

Brentwood Borough Council Draft Regulation 19 Local Plan (November 2019)

Habitats Regulations Assessment DRAFT for elected Councillors

Brentwood Borough Council

October 2018

Habitats Regulations Assessment of Brentwood District Council Draft Local Plan: Preferred Site Allocations.

Quality information

Prepared by

Verified by

George Wilkinson Seasonal Ecologist

Isla Hoffmann Heap

Isla Hoffmann Heap Senior Ecologist Approved by

James Riley Technical Director

Revision History

Revision	Revision date	Details	Authorized	Name	Position
0	25/10/2018	Draft for Client review	JR	James Riley	Technical Director

Habitats Regulations Assessment of Brentwood District Council Draft Local Plan: Preferred Site Allocations.

Prepared for:

Brentwood District Council

Prepared by:

AECOM Limited Midpoint, Alençon Link Basingstoke Hampshire RG21 7PP United Kingdom

T: +44(0)1256 310200 aecom.com

Limitations

AECOM Infrastructure and Environment UK Limited ("AECOM") has prepared this Report for the sole use of Brentwood Borough Council ("Client") in accordance with the terms and conditions of appointment. No other warranty, expressed or implied, is made as to the professional advice included in this Report or any other services provided by AECOM. This Report may not be relied upon by any other party without the prior and express written agreement of AECOM.

Where any conclusions and recommendations contained in this Report are based upon information provided by others, it has been assumed that all relevant information has been provided by those parties and that such information is accurate. Any such information obtained by AECOM has not been independently verified by AECOM, unless otherwise stated in the Report. AECOM accepts no liability for any inaccurate conclusions, assumptions or actions taken resulting from any inaccurate information supplied to AECOM from others.

The methodology adopted and the sources of information used by AECOM in providing its services are outlined in this Report. The work described in this Report was undertaken in October 2018 and is based on the conditions encountered and the information available during the said period of time. The scope of this Report and the services are accordingly factually limited by these circumstances. AECOM disclaims any undertaking or obligation to advise any person of any change in any matter affecting the Report, which may come or be brought to AECOM's attention after the date of the Report.

Copyright

© 2018 AECOM Limited. All Rights Reserved.

Table of Contents

1.	Introduction	7
Backgro	und to the Project	7
Legislati	on	7
Scope o	f the Project	8
This Rep	port	10
2.	Methodology	11
Introduc	tion	11
HRA Tas	sk 1: Test of Likely Significant Effects	11
	sk 2: Appropriate Assessment (AA)	
	sk 3: Avoidance & Mitigation	
Principa	I Other Plans and Projects That May Act 'In Combination'	13
3.	Pathways of Impact	
Introduc	tion	15
Recreati	onal Pressure	15
Atmosph	neric Pollution	19
Water Q	uality	
4.	Summary of Likely Significant Effects	23
5.	Appropriate Assessment: Epping Forest SAC	
Recreati	onal Pressure	25
Atmosph	neric Pollution	25
6.	Appropriate Assessment: Essex Coastal European Sites	
	onal Pressure	
Water Q	uality	
7.	Summary of Recommendations and Conclusions	
	idix A European Designated Sites Background	
	Forest SAC	
	Estuaries and Marshes SPA and Ramsar Site	
	stuaries SAC	
	and Roach SPA and Ramsar Site	
	and Southend Marshes SPA and Ramsar Site	
	ter Estuary SPA and Ramsar Site	
	idix B Figures	
Appen	idix C Likely Significant Effects Test of Plan Policies	

Figures

Figure 1: Four Stage Approach to Habitats Regulations Assessment (CLG, 200	/6) 11
--	--------

Tables

Table 1: Housing levels to be delivered across authorities surrounding Brentwood Borough	13
Table 2: Main sources and effects of air pollutants on habitats and species	19
Table 3: Wastewater Treatment Works with Catchments Serving Settlements Identified to Provide New	
Development in the Local Plan	22
Table 4: The Recreational Zone of Influence for Essex Coastal European Sites	27

1. Introduction

Background to the Project

- 1.1 AECOM has been appointed by Brentwood Borough Council to assist the Council in undertaking a Habitats Regulations Assessment (HRA) of its revised Draft Regulation 19 Local Plan (November 2019) (hereafter referred to as the 'Plan'). The Plan sets out the Council's proposed strategy to meet economic and housing needs in the Borough up to 2033. The Plan sets out development management policies and infrastructure requirements. The objective of this assessment is to identify any aspects of the Plan that would cause an adverse effect on the integrity of Natura 2000 sites, otherwise known as European sites (Special Areas of Conservation (SACs), Special Protection Areas (SPAs), (as a matter of Government policy) Ramsar sites, and 'Potential' sites for any such designations, either in isolation or in combination with other plans and projects. Advice on appropriate policy mechanisms for delivering mitigation where such effects have been identified is also provided.
- 1.2 In January 2018, Habitats Regulations Assessment was undertaken of residential and employment site allocations for the Plan¹. This is not being revisited within this assessment.

Legislation

- 1.3 The need for Appropriate Assessment is set out within Article 6 of the EC Habitats Directive 1992, and transposed into British law by the Conservation of Habitats and Species Regulations 2017. The ultimate aim of the Directive is to "maintain or restore, at favourable conservation status, natural habitats and species of wild fauna and flora of Community interest" (Habitats Directive, Article 2(2)). This aim relates to habitats and species rather than the European sites themselves, although the sites have a significant role in delivering favourable conservation status.
- 1.4 The Habitats Directive applies the Precautionary Principle² to European sites. Plans and projects can only be permitted having ascertained that there will be no adverse effect on the integrity of the site(s) in question. Plans and projects with predicted adverse impacts on European sites may still be permitted if there are no alternatives to them and there are Imperative Reasons of Overriding Public Interest (IROPI) as to why they should go ahead. In such cases, compensation would be necessary to ensure the overall integrity of the site network.
- 1.5 In order to ascertain whether or not site integrity will be affected, an Appropriate Assessment should be undertaken of the plan or project in question:

¹ AECOM. (January 2018) Habitats Regulations Assessment of Brentwood District Council Draft Local Plan: Preferred Site Allocations Regulation 18 Consultation (January 2018). Brentwood District Council

² The Precautionary Principle, which is referenced in Article 191 of the Treaty on the Functioning of the European Union, has been defined by the United Nations Educational, Scientific and Cultural Organisation (UNESCO, 2005) as:

[&]quot;When human activities may lead to morally unacceptable harm [to the environment] that is scientifically plausible but uncertain, actions shall be taken to avoid or diminish that harm. The judgement of plausibility should be grounded in scientific analysis".

Box 1: The legislative basis for Appropriate Assessment

Habitats Directive 1992

Article 6 (3) states that:

"Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives."

Conservation of Habitats and Species Regulations 2017

The Regulations state that:

"A competent authority, before deciding to ... give any consent for a plan or project which is likely to have a significant effect on a European site ... shall make an appropriate assessment of the implications for the site in view of that site's conservation objectives... The authority shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the European site".

1.6 Over time the phrase 'Habitats Regulations Assessment' has come into wide currency to describe the overall process set out in the Habitats Directive from screening through to Imperative Reasons of Overriding Public Interest (IROPI). This has arisen in order to distinguish the process from the individual stage described in the law as an 'Appropriate Assessment'. Throughout this report we use the term Habitats Regulations Assessment for the overall process and restrict the use of Appropriate Assessment to the specific stage of that name.

Scope of the Project

- 1.7 There is no pre-defined guidance that dictates the physical scope of a HRA of a Local Plan document. Therefore, in considering the physical scope of the assessment we were guided primarily by the identified impact pathways rather than by arbitrary 'zones'. Current guidance suggests that the following European sites be included in the scope of assessment:
 - All sites within the Brentwood Borough boundary; and
 - Other sites shown to be linked to development within the Brentwood Borough boundary through a known 'pathway' (discussed below).
- 1.8 Briefly defined, pathways are routes by which a change in activity provided within a Local Plan document can lead to an effect upon an internationally designated site. DCLG guidance states that the HRA should be 'proportionate to the geographical scope of the [plan policy]' and that 'an AA need not be done in any more detail, or using more resources, than is useful for its purpose' (CLG, 2006, p.6)³. More recently, the Court of Appeal⁴ ruled that providing the Council (as competent authority) was duly satisfied that proposed mitigation could be 'achieved in practice' such that the proposed development would have no adverse effect, then this would suffice. This ruling has since been applied to a planning permission (rather than a Local Plan document)⁵. In this case the High Court ruled that for 'a multistage process, so long as there is sufficient information at any particular stage to enable the authority to be satisfied that the proposed mitigation can be achieved in practice it is not necessary for all matters concerning

³ CLG. (2006) Planning for the Protection of European Sites, Consultation Paper.

⁴ No Adastral New Town Ltd (NANT) v Suffolk Coastal District Council Court of Appeal, 17th February 2015.

⁵ High Court case of R (Devon Wildlife Trust) v Teignbridge District Council, 28 July 2015.

mitigation to be fully resolved before a decision maker is able to conclude that a development will satisfy the requirements of the Habitats Regulations'.

- 1.9 No European sites lie within Brentwood Borough. However, the following sites are sufficiently close to the Borough and could be subject to impacts stemming from the Plan (distances from the Borough are in brackets):
 - Epping Forest SAC (6km west of the borough, 9km west of the nearest small village (Navestock Heath) and 13km west of the nearest suburb (Pilgrims Hatch));
 - Thames Estuary and Marshes SPA and Ramsar site (8.3km south-east);
 - Essex Estuaries SAC (12.4km east);
 - Crouch and Roach Estuaries SPA and Ramsar site (12.4km east);
 - Benfleet and Southend Marshes SPA and Ramsar site (13.4km south-east); and
 - Blackwater Estuary SPA and Ramsar site (19.8km north-east).
- 1.10 Other European sites located along the Essex coast that were considered include the following sites (distances from the Borough are in brackets):
 - Foulness Estuary SPA and Ramsar site (more than 27km);
 - Dengie SPA and Ramsar site (more than 35km);
 - Colne Estuary SPA and Ramsar site (more than 37km);
 - Stour and Orwell Estuary SPA and Ramsar site (more than 52km); and
 - Hamford Water SPA and Ramsar site (more than 57km).
- 1.11 Due to the considerable distances of the European sites listed in Paragraph 1.10, which are located well outside of the Borough's boundary, it is not considered realistic for impact pathways linking to the Plan to exist alone or in combination with these sites. As such, these European sites are not discussed further in this report.
- 1.12 The European sites located along the Essex coast are hereafter referred to as the 'Essex Coastal European sites'.
- 1.13 The reasons for the designation of the European sites considered in this report, together with current trends in habitat quality and pressures on these sites, are set out at Appendix A. The locations of the European sites considered in this report are illustrated in Appendix B, Figure B1.
- 1.14 In order to fully inform the screening process, a number of recent studies have been consulted to determine likely significant effects that could arise from the Plan. These include:
 - Final Water Resources Management Plan 2014. Essex & Suffolk Water. October 2014;
 - Future development proposed (and, where available, HRAs) for Barking & Dagenham, Basildon, Castle Point, Chelmsford, East Hertfordshire District Epping Forest, Harlow, Havering, Maldon, Redbridge, Rochford, Southend-on-Sea, Thurrock, and Waltham Forest Districts;
 - Recreational activity, tourism and European site recreational catchment data has been used where this exists
 for individual European sites, although this is limited. In such circumstances where data does not exist then this

HRA has used appropriate proxy information from other European sites designated for similar features and in similar settings that has been agreed by Natural England; and,

 Multi Agency Geographic Information for the Countryside (MAGIC) and its links to SSSI citations and the JNCC website (www.magic.gov.uk).

This Report

1.15 Chapter 2 of this report explains the process by which the HRA has been carried out. Chapter 3 explores the relevant pathways of impact. Chapter 4 summarises the Likely Significant Effects test of Plan Policies to determine which present potential scope for impacts on European sites (specifically Epping Forest SAC and Essex Coastal European Sites). The Likely Significant Effects test itself is undertaken in Appendix C. Chapters 5 and 6 provide Appropriate Assessment in relation to the impact pathways that could not be 'screened out' in Appendix C, and include recommendations to ensure the Plan does not affect the integrity of any European sites. Key findings and recommendations are summarised in Chapter 7.

2. Methodology

Introduction

- 2.1 The HRA has been carried out in the continuing absence of formal central Government guidance, although general EC guidance on HRA does exist⁶. The DCLG released a consultation paper on the Appropriate Assessment of Plans in 2006⁷. As yet, no further formal guidance has emerged. However, Natural England has produced its own internal guidance⁸, as has the RSPB⁹. Both of these have been referred to in undertaking this HRA.
- 2.2 Figure 1 below outlines the stages of HRA according to current draft DCLG guidance. The stages are essentially iterative, being revisited as necessary in response to more detailed information, recommendations and any relevant changes to the plan until no significant adverse effects remain.

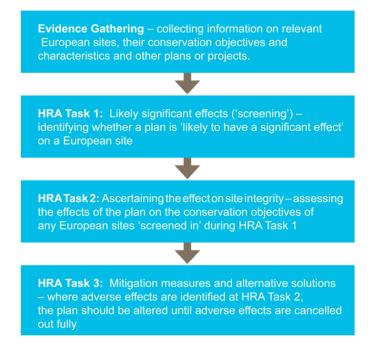


Figure 1: Four Stage Approach to Habitats Regulations Assessment (CLG, 2006)

HRA Task 1: Test of Likely Significant Effects

2.3 Following evidence gathering, the first stage of any Habitats Regulations Assessment is a Test of Likely Significant Effects (TOLSE). This is essentially a risk assessment to decide whether the full subsequent stage known as Appropriate Assessment is required. The essential question is:

"Is the Plan, either alone or in combination with other relevant projects and plans, likely to result in a significant effect upon European sites?"

- 2.4 The objective is to 'screen out' those plans and projects that can, without any detailed appraisal, be said to be unlikely to result in significant adverse effects upon European sites, usually because there is no mechanism for an adverse interaction with European sites.
- 2.5 In evaluating significance, AECOM have relied on our professional judgement as well as the results of previous stakeholder consultation regarding development impacts on the European sites considered within this assessment.

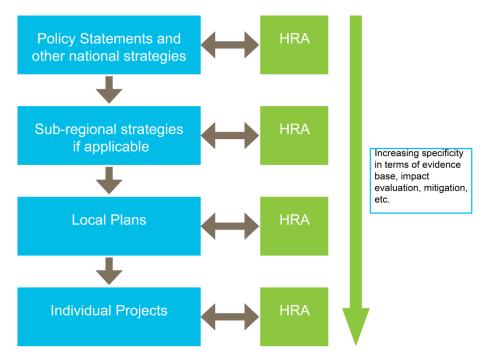
⁶ European Commission. (2001) Assessment of plans and projects significantly affecting Natura 2000 Sites: Methodological Guidance on the Provisions of Article 6(3) and 6(4) of the Habitats Directive.

⁷ CLG (2006) Planning for the Protection of European Sites, Consultation Paper.

⁸ http://www.ukmpas.org/pdf/practical_guidance/HRGN1.pdf

2.6 The level of detail in land use plans concerning developments that will be permitted under the plans is rarely sufficient to make a detailed quantification of adverse effects. It is therefore necessary to be cognisant of the fact that HRAs for plans can be tiered, with assessments being undertaken with increasing specificity at lower tiers. This is in line with the Department of Communities and Local Government guidance and Court rulings that the level of detail of the assessment, whilst meeting the relevant requirements of the Conservation Regulations, should be 'appropriate' to the level of plan or project that it addresses. This 'tiering' of assessment is summarised in Box 2.





2.7 On these occasions the advice of Advocate-General Kokott¹⁰ to the European Court of Justice is worth considering. She commented that: 'It would ...hardly be proper to require a greater level of detail in preceding plans [rather than planning applications] or the abolition of multi-stage planning and approval procedures so that the assessment of implications can be concentrated on one point in the procedure. Rather, adverse effects on areas of conservation must be assessed at every relevant stage of the procedure to the extent possible on the basis of the precision

¹⁰ Opinion of Advocate General Kokott, 9th June 2005, Case C-6/04. Commission of the European Communities v United Kingdom of Great Britain and Northern Ireland, paragraph 49.

http://curia.europa.eu/juris/document/document.jsf?docid=58359&doclang=EN

⁹ Dodd, A.M., Cleary, B.E., Dawkins, J.S., Byron, H.J., Palframan, L.J.& Williams, G.M. (2007) *The Appropriate Assessment of Spatial Plans in England: a guide to why, when and how to do it.* The RSPB, Sandy.

of the plan. This assessment is to be updated with increasing specificity in subsequent stages of the procedure' [emphasis added].

HRA Task 2: Appropriate Assessment (AA)

- 2.8 Where it is determined that a conclusion of 'no likely significant effect' cannot be drawn, the analysis has proceeded to the next stage of HRA known as Appropriate Assessment. Case law has clarified that 'appropriate assessment' is <u>not</u> a technical term. In other words, there are no particular technical analyses, or level of technical analysis, that are classified by law as belonging to Appropriate Assessment.
- 2.9 A recent decision by the European Court of Justice¹¹ (ECJ) concludes that measures intended to avoid or reduce the harmful effects of a proposed project on a European site, but which are not an integral part of the project or plan, may no longer be taken into account by competent authorities at the likely significant effects stage of HRA, essentially meaning that the role of avoidance and measures should be discussed in the subsequent Appropriate Assessment stage instead of the TOLSE stage.

HRA Task 3: Avoidance & Mitigation

- 2.10 Where necessary, measures will be recommended for incorporation into the Plan in order to avoid or mitigate adverse effects on European sites. There is considerable precedent concerning the level of detail that a Local Plan document needs to contain regarding mitigation for recreational impacts on European sites. The implication of this precedent is that it is not necessary for all measures that will be deployed to be fully developed prior to adoption of the Local Plan, but the Local Plan must provide an adequate policy framework within which these measures can be delivered.
- 2.11 When evaluating significance, AECOM has relied on professional judgement as well as the results of previous stakeholder consultation regarding development impacts on the European sites considered within this assessment.
- 2.12 When discussing mitigation for a Local Plan document, one is concerned primarily with the policy framework to enable the delivery of such mitigation rather than the details of the mitigation measures themselves since the Local Plan document is a high-level policy document.

Principal Other Plans and Projects That May Act 'In Combination'

2.13 In practice, in combination assessment is of greatest relevance when the plan would otherwise be screened out because its individual contribution is inconsequential. For the purposes of this assessment, we have determined that, due to the nature of the identified impacts, the key other plans and projects relate to the additional housing and commercial/industrial development proposed for other relevant Essex, Hertfordshire and London authorities over the lifetime of the Plan (Table 1). These were selected if they related to bordering authorities or if the authority encompassed one of the European designated sites discussed (e.g. Southend-on-Sea, within which the Benfleet and Southend Marshes SPA and Ramsar site is located).

Table 1: Housing levels to be delivered across authorities surrounding Brentwood Borough

Local Authority	Total housing provided
Epping Forest	11,400 (to 2033) ¹²
Havering	17,550 (to 2031) ¹³
Barking and Dagenham	17,850 (to 2024/25) ¹⁴
Basildon	15,260 (to 2034) ¹⁵
Uttlesford	These three authorities with Epping Forest District are working together as part of an
East Hertfordshire	HMA. Where impacts in combination such as air quality impacts are considered, thes
Harlow	assessments will be based in the level of development provided within the HMA.
Chelmsford	18,515 (to 2036) ¹⁶
Havering	17,550 (2016 - 2031) ¹⁷

Redbridge	16,845 (2015-2030) ¹⁸	
Waltham Forest	10,320 (2012 - 2026) ¹⁹	
Castle Point	No details on housing allocation provided; awaiting new local plan.	
Southend-on-Sea	No details on housing allocation provided; awaiting new local plan.	
Rochford	4,600 (to 2021) ²⁰	
Maldon	4,650 (to 2029) ²¹	
Thurrock	10,010 (to 2021) ²²	
Waltham Forest	10.320 (to 2026) ²³	

Waltham Forest 10,320 (to 2026)²³

- 2.14 The Minerals and Waste Development Plans for Essex, London and Suffolk are also of some relevance, since these may contribute to increased vehicle movements on the road network within Brentwood Borough (and thereby contribute to air quality impacts). The Essex and Suffolk Local Transport Plans to 2031 will also be important in terms of encouraging sustainable transport. However, the major impact is likely to be that of housing and commercial development within the surrounding districts, as set out in Local Plans. These have therefore been the main focus of the examination of cumulative 'in combination' effects with regard to this HRA.
- 2.15 In relation to recreational activity, the Epping Forest Management Plan and visitor surveys have been consulted for their plans and projects that may affect European sites in combination with development in Epping Forest District.

- ¹⁴ <u>https://www.lbbd.gov.uk/wp-content/uploads/2014/10/Adopted-Core-Strategy.pdf</u> [accessed 24/10/2018]
- ¹⁵ http://www.basildon.gov.uk/CHttpHandler.ashx?id=6599&p=0 [accessed 24/10/2018]

¹¹ People Over Wind and Sweetman v Coillte Teoranta (C-323/17).

¹² <u>http://www.efdclocalplan.org/wp-content/uploads/2017/12/Submission-Version-Local-Plan.pdf</u> [accessed 24/10/2018]

¹³ https://www.havering.gov.uk/download/downloads/id/1567/proposed_submission_for_the_local_plan.pdf [accessed 24/10/2018]

¹⁶https://www.chelmsford.gov.uk/planning-and-building-control/planning-policy-and-new-local-plan/new-local-plan/local-plan-examination/ [accessed 24/10/2018]

¹⁷ <u>https://www.havering.gov.uk/download/downloads/id/1909/lbhlp1 - proposed submission local plan 2016-2031.pdf</u> [accessed 24/10/2018]

¹⁸ <u>https://www.redbridge.gov.uk/media/2268/final-web-pdf_redbridge-local-plan_reduced.pdf</u> [accessed 24/10/2018]

¹⁹ https://branding.walthamforest.gov.uk/Documents/adopted-core-strategy.pdf [accessed 24/10/2018]

²⁰ https://www.rochford.gov.uk/sites/default/files/planningpolicy_cs_adoptedstrategy.pdf [accessed 24/10/2018]

²¹ http://www.maldon.gov.uk/download/downloads/id/14807/approved_maldon_district_local_development_plan_2014-2029.pdf [accessed 24/10/2018]

²² <u>https://www.thurrock.gov.uk/sites/default/files/assets/documents/core_strategy_adopted_2011_amended_2015.pdf</u> [accessed 24/10/2017]

²³ <u>https://static.walthamforest.gov.uk/sp/Documents/adopted-core-strategy.pdf</u> [accessed 24/10/2018]

3. Pathways of Impact

Introduction

- 3.1 In carrying out an HRA it is important to determine the various ways in which land use plans can impact on internationally designated sites by following the pathways along which development can be connected with internationally designated sites, in some cases many kilometres distant. Briefly defined, pathways are routes by which a change in activity associated with a plan document/development can lead to an effect upon an internationally designated site. Based in the findings of the Regulation 18 screening HRA, three main pathways have been identified that would be the focus of this analysis:
 - Air quality issues relating to Epping Forest SAC.
 - Recreational pressure on the Essex coastal European sites.
 - Water quality relating to the Essex coastal European sites.

Recreational Pressure

- 3.2 Recreational use of an internationally designated site has the potential to:
 - Cause damage through mechanical/ abrasive damage and nutrient enrichment;
 - Cause disturbance to sensitive species, particularly ground-nesting birds and wintering wildfowl; and
 - Prevent appropriate management or exacerbate existing management difficulties.
- 3.3 Different types of internationally designated sites are subject to different types of recreational pressures and have different vulnerabilities. Studies across a range of species have shown that the effects of recreation can be complex.

Mechanical/abrasive Damage and Nutrient Enrichment

- 3.4 Most types of terrestrial internationally designated site can be affected by trampling, which in turn causes soil compaction and erosion. Walkers with dogs contribute to pressure on sites through nutrient enrichment via dog fouling and also have potential to cause greater disturbance to fauna as dogs are less likely to keep to marked footpaths and move more erratically. Motorcycle scrambling and off-road vehicle use can cause serious erosion and disturbance to sensitive species.
- 3.5 There have been several papers published that empirically demonstrate that damage to vegetation in woodlands and other habitats can be caused by vehicles, walkers, horses and cyclists:
 - Wilson & Seney (1994)²⁴ examined the degree of track erosion caused by hikers, motorcycles, horses and cyclists from 108 plots along tracks in the Gallatin National Forest, Montana. Although the results proved difficult to interpret, it was concluded that horses and hikers disturbed more sediment on wet tracks, and therefore caused more erosion, than motorcycles and bicycles.
 - Cole (1995a, b)²⁵ conducted experimental off-track trampling in 18 closed forest, dwarf scrub and meadow and grassland communities (each tramped between 0 500 times) over five mountain regions in the US. Vegetation cover was assessed two weeks and one year after trampling, and an inverse relationship with trampling intensity was discovered, although this relationship was weaker after one year than two weeks, indicating some recovery of the vegetation. Differences in plant morphological characteristics were found to explain more variation in response between different vegetation types than soil and topographic factors. Low-growing, matforming grasses regained their cover best after two weeks and were considered most resistant to trampling, while tall forbs (non-woody vascular plants other than grasses, sedges, rushes and ferns) were considered

²⁴ Wilson, J.P. & Seney, J.P. (1994) Erosional impact of hikers, horses, motorcycles and off road bicycles on mountain trails in Montana. *Mountain Research and Development* 14:77-88.

²⁵ Cole, D.N. (1995a) Experimental trampling of vegetation. I. Relationship between trampling intensity and vegetation response. *Journal of Applied Ecology* 32: 203-214.

Cole, D.N. (1995b) Experimental trampling of vegetation. II. Predictors of resistance and resilience. Journal of Applied Ecology 32: 215-224.

least resistant. Cover of hemicryptophytes and geophytes (plants with buds below the soil surface) was heavily reduced after two weeks, but had recovered well after one year and as such these were considered most resilient to trampling. Chamaephytes (plants with buds above the soil surface) were least resilient to trampling. It was concluded that these would be the least tolerant of a regular cycle of disturbance.

- Cole (1995c)²⁶ conducted a follow-up study (in four vegetation types) in which shoe type (trainers or walking boots) and trampler weight were varied. Although immediate damage was greater with walking boots, there was no significant difference after one year. Heavier tramplers caused a greater reduction in vegetation height than lighter tramplers, but there was no difference in effect on cover.
- Cole & Spildie (1998)²⁷ experimentally compared the effects of off-track trampling by hiker and horse (at two intensities 25 and 150 passes) in two woodland vegetation types (one with an erect forb understorey and one with a low shrub understorey). Horse traffic was found to cause the largest reduction in vegetation cover. The forb-dominated vegetation suffered greatest disturbance, but recovered rapidly. Higher trampling intensities caused more disturbance.
- 3.6 The total volume of dog faeces deposited on sites can be surprisingly large. For example, at Burnham Beeches National Nature Reserve over one year, Barnard (2003)²⁸ estimated the total amounts of urine and faeces from dogs to be 30,000 litres and 60 tonnes respectively. The specific impact on Epping Forest SAC has not been quantified from local studies; however, the fact that habitats for which the SAC is designated appear to already be subject to excessive nitrogen deposition suggests that any additional source of nutrient enrichment (including uncollected dog faeces) will make a cumulative contribution to overall enrichment. Any such contribution must then be considered within the context of other recreational sources of impact on sites.

Disturbance

- 3.7 Concern regarding the effects of disturbance on birds stems from the fact that they are expending energy unnecessarily and the time they spend responding to disturbance is time that is not spent feeding²⁹. Disturbance therefore risks increasing energetic output while reducing energetic input, which can adversely affect the 'condition' and ultimately the survival of the birds. In addition, displacement of birds from one feeding site to others can increase the pressure on the resources available within the remaining sites, as they have to sustain a greater number of birds³⁰.
- 3.8 The potential for disturbance may be lower in winter than in summer due to the reduction in recreational users. In addition, the consequences of disturbance at a population level may be reduced because birds are not breeding. However, winter activity can still cause disturbance, especially as birds are particularly vulnerable at this time of year due to food shortages, such that disturbance which results in abandonment of suitable feeding areas can have severe

²⁶ Cole, D.N. (1995c) Recreational trampling experiments: effects of trampler weight and shoe type. Research Note INT-RN-425. U.S. Forest Service, Intermountain Research Station, Utah.

²⁷ Cole, D.N. & Spildie, D.R. (1998) Hiker, horse and llama trampling effects on native vegetation in Montana, USA. *Journal of Environmental Management* 53: 61-71.

²⁸ Barnard, A. (2003) Getting the Facts - Dog Walking and Visitor Number Surveys at Burnham Beeches and their Implications for the Management Process. *Countryside Recreation*, 11, 16-19.

²⁹ Riddington, R , Hassall, M., Lane, S. J., Turner, P. A., & Walters, R. (1996) The impact of disturbance on the behaviour and energy budgets of Brent geese. *Bird Study* 43:269-279.

³⁰ Gill, J.A., Sutherland, W.J. & Norris, K. (1998) The consequences of human disturbance for estuarine birds. RSPB Conservation Review 12: 67-72.

consequences. Several empirical studies have, through correlative analysis, demonstrated that out-of-season (October-March) recreational activity can result in quantifiable disturbance:

- Underhill *et al.* (1993)³¹ counted waterfowl and all disturbance events on 54 water bodies within the South West London Waterbodies SPA and clearly correlated disturbance with a decrease in bird numbers at weekends in smaller sites and with the movement of birds within larger sites from disturbed to less disturbed areas.
- Evans & Warrington (1997)³² found that on Sundays total water bird numbers (including shoveler and gadwall) were 19% higher on Stocker's Lake LNR in Hertfordshire, and attributed this to displacement of birds resulting from greater recreational activity on surrounding water bodies at weekends relative to week days.
- Tuite *et al.* (1984)³³ used a large (379 site), long-term (10-year) dataset (September March species counts) to correlate seasonal changes in wildfowl abundance with the presence of various recreational activities. They found that on inland water bodies shoveler was one of the most sensitive species to disturbance. The greatest impact on winter wildfowl numbers was associated with sailing/windsurfing and rowing.
- Pease *et al.* (2005)³⁴ investigated the responses of seven species of dabbling ducks to a range of potential causes of disturbance, ranging from pedestrians to vehicle movements. They determined that walking and biking created greater disturbance than vehicles and that gadwall were among the most sensitive of the species studied.
- A three-year study of wetland birds at the Stour and Orwell SPA, Ravenscroft (2005)³⁵ found that walkers, boats and dogs were the most regular source of disturbance. Despite this, the greatest responses came from relatively infrequent events, such as gun shots and aircraft noise. Birds seemed to habituate to frequent 'benign' events such as those involving vehicles, sailing and horses, but there was evidence that apparent habituation to more disruptive events related to reduced bird numbers i.e. birds were avoiding the most frequently disturbed areas. Disturbance was greatest at high tide on the Orwell, but birds on the Stour showed greatest sensitivity.
- 3.9 A number of studies have shown that birds are affected more by dogs and people with dogs than by people alone, with birds flushing more readily, more frequently, at greater distances and for longer. In addition, dogs, rather than people, tend to be the cause of many management difficulties, notably by worrying grazing animals, and can cause eutrophication near paths. Nutrient-poor habitats such as heathland are particularly sensitive to the fertilising effect of inputs of phosphates, nitrogen and potassium from dog faeces³⁶.
- 3.10 Underhill-Day (2005)³⁷ summarises the results of visitor studies that have collected data on the use of semi-natural habitat by dogs. In surveys where 100 observations or more were reported, the mean percentage of visitors who were accompanied by dogs was 54.0%.
- 3.11 However the outcomes of many of these studies need to be treated with care. For instance, the effect of disturbance is not necessarily correlated with the impact of disturbance, i.e. the most easily disturbed species are not necessarily those that will suffer the greatest impacts. It has been shown that, in some cases, the most easily disturbed birds simply move to other feeding sites, whilst others may remain (possibly due to an absence of alternative sites) and thus suffer greater impacts on their population³⁸. A literature review undertaken for the RSPB³⁹ also urges caution when extrapolating the results of one disturbance study because responses differ between species and the response

³¹ Underhill, M. C., Kirby, J. S., Bell, M. C. & Robinthwaite, J. (1993) Use of Waterbodies in South West London by Waterfowl. An Investigation of the Factors Affecting Distribution, Abundance and Community Structure. Report to Thames Water Utilities Ltd. and English Nature. Wetlands Advisory Service, Slimbridge.

³² Evans, D.M. & Warrington, S. (1997) The effects of recreational disturbance on wintering waterbirds on a mature gravel pit lake near London. International Journal of Environmental Studies 53: 167-182.

³³ Tuite, C.H., Hanson, P.R. & Owen, M. (1984) Some ecological factors affecting winter wildfowl distribution on inland waters in England and Wales and the influence of water-based recreation. *Journal of Applied Ecology* 21: 41-62.

³⁴ Pease, M.L., Rose, R.K. & Butler, M.J. (2005) Effects of human disturbances on the behavior of wintering ducks. *Wildlife Society Bulletin* 33 (1): 103-112.

³⁵ Ravenscroft, N. (2005) Pilot study into disturbance of waders and wildfowl on the Stour-Orwell SPA: analysis of 2004/05 data. Era report 44, Report to Suffolk Coast & Heaths Unit.

³⁶ Shaw, P.J.A., Lankey, K. & Hollingham, S.A. (1995) Impacts of trampling and dog fouling on vegetation and soil conditions on Headley Heath. *The London Naturalist*, **74**, 77-82.

³⁷ Underhill-Day, J.C. (2005). A literature review of urban effects on lowland heaths and their wildlife. Natural England Research Report 623.

³⁸ Gill, J.A., Norris, K. & Sutherland, W.J. (2001) Why behavioural responses may not reflect the population consequences of human disturbance. *Biological Conservation*, 97, 265-268.

³⁹ Woodfield, E. & Langston, R. (2004) Literature review on the impact on bird population of disturbance due to human access on foot. *RSPB research report* No. 9.

of one species may differ according to local environmental conditions. These facts have to be taken into account when attempting to predict the impacts of future recreational pressure on internationally designated sites.

3.12 Disturbing activities are on a continuum. The most disturbing activities are likely to be those that involve irregular, infrequent, unpredictable loud noise events, movement or vibration of long duration (such as those often associated with construction activities). Birds are least likely to be disturbed by activities that involve regular, frequent,

predictable, quiet patterns of sound or movement or minimal vibration. The further any activity is from the birds, the less likely it is to result in disturbance.

- 3.13 The factors that influence a species response to a disturbance are numerous, but the three key factors are species sensitivity, proximity of disturbance sources and timing/duration of the potentially disturbing activity.
- 3.14 Effects of increased recreational activities as a result of increased residential development stemming from the Plan on both Epping Forest SAC and the Essex Coastal Sites are assessed further in Chapters 5.1 and 6.1 respectively.

Atmospheric Pollution

3.15 The main pollutants of concern for European sites are oxides of nitrogen (NOx), ammonia (NH₃) and sulphur dioxide (SO₂). Ammonia can be directly toxic to vegetation, and research suggests that this may also be true for NOx at very high concentrations. More significantly, greater NOx or ammonia concentrations within the atmosphere will lead to greater rates of nitrogen deposition to vegetation and soils. An increase in the deposition of nitrogen from the atmosphere is generally regarded to lead to an increase in soil fertility, which can have a serious deleterious effect on the quality of semi-natural, nitrogen-limited terrestrial habitats.

Table 2: Main sources and effects of air pollutants on habitats and species

Pollutant	Source	Effects on habitats and species
Acid deposition	SO ₂ , NOx and ammonia all contribute to acid deposition. Although future trends in SO ₂ emissions and subsequent deposition to terrestrial and aquatic ecosystems will continue to decline, it is likely that increased NOx emissions may cancel out any gains produced by reduced SO ₂ levels.	Can affect habitats and species through both wet (acid rain) and dry deposition. Some sites will be more at risk than others depending on soil type, bed rock geology, weathering rate and buffering capacity.
Ammonia (NH ₃)	Ammonia is released following decomposition and volatilisation of animal wastes. It is a naturally occurring trace gas, but levels have increased considerably with expansion in numbers of agricultural livestock. Ammonia reacts with acid pollutants such as the products of SO ₂ and NO _X emissions to produce fine ammonium (NH ₄ +) - containing aerosol which may be transferred much longer distances (can therefore be a significant trans-boundary issue.)	Adverse effects are as a result of nitrogen deposition leading to eutrophication. As emissions mostly occur at ground level in the rural environment and NH ₃ is rapidly deposited, some of the most acute problems of NH ₃ deposition are for small relict nature reserves located in intensive agricultural landscapes.
Nitrogen oxides (NO _{x)}	Nitrogen oxides are mostly produced in combustion processes. About one quarter of the UK's emissions are from power stations, one-half from motor vehicles, and the rest from other industrial and domestic combustion processes.	Deposition of nitrogen compounds (nitrates (NO_3) , nitrogen dioxide (NO_2) and nitric acid (HNO_3)) can lead to both soil and freshwater acidification. In addition, NO_x can cause eutrophication of soils and water. This alters the species composition of plant communities and can eliminate sensitive species.
Nitrogen (N) deposition	The pollutants that contribute to nitrogen deposition derive mainly from NO_X and NH_3 emissions. These pollutants cause acidification (see also acid deposition) as well as eutrophication.	Species-rich plant communities with relatively high proportions of slow-growing perennial species and bryophytes are most at risk from N eutrophication, due to its promotion of competitive and invasive species which can respond readily to elevated levels of N. N deposition can also increase the risk of damage from abiotic factors, e.g. drought and frost.
Ozone (O ₃)	A secondary pollutant generated by photochemical reactions from NO_x and volatile organic compounds (VOCs). These are mainly released by the combustion of fossil fuels. The increase in combustion of fossil fuels in the UK has led to a large increase in background ozone concentration, leading to an increased number of days when levels across the region are above 40ppb. Reducing ozone pollution is believed to require action at international level to reduce levels of the precursors that form ozone.	Concentrations of O_3 above 40 ppb can be toxic to humans and wildlife, and can affect buildings. Increased ozone concentrations may lead to a reduction in growth of agricultural crops, decreased forest production and altered species composition in semi-natural plant communities.
Sulphur Dioxide (SO ₂₎	Main sources of SO_2 emissions are electricity generation, industry and domestic fuel combustion. May also arise from shipping and increased atmospheric concentrations in busy ports. Total SO_2 emissions have decreased substantially in the UK since the 1980s.	Wet and dry deposition of SO_2 acidifies soils and freshwater, and alters the species composition of plant and associated animal communities. The significance of impacts depends on levels of deposition and the buffering capacity of soils.

3.16 Sulphur dioxide emissions are overwhelmingly influenced by the output of power stations and industrial processes that require the combustion of coal and oil. Ammonia emissions are dominated by agriculture, with some chemical processes also making notable contributions. NOx emissions, however, are dominated by the output of vehicle exhausts (more than half of all emissions). Within a 'typical' housing development, by far the largest contribution to NOx (92%) will be made by the associated road traffic. Other sources, although relevant, are of minor importance (8%) in comparison⁴⁰. Emissions of NOx could therefore be reasonably expected to increase as a result of greater vehicle use as an indirect effect of the plan.

3.17 Whilst Epping Forest SAC is located more than 6km from the Borough boundary, the SAC is known to already be in exceedance of its Critical Load for nitrogen deposition. Chapter 5.2 investigates the potential for increased traffic movements stemming from the Plan to interact with the SAC.

Water Quality

- 3.18 The quality of the water that feeds European sites is an important determinant of the nature of their habitats and the species they support. Poor water quality can have a range of environmental impacts:
- 3.19 At high levels, toxic chemicals and metals can result in immediate death of aquatic life, and can have detrimental effects even at lower levels, including increased vulnerability to disease and changes in wildlife behaviour.
 - Eutrophication, the enrichment of plant nutrients in water, increases plant growth and consequently results in oxygen depletion. Algal blooms, which commonly result from eutrophication, increase turbidity and decrease light penetration. The decomposition of organic wastes that often accompanies eutrophication deoxygenates

⁴⁰ Proportions calculated based upon data presented in Dore CJ et al. 2005. UK Emissions of Air Pollutants 1970 – 2003. UK National Atmospheric Emissions Inventory. <u>http://www.airquality.co.uk/archive/index.php</u>

water further, augmenting the oxygen depleting effects of eutrophication. In the marine environment, nitrogen is the limiting plant nutrient and so eutrophication is associated with discharges containing available nitrogen.

- Some pesticides, industrial chemicals, and components of sewage effluent are suspected to interfere with the functioning of the endocrine system, possibly having negative effects on the reproduction and development of aquatic life.
- 3.20 Sewage and some industrial effluent discharges contribute to increased nutrients in the European sites and in particular to phosphate levels in watercourses.
- 3.21 The Plan provides for development within the following settlements that are served by the following Wastewater Treatment Works (WwTW):

Table 3: Wastewater Treatment Works with Catchments Serving Settlements Identified to Provide New Development in the Local Plan⁴¹

WwTW	Settlements with WwTW Catchment	Quantum of Residential Allocations Located within the WwTW Catchment and Approximate Quantum	Discharge Waters and Distance to European Sites
Brentwood (Nags Head)	Brentwood Warley Pilgrims Hatch	1490 net new dwellings	Discharges into Ingrebourne River (ultimately entering the River Thames at Rainham); connected to River Thames Estuaries and Marshes SPA/Ramsar 35km along an approximate south- east course.
Shenfield & Hutton	Brentwood Hutton Pilgrims Hatch	975 net new dwellings	Discharges into the River Wid at Little Crowbridge Grange, west of Billericay. The River Wid passes north-east into the River Chelmer before emerging into River Blackwater SPA/Ramsar site. The designated site is approximately 20km along a downstream course from the discharge site.
Upminster	Upminster West horndon Warley	2080 net new dwellings	Discharges into the River Mar Dyke near Childerditch (ultimately entering the River Thames at West Thurrock); connected to River Thames Estuaries and Marshes SPA/Ramsar 25km along an approximate south-east course.
Ingatestone	Ingatestone	316 net new dwellings	Discharges into the River Wid east of Ingatestone. The River Wid passes north-east into the River Chelmer before emerging into River Blackwater SPA/Ramsar site. The designated site is approximately 20km along a downstream course from the discharge site.
Doddinghurst	Doddinghurst Kelvedon Hatch	169 net new dwellings	Discharges east of Doddinghurst which enters the River Wid. This ultimately reaches River Blackwater SPA/Ramsar approximately 27km along a north- east course.

3.22 Epping Forest SAC is not vulnerable to changes in water levels. As such, this impact pathway is investigated further with regards to the Essex Coastal European Sites only in paragraph 5.3

⁴¹ Brentwood Scoping and Outline Water Cycle Study - <u>http://www.brentwood.gov.uk/pdf/21032011165157u.pdf</u>

4. Summary of Likely Significant Effects

- 4.1 The Likely Significant Effects test of the Local Plan policies is undertaken in Appendix A; this chapter provides a summary of that screening process.
- 4.2 It should be noted, that whilst the Local Plan provides both residential and employment site allocations, these have previously been subject to HRA⁴². As site allocations remain unchanged, these are not revisited. The Site Allocation HRA enabled all site allocations to be screened out in isolation, however in combination effects required further consideration.
- 4.3 Appendix C enables all Local Plan policies to be screened out from resulting in likely significant effects in isolation. This is primarily due to the distances from Brentwood District boundary to European designated sites. However, the Likely Significant Effects test identifies that the following policies have the potential to act in combination with neighbouring plans, and result in a Likely Significant Effect in combination.
- 4.4 These policies are as follows:
 - SP05: Housing Growth: Housing Growth. This policy allocates 7,392 net new houses during the plan period. It provides for **atmospheric pollution** as a linking impact pathway to Epping Forest SAC, and increased **recreational pressure** and **adverse water quality** as potential linking impact pathways to the Essex Coast European sites.
 - BEXX: Provision for Gypsies and Travellers. This policy allocates 13 permanent Gypsy and Traveller pitches during the plan period. It provides for **atmospheric pollution** as a linking impact pathway to Epping Forest SAC, and increased **recreational pressure** and **adverse water quality** as potential linking impact pathways to the Essex Coast European sites.
 - BEXX: Regularising Suitable Existing Traveller Sites. This policy two new sites for Gypsies and Travellers (7 pitches) during the plan period. It provides for **atmospheric pollution** as a linking impact pathway to Epping Forest SAC, and increased **recreational pressure** and **adverse water quality** as potential linking impact pathways to the Essex Coast European sites.
 - SP12: Employment Land Provision. This policy allocates a total of 3.28ha of employment land that is to be placed with Brentwood. It provides for **atmospheric pollution** as a linking impact pathway to Epping Forest SAC, and **adverse water quality** as a potential linking impact pathways to the Essex Coast European sites.
 - SP06: Job Growth. This policy aims to provide a total of 5,000 additional jobs within the Borough over the course of the Plan period. It provides for **atmospheric pollution** as a linking impact pathway to Epping Forest SAC, and adverse water quality as a potential linking impact pathways to the Essex Coast European sites.
 - BEXX: Brentwood Enterprise Park (101A). This policy allocates a single development site for employment purposes at the Brentwood Enterprise Park. It provides for **atmospheric pollution** as a linking impact pathway

⁴² AECOM. (January 2018) Habitats Regulations Assessment of Brentwood District Council Draft Local Plan: Preferred Site Allocations Regulation 18 Consultation (January 2018). Brentwood District Council

to Epping Forest SAC, and **adverse water quality** as a potential linking impact pathways to the Essex Coast European sites.

- SP07: Retail and Commercial Leisure Growth. This policy allocates retail floorspace within Brentwood Borough. It provides for **atmospheric pollution** as a linking impact pathway to Epping Forest SAC, and **adverse water quality** as a potential linking impact pathways to the Essex Coast European sites.
- X: Brentwood Enterprise Park. This policy allocates a single development site for employment purposes at the Brentwood Enterprise Park. It provides for **atmospheric pollution** as a linking impact pathway to Epping Forest SAC, and **adverse water quality** as a potential linking impact pathways to the Essex Coast European sites.
- 4.5 As such, based on the above summary it is the following impact pathways that will be subject to Appropriate Assessment within the remainder of this document:
 - Epping Forest: atmospheric pollution
 - Essex Coast European sites: recreational pressure
 - Essex Coast European sites: adverse water quality

5. Appropriate Assessment: Epping Forest SAC

Recreational Pressure

- 5.1 Epping Forest SAC receives a great many visits per year (estimated at over 4 million) and discussions with the City of London Corporation have identified long-standing concerns about increasing recreational use of the Forest resulting in damage to its interest features. A programme of detailed formal visitor surveys has been undertaken in recent years. A 2011 visitor survey report⁴³ identified that those living within 2km of the edge of the Forest comprise at least 95% of all visitors. However, further analysis of these data was undertaken by Footprint Ecology in September 2016⁴⁴. This further analysis identified that, although the scale of the data was substantial (in 2014 alone almost 900 questionnaires were returned) the catchment appeared to be larger than suggested by previous reports. A new survey was therefore undertaken in late 2017 and this identified that 75% of visitors live within 6.2km of the SAC, although visitor origin is not evenly distributed around the SAC; in Essex the major points of visitor origin are within 3km of the SAC, while in London the points of visitor origin are much more dispersed.
- 5.2 In September 2018, Natural England issued an Interim Advice Letter⁴⁵ to those local authorities that are located around Epping Forest SAC, including Brentwood District Council. This letter provided interim advice regarding the 'Emerging strategic approach relating to the Epping Forest Special Area of Conservation (SAC) Mitigation Strategy. Interim advice to ensure new residential development and any associated recreational impacts on Epping Forest SAC are compliant with the Habitats Regulations'. The Interim Advice Letter identified that as part of the work required to produce the Mitigation Strategy, 'Footprint Ecology undertook a visitor survey to identify a recreational zone of influence and to identify the distance the majority of visitors will travel to visit Epping Forest SAC. This report identified that 75% of visitors travelled up to 6.2Km to the SAC. Natural England therefore advises that in this interim period a zone of influence of 6.2Km is used to determine whether residential applications will have a recreational impact on Epping Forest SAC.'
- 5.3 As such it is this distance of 6.2km from Epping Forest SAC site boundary that is considered to be the recreational Zone of Influence (ZoI). Brentwood District just clips this zone (as noted in the Natural England advice); however the area within the 6.2km ZoI is (from review of freely available online imagery and mapping) woodland and arable farmland located in a rural setting and is highly unlikely to receive net new residential development (as opposed to replacement dwellings) within the Plan period. The nearest area that *might* receive a very small net increase in dwellings during the plan period due to (for example) windfall is Navestock Heath but this is a very small village and is situated well outside the 6.2km zone, being 9km from the SAC at its closest. The nearest suburban or urban area to the SAC (most likely to receive net new housing) is Pilgrims Hatch located 13km from the SAC. It is therefore concluded that recreational pressure on Epping Forest SAC is not a realistic linking impact pathway linking to the Brentwood Plan. As such it is considered that the Plan will not result in an adverse effect alone or in combination.

Atmospheric Pollution

5.4 Epping Forest SAC is known to be adversely affected by relatively poor local air quality alongside the roads that traverse the SAC and this has been demonstrated to have negatively affected the epiphytic lichen communities of the woodland. The nature of the road network around Epping Forest SAC is such that journeys between a number of key settlements around the Forest by car, van or bus effectively necessitate traversing the SAC. Modelling undertaken for the West Essex/East Hertfordshire Housing Market Area (HMA) authorities in 2016 indicated that even on B roads through the SAC vehicle flows are substantial (e.g. a 2014 base case of c.20,000 AADT on the B1393 with roadside NOx concentrations of 60µgm⁻³, twice the critical level) while the A121 between Wake Arms Roundabout and the M25 had 2014 base flows of 25,000 AADT. Moreover, lengthy queues are known to build around

⁴³ Alison Millward Associates. 2011. Epping Forest Visitor Survey 2011: Results Summary

⁴⁴ Footprint Ecology (2016). Initial review of current visitor data for Epping Forest

⁴⁵ Natural England (20th September 2018) Interim Advice Letter relating to 'Emerging strategic approach relating to the Epping Forest Special Area of Conservation (SAC) Mitigation Strategy. Interim advice to ensure new residential development and any associated recreational impacts on Epping Forest SAC are compliant with the Habitats Regulations'

most arms of Wake Arms Roundabout, which increases emissions compared to the same volume and composition of free-flowing traffic. In response to this, the HMA Authorities have co-signed a Memorandum of Understanding⁴⁶ (MoU) that identifies the need for a mitigation strategy to address potential increases in atmospheric pollution at Epping Forest SAC as a result of planned development. However, these data are now out of date and at the time of writing (October 2018) were being updated.

- 5.5 The modelling being undertaken for the West Essex/East Herts HMA is well advanced but has not yet been published and is subject to further changes. However, it is understood that the modelling clearly indicates that for the key roads through the SAC in Essex projected housing and employment growth arising from outside the HMA plays a negligible contribution in forecast changes in traffic and thus roadside air quality. This is due to the minimal role that the modelled roads play in journeys to work for people resident outside the West Essex/East Herts HMA. Indeed, changes in traffic flows on the modelled roads are overwhelmingly dominated by housing and employment growth in Epping Forest District itself, with even other parts of the same HMA (Harlow, East Herts and Uttlesford) playing a minimal role.
- 5.6 While parts of the SAC also lie within 200m of the A12 and A406 in the London Borough of Waltham Forest, 2011 Census data indicate that only 305 road-based journeys to work currently arising from Brentwood District are to destinations which *might* involve using those routes i.e. destinations in the London Boroughs of Waltham Forest, Haringey or Hackney. This is less than 2% of the 17,752 daily journeys to work to other districts that arise from Brentwood and is likely to be considerably less than 1% of all journeys to work for Brentwood residents when one adds in those people who both live and work in Brentwood. In short, routes through Epping Forest SAC play a negligible role in journeys to work for Brentwood residents and there is no reason to expect this pattern to change.
- 5.7 It is therefore considered that a conclusion of no adverse effects on integrity alone or in combination can be reached with regard to the Brentwood Plan. This conclusion will be reviewed as necessary once the modelling data for the West Essex/East Herts HMA are published.
- 5.8 Notwithstanding this conclusion, it should be acknowledged that the Plan provides positive policies that aim to reduce and/ or limit the increase of atmospheric pollution contributions as a result of development associated with the Local Plan. These are as follows:
 - NE08: Air Quality
 - SP08: Planning and Design for Resilience to Climate Change
 - SP09: Future Proofing
 - POLICY BEXX: Strategic Transport Infrastructure
 - BEXX: Car-light Development
 - BEXX: Sustainable Means of Travel and Walkable Streets
 - BEXX: Electric and Low Emission Vehicle
 - BEXX: Carbon Reduction, Renewable Energy and Water Efficiency
 - BEXX: Improving Energy Efficiency in Existing Dwellings
 - X: Communications Infrastructure
 - SP16: Creating Successful Places
- 5.9 This reinforces the conclusion of no adverse effect on integrity.

⁴⁶ MoU on. Manging the impacts of growth within the West Essex/ East Hertfordshire Housing Market Area on Epping Forest Special Area of Conservation (draft September 2016)

6. Appropriate Assessment: Essex Coastal European Sites

Recreational Pressure

6.1 It has been identified that coastal European sites in Essex are vulnerable to increased recreational pressure. As such Natural England has been working with neighbouring district, borough and county authorities to devise a strategic mitigation strategy to ensure that the increase in residential development within these authorities does not affect the sensitive European sites. In November 2017, Natural England issued interim advice regarding the 'Essex Recreational Disturbance Avoidance and Mitigation Strategy (RAMS)'. This identified core recreational catchments for the Essex Coastal sites as follows:

Table 4: The Recreational Zone of Influence for Essex Coastal European Sites⁴⁷

European Site	Zone of Influence (km)	Distance from the Borough Boundary (km)
Essex Estuaries SAC	24	12
Thames Estuary and Marshes Ramsar and SPA	10	8.3
Crouch and Roach Estuaries Ramsar and SPA	10	12.4
Benfleet and Southend Marshes Ramsar and SPA	10	13.4
Blackwater Estuary Ramsar and SPA	8	19.8

- 6.2 Table 4 identifies that two European sites have a recreational Zone of Influence that extends to Brentwood Borough. These are Essex Estuaries SAC (with a recreational Zone of Influence of 24km) and Thames Estuary and Marshes Ramsar and SPA (with a recreational Zone of Influence of 10km).
- 6.3 It is these two European sites (Essex Estuaries SAC and the Thames Estuary and Marshes Ramsar and SPA) that are discussed further within this Chapter. Due to the distances involved the three remaining Essex Coastal sites (Crouch and Roach Estuaries SPA and Ramsar site, Benfleet and Southend Marshes Ramsar and SPA, and Blackwater Estuary Ramsar and SPA site) can be screened out as recreational pressure from Brentwood is not a realistic linking impact pathway.
- 6.4 The entire of Brentwood District is located within 24km of the Essex Estuaries SAC, whilst a portion of the District is located within 10km of the Thames Estuary and Marshes SPA and Ramsar site, as such any net new residential development within Brentwood District has the potential to result in Likely Significant Effect in combination. The following policies provide for development within these recreational Zones of Influence and thus, unmitigated, potentially result in Likely Significant Effect:
 - SP05: Housing Growth: Housing Growth
 - BEXX: Provision for Gypsies and Travellers
 - BEXX: Regularising Suitable Existing Traveller Sites
 - GV1: Dunton Hills Garden Village
- 6.5 Brentwood Council recognises that there are significant threats to the Essex Estauries European sites due to a net increase in residential development. As such the Council have also produced protective policies that safeguard the local environment and the European Sites that lies within catchment of the Brentwood Borough. These policies and policy text include:
 - NE03: Recreational Disturbance Avoidance and Mitigation Strategy (RAMS): 'New development will need to consider on-site options for recreational disturbance impact mitigation and make appropriate financial

contributions towards off site mitigation as prescribed in the Essex Coastal 'RAMS' mitigation strategy and the Epping Forest 'RAMS' mitigation strategy (as applicable).

Prior to RAMS completions, the Council will seek proportionate contributions from proposed residential development to deliver all measures identified (including strategic measures) through project level HRAs, or otherwise, to mitigate any recreational disturbance impacts in compliance with the Habitat Regulations and Habitats Directive.

This policy should be read in conjunction with Policy XXX: Wildlife and Nature Conservation XXX Development Contributions.'

- 6.6 A single recommendation is made with regards to NE04: Wildlife and Nature Conservation: It is recommended that policy wording is amended to ensure that development will not be permitted where an adverse effect on the in integrity of a European site will result.
 - NE04: Wildlife and Nature Conservation: 'Sites of Special Scientific Interest (SSSIs), National Nature Reserves (NNR), Special Protection Areas (SPAs), Special Areas of Conservation (SACs) and Ramsar sites as shown

⁴⁷ Taken from Natural England interim guidance letter dated 16th November 2017 'Essex Recreational disturbance Avoidance and Mitigation Strategy (RAMS) – Interim advice to ensure new residential development and any associated recreational disturbance impacts on European designated sites are compliant with the Habitats Regulations'

on the Proposals Map - are unique and irreplaceable habitats and will require a full assessment in line with European legislation.'

- NE05: Ecology and Biodiversity: 'All development proposals should:
 - seek opportunities to support and integrate biodiversity in the built environment;
 - conserve, protect and enhance the network of habitats, species and sites (both statutory and nonstatutory, including priority habitats and species) of international, national and local importance commensurate with their status;
 - not result in any unacceptable impact on biodiversity and geodiversity, and mitigate all unavoidable impacts; and
 - deliver a net gain in biodiversity where possible, by creating, restoring and enhancing habitats that are of particular relevance and benefits in the local context.'
- 6.7 It is noted that currently, no bespoke visitor survey data exists for the Thames Estuary & Marshes SPA/Ramsar to inform the recreational Zone of Influence. However, the evidence base for recreation disturbance for this site and all other internationally designated sites within the Essex Coastal region is to be refined, as required, through the addition of bespoke visitor surveys. It is therefore possible that the recreational Zone of Influence for each site will be subject to change. However, in light of the most current data the above Zones of Influence stand. As the RAMS development progresses, Natural England's advice and recommendation may change. As such this HRA assessment may require updating in time. However, **it can be concluded that increased recreational pressure stemming from increased residential development provided by the Plan will not affect the integrity of any of the Essex Coastal European sites in combination.**

Water Quality

- 6.1. Five wastewater treatment works (WwTW) serve the urban areas in Brentwood. These are:
 - Doddinghurst WwTW
 - Ingatestone WwTW
 - Shenfiels and Hutton WwTW
 - Upminster WwTW
 - Brentwood WwTW
- 6.8 These are all provided by Anglian Water other than Brentwood WwTW which is provided by Thames Water (see Table 3 for the catchments of each of these WwTW).
- 6.9 The Brentwood Scoping and Outline Water Cycle Study (WCS) (2011)⁴⁸ identified that '*Brentwood WwTW and Shenfield and Hutton WwTW have the greatest spare flow capacity, and should be able to accommodate more of the proposed development. Upminster works also has capacity for additional growth*'. It identified that both Doddinghurst WwTW and Ingatestone WwTW have limited head room capacities. The Waste Water Treatment Works Needs Assessment in Essex and Southend-on-Sea (2014)⁴⁹ identified that for Ingatestone WwTW '*planned growth will bring the WwTWs close to its limit. Additionally, the WwTWs must currently treat wastewater to a high standard which could potentially limit growth*'. In 2014 this WwTW only had capacity for an additional 55 dwellings. Additionally, the WCS suggests that for the purposes of Plan preparation, these two WwTW should be considered to be at capacity and not able to accommodate increased growth.
- 6.10 Water from both Ingatestone WwTW (serves the settlement of Ingatestone) and Doddinghurst WwTW (serves the settlements of Doddinghurst and Kelvedon Hatch) discharges into the River Wid, and ultimately the River Chelmer before flowing into the River Blackwater and the Blackwater Estuary SPA and Ramsar site and the Essex Estuaries SAC more than 19km downstream from the Borough boundary (in a straight line).

⁴⁸ <u>http://www.brentwood.gov.uk/pdf/21032011165157u.pdf</u> [accessed 25/01/2018]

⁴⁹ URS Waste Water Treatment Works Needs Assessment in Essex and Southend-on-Sea (2014) <u>https://www.essex.gov.uk/Environment%20Planning/Planning/Minerals-Waste-Planning-Team/Planning-Policy/Documents/ECC WwTW Final Part A.pdf[accessed</u> 25/01/2018]

- 6.11 Due to the estuarine conditions and dynamic tidal processes in the Essex Coastal European sites, water conditions are essentially cold and relatively turbid with high levels of water movement and wave action. As such, inflows into the estuarine sites are constantly changing and water is flushed away from the area dispersing any waste water and associated sedimentation, phosphates, ammonia and Biochemical Oxygen Demand (BOD). In addition, the conditions described above tend to result in the various Essex estuaries being less susceptible to excessive macro-algal summer growth and winter persistence (and thus smothering of underlying sediments) than the estuaries in the warmer, clearer, calmer waters of the south coast such as the Solent estuaries, notwithstanding their generally hyper-nutrified status. This is supported by the analyses contained in several of the Environment Agency's Stage 3 Review of Consents reports for these estuaries. As such, the features for which these sites are designated (see Appendix A) are likely to be affected by wastewater discharge to a much smaller extent than other estuarine sites, particularly at distances of more than 19km, with consequent extensive dilution.
- 6.12 It is ultimately to the responsibility of the competent authority (in this case the Environment Agency) and water company to determine headroom capacities of WwTW such as Ingatestone and Doddinghurst and it is the Environment Agency's Review of Consents process that will ultimately determine whether amended consents can be granted. However, the Council needs confidence in the deliverability of its housing allocations. In light of the fact that both Ingatestone and Doddinghurst WwTW's are at capacity, it is recommended that the Council liaise with Thames Water and Anglian Water to ensure that development is delivered in locations that can accommodate increased sewage inputs. If upgrades to these two WwTW, or novel treatment solutions, are required then either the distribution of housing or the housing trajectory should reflect the need for those upgrades by (for example) avoiding front-loading of growth in the catchments of these WwTWs.
- 6.13 To aid this decision, process it is noted that Plan policy provides the following protective policies:
 - NE10: Flood Risk. 'Applications will need to demonstrate that the sewerage provider has been contacted to
 identify whether the sewerage network has adequate capacity both on and off site to serve the development
 and to assess the need to contribute to any additional connections for the development to prevent flooding or
 pollution of land and water courses'
- 6.14 However, it is considered that a conversation between the Council and the relevant water companies is also required at a strategic level. Once this conversation has taken place and it can be confirmed that the water companies have no core concerns, it will be possible to conclude no adverse effect on integrity from the Brentwood Plan.

7. Summary of Recommendations and Conclusions

- 7.1 The preceding assessment undertakes an assessment against the Habitats Regulations of the Draft Regulation 19 Local Plan
- 7.2 Following the Likely Significant Effects test (conducted in Appendix C) it was considered that Plan policy could result in the Likely Significant Effects resulting in the following linking impact pathways:
 - Epping Forest: atmospheric pollution
 - Essex Coast European sites: recreational pressure
 - Essex Coast European sites: adverse water quality
- 7.3 It is these that were subject to Appropriate Assessment.
- 7.4 A single recommendation is made with regards to NE04: Wildlife and Nature Conservation: It is recommended that policy wording is amended to ensure that development will not be permitted where an adverse effect on the in integrity of a European site will result.
- 7.5 It is also recommended that (unless it has already taken place) the Council seeks confirmation from the relevant water companies that their housing/employment distribution and trajectory does not pose issues with regard to the known capacity limitations of Ingatestone and Doddinghurst WwTWs.
- 7.6 Following Appropriate Assessment (conducted in Chapter 5 for Epping Forest and Chapter 6 for the Essex Coastal European sites), it was concluded that the Brentwood Local Plan provides sufficient policy framework to ensure that no adverse effects on the integrity of European sites results.

Appendix A European Designated Sites Background

Epping Forest SAC

Introduction

Part of the Epping Forest SAC is located within Epping Forest District. Approximately 70% of the 1,600 hectare (ha) site consists of broadleaved deciduous woodland, and it is one of only a few remaining large-scale examples of ancient wood-pasture in lowland Britain. Epping Forest SAC supports a nationally outstanding assemblage of invertebrates, a major amphibian interest and an exceptional breeding bird community.

Reasons for Designation⁵⁰

Epping Forest qualifies as a SAC for both habitats and species. The site contains the following Habitats Directive Annex I habitats:

- Beech forests on acid soils with *llex* and some *Taxus* in the shrublayer;
- Wet heathland with cross-leaved heath; and
- Dry heath.

The site also contains the Habitats Directive Annex II species, stag beetle *Lucanus cervus*, with widespread and frequent records.

Current Pressures and Threats⁵¹

- Air pollution
- Under grazing
- Public disturbance
- Changes in species distribution
- Inappropriate water levels
- Water pollution
- Invasive species
- Disease

Conservation Objectives

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;

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

 ⁵⁰ JNCC. (2015) Natura 2000 Standard Data Form: Epping Forest SAC.
 ⁵¹ Natural England. (2015) Site Improvement Plan: Epping Forest SAC.

Thames Estuaries and Marshes SPA and Ramsar Site

Introduction

The Thames Estuaries and Marshes comprise intertidal mudflats visible at low tide, saltmarsh and complex channel systems across a 4802.5ha area along the outer Thames Estuary. In addition, a series of disused quarry pits have been transformed to create an extensive series of ponds and lakes at Cliffe Pools. Levees and seawalls bound most intertidal areas, occasionally featuring small beaches. These coastal features support internationally important numbers of wintering avocet, dunlin, grey plover, knot, redshank and hen harrier, and summer populations of black-tailed godwit and ringed plover. The site also qualifies as a Ramsar site on account of the

saltmarsh and grazing marsh supporting diverse and internationally important assemblages of wetland plants and invertebrates.

The Thames Estuaries and Marshes SPA and Ramsar site consists of two Sites of Special Scientific Interest: Mucking Flats and Marshes SSSI, and South Thames Estuary and Marshes SSSI. Of these Sites, only Mucking Flats and Marshes SSSI is located in Essex, whereas South Thames Estuary and Marshes SSSI is located across the Thames in northern Kent.

Reasons for Designation

The Thames Estuaries and Marshes site is designated as an SPA⁵² for its Birds Directive Annex I and Ramsar site under criterion 6⁵³ for species that over-winter and over-summer. Over-summering species include:

- Ringed plover Charadrius hiaticula; and
- Black-tailed godwit *Limosa limosa islandica*.

Over-wintering species include:

- Grey plover *Pluvialis squatarola*;
- Red knot Calidris canutus islandica;
- Dunlin Calidris alpina alpina; and
- Common redshank Tringa totanus totanus.

In addition, the site qualifies as a Ramsar site under criterion 2⁵⁵, by supporting the endangered least lettuce *Lactuca saligna* and at least 14 nationally scarce plants of wetland habitats, including bulbous foxtail *Alopecurus bulbosus*.

Current Pressures and Threats⁵⁴

- Coastal squeeze
- Public access/disturbance
- Invasive species
- Changes in species distribution
- Fisheries: commercial marine and estuarine
- Vehicles: ilicit
- Air pollution: risk of atmospheric nitrogen

Conservation Objectives⁵⁵

With regard to the SPA and the individual species and/or assemblage of species for which the site has been classified (the 'Qualifying Features'), and subject to natural change;

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;

- The extent and distribution of the habitats of the qualifying features;
- The structure and function of the habitats of the qualifying features;
- The supporting processes on which the habitats of the qualifying features rely;
- The population of each of the qualifying features; and,
- The distribution of the qualifying features within the site.

Essex Estuaries SAC

Habitats Regulations Assessment of Brentwood District Council Draft Local Plan: Preferred Site Allocations.

 ⁵² http://incc.defra.gov.uk/page-2042 [accessed 18/01/2018]
 ⁵³ http://incc.defra.gov.uk/pdf/RIS/UK11069.pdf [accessed 18/01/2018]
 ⁵⁴ http://publications.naturalengland.org.uk/publication/6270737467834368 [accessed 18/01/2018]
 ⁵⁵ http://publications.naturalengland.org.uk/file/5268280864407552 [accessed 18/01/2018]

Introduction

The SAC comprises a large estuarine site along the Essex coastline of largely undeveloped coastal plain estuaries with associated open coast mudflats and sandbank and encompasses the Colne, Blackwater, Crouch and Roach estuaries. The Essex Estuaries SAC supports a diverse range of marine and estuarine sediment communities which in turn support diverse and unusual marine communities. The site is designated for the presence of several European designated priority habitats, including Atlantic salt meadows⁵⁶.

This SAC overlaps with several protected areas, including Blackwater Estuary Ramsar/SPA, Colne Estuary Ramsar/SPA, Crouch and Roach Estuaries Ramsar/SPA, Dengie Ramsar/SPA, Foulness Ramsar/SPA and Outer Thames SPA. In addition, the SAC consists of the following seven SSSIs:

- Blackwater Estuary SSSI
- Colne Estuary SSSI
- Crouch and Roach Estuary SSSI
- Dengie SSSI
- Foulness SSSI
- The Cliff, Burnham-On-Crouch SSSI
- Upper Colne Marshes SSSI

Reasons for Designation⁵⁸

Essex Estuaries qualifies as a SAC through its habitats, containing the Habitats Directive Annex I habitat:

- Estuaries an extensive, continuous area of estuarine habitat;
- Mudflats and sandflats not covered by seawater at low tide;
- Salicornia and other annuals colonizing mud and sand;
- Spartina swards;
- Atlantic salt meadows; and,
- Meditteranean and thermo-Atlantic halophilous scrubs.

Current Pressures and Threats⁵⁷

- Coastal squeeze
- Public access/disturbance
- Invasive species
- Changes in species distribution
- Fisheries: commercial marine and estuarine
- Vehicles: ilicit
- Air pollution: risk of atmospheric nitrogen deposition
- General planning permission

Conservation Objectives⁵⁸

With regard to the SAC and the natural habitats and/or species for which the site has been designated (the 'Qualifying Features'), and subject to natural change:

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring:

• The extent and distribution of qualifying natural habitats;

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

Crouch and Roach SPA and Ramsar Site

Introduction

The Crouch and Roach Estuaries is located on the Essex south coast spanning across 1735.58ha. The estuaries partly form from the River Crouch which is predominantly located between two ridges of London Clay and partly from the River Roach, which is set between areas of brick earth and loams. Coastal squeezing of the intertidal zone has left a narrow strip of tidal mud, which is used by significant bird numbers. The site is of importance for wintering waterbirds, such as the dark-bellied Brent goose *Branta b. bernicla*⁵⁹.

The Crouch and Roach Estuaries SPA and Ramsar site consists of a single Sites of Special Scientific Interest, Crouch and Roach Estuaries SSSI.

Reasons for Designation

The Crouch and Roach site is designated as an SPA⁶¹: for its Birds Directive Annex I and Ramsar site under criterion 6⁶⁰ for species that over-winter. This designation is provided for the presence of an internationally important population of dark-bellied Brent goose *Branta bernicla bernicla* (1% of total wintering Western European population).

In addition, the site qualifies as a Ramsar under criterion 2⁶¹, by supporting the vulnerable, endangered and at least 13 nationally scarce plants of wetland habitats, including slender hare's ear *Bupleurum tenuissimum*.

⁵⁶ http://jncc.defra.gov.uk/protectedsites/sacselection/sac.asp?EUCode=UK0013690 [accessed 18/01/2018]

⁵⁷ http://publications.naturalengland.org.uk/publication/5459956190937088 [accessed 08/01/2018]

⁵⁹ <u>http://jncc.defra.gov.uk/default.aspx?page=2019</u> [accessed 18/01/2017]

⁶¹ http://jncc.defra.gov.uk/pdf/RIS/UK11058.pdf[accessed 18/01/2017]

Several important invertebrate species are also present on site, including scarce emerald damselfly *Lestes dryas* and the large horsefly *Hybomitra expollicata*.

Current Pressures and Threats⁶²

- Coastal squeeze
- Public access/disturbance
- Invasive species
- Changes in species distribution
- Fisheries: commercial marine and estuarine
- Vehicles: ilicit
- Air pollution: risk of atmospheric nitrogen

Conservation Objectives⁶³

With regard to the SPA and the individual species and/or assemblage of species for which the site has been classified (the 'Qualifying Features'), and subject to natural change;

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring:

- The extent and distribution of the habitats of the qualifying features
- The structure and function of the habitats of the qualifying features
- The supporting processes on which the habitats of the qualifying features rely
- The population of each of the qualifying features, and,
- The distribution of the qualifying features within the site.

Benfleet and Southend Marshes SPA and Ramsar Site

Introduction

The Benfleet and Southampton Marshes are located on the north shore of the Outer Thames Estuary in Essex. The site covers a 2251.31ha area comprising an extensive series of saltmarshes, cockle shell banks, mudflats and grassland that support a diverse flora and fauna. The productive mudflats, cockle shell banks and saltmarsh

⁶² <u>http://publications.naturalengland.org.uk/publication/6270737467834368</u> [accessed 18/01/2018]

⁶³ file:///C:/Users/Ashley.Welch.NA/Downloads/UK9009244-Crouch-and-Roach-Estuaries-(Mid-Essex-Coast-Phase-3)-SPA-V2.pdf [accessed 18/01/2018] communities provide a wide range of feeding and roosting opportunities for internationally important numbers of wintering wildfowl and waders, such as the over-wintering population of dark-bellied brent geese⁶⁴.

The Benfleet and Southend Marshes SPA/Ramsar consist of a single Site of Special Scientific Interest, Benfleet and Southend Marshes SSSI.

Reasons for Designation

The Thames Estuaries and Marshes site is designated as an SPA⁶⁸: for its Birds Directive Annex I and Ramsar site under criterion 6⁶⁵ for on passage and over-wintering species. On passage species include:

Ringed plover (Charadrius hiaticula);

Over-wintering species include:

- Dark-bellied Brent goose
- Grey plover
- Knot

Current Pressures and Threats⁶⁶

- Coastal squeeze
- Public access/disturbance
- Invasive species
- Changes in species distribution
- Fisheries: commercial marine and estuarine
- Vehicles: ilicit
- Air pollution: risk of atmospheric nitrogen

Conservation Objectives⁶⁷

With regard to the SPA and the individual species and/or assemblage of species for which the site has been classified (the 'Qualifying Features'), and subject to natural change;

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;

- The extent and distribution of the habitats of the qualifying features
- The structure and function of the habitats of the qualifying features
- The supporting processes on which the habitats of the qualifying features rely
- The population of each of the qualifying features, and,
- The distribution of the qualifying features within the site.

Blackwater Estuary SPA and Ramsar Site

Introduction

Blackwater Estuary is the largest estuary in Essex covering a 4395.15ha area along the Essex coastline. The estuary comprises mudflats fringed by saltmarsh on the upper shores, and shingle, shell banks and offshore islands

⁶⁷ file:///C:/Users/Ashley.Welch.NA/Downloads/UK9009171-Benfleet-and-Southend-Marshes-SPA-V2.pdf [accessed 18/01/2018]

⁶⁴ <u>http://jncc.defra.gov.uk/page-2014-theme=default</u> [accessed 19/01/2018]

⁶⁵ http://jncc.defra.gov.uk/pdf/RIS/UK11006.pdf [accessed 18/01/2018]

⁶⁶ http://publications.naturalengland.org.uk/publication/6270737467834368 [accessed 18/01/2018]

featuring on the tidal flats. In addition, the surrounding contains terrestrial habitat of high conservation importance including the sea wall, ancient grazing marsh, fleet and ditch systems, and semi-improved grassland. The diversity of estuarine habitats results in the sites being of importance for a range of overwintering waterbirds⁶⁸. The site is also important during the summer for breeding terns. In addition to the ornithological interest, the site also qualifies as a Ramsar site on account of it supporting 7% of Britain's saltmarshes. The saltmarsh also supports diverse and internationally important assemblages of wetland plants and invertebrates, including the endangered water beetle *Paracymus aeneus*, and vulnerable damselfly *Lestes dryas*⁶⁹.

The Thames Estuaries and Marshes SPA/Ramsar consist of a single Site of Special Scientific Interest, Blackwater Estuary SSSI.

Reasons for Designation

The Blackwater Estuary site is designated as an SPA⁷²: for its Birds Directive Annex I and Ramsar site under criterion 6⁷³ summer breeding, on passage, and over-wintering species. Summer breeding species include:

• Little tern *Sternula albifrons*.

On passage species include:

• Ringed plover Charadrius hiaticula.

Over-wintering species include:

- Avocet Recurvirostra avosetta;
- Golden plover *Pluvialis apricaria*;
- Hen harrier Circus cyaneus;
- Ruff *Philomachus pugnax*;
- Black-tailed godwit Limosa limosa islandica;
- Dark bellied brent goose Branta bernicla bernicla;
- Grey plover Pluvialis squatarola;
- Dunlin Calidris alpina alpina;
- Common redshank *Tringa totanus totanus*;
- Shelduck Tadorna tadorna.

In addition, the site qualifies as a Ramsar site under criterion 2⁷³, by supporting at least 16 British Red Data Book invertebrate species, including the endangered water beetle *Paracymus aeneus*, vulnerable scarce emerald

⁶⁸ <u>http://jncc.defra.gov.uk/default.aspx?page=2020</u> [accessed 19/01/2018]

⁶⁹ http://jncc.defra.gov.uk/pdf/RIS/UK11007.pdf [accessed 19/01/2018]

damselfly Lestes dryas, the fly species Aedes flavescens, Erioptera bivittata, Hybomitra expollicata and the spiders Heliophanus auratus and Trichopterna cito.

Current Pressures and Threats⁷⁰

- Coastal squeeze
- Public access/disturbance
- Invasive species
- Changes in species distribution
- Fisheries: commercial marine and estuarine
- Vehicles: ilicit
- Air pollution: risk of atmospheric nitrogen

Conservation Objectives⁷¹

With regard to the SPA and the individual species and/or assemblage of species for which the site has been classified (the 'Qualifying Features'), and subject to natural change;

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring:

- The extent and distribution of the habitats of the qualifying features;
- The structure and function of the habitats of the qualifying features;
- The supporting processes on which the habitats of the qualifying features rely;
- The population of each of the qualifying features; and,
- The distribution of the qualifying features within the site.

⁷⁰ http://publications.naturalengland.org.uk/publication/6270737467834368 [accessed 18/01/2018]

⁷¹ http://publications.naturalengland.org.uk/publication/4888693533835264 [accessed 18/01/2018]



Figure A1: Locations of Internationally Designated Sites and Site Allocations

Appendix C Likely Significant Effects Test of Plan Policies

7.7 In the following screening table, where Policies are coloured green in the 'HRA implications' column, this indicates that the Policies do not contain potential impact pathways linking to European sites, and have therefore been screened out from further consideration in isolation. Where Policies an Site Allocations are coloured orange in the 'HRA Implications' column, this indicates that the Policies and Site Allocations have potential impact pathways linking to European sites, and have therefore been screened in for further consideration in isolation in isolation in isolation in isolation within this report.

Policy Description HRA Implications	
-------------------------------------	--

SP01: Sustainable	When considering development proposals, the Council will take a positive approach that reflects	No Likely Significant Effect
Development	the presumption in favour of sustainable development contained in the National Planning Policy	This policy describes various planning
	Framework. The Council will always work proactively with applicants to jointly find solutions which mean that	requirements of development proposals that
	proposals for sustainable development can be approved wherever possible, and to secure	contribute to the Council's Strategic Objectives.
	development that improves the economic, social and environmental conditions in the area.	This includes the safeguarding and where
	Planning applications that accord with policies in this Local Plan (and, where relevant, with	possible the enhancement of economic, social
	polices in relevant Development Plan Documents, and Neighbourhood Plans) will be approved	and environmental conditions of the Borough.
	without delay, unless material considerations indicate otherwise.	This policy is a development management
	Development will be supported and is considered to contribute towards delivering the Local Plan	policy that does not in itself provide for any
	Strategic Objectives and to be sustainable where it:	quantum, type or location of development and as such there are no linking impact pathways
	- has no unacceptable effect on visual amenity, the character	present.
	appearance of the surrounding area;	prosent
	 provides satisfactory means of access to the site for vehicles, cyclists 	
	and pedestrians and parking and servicing arrangements;	
	 ensures the transport network can satisfactorily accommodate the 	
	travel demand generated and traffic generation would not give rise to	
	adverse highway conditions or highway safety concerns or	
	unacceptable loss of amenity by reason of number or size of vehicles;	
	- has no unacceptable effect on health, the environment or amenity due	
	to the release of pollutants to land, water or air (light, noise pollution,	
	vibration, odour, smoke, ash, dust and grit);	
	- causes no unacceptable effects on adjoining sites, property or their	
	occupiers through excessive noise, activity or vehicle movements;	
	overlooking or visual intrusion; harm to or loss of outlook, privacy or	
	daylight/sunlight enjoyed by occupiers of nearby properties;	
	- takes full account of opportunities to incorporate biodiversity in	
	developments;	
	- delivers good design	
	- preserves and enhances the character and settlement setting of the	
	borough	

Policy	Description	HRA Implications	
	 when considering the impact of development on the significance of a designated heritage asset, greater weight should be given to the assets conservation and enhancement; results in no net loss of residential units; and new development would be required to mitigate its impact on local services and community infrastructure. 		
SP03: Health Impact Assessments (HIAs)	 Development with the following characteristics are required to complete and submit as part of the planning application a Health Impact Assessment: Major development proposals in areas with existing air quality exceedances, or where proposals are likely to create exceedances proposals which are delivering necessary social / community infrastructure requirements (education, health, leisure, open spaces) proposals which deliver land uses which are known to be, or perceived as being detrimental to health, such as A5 uses or betting shops developments that are 50 or more units (or less than 50 units at the discretion of the planning authority where the number of units could propose a significant impact on the community and infrastructure) and non-residential developments in excess of 1,000m². 	No Likely Significant Effect This policy addresses the heath requirements of development with particular emphasis on air quality and effects to local people and communities. This policy does therefore not allocate land for development rather provide mitigation for health impacts of development and is therefore not likely to pose as a likely significant effect to European Sites.	
SP04: Managing Growth	 New development within the borough will be directed towards: The site allocations set out in section xxxx Highly accessible locations along transit corridors The South Brentwood Growth Corridor is the focus for the majority of new housing and employment provision. xxxxxx Development is required to demonstrate how it will address the policies detailed in these site allocation policies. Development within or in part of the site allocation is required to address the priorities and deliver the identified land uses, infrastructure requirements, and design and delivery principals. The borough's Town Centre of Brentwood will be the focus for major retail development xxxxxxx Any other key growth area strategy points to elaborate on?? Development will be required to support the deliver of the necessary new infrastructure to support the growth, in line with policies xxxx 	No Likely Significant Effect This is a development management policy that does not identify any exact location, type or quantum of development. As such this policy is not expected to pose as a likely significant effect to the integrity of European Sites that lie within catchment of the Brentwood Borough.	

Policy	Description	HRA Implications
SP04: Developer Contributions	 Developments will be expected to: Pay community infrastructure level charges required by any charging schedules which are in operations for the borough Enter in section 106 agreements to provide affordable housing and make provision to mitigate the impacts of the development where necessary or appropriate, having regard to the relevant supplementary planning documents or guidance; and Submit a financial viability assessment as part of the planning application, where required, which may be subject to an intendent scrutiny by appointed experts, at the applicants cost, where they do not meet the planning policy requirements or do not propose to deliver the required section 106 planning obligations. 	No Likely Significant Effect This policy ensures that developers make either financial contributions or provisions to infrastructure to ensure that development does not impact on operational facilities. This policy is therefore not expected to have an adverse impact on the integrity of European Sites within catchment of Brentwood.
SP05: Construction Management	 All major development should sign up to the considerate constructors' scheme, or equivalent. During construction, major development is required to: Comply with the non-road mobile machinery low emissions zone requirements Minimise levels of noise, vibration, artificial light, odour, air quality, fumes, or dust pollution Consider the routing, timing and frequency of heavy goods vehicle movements to reduce their impact on vulnerable road users, local amenity and congestion Use, where available, construction and or freight consolidation centres Consider the impact of construction on water supply, floor risk and drainage and implement suitable mitigation measures where required. Major development must consider the cumulative impact of other major development occurring in the vicinity on levels of noise, vibration, artificial light, odour, air quality, fumes or dust pollution and plan timings of works, delivery timings and routes and location of equipment accordingly to reduce this cumulative impact. Development is required to employ the highest standards of sustainable construction, including: Sustainable construction methods, such as use of sustainably sourced materials recycled materials The reuse of demolished material from development site, where practical in order to minimise the transportation of waste and reduce carbon emissions. The sustainable disposal of material 	No Likely Significant Effect This policy outlines that all development should sign up and adhere to the considerate constructors' scheme this ensures that the highest level of health and safety and environmental standards are met both on site and within the wider area during construction. This includes aspects of noise pollution, air quality and drainage. As such this policy is not expected to pose as a likely significant effect to European Sites and is therefore screened out from further discussion.
SP06: Monitoring	Not yet described	No policy available to asses, however it is considered unlikely that a 'monitoring' policy will have any HRA implications.

Policy	Description	HRA Implications
SP08: Planning and Design for Resilience to Climate Change	 All planning applications should give an appropriate consideration to efficient resource management as well as methods for mitigating and adapting to the climate change. New developments and conversion of existing buildings should seek to: reduce transport related carbon emissions through location and the promotion of sustainable modes of transport in line with Policy X; reduce greenhouse gas emission during construction and operation in line with Policy X, transport related carbon emissions; clean and efficient use of resources, including land take, energy and water in line with Policy X (Energy, Water, SUD, Density, Transport, Waste Management??); ensure buildings, infrastructure and construction techniques are designed to adapt to a changing climate and to avoid contributing to its impacts including urban heat island effect in line with Policy X; provide a safe and secure environment which is resilient against the impacts of extreme weather events in line with Policy X; and enhance biodiversity and ecological resilience where possible, by means such as Green and Blue Infrastructure or new habitat creation in line with Policy X. 	No Likely Significant Effect This policy describes the Council's aims to ensure that development is appropriately mitigated against climate change. This policy is therefore not considered to pose as a likely significant effect to the integrity of European Sites within catchment of Brentwood Borough.

Policy	Description HRA Implications	
SP09: Future Proofing	 In planning and design for resilience, all applications must take into account the following principles of future proofing: well-being, safety and security for residents and/or users in line with Policy X (Managing Heat Risk) X (Air Quality) X (Space StandardsX (HIA); adaptable and flexible spatial planning and design in conjunction with Policy X; life cycle duration of infrastructure and buildings, including appropriate maintenance plan for the life of the development in conjunction with Policy X; potential hazards including fire, pest, flood, and climate change long term stresses in determining design, locations and installations of protection facilities, systems and buildings for the life of the development in line with Policy X; existing and potential source of pollution, such noise and air, and according mitigation measures in line with Policy X; increased quality of materials and installation in line with the principles of Sustainable Urban Drainage (SUDs) and natural flood management as part of the wider Green and Blue Infrastructure network to deliver multiple benefits in line with Policy X SUD, X GBI, Policy X Access to nature; provision of class leading digital connectivity infrastructure and other future essential technology in line with Policy X; and delivery phasing that takes into account demand and supply if and where appropriate. Time horizons for proposed future-proof interventions can vary depending on the size, location and purpose of development but long term time horizons based on objective and realistic assessment should be made clear in the proposal. This policy should be read in conjunction with Policy X (Connecting New Development to Digital Infrastructure), Policy X (Communications), Policy X (Low Emission Vehicles), Policy X (Creating Successful Places), Policy X (Managing Heat Risks), Policy X Greening Intervention, Policy X (Green and Blue Infrastructure) 	No Likely Significant Effect This policy encourages sustainable development aspects of this policy criteria include air quality, flood risk, climate change and green infrastructure. It is therefore considered to be of benefit to European sites within catchment of Brentwood and can therefore be screened out from further discussion.

Policy	Description	HRA Implications
POLICY BEXX: Strategic Transport Infrastructure	 Maximising the value of Elizabeth Line The Council supports the development of Elizabeth Line, maximising the potential for an overall improvement to Borough rail services, and mitigating environmental and transport impacts as a consequence of the scheme. This would be achieved through improvements to pedestrian and cycle infrastructure and bus services linking both new and existing developments to the train stations, and introduction of parking controls where needed. Development near Brentwood and Shenfield stations will demonstrate how the schemes connect to the surrounding walking, cycling and public transport links to the station. The proposed schemes must offer direct routes, as well as easy, effective orientation and navigation to the stations. Improving multimodal integration and/or capacity at train stations The Council will work with the highways authority, statutory bodies and key stakeholders, including public transport operators, to secure funding for: improving the public realm and circulation as well as achieving multimodal integration around both Brentwood and Shenfield Crossrail stations given the potential increased usage and footfall expected to arise from Crossrail; improving capacity of West Horndon station and creating associated multimodal interchange through phases to support new residents and employees; interim bus service(s) connecting the developments sites to West Horndon station; The Council will consider the scope for Park and Ride or Stride schemes where the demand and impacts are assessed within a detailed feasibility study. Delivering mitigations measures to the strategic highway and suitable non-highway mitigations measures. Development close to schools and early years & childcare facilities should facilitate an attractive public realm that is safe for children and encourages walking and cycling to address the impacts of school run traffic. 	No Likely Significant Effect This policy does not propose development at Elizabeth Line; rather this policy supports this development requires that public transport links are maximized to their best use. This policy therefore encourages the use of public transport and waling and cycling links into/ out of Brentwood. This policy is therefore not expected to impact on the integrity of European Sites that are located within catchment of the Borough.

Policy	Description	HRA Implications
BEXX: Car-light Development	 The Council supports car-light development proposals in appropriate locations that are, or are planned to be, well-connected by public transport and have good accessibility through walking and cycling. Car-light development are acceptable when all of the following are met: where there is safe, easily walkable and cyclable access to the Town Centre or District Shopping Centres or major employment sites; where there is excellent access to public transport connectivity; where the car-light status of the development can realistically be enforced by planning condition, planning obligations, on-street parking controls or other means such as car clubs. 	No Likely Significant Effect This is a development management policy identifying where car-light developments may be appropriate. This policy encourages the use of fewer cars within developments. As such this is a positive policy aimed at reducing atmospheric pollution and is therefore unlikely to have significant effects upon the European Sites located within catchment of Brentwood.

Policy	Description	HRA Implications
BEXX: Sustainable Means of Travel and Walkable Streets	 Development will be supported where it demonstrates that prioritisation of access to, from, and within a development is by walking, cycling and public transport, and is accessible for all. This is achieved by: linking the development or providing new links that will add to the existing surrounding walking, cycling and public transport networks; giving priority to pedestrian and cycle movement and public transport networks above the use of the private car so these are the best and safest means of moving around; improve areas where public transport, pedestrian and cycle movement is difficult or dangerous; safeguarding existing and proposed routes for walking, cycling, and public transport, from development that would prejudice their continued use and/or development. Funding for high quality physical provision of these routes will be required, both within and adjacent to the proposed developments; Any development requiring a new road or road access should accord with the following: be designed to give priority to the needs and safety of pedestrians and cycles, and make cycling, walking and public transport the obvious choice; restricts general motor traffic through design where appropriate; discourage inappropriate car-based links within the network, but encourages non-car based links; minimises additional car traffic in the surrounding area; and provide safe and appropriate access to the adjoining road, pedestrian and cycle networks. 	No Likely Significant Effect This policy ensures that new development within Brentwood is well connected to public transport links. Proposals that are not well connected to existing infrastructure will be rejected on the bases of unsustainable development. As such this policy is not likely to pose as a significant effect to European Sites that are located within catchment to Brentwood Borough. As such, this policy is screened out from further discussion.

Policy	Description	HRA Implications
BEXX: Sustainable Passenger Transport	The Council will facilitate and support sustainable passenger transport services operating in Brentwood to help deliver vision of the Local Plan. Development proposals should protect and enhance existing passenger transport and their capacity. Community facilities, schools, and specialist older persons housing, where reasonable and proportionate, should provide pick up and drop off facilities close to the principal entrance suitable for minibuses, taxis (with appropriate kerbs), and/or ambulances.	No Likely Significant Effect This policy ensures that there are adequate facilities for passenger transport services. It does not in itself provide for new development. As such, this policy is not considered to pose as a likely significant effect to the integrity of European Sites located within the Brentwood Borough. As such this policy is screened out from further discussion.
BEXX: Electric and Low Emission Vehicle	Where it is viable to do so, the Council may seek infrastructure for electric and low emission vehicle at major new developments. This could include, but is not limited to, electric vehicle charging / plug-in points or the infrastructure required to provide this in the future.	No Likely Significant Effect This policy encourages the use of electric or low emission vehicles for all major development. As such, this is a mitigating strategy for air quality control measures. As such this policy is not likely to pose as a likely significant effect to the integrity of European Sites within Brentwood Borough.

Policy	Description	HRA Implications	
BEXX: Mitigating the Transport Impact of Development	 Developments will only be permitted where they do not have an unacceptable transport impact and/or any significant impacts from the development on the transport network (in terms of capacity and congestion) and on highway safety can be effectively mitigated to an acceptable degree. Therefore, new development will require: sufficient information to be supplied to assess the likely impact of development. This should take the form of Travel Plans, Transport Assessments and/or Statements in accordance with the thresholds and detailed requirements for each land use category set in the latest Essex County Council's Development Management Policies; reasonable and proportionate financial contributions/mitigation measures where necessary to mitigate the transport impact of the development to an acceptable degree. This could include investment in infrastructure, services or behavioural change measures to encourage the use of sustainable modes of transport. Such measures should be provided to meet the first or early occupation of a site in order to influence travel behaviour from the outset. 	No Likely Significant Effect This policy is also a mitigating strategy designed to improve the efficiency of transport links by encouraging behavioral changes to transport. This policy is therefore not considered to pose as a likely significant effect to the integrity of European Sites and is screened out from further discussion.	
BEXX: Parking Standards	 The Council will refer developers to the latest Parking Standards adopted by Brentwood Borough Council. Schemes should comply with design standards and provision levels for uses and transport modes specified. In the following circumstances, the parking standards may be flexible to minimise pressure on land and encourage alternative modes of transport: Office developments in urban areas that are well-connected by public transport and have good accessibility through walking and cycling; Retail and mixed-use development in the Town Centre, District Shopping Centres and Local Centres with access to shared car parks with different facilities/users at different times; Commuter parking provision at train stations. Proposals which provide below these standards should be supported by evidence detailing the local circumstances that justify deviation from the standard. 	No Likely Significant Effect This policy does not allocate land for car parking; rather this policy ensures that abide by the Parking Standards adopted by the Borough. As such this policy is not expected to pose as a likely significant effect to European Sites and is screened out from further discussion.	

SP05: Housing Growth: Housing Growth	Provision is made for 7,392 new re Plan period 2016-2033 at an annua follows:				No Likely Significant Effect This policy allocates 7,392 net residential
		Net homes	%		dwellings within the Borough of Brentwood.
	Completions 2016/17 & 2017/18	364	5%		realistic linking impact pathway present, however in combination consideration is
	Extant permissions (April 2018)	1,000	14%	-	required to include quantum of residential development to be delivered by neighboring authorities.
	Permitted development allowance since 1 st April 2018	tbc	tbc		
	Windfall Allowance (2022/23 to 2032/33)	tbc	tbc		
	Brownfield Land within Brentwood Urban Area / Settlement Boundary	1,152	tbc%		
	Greenfield Land within Brentwood Urban Area / Settlement Boundary	95	tbc		
	Brownfield Land within settlement boundary – Other Locations	580	tbc		
	Green Belt Land – Edge of Brentwood Urban Area	1,437	tbc%		
	Green Belt Land – Edge of Ingatestone	218	tbc		
	Green Belt Land – Larger Villages	169	tbc		

Policy	Description	Description				
	Strategic Allocation – Dunton Hills Garden Village	2,500	tbc%			
	<u></u>	1,292	tbc%			
			tbc			
	Total	7,392	100%			
	Total Sites with a capacity for 10 or m development are set out in Polic	ore dwellings (m	100%			

Policy	Description	HRA Implications
BEXX: Housing Mix, Types and Tenures	 The Council will protect existing housing from redevelopment to other uses. All new development should deliver an inclusive, accessible environment throughout. On residential development proposals of 10 or more (net) additional dwellings the Council will require: an appropriate mix of dwelling types, sizes and tenures to meet the identified housing needs in the Borough as set out in the Strategic Housing Market Assessment or any similar evidence for market and affordable units (such as the Council's Housing Strategy), to provide choice, and contribute towards the creation of sustainable, balanced and inclusive communities; and each dwelling to be constructed to meet requirement M4(2) of the Building Regulations 2015 (accessible or adaptable dwellings), or subsequent government standard. On developments of 20 or more (net) dwellings the Council will require all of the above, and: a minimum of 5% of new affordable dwellings should be built to meet requirement M4(3) of the Building Regulations 2015 (wheelchair user dwellings), or subsequent government standard. On development sites of 500 or more dwellings the Council will require all of the above, and: a minimum of 5% self build homes which can include custom housebuilding; and provision for Specialist Accommodation taking account of local housing need in accordance with the criteria set out in Policy X: Specialist Accommodation. Where a development site has been divided into parts, or is being delivered in phases, the area to be used for determining whether this policy applies will be the whole original site. Where an applicant considers that it is not feasible or viable to meet the requirements as set out above the Council will expect this to be demonstrated with robust evidence and may negotiate a proportionate housing mix which is achievable, account will be taken of the nature, constraints, character and context of the site a	No Likely Significant Effect This policy safeguards current residential dwellings from re-development. It is a development management policy relating to housing mix, tenure and types. As such this policy is not expected to result in a net increase in residential development nor does this policy allocated sites for re-development. As such, this policy is no expected to pose as a likely significant effect to European Sites and can be screened out from further discussion.

Policy	Description	HRA Implications
7.3: Residential Density	Proposals for new residential development should take a design led approach to density which ensures schemes are sympathetic to local character and make efficient use of land. Residential densities will be expected to be 35 dwellings per hectare net or higher unless the special character of the surrounding area suggests that such densities would be inappropriate; or where other site constraints make such densities unachievable. Higher densities, generally above 65 dwellings per hectare net, will be expected in Town Centre, District Shopping Centres, and Village Service Centres or other locations with good public transport accessibility, subject to Policy 10.4.	No Likely Significant Effect This policy is related to housing density and design within town centers and within more rural settings. This policy does not provide for any new development, but is a development management policy and is therefore not considered to pose as a likely significant effect to the European Sites that are located within catchment to Brentwood. As such, this policy is screened out from further discussion.
7.7: Specialist Accommodation	 The Council will support proposals which contribute to the delivery of Specialist Accommodation, provided that the development: meets demonstratable established local community need; is readily accessible to public transport, shops, local services, community facilities and social networks and, where appropriate, employment and day centres; would not result in the over concentration of any one type of accommodation; where appropriate, provides suitable landscaping and amenity space; and where appropriate, is in accordance with Policy ? New Development in the Green Belt. Subject to viability, where accommodation falls within use Class C3 an appropriate proportion of affordable housing in accordance with policy ?: Affordable Housing will be required with the mix of tenures negotiated by the Council. A condition may be imposed restricting occupation to persons requiring specialist accommodation where deemed necessary. 	No Likely Significant Effect This policy supports the development of specialist accommodation; however, this is a development management policy that does not in itself identify any quantum or location of development. As such, this policy is not expected to pose as likely significant effects to the integrity of European Sites.

Policy	Description	HRA Implications
BEXX: Affordable Housing	 Over the Plan period, the Council will seek to deliver 30% of all net additional dwellings as affordable units with 86% Affordable/Social Rent and 14% as other forms of affordable housing⁷². The Council will require the provision of 35% of the total number of residential units to be provided and maintained as affordable housing within all new residential development sites on proposals of 11 or more (net) dwellings, with a tenure split as above. In considering the suitability of affordable housing, the Council will require that: the affordable housing be designed in such a way as to be seamlessly integrated to that of market housing elements of a scheme (in terms of appearance, build quality and materials) and distributed throughout the development so as to avoid the over concentration in one area; and the type, mix, size and cost of affordable homes will meet the identified housing need as reported by the Council's most up-to-date Strategic Housing Market Assessment and Housing Strategy. In seeking affordable housing provision the Council will have regard to scheme viability, only where robust viability evidence demonstrates that the full amount of affordable housing cannot be delivered the Council will negotiate a level of on-site affordable housing that can be delivered taking into account the mix of unit size, type and tenure and any grant subsidy received. The Council will only accept a financial contribution in lieu of on-site provision where it can be satisfactorily demonstrated that on-site provision is neither feasible nor viable. Where a site has been sub-divided or is not being developed to its full potential so as to fall under the affordable housing threshold the Council will seek a level of affordable housing to reflect the provision that would have been achieved on the site as a whole had it come forward as a single scheme for the allocated or identified site. Planning obligations will be used to ensure that the	No Likely Significant Effect This is a development management policy that describes the proportion of affordable housing required from development within Brentwood. As such, this policy does not allocate housing within Brentwood and is therefore not considered to pose as a likely significant effect to the integrity of European Sites located within catchment of Brentwood.

⁷² This includes starter homes, intermediate homes and shared ownership and all other forms of affordable housing as described by national guidance or legislation

Policy	Description	HRA Implications
Policy X: Rural Exception Sites	 Planning Permission may be granted for small scale affordable housing schemes, which would not otherwise be released for housing, in order to meet local rural housing need where: the site is within or adjacent to a settlement; the site is accessible to a range of local services, such as shops, primary schools, healthcare and public transport; the Council is satisfied that there is clear evidence, supplied by the applicant, of local need for the number and type of housing proposed within the village settlement that cannot be met another way; homes provided are 100% affordable unless it can be demonstrated that a small element of market housing is necessary to deliver a significant amount of affordable housing; the housing is provided for people with a strong and demonstrable local connection; the appropriate legal agreements are entered into for the affordable housing with the Council, to ensure homes remain affordable and exclusively for local need in perpetuity, and that the necessary management of the scheme can be permanently secured; and the development is small-scale, does not exceed that required to meet current need, respects the character of the settlement and surrounding landscape and would not cause significant harm to the purposes of the Green Belt A person with a strong local connection should meet the following criteria: existing local residents requiring separate accommodation; close relatives of existing local residents who have a demonstrable need to either support or be supported by them; or people whose work provides an important and necessary local service. 	No Likely Significant Effect This is a development of housing within rural areas in order to meet rural housing requirements. However, this policy does not in itself provide for any location or quantum of development. This policy is therefore not considered to pose as a likely significant effect to European Sites that are within catchment of Brentwood Borough.

Policy	Description	HRA Implications
X: Residential Space Standards	 All residential development shall comply with the following: Internal Residential Space All new build housing will achieve appropriate internal space through compliance with the nationally-described space standard. External Residential Space New residential units will be expected to have direct access to an area of private and/or communal amenity space. The form of amenity space will be dependent on the form of housing and could be provided in a variety of ways, such as a private garden, roof garden, communal garden, courtyard balcony, or ground-level patio with defensible space from public access. In providing appropriate amenity space, development should: consider the location and context of the development, including the character of the surrounding area; take into account the orientation of the amenity space in relation to the sun at different times of year; address issues of overlooking and enclosure, which may otherwise impact detrimentally on the proposed dwelling and any neighbouring dwellings; and design the amenity space to be of a shape, size and location to allow effective and practical use of and level access to the space by residents. Housing Quality Consideration should be given to how smart infrastructure can be integrated into the communal areas, including waste disposal points, shared batteries for renewable energy sources etc. All new-build residential development to incorporate sustainable design features to reduce carbon dioxide and nitrogen dioxide emissions, and the use of natural resources, in line with Policy 9.X Sustainable Construction And Efficient Resources Management; Policy 9.X Renewable And Low Carbon Energy Schemes, Policy X.X SUDS These standards are applicable for both private and affordable housing in Brentwood. Compliance with the criteria should be demonstrated in the Design and Access Statement submitted with the planning application.	No Likely Significant Effect This is a development management policy relating to current building standards. This includes aspects of internal space and amenity space. This policy does not therefore identify any location, type or quantum of development to be provided within Brentwood. It is therefore no expected that this policy would pose as a likely significant effect to the integrity of European Sites that are located within catchment of Brentwood Borough.

Policy	Description		HRA Implications	
BEXX: Provision for Gypsies and Travellers	In order to meet identified need, a total of 13 permanent pitches for Gypsies and Travellers as defined by national planning policy for the period 2016-2033 will be provided. Gypsy and Traveller Net new Accommodation pitches Policy BEXX Regularising 7 suitable existing traveller sites Policy XX Dunton Hills Garden 6 Village 13		• •	No Likely Significant Effect This policy allocates a total of 13 sites for Gypsies and Travellers. Whilst this is a small quantum of development which in isolation is unlikely to impact on a European site, in combination considerations are required.
BEXX: Regularising Suitable Existing Traveller Sites	Initial 13 Planning permission will be granted on the following sites for permanent gypsy and traveller accommodation as shown on the Policies Map and listed below: Site Ref XX Site Address: Oaktree Farm (Greenacres), Chelmsford Road No of Pitches: 6 Proposals for development at this site should comply with the following site-specific requirements: tbc [Insert map of site] Site Ref XX Site Address: Hunters Green, Albyns Lane, Navestock No of Pitches: 1 Proposals for development at this site should comply with the following site-specific			No Likely Significant Effect This policy allocates two new sites for Gypsies and Travellers (7 pitches). Whilst this is a small quantum of development which in isolation is unlikely to impact on a European site, in combination considerations is required.

Policy	Description	HRA Implications
BEXX: Proposals for Gypsies, Travellers and Travelling Showpeople on Unallocated Land	 Planning permission for Gypsy and Traveler caravan sites and sites for Travelling Showpeople (as defined in the Governments Planning Policy for Travellers) on unallocated land outside development frameworks, and outside the Green Belt, will only be granted in accordance with the following criteria: The site is well related to existing communities and accessible to local services and facilities, such as shops, primary and secondary schools, healthcare and public transport; and The location would not result in unacceptable living conditions for its occupants and adhere to the Designing Gypsy and Traveller Sites Good Practice Guide regarding Density and Spacing of caravans and trailers standards; and The site is serviced by a suitable access road; and essential services (water, electricity and foul drainage) are available on site or can be made available on site; and there is no significant adverse impact on the intrinsic character and beauty of the countryside; and there is no significant risk of land contamination or unacceptable risk of flooding; and there is no significant adverse impact on the amenity of nearby residents; and there is no significant adverse impact on the amenity of nearby residents; and there is no significant adverse impact on the amenity of nearby residents; and there is no significant adverse impact on the amenity of nearby residents; and plots for Travelling Showpeople should also be of sufficient size to enable the storage, repair and maintenance of equipment. Gypsy and Traveller sites are inappropriate development in the Green Belt. Any proposals in the Green Belt. If, through the application of such Policy, provision of a Gypsy and Traveller site in the Green Belt is considered acceptable in principle, the proposed development is required to comply with the criteria set out within this policy. 	No Likely Significant Effect This is a development management policy relating to proposals on unallocated land. It does not in itself identify any quantum or location of development. There are no linking impact pathways present.

Policy	Descript	ion			HRA Implications
BEXX: Safeguarding Permitted Sites	safeguar identified Any othe	ting gypsy and traveller sites listed be ded from alternative development, un traveller need across the Borough. r site that is subsequently granted a p use shall be safeguarded in accordar Location	No Likely Significant Effect This policy does not allocated new pitches; rather this policy ensures that existing gypsy and traveller sites are safeguarded from development. As such, this policy is not		
	x	Clementines Farm, Murthering Lane, Navestock	1	_	expected to pose as a likely significant effect to European Sites.
	x	Deep Dell Park (Willow Farm), Ingatestone	6		
	X	Lilliputs, Blackmore	2		
	X	Meadow View, Blackmore	2/3		
	X	Pond End, Kelvedon Hatch	1/2		
	X	Ponderosa, Kelvedon Hatch	1		
	X	Poplar Farm, Ingatestone	2/3		
	X	Roman Triangle, Mountnessing	5		
	X	Rye Etch, Navestock	3		
	X	The Willows', Kelvedon Hatch	3		
	X	Tree Tops, Navestock	3		
	X	Warren Lane, Doddinghurst	1		
	X	Wenlock Meadow	1		
	X	Hope Farm, Navestock	3		
	X	Orchard View, Navestock	4		
	permission traveller occupant	tes listed above applications for the re ons for gypsy and traveller sites to pe sites will be supported by the Local P t meet the definition of a Gypsy, Trave planning policy.	rmanent planning pe lanning Authority pro	rmissions for gypsy and wided the applicant and	

Policy	Description	HRA Implications
X: Sub-division of Pitches or Plots	 The Local Planning Authority will consider proposals for the sub-division of authorised Gypsy, Traveller and Travelling Showpeople sites, on a case by case basis and provided that the following criteria are met: the living environment of residents on the proposed site and neighbouring land is protected; and sites are of a suitable size to enable the creation of additional pitches or plots; and the sub-division of Gypsy and Traveller sites do not result in a total of more than 10 pitches on a site; and there is no significant loss of soft and hard landscaping and amenity provision within the existing site, particularly where conditioned by a previous consent; and there is no significant adverse impact on the intrinsic character and beauty of the countryside and; there is no adverse impact in terms of highways access and vehicle movement. It will be necessary for the application to demonstrate the need for the additional provision in relation to the requirement of Policy XX, the lack of alternative provision and specific circumstances of the applicant. 	No Likely Significant Effect This policy provides requirements to the sub- division of Gypsy, Traveller and Travelling Showpeople sites. Listed within the requirements are aspects relating to loss of soft and hard landscapes and the impacts on the intrinsic beauty of the countryside. This policy does not provide for any increase in development, but rather provides development management guidance relating to sub-division of pitches. It is therefore considered unlikely that this policy will have an impact on European Sites.

Policy	Description	HRA Implications
BEXX: Sustainable Construction and Resource Efficiency	 The Council will require all development proposals, including the conversion or re-use of existing buildings, to: maximise the principles of energy conservation and efficiency in the design, massing, siting, orientation, layout, construction method and use of materials; submit details of measures that increase resilience to the threat of climate change, including but not limited to summertime overheating; demonstrates how the water conservation measures were incorporated in the proposals; incorporate suitable Sustainable Urban Drainage Systems (SuDs), such as green roofs and rainwater attenuation measures; incorporate the reduction in the use of mineral resources, including an increase in the re-use of aggregate; include commercial and domestic scale renewable energy and decentralised energy as part of new development. 	No Likely Significant Effect This policy encourages sustainable development within Brentwood Borough. Aspects of sustainability that are to be incorporated at the design stage of development include SuDS, green roofs and rainwater attenuation measures. This policy is therefore not likely to have an impact on the integrity of European Sites that are located within catchment of Brentwood Borough.

BEXX: Carbon Reduction, Renewable Energy and Water Efficiency	Proposals for renewable, low carbon or decentralised energy schemes will be supported provided they can demonstrate that they will not result in adverse impacts, including cumulative and visual impacts which cannot be satisfactorily addressed. Development should meet the following minimum standards of sustainable construction and carbon reduction: New Residential Development: Year Minimum					No Likely Significant Effect This positive policy sets out the requirement for renewable and low carbon energy schemes, water efficiency measures and the requirement for developer contributions if these provisions cannot be provided on site. It is therefore considered unlikely that this policy will lead to
	sustainat construct	sustainable construction standards	reduction	efficiency		adverse impacts upon the integrity of European Sites that are within catchment of Brentwood.
	Up to 2020	In line with Part L Building Regulations	At least a 10% reduction in carbon dioxide emissions above the requirements of Part L Building Regulations	110 litres per person per day limit Major developme nt are expected to provide more substantial water manageme nt measures, such as rain/grey		

2020 onw ardsIn line with Part L Building RegulationsIn line with national nearly- zero carbon policy.If national nearly- zero carbon policy is unavailable, the	water harvesting. 110 litres per person per day limit Major developme nt are expected to provide			
onw Part L ards Building Regulations If national nearly- zero carbon policy. If national nearly- zero carbon policy is unavailable, the	110 litres per person per day limit Major developme nt are expected to			
onw Part L ards Building Regulations If national nearly- zero carbon policy. If national nearly- zero carbon policy is unavailable, the	per person per day limit Major developme nt are expected to			
ards Building Regulations Zero carbon policy. If national nearly- zero carbon policy is unavailable, the	per day limit Major developme nt are expected to			
Regulations policy. If national nearly- zero carbon policy is unavailable, the	limit Major developme nt are expected to			
If national nearly- zero carbon policy is unavailable, the	Major developme nt are expected to			
If national nearly- zero carbon policy is unavailable, the	developme nt are expected to			
nearly- zero carbon policy is unavailable, the	developme nt are expected to			
carbon policy is unavailable, the	nt are expected to			
unavailable, the	expected to			
unavailable, the				
previous target				
applies.	more			
However the	substantial			
minimum	water			
improvement	manageme			
over the	nt			
Building	measures,			
Regulations	such as			
baseline may	rain/grey			
be increased to	water			
reflect the	harvesting.			
reduction in				
costs of more				
efficient				
construction				
methods.				
New Non-residential Development	New Non-residential Development			

I				[
	Year	Minimum BREEM	On-site	Water
		rating*	carbon	efficiency
			reduction	
	Up	BREEAM 'Very	At least a	BREEAM
	to	Good' rating to be	10%	'Very Good'
	2020	achieved in the	reduction in	rating to be
		following	carbon	achieved in
		categories:	dioxide	category
		• Man 02	emissions	Wat 01
			above the	
		• Ene 04	requiremen	
		• Mat 03	ts of Part L	Major
			Building	developme
		• Wst 01	Regulation	nt are
		• Wst 03	s	expected to
		LE 03	0	provide
				more
				substantial
				water
				manageme
				nt
				measures,
				such as
				grey water
				harvesting.
	2020	BREEAM	In line with	BREEAM
	onw	'Excellent' rating	national	'Excellent'
	ards	to be achieved in	nearly-zero	rating to be
		the following	carbon	achieved in
		categories:	policy	category
				Wat 01
			F 0110 J	

	• Man 02				
	• Ene 04	If national	Major		
	• Mat 03	nearly-zero	developmen		
		carbon	t are		
	• Wst 01	policy is	expected to		
	• Wst 03	unavailable	provide		
	LE 03	, the 2016 -	more		
		2020 target	substantial		
		applies.	water		
		However the	managemen		
		minimum	t measures, such as		
		improveme	grey water		
		nt over the	harvesting.		
		Building	narvesting.		
		Regulation			
		s baseline			
		may be			
		increased			
		to reflect			
		the			
		reduction in			
		costs of			
		more			
		efficient			
		constructio			
		n methods.			
*. Th	e version of BREEAM tha	r should be the latest			
	EAM scheme and not be l				
	pre-planning stages of a pr				
I					

Passivhaus, will be supported provided that they are broadly at least in line with the standards set out above.

Application of major development, where feasible, will be required to provide a minimum of 10% of the predicted energy needs of the development from renewable energy

Application of major development, including redevelopment of existing floor space, should be accompanied by a Sustainability Statement (see figure X: Areas to be covered in the Sustainability Statement) as part of the Design and Access Statement submitted with their planning application, outlining their approach to the following issues:

- adaptation to climate change;
- carbon reduction;
- water management;
- site waste management; and
- use of materials.

Where it is not possible to meet these standards, applicants must demonstrate compelling reasons and provide evidence, as to why achieving the sustainability standards outlined above for residential and non-residential developments would not be technically feasible or economically viable; Where on-site provision of renewable technologies is not appropriate, or where it is clearly demonstrated that the above target cannot be fully achieved on-site, any shortfall should be provided via:

- allowable solutions contributions' via section 106 or CIL. These funds will then be used for energy efficiency and energy generation initiatives or other measure(s) required to offset the environmental impact of the development;
- off-site provided that an alternative proposal is identified and delivery is certain.

It is noted that legislation, policy and technology is continually changing in this area; therefore the Council will review and update this Policy as and when required.

	BEXX: Establishing	Stand-alone renewable energy infrastructure	No Likely Significa
	Low Carbon and	Community-led initiatives for renewable and low carbon energy, including developments outside	
	Renewable Energy	areas identified in local plans or other strategic policies that are being taken forward through	This policy describe
	Infrastructure	neighbourhood planning, will be encouraged, subject to the acceptability of their wider impacts	energy infrastructur
	Network	including on the green belt.	not identify any loca
		Decentralised energy infrastructure	development. The C
		The Council will work with developers and energy providers to seek opportunities to expand	that such infrastruct
		Brentwood's decentralised energy infrastructure.	or low-carbon. Furth
		Major new development will be expected to incorporate decentralised energy infrastructure in	proposals are to inv
		line with the following hierarchy:	and the impacts of
		- Where there is an existing heat network, new development will be expected to connect	therefore not consid
		to it;	significant effect to
		- Where there is no existing heat network, new development will be expected to deliver	Sites that lie within
		an onsite heat network, unless demonstrated that this would render the development	Borough.
		unviable;	
		- Where a developer is unable to deliver the heat network, they need to demonstrate that	
		they have worked in detail with third parties (commercially or community) to fully assess the opportunity;	
		- Where a heat network opportunity is not currently viable and no third party is interested	
		in its delivery, the development should be designed to facilitate future connection to a	
		heat network unless it can be demonstrated that a lower carbon alternative has been	
		put in place.	
		New development will be expected to demonstrate that the heating and cooling system have	
		been selected according to the following heat hierarchy:	
		- Connection to existing CHP/CCHP distribution network;	
		- Site-wide renewable CHP/CCHP;	
		- Site-wide gas-fired CHP/CCHP;	
		- Site-wide renewable community heating/cooling;	
		- Site-wide gas-fired community heating/cooling;	
		- Individual building renewable heating.	
		Developers of strategic development that could play a key role in establishing a decentralised	
		energy network, especially within the South Brentwood Growth Corridor, should engage at an	
		early stage with the Council, stakeholders and relevant energy companies to establish the future	
		energy requirements and infrastructure arising from large-scale development proposals and	
		clusters of significant new development. Applicants of these sites will prepare energy	
		masterplans which establish the most effective energy strategy and supply options.	
		Building scale technologies	
		1	

cant Effect

bes criteria for establishing ure within Brentwood. It does cation, type or extent of Council is keen to ensure icture is of renewable energy rthermore, the impacts of such nvolve the local community f green belt land. This policy is idered to pose as a likely o the integrity of European n catchment of the Brentwood

Policy	Description	HRA Implications
	Innovative approaches to the installation and/or construction of community and individually owned energy generation facilities or low carbon homes which demonstrate sustainable use of resources and high energy efficiency levels will be supported.	
BEXX: Assessing Energy Infrastructure	 Proposals for development involving the provision of individual and community scale energy facilities from renewable and/or low carbon sources, will be supported, subject to the acceptability of their wider impacts. As part of such proposals, the following should be demonstrated: the siting and scale of the proposed development is appropriate to its setting and position in the wider landscape; the proposed development does not create an unacceptable impact on the local amenities, the environment, the historic environment, the setting of a heritage asset, or a feature of natural or biodiversity importance. These considerations will include air quality, as well as noise issues associated with certain renewable and low carbon technologies; any impacts identified have been minimised as far as possible; where any localised adverse environmental effects remain, these are outweighed by the wider environmental, economic or social benefits of the scheme; renewable and low carbon energy development proposals located within the Green Belt will need to demonstrate very special circumstances, and ensure that adverse impacts are addressed satisfactorily (including cumulative landscape and visual impacts). 	No Likely Significant Effect This policy provides development management criteria for the development of energy infrastructure within the Brentwood Borough. These include impacts relating to noise, environment, biodiversity and air quality. This policy is therefore not considered to pose as a likely significant effect to the integrity of European Sites. As such, this policy can be screened out from further discussion.
BEXX: Improving Energy Efficiency in Existing Dwellings	 To support the transition to a low carbon future, and to tackle issues of rising energy costs, applications for extensions to existing dwellings and/or the conversion of ancillary residential floorspace to living accommodation should be accompanied by cost-effective improvements to the energy efficiency of the existing dwelling. The requirements of this policy will apply where the following measures have not already been implemented: cavity wall and/or loft insulation at least to the standards stipulated by Building Regulations; heating controls upgrade; E, F and G rated boilers replacement with an A-rated condensing boiler; and draught proofing around external doors, windows and un-used chimney. 	No Likely Significant Effect This policy describes the energy efficiency requirements of existing residential developments within Brentwood. This policy does not therefore provide site allocations for development and is unlikely to pose as a likely significant effect to the integrity of the European Sites that are within catchment of Brentwood Borough.

Policy	Description	HRA Implications
BEXX: Managing Heat Risk	 Development proposals should minimise internal heat gain and the risks of overheating through design, layout, orientation and materials. Major development proposals should demonstrate how they will reduce the potential for overheating and reliance on air conditioning systems by: minimising internal heat generation through energy efficient design; reducing the amount of heat entering a building through orientation, shading, albedo, fenestration, insulation and the provision of green roofs and walls; managing the heat within the building through exposed internal thermal mass and high ceilings; providing passive ventilation; providing mechanical ventilation; and providing active cooling systems. 	No Likely Significant Effect This policy describes a set of criteria for development to manage heat risks. This policy is therefore mitigating and is unlikely to pose have adverse impacts on the integrity of European Sites. As such, this policy can be screened out from further discussion.

Policy	Description	HRA Implications
X: Sustainable Drainage	All developments should incorporate appropriate Sustainable Drainage Systems (SuDS) for the disposal of surface water, in order to avoid any increase in flood risk or adverse impact on water quality. Applications must meet the following requirements: Quantity On brownfield developments SuDS features will be required to achieve a reduced run-off rate Sites over 0.1 hectares in Flood Zone 1 will be required to submit a drainage impact assessment. Larger sites over 1 hectare in Zone 1 or all schemes in Flood Zone 2 and 3 must be accompanied by a Flood Risk Assessment (FRA). Quality The design must follow an index based approach when managing water quality. Implementation in line with Chapter 26 of the updated CIRIA SuDS Manual is required. Source control techniques such as green roofs, permeable paving and swales should be used so that rainfall runoff in events up to 5mm does not leave the site. Amenity And Biodiversity SuDS should be sensitively designed and located to promote improved biodiversity, water use efficiency, river water quality, enhanced landscape and good quality spaces that benefit public amenities in the area. Redeveloped brownfield sites should disconnect any surface water drainage from the foul network. The preferred hierarchy of managing surface water drainage from any development is through infiltration measures, secondly attenuation and discharge to watercourses, and if these cannot be met, through discharge to surface water to a public sewerage network to serve their development.	No Likely Significant Effect This development management policy requiring that sustainable drainage is incorporated at the design stage of development proposals. It is therefore unlikely that this policy will pose as a likely significant effect to the integrity of European Sites. As such, this policy is screened out from further discussion.

Policy	Description	HRA Implications
X: Communications Infrastructure	 The Council will support investment in high quality communications infrastructure and superfast broadband, including community based networks, particularly where alternative technologies need to be used in rural areas of the Borough. Applications for new or the expansion of existing communications infrastructure (including telecommunications masts, equipment and associated development, and superfast broadband) are supported subject to the following criteria: evidence is provided to demonstrate, to the Council's satisfaction, that the possibility of mast or site sharing has been fully explored and no suitable alternative sites are available in the locality including the erection of antennae on existing buildings or other suitable structures; evidence is provided to confirm that the proposals conform to the latest national/international guidelines on radiation protection and would cause no harm to highway safety; evidence is provided to confirm that the proposals would cause no harm to highway safety; the proposal has sympathetic design and camouflage, having regard to other policies in the Local Plan; the proposal has been designed to minimise disruption should the need for maintenance, adaption or future upgrades arise; will not cause significant and irremediable interference with other electrical equipment, air traffic services or instrumentation operated in the national interest; and the proposal conforms to the latest International Commission on Non-lonising Radiation Protection (ICNIRP) guidelines, taking account of the cumulative impact of all operators equipment located on the mast/site where appropriate (ie. prevent location to sensitive community uses, including schools). 	No Likely Significant Effect This policy is related to communication infrastructure and ensuring the appropriate level of broadband is available to all residents within Brentwood Borough. Suitable communications infrastructure has the potential to reduce the need to travel and thus reduce atmospheric pollution contributions. This policy is therefore no expected to have likely significant impact to the European Sites located within catchment of the Brentwood Borough. As such, this policy is screened out from further discussion.

X: Connecting New	To support Brentwood's economic growth and productivity now and in the future, development proposals should:	No Likely Significant Effect
Developments to Digital Infrastructure	 proposals should: provision of up to date communications infrastructure should be designed and installed as an integral part of development proposals. As a minimum, all new developments must be served by the fastest available broadband connection, installed on an open access basis. This includes installation of appropriate cabling within dwelling or business units as well as a fully enabled connection of the developed areas to the full main telecommunications network; ensure that sufficient ducting space for future digital connectivity infrastructure (such as small cell antenna and ducts for cables, that support fixed and mobile connectivity and therefore underpins smart technologies) is provided where appropriate; support the effective use of the public realm, such as street furniture and bins, to accommodate well-designed and located mobile digital infrastructure. When installing new and improving existing digital communication infrastructure in new development, proposals should: identify and plan for the telecommunications network demand and infrastructure needs from first occupation; include provision for connection to broadband and mobile phone coverage across the site on major developments; the location and route of new utility services in the vicinity of the highway network or proposed new highway network should engage with the Highway Authority and take into account the Highway Authority's land requirements so as to not impede or add to the cost of the highway mitigation schemes; ensure the scale, form and massing of the new development does not cause unavoidable interference with existing communications infrastructure in the vicinity. If so, opportunities to mitigate such impact through appropriate design modifications should be progressed 	This policy describes that all new development within Brentwood must provide the appropriate level of digital infrastructure. This policy does not allocated sites for service development. As such, this policy is not considered to pose as a likely significant effect to the integrity of European Sites and is therefore screened out from further discussion.

Policy	Description	HRA Implications
	 including measures for resiting, re-provision or enhancement of any relevant communications infrastructure within the new development; demonstrate that the siting and design of the installation would not have a detrimental impact upon the visual and residential amenity of neighbouring occupiers, the host building (where relevant), and the appearance and character of the area; seek opportunities to share existing masts or sites with other providers; all digital communication infrastructure should be capable of responding to changes in technology requirements over the period of the development. Where applicants can demonstrate, through consultation with broadband infrastructure providers, that superfast broadband would not be possible, practical or economically viable: the developer will ensure that broadband service is made available via an alternative technology provider, such as fixed wireless or radio broadband; and ducting to all premises that can be accessed by broadband providers in the future, to enable greater access in the future. Or: 	

SP16: Creating	Proposals that meet high design standards to deliver safe, inclusive, attractive and accessible	No Likely Significant Effect
SP16: Creating Successful Places	 places will be supported. They should: provide a comprehensive design approach that deliver high quality, safe, attractive, inclusive, durable and healthy places to live and work in; deliver buildings, places and spaces that can adapt to changing social technological, economic and environmental conditions; incorporate energy efficient design and sustainable construction techniques, whilst ensuring that the aesthetic implications of green technology are appropriate to the context; achieves the successful integration of buildings, the routes and spaces between buildings, significant trees, historic boundaries, landmarks, views, topography, landscape, conservation areas and their setting; demonstrate a holistic approach to the design of the public realm, active frontages open space and landscaped area as an integral part of development proposals to provide attractive places that improve people's health and sense of vitality as well as to support improvements to the biodiversity, the micro climate and air pollution; create permeable, accessible and multifunctional streets and places that promotes active lifestyle and integrates different modes of transport, parking and servicing; ensure public and private amenity spaces of both existing and future development are inclusive, usable, safe and enjoyable; these include indoor and outdoor space, outlook, natural lighting, ventilation, matters of privacy, overlooking; integrate a mix of building typologies that meet the diverse needs of people in the borough and reduce the need to travel meet the principles of inclusive design and facilitate an inclusive 	No Likely Significant Effect A development management policy relating to creating successful places. This policy is not expected to pose as a likely significant effect to European Sites and can therefore be screened out from further discussion.
	environment for people of all abilities and age, ethnicity, gender, economic circumstances, and faith;	

Policy	Description	HRA Implications
	 be designed to minimise criminal activities and improve community safety; In addition, proposals should reflect the requirements of Brentwood boroughs Masterplan requirements where applicable. 	
BEXX: Responding to Context	 Successful design is founded upon an understanding and respect for an area's unique built, natural and cultural context. Development will be supported where it is demonstrated that it responds positively to its context and has drawn inspiration from the key characteristics of its surroundings. The Council will require applicants to demonstrate how proposals: identify and respond positively to existing features of natural, historic or local importance on and close to the proposed development site; use appropriate local characteristics to inform the use, layout, massing, scale, detailing, materials, location of entrances and landscape design of new development; enhance, reinforce or improve the quality and appearance of the surrounding area and the way it functions; and be well connected to, and integrated with, the immediate locality and wider area. 	No Likely Significant Effect This policy is related to development and building design. It is therefore not consider to pose as a likely significant effect to the integrity of European Sites located within catchment of Brentwood.
SP0X: Permeable and Legible Layout	 Development proposals will be favourably considered where the planning and design of layout: create a permeable and legible street system that connects well with the existing links within and outside of the development; arrange building forms, access points, routes, public and private spaces, and ancillary functions in an efficient, safe, workable, spatially coherent and attractive manner; incorporate existing site features of value; and safeguard the amenities of occupiers and nearby properties. 	No Likely Significant Effect A development management policy relating to scheme layout. This policy is not expected to pose as a likely significant effect to European Sites and can therefore be screened out from further discussion.

Policy	Description	HRA Implications
BEXX: Buildings Design	 In ensuring high quality design standard, new buildings will be supported where it can be demonstrated that they: have a positive impact on their setting in terms of siting, scale and massing, materials and detailing, use and ground floor activity, wider townscape and landscape impacts; are safe, convenient and accessible for all users to a level in excess of building regulations minima; design measures to reduce the environmental footprint of the buildings, in line with Policy X support and integrate biodiversity in the built environment; are constructed in a sustainable manner and are easily adaptable to needs of future occupiers; successfully integrate functional needs such as storage, refuse and recycling, bicycles and car parking; electric car charging points; and incorporate safe emergency evacuation facilities for all building users. Alterations and extensions to existing buildings will be permitted where they: reflect, or positively respond to, the existing building form, material palette and architectural detailing in keeping with Policy 10.X Responding to context; do not unacceptably overlook, overshadow or visually dominate neighbouring properties; respect the space between buildings where this contributes to the character of an area; and retain sufficient amenity space, bin storage, vehicle access and cycle and car parking. 	No Likely Significant Effect This policy is related to building design, this include preventing impacts to the surrounding landscape. As such, this policy is not expected to pose as a likely significant effect to European Sites and can therefore be screened out from further discussion.

Policy	Description	HRA Implications
BEXX: Paving Over Front Garden	 Where planning permission is required for proposals for the paving over of front gardens, the following criteria should be met: there will be no adverse impact on surface water run-off, particularly for those areas of the Borough with high levels of surface water flooding in line with Policy X (Flooding); it will not have a negative impact on the character and setting of the immediate area, particularly where applications fall within conservation areas or in the curtilage of a listed building; and it will not result in a net loss of biodiversity. 	No Likely Significant Effect This policy ensures that paving over gardens does not negatively impact upon surface water discourage and the environment. As such, this policy is not expected to pose as a likely significant effect to European Sites and can therefore be screened out from further discussion.

Policy	Description	HRA Implications
BEXX: Designing Landscape and the Public Realm	 Landscape and public realm must be designed as an integral part of new development proposals. High quality development will be supported where they can demonstrate how their proposals: are designed in relation to the function and character of the spaces and surrounding area; retain or enhance existing features including open spaces, trees, natural habitats or other features which make a positive contribution to the character, appearance or significance of the local area; incorporate Green and Blue Infrastructure in an appropriate manner to the scale of adjacent buildings and the space available; enhance biodiversity through the use of native planting and/or selected species capable of adapting to climate change; coordinate the design and siting of street furniture, boundary treatments, lighting, signage and public art; factor microclimate and daylight into the design proposals; use high quality materials, finishes and street furniture that are suitable to the location and context and help create local distinctiveness; adopt the principles of inclusive design and facilitate an inclusive environment for all users; and demonstrate how public spaces are to be maintained for the life of the development. 	No Likely Significant Effect This policy encourages development to including landscape design within development proposals, this includes open space and the planting of trees. As such, this policy is not expected to pose as a likely significant effect to European Sites and can therefore be screened out from further discussion.

Policy	Description	HRA Implications
BEXX: Open Space in New Development	 New development proposals are expected to provide functional onsite open space and/or recreational amenities and may where appropriate be required to also provide a financial contribution towards new or improved facilities within the Borough. The amount and type of provision required will be determined according to the size, nature and location of the proposal; quantity and type of open space needed; and existing provision accessible to the proposal. All payments will be in line with the Policy 10.7 Infrastructure and Community Facilities. A commuted sum may be requested for: proposals where strategic open space requirements cannot be met within the site; local and strategic open space in developments of single person households or of dwellings for the elderly (where however some compensating increase in private amenity space may be required); a town/district/village centre location within Brentwood; or where it is justified by an outstanding urban design approach based on site constraints and opportunities. All open space provision should be fully equipped to meet the needs of users as agreed by the Council, reflecting acceptable distance and minimum size criteria for different types of open space as set out in the Council's Open Space Standards (provided in Figures 10.3 and 10.4). Maintenance Plans should be submitted at planning application stage for all new facilities provided for exercise or recreation purposes. This is to secure quality over the long term and clarify responsibilities from the outset. 	No Likely Significant Effect This policy encourages the provision of and preservation of open spaces within Brentwood. This is a positive policy as open space has the potential to divert recreational pressure away from sensitive European sites. As such, this policy is not expected to pose as a likely significant effect to European Sites and can therefore be screened out from further discussion.

Policy	Description	HRA Implications
BEXX: Open Space, Community, Sport and Recreational Facilities	 Within the Borough's urban areas, permission will not be granted for development of land allocated on the Proposals Map as protected Open Space or Local Green Space unless it can be demonstrated: that alternative and improved provision can be created in a location well related to the functional requirements of the relocated use and existing and future users; the proposal would relate to the enhancement of the open space, contributing to both the character and amenity of the area; or the provision of new open space creates no additional displacement within the Green Belt. All proposals, including the designation of new Local Green Space and landscaping, must be accompanied by a maintenance plan to ensure long-term quality and scheme viability. There will be a presumption against any development that involves the loss of open space, community, sport, recreation or play facilities, including allotments, except where it can be demonstrated that there is an excess of provision, or where alternative facilities of equal or better quality and convenience will be provided as part of the development. Where appropriate, the Council will seek provision of community and recreational facilities through the acquisition of land, joint use of existing facilities or by entering into negotiation with private landowners. 	No Likely Significant Effect This policy encourages the preservation of open spaces within Brentwood. This is a positive policy as open space has the potential to divert recreational pressure away from sensitive European sites. As such, this policy is not expected to pose as a likely significant effect to European Sites and can therefore be screened out from further discussion.

BEXX: Green and	Brentwood's existing ecological networks including Thames Chase Forest, its green and open	No Likely Significant Effect
Blue Infrastrucutre	spaces, as well as green and blue features in the built environment are a part of the Borough's	This policy encourages the protection and
	network of Green and Blue Infrastructure (GBI) and should be protected, planned, enhanced and	This policy encourages the protection and enhancement of green and blue infrastructure
	managed. Development proposals should:	within Brentwood such as the Thames Chase
	- ensure GBI is integral to the primary decision making at every stage in	Forest. As such, this policy is not expected to
	the planning process;	pose as a likely significant effect to European
	- maximise opportunities for the provision, restoration, enhancement, and	Sites and can therefore be screened out from
	connection of GBI that integrates with natural and historic environments	further discussion.
	and systems;	
	- direct buildings and construction area to the least sensitive locations;	
	- provide appropriate specification and maintenance plans for proposed	
	on site green and blue infrastructure throughout the life of the	
	development, this includes small scale greening interventions such as	
	green roofs, street trees and soft landscaping;	
	 protect and enhance Brentwood's rivers, ponds and watercourses, 	
	avoid any adverse impacts on existing rivers, the water quality of the	
	rivers and watercourse, and demonstrate that any unavoidable impacts	
	are mitigated;	
	- seek to improve the water environment and ensure that adequate	
	wastewater infrastructure capacity is provided;	
	- ensure that misconnections between foul and surface water networks	
	are eliminated and not easily created through future building alterations;	
	- incorporate measures such as smart metering, water saving and	
	recycling, including retrofitting and rain/grey water harvesting, to help to	
	achieve lower water consumption rates and to maximise futureproofing;	
	- deliver environmental net gains; if there is a net loss from the	
	development, provide provisions through offsetting.	
	Where this is not possible, financial contributions to facilitate improvements to the quality and	
	extent of existing GBI in Brentwood Borough will be sought.	
	This Policy should be read in conjunction with Policy X Access to Nature, Policy X Flood Risk,	
	Policy X, Policies X (relating to Nature and Wildlife).	

Policy	Description	HRA Implications
BEXX: Access to Nature	 Access to nature should be integrated as a fundamental part of site and buildings design. Development, including conversion of existing buildings, will be supported if: major developments provide direct access to nature by measures such as buildings design and orientation, high-quality landscaping, planting, green roofs, green walls, nature-based sustainable drainage and/or non-motorised access to the countryside; These measures should be protected, planned, designed and managed as integrated features of Green and Blue Infrastructure; Development in areas that are more than 1km walking distance from an accessible green open space should seek opportunities to improve residents' experience and interaction with nature by means of design and/or greening interventions. This Policy should be read in conjunction with Policy X Addressing the Climate Change, Policy X Buildings Design, Policy X Designing Landscape and the Public Realm. 	No Likely Significant Effect This policy encourages access to nature within Brentwood, through green roofs and nature- based sustainable drainage. As such, this policy is not expected to pose as a likely significant effect to European Sites and can therefore be screened out from further discussion.
BEXX: Community Food Growing	Provision of space for personal and community gardening and food growing, within new developments will be supported.	No Likely Significant Effect This policy encourages community garden spaces within Brentwood. This is a positive policy as this type of outdoor activity has the potential to divert recreational pressure away from sensitive European sites. As such, this policy is not expected to pose as a likely significant effect to European Sites and can therefore be screened out from further discussion.

Policy	Description	HRA Implications
BEXX: Protecting Land for Gardens	 Proposals for development on sites that form part of an existing allotment, garden, or group of gardens will only be permitted where: the form, height and layout of the proposed development is appropriate to the surrounding pattern of development and the character of the area; sufficient garden space and space around existing dwellings is retained, especially where these spaces and any trees are worthy of retention due to their contribution to the character of the area and their importance for biodiversity; the amenity and privacy of neighbouring, existing and new properties is protected; provision is made for adequate amenity space, vehicular access arrangements and parking spaces for the proposed and existing properties; and there is no detrimental effect on the potential comprehensive development of the wider area. 	No Likely Significant Effect This policy encourages the preservation of garden spaces within Brentwood. This is a positive policy as garden provision has the potential to divert recreational pressure away from sensitive European sites. As such, this policy is not expected to pose as a likely significant effect to European Sites and can therefore be screened out from further discussion.

Policy	Description	HRA Implications
BEXX: Conservation and Enhancement of Historic Environment	 All development proposals that affect heritage assets and their settings will be required to: conserve, sustain and enhance designated and non-designated heritage assets including views into and out of conservation areas and their settings; ensure new development is sensitively sited and integrated in accordance with advice in accordance with national policy and guidance; submit a Heritage Statement providing sufficient information on the significance of the heritage asset, the potential impacts of the proposal on their character and setting , how a proposal has been modified to mitigate harm; where archaeological potential is identified this should include an appropriate desk based assessment and, where necessary, a field evaluation; and provide clear justification for any works that would lead to harm or substantial harm to a heritage asset through detailed analysis. Proposals that make sensitive use of heritage assets, particularly where these bring redundant or under used buildings or areas, especially any on English Heritage's At Risk Register, into appropriate use will be encouraged. When considering proposals for development that affect non-designated heritage assets, the Council will take into account the scale of any harm or loss and the significance of the heritage asset as set out in accordance with national policy and guidance. 	No Likely Significant Effect This policy encourages the preservation of historic landscapes within Brentwood. As such, this policy is not expected to pose as a likely significant effect to European Sites and can therefore be screened out from further discussion.

Policy	Description	HRA Implications
BEXX: Listed Buildings	 Proposals for development affecting or within the vicinity of a Listed Building should be accompanied by a Heritage Statement that describes the significance of the Listed Buildings affected and includes full details of the siting, design, access arrangements and external appearance of the development so that it is possible to assess whether the proposals are sympathetic to its character and setting. Changes of use of Listed Buildings and any associated works of alteration, including external illumination, may be permitted where this would contribute economically towards the restoration, retention or maintennance of the Listed Building and/or group of buildings, while protecting the historic, spatial or structural integrity of the building or its setting. Proposals for the alteration or extension of Listed Buildings will only be permitted where these are sympathetic to the buildings' character and appearance, and whether features of special architectural or historic interest are preserved, restored or complemented. Proposals involving the partial demolition or full demolition of a grade II Listed Building will only be permitted in exceptional circumstances; development involving the partial demolition or full demolition of a grade I or II* Listed Building will only be permitted in wholly exceptional circumstances 73, where all of the following criteria are met: the building cannot be used for its existing, previous or original purpose or function; nor can it be changed to any reasonable and viable use; conservation by grant-funding or some form of charitable or public ownership is demonstrably not possible; the historic character or appearance of the main building would be maintained or improved by the demolition of a long-term cleared site to the detriment of adjacent Listed Buildings. Where development is authorised subject to the above criteria, permission will be subject to agreement that any consequentia demolition shall no	No Likely Significant Effect This policy encourages the preservation of listed buildings within Brentwood. As such, this policy is not expected to pose as a likely significant effect to European Sites and can therefore be screened out from further discussion.

⁷³ Paragraph 194, NPPF (2018).

Prepared for: Brentwood District Council

Policy	Description	HRA Implications
BEXX: Local List	There is a general presumption in favour of the retention of local heritage assets, including buildings, structures, features and gardens of local interest as detailed in the Council's Local List. Where planning permission is required, proposals will be favourably considered where they retain the significance, appearance, character or setting of a local heritage asset.	No Likely Significant Effect This policy encourages the preservation of listed buildings, features and gardens within Brentwood. As such, this policy is not expected to pose as a likely significant effect to European Sites and can therefore be screened out from further discussion.
BEXX: Conservation Areas	 Buildings or parts of buildings, open spaces, trees, vistas or other features which make a positive contribution to the character, appearance or significance of the Conservation Area should be preserved or enhanced. All development or redevelopment in or within the vicinity of a Conservation Area will only be permitted where the Council is satisfied that: development does not adversely affect the streetscape, skyline or significant views; the development is proportional in scale, and complementary in design, with the adjoining buildings and wider area; where any or part demolition is proposed, the structure makes no material contribution to the character or appearance of the area, or the structure is considered to make a negative contribution to the appearance of the Conservation Area; where a change of use is proposed, there will be no adverse effect on the appearance or setting of the building; and where an alteration is proposed, it is appropriate and sympathetic in design, scale, materials and colour to the rest of the building. Proposals for any scheme, including alteration or replacement of shopfronts within a designated Conservation Area must include a historic and architectural evaluation within the Design and Access Statement. The level of detail provided should be proportionate to the importance of the heritage asset. Proposals will be expected to be of a high quality design and detailed information will be required. Outline planning permission will not be given for new buildings in a Conservation Area. 	No Likely Significant Effect This policy provides mitigation measures for impacts of development on heritage conservation areas. As such, this policy is not expected to pose as a likely significant effect to European Sites and can therefore be screened out from further discussion.

Policy	Description	HRA Implications
BEXX: Scheduled Monuments and Archaelogical Remains	The desirability of preserving a Scheduled Monument or their equivalent and its setting is a material consideration in the determination of planning applications. Planning permission will not be permitted for development which would adversely affect a Scheduled Monument, or other locally or nationally important sites and monuments, or their settings. A full Archaeological Assessment must be included with any planning application affecting areas of known or suspected archaeological importance to ensure that provision is made for the preservation of important archaeological remains. In areas considered less likely to have significant remains, full investigation or a watching brief may be required by planning condition. Where proposals affect archaeological sites and other designated assets, preference will be given to preservation in situ unless it can be shown that archaeological mitigation through recording, assessment, analysis report and deposition of archive is more appropriate. Any development that may affect archaeological remains will need to demonstrate the likely impact upon the remains and the proposed mitigation to reduce that impact.	No Likely Significant Effect This policy encourages the preservation of scheduled monuments and archaeological remains within Brentwood. As such, this policy is not expected to pose as a likely significant effect to European Sites and can therefore be screened out from further discussion.
BEXX: Protected Lane/Quiet Lane	Details not yet provided	Full details are yet to be provided. This policy is not expected to have any HRA implications

Policy	Description	HRA Implications
SP11: Strong and Competitive Economy	 The Council and its partners will seek to maintain high and stable levels of local economic growth, enabling the Borough's economy to diversify and modernise through the growth of existing business and the creation of new enterprises. Support will be given to proposals that secure job growth with 'high value' business and retail. This will be secured by: capitalising on the economic benefits that arise from Elizabeth Line; improving access to a range of employment opportunities for Borough residents in order to meet local employment needs and maintain viable, sustainable communities; Strategic Employment-led Development promoting economic growth through the intensification of vacant employment floorspace and underutilised sites, the regeneration of previously developed land, and the allocation of new sites necessary to support employment growth in sustainable locations; making better use of existing business premises by opening up vacant employment floorspace for use by other businesses; directing major new retail, office and leisure investment to the Borough's Town Centres, stimulating improvement and regeneration; supporting proposals which achieve the renewal and improvement of business premises to provide local employment; enhancing and protecting the important role of small and medium sized commercial enterprises within the Borough's economy; maintaining current tourist attractions and encouraging new opportunities to increase the amount of visitors to the Borough; and supporting the Borough's rural economy and growing agricultural enterprises. 	No Likely Significant Effect This policy is related to the economy of Brentwood through the safeguarding of current business and business premises. Whilst economic development has the potential to result in increased atmospheric pollution contributions, this policy does not identify any quantum or type of economic development. As such, this policy does not allocate sites for employment/ business development is therefore unlikely to pose as a significant effect to the European Sites located within catchment of Brentwood.

Policy	Description	HRA Implications
SP12: Employment Land Provision	Providing for additional jobs will require a total of 32.8 hectares of new employment land. Areas allocated for employment purposes are set out in Policy 8.4 and identified on the Proposals Map.	Likely Significant Effect This policy allocates a total of 32.8ha of employment land that is to be placed with Brentwood. In isolation there are no realistic linking impact pathways present, none the less in combination assessment is required.
SP06: Job Growth	Provision is made for 5,000 additional jobs to be provided in the Borough over the Plan period at an annual average rate of 250. Job growth will be distributed primarily through new employment (B-use) allocations but supported by existing employment sites and appropriate redevelopment where appropriate. In addition, other business sectors will support job growth over the Plan period, such as retail, hotel and leisure uses.	Likely Significant Effect This policy aims to provide a total of 5,000 additional jobs within the Borough over the course of the Plan period. In isolation there are no realistic linking impact pathways present, none the less in combination assessment is required.
BEXX: Employment Development Criteria	 Development for employment uses (Class B1, B2 or B8) will be encouraged provided the proposal: is of a scale and nature appropriate to the locality; provides appropriate landscaping and screening; is accessible by public transport, walking and cycling; ensures vehicular access avoids residential streets and country lanes, and the proposal does not give rise to significant traffic movements within rural areas; is easily accessible to main arterial routes (A127, A12, M25) with appropriate parking provision; and is accompanied by a Transport Assessment and Travel Plan in accordance with Policy 10.1 where a significant amount of movement is generated. 	No Likely Significant Effect A development management policy that provides criteria for employment development. This policy does not identify any quantum or location of development and is therefore not expected to pose as a likely significant effect to the integrity of European Sites.

Policy	Description	HRA Implications
BEXX: Employment Land Allocations	 Within those areas allocated for general employment and office development listed in Figure 8.3 and on the Proposals Map, the Council will seek to achieve and retain a wide range of employment opportunities. Redevelopment or change of use of business, office, general industry and distribution for non Class B uses will only be permitted where: a. the proposal is for other non-residential uses that provide significant employment with no reasonable prospect of locating elsewhere in the Borough, and there is no identified need for the site or buildings for Class B uses; b. the proposal is wholly for affordable housing, the site is vacant and development would not prejudice continuation of adjacent employment uses; c. the proposal is for any other use and the application is supported by a statement of efforts made to secure re-use for Class B1-B8 or similar uses and other non-residential use that provides employment, which evidence demonstrates there is no realistic prospect of the site or buildings being used or re-used, including through redevelopment, for these purposes; or d. the site or buildings would be physically unsuitable for re-use for Class B1-B8 or similar use, even after adaptation (including sub-division into smaller units), refurbishment or redevelopment, in terms of siting, design, access, layout and relationship to neighbouring buildings and uses. 	No Likely Significant Effect A development management policy relating to employment land allocations. This policy does not in itself allocate any employment sites and does not identify any quantum of development and is therefore not expected to pose as a likely significant effect to the integrity of European Sites.

Policy	Description	HRA Implications
BEXX: Brentwood Enterprise Park (101A)	 Employment Criteria and Allocations Brentwood Enterprise Park will provide new floorspace for employment development (Use Classes B1, B2 and B8), made up of land at the former M25 works site (south of A127, site ref: 101A) and land at Codham Hall (north of A127, site ref: 101B), as set out on the Proposals Map. Development proposals should meet the following criteria: e. Employment uses and jobs provided on site are consistent with the economic strategy set out within this Plan, and support the vitality and viability of Brentwood Town Centre and other Borough centres; f. Development is of a high design standard, meeting aspirations to enhance this location as a key gateway into Brentwood; g. Landscaping and planting should be used to create a buffer and provide improved visual amenity between the site and surrounding land, minimising any amenity impacts; and h. In accordance with Policy 10.3 Sustainable Transport, proposals should be accompanied by: i. Green Travel Plan linking this site with Brentwood, Shenfield, West Horndon and Dunton Hills Garden Village, and ii. Transport Assessment. Brentwood Enterprise Park will comprise the following while further detail is provided through supporting Masterplan work for the site: Land at Former M25 Works Site, South of A127 (101A) Provision of 23.5 hectares of employment land is made at the former M25 Works Site with business floorspace (Use Classes B1, B2, and B8) to meet market-led needs along with complimentary associated ancillary uses. The site will have a particular onus on high quality buildings and attractive site frontages to surrounding roads. 	No Likely Significant Effect This policy allocates a single development site for employment purposes at the Brentwood Enterprise Park. However this policy does not allocate any quantum of development. In addition this site has previously been subject to HRA ⁷⁴ which enabled this allocation to be screened out alone. In combination impact pathways relating to water quality and air pollution require further investigation.

⁷⁴ AECOM. (January 2018) Habitats Regulations Assessment of Brentwood District Council Draft Local Plan: Preferred Site Allocations Regulation 18 Consultation (January 2018). Brentwood District Council

Policy	Description	HRA Implications
BEXX: Supporting the Rural Economy	 The Council will promote a sustainable rural economy by supporting appropriate, small scale rural enterprise. Proposals to diversify the range of economic activities on a farm or in a rural area will be supported where proposals: are accessible, and traffic generation can be satisfactorily accommodated by the existing or planned local road network, ensuring access arrangements are acceptable to the scale and type of development with no adverse effect on the road network; benefit the local community and do not adversely affect quality of life or the amenity of local residents; conserve and enhance local character and maintain the openness of Green Belt; are consistent in scale and environmental impact with their rural location; have no detrimental impact on existing village shops and business; have no unacceptable effect on water quality or flooding, watercourses, biodiversity or important wildlife habitats; and work collaboratively with Essex County Council, communications operators and providers, to provide high quality communications infrastructure and support initiatives, technologies and developments which increase and improve coverage and quality throughout the Borough. 	No Likely Significant Effect A development management policy relating to supporting the rural economy. It is noted that economic development has the potential to result in increased atmospheric pollution contributions, however this policy does not identify any quantum, location or type of economic development. As such, it is unlikely that this policy will have significant impacts on the integrity of European Sites located within catchment of Brentwood. This policy can therefore be screened out from further discussion.
SP07: Retail and Commercial Leisure Growth	Provision is made for 4,844 square metres (net) of comparison retail floorspace and 3,833 square metres (net) of convenience floorspace to be provided in the Borough over the Plan period.	No Likely Significant Effect This policy allocates retail floorspace within Brentwood Borough. In isolation there are no realistic linking impact pathways present, however in combination assessment relating to atmospheric pollution and water quality is required.

SCXX: Retail	The Council will promote the continued roles and functions of the Designated Centres to	No Likely Significant Effect
Hierarchy of Designated Centres	positively contribute towards their viability, vitality, character and structure. The hierarchy of Designated Centres in Brentwood Borough is as follows:	A development management policy providing
	i. Brentwood Town Centre	the retail hierarchy within Brentwood. There are
	The Town Centre should be the first choice for retail, leisure and main	no linking impact pathways present and this
	town centre uses. If Brentwood cannot accommodate the retail	policy can be screened out.
	floorspace projection within the Town Centre, it may be appropriate to	
	allocate additional retail floorspace in smaller Designated Centres or	
	strategic residential allocations.	
	j. District Shopping Centres	
	The District Shopping Centres will be a focus of more localised retail,	
	commercial, flexible work space, community facilities and services that	
	reduce the need to travel and contribute towards more sustainable and	
	neighbourhood-scale living.	
	k. Local Centres	
	Local Centres include small shops of a local nature, serving a small	
	catchment. They have an important role in providing day to day shops	
	and services that are accessible to residents in villages and rural parts	
	of Brentwood, especially in areas more remote from the larger centres.	
	The Designated Centres and Primary Shopping Area are detailed in Figure X and shown on the	
	policies map. The sequential approach and impact assessment	
	Retail, leisure, office and other main town centre uses will continue to be directed to these	
	centres in line with the sequential approach to retail development locations set out in the NPPF ⁷⁵ .	
	Development should contribute positively to the attractiveness, vitality, safety, environmental	
	quality, historic character, employment opportunities and social inclusiveness of these centres.	
	Change of use of upper floors above commercial premises to working space and/or residential will be encouraged provided that reasonable facilities and amenities are provided for, that	
	development does not result in in the loss of ancillary storage space or other beneficial use to	
	the extent that it would make a ground floor unit unviable, and that the development would not	
	prevent off street servicing of any ground floor unit.	
	Any retail developments proposed outside these centres must be subject to a retail impact assessment, where the proposed gross floorspace is greater than 2,500 sq. m. A retail impact	
	assessment, where the proposed gross noorspace is greater than 2,000 Sq. III. A fetdil illipact	

⁷⁵ Paragraph 86

Prepared for: Brentwood District Council

Policy	Description	HRA Implications
	assessment may be required below this threshold where a proposal could have a cumulative impact or an impact on the role or health of nearby centres within the catchment of the proposal.	

SCXX: Brentwood	The Council will conserve the positive qualities of Brentwood Town Centre while enhancing and	No Likely Significant Effect
Town Centre	improving negative aspects of function and appearance.	
	Development in the Town Centre should contribute to the Council's aim of improving the capacity	A development management policy relating to
	and quality of the public realm throughout Brentwood Town Centre, contribute to a vibrant High	Brentwood town centre. There are no linking
	Street and the surrounding Conservation Area in line with the Town Centre Design Guide SPD.	impact pathways present and this policy can be
	Shopfronts and signage have significant impacts on its surroundings therefore proposals are	screened out.
	required to incorporate high quality, attractive shopfronts that enhance the street scene, in line	
	with the Council's adopted Town Centre Shopfront Guidance SPD.	
	Where necessary, design must incorporate technology and property management, parking and traffic movement mitigations to reduce congestion.	
	Chapel Ruins, Baytree Centre and South Street areas	
	This area provides a link to strategic sites on the High Street therefore improving its permeability	
	and integration into the wider public realm network will create a more welcoming and flexible	
	space at the heart of the Town Centre, enable its historical settings to be celebrated. Proposals	
	should demonstrate how they:	
	I. contribute to the enhancement of public realm around Chapel Ruins	
	and the Conservation Area, retain and enhance their significance and	
	character;	
	m. complement the retail function and maintain or add to the vitality,	
	viability and diversity of the Town Centre, by means such as mixed use	
	schemes that include retail, leisure and residential;	
	n. facilitate safe and pleasant pedestrian movement through improved	
	alleyways, lighting, wayfinding and landscaping; and/or	
	o. assist in uplifting and transforming the Baytree Centre and integrate it	
	with the other parts of the Town Centre.	
	William Hunter Way	
	The Council will work with developers and partners to improve the public realm links between the High Street and William Hunter Way, and through the redevelopment of William Hunter Way car	
	park, create a mixed-use scheme to provide new retail and commercial floorspace.	
	Proposals should demonstrate how they:	
	p. contribute to the improvements to frontages and public realm on	
	William Hunter Way through landscaping and redevelopment;	

Policy	Description	HRA Implications
Policy	 Q. provide additional shopfronts and double fronted shops, if development involves the rear of premises on the north side of the High Street; r. facilitate safe and pleasant pedestrian movement through improved lighting, wayfinding and landscaping; s. reprovide an appropriate quantum of parking, ensure that parking is well designed and integrated into the public realm. Linkages to Brentwood station Improvements to the rail service to London will increase Brentwood Town Centre's regional public transport accessibility. The Council will seek to enhance public realm and way finding around Brentwood Station, foster a stronger sense of place and sense of arrival, improve the linkages from the Town Centre to the station, with Kings Road being the primary focus. 	HRA Implications
	 Proposals should demonstrate how they: t. contribute to the enhancement of public realm around Brentwood station, Kings Road and Kings Road junction through design, landscaping and redevelopment; u. facilitate safe and convenient traffic movement with priority given to pedestrians and cyclists, by means such as improved junctions, cycle paths, lighting and wayfinding; v. add to the vitality and vibrancy of the Town Centre by providing an appropriate mix and balance of uses including residential, employment, commercial and amenity spaces; and provide an appropriate quantum of parking, whilst ensure that parking is well designed and integrated into the public realm. 	

SCXX: Mixed Use	Within the boundary of Designated Centres as set out in Policy X and defined on the policies	No Likely Significant Effect
Development in Designate Centres	 map: mixed use development will be supported if: 	A development management policy relating to
	\circ they are in proportion to the scale and function of the centre;	mixed use development. There are no linking impact pathways present and this policy can be
	 they contain an appropriate mix of ground floor uses; 	screened out.
	 proposed development makes efficient use of the site and is 	
	considered to be of sufficient density.	
	- proposals resulting in the loss of centre uses at ground floor level to	
	non-centre uses, as defined in Figure X, which results in an	
	unacceptable mix of uses will not be permitted;	
	 non-retail development that are classed as centre uses, as defined in Figure X, should: 	
	 complement the retail function and maintain or add to the 	
	vitality, viability and diversity of the centre;	
	 provision is made for an active frontage, such as a window 	
	display, which is in keeping with the character of the shopping	
	area;	
	o not give rise to a detrimental effect, individually or cumulatively,	
	on the character or amenity of the area through smell, litter,	
	noise or traffic problems;	
	 proposals for new hot food takeaways (Use Class A5) within 	
	400m walking distance from the entrance points of primary or	
	secondary schools will be restricted in order to promote the	
	health and wellbeing of school pupils. Hours of opening will be	
	limited to after 5pm on school days and lunch time opening will	
	only be permitted where schools within 400m do not allow pupils to freely leave school premises during lunch breaks;	
	 changes of use from retail to another centre use as set out in Figure X 	
	will only be permitted where the development would satisfy the above	
	criteria and retain an appropriate mix and balance of uses which will	
	provide for the needs of local residents;	

Policy	Description	HRA Implications
	 proposals for separate units of retail, offices, leisure, cultural, community facilities and residential on upper floors are supported provided that the use would have a safe and convenient access, a separate refuse and recycling store, and would not inhibit the functioning of the ground floor use. Centre uses and employment uses should be given priority over residential uses unless it can be demonstrated that this would lead to an imbalance of uses. 	

Policy	Description	HRA Implications
SCXX: Primary Housing Areas	 Retail use should remain the predominant use in Primary Shopping Areas as set out in Policy X and defined on the policies map. Proposed retail development will be supported if they: contribute to the area's attractiveness, accessibility and vibrancy by adding to or providing a range of shops to meet local needs, including opportunities for small, independent shops; would not result in subdivision of an existing large retail unit; be fully integrated with the existing shopping area; facilitate safe, convenient and pleasant pedestrian movement through improved lighting and landscaping. Proposals resulting in the loss of retail uses at ground floor must demonstrate that: the use is no longer viable, by evidence of active marketing to the public for at least 12 months, showing that the premises are not reasonably capable of being used or redeveloped for a retail use; development would not result in 3 or more non-retail use units in adjoining premises. Proposals for retail and commercial leisure development outside the Borough's Primary Shopping Areas over 2,500 square metres will only be permitted provided an accompanying impact assessment can satisfactorily demonstrate that: associated travel demand can be satisfactorily accommodated by the transport network with appropriate mitigation; the proposal does not give rise to any detrimental impact on amenities in the surrounding area; and travel by more sustainable forms of transport than the private car will be achieved. 	No Likely Significant Effect A development management policy relating to Primary Housing Areas. There are no linking impact pathways present and this policy can be screened out.

Policy	Description	HRA Implications
SCXX: Non-centre Uses	 Proposals for non-centre uses in the Designated Centres; should demonstrate how they: complement the retail function and makes a positive contribution to the vitality, viability and diversity of the Designated Centre it is located within; would not create an over-concentration of non-centre uses which are harmful to the function of the centre provision is made for an active frontage in keeping with the character of the shopping area; would not give rise, either alone or cumulatively, to a detrimental effect on the character or amenity of the area through smell, litter, noise or traffic problems. Demonstrates any potential related problems can be overcome satisfactorily to protect amenities of surrounding residents. Details of extraction, filtration, refrigeration or air conditioning units should be submitted with any application; and for proposals creating more than two residential flats above ground floor level, the development would not result in the loss of ancillary storage space or other beneficial use to the extent that it would make a ground floor unit unviable, and the development would not prevent off street servicing of any ground floor unit. 	No Likely Significant Effect A development management policy relating to Non-centre uses. There are no linking impact pathways present and this policy can be screened out.

Policy	Description	HRA Implications
SCXX: Night Time Economy	 After-hours cultural, entertainment and leisure uses in Designated Centres will be encouraged as part of mixed use development. After-hours leisure should raise standards and broaden the appeal of the night-time economy. Proposals should: be safe and welcoming, delivering high standards of customer care; allow people to walk and cycle around the centre with ease; offer a vibrant choice of leisure and entertainment for a diversity of ages, lifestyles and cultures, including families and older people; provide a mix of activities that reinforce local character and identity; would not give rise, either alone or cumulatively, to a detrimental effect on the character or amenity of the surrounding residential area through smell, litter, noise or traffic problems. Demonstrates any potential related problems can be overcome satisfactorily to protect amenities of surrounding residents; provide evidence of responsible management and stewardship arrangements to ensure there is no disturbance to surrounding properties and residents or harm to surrounding area amenity. 	A development management policy relating to the night time economy. There are no linking impact pathways present and this policy can be screened out.
XX: Planning for Inclusive Communities	 To plan for and build inclusive environment that supports our residents and communities, the Council will work will partners, stakeholders and developers to: provide access to good quality community spaces, services and amenities and infrastructure that accommodate, encourage and strengthen communities; create places that foster a sense of belonging and social interaction, where communities can develop and thrive; ensure that streets and public spaces are planned for everyone to move around and spend time in comfort and safety, are convenient and welcoming with no disabling barriers, providing independent access without additional undue effort, separation or special treatment; ensure buildings and places are designed in a way that everyone regardless of their ability, age, income, ethnicity, gender, faith, sexual orientation can use confidently, independently, with choice and dignity, avoiding separation or segregation; ensure that new buildings and spaces are designed to reinforce inclusivity of neighbourhoods, and are resilient and adaptable to changing community requirements. 	No Likely Significant Effect This policy safeguards community spaces and amenities. This policy ensures that development is inclusive for all and as such this policy is regards development management and design rather than site allocations. As such this policy is unlikely to have significant effects to the integrity of European Sites and is screened out of further discussion.

Policy	Description	HRA Implications
XX: Protecting and Enhancing Community Assets	 The Council recognises the importance of community assets as part of social infrastructure and seeks to ensure that: existing community assets will be protected from inappropriate changes of use or redevelopment; new facilities should be easily accessible by public transport, cycling and walking and will be prioritised in Designated Centres; development proposals that provide high quality, inclusive community assets that addresses a local or strategic need and supports service delivery strategies will be supported; development proposals that seek to make best use of land, including the co-location of different forms of community assets and the rationalisation or sharing of facilities, will be encouraged and supported; development proposals that would result in a loss of community assets will be discouraged unless it can be demonstrated that: there are realistic proposals for re-provision that continue to serve the needs of the neighbourhood and wider community; or the loss is part of a wider public service transformation plan which requires investment in modern, fit for purpose infrastructure and facilities to meet future population needs or to sustain and improve services. redundant community assets should be considered for full or partial use as other forms of social infrastructure before alternative developments are considered. 	No Likely Significant Effect This policy safeguards community assets such as community centres and public transport from re-development/ change of use. This policy is therefore not expected to pose as a likely significant effect to the integrity of the European Sites located within catchment of Brentwood.

Policy	Description	HRA Implications
SCXX: Securing New Infrastructure and Facilities	The Council will require all new development to meet on and off-site infrastructure requirements necessary to support development proposals and mitigate their impacts. Planning obligations secured through Section 106 agreements will be used to provide necessary site related infrastructure requirements such as new access arrangements, provision of open space and other community infrastructure, local highway/transportation mitigation and environmental enhancements. Necessary off-site infrastructure will continue to be secured through the pooling of contributions secured through Planning Obligations and, once adopted, according to the Council's Community Infrastructure Levy Charging Schedule. The Council will require all new development to be consistent with the adopted ECC Developers Guide to Infrastructure Contributions, to reflect the level of contributions required from new development for the provision of essential infrastructure by ECC. Planning Obligations will include specific infrastructure requirements made necessary by individual developments. Section 216 of the Planning Act (2008) sets out the broad types of infrastructure which CLL can be used for. This includes transport facilities, flood defences, schools, medical facilities, recreational facilities, open spaces and affordable housing. Further information regarding requirements will be set out in the Council's Infrastructure Delivery Plan. The Council's is preparing a Community Infrastructure Levy (CLL) Charging Schedule alongside the Local Plan. Until this is adopted, the Council will assess all development proposals and seek the provision of, or contributions to, necessary on or off-site infrastructure to be secured through planning obligations.	No Likely Significant Effect This policy ensures that all development is supported by the corrected level of infrastructure, this also include green space. This policy does not therefore allocate infrastructure; rather this policy provides mitigation for development. As such this policy is not expected to have likely significant effects to European Sites and is screened out from further discussion.

Policy	Description	HRA Implications
SCXX: Education Facilities	 Sites proposed for or in current educational use are protected for that use in line with Policy XX Protecting and Enhancing Community Assets. In addition, the change of use or re-development of educational establishments and their grounds will not be permitted unless: it can be clearly demonstrated that the use of the site is genuinely redundant and no other alternative educational or community use can be found; satisfactory alternative and improved facilities will be provided; the area of the site to be redeveloped is genuinely in excess of Government guidelines for playing field provision, taking into account future educational projections. Where there is a demonstrable need for the facilities, as a result of existing deficiency or regeneration or new development, planning permission will be granted for appropriate and well-designed proposals for new school and education facilities in sustainable locations on sites of sufficient size. New or enhanced education facilities will be permitted if: the scale, range, quality and accessibility of education facilities are improved; they are located in or in close proximity to the community that they are intended to serve; for proposals in urban areas, the site is easily accessible by public transport, walking and cycling; adverse impacts on the transport network and parking provision will be mitigated to an acceptable level; and they mitigate the impact of any associated residential development. The Council recognises the differences in location and design requirements between rural and urban based new education proposals in the Borough and will assess applications accordingly. Where necessary, the Council will utilise planning obligations or CL to help mitigate any adverse impacts of an educational development and assist in delivering development that has a positive impact on the community. Developers should ne	No Likely Significant Effect This policy does not allocated sites for development; rather this policy safeguards education facility, such as a schools, are safeguarded from development. As such this policy is not expected to pose as a likely significant effect to European Sites.

Policy	Description	HRA Implications
SCXX: Buildings for Institutional Purposes	 Where there is a demonstrable need for the facilities, as a result of existing deficiency or regeneration or new development, planning permission will be granted for appropriate and well-designed proposals in sustainable locations on sites of sufficient size. Redevelopment, change of use to or new buildings for institutional purposes will be permitted where the Council is satisfied that: the scale, range, quality and accessibility of facilities are improved; the proposal is in close proximity to the community that the facilities are intended to serve; the site is easily accessible by public transport, walking and cycling, impacts on the transport network are mitigated to an acceptable level and parking provision is adequate; and/or the impact of any associated residential development are mitigated. 	No Likely Significant Effect This policy does not allocate sites for the development for institutional purposes. This policy describes that development must be sustainable in design. As such, this policy is not expected to pose as a likely significant effect to European Sites.
SP10: Health Planning	 To improve Brentwood's residents' health and well-being as well as reduce health inequalities, the Council will work with relevant partners and developers to: ensure that the wider determinants of health and well-being are addressed in an integrated and co-ordinated way, taking a systematic approach to improving the mental and physical health of all residents and reducing health inequalities; promote more active and healthy lives for all residents and ensure healthy choices are available; assess the potential impacts of development proposals on the mental and physical health and wellbeing of communities, in order to mitigate any potential negative impacts, maximise potential positive impacts, and help avoid health inequalities, for example through the use of Health Impact Assessments; plan for appropriate health and care infrastructure to address the needs of Brentwood's population. plan for improved access to and quality of green spaces, the provision of new green and blue infrastructure, and spaces for play, recreation and sports; seek to improve air quality where appropriate and necessary; ensure that new buildings are well-insulated and sufficiently ventilated to avoid the health problems associated with damp, heat and cold; seek to create a healthy food environment, increasing the availability of local produce through community allotments and restricting unhealthy options in line with Policy X, ,X, X. This policy should be read in conjunction with Policy XX (Health Impact Assessment), XX (creating successful places) XX (managing heat risks) XX (access to nature) etc. 	No Likely Significant Effect This policy is aimed at improving the health of Brentwood's residential population. Objectives within this policy include improving aspects of the Boroughs air quality and accessibility to open green spaces. As such, this policy is not expected to pose as a likely significant effect to the integrity to European Sites. This policy can therefore be screened out from further discussion.

SCXX: Promoting	Brentwood Borough Council is committed to ensuring all new developments promote healthier	No Likely Significant Effect
Health and Wellbeing	and inclusive environments. The design of the built environments and new developments play a	
-	key role in ensuring that health inequalities are not exacerbated and make it harder for people to	This policy describes similar objectives to Policy
	live healthier lives. The evidence suggests that the following issues impact on the physical,	SP10: Health Planning. It is a management
	social, and mental health of communities:	policy relating to the promotion of health and
	- The location, density and mix of land use;	wellbeing. This policy is therefore also not
	- Street layout and connectivity;	expected to pose as a likely significant effect to
	- Access to public services, employment, local fresh food, education, leisure and	European Sites that are located within
	recreation activities, and other community services;	catchment of Brentwood. This policy is therefore
	- Safety and security;	screened out from further discussion.
	- Open and green space;	
	- Affordable and energy efficient housing;	
	- Air quality and noise;	
	- Extreme weather events and climate change;	
	- Community interaction; and	
	- Transport	
	Majority of proposals will be required to assess their impacts on health and well-being, upon the	
	capacity of existing health and social care services and facilities, the environmental impacts and	
	the promotion of health improvement activities. For Use Class C2 developments comprising	
	residential care homes and nursing homes, and Use Class C3 residential developments of any	
	size are encouraged to illustrate how health and wellbeing have been considered within the	
	development. Planning proposals should adhere to the requirements set out in the Essex	
	Planning Officer's Association (EPOA) Health Impact Assessment (HIA) Guidance notes.	
	Those developments that are 50 or more units (or less than 50 units at the discretion of the	
	planning authority where the number of units could propose a significant impact on the	
	community and infrastructure) and non-residential developments in excess of 1,000m2, are	
	required to submit a Health and Wellbeing Impact Assessment as required by the EPOA HIA	
	Guidance Note, which will measure the impact on health and wellbeing, the demand on the	
	capacity of health and social care services and facilities arising from the development. Where	
	significant impacts are identified, planning permission will be refused unless infrastructure	
	provision and/or funding to reasonably meet the health and wellbeing and service requirements	
	of the development are provided and/or secured by planning obligations, or by CIL, as	
	appropriate.	
	Brentwood Borough Council will require a Health and Wellbeing Impact Assessment to be	
	prepared and carried out in accordance with the advice and best practice for such assessments	
	as published locally through the Essex Planning Officers Association (EPOA). Developers will be	
	expected to contact the Council at pre-application stage to complete the Healthy Communities	

Policy	Description	HRA Implications
	Checklist (as part of the validations checklist), to enable joint discussions to take place on the likely health and wellbeing impacts and environmental impacts of proposals. This is an opportunity to strengthen the process of spatial planning through partnership working, community engagement, evidence sharing and coordination and the impacts on health and wellbeing and the environment. Where applicable planning applications must adhere to POLICY SP10: HEALTHY PLANNING	
NE01: Conserving and Enhancing the Natural Environment	The Council is committed to the conservation and enhancement of the Borough's natural environment, including its varied landscapes, heritage, biodiversity and habitats, through the protection of designated sites and species, whilst planning positively for biodiversity networks and minimising pollution. The Council will plan for a multifunctional network of green and blue infrastructure which protects, enhances and, where possible, restores ecosystems, securing a net gain in biodiversity across Brentwood. The needs and potential of biodiversity will be considered together with those of natural, historic and farming landscapes, the promotion of health and wellbeing, sustainable travel, water management and climate change adaptation. The Council will ensure that new development does not contribute to water pollution and, where possible, enhances water quality, and demonstrates the advancement of biodiversity and amenity interests through the provision of a range of measures to protect, enhance and buffer watercourses. The Council will take a precautionary approach where insufficient information is provided about avoidance, management, mitigation and compensation measures. Management, mitigation and compensation measures. Management, mitigation and compensation measures is considered to the conservation and enhancement of the Borough's natural environment, including its varied landscapes, heritage, biodiversity and habitats, through the protection of designated sites and species, whilst planning positively for biodiversity networks and minimising pollution.	No Likely Significant Effect This policy safeguards and enhances the natural environment As such this policy is not expected to pose as a likely significant effect to the integrity of European Sites and is screened out from further discussion.

Policy	Description	HRA Implications
NE02: Safeguarding the Historic and Natural Heritage Landscape Character	 Development should foster a sense of place and local identity, and respect, and where possible, enhance the character of the area. In assessing individual proposals, regard will be given to: sensitivity of an area to change; importance of retaining the individual identity of separate settlements and parts thereof; protecting, conserving and, where appropriate, enhancing heritage assets and their settings in order to conserve their significance; potential impact of development on non-designated heritage assets including archaeology; conserving and enhancing natural landscapes and their biodiversity and habitats, including through the creation of new habitats; Thames Chase Plan; and cumulative impact of development on heritage assets and the landscape character. 	No Likely Significant Effect A development management policy relating to heritage and landscape. There are no linking impact pathways present and this policy can be screened out.
NE03: Recreational Disturbance Avoidance and Mitigation Strategy (RAMS)	New development will need to consider on-site options for recreational disturbance impact mitigation and make appropriate financial contributions towards off site mitigation as prescribed in the Essex Coastal 'RAMS' mitigation strategy and the Epping Forest 'RAMS' mitigation strategy (as applicable). Prior to RAMS completions, the Council will seek proportionate contributions from proposed residential development to deliver all measures identified (including strategic measures) through project level HRAs, or otherwise, to mitigate any recreational disturbance impacts in compliance with the Habitat Regulations and Habitats Directive. This policy should be read in conjunction with Policy XXX: Wildlife and Nature Conservation XXX Development Contributions.	No Likely Significant Effect A positive policy identifying the need for development to contribute to the relevant RAMS as required, thus providing protection to European sites from in combination effects of increased recreational pressure. This policy is therefore expected to be of benefit to these sites and unlikely to be of any significant effect.

NE04: Wildlife and	Designated Environments Sites of Special Scientific Interact (SSSIs), National Nature Reserves (NNR), Special Protection	No Likely Significant Effect
NE04: Wildlife and Nature Conservation	 Designated Environments Sites of Special Scientific Interest (SSSIs), National Nature Reserves (NNR), Special Protection Areas (SPAs), Special Areas of Conservation (SACs) and Ramsar sites - as shown on the Proposals Map - are unique and irreplaceable habitats and will require a full assessment in line with European legislation. These sites are afforded the highest level of protection and proposals should demonstrate avoidance, onsite management and onsite mitigation. Development on land within or outside these sites, which is likely to have an adverse impact on it (either individually or in combination with other developments) without appropriate mitigation (relative to the significance of the impact) will not be permitted. The Council will take a precautionary approach where insufficient information is provided about avoidance, management and mitigation measures. The Council will secure management, mitigation and enhancement through planning conditions/obligations where necessary. The Council acknowledge the sensitive biodiversity sites just beyond the borough boundary, including Basildon Meadows SSSI, Norsey Wood SSSI and Epping Forest SSSI and Special Area of Conservation. Proposals likely to have an adverse effect on these neighbouring sites will be assessed in per policy xxx above. Proposals likely to have an adverse effect on a Local Wildlife Site (LoWS), Local Nature Reserve (LNR), Special Roadside Verge or a site that satisfies the relevant designation criteria will not be permitted unless the benefits of the development clearly outweigh the harm to the nature conservation value of the site. If such benefits exist, the developer will be required to demonstrate that impacts will be avoided, and impacts that cannot be avoided will be mitigated on-site. Where residual impacts remain, offsite compensation will be required and demonstrate how they are achieving biodiversity net-gain in the Borough of Brentwood. Where	No Likely Significant Effect This policy safeguards designated sites of biological importance including European designated sites. This policy is therefore of benefit to European Sites and not expected to pose as a likely significant effect to the European Sites that are located within catchment of Brentwood. Recommended that policy wording is amended to ensure that development will not be permitted where an adverse effect on the in integrity of a European site will result.
	Hedgerows Hedgerows make an important contribution to the character of an area and may be historically and occasionally archaeological important. They also contribute significantly to biodiversity. Therefore, like trees, hedgerows should be protected for their amenity, biodiversity and historic value. Development that is likely to impact hedgerows must be subjected to an assessment against the criteria of the Hedgerow Regulations 1997.	

Policy	Description	HRA Implications
	If a Hedgerow is deemed to be important under the Hedgerow Regulations, development proposals must demonstrate that adverse impacts upon the Important Hedgerow will be avoided, and impacts that cannot be avoided are mitigated on-site. In considering development proposals, the Council will normally expect the retention and beneficial management of any existing hedgerow; where a hedgerow is to be removed, the council will, where appropriate, require its replacement with native species, either within or neighbouring sites, as part of its mitigation strategy, or demonstrate how it will contribute to biodiversity net-gain through other appropriate habitat creation. In granting planning permission for new development where significant hedgerows are to be retained, the Council will ensure that these hedgerows are given appropriate protection during the building works, through the use of planning conditions. The Council will assess sites proposed for development to ascertain whether they fulfil the criteria for designation and may request information from applicants to assist in that process. If a site satisfies the criteria it will, for planning purposes, be treated as if it were a LoWS/LNR. All stages of development must be considered when assessing the impact and cumulative impact on wildlife sites both within and in proximity to the Borough of Brentwood. The Council will take a precautionary approach where insufficient information is provided about avoidance, management, mitigation and compensation measures through planning conditions/obligations where necessary. Proposals that result in a net gain in Priority Habitat will in principle be supported, subject to other policies in this plan. Where Priority Habitats are likely to be adversely impacted by the proposal, the developmer must demonstrate that adverse impacts will be avoided, and impacts that cannot be avoided are mitigated onsite. Where residual impacts remain, offsite compensation will be required so that there is no net loss in quantity and quality of Pri	

Policy	Description	HRA Implications
NE05: Ecology and Biodiversity	 All development proposals should: a. seek opportunities to support and integrate biodiversity in the built environment; b. conserve, protect and enhance the network of habitats, species and sites (both statutory and non-statutory, including priority habitats and species) of international, national and local importance commensurate with their status; c. not result in any unacceptable impact on biodiversity and geodiversity, and mitigate all unavoidable impacts; and d. deliver a net gain in biodiversity where possible, by creating, restoring and enhancing habitats that are of particular relevance and benefits in the local context. This Policy should be read in conjunction with Policy X Addressing the Climate Change, Policy X Green and Blue Infrastructure, and Policy X Landscape Protection and Woodland Management. 	No Likely Significant Effect This policy safeguards ecology and biodiversity. This policy is not expected to pose as a likely significant effect and is therefore screened out from further discussion.

Policy	Description	HRA Implications
NE06: Landscape Protection and Woodland Management	 Development will not be permitted where it would have a detrimental effect on, or result in the loss of, significant landscape heritage or a feature of ecological importance, including trees, woodlands or hedgerows. Where appropriate development proposals will be required to be accompanied by: an ecological survey as required by appropriate to the nature and scale of the proposal, identifying links to similar ecosystems within proximity of the development site in line with Policy 10.10 Green Infrastructure; a landscape scheme detailing new planting requirements and where appropriate, replacement trees of a value commensurate or greater to that which is lost, boundary treatments and proposals for ecological enhancement; an arboricultural assessment detailing the measures to protect and/or justification for the removal of any trees or hedgerows during onsite construction; details of landscaping maintenance arrangements; and a method statement for any land raising and/or dispersal of excavated or dredged materials. Areas of landscape, biodiversity and geodiversity interest and local distinctiveness within the Borough will be protected from harm and their retention, enhancement and restoration will be encouraged. Where feasible, proposals should promote the use of trees, hedges, wildlife gardens, allotments, ponds, green roofs/walls, roosting boxes and wider habitat creation. In exceptional circumstances, where the landscape, biodiversity measures being implemented. In line with the NPPF, planning permission will not be permitted for development resulting in the loss of aged or veteran trees found outside ancient woodland, unless the need for, and benefits of, the development in that location clearly outweigh the loss. 	No Likely Significant Effect This policy safeguards woodland and associated biodiversity by provide mitigation for all development proposals. This policy is not expected to pose as a likely significant effect and is therefore screened out from further discussion.

Policy	Description	HRA Implications
NE07: Thames Chase Community Forest	 The Council supports the conservation and enhancement of the area of the Thames Chase Community Forest within that part of the Borough as identified on the Proposals Policies Map. Through the Thames Chase Plan and Local Development Plan, the Council will support the aims of the Thames Chase Plan objectives: To protect, improve and expand the woodland character of the Community Forest; To sustain the natural integrity of the Community Forest's air, land and water including wildlife; To integrate Climate Change adaption and mitigation responses into the developing Community Forest; To use the Community Forest to improve local health and wellbeing, volunteering, learning and employment; and To enable effective partnership working from national to local level to maximise the impact of available resources. Implementation will be affected in conjunction with Brentwood Countryside Management Service and local landowners. Any development proposals within the Community Forest area will be expected to make a positive contribution towards its implementation and comply with the policies contained in this plan. Within the Green Belt, proposals will also need to comply with criteria set out in Green Belt Policies.(REFERENCE POLICY XXX). 	No Likely Significant Effect This policy safeguards the Thames Chase Community Forest. This policy is not expected to pose as a likely significant effect and is therefore screened out from further discussion.

Policy	Description	HRA Implications
NE08: Air Quality	The Council will promote measures to improve air quality, particularly within designated Air Quality Management Areas, and will expect development proposals to reduce sources of air pollution. Where the Council considers that air quality objectives are likely to be prejudiced or proposals fall within an Air Quality Management Area, applicants will be required to submit a detailed air quality assessment which sets out the impact the proposed development would have upon air quality, with particular consideration of traffic congestion. Planning permission will not be granted for development where there is likely to be a significant adverse impact on air quality. Air Quality Management Areas are shown on the Proposals Map. The Council will promote measures to improve air quality, particularly within designated Air Quality Management Areas, and will expect development proposals to reduce sources of air pollution. Where the Council considers that air quality objectives are likely to be prejudiced or proposals fall within an Air Quality Management Area, applicants will be required to submit a detailed air quality assessment which sets out the impact the proposed development would have upon air quality assessment which sets out the impact the proposed development would have upon air quality, with particular consideration of traffic congestion. Planning permission will not be granted for development where there is likely to be a significant adverse impact on air quality. Air Quality Management Areas are shown on the Proposals Map.	No Likely Significant Effect This policy promotes improvements in air quality. This policy is not expected to pose as a likely significant effect and is therefore screened out from further discussion.
NE09: Floodlighting and Illumination	 Development proposals involving floodlighting or any other means of illumination (other than advertisements) will only be permitted where the scheme: is appropriate for the intended use; is energy efficiency efficient; provides the minimum level of light necessary to achieve its purpose; minimises losses to the night sky and does not give rise to any increase in sky glow; and ensures the appearance of the installation when unlit is acceptable. Proposals must demonstrate adequate protection from glare and light spill particularly in sensitive locations, such as residential areas, sites of nature conservation interest, and have no adverse effect on amenity, highway safety, landscape or historic character. Applicants will need to submit a full lighting strategy, proportionate to their application, specifying details of lights, their power and type, overall level and distribution of illumination and times of operation. Conditions may be imposed to restrict lighting levels and hours of use or require measures to be taken to minimise adverse effects. 	No Likely Significant Effect This policy aims to minimize/ reduce noise pollution by providing mitigation for all development proposals. This policy is not expected to pose as a likely significant effect and is therefore screened out from further discussion.

NE10: Flood Risk	The Council will work in partnership with the Environment Agency and the Lead Local Flood	No Likely Significant Effect
	Authority (Essex County Council) to manage and mitigate flood risk. All development proposals	
	in areas at risk of flooding will need to submit a Flood Risk Assessment (FRA) in accordance	This policy aims to reduce flood risk. This policy
	with Sustainable Drainage Policy XXX, commensurate with the scale of the flood risk and	is not expected to pose as a likely significant
	recognising all likely sources of flooding – surface water, ground water and watercourse flood	effect and is therefore screened out from further discussion.
	risk. Proposed development will be required to avoid where possible flood risk to people and property	
	and manage any residual risk, taking account of the impacts of climate change by:	
	e. applying the Sequential Test, directing development to areas at lowest	
	risk of flooding;	
	f. if necessary, applying the Exception Test;	
	g. safeguarding land from development that is required for current and	
	future flood management;	
	h. using opportunities offered by new development to reduce the causes	
	and impacts of flooding; and	
	In areas designated as functional flood plains, development will only be permitted in accordance	
	with national policy and guidance, and then only if:	
	i. proposals are located in the lowest appropriate flood risk zone with	
	regard to guidance set in the Brentwood Strategic Flood Risk	
	Assessment as part of the sequential test;	
	j. development would not constrain the natural function of the flood plain,	
	either by impeding flow or reducing storage capacity; and	
	k. development is constructed so as to remain operational even at times	
	of flood through resistant and resilient design.	
	Where development is permitted within flood risk areas it must demonstrate that, where required,	
	it will reduce fluvial and surface water flood risk and manage residual risks through appropriate	
	flood mitigation measures including emergency planning and response. These measures may	
	include, but are not restricted to:	
	I. land management, landscape and planting measures;	
	m. SuDS, including source control techniques;	
	n. strategic water storage;	
	o. flow diversion and attenuation; and	

Policy	Description	HRA Implications
	 p. property level protection, which can include appropriate finished floor levels, safe area(s), emergency flood planning and flood resilience measures Applications will need to demonstrate that the sewerage provider has been contacted to identify whether the sewerage network has adequate capacity both on and off site to serve the development and to assess the need to contribute to any additional connections for the development to prevent flooding or pollution of land and water courses q. Where sewerage capacity is identified as insufficient, development will only be permitted if it is demonstrated that improvements will be completed prior to occupation of the development. Where the site is located within a Critical Drainage Area (CDA). Development may have the potential to impact on the CDA in respect of surface water flooding. As a result of this the site will require an individually designed mitigation scheme to address this issue. This policy should be read in conjunction with Policy XXX SuDS, Policy XXX RAMSPolicy XXX Wildlife and Nature Conservation. 	

Policy	Description	HRA Implications
NE11: Contaminated Land and Hazardous Substances	 Development proposals involving the use, movement or storage of hazardous substances will only be permitted within Employment Areas and planning permission will only be granted for development on, or near to land which is suspected to be contaminated, where the Council is satisfied that: there will be no threat to the health or safety of future users or occupiers of the site or neighbouring land; there will be no adverse impact on the environment and quality of local groundwater or quality of surface water; and there would be no unacceptable adverse impacts on property. The Council will require applicants proposing development on or near known or potentially contaminated land to submit a detailed site characterisation and tiered risk assessment and to identify any remedial measures that need to be carried out (including remedial treatment and monitoring arrangements), provided in a detailed Remediation Scheme. Evidence of remediation should be to the satisfaction of the relevant statutory regulators. Planning permission will not be permitted for development on sites that lie near or adjacent to a hazardous substance site or notifiable installation, if the safety of the future occupiers of the development could be adversely affected by the normal permitted operations of the existing uses. 	No Likely Significant Effect A development management policy relating to contaminated land and hazardous substances. There are no linking impact pathways present and this policy can be screened out.

NE12: Green Belt	Brentwood Borough is entirely located within the London Metropolitan Green Belt, northeast of	No Likely Significant Effect
	Greater London. Brentwood is c. 15,312 ha in area, of which 13,700 ha of land is currently	This policy of swands succes hold land. This
	designated as Green Belt (over 89% of the borough). Brentwood currently makes up	This policy safeguards green belt land. This policy is not expected to pose as a likely
	approximately 2.83% of the overall London Metropolitan Green Belt.	significant effect and is therefore screened out
	The Metropolitan Green Belt boundaries within Brentwood Borough will be maintained in order to continue to serve its key function, and be protected from inappropriate development, and to:	from further discussion.
	 Preserve the Borough's special character and landscape setting; 	
	 Check the growth of London and prevent ribbon development and 	
	urban sprawl;	
	- Prevent the coalescence of settlements;	
	 Assist in safeguarding the countryside from encroachment; and 	
	 Assist in urban brownfield land reuse, by encouraging the recycling of 	
	derelict and other urban land.	
	Development proposals within the Green Belt will be assessed in accordance with national	
	policy and guidance. Development within the Green Belt will only be permitted if it maintains the	
	Green Belt's openness and does not conflict with the purposes of the Green Belt or harm its visual amenities.	
	Consideration will be given to Gypsy and Traveller allocations within the Green Belt as long as it	
	meets the requirements set out in Policy BE XX: Proposals for Gypsy, Travellers and Travelling	
	Showpeople on Unallocated Land.	
	Consideration will also be given to planning applications related to Sports and Recreational	
	Facilities provided they meet the following criteria:	
	 the openness of the green belt is not compromised; 	
	 in the situation for parking facilities, where appropriate, permeable 	
	surface should be considered to avoid surface water flooding;	
	- where the relocation and/or replacement of a sport and/or recreational	
	building is being proposed, the building footprint is to be no larger than	
	the existing footprint; and	
	 the proposal adheres to the policy requirements as set out in POLICY 	
	BEXX: OPEN SPACE, COMMUNITY, SPORT AND RECREATIONAL	
	FACILITIES.	
	Proposals related to sustainable energy technologies will be supported as long as it adheres to the requirements set out in this policy, POLICY BEXX: SUSTAINABLE CONSTRUCTION AND	

Policy	Description	HRA Implications
	RESOURCE EFFICIENCY, and POLICY BEXX: Carbon Reduction, Renewable Energy And Water Efficiency.	

NE13: New	Within the defined Green Belt the construction of new buildings are considered inappropriate	No Likely Significant Effect
Development, Extension and Replacement of Buildings in Green Belt	 development in the Green Belt. Exceptions to this are: building for agriculture and forestry; provision of appropriate facilities for outdoor sport, outdoor recreation and for cemeteries, as long as it preserves the openness of the Green Belt and does not conflict with the purposes of including land within it; the extension or alteration of a building provided that it does not result in disproportionate additions over and above the size of the original building. In case of a dwelling that following also applies: the existing dwelling is lawful, permanent, designed and originally constructed for residential use; a substantial identifiable part of the original dwelling remains in place; the design of the extension is appropriate to the host building and its setting and does not harm the openness or function of the Green Belt; and applications to extend domestic curtilage into the Green Belt will not be permitted The replacement of a building provided the new building is in the same use and not materially larger than the one it replaces; In addition the replacement of existing buildings will be allowed provided the following conditions are met: the proposal would not lead to an expansion or intensification of the activity on the site; any replacement dwelling will be expected to be located in the position of the existing dwelling expect where the local planning authority considers an alternative sitting to be more appropriate in green belt or amenity terms; where the existing dwelling is a bungalow it should be replaced by a bungalow 	A development management policy relating to development in the green belt. It does not identify any type, quantum or location of development. This policy is not expected to pose as a likely significant effect and is therefore screened out from further discussion.

- Limited infilling in villages, and limited affordable housing for local	
community needs under policies set out in the Local Development Plan	
(see policy X)	
- Limited infilling or the partial or complete redevelopment of previously	
developed sites (brownfield land), whether redundant or in continuing	
use (excluding temporary buildings), which would not have a greater	
impact on the openness of the Green Belt and the purpose of including	
land within it than the existing development (see policy X).	
The Council will encourage the beneficial use of the Green Belt, through opportunities to	
improve access, outdoor sport and recreation; retain and enhance landscapes, visual amenity	
and biodiversity; or improve damaged and derelict land.	
The following settlements are excluded from the Green Belt as identified on the Proposals Map:	
Blackmore, Brentwood, Doddinghurst, Herongate, Hook End, Hutton, Hutton Mount, Ingatestone, Ingrave, Kelvedon Hatch, Mountnessing, Pilgrims Hatch, Shenfield, Stondon	
Massey, West Horndon and Wyatts Green.	
Microgeneration integral to individual new development are encouraged, and may be acceptable	
under permitted development. Where not permitted development, the renewable energy	
installations should not impact on the openness, function and permanence of the Green Belt or	
conflict with the purpose of the land within it. Proposals for larger scale renewable energy	
projects in the Green Belt will comprise inappropriate development (NPPF Paragraph 91) and	
therefore only in very special circumstances will they be permitted. Proposals to extend dwellings within the Green Belt (other than those identified in Policy 9.10)	
will be permitted in exceptional circumstances, in order to ensure the new building is not	
materially larger than the original, provided all the following criteria are met:	
- the existing dwelling is lawful, permanent, designed and originally	
constructed for residential use;	
- a substantial and identifiable part of the original dwelling remains in	
place;	
- the total size of the dwelling as extended (including conservatories)	
does not exceed the original habitable floor space by more than 30%;	
- the design of the extension is appropriate to the host building and its	
setting and does not harm the openness or function of the Green Belt;	
and	
anu	

- application to extend domestic curtilage into the Green Belt will not be	
permitted.	
Extensions to replacement dwellings will only be permitted where the habitable floorspace of the	
replacement dwelling and the total habitable floorspace of any extensions permitted together	
with that applied or would not be greater than 30% above the original habitable floor area of the previous dwelling which had been replaced.	
Where appropriate, a condition will be imposed to prevent this habitable floorspace limitation	
from being exceeded through the implementation of permitted development rights.	
Extension of a dwelling resulting, from the conversion of a rural building will not be permitted, notwithstanding permitted development rights.	
Outside settlements and established areas of development listed in Policy 9.8 and Policy 9.10,	
the replacement or substantial rebuilding of permanently occupied dwellings will only be allowed subject to the following criteria:	
- where the existing dwelling has not been previously extended or where	
it has been extended by less than 30% above the original habitable	
floor space:	
- the floor space of the replacement dwelling will be no larger than 30%	
above the original habitable floor space, or	
- where the existing dwelling has been extended by more than 30%	
above the original habitable floor space:	
- the replacement habitable floor space of the replacement dwelling will	
be no larger than the existing habitable floor space.	
- the visual mass of the replacement dwelling should be no greater than	
that of the existing dwelling;	
- where the original, existing dwelling is a bungalow it should be replaced	
by a bungalow; and	
- any replacement dwelling will be expected to be located in the position	
of the existing dwelling except where the local planning authority	
considers an alternative siting to be more appropriate in green belt or	
amenity terms.	

Policy	Description	HRA Implications
NE14: Established Areas of Development and Structures in the Green Belt	 where appropriate, a condition will be imposed removing permitted development rights to extend the building, use the roof space for habitable purposes and erect walls, fences or further out-buildings. (This policy is not intended to relate to uses created via the re-use of rural buildings). Where new building or structures are proposed within the Green Belt, inappropriate development will not be approved expect in very special circumstances. Within established areas of frontage ribbon development included within the Green Belt listed below, planning permission for change of use to residential, new residential development on genuine infill plots, replacement of existing dwellings, or extensions to existing dwellings will be allowed subject to criteria set down in other policies in this plan being satisfied. Relevant frontages are: 169-293 Chelmsford Road; 39-47, 51-109 Coxtie Green Road; 1-19 Bellhouse Lane; Between Coppersfield And Greenoaks, Doddinghurst Road (Parkwood); 1-13 (Excluding 2), 21-56 (Excluding 24, 26) Nags Head Lane; The Thorns/The Briars, Ongar Road; 54-88 Billericay Road; 554-664 Rayleigh Road. New building for education and community uses which can demonstrate a requirement for a Green Belt location. Proposals for appropriate sports and recreational facilities will be permitted as long as the proposal preserves the openness of the Green Belt as set out in the National Planning Policy Framework. 	No Likely Significant Effect A development management policy relating to established areas of development and structures within the green belt. It does not identify any type, quantum or location of development. This policy is not expected to pose as a likely significant effect and is therefore screened out from further discussion.

Policy	Description	HRA Implications
NE15: Previously Developed Land in Green Belt	 Proposals for redevelopment of previously developed sites (brownfield) within the Green Belt will be permitted where redevelopment: contributes towards local housing needs or provides new jobs; would not have significantly greater impact on the openness of the Green Belt; improves the setting of the Green Belt through more appropriate landscaping; provides community benefits to both the new and existing local community; supplies or improves travel links to nearby existing communities, such as villages; and contributes to the Borough's sustainable development principles as set out in other policies in the Plan. The Council will assess the proposed development based on the following: The size, scale, massing and spread of new development compared to the existing; The activities / use of the new development compared to the existing; and The location of the site is sustainable and appropriate to the type of development proposed. 	No Likely Significant Effect A development management policy relating to previously developed land within the green belt. It does not identify any type, quantum or location of development. This policy is not expected to pose as a likely significant effect and is therefore screened out from further discussion.
NE16: Site Allocations in Green Belt	Sites allocated to meet housing needs in Green Belt will be expected to provide significant community benefit, both for surrounding existing communities and those moving into new homes on site. These sites will be de-allocated from Green Belt to allow development to take place and provide new defensible boundaries to protect open countryside for future generations. The extent of development at Dunton Hills Garden Village will be de-allocated from Green Belt, to be set by a separate Masterplan for the garden village.	No Likely Significant Effect A development management policy relating to site allocations within the green belt. It does not identify any type, quantum or location of development. This policy is not expected to pose as a likely significant effect and is therefore screened out from further discussion

Policy	Description	HRA Implications
NE17: Agricultural Workers Dwellings	 New Dwellings Planning permission will only be granted for a new agricultural, horticultural, forestry worker's dwelling where: evidence has been submitted to the satisfaction of the Borough Council that there is a viable agricultural, horticultural or forestry business need for a permanent dwelling in that location; there are no suitable alternative dwellings available or could be made available in the locality to meet the needs of the agricultural holding; that there is a long-term need for agricultural worker dwellings the size and accommodation levels to be included in the proposed dwelling is commensurate with the needs of the holding; and the development is in all other respects acceptable against other relevant policies in the plan and the requirements as set out in the NPPF and NPPG. Conditions will be attached to any permission limiting the occupancy to that required for the holding concerned or other agricultural use nearby. Removal of Occupancy Conditions on Existing Dwellings Planning permission will be granted for the removal of a restrictive agricultural worker occupancy concerned or other agricultural use nearby. 	No Likely Significant Effect A development management policy relating to agricultural workers dwellings. It does not identify any type, quantum or location of development. This type of development will be delivered as windfall development. This policy is not expected to pose as a likely significant effect and is therefore screened out from further discussion.

NE18: Re-use and	The Council will support the re-use, conversion or adaptation of rural buildings for other	No Likely Significant Effect
Residential	employment generating uses, tourism, leisure or community or residential use provided the	A double provide the program and policy relation to
Conversion of Rural	development proposal meets all the following criteria:	A development management policy relating to the re-use ad residential conversion of rural
Buildings	- it does not have a greater impact on the openness of the Green Belt	buldongs. It does not identify any type, quantum
	and the purpose of including land within the Green Belt than the original or current lawful use;	or location of development. This policy is not
	- the new use should not require elements which might conflict with the	expected to pose as a likely significant effect and is therefore screened out from further
	openness and function of the Green Belt;	discussion.
	- the applicant can demonstrate that the building is of permanent and	
	substantial construction;	
	- the conversion of the building would not result in a major or complete	
	reconstruction; and	
	- the proposed re-use should not have an unacceptable detrimental	
	impact on the fabric and character of the building due to unsympathetic	
	changes to or the introduction of features such as windows, door	
	openings and chimneys.	
	Notwithstanding prior approval permitted development rights for the change of use of agricultural	
	buildings of 500 sqm or less, to Class R, the re-use and adaptation of existing rural buildings can	
	play an important role in meeting the needs of rural areas for employment, tourism, leisure	
	and/or community uses. In addition, the re-use of rural buildings for commercial development	
	can support the rural economy by promoting the sustainable growth and expansion of	
	businesses through conversion of existing buildings and diversification of agricultural and other land-based rural businesses. Tourism could be a vital and sustainable source of business for the	
	rural economy and provides employment for local people and therefore contributing to the	
	objective of sustaining vital rural communities. Some buildings could be suitable for businesses	
	connected with tourism, while community uses can make a valuable contribution to local	
	communities in appropriate locations.	
	In the case of traditional rural buildings, the proposed use must be compatible with the historic	
	character and significance, and structural integrity of the building. A historic building assessment	
	of the structures may be required as part of the planning application with the potential for a full historic record to be completed as a condition of the application prior to conversion.	
	Where appropriate, conditions will be imposed removing permitted development rights to extend	
	the property, alter the external appearance, construct buildings or structures (including	
	walls/fences) within the curtilage, and change the use.	

Policy	Description	HRA Implications
	Permission will not be granted for the re-use of an agricultural building erected under Class A of Part 6 of Schedule 2 of the General Permitted Development Order as amended within 10 years of its substantial completion.	
BEXX: Housing Land Allocations	 Sites (with potential capacity for 10 or more homes) allocated for residential development over the Plan period 2013-2033 are set out in Figure 7.2, and identified on the Proposals Map. Where indicated, a mix of uses, including residential may be sought or appropriate. Further detail is set out in Appendix 2. Proposals for housing submitted on these allocations in accordance with the phasing indicated, will be approved where the proposed scheme is in accordance with other relevant policies in the Plan. Planning applications in advance of its phasing will only be approved where: early release would not prejudice the delivery of other allocated sites phased in an earlier time period; the site is required now to maintain a five year supply of deliverable sites; and infrastructure requirements of the development can be fully and satisfactorily addressed. 	No Likely Significant Effect A development management policy relating to housing land allocations. It does not identify any type, quantum or location of development. This policy is not expected to pose as a likely significant effect and is therefore screened out from further discussion.

Policy	Description	HRA Implications
X: Brentwood Enterprise Park	 Land south east of M25 Junction 29, as shown in Appendix XX, is allocated to provide high quality employment development and significant number of jobs. Development proposals should consider the following: Amount and type of development: XX ha of employment land (principally use classes B1, B2 and B8) taking account of market needs along with ancillary and supporting uses. XXha of landscaping and earthworks to create a buffer and provide improved visual amenity between the site and surrounding land, minimising any amenity impacts. Supporting on-site development: Ancillary uses (e.g. hotel, small shops and eateries). Development principles: Principle landscaping and earthworks to be situated to the south of the site and to remain in perpetuity for non-development uses; Site is identified as a key gateway location and development should reflect this in terms of design quality; Consideration of adjoining Local Wildlife Site; Maintain and enhance Public Right of Way through site; and Full traffic assessment and Travel Plan to accompany an application. Infrastructure requirements: Early Years school provision; Access points via M25 Junction 29 and Warley Street (B186) which will require highway improvements; Bus links; 	No Likely Significant Effects. This policy allocates a single development site for employment purposes at the Brentwood Enterprise Park. This allocation has previously been subject to HRA ⁷⁶ which enabled this allocation to be screened out alone. In combination impact pathways relating to water quality and air pollution require further investigation.

⁷⁶ AECOM. (January 2018) Habitats Regulations Assessment of Brentwood District Council Draft Local Plan: Preferred Site Allocations Regulation 18 Consultation (January 2018). Brentwood District Council

Policy	Description	HRA Implications
GV1: Dunton Hills Garden Village	 The Land east of the A128, south of the A127 and north of the C2C railway line – as illustrated by the red line boundary in Fig xx - is allocated for residential-led development to deliver Dunton Hills Garden Village. The scheme will comprise a mixed-use development of minimum 2500 homes, together with the necessary community, utility and transport infrastructure to support a self-sustaining, thriving and healthy neighbourhood; including an appropriate number of schools; a new village main centre and/or peripheral neighbourhood centre(s); interconnected multi-purpose green infrastructure; a network of active and public transport links; and a mix of housing types that are affordable. Successful development of the site will require: Garden Communities principles to be fully embedded demonstrating how these have informed the detailed masterplan; A holistic and comprehensive master plan to be established, codesigned with the relevant stakeholders, along with the necessary and proportionate design guide to frame and guide the consistent quality and delivery across the site by contractors; Proposals to creatively address the key site constraints and sensitively respond to the unique qualities and opportunities afforded by the historic landscape and environmental setting to deliver a distinctive and well-design garden village in line with the ambitious vision and strategic aims and objectives for Dunton Hills; The production and implementation of a development and phasing plan that demonstrates how delivery will be phased, managed, accelerated and governed and how the legacy assets will be handed over for ongoing legacy operations and maintenance; << Permission for mixed-use development will be granted subject to the parameters set out in Error! Reference source not found.. 	No Likely Significant Effects. Due to the distances involved, there are no impact pathways present. In combination impact pathways are however considered further within this document.

DV2: Spatial Design	Development proposals must deliver all the necessary supporting spatial components to address	No Likely Significant Effect
of Dunton Hills	the specific site constraints, potential impacts and opportunities as set out by the strategic aims	No Encry Significant Enect
Garden Community	and objectives and as detailed below:	A development management policy relating to
Caraon Community	Distinctiveness (I)	the spatial design of Dunton Hills Garden
	Development of the masterplan and design guide for the scheme should demonstrate how the	Community. There are no linking impact
	new settlement will be designed to be distinctive. It should ensure:	pathways present and as such this policy can
	- Village design that respects the traditions and vernacular of village life and style-	be screened out.
	essence, while ensuring 21st century conveniences and design by firmly embedding	
	garden city principles and local aspirations;	
	- Dunton Hills village will comprise a number of sub-neighbourhoods, each with their	
	separate character, which come together with an overall clear identity following a	
	coherent vernacular, highly networked street pattern and public realm design;	
	- The distinct qualities and unique character should be informed by the sites landscape	
	setting and heritage features, in line with policy X; and	
	- The new village should be planned around the creation distinct sub neighbourhoods	
	that are informed by the historic setting and knowledge of the site, each with its own	
	distinct character.	
	Density (II)	
	Development of the site should consider setting out a range of appropriate densities across the	
	site to ensure a compact, highly networked walkable and fine-grained environment with a street	
	based vernacular. A density plan should inform the masterplan proposals to demonstrate how	
	appropriate densities will be achieved, while maintaining its feel as a village. Permission will be	
	granted for development that achieves the following urban design principles:	
	- Homes with gardens should be predominantly terraced streets, compact and making	
	best use of space. A predominance of sprawling detached housing will not be favoured.	
	- Development proposals should consider a density hierarchy that increase towards the local centres and around public open spaces: the village core should adopt 'town	
	house/Georgian street type' density with heights up to 4/5 stories (45-60 dpha), to	
	ensure a focal area with footfall to make it instantly workable; up to 3/4 stories (30-45	
	dpha) where residential properties front open spaces and communal village greens and	
	up to 2 story along residential streets.	
	 Densities for residential development along edges of settlements can be a lower 	
	density allowing for a small number of larger homes' needs.	
	Architecture (III)	
	Architecture should be informed by a co-designed workshop with the local community.	

Historic garden villages placed a huge emphasis on the use of high-quality and often local	
materials. Attention to detail and the use of architects resulted in homes and communities that	
remain desirable today.	
Featuring the application of the highest sustainability standards, innovative use of local and	
sustainable new materials, and high-quality imaginative architecture, making use of expert	
craftsmanship. They should have 'postcardability' - a distinct and recognisable character, with	
imaginative and varied architecture forming part of a collective and harmonious 'whole'.	
Materials (III)	
Materials should be informed by a co-designed workshop with the local community.	
Urban Layout/Public Realm Design (IV)	
- The public realm should be an integral part of the wider green infrastructure plan and	
be informed by site opportunities, such as viewsheds, green infrastructure, existing habitat value.	
- Development should be designed so that it does not visually intrude onto the landscape	
corridor.	
- The interface between the green space and the built structures should ensure passive	
surveillance, with coherent and gradual transitions, and not be over-sized.	
- A highly connected network of streets should be designed, taking cues from existing	
field boundaries to form an accessible, connected and fine grained urban layout with	
neighbourhoods that are legible and easy to navigate, with a wide range of interlinked	
uses and generous green spaces, ensuring street blocks are not overly long < <there's< td=""><td></td></there's<>	
a suggested optimum, find and insert>>, as they discourage walking, and often lead to	
less social interaction;	
- Orientations/morphology to take into account the landscape views; aspects should take	
opportunities for passive heating and cooling;	
- Public realm should focus on the importance of the street scene through attractive	
buildings, public art, street furniture, the use of materials, strong landscaping providing	
wide pavements and grass/planted verges, tree-lined avenues and where appropriate,	
incorporation of rain gardens and food production opportunities.	
Green Infrastructure (V)	
The scheme should present a clear green infrastructure plan that enhances and connects the	
landscape, incorporating the following design guidelines:	
- The scheme proposals should be landscape-led, demonstrating a 'design and build	
with nature' approach < <could biophilic="" design="" elaborate="" elements;="" natural<="" of="" td="" use=""><td></td></could>	
materials etc more work through design workshops needed >>	
- The development should retain and incorporate a generous amount of green space for	
multi-functional recreational use with an aim to ensure at least 50% of land creates a	

	connected and biodiverse ecological network of multi-functional green infrastructure	
	with a variety of activity nodes and treatments, including public natural parkland,	
	pockets of village greens, local nature reserve, allotment sites, sports pitches and fields	
	and streetscape landscaping, such as tree lined trees and grass verges.	
	- Some allotments should be created for any residential properties which may not have a	
	garden; creative interweaving of productive landscapes within the GI network will be	
	favourably considered.	
	 Appropriate amount and depth of green infrastructure screening to mitigate noise and 	
	air pollution adjacent to A127, A128, rail tracks.	
	- Designating a 'Nature Improvement Area' on the eastern boundary with Basildon, to	
	strengthen the Green Belt boundary and improve the landscape, habitat value and	
	environmental quality, maintaining the openness and enhancing biodiversity, thus	
	reinforcing the eastern green belt boundary to provide a woodland buffer, supporting	
	the beneficial purpose and use of the green belt.	
	- Green spaces should be highly accessible and incorporate universal design measures,	
	and include suitable pathways to allow for walkers, cyclist, and horse riders to ramble	
	through.	
	- Consideration should be given to integrating rain garden SuDS into both the	
	streetscape and green/blue space within development areas. These may then link into	
	the landscape public realm depending on the detailed topography of the area and	
	ultimately into retention and attenuation ponds	
	Biodiversity Net-gain and Ecological Connectivity (VI)	
	- Proposals will need to retain and weave through priority habitats such as significant	
	areas of existing woodland habitat and where relevant reinstate degraded fenland.	
	- Proposals will need to demonstrate the measures taken to protect mature trees, and	
	where possible, enhance hedgerows, ponds and other environmental features of note,	
	which contribute to the character and biodiversity.	
	- seek to retain the river course and ponds and to interconnect them to proposed	
	ecological network made up of open spaces and green infrastructure to create multi-	
	functional spaces. Connecting these natural heritage assets gives structure to the site	
	and naturally divides it into potentially varying character areas for development.	
	- Proposals will need to be designed to minimise the loss of ponds and any wildlife they	
	support, and/or provide appropriate mitigation both surrounding ponds and throughout	
	the site to maintain connectivity between the wildlife populations they support	
	- Increasing ecological connectivity between existing and surrounding 'living landscape'	
	habitats beyond the development boundary; following Eastlands Spring connecting	
	Thorndon Country Park to Langdon Hills Country Park.	
L		

Sport, Recreational, Leisure Public Open Space (VII)	
The provision for green space opportunities for recreation and sport must be an integral part of	
the green infrastructure plan; it should incorporate as a minimum the following provision.	
- At least 5 ha shall be used for sports and recreation groups to provide a variety of pitch	
sizes in line with the 2018 Play Pitch Strategy.	
- The green infrastructure plan will account for the creation of varied recreational	
experiences to appeal to a varied range of users with different interests and age-related preferences.	
 Creative incorporation of productive landscapes, providing opportunities of community 	
and informal growing opportunity, to also be used as a learning and teaching resource	
by the local schools.	
- The GI following Nightingale road should incorporate a heritage trail with signage and	
history information boards.	
- Pathways through the GI network will be made of permeable material and follow a	
coherent treatment throughout the village. The pathways will all connect into a circular	
walk, with interconnected shortcut routes and be signposted offering directions to key	
destination points.	
- Appropriate number of play spaces shall be incorporated into the green infrastructure	
plan, with an emphasis on natural play options.	
Views (VIII)	
- Key views shall be safeguarded and maintained and become distinctive features on the	
development.	
 Development proposals should be accompanied by a viewshed analysis to 	
demonstrate how the urban layout will incorporate safeguarded views.	
- Streets and avenues should orientated towards the key views to maintain a landscape	
corridor out onto the neighbouring open landscapes and to the wider key distant views	
such as London skyline and Langdon Hills and other identified.	
 Visual separation should be achieved on the eastern boundary of the site. 	
Heritage Features (IX)	
Heritage features should be enhanced and incorporated to provide attractive and distinctive	
features that make a positive contribution to the character of the local area and an attractive	
setting for development.	
- the landscape setting, historic features, names and field patterns and boundaries that	
are present today, or documented in past accounts. For example, heritage names such	
as Dunton Ridge, East Horndon Hall, past field names as well as current hill names,	
given to the site by the golf players, should all inspire how the design of the village	
develops to make it	

	 Protection and enhancement where possible of existing public rights of way 	
	- During the construction process, any artefacts found on site shall be recorded, secure	
	and store heritage assets on site for later display	
	 Incorporate the historic core as part of the DHGV Town Centre 	
	- Development should also aim to retain and integrate remaining and remnant historic	
	features	
	- There is a clear opportunity for development to benefit from these structural landscape	
	characteristics, helping to bind old with new through retention, incorporation and	
	interpretation of both the original spatial structures and key woodland features.	
	- Protect listed features during the construction phase and during any retrofitting to make	
	the structures fit for purpose for new uses.	
	Key development principles should include:	
	- The retention of all buildings dating from C17-C19 as a complementary historic	
	farmhouse and farmyard group structures	
	- The retention of open views, foreground of the brook and backdrop of the hillside as	
	part of the complementary rural setting of the historic farm group	
	- The retention of historic fabric, historic and architectural interest, and complementary	
	fixtures and fittings of all the buildings and the retention of the simple agricultural	
	exteriors and open volumes of the large threshing barns	
	- Complementary uses for the farm buildings alongside the continuing residential use of	
	the main house, such as farm shop and community uses	
	- The retention and reinstatement of historic links and visual links between the historic	
	settlement groups, Nightingale Lane, hillside, agricultural setting and estuary, together	
	with new links with similar character to groupings within the proposed new settlements,	
	and	
	- The retention and reinstatement of hedge boundaries, ponds and other historic rural	
	features within the curtilage and setting where possible.	
	Social Infrastructure (XI)	
	The delivery of social infrastructure is underpinned by the Essex County Council Developer's	
	Guide to Infrastructure Contribution (2016).	
	The garden village should set aside land for future community needs.	
	- Safeguard xxx ha of land to expand the school should development go beyond 2500	
	- Safeguard xxx ha of land for a future rapid transport system	
	- Safeguard xxx ha to respond to the demand for different types of community space, to	
	evolve as communities settle in the area.	
	- Flexible buildings to respond to demand	
	- Civic buildings to respond to demand for uses (e.g. church vs community hall, etc.	
L		

	As a minimum the development shall deliver the education, health facilities, community spaces. Health Facility (XIII)	
	- Health facility will need to be part of the community infrastructure, and this should be	
	carefully planned to ensure the integration encourages better healthier behaviours. The	
	facility should focus on wellbeing and prevention and be an exemplar example of	
	integrating diagnosis, treatment and proactive wellbeing onsite, set in a backdrop of	
	nature, where prescribing healthy activity would be made possible by the integration of services.	
	 Integrating the health facility in proximity to recreation facilities. 	
	 Actively encourages 'sustainable healthcare', embedding a design that encourages 	
	healthy living, eating, and activity. Design principles should demonstrate the key	
	principles of Centre for Sustainable Health Care including: prevention; patient	
	empowerment and self-care; lean systems; low carbon alternatives.	
	Educational Facility (XIII)	
	- Provision for primary and secondary should be provided in accordance with Essex	
	County Council guidelines.	
	Community Facilities (XIII)	
	>>do we want to be specific? Feel this needs further workshop input with local community.	
	Emergency Services (XIII)	
	< <needs further="" health="" partners="" with="" work="">> A building capable of accommodating a police</needs>	
	facility as a base for a new safer neighbourhoods team is to be established in the first phases of	
	development. This building will be in a form to be agreed following consultation with existing	
	community representatives in the area. For firefighting purposes the development will provide	
	water supply and fire hydrants Sports & Recreation.	
	Village Centre (XII)	
	- The main village centre should be central to the new community in and around the	
	farmstead designed to be mixed-use, with a range of commercial and community uses along ground floor frontages and a mix of uses on upper floors including residential and	
	small scale employment.	
	- Agglomerated services of community, retail, Flexible Employment Space. Mix of use	
	classes to adapt to changing circumstances	
	- Suitable uses and facilities within the village centre.	
	Activity Nodes an Landmarks (XI)	
	>>should be in part informed by further site analysis and co design workshops.	
	Employment (XI)	
L		

- Primarily it is envisaged that employment space will be within use classes B1(a) offices,	
B1(b) research and development, and B1(c) light industry appropriate in a residential	
area. Development within use classes P2 general industrial and P2 storage will feaus and	
 Development within use classes B2 general industrial and B8 storage will focus one. East Horndon and distribution will be supported where they are of a scale, design and 	
form consistent and complementary with the overall character of the Garden Village.	
- All employment provision is expected to be provided in appropriate locations on the site	
and be compatible with the wider residential environment of the Garden Village.	
 Flexible business starter and incubation space will be provided as part of the mix of 	
employment. This could include a business hub/centre offering a co-working space for	
local, small and medium enterprises, startups, entrepreneurs and freelancers in a	
variety of different units designed to be flexible, attractive and secure.	
- Implement a Jobs Brokerage Scheme to ensure that the many new jobs created on site	
go to local people.	
Active Travel (XIII)	
- Development should incorporate Active by design measures to make walking and	
cycling accessible and prevalent and discourage car use for short internal trips, for	
example changing travel mode behaviours through design; i.e. streets narrow and	
'village' in feel; dense network of streets, paths and parks ensures that it is faster and	
more enjoyable to walk and bike than to drive; less land to streets.	
- Innovative public transport options, bearing in mind the topography of the site, making	
active travel challenging for some; incorporation of electric bike schemes to overcome	
 this impediment. Segregated cycle and pedestrian routes should be provided, to encourage more to 	
cycle and feel safe on the streets. These should integrate with quiet way options	
through green routes where possible.	
Gateways and Access (XIII)	
 Provision of mitigation measures to ensure only acceptable levels of impact occur to 	
J28 on A127, as a result of predicted traffic generated from the site.	
- Traffic calming measures at junctions xxx	
- Main roads into the site from the A217 will be designed to slow down the traffic, making	
it clear that it is now a neighbourhood zone. Boulevard approach to design, with grass	
meridians and verges and trees should be used as a tactic to slow down the traffic and	
give the road an instant village feel.	
- >>insert info on any junction improvements into the site.	
Public Transport (XX)	

 Development delivers a dedicated bus route from the village to West Horndon station, together with the necessary road and station improvements to accommodate the bus 	
and more usage	
 Dedicated bus route taking pupils to nearby secondary school in the early phases of the work 	
- All houses should be no more than 400 m (10 min walk) to a bus stop	
- The necessary West Horndon station improvements to allow for a bus terminus and	
turnaround, as well as infrastructure for bike storage.	
Clean Vehicle Alternatives (XX)	
- The transport sector is innovating fast and provision should be planned to future proof	
transport needs, behaviours. Network of electric vehicle charging points should be	
designed into the public realm in appropriate locations.	
- Design placement proposals should demonstrate how they are suitably placed, do not	
obstruct pedestrian access, incorporate universal design principles and are discrete as	
far as possible.	
- Proposals should also be incorporating car sharing clubs; EV only development; time	
limiting car parking in the central locations;	
 discrete parking in residential areas; how we dealing with parking? Some prefer off 	
street parking on front gardens leaving streets clean; others advocate for front gardens	
to be a space for socialising and biodiversity; which approach to be taken here? Should	
be informed by further design workshop.	
Street Hierarchy (XIII)	
- The development should be served by an attractive, accessible, networked and safe	
streets designed so that they promote the safe passage for pedestrians and cyclists	
along segregate routes.	
- The roads will be designed to accommodate an electric bus as well as pedestrians and	
cyclists to discourage the use of the car for local journeys.	
 A pedestrian and cycle connection from the streets to the woodland, linear natural 	
• •	
parkland will be required as well as to key destinations such as the village centres, the	
schools, civic facilities.	
- Cul-de-sacs should be an exception; street widths important to allow cycling and not	
allow the car to dominate, making them pedestrian friendly with opportunities for home	
zones to establish.	
- The road hierarchy shall be designed to:	
 Provide a legible and permeable framework making it a walkable 	
neighbourhood.	
 Ensure that vehicle and pedestrian routes are both well overlooked and busy; 	

· · ·		
	 a 20 mile an hour zone within the development. 	
	 street parking??? 	
	 Reflect the importance of routes according to the level of anticipated 	
	pedestrian, cycle and vehicular flow and the requirements of accessibility for	
	servicing, refuse, emergency access and bus routing;	
	- materials, space and planting used in streets and at junctions in order to influence both	
	the final character of the place and the movement patterns and priorities by mode; and	
	- Through an associated network of footpaths and cycle paths, to ensure safe routes to	
	schools and other facilities.	
	- The access road off the A128 should not over dominate, will be the widest street and so	
	a boulevard approach will be necessary to ensure traffic calming etc.	
	- Do we want to be specific?? This is more design guide detail: Check parameters:	
	 6.1m-7.3m width (widened on bends to accommodate bus route and on street 	
	parking where provided to ensure public transport vehicles are not impeded);	
	 3m shared footway and cycle path where appropriate on each side of the road; 	
	 Landscaping (including street trees) and street furniture where appropriate; 	
	 3m landscaped verges where appropriate; 	
	 On street parking where appropriate; and 	
	 Bus stops at regular intervals (400m). 	
S	SuDS and Drainage (XX)	
	- Strategically designed and phased Sustainable Urban Drainage scheme to deal with	
	surface water runoff from the steeper topography, including street verges that double up	
	as rain gardens ⁷⁷ .	
P	Potable and Non-potable Water (XX)	
	- >>?? Who is the water authority in the area? Discussion with them might be required?.	
E	nergy (XX)	
	- All public buildings (e.g. school) to be BREAM excellent or other appropriate	
	schemes??	
	 Xx % of energy should be generated from renewable resources 	
	 Aim to achieve Zero carbon homes?? (review case studies) 	
S	Superfast Broadband (XX)	
	 >>insert requirements from IDP Work. 	
H	lousing (XX)	
	 >>insert IDP requirements 	
	 Design – terraced streets; compact; front gardens 	
	 Mix – tenures, sizes >>insert table from IDP work 	
	 35% of the scheme dwellings shall be affordable; 	

⁷⁷ https://raingardens.info/wp-content/uploads/2012/07/UKRainGarden-Guide.pdf

Policy	Description	HRA Implications
	 innovative ways to deliver affordability; models from abroad (i.e. incremental, leaving interiors up to the choice of home owner); materials used <<how build="" dealing="" extracted="" from="" halsnead="" plots??="" self="" we="" with="">>Serviced plots for self-build should not come forward until after strategic highways infrastructure has been provided, as the sale of serviced plots will not generate sufficient funds to pay for new roads and it is important not to impede the ability of standard housing development to progress and deliver the roads at an existing infrastructure to ensure that there is sufficient capacity available in order to cope with increased usage.</how> G&T provision 	
GV3: Design and Delivery of Dunton Hills Garden Community	 The design, development and phased delivery of DHGV must accord with all the following principles: The public sector working pro-actively and collaboratively with the private sector to: secure high-quality of place-making in accordance with Policy GV2; ensure the timely delivery of on-site and off-site infrastructure required to address the impact of these new communities; and provide and fund a mechanism for future stewardship, management, maintenance and renewal of community infrastructure and assets; Community and stakeholders involvement in the design and delivery from the outset and the delivery of a long-term community engagement strategy; Prior to the submission of outline planning applications, developers must submit a supporting statement setting out a sustainable long-term governance and stewardship arrangement for the community assets including Green Infrastructure, the public realm and community and other relevant facilities to be funded by the developer; A Strategic Masterplan must be developed along with a design guide to guide a coherent development across the allocation site, and illustrate key connections with surrounding GI and employment sites. Strategic Master Plans and detailed design proposals must be reviewed and informed by the independent Quality Review Panel and be consistent with and adhere to the relevant Design Codes. Covenants – use to include maintenance of front gardens and public realm (e.g. Blackheath model A suitable management body will need to be established to manage the assets of the DHGV over the long-term. The most suitable approach should emerge through the design and delivery process.	No Likely Significant Effect A development management policy relating to the design and delivery of Dunton Hills Garden Community. There are no linking impact pathways present and as such this policy can be screened out.