

Sustainability Appraisal (SA) for the Harlow Local Development Plan

SA Report

Harlow Council

May 2018

Quality information

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Revision History

Revision	Revision date	Details	Authorised	Position
1	10 January 2018	Working Draft for internal review	Alastair Peattie	Principal Consultant
2	17 January 2018	Draft for client review	Alastair Peattie	Principal Consultant
3	13 March 2018	Final Draft	Alastair Peattie	Principal Consultant
4	09 May 2018	Final for consultation	Alastair Peattie	Principal Consultant

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1. Introduction

- 1.1 AECOM is commissioned to lead on Sustainability Appraisal (SA) in support of the emerging Harlow Local Development Plan. SA is a mechanism for considering and communicating the likely effects of an emerging plan, and alternatives, with a view to avoiding and mitigating adverse effects and maximising the positives. SA of Local Plans is a legal requirement.¹

SA explained

- 1.2 It is a requirement that SA is undertaken in-line with the procedures prescribed by the Environmental Assessment of Plans and Programmes Regulations 2004, which transposed into national law EU Directive 2001/42/EC on Strategic Environmental Assessment (SEA).²
- 1.3 In-line with the Regulations, a report (known as the SA Report) must be published for consultation alongside the Draft Plan that essentially 'identifies, describes and evaluates' the likely significant effects of implementing 'the plan, and reasonable alternatives'.³ The report must then be taken into account, alongside consultation responses, when finalising the plan.
- 1.4 More specifically, the SA Report must answer the following three questions:
1. What has Plan-making / SA involved up to this point?
 - Including in relation to 'reasonable alternatives'.
 2. What are the SA findings at this stage?
 - i.e. in relation to the Draft Plan.
 3. What happens next?
 - What steps will be taken to finalise (and monitor) the plan?

This SA Report⁴

- 1.5 This SA Report is published alongside the Draft Pre-Submission Local Development Plan, under Regulation 19 of the Town and Country Planning (Local Planning) (England) Regulations 2012 and, as such, each of the three SA questions is answered in turn below, with a 'part' of the report dedicated to each.
- 1.6 Before answering Question 1, two initial questions are answered in order to further 'set the scene': i) What is the plan trying to achieve?; and ii) What is the scope of the SA?

¹ Since provision was made through the Planning and Compulsory Purchase Act 2004 it has been understood that local planning authorities must carry out a process of Sustainability Appraisal alongside plan-making. The centrality of SA to Local Plan-making is emphasised in the National Planning Policy Framework (2012). The Town and Country Planning (Local Planning) (England) Regulations 2012 require that an SA Report is published for consultation alongside the 'Proposed Submission' plan document.

² The SA process incorporates the SEA process. Indeed, SA and SEA are one and the same process, differing only in terms of substantive focus. SA has an equal focus on all three 'pillars' of sustainable development (environment, social and economic).

³ Regulation 12(2) of the Environmental Assessment of Plans and Programmes Regulations 2004

⁴ See Appendix I for further explanation of the regulatory basis for answering certain questions within the SA Report, and a 'checklist' explaining more precisely the regulatory basis for presenting certain information.

2. What is the plan seeking to achieve?

Overview

- 2.1 Once adopted, the Harlow Local Development Plan will set out the framework to guide and shape development in Harlow to 2031, and will replace all of the saved policies of the Adopted Replacement Harlow Local Plan (2006).

Plan vision and objectives

Vision

- 2.2 By 2033, Harlow will have:
- regained its reputation as a place of aspiration, innovation and prosperity;
 - secured its role as a key urban centre that has benefited from growth, regeneration and sustained investment in infrastructure, services and facilities;
 - provided sufficient new homes to meet local needs, providing opportunities to those unable to purchase open market housing, through a significant increase in the provision of affordable homes;
 - a reputation as a location for high tech industries, research and development, advanced manufacturing and information technology, and the disparity between the skills and qualifications of Harlow residents compared to visitors will be significantly reduced;
 - excellent education facilities, which the varied, vibrant and aspiring communities will be taking advantage of; and
 - become famous for its quality and quantity of public art, building on its status as a sculpture town.
- 2.3 Harlow's residents will be more active, taking advantage of Harlow's excellent sporting, leisure and cultural facilities.
- 2.4 The perception of Harlow as a declining economic centre will have been reversed through the success of the Enterprise Zone sites and securing the status of the district as a prime business location and retail destination.
- 2.5 The district's economy will be diversified and there will be a wide range of employment opportunities across Harlow, fit for a modern and dynamic economy.
- 2.6 New development will have revitalised key areas. A programme of urban renewal will have replaced poorer housing stock with modern and sustainable buildings; this will have been complemented by a programme of selective development in locations across the district as part of a holistic programme of regeneration and redevelopment.
- 2.7 Major progress will have been made to address Harlow's health and wealth inequalities as well as addressing localised deprivation across the district's deprived neighbourhoods.
- 2.8 The amount of vacant and underused land in district will have been minimised. Urban expansion of Harlow will be complete and residents will see the benefits of the growth through better infrastructure and other facilities and services across the district. The Town Centre, Neighbourhood Centres and Hatches will be thriving mixed-use areas benefiting from an improved public realm and increased activity.
- 2.9 Harlow will have retained a network of Green Wedges, supplemented by a number of Green Fingers. The district's Green Infrastructure, including green and open spaces, will be of consistently high quality and better connected to residential areas, providing multifunctional opportunities for residents and wildlife. Residents will also benefit from improved access to the countryside surrounding Harlow.

- 2.10 The land use and transport policies will be co-ordinated to ensure the maximum possible increase in passenger transport, walking and cycling. Major investment will be underway to address a number of specific transport capacity issues which are currently restricting growth and investment. This investment will include a new junction on the M11 (Junction 7a); substantial improvements to the internal road network, including support for a northern bypass beyond the Local Plan period; and the provision of an improved railway network through Crossrail 2 and/or four-tracking of the West Anglia mainline.
- 2.11 New development will minimise the use of global resources, support the development of good waste management and mitigate and adapt to the effects of climate change. Development will be innovative in design and construction and new buildings will be energy efficient and use as much energy from renewable sources as possible.

Strategic Objectives

- 2.12 The Local Plan Strategic Objectives are set out in **Table 2.1** below.

Table 2.1: Local Plan Strategic Objectives

Local Plan Theme	Local Plan Strategic Objective
PLACESHAPING (Enhancing the quality of the built and natural environment)	<ol style="list-style-type: none"> 1. Create and enhance high quality built environments which are well connected to revitalised green spaces 2. Deliver high quality design through new development whilst protecting and enhancing the district's historic environment 3. Adapt to and mitigate the impacts of climate change
HOUSING (Delivering housing at the right scale, of the right type and in the right location to meet the whole community's needs)	<ol style="list-style-type: none"> 4. Identify sites to meet local housing needs both now and in the future 5. Provide a range of suitable housing for the community including a range of tenure and type 6. Improve the quality of homes in the district through new developments, regenerated neighbourhoods and priority estates
PROSPERITY (Securing economic growth & regeneration to improve employment & educational opportunities in the district & reflect its strategic role)	<ol style="list-style-type: none"> 7. Meet the employment needs of the district by diversifying and investing in the district's employment base 8. Secure economic revitalisation and reinforce Harlow's reputation as a key centre for Research and Development 9. Improve educational opportunities and the skills base of local residents 10. Provide a range of shopping needs for local residents and the wider sub-region by regenerating the Town Centre and protecting and enhancing Neighbourhood Centres and Hatches
LIFESTYLES (Sustainably meeting the leisure, recreational and cultural requirements of the community)	<ol style="list-style-type: none"> 11. To provide and enhance sporting, leisure, recreational facilities and cultural opportunities in the district
INFRASTRUCTURE (Ensuring growth and regeneration is supported by appropriate infrastructure provision)	<ol style="list-style-type: none"> 12. Ensure that development is fully supported by providing the necessary infrastructure including education, healthcare and other community facilities 13. Reduce the need to travel by vehicle by ensuring new development is sustainably located or accessible by sustainable modes of transport 14. Improve transport links, particularly for sustainable modes of transport, to community facilities 15. Enhance and promote the role of Harlow as a transport interchange along the M11

What is the Local Plan not seeking to achieve?

- 2.13 It is important to emphasise that the plan will be strategic in nature. Even the allocation of sites/establishment of site-specific policy through this plan should also be considered a strategic undertaking, i.e. a process that omits consideration of some detailed issues (in the knowledge that they can be addressed at the planning application stage). The strategic nature of the Local Plan is reflected in the scope of the SA.

3. What is the scope of the SA?

Introduction

- 3.1 The aim here is to introduce the reader to the scope of the SA, i.e. the sustainability issues/objectives that should be a focus of (and provide a broad methodological framework for) SA.
- 3.2 Further information on the scope of the SA - i.e. a more detailed review of sustainability issues/objectives as highlighted through a review of the sustainability 'context' and 'baseline' - is presented in **Appendix II**.

Consultation on the scope

- 3.3 The Environmental Assessment of Plans and Programmes Regulations 2004 require that "When deciding on the scope and level of detail of the information that must be included in the Environmental Report [i.e. the SA scope], the responsible authority shall consult the consultation bodies". In England, the consultation bodies are the Environment Agency, Historic England and Natural England.⁵ As such, these authorities were consulted on the SA scope in 2010. Since that time, the SA scope has evolved as new evidence has emerged; however, the underlying scope remains fundamentally the same as that agreed through the dedicated scoping consultation in 2010. It should be noted that updated scoping information is presented in **Appendix II** of this SA Report.
- 3.4 It should be noted that the Council is preparing a separate Area Action Plan for Harlow Town Centre and this will also be subject to SA.

SA framework

- 3.5 **Table 3.1** presents the sustainability objectives - grouped under eleven topic headings - established through SA scoping, i.e. in light of context/baseline review and consultation. Taken together, the sustainability topics and objectives provide a methodological 'framework' for undertaking appraisal.

Table 3.1: SA topics and objectives (i.e. the SA framework as broadly agreed in 2010)

SA Topics	SA Objectives
Air quality	<ul style="list-style-type: none"> To ensure that the Air Quality in Harlow remains below objective limits and continues to improve.
Biodiversity and green infrastructure	<ul style="list-style-type: none"> To conserve and enhance biodiversity in Harlow. To promote, enhance and strategically expand the district's network of green infrastructure.
Climate change (mitigation & adaptation)	<ul style="list-style-type: none"> To lower Greenhouse Gas (GHG) emissions. To increase the amount of energy generated by decentralised or renewable sources and the use of renewable sources of energy by new development. To minimise the impact of development on surface water flooding and avoid development within areas of flood risk.
Community and wellbeing	<ul style="list-style-type: none"> To reduce poverty and social exclusion. To meet the health and social care needs of the district's growing and ageing population and its disabled population. To encourage healthy lifestyles and reduce inequalities in health, particularly through reducing obesity and diabetes. To reduce levels of crime, particularly Criminal Damage and Arson and Vehicle Offence crimes.

⁵ In accordance with Article 6(3) of the SEA Directive, these consultation bodies were selected because 'by reason of their specific environmental responsibilities, [they] are likely to be concerned by the environmental effects of implementing plans and programmes.'

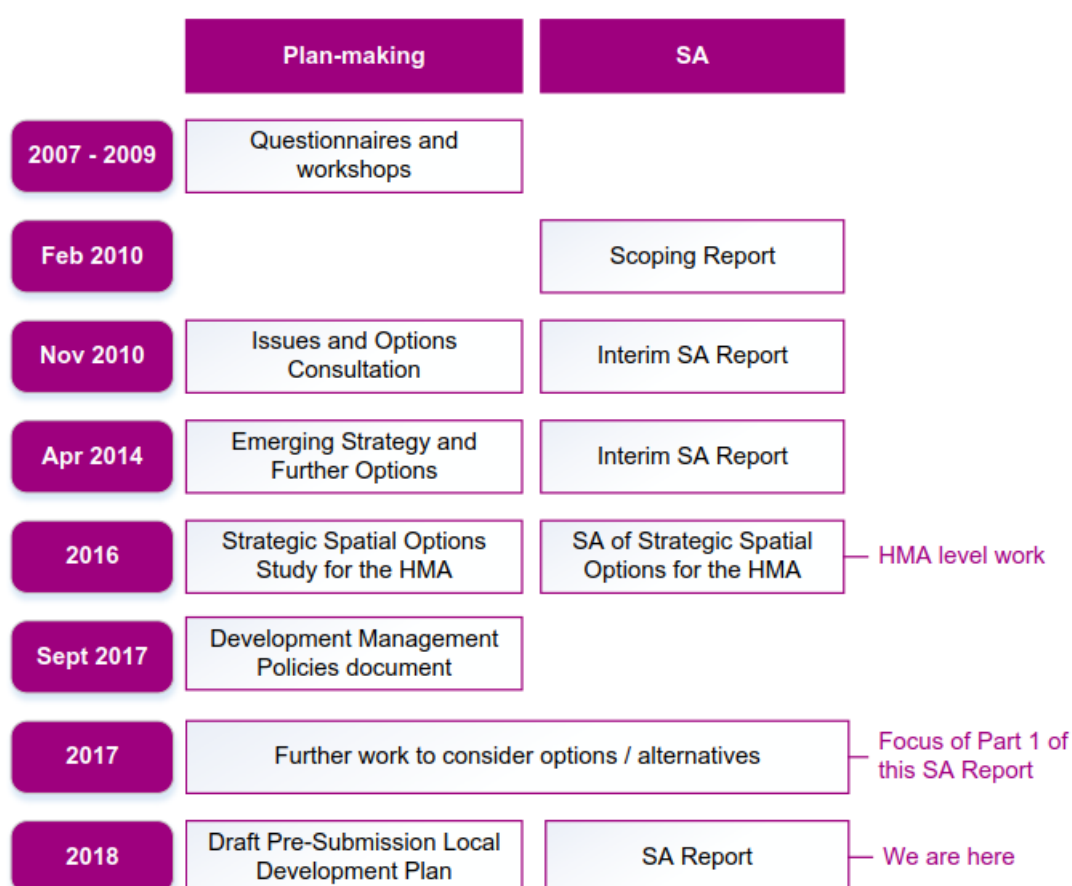
SA Topics	SA Objectives
	<ul style="list-style-type: none"> To renew the district's deprived neighbourhoods and address poor public realm within and around residential areas to ensure that pedestrian routes are integrated with areas of activity.
Economy and employment	<ul style="list-style-type: none"> To reduce a mismatch between jobs and skills by improving levels of skills, training and qualifications within the district. To ensure that job creation is matched by the provision of appropriate facilities and infrastructure. To promote investment, develop an attractive employment base and create a diversified economy within the district through avoiding the dominance of a few large employers and encouraging the 'clustering' of businesses within existing locations. To regenerate the town centre through upgrading the level of retail provision, encouraging a broader mix of uses including residential, introducing a high quality public realm and restructuring centres to increase passing traffic and overcome accessibility issues.
Historic environment	<ul style="list-style-type: none"> To protect the district's historic environmental assets from inappropriate development. To ensure that development respects the character, appearance and features of historical designations, in addition to the setting and views into or out of these areas. To ensure that the existing historic settlements and distinct settings of Churchgate Street and Old Harlow, and the new settlement of Newhall, retain their distinctive identity. To promote the creation of quality streets and spaces whilst protecting the town's distinctive character and heritage.
Housing	<ul style="list-style-type: none"> To increase the provision of housing, particularly affordable housing, to ensure that appropriate levels of new dwellings are provided over the plan period. To diversify the housing stock, increase density and address poor public realm within and around residential areas. To ensure that that the housing needs of an ageing (and disabled) population are met.
Land and waste	<ul style="list-style-type: none"> To support efficient use of land, including development of previously developed land in the district. To support the remediation of contaminated land.
Landscape	<ul style="list-style-type: none"> To ensure that development takes into account the Green Belt and Green Wedges that characterise the district. To ensure that the district's landscape assets are protected and integrated to maximise their potential amenity value, particularly in greenfield areas.
Transport	<ul style="list-style-type: none"> To promote a more sustainable modal shift so that levels of private car use for commuting are reduced. To promote measures that integrate transport and land use planning in order to provide for the greatest possible increase in passenger transport uptake as well as implementing enhanced access to the M11 through a new junction.
Water	<ul style="list-style-type: none"> Given that Harlow is located in an area of serious water stress which will be exacerbated due to climate change and future growth and development, water efficiency measures should be sought, including through the promotion of SuDS. To encourage reduced per capita consumption of water and maintain high levels of drinking water quality. To maintain and improve the water quality of Harlow's water courses in line with the Water Framework Directive requirements. To ensure the distribution and location of new development takes the water supply and sewerage infrastructure into account.

Part 1: What has plan-making /
SA involved up to this point?

4. Introduction (to part 1)

- 4.1 In-line with regulatory requirements, there is a need to explain how work was undertaken to develop and then appraise reasonable alternatives, and how the Council then took into account appraisal findings when finalising the Draft Pre-Submission Local Development Plan.
- 4.2 This part of the report sets out to present information regarding the consideration of reasonable alternatives, in particular District-wide spatial strategies, i.e. alternative approaches to the allocation of land to meet housing needs. This information is important given regulatory requirements.⁶
- 4.3 Plan-making has been underway since 2007, with a number of consultations being held prior to this current stage under Regulation 19 of the Local Planning Regulations. **Figure 1** sets out the key steps to date for plan-making and the SA.

Figure 1: Key steps in plan-making/SA process



- 4.4 As illustrated in the Figure above, there have been a number of steps leading up to the publication of the Draft Pre-Submission Local Development Plan. Reasonable alternatives have been developed and considered through the SA at key stages as appropriate.
- 4.5 Part 1 of this SA Report focuses on the work undertaken in 2016 and 2017 that led to the development of reasonable alternatives and the preferred approach set out in the Draft Pre-Submission Local Development Plan in 2018. This includes joint work undertaken amongst the four authorities that comprise the West Essex and East Hertfordshire Housing Market Area (HMA) to establish Objectively Assessed Housing Need (OAHN) for the HMA and how this need should be apportioned between the four authorities (and, in particular, how the growth of Harlow should be best accommodated).

⁶ There is a requirement for the SA Report to present an appraisal of 'reasonable alternatives' and 'an outline of the reasons for selecting the alternatives dealt with'. Whilst this report is not the SA Report, it is appropriate to present this information nonetheless for the benefit of stakeholders.

- 4.6 To avoid unnecessary confusion we do not provide the detail of the earlier alternatives work presented in the Interim SA Reports published in 2010 and 2014. The HMA level work carried out in 2016 superseded the earlier work and, as a result, it was necessary to revisit and refine the understanding of the reasonable alternatives for Harlow.
- 4.7 The documents set out in the Figure above, including Interim SA Reports, are available on the Council's website.⁷

What about other plan issues?

- 4.8 Whilst the plan will set policy in relation to a range of range of issues aside from spatial strategy, it is clear that setting spatial strategy is at the heart of the plan. It is the key issue to be addressed, and taken to be the primary objective of the plan. Hence it is considered reasonable⁸ that alternatives appraisal should focus on this matter.
- 4.9 Whilst the plan will set policy to address a range of other thematic issues (both strategic, e.g. in relation to "The Natural Environment, Landscape Character and Green Infrastructure"; and development management, e.g. "Heritage Assets") these policy areas have not been a focus of alternatives appraisal, and are not discussed further within this part of the Report.
- 4.10 It should again be noted that the Council is producing an Area Action Plan (AAP) to cover the area of Harlow Town Centre. The AAP will provide a spatial planning framework to guide development and secure the regeneration of Harlow Town Centre for the period up to 2033. The AAP will be subject to SA and this will consider a range of issues that are relevant to the Town Centre.

What about site options?

- 4.11 Site options identified by the Council were appraised through the SA. The role of site options appraisal within the SA process has primarily been to provide an evidence base to facilitate the development of District-wide reasonable alternatives.⁹ As such, site options appraisal is not given further explicit attention within this part of the report. The formal site options appraisal findings are presented in **Appendix III**.

Structure of this part of the report

- 4.12 This part of the report is structured as follows:
- **Chapter 5** - explains reasons for selecting the alternatives dealt with;
 - **Chapter 6** - presents an appraisal of the reasonable alternatives; and
 - **Chapter 7** - explains reasons for selecting the preferred option, in light of the appraisal of reasonable alternatives.

⁷ <http://www.harlow.gov.uk/local-plan>

⁸ Recent case-law (most notably Friends of the Earth Vs. Welsh Ministers, 2015) has established that planning authorities may apply discretion and planning judgement when determining what should reasonably be the focus of alternatives appraisal, recognising the need to apply a proportionate approach and ensure an SA process / report that is focused and accessible.

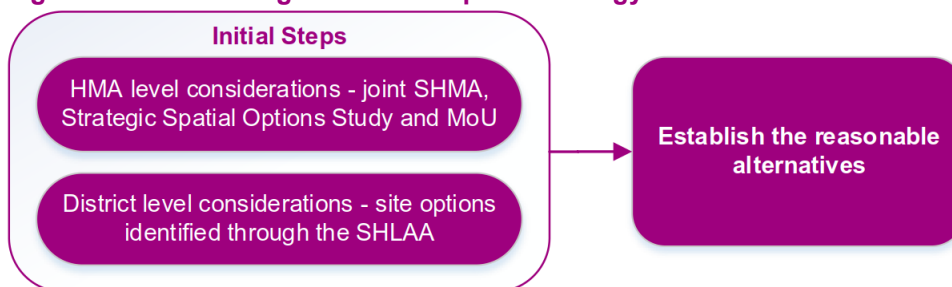
⁹ In other words, site options appraisal was undertaken as a means to an end (i.e. development and appraisal of reasonable alternatives), rather than an end in itself. It is worth noting that individual site options are not 'alternatives' in that they are not mutually exclusive.

5. Establishing the reasonable alternatives

Introduction

- 5.1 The aim here is to discuss the key steps undertaken in 2016 and 2017 that led to the development of reasonable spatial strategy alternatives for appraisal and then consultation in 2018. Ultimately, the aim of this chapter is to present ‘an outline of the reasons for selecting the alternatives dealt with’, in accordance with the Regulations.
- 5.2 Specifically, this chapter explains how reasonable alternatives were established subsequent to certain initial steps - see **Figure 2**.

Figure 2: Establishing reasonable spatial strategy alternatives



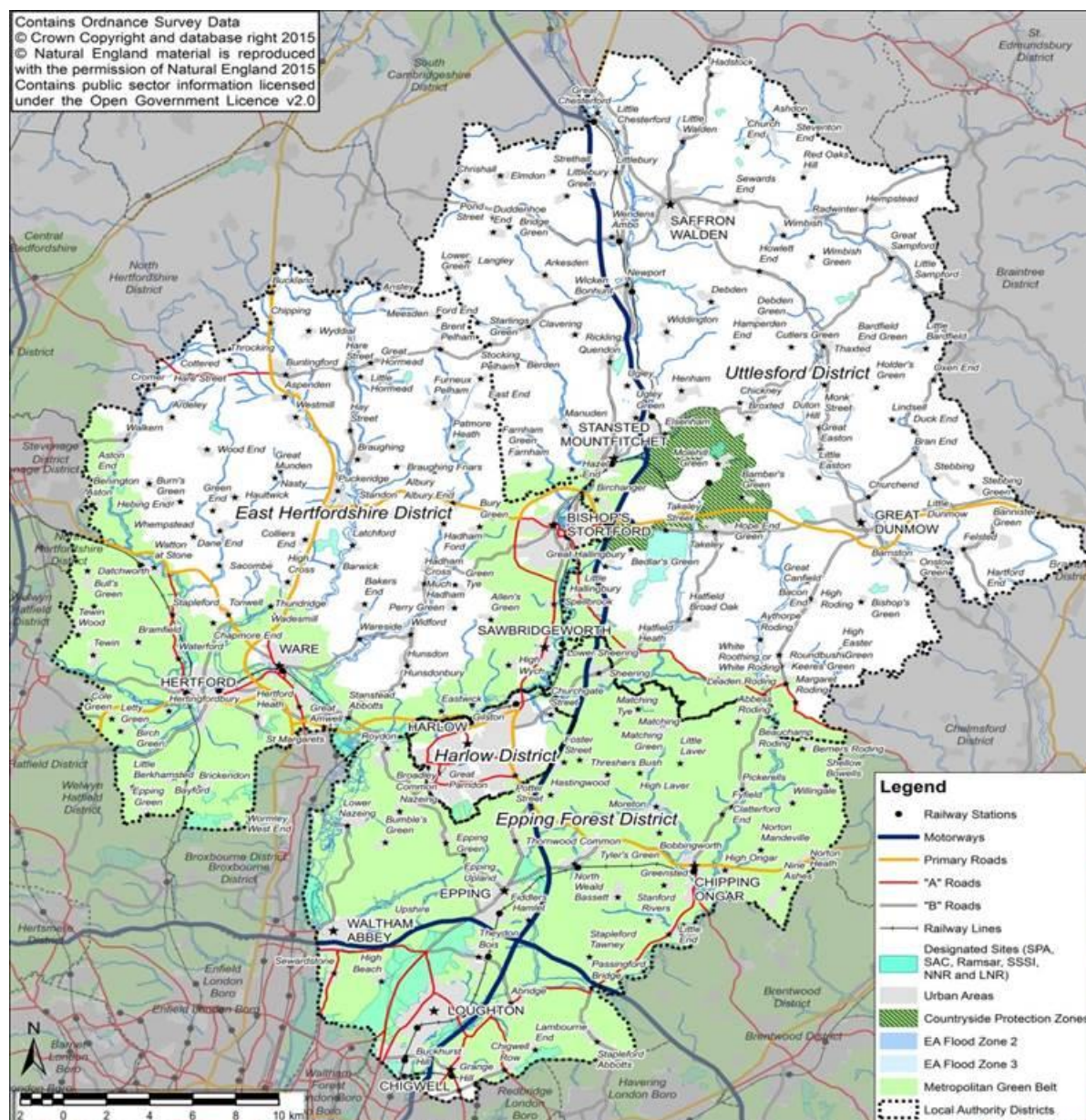
- 5.3 We firstly discuss the initial steps in turn, and then conclude by explaining how the evidence-base was drawn on to establish District-wide reasonable alternatives for appraisal through the SA.

Housing Market Area (HMA) level considerations

Overview

- 5.4 A three step approach was taken, which ultimately resulted in the establishment of a preferred broad spatial strategy for the West Essex and East Hertfordshire HMA see **Figure 3**, including a decision on the approach to growth in and around Harlow. Harlow was recognised as the most sustainable location within the HMA to focus residential development given its role as a sub-regional centre for employment, its Enterprise Zone status; its important location on the London Stansted Cambridge corridor and the wider economic growth aspirations for the town.

Figure 3: West Essex and East Hertfordshire Housing Market Area



Step 1 - Establish understanding of housing and economic needs

- 5.5 A joint Strategic Housing Market Assessment (SHMA) was undertaken for the four authorities of the HMA - East Herts District Council, Epping Forest District Council, Harlow District Council and Uttlesford District Council - in order to establish Objectively Assessed Housing Need (OAHN) for the HMA.
- 5.6 The SHMA was published in September 2015 and identified OAHN for the HMA to be 46,100 dwellings over the period 2011 - 2033, equivalent to an average of 2,095 dwellings per year. This included an Objectively Assessed Need for Affordable Housing of 13,600 dwellings.¹⁰
- 5.7 The SHMA provided a break-down OAHN for each authority, as follows:
 - 16,400 dwellings in East Hertfordshire (745 per year);
 - 11,300 dwellings in Epping Forest (514 per year);

¹⁰ Opinion Research Services (September 2015) West Essex and East Hertfordshire Strategic Housing Market Assessment: Report of Findings.

- **5,900 dwellings in Harlow (268 per year); and**
 - 12,500 dwellings in Uttlesford (568 per year).
- 5.8 In addition, the SHMA highlighted that the Department of Communities and Local Government's (DCLG)¹¹ 2012-based household projections showed the number of households in the HMA increasing from 175,189 to 224,827 over the 22-year period 2011-33. The SHMA explained that:
- “PPG [Planning Practice Guidance] identifies that the starting point for estimating housing need is the [D]CLG 2012-based household projections. For the 22-year period 2011-33, these projections suggest an increase of 49,638 households across the West Essex and East Hertfordshire HMA: an average growth of 2,256 households each year, comprised of 779 in East Hertfordshire, 653 in Epping Forest, **326 in Harlow** and 498 in Uttlesford.”
- 5.9 In August 2016, Opinion Research Services (ORS) updated the OAHN (but without undertaking a full review of the SHMA) to take into account more recent information including the DCLG 2014-based household projections and suggested a revised OAHN for the HMA of 54,608 disaggregated as follows:
- 19,427 dwellings in East Hertfordshire (883 per year);
 - 13,278 dwellings in Epping Forest (604 per year);
 - **7,824 dwellings in Harlow (356 per year); and**
 - 14,080 dwellings in Uttlesford (640 per year).

N.B. Alongside the SHMA, the four authorities commissioned a study to consider the Objectively Assessed Economic Need of the Functional Economic Market Area (FEMA),¹² which considers a wider area than that of the HMA.¹³ This was published in 2015 and provided an up-to-date assessment of jobs growth need in the FEMA for the period 2011-2033. The study identified a net jobs growth per year of 1,890 for the FEMA. For the West Essex and East Hertfordshire authority areas, this translated into the following ranges in jobs growth: 435 - 505 jobs per year in East Herts; 400 - 455 jobs per year in Epping Forest; **325 - 335 jobs per year in Harlow**; 665 - 675 jobs per year in Uttlesford.

Step 2 - Develop and appraise strategic spatial alternatives

- 5.10 In response to a need to fulfil Duty to Cooperate requirements, and to adhere to the spirit of the current NPPF¹⁴ which requires that local authorities “... *demonstrate evidence of having effectively cooperated to plan for issues with cross-boundary impacts when their Local Plans are submitted for examination*”¹⁵, the West Essex and East Hertfordshire authorities explored options for meeting Objectively Assessed Need in the sub-region. This included the consideration of a range of locational options for delivering housing.
- 5.11 To support this process the four authorities undertook the following:
- identified options for spatially distributing the housing need identified in the SHMA (2015), the DCLG 2012-based household projections and the August 2016 advice from ORS across the HMA, based on an analysis of the policy context and evidence base;
 - provided an evidence-based Sustainability Appraisal setting out the anticipated significant positive and negative impacts of each option (including opportunities to deliver infrastructure, employment development, regeneration benefits, etc.) and potential mitigation measures (where relevant); and

¹¹ Please note DCLG is now called the Ministry of Housing, Communities and Local Government (MHCLG).

¹² Hardisty Jones Associates (September 2015) Economic Evidence to Support the Development of the OAHN for West Essex and East Herts

¹³ The FEMA covers the four authority areas, but also includes: Broxbourne, a fringe area comprising all of the immediately adjacent local authorities; and a link to central London.

¹⁴ A revised NPPF has been published for consultation in March 2018. Transitional arrangements are also proposed which will apply the previous Framework to the examining of plans which are submitted on or before the date which is six months after the date of the publication of the new Framework.

¹⁵ Paragraph 181, National Planning Policy Framework

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/6077/2116950.pdf

- developed a Memorandum of Understanding (MoU) between the four authorities which sets out a high level agreement as to how new housing should be distributed across the HMA.
- 5.12 These activities are collectively referred to as the Strategic Spatial Options Study. It is anticipated that the study will provide a critical piece of evidence for demonstrating to the Planning Inspectorate at the independent examinations into the four local plans that the key strategic issue of housing growth has been robustly addressed and that the Duty to Co-operate has been clearly complied with.
- 5.13 As part of the Strategic Spatial Options Study, a range of spatial options for distributing housing across the HMA were considered. Three levels of growth were considered:
- ~46,100 new homes in line with the 2015 SHMA
 - ~49,638 new homes in line with the DCLG 2012-based household projections
 - ~57,400 new homes in line with early advice from ORS in light of more recent information including the DCLG 2014-based household projections (NB this figure was later revised down to 54,608 – see above)
- 5.14 In particular, the spatial options explored different levels of growth in and around Harlow, a key urban centre within the HMA:
- ~10,500 (lower growth)
 - ~14,150 (medium growth)
 - ~17,650 (higher growth)
 - ~20,985 (maximum growth)
- 5.15 The study identified the following reasonable strategic spatial options:
- **Spatial options to deliver ~46,100 new homes across the SHMA area:**
 - A. Each authority meets its OAHN within its own boundaries (NB ~14,150 at Harlow)
 - B. Less development at Harlow and accelerated development on the A120 (NB ~10,500 at Harlow)
 - C. Less development at Harlow and two new settlements in East Herts (NB ~10,500 at Harlow)
 - D. Maximum growth at Harlow (NB ~17,650 at Harlow; reduced allocations in constrained areas of the HMA¹⁶)
 - **Spatial option to deliver ~49,638 new homes:**
 - E. Higher growth across the HMA (NB ~17,650 at Harlow; allocations in constrained areas)
 - **Spatial option to deliver ~57,400 new homes:**
 - F. Maximum growth across the HMA (NB ~ 20,985 at Harlow)

Step 3 - Identify the preferred strategy

- 5.16 To assist in discharging the Duty to Co-operate, the Co-operation for Sustainable Development Member Board (the Co-op Member Board) considered six options (A-F) for accommodating new housing development across the West Essex and East Hertfordshire Housing Market (HMA) area up to 2033 (see above). These six options varied in terms of: (i) the overall quantum of development to be provided for across the HMA (ranging from ~48,300 to ~56,250 new houses); and (ii) the spatial distribution of that development. Varying the overall quantum of development allowed the Co-op Member Board to test the implications of different levels of growth including: 46,100 (the figure for OAHN in the Strategic Housing Market Assessment, SHMA); 49,638 (a figure based on the CLG 2012-based household projections); and 54,608

¹⁶ Figures reduced across settlements in East Herts (Bishop's Stortford, Hertford, Sawbridgeworth and Ware) and Epping Forest to minimise Green Belt incursion.

(an updated OAHN figure provided by Opinion Research Services, ORS, in light of information including the CLG 2014-based household projections). Varying the spatial distribution of development allowed the Co-op Member Board to explore the implications of focusing different levels of development in different parts of the HMA. In particular, the options varied in terms of the level of development located in and around Harlow, the HMA's key urban centre.

- 5.17 The implications of the six HMA spatial strategy options (A-F) were investigated through four means:
1. Transport modelling by Essex County Council to explore their implications in relation to traffic flows and the need for road upgrades or additional highways infrastructure;¹⁷
 2. Sustainability Appraisal to assess their implications in relation to a range of topics including biodiversity, community and wellbeing, historic environment, landscape and water. The findings of the SA were published in 2016;¹⁸
 3. Habitat Regulations Assessment to determine their implications, if any, for the integrity of the European sites; and
 4. Strategic Site Assessment to assess the suitability of the potential sites in and around Harlow that could deliver new housing development.¹⁹
- 5.18 The findings of these studies are summarised below.

Transport modelling

- 5.19 The transport modelling indicated a 35-40% increase in trips on the network by 2033 based on 14,000 new homes in and around Harlow (and 48,000 across the wider HMA) (NB 14,000 equates to Option A above) compared to the base year 2014. In light of the transport modelling, it was concluded that a major improvement at Junction 7 of the M11 and a new Junction 7A were both essential to deliver growth. It was also concluded that a major improvement at Junction 8 was also essential to support HMA growth as well as potential expansion at Stansted Airport beyond the currently consented growth of up to 35 million passengers per annum (mppa).
- 5.20 With respect to Harlow town, in light of the transport modelling, it was also concluded that early delivery of a second crossing over the River Stort was essential to enable the development of an effective north-south sustainable travel corridor, significant modal shift towards public transport, walking and cycling and wider network benefits to Harlow (NB sustainable travel corridors are also arguably a key element of any 'garden settlement' approach to development in and around Harlow). In terms of the level of development that can be accommodated in and around Harlow, the transport modelling undertaken to date indicates that growth of between 14,000 and 17,000 new homes in and around Harlow could be accommodated provided that key mitigation measures are delivered during the plan period. For this reason, agreement was sought on a MoU on Highways and Transportation Infrastructure for the West Essex and East Hertfordshire HMA.

Harlow Strategic Site Assessment Report

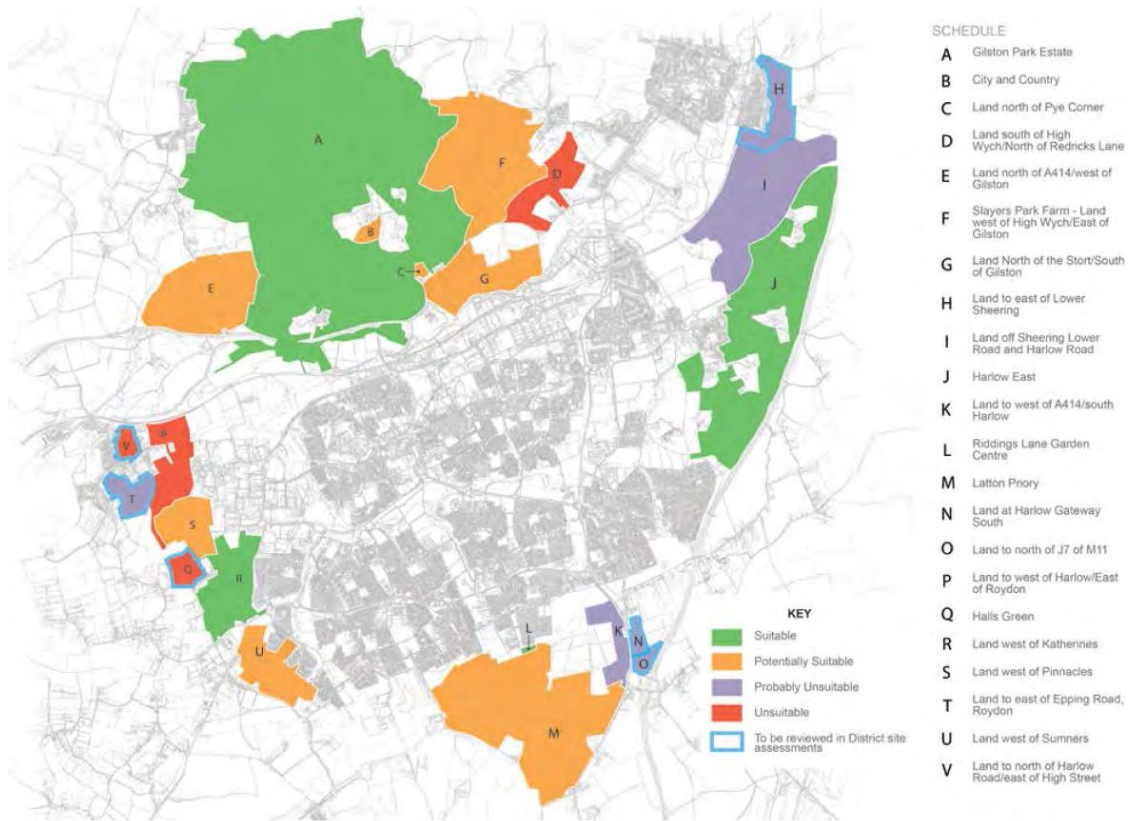
- 5.21 The Harlow Strategic Site Assessment Report (Sept 2016) identified an initial 'basket of sites' or a long list deemed to be 'suitable' or 'potentially suitable' for future development (should there be appropriate site specific mitigation and dependent on strategic Harlow-wide infrastructure improvements). The findings of the assessment are presented in **Figure 4** below.

¹⁷ Essex County Council. West Essex and East Hertfordshire Local Plan Modelling. Technical Notes 1 to 6.

¹⁸ Epping, East Herts, Harlow and Uttlesford District Councils (2016) SA of Strategic Spatial Options for the West Essex and East Hertfordshire Housing Market Area.

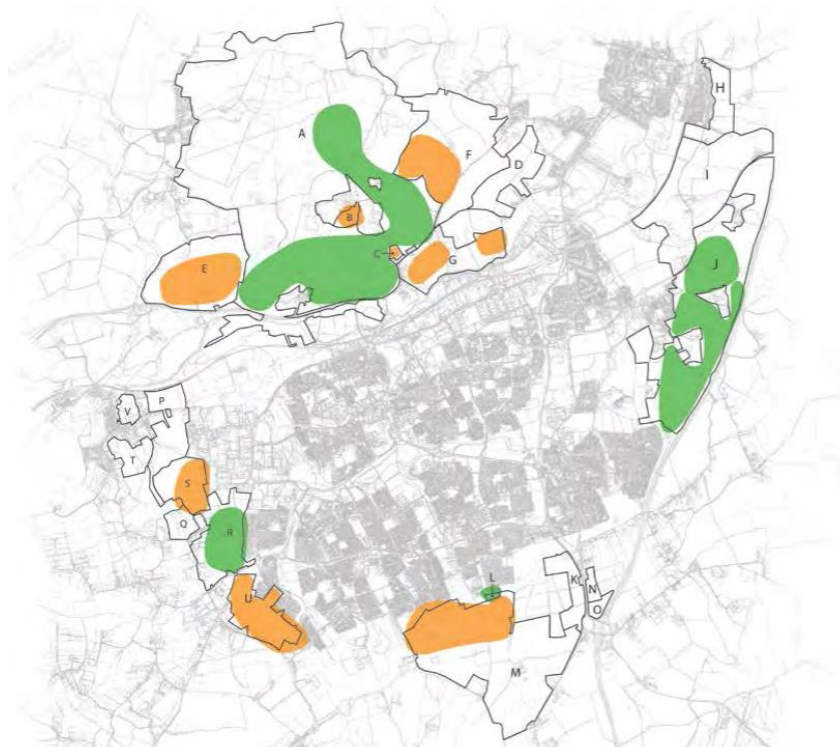
¹⁹ East Herts, Epping Forest, Harlow and Uttlesford District Councils (2016) Harlow Strategic Site Assessment Report.

Figure 4: Harlow Site Assessment Report summary findings



5.22 An analysis of constraints and promoter proposals as part of the Strategic Site Assessment Report showed that, largely in landscape terms, the full extent of many of the sites would not be developed. The approximate extent of the appropriate developable areas for the sites judged to be suitable or potentially suitable is presented in **Figure 5**.

Figure 5: Approximate developable areas of suitable and potentially suitable sites

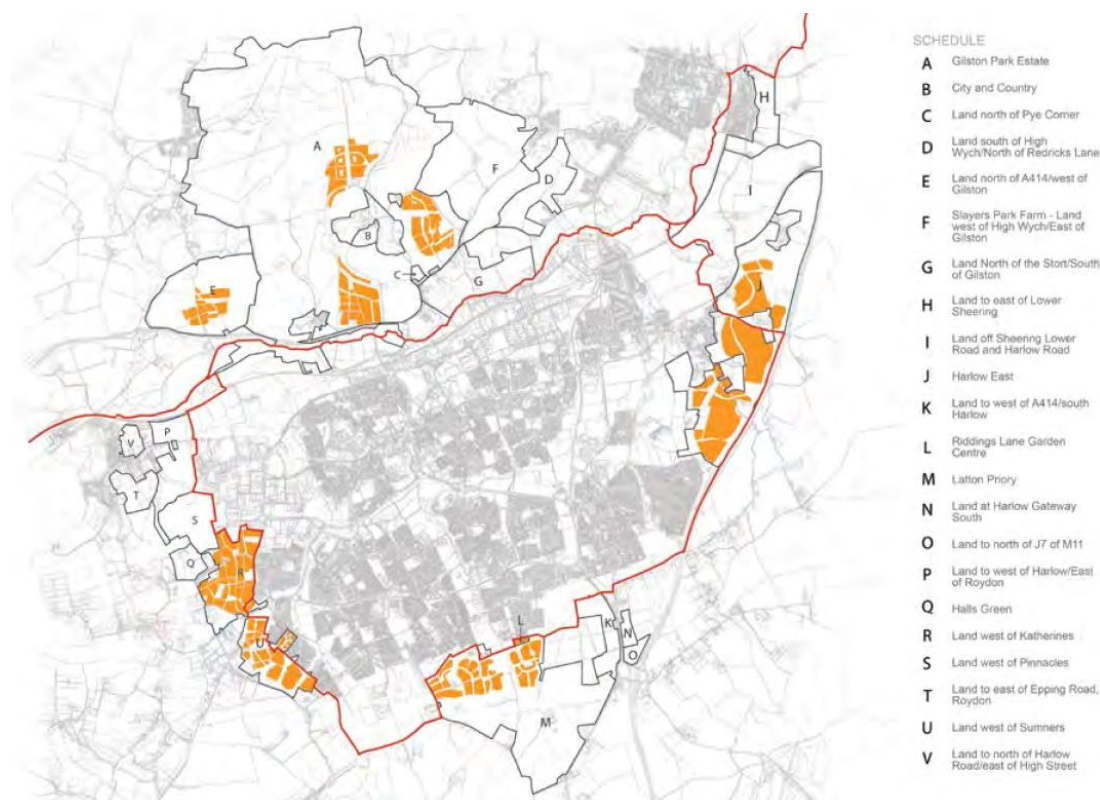


5.23 Taking **Figure 5** as the starting point, the Strategic Site Assessment Report then identified synergistic spatial opportunities for sites considered in combination(s). It identified that there are sufficient suitable sites in and around Harlow to accommodate close to 16,100 units provided that:

- Further detailed traffic modelling for development to the East of Harlow demonstrates growth is deliverable on the scale envisaged;
- Significant infrastructure requirements are met, including highways, sustainable travel options, education, sewerage/drainage etc.;
- Landscape impacts can be mitigated; and
- Development can be distributed amongst several sites in combination (e.g. north and west of Harlow).

5.24 Based on the evidence available and assessments carried out, the report recommended the most suitable option for growth capable for accommodating 16,100 units. This is presented in **Figure 6** below with the shaded orange areas showing the indicative net developable area on sites deemed to be suitable/potentially suitable.

Figure 6: Harlow Site Assessment Report recommended options



Sustainability Appraisal

5.25 As part of the Strategic Spatial Options Study, a Sustainability Appraisal (SA) was carried out to assist in determining the most appropriate housing growth and distribution option for the HMA. An appraisal of the reasonable strategic spatial options identified in Paragraph 5.16 of this SA Report was carried out against a SA Framework.

5.26 The SA found that in many respects the overall sustainability performance of many of the strategic spatial options considered were broadly similar. However, there were differences between them in terms of the potential environmental effects that might arise and the socio-economic opportunities offered by the options in specific locations. For example Options A, B, C and E, which promoted the delivery of an increased proportion of housing in the parts of the sub-region outside of Harlow, would increase the potential for supporting services and facilities

across a broader range of locations than Option D. Option D, through limiting housing delivery in Bishop's Stortford, Hertford, Sawbridgeworth, Ware, Chigwell, Chipping Ongar, Epping, Theydon Bois, Waltham Abbey, Saffron Walden and Great Dunmow, and larger villages in Uttlesford, might reduce the potential for effects on landscape and townscape character, biodiversity assets and air/noise quality in the vicinity of these locations. However this would come at a significant trade-off in terms of meeting local housing needs and supporting the vitality of these settlements. Similarly, whilst Options D, E and F, and to a lesser extent, Option A had increased potential to lead to environmental effects in the vicinity of Harlow, these options would do more to realise the wider sustainability benefits associated with focusing growth in the primary settlement of the sub-region.

- 5.27 Options D, E and F proposed a higher level of growth and were therefore identified as having the greater potential to deliver a broader range of housing types and tenures, promote the vitality of settlements and support infrastructure delivery.
- 5.28 The SA concluded that, overall, the sustainability performance of the six options would largely depend on the more detailed elements relating to the delivery of growth in the sub-region. This would relate to the specific location of new development areas, the design and layout of new development and the integration of elements such as enhancements to sustainable transport networks and green infrastructure provision.
- 5.29 It should be noted that the SA work carried out as part of the Strategic Spatial Options Study was not undertaken in line with the requirements prescribed by the SEA Regulations. The SA in that case focussed solely on reasonable alternatives and there was no 'draft plan' being prepared. Instead, it was anticipated that the selected alternative would be reflected in the content of the emerging Local Plans for East Herts, Epping Forest, Harlow and Uttlesford Districts.

Habitats Regulations Assessment

- 5.30 As part of the Strategic Spatial Options Study, a Habitats Regulations Assessment (HRA) was carried out to determine the implications of the strategic spatial options, if any, for the integrity of European sites.
- 5.31 Potential effects on the Lee Valley SPA/Ramsar, Epping Forest SAC and Wormley-Hoddesdon Park Woods SAC were examined as a result of disturbance from recreational activities and effects arising from urbanisation, atmospheric pollution, water abstraction and changes in water quality.

Atmospheric pollution

- 5.32 With respect to atmospheric pollution and the key issue of transport pollution affecting Epping Forest SAC, the HRA concluded that there was relatively little difference between any of the options. The HRA indicated that no option resulted in a change in nitrogen or acid deposition rate equivalent to (or even close to) 1% of the critical load on any road link. It was therefore possible to conclude, in line with relevant guidelines that all options would make an imperceptible or inconsequential contribution to local nitrogen and acid deposition within Epping Forest SAC. As such, it was concluded that there would be no adverse effect on the integrity of Epping Forest SAC from the options, either alone or in combination with other plans and projects (the same conclusion also applied to the other two European sites). In practice, the HRA was not therefore material to the ultimate choice of option.
- 5.33 However, it was evident from the HRA work that, even allowing for some improvement in background air quality to 2033 from improved emissions technology, the total nitrogen deposition rates adjacent to all modelled road links would reach, or exceed, the lowest point of the currently used critical load range for Epping Forest SAC. As such, while the modelling indicated that none of the options could be 'blamed' for making a significant contribution to the future elevated nitrogen deposition rates, when all traffic is taken together there would clearly remain potential for a continued negative effect on the SAC by 2033. Therefore, while it may not be required as 'mitigation', the HMA authorities pursued agreement on a MoU on Managing the impacts of growth within the West Essex/East Hertfordshire Housing Market Area on Epping

Forest SAC, the signatories of which included Natural England and the City of London Corporation (Conservators of Epping Forest).²⁰

Recreational pressure

- 5.34 In terms of recreational pressures, whilst significant effects from the options considered were not anticipated on Lee Valley SPA/Ramsar site or Wormley Hoddesdonpark Woods SAC, it was recommended that all new development deliver greenspace in line with the Natural England Accessible Natural Greenspace (ANGSt) standard to ensure it is self-sufficient. Adverse effects on Epping Forest SAC due to growth in Epping Forest District in particular could not be dismissed particularly due to development in the following settlements: Loughton, Epping, Waltham Abbey, Theydon Bois and Chigwell. More detailed visitor survey work may be required. Any such survey, and any more refined assessment of impacts and mitigation solutions would be undertaken within the scope of a strategic commitment that all the HMA authorities have made in the MoU between the HMA authorities, Essex County Council, Hertfordshire County Council, Natural England and the Corporation of London. Visitor survey work has now been completed and strategic mitigation solutions will follow (such as access management contributions and, for the largest sites, provision of on-site alternative recreational natural greenspace).

Water abstraction and quality

- 5.35 In relation to water abstraction, the HRA concluded that the options would not result in adverse effects on the Lee Valley SPA/Ramsar site through excessive water drawdown, either alone or in combination with other plans and projects. It also concluded that there would not be a water quality effect from the options on Lee Valley SPA/Ramsar site either alone or in combination with other projects and plans.

Preferred Spatial Option

- 5.36 In light of the work outlined above, the Co-op Member Board identified a Preferred Spatial Option to deliver c. 51,000 new homes across the HMA to 2033 broken down in Table 5.1 below.

Table 5.1: The preferred broad strategy for the HMA

Local authority	Net new dwellings 2011-2033
East Hertfordshire District Council	c. 18,000
Epping Forest District Council	c. 11,400
Harlow District Council	c. 9,200 (N.B. this target is higher than the identified OAHN at the time)
Uttlesford District Council	c. 12,500
Total across the HMA	c. 51,100
...of which the area in and around Harlow ²¹ will provide	c. 16,100

- 5.37 The preferred strategy was established drawing on evidence available at the time on the basis that:
- At c. 51,000 new homes, the planned level of housing growth is higher than both the established OAHN within the published 2015 SHMA (46,100) and the figure based on the CLG 2012-based household projections (49,638). It is lower than ORS' estimated OAHN figure taking into account recent information including the CLG 2014-based household projections (54,608) but nonetheless represents good progress towards this higher figure.

²⁰ Memorandum of Understanding (Feb 2017) Managing the impacts of growth within the West Essex/East Hertfordshire Housing Market Area on Epping Forest Special Area of Conservation.

²¹ 'in and around Harlow' refers to development in Harlow Town as well as around Harlow in adjoining Districts.

Overall, the figure of c. 51,000 indicates that the four HMA authorities are positively seeking opportunities to meet the development needs of their areas in line with the National Planning Policy Framework (NPPF), and, furthermore, significantly boosting the supply of housing (NPPF, para. 47).

- Harlow represents the most sustainable location within the HMA at which to concentrate development given its role as a sub-regional centre for employment (especially in technology); its Enterprise Zone status; the need to rejuvenate the town centre; the opportunity to capitalise on its transport connections (for example, good rail links to London, Stansted Airport and Cambridge) and deliver north-south and east-west sustainable transport corridors traversing the town; its important location on the London – Stansted – Cambridge corridor; and, above all, the wider economic growth aspirations for the town. The findings and recommendation of the London Stansted Cambridge Corridor (LSCC) Growth Commission report, published in July 2016, stated that “*Broxbourne, Harlow and Stevenage have significant strategies and ambitions for growth and development. They can play an important role in supporting the Corridor’s tech and life sciences clusters. Current development and future plans will greatly improve the industrial, commercial and residential offer. These areas must be supported to provide the right types of development that enhance the quality of place for the Corridor’s knowledge-based industries and residents*” (our emphasis).²²
- The transport modelling to date demonstrates that growth of between 14,000 and 17,000 new homes in and around Harlow can be accommodated provided that the mitigation measures set out in the then Draft [now signed] Highways and Transportation Infrastructure MoU for the West Essex and East Hertfordshire HMA are delivered during the plan period. Evidence suggested that growth beyond 2033 is likely to be possible subject to further transport modelling and the identification and delivery of additional strategic highway mitigation measures.
- The Harlow Strategic Site Assessment (September 2016) indicated that sufficient suitable strategic sites are available in and around Harlow to deliver the figure of c. 16,100 (together with sites either already completed or granted planning permission as well as urban brownfield sites). The Strategic Site Assessment is available on the Council’s Local Plan evidence-base webpage.²³

Updated evidence

- 5.38 A further SHMA update was carried out in 2017 taking into consideration the latest relevant evidence including DCGL’s 2014 based household projections (July 2016). These updates led to a revised OAHN for the HMA of 51,710 dwellings from a previous figure of 46,100 while the need for affordable housing remained largely unchanged from the 2015 SHMA.
- 5.39 The latest updates identified a slightly increased OAHN for three of the four local authorities in the HMA. However, as the increase had been largely anticipated and accounted for in the HMA level work and preferred strategy, the updated overall housing need across the entire HMA remained broadly consistent with what had already been agreed (signed Memorandum of Understanding, March 2017).
- 5.40 It was not considered necessary to revisit alternatives for the level and distribution of growth for the HMA as set out in the signed MoU (March 2017). The SA of Strategic Spatial Options published in 2016 considered three alternatives for the overall level of growth in the HMA, which included the delivery of ~ 46,000, ~ 49,638 and ~ 57,400 new homes within the HMA.²⁴ As such, higher numbers including figures approximating to and in excess of 51,710 new dwellings had already been tested and so there was no need to revisit the HMA-level optioneering work.

²² London Stansted Cambridge Corridor Growth Consortium (2016). Findings and recommendation of the London Stansted Cambridge Growth Commission www.lscgcommission.org.uk/wp-content/uploads/2016/07/LSCC-Growth-Commission-Final-Report-full.pdf.

²³ Harlow, Epping Forest, East Herts and Uttlesford District Councils (2016) Harlow Strategic Site Assessment. Prepared by AECOM.

²⁴ Epping, East Herts, Harlow and Uttlesford District Councils (2016) SA of Strategic Spatial Options for the West Essex and East Hertfordshire Housing Market Area.

- 5.41 As a result, the HMA authorities are satisfied that the approach set out within the MoU will ensure that the predicted housing need of the HMA will be met over the course of the Local Plan periods.²⁵ Harlow Council's housing requirement therefore remains 9,200 dwellings as set out within the signed MoU (March 2017) and is still higher than the identified OAHN of 7,409 dwellings.

District level considerations

Overview

- 5.42 The HMA work discussed above resulted in an understanding of the preferred strategic sites within and surrounding Harlow, and resulted in an understanding of the housing requirement which would need to be delivered through other sites within Harlow. There remained a need to develop a District-wide understanding of the site options available to deliver the remaining housing requirement.

Housing sites

- 5.43 To inform the preparation of the Local Development Plan the Council carried out a Strategic Housing and Land Availability Assessment (SHLAA) to identify opportunities to meet the town's housing need and provide information about the deliverability of potential sites. The SHLAA was published in 2014 and **Figure 7** below shows the sites that were identified and considered through that assessment.

Figure 7: Sites identified and considered through the SHLAA process



²⁵ It should be noted that Uttlesford District Council published a Regulation 18 Local Plan for consultation in July 2017, which includes a housing target of 14,100 dwellings.

- 5.44 The method and detailed findings of the SHLAA are available on the Council's website.²⁶ It is important to note that a significant number of sites identified and assessed through the SHLAA process are in public ownership. As explained in the SHLAA Report (2014), "*This is the legacy from the New Town era where land and buildings were extensively owned by the Harlow Development and then Commission for New Towns and Homes and Communities Agency. Much of the land and buildings were transferred into Council Ownership. In addition Essex County Council has put forward land in its ownership*".
- 5.45 At the time the SHLAA (2014) found that the potential dwelling supply in Harlow was 8,886 dwellings, which included new sites (2,307 dwellings) commitments (4,027 dwellings), completions (541 dwellings from 01/04/11 to 31/03/13) and potential development that could be delivered at the strategic broad location in the east 2,011 dwellings).
- 5.46 All of the sites identified and considered through the SHLAA were appraised through the SA process. The findings of this work are presented in **Appendix III** of this SA Report.
- 5.47 Since the publication of the SHLAA the call for sites has remained opened and the Council has continued to monitor and update the evidence relating to land availability and housing supply (see below). For further information on the Council's site selection process please refer to **Appendix III**.

Housing requirement

- 5.48 The most recent SHMA update (July 2017) identified that Harlow has an OAHN of 7,409 dwellings. The Local Plan must ensure there is a sufficient supply of market, affordable and specialist dwellings to meet this need. To contribute to the substantial need for affordable housing need across the HMA²⁷ and aspirations for regeneration in Harlow²⁸, an additional 1,800 dwellings are also to be delivered as agreed through the signed MoU in March 2017. This gives a total housing requirement for Harlow of 9,200 dwellings.
- 5.49 Since the start of the Local Development Plan period (1st April 2011), 5,558 dwellings have been completed and/or granted planning permission, a significant contribution towards meeting this housing requirement. This leaves an additional requirement of 1,042 dwellings to be delivered, as shown in **Table 5.2** below.

Table 5.2: Housing supply

	Dwellings
Completions at 31 March 2017	1,436
Commitments at 31 March 2017	4,122
Strategic Housing Site East of Harlow	2,600
Additional Requirement	1,042
Total	9,200

- 5.50 It should be noted that whilst there has been a steady supply of windfall sites, their contribution to the overall housing supply has not been significant. The New Town legacy of Harlow means the District has been carefully planned from the outset; consequently there are very few opportunities for windfall sites. The Council therefore considered that the windfall supply in Harlow would not meet the national criteria and consequently could not be included as a reliable source of supply in the five year supply calculations.

²⁶ Harlow Council (2014) Strategic Housing and Land Availability Assessment.

²⁷ Opinion Research Services (July 2017) West Essex and East Hertfordshire Strategic Housing Market Assessment: Affordable Housing Update.

²⁸ Harlow Council (2013) Harlow Future Prospects Study: Linking Regeneration & Growth.

Establishing reasonable alternatives

- 5.51 In trying to establish reasonable alternatives for delivering the remaining housing requirement of 1,042 dwellings, it is important to remember that Harlow is not typical of most Districts. It is a former New Town with a planned layout which has been developed from a Master Plan. The consequence of this is that land was identified with some form of specific function and the size of the District is therefore very small and constrained by the Green Belt.
- 5.52 The Master Plan sought to preserve the form of the original landscape and the natural features that gave the District its distinctive character; consequently the green areas were generally kept free of buildings and as natural as possible. Almost half of the land in Harlow is a form of open / green space, much of which is multi-functional, with 28% being designated as Green Wedges or Green Fingers, and 10% as Green Belt. These Green Wedges and Green Fingers are fundamental parts of the green infrastructure, as they contain multi-functional open spaces which are linked to other open spaces and the wider countryside.
- 5.53 Harlow's unique character created from key master planning principles has resulted in a strong relationship between the urban form and the Green Wedge network, through which transport corridors pass. The Green Wedges provide a series of connectable open spaces which link major facilities and services, offering a pleasant and attractive footpath, cycleway and bridleway system.
- 5.54 The District boundary reflects the original New Town designated area and, as such, is tightly drawn around the urban area. This means that, unlike many other Councils, Harlow does not have a large hinterland or neighbouring settlements in which to search for potential housing sites.
- 5.55 Through the site selection process (see **Appendix III**) the Council identified twenty one available and suitable sites that could deliver around 1,147 new dwellings. The majority of these sites are previously developed land (PDL) with only three available and suitable open space sites identified with a capacity to deliver around 63 new dwellings. It should be noted that the three open space sites are identified as being of low value and quality through the Harlow Open Space and Green Infrastructure Study (2013).²⁹
- 5.56 As set out above, the District boundary is tightly drawn around the urban area, reflecting the original New Town designated area. This means that there are limited opportunities for development on greenfield sites on the edge of the town and within the District's boundary. This leaves the Green Wedges, Green Fingers and other areas of open space which are fundamental to the green infrastructure and unique character of Harlow. Taking all these factors into account, no other available, suitable or deliverable sites were identified through plan-making that could provide further capacity and feed into the development of reasonable alternatives for meeting the additional housing requirement of 1,042 dwellings.
- 5.57 In line with the NPPF and given the importance of the open spaces within Harlow, any alternative should seek to maximise the use of PDL to meet the remaining housing requirement of 1,042 dwellings. It was therefore considered reasonable that alternatives for the additional housing requirement should focus on this issue by exploring increased densities on PDL.
- 5.58 It was determined by the Council that increased densities would be most appropriate for PDL sites that are:
- located within or in close proximity to the town centre where high density schemes may be more suitable utilising existing facilities and public transport in the town centre;
 - located within close proximity to future public transport nodes likely to come forward as part of the sustainable transport corridor work; and/or
 - located within the District's Hatches³⁰ where higher density would stimulate regeneration due to their close proximity to public transport.

²⁹ Harlow Council (2013) Open Space and Green Infrastructure Study. Prepared by LUC.

³⁰ Hatches sit below the town centre and district centres in the retail hierarchy. They serve specific local needs and provide for a range of community services.

- 5.59 For those PDL sites meeting the criteria above both a moderate and high density option were explored. The Council calculated the alternative densities so that they would reflect similar applications at town centre/neighbourhood centre sites within Harlow as well as the sustainability of the sites in terms of access to public transport and facilities/services.
- 5.60 Based on the above, three reasonable alternatives were identified to meet the additional housing requirement of 1,042 dwellings and these are set out in **Table 5.3** below.

Table 5.3: The reasonable alternatives

Ref	Location	Justification for increase in density	Site Size (ha)	Option A Preferred Approach		Option B Moderate density on certain PDL sites		Option C High density on certain PDL sites	
				Density (dph)	Capacity	Density (dph)	Capacity	Density (dph)	Capacity
1	Princess Alexandra Hospital	Close to town centre	14	43	650	120	1400	200	2800
2	Stow Service Bays		0.5	196	70	196	70	196	70
3	Land east of Katherines Way, west of Deer Park		2.37	30	69	30	69	30	69
4	Lister House, Staple Tye Mews, Staple Tye Depot and The Gateway Nursery		0.93	45	42	45	42	45	42
5	Land south of Clifton Hatch		1	36	36	36	36	36	36
6	Riddings Lane	Close to sustainable transport corridor node	1.56	22	35	40	62	120	187
7	Kingsmoor Recreation Centre		0.8	44	35	44	35	44	35
8	The Evangelical Lutheran Church, Tawneys Road		0.18	195	35	195	35	195	35
9	Land east of 144-154 Fennells		0.81	28	23	28	23	28	23
10	Pollard Hatch plus garages and adjacent land	Hatch regeneration scheme	0.44	45	20	65	31	100	44
11	Land between Second Ave and St. Andrews Meadow		0.42	38	16	38	16	38	16
12	Coppice Hatch and garages	Hatch regeneration scheme	0.34	47	16	65	22	100	34
13	Sherards House		0.47	32	15	32	15	32	15
14	Elm Hatch and public house	Hatch regeneration scheme	0.2	65	13	65	13	100	20
15	Playground west of 93 - 100 Jocelyns		0.39	30	12	30	12	30	12
16	Fishers Hatch	Hatch regeneration scheme	0.19	52	10	65	12	100	19
17	Slacksbury Hatch and associated garages	Hatch regeneration scheme	0.24	41	10	65	16	100	24
18	Garage blocks adjacent to Nicholls Tower		0.34	29	10	29	10	29	10
19	Stewards Farm		0.5	20	10	20	10	20	10
20	Land between Barn Mead and Five Acres		0.32	31	10	31	10	31	10
21	Pypers Hatch	Hatch regeneration scheme	0.19	54	10	65	12	100	19
TOTAL DWELLINGS				Option A 1,147		Option B 1,951		Option C 3,530	

6. Appraisal of the reasonable alternatives

Introduction

6.1 The aim of this chapter is to present summary appraisal findings in relation to the reasonable alternatives introduced above. Detailed appraisal findings are presented in **Appendix IV**.

Summary alternatives appraisal findings

6.2 **Table 6.1** presents summary appraisal findings in relation to the three alternatives introduced above. Detailed appraisal methodology is explained in **Appendix IV**. Within each row (i.e. for each of the topics that comprise the SA framework) the columns to the right hand side seek to both categorise the performance of each option in terms of 'significant effects' (using **red / green**) and also rank the alternatives in relative order of performance. Also, '=' is used to denote instances where the alternatives perform on a par (i.e. it not possible to differentiate between them). A star is used to highlight the option or options that are preferred from an SA perspective.

Table 6.1: Summary spatial strategy alternatives appraisal findings

Summary findings and conclusions						
Topic	Categorisation and rank					
	Option A Preferred approach		Option B Moderate density on certain PDL sites		Option C High density on certain PDL sites	
	Rank	Significant effect?	Rank	Significant effect?	Rank	Significant effect?
Air quality	1	No	2	No	3	?
Biodiversity and green infrastructure	=	No	=	No	=	No
Climate change	1	No	2	No	3	?
Community and wellbeing	=	Yes	=	Yes	=	Yes
Economy and employment	2	No	2	No	1	No
Historic environment	1	No	2	No	3	?
Housing	2	Yes	2	Yes	1	Yes
Land and waste	=	No	=	No	=	No
Landscape	1	No	2	No	3	?
Transport	1	No	2	No	3	?
Water	=	No	=	No	=	No

- 6.3 There are no differences between the options in terms of the spatial distribution/location of development. Options B and C propose a higher housing density at eight brownfield sites that are close to the town centre, the District's Hatches and/or potential sustainable transport corridor nodes. The appraisal therefore focused in particular on the issues of increased density at eight of the proposed sites as well as the resulting overall increase in growth for the District as a whole. In terms of the overall level of growth, Option A would deliver 1,147 dwellings; Option B 1,951 dwellings and Option C 3,530 dwellings during the life of the Plan.
- 6.4 The SA found that there are both positive and negative aspects of delivering increased densities at the eight brownfield sites identified. The additional housing growth could further assist regeneration through enhanced improvements to community infrastructure and the public realm as a result of increased Section 106 contributions. Furthermore, increased contributions could also contribute to enhanced management of existing green infrastructure. It is important to note that there is a significant level of uncertainty at this stage.
- 6.5 The increased density is also positive in terms of the housing topic as there is the potential to deliver a greater number of new homes within Harlow and allow for more flexibility should some sites not come forward or their capacity be less than expected. However, there is the potential that the increased densities could make it more difficult deliver a suitable mix of market and affordable homes, in particular family homes. It is also possible that the contributions required to deliver the necessary infrastructure to support the increased levels of development and mitigate for potential impacts (explored below) could affect the viability of these eight brownfield sites. As mentioned above, there is a significant level of uncertainty at this stage.
- 6.6 The appraisal found that Option C is preferred in relation to the housing and economy topics given the increased level of growth. The difference in the overall level of growth between Options A and B is less significant so they are ranked similarly against these topics.
- 6.7 The appraisal found that Option B and in particular Option C performed less well against SA topics relating to the historic environment and landscape. For the purposes of the appraisal it was assumed that the increased density proposed through Option B and in particular Option C would result in a built form that is generally higher than the surrounding areas. This could have long term negative effects on the character of these areas and therefore the townscape and historic environment. The appraisal identified this as a particular issue for the Princess Alexandra Hospital (HS2-1) and Elm Hatch and Public House (HS2-14) sites given the presence of designated heritage assets, including a Conservation Area, Scheduled Monuments and Listed Buildings. The increased density could also reduce the level of open/green space being delivered on the eight brownfield sites. As highlighted earlier in this SA Report, areas of open/green space are fundamental to the character of the town.
- 6.8 While increased Section 106 contributions as a result of a higher level of growth could possibly deliver enhanced improvements to the historic environment, townscape and existing green infrastructure this is uncertain at this stage. Ultimately the nature and significance of effects in relation to the landscape and historic environment are uncertain as they will be dependent on the precise design and layout of development as well as mitigation measures delivered. The appraisal found that Option A is preferred in relation to landscape and the historic environment.
- 6.9 Option A seeks to deliver the preferred approach agreed through the MoU (March 2017) for the distribution of housing growth across the HMA. There is also a signed MoU (February 2017) committing the relevant stakeholders, including Harlow District Council, to deliver the necessary transport infrastructure improvements to deliver the agreed level of growth across the HMA. Taking this into account the appraisal found that Option A would not result in a significant negative effect on SA topics relating to transport, air quality and climate change. Option B would result in an increase of 804 dwellings and Option C an increase of 2,383 dwellings compared to Option A. While Option B is likely to have a greater impact on traffic compared to Option A, the appraisal considered that this is likely to be minimal and not of significance in terms of differentiating between them. The level of growth proposed through Option C is more likely to substantially increase the levels of traffic. At this stage it is not known if further improvements to transport infrastructure are possible and could be delivered to accommodate the associated increase in traffic with Option C.

- 6.10 The appraisal also noted that there were positive aspects to Options B and C as they propose further growth close to the town centre, local centres (Hatches) as well as sustainable transport corridor nodes. This could help to reduce reliance on the private vehicle and encourage a modal shift; however, again this is uncertain at this stage.

7. Developing the preferred approach

Introduction

- 7.1 The aim of this Chapter is to present the Council's response to the alternatives appraisal/the Council's reasons for developing the preferred strategy in-light of alternatives.

The Council's outline reasons

- 7.2 The Council has identified its preferred spatial approach for housing and employment allocations based on various technical documents and discussions with stakeholders and developers. Housing sites were allocated based on a detailed site selection process as set out in the Council's Strategic Housing Land Availability Assessment (SHLAA) 2014 having considered existing constraints, the deliverability and developability of sites and the original Master Plan for Harlow as prepared by Sir Frederick Gibberd.
- 7.3 The original Master Plan for Harlow, the town's tight administrative boundaries and other environmental constraints including the River Stort and topography mean that the number of site options and therefore spatial alternatives for housing is limited. The site selection process for the SHLAA identified 369 potential development sites but after a sieving process this reduced to 59 developable sites. These sites include greenfield land identified for release from the Green Wedge network and Green Belt as recommended in associated evidence base studies. The preferred approach has resulted in a mix of small, medium and large sites dispersed across the town and includes greenfield land and brownfield land as well as sites identified for regeneration. It also includes a large strategic housing site proposed for Green Belt release which will provide approximately 2,600 homes. This site will help achieve the critical mass needed to regenerate the town and support strategic infrastructure requirements.
- 7.4 The Council considered the potential for developing further greenfield land, namely parts of the Green Wedge network. However, this would have significant consequences on the role and function of the green infrastructure network of Harlow, impacting on the availability of open space for Harlow residents and detracting from the purposes of the original Master Plan for Harlow. The Council has considered increasing densities across particular sites as set out in Chapter 5 of this SA Report as the only reasonable alternative to the preferred approach. These alternative scenarios would increase densities at sites close to sustainable transport nodes, on sites close to the town centre due to access to services and facilities and at hatches where additional housing could support regeneration. It must be noted that the SHLAA process has already applied higher densities to such sites albeit on a lower scale (justification for this approach is outlined in the 2014 SHLAA document).
- 7.5 Increasing densities would increase the housing supply across Harlow and the HMA as a whole; however, the local plan is already providing more homes than the OAHN in order to bring forward regeneration opportunities and affordable housing provision. Increasing densities on the sites identified in Table 5.3, either through Options B or C, would have the following negative effects for Harlow:
1. In order to achieve higher densities, developments would have to build flatted schemes due to land capacity constraints. It is evident from planning applications, appeal decisions and viability evidence prepared for the Local Plan that most flatted schemes in Harlow are unable to provide affordable housing (a significant issue in Harlow as set out in the SHMA) and planning contributions towards infrastructure.
 2. Without the provision of planning contributions towards infrastructure, the Council is unable to bring forward improvements to the public transport network, the provision of education and healthcare facilities and other important services to make Harlow a sustainable place. It will place pressure on existing infrastructure provision in Harlow.
 3. Most sites are located in existing built-up areas within close proximity of homes. Flatted schemes, particularly high-rise which are needed to achieve Option C densities, are likely to have significant impacts on the amenity of residents and amenity of the topography and

landscape of Harlow and countryside surrounding Harlow. It will also impact on the design and layout of existing streets in Harlow in contrary to the original Master Plan for the town.

- 7.6 The Council's future employment needs will continue to be delivered on existing employment sites and through the Enterprise Zone sites which are still considered to be the most sustainable locations having regard to the availability of land and the need for other facilities and services and housing. The Council will continue to seek measures to maximise employment land in existing sites and retain employment provision.
- 7.7 It is considered that the preferred approach acknowledges the existing constraints in Harlow, the original Master Plan for the town and the role and function of the land within it. It provides opportunities for regeneration and greenfield development and considers the viability of sites to deliver affordable housing and infrastructure. It also provides the correct level and spatial distribution of growth to bring about transformational change to Harlow, enhance its role as a strategic hub within the London Stansted Cambridge Corridor and deliver sustainable growth supported by the correct levels of infrastructure. The preferred approach is also in line with the signed MoU for the distribution of OAHN across the West Essex and East Hertfordshire HMA.

Part 2: What are SA findings at this current stage?

8. Introduction (to Part 2)

- 8.1 The aim of this chapter is to present an appraisal of the Draft Pre-Submission Local Development Plan (hereafter referred to as the 'Draft Plan'), as currently published under Regulation 19 of the Draft Planning Regulations.

Methodology

- 8.2 The appraisal identifies and evaluates 'likely significant effects' of the Draft Plan on the baseline, drawing on the sustainability topics/objectives identified through scoping (see **Table 2.1**) as a methodological framework. In total, there are eleven topics relating to:
- Air quality
 - Biodiversity and green infrastructure
 - Climate change
 - Community and wellbeing
 - Economy and employment
 - Historic environment
 - Housing
 - Land and waste
 - Landscape
 - Transport
 - Water
- 8.3 Every effort is made to predict effects accurately; however, this is inherently challenging given the high level nature of the policies under consideration, and understanding of the baseline (now and in the future under a 'no plan' scenario) that is inevitably limited. Given uncertainties there is a need to make assumptions, e.g. in relation to plan implementation and aspects of the baseline that might be impacted. Assumptions are made cautiously, and explained within the text (with the aim to strike a balance between comprehensiveness and conciseness/ accessibility). In many instances, given reasonable assumptions, it is not possible to predict 'significant effects', but it is nonetheless possible and helpful to comment on merits (or otherwise) of the Plan in more general terms.
- 8.4 Finally, it is important to note that effects are predicted taking account of the effect characteristics and 'significance criteria' presented within Schedules 1 and 2 of the SEA Regulations.³¹ So, for example, account is taken of the probability, duration, frequency and reversibility of effects as far as possible. Cumulative/ in-combination effects are also considered, i.e. the potential for the Plan to impact an aspect of the baseline when implemented alongside other plans, programmes and projects. Explicit reference is made within the appraisal as appropriate (given the need to balance the desire of systematic appraisal with a desire to ensure conciseness/accessibility).

Adding structure to the appraisal

- 8.5 Whilst the aim is essentially to present an appraisal of 'the plan' under each of the SA objective headings,³² it is appropriate to also give stand-alone consideration to elements of the Plan. As such, within the appraisal narratives below, sub-headings are used to ensure that stand-alone consideration is given to distinct elements of the Plan, before the discussion under a final sub-heading concludes on the Draft Plan as a whole.
- 8.6 Within these narratives, specific policies are referred to only as necessary (i.e. it is not the case that systematic consideration is given to the merits of every plan policy in terms of every sustainability topic/objective).

³¹ Environmental Assessment of Plans and Programmes Regulations 2004

³² Regulations require simply an appraisal of 'the plan'.

9. Appraisal of the Draft Plan

Introduction

- 9.1 As introduced above, the aim of this chapter is to present an appraisal of the Draft Plan under the SA topics, which are closely linked to the SA framework.

Air quality

Commentary on the spatial strategy

- 9.2 Air pollution in Harlow is considered to be generally low, with monitoring concluding that there are no areas where the air quality has led to the designation of an Air Quality Management Area (AQMA).³³ The trend across all monitored sites indicates that air quality is improving in the District, and the spatial strategy seeks to maintain this position, focusing development at the Strategic Housing Site East of Harlow. The site makes provision for around 2,600 homes and associated infrastructure, forming one part of the four strategic Garden Town Communities surrounding Harlow. A Master Plan is to be produced for the East of Harlow site, based on the Garden Town Charter in partnership with the Council and other stakeholders. Through this, the spatial strategy seeks to create a step change in modal shift by contributing to the delivery of the Sustainable Transport Corridors, which are a key element of the 'garden settlement' approach, and will help establish an integrated, accessible and safe transport system. This will maximise the use of the sustainable high quality transport modes of walking, cycling and the use of public and community transport to promote healthy lifestyles and provide linkages to and from Harlow and the New Garden Town Communities.
- 9.3 Focusing development in the east of the District will have good access to public transport and services/facilities through the provision of infrastructure as per Policy HS3 (Strategic Housing Site East of Harlow), therefore contributing towards reducing dependency on the car. However, while there are no AQMA's designated in the District, it is recognised that traffic emissions are the most significant source of air pollution in the District.³⁴ By focusing housing and employment provision in the east, development has the potential to increase pressure on key transport corridors, exacerbating congestion problems where they exist.
- 9.4 It is recognised that Harlow and Gilston Garden Town Community lies in the core area of the 'London Stanstead Cambridge Corridor' (LSCC), one of the most important and fastest growing economic growth areas in the country. The cumulative effect of proposed development in the HMA on the highways network was considered through the Strategic Spatial Options Study, which explored and identified options for spatially distributing the housing need across the HMA. This work was also informed by transport modelling.³⁵ A signed Memorandum of Understanding (Feb 2017) has been produced, which identifies a number of new infrastructure interventions that will be necessary. The most notable of these is a proposed new motorway junction on the M11 (Junction 7A), which will improve the flow of traffic east to west across the District and provide a catalyst for further development, promoting Harlow as a growth location along the M11 corridor. The Council will also work with Network Rail and the local railway operator to improve journey reliability, frequency, capacity and overall comfortability for train users using the West Anglia Mainline.
- 9.5 In terms of the impact on Epping Forest SAC, due to the large distances involved, the HRA (2017) concluded that no site allocations (either employment or residential), would affect the integrity of the European site in isolation, however in combination effects require further consideration. The HRA discusses the traffic modelling and air quality impact assessment undertaken to support the assessment of the different HMA options as part of the Strategic

³³ Harlow District Council (2017) Air Quality Annual Status Report
http://www.essexair.org.uk/AQInEssex/LA/Harlow.aspx?View=reports&ReportType=Harlow&ReportID=Harlow_2017_ASR&StartIndex=1&EndIndex=7

³⁴ Ibid.

³⁵ Epping, East Herts, Harlow and Uttlesford District Councils (2016) SA of Strategic Spatial Options for the West Essex and East Hertfordshire Housing Market Area.

Spatial Options Study.³⁶ As a result of that modelling and broader discussion with Natural England and City of London Corporation, the HMA authorities agreed that a mitigation strategy should be devised³⁷ in relation to Epping Forest SAC. Since that commitment was made governance arrangements are in place and traffic modellers have been working on potential traffic mitigation scenarios. A programme of long-term air quality monitoring is also being planned within input from the City of London Corporation. This will be useful in air quality model verification but its main value will be in tracking the expected improvement in emissions over the plan period. This can feed into any regular reviews of housing/employment quantum and mitigation measures over the plan period.

Commentary on other policies

- 9.6 Policy PL9 (Pollution and Contamination) requires that all development must minimise and, where possible, reduce all forms of pollution and contamination. This includes impacts on air quality. The policy seeks to ensure that development proposals set out an appropriate scheme of mitigation, where pollution/contamination-generating development would otherwise result in an unacceptable impact on neighbouring uses, environment or biodiversity.
- 9.7 Policy WE1 (Strategic Green Infrastructure) recognises that Green Infrastructure (open spaces, landscaping, trees and hedgerows) contribute positively towards reducing air pollution through assisting carbon sequestration. The policy therefore seeks to protect and enhance the wealth of Green Infrastructure within the District, while also requiring that new Green Infrastructure be planned into new development.
- 9.8 Policy IN1 (Development and Sustainable Modes of Travel) seeks to minimise the need to travel, promote opportunities for sustainable transport modes, and improve accessibility to local facilities and linkages with the surrounding pedestrian and cycle network. This will help to reduce reliance on the private vehicle and encourage the use of more sustainable modes of travel with the potential for a long-term positive effect by helping to reduce atmospheric pollution.
- 9.9 Further sustainability initiatives promoted through Policy IN1 include requiring that development provide electric vehicle charging points (EVCPs) in accordance with the latest government guidance.
- 9.10 Policy IN2 (Impact of Development on the Highways Network including Access and Servicing) further seeks to support the transition to a low carbon future through improving road congestion and facilitating sustainable movement. In this context, the policy recognises that in accordance with national policies and guidance, it may be necessary for an application to be accompanied by either a Transport Statement or Transport Assessment; depending on the degree of the proposal's impact on highway users and movement in the local area generally. The Council will consult with the Local Highway Authority and other bodies on the Transport Assessment or Statement.
- 9.11 Policy IN3 (Parking Standards) requires that vehicle parking must be provided in accordance with the adopted Essex Vehicle Parking Standards³⁸, unless otherwise indicated elsewhere in the Draft Plan and/or supporting documents. The Parking Standards provide a rigorous approach to parking, accessibility and promoting travel choice. The policy therefore seeks to reduce reliance on the car and promote more sustainable modes of travel while ensuring that on-street parking issues are not created.

³⁶ Epping, East Herts, Harlow and Uttlesford District Councils (2016) SA of Strategic Spatial Options for the West Essex and East Hertfordshire Housing Market Area.

³⁷ The MoU states that 'It is intended this Joint Strategy will be in agreed and published prior to the determination of any of the planning applications on sites around Harlow that are part of The Spatial Option detailed in the "Distribution of OAN across West Essex and East Hertfordshire" MoU. If the Joint Strategy is not in place when planning applications are submitted, applicants will be required to submit the necessary information to ascertain whether any adverse impacts will be caused in Epping Forest, and if necessary any mitigation measures that may be necessary'.

³⁸ Essex County Council (2009) Parking Standards: Design and Good Practice.

Appraisal of the plan as a whole

- 9.12 Air quality in Harlow currently meets the national Air Quality Objectives, and as such, Harlow Council does not have an Air Quality Strategy or Action Plan. However, through the Draft Plan, the Council prioritises a clean and green environment, adopting a number of policies which are focused on reducing the District's carbon footprint and improving air quality.
- 9.13 It is likely that significant new developments in the Harlow area will result in traffic growth within Harlow and along key transport corridors, in particular the M11 and A414. The Plan aims to safeguard the environment from harmful development that may affect air quality through strategic level master planning for the Garden Town Communities. Measures to be implemented include the proposal for a new junction 7a on the M11, which is anticipated to reduce the anticipated strain on the local and wider road network, creating a significant change to how vehicles would access Harlow. A number of preliminary traffic options have also been identified through the Plan to reduce the volume of vehicles on the road, including preventing HGVs using smaller residential roads moving to priority routes.
- 9.14 In the context of Epping Forest SAC, the HRA (2017) considers that the Plan's firm commitment to the development of mitigation strategies to address air quality around Epping Forest, the commencement of work on those solutions, the agreement to a deadline for devising those strategies, and the authorities' (West Essex and East Hertfordshire HMA Local Authorities, Essex and Hertfordshire County Councils, City of London Corporation and Natural England) commitment to monitor the efficacy of those strategies provides a sufficient framework to ensure no adverse effect will arise from air quality on the integrity of the SAC.
- 9.15 On balance, it is appropriate to conclude **neutral effects** at this stage, i.e. it is not possible to conclude positive or negative effects on the baseline. It is recognised that the updating of traffic and air quality modelling and the testing and securing of specific mitigation measures will clearly be an iterative process.

Biodiversity and Green Infrastructure

Commentary on the spatial strategy

- 9.16 In terms of biodiversity constraints, there are no European sites located within the District boundary. However, there are four European sites that lie beyond the District boundary but are within the influence of the Draft Plan and where there is the potential for impacts. These are Epping Forest SAC, Lee Valley SPA and Ramsar site, and Wormley-Hoddesdonpark Woods SAC.
- 9.17 The potential effect of the Draft Plan, both alone and in combination, on European sites has been considered through the Habitats Regulations Assessment (HRA) process. The HRA recommended that to enable surrounding HMA authorities and MoU signatories to provide the quantum of housing identified within the West Essex/ East Hertfordshire HMA in proximity to Harlow, the garden communities being created around Harlow should deliver a suitably large amount of natural accessible greenspace to maximise their recreational self-sufficiency. Ultimately the quantum of Green Infrastructure required and achievable will be dependent on the layout of these larger developments and detail will need to be established for individual planning applications. This is a recommendation regarding practical design and implementation of these developments, rather than for the Local Plan itself. It matches recommendations made to Epping Forest District Council through the HRA for their Local Plan.
- 9.18 The HRA acknowledges that the Harlow Local Plan will not affect the integrity of Epping Forest SAC via atmospheric pollution in isolation, but an adverse effect in combination was identified without delivery of mitigation, although Harlow are likely to be a more minor contributor than authorities closer to the SAC. The Council already provides a policy hook to address these issues in combination with neighbouring authorities via the cross boundary MoU³⁹ and the resulting mitigation strategies currently being developed. The strategic transport model is to be rerun and subsequent air quality modelling undertaken prior to commencement of the examination. The modelling will reconfirm the contribution that the plan will provide to atmospheric pollution in Epping Forest and thus its relative contribution to the mitigation strategy. In addition to the reference in the text of the plan, the HRA recommends that the Local Plan also provide explicit policy reference to the strategic framework in place to address air quality at Epping Forest, including specific reference to a multi-authority mitigation strategy and a timetable for the production of that strategy (e.g. prior to adoption). This will enable the Council to make contributions to the strategic mitigation that is proportionate to the Plans atmospheric pollution contributions. With the implementation of this recommendation, the HRA concluded that the Plan and associated Council initiatives (such as the MoU and resulting mitigation strategies) would present a sufficiently robust framework to ensure that the Plan will not affect the integrity of sensitive European sites, although the detailed development of a mitigation strategy is ongoing.
- 9.19 The HRA concluded that provided that the above recommendation is incorporated into the LDP, and the traffic and air quality modelling are updated as discussed and demonstrate that mitigation measures are sufficient to address potential adverse effects on the SAC, it can be concluded that the Harlow LDP has a suitable framework in place to ensure that development delivered will not affect the integrity of any European sites either alone or in combination.⁴⁰
- 9.20 It should also be noted that the cumulative or in combination effects of proposed development within the HMA on Epping Forest SAC and the Lee Valley SPA/Ramsar were also considered through the HRA process undertaken with respect to the HMA Strategic Spatial Options Study. This considered: disturbance from recreational activities and urbanisation; atmospheric pollution; water abstraction; and water quality.⁴¹
- 9.21 In terms of recreational pressures, whilst significant effects from the HMA options considered were not anticipated on the European sites, it was recommended that all new development

³⁹ Memorandum of Understanding on managing the impacts of growth within the West Essex / East Hertfordshire Housing Market Area on Epping Forest Special Area of Conservation (draft September 2016)

⁴⁰ Harlow Council (2018) Habitats Regulations Assessment Report. Prepared by AECOM.

⁴¹ Ibid.

- should deliver greenspace in-line with the Natural England Alternative Natural Greenspace (ANG) standard to ensure self-sufficiency. In relation to air quality, it was considered that the options considered would not lead to a likely significant effect upon the European sites either alone or in combination with other projects or plans. In relation to water abstraction, it was concluded that delivery of the options would not result in adverse effects on the Lee Valley SPA/Ramsar site through excessive water drawdown, either alone or in combination with other plans and projects. It was also evaluated that there would not be a water quality effect from the options on Lee Valley SPA/Ramsar site either alone or in combination with other projects and plans.
- 9.22 There are two Sites of Special Scientific Interest (SSSIs) that fall within the District Boundary. A small portion of Hunsdon Mead SSSI in the North West and Harlow Woods SSSI in the South. The District also falls within Impact Risk Zones (IRZs) for a number of other SSSIs. IRZs are defined by Natural England (NE) provide an indication of the type and scale of development within that area that could have an impact on a SSSI based on its sensitivities.
- 9.23 A number of site allocations proposed within the Draft Plan fall within IRZs where residential developments of 50 units or more could pose a risk to a SSSI. Some of the proposed allocations exceed this threshold and consultation with Natural England would therefore be required.
- 9.24 Development proposed in the Draft Plan is most likely to result in impacts on SSSIs that fall within the District boundary. No allocations are proposed within 1.3km of the Hunsdon Mead SSSI so it is considered unlikely that significant effects would arise as a result of the Draft Plan alone. In terms of cumulative effects, these are most likely to arise as a result of the delivery of the Gilston Garden Town Community through the East Herts Draft Plan to the North of Harlow. It is unlikely that recreational activity at the sites would increase significantly given the barrier to movement presented by the A414 and the River Stort. The SSSI is not within 200m of the A414 so will not be directly impacted by increased atmospheric pollution from increased traffic and there is planned mitigation to be delivered in terms of transport infrastructure. There are also not likely to be any significant effects in relation to water quality or levels at the site once mitigation proposed through the Draft Plans has been taken into account.
- 9.25 There is one allocation (HS2-9 (Land east of 144-145 Fennells)) proposed in close proximity to Harlow Woods SSSI and Ancient Woodland. Harlow Woods is comprised of three adjacent ancient semi-natural woods, which are assessed by NE as having an unfavourable recovering (53.95%) and a favourable (46.05%) condition status. Details on the site indicate that the site level management of the woodland is the most important aspect in maintaining a favourable condition status.⁴² There are no PRoW running through the site and the designated areas are adjacent to an existing recreation ground providing an alternative area for recreation. The SSSI is not near a major road that is likely to see a significant increase in traffic so impacts as a result of increased traffic and atmospheric pollution are not predicted. There are also not likely to be any significant effects in relation to water quality or levels at the SSSI once mitigation proposed through the Draft Plan has been taken into account. Taking the above into account it is considered that there is unlikely to be a significant effect either alone or cumulatively on the Harlow Woods SSSI once mitigation measures proposed through Draft Plan policies have been taken into account.
- 9.26 Allocation HS2-7 (Kingsmoor recreation Centre) is adjacent to Burnett Wood which is designated as Ancient Woodland. Mitigation measures proposed through Draft Plan policies, including a suitable buffer between any development and the Ancient Woodland should minimise any potential impacts as a result of proposed development.
- 9.27 In terms of locally designated sites, there are a number of Local Wildlife Sites (LWSs) within the District. The larger LWSs are located in the North and South of the District as well as centrally following the Green Infrastructure/Wedges. It is noted that Hawkenbury Meadow LWS is located in Great Pardon, in close proximity to individual site allocations. However, due to the existing urban environment surrounding the LWS, it is not expected that development would lead to adverse effects on the designated site. Development proposed as part of the East of Harlow Strategic Site is adjacent to the North and South of the Feltimore Meadow LWS.

⁴² Natural England Designated Sites View. <https://designatedsites.naturalengland.org.uk/>

Feltimore Meadow coincides with an area of Green Wedge, and is expected to be sufficiently protected through the Draft Plan policies.

- 9.28 In the north there is a series of floodplains and other wetland sites along the River Stort and Stort Valley; centrally from the Pinnacles area through to Newhall is a series of Ancient Woodlands and grasslands representing old countryside habitats; and in the south are the woodlands and commons of Parndon and Latton Bush areas. The spatial strategy is underlined by the need to support the creation of continuous wildlife corridors extending throughout the sub-region, and minimise the risk of habitat fragmentation and/or loss through the development of the Garden Town Communities and also individual sites. This is reiterated through the Green Infrastructure Plan for the Harlow Area (2005), which the Hertfordshire Green Infrastructure Plan (2011) identifies as an “existing initiative” that should be taken into account.⁴³

Commentary on other policies

- 9.29 Policy WE1 (Strategic Green Infrastructure) provides for the protection and enhancement of existing green infrastructure, requiring that new Green Infrastructure must be planned into new development.
- 9.30 Policy WE2 (Green Wedges and Green Fingers) ensures that development will provide for Green Wedges and Green Fingers, recognising their role is to provide multi-functional Green Infrastructure, including open spaces for sport, recreation and quiet contemplation, wildlife corridors, footpaths, cycleways and bridleways.
- 9.31 Policy WE3 (Biodiversity and Geodiversity) proposes that all biodiversity and geodiversity assets in the District will be preserved and enhanced. It is noted that it is recommended within the HRA (2017) that *“this policy also provides for the protection of internationally designated wildlife sites both within and outside of the District as impact pathways stemming from Harlow have the potential to interact with European sites located within surrounding authorities”*.⁴⁴
- 9.32 Policy SIR1 (Infrastructure Requirements) ensures the delivery and timely provision of new infrastructure to support development. This includes the delivery of new allotment provision which will improve biodiversity in the area.
- 9.33 Policy SIR2 (Enhancing Key Gateway Locations) plans for the enhancement of gateways. The gateway locations identified will be seamlessly integrated within the wider transport and green infrastructure network of Harlow and enhanced and improved.
- 9.34 Policy PL6 (Trees and Hedgerows) aims to protect the trees and hedgerows in Harlow. The policy implements a set of criteria to assess development where adverse effects on existing trees are hedges are expected, supporting development only where adverse effects are not predicted.
- 9.35 Policy PL7 (Green Infrastructure and Landscaping) further seeks to provide for the protection and enhancement of GI. The requirements of the policy is for new Green Infrastructure and landscaping to be sympathetically integrated into development to ensure the continuation of Sir Frederick Gibberd’s master plan, therefore contributing to enhancing and conserving the environment.
- 9.36 Policy L1 (Open Spaces, Play Areas and Sporting Provision and Facilities in Major Development) identifies the need for major development to provide public open space and other outdoor amenities which have the potential to divert recreational activity away from sensitive designated sites.
- 9.37 Policy L2 (The Provision and Loss of Recreational, Sporting, Cultural and Community Facilities) relates to the provision and loss of recreational, sporting, cultural and community facilities. It is noted that the provision of recreational facilities has the potential to reduce recreational pressure on sensitive designated sites, whilst the loss of it could increase recreational pressure. Loss of recreational facilities will only be supported under certain criteria.

⁴³ Land Use Consultants (2011) Hertfordshire Strategic Green Infrastructure Plan

⁴⁴ Harlow Council (2018) Habitats Regulations Assessment Report. Prepared by AECOM.

Appraisal of the Draft Plan as a whole

- 9.38 The HRA process concluded that the development proposed through the Draft Plan will not have an adverse effect on any European sites, either alone or in combination. This conclusion is dependent on a number of recommendations, including the recommendation that the Local Plan also provide explicit policy reference to the strategic framework in place to address air quality at Epping Forest, including specific reference to a multi-authority mitigation strategy and a timetable for the production of that strategy (e.g. prior to adoption). This will enable the Council to make contributions to the strategic mitigation that is proportionate to the Plans atmospheric pollution contributions.
- 9.39 The Draft Plan proposes a number of allocations that are in close proximity to a SSSI (or fall within Impact Risk Zones for a SSSI), Ancient Woodland and/or Local Wildlife Site. The appraisal concluded that given the sensitivities of the designated sites, scale of proposed growth and mitigation provided through Draft Plan policies as well as the development management process that there will not be any significant effects either alone or cumulatively.
- 9.40 The loss of greenfield land in the East of the District and surrounding Harlow through the delivery of the Garden Town Communities, in Epping Forest and East Herts, has the potential for a cumulative negative effect on biodiversity through habitat loss and fragmentation. Policies within the Draft Plan seek to ensure Green Wedges, and the wider Green Infrastructure Network continues to provide ecological corridors for wildlife, which helps to reduce the significance of the effect to a certain extent. It will be important for a connected Green Infrastructure network that runs through Harlow as well as the surrounding Garden Town Communities. The Council will work with Natural England, The Essex Wildlife Trust, The Biological Records Centre, Essex County Council and other bodies to conserve, enhance, protect and manage the network of Green Wedges and Green Fingers, which are key physical features of Harlow that have shaped its subsequent growth.
- 9.41 It is recognised that there is the potential to avoid/mitigate effects through site specific policy and detailed design of proposed allocations. However, on balance it is appropriate to conclude **uncertain long term minor negative effects** at this stage.

Climate Change

Commentary on the spatial strategy

- 9.42 With regards to climate change mitigation, key issues include the need to capitalise upon opportunities to design-in low carbon infrastructure to development from the outset, and therefore minimise additional CO₂ emissions associated with development. There is also the need to reduce car dependency and distance travelled by private car and therefore per capita transport related CO₂ emissions; planning has an important role to play in this regard.
- 9.43 Harlow Council recognises the importance of reducing its carbon footprint and the use of resources across the District. This is evidenced through the Harlow Carbon Management Plan⁴⁵, where the Council have set a target of reducing its carbon emissions by a 25% by 2020/21. This includes emissions from industry and the commercial sector, domestic emissions and those from road transport. In this context, the proposed Garden Town Communities, which includes the East of Harlow Site (Policy HS3), will provide opportunities to promote high environmental standards in terms of energy efficiency, design, and low-carbon energy.
- 9.44 Excluding the East of Harlow allocation, the proposed development at Princess Alexandra Hospital (650 dwellings) could provide an opportunity to deliver a Combined Heat and Power (CHP) scheme. Notwithstanding the uncertainty, the delivery of a scheme such as this would contribute positively towards reducing CO₂ emissions from the built environment.
- 9.45 In relation to reducing CO₂ emissions from transport, the preferred spatial strategy has some merit as development is focused around Harlow, where there is good access to public transport and services/facilities, and therefore good potential to support modal shift away from car use. However, it is recognised that development is likely to increase vehicular use of key transport corridors, notably the M11 and A414. Therefore, considering the scale and nature of the Harlow and Gilston Garden Town, a number of infrastructure and statutory requirements will be met by each of the four Garden Town Communities. Looking specifically at the Strategic Housing Site East of Harlow; infrastructure and statutory requirements will be met on the site for the benefit of residents and off-site to mitigate the impacts of the development. This includes local highway solutions and improvements to Harlow's sustainable transport network.
- 9.46 In terms of flood risk, the River Stort runs through the District, east to west along its northern boundary. The preferred strategy performs well in respect of avoiding the floodplain of the River Stort, directing a large proportion of growth to the east of the District. Fluvial flood risk has been a clear focus of the site selection process, with development following a risk-based and sequential approach, so that it is located in the lowest flood risk area. The Council will work with the Environment Agency and the Flood Risk Management Authority to implement flood alleviation schemes as set out in the Strategic Flood Risk Assessment and Surface Water Management Plan for Harlow. The spatial strategy requires that development provide sustainable drainage solutions and flood mitigation measures for areas of the site which are identified in the Strategic Flood Risk Assessment. The Strategic Housing Site East of Harlow in particular contains small areas of Flood Zone 2 and 3 (of high risk of flooding). In line with the spatial strategy, development will resolve any flood risk issues, both on-site and downstream/upstream.
- 9.47 Surface water flood risk is an important issue for the District. Policy PL10 (Water Quality, Water Management, Flooding and Sustainable Drainage Systems) aims to prevent this through the use of sustainable drainage systems in new development, in line with the Harlow Surface Water Management Plan⁴⁶ and the Essex SuDS Design Guide⁴⁷.
- 9.48 It is considered likely that suitable mitigation is available to address any significant surface water flooding issues and ensure that any residual effects are neutral.

⁴⁵ Harlow District Council (2016) Harlow Carbon Management Plan.

⁴⁶ Capita Symonds (2013) Harlow Surface Water Management Plan.

⁴⁷ Essex County Council (2016) Sustainable Drainage System Design Guide. <http://flood.essex.gov.uk/new-development-advice/how-to-design-suds-in-essex>

Commentary on other policies

- 9.49 There are a number of policies that will help to minimise per capita CO₂ emissions from transport as well as per capita CO₂ emissions from the built environment.
- 9.50 Policy IN1 (Development and Sustainable Modes of Travel) seeks to minimise the need to travel, promote opportunities for sustainable transport modes, and improve accessibility to local facilities and linkages with the surrounding pedestrian and cycle network. This will help to reduce reliance on the private vehicle and encourage the use of more sustainable modes of travel with the potential for a long-term positive effect by helping to reduce greenhouse gas emissions.
- 9.51 Policy IN2 (Impact of Development on the Highways Network including Access and Servicing) further seeks to support the transition to a low carbon future through improving road congestion and facilitating sustainable movement. In this context, the policy recognises that in accordance with national policies and guidance, it may be necessary for an application to be accompanied by either a Transport Statement or Transport Assessment; depending on the degree of the proposal's impact on highway users and movement in the local area generally. The Council will consult with the Local Highway Authority and other bodies on the Transport Assessment or Statement.
- 9.52 Policy PL9 (Pollution and Contamination) requires that all development must minimise and, where possible, reduce all forms of pollution and contamination. This includes impacts on air quality. The policy seeks to ensure that development proposals set out an appropriate scheme of mitigation, where pollution/contamination-generating development would otherwise result in an unacceptable impact on neighbouring uses, environment or biodiversity.
- 9.53 Policy PL3 (Sustainable Design, Construction and Energy Use) encourages the incorporation of low carbon and renewable energy measures in new and existing development, which includes integrating passive ventilation such as wind catchers, and the use of local, sustainable, and energy efficient materials. This is supported by policy PL1 (Design Principles for Development) which expects a high standard or urban and architectural design for all development.
- 9.54 Policy PL10 (Water Quality, Water Management, Flooding and Sustainable Drainage Systems) ensures that all proposals for new development must follow a risk-based and sequential approach so that it is located in the lowest flood risk area. It also requires all development proposals within Flood Zone 2 and Flood Zone 3 to be appropriately flood resilient and resistant, including provision of safe access and escape routes where required, and that any residual risk can be safely managed. Also, all proposals for new development will be required to manage and reduce surface water run-off. Where a sustainable drainage system is required, the drainage scheme must provide appropriate attenuation taking into account climate change.

Appraisal of the Draft Plan as a whole

- 9.55 Whilst housing growth in itself does not give rise to concerns regarding climate change mitigation, there is a need to minimise per capita emissions. This means distributing housing to locations where car dependency and the need to travel long distances by car are minimised (with 'modal shift' support), and supporting larger, strategic-scale development schemes that give rise to the greatest opportunity to design-in low carbon infrastructure. In both respects the preferred spatial strategy performs well, and policies are set in place to encourage sustainable travel, promote growth in sustainable locations, and encourage best practice in building design that will promote energy conservation. Nonetheless, there is always the potential to 'go further', and climate change mitigation should be a focus of ongoing work (e.g. to ensure that adjacent development sites coordinate efforts).
- 9.56 In terms of climate change adaptation, the development management policies seek to ensure that water management; flooding and sustainable drainage is fully considered as part of new development proposals. While the presence of the River Stort does give rise to concerns, to minimise the issue, the Plan requires that new development is directed to areas of lowest flood risk. Additionally, where sites are at risk of flooding, the most vulnerable parts of the proposed development must be located in areas of lowest flood risk. It is recognised throughout the Plan

that surface water flooding is also a constraint for the District, and as such development proposals must be flood resilient and resistant, with safe access and escape routes, and it should also be demonstrated that residual risks can be safely managed. The Plan also requires the implementation of integrated and maintainable SuDS in new development that achieves multiple flood risk benefits.

- 9.57 On balance, it is appropriate to conclude **neutral effects** at this stage, i.e. it is not possible to conclude positive or negative effects on the baseline.⁴⁸

⁴⁸ In relation to climate change mitigation, there is very little potential to conclude that a Draft Plan will result in significant effects, recognising the climate change mitigation is a global issue.

Community and Wellbeing

Commentary on the spatial strategy

- 9.58 Harlow is a relatively deprived District, and as such, priority issues relate to the need to address pockets of relative deprivation locally; plan for an ageing population; and ensure that new and existing communities have adequate access to community infrastructure, including health and education facilities.
- 9.59 The District's Infrastructure Delivery Plan (IDP) (2017) sets out the key infrastructure requirements to support the proposed growth for the District as identified in the Draft Plan.⁴⁹ Accordingly, Policies IN1 to IN6 set out the policies by which the Council will seek to ensure that investment in infrastructure keeps pace with growth. The spatial strategy directs development to the east of Harlow, developing the Harlow and Gilston Garden Town. Focussed growth around Harlow through the delivery of Garden Town Communities is supported given the good accessibility to facilities, services, and employment, and also the opportunity to deliver new community infrastructure. This is identified within the IDP (2017) and is set to include transport infrastructure, education, health care provision, utilities, and social care provision to support new and existing communities.
- 9.60 Garden Town status, and associated government funding means that there is an opportunity in respect of well-planned and high quality new development that meets the needs of the community. The design, development and phased delivery of each Garden Town Community must accord with principles set out in Policy HGT1 (Development and Delivery of Garden Communities in the Harlow and Gilston Garden Town). This includes the securing of high-quality place making, and ensuring the timely delivery of on-site and off-site infrastructure to address the impact of the new Garden Town communities. To further meet community needs, and in the interest of transparency, the spatial strategy promotes community and stakeholder involvement in the design and delivery from the outset and the delivery of a long-term community engagement strategy.
- 9.61 There will be further long-term positive effects for communities through the delivery of development and revitalisation of Harlow Town Centre. The Harlow Town Centre Area Action Plan (AAP) is investigating opportunities to provide commercial-leisure and entertainment facilities in order to develop both a day-time and night-time economy in the town centre. This will positively develop the local community, improving the attraction of the town for residents and visitors. The aim is for Harlow to continue to be a sub-regional centre, competing with towns such as Bishop's Stortford, the Brookfield Centre, Hertford, Stevenage and the City of Chelmsford, by having an improved retail offer, new commercial leisure provision, an enhanced physical environment and more business space.
- 9.62 Harlow was built around a series of neighbourhoods, dissected by large areas of natural and semi-natural space, now known as Green Wedges, which are key physical features of Harlow that have shaped its subsequent growth. The spatial strategy places focus on improving the health and wellbeing of residents through protecting and enhancing its Green Wedges, and associated Green Infrastructure network. While site allocations within the town centre utilise previously developed land, there is set to be some small areas of loss of open space. The allocation of sites has been informed by the Open Space and Green Infrastructure Study (2013) and where possible development is focussed on open space that is low value and quality.⁵⁰
- 9.63 It is also recognised that high levels of growth outside of the settlement through the delivery of the Garden Town Communities has the potential to result in damage to/ loss of Green Infrastructure. Policy HGT1 (Development and Delivery of Garden Communities in the Harlow and Gilston Garden Town) and other policies within the Plan seek to ensure that footpaths, cycleways, bridleways and other green routes, will be protected and enhanced, ensuring they are safe, accessible and well connected to services and facilities. This is in accordance with the recommendations of the Harlow Open Space Study (2013), the Green Infrastructure Plan for the Harlow Area (2005), and the IDP (2017).

⁴⁹ Harlow Council (2017) Delivery Study for Harlow and Surrounding Area: Infrastructure Delivery Plan

⁵⁰ Harlow Council (2013) Open Space and Green Infrastructure Study. Prepared by LUC.

Commentary on other policies

- 9.64 The majority of policies in the Draft Plan will affect this topic in some way, either directly or indirectly, by helping to meet the needs of communities. The policies of particular importance are identified below.
- 9.65 Policy HGT1 (Development and Delivery of Garden Communities in the Harlow and Gilston Garden Town) has already been discussed, above. It sets out a range of principles to ensure that growth is supportive of community aspirations, with benefits felt by both new and existing communities.
- 9.66 Policy H6 (Housing Mix) ensures that a range of housing types and sizes, across a range of tenures, must be provided in major residential development, and that community-led housing development will be supported on appropriate sites. In this context, Policy H8 (Affordable Housing) sets out the requirements for the provision of affordable homes in all major development.
- 9.67 Policy HS4 (Gypsies and Travellers) seeks to fulfil the needs of the District's Gypsy, Traveller and Travelling Showpeople community. The policy will provide over and above the 9 pitches required, restoring 12 pitches at Fern Hill Lane site. Development Management policy H10 (Travellers Pitches and Plots) further ensures that where additional pitches/plots may be required, development will:
- Not have an unacceptable adverse effect on the character of the locality, the appearance of the street scene, the amenities enjoyed by the occupiers of neighbouring dwellings, or designated and locally identified habitats;
 - Be within a reasonable distance of shops, schools, healthcare and other community/leisure facilities; and
 - Provide safe and convenient vehicular access to the local highway network, together with adequate space to allow for the parking and movement of vehicles.
- 9.68 PL1 (Design Principles for Development) requires a high standard of urban and architectural design, where development proposals meet the diverse needs of people, improves the public realm, and reduce the risk of crime and the fear of crime. Furthermore, development proposals must protect and enhance local distinctiveness, provide appropriate, legible and safe connections with surrounding streets, neighbouring development and Green Infrastructure, and integrate with sustainable modes of transport. In this context, Policy PL2 (Amenity Principles for Development) further supports development which preserves and/or improves the level of amenity in the local area.
- 9.69 In terms of community facilities, Policy L1 (Open Spaces, Play Areas and Sporting Provision and Facilities in Major Development) and Policy L2 (The Provision and Loss of Recreational, Sporting, Cultural and Community Facilities) propose that the above listed facilities are required and supported, together with their management and maintenance. Development is required to address the needs arising from the proposal, and ensure that facilities are easily accessible by all sectors of the community, by both public and private transport.
- 9.70 Policy PR2 (Development within Neighbourhood Service Areas) will help reduce inappropriate business uses proliferating in residential areas, particularly those which affect the amenity of residents. The policy ensures that development in the Neighbourhood Service Areas is limited to the provision of offices, light industrial uses and start-up units falling within use class B1, protecting employment provision at the local, neighbourhood level.
- 9.71 In terms of health and wellbeing Policy PL9 (Pollution and Contamination) seeks to ensure that any proposal for new development does not give rise to, or would be subject to, unacceptable levels of pollution and/or contamination.
- 9.72 Policy IN1 (Development and Sustainable Modes of Travel) seeks to promote sustainable accessibility, requiring that all development should have regard to the modal hierarchy set out in the Strategic Policies. Development should be of high quality, and sustainable in design, linking

to the existing cycleway, public right of way and bridleway network, offering maximum flexibility in the choice of travel modes, with accessibility for all potential users.

- 9.73 PL7 (Green Infrastructure and Landscaping) requires that development proposals protect and enhance Green Infrastructure and landscaping as part of development. Proposals must demonstrate that they have been designed taking into consideration the practicalities and requirements of future management and maintenance, and providing appropriate footpaths, cycleways and bridleways.

Appraisal of the Draft Plan as a whole

- 9.74 Delivery of the Draft Plan will help to meet the housing, and employment requirements of existing and new communities within the District and the HMA. The urban expansion of Harlow will benefit residents through providing improved infrastructure, facilities, and services across the District, as set out within the IDP (2017). This will contribute towards the development of sociable, vibrant, healthy and walkable neighbourhoods with equality of access for all. Further to this, the regeneration of Harlow will address Harlow's health and wealth inequalities, as well as potentially have a positive effect on the District's neighbourhoods by reducing localised deprivation.
- 9.75 Site specific and District-wide policies are proposed that provide a variety of measures to ensure that the negative impacts of growth on the communities are minimised, and potential opportunities are realised. The Draft Plan seeks to ensure that there is sufficient access to the District's Green Infrastructure network, with particular focus on retaining the network of Green Wedges which have shaped Harlow's growth. Additionally, policies are co-ordinated to ensure the maximum increase in sustainable transport use, to ensure ease of movement and accessibility to all. On balance, it is appropriate to conclude that the Plan would have **long term significant positive effects** on communities and wellbeing.

Economy and Employment

Commentary on the spatial strategy

- 9.76 Harlow's economy has changed dramatically from its New Town origins. Large companies are no longer the hallmark of the economy, with 99.5% of Harlow's businesses now classified as small & medium-sized enterprises, employing less than 250 people. The vast majority of Harlow's businesses (86.9%) employ less than 10 people. Manufacturing has declined but still remains a very important element of the economy supporting 3,500 jobs.⁵¹
- 9.77 Harlow has a 51 hectare Enterprise Zone (EZ), which is one of the 48 designated sites across the UK selected by Government to provide a platform for economic growth and deliver benefits for business.⁵² At the heart of the London Stansted Cambridge corridor, Harlow, as a business location, is growing in significance as a location for world class knowledge-based businesses and organisations including Life Sciences (Public Health England), ICT & Digital (Arrow Electronics) and Advanced Manufacturing (Raytheon). Harlow has also experienced very strong growth in its business population and this is reflective of economic growth sectors in the wider London Stansted Cambridge Corridor (LSCC).⁵³
- 9.78 The spatial strategy seeks to deliver 9,200 dwellings and 20ha of employment land, which will create a significant amount of new jobs in the District.⁵⁴ This is line with the findings of the West Essex and East Hertfordshire Assessment of Employment Needs 2017 prepared in coordination with neighbouring authorities within the sub-regional Functional Economic Area (FEMA). The employment sites identified in the spatial strategy will contribute to meeting the forecast increase in the total number of jobs in the FEMA over the Plan period; responding to the particular growth in Life Sciences and MedTech, advanced manufacturing, ICT and digital industries. This will have a significant long-term positive effect for the economy in Harlow and the wider FEMA as it will meet the needs of these particular sectors and occupiers.
- 9.79 Harlow and Gilston Garden Town Community lies in the core area of the 'London Stanstead Cambridge Corridor' (LSCC), one of the most important and fastest growing economic growth areas in the country. To reflect the commercial role of the Harlow and Gilston Garden Town, up to 18.8ha of B1 uses will be delivered at Harlow Business Park at The Pinnacles and at the Harlow Enterprise Zone at London Road. The aim is for Harlow to prosper as a sub-regional centre, competing with towns such as Bishop's Stortford, the Brookfield Centre, Hertford, Stevenage and the City of Chelmsford, by having an improved retail offer, new commercial leisure provision, an enhanced physical environment and more business space.
- 9.80 Significant employment opportunities already exist at Harlow through the relocation of Public Health England and the Harlow Enterprise Zone. The Economic Development and Prosperity Strategy identified within the Draft Plan supports the growth and retention of existing businesses and inward investment into the District by protecting strategic and locally important sites for employment uses. This includes promoting small scale employment uses within the Garden Town Communities to encourage the sustainable growth of Harlow and reduction in out-commuting. This will enable good opportunity to travel to work by walking, cycling and public transport.
- 9.81 It is anticipated that an enlarged population will support and attract a greater range of services and facilities as well as provide an expanded labour pool. However, to maximise these benefits it is essential that existing issues of congestion are relieved. Transport links to, and facilities at, employment areas may need to be improved in order to capitalise upon new development and an increased local employee catchment. As such, in order to help promote Harlow as a growth location along the M11 corridor, improvements will be made to the local highway and public transport network, improving connections with Stanstead Airport and London. The Council has also supported the extension of Crossrail 2 to Harlow, to reinforce the key locational advantages of the District and to serve the growth identified across the wider Harlow area.

⁵¹ Harlow Council (2017) Harlow Economic Development Strategy

⁵² Harlow Council (2017) Harlow Corporate Plan

⁵³ Ibid.

⁵⁴ Hardisty Jones Associates (2017) West Essex and East Hertfordshire Assessment of Employment Needs.

9.82 The spatial strategy acknowledges the contribution that Harlow Town Centre will make towards job provision in the District (this being set out in the Town Centre AAP), attracting investors to locate in Harlow and, therefore, develop and regenerate the centres and reduce vacancy rates. The AAP also looks to develop the area's visitor economy, supporting the provision of and improvement to existing leisure and recreational attractions. In this context, the delivery of corresponding facilities such as hotel accommodation, and the improved links to Stanstead Airport and London proposed, will likely have a positive effect on tourism in the District.

Commentary on other policies

9.83 All four of the Economic Development and Prosperity Strategy Policies (ED1-ED4) seek to deal with relevant matters. Notably, Policy ED2 (Protecting Existing Floorspace) seeks to retain and enhance the District's existing employment sites for a mixed office, industrial and warehouse uses and other associated activities. These sites make an important contribution to employment provision, drawing in a variety of local and national businesses and diversifying the local economy.

9.84 Policy ED3 (Developing a Skills Strategy) seeks to deliver improvements to schools and higher education facilities; providing adult learning opportunities; enhancing partnerships; and supporting local skills and employment providers. This will help to support opportunities for skills and training within the District, improving the lives of residents by increasing living standards through higher wages.

9.85 Policy RS1 (Retail Hierarchy) requires that retail development must be directed to Harlow Town Centre first, followed by the centres set out in the retail hierarchy. This reflects the role and function of the District's retail centres and ensures the future vitality of Harlow and the Harlow and Gilston Garden Town. Further to this, Policy RS2 (Future Retail Floorspace) identifies the needs for the District based on housing growth coming forward in the Garden Town Communities, ensuring future retail requirements are met.

9.86 A range of other policies are of relevance to the achievement of economic objectives, including the policies dealing with 'Transport' and 'Infrastructure'. Policies IN1 (Development and Sustainable Modes of Travel) and IN2 (Impact of Development on the Highways Network including Access and Servicing) seek to improve levels of congestion, connectivity and accessibility around the District through improvements to sustainable transport, including cycleways, footways and bridleways in development. Policy IN4 (Broadband and Development) requires major development to contribute towards the provision of infrastructure suitable to enable the delivery of high-speed broadband services across the Harlow area. This will contribute positively towards sustainable economic growth and attracting businesses to the District.

9.87 SIR1 (Infrastructure Requirements) seeks to deliver the timely provision of infrastructure necessary to support development in Harlow and Harlow and Gilston Garden Town. This includes but is not limited to transport, education, healthcare, and community facilities; having an indirect positive effect on businesses that may be reliant on this provision.

9.88 SIR2 (Enhancing Key Gateway Locations) identifies important entrance points for commuters and visitors to Harlow and linkages that connect the Harlow and Gilston Garden communities with the Harlow urban area. The policy seeks to integrate these locations within the wider transport network and green infrastructure network of Harlow, enhancing key destinations as attractors for businesses.

Appraisal of the Draft Plan as a whole

9.89 The Draft Plan allocates land to support housing and employment growth at Harlow, and within the Harlow environs, to help ensure that sub-regional economic growth objectives are realised. Additional housebuilding and related infrastructure development will boost employment opportunities across a range of sectors that will support the local employment base, and create new jobs in new and growing sectors.

- 9.90 The Economic Development and Prosperity Strategy is reflected through the Draft Plan, proposing new development in strategic employment areas to revitalise the District, utilising its location along the M11 transport corridor. The Draft Plan has identified sufficient land to meet identified employment needs through the delivery of the Enterprise Zone and through undeveloped sites at Templefields and the Pinnacles. These sites are expected to satisfy the demand for growth sectors in the Harlow and Gilston Garden Town, assisting in the integration of new employment.
- 9.91 Policies within the Draft Plan ensure the retail hierarchy is followed, and that existing employment space is protected. The Plan also places focus on developing a visitor economy for Harlow supporting the provision of and improvement to existing leisure and recreational attractions; including the River Stort, Harlow Town Park and Harlow Museum. The development of the visitor economy in the town centre and the provision of hotel accommodation, building links to Stanstead Airport and London, will boost tourism in the District, having a positive effect on economic growth. On balance, it is appropriate to conclude that the Draft Plan would have **long term significant positive effects** on economy and employment.

Historic Environment

Commentary on the spatial strategy

- 9.92 Harlow contains a wealth of heritage assets and has a rich historic environment, including ten Conservation Areas (of note is Old Harlow which was established before the New Town was built; and the Mark Hall neighbourhood, which reflects the early architectural style and planning of the New Town), listed buildings, Scheduled Monuments and areas of archaeological value. The heritage value of the District contributes towards the visitor economy, which is highlighted throughout the Plan, building upon the District's arts and cultural attraction and its 'Sculpture Town' status.
- 9.93 The spatial strategy seeks to protect the District's historic assets through sensitive design and layout, maintaining the setting of the distinct areas of Churchgate Street, Old Harlow and Newhall. The majority of growth proposed through the spatial strategy is either completed and/or committed development. The East of Harlow site will deliver around 2,600 dwellings between the existing settlement and the M11. It will result in the loss of greenfield land in close proximity to the Churchgate Street Conservation Area and is likely to change the character of the area and therefore affect the setting of the Conservation Area as well as a number of listed buildings. Draft Plan policies will help to reduce the significance of the negative effect and these are discussed in more detail below.
- 9.94 The majority of the remaining housing requirement is being met through the regeneration of previously developed land. This has the potential for a positive effect on the historic environment through the regeneration of areas/ buildings that are currently detracting from the townscape and historic environment; however, this is uncertain at this stage. A small amount of development is proposed on open space sites within the town. All of these are small scale and unlikely to result in a significant negative effect on the historic environment.
- 9.95 Development proposed in the East of the District through the Harlow Draft Plan and in the surrounding area through the Epping Forest and East Herts Draft Plans to deliver the Garden Town Communities have the potential for a cumulative negative effect on the historic environment. The loss of greenfield and agricultural land will have impacts on the character of the wider historic environment and affect the setting of a number of designated heritage assets.
- 9.96 Historic England highlight within the Harlow Strategic Site Assessment (2016) the importance of retaining the character to the north, west and south of Harlow, stating that Latton Priory and its setting within open countryside is "undoubtedly important". Further to this, the Strategic Spatial Options Study (2016) identified that the proposed strategy for the HMA has the potential for cumulative effects on the nationally designated features present around the Harlow fringe. This includes the scheduled monuments and listed buildings located to the south of the town.
- 9.97 Policy HGT1 (The Development and Delivery of Garden Communities in the Harlow and Gilston Garden Town) highlights that development will be sensitive to heritage assets and their settings; requiring that the development and phased delivery of the Garden Town Communities must secure high quality design, and create distinct environments which relate to the surrounding area and the natural and historic landscape and systems.
- 9.98 Ultimately the nature and significance of effects are uncertain at this stage as they will be dependent on the precise design and layout of development as well as mitigation measures delivered. There may be opportunities to enhance the historic environment, particularly through the regeneration of brownfield land within the town; however, this is uncertain at this stage. The Plan includes a number of policies that will help to ensure that development avoids as well as reduces the significance of negative effects on the historic environment and these are considered in more detail below.

Commentary on other policies

- 9.99 Policy WE4 (Heritage) seeks to conserve heritage assets, particularly those that are recognised as having an intrinsic link to the District's New Town Heritage. This policy is likely to have a long-term positive effect on this topic, encouraging development proposals to seek opportunities, where possible, to enhance the historic environment.
- 9.100 PL11 (Heritage Assets and their Settings) further seeks to protect the significance of heritage assets, requiring that where development affects a heritage asset or its setting, an appropriate management plan must be in place to conserve and enhance the asset and its setting. The Council will consult with Historic England and possibly other bodies such as Essex County Council where development would affect heritage assets and/or their setting.
- 9.101 Policy PL1 (Design Principles for Development) requires development to deliver high quality design through development that protects and enhances the District's historic environment.
- 9.102 Policy ED4 (Developing a Visitor Economy) seeks to maintain and enhance the local townscape and heritage setting; supporting development proposals where they are of a scale, type and appearance appropriate to the locality. The policy seeks to the District's arts and cultural visitor economy, utilising the New Town heritage and natural features.
- 9.103 Policy PL12 (Advertisements) assesses proposals for advertisements against the effect the advertisement may have on the general amenity of the area, including the historic environment, and the presence of any features of landscape or cultural significance. This seeks to avoid clutter and/or an unattractive street scene that would adversely effect on the historic environment.
- 9.104 There are also a number of policies that seek to protect and enhance the landscape character of the District, which is important in terms of protecting setting of designated heritage assets within the District. These include Policies PL7 (Green Infrastructure and Landscaping), WE1 (Strategic Green Infrastructure) and PL4 (Green Wedges and Green Fingers).

Appraisal of the Draft Plan as a whole

- 9.105 The majority of growth proposed through the Draft Plan is either completed and/ or committed development. The East of Harlow allocation is the largest proposed development and will deliver around 2,600 new dwellings and associated infrastructure in close proximity to a number of designated heritage assets. The loss of greenfield and agricultural land will change the character of the area and is likely to have a negative effect on the historic environment.
- 9.106 The majority of the remaining housing requirement is being met through the regeneration of previously developed land within the town. This has the potential for a positive effect on the historic environment through the regeneration of areas/ buildings that are currently detracting from the townscape and historic environment; however, this is uncertain at this stage. A small amount of development is proposed on open space sites within and on the edge of the town. The majority of these are small scale and unlikely to result in a significant negative effect on the historic environment.
- 9.107 Development proposed in the East of the District through the Harlow Draft Plan and in the surrounding area through the Epping Forest and East Herts Draft Plans to deliver the Garden Town Communities have the potential for a cumulative negative effect on the historic environment. The loss of greenfield and agricultural land will have impacts on the character of the wider historic environment and affect the setting of a number of designated heritage assets. Historic England highlighted the importance in trying to retain the character of the areas surrounding Harlow through the HMA level Strategic Spatial Options Study
- 9.108 The Draft Plan seeks to minimise impacts on the historic environment through a number of policies. This includes Policies WE4 (Heritage) and PL11 (Heritage Assets and their Settings) which establish the framework for the protection and proactive conservation of heritage assets.

They seek to conserve and enhance the unique built environment, recognising that there are parts of the historic environment which contribute strongly to the character and distinctiveness of places, bringing wider social, cultural, economic and environmental benefits to local communities and providing enjoyment to the wider public.

- 9.109 Development that affects a heritage asset or its setting will also be assessed based on the effects caused by the development on the significance of the heritage assets, with some proposals requiring the implementation of an appropriate management plan. Development will be supported where it includes high quality design that respects the character and appearance of the local area; and having regard to the relevant Character Appraisals and Management Plans if proposing development within a Conservation Area.
- 9.110 On balance, it is appropriate to conclude **uncertain minor cumulative negative effects** at this stage, given the extent of the local heritage value and the significant level of growth proposed cumulatively through the Garden Town Communities. It is recognised that there will be the potential to avoid/mitigate effects through site specific policy and detailed design of proposed allocations.

Housing

Commentary on the spatial strategy

- 9.111 With respect to housing need, the spatial strategy allocates sites to support housing growth in accordance with the identified requirement of up 9,200 new homes over the plan period. This figure has been established in coordination with neighbouring authorities within the West Essex and Hertfordshire HMA, the current version of the SHMA (2017), and the Essex wide GTAA. The housing requirement is above the OAHN of 7,409 dwellings identified for Harlow through the most recent SHMA update (July 2017). The additional growth will help to meet significant affordable housing needs⁵⁵, aspirations for regeneration in Harlow⁵⁶ and provide an additional buffer should any allocated sites not come forward within the Draft Plan period.
- 9.112 Given the overall housing need and the limited land availability within Harlow, the spatial strategy allocates 2,600 new homes at the Strategic Housing Site East of Harlow. This is to have a significant positive effect in relation to the housing topic through diversifying the existing housing market and supporting economic aims. Further to this, locating housing in the east should address areas of housing deprivation and barrier to services. All Strategic Sites surrounding Harlow and forming the Garden Town Communities will provide a wide range of types and tenures of homes, informed by site-specific evidence, ensuring there is a balanced mix of sustainable and high quality homes across the West Essex and Hertfordshire HMA.
- 9.113 A key challenge for the District is the shortage of affordable housing and a range of good quality housing stock. Harlow has the highest percentage requirement of affordable housing need in the HMA, with 61% in Harlow compared with 35% in Epping Forest, 32% in East Hertfordshire and 26% in Uttlesford. The need in Harlow equates to around 3,400 new affordable dwellings over the Draft Plan period.⁵⁷ The spatial strategy seeks to address this need, maximising the use of previously developed land for new homes, including bringing forward Priority Estate Regeneration projects. These provide an opportunity to redevelop some of the more outdated estates, producing a net increase in the number of homes in the area, further increasing the supply of affordable homes.
- 9.114 In terms of Gypsies and Travellers, a future need of 9 pitches in the District has been identified for the remainder of the Draft Plan period. The spatial strategy seeks to provide 12 additional pitches through the refurbishment of Fern Hill Lane site; going over and above the identified need and providing additional pitches to meet provision beyond the Plan period. Where further evidence demonstrates that additional provision is required, Policy H10 (Travellers Pitches and Plots) sets out the criteria against which applications will be assessed to ensure sustainable delivery.

Commentary on other policies

- 9.115 Policy H7 (Housing Mix and Accommodation Types) seeks to ensure that an appropriate mix of housing and accommodation types is provided to meet the needs of all residents. This includes support for proposals for housing specifically designed to meet the identified needs of older people, specialist accommodation and self-build/custom build housing. This is supported through the remainder of the Housing Policies (H1-10). For example, Policy H10 (Travellers' Pitches and Plots) seeks to meet the needs of Gypsies, Travellers and Travelling Showpeople, restoring 12 pitches at the Fern Hill Lane site.
- 9.116 As discussed, above, Harlow has a significant percentage affordable housing need in comparison to the other Districts in the HMA. Policy H8 (Affordable Housing) sets out the affordable housing requirement for new developments coming forward during the plan period, a need of 3,400 homes. The delivery of this will have a long-term positive effect on housing as it will help to meet the affordable housing need within Harlow.

⁵⁵ Opinion Research Services (July 2017) West Essex and East Hertfordshire Strategic Housing Market Assessment: Affordable Housing Update.

⁵⁶ Harlow Council (2013) Harlow Future Prospects Study: Linking Regeneration & Growth.

⁵⁷ Opinion Research Services (Sept 2015) West Essex and East Hertfordshire Strategic Housing Market Assessment: Report of Findings.

- 9.117 Policy HS1 (Housing Delivery) sets out the spatial development strategy. Policy HS3 (Strategic Housing Site East of Harlow) seeks to deliver 2,600 dwellings and associated infrastructure on land to the east of Harlow. This has the potential to deliver a broad range of housing types and tenures, with accompanying infrastructure provision, having a positive effect on supporting services and facilities. Policy HS2 (Housing Allocations) proposes a number of housing allocations to help meet the housing requirement.
- 9.118 The Draft Plan also seeks to deliver good quality housing that makes a positive contribution towards communities and improve the quality of the built environment through Policy PL1 (Design Principles for Development). This policy seeks to ensure that the layout and size of new dwellings are suitable to serve the amenity requirements of future occupiers.

Appraisal of the Draft Plan as a whole

- 9.119 The Draft Plan takes a positive approach to providing for the housing needs of the District, allocating sites to meet the District's housing requirement over the plan period. This has been established in coordination with neighbouring authorities within the HMA and is set out within the MoU, agreed in March 2017. The Draft Plan will deliver additional housing growth over identified needs to help meet the significant affordable housing needs, meet aspirations for regeneration and provide a buffer in case any sites don't come forward during the life of the Plan.
- 9.120 A strong focus on development in and around Harlow reflects the fact that the town represents the most sustainable location within the HMA. Harlow's role as sub-regional centre for employment is prioritised, as well as its Enterprise Zone status; the need to rejuvenate the town centre; the opportunity to capitalise on its transport connections; its important location on the London - Stanstead - Cambridge corridor; and above all, the wider growth aspirations for the town.
- 9.121 Draft Plan policies seek to ensure that housing is delivered at the right scale, of the right type and in the right location to meet community needs. The range of specific and specialist housing needs to be met includes affordable housing as well as the needs of Gypsies, Travellers and Travelling Showpeople communities. With regard to affordable housing, viability work leads to the conclusion that policy can require at least 30% affordable housing on major developments, meeting an affordable housing need of 154 dwellings per annum. With regards to Gypsy and Travellers, the proposal is to take a precautionary approach, in that accommodation will be provided over and above that necessary to meet the needs of Travellers.
- 9.122 In conclusion, **long term significant positive effects** are predicted.

Land and Waste

Commentary on the spatial strategy

- 9.123 Key issues locally include the efficient use of land, whether there are potential contamination issues, the agricultural quality of land, and how waste issues will be managed; however, the spatial strategy, as understood at the current time, has limited implications.
- 9.124 The spatial strategy seeks to maximise the use of previously developed land for new homes and minimise impact on the environment, having long-term positive effects in relation to the efficient use of land. This includes the redevelopment of the Princess Alexandra Hospital, and the Priority Estate Regeneration projects. This will provide an opportunity to redevelop some of the more outdated estates, maximising the allocation at these locations.
- 9.125 Best and most versatile agricultural land is present in the East of the District (Grade 2), and as such development of the Strategic Site to the East of Harlow would lead to the loss of this resource. None of the other allocations within the District are likely to result in the significant loss of any agricultural land. Cumulatively, the development of the East of Harlow site as well as the Garden Town Communities proposed through the Epping Forest and East Herts Draft Plan will result in a significant loss of agricultural land.
- 9.126 10% of the District is currently within the Metropolitan Green Belt, which under the spatial strategy is to be protected from inappropriate development, and where possible, enhanced. The spatial strategy seeks to link the District's Green Belt to the existing Green Wedges and Green Fingers, preventing neighbourhood coalescence, and shaping the unique character of Harlow. This contributes positively to the Garden Town principle of *'combining the best of town and country to create healthy communities, including opportunities to grow food'*.
- 9.127 New development will support the implementation of good waste management in line with the Essex and Southend-on-Sea Waste Draft Plan (2017), which forms part of the Development Plan for Harlow. Under Policy SIR3 (Waste and Minerals) proposals will be required to implement the principles of the Waste Hierarchy and contribute towards the achievement of a 50% recycling target by 2020⁵⁸. The Waste Draft Plan seeks to direct new waste development towards Harlow, ensuring that the District is adequately served in light of the forecasted increase in waste management needs throughout the Draft Plan period.

Commentary on other policies

- 9.128 Although references are made throughout the Plan to encourage the use of previously developed land (including within the spatial development strategy), there is no specific policy which relates to the use of previously developed land; this is however adequately addressed by the NPPF.
- 9.129 Policy WE1 (Strategic Green Infrastructure) and Policy WE2 (Green Wedges and Green Fingers) require that new Green Infrastructure be planned into development, and where possible connected to existing Green Infrastructure (including the Green Belt, Green Wedges and Green Fingers). This will maintain the District's natural features, recognising that they are fundamental to the character of Harlow.
- 9.130 Policy PL9 (Pollution and Contamination) permits development provided that it does not give rise to, or would be subject to, unacceptable levels of pollution and contamination. Where it can be demonstrated that pollution and/or contamination is unavoidable, appropriate measures must mitigate the negative effects of the development.
- 9.131 Policy SIR3 (Waste and Minerals) as discussed, above, ensures that principles within the Waste and Minerals Development Plan documents continue to be implemented as part of the District's contribution to minerals and waste planning.

⁵⁸ The EU Waste Framework Directive states that the UK must recycle 50% of household waste by 2020

Appraisal of the Draft Plan as a whole

- 9.132 Development proposed through the Draft Plan has the potential for impacts on the quality and quantity of natural resources. The Plan will involve the loss of greenfield and agricultural land, directing a large proportion of growth to the East of Harlow Site where high value agricultural land is present. Opportunities to redevelop previously developed land through the regeneration of Harlow are set to be maximised; however, it is recognised available brownfield land within the District is limited.
- 9.133 There is the potential for a significant cumulative loss of greenfield and agricultural land surrounding Harlow as a result of development proposed through the emerging Harlow, Epping Forest and East Herts Draft Plans. However, it is important to note that there has been extensive work carried out at the HMA level through the Strategic Spatial Options Study to explore alternatives for development surrounding Harlow and ensure that the most appropriate sites are brought forward to meet identified needs.
- 9.134 On balance, it is appropriate to conclude **long term minor negative effects**. However, this conclusion is uncertain, given that there would be greenfield loss under a 'no plan' (or 'future baseline') scenario and that all the alternatives would result in a similar conclusion. It is not clear that more could be done through the spatial strategy to minimise greenfield land take.

Landscape

Commentary on the spatial strategy

- 9.135 The sensitivity of the different Landscape Character Areas to change within the District was considered through The Harlow Area Landscape and Environment Study (2005). Based on this evidence the preferred strategy will result in development in landscape areas of low sensitivity to small, substantial, and very-large urban development. However, it recognised that the landscape sensitivity of these areas may have changed since the publication of this study.
- 9.136 There are three areas designated as Special Landscape Areas within the District, which are areas that have a 'special visual quality that distinguishes them from other tracts of countryside'.⁵⁹ These are located in the north-western corner, south-western corner and north-eastern corner and fall within designated Green Belt land. These areas will be protected through the Draft Plan, maintaining their visual quality of importance.
- 9.137 The Strategic Housing Site East of Harlow falls within a relatively contained Landscape Character Area, with limited visibility resulting from the areas topography and the adjacent urban built form. The sense of tranquillity of the area is very limited, and as such development is not expected to adversely impact the landscape character. Nonetheless, it is recognised that the delivery of 2,600 homes on the eastern edge of the District will result in some residual effects on the landscape, and as such mitigation is proposed through the spatial strategy.
- 9.138 The remaining site allocations are all located within the urban boundary of Harlow and the majority of growth will be delivered on previously developed land. The regeneration of brownfield land presents an opportunity to have a positive effect on the built environment and townscape although the significance of this will be dependent on each site and the implementation of development. The dominant green spaces (notably the Green Wedges and Green Fingers) provide a sense of openness and tranquillity within the otherwise densely populated area. These areas are to be retained and enhanced through individual site requirements and the wider spatial strategy.
- 9.139 The spatial strategy has been informed by the guiding principles of Sir Frederick Gibberd's original master plan for Harlow as a planned New Town. These principles have shaped Harlow's distinctive form and landscape character and underpin the proposed spatial strategy, aiding the delivery of Garden Town Communities across the Harlow and Gilston Town. In line with Policy HGT1 (The Development and Delivery of Garden Communities in the Harlow and Gilston Garden Town), development of the Garden Town Communities are required to create distinctive environments which relate to the surrounding area and natural and historic landscapes and systems.
- 9.140 In terms of cumulative effects, the development of the Garden Town Communities proposed through the emerging Harlow, Epping Forest and East Herts Draft Plans are likely to alter the character of the landscape surrounding Harlow. This will likely give rise to direct impacts to settlement edge landscapes through the loss of greenfield and agricultural land, which are inherently important on the basis that they are valued for their visual and historic character.

Commentary on other policies

- 9.141 Policy PL1 (Design Principles for Development) sets out the design criteria for Harlow, requiring that development protect, enhance or improves local distinctiveness, taking account of local character, patterns of development, urban form and landscape character, and Green Infrastructure including trees and landscaping.
- 9.142 Policy PL6 (Trees and Hedgerows) supports development which seeks to ensure that trees and hedgerows in Harlow, which form part of an important part of the Green Infrastructure and landscaping, are protected. This is further reiterated through Policy WE3 (Biodiversity and Geodiversity) which seeks to preserve and enhance biodiversity assets including aged or veteran trees outside Ancient Woodland.

⁵⁹ Chris Blandford Associates (2005) Harlow Area Landscape and Environment Study.

- 9.143 Policy PL7 (Green Infrastructure and Landscaping) requires that Green Infrastructure and landscaping must be protected and enhanced as part of development. This is reiterated through Policy WE1 (Strategic Green Infrastructure) which also seeks to protect and enhance the network of accessible, multi-functional green infrastructure as identified on the Policies Map. In this context, Policy PL5 (Other Open Spaces) requires that development does not compromise the landscape character, openness, or urban design principles of the town and/or the surrounding area.
- 9.144 Policy WE2 (Green Wedges and Green Fingers) highlights that Green Wedges and Green Fingers are fundamental to the character of Harlow. The purpose of this policy is to continue to protect the Green Wedges and Green Fingers, requiring that development enhance the wider landscape and setting, and integrate with the District's existing Green Infrastructure. This is reiterated through Policy PL5 (Other Open Spaces), which requires that development does not compromise the landscape character, openness, or urban design principles of the town and/or the surrounding area.
- 9.145 Policy PL12 (Advertisements) assesses proposals for advertisements against the effect the advertisement may have on the general amenity of the area, including the historic environment, and the presence of any features of landscape or cultural significance. This seeks to avoid clutter and/or an unattractive street scene that would adversely effect on the historic environment.
- 9.146 Policy SIR2 (Enhancing Key Gateway Locations) requires the use of appropriate landscaping and boundary treatments to seamlessly integrate identified gateway locations with the wider Green Infrastructure network of Harlow.

Appraisal of the Draft Plan as a whole

- 9.147 The Draft Plan seeks to maximise the use of previously developed land and generally directs growth towards landscape areas of low landscape sensitivity. The regeneration of brownfield land presents an opportunity to have a positive effect on the built environment and townscape although the significance of this will be dependent on each site and the implementation of development.
- 9.148 The East of Harlow allocation proposes the delivery of around 2,600 new dwellings and associated infrastructure on greenfield land. The site falls within a relatively contained Landscape Character Area, with limited visibility resulting from the areas topography and the adjacent urban built form. The sense of tranquillity of the area is very limited, and as such while development is not expected to have significant negative effect on the landscape there will be changes to the character of the area.
- 9.149 In terms of cumulative effects, the development of the Garden Town Communities proposed through the emerging Harlow, Epping Forest and East Herts Draft Plans are likely to alter the character of the landscape surrounding Harlow. This will likely give rise to direct impacts to settlement edge landscapes through the loss of greenfield and agricultural land, which are inherently important on the basis that they are valued for their visual and historic character.
- 9.150 The policies contained within the Draft Plan aim to conserve, protect and enhance the natural and built environment of Harlow, including its Green Infrastructure network and overall landscape quality. Under Policy HGT1 (Development and Delivery of Garden Town Communities in the Harlow and Gilston Garden Town) proposals are to deliver distinctive environments which relate to the surrounding area and the natural and historic landscape and systems, green infrastructure and biodiversity.
- 9.151 Development design is required to take into account of the adopted Harlow Design Guide SPD, ensuring that design and layout of new development respects Sir Frederick Gibberd's master plan for the New Town, ensuring the town is contained within the original landscape and retains as many natural features as possible. In this context, the Draft Plan policies provide a strong framework to ensure that the urban form and building design is shaped by, and responds to, the character of the surrounding countryside.

9.152 The precise layout and design of development surrounding Harlow, sensitivity of the landscape in those areas and mitigation available will ultimately determine the significance of effects. At this stage, **uncertain minor cumulative negative effects** are predicted as a result of the development of the Garden Town Communities proposed through the emerging Harlow, Epping Forest and East Herts Draft Plans. Careful master planning done in partnership with surrounding authorities and key stakeholders will help to reduce the significance of any residual effects.

Transport

Commentary on the spatial strategy

- 9.153 Harlow is the largest settlement in the sub-region, with good access to services/facilities, and employment, given its Enterprise Zone status. Development proposed through the spatial strategy therefore has the potential for positive effects on this topic by promoting accessibility, helping to reduce the need to travel and reduce reliance on the private vehicle.
- 9.154 Proposed development within and surrounding Harlow will utilise the District's transport connections with London, Cambridge, the major international airport of Stanstead (located 24km to the north east), and links to the M25. The extension of Crossrail 2 to Harlow will also reinforce the key locational advantages of the District and serve the growth identified across the wider Harlow area.
- 9.155 The road network around Harlow carries large volumes of traffic; the most notable area of congestion being on the routes and links to Junction 7 of the M11, but also the A414. Transport Modelling carried out as part of the Strategic Spatial Options Study for the West Essex and East Hertfordshire Housing Market Area indicated that a 35-40% increase in trips on the network by 2033 is to be expected, based on 14,000 new homes in and around Harlow (and 48,000 across the wider HMA).⁶⁰
- 9.156 In terms of the level of development that can be accommodated in and around Harlow, the transport modelling indicated that the preferred spatial strategy for the HMA can be delivered; provided that key mitigation measures are delivered during the Plan period. The Council has been working with neighbouring planning authorities, Essex and Hertfordshire County Councils and Highways England to delivery the necessary infrastructure to support the delivery of the proposed garden Town Communities around Harlow. The signed MoU (2017) has been produced, which identifies a number of strategic new infrastructure interventions that will be necessary. This includes new motorway junctions identified within the transport modelling. The New M11 Junction 7a will improve the flow of traffic east to west across the District and provide a catalyst for further development, promoting Harlow as a growth location along the M11 corridor. The Council will also work with Network Rail and the local railway operator to improve journey reliability, frequency, capacity and overall comfortability for train users using the West Anglia Mainline.
- 9.157 With respect to Harlow town, it was concluded through the transport modelling that an early delivery of a second crossing over the River Stort was essential to enable the development of an effective north-south sustainable travel corridor, significant modal shift towards public transport, walking and cycling, and wider network benefits to Harlow.
- 9.158 The spatial strategy will be underpinned by the necessary supporting transport infrastructure identified, above, with development phased over the Draft Plan period to ensure that correct levels of infrastructure are provided. In line with Policy HGT1 (The Development and Delivery of Garden Communities in the Harlow and Gilston Garden Town), development seeks to create a step change in modal shift by contributing to the delivery of Sustainable Transport Corridors, providing linkages to and from Harlow and the new Garden Town Communities. The Transport Corridors will provide high speed bus routes with limited stops, positively improving connections within Harlow and to areas outside of the District, the Enterprise Zones and other employment areas. It is noted that the sites likely to benefit most are those located close to the proposed bus stops (Latton Priory, Harlow Town Centre, the train station, and Gilston), as a result of improved access to sustainable transport.
- 9.159 On-site and off-site infrastructure proposed through the Draft Plan will establish an integrated, accessible and safe transport system that meets the needs of existing and future cross-boundary residents and visitors.

⁶⁰ Epping, East Herts, Harlow and Uttlesford District Councils (2016) SA of Strategic Spatial Options for the West Essex and East Hertfordshire Housing Market Area.

Commentary on other policies

- 9.160 Policy IN1 (Development and Sustainable Modes of Travel) seeks to minimise the need to travel, promote opportunities for sustainable transport modes, and improve accessibility to local facilities and linkages with the surrounding pedestrian and cycle network. This will help to reduce reliance on the private vehicle and encourage the use of more sustainable modes of travel with the potential for a long-term positive effect by helping to reduce greenhouse gas emissions.
- 9.161 Further sustainability initiatives promoted through Policy IN1 include requiring that development provide electric vehicle charging points (EVCPs) in accordance with the latest government guidance.
- 9.162 Policy IN2 (Impact of Development on the Highways Network including Access and Servicing) further seeks to support the transition to a low carbon future through improving road congestion and facilitating sustainable movement. In this context, the policy recognises that in accordance with national policies and guidance, it may be necessary for an application to be accompanied by either a Transport Statement or Transport Assessment; depending on the degree of the proposal's impact on highway users and movement in the local area generally. The Council will consult with the Local Highway Authority and other bodies on the Transport Assessment or Statement.
- 9.163 Policy IN3 (Parking Standards) requires that vehicle parking must be provided in accordance with the adopted Essex Vehicle Parking Standards⁶¹, unless otherwise indicated elsewhere in the Draft Plan and/or supporting documents. The Parking Standards provide a rigorous approach to parking, accessibility and promoting travel choice. The policy therefore seeks to reduce reliance on the car and promote more sustainable modes of travel while ensuring that on-street parking issues are not created
- 9.164 Policy SIR1 (Infrastructure Requirements) seeks to ensure that new development is served and supported by appropriate infrastructure and services identified through the Infrastructure Delivery Plan, which includes transport infrastructure. It is also noted that individual development proposals will be required to secure related infrastructure both on and off site necessary to make the development acceptable.
- 9.165 Policy SIR2 (Enhancing Key Gateway Locations) seeks to seamlessly integrate the gateway locations identified with the wider transport network of Harlow; improving pedestrian cycle routes which are legible, secure and safe, and that connect with the existing network
- 9.166 Policy PL1 (Design Principles for Development) seeks to ensure that new development forms inclusive development that is accessible, well-connected, gives sustainable modes of transport priority over private vehicles, and integrates land uses with sustainable modes of travel.
- 9.167 Policy PR5 (The Sequential Test and Principles for Main Town Centre Uses) supports development where it is related to public transport facilities, or is located where appropriate provision for sustainable transport can be provided. Outside of the centres, Policy PR3 (Employment Development Outside Employment Areas and Neighbourhood Services Areas) takes a similar approach to development, supporting proposals only when consideration has been taken for the impact of development on road congestion.

Appraisal of the Draft Plan as a whole

- 9.168 The Draft Plan will deliver housing, employment and associated improvements to services/facilities and public transport, to meet the needs of new and existing communities, reducing the need to travel, and alleviating levels of congestion on the local transport network.
- 9.169 The delivery of the Harlow and Gilston Garden Town as well as other Garden Town Communities will be accompanied by new essential infrastructure across a range of sustainable modes, including the delivery of the Sustainable Transport Corridors to connect the major sites

⁶¹ Essex County Council (2009) Parking Standards: Design and Good Practice <https://www.castlepoint.gov.uk/essex-vehicle-parking-standards>

in the Garden Town. Policy HGT1 (The Development and Delivery of Garden Communities in the Harlow and Gilston Garden Town) promotes well located and co-ordinated development, which will facilitate the development of sustainable movement corridors, utilising growth to support public transport, walking and cycling corridors.

- 9.170 There are aspirations throughout the Draft Plan for a modal shift in travel, where 60% of travel would be by sustainable modes of transport and 40% would be by car. Sustainable transport matters (including walking, cycling and public transport) are, therefore, a key focus for Plan policies to support the successful future growth of Harlow.
- 9.171 While the Plan seeks to support modal shift away from car dependency; there are, however existing traffic problems that could be exacerbated. The transport modelling work undertaken indicates that the proposed level of development in the Draft Plan would increase traffic levels across the network.
- 9.172 A signed Memorandum of Understanding (Feb 2017) has been produced, which identifies a number of new infrastructure interventions that will be necessary. The most notable of these is a proposed new motorway junction on the M11 (Junction 7A) and the provision of new Sustainable Transport Corridors through Harlow. On-site and off-site infrastructure proposed will help manage overall travel demand; establishing an integrated, accessible and safe transport system that meets the needs of existing and future cross-boundary residents and visitors.
- 9.173 On balance, it is appropriate to conclude **uncertain positive effects**, recognising that there is some uncertainty at this stage.

Water

Commentary on the spatial strategy

- 9.174 Harlow is located within an area of serious water stress, which will be exacerbated due to climate change and future growth and development. Consideration has been given to ensuring water demand and waste water infrastructure capacity can be managed throughout the Plan period; however, there is little evidence to indicate that this is a significant issue for the spatial strategy.
- 9.175 Harlow falls into the Upper Lee catchment area and portable drinking water in the District is provided by Affinity Water. Across Affinity Water's Central Region area, which Harlow is located in, the Water Resources Management Plan (2014) sets out water related infrastructure projects which will ensure that predicted demands can be met.
- 9.176 Thames Water is responsible for waste water in Harlow and the surrounding area, ensuring infrastructure is in place to accommodate anticipated growth. In this context, the Rye Meads Sewage Treatment Works (STW) is currently being upgraded to increase capacity. The upgrade will provide Rye Meads STW with a treatment capacity of 447,134 Population Equivalent.
- 9.177 Thames Water position statement (2017) indicates that capacity in the Treatment Works is expected up to 2036; however, upgrades may be required in sludge and storm streams. Further network modelling and growth review is being undertaken by Thames Water to understand sewer capacity in the area before outlining further intervention solutions. This modelling work will inform a Water Cycle Study being prepared by the Council.⁶²
- 9.178 The Council will work with the relevant utility providers, as discussed above, to ensure that new homes have connections to clean water, wastewater, and other utilities. A requirement for the Harlow and Gilston Garden Town Communities under policy HGT1 (Development and the Delivery of Garden Town Communities in the Harlow and Gilston Garden Town) is the provision of water supply and waste water network infrastructure for occupants.
- 9.179 Harlow Council commissioned a Water Cycle Study Phase 1 Update and the Draft Report did not identify any issues which require further assessment by a Phase 2 study.⁶³

Commentary on other policies

- 9.180 Policy PL10 (Water Quality, Water Management, Flooding and Sustainable Drainage Systems) supports development only where it does not adversely affect water quality, including quality of waterways and other bodies of water, identified Source Protection Zones (SPZ), Aquifers and all other groundwater. In terms of water management, the policy requires that all new dwellings achieve the Optimal Technical Housing Standard for water efficiency of no more than 110 litres per person per day as described by Building Regulations.
- 9.181 Policy PL9 (Pollution and Contamination) permits development provided that it does not give rise to unacceptable impacts on surface and groundwater quality. Where it can be demonstrated that adverse effects cannot be avoided, appropriate measures must mitigate the negative effects of development.

Appraisal of the Draft Plan as a whole

- 9.182 The Council will work with the relevant utility providers to ensure that new homes have connections to clean water, wastewater, and other utilities. Harlow Council commissioned a Water Cycle Study Phase 1 Update and the Draft Report did not identify any issues which require further assessment by a Phase 2 study.⁶⁴

⁶² Thames Water (2017) Greater Harlow Position Statement.

⁶³ Harlow Council (April 2018) Water Cycle Study Update Draft Report. Prepared by JBA Consulting.

⁶⁴ Harlow Council (April 2018) Water Cycle Study Update Draft Report. Prepared by JBA Consulting.

9.183 The development management policies within the Plan seek to ensure that water quality and water management is fully considered as part of new development proposals, and it is expected that most sites should prove possible to ensure adequate water supply and infrastructure. Taking the evidence into account a **neutral effect** is concluded at this stage.

Part 3: What happens next?

10. Introduction (to Part 3)

10.1 The aim of this chapter is to explain next steps in the plan-making/SA process.

Plan finalisation

10.2 Subsequent to the consultation on the Draft Pre-Submission stage, the main issues raised will be identified and summarised by the Council, who will then submit the plan (and the summary of representations received) for Examination. At Examination a Government appointed Planning Inspector will consider representations (in addition to the SA Report and other submitted evidence) before determining whether the plan is sound (or requires further modifications).

10.3 If found to be 'sound' the plan will be formally adopted by the Council. At the time of adoption an 'SA Statement' will be published that sets out (amongst other things) 'the measures decided concerning monitoring'.

Monitoring

10.4 At the current time, there is a need only to present 'measures envisaged concerning monitoring'. The Draft Pre-Submission Local Plan includes a range of proposed monitoring measures. The table below lists a selection of the Council's proposed measures, as well as any wider monitoring measures, that are of particular importance given the findings of the appraisal.

Table 10.1: A selection of the Council's potential monitoring measures

SA topic	Proposed measure
Air quality	<ul style="list-style-type: none"> Preparation of a Joint Action Plan to manage the impacts of growth on Epping Forest SAC (see Memorandum of Understanding), which is likely to propose a number of monitoring measures. Risk of pollution and contamination.
Biodiversity and green infrastructure	<ul style="list-style-type: none"> Preparation of a Joint Action Plan to manage the impacts of growth on Epping Forest SAC (see Memorandum of Understanding), which is likely to propose a number of monitoring measures. Change in number of biodiversity and geodiversity designated assets in the district.
Climate change (mitigation and adaptation)	<ul style="list-style-type: none"> None at this stage.
Community and wellbeing	<ul style="list-style-type: none"> Number of key local facilities in Neighbourhood Centres and Hatches. Delivery of strategic and local infrastructure to support new development. Amount of public open space, allotments, play space and sporting provision and facilities. Change in number and area of Recreational, Sporting, Cultural and Community Facilities.
Economy and employment	<ul style="list-style-type: none"> Net additional employment floorspace up to 2033. Net loss of employment floorspace in Strategic Employment Areas and Neighbourhood Service Areas. Change in number of visitors. Change in employment floorspace outside Strategic Employment Areas and Neighbourhood Service Areas. Number of jobs created by the major developments. Net additional retail floorspace in existing Retail Centre.
Historic environment	<ul style="list-style-type: none"> Change in number and area of heritage assets in the district.
Housing	<ul style="list-style-type: none"> Net additional dwellings built.

SA topic	Proposed measure
	<ul style="list-style-type: none"> • Net additional dwellings built in Strategic Housing Site East of Harlow. • Number of new Gypsy and Traveller pitches completed. • Percentage of new dwellings meet the Building Control Part M4(2) Standard for accessible and adaptable homes. • Number of dwellings for wheelchair users under the Building Control Part M4(3) standard in major residential development. • Type and size of housing in major residential developments. • Percentage of Affordable Housing built in new major residential developments • Net additional land allocated for self-build.
Land and waste	<ul style="list-style-type: none"> • Percentage of recycling household waste. • Retention of Green Belt, Green Wedge, Green Finger or Other Open Space.
Landscape	<ul style="list-style-type: none"> • Retention of Green Belt, Green Wedge, Green Finger or Other Open Space.
Transport	<ul style="list-style-type: none"> • Delivery of strategic and local infrastructure to support new development.
Water	<ul style="list-style-type: none"> • Percentage of new dwellings achieving the Optional Technical Housing Standard for water efficiency (no more than 110 litres per person per day).

Appendices

Appendix I: Regulatory requirements

As discussed in Chapter 1 above, Schedule 2 of the Environmental Assessment of Plans Regulations 2004 explains the information that must be contained in the SA Report; however, interpretation of Schedule 2 is not straightforward. **Table A** links the structure of this report to an interpretation of Schedule 2 requirements, whilst **Table B** explains this interpretation.

Table A: Questions answered by the SA Report, in accordance with an interpretation of regulatory requirements

Questions answered		As per the regulations...the SA Report must include...	
Introduction	What's the plan seeking to achieve?	<ul style="list-style-type: none"> An outline of the contents, main objectives of the plan and relationship with other relevant plans and programmes 	
	What's the SA scope?	What's the sustainability 'context'?	<ul style="list-style-type: none"> Relevant environmental protection objectives, established at international or national level Any existing environmental problems which are relevant to the plan including those relating to any areas of a particular environmental importance
		What's the sustainability 'baseline'?	<ul style="list-style-type: none"> Relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan The environmental characteristics of areas likely to be significantly affected Any existing environmental problems which are relevant to the plan including those relating to any areas of a particular environmental importance
		What are the key issues and objectives that should be a focus?	<ul style="list-style-type: none"> Key environmental problems / issues and objectives that should be a focus of (i.e. provide a 'framework' for) assessment
Part 1	What has plan-making / SA involved up to this point?	<ul style="list-style-type: none"> Outline reasons for selecting the alternatives dealt with (and thus an explanation of the 'reasonableness' of the approach) The likely significant effects associated with alternatives Outline reasons for selecting the preferred approach in-light of alternatives assessment / a description of how environmental objectives and considerations are reflected in the Plan 	
Part 2	What are the SA findings at this current stage?	<ul style="list-style-type: none"> The likely significant effects associated with the Submission Plan The measures envisaged to prevent, reduce and offset any significant adverse effects of implementing the Submission Plan 	
Part 3	What happens next?	<ul style="list-style-type: none"> A description of the monitoring measures envisaged 	

Table B: Questions answered by the SA Report, in accordance with regulatory requirements

<u>Schedule 2</u>	<u>Interpretation of Schedule 2</u>	
<i>The report must include...</i>	<i>The report must include...</i>	
1. an outline of the contents, main objectives of the plan and relationship with other relevant plans and programmes;	An outline of the contents, main objectives of the plan and relationship with other relevant plans and programmes	i.e. answer - <i>What's the plan seeking to achieve?</i>
2. the relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan	Any existing environmental problems which are relevant to the plan including, in particular, those relating to any areas of a particular environmental importance	i.e. answer - <i>What's the 'context'?</i>
3. the environmental characteristics of areas likely to be significantly affected;		
4. any existing environmental problems which are relevant to the plan or programme including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to Directives 79/409/EEC and 92/43/EEC;	The relevant environmental protection objectives, established at international or national level	i.e. answer - <i>What's the 'baseline'?</i>
5. the environmental protection objectives, established at international, Community or Member State level, which are relevant to the plan and the way those objectives and any environmental considerations have been taken into account during its preparation;	The relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan'	
6. the likely significant effects on the environment including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors;	The environmental characteristics of areas likely to be significantly affected	
7. the measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan;	Any existing environmental problems which are relevant to the plan including, in particular, those relating to any areas of a particular environmental importance	i.e. answer - <i>What are the key issues & objectives?</i>
8. an outline of the reasons for selecting the alternatives dealt with and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the required information	Key environmental problems / issues and objectives that should be a focus of appraisal	
9. a description of the measures envisaged concerning monitoring.	An outline of the reasons for selecting the alternatives dealt with (i.e. an explanation of the 'reasonableness of the approach')	i.e. answer - <i>What has Plan-making / SA involved up to this point?</i> [Part 1 of the Report]
	The likely significant effects associated with alternatives, including on issues such as... ... and an outline of the reasons for selecting the preferred approach in light of the alternatives considered / a description of how environmental objectives and considerations are reflected in the draft plan.	
	The likely significant effects associated with the draft plan	i.e. answer - <i>What are the assessment findings at this current stage?</i> [Part 2 of the Report]
	The measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects of implementing the draft plan	
	A description of the measures envisaged concerning monitoring	i.e. answer - <i>What happens next?</i> [Part 3 of the Report]

Whilst Tables A and B signpost *broadly* how/where this report presents the information required of the SA Report by the Regulations, as a supplement it is also helpful to present a discussion of *more precisely* how/where regulatory requirements are met - see **Table C**.

Table C: 'Checklist' of how (throughout the SA process) and where (within this report) regulatory requirements have been, are and will be met.

Regulatory requirement	Discussion of how requirement is met
Schedule 2 of the regulations lists the information to be provided within the SA Report	
1. An outline of the contents, main objectives of the plan or programme, and relationship with other relevant plans and programmes;	Chapter 2 ('What's the plan seeking to achieve') presents this information.
2. The relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme;	These matters were considered in detail at the scoping stage, which included consultation on a Scoping Report published in 2010.
3. The environmental characteristics of areas likely to be significantly affected;	The outcome of scoping was an 'SA Framework', and this is presented within Chapter 3 ('What's the scope of the SA').
4. Any existing environmental problems which are relevant to the plan or programme including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to Directives 79/409/EEC and 92/43/EEC.;	More detailed scoping information - i.e. messages established through context and baseline review - is presented within Appendix II.
5. The environmental protection, objectives, established at international, Community or national level, which are relevant to the plan or programme and the way those objectives and any environmental, considerations have been taken into account during its preparation;	<p>The Scoping Report (2010) presents a detailed context review, and explains how key messages from the context review (and baseline review) were then refined in order to establish an 'SA framework'. An updated context review is provided in Appendix II of this SA Report.</p> <p>The context review informed the development of the SA framework and topics, presented in Chapter 3.</p> <p>With regards to explaining "<i>how... considerations have been taken into account</i>":</p> <ul style="list-style-type: none"> • Chapter 5 explains how reasonable alternatives were established in 2017/18. • Chapter 6 set out the summary findings of the appraisal of the reasonable alternatives, with the detailed appraisal provided in Appendix IV. • Chapter 7 explains the Council's 'reasons for supporting the preferred approach', i.e. explains how/why the preferred approach is justified in-light of alternatives appraisal (and other factors). • Chapter 9 sets out the findings of the appraisal of the Draft Pre-Submission Local Plan.
6. The likely significant effects on the environment, including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors. (Footnote: These effects should include secondary, cumulative, synergistic, short, medium and long-term permanent and temporary, positive and negative effects);	<ul style="list-style-type: none"> • Chapter 6 sets out the summary findings of the appraisal of the reasonable alternatives for the Draft Plan (in relation to the spatial strategy, which is the 'stand-out' plan issue and hence that which should be the focus of alternatives appraisal/consultation), with the detailed appraisal provided in Appendix IV. • Chapter 9 presents the Draft Pre-Submission Local Plan appraisal. <p>As explained within the various methodology sections, as part of appraisal work, consideration has been given to the SA scope, and the need to consider the potential for various effect characteristics/dimensions.</p>
7. The measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan or programme;	The appraisal of reasonable alternatives presented in Chapters 6 and of the Draft Pre-Submission Local Plan in Chapter 9 identify how the plan might potentially 'go further' in certain respects, and makes a number of specific recommendations.

Regulatory requirement**Discussion of how requirement is met**

8. An outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the required information;	Chapters 5, 6 and 7 deal with 'Reasons for selecting the alternatives dealt with', in that there is an explanation of the reasons for focusing on particular issues and options. Also, Chapter 7 explains the Council's 'reasons for selecting the preferred option' (in light of alternatives appraisal). Methodology is discussed at various places, ahead of presenting appraisal findings, and limitations/assumptions are also discussed as part of appraisal narratives.
9. Description of measures envisaged concerning monitoring in accordance with Art. 10;	Chapter 10 presents measures envisaged concerning monitoring.
10. A non-technical summary of the information provided under the above headings	The NTS is provided in a separate document.

The SA Report must be published alongside the Draft Plan, in accordance with the following regulations

authorities with environmental responsibility and the public, shall be given an early and effective opportunity within appropriate time frames to express their opinion on the Draft Plan or programme and the accompanying environmental report before the adoption of the plan or programme (Art. 6.1, 6.2)	Interim SA Reports were published alongside the Issues and Options Document in 2010 and Emerging Strategy and Further Options in 2014. These reports set out the findings of the SA for the preferred approaches and alternatives at that time. At the current time, this SA Report is published alongside the Draft Pre-Submission Local Plan, under Regulation 19, so that representations might be made ahead of submission.
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The SA Report must be taken into account, alongside consultation responses, when finalising the plan.

The environmental report prepared pursuant to Article 5, the opinions expressed pursuant to Article 6 and the results of any transboundary consultations entered into pursuant to Article 7 shall be taken into account during the preparation of the plan or programme and before its adoption or submission to the legislative procedure.	The Council has taken into account the Interim SA Reports published in 2010 and 2014, alongside consultation responses received, when finalising the Draft Pre-Submission Local Plan for publication. Appraisal findings presented within this current SA Report will inform a decision on whether or not to submit the plan, and then (on the assumption that the plan is submitted) will be taken into account when finalising the plan at Examination (i.e. taken into account by the Inspector, when considering the plan's soundness, and the need for any modifications).
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Appendix II: Scoping information

Introduction

As discussed in Chapter 3 ('What's the scope of the SA?') the SA scope is primarily reflected in a list of objectives ('the SA framework'), which was established subsequent to a review of the sustainability 'context' / 'baseline', analysis of key issues, and consultation. The detailed scoping information was presented in a draft scoping report sent to statutory consultees in 2010. Since that time, the SA scope has evolved somewhat as new evidence has emerged; however, the underlying scope remains fundamentally the same as that agreed through the dedicated scoping consultation in 2010.

The aim of this appendix is to present a summary of the scoping information and ensure that the information required under Schedule 2 of the SEA Regulations is provided.

Relationship with other plans and programmes

The following plans and programmes provide the key policy context for the Harlow Local Plan:

- **National Planning Policy Framework (NPPF):**⁶⁵ sets out the Government's planning policies for England and how these are expected to be applied. The framework acts as guidance for local planning authorities, covering a range of environmental, social and economic themes, including:
 - The commitment to halt the overall decline in biodiversity by minimising impacts and achieving net gains in biodiversity wherever possible;
 - Adopting proactive strategies to adaptation and manage risks through adaptation measures including well planned green infrastructure;
 - Considering the potential cumulative impact of a number of smaller developments on air quality as well as more substantial ones;
 - Using technology to reduce the need to travel;
 - Encouraging land use and transport development which support reductions in greenhouse gas emissions and reduced congestion; and
 - Supporting new and emerging business sectors, including positively planning for 'clusters or networks of knowledge driven, creative or high technology industries'.
- **National Planning Practice Guidance (NPPG):**⁶⁶ provides relevant, technical planning practice guidance for local authorities, including:
 - Local Plans should consider the opportunities that individual development proposals may provide to enhance biodiversity and contribute to wildlife and habitat connectivity in the wider area;
 - Local Plans should support the delivery of appropriately sited green energy and the management of greenhouse gas emissions through energy efficiency measures;
 - Local Planning Authorities should "*adopt proactive strategies to mitigate and adapt to climate change*". Climate change can be mitigated through Local Plans by reducing the need to travel, providing opportunities for renewable and low carbon energy technologies, identifying opportunities for decentralised energy and heating and through the design of new development to reduce energy demand;
 - Where significant development of agricultural land is demonstrated to be necessary, local planning authorities should seek to use areas of poorer quality land in preference to those of a higher quality; and

⁶⁵ Department for Communities and Local Government (2012) National Planning Policy Framework https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/6077/2116950.pdf

⁶⁶ Department for Communities and Local Government (2012) National Planning Practice Guidance. <http://planningguidance.communities.gov.uk/>

- It is important for local planning authorities to undertake an assessment of the transport implications in developing or reviewing their Local Plan so that a robust transport evidence base may be developed to support the preparation and/or review of that Plan.
- **Biodiversity 2020 Strategy**⁶⁷: A strategy for England's wildlife and ecosystem services, 2011: builds on the Natural Environment White Paper and set out the “strategic direction for biodiversity policy for the next decade”. Aims to halt biodiversity loss and improve the ecological networks and ecosystems for all peoples.
- **Climate Change Act 2008**⁶⁸: established a framework to develop an economically credible emissions reduction path. The Act sets targets for greenhouse gas (GHG) emission reductions through action in the UK of at least 80% by 2050, and reductions in CO2 emissions of at least 26% by 2020, against a 1990 baseline.
- **Flood and Water Management Act (2010)**⁶⁹: sets out measures to ensure that risk from all sources of flooding, not just rivers and seas, is managed more effectively. This includes: incorporating greater resilience measures into the design of new buildings; utilising the environment in order to reduce flooding; identifying areas suitable for inundation and water storage to reduce the risk of flooding elsewhere; rolling back development in coastal areas to avoid damage from flooding or coastal erosion; and creating sustainable drainage systems (SuDS).
- **Essex Biodiversity Action Plan (2011)**⁷⁰: sets targets for the protection of species and habitats in Harlow. The Plan identifies 25 species and 10 habitat types as a focus for action. The following are relevant to Harlow
 - Species: Brown hare, dormouse, otter, pipestrelle bat, water vole, bittern, grey partridge, skylark, song thrush, great crested newt, stag beetle and black poplar.
 - Habitats: Hedgerows, Ancient Woodland, old orchards, reed beds, urban habitats, natural grassland.
- **Essex Local Flood Risk Management Strategy (2013)**⁷¹: sets out what needs to be done to tackle flooding in Essex. The strategy focuses on ‘local flood risk’, assessing levels of risk from different flooding sources.
- **Essex and Suffolk Water, Water Resource Management Plan (2014)**⁷²: sets out how Essex and Suffolk Water will manage the balance between water supply and demand over a 25 year period up to 2040. Non-household demand is forecast to be lower at the end of the period than it is today and this follows the trend of the last 20 years although the rate of decline is forecast to be much more modest. It concludes that in 2040, Essex will have a demand of around 11 Mega litres per day less than today, despite a population increase of 100,000 people.
- **Essex & Southend Waste Local Plan (2001)**⁷³: Management of waste is guided by the Essex & Southend Waste Local Plan (adopted, 2001); the Replacement Waste Local Plan has been submitted for Examination and will address waste planning until 2032 including allocations for sites.
- **The Greater Essex Integrated County Strategy (2010)**⁷⁴: provides a shared vision across all local authorities in Greater Essex, identifying the priorities needed to achieve increased

⁶⁷ Defra (2011) Biodiversity 2020: A strategy for England's wildlife and ecosystem services

<https://www.gov.uk/government/publications/biodiversity-2020-a-strategy-for-england-s-wildlife-and-ecosystem-services>

⁶⁸ Climate Change Act 2008 <http://www.legislation.gov.uk/ukpga/2008/27/contents>

⁶⁹ Flood and Water Management Act (2010) <http://www.legislation.gov.uk/ukpga/2010/29/contents>

⁷⁰ Essex Biodiversity Project (2011) Essex Biodiversity Action Plan 2011 <http://www.essexbiodiversity.org.uk/biodiversity-action-plan>

⁷¹ Essex County Council & Capita Symonds (2013) Essex County Council Local Flood Risk Management Strategy available [online] <https://www.essex.gov.uk/environment%20Planning/environment/local-environment/flooding/flood-water-management-strategies/Pages/default.aspx>

⁷² Essex and Suffolk Water (2014) Water Resources Management Plan https://www.eswater.co.uk/assets/documents/ESW_Final_Published_PR14_WRMP_Report_-_V3_-_08OCT14.pdf

⁷³ Essex County Council & Southend Unitary Authority (2001) The Essex and Southend Waste Local Plan <https://www.essex.gov.uk/Environment%20Planning/Planning/Minerals-Waste-Planning-Team/Planning-Policy/Pages/Replacement-Waste-Local-Plan.aspx>

⁷⁴ Essex County Council (2014) Integrated County Strategy <http://www.essex.gov.uk/Your-Council/Strategies-Policies/Integrated-County-Strategy/Pages/Default.aspx>

economic growth. The broad strategic focus of the strategy is on the Thames Gateway, key towns and low carbon energy.

- **Greater Essex Growth and Infrastructure Framework 2016-2036 (2017)**⁷⁵: The Growth and Infrastructure Framework (GIF) is a strategic document and supporting dataset that draws together the planned population, housing and economic growth of Greater Essex. The aim is to deliver an assessment of the cumulative capital costs of infrastructure required to deliver this growth.
- **Essex Transport Strategy - the Local Transport Plan for Essex (2012)**⁷⁶: sets out the County Council's aspirations for improving travel in the county. Priorities include providing for and promoting access by sustainable modes of transport to and from development areas; improving journey times on congested routes; improving the attractiveness of cycling; and improving access to green spaces. Consideration will also need to be given to other Non-Motorised Users (NMUs) such as equestrians, as well as ensuring the connectivity and accessibility between the sustainable transport modes.
- **Harlow Open Space and Green Infrastructure Study (2012)**⁷⁷: assesses the quantity, quality and value of the open space and green infrastructure in the District. The study forms a key part of the evidence base for the emerging Local Plan and other local policies, and includes locally-derived standards for the provision of open space and recreational facilities in the area. It recommends that the approach to open space planning in the future will be on improving the quality of existing sites as well as meeting the quantitative needs of the future population.
- **Harlow Regeneration and Social Inclusion Strategy (2010)**⁷⁸: provides a framework for the Council to prioritise its own actions and activities, and to engage with and influence other relevant organisations. The strategy aims to support Harlow as a place with an economically thriving and inclusive community with the positive attributes and vibrancy of a city. The Strategy identifies the regeneration of Harlow's town centre as the Council's top corporate priority.
- **Harlow Contaminated Land Strategy (2008)**⁷⁹: sets out how land in the District which merits detailed individual inspection will be identified in an ordered, rational and efficient manner, and in what time scale.

Baseline information (environmental characteristics, problems and evolution without the plan)

Overview

Harlow District, which has a population of approximately 85,400 residents⁸⁰, is located in the west of Essex County, and is bordered by the Epping Forest District to the south, west and east; and East Hertfordshire District (in the county of Hertfordshire) to the north.

Harlow is 38km north of London and 50km south of Cambridge. It has good access to the M1 and the West Anglia Mainline railway and Stanstead Airport is located 24km to the north east. Harlow is the smallest local authority area in Essex, with a land area of 30.5sqkm.

In 1949, Fredrick Gibberd's masterplan for Harlow was established, to deliver the New Town. The current tight administrative boundary of Harlow, and subsequent small size of the District, is a legacy of the Harlow New Town designation. The masterplan was influenced by the area's distinctive landscape and environmental features, such as the River Stort in the north, the valley ridges and wooded areas in the south and other important ecological assets.

After the main town centre, there are five neighbourhood centres which have been focussed around a shopping centre with easy access to social and educational facilities, connective by a series of

⁷⁵ Essex County Council (2017) Greater Essex Growth and Infrastructure Framework.

⁷⁶ Essex County Council (2012) Local Transport Plan.

⁷⁷ Land Use Consultants (2013) Harlow Open Space and Green Infrastructure Study.

⁷⁸ Essex County Council, West Essex NHS, Harlow District Council (2010) Harlow Regeneration and Social Inclusion Strategy (2010 – 2015).

⁷⁹ Harlow District Council (2008) Statutory Contaminated Land Strategy.

⁸⁰ ONS (2011).

distributor roads together with a network of cycleways and footpaths. These were separated by a network of landscape wedges, now known as Green Wedges, which were designated to reflect the original landscape setting. The Green Wedges continue to provide amenity space for residents, habitats for wildlife, transport corridors, locations for schools and sport and community facilities.

Two industrial sites, Templefields and Pinnacles are located in the north and northwest of the District which provide the District's main employment areas. Harlow has a slightly higher percentage of working age people than the East of England with a high level of self-containment. However, residents of Harlow earn less than the County average and less than the average income of employees who work within Harlow, suggesting higher paid jobs are being filled by those living outside of Harlow.

Housing affordability in the District has been a significant problem in more recent times. People in Harlow are living longer and more live alone resulting in smaller households, increasing the need for homes irrespective of growing population. The percentage of overall housing need for 2011-33 is 67%, considerably higher than East Herts (31%), Epping Forest (34%), and Uttlesfield (27%).

The District is largely urban, however almost half of the land in Harlow is a form of open space, much of which is multi-functional, with 28% being designated as Green Wedges or Green Fingers, and 10% of the land being designated as the Metropolitan Green Belt. These are fundamental parts of the Green Infrastructure Network, linking to other open spaces and the countryside.

Harlow contains a number of locally designated and nationally designated biodiversity sites including two Sites of Special Scientific Interest. Harlow also has a rich heritage, including 10 Conservation Areas, highlighting the early architectural style and planning of the New Town.

Harlow is within close proximity to major transport corridors including the M11 in the east which stretches from London to Cambridge and beyond towards Peterborough, and provides access to Stansted Airport which lies just north of Harlow; the A10 which lies further west which runs north-south from central London to Cambridge; the M25 ring-road Motorway around London; and the A414 which provides east-west routes from Chelmsford through to St Albans.

Harlow only has two major connections to the national road network: Junction 7 on the M11, and the A414 at Burnt Mill. Junction 7 of the M11 is at capacity, and the A414 can become severely congested at peak periods.

In terms of sustainable transport options, the District has two railway stations; Harlow Town and Harlow Mill located in the north and north-east of Harlow. Cycleways are aligned with the footpath system running through Green Wedges and are extensive across the District. A number of locations in the highway network have designated bus lanes.

Air Quality

The Essex Air Quality Consortium identifies that traffic emissions are the most significant source of pollution in Harlow. The main roads in the District are the M11 and the A414. In addition, there are a number of industrial processes; the majority of these are located in the two main industrial areas of the town (Templefields (to the north) and Pinnacles (to the northwest)).

Air pollution in Harlow is considered to be generally low, and monitoring of local Air Quality has measured no exceedances of air quality objective at relevant exposure⁸¹. The Essex Air Quality Consortium state that the review and assessments to date have not identified any areas of concern or an Air Quality Management Area (AQMA). The trend across all monitored sites indicates that air quality is improving throughout Harlow.

Biodiversity

Harlow District is a predominately urban environment, however contains a number of national and local designated biodiversity sites. There are no European sites located within the District boundary. Harlow Woods Site of Scientific Interest (SSSI) is located to the south of Harlow and is made up of two units of broadleaved, mixed, and yew woodland – lowland habitat comprising three adjacent ancient semi-natural woods: Parndon Wood, Hospital Wood and Ridsen's Wood. The status of this

⁸¹ Harlow District Council (2017) Air Quality Annual Status Report.

site is unfavourable recovering (53.95%) and favourable (46.05%). Hunsdon Mead SSSI is located to the northwest of Harlow on the District's boarder. This site is a registered Common, comprising of unimproved grassland managed on the traditional ancient Lammas system of hay making followed by winter grazing. The status of this site is unfavourable recovering.

In terms of locally designated sites, there are a number of Local Wildlife Sites (LWSs) within the District, distributed in three distinct bands running east-west. There are also four Local Nature Reserves located within the District, to the north, south and east. A key habitat within Harlow area is the River Stort located along the northern border of the District. It is a wetland habitat with a wide range of wildlife species, including BAP priority habitats and species.

Harlow also contains a network of green space of particular importance to the character of the District and community-wellbeing. The Green Wedges and Green Fingers provide a series of connectable open spaces throughout the District, holding significant biodiversity value for the area.

Climate Change

The Government has set a target under the Climate Change Act 2008 to reduce CO₂ emissions by 80% by 2050, with an interim target of 34% by 2020, both against a 1990 baseline. The Government requires local planning authorities to adopt proactive strategies to mitigate and adapt to climate change and reduce the consumption of natural resources. For example, the impact of new development on climate change can be reduced by locating it where possible in places where it is not entirely necessary to rely on having access to a car; and by the design of carbon neutral homes which seek to achieve energy and water efficiency through sustainable construction and by increased use of renewable energy.

With regards to 'sustainable design and construction', the Local Plan's role is more limited, following Government's withdrawal of the Code for Sustainable Homes in March 2015. There is, however, the potential to minimise carbon emissions from the built environment by supporting decentralised, low carbon heat and electricity generation/transmission.

The Council's Carbon Management Plan (2016) shows that the 25% target reduction in its 2011 Plan has been achieved, and sets a target of reducing its operational carbon emissions by a further 25% by 2020/21 (from a baseline of 2014/15). The baseline represents 2700 tonnes CO₂ produced from Council operations including energy, waste and water usage. A target of 25% by 2020/21 will see these emissions reduced by 5% or 135 tonnes CO₂ each year.

Harlow is located within the River Stort Catchment. Tributaries of the River Stort that flow through Harlow include Harlowbury Brook, Todd Brook, Parndon Brook, Cannons Brook and Princey Brook. The Strategic Flood Risk Assessment Level 1 (2016) identifies that primary flood risk in Harlow is associated with the River Stort to the north of the town around Harlow Town station, Temple Fields north of the railway line, and south of the railway line at the A414 roundabout. These areas are located in Flood Zone 2. Some properties along Guilfords, in the east of Harlow, are also shown to be at risk from the Harlowbury Brook and are located in Flood Zone 2.

Areas identified to be at risk of surface water flooding are in the south of Harlow towards Todd Brook, and Temple Fields. Elsewhere, surface water flooding tends to be either flow paths or ponding along transport routes, or ponding of water in gardens or open land.

Community and Wellbeing

The Gibberd Masterplan for Harlow sets out self-providing neighbourhoods with strong local centres, which are separated by Green Wedges. Harlow was designed with a hierarchy of retail centres; which may now be described as: a town centre; five Neighbourhood Centres: Old Harlow, The Stow, Church Langley, Bush Fair, and Staple Tye; and 18 Hatches. Harlow has a very high population density of 36.8 people per hectare, compared to 4.7 for Essex and 4.1 for England.

In 2016, Harlow's population was recorded as being approximately 85,900 residents⁸², of which, 41,700 are male and 44,100 are female.

⁸² Nomis (2016).

In 2016, compared to the East (61.5%), Harlow had a higher proportion of residents aged 16-64 (62.9%), however this is marginally lower than that for Great Britain (63.1%). Of these people aged 16-64, 63.5% are male in Harlow, which again is higher than the figure for the East, and lower than the figure for Great Britain.⁸³ Population growth for the District is projected at 89,000 for 2020⁸⁴, an increase of 4.5%.

Less than half of all residents in Harlow are married (44.82%) which is lower than both the Essex (50.62%) and England (46.59%) figures. Harlow's proportion of residents registered in a civil partnership was recorded at 0.15% in 2011, which is comparable with the proportion of residents in the County (0.16%), however is lower than the national figure (0.23%). Harlow has a high proportion of divorcees with 10.76% being divorced in 2011. This is higher than the County figure (9.38%) and the England figure (8.97%).

The most recent 2011 census found that the majority of the population described their ethnic group as white British (83.86%), which is slightly lower than the average for Essex (90.76%) but higher than the average for England (69.75%). A further 4.16% described their ethnic group as 'Other', while 2.75% described their ethnic group as 'African'; which is considerably greater than that of Essex (0.87%) and England (1.84%).

The Indices of Multiple Deprivation (IMD) 2015 measures deprivation for seven sub-domains and also calculates an overall index score. In 2015, Harlow District was ranked 71/326 nationally, where the lowest number is the most deprived. This is significantly lower than neighbouring authorities Epping Forest (199/326), and East Hertfordshire (315/326).

At a local scale, the IMD (2015) measures how deprived a 'Lower Super Output Area (LSOA)' area (this is usually equal to or smaller than an electoral Ward) is compared with all of the other areas in the country, using a range of indicators. It then ranks them in order of deprivation with 1 being the most deprived area in the country, and 32,844 being the least deprived. There are a total of 54 Lower Super Output Areas within the District. The majority of the District experiences less deprivation than the rest of the country, according to the Indices of Deprivation (2015), with no LSOAs within the District falling within the 10% most deprived nationally.

There are, however, four LSOAs ranked within the 20% most deprived (2nd decile), and 17 LSOAs ranked within the 30% most deprived (3rd decile). These include parts of Todbrook and Nettleswell wards, which were both ranked within the 20% most deprived (2nd decile), along with parts of Mark Hall and Sumner and Kinsmoor on the south eastern edge of the District. Another two LSOAs within Mark Hall Ward fall within the 30% most deprived (3rd decile), along with two LSOAs in Nettleswell Ward, two in Harlow Common Ward, and the entirety of the Staple Tye Ward.

Pockets of deprivation have been identified within the District in relation to crime, and education and training. Particularly low levels of deprivation were identified in relation to living environment.

Overall, measures for health are good; the most recent 2011 census shows that 97.22% of Harlow's working age population had no limitations on their ability to carry out day-to-day activities. This is slightly lower than the Essex figure of 88.40%, but in line with the England figure of 87.25%. 7.54% of residents aged between 16 and 64 recorded that their day-to-day activities were limited a little which is higher than the figure recorded for Essex (6.83%) and England (7.14%).

In terms of general health, 70.08% of Harlow's population were in 'very good health' at the time of the 2011 census. This was slightly higher in Essex (74.78%) and in England (72.84%). The figures for the population in 'good health' in Harlow (55.69%) are more comparable with Essex (55.44%) and England (52.85%). Similarly, those who were recorded as being in 'very bad health' (1.88%) were comparable regionally (1.73%) and nationally (1.92%).

90.16% of Harlow's population receive no unpaid care compared with 89.51% in Essex and 89.76% in England. The highest amount of unpaid care in Harlow is between 1 and 19 hours per week (6.13%) compared with 6.94% in Essex and 6.51% in England.

⁸³ Ibid.

⁸⁴ Public Health England (2017) Harlow District Health Profile.

Economy and Employment

Harlow's economy has changed dramatically from its New Town origins. Large companies are no longer the hallmark of the economy, with 99.5% of Harlow's businesses now classified as small & medium-sized enterprises, employing less than 250 people. The vast majority of Harlow's businesses (86.9%) employ less than 10 people. Manufacturing has declined but still remains a very important element of the economy supporting 3,500 jobs.⁸⁵

Harlow has a 51 hectare Enterprise Zone (EZ), which is one of the 48 designated sites across the UK selected by Government to provide a platform for economic growth and deliver benefits for business.⁸⁶ At the heart of the London Stansted Cambridge corridor, Harlow, as a business location, is growing in significance as a location for world class knowledge-based businesses and organisations including Life Sciences (Public Health England), ICT & Digital (Arrow Electronics) and Advanced Manufacturing (Raytheon). Harlow has also experienced very strong growth in its business population and this is reflective of economic growth sectors in the wider London Stansted Cambridge Corridor (LSCC).⁸⁷

Harlow Town Centre is the only defined 'Town Centre' within the District. It is the focus for the District's comparison goods shopping, although the retail parks of Edinburgh Way also have a large comparison goods offer, which compete for spending with the Town Centre. Additionally, Harlow Town Centre has a range of employment facilities (including the Civic Centre), leisure facilities (including cinema, bowling, gyms and bingo) and three supermarkets (Tesco Metro and a large Asda store within the main centre and a large Sainsbury's to the north of the Town Centre). The centre is pedestrianised throughout and much of the 'prime pitch' retail offer is occupied by national multiple retailers, particularly in the covered Harvey Centre and the Water Gardens, a southern extension to the Town Centre which opened in 2003/4.⁸⁸

The Town Centre has been the main shopping channel for centuries, but in the face of new forms of e-tailing (i.e. online shopping) and m-tailing (shopping through mobile phones, tablets, etc.) competition, centres will need to continue to adapt in order to remain viable shopping destinations. The health check assessment for Harlow Town Centre confirms that there remains under-provision of leisure and social activities as well as traditional retailing with increased bars, restaurants, food outlets and community spaces.⁸⁹ There is also a lack of higher-end retailers in the centre; with evidence showing A1 Town Centre primary frontages have reduced from 78% in 2003 to 60% in 2017 mainly due to large store closures. Additionally, 10.5% of primary frontages and 20.5% of secondary frontages were vacant in June 2017. This may partly be a reflection of the current demographic profile of the area.⁹⁰

Harlow has a slightly higher percentage of working age people (16-64) than the East of England. Of these, 67.7% are economically active, which is higher than that of the East of England, but lower than that of England as a whole⁹¹. Currently, however, Harlow residents do not take advantage of the higher-skilled, higher-paid jobs in the Town.⁹² Residents of Harlow earn less than the county average and less than the average income of employees who work in Harlow, suggesting that higher paid jobs are being filled by those living outside of the District.

In 2011⁹³, the proportion of the District's residents with no qualifications was higher than the average for the East of England and for England as a whole. However, more of the District's residents had Level 1 and Level 2 qualifications, than the average for the East of England or the average for England as a whole. Nevertheless, there are less of the District's residents with Level 3, and Level 4 and above qualifications than the average for the East of England and for England as a whole.

⁸⁵ Harlow Council (2017) Harlow Economic Development Strategy

⁸⁶ Harlow Council (2017) Harlow Corporate Plan

⁸⁷ Ibid.

⁸⁸ Harlow Council (2017) Retail and Leisure Needs Study

⁸⁹ Harlow Council (2017) Retail and Leisure Needs Study

⁹⁰ Harlow Retail Frontages Study 2017

⁹¹ ONS (2011)

⁹² Harlow Council (2017) Harlow Economic Development Strategy

⁹³ Ibid.

Historic Environment

Harlow District is largely urban and its historical value is largely reflected in its designation as a New Town in 1947. The layout and architecture of the town is strongly linked to the concepts set out in Sir Fredrick Gibberd's Master Plan.

The District currently has ten Conservation Areas, designated for their special architectural or historic interest. There are also, 11 Scheduled Monuments, 1 Registered Park/Garden, and 168 listed buildings in Harlow. The Council has also sought to identify buildings and structures that have not been identified nationally for listing but which contribute towards the District's distinct character and historic environment.

Housing

The 2011 Census recorded over 35,800 dwellings in the District and 34,700 households. This is expected to rise to approximately 40,745 dwellings and 39,455 households by 2033.

The census also provides detailed information about occupancy, which provides a measure of whether a household's accommodation is overcrowded or under occupied. When considered by tenure, Harlow has seen a more modest increase (+21%) including a reduction in owned (-4%), but with a larger increase in private rent (+38%) and social rented (+21%).

Harlow's property prices are lower than other parts of Essex. However, the affordable housing percentage requirement in Harlow is 61%, compared to 35% in Epping Forest, 32% in East Hertfordshire and 26% in Uttlesford. The number of households on the housing register in Harlow rose from 1,900 to 3,300 over the period 2001-2014.

Land and Waste

Although the District is largely urban, 10% of the land is currently designated as being in the Metropolitan Green Belt. There are also large areas of Green Wedges and Green Fingers in Harlow, which, alongside the Green Belt, prevent neighbourhood coalescence. The Gibberd plan shaped the development of Harlow and allowed for the designation of large landscaped areas of Green Wedges to separate out neighbourhoods and compensate for small garden spaces. These remain a *"fundamental element of the network of green spaces within Harlow"*. The town also contains a Town Park and other smaller green spaces of internal open space existing within the residential and business areas of the town.

The Agricultural Land Classification (ALC) for Harlow District is that of an urban area, however; the periphery of the District and the neighbouring areas contain land of high agricultural quality (Grade 2 and Grade 3) and are of a traditional farmland character. The soil types on the periphery of the District include: surface water gleys to the southwest; pelosols to the south and east, and; water and brown soils to the northwest and northeast.

In terms of the District's Waste Performance for 2015/16, the total recycled or composted (45.3%) is lower than the authority average.⁹⁴

Landscape

National policy and legislation supports the protection and improvement of the natural environment through measures such as the development of green infrastructure networks and through habitat and species protection together with the achievement of net gains in biodiversity.

The original Harlow Master Plan utilised a 'landscape-led' approach for Harlow, which shaped the town's urban environment and linked strongly to the surrounding countryside. In addition to Green Wedges (linear open spaces) forming the urban structure of the town's neighbourhoods, and the Green Belt on the periphery of the District, the District contains large amounts of designated open space. The Town has numerous physical and visual links from the town centre to the surrounding countryside through these Green Wedges, which *"encapsulate natural features such as valleys, woods and brooks"*. The Stort River corridor separates the town from the undulating and rolling

⁹⁴ Essex Waste Partnership (2015) Essex Waste Partnership Performance Tables.

landscape to the north, and there is a pronounced north-facing ridge slope to the south of the town which “visually and physically contains the urban area from the open countryside to the south”.

In terms of landscape constraints, there are three areas designated as Special Landscape Areas within the District, which are areas that have a “special visual quality that distinguishes them from other tracts of countryside⁹⁵”. These are located in the north-western corner, south-western corner and north-eastern corner and fall within designated Green Belt land.

Harlow District is located within the National Character Area (NCA) 86: South Suffolk and North Essex Clayland. It lies in the south of this area, close to the border with the Northern Thames Basin NCA 111. NCA 86 is “Broadly flat, chalky, boulder clay plateau dissected by undulating river valley topography, particularly marked in upper valley reaches, which are much smaller in scale.”

Transport

Harlow is a regional transport node and is part of the Harlow and Stanstead/ M111 Corridor strategy area for Essex.

Harlow is located in the south of the East of England close to London, and has excellent access to the major international airport of Stansted (20 minutes away), Cambridge, London, and links to the M25 and the Channel Tunnel. Key transport routes are provided by the M11 and A414, and the local rail provides direct rail links to London via the London Liverpool Street line of the West Anglia Network. This provides direct access to London, Stansted Airport and Cambridge (with onward connections to the East Coast Mainline, Norwich and Kings Lynn). Harlow Town and Harlow Mill train stations are located in the north of the district, with the train line running west-east in the District, and there is another station located at Roydon to the west of the District. However, “while Harlow is well located in terms of proximity to Stanstead and the M11, the current strategic transport linkages are currently inadequate and compromise the original vision for transport and connectivity by Gibberd”.

The M11 and the A414 carry large volumes of traffic and have a direct influence upon the daily traffic patterns and conditions in Harlow and on the immediately adjacent highway network. The most notable area of congestion is on the routes and links to Junction 7 of the M11 (Harlow’s principal access to the strategic motorway network), but primarily on the A414 (a busy, major intra-regional highway route, serving both local traffic and longer distance through traffic connecting to the motorway network). The main highway links and junctions throughout Harlow regularly experience congestion and delay, and this is likely to get worse as car ownership continues to rise. Furthermore, the reliance on only one junction is unusual for a town of the size and character of Harlow. Other major roads include: the A1184 – provides access to Harlow and Junction 7 of the M11 (via A414) and Sawbridgeworth to the north; the A1169 – links to the A414; the B181 – runs north-south from Roydon to Epping and provides access to the A414; the B1393 – runs north-south, and; the B180.

The Harlow area also has several public footpaths and bridleways, to include Stort Valley Way and Three Forests Way, and National Cycle Route 1 runs through the area.

It should be noted that a Sustainable Transport Corridor Study for Harlow and Gilston Garden Town is currently being prepared.

Water

National policy sets out that local authorities should adopt proactive strategies in regard to climate change resilience and take full account of water supply and demand considerations. They should include local plan policies to deliver the provision of infrastructure including waste management, water supply and wastewater.

Harlow is located within an area of serious water stress, which will be exacerbated due to climate change and future growth and development.

Harlow falls into the Upper Lee catchment area and portable drinking water in the District is provided by Affinity Water. Across Affinity Water’s Central Region area, which Harlow is located in, the Water

⁹⁵ Chris Blandford Associates (2005) Harlow Area Landscape and Environment Study.

Resources Management Plan (2014) sets out water related infrastructure projects which will ensure there is not a water deficit.

Thames Water is responsible for waste water in Harlow and the surrounding area, ensuring infrastructure is in place to accommodate anticipated growth. In this context, the Rye Meads Sewage Treatment Works (STW) is currently being upgraded to increase capacity. The upgrade will provide Rye Meads STW with a treatment capacity of 447,134 Population Equivalent.

Thames Water position statement (2017) indicates that capacity in the Treatment Works is expected up to 2036; however upgrades may be required in sludge and storm streams. Further network modelling and growth review is being undertaken by Thames Water to understand sewer capacity in the area before outlining further intervention solutions. Harlow Council commissioned a Water Cycle Study Phase 1 Update and the Draft Report did not identify any issues which require further assessment by a Phase 2 study.⁹⁶

What is the situation without the Plan

There can be many factors that may influence the future of the District's baseline. In terms of biodiversity, without careful strategic planning proposed through the Plan, habitats and species have the potential to come under increased pressure from the provision of new housing, employment and infrastructure in the District, resulting in fragmented, poor quality natural environments, characterised by simplified land use, and lacking in diversity. As well as being ecologically less resilient, a landscape of disconnected fragments is also less likely to be valued by people as it lacks the aesthetic appeal, opportunities for recreation and historical and other features linked to a sense of local identity.

Habitat loss/fragmentation will be exacerbated by the effects of climate change, which has the potential to lead to changes in the distribution and abundance of species and changes to the composition and character of habitats. Climate change is anticipated to have major effects on other constraints in the District; including the extent and frequency of flooding. There is a need to take cross-cutting action through spatial planning to address flood risk, as without the Plan, the effects of climate change may be more severe and the District less well prepared through missed adaptation opportunities and unforeseen mitigation opportunities.

Strong, spatial planning also has the potential to drive forward change in terms of energy efficiency and the incorporation of renewable energy within the built environment. The District already has limited existing renewable energy and therefore without the Plan, the potential for different forms of renewable energy may not be reached, with CO₂ emissions for the District likely continuing to rise. Rising CO₂ emissions can be attributed to future transport problems, such as those relating to the existing transport linkages along the Harlow and Stanstead/ M11 corridor. Housing and employment provision has the potential to increase traffic flows without appropriate locational policies and interventions, which is likely to be a considerable issue for the District considering the high percentage of travellers to work. Areas of particular sensitivity to increased traffic flows are likely to be routes with the largest congestion issues, including the routes and links to Junction 7 on the M11 and the A414.

Existing planning policy encourages the efficient use of land and a preference for the development of brownfield land where possible. Future housing, employment and infrastructure growth is likely to result in further loss of open space and agricultural land, and may also impact on the fabric and setting of cultural heritage assets. This includes through inappropriate design and layout in the District's neighbourhood centres. It should be noted, however, that existing historic environment designations will offer a degree of protection to cultural heritage assets and their settings. New development without the Plan also has the potential to lead to incremental changes in landscape and townscape character and quality in and around the District. This includes from the loss of/damage to the three Special Landscape Areas within the District, and also through visual impact.

In terms of communities, without the Plan, Harlow's Neighbourhood Centres may fail to provide essential facilities and services within walking distance for local residents, failing to meet the requirements of 'self-sufficient' neighbourhoods. While regeneration plans for neighbourhood areas may go ahead without the Plan (for example through the direction of the Harlow Town Centre AAP),

⁹⁶ Harlow Council (April 2018) Water Cycle Study Update Draft Report. Prepared by JBA Consulting.

this may not deliver joined-up strategic thinking based upon the original Gibberd concept and town needs.

Without the Plan, issues of connectivity between Harlow and the surrounding areas may be perpetuated and there may be a lack of private investment in employment/retail provision. This may have an adverse effect on the economic prosperity of the District, and the functionality of Harlow as a sub-regional centre.

Appendix III: SA of site options

Introduction

As explained within Chapter 4 above, site options have been appraised for completeness and to help inform the development of District-wide spatial strategy alternatives.

The aim of this appendix is to:

1. explain the Council's site selection process;
2. explain the site options appraisal methodology; and then
3. present the outcomes of the site options appraisal.

Council's site selection process

The Council produced in 2014 a Strategic Housing Land Availability Assessment (SHLAA) as required by the NPPF. This assessment helps to establish realistic assumptions about the availability, suitability and the likely economic viability of land to meet the identified need for housing over the plan period.

Sites for assessment were selected from the following sources:

- Call for Sites exercise (sites put forward as part of the Call for Sites). The Council's Planning Consultation database and local knowledge was used to compile a list of bodies and individuals, including developers to contact to ascertain if they wished to promote land in their ownership for development. Forms and an explanatory letter were sent out to those parties interested;
- Potential Council assets were also identified (i.e. Sites put forward by the Council's Assets and Facilities team through the Call for Sites);
- Sites Previously Considered were evaluated (Sites which had been included in past studies, e.g. Local Plan sites, early capacity study surveys, expired permissions);
- Urban Capacity Study 2006 (Study undertaken by consultants looking at previously developed land); and
- Other Candidate Sites were considered (sites which were excluded in the other sources. These included playing fields, allotments, school sites, town park, other Green Wedge sites and open space).

The SHLAA exercise identified 369 potential sites (the majority of open land in the District), which for completeness have all been subject to appraisal through the SA process with the findings set out in Table C below. These 369 sites were subjected to a sieving process to identify land which was suitable for residential development excluding those subject to specific constraints. Initial sieving included SSSI's; flood zones etc.; land such as statutory allotments; school playing fields; and the Town Park were also discounted. In addition, a small number of sites were rejected as having no potential to deliver housing or would yield less than six dwellings. This assessment reduced the original list of 369 potential sites down to 59 developable sites.

The developable sites were considered by members of the Local Plan Panel in November 2013 along with the proposed changes to reported Green Belt and Green Wedge Study proposals (see below). The sites were scrutinised again by the Panel in December 2013.

The sites that were potentially suitable for development were identified in the public consultation on the Emerging Strategy and Further Options Consultation 2014, and associated summary leaflet. The Green Wedge and Green Belt Studies of 2014 and 2016 identified land which did not fulfil the purposes of those designations. This resulted in the identification of sites in the SHLAA that could be considered for other uses without prejudicing Green Wedge and Green Belt policies. The Green Wedges are, in particular, an important component of the original Master Plan for Harlow. The

principles of the Green Wedges were enshrined and carried forward in subsequent development plans for the District, with the following roles:

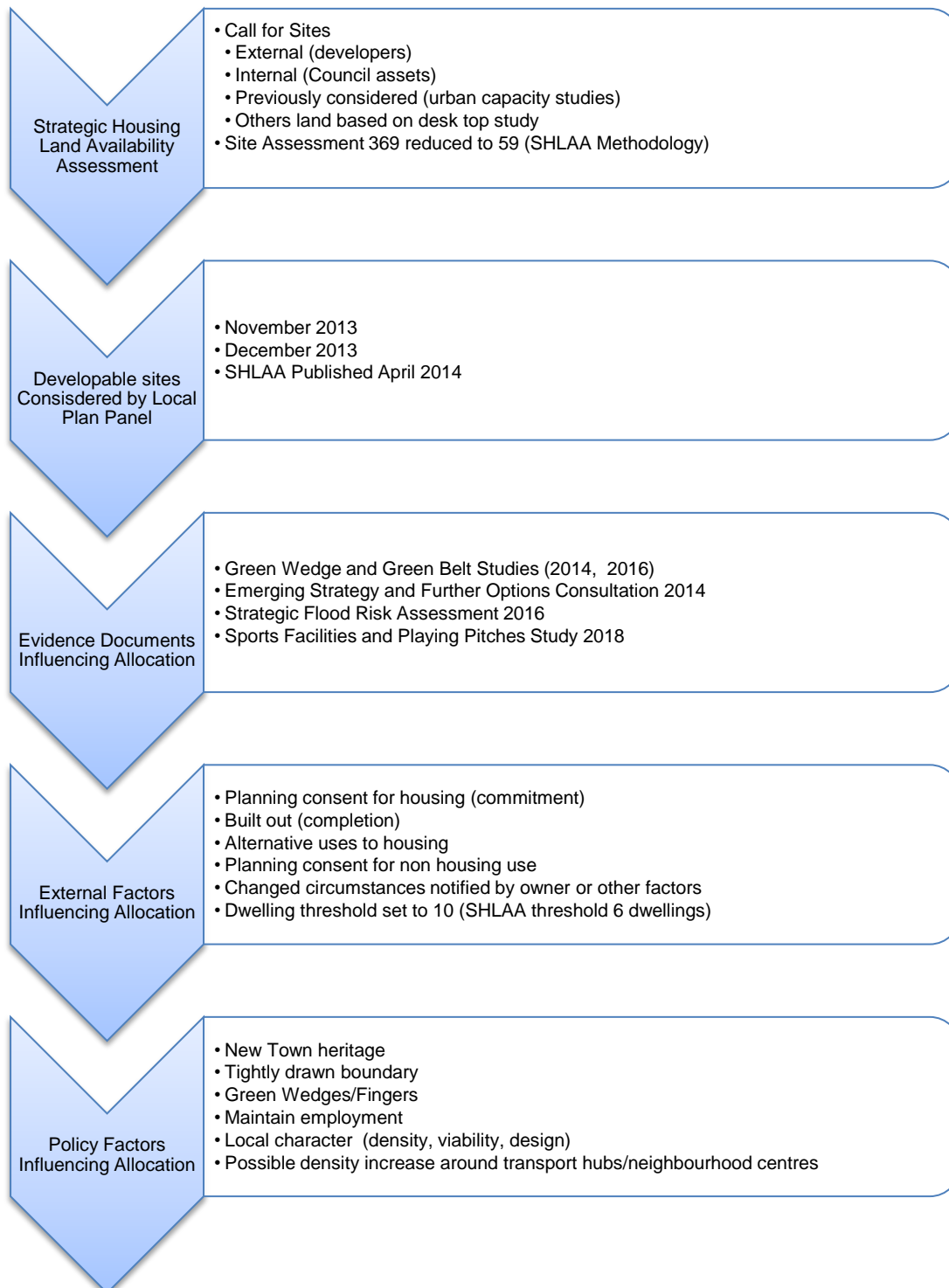
- to provide a visual and physical separation between neighbourhood clusters and between housing and industry;
- to preserve the natural features of the town, and provide natural habitats for the benefit of people and wildlife;
- to introduce a rural character to parts of the town; and
- to provide for a range of informal recreation.

These roles are strongly supported by the Council and the general public, as shown in the response to the Issues and Options Consultation in January 2011. Consequently the Green Wedges are rigorously protected by current policy and, based on the Green Wedge Review, will continue to be so in the emerging Local Development Plan. This means there is no scope for the identification of further housing sites in the District's Green Wedges.

A Strategic Flood Risk Assessment was undertaken by consultants in in 2016. One of its requirements was to assess the developable sites against the possibility of flooding. Whilst there was a small effect on a limited number of sites, none were considered ruled out because of such issues.

The Sports Facilities and Playing Pitches Study (2018) reviewed playing pitch provision in Harlow in order to inform policy development in the emerging Local Development Plan. Arising from this review and detailed assessments, no surplus play pitches were identified. Consequently no opportunity has arisen to bring forward additional housing sites on surplus playing pitches.

Following the completion of the various technical assessments, the number of potential developable sites originally considered has been reduced further either because of physical constraints or because the sites are no longer being promoted by the land owner as they are being retained for other uses. Additionally some of these sites now have the benefit of planning consent for housing development and are now regarded as a commitment or have been built out and considered a completion. These sites are still relevant, however, and contribute to the overall housing land supply. Other sites have been excluded due to a variety of factors. The site may have become unavailable since previous consultations due to alternative uses being put forward by the land owner or planning permission has been obtained for an alternative use, or because of changed circumstances as indicated by the site owner. The dwelling number threshold for allocations was set at 10 dwellings which then excluded developable sites below that threshold. The figure below sets out the process:



Overall the District's New Town heritage has restricted options for major growth beyond that identified for allocation. The tightly drawn District boundary and the essential Green Wedges which are a key spatial element of the character of the Garden Town, reduce the opportunity of reasonable housing site options being identified. Evidence suggests that there is a need to maintain existing employment areas to meet future employment needs in Harlow which effectively rules out such locations being considered for housing.

Developing the appraisal methodology

Given the number of site options and limited site-specific data availability it was not possible to simply discuss ('qualitative analysis') the merits of each site option under the SA framework (i.e. take an approach to analysis as per that taken to the appraisal of spatial strategy options - see **Appendix IV**).⁹⁷

As such, work was undertaken to develop a methodology suited to site options appraisal, whilst also reflecting the SA framework as best as possible. The methodology essentially involved employing GIS data-sets, and measuring ('quantitative analysis') how each site option related to various constraint and opportunity features.

Two GIS tools were used to undertake the appraisal of site options depending on the feature and measurements required. These provided either a:

- Straight line distance from a feature to a site option and percentage overlap of any features within a site option. Measurements were taken from the closest boundary of the site option and the feature.
- or
- Distances calculated from a site option to a feature along a real world network of roads and urban footpaths using Ordnance Survey Integrated Transport Network. The network analyst tool helps to provide approximate real world walking distances. Measurements are taken from the boundary of the site where it is within 20m of the road/ footpath network and is therefore assumed to have access.

The site options appraisal methodology is presented in **Table A** below. It sets out the criteria and thresholds as well as the GIS tool used and provides further commentary as necessary. The table recognises data limitations. It is important to be clear that the aim of categorising the performance of site options is to aid differentiation, i.e. to highlight instances of site options performing relatively well/ poorly. The intention is not to indicate a 'significant effect'.⁹⁸

⁹⁷ Qualitative analysis of site options would only have been possible were time/resources available to generate data/understanding for all site options through site visits and discussion with promoters. Without this data/understanding, any attempt at qualitative analysis would have led to a risk of bias (e.g. sites that are being proactively promoted may have been found to perform favourably).

⁹⁸ Whilst Regulations require that the SA process identifies and evaluates significant effects of the draft plan and reasonable alternatives, there is no assumption that significant effects must be identified and evaluated for all site options considered. See Part 1 of this report for a discussion of how reasonable alternatives have been considered through the Harlow Local Plan / SA process, and in particular see Chapter 6 for an appraisal of the reasonable alternatives at the current time.

Table A: Site options appraisal methodology

Criteria	'RAG' rules	Data and measurement	Commentary
Intersects with a flood zone?	<p>R = > 50% intersects with Flood risk zone 2 or 3</p> <p>A = < 50% intersects with Flood risk zone 2 or 3</p> <p>G = Flood risk zone 1</p>	Data provided by the Environment Agency. Straight line distance/ overlap measurement.	This criterion will help to identify sites that fall within high flood risk areas. N.B. While it is important to avoid development in flood zones, there is the potential to address flood risk at the development management stage, when a 'sequential approach' can be taken to ensure that uses are compatible with flood risk. There is also the potential to design-in Sustainable Drainage Systems (SuDS).
Proximity to a Special Protection Area, Special Area of Conservation or Ramsar site?	<p>A = <4km</p> <p>G = >4km</p>	Data provided by Natural England and includes sites lying outside of the District. Straight line distance/ overlap measurement.	It is recognised that distance in itself is not a definitive guide to the likelihood or significance of effects on a European site. This will be dependent on a variety of information, some of which is not available at this stage, such as the precise scale, type, design and layout of development as well as level of mitigation to be provided. It is also important to note that the Local Plan will be subject to Habitats Regulations Assessment and this will consider the likelihood of proposed development having a significant effect on European sites.
Proximity to a Site of Special Scientific Interest (SSSI)?	<p>R = <200m</p> <p>A = 200 - 800m</p> <p>G = >800m</p>	Data provided by Natural England and includes sites lying outside of the District. Straight line distance/ overlap measurement.	The data for SSSIs is provided by NE and includes sites lying outside of the Borough. NE has defined SSSI Impact Risk Zones for SSSIs. They define zones around each site which reflect the particular sensitivities of the features for which it is notified and indicate the types of development proposal which could potentially have adverse impacts. Given the presence of SSSIs within and surrounding the Borough impact risk zones cover the majority of the plan area. The RAG distances have been selected to take account of this and help differentiate between the sites options. It is recognised that distance in itself is not a definitive guide to the likelihood or significance of effects on a SSSI. This will be dependent on a variety of information, some of which is not available at this stage, such as the precise scale, type, design and layout of development as well as level of mitigation to be provided.
Proximity to a Local Wildlife Site?	<p>R = Includes or is adjacent</p> <p>A = <50m</p> <p>G = >50m</p>	Data provided by Harlow Council and does not include sites lying outside of the District. Straight line distance/ overlap measurement.	The data for Local Wildlife Sites (LWS) has been provided by Harlow Council and does not include LWS lying outside the District. There are a number of LWS situated within the District and the RAG distances reflect this along with the assumption that these are of less significance and therefore less sensitive than European sites / SSSIs.
Proximity to a Local Nature Reserve	<p>R = Includes or is adjacent</p> <p>A = <50m</p> <p>G = >50m</p>	Data provided by Harlow Council and includes sites lying outside of the District. Straight line distance/ overlap measurement.	There are a number of Local Nature Reserves (LNRs) situated within and around the District and the RAG distances reflect this along with the assumption that these are of less significance and therefore less sensitive than European sites / SSSIs.
Intersects with a priority habitat?	<p>A = Intersects</p> <p>G = Does not intersect</p>	Data provided by Natural England. Straight line distance/ overlap measurement.	Highlights those site options that contain priority habitat.

Criteria	'RAG' rules	Data and measurement	Commentary
Proximity to a Conservation Area?	R = Intersects or is adjacent A = <50m G = >50m	Data provided by Harlow Council and does not include features outside the District. Straight line distance/ overlap measurement.	It is appropriate to 'flag' a red where a site is within, intersects or is adjacent to a Conservation Area. It is also appropriate to flag sites that might more widely impact on the setting of a Conservation Area and a 50m threshold has been assumed. It is recognised that distance in itself is not a definitive guide to the likelihood or significance of effects on a heritage asset. It is also recognised that the historic environment encompasses more than just designated heritage assets. Whilst there is good potential to highlight where development in proximity to a heritage asset might impact negatively on that asset, or its setting, a limitation relates to the fact that it has not been possible to gather views from heritage specialists on sensitivity of assets / capacity to develop each of the sites. This is a notable limitation as potential for development to conflict with the setting of historic assets / local historic character can only really be considered on a case-by-case basis rather than through a distance based criteria. It will also sometimes be the case that development can enhance heritage assets. The likely effects of the draft plan, including reasonable alternatives, on the historic environment has been considered in Parts 1 and 2 of the main SA Report.
Proximity to a Historic Park or Garden?	R = Intersects or is adjacent A = <50m G = >50m	Data provided by Historic England and includes assets lying outside of the District. Straight line distance/ overlap measurement.	As above.
Proximity to a Scheduled Monument?	R = Intersects or is adjacent A = <50m G = >50m	Data provided by Historic England and includes assets lying outside of the District. Straight line distance/ overlap measurement.	As above.
Proximity to a listed building?	R = Intersects or is adjacent A = <50m G = >50m	Data provided by Historic England and includes assets lying outside of the District. Straight line distance/ overlap measurement.	As above.
Proximity to an existing employment area?	R = >800m A = 400-800m G = <400m	Data provided by Harlow Council and does not include features outside the District. Network analyst measurement.	Highlights walking distance to strategic employment areas. There is no clear guidance on distance thresholds, and it is recognised that these facilities will often be reached by car or public transport. The thresholds therefore reflect the spread of the data.
Proximity to the town centre?	R = >800m A = 400-800m G = <400m	Data provided by Harlow Council. Network analyst measurement.	Highlights walking distance to the town centre. There is no clear guidance on distance thresholds, and it is recognised that neighbourhood centres will often be reached by car or public transport. The thresholds therefore reflect the spread of the data.
Proximity to a	R = >800m	Data provided by Harlow Council	Highlights walking distance to neighbourhood centres. There is no clear guidance on

Criteria	'RAG' rules	Data and measurement	Commentary
neighbourhood centre?	A = 400-800m G = <400m	and does not include features outside the District. Network analyst measurement.	distance thresholds, and it is recognised that neighbourhood centres will often be reached by car or public transport. The thresholds therefore reflect the spread of the data.
Proximity to a shopping area?	R = >800m A = 400-800m G = <400m	Data provided by Harlow Council and does not include features outside the District. Network analyst measurement.	Highlights walking distance to a shopping area. There is no clear guidance on distance thresholds, and it is recognised that shopping areas will often be reached by car or public transport. The thresholds therefore reflect the spread of the data.
Proximity to a school?	R = >800m A = 400-800m G = <400m	Data provided by Harlow Council includes features outside the District. Network analyst measurement.	Highlights walking distance to a school. Department for Transport guidance ⁹⁹ suggests 800m as a walkable distance for those accessing community facilities.
Proximity to a Doctor or Health Centre?	R = >800m A = 400-800m G = <400m	Data provided by Harlow Council and includes features outside the District. Network analyst measurement.	Highlights walking distance to a Doctor or Health Centre. Department for Transport guidance ¹⁰⁰ suggests 800m as a walkable distance for those accessing community facilities.
Proximity to a sports and health facility?	R = >800m A = 400-800m G = <400m	Data provided by Harlow Council and does not include features outside the District. Network analyst measurement.	Highlights walking distance to a leisure centre. Department for Transport guidance ¹⁰¹ suggests 800m as a walkable distance for those accessing community facilities.
Proximity to a playground?	R = >800m A = 400-800m G = <400m	Data provided by Harlow Council and does not include features outside the District. Network analyst measurement.	Highlights walking distance to a playground. Department for Transport guidance ¹⁰² suggests 800m as a walkable distance for those accessing community facilities.
Proximity to an allotment?	R = >800m A = 400-800m G = <400m	Data provided by Harlow Council and does not include features outside the District. Network analyst measurement.	Highlights walking distance to an allotment. Department for Transport guidance ¹⁰³ suggests 800m as a walkable distance for those accessing community facilities.
Proximity to a bus stop?	R = >400m G = <400m	Data provided by Harlow Council and does not include features outside the District. Network	Highlights walking distance to a bus stop. Department for Transport guidance ¹⁰⁴ suggests 400m as a walkable distance for those accessing a bus stop.

⁹⁹ WebTag (December 2015) Unit A4.2 paragraph 6.4.5, Department for Transport

¹⁰⁰ Ibid.

¹⁰¹ Ibid.

¹⁰² Ibid.

¹⁰³ Ibid.

¹⁰⁴ Ibid.

Criteria	'RAG' rules	Data and measurement	Commentary
		analyst measurement.	
Proximity to a train station?	A = >800m G = <800m	Data provided by Harlow Council and does not include features outside the District. Network analyst measurement.	Highlights walking distance to a train station. Department for Transport guidance ¹⁰⁵ does not suggest a walkable distance for a train station so it is assumed that 800m is appropriate. This is in line with what is suggested for access to community facilities.
Proximity to a public right of way (PRoW)?	A = >50m G = <50m	Data provided by Harlow Council and does not include features outside the District. Straight line distance/ overlap measurement.	Highlights the proximity of site options to PRoW. Where a PRoW falls within a site it is assumed that this can be retained or an alternative route provided to ensure that links are not severed. It is also assumed that the closer a development is to a PRoW the more likely there is for an opportunity to enhance.
Proximity to a cycle route?	A = >50m G = <50m	Data provided by Harlow Council and does not include features outside the District. Straight line distance/ overlap measurement.	Highlights the proximity of site options to a cycle route. Where a cycle route falls within a site it is assumed that this can be retained or an alternative route provided to ensure that links are not severed. It is also assumed that the closer a development is to a cycle route the more likely there is for an opportunity to enhance.
Is the site within an area that suffers from problems of overall deprivation?	R = Site does not intersect with an 'output area' that is relatively deprived A = Any of the site intersects with an 'output area' that is relatively deprived i.e. in the 20-40% (2nd quintile) most deprived in the district. G = Any of the site intersects with an 'output area' that is relatively deprived (i.e. in the 0-20% (1st quintile) most deprived in the district	Data provided by Department for Communities and Local Government. Straight line distance/ overlap measurement.	Highlights site options that fall within an area of deprivation. Development in an area of relative deprivation (as measured by the Index of Multiple Deprivation) may support regeneration. However, it is recognised that this will be dependent on a variety of factors, including the level of improvements delivered in terms of community facilities.

¹⁰⁵ Ibid.

Appraisal findings

Table B and C present appraisal findings in relation to the site options and allocations that have been a focus of plan-making. Specifically, the tables present an appraisal of the site options/ allocations in terms of the 24 appraisal criteria (Table A), with performance categorised on a simple 'RAG' scale.

Table B: Housing and Employment Allocations

Site Ref	Location	Flood zone	SAC/ SPA /Ramsar	SSSI	Local Wildlife Site	Local Nature Reserve	Priority Habitat	Conservation area	Historic P or G	Scheduled M	Listed building	Employment area	Town centre	Neighbourhood Centre	Shopping area	School	GP/health centre	Sports and Health Facility	Playground	Allotment	Bus stop	Train station	Public Rights of Way (PRoW)	Cycle Route
HS2-1	Princess Alexandra Hospital	Green	Green	Green	Green	Green	Yellow	Green	Green	Red	Red	Yellow	Green	Red	Green	Green	Green	Yellow	Green	Green	Green	Yellow	Green	Green
HS2-2	The Stow Service Bays	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Red	Red	Green	Yellow	Red	Yellow	Yellow	Green	Green	Yellow	Yellow	Yellow
HS2-3	Land east of Katherines Way, west of Deer Park	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Red	Red	Yellow	Green	Yellow	Yellow	Green	Green	Green	Yellow	Green	Green
HS2-4	Lister House, Staple Tye Mews, Staple Tye Depot and the Gateway Nursery	Green	Green	Yellow	Yellow	Green	Green	Green	Green	Green	Green	Green	Red	Green	Yellow	Green	Green	Green	Green	Yellow	Green	Yellow	Green	Green
HS2-5	Land south of Clifton Hatch	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Red	Red	Green	Green	Red	Yellow	Green	Yellow	Green	Yellow	Green	Green
HS2-6	Riddings Lane	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Red	Red	Red	Green	Red	Yellow	Green	Green	Red	Yellow	Yellow	Yellow
HS2-7	Kingsmoor Recreation Centre	Green	Green	Yellow	Red	Green	Yellow	Green	Green	Green	Green	Red	Red	Red	Yellow	Yellow	Yellow	Green	Green	Red	Red	Yellow	Yellow	Yellow
HS2-8	The Evangelical Lutheran Church, Tawneys Road	Green	Green	Green	Green	Green	Green	Yellow	Green	Green	Green	Green	Red	Green	Red	Yellow	Green	Green	Green	Green	Green	Yellow	Green	Green

Site Ref	Location	Flood zone	SAC/ SPA /Ramsar	SSSI	Local Wildlife Site	Local Nature Reserve	Priority Habitat	Conservation area	Historic P or G	Scheduled M	Listed building	Employment area	Town centre	Neighbourhood Centre	Shopping area	School	GP/health centre	Sports and Health Facility	Playground	Allotment	Bus stop	Train station	Public Rights of Way (PROW)	Cycle Route
HS2-9	Land east of 144-154 Fennells	Green	Green	Red	Red	Red	Yellow	Green	Green	Green	Green	Red	Red	Red	Green	Yellow	Red	Green	Green	Red	Green	Yellow	Green	Green
HS2-10	Pollard Hatch plus garages and adjacent land	Yellow	Green	Green	Green	Green	Green	Green	Green	Green	Yellow	Red	Red	Red	Green	Green	Red	Yellow	Green	Green	Green	Yellow	Yellow	Yellow
HS2-11	Land between Second Avenue/St. Andrews Meadow	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Yellow	Red	Green	Yellow	Green	Green	Yellow	Green	Yellow	Green	Yellow	Yellow	Yellow
HS2-12	Coppice Hatch and garages	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Red	Red	Green	Green	Red	Yellow	Green	Green	Green	Yellow	Yellow	Yellow
HS2-13	Sherards House	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Red	Red	Green	Green	Red	Green	Green	Green	Green	Yellow	Yellow	Yellow
HS2-14	Elm Hatch and public house	Green	Green	Green	Red	Green	Green	Red	Green	Yellow	Yellow	Red	Red	Red	Green	Yellow	Red	Yellow	Yellow	Green	Green	Yellow	Yellow	Yellow
HS2-15	Playground west of 93 – 100 Jocelyns	Green	Green	Green	Green	Green	Yellow	Green	Green	Green	Green	Yellow	Red	Green	Red	Yellow	Green	Yellow	Green	Red	Green	Yellow	Green	Yellow
HS2-16	Fishers Hatch	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Yellow	Red	Green	Green	Yellow	Red	Green	Green	Green	Yellow	Yellow	Yellow
HS2-17	Slacksbury Hatch and associated garages	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Yellow	Red	Green	Green	Yellow	Green	Green	Green	Green	Yellow	Yellow	Yellow
HS2-18	Garage blocks adjacent to Nicholls Tower	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Red	Red	Green	Yellow	Red	Green	Green	Green	Green	Yellow	Yellow	Green
HS2-19	Stewards Farm	Green	Green	Yellow	Green	Green	Green	Green	Green	Green	Red	Red	Red	Red	Green	Green	Red	Yellow	Green	Green	Green	Yellow	Green	Green
HS2-20	Land between Barn Mead and Five Acres	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Red	Yellow	Yellow	Green	Red	Green	Green	Yellow	Green	Yellow	Green	Green

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HS2-21	Pypers Hatch	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Red	Yellow	Green	Yellow	Green	Red	Green	Green	Green	Yellow	Yellow	Yellow
HS3	Strategic Site to the East of Harlow (north)	Green	Green	Green	Red	Green	Yellow	Green	Green	Green	Yellow	Red	Red	Red	Red	Yellow	Red	Green	Yellow	Yellow	Green	Yellow	Green	Yellow
HS3	Strategic Site to the East of Harlow (south)	Green	Green	Green	Red	Green	Green	Green	Green	Green	Yellow	Red	Red	Red	Red	Green	Red	Green	Yellow	Yellow	Green	Yellow	Green	Yellow
ED1-01	Harlow Business Park, The Pinnacles	Green	Yellow	Yellow	Green	Green	Green	Green	Green	Green	Green	Green	Red	Red	Yellow	Red	Red	Red	Red	Red	Red	Yellow	Yellow	Yellow
ED-02	London Road	Green	Green	Green	Red	Green	Yellow	Green	Green	Green	Green	Green	Red	Green	Red	Yellow	Green	Yellow	Green	Yellow	Green	Yellow	Green	Green
ED1-03	East Road, Templefields	Green	Green	Green	Green	Green	Yellow	Yellow	Green	Green	Green	Green	Red	Red	Yellow	Yellow	Red	Yellow	Yellow	Yellow	Green	Yellow	Yellow	Yellow

Table C: SHLAA site options

Site Ref	Location	Flood zone	SAC/ SPA /Ramsar	SSSI	Local Wildlife Site	Local Nature Reserve	Priority Habitat	Conservation area	Historic P or G	Scheduled M	Listed building	Employment area	Town centre	Neighbourhood Centre	Shopping area	School	GP/health centre	Sports and Health Facility	Playground	Allotment	Bus stop	Train station	Public Rights of Way (PRoW)	Cycle Route
1	The Angle	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Green	Red	Yellow	Yellow	Green	Yellow	Yellow	Green	Green	Yellow	Yellow	Green
126	Land at Latton Farm west of Puffers Green	Green	Green	Green	Red	Green	Yellow	Red	Green	Green	Yellow	Red	Red	Red	Yellow	Yellow	Yellow	Green	Green	Green	Green	Yellow	Green	Green
127	Land adjacent to Latton Farm Buildings, Puffers Green	Green	Green	Green	Green	Green	Green	Red	Green	Green	Yellow	Red	Red	Yellow	Yellow	Yellow	Red	Green	Green	Green	Green	Yellow	Green	Green
128	Land south of Markhall Wood, north Puffers Green	Green	Green	Green	Red	Green	Yellow	Red	Green	Green	Yellow	Red	Red	Red	Yellow	Red	Red	Yellow	Yellow	Green	Green	Yellow	Green	Green
129	Land south of Nortel car park	Green	Green	Green	Green	Green	Yellow	Green	Green	Green	Green	Green	Red	Green	Red	Yellow	Yellow	Red	Yellow	Green	Green	Yellow	Green	Green
130	Ladyshot Playing Field	Green	Green	Green	Red	Green	Yellow	Green	Green	Green	Green	Red	Red	Red	Green	Red	Red	Red	Green	Yellow	Green	Yellow	Yellow	Yellow
131	Land at junction Momples Rd./First Ave (east)	Green	Green	Green	Green	Green	Green	Yellow	Green	Green	Green	Yellow	Red	Yellow	Yellow	Yellow	Red	Yellow	Green	Green	Green	Yellow	Green	Green
132	Land at junction Momples Rd./First Ave (west)	Green	Green	Green	Green	Green	Green	Yellow	Green	Green	Green	Yellow	Red	Green	Yellow	Yellow	Yellow	Yellow	Green	Green	Green	Yellow	Green	Green
133	Mark Hall Park, Muskham Rd.	Green	Green	Green	Green	Green	Yellow	Red	Green	Green	Yellow	Green	Red	Green	Green	Green	Yellow	Green	Green	Green	Green	Yellow	Green	Green
134	Land north of Bromley Close	Green	Green	Green	Green	Green	Yellow	Yellow	Green	Green	Green	Green	Red	Red	Yellow	Yellow	Red	Yellow	Yellow	Green	Green	Yellow	Yellow	Yellow
135	Land between Fern Hill Lane and Hilly Field	Green	Green	Green	Green	Green	Yellow	Green	Green	Green	Green	Red	Red	Red	Yellow	Green	Red	Yellow	Green	Green	Green	Yellow	Green	Yellow
136	Land North of Sakins Croft	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Green	Yellow	Yellow	Green	Green	Green	Green	Green	Yellow	Yellow	Yellow

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137	Playing Field east of Five Acres north of Southern Way																							
138	Land between Aylets Field and Latton Bush Centre																							
139	Barn Mead Playing Field																							
14	Purford Green School																							
140	Land between Church Leys and Tillwicks Rd.																							
141	Playing Field south of Second Ave, west of Tillwicks Rd.																							
143	Landjunction of Second Ave/Howard Way south of Long Ley																							
144	Land west of 31,32 Rye Hill Rd.																							
145	Land west of Rye Hill reservoir																							
146	Land south of Parndon Wood Crematorium and Parndon Wood																							
147	Land rear of 1-20 Rye Hill Rd.																							
148	Land south of Hospital Wood																							
149	Playing field south of Fennels																							

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150	Field to rear of 57-60 Fennels																							
151	Sports field west of Thurstons and Fennels																							
152	Field to rear of 98-117 Markwell Wood																							
153	Land adjacent to 97 Markwell Wood																							
154	Sports field east of Markwell Wood																							
155	Playing field to the east of Shawbridge																							
156	Land south of Third Ave.north of former Passmores school																							
157	Land north east of Passmores House																							
158	Land south of Passmores House, north of Willowfield																							
159	land west of Passmores House, east of Abercrombie Way																							
160	Land at the junction of Third Ave./Abercrombie Way																							
162	Land west of Hester House off Hodings Rd.																							
163	Land north of Parsloe Rd.east of Standingford																							

Site Ref	Location	Flood zone	SAC/ SPA /Ramsar	SSSI	Local Wildlife Site	Local Nature Reserve	Priority Habitat	Conservation area	Historic P or G	Scheduled M	Listed building	Employment area	Town centre	Neighbourhood Centre	Shopping area	School	GP/health centre	Sports and Health Facility	Playground	Allotment	Bus stop	Train station	Public Rights of Way (PROW)	Cycle Route
164	Recreation ground west of the Maples & Burnett Park	Green	Green	Yellow	Yellow	Green	Green	Green	Green	Green	Green	Red	Red	Red	Yellow	Yellow	Red	Green	Yellow	Red	Green	Yellow	Green	Green
165	Playground and land west of Burnett Wood	Green	Green	Yellow	Red	Green	Yellow	Green	Green	Green	Yellow	Red	Red	Red	Yellow	Yellow	Yellow	Green	Green	Red	Red	Yellow	Green	Yellow
166	Land to the east of Mallows Green	Green	Green	Yellow	Yellow	Green	Green	Green	Green	Green	Green	Red	Red	Red	Green	Green	Green	Red	Green	Red	Green	Yellow	Green	Green
167	Land east of Sumners Leisure Centre	Green	Green	Yellow	Yellow	Green	Green	Green	Green	Green	Green	Red	Red	Red	Green	Green	Green	Red	Green	Yellow	Green	Yellow	Green	Yellow
168	Land east of Dunstalls & Sycamore Field	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Red	Red	Yellow	Yellow	Yellow	Yellow	Green	Green	Green	Yellow	Yellow	Yellow
169	Sports ground west of 48-57,59 and 81 Millwards	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Red	Red	Green	Green	Green	Red	Green	Yellow	Green	Yellow	Yellow	Yellow
17	Northbrooks house and grounds	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Yellow	Red	Yellow	Yellow	Red	Green	Yellow	Yellow	Green	Yellow	Yellow	Yellow
170	Land between Tithlands and Water Lane	Green	Yellow	Green	Green	Green	Green	Green	Green	Green	Green	Red	Red	Red	Yellow	Yellow	Yellow	Red	Green	Yellow	Green	Yellow	Green	Green
173	Land east of Harlow Business Centre	Yellow	Green	Green	Red	Green	Yellow	Green	Green	Green	Green	Yellow	Red	Red	Red	Red	Red	Red	Yellow	Yellow	Red	Yellow	Green	Green
174	Jean McAlpine park	Green	Yellow	Green	Yellow	Green	Yellow	Green	Green	Green	Green	Yellow	Red	Red	Yellow	Red	Yellow	Red	Yellow	Yellow	Green	Yellow	Yellow	Yellow
175	Land at Junction Parkway/Roydon Rd.	Green	Yellow	Yellow	Green	Green	Green	Green	Green	Green	Green	Green	Red	Red	Yellow	Red	Red	Red	Red	Red	Red	Yellow	Yellow	Yellow
176	Playing field west of Foldcroft south of Canons Brook Club House	Yellow	Yellow	Green	Green	Green	Green	Green	Green	Green	Red	Red	Red	Red	Yellow	Yellow	Yellow	Red	Green	Green	Green	Yellow	Yellow	Yellow
177	Land south of 89-94 Canons Gate	Green	Green	Green	Green	Green	Green	Green	Green	Green	Yellow	Red	Red	Red	Green	Yellow	Yellow	Red	Green	Green	Green	Yellow	Yellow	Yellow

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178	Ram Gorse Playing field	Yellow	Green	Green	Red	Green	Yellow	Green	Green	Green	Green	Green	Red	Red	Yellow	Yellow	Yellow	Red	Yellow	Green	Green	Yellow	Green	Green
179	Land around Roydon Lea Farm	Yellow	Yellow	Red	Yellow	Green	Yellow	Green	Green	Green	Yellow	Yellow	Red	Red	Red	Red	Red	Red	Red	Red	Red	Yellow	Green	Yellow
18	North of Fern Hill Lane Caravan Park	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Red	Red	Yellow	Yellow	Red	Yellow	Yellow	Green	Red	Yellow	Yellow	Yellow
180	Katherines School	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Yellow	Red	Red	Green	Green	Red	Red	Green	Green	Green	Yellow	Yellow	Yellow
181	Milwards	Green	Green	Yellow	Green	Green	Green	Green	Green	Green	Green	Yellow	Red	Red	Yellow	Green	Yellow	Yellow	Green	Red	Green	Yellow	Yellow	Yellow
182	Kingsmoor	Green	Green	Yellow	Green	Green	Green	Green	Green	Green	Yellow	Green	Red	Yellow	Green	Green	Yellow	Yellow	Green	Red	Green	Yellow	Yellow	Yellow
183	Stewards	Green	Green	Yellow	Red	Green	Yellow	Green	Green	Green	Green	Green	Red	Green	Green	Green	Green	Green	Green	Green	Green	Yellow	Yellow	Green
184	Moorfields	Green	Green	Red	Red	Green	Yellow	Green	Green	Green	Green	Yellow	Red	Yellow	Green	Green	Yellow	Yellow	Green	Yellow	Green	Yellow	Green	Green
185	Longwood	Green	Green	Yellow	Green	Green	Green	Green	Green	Green	Green	Yellow	Red	Yellow	Green	Green	Yellow	Green	Green	Green	Green	Yellow	Yellow	Yellow
186	Commonside	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Red	Red	Yellow	Green	Red	Green	Green	Green	Green	Yellow	Yellow	Yellow
187	Latton Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Red	Red	Yellow	Green	Yellow	Yellow	Green	Green	Green	Yellow	Yellow	Yellow
188	Potter St.	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Red	Red	Green	Green	Green	Yellow	Green	Green	Green	Yellow	Yellow	Yellow
189	Pear Tree Mead	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Yellow	Red	Yellow	Green	Green	Yellow	Yellow	Green	Yellow	Green	Yellow	Yellow	Yellow

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19	Rear garden 1 Churchgate St.	Green	Green	Green	Green	Green	Green	Red	Green	Green	Yellow	Red	Red	Red	Red	Yellow	Red	Yellow	Green	Green	Green	Yellow	Green	Green
190	Henry Moore	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Yellow	Red	Yellow	Red	Yellow	Red	Red	Yellow	Red	Green	Yellow	Yellow	Green
191	Church Langley School	Green	Green	Green	Yellow	Green	Green	Green	Green	Green	Green	Green	Red	Green	Red	Green	Green	Red	Green	Yellow	Green	Yellow	Yellow	Yellow
192	Purford Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Yellow	Red	Yellow	Green	Green	Yellow	Green	Green	Green	Green	Yellow	Yellow	Yellow
193	William Martin	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Yellow	Red	Yellow	Yellow	Yellow	Yellow	Green	Yellow	Green	Green	Yellow	Green	Green
194	Harlow Fields	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Red	Red	Green	Green	Red	Green	Yellow	Yellow	Green	Yellow	Yellow	Yellow
195	Passmores	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Red	Red	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Green	Yellow	Yellow	Yellow
196	Abbotsweld	Green	Green	Green	Yellow	Green	Green	Green	Green	Green	Green	Red	Red	Red	Green	Green	Red	Green	Yellow	Yellow	Green	Yellow	Yellow	Yellow
197	St. Lukes	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Yellow	Red	Yellow	Yellow	Green	Yellow	Yellow	Green	Green	Green	Yellow	Green	Green
198	Jerounds	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Red	Red	Green	Green	Red	Green	Yellow	Yellow	Green	Yellow	Yellow	Yellow
199	Hare St. Community	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Yellow	Red	Green	Green	Yellow	Green	Green	Yellow	Green	Yellow	Yellow	Yellow
2	6 Broomfield	Green	Green	Green	Green	Green	Green	Red	Green	Green	Green	Green	Red	Yellow	Yellow	Yellow	Red	Yellow	Yellow	Green	Red	Yellow	Yellow	Yellow
200	The Downs	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Green	Red	Yellow	Yellow	Red	Red	Yellow	Yellow	Red	Yellow	Yellow	Yellow

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201	The Spinney	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Red	Yellow	Red	Green	Yellow	Red	Yellow	Yellow	Red	Yellow	Yellow	Yellow
202	Mark Hall	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Yellow	Red	Yellow	Red	Yellow	Yellow	Yellow	Green	Yellow	Green	Green
203	St Nicholas School	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Red	Red	Red	Yellow	Red	Yellow	Yellow	Yellow	Green	Yellow	Yellow	Yellow
204	Churchgate Primary School	Green	Green	Green	Green	Green	Green	Red	Green	Green	Yellow	Red	Red	Red	Red	Yellow	Red	Green	Yellow	Yellow	Green	Yellow	Yellow	Yellow
205	Harlowbury	Green	Green	Green	Green	Green	Green	Red	Green	Red	Green	Red	Red	Yellow	Red	Green	Yellow	Yellow	Yellow	Green	Green	Yellow	Yellow	Yellow
206	Fawbert and Barnard School	Green	Green	Green	Green	Green	Green	Green	Green	Green	Yellow	Red	Red	Green	Red	Green	Yellow	Green	Yellow	Green	Green	Yellow	Green	Green
207	Tanys Dell School	Green	Green	Green	Green	Green	Yellow	Red	Green	Green	Green	Green	Red	Yellow	Green	Green	Red	Green	Green	Green	Green	Yellow	Green	Green
208	St. Albans School	Green	Green	Green	Green	Green	Green	Green	Green	Green	Yellow	Yellow	Red	Red	Red	Red	Red	Red	Red	Yellow	Red	Yellow	Yellow	Yellow
209	Burnt Mill School	Green	Green	Green	Green	Green	Green	Red	Green	Green	Green	Green	Red	Red	Red	Yellow	Yellow	Yellow	Green	Green	Green	Yellow	Green	Green
21	Corner Gilden Way/Churchgate St.	Green	Green	Green	Green	Green	Green	Yellow	Green	Green	Green	Red	Red	Red	Red	Yellow	Red	Yellow	Green	Green	Green	Yellow	Green	Yellow
210	St Marks School	Green	Green	Green	Red	Green	Yellow	Green	Green	Green	Green	Red	Green	Red	Yellow	Green	Yellow	Green	Green	Green	Green	Yellow	Yellow	Yellow
211	Broadfields	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Yellow	Yellow	Green	Green	Yellow	Yellow	Green	Green	Green	Yellow	Yellow	Yellow
212	Little Parndon	Green	Green	Green	Green	Green	Yellow	Green	Green	Green	Green	Red	Red	Red	Yellow	Yellow	Green	Red	Yellow	Yellow	Green	Yellow	Yellow	Yellow

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213	Town Park - west of Spurriers																							
214	Town Park - east of School Lane																							
215	Town Park - northwest of Jim Desormeaux Bungalows																							
216	Town Park - north of Edinburgh Way																							
217	Allotment - Felmongers																							
218	Allotment- Fullers Mead																							
219	Allotment - Commonfields																							
220	Allotment- Tanys Dell																							
221	Allotment - Glebelands																							
222	Allotment - Canons Brook																							
223	Allotment - Canons Gate																							
224	Allotment - Chippingfield																							
225	Allotment - The Dashes																							

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226	Allotment - Foldcroft	Yellow	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Red	Red	Yellow	Yellow	Yellow	Red	Green	Green	Green	Yellow	Yellow	Yellow
227	Allotment - Izzards	Green	Green	Green	Green	Green	Yellow	Yellow	Green	Green	Green	Green	Red	Green	Red	Yellow	Yellow	Red	Yellow	Green	Green	Yellow	Yellow	Yellow
228	Allotment - Linford End	Green	Green	Green	Yellow	Green	Green	Green	Green	Green	Green	Red	Red	Yellow	Red	Green	Yellow	Yellow	Yellow	Green	Green	Yellow	Yellow	Yellow
229	Allotment - Long Ley	Green	Green	Green	Red	Green	Yellow	Red	Green	Green	Yellow	Red	Yellow	Red	Yellow	Yellow	Yellow	Yellow	Green	Green	Green	Yellow	Yellow	Yellow
23	Former Scout Hut Elderfield	Green	Green	Green	Green	Green	Green	Yellow	Green	Green	Green	Red	Red	Yellow	Red	Yellow	Yellow	Green	Green	Yellow	Green	Yellow	Yellow	Yellow
230	Allotment - Manor Hatch	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Red	Red	Green	Yellow	Red	Yellow	Green	Green	Green	Yellow	Green	Green
231	Allotment - Rushes Mead	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Red	Yellow	Red	Green	Red	Yellow	Yellow	Green	Green	Yellow	Yellow	Yellow
232	Allotment - Stackfield	Green	Green	Green	Green	Green	Yellow	Red	Green	Green	Green	Green	Red	Yellow	Green	Green	Red	Green	Green	Green	Green	Yellow	Yellow	Yellow
233	Allotment - Sylvesters	Green	Yellow	Green	Green	Green	Green	Green	Green	Green	Green	Red	Red	Red	Green	Green	Red	Red	Green	Green	Green	Yellow	Yellow	Yellow
234	Allotment - The Oxleys	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Red	Red	Red	Green	Red	Yellow	Yellow	Green	Green	Yellow	Yellow	Yellow
235	Allotment - Upper Stonyfield	Green	Green	Green	Green	Green	Green	Green	Green	Green	Yellow	Red	Green	Red	Green	Green	Green	Yellow	Green	Green	Green	Yellow	Yellow	Yellow
236	Allotment - Vicarage Wood	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Red	Yellow	Green	Red	Yellow	Red	Green	Green	Green	Yellow	Yellow	Yellow
237	Allotment - Greygoose Park 1	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Red	Red	Green	Yellow	Red	Yellow	Green	Green	Green	Yellow	Yellow	Yellow

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238	Allotment - Greygoose Park 2																							
239	Gardens to the rear of 161-173,45a-63,101-107 Fullers Mead																							
24	Former Nursery South of Gilden Way																							
240	Allotment - Willowfield																							
242	Land north of Gravelpit Springs and Latton Farm																							
243	Land east of 62-68 Herons Wood & south 49-50 Herons Wood																							
244	Land to the rear of Queens Head PH Churchgate St.																							
246	Gardens to the rear of 46-52 Collins Meadow																							
247	Land east of Goldings Farm																							
248	2-40 Dudley Terrace																							
249	Burnside Terrace																							
25	Former Scout Hut Pytt Field																							
250	Land east of 47-53 Jerounds																							

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252	Land and gardens 7-10 Kingsmoor Rd.	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Red	Red	Green	Green	Red	Yellow	Green	Green	Green	Yellow	Yellow	Yellow
253	Land east of Larkswood	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Red	Red	Green	Green	Green	Yellow	Green	Green	Green	Yellow	Yellow	Yellow
254	Land north of 5 & 14 Morningtons	Green	Green	Yellow	Green	Green	Green	Green	Green	Green	Yellow	Yellow	Red	Yellow	Green	Green	Yellow	Yellow	Green	Red	Green	Yellow	Yellow	Yellow
255	Land north of Little Pynchons and Pear Tree Mead	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Green	Yellow	Green	Green	Green	Green	Green	Green	Yellow	Yellow	Yellow
257	Playground south of 145-150 Little Brays	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Green	Yellow	Green	Yellow	Green	Green	Green	Green	Yellow	Yellow	Yellow
258	Land west of Goldings Farm	Green	Green	Green	Green	Green	Green	Green	Green	Green	Yellow	Red	Red	Red	Yellow	Yellow	Red	Yellow	Green	Yellow	Green	Yellow	Green	Green
260	Land at junction Kingsmoor Rd/Southern Way	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Yellow	Red	Yellow	Green	Yellow	Yellow	Green	Green	Yellow	Green	Yellow	Yellow	Yellow
261	Playing Field east of Latton Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Yellow	Red	Yellow	Yellow	Green	Yellow	Green	Green	Green	Green	Yellow	Green	Green
262	Allotment Riddings lane	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Red	Red	Yellow	Green	Yellow	Yellow	Green	Green	Green	Yellow	Yellow	Yellow
263	Play area west of the Hill	Green	Green	Green	Green	Green	Yellow	Yellow	Green	Green	Green	Yellow	Red	Yellow	Red	Red	Yellow	Red	Green	Red	Red	Yellow	Yellow	Yellow
264	Playground west of Stilecroft	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Yellow	Red	Yellow	Green	Green	Yellow	Green	Green	Green	Green	Yellow	Yellow	Yellow
265	Land off Three Horseshoes Rd.	Green	Green	Green	Red	Green	Yellow	Green	Green	Green	Green	Red	Red	Red	Yellow	Yellow	Red	Green	Green	Green	Green	Yellow	Yellow	Yellow
266	Sherards House and adjacent land	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Red	Red	Green	Green	Red	Green	Green	Green	Green	Yellow	Yellow	Yellow

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267	Land southwest of 120 Churchfield	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Red	Yellow	Red	Yellow	Red	Red	Yellow	Green	Green	Yellow	Yellow	Yellow
268	Rear gardens of 19-24 Cock Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Red	Red	Green	Yellow	Red	Yellow	Green	Green	Green	Yellow	Yellow	Yellow
269	Crabbe Farm	Green	Green	Green	Yellow	Green	Green	Green	Green	Green	Red	Red	Red	Red	Green	Green	Yellow	Yellow	Green	Yellow	Green	Yellow	Green	Green
27	Manor Hatch	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Yellow	Red	Yellow	Green	Green	Red	Green	Green	Green	Green	Yellow	Yellow	Yellow
270	Land to rear of 42-59 Old Rd.	Green	Green	Green	Green	Green	Green	Red	Green	Red	Green	Red	Red	Yellow	Red	Yellow	Yellow	Yellow	Yellow	Green	Green	Yellow	Yellow	Yellow
271	Land west 21-32 Hawkenbury	Yellow	Green	Green	Red	Red	Yellow	Green	Green	Green	Green	Yellow	Red	Red	Green	Yellow	Red	Yellow	Green	Green	Green	Yellow	Green	Green
272	Hillside Potter St.	Green	Green	Green	Yellow	Green	Green	Green	Green	Green	Yellow	Red	Red	Red	Green	Green	Green	Red	Green	Green	Green	Yellow	Green	Green
273	Land between 20 & 54 Orchard Croft	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Red	Green	Yellow	Yellow	Yellow	Red	Yellow	Yellow	Green	Yellow	Yellow	Yellow
274	Land between Paringdon Rd. & Parndon Wood Rd.	Green	Green	Red	Green	Green	Green	Green	Green	Green	Yellow	Yellow	Red	Red	Green	Yellow	Red	Green	Green	Red	Green	Yellow	Green	Green
275	Land to rear of The Friars	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Red	Red	Green	Yellow	Red	Yellow	Green	Green	Green	Yellow	Yellow	Yellow
277	Gateway Scheme (was Harlow Sports Centre)	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Yellow	Yellow	Yellow	Red	Green	Yellow	Green	Yellow	Yellow	Yellow
279	Former Harlow Swimming Pool	Green	Green	Green	Green	Green	Green	Yellow	Green	Green	Green	Red	Green	Red	Yellow	Yellow	Green	Yellow	Green	Green	Green	Yellow	Green	Green
28	Land off Manor Hatch Close	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Yellow	Red	Yellow	Green	Green	Red	Green	Green	Green	Green	Yellow	Yellow	Yellow

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280	Marshgate Farm	Green	Green	Green	Green	Green	Green	Red	Green	Green	Red	Green	Red	Red	Red	Red	Yellow	Red	Yellow	Red	Green	Green	Yellow	Yellow
283	Adams House The High	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Green	Red	Red	Red	Yellow	Red	Yellow	Yellow	Green	Yellow	Green	Green
284	1 & 1a Walfords Close	Green	Green	Green	Green	Green	Green	Yellow	Green	Green	Yellow	Yellow	Red	Green	Red	Green	Green	Green	Yellow	Green	Yellow	Yellow	Green	Green
285	Land south of Mulberry Green Gardens	Green	Green	Green	Green	Green	Green	Red	Green	Green	Green	Red	Red	Yellow	Red	Yellow	Yellow	Green	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
286	Block bounded by Broad Walk/East Walk/Terminus St.	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Green	Red	Red	Red	Red	Red	Yellow	Yellow	Green	Yellow	Yellow	Yellow
287	Westgate House and MS carpark	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Green	Red	Yellow	Yellow	Green	Yellow	Yellow	Yellow	Green	Yellow	Yellow	Yellow
288	Land at junction of Cambridge Rd./Old Rd.	Green	Green	Green	Green	Green	Green	Red	Green	Green	Green	Green	Red	Red	Red	Red	Red	Red	Yellow	Red	Green	Yellow	Yellow	Yellow
289	Land at junction Southern Way/Abercrombie Way	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Yellow	Red	Green	Yellow	Yellow	Green	Green	Green	Yellow	Green	Yellow	Yellow	Green
29	East of Lower Meadow South of Radburn Close	Green	Green	Green	Red	Green	Yellow	Green	Green	Green	Green	Red	Red	Red	Yellow	Yellow	Red	Red	Yellow	Green	Green	Yellow	Green	Yellow
290	Land at Markhall Wood west of Pennymead	Green	Green	Green	Red	Green	Yellow	Green	Green	Green	Green	Red	Red	Red	Green	Red	Red	Red	Green	Yellow	Green	Yellow	Green	Green
292	Land north of Jocelyns off Station Rd.	Green	Green	Green	Green	Green	Yellow	Green	Green	Green	Green	Green	Red	Green	Red	Yellow	Green	Yellow	Yellow	Green	Yellow	Yellow	Yellow	Yellow
293	Land between Athena Estate (Edinburgh Way) and A414	Green	Green	Green	Green	Green	Yellow	Green	Green	Green	Green	Green	Red	Red	Red	Red	Red	Red	Red	Yellow	Red	Yellow	Yellow	Yellow
294	Land between Hull Grove and Archers	Green	Green	Yellow	Green	Green	Green	Green	Green	Green	Yellow	Red	Red	Red	Yellow	Yellow	Yellow	Yellow	Green	Red	Green	Yellow	Yellow	Yellow

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296	Land to the rear of Cotswold Mulberry Green	Green	Green	Green	Green	Green	Green	Red	Green	Green	Red	Red	Red	Yellow	Red	Green	Yellow	Green	Green	Yellow	Green	Yellow	Green	Green
297	Playground adjacent to Partridge Day Centre (Barn Mead)	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Red	Red	Yellow	Yellow	Red	Green	Yellow	Yellow	Green	Yellow	Yellow	Yellow
298	Garden to rear of Tye Cottage (Tye Green Village)	Green	Green	Green	Green	Green	Green	Red	Green	Green	Green	Yellow	Red	Green	Red	Yellow	Green	Yellow	Green	Yellow	Green	Yellow	Yellow	Yellow
299	Garage block between 63 & 86 Primrose Field	Green	Green	Green	Green	Green	Green	Yellow	Green	Green	Green	Yellow	Red	Green	Red	Yellow	Green	Yellow	Green	Yellow	Green	Yellow	Yellow	Yellow
3	Bali Hai - off Roydon Rd.	Green	Yellow	Yellow	Green	Green	Green	Green	Green	Green	Green	Green	Red	Red	Red	Red	Red	Red	Red	Red	Red	Yellow	Yellow	Yellow
300	Staple Tye	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Green	Yellow	Red	Green	Yellow	Green	Yellow	Green	Yellow	Yellow	Yellow
301	Coppice Hatch and garages	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Red	Red	Green	Green	Red	Green	Yellow	Green	Green	Yellow	Yellow	Yellow
302	Allotments west of Dudley Terrace	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Red	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Green	Green	Yellow	Yellow	Yellow
303	Club House and car park south of Clifton Hatch	Green	Green	Green	Yellow	Green	Green	Green	Green	Green	Yellow	Red	Red	Red	Green	Green	Red	Yellow	Green	Yellow	Green	Yellow	Green	Green
304	Garages and land north of Great Leylands south of Highfield	Green	Green	Green	Red	Green	Yellow	Green	Green	Green	Green	Yellow	Red	Yellow	Green	Yellow	Red	Green	Green	Green	Green	Yellow	Green	Yellow
305	Brays Mead allotments	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Yellow	Red	Green	Red	Yellow	Green	Yellow	Green	Green	Green	Yellow	Yellow	Yellow
306	Allotments east of Stewards	Green	Green	Yellow	Green	Green	Green	Green	Green	Green	Yellow	Red	Red	Yellow	Green	Green	Red	Yellow	Green	Green	Green	Yellow	Green	Green
307	Garage blocks north of 71 & 91 Glebelands	Green	Green	Green	Green	Green	Yellow	Red	Green	Green	Green	Green	Red	Yellow	Yellow	Yellow	Red	Yellow	Green	Green	Red	Yellow	Yellow	Yellow

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308	Former car showroom junction Howard Way/First Ave																							
309	Allotments between Parsonage Leys and Arkwrights																							
310	Allotments north of Ram Gorse																							
311	Land north of Ram Gorse																							
312	Caravan Site Flex Meadow																							
313	Allotment off Mill Lane																							
314	Pypers Hatch																							
315	Telephone Exchange Fifth Ave.																							
316	Aneurin Bevan Centre																							
317	Garage block north of Gothic Hse. London Rd.																							
318	Former garage site north of Churchfield																							
319	Allotments junction Commonsides Rd./Fern Hill Lane																							
32	Bush Fair/Sherwood House and Car Parks																							

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320	Allotments north of Stile Croft	Green										Green	Red	Green	Yellow	Green	Yellow	Green				Yellow	Yellow	Yellow
321	Playground off Mill Lane	Green										Red	Red	Red	Red	Yellow	Red	Yellow	Green			Yellow	Yellow	Yellow
322	Allotment off Mill Lane	Green						Yellow				Red	Red	Red	Red	Yellow	Red	Yellow	Green			Yellow	Yellow	Yellow
323	Garage block between 30 & 31 Long Ley	Green										Red	Red	Red	Green	Yellow	Green	Red	Green	Yellow		Yellow	Yellow	Yellow
324	Garage block north of Westfield	Green										Red	Red	Red	Yellow	Green	Red	Green		Yellow		Yellow	Yellow	Yellow
325	Scout hut junction School Lane/First Ave.	Green					Yellow	Red			Yellow	Red	Yellow	Yellow	Green	Yellow	Green	Yellow	Green			Yellow	Green	Green
326	Garage Block south of Great Plumtree	Green						Red				Yellow	Red	Yellow	Yellow	Yellow	Yellow	Yellow	Green			Yellow	Yellow	Yellow
328	Land off Old Hall Rise Church Langley	Green										Red	Red	Red	Red	Red	Red	Red	Green	Red		Yellow	Yellow	Yellow
329	Garage block west of 287-290 Ladyshtot	Green			Red		Yellow					Red	Red	Yellow	Green	Red	Yellow	Red	Green			Yellow	Green	Green
330	Garage block east of 190-194 Pittmans Field	Green			Red		Yellow					Red	Red	Green	Yellow	Yellow	Green	Yellow	Yellow			Yellow	Yellow	Yellow
331	Garage block adjacent to Pennymead Tower	Green										Red	Red	Yellow	Green	Red	Yellow	Red	Green			Yellow	Yellow	Yellow
332	Garage block south of Sewell Harris Close	Green			Red		Yellow					Red	Red	Green	Yellow	Yellow	Green	Red	Green			Yellow	Green	Green
333	Garage block south of 48-53 Rushes Mead	Green										Red	Red	Yellow	Red	Green	Red	Yellow	Yellow			Yellow	Yellow	Yellow

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334	Garage block adjacent to Tendring Mews																							
335	Wayside Farm and adjacent land																							
337	Garage block north of 45-50 Pear Tree Mead																							
338	Electricity sub stations south of Barn Mead																							
339	Gardens to the rear of 28-38 Mulberry Green																							
34	Garages at rear of 55-59 Hook Field																							
340	Land north of Rye Hill reservoir																							
341	Mobility House (The High)																							
342	Car showroom Potter Street																							
344	Land at Yorkes Tye Green Village																							
345	Care Centre east of Barn Mead																							
346	Rear gardens of 247-250 Felmongers																							
347	Land associated with Hestor House and Hester Mews																							

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348	Allotments north of 1-6 Carters Mead																							
349	Road Safety training ground																							
35	Land to the East of Harlow Fields School																							
350	Car park Kitson Way																							
351	Post Office and yard Post Office Road																							
352	Maunds Hatch and Hall																							
353	Land north of former Nortel Laboratories																							
354	Skins Farm leisure plots																							
355	Land to the East of East End farm																							
356	land East of Broomfield																							
357	Land South of Parkhill																							
359	Burgoyne Hatch																							
36	Garage blocks adjacent to Nicholls Tower																							

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360	Cawley Hatch	Green	Yellow	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Red	Green	Red	Red	Yellow	Red	Red	Green	Yellow	Green	Green
361	Sumners Hatch	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Red	Red	Green	Green	Red	Green	Yellow	Green	Green	Yellow	Green	Green
362	Ward Hatch	Green	Green	Green	Green	Green	Green	Red	Green	Green	Green	Green	Red	Yellow	Green	Green	Red	Green	Green	Green	Green	Yellow	Yellow	Yellow
363	Mill Hatch	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Red	Green	Red	Red	Red	Red	Yellow	Green	Yellow	Yellow	Yellow
364	Land to the North of Milwards	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Yellow	Red	Yellow	Yellow	Yellow	Yellow	Green	Green	Yellow	Green	Yellow	Green	Green
365	Land East of Staple Tye	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Yellow	Red	Yellow	Yellow	Green	Green	Green	Green	Green	Green	Yellow	Yellow	Green
366	Land North of Woodhill	Green	Green	Yellow	Green	Green	Green	Green	Green	Green	Green	Red	Red	Yellow	Yellow	Yellow	Yellow	Yellow	Green	Green	Green	Yellow	Green	Green
367	Lutheran Church	Green	Green	Green	Green	Green	Green	Yellow	Green	Green	Green	Green	Red	Green	Red	Yellow	Green	Green	Green	Green	Green	Yellow	Green	Green
368	Land to the north of Nicholsfield Pavilion	Green	Green	Green	Green	Green	Green	Yellow	Green	Green	Green	Red	Red	Red	Green	Yellow	Red	Green	Green	Green	Green	Yellow	Green	Green
37	Garage blocks adjacent to Moore Tower	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Yellow	Red	Red	Green	Yellow	Red	Yellow	Yellow	Yellow	Green	Yellow	Yellow	Yellow
370	Allotment to the South of Little Brays	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Green	Yellow	Green	Yellow	Green	Green	Green	Green	Yellow	Yellow	Yellow
371	Harolds Grove	Green	Yellow	Green	Red	Green	Yellow	Green	Green	Green	Green	Green	Red	Red	Red	Red	Red	Red	Red	Red	Red	Yellow	Yellow	Yellow
372	Norman Booth Recreation Centre	Green	Green	Green	Green	Green	Green	Yellow	Green	Green	Green	Red	Red	Yellow	Red	Yellow	Yellow	Green	Green	Green	Green	Yellow	Green	Yellow

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373	High Street Old Harlow																							
374	Aylets Field; The Briars; Copshall Close; - Known as Priority Estates																							
375	Northbrooks Regeneration area (excuding Northbrooks House)																							
376	Edinburgh Gate																							
38	Elm Hatch and Public House																							
39	Stewards Farm																							
41	Council Depot adjacent to Willowfield Tower																							
42	Land adjacent to Willowfield Tower plus garage block																							
43	Sherards Hatch and adjacent land																							
44	Kingsmoor House and gardens																							
45	Pollard Hatch plus garages and adjacent land																							
46	Katherines Hatch																							
47	The Stow																							

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48	Service bays rear of The Stow	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Red	Green	Yellow	Yellow	Green	Yellow	Green	Yellow	Green	Yellow	Yellow	Yellow
49	Common room adjacent to Glebelands playground	Green	Green	Green	Green	Green	Green	Red	Green	Green	Green	Yellow	Red	Yellow	Yellow	Yellow	Yellow	Yellow	Green	Green	Green	Yellow	Yellow	Yellow
5	SW Harlow (land in Harlow)	Green	Yellow	Green	Green	Green	Yellow	Green	Green	Green	Green	Red	Red	Red	Green	Green	Green	Red	Green	Yellow	Green	Yellow	Green	Green
50	Mark Hall barn and adjacent land	Green	Green	Green	Green	Green	Green	Red	Green	Green	Red	Yellow	Red	Yellow	Yellow	Yellow	Red	Yellow	Green	Green	Green	Yellow	Green	Green
51	Ladyshot Pavilion	Green	Green	Green	Green	Green	Yellow	Green	Green	Green	Green	Red	Red	Red	Yellow	Red	Red	Red	Green	Yellow	Green	Yellow	Yellow	Yellow
52	Garages east of 99-102 Greenhills	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Yellow	Red	Green	Green	Yellow	Red	Green	Green	Green	Yellow	Yellow	Yellow
53	Garages south of 158-159 Halling Hill	Green	Green	Green	Red	Green	Yellow	Green	Green	Green	Green	Yellow	Red	Green	Yellow	Yellow	Green	Yellow	Yellow	Green	Green	Yellow	Yellow	Yellow
54	Former garage and allotments west of 1 Felmongers	Green	Green	Green	Green	Green	Green	Yellow	Green	Green	Green	Red	Red	Yellow	Yellow	Yellow	Red	Yellow	Green	Green	Green	Yellow	Yellow	Yellow
55	Garages 88-96 Collins Meadow	Green	Green	Green	Red	Green	Yellow	Green	Green	Green	Green	Red	Red	Red	Green	Yellow	Yellow	Green	Green	Green	Green	Yellow	Yellow	Yellow
56	Garages and adjacent land to the rear of 83-87 Halling Hill	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Red	Green	Red	Green	Green	Green	Yellow	Yellow	Green	Yellow	Yellow	Yellow
57	Former garages south of 151 Milwards	Green	Green	Yellow	Red	Green	Yellow	Green	Green	Green	Green	Red	Red	Red	Yellow	Yellow	Yellow	Yellow	Green	Red	Green	Yellow	Yellow	Yellow
58	Garages to rear of 62 Stackfield	Green	Green	Green	Green	Green	Yellow	Red	Green	Green	Green	Green	Red	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Green	Red	Yellow	Green	Green
59	Garages and land to the rear of 55-69 The Hill	Green	Green	Green	Green	Green	Yellow	Red	Green	Green	Green	Yellow	Red	Green	Red	Red	Green	Yellow	Green	Yellow	Green	Yellow	Yellow	Yellow

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6	Harlow North (land in Harlow)	Green	Yellow	Red	Red	Red	Yellow	Green	Green	Red	Red	Green	Yellow	Red	Red	Red	Yellow	Red	Green	Yellow	Green	Green	Green	Green
60	Garages to the rear of 258 & 259 Church Leys	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Yellow	Red	Yellow	Green	Yellow	Red	Yellow	Yellow	Green	Green	Yellow	Yellow	Yellow
61	Garages to the rear of 122 & 131 Pennymead	Green	Green	Green	Yellow	Green	Green	Green	Green	Green	Green	Red	Red	Red	Green	Red	Yellow	Red	Green	Yellow	Green	Yellow	Green	Green
62	Garages and land to the rear of 11-18 Great Leylands	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Yellow	Green	Green	Yellow	Green	Green	Green	Green	Yellow	Yellow	Yellow
63	Garages to the rear of 49-53 The Readings	Green	Green	Green	Green	Green	Green	Green	Green	Green	Yellow	Red	Red	Yellow	Red	Yellow	Yellow	Green	Yellow	Yellow	Red	Yellow	Yellow	Yellow
64	Garages to the rear of 170-183 Wharley Hook	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Yellow	Red	Yellow	Yellow	Green	Green	Yellow	Green	Yellow	Green	Yellow	Yellow	Yellow
65	Garage blocks to the rear of 1-6 Harefield	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Red	Yellow	Green	Red	Yellow	Red	Green	Green	Green	Yellow	Yellow	Yellow
66	Garage block to the east of 165 Orchard Croft	Green	Green	Green	Green	Green	Green	Green	Green	Green	Yellow	Red	Red	Green	Yellow	Green	Green	Red	Green	Yellow	Green	Yellow	Green	Green
67	Garage Block to the rear of 65 to 73 Chippingfield	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Red	Green	Red	Yellow	Green	Green	Yellow	Green	Green	Yellow	Yellow	Yellow
68	Slacksbury Hatch and associated garages	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Yellow	Red	Green	Green	Green	Green	Green	Green	Green	Yellow	Yellow	Yellow
69	Blackbush Spring Common Room	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Red	Green	Green	Yellow	Green	Red	Green	Green	Green	Yellow	Yellow	Yellow
70	Garage blocks between 1 and 36 Arkwrights	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Red	Yellow	Green	Yellow	Green	Red	Green	Green	Green	Yellow	Yellow	Yellow
72	Lister House, Staple Tye Mews, Staple Tye Depot, and The Gateway Nursery	Green	Green	Yellow	Yellow	Green	Green	Green	Green	Green	Green	Green	Red	Green	Yellow	Green	Green	Green	Green	Yellow	Green	Yellow	Green	Green

Site Ref	Location	Flood zone	SAC/ SPA /Ramsar	SSSI	Local Wildlife Site	Local Nature Reserve	Priority Habitat	Conservation area	Historic P or G	Scheduled M	Listed building	Employment area	Town centre	Neighbourhood Centre	Shopping area	School	GP/health centre	Sports and Health Facility	Playground	Allotment	Bus stop	Train station	Public Rights of Way (PROW)	Cycle Route
75	Collins Meadow Playing Fields																							
77	Playing field off Paringdon Rd.																							
79	Recreation ground Shawbridge																							
8	Peldon Lane																							
80	The Stow playing field																							
81	The Dashes playing field																							
82	Long Ley playing field																							
84	Land to the north of Roydon Road																							
85	Canons Brook Golf Course (south)																							
86	Canons Brook Golf Course (north)																							
87	Land adjacent to Fairview and Hillview off Well Lane																							
89	Post Office Road car park																							
9	PAH																							

Site Ref	Location	Flood zone	SAC/ SPA /Ramsar	SSSI	Local Wildlife Site	Local Nature Reserve	Priority Habitat	Conservation area	Historic P or G	Scheduled M	Listed building	Employment area	Town centre	Neighbourhood Centre	Shopping area	School	GP/health centre	Sports and Health Facility	Playground	Allotment	Bus stop	Train station	Public Rights of Way (PRoW)	Cycle Route
90	Market Square and linking footpaths	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Red	Green	Red	Yellow	Yellow	Green	Red	Yellow	Yellow	Green	Yellow	Green	Green
93	Faircroft/Little Bays Station Rd. (Vince Dunne Mews)	Green	Green	Green	Green	Green	Green	Red	Green	Green	Yellow	Yellow	Red	Green	Red	Yellow	Green	Yellow	Green	Yellow	Green	Yellow	Yellow	Yellow
94	Car park and garage block Wayre St.	Green	Green	Green	Green	Green	Green	Red	Green	Green	Yellow	Yellow	Red	Green	Red	Green	Green	Green	Yellow	Green	Green	Yellow	Green	Green
95	The Latton Bush Centre	Green	Green	Green	Green	Green	Green	Green	Green	Green	Yellow	Yellow	Red	Yellow	Yellow	Green	Green	Green	Green	Green	Green	Yellow	Green	Green
97	Former Council offices off Maddox Rd.	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Yellow	Red	Green	Green	Yellow	Yellow	Green	Green	Green	Yellow	Yellow	Yellow
99	Garage block and land west of Dashes Playing Field	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Green	Red	Yellow	Yellow	Yellow	Red	Yellow	Green	Green	Yellow	Green	Green

Appendix IV: SA of reasonable alternatives

Introduction

As explained within 'Part 1' above, a focus of work has been on the development and appraisal of spatial strategy alternatives, with a view to informing determination of the preferred strategy. The alternatives are as follows (NB. significantly differentiating figures from Option 1a are highlighted in red)

Appraisal methodology

For each of the options, the assessment examines **likely significant effects** on the baseline, drawing on the sustainability objectives identified through scoping (see Table 4.1) as a methodological framework. **Green** is used to indicate significant positive effects, whilst **red** is used to indicate significant negative effects. Every effort is made to predict effects accurately; however, this is inherently challenging given the high level nature of the policy approaches under consideration. The ability to predict effects accurately is also limited by understanding of the baseline (now and in the future under a 'no plan' scenario). In light of this, there is a need to make considerable assumptions regarding how scenarios will be implemented 'on the ground' and what the effect on particular receptors would be. Where there is a need to rely on assumptions in order to reach a conclusion on a 'significant effect' this is made explicit in the appraisal text.

Where it is not possible to predict likely significant effects on the basis of reasonable assumptions, efforts are made to comment on the relative merits of the alternatives in more general terms and to indicate a **rank of preference**. This is helpful, as it enables a distinction to be made between the alternatives even where it is not possible to distinguish between them in terms of 'significant effects'. A star is used to highlight the option or options that are preferred from an SA perspective.

Finally, it is important to note that effects are predicted taking into account the criteria presented within Regulations.¹⁰⁶ So, for example, account is taken of the duration, frequency and reversibility of effects. Cumulative effects are also considered (i.e. where the effects of the plan in combination with the effects of other planned or on-going activity that is outside the control of the Epping Forest District Local Plan).

¹⁰⁶ Schedule 1 of the Environmental Assessment of Plans and Programmes Regulations 2004.

Air Quality

	Option A Preferred Approach	Option B Moderate density on certain PDL sites	Option C High density on certain PDL sites
Rank of preference	1	2	3
Significant effect?	No	No	?

Air pollution in Harlow is considered to be generally low, with monitoring concluding that there are no areas where the air quality has led to the designation of an Air Quality Management Area (AQMA).¹⁰⁷ While the trend across all monitored sites in the District indicates that air quality is improving, it is recognised that traffic emissions are the most significant source of air pollution in the District.¹⁰⁸

The road network around Harlow carries large volumes of traffic; the most notable area of congestion being on the routes and links to Junction 7 of the M11, but also the A414. Transport Modelling carried out as part of the Strategic Spatial Options Study for the West Essex and East Hertfordshire HMA indicated that a 35-40% increase in trips on the network by 2033 is to be expected, based on 14,000 new homes in and around Harlow (and 48,000 across the wider HMA).¹⁰⁹

In terms of the level of development that can be accommodated in and around Harlow, the transport modelling indicated that the preferred spatial strategy for the HMA can be delivered; provided that key mitigation measures are delivered during the Plan period. A signed Memorandum of Understanding (Feb 2017) has been produced, which identifies a number of new infrastructure interventions that will be necessary. The most notable of these is a proposed new motorway junction on the M11 (Junction 7A), which will improve the flow of traffic east to west across the District and provide a catalyst for further development, promoting Harlow as a growth location along the M11 corridor.

Option A seeks to deliver the preferred approach agreed through the distribution of OAHN MoU (March 2017) for the HMA, so it is therefore concluded that it will not result in any significant negative effects on traffic and air quality. Options B and C propose increased density on eight brownfield sites and therefore an increased overall level of growth to be delivered during the life of the Plan. Option B would result in an increase of 804 dwellings and Option C an increase of 2,383 dwellings compared to Option A. While Option B is likely to have a greater impact on traffic compared to Option A, it is likely to be minimal and not of significance in terms of differentiating between them. The level of growth proposed through Option C is more likely to substantially increase the levels of traffic and therefore have a negative effect on air quality; however, this is uncertain as it is not clear if there is mitigation available that could reduce the significance of the effect and accommodate the additional traffic generated.

It should be noted that increased density is being proposed at sites that are in close proximity to the town centre, Hatches and sustainable transport corridor nodes. This should help to reduce the impacts on traffic levels given accessibility to services/ facilities, employment and sustainable transport modes. Option A performs better in terms of air quality as it proposes the level of growth agreed through the OAHN MoU and there is a commitment to deliver the necessary transport infrastructure through a separate MoU.

¹⁰⁷ Harlow District Council (2017) Air Quality Annual Status Report.

¹⁰⁸ Ibid.

¹⁰⁹ Epping, East Herts, Harlow and Uttlesford District Councils (2016) SA of Strategic Spatial Options for the West Essex and East Hertfordshire Housing Market Area.

Biodiversity and green infrastructure

	Option A Preferred Approach	Option B Moderate density on certain PDL sites	Option C High density on certain PDL sites
Rank of preference	=	=	=
Significant effect?	No	No	No

It's important to note that there are no differences between the options in terms of the spatial distribution of development. The focus of the appraisal is therefore on the issue of increased density at certain brownfield sites and the resulting overall increase in level of growth for the District.

Increasing the density of development at eight of the brownfield allocations is not likely to result in any significant effects on biodiversity at those individual sites alone. The boundaries of the sites would not change as a result of increased density proposed under Options B and C. While it is recognised that brownfield sites can have biodiversity value there is no evidence to suggest that this is the case for any of the seven sites. A higher density of housing at these sites increases the likelihood that any existing open/ green space on them will be lost and will make the delivery of onsite multifunctional green infrastructure (GI) more difficult. Conversely, increasing the density of development can also provide an opportunity for increased Section 106 contributions. This could help deliver greater enhancements to biodiversity through additional provision of multifunctional green infrastructure (off site) or perhaps improved management of the Green Wedges and Fingers within the town. Given the lack of available land within Harlow delivering off site multifunctional GI could prove difficult.

As the density of development on these eight sites increases so does the overall level of growth for the District. While this is not likely to result in any direct impacts on designated or wider biodiversity, there is the potential for indirect effects through increased disturbance, which includes increased recreational activity. Considering the existing urban nature of the sites as well as future growth proposed through the Garden Town Communities surrounding Harlow it is unlikely that the increased level of growth proposed under Options B and C would result in a significant negative cumulative effect.

Overall, it is difficult to identify any significant differences between the options given uncertainties. Options B and C could provide greater Section 106 contributions and therefore opportunities for enhancement of existing GI compared to Option A. However, they could also result in less provision of on-site multifunctional GI on site and have a greater likelihood for indirect negative effects as a result of increased recreation.

Climate change (mitigation and adaptation)

	Option A Preferred Approach	Option B Moderate density on certain PDL sites	Option C High density on certain PDL sites
Rank of preference	1	2	3
Significant effect?	No	No	?

With regards to climate change mitigation, key issues relate to A) the need to capitalise upon opportunities to design-in low carbon infrastructure, and therefore reduce per capita related CO₂ emissions; and B) the need to reduce car dependency and distance travelled by private car, and therefore per capita transport related CO₂ emissions.

It is not clear at this stage if there are any significant differences between the options in terms of opportunities to design-in low carbon energy. Options B and in particular Option C could provide greater Section 106 contributions and therefore help to deliver enhanced provision of renewable or low carbon energy either on or off site. However, this is uncertain at this stage. There is no evidence to suggest that there are particular opportunities to deliver renewable or low carbon energy at any of the eight sites where a higher density is proposed.

With regards to climate change adaptation, a key issue is flood risk. None of the proposed sites are within an area of high flood risk and it is considered that there are no significant differences between the options in terms of this issue.

In terms of reducing reliance on the private vehicle all of the options propose development at the same sites, the majority of which have good access to sustainable transport modes and neighbourhood/local centres. Options B and C propose a higher density of housing at eight sites that are in close proximity to the town centre, Hatches and sustainable transport corridor nodes. Option B would result in an increase of 804 dwellings and Option C an increase of 2,383 dwellings compared to Option A. While Option B is likely to have a greater impact on traffic compared to Option A, it is likely to be minimal and not of significance in terms of differentiating between them. The level of growth proposed through Option C is more likely to substantially increase the levels of traffic and therefore have a negative effect in terms of greenhouse gas emission; however, this is uncertain as it is not clear if there is mitigation available that could reduce the significance of the effect and accommodate the additional traffic generated.

Community and wellbeing

	Option A Preferred Approach	Option B Moderate density on certain PDL sites	Option C High density on certain PDL sites
Rank of preference	=	=	=
Significant effect?	Yes	Yes	Yes

There are no differences between the options in terms of the spatial distribution of development. Options B and C propose a higher density of growth at eight brownfield sites that are in close proximity to the town centre, Hatches and a potential sustainable transport corridor node. As the level of growth increases at the eight brownfield sites due to higher densities, so does the potential for increased Section 106 contributions and subsequent improvements to community infrastructure and the public realm. At this stage there is a significant uncertainty around the level of improvements that could be delivered under Options B and C.

Increased density could result in a greater loss of any exiting green/open space at these eight sites; however, this is uncertain as the precise design, including height, and layout of development is not known. Increasing the density of development could also provide an opportunity for increased Section 106 contributions. This could help deliver greater enhancements to green/open space through additional provision of multifunctional green infrastructure (on or off site) or perhaps improved management of the existing Green Wedges and Fingers within the town. Conversely, a reduction in areas for community interaction and recreation on-site, such as open/green space, could have a negative effect on community integration and cohesion.

All of the options are likely to have a significant positive effect on this topic through the provision of housing and associated improvements to community infrastructure and the public realm. While Options B and C have the potential for benefits through increased contributions to community infrastructure and public realm improvements they could also result in less provision of open/green space on-site for less community interaction and recreation. On balance, it is difficult to identify any significant differences between the options given uncertainties.

Economy and employment

	Option A Preferred Approach	Option B Moderate density on certain PDL sites	Option C High density on certain PDL sites
Rank of preference	2	2	1
Significant effect?	No	No	No

There are no differences between the options in terms of the spatial distribution of development. Options B and C propose higher density development and therefore more growth at eight brownfield sites near to the town centre, District's Hatches as well as one potential sustainable transport corridor node. More housing growth in close proximity to these areas will help to support the regeneration and vitality of centres. Furthermore, Options B and C could result in a greater level of improvements to the public realm through increased Section 106 contributions making the centres more attractive to visitors. However, this is uncertain at this stage.

None of the options would result in any differences in terms of the amount or location of new employment land coming forward. Effects are more likely to be indirect through the regeneration of the built environment, public realm and increased population. On balance, it is considered that Option C could have a greater positive effect for the local economy through enhanced improvements to the public realm and increased visitor activity. The differences between Option A and B are less significant.

Historic environment

	Option A Preferred Approach	Option B Moderate density on certain PDL sites	Option C High density on certain PDL sites
Rank of preference	1	2	3
Significant effect?	No	No	?

It's important to note that there are no differences between the options in terms of the spatial distribution of development. The focus of the appraisal is therefore on the issue of increased density at seven brownfield sites and the resulting overall increase in level of growth for the District.

In terms of designated sites, the boundary of the Elm Hatch and public house site (HS2-14) falls just within the Netteswellbury Conservation Area and is in close proximity to a number of listed buildings. As the density of housing increases at this site so does the likelihood for a negative effect of significance on these designated heritage assets. It is assumed at this stage that the increased density proposed under Option B and in particular Option C could result in buildings that are higher than the current built form and therefore not in keeping with the character of the area. This could affect the setting of the designated heritage assets and the wider historic environment.

The Princess Alexandra Hospital site (HS2-1) contains a Scheduled Monument and is within 50m of two others, all Bowl barrows (burial mounds). The site also contains a listed building and there are a number more in close proximity. At this stage it is uncertain if the density of development proposed under Option B and C would result in development that is higher than the existing hospital buildings. Development provides an opportunity for the regeneration of this site, which could have a positive effect on the historic environment as long as the design, layout and density of development is sympathetic to the designated heritage assets and wider historic environment.

Density increases at the remaining brownfield sites are less likely to have a significant effect on the historic environment given their distance from designated heritage assets as well as the small scale of the sites/development. However, it is recognised that the historic environment encapsulates more than just designated heritage assets. On balance, it is considered unlikely that Options A or B would result in a significant negative effect on the historic environment. There is suitable mitigation available to reduce the residual effect to a minor negative. Mitigation is likely to be more difficult and/or expensive for the level of density proposed through Option C.

Housing

	Option A Preferred Approach	Option B Moderate density on certain PDL sites	Option C High density on certain PDL sites
Rank of preference	2	2	1
Significant effect?	Yes	Yes	Yes

All of the options provide sufficient development to help meet the identified housing needs for the District and deliver the additional housing requirement of 1,042 dwellings. As the density of development on certain PDL sites increases so does the overall level of growth for the District. As the overall level of growth increases so does the potential to deliver a greater number of affordable homes and help meet the significant needs identified for the District.¹¹⁰ It is not clear at this stage if the higher densities, particularly for the larger sites, would affect the percentage of affordable homes being delivered on-site and if so, where else they might be delivered.

Option C is likely to have a positive effect of greater significance compared to the other options on this topic as it would result in the delivery of an additional 2,383 dwellings compared to Option A and 1,578 compared to Option B. Potential drawbacks to Option C are that a higher density of development on some of the sites could make it more difficult to provide a sufficient mix of market and affordable housing, in particular family homes, but this is uncertain.

The additional growth proposed under Options B and C does offer more flexibility during the life of the Plan should any allocated sites not to come forward. However, the higher density proposed through Option C could affect the viability of these sites, through increased levels of infrastructure/ mitigation required.

All of the options have the potential for a significant positive effect by meeting the additional housing requirement. Option C is likely to have an enhanced positive effect as it proposes a higher level of overall growth, although there are questions over viability.

¹¹⁰ Opinion Research Services (July 2017) West Essex and East Hertfordshire Strategic Housing Market Assessment: Affordable Housing Update.

Land and waste

	Option A Preferred Approach	Option B Moderate density on certain PDL sites	Option C High density on certain PDL sites
Rank of preference	=	=	=
Significant effect?	No	No	No

It's important to note that there are no differences between the options in terms of the location of development. With this in mind, there is little to differentiate between the options in terms of the efficient use of land. All of the options are likely to have a positive effect on this topic as they seek to maximise the use of previously developed land. Higher density development at certain sites could reduce the amount of green/open space provided on them but this is uncertain and dependent on a number of factors.

Options B and C will generate more household waste as a result of the increased number of new homes compared to Option A. However, there is no evidence to suggest that would be a significant issue and that effective waste management could not be provided.

Landscape

	Option A Preferred Approach	Option B Moderate density on certain PDL sites	Option C High density on certain PDL sites
Rank of preference	1	2	3
Significant effect?	No	No	?

There are no differences between the options in terms of the spatial distribution of development. The focus of the appraisal is therefore on the issue of increased density at eight brownfield sites and the resulting overall increase in level of growth for the District.

Given the small scale/ capacity of the majority of brownfield sites where higher densities are proposed, it is unlikely that there would be a significant effect on townscape as a result of development alone at those sites. The Princess Alexandra Hospital (HS2-1) is the largest site and it is assumed that the density of development proposed, in particular through Option C, would result in a built form that is higher than the existing hospital buildings but this is uncertain.

Increased density at certain brownfield sites could help to further support regeneration, allowing for greater contributions and therefore improvements to the public realm and exiting built environment. It could also result in a reduction in the level of open/green space on-site, which important to the character of the town.

Ultimately, the nature and significance of the effect on townscape is dependent on the precise design and layout of development. On balance, it is considered that Option C is more likely to result in a negative effect of significance on townscape and there is a greater level of uncertainty around the ability to provide suitable mitigation.

Transport

	Option A Preferred Approach	Option B Moderate density on certain PDL sites	Option C High density on certain PDL sites
Rank of preference	1	2	3
Significant effect?	No	No	?

The road network around Harlow carries large volumes of traffic; the most notable area of congestion being on the routes and links to Junction 7 of the M11, but also the A414. Transport Modelling carried out as part of the Strategic Spatial Options Study for the West Essex and East Hertfordshire HMA indicated that a 35-40% increase in trips on the network by 2033 is to be expected, based on 14,000 new homes in and around Harlow (and 48,000 across the wider HMA).¹¹¹

In terms of the level of development that can be accommodated in and around Harlow, the transport modelling indicated that the preferred spatial strategy for the HMA can be delivered; provided that key mitigation measures are delivered during the Plan period. A signed Memorandum of Understanding (Feb 2017) has been produced, which identifies a number of new infrastructure interventions that will be necessary. The most notable of these is a proposed new motorway junction on the M11 (Junction 7A), which will improve the flow of traffic east to west across the District and provide a catalyst for further development, promoting Harlow as a growth location along the M11 corridor.

Option A seeks to deliver the preferred approach agreed through the distribution of OAHN MoU (March 2017) for the HMA, so it is therefore concluded that it will not result in a significant negative effects in terms of traffic. Options B and C propose increased density on eight brownfield sites and therefore an increased overall level of growth to be delivered during the life of the Plan. Option B would result in an increase of 804 dwellings and Option C an increase of 2,383 dwellings compared to Option A. While Option B is likely to have a greater impact on traffic compared to Option A, it is likely to be minimal and not of significance in terms of differentiating between them. The level of growth proposed through Option C is more likely to substantially increase the levels of traffic; however, this is uncertain.

Higher density growth is proposed at sites that are close to the town centre, local centres (Hatches) as well as sustainable transport corridor nodes. This is positive in terms of transport and movement as development around these areas will have excellent access to services/facilities as well as sustainable transport modes. This will help to reduce reliance on the private vehicle and encourage a modal shift.

Taking the above into account it is predicted that Options A and B would not result in a significant negative effect on this topic. There is a greater level of uncertainty for Option C as it is not clear at this stage if improvements to highway infrastructure could be delivered.

¹¹¹ Epping, East Herts, Harlow and Uttlesford District Councils (2016) SA of Strategic Spatial Options for the West Essex and East Hertfordshire Housing Market Area.

Water

	Option A Preferred Approach	Option B Moderate density on certain PDL sites	Option C High density on certain PDL sites
Rank of preference	=	=	=
Significant effect?	No	No	No

As the density of development on certain PDL sites increases so does the overall level of growth for the District. This has the potential to increase pressure on water resources as well as Waste Water Treatment Works (WwTWs).

The District falls within Affinity Water's supply area. Water companies in England are legally required to supply water to private consumers and businesses within their area. As set out in the Water Industry Act 1991, they must prepare and maintain a Water Resources Management Plan (WRMP) that sets out how the company intends to maintain the balance between water supply and demand. Water companies are currently in the process of updating their WRMPs to take account of predicted growth and ensure that there are schemes in place to meet future demands. As the level of growth proposed under the options increases so does the pressure on water resources. However, given the legal requirements in place for WRMPs, it is considered that there are no significant differences between the options in terms of effects on water resources.¹¹²

Thames Water is responsible for waste water in Harlow and the surrounding area, ensuring infrastructure is in place to accommodate anticipated growth. Thames Water position statement (2017) indicates that capacity at the Rye Meads Sewage Treatment Works (STW) is expected up to 2036; however, upgrades may be required in sludge and storm streams. Further network modelling and growth review is being undertaken by Thames Water to understand sewer capacity in the area before outlining further intervention solutions.¹¹³

Harlow Council commissioned a Water Cycle Study Phase 1 Update and the Draft Report did not identify any issues which require further assessment by a Phase 2 study.¹¹⁴

There are no significant differences between the options and they are all predicted to have a neutral effect in relation to the water environment.

¹¹² Affinity Water (2014) Water Resource Management Plan.

¹¹³ Thames Water (2017) Greater Harlow Position Statement.

¹¹⁴ Harlow Council (April 2018) Water Cycle Study Update Draft Report. Prepared by JBA Consulting.

