Basildon Borough Local Plan

Integrated Impact Assessment

Issues and Options IIA Report

Basildon Borough Council

Final report

Prepared by LUC

June 2023

Version	Status	Prepared	Checked	Approved	Date
1	Working Draft Report	K Williamson R Finnigan	J Allen	J Allen	12/05/2023
2	Final draft	K Williamson	J Allen	J Pearson	12/06/2023

Note that this report has been formatted to meet the requirements of the Web Content Accessibility Guidelines (WCAG 2.1) to Level AA, following the Public Sector Bodies (Websites and Mobile Applications) Accessibility Regulations (2018).











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Chapter 1

Introduction

1.1 Basildon Borough Council (the Council) commissioned LUC in January 2023 to undertake an Integrated Impact Assessment, comprising Sustainability Appraisal (SA) incorporating Strategic Environmental Assessment (SEA), Health Impact Assessment (HIA), Equalities Impact Assessment (EqIA) and Habitats Regulations Assessment (HRA) for a new Local Plan. For the purposes of this report, we refer to the IIA of the Basildon Local Plan which should be taken as incorporating SA, SEA, HIA and EqIA. The Habitats Regulations Assessment (HRA) of the new Local Plan will be dealt with separately from the IIA later in the plan-making process, as a more distinct assessment process.

1.2 This IIA report appraises the Issues and Options Consultation Document for the Basildon Local Plan and will be subject to public consultation in the summer of 2023. A Scoping Report was prepared and consulted on in February 2023. Comments received from the statutory consultation bodies have been incorporated into this initial IIA report, alongside relevant information from the Scoping Report.

1.3 It should be noted that this report is in an ‘Accessible format’, which means it has been formatted to meet the requirements of the Public Sector Bodies (Websites and Mobile Applications) Accessibility Regulations (2018), as set out in the Web Content Accessibility Guidelines (WCAG 2.1). This means it must have larger font, larger spacing between lines and headings, less information presented in tables, ‘alt text’ provided for all figures and it is able to be read by screen-reading software.

Basildon Borough

1.4 Basildon Borough is in South Essex, 30 miles east of the City of London. It covers an area of 87km^2 and has a population of approximately 187,600 **[See reference** 1**]**. The main settlement is Basildon, a Mark 1 New Town designated in 1948 and built in several phases over 50 years. The New Town area, to the south of the Borough includes the neighbourhoods of Basildon, Laindon, Vange, Pitsea, Steeple View and Noak Bridge. Basildon has the largest population in the Borough. Two smaller independent towns are situated to the north of the Borough: Billericay (including Great Burstead and South Green and Break Egg Hill) is the second largest settlement followed closely by Wickford (incorporating Shotgate). The urban areas are enveloped by rural countryside containing two serviced villages and thirteen smaller plotland settlements set within the Green Belt **[See reference** 2**]**.

1.5 The Borough's landscape comprises urban development, arable farmland, permanent grazing with hedgerows, woodland and a large area of Thames Estuary marshland. It also contains significant areas of plotland landscape, characterised by a mosaic of scrub, grassland and relict woodland habitats with small-scale communities of a rural nature.

1.6 Basildon Borough is served by two railway services running through the north and south of the Borough, both terminating in the City of London. National Express East Anglia provides services out of London Liverpool Street, which serves Billericay and Wickford with connections to Chelmsford, via Shenfield to the west. Rail services from Billericay/Wickford already connect with Stratford, connecting the Borough to Eurostar services at Stratford International and the Queen Elizabeth Olympic Park. In the south of the Borough, the rail franchise 'c2c', operates out of Fenchurch Street London and serves Grays, Chafford Hundred (for Lakeside Shopping Centre), Stanford le Hope and Corringham, via Upminster. London Underground services on the District line depart from Upminster, with connections to the Jubilee line available from West Ham.

1.7 Basildon Borough is well connected to the regional and national road network with two major road routes, the A127 and A13, linking South Essex with

the M25. Both these ‘A’ roads continue eastwards to Southend on Sea. The A130 in the east of the Borough together with the recent £63m investment in the new Sadlers Farm Junction provides dual carriageway access to Chelmsford, north Essex and Canvey Island. To the south west, preliminary planning work is under way to construct a new tunnel under the Thames to the east of Tilbury and Gravesend, called the ‘Lower Thames Crossing’ providing better connections to the southern bank of the river to the south and the M25 to the west.

1.8 Current conditions, trends and key issues for Basildon Borough in relation to social (including health and equalities), economic and environmental topics of relevance to the Local Plan and IIA are described in more detail in **Chapter 4** of this IIA Report.

Outline of the Local Plan and its objectives

1.9 The Basildon Borough Local Plan is intended to shape how the borough changes over the years to 2042 and possibly beyond. It will provide a positive vision for the future of Basildon Borough, help guide future investment, and identify future land use by allocating development sites. It will also set out the planning policies that will help guide local decision making on planning applications to ensure that they contribute towards its vision and objectives.

1.10 The vision for the new Local Plan sets out the council’s aspirations for growth, change and sustainable development up to the proposed plan period in 2042. The council’s Corporate Plan 2022-2026 sets out three key strategic themes which cover the full range of the council's responsibilities and priorities. The vision for the Local Plan will build on these themes.

- People: Basildon to be home to healthy and active local communities able to support themselves and each other.

- Place: Basildon to offer a high quality of life for all residents through attractive, liveable, accessible and safe neighbourhoods and towns along with the provision of enduring facilities, green spaces and town centres that meet the needs of the community.
- Prosperity: Basildon to have a thriving, dynamic and diverse economy where all our communities benefit from increased opportunity and our workforce has the right skills for our local economy and beyond.

1.11 Setting strategic objectives are a way of ensuring the vision becomes a reality. These key priorities form the basis of the Local Plan and shape how it will be delivered. These objectives will set the overall policy direction for all the strategic policies, site allocations and development management policies in the Local Plan.

- Protecting and enhancing the quality of the local environment.
- Improving the quality and value of the Green Belt.
- Minimising our impact on the environment.
- Creating vibrant and thriving town centres.
- Strengthening the competitiveness of the local economy.
- Delivering new homes.
- Capitalising on local tourism opportunities.
- Helping local people maintain healthier lifestyles.
- Enhancing the quality of life for all.
- Securing the delivery of supporting infrastructure.

1.12 Building on the vision and strategic objectives set out above, the Council has prepared an Issues and Options Consultation Document ~~for consultation~~. The document asks questions about the key issues and options for the Basildon Local Plan focussing on:

- The length of the plan period.
- Ranking of Green Belt purposes.

- Allocating land.
- Climate change ambitions.
- Biodiversity ambitions.
- Six green and blue infrastructure priorities.
- Five health priorities.
- 10 design priorities.
- Access to housing.
- Six delivering homes considerations.
- Housing type priorities.
- Gypsy, traveller and travelling showpeople site access.
- Spatial focus for employment growth.
- Eight employment type priorities.
- Four economic growth catalysts.
- Six town centre use priorities.
- Six ways to reduce reliance on private vehicle use.
- Six infrastructure priorities.

1.13 Following the consultation on the Issues and Options Consultation Document, the Council will consult on a range of policies and proposals and a draft Local Plan, before publishing a final version for submission and public examination.

Relationship of Basildon Local Plan with other relevant plans and programmes

1.14 Schedule 2 of the SEA Regulations requires the IIA Report to provide:

a) “an outline of the contents and main objectives of the Plan and its relationship with other relevant plans or programmes”

1.15 The Basildon Borough Local Plan is being prepared in accordance with the approved Local Development Scheme (2022-2027) **[See reference** 3**]**. The Local Plan is a Borough wide plan to coordinate the development and growth requirements of the Borough over a period of 15 to 20 years.

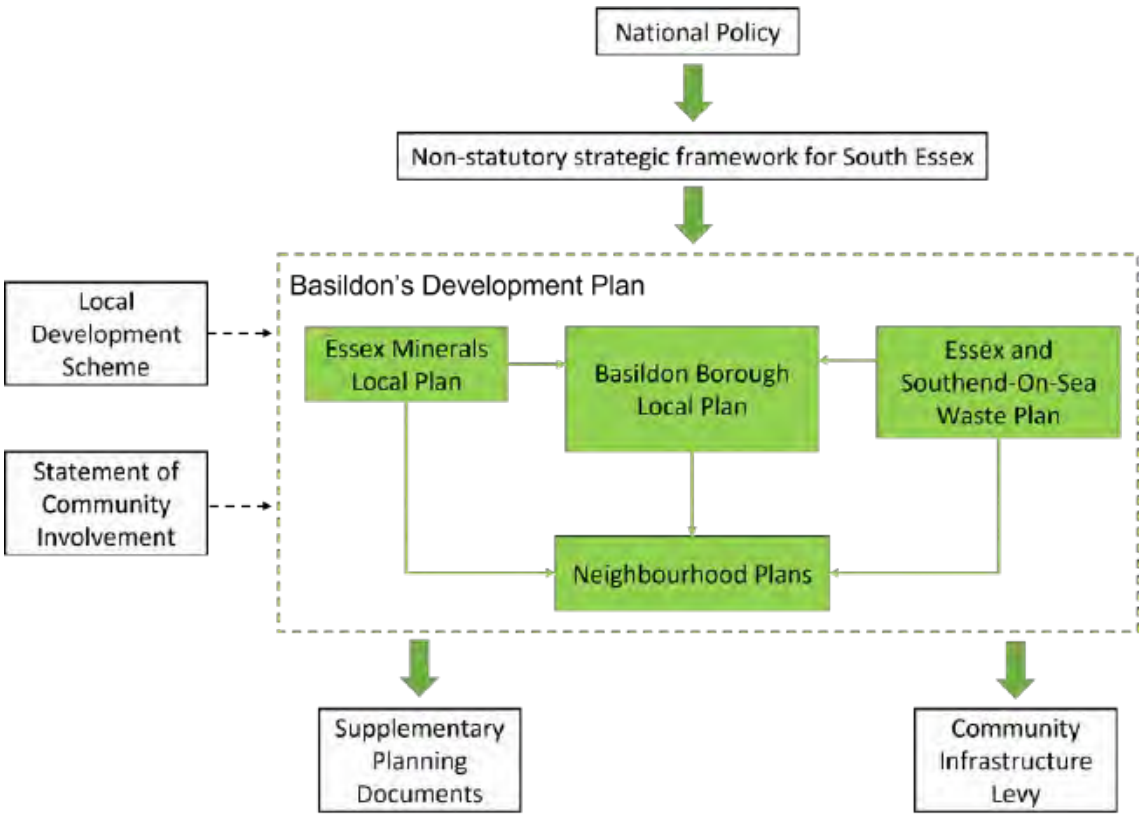
1.16 The Council are at an early stage in the development of the new Local Plan preparing an initial Issues and Options Consultation document for consultation under Regulation 18 of the Town and Country Planning (Local Planning) (England) Regulations 2012 in the summer of 2023. This document is intended to start a conversation as to the type of place everyone wants Basildon Borough to become. It represents the beginning of the formal process of consultation on the new Local Plan. Future stages of the Basildon Local Plan will include detailed policies on delivering new homes, jobs, services and infrastructure and manage detailed planning issues such as the allocation of specific sites for new development.

1.17 Notwithstanding the further work to be done for the new Local Plan, it is relevant to consider some of the council’s existing evidence base to understand the need for development and growth in the borough. The council is reviewing its evidence base to ensure the new Local Plan is supported by relevant and up-to-date evidence.

1.18 Once adopted, the new Local Plan will replace the existing Basildon District Local Plan Saved Policies 2007**[See reference** 4**]**. Future plan-making will also need to take full account of the adopted Essex Minerals and Essex and Southend-on-Sea Waste Local Plans and the emerging non-statutory, strategic framework for South Essex which the Association of South Essex Local Authorities (ASELA) is currently preparing. Work has commenced on several neighbourhood development plans within Basildon Borough, and these will become part of the statutory development plan once they are ‘made’.

1.19 The relationship of the Local Plan to other relevant planning policy and supporting documents is shown in **Figure 1.1**. The wider policy context within which the Local Plan and IIA must operate is described in **Chapter 3**.

Figure 1.1: Relationship of Local Plan to other documents



Sustainability Appraisal and Strategic Environmental Assessment

1.20 The Planning and Compulsory Purchase Act 2004 **[See reference 5]** requires Local Plans to be subject to SA. SA is designed to ensure that the plan preparation process maximises the contribution that a plan makes to sustainable development and minimises any potential adverse impacts. The SA process involves appraising the likely social, environmental and economic

effects of the policies and proposals within a plan from the outset of its development.

1.21 SEA is also a statutory assessment process, originally required under the European SEA Directive **[See reference** 6**]**, transposed in the UK by the SEA Regulations **[See reference** 7**]** and amended by the Environmental Assessments and Miscellaneous Planning (Amendment) (EU Exit) Regulations 2018 (SI 2018/1232). As set out in the explanatory Memorandum accompanying the Brexit amendments **[See reference** 8**]**, they are necessary to ensure that the law functions correctly following the UK's exit from the EU. No substantive changes were made by this instrument to the way the SEA regime currently operates. Therefore, the SEA Regulations remain in force, and it is a legal requirement for the Basildon Local Plan to be subject to SA and SEA throughout its preparation. The SEA Regulations require the formal assessment of plans and programmes which are likely to have significant effects on the environment and which set the framework for future consent of projects requiring Environmental Impact Assessment (EIA) **[See reference** 9**]**. The purpose of SEA, as originally defined in Article 1 of the SEA Directive, is:

> "To provide for a high level of protection of the environment and to contribute to the integration of environmental considerations into the preparation and adoption of plans…with a view to promoting sustainable development."

1.22 SEA and SA are separate processes but have similar aims and objectives. Simply put, SEA focuses on the likely environmental effects of a plan whilst SA includes a wider range of considerations, extending to social and economic impacts. The Government's planning practice guidance **[See reference** 10**]** shows how it is possible to satisfy both requirements by undertaking a joint SA and SEA process, and to present an SA Report that incorporates the requirements of the SEA Regulations. The SA and SEA of the Local Plan is being undertaken using this integrated approach and throughout this report the abbreviation 'IIA' should therefore be taken to refer to 'SA incorporating the requirements of SEA'.

1.23 The IIA process comprises several stages, as set out below:

Stage A: Setting the context and objectives, establishing the baseline and deciding on the scope.

Stage B: Developing and refining options and assessing effects.

Stage C: Preparing the Sustainability Appraisal Report.

Stage D: Consulting on the Local Plan and the IIA Report.

Stage E: Monitoring the significant effects of implementing the Local Plan.

1.24 On 11th May 2022 the Government published the Levelling-up and Regeneration Bill **[See reference** 11**]**, which sets out in detail the Government's proposals for reforming the planning system. Amongst other things, the Bill proposes the replacement of the current SEA regime with a new requirement for an Environmental Outcomes Report. The specific requirements will be set out in forthcoming legislation, along with information about transition arrangements but for now, the requirement for SEA remains, as set out in existing legislation. Any changes to the legal framework for carrying out IIA will be addressed as appropriate as the Local Plan is prepared.

Health Impact Assessment

1.25 HIA is a non-statutory process that identifies the health and wellbeing impacts (both positive and negative) of a plan or development proposal. It ensures that the effect of development on both health and health inequalities is considered and responded to during the planning process. Public Health England's 2020 guidance on 'Health Impact Assessment in spatial planning' outlines that, as the SEA Regulations require consideration of 'human health' as a topic, it is possible to integrate an HIA within an IIA, although it is for the local authority to judge whether a standalone HIA is needed or whether an integrated assessment is a more appropriate approach **[See reference 12]**. For the assessment of the Local Plan, it is considered that an integrated assessment is appropriate to consider the social (including health), economic and

environmental effects of the framework. Therefore, throughout this report, the term ‘IIA’ should be taken to refer to ‘SA incorporating the requirements of SEA and HIA’.

1.26 Different health effects will arise among different groups of people and individuals exposed to the same risk or hazard. This is because of differences in their exposure to the hazard, their sensitivity and their capacity to respond to events (i.e., their resilience) or to adapt in the long term.

1.27 The HIA will follow the Essex Planning Officers’ Association (EPOA) Health Impact Assessment methodology **[See reference** 13**]** which sets out ten key topics relating to health and wellbeing which will be considered when identifying relevant environmental and socio-economic health determinants to inform the IIA Framework:

1. Access to education:
   - Promote access to educational infrastructure.

2. Access to skills and employment:
   - Promote access to education, skills, training and employment opportunities.

3. Access to healthcare services:
   - Provide appropriate access to NHS healthcare services and opportunities for self-care.

4. Access to open, green and blue spaces:
   - Provide access to interesting and stimulating open spaces and natural environments to encourage people to be physically active.

5. Active environments:

- Ensure developments embody the principles of lifetime neighbourhoods and promote independent living.

6. Encourage active travel:

- Encourage active travel through the promotion of walking, wheeling, cycling and other measures to reduce reliance on motorised transport.

7. Design of homes and housing:

- Design of homes and spaces including the promotion and application of Sport England Active Design Principles.

8. Access to healthy food:

- Promote better access to healthy and locally sourced food.

9. Support communities:

- Create safe and accessible built environments with well-designed public spaces that encourage community participation and designed-out crime measures.

10. Environmental sustainability:

- Address environmental sustainability including future-proofing measures.

1.28 The way in which these health determinants have been integrated into the framework of objectives against which the likely effects of the Local Plan will be appraised is set out in **Chapter 5**. The IIA process will seek to understand how health is affected by the Local Plan so that, in assessing it, major relevant health issues are covered, maximising positive effects and preventing, offsetting or minimising negative ones, and promoting healthier planning.

Equalities Impact Assessment

1.29 The requirement to undertake formal Equalities Impact Assessment (EqIA) of development plans was introduced in the Equality Act 2010 but was abolished in 2012. Despite this, authorities are still required to have regard to the provisions of the Equality Act, namely the Public Sector Duty which requires public authorities to have due regard for equalities considerations when exercising their functions. Equality impacts will therefore be carefully considered and integrated into the IIA Framework.

Habitats Regulations Assessment

1.30 The requirement to undertake Habitats Regulations Assessment (HRA) of land-use plans was confirmed by the amendments to The Conservation (Natural Habitats, &c.) (Amendment) Regulations 2007 **[See reference 14]**. The currently applicable version is The Conservation of Habitats and Species Regulations 2017, as amended by The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 **[See reference 15]** (hereafter referred to as the "Habitats Regulations"). When preparing a land-use plan, the competent authority is therefore required by law to carry out an HRA. The competent authority can commission consultants to undertake HRA work on its behalf which is then reported to and considered by the competent authority.

1.31 HRA refers to the assessment of the likely significant effects of a land-use plan on 'European sites' of nature conservation importance. European sites comprise Special Protection Areas (SPAs), Special Areas of Conservation (SAC), potential SPAs (pSPAs), candidate SACs (cSACs), Sites of Community Importance (SCIs) and Ramsar sites although these are designated at an international level.

1.32 The purpose of HRA is to assess the impacts of a land-use plan against the conservation objectives of a European site and to ascertain whether it would adversely affect the integrity of that site. The competent authority will consider

the HRA and may only progress the land-use plan if it considers that it will not adversely affect the integrity of any European site or have a significant effect on qualifying habitats or species for which the European sites are designated, or if Imperative Reasons of Overriding Public Interest (IROPI) are identified.

1.33 The HRA will be undertaken separately but the findings, once available, will be considered in the IIA where relevant, for example to inform judgements about the likely effects of potential development locations on biodiversity.

Approach to Integrated Impact Assessment

1.34 The methodology for this IIA report is set out in **Chapter 2.** The framework for the appraisal process is set out in **Chapter 5.** In accordance with the Government's Planning Practice Guidance on SEA/SA, the IIA Report is proportionate and relevant to the Local Plan, focussing on what is needed to assess likely significant effects **[See reference** 16**]**. It also takes account of the National Planning Policy Framework (NPPF) and the emphasis it places on achieving sustainable development.

1.35 This IIA Report follows key legislation, policy and guidance including:

- Directive 2001/42/EC on the assessment of the effects of certain plans, and programmes on the environment i.e., the SEA Directive **[See reference** 17**]**;
- The Environmental Assessment of Plans and Programmes Regulations 2004 (SI 2004/1633) **[See reference 18]**, as amended by the Environmental Assessments and Miscellaneous Planning (Amendment) (EU Exit) Regulations 2018 (SI 2018/1232) **[See reference 19]**;
- Strategic Environmental Assessment and Sustainability Appraisal National Planning Practice Guidance **[See reference** 20**]**;

- A Practical Guide to the Strategic Environmental Assessment Directive **[See reference** 21**]**;
- Guidance on Integrating Climate Change and Biodiversity into Strategic Environmental Assessment **[See reference** 22**]**;
- Guidance on Strategic Environmental Assessment / Sustainability Appraisal and the Historic Environment **[See reference** 23**]**;
- Strategic Environmental Assessment: Improving the effectiveness and efficiency of Strategic Environmental Assessment / Sustainability Appraisal for land use plans **[See reference** 24**]**;
- Draft Guidance on Assessing Health Impacts in Strategic Environmental Assessment **[See reference** 25**]**; and
- Health Impact Assessment in spatial planning: A guide for local authority public health and planning teams **[See reference** 26**]**.

Where the SEA Regulations are addressed in this IIA Report

1.36 The text in this section signposts the relevant sections of the IIA Report that are considered to meet the SEA Regulations requirements (the remainder will be met during subsequent stages of the IIA of the Local Plan). This section will be updated and included in the full IIA Report at each stage of the IIA to show how the requirements of the SEA Regulations have been met through the IIA process.

Regulation 12 and Schedule 2

1.37 The SEA Regulations require the responsible authority to prepare, or secure the preparation of, an 'environmental report', which in this case will comprise the IIA report. The environmental report must identify, describe and evaluate the likely significant effects on the environment of implementing the

plan or programme and reasonable alternatives, taking into account the objectives and geographical scope of the plan or programme (Regulation 12). The information required by Schedule 2 of the SEA Regulations is set out below, indicating which part(s) of the IIA Report provide that information:

- An outline of the contents and main objectives of the plan or programme, and of its relationship with other relevant plans and programmes.
    - Covered in **Chapter 1** and Chapter 3 of this IIA Report.
- The relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme.
    - Covered in **Chapter 4** of this IIA Report.
- The environmental characteristics of areas likely to be significantly affected.
    - Covered in **Chapter 4** of this IIA Report.
- Any existing environmental problems which are relevant to the plan or programme including those relating to any areas of a particular environmental importance, such as areas designated pursuant to Directives 79/409/EEC and 92/43/EEC.
    - Covered in **Chapter 4** of this IIA Report.
- The environmental protection objectives established at international, community or national level that are relevant to the plan or programme and the way those objectives and any environmental considerations have been considered during its preparation.
    - Covered in **Chapter 3** and **Appendix A** of this IIA Report. **Chapter 5** describes the IIA Framework, which shows how the objectives have been considered.
- The likely significant effects on the environment, including short, medium and long-term effects, permanent and temporary effects, positive and negative effects, and secondary, cumulative and synergistic effects, on issues such as 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 these issues.

  - This requirement will be met throughout the IIA process, and in more detail as the local plan is developed. An initial appraisal of the Issues and Options is set out in **Chapter 6** of this IIA report. **Chapter 5** describes the method by which significant effects have and will continue to will be identified.

- 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.

  - This requirement will be met at a later stage in the IIA process.

- 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.

  - This requirement will be met throughout the IIA process, and in more detail as the Local Plan is developed. An initial appraisal of the Issues and Options is set out in Chapter 6 of this IIA report.

- A description of measures envisaged concerning monitoring in accordance with Regulation 17.

  - This requirement will be met at a later stage in the IIA process.

- A non-technical summary of the information provided under the above headings.

  - This requirement will be met at a later stage in the IIA process.

1.38 The report shall include the information that may reasonably be required considering current knowledge and methods of assessment, the contents and level of detail in the plan or programme, its stage in the decision-making process, and the extent to which certain matters are more appropriately assessed at different levels in that process to avoid duplication of the assessment (Reg. 12(3)).

- This is addressed throughout the IIA Report.

1.39 When deciding on the scope and level of detail of the information that must be included in the environmental report, the responsible authority shall consult the consultation bodies (Reg. 12(5)).

- Consultation was undertaken on the IIA Scoping Report from February to March 2023 with the three consultation bodies (Environment Agency, Historic England and Natural England). Consultation on this IIA report will take place in Summer 2023.

Regulation 13

1.40 Authorities with environmental responsibility and the public shall be given an 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 (Regulation 13).

- Public consultation on the Local Plan and accompanying IIA Reports will take place as the local Plan develops in accordance with the Council's Local Development Scheme (the timetable for preparing the Local Plan).

Regulation 14

1.41 EU Member States must be consulted where the implementation of the plan or programme is likely to have significant effects on the environment of that country (Regulation 14).

- The Basildon Local Plan is not expected to have significant effects on EU Member States.

Regulation 16

1.42 Provision of information on the decision: When the plan or programme is adopted, the public and any countries consulted under Reg. 14 must be informed and the following made available to those so informed:

- The plan or programme as adopted;
- A statement summarising how environmental considerations have been integrated into the plan or programme and how the environmental report, the opinions expressed, and the results of consultations entered have been considered, and the reasons for choosing the plan or programme as adopted, in the light of the other reasonable alternatives dealt with; and
- The measures to be taken to monitor the likely significant effects of the plan or programme.
    - To be addressed after the Basildon Local Plan is adopted.

Regulation 17

1.43 Monitoring of the significant environmental effects of the plan's or programme's implementation.

- To be addressed after the Basildon Local Plan is adopted.

Quality assurance

1.44 Environmental reports should be of a sufficient standard to meet the requirements of the SEA Regulations.

- This IIA Report has been produced in line with current guidance and good practice for SEA/SA and this section has demonstrated where the requirements of the SEA Regulations have been met.

Structure of the IIA report

1.45 This chapter describes the background to the production of the Basildon Local Plan and the requirement to undertake IIA and other assessment processes. The remainder of this IIA Report is structured into the following sections:

- **Chapter 2** sets out the methodology for the IIIA.
- **Chapter 3** presents the policy context for the Local Plan and the IIA.
- **Chapter 4** presents the baseline and key sustainability issues in the borough.
- **Chapter 5** presents the IIA framework against which the effects of the Local Plan will be assessed and explains how this has been developed.
- **Chapter 6** appraises the appraisable Issues and Options contained within the Basildon Local Plan Issues and Options Consultation Document.
- **Chapter 7** describes the next steps to be undertaken in the IIA of the Basildon Local Plan.
- **Appendix A** provides a more comprehensive review of relevant policy documents.
- **Appendix B** sets out the comments received by statutory consultees in response to the consultation on the Scoping Report, held in February 2023.

Chapter 2

Methodology

2.1 In addition to complying with legal requirements, the approach being taken to the IIA of the Basildon Local Plan is based on current good practice and the guidance on SA/SEA set out in the Government's Planning Practice Guidance. This calls for the SA/SEA (in this case IIA) to be carried out as an integral part of the plan-making process. The section below sets out the main stages of the plan-making process and shows how these correspond to the SA/SEA (in this case IIA) process.

Main Stages of plan-making, SA and SEA (IIA)

Local Plan Evidence Gathering and Engagement

- SA/SEA/IIA Stage A – Setting the context and objectives, establishing the baseline and deciding on the scope:
  - Identifying other relevant policies, plans and programmes, and sustainability objectives.
  - Collecting baseline information.
  - Identifying sustainability issues and problems.
  - Developing the SA/IIA Framework.
  - Consulting on the scope of the SA/IIA.

Local Plan Production

- SA/SEA/IIA Stage B – Developing and refining options and assessing effects:
  - Testing the Local Plan objectives against the SA/IIA Framework.
  - Developing the Local Plan options.
  - Evaluating the effects of the Local Plan.
  - Considering ways of mitigating adverse effects and maximising beneficial effects.
  - Proposing measures to monitor the significant effects of implementing the Local Plan.
- SA/SEA/IIA Stage C – Preparing the Sustainability Appraisal (or IIA) Report.
- SA/SEA/IIA Stage D – Seek representations on the Local Plan and the Sustainability Appraisal (or IIA) Report:
  - Public participation on Local Plan and the SA/IIA Report.
  - Appraising significant changes.

Local Plan Examination

- SA/SEA/IIA Stage D (cont.):
  - Appraising significant changes resulting from representations.

Local Plan Adoption and Monitoring

- SA/SEA/IIA Stage D (cont.):
  - Making decisions and providing information.
- SA/SEA/IIA Stage E: Monitoring the significant effects of implementing the Local Plan:

- Finalising aims and methods for monitoring.
- Responding to adverse effects.

Stage A: Scoping

2.2 The IIA process began with the production of an IIA Scoping Report for the Local Plan, prepared by LUC in February 2023. The Scoping stage of the IIA involves understanding the social, economic and environmental baseline for the Plan area, as well as the sustainability policy context and key sustainability issues.

Review other relevant policies, plans and programmes to establish policy context

2.3 The Local Plan is not prepared in isolation; rather it is prepared within the context of other policies, plans and programmes. The SEA Regulations require the Environmental Report to describe the relationship of the plan with other relevant plans and programmes. It should also be consistent with environmental protection legislation and support attainment of sustainability objectives that have been established at the international, national and regional/sub-regional levels.

2.4 The IIA Scoping Report contained a review of relevant policies, plans and programmes at the national, regional and local levels that were considered to be relevant to the scope of the Local Plan. A summary of the relevant international and national level policies, plans and programmes is provided in **Chapter 3** of this IIA report and a more detailed record can be found in **Appendix A**.

Collect baseline information to establish sustainability context

2.5 Information on existing environmental, social and economic conditions in the plan area provides the baseline against which the plan's effects can be assessed in the IIA and monitored during the plan's implementation. Baseline information can also be combined with an understanding of drivers of change that are likely to persist regardless of the local plan to understand the likely future sustainability conditions in the absence of the local plan.

2.6 The SEA Regulations require the Environmental Report (in this case the IIA report) to describe relevant aspects of the current state of the environment and how they are likely to evolve without the plan. An understanding of this likely future, together with the assessed effects of the plan itself, additionally allows the IIA to report on cumulative effects, another requirement of the SEA Regulations.

2.7 The SEA Regulations require assessment of effects in relation to the following 'SEA topics': biodiversity, population, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage (including architectural and archaeological heritage), landscape, and the inter-relationship between these. Baseline information was therefore collected in relation to the SEA topics and additional sustainability topics were also addressed, covering broader socio-economic issues such as housing, access to services, crime and safety, education and employment. This reflects the integrated approach that is being taken to the SA, SEA and other impact assessment processes. Baseline information for the Borough was presented in the IIA Scoping Report produced by LUC in February 2023. Any updates since the publication of the Scoping Report have been reflected in **Chapter 3** and **Chapter 4** of this IIA Report.

Identify sustainability issues

2.8 The baseline information also allows the identification of existing sustainability issues, including problems as required by the SEA Regulations. The sustainability issues and their likely evolution without the Local Plan were initially presented in the IIA Scoping Report and are set out in **Chapter 3** and **Chapter 4** of this IIA report.

Develop the IIA framework

2.9 The relevant sustainability objectives identified by the review of other policies, plans and programmes together with the key sustainability issues facing the Borough, identified by the collection and review of baseline information in the IIA Scoping Report, informed the development of a set of sustainability objectives (the 'IIA framework') against which the effects of the Plan would be assessed. These objectives also take into account the types of issues that are capable of being affected by the land use planning system.

2.10 Development of an assessment framework is not a requirement of the SEA Regulations but is a recognised way in which the likely sustainability effects of a plan can be transparently and consistently described, analysed and compared. The IIA framework comprises a series of sustainability objectives and supporting criteria that are used to guide the appraisal of the policies and proposals within a plan. An explanation of the development of the IIA framework for the Basildon Local Plan is set out in **Chapter 5**.

Consult on the scope and level of detail of the IIA

2.11 Public and stakeholder participation is an important part of the IIA and wider plan-making processes. It helps to ensure that the IIA report is robust and

has due regard for all appropriate information that will support the Plan in making a contribution to sustainable development.

2.12 The SEA Regulations require the statutory consultation bodies (the Environment Agency, Historic England and Natural England) to be consulted "when deciding on the scope and level of detail of the information that must be included" in the IIA Report. The scope and level of detail of the IIA is governed by the IIA framework and the statutory consultees have therefore been consulted on this when it was developed as part of the scoping process for the IIA Report. The Council undertook consultation with the statutory consultees for the IIA Scoping Report in early 2023.

2.13 Appendix B contains the comments that were received during this period of consultation.

Stage B: Developing and refining options and assessing effects.

2.14 Developing options for a plan is an iterative process, usually involving a number of consultations with the public and stakeholders. Consultation responses and the IIA help to identify where there may be 'reasonable alternatives' to the options being considered for a plan.

2.15 In relation to the IIA report that needs to be prepared for the Basildon Local Plan, Part 3 of the SEA Regulations 12 (2) requires that:

> "The (environmental or SA/IIA) report must identify, describe and evaluate the likely significant effects on the environment of—
>
> - implementing the plan or programme; and

- reasonable alternatives, taking into account the objectives and the geographical scope of the plan or programme."

2.16 Schedule 2 (h) of the SEA Regulations requires that the Environmental (or SA/IIA) Report includes a description of:

"(h) an outline of the reasons for selecting the alternatives dealt with"

2.17 The SEA Regulations therefore require that when considering the policies and site allocations for inclusion in a plan, any alternative policy approaches or site options that are 'reasonable' must be subject to appraisal. Therefore, alternatives that are not reasonable do not need to be subject to appraisal. Examples of unreasonable alternatives could include policy options that do not meet the objectives of the plan or national policy (e.g. the NPPF) or site allocation options that are unavailable or undeliverable.

2.18 The IIA findings are not the only factors taken into account when plan-makers are determining a preferred option to take forward in a plan. Indeed, there will often be an equal number of positive or negative effects identified by the IIA for each option, such that it is not possible to rank them based on sustainability performance in order to select a preferred option. Factors such as public opinion, deliverability and conformity with national policy will also be taken into account by plan-makers when selecting preferred options for the plan.

2.19 The consideration of reasonable alternatives has been a key focus of attention within the IIA process. This section provides an overview of how options have been identified by Basildon Council to date, which ones are 'reasonable alternatives and therefore been subject to IIA, and how this appraisal work has fed into the development of Basildon's Local Plan.

Issues and Options of the Basildon Local Plan (Regulation 18)

2.20 This IIA report considers the Issues and Options for the Basildon Local Plan which will be subject to consultation in the summer of 2023.

2.21 Not all of the issues and options contained within the Issues and Options Consultation Document represent clear, distinct and appraisable options and so only certain options have been subject to IIA at this stage. The results of LUC's appraisal of the appraisable is set out in **Chapter 6**, along with justification for why each option was appraised or not appraised. As the Local Plan develops, its contents and all reasonable alternatives will be subject to IIA.

Stage C: Preparing the IIA report

2.22 This IIA report describes the process that has been undertaken to date in carrying out the IIA of the Issues and Options of the Basildon Local Plan. It contains an appraisal of the vision and objectives for the plan, and six broad spatial options. The focus of the appraisal has been the identification of significant effects, whether positive or negative, in accordance with the SEA Regulations.

2.23 This IIA report is intended to meet all the reporting requirements of Schedule 1 of the SEA Regulations.

Stage D: Consultation on the Local Plan and this IIA report

2.24 Basildon Council is inviting comments on the Issues and Options for the Basildon Local Plan (2023) and this IIA report. These documents are being published on the Council's website for consultation in the summer of 2023.

Stage E: Monitoring and implementation of the Local Plan

2.25 This will be prepared at a later stage of the plan making process, once the Council has prepared a full draft of the Local Plan and it is possible to determine what the likely significant effects of the Local Plan are as a whole and in combination with other Plans, Programmes and Projects.

Appraisal methodology

2.26 The SEA Regulations, Schedule 2(8) require the Environmental Report to include:

> "…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."

IIA framework

2.27 The development of a set of IIA objectives (known as the IIA framework) is a recognised way in which the likely environmental and sustainability effects of a plan and reasonable alternatives can be described, analysed and compared. The IIA framework for the IIA of the Basildon Local Plan is presented in **Chapter 5** and was developed by LUC from the analysis of national, regional and local policy objectives, baseline information, and key sustainability issues identified in the Plan area.

2.28 The IIA framework comprises a series of IIA objectives, each accompanied by a set of guide questions that are used to appraise the performance of the Local Plan against the IIA objectives, including overall alternative spatial strategies for growth being considered by the Council for inclusion in the Local Plan. The relationship between the key sustainability issues, the IIA objectives and the SEA Topics, Equality Act 2010 protected characteristics and Essex Planning Officers' Association Health Impact Assessment topics is set out within **Chapter 5.**

Key to IIA effects symbols

2.29 The findings of the IIA are presented as colour coded symbols showing an effect for each option against each one of the IIA objectives along with a concise justification for the effect given, where appropriate. The colour coding is shown in **Table 2.2** below.

Table 2.1: Key to IIA effects symbols

Symbol and Colour Coding Used	Description of Effect
++	Significant positive effect likely.
++/-	Mixed significant positive and minor negative effects likely.
+	Minor positive effect likely.
+/-	Mixed minor effects likely.
++/--	Mixed significant effects likely.
-	Minor negative effect likely.
--/+	Mixed significant negative and minor positive effects likely.
--	Significant negative effect likely.
0	No or negligible effect likely.
?	Likely effect uncertain.
N/A	Assessment criterion not applicable.

2.30 Where a potential positive or negative effect is uncertain, a question mark was added to the relevant symbol (e.g. +? or -?) and the symbol has been colour coded as per the potential positive, negligible or negative effect (e.g. green, white, yellow, pink, etc.). Negligible effects are recorded where a policy or site allocation is considered to have no effect in contributing to achievement of the IIA objective. This is usually the case when an objective or policy is focused on a very narrow topic and would only affect two or three IIA objectives.

2.31 The likely effects of options and policies need to be determined and their significance assessed, which inevitably requires a series of judgments to be made. The appraisal has attempted to differentiate between the most significant effects and other more minor effects through the use of the symbols shown

above. The dividing line in making a decision about the significance of an effect is often quite small. Where either (++) or (--) has been used to distinguish significant effects from more minor effects (+ or -) this is because the effect of an option or policy on the IIA objective in question is considered to be of such magnitude that it will have a noticeable and measurable effect taking into account other factors that may influence the achievement of that objective. However, effects are relative to the scale of proposals under consideration.

2.32 Mixed effects have only been presented where directly opposing effects (i.e. positive and negative) have been identified through the appraisal (e.g. +/-, ++/-, --/+ and ++/--). For some IIA objectives, it is possible that a policy might have a minor positive effect in relation to one aspect of the policy and a significant positive effect in relation to another aspect (giving a score of +/++). However, in these instances, only the significant score is shown in the appraisal tables. Similarly, if a policy could have a minor and significant negative effect (-/--) for the same IIA objective, only the significant negative score is shown in the appraisal tables. The justification text relating to the appraisal describes where the various elements of the policy or site being appraised might have potential to result in effects of differing magnitude.

2.33 The likely sustainability effects of the appraisable Issues and Options for the Basildon Local Plan are summarised in **Chapter 6**. Potential cumulative impacts will be considered in later IIA process, when the Basildon Local policies and site allocations and their reasonable alternatives are at a more developed stage.

Difficulties encountered

2.34 To date, the main difficulties encountered or limitations of the IIA process include:

- The high-level nature of the policy options meant that at this stage it was difficult to assess in detail the likely effects of the options on each IIA objective. Once policies have been worked up in more detail, it should be possible to draw more certain conclusions about their likely effects and

make recommendations on how policy options might be worded to improve their sustainability performance.

- Because many effects of development are dependent on the exact location, layout and design of development, it may be possible to mitigate some of the effects highlighted in this IIA. However, given the inherent uncertainties about these details at this strategic stage of planning and assessment, the IIA focuses on identifying potential significant effects of the options considered, without making assumptions about detailed design or mitigation measures that might be implemented.
- The number of strategies, plans, programmes, policy documents, advice and guidance produced by a range of statutory and non-statutory bodies means that it has not been possible within the resources available to consider every potentially relevant document in detail (see **Chapter 3** and **Appendix A**). Strategies, plans and programmes will be newly prepared or updated throughout the preparation of the local plan and each iteration of the IIA will take account of those changes, where it is appropriate.
- The IIA of future iterations of the Local Plan and associated new reasonable alternatives will continue to benefit from the more recent, accurate and consistent evidence available.

Chapter 3

Policy Context

3.1 Schedule 2 of the SEA Regulations requires the SA Report to describe:

> (e) "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"

3.2 To establish a clear scope for the IIA it is necessary to review and develop an understanding of the environmental, social and economic policy objectives that the Basildon Local Plan should seek to conform with. This chapter summarises the international and national policy objectives that should be taken into consideration during preparation of the plan. These objectives have been considered when drafting the IIA Framework in **Chapter 5**.

There is an extensive range of policy documents that are of potential relevance to the Local Plan preparation and IIA process. A pragmatic and proportionate approach has been taken to the review of the policy context, seeking to identify key sustainability (i.e. environmental, social or economic) objectives that have the potential to be influenced by a local plan. A summary of the relevant objectives of key policy documents is provided in this chapter with a wider and more detailed review provided in **Appendix A**.

Implications of Brexit

3.3 As of the end of January 2020 the UK has left the EU. Principally, the UK's environmental law is derived from EU law or was directly effective EU law. As a result of Brexit, the European Union (Withdrawal) Act 2018 converts existing EU law which applied directly in the UK's legal system (such as EU Regulations and EU Decisions) into UK law and preserves laws made in the UK to implement EU obligations (e.g., the laws which implement EU Directive). This body of law is known as retained EU law and is could be subject to future, post-Brexit amendments.

3.4 As set out in the Explanatory Memorandum accompanying the Brexit amendments to the SEA Regulations **[See reference** 27**]**, the purpose of the Brexit amendments is to ensure that the law functions correctly after the UK has left the EU.

3.5 No substantive changes have been made the UK regulations to date; however, the Government does intend to reform the planning system, including replacing SEA and SA with a new requirement for an Environmental Outcomes Report. No further information is known at the time of writing. Any changes to the legal framework for carrying out SA/SEA will be addressed as appropriate as the Local Plan is prepared.

International plans, policies and programmes

3.6 At the international level, there is a wide range of plans and programmes which act to inform and shape national level legislation. Planning policy in England at a national and local level (i.e., the NPPF and the Local Plan) should be aware of, and in conformity with, the relevant legislation.

3.7 In addition to the EU Directives temporarily transposed into UK legislation, the **2030 Agenda for Sustainable Development** (2015) **[See reference** 28**]**, adopted by all United Nations Member States, provides a shared blueprint for peace and prosperity for people and the planet and includes 17 Sustainable Development Goals (SDGs), designed to achieve a better and more sustainable future for all. Relevant to the Local Plan and this IIA are the following SDGs:

- SDG 1: No Poverty
- SDG 2: Zero Hunger
- SDG 3: Good Health and Well-being
- SDG 4: Quality Education
- SDG 5: Gender Equality
- SDG 6: Clean Water and Sanitation
- SGD 7: Affordable and Clean Energy
- SDG 8: Decent Work and Economic Growth
- SDG 9: Industry, Innovation and Infrastructure
- SDG 10: Reduced Inequalities
- SDG 11: Sustainable Cities and Communities
- SDG 12: Responsible Consumption and Production
- SDG 13: Climate Action
- SDG 14: Life Below Water
- SDG 15: Life on Land

3.8 The sustainability objectives of other international plans and programmes of relevance to the Local Plan and IIA are provided in **Appendix A**.

National plans, policies and programmes

3.9 The National Planning Policy Framework (NPPF) **[See reference 29]** is the overarching planning framework that provides national planning policy and principles for the planning system in England. The Basildon Local Plan must be consistent with the requirements of the NPPF, which states:

> "Succinct and up-to-date plans should provide a positive vision for the future of each area; a framework for addressing housing needs and other economic, social and environmental priorities; and a platform for local people to shape their surroundings."

3.10 The NPPF sets out information about the purposes of local plan-making, stating that plans should:

- "Be prepared with the objective of contributing to the achievement of sustainable development;
- Be prepared positively, in a way that is aspirational but deliverable;
- Be shaped by early, proportionate and effective engagement between plan-makers and communities, local organisations, businesses, infrastructure providers and operators and statutory consultees;
- Contain policies that are clearly written and unambiguous, so it is evident how a decision maker should react to development proposals;
- Be accessible using digital tools to assist public involvement and policy presentation; and
- Serve a clear purpose, avoiding unnecessary duplication of policies that apply to a particular area."

3.11 The NPPF also states that:

> "Local plans and spatial development strategies should be informed throughout their preparation by a Sustainability Appraisal that meets the relevant legal requirements. This should demonstrate how the plan has addressed relevant economic, social and environmental objectives (including opportunities for net gains). Significant adverse impacts on these objectives should be avoided and, wherever possible, alternative options which reduce or eliminate such impacts should be pursued. Where significant adverse impacts are unavoidable, suitable mitigation measures should be proposed (or, where this is not possible, compensatory measures should be considered)."

3.12 The NPPF is supported by the national **Planning Practice Guidance** (PPG) **[See reference** 30**]**, which provides guidance on how the Government's planning policies for England are expected to be applied. The relevant PPG for each topic is detailed in **Appendix A**.

3.13 At the time of writing the government is consulting on further revisions to the NPPF. The consultation is due to close at the beginning of March 2023 and the finalised changes to the NPPF will not be known until later in the spring 2023. Until such time as these revisions to the NPPF are finalised, the following paragraphs summarise the sustainability objectives detailed in the currently adopted NPPF relevant to the IIA topics.

3.14 Climate change adaptation and mitigation: The NPPF contains as part of its environmental objective a requirement to mitigate and adapt to climate change, "including moving to a low carbon economy". The document also states that the "planning system should support the transition to a low carbon future in a changing climate, taking full account of flood risk and coastal change". To achieve these aims new development should be planned to ensure appropriate adaptation measures are included (including green infrastructure) and should be designed, located and orientated as to help to reduce greenhouse gas emissions.

3.15 The revised framework also requires that development is directed away from areas which are at highest existing or future risk of flooding. Where development is required in such areas, the "development should be made safe for its lifetime without increasing flood risk elsewhere".

3.16 In relation to coastal change in England planning policies and decisions should take account of the UK Marine Policy Statement and marine plans. Furthermore, plans should "reduce risk from coastal change by avoiding inappropriate development in vulnerable areas and not exacerbating the impacts of physical changes to the coast".

3.17 Transport: The NPPF requires that "transport issues should be considered from the earliest stages of plan-making". The scale, location and density of development should reflect "opportunities from existing or proposed transport infrastructure". To help reduce congestion and emissions and improve air quality and public health the planning system should focus significant development "on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes". The revised framework also requires that planning policies support an appropriate mix of uses across an area to further help reduce the need to travel as well as the provision of a high-quality walking and cycling network.

3.18 While the framework promotes the use and development of sustainable transport networks it also requires that "where there is robust evidence, sites and routes which could be critical in developing infrastructure to widen transport choice and realise opportunities for large scale development" should be identified and protected.

3.19 Population, health and wellbeing: The NPPF includes, as part of its social objective, the promotion of "strong, vibrant and healthy communities" by:

- "ensuring that a sufficient number and range of homes can be provided to meet the needs of present and future generations; and

- by fostering well-designed, beautiful and safe places, with accessible services and open spaces that reflect current and future needs and support communities' health, social and cultural wellbeing."

3.20 Ultimately, planning policies and planning decision making should "aim to achieve healthy, inclusive and safe places".

3.21 The document states that strategic policies should set out the pattern, scale and quality of development and make sufficient provision for "housing (including affordable housing) … [as well as] community facilities (such as health, education and cultural infrastructure)". Policies should reflect "the size, type and tenure of housing needed". This policy approach is to include but should not be limited to housing requirements relating to affordable homes, families with children, older people, students, people with disabilities, service families, travellers, those who rent their homes and people wishing to commission the construction of their own homes. Major developments that involve the provision of new housing planning policies and decisions should expect at least 10% of the total number of homes to be delivered for affordable home ownership subject to conditions and exemptions.

3.22 To help to diversify opportunities for builders, promote a better mix of site sizes and increase the number of schemes that can be built quickly to meet housing need, the NPPF states that at least 10% of the sites allocated for housing through a local authority's plan should be on sites no larger than one hectare, unless there are strong reasons why this target cannot be reached.

3.23 Where there is an identified need, development of sites in suitable locations, not already allocated for housing to provide entry-level homes suitable for first-time buyers is to be supported by local planning authorities, unless such need is already to be met at other locations within the authority area. These sites should comprise of entry-level homes that offer one or more types of affordable housing.

3.24 The document also promotes a theme of enhancing healthy and safe communities which is to be achieved by creating places which "promote social interaction (and) enable and support healthy lifestyles".

3.25 As part of this approach social, recreational and cultural facilities and services that the community needs should be provided guided by planning policies which:

- "plan positively for the provision and use of shared spaces, community facilities (such as local shops, meeting places, sports venues, open space, cultural buildings, public houses and places of worship) and other local services;
- support the delivery of local strategies to improve health, social and cultural wellbeing for all sections of the community; and
- help prevent unnecessary loss of valued facilities and services."

3.26 Plan making through the guidance of the NPPF recognises the important role of access to open spaces and other facilities which provide opportunities for sport and physical activity has in terms of health and wellbeing of communities. The importance of delivering a sufficient choice of school places to meet the needs of existing and new communities is also recognised in the document and local planning authorities should take a "proactive, positive and collaborative approach to meeting this requirement".

3.27 The NPPF also sets out that the standard method provided in national planning guidance should be used to undertake a local housing need assessment identifying the minimum number of homes needed. The **Housing Delivery Test Measurement Rule Book** (2018) **[See reference 31]** provides this standard method allowing for calculation of objectively assessed housing need using government household forecasts adjusted for local house prices and local earnings. Unmet need from neighbouring areas that form part of the adopted housing requirement is included in the calculation.

3.28 Economy: The NPPF contains an economic objective to "help build a strong, responsive and competitive economy, by ensuring that sufficient land of

the right types is available in the right places and at the right time to support growth, innovation and improved productivity". It also requires that planning seeks to "create the conditions in which businesses can invest, expand and adapt" with policies required to "set out a clear economic vision and strategy which positively and proactively encourages sustainable economic growth". There is also a requirement for the planning system to identify and coordinate the provision of infrastructure. Furthermore, planning policies should address the specific locational requirements of different sectors. Planning policies are also required specifically to address support for the rural economy.

3.29 The NPPF also supports the role of town centres as functioning at the heart of local communities. This support is required to provide for a "positive approach to [town centres'] growth, management and adaptation". Included within this support is a requirement to "allocate a range of suitable sites in town centres to meet the scale and type of development needed, looking at least ten years ahead".

3.30 Historic environment: Of relevance to the approach of the planning system to the historic environment the NPPF contains an environmental objective to contribute to the protection and enhancement of the built and historic environment. The document also sets out a strategy to seek "the conservation and enjoyment of the historic environment, including heritage assets most at risk through neglect, decay and other threats". Such a strategy is required to take into consideration the desirability of sustaining and enhancing the significance of heritage assets and bringing them into viable use.

3.31 It should also be considerate of the wider benefits of conserving the historic environment, the contribution new development can make in terms of character and distinctiveness and the opportunity for the historic environment to contribute to this character and distinctiveness.

3.32 Landscape: The NPPF includes as part of its approach to protecting the natural environment, recognition for the intrinsic character and beauty of the countryside, and the wider benefits to be secured from natural capital. Importantly, great weight is to be given to conserving landscape and scenic

beauty in National Parks, the Broads and Areas of Outstanding Natural Beauty (AONB).

3.33 As part of the approach to achieving well-designed places the NPPF states that planning policies and decisions should ensure that developments “are sympathetic to local character and history, including the surrounding built environment and landscape setting”.

3.34 Biodiversity: A requirement of the NPPF’s environmental objective is that the planning system should contribute to protecting and enhancing the natural environment including helping to improve biodiversity and using natural resources prudently. In support of this aim the framework states that Local Plans should “identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks” and should also “promote the conservation, restoration and re-creation of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity”.

3.35 The framework requires that plans should take a strategic approach in terms of “maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries”.

3.36 Air, land and water quality: The NPPF states that planning policies and decisions should contribute to and enhance the natural and local environment by protecting and enhancing valued soil and the economic and other benefits of the best and most versatile agricultural land. Policies should also prevent new and existing development from “contributing to, being put at unacceptable risk from, or being adversely affected by unacceptable levels of soil, air, water or noise pollution”.

3.37 The document also requires that strategic policies should seek to make the most effective use of land in meeting local requirements making as much use as possible of previously developed or ‘brownfield’ land. Furthermore, policies

should “support appropriate opportunities to remediate despoiled, degraded, derelict, contaminated or unstable land”.

Sub-national plans, policies and programmes

3.38 The **South Essex Framework** **[See reference** 32**]** is being produced by Basildon Borough Council, Brentwood Borough Council, Castle Point Borough Council, Rochford District Council, Southend-on-Sea Borough Council, Thurrock Council and Essex County Council (the Association of South Essex Local Authorities). The South Essex Framework will be non-statutory and set out principles and good practice examples, rather than policies. It will provide the strategic framework for development in South Essex up to 2040, focusing on housing and economic development needs within the context of quality place making. Sitting within the context of the South Essex Strategic Vision 2050 it will lay the foundations for further sustainable growth and investment to 2050.

3.39 Other relevant sub-national plans, Policies and programmes are referenced in **Appendix A**.

Chapter 4

Baseline information for development in Basildon

4.1 Baseline information provides the basis for predicting and monitoring the likely sustainability effects of a plan and helps to identify key sustainability issues.

4.2 Schedule 2 of the SEA Regulations requires information to be provided on:

1. The relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme.
2. The environmental characteristics of areas likely to be significantly affected.
3. 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 Council Directive 79/409/EEC on the conservation of wild birds and the Habitats Directive [92/43/EEC].

Climate change adaptation and mitigation

Climate change predictions

Current baseline information

4.3 Climate change presents a global risk, with a range of different social, economic and environmental impacts that are likely to be felt within Basildon across numerous receptors. A key challenge in protecting the environment will be to tackle the causes and consequences of climate change: warmer, drier summers and wetter winters with more severe weather events all year, higher sea levels and increased river flooding. A strong reaction is required from planning to ensure appropriate action can be taken to help species and habitats adapt and to enable the agricultural sector to continue to deliver diverse, affordable and good quality produce.

4.4 There has been a general trend towards warmer average temperatures in recent years with the most recent decade (2012–2021) being on average 0.2°C warmer than the 1991–2020 average and 1.0°C warmer than 1961–1990. All the top ten warmest years for the UK in the series from 1884 have occurred this century **[See reference** 33**]**.

4.5 Heavy rainfall and flooding events have been demonstrated to have increased potential to occur in the UK as the climate has generally become wetter. For example, for the most recent decade (2012–2021) UK summers have been on average 6% wetter than 1991–2020 and 15% wetter than 1961–1990 **[See reference** 34**]**.

4.6 The Intergovernmental Panel on Climate Change (IPCC) special report on global warming outlines that, under emissions in line with current pledges under

the Paris Agreement, global warming is expected to surpass 1.5ºC, even if these pledges are supplemented with very challenging increases in the scale and ambition of mitigation after 2030. This increased action would need to achieve net zero CO_2 emissions in less than 15 years **[See reference** 35**]**..

4.7 Basildon Borough has yet to declare a climate change emergency in the Borough; however, in 2021 the Council committed to working towards two carbon reduction targets. The first is to produce net-zero emissions in the borough by 2050, in line with national legislation, but the Council aim to achieve the target sooner if possible. The second is a more ambitious target to achieve net-zero emissions across the Council's buildings and services by 2030. The high-level steps that must be taken by the Council are outlined in their Climate Strategy and Action Plan **[See reference** 36**]**. These include facilitating a move towards a greener local economy, greener buildings and energy, transport and improvements to the green infrastructure network.

Projected baseline information

4.8 UK Climate Projections 18 (UKCP18) for the East of England identify the following main changes (relative to 1981-2000) to the climate by the end of the plan period (2038) **[See reference** 37**]**:

- Increase in mean winter temperature by 1.0°C;
- Increase in mean summer temperature by 1.2°C;
- Increase in mean winter precipitation by 5.0%; and
- Decrease in mean summer precipitation by 10.0%.

4.9 The UK Climate Risk Independent Assessment (CCEA3) identifies likely trends from climate change and sets out 61 specific risks and opportunities to the UK from climate change, including the following **[See reference** 38**]**:

Risks

- The number of incidents of food poisoning, heat stress and heat related deaths may increase in summer.
- Domestic energy use may increase during summer months as refrigeration and air conditioning demand increases.
- Wetter winters and more intense rainfall events throughout the year may result in a higher risk of flooding from rivers.
- More intense rainstorms may in some locations result in the amount of surface water runoff exceeding the capacity of drainage systems, consequently leading to more frequent and severe localised flash flooding.
- More frequent storms and floods may cause increased damage to property and infrastructure, resulting in significant economic costs.
- Periods of drought in summer could lead to soil shrinking and subsidence, causing damage to buildings and transport networks. Drought may also impact negatively on agriculture, industry and biodiversity.
- Warmer and drier summers are likely to affect the quantity and quality of water supply, which will need careful management.
- The changing climate will impact on the behaviour and distribution of species and may encourage the spread of invasive species.

Opportunities

- Milder winters should reduce the costs of heating homes and other buildings, helping to alleviate fuel poverty and reducing the number of winter deaths from cold.
- Domestic energy use may decrease in winter due to higher temperatures.

- Warmer and drier summers may benefit the recreation and tourism economy.

Emissions and energy

Current baseline information

4.10 Carbon Dioxide (CO_2) is the main greenhouse gas, accounting for about 80% of the UK greenhouse gas emissions. Emissions are produced when fossil fuels such as coal or gas are burnt or processed. In recent years, increasing emphasis has been placed on the role of regional bodies and local government in contributing to energy efficiency improvements, and hence reductions in carbon dioxide emissions. In line with the wider UK, the East of England has seen a decrease in CO_2 emissions in recent years. One of the main drivers for reduced levels of emissions has been a decrease in the use of coal for electricity generation, accounting for a decrease in emissions for domestic electricity.

4.11 The Government regularly publishes Local Authority and regional carbon dioxide emissions national statistics **[See reference** 39**]**. The statistics are largely consistent with the UK national Greenhouse Gas Inventory and with the Devolved Administration Greenhouse Gas Inventories. In the East of England, carbon dioxide emissions have fallen from 7.4 tonnes (t) per capita to 4.4t per capita (equivalent to a 51% reduction) from 2005 to 2019. Emissions from Basildon are like those of East of England, falling steadily from 6.7t per capita to 3.9t per capita over the same period (equivalent to a 53% reduction) as demonstrated in **Table 3.1**. It should be noted the figures in **Table 3.1** do not account for Land Use, Land Use Change and Forestry (LULUCF) figures in Basildon. In 2020, LULUCF accounted for -3.1 kilotons (Kt) carbon dioxide emissions in Basildon **[See reference** 40**]**.

Table 4.1: CO_2 emissions estimates in Basildon 2005-2019 [See reference **41**]

Year	Total Emissions (kt)	Per Capita Emissions (t)
2005	1,135.6	6.7
2006	1,132.6	6.7
2007	1,141.9	6.7
2008	1,092.9	6.3
2009	976.9	5.6
2010	1,031.9	5.9
2011	924.7	5.3
2012	995.5	5.6
2013	947.9	5.3
2014	853.8	4.7
2015	821.5	4.5
2016	785.9	4.3
2017	756.2	4.1
2018	743.4	4.0
2019	726.0	3.9

4.12 The Department for Business, Energy & Industrial Strategy produced the following consumption figures for Basildon in 2020 **[See reference** 42**]**

- **Coal** – a total of 2.0 kilo tonnes of oil equivalent (ktoe) predominantly through industrial use;
- **Manufactured Fuels** – a total of 1.0ktoe predominantly through domestic use;
- **Petroleum** – a total of 93.4ktoe predominantly through road transport;

- **Gas** – a total of 112.5ktoe predominantly through domestic use;
- **Electricity** – a total of 68.8ktoe predominantly through industrial and commercial use; and,
- **Bioenergy and wastes** – a total of 13.6ktoe, predominantly through industrial and commercial use.

4.13 Between 2005 and 2020 the total reported energy consumption for the Borough fell from 338.7 to 291.3ktoe. The changes in consumption by energy type are shown in **Table 3.2**.

Table 4.2: Energy consumption in Basildon by type 2005-2020

Energy type	Energy consumption in ktoe (2005)	Energy consumption in ktoe (2020)
Coal	2.4	2.0
Manufactured fuels	1.6	1.0
Petroleum	110.9	93.4
Gas	145.3	112.5
Electricity	77.1	68.8
Bioenergy and wastes	1.4	13.6
Total	**338.7**	**291.3**

Projected baseline information

4.14 The Tyndall Centre for Climate Change Research has undertaken work to calculate the 'fair' contribution of local authorities towards the Paris Climate Change Agreement. Based on the analysis undertaken the following recommendations have been made for Basildon **[See reference** 43**]**:

- Stay within a maximum cumulative carbon dioxide emissions budget of 4.8 million tonnes ($MtCO_2$) for the period of 2020 to 2100. At 2017 CO_2 emission levels, Basildon would use this entire budget within 7 years from 2020.
- Initiate an immediate programme of CO_2 mitigation to deliver cuts in emissions averaging a minimum of -13.1% per year to deliver a Paris aligned carbon budget. These annual reductions in emissions require national and local action and could be part of a wider collaboration with other local authorities.
- Reach zero or near zero carbon no later than 2042. This report provides an indicative CO_2 reduction pathway that stays within the recommended maximum carbon budget of 4.8 MtCO2. In 2042 5% of the budget remains. This represents very low levels of residual CO_2 emissions by this time, or the Authority may opt to forgo these residual emissions and cut emissions to zero at this point. Earlier years for reaching zero CO_2 emissions are also within the recommended budget, provided that interim budgets with lower cumulative CO_2 emissions are also adopted.

4.15 Given the trends in carbon emissions and energy consumption at both national and local level, carbon emissions in Basildon are likely to continue declining.

Road travel and associated energy consumption

Current baseline information

4.16 CO_2 emissions in the UK are provisionally estimated to have increased by 6.3% in 2021 from 2020, to 341.5 million tonnes (Mt), however compared to 2019, the most recent pre-pandemic year, 2021 CO_2 emissions are down 5.0% **[See reference** 44**]**. This increase in 2021 is primarily due to the increase in the use of road transport as nationwide lockdowns were eased, along with

increases in emissions from power stations and the residential sector. CO_2 emissions from transport rose 10.0% in 2021, accounting for almost half of the overall increase from 2020 **[See reference** 45**]**.

4.17 Road transport accounts for more than half of oil demand in the UK and relies on petrol and diesel to meet around 98% cent of its energy needs. This has implications for carbon emissions considering the regular need to travel for both residents and those undertaking business.

4.18 The overall road energy consumption in Basildon decreased between 2005 and 2020 from 93.6t of equivalent oil (ktoe) to 86.3ktoe. This change was most influenced by the decreasing energy consumption for personal road travel which fell during this period from 69.4ktoe to 58.8ktoe. During this period energy consumption recorded in Basildon for freight uses rose from 24.2ktoe to 27.5ktoe **[See reference** 46**]**.

4.19 Recent trends across the UK indicate that diesel consumption excluding biodiesel fell in 2018 for the first time since 2009. The trend is due in part to a slowing of growth in the diesel vehicle fleet following sharp drops in new registrations as well as increased efficiencies. It is expected that the UK will diversify in road transport to include more electric and ultra-low emissions vehicles in the coming years **[See reference** 47**]**.

4.20 As of October 2022, there were 34,637 public electric vehicle charging devices available in the UK. Of these, 6,395 were rapid devices. Within Basildon there are a total of 63 public electric vehicle charging devices and 11 of these are rapid charging devices. There are approximately 33.6 charging devices per 100,000 population. In comparison to the rest of the UK, Basildon is below the UK average of 51.6 charging devices per 100,000 population. Basildon performs within the 40% to <60% margin compared to other local authorities in terms of this measure **[See reference** 48**]**.

4.21 Basildon is among the initial areas of the county where Essex County Council has launched a pilot electric scooter hire scheme. The trial seeks to provide people with a zero carbon, socially distanced alternative to short car

journeys, reducing congestion and air pollution. The scheme is operated by Tier until May 2024 pending the wider decision on future policy by the Department for Transport **[See reference** 49**]**.

4.22 Basildon benefits from good transport and connectivity to the Wider Essex region, Kent, east and central London. The Borough is served by significant road transport networks, including being intersected by the A13 to the south, and the A127 and A1235 to the north of the plan area. However, the latest Essex Local Transport Plan states that congestion is common on these routes, including the A1235 and A132 around the Basildon Enterprise Corridor, the A176 between Five Bells and Basildon Hospital and the A132 / A13 junction in Pitsea **[See reference** 50**]**.

Projected baseline information

4.23 Growth in traffic levels may occur in Basildon because of projected population growth in the Borough and associated development needs. The UK Government aims to ban the sale of new petrol and diesel cars by 2030 **[See reference** 51**]** which will significantly cut carbon emissions across the UK. While the full effect of this will not be seen immediately as people continue to use their existing vehicles, the market share of electric cars in the UK is already significant and likely to continue growing rapidly**.**

Renewable and low carbon energy constraints and opportunities

Current baseline information

4.24 Essex has a strong track record of renewable energy usage. During 2011, 849.2 Gigawatt hours (GWh) of energy was generated from renewable sources in the county of Essex. This equated to 26% of all the energy generated from

renewables in the East of England in 2011. Only Cambridgeshire generated more (28%) **[See reference 52]**.

4.25 Basildon Borough Council published a Renewable and Low Carbon Energy Constraints and Opportunities Study in 2015 **[See reference 53]**. The study concluded that the Borough has the capacity to accommodate the following technologies at the following scales:

- Large scale onshore wind turbines – 18.06 Megawatt (MW) – equal to 20% of the Borough's electricity needs.
- Large scale solar photovoltaics (PV) – 102MW – equal to 113% of the Borough's electricity needs.
- Energy from Municipal Solid and Commercial and Industrial Waste – 4.03MW – equal to 4.46% of the Borough's electricity needs.
- Microgeneration associated with residential, and community uses – 36MW – equal to 39.82% of the Borough's electricity needs.

4.26 Published as part of the National Statistics publication Energy Trends produced by the Department for Business, Energy and Industrial Strategy (BEIS), data concerning renewable electricity generation, capacity and number of sites is available at Borough level between 2014 and 2021 **[See reference 54]**. Basildon has increased its capacity to generate electricity from renewable sources from 2014 to 2021 from 20.9MW installed capacity to 30.5MW installed capacity. The majority of this is from landfill gas (15.2MW), followed by photovoltaics (13.6MW), and finally sewage gas (1.2MW). Photovoltaics saw the largest increase in this time from 4.5MW to 13.6MW, the largest proportion of capacity. Despite these increases, energy generation from renewable sources has decreased drastically during this period, from 113,982MWh to 11,735MWh.

Projected baseline information

4.27 It is clear from existing trends that Basildon is significantly increasing its capacity to generate renewable and low carbon sources of energy, with scope

to increase capacity further across of a range of technology types. The drastic reduction in renewable and low carbon energy generation over the same period does suggest however that the transition is likely to be slower than the growth in capacity would indicate, at least in the short term. As capacity continues to increase over the medium to long term, energy generation is also likely to significantly increase.

Flood risk

Current baseline information

4.28 The UK Climate Projections (UKCP18) predicts that by 2070, under a high emission scenario, average winter precipitation is projected to increase, whilst average summer rainfall is projected to decrease. Although summer rainfall is projected to decrease, there will be an increased frequency of short lived high intensity showers **[See reference** 55**]**.

4.29 Both urban and rural parts of the Borough will become more vulnerable to fluvial and coastal flooding, water supply deficiencies, subsidence and sea level rises, as the local climate continues to change.

4.30 Several sources of flooding pose a risk to Basildon Borough. The majority of Basildon is within Flood Zone 1, with about 2% of the Borough in Flood Zone 2 and 9% defined as Flood Zone 3. **Figure 3.3** at the end of this chapter illustrates the main areas of flood risk in the Borough.

4.31 Fluvial flood risk from the River Crouch and its tributaries poses a significant risk to the residential areas of Wickford and Basildon. Fluvial flood risk posed by the Mountnessing Brook and Haveringsgrove Brook pose a risk to the west of Billericay. The tidal estuaries of Vange Creek and East Haven Creek and Timberman's Creek are located to the south eastern part of the Borough and pose a residual flood risk. Additionally, the River Thames poses a tidal

flooding risk in the south of the Borough, although this area is predominantly uninhabited marshland.

4.32 The Environment Agency AIMS data shows that Basildon Borough is protected by high ground along the edge of the River Crouch and its tributaries. There are three Environment Agency Flood Warning Areas in Basildon **[See reference** 56**]**:

- River Crouch from Noak Bridge to Run well, including Wickford (tidal flooding);
- Canvey Island North (within the Thames Estuary); and
- Shellhaven to Grays including Tilbury (fluvial flooding from the River Thames).

4.33 Increasing risks of flooding could lead to negative impacts on local habitats or species and pose a threat to an increasing number of properties. All new buildings will therefore need to be built in appropriate locations that minimise, or successfully mitigate against these risks, as well as being designed in such a way to maximise their adaptability to climate change in the future. Planning Practice Guidance states if 'proposed development cannot be made safe throughout its lifetime without increasing flood risk elsewhere, it should not be permitted' and that avoidance of flood risk should be the primary consideration.

4.34 The Sustainable Drainage Systems (SuDS) Design Guide for Essex forms the local standards for Essex and, together with the National Standards, strongly promotes the use of SuDS to help reduce surface water runoff and mitigate flood risk. It provides guidance on the planning, design and delivery of attractive and high-quality SuDS schemes which should offer multiple benefits to the environment and community alike **[See reference** 57**]**.

4.35 A Strategic Flood Risk Assessment (SFRA) was prepared for the Borough in 2018. The Level 1 SFRA confirms that surface water flooding poses a significant risk to the Borough. Areas of high surface water flood risk are located along the course of the River Crouch and over areas of Basildon and Wickford. Localised surface water flooding within the Borough can be attributed to

topographic depressions and obstructions to surface water flow. 19 Critical Drainage Areas (CDAs), as defined in the South Essex Surface Water Management Plan (SWMP) (2020), are located within Basildon Borough, the majority of which are located within Basildon. The Washland System created as part of the development of Basildon New Town and the expansion of Wickford and Billericay, performs a surface water management function for the urban area, however, the capacity of this system is dependent on continued maintenance **[See reference** 58**]**.

4.36 Fluvial flooding tends to occur when high rainfall in the upper catchment of the River Crouch coincides with high tide levels to produce higher volume fluvial flows and elevated water in the River and its tributaries. A notable extent of the floodplain is in rural areas; however, parts of Wickford and the North of Basildon are also affected by fluvial flooding **[See reference** 59**]**.

4.37 The southern part of the Borough is next to the tidal estuaries of Vange Creek and East Haven Creek. Although this area is protected from tidal flooding by flood defence walls and two mechanical flood barriers, there is residual flood risk in the event of a barrier failing or the flood defence walls being breached by the sea. Defences at this location could be overtopped in the future if defences are not raised in line with climate change.

4.38 Planning Practice Guidance also states that 'the local planning authority may have a Local Plan policy on what changes of use will be acceptable in areas at risk of flooding' in order to ensure that the regeneration of existing urban areas does not lead to higher vulnerability uses in areas of flood risk.

4.39 The Basildon Borough Level 2 SFRA built on the findings of the Basildon Borough Level 1 2011 report **[See reference** 60**]** exploring the risks associated with tidal breach along the southern boundary of the Borough. The Level 2 SFRA concluded that in the event of a failure of these flood barriers, floodwaters would inundate the southern part of the Borough including the Vange marshes, Pitsea marshes and Bowers marshes. Further review of the surface water flood risk revealed increased risks along the corridors of the River

Crouch and River Wid and the topographic tributaries that lead into these watercourses to be the key areas of increased risk of surface water flooding.

4.40 Further assessment of the risk of flooding from surface water has been undertaken as part of the SWMP for South Essex **[See reference** 61**]** which resulted in the designation of the Borough's CDAs where multiple or interlinked sources of flood risk cause flooding during a severe rainfall event, affecting houses, businesses and/or infrastructure and where mitigation measures may be implemented to reduce the impact of flooding. Pluvial modelling undertaken as part of the SWMP identified that flooding is typically shallow and widely dispersed. The SWMP was updated in 2020 and includes an Action Plan for South Essex **[See reference** 62**]**, which sets out actions for each of the CDAs to reduce the likelihood and impact of flooding within Basildon.

Projected baseline information

4.41 As previously outlined in the 'climate change predictions' section of this chapter, the climate in the Basildon Borough is expected to change, presenting a series of risks. These include wetter winters, more intense rainfall events and more frequent storms and floods, leading to increased damage to property and infrastructure and significant economic costs. The Environment Agency has provided 'Local flood risk assessments: climate change allowances' **[See reference** 63**]** indicating climate change impacts on peak rainfall intensity, peak river flows for the South Essex Management Catchment and sea level rise allowances for the East of England.

4.42 Due to the geography of the Borough, flooding (including flash, fluvial and tidal flooding) is one of the greatest risks to the Basildon Borough from climate change. Climate change will likely result in sea level rise which could lead to more frequent flooding in the Borough and impact communities, businesses and local authority services. Additionally, incidences of heavy rainfall are expected to continue to rise and will present challenges in terms of drainage and flood risk.

Implications for health

4.43 Climate change has potential for substantial implications on human health, including:

- Disruption to health, social care and emergency management services and schools provision, from flooding, heatwaves and storms.
- Flooding poses multiple risks to people's health, such as heart attacks, trauma, an increase in waterborne infectious diseases, and common mental and post-traumatic stress disorders. Damp housing and damage to water and sanitation infrastructure can further reinforce the adverse effects on health.
- Climate change may bring increases in both cold weather excess mortality and heat-related deaths and illness occurring in the summer. Excess heat represents a serious threat for the entire population, but the elderly and small children, and people with pre-existing cardiovascular, respiratory and renal diseases, diabetes and neurological disorders, are more susceptible. Urban areas tend to be at greater risk due to the "urban heat island" effect. The number of excess deaths in England resulting from heatwaves (excluding COVID-19) in 2022 was 2,803 for those aged 65 and over. Cumulative excess deaths resulting from heatwaves in summer 2022 was the highest recorded on record since the heatwave plan for England was introduced in 2004 **[See reference 64]**.
- Cases of food poisoning in the UK that are linked to warm weather have been increasing rapidly.
- Wildfire likelihood and severity set to increase due to climate change.
- The likely increase in occurrence of severe winter gales is a cause for concern. Deaths during severe gales are commonplace, as are severe injuries. The likely loss of electrical power supplies during severe storms adds very significantly to these problems. Better forecasting of gales and better design and more frequent exercising of disaster plans may well help to mitigate the worst effects.

Key sustainability issues and opportunities for the Local Plan to address them

4.44 There is a need to significantly reduce the Borough's greenhouse gas emissions to help meet international and national greenhouse gas reduction targets. The Local Plan provides opportunities to help achieve this through:

- Encouraging energy efficiency measures in the construction and design of new buildings.
- Reducing carbon emissions from private car use by reducing the need to travel and supporting the use of low or zero emission transport modes, as discussed below in the section covering transport.
- Continuing to build renewable and low carbon energy generation capacity and reduce reliance on non-renewable energy sources to meet the Borough's energy demands (mainly electricity), focussing on increasing generation from existing installations in the short term.
- Promoting green infrastructure to deliver carbon sequestration.

4.45 The effects of climate change in the Borough are likely to result in extreme weather events becoming more common and more intense. Flood risk is of particular significance in this regard, alongside heatwaves and drought. The Local Plan provides an opportunity to help adapt to the unavoidable effects of climate change by:

- Locating development in locations with no or low flood risk.
- Encouraging flood and heat resilient development.
- Promoting green infrastructure to deliver flood retention, shading/ cooling, air quality improvements and safe havens for vulnerable species.

Transport

Transport

Current baseline information

4.46 Figure 3.4 at the end of this chapter illustrates the main road, rail and cycling routes in the Borough.

4.47 Basildon Borough's Local Plan Transport and Highway Impact Assessment (THIA) **[See reference** 65**]** assesses the final level of growth associated with the draft Local Plan (2018). The paper reports that many of the junctions in Basildon are close to or at capacity and there is a need for significant mitigation measures to accommodate growth in the settlements of Billericay and Wickford. The THIA identifies the status of the following junctions at base date (2014) amongst Basildon Borough's urban areas:

- Basildon:
  - Three junctions at or over capacity, predicted to rise to eight by 2034 background growth.
  - Six junctions approaching capacity, predicted to fall to two by 2034 background growth).
- Billericay:
  - Two junctions at or over capacity, predicted to rise to four by 2034 background growth).
  - Two junctions approaching capacity, predicted to rise to four by 2034 background growth).
- Wickford:
  - One junction at or over capacity, predicted to rise to two by 2034 background growth.

- One junction approaching capacity, predicted to rise to two by 2034 background growth.

4.48 The Basildon Parking Capacity and Intervention Study **[See reference** 66**]** highlighted a surplus of parking capacity in Basildon town centre and a shortfall in Billericay and Wickford town centres. However, this study was completed in 2016, and with the current focus on facilitating and encouraging active and sustainable travel, the need for additional parking in Wickford and Billericay is being reconsidered.

4.49 The Lower Thames Crossing is a proposed new motorway connecting Kent, Thurrock and Essex through a tunnel beneath the river Thames. If permission is granted, the Project will provide over 90% additional road capacity across the Thames east of London. The new motorway will have three lanes in each direction, with a speed limit of 70mph. It will connect the tunnel to the A2 and M2 in Kent on the southern side and A13 and junction 29 of the M25 in the London Borough of Havering on the northern side. The crossing will also feature a 4km-long twin-tube tunnel under the Thames River, for southbound and northbound traffic. With a diameter of 16m, the tunnel will be one of the largest bored-tunnels in the world **[See reference** 67**]**.

4.50 After submitting a Development Consent Order (DCO) application to the Planning Inspectorate in October 2020, the application was withdrawn in November 2020. Further community impact consultation was carried out from 14th July to the 8th of September 2021 to provide more detail about the project and how it would affect local communities and the environment, during its construction and after it opens. National Highways submitted its second planning application for the scheme at the start of November 2022 **[See reference** 68**]**.

4.51 At the time of Census 2021, UK government guidance and lockdown restrictions resulted in unprecedented changes to travel behaviour and patterns. As of 2021, out of the estimated working population (89,013), 27,225 (31%) Basildon residents worked mainly at or from home. However, 69% of residents in employment continue to commute for work **[See reference** 69**]**. This

correlates with the broader UK, in which just over 19.1 million usual residents aged 16 years and over in employment (68.8%) travel to a workplace **[See reference** 70**]**. It should be noted however that there are some significant spatial variations in the prevalence of home working across the Borough, for example home working is much more common in more affluent parts of the borough, such as Billericay, and much less common in more deprived areas such as Pitsea.

4.52 As seen in **Table 3.3**, out of an estimated total of 89,013 employed Basildon residents, the most popular mode of transport to travel to work was by car or van (51.2% - as a driver or passenger), followed by on foot (6.2%) and by train (5.6%). A similar picture was seen in the East of England, where out of an estimated total of 3,028,640 residents, the most popular mode of transport to travel to work was by car (51.5% - as a driver or passenger), followed by on foot (7.3%) and by train (2.3%).

Table 4.3: Method of travel to work 2021

Method of travel to work	East of England	Basildon
All Categories	3,028,640	89,013
Work mainly at or from home	966,487	27,225
Underground, metro, light rail, tram	18,366	707
Train	69,954	4,967
Bus, minibus or coach	61,931	1,846
Taxi	16,936	802
Motorcycle, scooter or moped	13,632	386
Driving a car or van	1,445,280	41,731
Passenger in a car or van	114,537	3,818
Bicycle	70,857	1,057
On foot	219,725	5,498

Method of travel to work	East of England	Basildon
Other method of travel to work	30,935	976

4.53 Neighbouring areas of Thurrock (5,130 commuters), Castle Point (5,083), Chelmsford (4,618 commuters) and Southend-on-Sea (4,407 commuters) account for the largest inflows of commuters to Basildon (see **Figure 3.1**). When assessing the largest numbers of commuters by car or van, the same pattern emerges. Thurrock has the highest number (4,295 commuters), followed by Castle Point (4,205 commuters), Chelmsford (4,079 commuters) and Southend-on-Sea (3,417 commuters) (see **Figure 3.2**) **[See reference** 71**]**.

4.54 Large numbers of commuters (predominately by car or van) travel out of Basildon to London (6,305 commuters), Thurrock (5,310 commuters), Chelmsford (4,618 commuters) and Brentwood (1,970 commuters).

4.55 Figures 3.1 and **3.2** below show the flows of commuters in and out of the Borough. It should be noted that the figures draw on relatively old (2001) Office of National Statistics (ONS) data.

Figure 4.1: Flows of commuters in and out of the Borough (total)



Figure 4.2: Flows of commuters in and out of the Borough (by car or van)



4.56 A significant proportion of the Borough's workforce travel in from neighbouring areas (e.g., Castle Point, Rochford and Southend) and this can lead to congestion, particularly at peak times on parts of the Borough's road network. According to Essex's Local Transport Plan **[See reference** 72**]**, congestion is common on several key routes including, the A1235 and A132 around the Basildon Enterprise Corridor, the A176 between Five Bells and Basildon Hospital and the A132 / A13 junction in Pitsea. However, with the introduction of 'work from home' arrangements in the onset of the COVID-19 pandemic, the number of commuters has drastically reduced, as discussed previously. With many employers adopting hybrid working arrangements, the number of commuters is not anticipated to reach the same level as prior to the pandemic.

4.57 According to the 2017 Basildon Borough Cycling Action Plan, although Essex County Council and Basildon Borough Council have been promoting and facilitating cycling for many years, the lack of a planned and justifiable list of interventions aimed at widening the appeal of cycling within the Borough means that it has not always been prioritised and the proportion of people travelling to work by bicycle is well below the national average **[See reference** 73**]**. An emerging Active Environments Strategy (2023) is looking to address this. The strategy makes six commitments to encourage Basildon Borough to walk, wheel, scoot and cycle:

- To support local communities to offer a diverse range of accessible opportunities for people to walk, wheel, scoot and cycle in their local area.
- To use gamification and digitisation to support and encourage residents to be more active through walking, wheeling, scooting and cycling.
- To work to tackle the high start-up costs of cycling (bike, lock, helmet) which has been identified as a barrier for many people from cycling.
- To increase levels of active travel to achieve the Borough Council's net-zero by 2050 aim.
- To work collaboratively across the organisation to incorporate active environments work across corporate plan ambitions of people, place and prosperity.

- To ensure that residents feel safe and are safe. Basildon Borough Council seek to develop the infrastructure to increase safety and accessibility of the network.

4.58 The Local Walking and Cycling Infrastructure Plan Plus **[See reference** 74**]** also recognises Basildon Borough Council's objectives to provide a high quality and ambitious integrated cycling, walking and public transport network, to improve access across and between several town centres and to encourage multi-modal travel. The outputs of this plan include:

- A cycling network map with a programme of cycle infrastructure improvements.
- A walking network map with a programme of walking infrastructure improvements.
- A prioritised list of cycling and walking proposals for future investment.

4.59 Basildon Borough's urban areas (Basildon, Billericay and Wickford) contain the most cycling infrastructure; however, this is not consistent and there is a need to deliver improvements across the existing network and also to secure new route provision within new developments:

- **Billericay** – There is very little cycling infrastructure in Billericay – just some very short sections of shared footway alongside new housing estates.
- **Wickford** – There is very little cycling infrastructure in Wickford – just some very short sections of shared footway alongside new housing estates.
- **Basildon Town** – Basildon town has a relatively dense network of cycling provision which is typical of the 'new towns' of the 1950s. Much of the network is substandard, with facilities too narrow to support large levels of use particularly where there are shared paths which are well used by pedestrians. Some obvious desire lines are not catered for by the existing provision, and cyclists have limited priority and protection at junctions and crossings **[See reference** 75**]**. East to west cycling provision is better in

Basildon Town than north to south. This is due in part to investment in Cranes Farm Road in recent years.

Projected baseline information

4.60 Sustainable public transport, including active travel investment is essential alongside direct road congestion interventions if the Borough is to tackle its heavy reliance on private transport in the Borough.

Implications for health

4.61 A lack of sustainable and active travel options can have negative impacts on public health whilst also increasing reliance on relatively expensive private motorised transit and exacerbating existing inequalities. Encouraging active travel, such as walking, wheeling and cycling can have a wide range of positive implications for health, including increased physical activity and opportunities for social interaction. In addition, an increase in active travel could be associated with a decrease in reliance on often expensive vehicular transport, and an associated decrease in air pollutants that can be harmful to human health.

Key sustainability issues and opportunities for the Local Plan to address them

4.62 Several of Basildon Borough's road links are inadequate, with several roads and junctions noted as being at or near to capacity, and many experiencing congestion at peak times. Adverse traffic conditions on these routes often have knock-on effects on local roads, leading to localised gridlock on occasion and impacting negatively on economic productivity. In addition, with planned developments and increased housing and job provision, more pressure may be placed on the Borough's road networks.

4.63 Without the Local Plan it is anticipated that traffic congestion and air and noise pollution will continue to increase with the rising population and car dependency will continue to be high. The implications of air pollution for human health and the natural environment are described in subsequent sections.

4.64 The Local Plan provides an opportunity to reduce the demand on the transport network and to address potential adverse effects of travel by:

- Locating development and tailoring densities sustainably (with good access to shops, services and sustainable transport modes);
- Supporting the development of sustainable transport links;
- Supporting and prioritising sustainable travel choices (e.g., requiring sustainable modes to be available on occupation of new homes and workplaces); and,
- Supporting the uptake of electric vehicles and e-bikes through the provision of electric vehicle charging infrastructure.

Population, health and wellbeing

Population

Current baseline information

4.65 Basildon is the 11th most densely populated of the East of England's 45 local authority areas serving an estimated population of 187,600 people across 16 wards **[See reference** 76**]**. **Table 3.4** presents the most recent (2019) estimates of population by ward in Basildon **[See reference** 77**]**:

Table 4.4: Estimated populations by ward in Basildon [See reference **78**]

Ward	Estimated Population (as of 2019)
Billericay East	12,229
Billericay West	11,976
Burstead	10,836
Crouch	9,062
Fryerns	14,959
Laindon Park	6,866
Langdon Hills	9,224
Lee Chapel North	14,760
Nethermayne	13,890
Pitsea North West	13,216
Pitsea South East	12,358
St Martins	9,929
Vange	10,647
Wickford Castedon	7,679
Wickford North	13,092
Wickford Park	10,183

4.66 Figure 3.5 at the end of this chapter illustrates the Borough's settlement hierarchy.

Projected baseline information

4.67 The Borough's population has increased dramatically over the last 60 years, following the phased construction of Basildon New Town. The Borough's population will continue to grow, albeit at a much slower rate. Sub-national population projections suggest that the Borough's population will continue to grow with 206,509 people projected to live in the Borough by 2043 **[See reference** 79**]**. The largest age group predicted to experience growth is the 65+ category, which is expected to rise from 32,227 (2019) to 41,478 (2043).

4.68 As the population grows so does the Borough's population density, particularly in the Borough's three centres of growth – Basildon, Billericay and Wickford.

4.69 Basildon Borough has a population density of 16.9 persons per hectare, which is significantly higher than the South Essex average of 10.2 persons per hectare **[See reference** 80**]**. The greater the population density the greater the challenge to ensure the Borough's communities have the quality of life, facilities and services and infrastructure they need, including public and private open space. However, increased population density can have both positive and negative effects in sustainable development terms, depending upon how it is designed and delivered (indeed, some of the most attractive and desirable parts of cities and towns in the UK and abroad are often those areas that are most densely developed).

Housing

Current baseline information

4.70 Between November 2021 and November 2022, Basildon saw the third highest rise in house prices in South Essex, from £384,573 to £409,649 (a 6.52% increase) **[See reference** 81**]**. In 2021, the average house price in

Basildon was £340,000. This is higher than the average for both the East of England on a regional scale (£238,000) and England on a national scale (£183,000). As of August 2020, Burstead Ward has the highest average house price and conversely house prices in Pitsea North West Ward have the lowest average prices. The highest rise in average house prices over recent years have been in Crouch, Wickford Park and Burstead Wards with average house prices rising by 33% between 2016 and 2011 **[See reference** 82**]**.

4.71 A draft of the Basildon Housing Strategy 2023-2028 is currently being consulted upon. It identifies that rising house prices and rents are a barrier to delivering genuinely affordable housing and focusses on three solutions:

- Improve access to housing opportunities and choice.
- Make best use of council homes.
- Support residents to create neighbourhoods they wish to live in and be part of **[See reference** 83**]**.

4.72 The Councils' housing registers suggest that 5,629 households throughout South Essex are currently classified as needing affordable housing, based on allocation policies. Basildon appears to have the greatest absolute number in need, with a current total need of 1,349 affordable homes **[See reference** 84**]**.

4.73 Basildon Borough has not delivered its annual housing target in the last three reporting years which has resulted in the Borough achieving only 41% of its expected housing delivery across the three year period. The average delivery performance across Essex for the same period was 85% which is higher than in Basildon Borough **See reference** 85**].**

4.74 As of June 2020, accommodation for Gypsies and Travellers consists of 1 public site (25 pitches), 55 private sites (95 private pitches), 8 private sites with temporary planning permission (8 pitches), 12 long-term tolerated encampments (14 pitches) and 31 unauthorised sites (70 pitches). There is one Travelling Showpeople site, comprising two plots, in the area. The latest Basildon Borough Gypsy, Traveller and Travelling Showpeople Local Needs Accommodation Assessment **[See reference** 86**]** concluded that the estimated

extra pitch provision that is required for Gypsies and Travellers to 2038 in Basildon is 85 pitches, when accounting for all known and a reasonable proportion of unknown households. There is a need for three additional plots for Travelling Showpeople in Basildon up to 2038.

Projected baseline information

4.75 According to the South Essex Housing Needs Assessment, the minimum annual housing figure for Basildon Borough is 1,041. There is a 70% need for houses, a 20% need for flats, and a 10% need for bungalows between 2020 – 2040. Of these properties, 14% must be 1 bed, 26% must be 2 beds, 40% must be 3 beds, and 20% must be 4 beds+ **[See reference** 87**]**.

4.76 The South Essex Housing Needs Assessment predicts that a new gross need for 970 affordable homes could arise every year from new and existing households throughout the Basildon Borough. This is the highest predicted need in South Essex, but there is an estimated supply of 449 homes per annum, also the highest in South Essex, giving a net need for 521 homes per annum **[See reference** 88**]**.

4.77 The Council predict that the number of people registered as homeless is likely to continue to grow. This increase is believed to be largely because of reasons such as the economic climate, increased costs of both private and owner-occupied accommodation, and the government's welfare reforms. The continued rise of homelessness within the Borough is seen by the Council as being unsustainable and unlikely to fall without intervention **[See reference** 89**]**.

Health

Current baseline information

4.78 Health is a cross-cutting topic and as such many topic areas explored in this IIA Report influence health either directly or indirectly.

4.79 The Office of National Statistics (ONS) have created an index that gives every local area in England an overall health score for each of the past six years. This overall score is made up of measures in different categories, called domains and subdomains. These measures include physical and mental health conditions like diabetes or anxiety, local unemployment, road safety, and behaviours like healthy eating **[See reference** 90**]**.

4.80 This score can show whether health in a local area is improving. The Health Index score has a baseline of 100, which represents England's health in 2015. A score higher than 100 means that an area has better health for that measure than was average in 2015, lower than 100 means worse health than the 2015 average in 2020, Basildon's Health Index Score was 98.3, which is down 1.4 points compared with the previous year.

4.81 The health of people in Basildon is better in some respects and worse in other respects compared with the England average. "Physical health conditions" looks at cancer, cardiovascular conditions, dementia, diabetes, kidney and liver disease, musculoskeletal conditions, and respiratory conditions. Basildon's best score across all subdomains is 110.7 for health relating to "physical health conditions".

4.82 The second highest scoring subdomain is "access to green space", in which Basildon has a Health Index score of 103.6. The score for the East of England is 101.1, while England has a score of 99.9 which puts it close to the national average across England for this subdomain.

4.83 “Living conditions” addresses air pollution, household overcrowding, noise complaints, road safety, and rough sleeping. Basildon’s score for “living conditions” improved from 95.1 in 2015 to 103.5 in 2020. This means Basildon went from being in the bottom 25% of local authority areas to being in the bottom 40% across England for this subdomain. The change was largely driven by a decrease in air pollution (the index improved by 19.7 points) and a decrease in rough sleeping (the index improved by 13.1 points).

4.84 “Economic and working conditions” looks at child poverty, job-related training, unemployment, and workplace safety. Between 2015 and 2020, Basildon’s Health Index value for “economic and working conditions” went from 98.4 to 101.6. This means Basildon went from being in the bottom 40% of local authority areas to being close to average for this subdomain. The change was largely driven by improvements in workplace safety (an increase of 6.7) and a decrease in child poverty (the index improved by 5.2 points). However, there was a worsening in job-related training (a decrease of 22.7).

4.85 In the Borough there are lower rates of infant deaths, people feeling “in poor health” and poor mental health than the national averages. However, the numbers of people with diabetes, teenage pregnancy, those who eat healthily, adults who are physically active and hip fractures in the elderly are worse than regional and national levels **[See reference** 91**]**. As such, interventions need to reach high risk groups to reduce the number of preventable health conditions and service demand. Reducing smoking and child/adult obesity, plus increasing the level of physical activity, are also areas for improvement **[See reference** 92**]**.

Life expectancy

4.86 In Essex, there had been a steady increase in life expectancy for both men and women for the first decade of the 2000s. However, in the last 10 years the trend has levelled off for Essex and for all the constituent district areas.
For women it is now consistently below the regional average **[See reference** 93**]**.

4.87 Life expectancy at birth in the Borough was 79.35 for males and 83.08 for females. These are similar when compared to the England value. Life expectancy is 9.6 years lower for men and 7.5 years lower for women in the most deprived areas of Basildon than in the least deprived areas, with the ward Pitsea North West experiencing the lowest life expectancy for both males and females **[See reference** 94**]**. Circulatory disease, cancer, respiratory conditions and digestive disorders are the main disease areas which are driving the differential life expectancy gap between Essex communities **[See reference** 95**]**.

Obesity

4.88 Being overweight or obese carries numerous health risks, including increased likelihood of type 2 diabetes, cancer, heart and liver disease, stroke and related mental health conditions. It is estimated this health issue places a cost of at least £5.1 billion on the NHS and tens of billions on wider UK society every year. Obesity in adults in Basildon is worse than East of England and England, with 70.5% of adults overweight or obese **[See reference** 96**]**.

4.89 There is also a high level of obesity amongst children in the Borough. By Year 6 33.9% of children are classified as overweight or obese. This is significantly worse than East of England and Essex. The gap between reception and year 6 in relation to obesity or being overweight is greatest in Basildon **[See reference** 97**]**.

Mental health and perception of wellbeing

4.90 National research highlights that good emotional and mental health is fundamental to the quality of life. Residents of the Borough reported having higher life satisfaction (7.66 out of 10), happiness (7.83) and sense that life is worthwhile (7.83) in comparison to England on a national scale (7.55, 7,78, and 7.45 respectively) during the 2021/22 period **[See reference** 98**]**.

4.91 According to the 2019 Essex County Council School's Health and Wellbeing Survey **[See reference** 99**]**, 79% and 69% of primary and secondary school pupils in Basildon agreed with the statement 'My life is going well', respectively. 92% of both primary and secondary school pupils were happy with the home that they lived in. 34% and 35% of primary and secondary school pupils often lose their temper or get angry, respectively, with 8% of both primary and secondary school pupils saying this happens every day. 20% and 28% of primary and secondary school pupils often feel sad or tearful, with 7% and 10% saying this had been the case for more than six months, respectively.

Social isolation/loneliness

4.92 The ONS mapped loneliness rates by local authorities between October 2020 to February 2021 during the COVID-19 pandemic. Areas with higher concentrations of younger people and higher rates of unemployment tended to have higher rates of loneliness during the study period. Local authorities in more rural areas had a lower loneliness rate than urban, industrial, or other types of areas. In the Basildon Borough, 6.9% of the adult population reported they 'often or always' felt lonely. This was lower than the British average of 7.2% **[See reference** 100**]**.

COVID-19

4.93 The COVID-19 pandemic highlighted health inequalities nationally, including the differences in people's health and well-being that result from the conditions in which they are born, grow, live, work and age. For example, the pandemic has impacted social and community networks, showing that lack of social contact has a detrimental impact on mental health (causing or facilitating anxiety and depression). It also had a negative impact on individual lifestyle factors such as lack of exercise and unhealthy diet, causing other health issues.

Projected baseline information

4.94 Given that Basildon Borough has performed poorly for some health indicators against regional and national averages, it is likely it will continue to do so without substantial intervention. There are a range of potential changes in determinants that will affect health in the UK and Basildon Borough in the future including climate change. Summers are expected to become hotter, and overheating may increase the excess mortality rate for vulnerable groups.

Access to services and facilities

Current baseline information

4.95 Services and facilities include hospitals and GPs, recreational resources, food retailers, employment and education centres, and other aspects of social infrastructure such as community centres and places of worship. Good and equitable accessibility and the provision of sufficient community facilities is a vital part of development's role in improving the health and well-being of a community.

4.96 The most recent Department for Transport 'journey time statistics' **[See reference** 101**]** demonstrates the average journey time taken to reach the nearest key services (employment centres, primary and secondary schools, further education, GPs, hospitals, food stores and town centres) across local authorities. The average times taken to reach the nearest key services in Basildon is consistently lower across its regional and national comparisons as demonstrated in **Table 3.5** below.

Table 4.5: Average journey times to key services [See reference 102]

Mode of travel	Basildon Borough (minutes)	East of England (minutes)	England (minutes)
Public Transport/walking	15.8	20.7	17.9
Cycle	13.5	18.6	15.6
Car	9.6	11.3	10.3
Walking	24.1	34.0	28.0

4.97 Along with being physically available, support services need to provide people with a positive experience to promote uptake and engagement for early intervention and reducing or delaying development of additional health and care needs in the longer term. In Essex, fewer patients have a good experience in making a GP appointment overall. The rate had been falling over recent years, to the lowest in 2020 which likely had been impacted by changes resulting from the pandemic as improvements have been seen in reported experience lately and have surpassed levels seen in most recent years.

4.98 The Borough benefits from having a regional acute medical facility in the form of Basildon University Hospital. In June 2007, a major new addition to the hospital was completed, the Essex Cardio-Thorasic Unit, offering specialist care to patients with heart problems.

Projected baseline information

4.99 Access to key services and facilities could become more challenging as the population in the Borough continues to grow, if this results in insufficient capacity in the nearest services. As the population ages, this may result in a larger proportion of Basildon's population not having access to key services that are only readily accessible by car.

Open spaces, sports and recreation

Current baseline information

4.100 As a New Town, Basildon was planned with a considerable amount of open space as part of the New Town Masterplanning, much of which is still used for the purpose it was set aside for and now provides a range of health, biodiversity, landscape and flood defence benefits. No parks have yet been awarded the qualitative Green Flag Award.

4.101 The relatively old PPG17 Open Space Assessment **[See reference** 103**]** undertaken for Basildon Borough in 2010 noted that the Basildon Settlement Area had the greatest supply of open space per head of population and the majority of these are spaces of high quality. Clusters of lower quality open spaces existed around Eastern Pitsea, South of the A127, Laindon Park/Lee Chapel North and Vange.

4.102 Billericay and Burstead have an above Borough average provision of natural green space and outdoor sports facilities but have an undersupply of Urban Parks and Gardens and Smaller Amenity Space. Generally, the quality of spaces is good, with poor quality open space noted in Little Burstead, Eastern Mountnessing Fringe and Barleylands Farm (North of Southend Road). The Noak Bridge and Ramsden Area contains a high proportion of the Borough's overall sports pitch provision but lacks an urban park. Most open spaces in this settlement area, which is mostly rural in nature, are of a high quality.

4.103 Wickford has a slight over-provision of urban parks and gardens, but a high under supply of natural and semi-natural open space, outdoor sports space and amenity green space. The quality of open spaces is mixed, although two open spaces are 'excellent' – Wickford Memorial Park and The Wick Country Park.

4.104 According to the Open Space Assessment Gap Analysis Report **[See reference** 104**]**, there has not been a notable net increase in open space provision since 2010 within Basildon. As of 1st December 2015, only 4.38 hectares had been recorded across 3 sites. Several spaces had been lost to development or other uses.

4.105 In 2012, the NPPF introduced a new concept of a Local Green Space designation. The Local Green Space designation provides communities with a way to place special protection against the development of green areas of particular importance to them. Basildon subsequently defined 39 sites as Local Green Spaces **[See reference** 105**]**.

4.106 Basildon Borough has several indoor sports facilities including 12 swimming pools, 15 sports halls, 12 health and fitness centres and 8 indoor tennis courts, which are reaching their capacity. The quality of the current indoor sports facilities is mixed with scores ranging from 43% to 84% in terms of quality (where 100% = highest quality) **[See reference** 106**]**.

4.107 The 2018 Playing Pitch Strategy Assessment Report **[See reference** 107**]** identified a total of 174 grass football pitches within Basildon Borough across 46 sites, of which 157 pitches are available for community use across 35 sites.

Projected baseline information

4.108 Development pressure could lead to the loss of some existing open space and sports/recreation facilities while projected population increases are likely to increase demand for such facilities.

Crime

Current baseline information

4.109 The crime rate in the Basildon Borough is 10,809 incidents per 100,000 population, according to figures published by the ONS for the year ending July 2022. In the year ending July 2022, there were 20,284 incidents of crime, a 1,995 increase in incidents when compared to the previous year **[See reference** 108**]**. The number of incidents of crime in the Basildon Borough grew by 10.9% between the years ending July 2021 and July 2022. Between 2011 and 2021, crime incidents on average grew by 4.9% per year **[See reference** 109**]**.

4.110 According to CrimeRate **[See reference** 110**]**, crime in the Borough is mainly focussed on the town of Basildon, which is subsequently recorded as the most dangerous major town in Essex. The town is among the top 20 most dangerous overall out of Essex's 315 towns, villages, and cities. The overall crime rate in Basildon in 2021 was 127 crimes per 1,000 people. This compares poorly to Essex's overall crime rate, coming in 56% higher than the Essex rate of 81 per 1,000 residents.

4.111 Road safety remains a significant local issue and needs to improve. 931 people were Killed or Seriously Injured (KSI) on roads in Essex in 2018 **[See reference** 111**]**.

Projected baseline information

4.112 Crime rates are influenced by such many variables that it is very difficult to anticipate future trends. Spatial variation that currently exists in relative crime deprivation across the Basildon Borough is likely to remain for the foreseeable future, and for the most part will likely mirror overall deprivation trends.

Education

Current baseline information

4.113 There is a high level of child poverty in Basildon, as well as a high rate of children in care. As such, there is a high level of eligibility for free early education entitlement (two year olds). However, the take up rate is very low. With regard to education, 77.1% of all primary and secondary school children studying in Basildon attend a good or outstanding school, slightly lower than the County average. There is also a higher than average persistent secondary absenteeism. Fewer pupils than average aspire to go to university. Despite this, the number of adults with no qualifications is below average **[See reference** 112**]**.

4.114 The Borough currently has 11 secondary schools in total (10 ECC funded and 1 privately funded) and 55 primary schools. Essex County Council's 'Meeting the demand for school places – 10 Year Plan' highlights a need for an additional 9,500 primary school places and 4,100 secondary school places between 2021 and 2030. Consequently, eleven schools across Basildon will be expanded and new primary schools provided **[See reference** 113**]**.

4.115 Educational achievement varies considerably depending on school location in the Borough. The schools in Billericay and Wickford out-perform the schools in Basildon and are above the county and national averages for GCSE results. Despite this, educational attainment at both primary and secondary school levels falls below the Essex average, although this is much more significant with regards to secondary schools in the Borough.

4.116 South Essex College's new state-of-the-art college based in Basildon Town Centre will raise the profile of skills and education in the borough and will contribute to raising the aspirations of residents to develop their skills and career prospects. The curriculum has been developed with local businesses and will focus on digital skills – thus providing our young people with a sound knowledge base from which to take advantage of the higher paid jobs within

Basildon and Essex **[See reference** 114**]**. PROCAT, Further Education College of Advanced Technology, is providing an employer-commissioned and driven curriculum focussed on Advanced Technologies and offers higher apprenticeships and foundation degrees in growth sectors such as Rail, Aviation and Engineering.

4.117 Although there are some Higher Education offers available from PROCAT and South Essex College, mainly from Anglia Ruskin University, there is no dedicated HE presence in the Borough. This means that young people must travel outside the Borough to access higher skills training and very few come back to live in the Borough.

4.118 Qualifications gained at 'A' level or higher are much lower than the national and regional averages, particularly in academic degrees. If this situation does not improve, this could have a negative impact on the economic competitiveness of the Borough and could affect people's long-term employability. It may also result in the more skilled jobs being taken by people who live outside the Borough.

Projected baseline information

4.119 The capacity of schools in the Borough could become oversubscribed as the population continues to grow.

Deprivation

Current baseline information

4.120 Poverty impacts upon entire families and has significant impacts on health, education, skills and life chances. Efforts to lift people out of poverty is a challenge, especially as it is linked to so many other factors such as income levels, cost of living and family size. Basildon Borough has a higher proportion

of benefit claimants of working age (11.1%), than the national (11%) and regional (9%) averages **[See reference** 115**]**.

4.121 In the Indices of Multiple Deprivation 2019 **[See reference** 116**]**, the Basildon Local Authority area was ranked 111 out of 317 lower tier authorities in England based on the average rank of the LSOAs in this area (where 1= most deprived). This places Basildon in the bottom 40% of most deprived Lower Tier Local Authorities (LTLAs) nationally. Compared to the other local authority areas in Essex, Basildon is ranked as third out of 12 in the county for overall deprivation. Basildon is one of three areas in Essex which fall into the lower 50% of most deprived areas nationally.

4.122 12 (10.9%) of Basildon Borough's Lower Layer Super Output Areas (LSOAs) are ranked within the most deprived 10% of areas nationally for overall deprivation, whilst 14 (12.7%) are ranked within the most deprived 20% of areas nationally. Most of these LSOAs are located within and around Basildon New Town and Laindon. Conversely, 15 (13.6%) and 11 (10.0%) of Basildon Borough's LSOAs are ranked within the least deprived 10% and 20% of areas nationally, respectively. These areas tend to be in the north of the Borough and along its southern edge, in Langdon Hills. **Figure 3.6** at the end of this Chapter illustrates the range and distribution of deprivation across the Borough.

Projected baseline information

4.123 Basildon Local Authority area was ranked 111 out of 317 lower tier authorities in overall deprivation in the Index of Multiple Deprivation. Whether this trend will continue is uncertain.

Equalities

Current baseline information

4.124 The Equality Act 2010 identifies nine 'protected characteristics' and seeks to protect people from discrimination based on these characteristics. It presents three main duties: to eliminate discrimination, harassment, victimisation and other conduct that is prohibited under the Act; to advance equality of opportunity between persons who share relevant protected characteristics and persons who do not share it; and to foster good relations between persons who share a relevant protected characteristic and persons who do not share it. The nine protected characteristics identified through the Act are:

- Age: Children (0-4), Younger people (aged 18-24), older people (aged 60 and over);
- Disability: Disabled people, people with physical and mental impairment;
- Gender reassignment;
- Marriage and civil partnership;
- Pregnancy and maternity;
- Race;
- Religion or belief;
- Sex; and
- Sexual orientation.

Age

4.125 Basildon has a slightly younger demographic when compared to Essex – the median age in Basildon in 2019 was 39.3 and 42.8, respectively.

4.126 Whilst this has remained relatively constant for the past 10 years of data gathering, the Borough's age structure has been changing in line with national trends, with a decreasing proportion of young people and an increasingly ageing population. The working population is essential for economic growth, requiring adequate housing, access to jobs and businesses; yet Basildon's working population is forecast to decrease by three percentage points by 2024. Although the number of over 65s in Basildon is low compared to the county, projections suggest the county and Borough populations are likely to continue to age, placing greater and more complex demands upon support and care services (e.g., health, social care etc.) and may lead to changes in future housing and service provision needs. Burstead and Wickford Castledon have the highest proportion of over 65s, with nearly a quarter (over 24%) of residents falling into this age group (ONS, 2019). The wards with the highest proportion of under 25s are Vange, St Martins and Lee Chapel North, with a third (33%) of the resident population **[See reference** 117**]**.

4.127 According to MOSAIC **[See reference** 118**]** the top three most prevalent household types in Basildon are:

- M56 Solid Economy (6.6% of households):
  - Families with children, aged 26-55.
  - Renting from social landlord.
  - Household income less than £15k.
  - Lower wage service roles.
  - Relatively stable finances but small bills may be a struggle.
- H35 Primary Ambitions (4.0% of households):
  - Co-habiting couples aged 26-45 with children under 11.
  - Own (with a mortgage) their affordable homes in good suburbs which they may now be out-growing.
  - Household incomes of £40-59k.
- D17 Thriving Independence (3.8% of households):

- Well-qualified older singles and cohabitees without children, aged 35-46.
- Incomes of £30-49k, from successful professional careers.
- Living in good quality housing with large mortgages.

4.128 Vange and Lee Chapel North wards are areas with high deprivation and health inequalities. As such, their household profiles are quite different to those mentioned previously. 19.4% of households in Vange and 16.3% of households in Lee Chapel North tend to be families with children, renting their homes with incomes under £15k. Both areas also have a large proportion of cohabiting couples or singles with children, again renting with household incomes under £15k.

Disability

4.129 The 2021 Census presented figures on people with disabilities in the UK. Of Basildon Borough's population, 82.4% stated that their daily activities are 'not limited' by a long-term illness, while 10.0% are limited 'a little' and 7.6% are 'limited a lot' by illness **[See reference** 119**]**.

Marriage and civil partnership

4.130 From the 2021 census data, 35.7% of the population were married or in a registered civil partnership and 29% of the population were never marries and never in a registered civil partnership **[See reference** 120**]**.

Pregnancy and maternity

4.131 The total fertility rate (TFR) for England was 1.62 children per woman in 2021, increasing from 1.59 in 2020, an increase of 1.9%. The region with the

highest TFR was the East of England, with 1.76 births per 1,000 women, an increase from 1.69 in 2020 **[See reference** 121**]**.

4.132 In Basildon, there were a total of 2,424 births in 2021. This was the highest number in the Essex County **[See reference** 122**]**.

Ethnicity

4.133 In 2021, 87.5% of Basildon Borough's population reported as being 'White', which is higher than the England and Wales average (81.7%). 'Black, Black British, Black Welsh, Caribbean or African' accounted for 4.8% of the population, 'Asian, Asian British or Asian Welsh' accounted for 4.3%, and mixed or multiple ethnic groups accounted for 2.6%. 0.9% of the population reported as being from any other ethnic group **[See reference** 123**]**.

4.134 In 2021, 88.2% of people in the Basildon Borough were born in the UK.

Religion and belief

4.135 In 2021, most of the Basildon Borough's population identified as Christian (46.5%). The second largest group within the Borough is 44.1% of residents who classify themselves as having no religion **[See reference** 124**]**.

Sex

4.136 Based on figures from the 2021 census, there are 96,504 females (51.4%) and 91,067 males (48.6%) **[See reference** 125**]**.

Sexual orientation and gender identity

4.137 From the 2021 census data, 91.71% of people aged 16 years and over in Basildon identified as being straight or heterosexual. 2.06% of people aged 16 years and over identified with being lesbian, gay, bisexual, or other (LBG+). 6.24% of people aged 16 years and over preferred not to answer **[See reference** 126**]**.

4.138 From the 2021 census data, 94.78% of people aged 16 years and over in Basildon have a gender identity the same as their sex registered at birth. 0.37% have a gender identity different from their sex registered at birth. 4.85% did not answer **[See reference** 127**]**.

Projected baseline information

4.139 A review of the baseline information suggests that Basildon has an ageing population, growing ethnic and religious diversity, and a low mortality rate.

4.140 It is expected that the ratio of those residents over the age of 65 will increase in the future across the UK. Basildon has a relatively low old-age-dependency ratio at 27.4 compared to the national ratio of 63.5 which indicates that the number of people of state pension age per 1,000 people of working age is comparatively lower, however this number is expected to rise in line with national trends **[See reference** 128**]**. An ageing population will put additional pressure on health and social care infrastructure in the Borough.

Implications for health

4.141 Some areas of the Borough experience health challenges, with high levels of obesity and risk of associated health problems. The UK Chief Medical Officers advise that for good physical and mental health, adults should aim to

be physically active every day. Over the course of a week adults should accumulate at least 150 minutes of moderate intensity activity; or 75 minutes of vigorous intensity activity day; or even shorter durations of very vigorous intensity activity; or a combination of moderate, vigorous and very vigorous intensity activity **[See reference** 129**]**.

4.142 Similarly, open spaces and recreational facilities provide residents space in which they can undertake physical activity to the benefit of public health, including lowering the risk of specific health conditions such as depression, anxiety, cortisol, blood pressure, pre-term birth, low birthweight, and type 2 diabetes. There is generally positive evidence relating to the impacts of activities in natural environments on children's mental health and their cognitive, emotional and behavioural functioning. These health benefits are thought to arise through a range of pathways, including providing opportunities and safe spaces for physical activity, for restoration and relaxation, and for socialising with friends and family. Exposure to green and blue space is also associated with higher levels of life satisfaction. Impacts appear to differ according to socio-economic status and other demographic factors such as age or gender.

4.143 Similarly, encouraging active travel, such as walking, wheeling and cycling can have a wider range of positive implications for health, including increased physical activity and opportunities for social interaction. In addition, an increase in active travel would be associated with a decrease in vehicular transport and an associated decrease in air pollutants that can be harmful to human health.

Key sustainability issues and opportunities for the Local Plan to address them

Population

4.144 Population growth and demographic change will place additional demand on key services and facilities such as health, education and social care.

Additionally, an ageing population will place additional pressures on housing, health and social care services. Without the Local Plan it is likely that services and facilities will still be delivered. However, it is less likely that these will be in appropriate locations, or of sufficient quality and quantity to keep pace with demand arising from new residential development. The Local Plan offers an opportunity to deliver these in a coherent, sustainable manner alongside development.

Housing

4.145 Affordability of housing within the Basildon Borough is an issue, with the median property price-to-earnings ratio for Basildon Borough Council higher than the average for both the East of England and England on a national scale. The Borough's growing population will create additional demand for family homes, while relatively low levels of income will need to be considered through the provision of affordable accommodation. Basildon Borough has not delivered its annual housing target in the last three reporting years which has resulted in the Borough achieving only 41% of its expected housing delivery across the three year period, leaving a gap in the supply of much needed housing (including affordable housing) within the Borough. Without the Local Plan, the objectively assessed need for new housing and the appropriate mix of housing types in Basildon will not be delivered and the current trends will continue. The Local Plan offers the opportunity to facilitate and expedite the delivery of a variety of housing, including affordable housing and housing to meet the needs of an ageing population. The Local Plan also offers the opportunity to target residential development in areas where the barriers to housing are greatest.

Health

4.146 Given that Basildon Borough has performed poorly for some health indicators against regional and national averages, it is likely it will continue to do so without substantial intervention, particularly the Borough's high level of obesity. The Local Plan has an important role to play in encouraging active lifestyles through the provision of sufficient safe, inclusive and quality open

spaces/recreational resources and active travel routes and offers the opportunity to curb current negative trends.

Access to services and facilities

4.147 Whilst the Basildon Borough generally has good access to services and facilities, this could become more challenging as the population in the Borough continues to grow with insufficient capacity to the nearest services. As the population ages, this may also result in a larger proportion of Basildon's population not having access to key services that are only readily accessible by car. The Local Plan provides an opportunity to ensure that future developments, particularly those which will provide large numbers of jobs or key services are accessible to all.

Open spaces, sports and recreation

4.148 The Basildon Borough has a wide variety of parks and open spaces, with its neighbourhoods having access to plenty of green space; however, there has not been a notable net increase in open space provision since 2010. The Local Plan offers the opportunity to ensure that the accessibility and quality of open spaces remains high and new green and blue infrastructure is planned alongside new development.

Crime

4.149 The crime rate in the Basildon Borough is 10,809 incidents per 100,000 population, according to figures published by the ONS for the year ending July 2022. In the year ending July 2022, there were 20,284 incidents of crime, a 1,995 increase in incidents when compared to the previous year. Crime in the Borough is mainly focussed on the town of Basildon, which is subsequently recorded as the most dangerous major town in Essex. The Local Plan provides an opportunity to provide appropriate local policy response, linked to socio-

economic regeneration, locating employment in areas of high deprivation, providing community services and facilities including education facilities. This should have indirect, positive effects on actual crime and fear of crime.

Education

4.150 Comparably fewer qualifications/ training gained at 'A' Level or higher in the Borough than the region or country. If this continues it could have a negative impact on the economic competitiveness of the Borough and may lead to more jobs going to people from outside the Borough and affect local people's long-term employability. The Local Plan presents an opportunity to improve the accessibility and provision of high-quality education and training facilities in the Borough. By improving levels of educational attainment there could be wider social benefits and improvements to the local economy.

Deprivation

4.151 There is a need to reduce inequality between those living in the most deprived areas of the Basildon Borough and those living in the least deprived areas of the Borough. The Local Plan presents an opportunity to close the gap between the most and least deprived areas in the Borough through spatial planning, particularly with a view to encouraging new development that will provide jobs, raise income levels, support education/skills/training, reduce crime, and barriers to housing and services.

Equalities

4.152 The Local Plan provides an opportunity to promote equality of opportunity for all the Borough's residents, including those with protected characteristics.

Economy

Economy and employment

Current baseline information

4.153 The main source of employment in Basildon New Town in its early development years was manufacturing. Companies wishing to redevelop or expand their manufacturing capacity were directed out of London to the new and expanding towns being built on its edge. In this way, companies such as Yardley's, Carreras, Ford Tractors, STC and Ilford Films, all became established in the New Town's northern industrial belt (A127 Corridor). With the exception of the Tractor Plant (now Case New Holland) all these major manufacturing employers have since closed, and their premises have been redeveloped. Existing major employers in the Borough include Ford (its research and development Technical Centre is located at Dunton), Selex Galileo and New Holland Agriculture. Established industrial estates are located along the A127 Corridor. Existing employment sites continue to perform well across the Borough with lower than average vacancies **[See reference** 130**]**. However, Artificial Intelligence (AI) is expected to reduce employment in this sector overall by up to 25% by 2037 (equivalent to 1,850 employees in Basildon). Despite this, AI could create up to 25% more jobs by 2025 **[See reference** 131**]**.

4.154 The South Essex Economic Needs Assessment **[See reference** 132**]** highlights the considerable economic opportunities within South Essex, focussing on its proximity to London, Europe, its connections, labour force and land assets. The document highlights the importance of continued investment in Basildon Borough's health and technology, research and development industry and Basildon town centre. The document also stresses the need for a flexible supply of employment land and premises to meet organic growth.

4.155 Between 2010 and 2018, the number of businesses in Basildon grew by 31%, which is more than 7% greater than the England average and 12% greater than the South East Local Enterprise Partnership (LEP) area. The most pronounced period of growth was between 2014 and 2018, as the Borough recovered from the recession. Over this period, the number of individuals employed in Basildon Borough grew by 14% **[See reference** 133**]**.

4.156 The primary threats to Basildon's economy are the UK's departure from the European Union and automation. According to the Future Economic Opportunities and Challenges Study **[See reference** 134**]**, Basildon's economy could shrink as much as 2% (£83m) over a 10-year period because of Brexit.

4.157 The Basildon A127 Enterprise Corridor is the largest concentration of employment in Essex and one of the largest concentrations of advanced manufacturing in the South of England. The Borough's key employment sectors are Wholesale and Retail Trade, Repair of Motor Vehicles and Motorcycles; Human Health and Social Work Activities; Professional, Scientific and Technical Activities; and Administrative and Support Service Activities.

4.158 Basildon Borough is within the national regeneration area of Thames Gateway. Basildon Borough is the largest employment area in Thames Gateway, outside of Canary Wharf. As such, there is a higher than average ratio of jobs per population and an increasing number of jobs. However, the number of people unemployed in the Borough is higher than average **[See reference** 135**]**.

4.159 There are over 93,700 people (79.4%) employed within the Borough. Data from NOMIS shows that unemployment rose to 4.2% in March 2020 because of the COVID-19 pandemic. The unemployment rate has since remained at around 4.3%, which is higher than the regional average (3.8%) but lower than the national average (4.6%) **[See reference** 136**]**.

Projected baseline information

4.160 The full economic impact of the COVID-19 pandemic will not be known for some time. However, anecdotal evidence suggests that office-based staff will work remotely/at home more frequently; consequently, businesses are likely to reduce their office space. Rising heating costs have the potential to encourage people back into the office however it is uncertain whether attendance will return to pre-pandemic levels.

Town centres and retail

Current baseline information

4.161 The hierarchy of centres for Basildon Borough is identified as follows:

- Regional town centres: Basildon;
- Town centres: Billericay, Laindon, Pitsea and Wickford; and,
- Local centres: 39 local centres.

4.162 Basildon Town Centre has a good diversity of retail uses, with a mixed retail offer oriented towards comparison goods. While retail diversity is strong, the Town Centre offers very limited leisure and evening economy options (the Towngate Theatre is the only cultural venue within the Town Centre and there is a noticeable absence of family dining options). Since 2014, there has been a noticeable decline in the number of vacant units around Town Square and the Eastgate shopping centre. However, there are some parts of the centre, most noticeably East Walk, where the vacancy rate appears to have increased. The latest official record points towards 45 vacant units (18.4%) in Basildon Town Centre **[See reference** 137**]**. Vacant outlets can point to a variety of reasons including poor maintenance, inactive marketing or simply because the units are unsuited to modern retailing requirements. National decisions to close stores (Marks and Spencer), move out of town (Clarks) and retailers entering

administration (Toys R Us and Maplin) have also recently impacted on Basildon's range of retailers in a short space of time.

4.163 Pedestrian flows in the town centre are good, and it is clear the centre is well-supported, reflected in comprehensive regeneration plans underway within Basildon Town centre. The pedestrianised nature of the town centre is a positive asset to the centre, as is the market and presence of civic facilities. A new vision for Basildon town centre has recently been adopted by the council. The Vision is supported by a Delivery Plan which sets out the actions and next steps in the short, medium and long-term, setting out the strategic direction and ambitions for Basildon Town Centre over the next 10 years. This would involve new buildings being 'greener', as well as taking advantage of Basildon's existing transport links, thus encouraging good growth **[See reference** 138**]**.

4.164 Billericay is a smaller town which sits to the north-west of the Borough. It has a focus on high-end national retailer and leisure operators and appears to cater for a relatively affluent catchment area. While there are a range of day to day services to meet many residents' local needs, the fact that much of the town centre is given over to more niche uses does not mean that expenditure loss to large surrounding centres is inevitable. The vacancy rates here are extremely low, and the centre appears well supported throughout the length of the linear High Street. Overall, the centre is performing well and does not present any significant areas of concern.

4.165 Laindon was a purpose-built district centre on the western side of Basildon urban area, in need of regeneration. Planning permission exists for the redevelopment of the centre. The former shopping centre has been demolished.

4.166 Pitsea Town Centre lies on the eastern side of Basildon urban area, at the intersection of several major intra and inter-urban roads. The centre is dominated by the presence of a Tesco Extra supermarket – the largest supermarket in the Borough and one of the 20 largest supermarkets in the county. A significant programme of regeneration has recently been completed in the 'traditional' element of the town centre. At present, the retail offer in the Town is skewed towards convenience good retailing as well as meeting some

day-to-day comparison and service needs. There are many take-away/fast food restaurants in the centre, which limits the diversity of uses and serves to bring the overall feel of the centre somewhat downmarket. The proportion of vacant property stands at 1.8% which is significantly lower than the current UK average of 12.3%.

4.167 Wickford Town Centre, in the north-east of the Borough, has also been subject to several recent regeneration initiatives. The retail offer in the town centre is particularly limited. There are several independent retailers and a good range of service providers such as banks and chemists. Leisure options are limited to a small number of restaurants and take away establishments, and the town centre is unlikely to have a significant evening economy. The proportion of vacant properties at 5% is lower than the national average. Pedestrian flows are good as the town centre is linear in shape although the northern section of the town centre has less pedestrian footfall than the south.

Projected baseline information

4.168 The COVID-19 pandemic has adversely impacted the health of town centres, exacerbating long-term trends of increased empty retail units and reduced footfall. However, long-term impacts following the pandemic are uncertain. In addition, increases in online retailing have also impacted high-street retailing in the Borough. However, there is potential for small retailers to expand their existing high street presence by creating a strong online retail presence. There is also likely to be significant impact on the local economy due to the cost of living crisis experienced across the UK.

Implications for health

4.169 Employment and job security influence mental health and levels of stress. Income can also influence physical health, in terms of the quality and location of housing that people can afford. A strong local economy will help create more

job opportunities, contribute to greater job stability and raise the quality of life for local people, resulting in improved health outcomes.

Key sustainability issues and opportunities for the Local Plan to address them

Economy and employment

4.170 Basildon Borough's local economy is largely dependent on particular industries such as manufacturing and logistics. The borough's economic structure could therefore benefit from encouraging further diversity of business. However, in order to diversify the economy further, there will be a need to increase the take up rate of further education courses and increase the skills base of the local labour market, to ensure local business sectors can diversify, thus helping to improve the long term prosperity of residents. There is also a common requirement to make provisions for jobs growth in line with increases to housing provision, whilst having regard to biodiversity and the wider environment. The Local Plan presents an opportunity to improve the accessibility and provision of high-quality education and training facilities in the Borough to diversify the local workforce and economy. The Local Plan also allows for the delivery of businesses and employment opportunities in strategic areas across the Borough in a coherent and sustainable manner.

Retail and commercial leisure facilities

4.171 There is a need to enhance the viability of town centres, whilst meeting various development needs and regeneration aspirations within social and environmental constraints. This is particularly important considering the impact of the COVID-19 pandemic. The Local Plan presents an opportunity to help sustain the vitality of the town centres by safeguarding and providing retail and commercial land and floorspace, where demand for this exists, and by responding flexibly to changes in consumer behaviour.

Historic environment

Historic environment

Current baseline information

4.172 Basildon Borough Historic Environment Characterisation Project reports on the Borough's well-preserved historic landscape character which contains a rich resource of historic features of high sensitivity **[See reference** 139**]**. There are 13 Historic Environment Character Areas in the Borough. Much of the open countryside contains pre 18th century features, including Anglo-Saxon or medieval field patterns, historic churches and other listed buildings.

4.173 As of 2023, there are 129 Listed Buildings: 2 Grade I, 12 Grade II* and 112 Grade II. Additionally, there are 3 Scheduled Monuments and 4 Conservation Areas **[See reference** 140**]**. The greatest concentration of listed buildings is in Billericay High Street, which is also a Conservation Area **[See reference** 141**]**. **Figure 3.7** at the end of this Chapter illustrates the key historic assets in the Borough.

4.174 There are four Conservation Areas; all of which are located entirely or in part in the north west of the Borough:

- Billericay;
- Great Burstead;
- Little Burstead; and
- Noak Bridge.

4.175 The Billericay Conservation Area **[See reference** 142**]** is characterised by a collection of buildings dating from the 15th to the 19th centuries, modest in scale and rarely above two storeys in height, many of which have been used as

High Street shops. The Conservation Area Appraisal labels the High Street in the Billericay Conservation Area as fragile with several derelict buildings in the Conservation Area and the mid twentieth century rows of shops have diluted the character of the town centre visually.

4.176 The focal point of the Great Burstead Conservation Area **[See reference** 143**]** is the Church owing to its height, mass, form and materials. The rest of the Conservation Area is more mixed; the older houses providing a link with the village's history which has been eroded to some extent by infill and rebuilding in 'modern' styles. The Conservation Area Appraisal labels the Conservation Area as fragile and under threat, being very small and surrounded by modern suburbia.

4.177 Most buildings in Little Burstead Conservation Area **[See reference** 144**]** are dwelling houses, ranging from semi-detached cottages to large high-status buildings, many of which have extensions and converted outbuildings. Although these are usually well executed in appropriate materials, a number have been positioned where they are very prominent when viewed from the road increasing the risk of suburban creep in the Conservation Area.

4.178 The Noak Bridge Conservation Area **[See reference** 145**]** is an unusual and special place, with a unique character which has made it very popular with residents. Noak Bridge is a residential suburb of Basildon New Town. There are no listed buildings, scheduled areas, other heritage assets or known archaeological sites in Noak Bridge. The total enclosure of Noak Bridge is important to preserving its separate identity and attractive setting.

4.179 The Borough's archaeological heritage is a finite and fragile resource and should be protected and where possible enhanced. There are over 500 archaeological records in the Borough dating from as early as the Palaeolithic Period (500,000-10,000 BC) to the Post-Medieval Period (1538-1900), with reasonably significant concentrations of Roman and Medieval find spots in Billericay and Wickford **[See reference** 146**]**.

Projected baseline information

4.180 The historic environment can be considered a finite resource. It cannot be replaced and is susceptible to decline over time as historic features experience degradation and decay. However, cultural heritage can evolve and change, and features which are not currently considered a valued part of the historic environment may become so in the future, either due to their uniqueness, past use, or historic or cultural significance.

4.181 At local level, new developments, infrastructure and environmental pressures, such as extreme weather and flooding, present the greatest risk to cultural heritage assets.

4.182 Historic England has a Heritage at Risk Register **[See reference 147]** which includes historic buildings, listed buildings, sites and Conservation Areas at risk of being lost through neglect, deterioration or decay. The register aims to highlight those places and buildings in greatest need of repair. As of 2023, Basildon does not have any heritage registered as at risk however this is potentially subject to change.

Implications for health

4.183 Historic England explored the links between the historic environment and health in Wellbeing and the Historic Environment **[See reference** 148**]**. This identified mental and social wellbeing benefits of the historic environment, including opportunities to meet people and expand knowledge through volunteering or visiting historic sites and giving people a sense of place, community and belonging.

Key sustainability issues and opportunities for the Local Plan to address them

4.184 There are many designated and undesignated heritage assets and areas of historical and cultural interest in the Basildon Borough that could be adversely affected by climate change and poorly located or designed development. While several of the historic assets in the Borough, for example Listed Buildings and Scheduled Monuments, will continue to be protected by statutory designations, without the Local Plan it is possible that these, and undesignated assets, will be adversely affected by inappropriate development. The Local Plan provides an opportunity to protect these assets (including their settings) from inappropriate development, as well as enhancing the historic environment and improving accessibility and interpretation of distinctive features of local heritage.

Landscape

Landscape

Current baseline information

4.185 The Basildon Borough Landscape Character Assessment and Capacity Study **[See reference** 149**]** concludes that much of the Borough's topography is not well-suited to accommodating development as a large proportion of the Green Belt areas are either flat estuary marshes, lower valley slopes of the River Crouch or ridges and prominent slopes on valley sides with limited enclosure, such as the Langdon Hills. The estuary marshland and restored landfill areas in the south of the Borough and the Upper Crouch Valley are open landscapes with little mature vegetation to provide enclosure and screening of potential development sites.

4.186 The north-west of the Borough around Billericay and the south-west in the Langdon Hills area, have some substantial areas of mature vegetation and woodland blocks which create a more enclosed landscape which could assist in screening new development. Much of the landscape in the Borough is of medium scale and complexity which is generally considered to be of medium sensitivity. Smaller scale and more complex areas are typically on the edges of settlements and historic areas, such as around parts of Billericay and in the Langdon Hills.

4.187 A total of 6,950ha of Basildon Borough is designated as Green Belt. This represents approximately 63% of the total area of the Borough. The Borough boundary is generally drawn tightly around the existing urban edges of the Borough's settlements. Notable land uses within the Green Belt include large areas of marshland flowing into the Thames estuary, country parks and agricultural fields punctuated by small villages and 'plotlands' development. The plotlands were originally small plots of land sold in the first half of the 20th century to people who built weekend cottages, holiday bungalows or smallholdings, often to escape London. Those that remain represent the largest areas of development within the Borough's Green Belt.

4.188 Development within the Borough is well concentrated in the three main settlements (Basildon, Billericay and Wickford) and there is currently in most locations a clear sense of separation between these settlements. However, the plotlands to the north, north east and east of Basildon and south and west of Wickford do blur the lines between the urban areas and open countryside in places. Furthermore, the distance between some settlements is small (e.g., 1km between Wickford and Basildon) and the potential for merging/coalescence is high if further development takes place.

Projected baseline information

4.189 The National Character Map defines Basildon Borough as lying within National Character Areas 111 – Northern Thames Basin and Area 81 – Greater Thames Estuary **[See reference** 150**]**. Within the **Greater Thames Estuary**

NCA, there are several drivers for change that will put pressure on the flat estuary landscape. These include:

- New industrial complexes and major transport links;
- Housing provision urban expansion within the main settlements;
- Increased tourism and recreation-related uses of the Estuaries, such as nature parks, boating, water and jet skiing, new marinas, which may increase visitor pressure and reduce the feeling of remoteness and wilderness in some areas;
- Sea level rise is likely to result in significant losses of salt marsh and other habitats (including sand dunes, coastal vegetated shingle and mudflats) through coastal squeeze, with increased pressure on coastal defence structures due to reduced wave attenuation by the salt marsh and pressure on active dynamic coastal processes;
- A substantial alteration of estuarine morphology may occur due to changes in sedimentary processes, with extensive mudflats likely to become sandier, affecting composition of bird species, changes in community composition of estuarine habitats due to increased submergence levels and a continuing and potentially accelerating reduction in sediment supply to recharge shingle beach systems;
- Increased sedimentation and barrier breaches would result in the loss of saline lagoons. Increased saline intrusion would potentially result in a significant alteration to, and the loss of, other species and habitats, including a reduction in quality of coastal arable farmland;
- Likely impacts of climate change on grazing marsh habitat include the loss of species due to saline intrusion, drying out in summer, and unpredictable inundation due to wetter winters and more frequent storm events with increased silt loading and loss of breeding habitat for wetland birds; and,
- A change in the arable landscape may also occur, with the appearance of species and crops adapted to new climatic conditions and a longer growing season potentially leading to double cropping.

4.190 Within the **Northern Thames Basin NCA**, drivers for change include:

- Continued urban expansion of settlements putting pressure on their landscape setting;
- Provision of new open space to improve health and wellbeing, which could lead to habitat fragmentation and an altered landscape character;
- Increased development of infrastructure (transport, logistics and industrial);
- Continued demand for minerals across South Essex;
- Climate change will lead to increased wind erosion in hotter and drier periods and water erosion in the wetter, colder periods;
- Loss of brownfield sites in developed areas putting pressure on invertebrate habitats; and
- Decreased water availability with potential loss of specific drought intolerant species and water quality of water bodies.

4.191 Maintaining the rural landscape and natural landforms will be dependent on being able to preserve and conserve ancient woodlands, unimproved grasslands, protected lanes, commons and hedge-rowed field patterns, as well as the ridges and hilltops from inappropriately located or designed development, changing agricultural practices and seasonal climate change. The urban landscapes can be conserved by maintaining green spaces, landscaping and trees and implementing good design practices in new developments.

Implications for health

4.192 The landscape can benefit mental health and wellbeing in providing a pleasant setting and identifying and enhancing local landscape contributes to sense of place and belonging. Sensitive landscape management can also improve social and physical health by encouraging physical recreation, including providing a pleasant environment for activities such as walking and cycling, providing good public access links and helping people to feel safe and confident in navigating landscapes.

Key sustainability issues and opportunities for the Local Plan to address them

4.193 The Borough's varied urban, rural and natural landscapes are vulnerable to adverse effects from urban expansion, increasing recreational pressures, seasonal climate change as well as agricultural and land management practices. The Local Plan provides an opportunity to help to protect and enhance such areas. It will be better placed to do so if it is able to draw on up to date evidence on landscape character and sensitivity.

Biodiversity

Biodiversity

Current baseline information

4.194 In a relatively urbanised area such as Basildon Borough, the retention of natural features is especially important to maintain a balanced environment. However, no green infrastructure was secured in the Borough through developer contributions for the monitoring period 2020/21 **[See reference** 151**]**.

4.195 Whilst there are no internationally or European protected wildlife sites in the Borough, there are several sites that fall within 5km. These are:

- The **Crouch and Roach Estuaries** (designated as a Ramsar, Special Protection Area (SPA) and Special Area of Conservation (SPA), recognising the importance of the estuarine and saltmarsh habitats and internationally important populations of overwintering waterfowl occurring at the estuaries).

- **Benfleet and Southend Marshes** (designated as a SPA and Ramsar site recognising the importance of the saltmarsh, mudflat and grassland habitats and internationally important numbers of wintering wildfowl and waders occurring at the marshes).
- The **Thames Estuary and Marshes** (designated as a SPA and Ramsar site recognising the importance of the estuarine, saltmarsh and grazing marsh habitats and internationally important assemblages of wintering and breeding waterfowl occurring at the marshes).

4.196 The Local Plan Habitats Regulations Assessment will consider the potential impacts of development on each of these sites (as well as other sites within the wider vicinity of the Borough boundary).

4.197 The Borough is an important location for various nationally and locally important habitats and species. There are six Sites of Special Scientific Interest (SSSIs) in the borough. They form part of the national network, representing the diversity of wildlife, range of habitats and geological and physiographical features, which occur naturally in England. SSSIs have an invaluable role in scientific research and education, as well as supporting habitats and populations of plants and animals that are often under threat in the wider countryside.

4.198 In comparison with 77.3% regionally, and 75.4% nationally, 100% of the Borough's SSSIs are in "favourable" or "recovering" condition **[See reference** 152**]**. Grazing methods, scrub control, ditch management, water level management, personal watercraft activity and landfill operations are regarded as significant threats to SSSIs unit condition. However, Basildon is a relatively urbanised borough which is likely to give rise to recreational pressure on wildlife sites with public access, including SSSIs.

4.199 There are no National Nature Reserves in the Borough.

4.200 According to the Basildon Local Wildlife Sites Review **[See reference** 153**]**, there are 49 Local Wildlife Sites (LoWS) with a total area of 888.1ha.

4.201 Since 2009, four new sites totalling 35.8ha have been added:

- Nevendon Washland (19.7ha).
- Little Burstead Churchyard (0.4ha).
- Langdon Lake and Meadows (13.6ha).
- Staneway Verge and Woodland (2.1ha).

4.202 Three existing LoWS have been expanded by a total of 65.2ha, whilst seven sites have been reduced in size by a total of 20.6ha. Nine sites with a total area of 250.4ha have been removed. The percentage of the Borough now covered by a Local Wildlife Site is 8.1%. Proactive management and monitoring of LoWS is essential to prevent adverse change brought about by actions such as agricultural practices, inappropriate management, road-widening and recreational activities.

4.203 There are 19 Ancient Woodlands within the Borough, covering an area of 248.91ha **[See reference** 154**]**. These habitats are of particular importance, in that they have evolved unique characteristics and qualities through the centuries and, once destroyed, are irreplaceable. Those remaining should be protected and enhanced for historic and aesthetic value, for their contribution to wildlife, species diversity and for informal recreation. **Figure 3.8** at the end of this chapter illustrates the key nature conservation designations in the Borough.

4.204 Endangered species and habitats are protected through the compilation and delivery of Biodiversity Action Plans (BAPs) at national, regional and local levels. Priority Habitats and Species are regarded as the most important habitats and species that need to be conserved across the country. In 2009 the map of UK BAP Priority Habitats across the Borough was brought up to date. A total of 113 were recorded, covering some 868ha, 82% of which is protected as LoWs and 16% SSSI **[See reference** 155**]**.

Projected baseline information

4.205 At UK level, the publication of the State of Nature Report **[See reference** 156**]** provides an overview of the health of the country's wildlife and how human impacts are driving sweeping changes in the UK. It looks back over 50 years of monitoring to see how nature has changed since the 1970s, averaging a 13% decline in the average abundance of wildlife in the UK since the 1970s, with key drivers for change being agricultural productivity, climate change and increasing average temperatures, urbanisation and hydrological changes. The report finds that on average, metrics suggest that decline in species abundance and distribution of species has continued in the UK throughout the most recent decade. These trends are likely to continue in the absence of concerted action.

Implications for health

4.206 A strong link exists between access to nature and biodiversity and associated health and societal benefits. Considering the COVID-19 pandemic, the importance of safe, accessible and well-connected green and blue spaces for improving quality of life has also never been more pertinent.

4.207 According to the recently published World Health Organisation report 'Nature, Biodiversity and Health: An Overview of Interconnections' **[See reference** 157**]** increased exposure to nature has been associated with a lower risk of specific health conditions including depression, anxiety, cortisol, blood pressure, pre-term birth, low birthweight, type 2 diabetes, and reduced risk of death from all causes. There is generally positive evidence relating to the impacts of activities in natural environments on children's mental health and their cognitive, emotional and behavioural functioning. These health benefits are thought to arise through a range of pathways, including providing opportunities and safe spaces for physical activity, for restoration and relaxation, and for socialising with friends and family. Exposure to green and blue space is also associated with higher levels of life satisfaction. Impacts appear to differ according to socio-economic status and other demographic factors such as age or gender. The '15 minute neighbourhood' concept is encouraged as part of

Natural England's Green Infrastructure Framework. This seeks to ensure that everyone has access to good quality natural greenspace within 15 minutes walking distance from their homes, in line with the Accessible Natural Greenspace Standards and Green Flag Criteria.

Key sustainability issues and opportunities for the Local Plan to address them

4.208 The Basildon Borough contains many areas of high ecological value, including sites of national importance. There is a need for continued preservation and long-term management of these areas in the Borough. Local Wildlife Sites in the Borough are being negatively affected by actions such as agricultural practices, inappropriate management, road widening, and recreational activities. If this continues, it could affect their wildlife value and contribution they make to biodiversity, landscapes and the natural environment. Even without the Local Plan, some important habitats and biodiversity sites will continue to receive statutory protection. However, the Local Plan presents an opportunity to manage the sensitivities of the sites and biodiversity networks, for example by locating development away from the most sensitive locations, provide for new green and blue infrastructure, and ensure that growth does not adversely affect their current condition but where possible contributes to their improvement.

Air, land and water quality

Soils and geology

Current baseline information

4.209 Roughly two thirds of Basildon Borough is rural with large areas of open farmland and scattered rural developments **[See reference** 158**]**. The most versatile and most productive agricultural land in the country is classified as Grade 1, 2 and 3a. Basildon Borough does not have any Grade 1 or 2 land unlike neighbouring boroughs/districts. Most of the land in the Borough is classified as Grade 3. Grade 3 land is subdivided into 3a, which is considered as 'best and most versatile' and 3b, which is not, indicating that some parts of the Borough could contain high quality agricultural land, although this is not defined in Basildon Borough.

4.210 In the monitoring period 2020/21, 69.7% of dwelling completions in the Borough were on brownfield sites, compared to 30.3% of completions on greenfield sites.

4.211 Essex has extensive deposits of sand and gravel, with localised deposits of silica sand, chalk, brickearth and brick clay. Within Essex there are 20 permitted sand and gravel sites, one silica sand site, two brick clay sites, and one chalk site **[See reference** 159**]**. In respect of underlying minerals, the Borough has 23 Sand and Gravel Mineral Safeguarding Areas (MSAs), the main clusters of which are located around the centre and south of Billericay and east and south of Wickford **[See reference** 160**]**. Smaller clusters are dotted within the countryside between the two settlements and to the west and south of Basildon.

4.212 The development of Previously Developed Land (PDL) in Basildon Borough is focused on sites in town centres or in existing housing estates that

are subject to wider regeneration schemes. Basildon's New Town's comprehensive development legacy has, to some extent, meant that there has been a relatively small supply of PDL in the Borough, compared to more industrialised areas. The Borough's Brownfield Land Register states that there are a total of 118 sites within the Basildon Borough that have been identified as Brownfield land. Of these sites, 39 are either built out or no longer considered available or suitable, however they remain on the register for historical reasons and have not been deleted. This leaves 79 sites in the Brownfield Land Register that have commenced or could still be built out. These have the capacity to accommodate a minimum of 5,748 dwellings and a maximum of 5,912 new dwellings **[See reference** 161**]**.

Projected baseline information

4.213 Soil is a finite natural resource which regenerates only over extremely long geological timescales and provides many essential services including food production, water management and support for valuable biodiversity and ecosystems. It also plays a role in preventing climate change as a larger storer of carbon.

4.214 Soils in England have degraded significantly over the last two decades due to intensive agricultural production and industrial pollution and continue to face the following threats:

- Soil erosion by wind and rain, affects the productivity of soils as well as water quality and aquatic ecosystems;
- Compaction of soil, reduces agricultural productivity and water infiltration, and increased flood risk through higher levels of runoff; and
- Organic matter decline affects the supply of nutrients in soil moisture (particularly during summer and autumn months) in the future, which is likely to affect the natural environment and landscape.

Waste

Current baseline information

4.215 Essex's landfill sites are rapidly filling up and will continue to be a source of local greenhouse gas emissions for many years to come. There has been a steady fall in the amount of waste being collected per head in the Borough, which can be partially attributed to the increase in the availability of doorstep recycling schemes to Borough households, which have encouraged residents to separate and recycle elements of their general domestic waste. In 2019-2020, 23.9% of household waste was reused or recycled in Basildon **[See reference** 162**]**. This was the fourth lowest rate in Essex, after Tendering District Council (20.5%), Chelmsford City Council (22.5% and Braintree (23.2%). As of 2023, around 44% of household waste in the borough is recycled, but the council is calling on residents to help increase this to at least 55% by 2025 **[See reference** 163**]**.

Projected baseline information

4.216 In terms of how waste arisings are managed, recent trends are predicted to continue; with increases in total waste collected. Recycling trends since 2010/2011 suggest the recycling rates will continue to increase. These projections are also highly dependent on other variables, including population growth, implementation of large regeneration and infrastructure projects, and the amount of waste that is imported from outside the Borough.

Water

Current baseline information

4.217 The Water Cycle Study for South Essex **[See reference** 164**]**, conducted in 2011, revealed that 18% of surface waters in the Anglian River Basin District achieved a minimum of 'Good' status. The majority of the remaining 82% (681 water bodies) failed to achieve 'Good' status due to high phosphate levels. With regards to groundwater bodies 65% achieved 'Good' status with the remainder being rated as 'Poor'.

4.218 The Borough lies within the Essex South Management Catchment, which contains three main water bodies categorised as rivers, canals and surface water transfers. In terms of water quality, the three water bodies in Essex South achieved moderate ecological water quality and failed to achieve good chemical water quality status **[See reference** 165**]**. Four sectors were identified as the principal reasons for not achieving good status: the water industry; agriculture and rural land management; local and central government; and industry **[See reference** 166**]**.

4.219 Most of the Borough's water supply is provided by Essex and Suffolk Water from its Hanningfield Reservoir, 3 miles north of the Borough. A small proportion of the water supply for Billericay comes directly from Abberton Reservoir, near Colchester. In the hillier parts of the Borough in Langdon Hills and Billericay, smaller reservoirs and/ or water towers are also required to maintain water pressure and distribute a constant supply to customers. To cope with increasing demands for water supplies, due to population growth and development targets, Abberton Reservoir was expanded. A chalk aquifer underneath Billericay is designated as a Groundwater Vulnerability Area. These are protected by the Environment Agency through the planning and environmental consent systems to safeguard against excessive pollution, abstraction, or interference. This aquifer is not used for domestic water supplies as it is regarded as having been over-abstracted.

4.220 Water consumption rates per household are still mainly composed of flushing toilets, washing clothes or taking a bath or shower. Water consumption has hardly altered since 2001, despite water saving measures being promoted and more water efficient appliances available from manufacturers.

4.221 The assessment of wastewater transfer and treatment capacity identified that Wickford and Basildon have no capacity to accept and treat additional flows, but Billericay has within the existing discharge consent capacity for the level of growth proposed. While some of the proposed development areas could not support the levels of growth proposed at the current time, with the provision of additional infrastructure it may be possible to support new development **[See reference** 167**]**.

Projected baseline information

4.222 Under predicted climate change scenarios, more frequent drought conditions are expected in the East of England, along with increased demands on water resources. Future developments will create additional demand for water abstraction from surface and groundwater sources in the Basildon Borough. At a high level, it is broadly assumed that the quality of water bodies will improve in line with Water Framework Directive objectives. However, water quality is influenced by a wide range of internal and external factors, including climate change, geology and soils, human consumption and population change, and pollution from human activities such as industry, agriculture, contaminated runoff from roads and other built surfaces, combined sewer overflows, and nutrient enrichment from treated wastewater. Future development, particularly in areas close to water bodies, may therefore hamper efforts to improve water quality.

Air and noise pollution

Current baseline information

4.223 Human health, quality of life and the environment can all be negatively affected by air and noise pollution. Even though there has not been the need to establish any Air Quality Management Areas (AQMAs) in the Borough, air quality is closely monitored **[See reference** 168**]**.

4.224 The following actions have been taken in the Basildon Borough to improve air quality **[See reference** 169**]**:

- **A127 speed limit reduction:** the reduction in speed limit from 70mph to 50mph is expected to reduce nitrogen dioxide on the A127 to safe levels and reduce personal injury collisions on this stretch of the road.
- **A127 junction improvements:** potential junction improvement options on the A127 are being explored including at the Fortune of War junction. Emerging schemes would seek to have a positive impact on air quality in Basildon by reducing congestion.
- **Relocation of pedestrian/cyclist crossings in East Mayne:** relocation of the existing pedestrian and cycle route in East Mayne away from the central reservation will reduce people's exposure to air pollution in the central reservation of the worst affected area.
- **Basildon Integrated Transport Package:** a package of transport improvements was developed to support growth and regeneration in Basildon, reduce congestion, encourage increased use of sustainable transport and improve air quality.
- **Electric vehicle charging points**: Basildon Borough Council received Government funding to install additional electric vehicle charging facilities across Basildon to support the uptake of electric vehicles. Several rapid and fast electric vehicle chargers have now been installed in car parks across the borough, including some specifically for use by taxis and private hire vehicles. Basildon now has more electric vehicle charging

points than any other area in Essex and is within the top 40% in the country.

- **Buses**: government funding was secured to help reduce emissions from buses along the A127 corridor. Bus companies are using the funding to upgrade their vehicles.
- **E-scooter trial:** Basildon Borough is among the initial areas in Essex with a pilot electric scooter hire scheme.
- **Cycle facilities**: cycle facilities along Upper Mayne and Cranes Farm Road were upgraded in 2019 as part of a Defra-funded scheme, linking key commercial and recreational locations. Further route improvements have also been made, connecting residential areas and schools to the west, as far as Laindon link, as part of the Basildon Flagship Cycle Route.

4.225 The greatest cause for complaint in the Borough with regards to excessive noise is that more commonly associated with domestic sources (e.g., barking dogs) rather than industry or commerce. Noise arising from road traffic, aircraft noise and construction work do not represent significant reported local problems.

4.226 Figure 3.9 at the end of this chapter illustrates the latest recorded background concentration of levels of Nox and PM10 across the Borough.

Projected baseline information

4.227 Whilst there are currently no AQMAs declared by Basildon Borough Council, there is a possibility that air quality may worsen in the long-term because of climate change, due to a greater likelihood of prolonged periods of still, dry days, and to-date this relationship has been difficult to predict. This will need to be considered in the potential development of air quality action plans and monitoring regimes, as will the effects of major infrastructure developments.

Implications for health

4.228 Air pollution is associated with several adverse health impacts and is recognised as a contributing factor in the onset of heart disease and cancer. Pollution particularly affects the most vulnerable in society such as children, the elderly, and those with existing heart and lung conditions. There is also often a strong correlation between poor air quality areas and less affluent areas.

4.229 Essex is one of the driest areas of the country and thus faces ongoing water resource challenges, growing demand, and uncertainty from climate change. In addition, poor water quality can increase the risk of water-borne disease.

Key sustainability issues and opportunities for the Local Plan to address them

Soils and geology

4.230 The amount of housing and economic development needed in the Borough will require significant amounts of mineral resources and greenfield land. Without the Local Plan it is possible that development could result in unnecessary sterilisation of mineral and agricultural resources thereby preventing their use for future generations. There is therefore a need in Basildon to minimise the amount of development located on higher quality agricultural land and on important mineral reserves. In the absence of the Local Plan, the NPPF would apply. This supports the reuse of brownfield land, but the Local Plan provides an opportunity to strengthen this approach to ensure these natural assets are not lost or compromised by prioritising brownfield sites and lower quality agricultural land for development.

Waste

4.231 Essex's landfill sites are rapidly filling up and will continue to be a source of local greenhouse gas emissions for many years to come. However, there has been a steady fall in the amount of waste being collected per head in the Borough, which can be partially attributed to the increase in the availability of doorstep recycling schemes to Borough households. The National Planning Policy for Waste **[See reference 170],** and the Joint Municipal Waste Management Strategy for Essex **[See reference** 171**]**, would apply which support driving waste management up the waste hierarchy. However, the Local Plan provides an opportunity to:

- Require developments to use locally sourced, reclaimed, recycled or low environmental impact products in design and construction;
- Provide adequate space in new developments for waste facilities capable of accommodating general waste, recyclable waste and compostable waste;
- Ensure site allocations do not compromise the operation of nearby waste management facilities; and
- Ensure sufficient land is available in appropriate locations for new waste management facilities.

Water

4.232 The Borough contains waterbodies of poorer water quality which do not meet 'Good' status. Pollution sources responsible for this include transport drainage and wastewater discharges. The East of England is predicted to face a gap between supply and demand of up to 750 mega litres a day (ML/d) if the region carries managing water resources in the same way – the equivalent of 40 Olympic sized swimming pools daily **[See reference** 172**].**

4.233 Without the Local Plan, it is possible that unplanned development could be in areas that could lead to further water quality issues and risks to the natural

environment. However, existing safeguards, such as the Water Framework Regulations, would help to reduce the potential for this to occur. The Local Plan provides an opportunity to ensure that development is located and designed to consider the sensitivity of the water environment and water-dependent protected sites, to plan for adequate wastewater infrastructure, to incorporate sustainable drainage systems (SuDS), and to promote water efficiency and grey water recycling.

Air and noise

4.234 Air pollution associated with Basildon's road network has exceed statutory NO_2 levels and needs active monitoring and management. Whilst noise complaints in the Borough are more commonly associated with domestic noise, Building Regulations aim to manage the impact of noise from new domestic and industrial developments through good design. Furthermore, the increasing prevalence of sustainability standards such as BREEAM will also have a positive contribution. Development of an up to date local planning framework will ensure that Local Plan and development management policies seek to address the current sustainability issues (including noise). In the absence of the Local Plan, the policies in the NPPF and the Clean Air Strategy **[See reference 173]** would apply which support measures to improve air quality through traffic and travel management; to develop and enhance green infrastructure; and to direct new development to sustainable locations which limits the need to travel and offer a choice of transport modes. However, without targeted action at a local level, it is anticipated that traffic congestion will continue to increase with the rising population and car dependency may continue to be high. The Local Plan provides an opportunity to contribute to improved air quality in the Borough through:

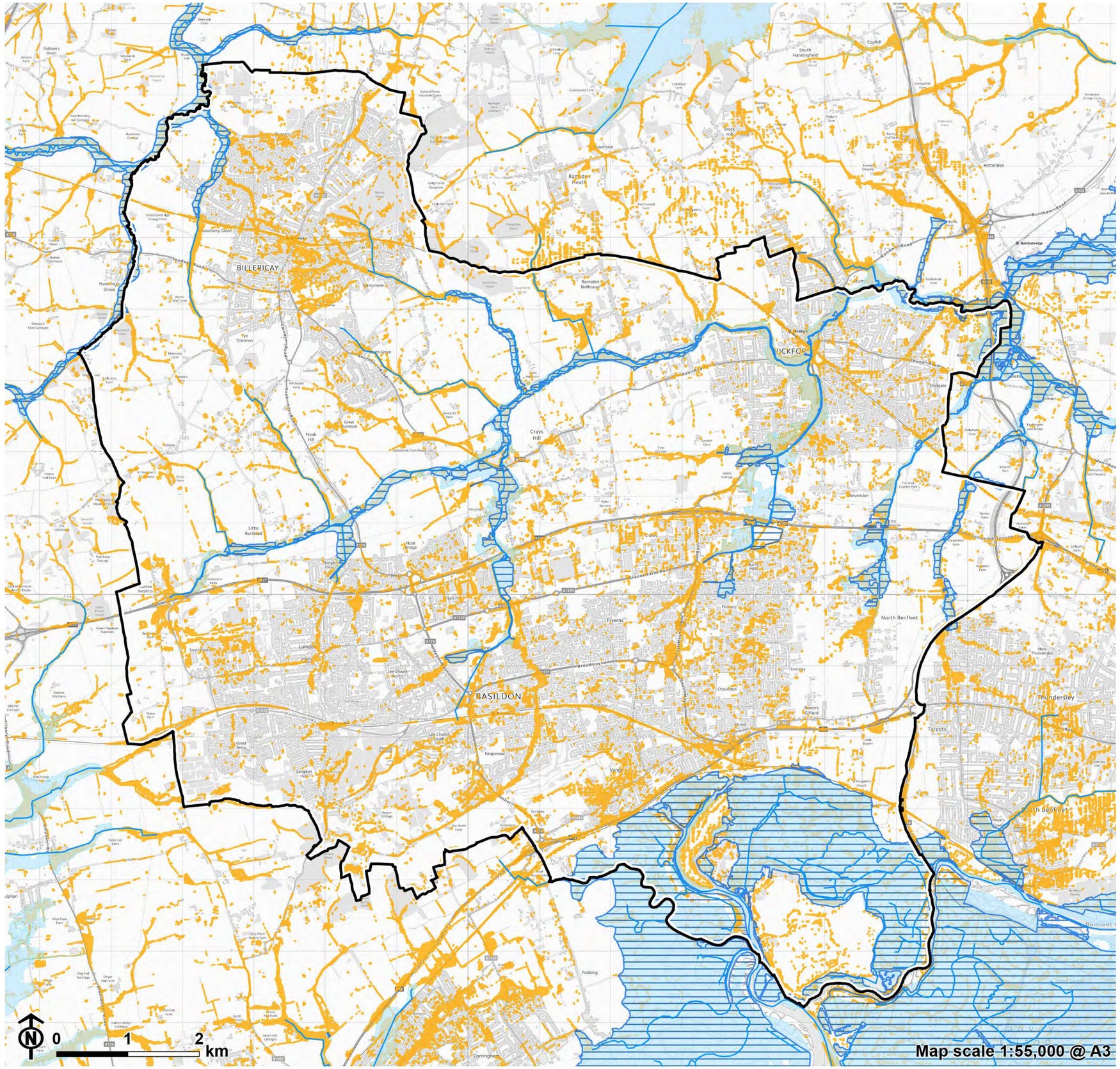
- Locating development sustainably (with good access to services and sustainable transport modes);
- Supporting sustainable travel choices (e.g., requiring sustainable modes to be available on occupation of new homes and workplaces);
- Supporting the uptake of electric vehicles and e-bikes through the provision of electric vehicle charging infrastructure;

- Limiting through traffic through new communities and construction sites.
- Specifying a requirement for applications for major development to include an assessment of their air quality impacts as part of their Transport Assessments/Statements; and
- Specifying a requirement for major developments which may impact on areas at risk of exceeding EU limit values to provide for ongoing air quality monitoring that confirms the effectiveness of proposed mitigation of the traffic and air quality impacts of development.

Basildon IIA and HRA of Local Plan
Basildon Borough Council

LUC

Figure 4.3: Flood risk



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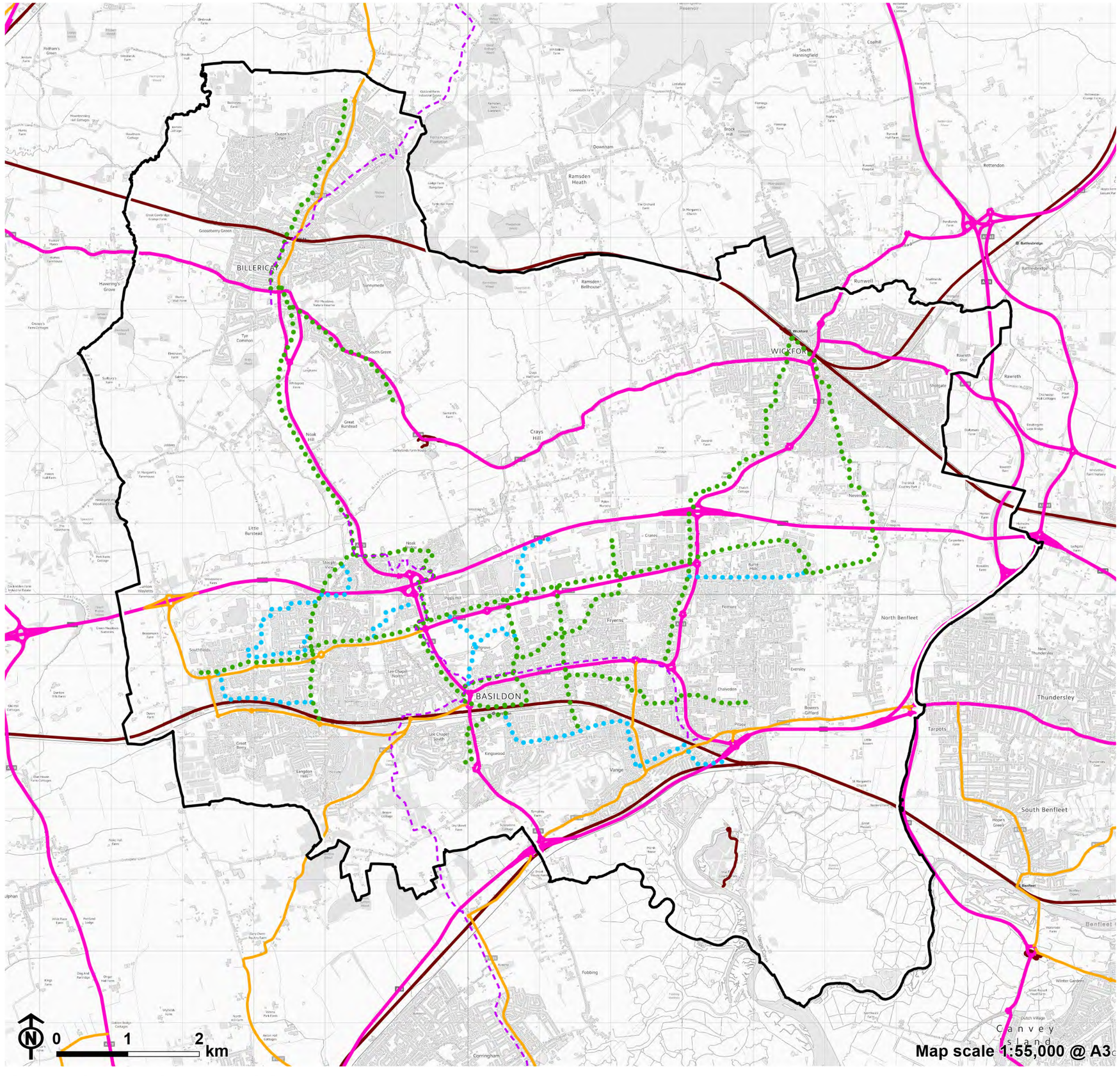
Source: Basildon Borough Council, EA

Figure 4.4: Transport network



- Basildon Borough boundary
- A road
- B road
- Rail network
- National Cycle Network (NCN)
- Primary cycling route
- Secondary cycling route

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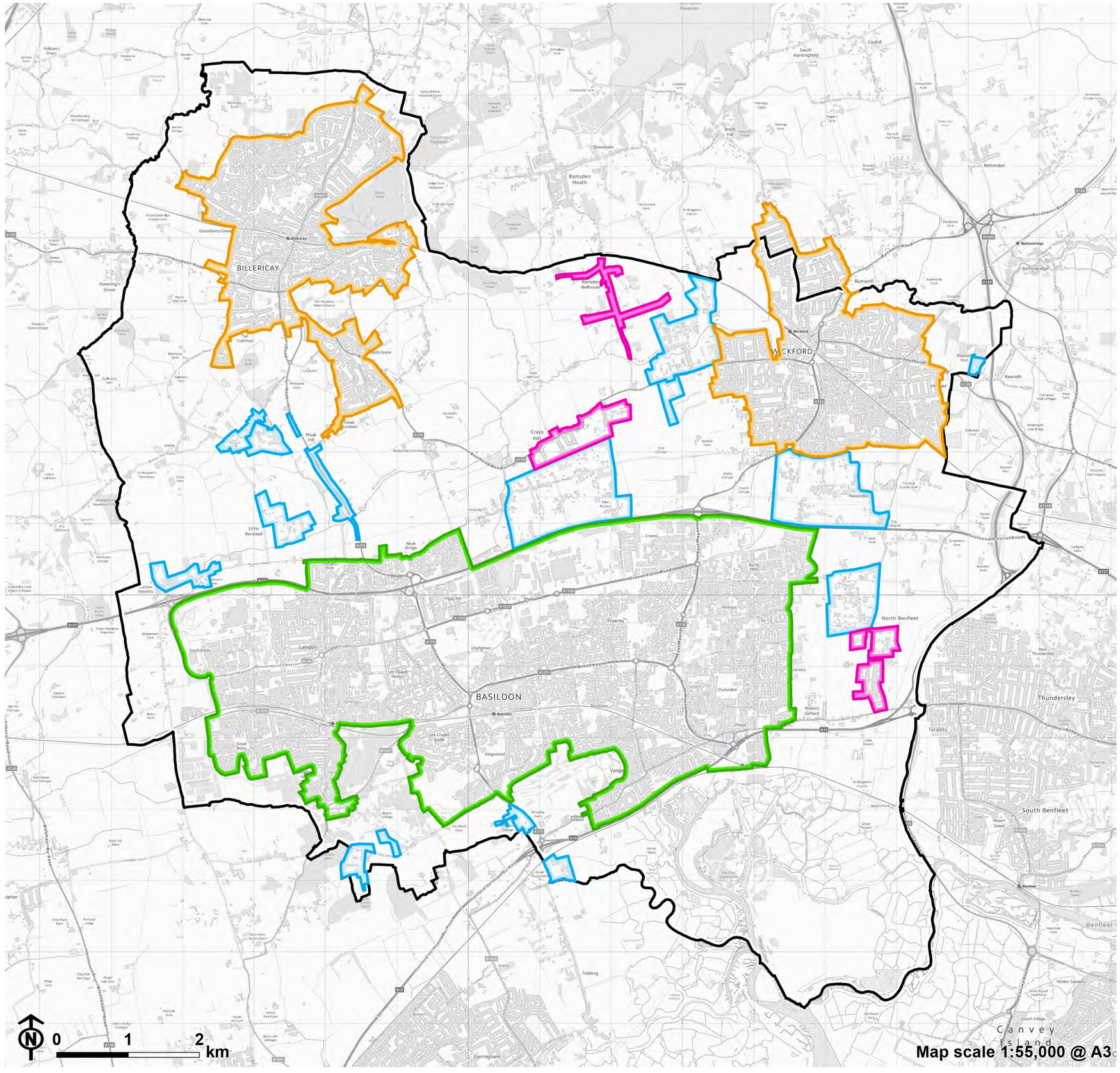
CB:KH EB:Horton_K LUC 12320_FIG03_04_Transport_A3LAccessible 07/02/2023
Source: Basildon Borough Council, OS, OSM, Sustrans

Figure 4.5: Settlement hierarchy



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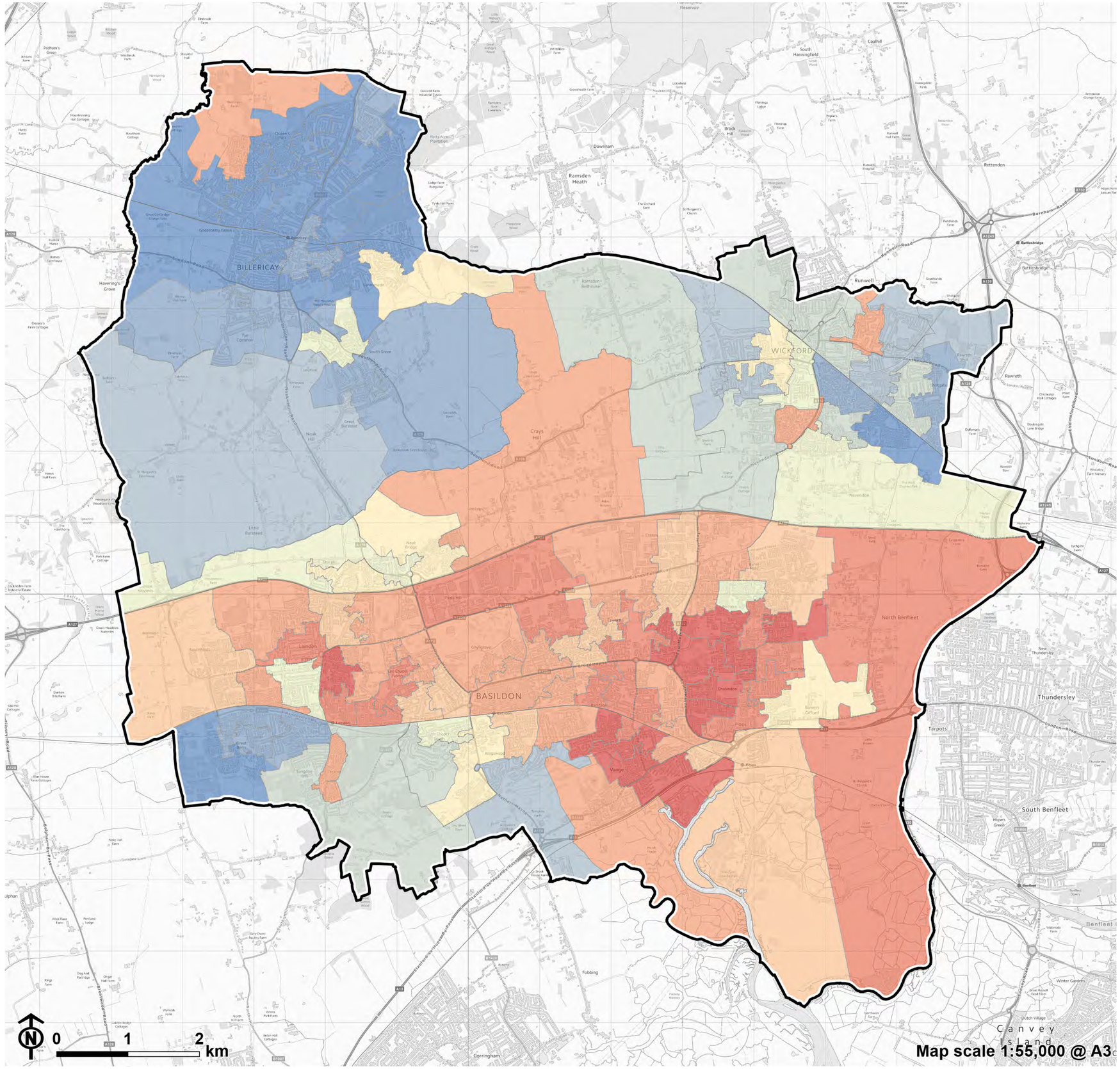
Source: Basildon Borough Council

Figure 4.6: Index of Multiple Deprivation


Basildon Borough boundary
IMD Percentage
0-10% (Most deprived)
10-20%
20-30%
30-40%
40-50%
50-60%
60-70%
70-80%
80-90%
90-100% (Least deprived)
BILLERICAY
WICKFORD
BASILDON
Runwell
Rawreth
Rettendon
Ramsden Heath
Downham
South Hanningfield
Coalhill
Thundersley
South Benfleet
North Benfleet
Tarpots
Canvey Island
Corringham
Fobbing
Laindon
Vange
Crays Hill
Nevendon
Battlesbridge
Havering's Grove
Goosebury Green
Tye Common
South Green
Great Burstead
Little Burstead
Noak Hill
Ramsden Bellhouse
Rawreth Shot
Rawreth Industrial Estate
Basildon Hospital
Queen's Park
Lodge Farm Reservoir
Brock Hill
Rettendon Place
Runwell Hospital
Pendlands Farm
Southlands Farm
Chichester Hall Cottages
Wheatley Farm Nursery
Dutch Village
Winter Gardens
Benfleet
Hope's Green
Thundersley Park
Chalvedon
Kingswood
Langdon Hills
Great Berry
Dunton Hills Farm
Old Hill Cottages
Nobs Hall Farm
Perry Hall Farm
Wick Place Farm
Kings Farm
Dog And Partridge
Orgrd Hall Farm
Wyllyotts Manor
Park Farm Cottages
Hawthorns Cottages
Hunt's Farm
Padham's Green
Shoulder Hill
Hawthorns Farm
Hunt's Green
Hunt's Hall Cottages
Great Coxbridge
Coxbridge Farm
Bowers Farm
Tye House Farm Cottages
Crouch's Farm Cottages
Havering's Grove
Hall Farm
Hall Farm Cottages
Little Burstead Farm
Noak Hill Farm
Noak Hill Woodland Centre
Little Burstead Farm
Burstead Farm
Burstead Farm Cottages
Burstead Farm Road
Tye Common Farm
Tye Common Farm Cottages
Tye Common Road
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Gooseberry Green Farm
Gooseberry Green Road
Ramsden Bellhouse Road
Ramsden Heath Road
Ramsden Heath Nature Reserve
Lodge Farm Bungalow
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Goosehills Farm
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Figure 4.7: Historic environment

- Basildon Borough boundary
- Grade I Listed building
- Grade II* Listed building
- Grade II Listed building
- Conservation area
- Scheduled monument

0 1 2 km

Map scale 1:55,000 @ A3

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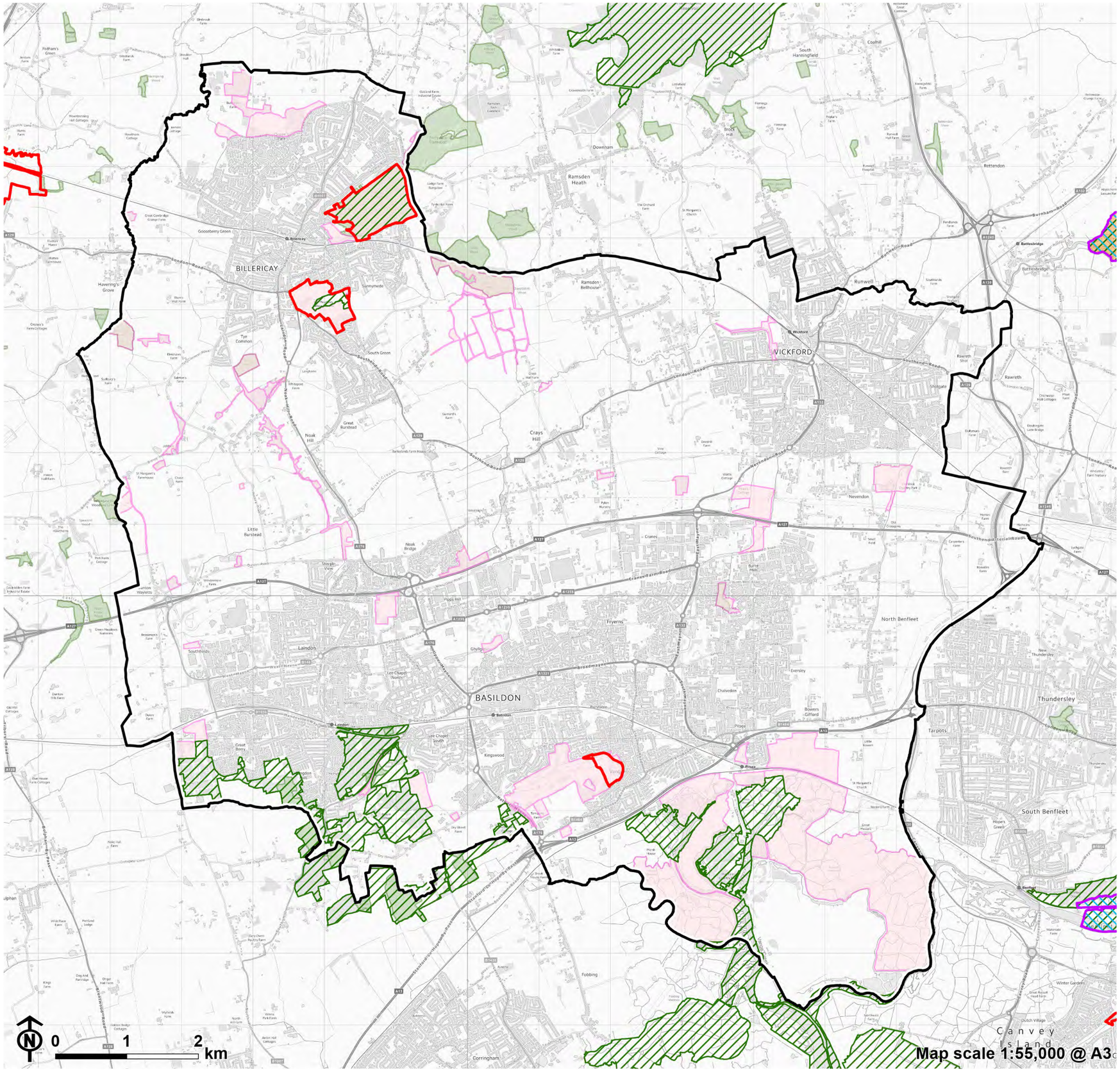
Source: Basildon Borough Council, HE

LUC

Figure 4.8: Natural environment



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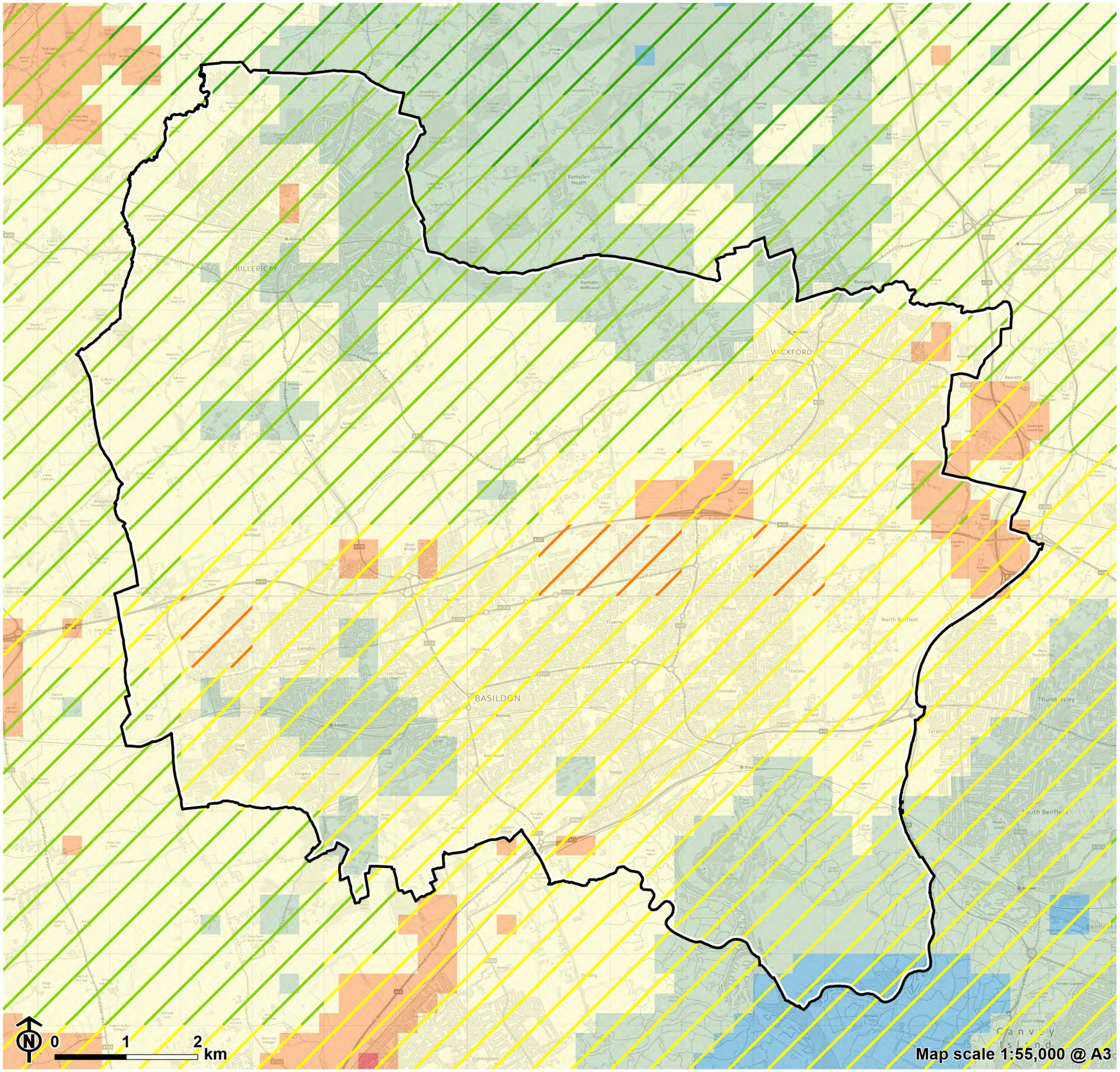
CB:PS EB:Horton_K LUC 12320_FIG03_08_Natural_Environment_A3LAccessible 07/02/2023
Source: Basildon Borough Council, NE

Basildon IIA and HRA of Local Plan
Basildon Borough Council

LUC

Figure 4.9: Air pollution



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CB:KH EB:Horton_K LUC 12320_FIG03_09_Air_Quality_PM10_A3LAccessible 07/02/2023
Source: Basildon Borough Council, DEFRA

Chapter 5

Framework for assessing significant effects

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

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

5.2 The development of a set of IIA objectives (known as the IIA framework) is a recognised way in which the likely environmental and sustainability effects of a plan can be described, analysed and compared. The SA Framework for the withdrawn Local Plan was established in the 2013 Basildon Borough Local Plan Core Strategy Sustainability Appraisal Scoping Report Update. The IIA Framework presented overleaf builds on and streamlines this older framework, having been reviewed and updated to consider the requirements of Health Impact Assessment (HIA) and Equalities Impact Assessment (EqIA) as well as Sustainability Appraisal (SA), the latest baseline and key sustainability issues and opportunities identified for Basildon Borough, and the latest targets and objectives set out in other relevant plans, programmes and strategies. This updated IIA Framework will help to ensure that the IIA of the Local Plan reflects recent global events (such as the COVID-19 pandemic), challenges and priorities, thereby helping to deliver an ambitious Local Plan.

5.3 The IIA objectives and appraisal guidance (which provide a guide to the factors that should be considered when carrying out assessments) set out in the IIA Framework are subject to change as new information comes to light during the IIA process.

5.4 The IIA Framework for the appraisal of the Basildon Local Plan is set out below; each primary bullet point constitutes an IIA objective and the sub-bullet points set out further guidance to help guide the appraisal of each objective. The questions included in the framework are not exhaustive, and some may be more relevant to certain Plan elements than others. The framework below also highlights the most relevant SEA topics for each IIA objective, and whether each objective supports the Basildon Local Plan Health Impact Assessment and/or Equalities Impact Assessment.

IIA framework for the Basildon Local Plan

IIA objective 1: Housing

- IIA objective 1 – Provide new and affordable housing to meet identified needs of the whole community, covering housing of a suitable mix and type.
  - Does the Local Plan provide the amount and mix (size; tenures) of homes to meet local needs over the plan period, including sites for gypsies and travellers and travelling showpeople?
  - Will the Local Plan increase the range and affordability of housing to support the growing population and for all social groups?
  - Will the Local Plan address the housing needs of older people, disabled people and vulnerable groups e.g., accessible and adaptable housing, extra care housing or sheltered housing?

- Does the Local Plan promote good design through layout, orientation and internal space standards?
- Does the Local Plan promote delivery of new housing to lifetime homes specifications?
- Will the Local Plan safeguard and enhance the identity of the Borough's existing residential communities?

Relevant SEA topics and coverage of Equalities and Health Impact Assessment

- Population;
- Human health;
- Material assets;
- Equalities Impact Assessment – Equality Act 2010 protected characteristics:
  - Age: Children (0-4), Younger people (aged 18-24), older people (aged 60 and over); and,
  - Disability: Disabled people, people with physical and mental impairment.
- Health Impact Assessment:
  - Suitable, quality housing provides mental benefits of security and physical health benefits of having a healthy living environment; and,
  - Addresses EPOA objective 7: Design of homes and housing.

IIA objective 2: Community cohesion, health, wellbeing, and safety

- IIA objective 2 – Create a safe, healthy and inclusive living environment and encourage healthy lifestyles, improving access to local services and

facilities that promote prosperity, health, well-being, recreation and integration.

- Does the Local Plan promote equality of access and opportunity through adequate provision and distribution of local community, health, education and retail services and facilities for all?
- Does the Local Plan seek to facilitate the integration of new communities with existing communities by delivering a mix of supporting/other uses alongside housing development?
- Does the Local Plan promote physical activity and outdoor recreation by maintaining, connecting and creating a range of accessible, new, high quality, multifunctional open spaces, green and blue infrastructure, recreation, play and sports facilities?
- Does the Local Plan facilitate access to high quality health facilities for all, including ensuring access to GPs and health centres with sufficient capacity to serve the local population?
- Does the Local Plan protect physical and mental health and wellbeing by preventing, avoiding and mitigating adverse health effects associated with air pollution, noise, vibration, odour, and contamination of land and water?
- Does the Local Plan promote healthy lifestyles by encouraging and facilitating walking, wheeling and cycling?
- Does the Local Plan improve road safety, such as through traffic calming measures or better lighting?
- Will the Local Plan help to reduce levels of crime, anti-social behaviour and the fear of crime e.g., by including measures to increase safety and security of new development and public realm?
- Does the Local Plan promote access to safe, inclusive and accessible, open spaces, including for women and children, older persons and persons with disabilities?
- Does the Local Plan promote accessibility to healthier food options and seek to restrict the density of unhealthy food outlets?

Relevant SEA topics and coverage of Equalities and Health Impact Assessment

- Population;
- Human health;
- Equalities Impact Assessment – all Equality Act 2010 protected characteristics;
- Health Impact Assessment:
  - This objective directly addresses health and wellbeing;
  - Ensuring access to services and facilities means that people can access healthcare, recreation and sport facilities, and meet their daily needs, ensuring both physical and mental wellbeing;
  - Reducing crime, anti-social behaviour and fear of crime is important for physical and mental wellbeing;
  - Creating cohesive neighbourhoods with high levels of pedestrian activity/outdoor interaction, ensures both physical and mental wellbeing and addresses all EPOA objectives.

IIA objective 3: Equalities

- IIA objective 3 – Advance equality of opportunity and foster good relations between those who share a protected characteristic (Equality Act 2010) and those who do not.
  - Does the Local Plan remove or reduce disadvantages suffered by people due to their protected characteristics?
  - Does the Local Plan promote inclusive design, including making places accessible for people with limited mobility, neurodiversity and disabilities?
  - Does the Local Plan help meet the needs of people with certain protected characteristics (i.e., age, disability, gender reassignment,

marriage and civil partnership, pregnancy and maternity, race, religion or belief, sex, and sexual orientation.)?

Relevant SEA topics and coverage of Equalities and Health Impact Assessment

- Population;
- Human health;
- Equalities Impact Assessment – all Equality Act 2010 protected characteristics; and,
- Health Impact Assessment:
  - Equality of opportunity ensures everyone can access the services and facilities they need, as well as promoting a sense of inclusion.

IIA objective 4: Economy and employment

- IIA objective 4 – Facilitate a prosperous and growing economy that creates a range of new jobs and improves vitality and viability of town centres.
  - Does the Local Plan provide an adequate supply of land and infrastructure to meet the Borough's forecast employment needs with sufficient flexibility to respond to uncertainties and changing economic circumstances?
  - Does the Local Plan enable access to employment opportunities, particularly for disadvantaged groups and deprived areas?
  - Does the Local Plan support opportunities for the expansion and diversification of business and inward investment?
  - Does the Local Plan maintain and enhance the economic vitality and vibrancy of town centres?
  - Does the Local Plan support an appropriate level of retail and other services in smaller service centres and rural areas?

- Does the Local Plan support sustainable tourism within the Borough?

Relevant SEA topics and coverage of Equalities and Health Impact Assessment

- Population and human health;
- Material assets;
- Equalities Impact Assessment – all Equality Act 2010 protected characteristics;
- Health Impact Assessment:
  - Security of employment is important for mental wellbeing; and,
  - Addresses EPOA objective 2: Access to skills and employment.

IIA objective 5: Transport

- IIA objective 5 – Reduce road traffic and congestion, pollution and accidents, and promote sustainable modes of transport and efficient movement patterns in the Borough.
  - Does the Local Plan encourage a modal shift to sustainable modes of transport by supporting maintenance and expansion of public and active transport networks?
  - Does the Local Plan support the provision and maintenance of facilities for electric vehicle charging and car-sharing?
  - Does the Local Plan reduce the need to travel by promoting the delivery of integrated, compact communities made-up of a complementary mix of land uses?
  - Does the Local Plan help to address road congestion and its causes?

Relevant SEA topics and coverage of Equalities and Health Impact Assessment

- Air;
- Climatic factors;
- Population and human health;
- Equalities Impact Assessment – Equality Act 2010 protected characteristics:
  - Age: Children (0-4), Younger people (aged 18-24), older people (aged 60 and over);
  - Disability: Disabled people, people with physical and mental impairment;
- Health Impact Assessment:
  - Encouraging active travel, such as walking, wheeling and cycling can have a wider range of positive implications for health, including increased physical activity and opportunities for social interaction. In addition, an increase in active travel would be associated with a decrease in vehicular transport and an associated decrease in air pollutants that can be harmful to human health; and,
  - Addresses EPOA objectives 5: Active environments and 6: Encouraging active travel.

IIA objective 6: Air

- IIA objective 6 – Improve air quality by reducing emissions and concentrations of harmful atmospheric pollutants.
  - Does the Local Plan improve air quality by minimising pollutant emissions from all sources?

Relevant SEA topics and coverage of Equalities and Health Impact Assessment

- Air;
- Climatic factors;
- Population;
- Human health;
- Biodiversity;
- Equalities Impact Assessment – all Equality Act 2010 protected characteristics;
- Health Impact Assessment:
  - Poor air quality can lead to and aggravate respiratory diseases; and,
  - Addresses EPOA objective 10: Environmental sustainability.

IIA objective 7: Mineral, soil, water and waste

- IIA objective 7 – To promote sustainable forms of development that maintain and improve the quality of the Borough's natural resources, including minerals, soils, waters and waste materials.
  - Does the Local Plan prioritise development of brownfield/previously developed land over greenfield land, where possible, recognising the limited amount of brownfield land in the Borough and the potential for some brownfield sites to have high biodiversity interest, particularly for invertebrates?
  - Does the Local Plan support the efficient use of natural resources, minimising waste and promoting appropriate waste management in line with the waste hierarchy?
  - Does the Local Plan avoid the sterilisation of mineral and best and most versatile soil resources?

- Does the Local Plan protect and enhance the quality of waterbodies?
- Does the Local Plan ensure there are sufficient water resources and waste water treatment capacity to accommodate new development?
- Does the Local Plan promote the efficient use of water, such as minimising water consumption and abstraction and by encouraging re-use of grey and rainwater?

Relevant SEA topics and coverage of Equalities and Health Impact Assessment

- Material assets;
- Climatic factors;
- Soil;
- Water;
- Biodiversity;
- Landscape;
- Health Impact Assessment:
  - Sustainable use of resources ensures that resources are available for essential infrastructure, including transport, health centres and local amenities;
  - Optimising reuse and minimising waste also benefit the wider environment and the ecosystem services it provides;
  - Availability of clean water is essential for drinking and sanitation;
  - Best and most versatile land is important for food growing; and,
  - Addresses EPOA objective 8: Access to healthy food and 10: Environmental sustainability.

IIA objective 8: Climate change mitigation

- IIA objective 8 – Reduce Basildon Borough's contribution to climate change.
  - Does the Local Plan promote energy efficiency by encouraging the use of energy efficient buildings and plant?
  - Does the Local Plan minimise greenhouse gas emissions from transport, domestic, commercial and industrial sources?
  - Does the Local Plan increase the proportion of energy generated from renewable and low carbon sources?

Relevant SEA topics and coverage of Equalities and Health Impact Assessment

- Climatic factors;
- Air;
- Water;
- Material assets;
- Population;
- Human health;
- Health Impact Assessment:
  - Activities that generate greenhouse gas emissions often generate other pollutants that adversely affect health and wellbeing; and,
  - Addresses EPOA objective 10: Environmental sustainability.

IIA objective 9: Climate change adaptation

- IIA objective 9 – Reduce Basildon Borough's vulnerability to the impacts of climate change.

- Does the Local Plan seek to build resilience, protect health and wellbeing and adapt to the impacts of climate change, such as flood, drought, overheating, and extreme weather events particularly on groups more vulnerable to the effects of climate change?
- Does the Plan avoid placing people and property in areas of flood risk, or where it exceptionally does, is it safe without increasing flood risk elsewhere, considering the effects of climate change?
- Does the Local Plan encourage the creation, management and enhancement of a coherent green and blue infrastructure network?

Relevant SEA topics and coverage of Equalities and Health Impact Assessment

- Climatic factors;
- Air;
- Water;
- Soil;
- Population;
- Human health;
- Equalities Impact Assessment – Equality Act 2010 protected characteristics:
  - Age: Children (0-4), Younger people (aged 18-24), older people (aged 60 and over);
  - Disability: Disabled people, people with physical and mental impairment; and
  - Pregnancy and maternity.
- Health Impact Assessment:
  - Climate change impacts on health and wellbeing for example by increasing weather-related illnesses and accidents (such as heat

strokes and storm damage), affecting food production and increasing the spread of disease;

- Flooding can result in emotional and financial stress, as well as the spread of disease; and,
- Addresses EPOA objective 10: Environmental sustainability.

IIA objective 10: Biodiversity and geodiversity

- IIA objective 10 – Value, maintain, conserve and enhance the Borough's biodiversity and geodiversity.
  - Does the Local Plan conserve and enhance habitats of international, national, regional or local importance, taking into account the impacts of climate change?
  - Does the Local Plan conserve international, national, regional or locally important terrestrial or aquatic species, taking into account the impacts of climate change?
  - Dose the Local Plan conserve, enhance and improve the connectivity of the Nature Recovery Network of ecological assets and green/blue spaces, considering the impacts of climate change?
  - Does the Local Plan require that development deliver above 10% net gains in biodiversity?

Relevant SEA topics and coverage of Equalities and Health Impact Assessment

- Biodiversity;
- Climatic Factors;
- Soil;
- Water;
- Health Impact Assessment:

- Well-functioning ecosystems provide a range of ecosystem services, including clean air and water, pollination of food crops and opportunities for recreation;
- Connection with nature can improve mental wellbeing; and,
- Addresses EPOA objective 4: Access to open, green and blue spaces.

IIA objective 11: Historic environment

- IIA objective 11 – Value, conserve and enhance the Borough's historic environment and cultural heritage.
  - Does the Local Plan conserve and enhance designated and undesignated heritage assets, including their setting and their contribution to wider local character and distinctiveness, avoiding adverse effects on their significance?
  - Does the Local Plan outline opportunities for improvements to the conservation, management and enhancement of the historic environment?
  - Does the Local Plan promote access to the local historic environment?
  - Does the Local Plan seek to manage current and future risks to the historic environment, such as climate change?

Relevant SEA topics and coverage of Equalities and Health Impact Assessment

- Historic environment;
- Landscape;
- Health Impact Assessment:
  - The historic environment can promote wellbeing by providing a sense of place, pride in the local area, and intellectual stimulation; and,

- Addresses EPOA objective 4: Access to open, green and blue spaces and 9: Supporting communities.

IIA objective 12: Landscape, townscape and visual impacts

- IIA objective 12 – Value, conserve and enhance the Borough's landscape and townscape, ensuring development does not detract from the quality of views and local distinctiveness.
  - Does the Local Plan value, conserve and enhance sensitive and special landscapes, and townscapes?
  - Does the Local Plan value, conserve and enhance the landscape character of the Borough?
  - Is the scale/density of development in keeping with important and valued features of the local landscape and seascape?
  - Does the Local Plan encourage high quality design principles to respect local character?
  - Does the Local Plan seek to enhance the range and quality of the public realm and open spaces?

Relevant SEA topics and coverage of Equalities and Health Impact Assessment

- Historic environment;
- Landscape;
- Health Impact Assessment:
  - The landscape and townscape can promote wellbeing by providing a sense of place, a sense of peace and beauty, interest and providing sites for recreation; and,

- Addresses EPOA objective 4: Access to open, green and blue spaces and 9: Supporting communities.

Predicting and evaluating effects

5.5 The prediction and evaluation of the effects of options in the Local Plan relies heavily on the IIA Framework – every policy and site option (and reasonable alternative) will be appraised for their likely impacts in relation to achievement of the IIA objectives. In line with the SEA Regulations, the following characteristics of effects will be predicted and evaluated:

- Probability;
- Duration, including short, medium and long-term impacts;
- Frequency;
- Reversibility;
- Cumulative and synergistic nature;
- Transboundary nature;
- Secondary nature;
- Permanent or temporary nature; and
- Positive or negative nature.

Probability

5.6 There is an inherent degree of uncertainty in carrying out an IIA. Should it be adopted, the Local Plan would likely be in force for several years. Over this time, currently unforeseen changes are likely to occur. For example, any given community facility in Basildon Borough could potentially close or move within a period of months, and thus an assessment which considers that a Local Plan policy or site would provide new residents with good access to this facility pre-development, may not do so by the time construction begins. These

circumstances are impossible to predict. The planning system is generally robust enough to deal with such changes by re-assessing the needs of sites and communities at the time applications are made. Uncertainties are dealt with in IIA by adopting a precautionary approach, wherein a reasonable worst-case scenario is assumed unless reliable evidence suggests otherwise. This is to ensure that any potentially significant negative effects are identified, and appropriate consideration is given to how the Local Plan could help to avoid or mitigate the worst effects if such scenarios were to arise. However, it is accepted that the likelihood of many such worst-case scenarios occurring is low, particularly as the comprehensive array of policies proposed in the Local Plan would help to avoid or mitigate negative impacts.

5.7 The assessment of Local Plan options will indicate where uncertainties exist in relation to the effects identified.

Duration, including short, medium and long-term impacts

5.8 The temporal scope of the IIA covers the Local Plan period. For the purposes of the IIA:

- Short term covers the period for 0-5 years, or during construction (inclusive of temporary impacts);
- Medium term covers the period for 5-20 years; and
- Long term covers the period over 20 years, beyond the Local Plan period.

5.9 Effects can occur over multiple terms, such as arising in the short-term and residing in the long-term.

Frequency

5.10 All effects of the Local Plan are considered to occur once, unless indicated otherwise.

Reversibility

5.11 The assessment will consider whether effects are reversible or irreversible. Reversible effects may be identified where a former mineral site is proposed for restoration to open space; irreversible effects may be identified where development is proposed on greenfield land thereby resulting in the loss of best and most versatile agricultural land.

Cumulative and synergistic effects

5.12 The IIA will provide an appraisal of all reasonable options considered for inclusion in the Local Plan. The vision, strategic objectives, policies and site allocations of the Local Plan will not be adopted in isolation and therefore an evaluation of the cumulative and synergistic effects will be undertaken. Cumulative and synergistic effects are defined as follows:

- Cumulative effects arise, for instance, where several developments each have insignificant effects but together have a significant effect, or where several individual effects have a combined effect; and
- Synergistic effects interact to produce a total effect greater than the sum of the individual effects, so that the nature of the final impact is different to the nature of the individual impacts.

Transboundary effects

5.13 The geographical extent of effects will be experienced predominantly in Basildon Borough. However, where effects would be likely to be discernible in neighbouring authorities or at a scale greater than Basildon Borough, this will be specified. For example, transboundary effects may be experienced as housing provision and education can all result in flows of people across local authority boundaries. Furthermore, the high number of Basildon Borough residents commuting to other local authority areas for work, mainly by private car, is contributing to traffic congestion and poor air quality in the region.

Secondary effects

5.14 The assessment process inherently includes a consideration of secondary effects. Secondary effects are defined as “effects that are not a direct result but occur away from the original effect or as a result of a complex pathway”.

Permanent or temporary

5.15 The assessment will indicate whether effects are temporary or permanent in nature. Should the Local Plan be adopted, it would only be in place for the Plan period and would subsequently be replaced by a new Local Plan. Many of the effects of policies in the Local Plan are therefore typically temporary effects. Nevertheless, several the effects of new development on a greenfield site would be likely to be permanent.

Positive and negative effects and significance

5.16 The IIA will evaluate whether the nature of effects is likely to be positive, negative, neutral or mixed. The magnitude of effects in relation to each IIA objective will be defined as significant or minor. For example, a significant

positive effect would be identified where an option is likely to significantly contribute to the achievement of an IIA objective, whereas an adverse effect (either significant or minor negative) would be identified where the option conflicts with the IIA objective. Options which are unlikely to significantly influence whether an objective will be achieved will receive a neutral rating. Mixed effects may be identified where an option is expected to have both a positive and negative effect on the IIA objective.

5.17 The IIA assessments will be carried out at a high level and so the dividing line between sustainability effects is often quite small. The effect of an option on a IIA objective will be significant where it is of such magnitude that it will have a noticeable and measurable effect compared with other factors that may influence the achievement of that IIA objective.

5.18 Minor effects will still be identified as these assist with the identification of cumulative and synergistic effects (e.g., several minor effects can combine to become a significant effect), can help to identify opportunities for enhancements (e.g., enhancing a minor positive effect to make it significant) and better enable the Council to make a more informed decision over the sustainability performance of options.

5.19 In determining the significance of the effects of the options for potential inclusion in the Local Plan, the IIA will consider the plan's relationship with the other documents in the planning system such as the NPPF and other national policy approaches, and regulatory requirements, as these may provide additional safeguards or mitigation of potentially significant adverse effects.

5.20 The findings of the IIA will be presented as a colour coded symbol showing a score for each option (including reasonable alternatives) against each of the IIA objectives along with a concise justification for the score given, where appropriate. The use of colour coding in the matrices will allow for the magnitude of effects (both positive and negative) to be easily identified. **Table 4.1** presents the colour coded symbols and definitions that will be used to report the significance of effects of the Local Plan policies and sites and their reasonable alternatives.

Table 5.1: Effect symbols and colours used in IIA

Symbol and Colour Coding Used	Description of Effect
++	Significant positive effect likely.
++/-	Mixed significant positive and minor negative effects likely.
+	Minor positive effect likely.
+/-	Mixed minor effects likely.
++/--	Mixed significant effects likely.
-	Minor negative effect likely.
--/+	Mixed significant negative and minor positive effects likely.
--	Significant negative effect likely.
0	No or negligible effect likely.
?	Likely effect uncertain.
N/A	Assessment criterion not applicable.

Reasonable alternatives

5.21 The IIA must appraise not only the preferred options for inclusion in the Local Plan but also 'reasonable alternatives' to these options. This implies that alternatives that are not reasonable do not need to be subject to appraisal. Part (b) of Regulation 12(2) notes that reasonable alternatives will consider the objectives of the plan, as well as its geographical scope. Therefore, alternatives that do not meet the objectives of national policy or are outside the Plan area are unlikely to be reasonable.

5.22 The objectives, policies and site allocations to be considered for inclusion within the Local Plan are in the process of being identified and reviewed. The Council's reasons for selecting the alternatives to be included in the Local Plan will be reported at a later stage in the IIA process.

Health Impact Assessment

5.23 The background and overall approach to HIA is set out in **Chapter 1**. The IIA Framework above identifies the IIA objectives that have potential to impact the health and wellbeing of the population.

Equality Impact Assessment

5.24 There are three main duties set out in the Equality Act 2010, which public authorities including Basildon Borough Council must meet in exercising their functions:

- To eliminate discrimination, harassment, victimisation and other conduct that is prohibited under the Act;
- To advance equality of opportunity between persons who share relevant protected characteristics and persons who do not share it; and
- To foster good relations between persons who share a relevant protected characteristic and persons who do not share it.

5.25 The Equality Act 2010 identifies nine 'protected characteristics' and seeks to protect people from discrimination based on these characteristics:

- Protected characteristics identified in the Equality Act 2010:
  - Age: Children (0-4), Younger people (aged 18-24), older people (aged 60 and over);
  - Disability: Disabled people, people with physical and mental impairment;

- Gender reassignment;
- Marriage and civil partnership;
- Pregnancy and maternity;
- Race;
- Religion or belief;
- Sex; and
- Sexual orientation.

5.26 The Local Plan will therefore be assessed to consider the likely impacts of policy and site options on each of the nine protected characteristics from the Equality Act.

Chapter 6

Initial options and IIA findings

6.1 This chapter records the IIA findings for the initial Issues and Options being considered in relation to the preparation of the Basildon Local Plan. The consideration of options (or 'reasonable alternatives' to what will become the final Basildon Local Plan) is one of the most important parts of both the plan-making and the IIA process. The national Planning Practice Guidance states:

> The sustainability appraisal needs to consider and compare all reasonable alternatives as the plan evolves, including the preferred approach, and assess these against the baseline environmental, economic and social characteristics of the area and the likely situation if the plan were not to be adopted. In doing so it is important to:
>
> - outline the reasons the alternatives were selected, and identify, describe and evaluate their likely significant effects on environmental, economic and social factors using the evidence base (employing the same level of detail for each alternative option). Criteria for determining the likely significance of effects on the environment are set out in schedule 1 to the Environmental Assessment of Plans and Programmes Regulations 2004;
> - as part of this, identify any likely significant adverse effects and measures envisaged to prevent, reduce and, as fully as possible, offset them;
> - provide conclusions on the reasons the rejected options are not being taken forward and the reasons for selecting the preferred approach in light of the alternatives.
>
> Any assumptions used in assessing the significance of the effects of the plan will need to be documented. Reasonable alternatives are the different realistic options considered by the plan-maker in developing the policies in

the plan. They need to be sufficiently distinct to highlight the different sustainability implications of each so that meaningful comparisons can be made.

The development and appraisal of proposals in plans needs to be an iterative process, with the proposals being revised to take account of the appraisal findings.

6.2 By appraising the reasonable alternative options, the IIA provides information about how different options perform in environmental, social and economic terms, which in turn can help the Council decide which option to pursue.

6.3 It should be noted, however, that the IIA does not decide which policy options should be adopted. Other factors, such as the views of stakeholders and the public, and other evidence base studies, also help to inform the decision. The IIA Report must, however, communicate how these various factors, including the IIA, have been taken into account by the Council in selecting the preferred policy options and why the Council considers the preferred approach to be an appropriate strategy when compared to the alternatives. This will be reported on at a later stage in the IIA process once preferred options have been selected.

Identifying reasonable and appraisable options within the Basildon Issues and Options Consultation Document

6.4 The Basildon Local Plan is at an early stage of preparation, with initial issues and options being confined to high level policy directions and aspirations. There are therefore a limited number of options suitable for appraisal through the IIA process at this stage. This chapter describes which options have been

considered by the Council to date and which options are considered to be appraisable and which options are not. The chapter then goes on to appraise the appraisable options against the IIA framework, identifying each option's likely significant effects.

Issues and options that have not been subject to IIA at this stage

6.5 The majority of the issues and options within the Issues and Options Consultation Document are set out in section four entitled 'Strategic Matters and Key Issues' which covers a comprehensive range of strategic policy areas.

6.6 The strategic matters and key issues covered in section four include:

- The length of the plan period.
- Ranking of Green Belt purposes.
- Allocating land
- Climate change ambitions.
- Biodiversity ambitions.
- Six green and blue infrastructure priorities.
- Five health priorities.
- 10 design priorities.
- Access to housing
- Six delivering homes considerations.
- Housing type priorities.
- Gypsy, traveller and travelling showpeople site access.
- Spatial focus for employment growth.
- Eight employment type priorities.

- Four economic growth catalysts.
- Six town centre use priorities.
- Six ways to reduce reliance on private vehicle use.
- Six infrastructure priorities.

6.7 None of the options set out in section four of the Issues and Options Consultation Document have been appraised. This was for a range of reasons:

- Some issues and options are too open ended to be able to identify clear distinct effects against each of the IIA objectives;
- Some of the issues and options reference national planning policy requirements with no notable local emphasis at this stage and therefore just represent the baseline minimum requirements that would be delivered in the absence of the Local Plan; and,
- Some of the issues and options at this stage of plan making are formulated to seek preferences and supporting information, without forming clear, distinct options for appraisal.

Reasonable and appraisable issues and options

6.8 The following issues and options set out in the Issues and Options Consultation Document are considered to be reasonable and appraisable:

- Three vision themes: people, place and prosperity.
- The draft vision.
- 10 strategic objectives.
- Six spatial options.

Vision and strategic objectives

6.9 Section three of the Issues and Options Consultation Document outlines the vision and strategic objectives for the emerging plan.

6.10 The overarching vision for the Basildon Local Plan is built on three vision themes:

- **People:** We want Basildon to be home to healthy and active local communities able to support themselves and each other.
- **Place:** We want Basildon to offer a high quality of life for all residents through attractive, liveable, accessible and safe neighbourhoods and towns along with the provision of enduring facilities, green spaces and town centres that meet the needs of the community.
- **Prosperity:** We want Basildon to have a thriving, dynamic and diverse economy where all our communities benefit from increased opportunity and our workforce has the right skills for our local economy and beyond.

6.11 The overarching draft vision for Basildon is:

‘By 2042, we want to accelerate Basildon Borough’s ambition. We want a prosperous economy providing employment for all our residents, including higher value jobs. We need housing and a wider range of housing for all resident’s needs. We want to protect and enhance our natural environment and biodiversity. The Borough will be safe, and residents will benefit from high standards of health and wellbeing. There needs to be an improved cultural offer, more vibrant town centres and higher educational attainment and aspirations. We need to encourage more resilient communities, reflecting the diversity within the Borough.’

6.12 10 draft strategic objectives have been defined to support the delivery of the vision themes (people, place and prosperity) and the overarching vision:

- Helping local people maintain healthier lifestyles.
- Enhancing the quality of life for all.
- Protecting and enhancing the quality of the local environment.
- Improving the quality and value of the Green Belt.
- Minimising our impact on the environment.
- Creating vibrant and thriving town centres.
- Delivering new homes.
- Securing the delivery of supporting infrastructure.
- Strengthening the competitiveness of the local economy.
- Capitalising on local tourism opportunities.

6.13 These three components of the Issues and Options Consultation Document were subjected to IIA. No reasonable alternatives were identified at this stage.

Spatial options to delivering growth

6.14 Section five of the Issues and Options Consultation Document outlines six broadly distinct spatial options for distributing growth needs in Basildon over the plan period:

- **Densification of existing urban areas**: This option would maximise development in the existing urban areas of Basildon, Billericay and Wickford within reasonable density and environmental limits. This approach would require intensive use of brownfield land, the building of taller buildings, building on existing residential back gardens or in-between existing buildings and/or redeveloping underused sites at higher densities.

- **Urban extensions**: This option would require the strategic release of Green Belt land to accommodate new homes and jobs in extensions to the Borough's existing urban areas inset within the Green Belt. This is because all land outside the defined urban areas within Basildon Borough is designated as Green Belt.
- **Infill development within existing villages and plotland**: This option would necessitate development within villages and plotlands currently washed-over by the Green Belt designation. Such development would enable more facilities to be viably located within smaller settlements, but could significantly change their character.
- **Expansion of existing villages**: This option would defining new or extending existing villages, including potentially insetting some villages and plotlands currently washed-over by the Green Belt designation. Again, such development would enable more facilities to be viably located within smaller settlements, but could significantly change their character.
- **New settlements**: This option would establish a whole new town or village in a new location, requiring the release of a significant area of Green Belt land. The delivery of a new settlement would include a mixture of homes, jobs and strategic infrastructure that allows the community to be self-sufficient. New settlements could add to the offer and resilience of existing towns and villages and provides an opportunity for services and facilities to be provided at the heart of the new community.
- **Strategic transport corridors**: This option would concentrate growth along with the Borough's national and regional road and rail network, including the east-west A127, A13 and north-south A130 corridors. These connect the borough with London and Greater Essex. This would likely require the release of Green Belt land and the densification of existing urban centres.

6.15 Paragraph 5.20 of the Issues and Options Consultation Document states that 'it is likely that the most suitable spatial strategy will involve a balance of elements to provide the most sustainable and achievable strategy'. In order to guide the council and consultees in defining an appropriate and sustainable pattern of development, each spatial option has been appraised in isolation at

this stage in order to draw out clear differences in their likely effects. As the spatial strategy is developed, the IIA will test additional spatial options, most likely including a combination of the six spatial options referenced in the Issues and Options Consultation Document.

Likely effects of the draft vision themes, overarching vision and 10 strategic objectives

6.16 Given the clear aspirational relationship between the three vision themes, the overarching vision and 10 strategic objectives, these three components of the Issues and Options Consultation Document have been appraised together. **Table 6.1** sets out how the 10 strategic objectives for delivering the overarching vision broadly fall under the three vision themes used to underpin the overarching vision. Therefore, where effects are identified for a specific strategic objective, these are considered to apply to the relevant overarching vision theme.

Table 6.1: Relationship between Vision themes

Vision Themes	Strategic Objectives
People	Helping local people maintain healthier lifestyles.
People	Enhancing the quality of life for all.
Places	Protecting and enhancing the quality of the local environment.
Places	Improving the quality and value of the Green Belt.
Places	Minimising our impact on the environment.
Places	Creating vibrant and thriving town centres.
Places	Delivering new homes.
Places	Securing the delivery of supporting infrastructure.

Vision Themes	Strategic Objectives
Prosperity	Strengthening the competitiveness of the local economy.
Prosperity	Capitalising on local tourism opportunities.

6.17 Table 6.2 below sets out the likely effects of the Issues and Options vision and strategic objectives. The reasoning for the identification of these likely effects is set out by IIA objective below the table.

Table 6.2: Vision and Strategic Objectives effects

IIA Objectives	Overarching Vision	Strategic Objective – People – Helping local people maintain healthier lifestyles	Strategic Objective – People – Enhancing the quality of life for all	Strategic Objective – People – Protecting and enhancing the quality of the local environment	Strategic Objective – Place – Improving the quality and value of the Green Belt	Strategic Objective – Place – Minimising our impact on the environment	Strategic Objective – Place – Creating vibrant and thriving town centres	Strategic Objective – Place – Delivering new homes	Strategic Objective – Prosperity – Securing the delivery of supporting infrastructure	Strategic Objective – Prosperity – Strengthening the competitiveness of the local economy	Strategic Objective – Prosperity – Capitalising on local tourism opportunities
IIA1: Housing	++	0	+?	0	0	0	0	++	0	0	0
IIA2: Health and well-being	++	++	+	+	0	0	+	+	+	+	0
IIA3: Equalities	++	+	++	0	0	0	0	+	+	+	0
IIA4: Economy and employment	++	0	0	0	0	0	++	+	+	++	+
IIA5: Transport	0	0	0	0	0	0	0	0	+	0	0
IIA6: Air quality	+?	+?	+?	+?	0	+?	0	0	+?	0	0
IIA7: Natural resources	+/-	0	0	+	+	+	0	-	-	-	0
IIA8: Climate change mitigation	+?	+?	+?	+?	0	+?	0	0	+?	0	0
IIA9: Climate change adaptation	0	0	0	0	0	+	0	0	0	0	0
IIA10: Biodiversity and geodiversity	++/-	0	0	++	+	++	0	-	-	-	0
IIA11: Historic environment	-?	0	0	0	0	0	0	-?	-?	-?	0
IIA12: Landscape and townscape	+/-	0	0	+	++	+	+	-	-	-	0

IIA 1: Provide new and affordable housing to meet identified needs of the whole community, covering housing of a suitable mix and type

6.18 The vision is likely to have a significant positive effect against this IIA objective because it promotes the delivery of a diverse range of accommodation that meets local needs.

6.19 The strategic objective promoting the delivery of new homes is also likely to generate a significant positive effect against this IIA objective. A minor positive effect is also acknowledged for the strategic objective that seeks to enhance the quality of life for all, as this should ideally include improving the accessibility to affordable homes, however this is not specified, and so this is uncertain.

6.20 The other strategic objectives are expected to have a negligible effect, as they make no reference to the themes of this IIA objective.

IIA 2: Create a safe, healthy and inclusive living environment and encourage healthy lifestyles, improving access to local services and facilities that promote prosperity, health, well-being, recreation and integration

6.21 The vision is likely to have a significant positive effect against this IIA objective because it promotes a safe Borough with high standards of health and wellbeing.

6.22 The strategic objective promoting the maintenance of healthier lifestyles is likely to generate a significant positive effect against this objective. Other objectives that indirectly benefit the health and wellbeing of Borough residents, workers and visitors include those that encourage the enhancement of the quality of life, the local environment and Green Belt, the delivery of new homes and supporting infrastructure, creating vibrant and thriving town centres and strengthening the local economy are also likely to have a minor positive effect on this IIA objective.

6.23 The other strategic objectives are expected to have a negligible effect, as they make no reference to the themes of this IIA objective.

IIA 3: Advance equality of opportunity and foster good relations between those who share a protected characteristic (Equality Act 2010) and those who do not

6.24 The vision is likely to have a significant positive effect against this IIA objective because it acknowledges and supports the diversity of the Borough, referring to a need for an improved cultural offer and an extended variety of educational, economic and housing opportunities for all.

6.25 The strategic objective promoting the enhancement of quality of life for all is likely to have a significant positive effect against this IIA objective due to its inclusivity. Other objectives that support access and equality such as supporting healthier lifestyles, and the delivery of new homes, economic competitiveness and infrastructure also scored minor positive effects for this IIA objective.

6.26 The other strategic objectives are expected to have a negligible effect, as they make no reference to the themes of this IIA objective.

IIA 4: Facilitate a prosperous and growing economy that creates a range of new jobs and improves vitality and viability of town centres

6.27 The vision is likely to have a significant positive effect against this IIA objective because it references a move towards a prosperous economy providing employment for all residents, as well as more vibrant town centres.

6.28 The strategic objectives that promote new and thriving town centres and a strengthening of the local economy's competitiveness are likely to have a significant positive effect on this IIA objective. The strategic objectives that deliver new homes and infrastructure will accommodate the growing population of workers and facilitate growth with minor positive effects on this objective. The strategic objective that promotes opportunities for local tourism is also likely to score a minor positive effect due to the economic benefit that tourism can provide for the Borough.

6.29 The other strategic objectives are expected to have a negligible effect, as they make no reference to the themes of this IIA objective.

IIA 5: Reduce road traffic and congestion, pollution and accidents, and promote sustainable modes of transport and efficient movement patterns in the Borough

6.30 The vision is likely to have a negligible effect against this IIA objective as it does not make reference to the implementation of more sustainable modes of transport or promote the mitigation of pollution in the Borough.

6.31 None of the proposed strategic objectives directly discuss improvements to transport within the Borough, and as such, most of the strategic objectives are

expected to receive a negligible effect in relation to this IIA objective. The strategic objective to secure the delivery of supporting infrastructure, however, must cover some transport infrastructure to be effective, and as such is likely to have a minor positive effect.

IIA 6: Improve air quality by reducing emissions and concentrations of harmful atmospheric pollutants

6.32 The vision is likely to have a negligible effect against this IIA objective as it does not make reference to improving air quality or reducing emissions across the Borough.

6.33 The vision and strategic objectives refer to improving air quality or reducing emissions directly, but the vision elements and strategic objectives that maintain and improve quality of life, infrastructure and the environment could be achieved in part through air pollution mitigation and could therefore have a minor positive effect on this IIA objective. However, given that these elements and strategic objectives could be delivered without such measures, albeit to a lesser degree, all minor positive effects recorded for this IIA objective are recorded as uncertain.

6.34 The other strategic objectives are expected to have a negligible effect, as they make no reference to the themes of this IIA objective.

IIA 7: To promote sustainable forms of development that maintain and improve the quality of the Borough's natural resources, including minerals, soils, waters and waste materials

6.35 The vision is likely to have a minor positive effect against this IIA objective as it refers to the protection and enhancement of the natural environment that includes natural resources such as minerals, soil and water, however these are not directly discussed. However, the delivery of a prosperous economy, higher value jobs and housing and infrastructure for all resident's needs is likely to result in the need to develop greenfield land which may result in the loss of some natural resources in the Borough. Noting that such losses will likely be kept to a minimum, this negative effect is recorded as minor, resulting in a mixed minor positive and minor negative effect overall.

6.36 Like the vision, whilst none of the strategic objectives make direct reference to the protection of the Borough's minerals, soils, water quality or waste, the strategic objectives that promote the improvement of the quality and value of the Green Belt and environment are likely to have at least minor positive effects on this IIA objective.

6.37 Similarly, like the vision, securing the delivery of homes, economic growth and infrastructure have the potential to generate minor negative effects against this objective.

6.38 The other strategic objectives are expected to have a negligible effect, as they make no reference to the themes of this IIA objective.

IIA 8: Reduce Basildon Borough's contribution to climate change

6.39 The vision and strategic objectives do not refer to climate change mitigation measures, but the vision elements and strategic objectives that maintain and improve quality of life, infrastructure and the environment could be achieved in part through climate change mitigation measures and therefore have a minor negative positive effect on this IIA objective. However, given that these elements and strategic objectives could be delivered without such measures, albeit to a lesser degree, all minor positive effects recorded for this IIA objective are recorded as uncertain.

6.40 The strategic objectives are expected to have a negligible effect, as they make no reference climate change or potential mitigative provisions.

IIA 9: Reduce Basildon Borough's vulnerability to the impacts of climate change.

6.41 The vision and strategic objectives do not refer to climate change adaptation measures, but the vision elements and strategic objectives that maintain and improve quality of life, infrastructure and the environment could be achieved in part through climate change adaptation measures and therefore have a minor positive effect on this IIA objective. However, given that these elements and strategic objectives could be delivered without such measures, albeit to a lesser degree, all minor positive effects recorded for this IIA objective are recorded as uncertain.

6.42 The other strategic objectives are expected to have a negligible effect, as they make no reference climate change or potential adaptive provisions.

IIA 10: Value, maintain, conserve and enhance the Borough's biodiversity and geodiversity

6.43 The vision is likely to have a significant positive effect against this IIA objective because it references the protection and enhancement of the natural local environment and biodiversity. However, the delivery of a prosperous economy, higher value jobs and housing and infrastructure for all resident's needs is likely to result in the need to develop greenfield land which may adversely impact some natural habitats in the Borough. Noting that such losses will likely be kept to a minimum, this negative effect is recorded as minor, resulting in a mixed significant positive and minor negative effect overall.

6.44 The strategic objectives that promote the environment and biodiversity are likely to have a significant positive effect against this objective. This includes the objective to protect and enhance the quality of the local environment and the objective to minimise impacts on the environment. A minor positive effect is recorded for the strategic objective to improve the quality and value of the Green Belt, which is likely to include improving its multifunctionality including biodiversity to some degree.

6.45 Similarly, like the vision, securing the delivery of homes, economic growth and infrastructure have the potential to generate minor negative effects against this objective.

6.46 The other strategic objectives are expected to have a negligible effect, as they make no reference climate change or potential mitigative provisions.

IIA 11: Value, conserve and enhance the Borough's historic environment and cultural heritage

6.47 The vision and strategic objectives do not make reference to the Borough's historic environment and cultural heritage. No provision is made to protect or enhance them so no positive effects can be recognised. However, the delivery of a prosperous economy, higher value jobs and housing and infrastructure for all resident's needs is likely to result in the need to develop greenfield land and increase the density of existing urban areas which may adversely impact some historic assets in the Borough. Noting that such impacts will likely be kept to a minimum and could potentially be avoided in all cases, this negative effect is recorded as minor uncertain.

6.48 Similarly, like the vision, securing the delivery of homes, economic growth and infrastructure have the potential to generate uncertain minor negative effects against this objective.

IIA 12: Value, conserve and enhance the Borough's landscape and townscape, ensuring development does not detract from the quality of views and local distinctiveness

6.49 The vision is likely to have a minor positive effect against this IIA objective as whilst it does not make direct reference to the Borough's landscape or townscapes, it does refer to the protection and enhancement of the natural local environment and biodiversity, which suggests a level of conservation for the local natural landscape. However, the delivery of a prosperous economy, higher value jobs and housing and infrastructure for all resident's needs is likely to result in the need to develop greenfield land and increase densities in urban areas which may adversely impact some sensitive parts of the Borough's landscapes and townscapes. Noting that such impacts will likely be kept to a

minimum, this negative effect is recorded as minor, resulting in a mixed minor positive and minor negative effect overall.

6.50 The strategic objective that promotes improvements to the quality and value of the Green Belt is likely to have a significant positive effect in relation to this IIA objective due to its principal role of the designation in maintaining the openness of the countryside and preserving the distinctiveness of existing settlements. Other objectives that promote increased environmental protection are likely to have a minor positive effect on this IIA objective. This includes protecting and enhancing the quality of the local environment and minimising impacts on the environment. The objective to create vibrant and thriving town centres is also likely to receive a minor positive effect due to its enhancement of the Borough's townscapes.

6.51 Similarly, like the vision, securing the delivery of homes, economic growth and infrastructure have the potential to generate minor negative effects against this objective.

6.52 The other strategic objectives are expected to have a negligible effect, as they make no reference to the themes of this IIA objective.

Overarching vision, vision theme and strategic objective recommendations

6.53 The notable absence of positive effects associated with IIA objectives IIA 5 (transport), IIA 8 (climate change mitigation), IIA 9 (climate change adaptation) and IIA 11 (historic environment) could be remedied through additional wording and communicating a clear aspiration to tackle these important issues directly.

Likely effects of the spatial options

6.54 Paragraph 4.31 of the Issues and Options Consultation Document outlines the Borough's housing needs based on the Government's standard methodology as 1,041 homes per year or 20,820 homes by 2042. This figure is an important point of reference in the appraisal of the below spatial options, providing a guide as to the likely scale of growth required.

6.55 Table 6.3 summarises the likely effects of delivering the above growth needs through each of the six spatial options within the Issues and Options Consultation Document. At this stage, in the absence of any details on the number and location of specific site options, it is assumed that all six spatial options could accommodate the Borough's growth needs.

6.56 The latter part of this section considers how delivering a greater or lower scale of growth to the existing housing and economic growth needs would influence the effects recorded against the IIA objectives below.

Table 6.3: Spatial Options effects

IIA Objectives	1) Densification of existing urban areas	2) Urban extensions	3) Infill development	4) Expansion of existing villages	5) New settlements	6) Strategic transport corridors
IIA1: Housing	++	++	++	++	++	++
IIA2: Health and well-being	+	+	+	+	+	+
IIA3: Equalities	+	+	+	+	+	+
IIA4: Economy and employment	+	+	+	+	+	++
IIA5: Transport	+	+	-	-	+/-	+/-
IIA6: Air quality	+	+	-	-	+/-	+/-
IIA7: Natural resources	-?	--?	-?	--?	--?	--?
IIA8: Climate change mitigation	+	+	-	-	+/-	+/-
IIA9: Climate change adaptation	-	-	-	-	-	-

IIA Objectives	1) Densification of existing urban areas	2) Urban extensions	3) Infill development	4) Expansion of existing villages	5) New settlements	6) Strategic transport corridors
IIA10: Biodiversity and geodiversity	-?	--?	--?	--?	--?	--?
IIA11: Historic environment	--?	--?	--?	--?	--?	--?
IIA12: Landscape and townscape	-?	--?	--?	--?	--?	--?

6.57 The reasoning for the identification of these likely effects is set out by IIA objective below.

IIA 1: Provide new and affordable housing to meet identified needs of the whole community, covering housing of a suitable mix and type

6.58 As set out above, it is assumed that all six options could deliver the required amount of development at this stage, and that this would include the required mix and type of housing identified within the evidence base for the Basildon local plan. All of the options could achieve the aims of IIA 1 (housing) and have been scored as having the potential for significant positive effects on IIA 1.

IIA 2: Create a safe, healthy and inclusive living environment and encourage healthy lifestyles, improving access to local services and facilities that promote prosperity, health, well-being, recreation and integration

6.59 Options 1 (Densification), 2 (Urban Extensions), 3 (Infill Development) and 4 (Expansion of Existing Villages) provide for development within or adjacent to existing communities. Option 5 (New Settlements) and Option 6 (Strategic Transport Corridors) provide for development in new locations.

6.60 Options 1 (Densification), 2 (Urban Extensions), 3 (Infill Development) and 4 (Expansion of Existing Villages) have the potential to integrate new development within existing communities, creating and embedding integrated

services. These options have been scored as having the potential for -minor positive effects on IIA objective 2.

6.61 Option 5 (New Settlements) and Option 6 (Transport Corridors) also have the potential to create a safe, healthy and inclusive living environment, given the less constrained scope of development for a completely new settlement, or development along a transport corridor. These options have also been scored as having the potential for minor positive effects on IIA objective 2.

IIA 3: Advance equality of opportunity and foster good relations between those who share a protected characteristic (Equality Act 2010) and those who do not

6.62 As set out above, Options 1 (Densification), 2 (Urban Extensions), 3 (Infill Development) and 4 (Expansion of Existing Villages) provide for development within or adjacent to existing communities. Option 5 (New Settlements) and Option 6 (Strategic Transport Corridors) provide for development in new, more dispersed locations.

6.63 Options 1 (Densification), 2 (Urban Extensions), 3 (Infill Development) and 4 (Expansion of Existing Villages) have the potential to integrate new development within existing communities, and fostering relationships but this will depend on further detail for the development proposed. These options have been scored for minor positive effects on IIA 3 (equalities).

6.64 Options 5 (New Settlements) and 6 (Transport Corridors) have the potential capacity and scale to create new communities, and community links. These options have also been scored as having the potential for minor positive effects on IIA 3 (equalities).

IIA 4: Facilitate a prosperous and growing economy that creates a range of new jobs and improves vitality and viability of town centres.

6.65 Options 1 (Densification), 2 (Urban Extensions), 3 (Infill Development) and 4 (Expansion of Existing Villages) provide for growth in or around existing town centres or areas of economic activity, supporting local economies and the vitality of town centres. Support for IIA 4 from these options is likely to be positive in all cases as development could provide greater footfall and employees for existing economic areas within the Borough. These options have been scored as having potential for minor positive effects on IIA 4.

6.66 The locations for Option 5 (New Settlements) are unknown but it is likely that new settlements would need to create new centres and new relationships with existing centres. New settlements are likely to be at a scale where this is possible to achieve., Option 5 has also been scored as having the potential for minor positive effects on IIA 4.

6.67 Option 6 (Transport Corridors) would promote growth around existing areas of economic activity. This option has been scored as having the potential for significant positive effects on IIA 4.

IIA 5: Reduce road traffic and congestion, pollution and accidents, and promote sustainable modes of transport and efficient movement patterns in the Borough.

6.68 Where development would be concentrated within urban locations (Option 1 Densification) or link to existing patterns of development (Option 2 (Urban Extensions), existing connections within the Borough would be strengthened. Vehicle journeys are likely to be shorter, reducing congestion and improving

movement through the Borough. There will be greater opportunity for pedestrian movements and journeys by public transport. These options have been scored as having the potential for minor positive effects on IIA 5.

6.69 Option 3 (Infill Development) and Option 4 (Expansion of Existing Villages) are less likely to contribute effectively to IIA 5, as traffic will be more dispersed across the Borough, and journey times will be increased. There will also likely be less opportunities and greater strain on public transport. these options are considered to have the potential for minor negative effects on IIA 5.

6.70 The impacts of Option 5 (New Settlements) and Option 6 (Transport Corridors) on IIA 5 are considered likely to be mixed. The locations are likely to be more dispersed than options in existing urban areas, increasing traffic and journey times, but new settlements and development along transport corridors are likely to have good strategic links within the borough. The scale of development in one location may provide opportunities for walkable neighbourhoods and new public transport. These options have been scored as having the potential for mixed effects on IIA 5.

IIA 6: Improve air quality by reducing emissions and concentrations of harmful atmospheric pollutants

6.71 As set out above in relation to IIA 5 (transport), where development would increase the density of existing development (Option 1 Densification) or link to existing patterns of development (Option 2 (Urban Extensions), existing connections within the Borough would be strengthened. Vehicle journeys are likely to be shorter, reducing congestion and improving movement through the Borough. Reducing transport movements will have a significant impact on emissions in the borough, and subsequent impacts on air quality. These options have been scored as having the potential for minor positive effects on IIA 6.

6.72 Option 3 (Infill Development) and Option 4 (Expansion of Existing Villages) are less likely to contribute effectively to IIA 6, as traffic will be more dispersed across the Borough, and journey times will be increased. There will also likely be less opportunities and greater strain on public transport. These options are less likely to reduce emissions within the borough, and subsequently less likely to improve air quality. These options have been scored as having the potential for minor negative effects on IIA 6.

6.73 The impacts of Option 5 (New Settlements) and Option 6 (Transport Corridors) on IIA 6 are considered likely to be mixed. The locations are likely to be more dispersed than options in existing urban areas, increasing traffic and journey times, but new settlements and development along transport corridors are likely to have good strategic links within the borough. The scale of development in one location may provide opportunities for walkable neighbourhoods and new public transport. As the potential for reducing emissions and improving air quality is mixed, these options have been scored as having the potential for mixed effects on IIA 6.

IIA 7: To promote sustainable forms of development that maintain and improve the quality of the Borough's natural resources, including minerals, soils, waters and waste materials

6.74 All development will use natural resources. Where development would increase the density of existing urban areas (Option 1 Densification) or villages (Option 3 Infill Development), the potential for negative effects on Objective IIA 7 could be more limited. Densification would involve a smaller footprint for development and that development would be more likely to be able to make use of brownfield land, compared to other spatial options. These options have been scored as having uncertain minor negative effects on IIA 7.

6.75 All other options (Option 2 Urban Extensions, Option 4 Expansion of Existing Villages, Option 5 New Settlements and Option 6 Strategic Transport Corridors) will involve more significant loss of greenfield land) and therefore have the potential for greater use of natural resources. These options have been scored as having the potential for uncertain significant negative effects on IIA7.

IIA 8: Reduce Basildon Borough's contribution to climate change

6.76 All options will contribute to climate change as they propose the use of additional land and resources to provide new growth. There are potential opportunities to minimise or mitigate the impacts of new housing depending on its location and scale. A key driver and measurable output of reducing Basildon Borough's contribution to climate change will be reducing the volume of transport emissions. Other, more detailed, drivers of climate change could be appraised by the IIA once spatial and other policy options are more developed.

6.77 As set out in relation to IIA 5 (transport) and IIA 6 (air quality), where development would be concentrated within urban locations (Option 1 Densification) or link to existing patterns of development (Option 2 (Urban Extensions), existing connections within the Borough would be strengthened. Vehicle journeys are likely to be shorter, reducing congestion and improving movement through the Borough, therefor reducing emissions. This has the potential for a positive effect on the borough's contribution to climate change. These options have been scored as having the potential for minor positive effects on IIA 8.

6.78 Option 3 (Infill Development) and Option 4 (Expansion of Existing Villages) are less likely to contribute effectively to IIA 5, as traffic will be more dispersed across the Borough, and journey times will be increased, increasing emissions across the borough. As these options are less likely to reduce emissions within the borough, they are considered to have the potential for minor negative effects on IIA 8.

6.79 The impacts of Option 5 (New Settlements) and Option 6 (Transport Corridors) on IIA 8 are considered likely to be mixed. The locations are likely to be more dispersed than options in existing urban areas, with the potential for increased emissions. However, the scale of development in one location could provide more opportunities for walkable neighbourhoods and public transport, as well as viability for larger schemes for sustainable energy. These options have been scored as having the potential for mixed effects on IIA 8.

IIA 9: Reduce Basildon Borough's vulnerability to the impacts of climate change

6.80 All options could increase Basildon Borough's vulnerability to climate change. There are potential opportunities to minimise or mitigate the impacts of new growth depending on its location and scale.

6.81 All options have been scored as having the potential for minor negative effects on IIA 9, but the reasons for the appraisal finding vary across the options.

6.82 Where increased densities of development are proposed (Option 1 Densification and Option 2 Urban Extensions) there is likely to be an increase in the heat island effect, decreasing the ability of areas to cool effectively and increasing the impact of climate change on Basildon's town centres.

6.83 Where development is more dispersed, and the loss of greenfield land is greater, there are likely to be greater effects on existing ecosystem services such as flood capacity, and the capacity of the wider environment to adapt to climate change. This applies to Option 3 (Infill Development), Option 4 (Expansion of Existing Villages), Option 5 (New Settlements) and Option 6 (Transport Corridors).

IIA 10: Value, maintain, conserve and enhance the Borough's biodiversity and geodiversity

6.84 Where development would increase the density of existing development (Option 1 Densification and Option 3 Infill Development) there is the potential for minor effects on Objective IIA 10. Densification would involve a smaller footprint for development and have a smaller effect on areas of biodiversity and geodiversity. There is potential for loss of biodiversity within built up areas to have a negative effect on wider green networks, but this is considered to be minimal. This option has been scored as having uncertain minor negative effects on IIA 10.

6.85 All other options (Option 2 Urban Extensions, Option 3 Infill Development, Option 4 Expansion of Existing Villages, Option 5 New Settlements and Option 6 Strategic Transport Corridors) will involve more significant loss of greenfield land and therefore have the potential for greater effects on biodiversity and geodiversity. These options have been scored as having the potential for uncertain significant negative effects on IIA 10.

IIA 11: Value, conserve and enhance the Borough's historic environment and cultural heritage

6.86 At this early stage, all options have the potential to have a potential for negative effects on IIA 11 as the potential for impact will depend on the location of the development in relation to historic assets.

6.87 Option 1 (Densification) is likely to locate growth where there is a greater concentration of assets within existing town centres. All options, however, could have effects on individual historic assets. The nature and significance of the impact is dependent on the location, nature and significance of the asset, as

well as the proposed development within each option. Effects on historic assets are not necessarily dictated by proximity or visibility.

6.88 Options that propose growth near to existing development (Option 2 Urban Extensions, Option 3 Infill, Option 4 Expansion of Existing Villages and Option 6 Strategic Transport Corridors) could affect individual historic assets, or areas of existing cultural heritage, depending on proximity and design. Option 5 (New Settlements) could affect single historic assets due to the potential scale of development. All options have been scored as having the potential for uncertain significant negative effects on IIA 11.

IIA 12: Value, conserve and enhance the Borough's landscape and townscape, ensuring development does not detract from the quality of views and local distinctiveness

6.89 As is the case with the appraisal of the options against IIA 11, at this early stage all options have the potential to have a negative impact on IIA 12.

6.90 Option 1 (Densification) could have the least negative effect on IIA 12, dependant on the capacity within the existing townscape. Options where growth would be directed near to existing development (Option 2 Urban Extensions, Option 3 Infill, Option 4 Expansion of Existing Villages and Option 6 Strategic Transport Corridors) could have negative effects on local views and landscape. Option 5 (New Settlements) could also have a negative effect on the aims of IIA 12, due to the potential scale of development in a single location.

6.91 All options have been scored as having the potential for uncertain significant negative effects on IIA 12.

Spatial options recommendations

6.92 The IIA recommends that a combination of options is likely to be the most appropriate, based on the initial appraisal and considering the capacity of each spatial option to deliver the required amount of development.

6.93 Refined options should include criteria detailing how development would be expected to meet the aims of the IIA objectives both on specific sites, as well as the provision of wider topic-based policies within the local plan. Revised options should also carefully consider the amount, type and mix of housing development required to achieve the aims of the IIA objectives, particularly IIA objective 1 (Housing).

Alternative levels of development

6.94 As set out above, all six spatial options have been assessed on the basis that the Basildon Local Plan will aim to meet its growth needs within the Plan period, which based on the Government's standard methodology equates to 20,820 homes. However, following the collection of additional evidence through the plan-making process the Council may decide to deliver a higher or lower level scale of growth. The following section considers the potential effects on the IIA objectives for exceeding or not fully meeting the Borough's growth needs.

Likely effects of planning for greater levels of development within the local plan

6.95 Increased levels of development could generate positive effects against IIA 1 (housing) and IIA 4 (economy and employment) providing there is capacity within the local housing market and to grow the local economy.

6.96 Delivering more homes and jobs will require more land either through additional greenfield land take or the densification of existing and planned development (most likely a combination of the two). This increases the likelihood of negative effects against IIA objective 2 (health), IIA 6 (air pollution), IIA 8 (climate change mitigation) and IIA 9 (climate change adaptation) as greater concentrations of people and development are likely to result in greater concentrations of air, noise and light pollution.

6.97 Additional development will also increase the likelihood of negative effects against IIA objectives 7 (natural resources), 10 (biodiversity), 11 (historic environment) and IIA 12 (landscape and townscape). The greater the extent and scale of growth, the greater the pressure on natural resources.

6.98 Given that most options relate to existing settlement patterns, apart from Option 5 (New Settlements), increased growth would potentially put further pressure on the capacity of existing services and facilities, but it is assumed that additional provision would be required, commensurate with increased growth. In addition, greater growth would contribute to the economies of scale necessary to viably meet demand for new and improved services and facilities. Overall, there are likely to be mixed effects in relation to IIA objective 2 (health and wellbeing) and IIA objective 3 (equalities).

6.99 Housing delivery challenges associated with higher growth levels may, however, require a spatial strategy that includes a wider range of sites and locations that could require more smaller sites in villages and a distribution of development less able to focus on locations with good access to services and facilities, including public transport. Such a spatial strategy would result in more development and road traffic in rural areas, likely generating minor to major negative effects against IIA objective 2 (health), IIA 3 (equalities), IIA 6 (air quality), IIA 7 (natural resources), IIA 8 (climate change mitigation) IIA 9 (climate change adaptation), IIA 10 (biodiversity), IIA 11 (historic environment) and IIA 12 (landscape and townscape).

Likely effects of providing for lower levels of development within the local plan

6.100 The more limited the extent and scale of growth, the less pressure on IIA objective 7 (natural resources). There would also be more limited direct and indirect negative effects on the natural and historic environment, both at the local and landscape scale. This option would therefore be likely to reduce negative effects against IIA 10 (biodiversity and geodiversity), IIA 11 (historic environment) and IIA 12 (landscape and townscape).

6.101 Not meeting objectively assessed needs would lead to negative effects against IIA objective 1 (Housing) and IIA 4 (economy and employment). The significance of these effects will depend on the scale of the shortfall identified and whether any of this shortfall can be accommodated by willing neighbouring local authorities. Not meeting demand adversely affects the affordability of homes and job prospects resulting in negative socio-economic effects against IIA objectives 2 (health), IIA 3 (equalities).

6.102 The fewer new homes and jobs that are available in Basildon over the plan period, the less likely people will be able to live and work in the local area. People are likely to have to travel greater distances to commute to and from workplaces and access local services and facilities, resulting in more negative effects against IIA 6 (air quality) and IIA objective 8 (climate change mitigation).

6.103 If neighbouring authorities are willing and able to accommodate some or all of Basildon's shortfall, particularly, negative effects against IIA 1 (housing), IIA 2 (health), IIA 3 (equalities) and IIA 4 (economy and employment) could be reduced but would not be eliminated given housing affordability would likely still be an issue.

Summary for lower or greater levels of housing

6.104 The potential positive and negative effects will, to some extent, be proportional to the scale of growth.

6.105 If the scale of growth is lower, the effects of the spatial options against IIA objectives 6 (air pollution), IIA 7 (natural resources), IIA 10 (biodiversity and geodiversity), IIA 11 (historic environment) and IIA 12 (landscape and townscape) may be less negative than shown in Table 6.3. At the same time, effects against IIA objective 1 (housing), IIA 2 (health), IIA 3 (equalities) and IIA 4 (economy and employment) would be likely to be less positive and more negative.

6.106 If the scale of growth is higher, effects of the spatial options against IIA objectives 6 (air quality), IIA 7 (natural resources), IIA 10 (Biodiversity), IIA 11 (Historic environment) and IIA 12 (landscape and townscape) may be more negative than shown in Table 6.3. At the same time, effects against IIA Objective 1 (housing), IIA 2 (health), IIA 3 (equalities) and IIA 4 (economy and employment) would be likely to be more positive.

Chapter 7

Conclusions and next steps

7.1 This document sets out the appraisal process and potential effects for the appraisable Issues and Options being considered in the early preparation of the Basildon Local Plan. It includes a review of the policy context, sustainability baseline and key sustainability issues relevant to the IIA of the emerging Basildon Local Plan. It also sets out the IIA Framework to guide the assessment of policies and sites considered for the Local Plan (including reasonable alternatives).

7.2 Chapter 6 sets out the likely effects of the appraised issues and options and includes early recommendations for developing the options to help meet the IIA objectives within the Basildon Local Plan.

7.3 In summary, the overarching vision, vision themes and strategic objectives generally have positive effects against the IIA framework, with notable significant positive effects against IIA objectives IIA 1 (housing), IIA 2 (health and wellbeing), IIA 3 (equalities), IIA 4 (economy and employment), IIA 10 (biodiversity) and IIA 12 (landscape and townscape). The overarching vision, vision themes and strategic objectives focussing on the delivery of homes, infrastructure, and economic growth have the potential to generate adverse effects against IIA objectives IIA 7 (natural resources), IIA 10 (biodiversity), IIA 11 (historic environment) and IIA 12 (landscape and townscape), given the potential for such development to result in the loss of such assets, or adversely affect their setting or special character. These adverse effects are limited to minor at this stage in recognition of the fact that significant measures will be taken to avoid and minimise such adverse effects through the plan-making and development management process. There is a notable absence of positive effects associated with IIA objectives IIA 5 (transport), IIA 8 (climate change mitigation), IIA 9 (climate change adaptation) and IIA 11 (historic environment) due to the lack of any clear aspiration to tackle these important issues directly in the overarching vision, vision themes and strategic objectives.

7.4 The six spatial options generally have positive effects against IIA objectives IIA 1 (housing), IIA 2 (health and wellbeing), IIA 3 (equalities) and IIA 4 (economy and employment) where all options will meet the need for growth set out within the local plan evidence base. All six spatial options have the potential for minor negative effects against IIA 9 (climate change adaptation), given the scale of growth required and the land required to deliver it.

7.5 Mainly negative or mixed effects were generally identified in relation to the other IIA objectives. In general, the options proposing greater density of development or development near existing urban centres (Option 1 Densification and Option 2 Urban Extensions) were considered to have fewer negative effects on all the IIA objectives. Growth would be less dispersed within these options, minimising the use of greenfield land, and there would be fewer negative effects on the natural environment more generally.

7.6 Options in more dispersed locations (Option 3 Infill Development and Option 4 Expansion of Existing Villages) were considered to have more negative effects on the wider environment, particularly in relation to IIA 5 (transport), IIA 6 (air quality) and IIA 8 (climate change adaptation), as there is a greater requirement for development on greenfield land, and greater potential for increased traffic movement, reducing air quality and impacting on capacity for climate change adaptation.

7.7 Option 5 (New Settlements) and Option 6 (Strategic Transport Corridors) were considered to have the potential for more mixed effects on IIA 5 (transport), IIA 6 (air quality) and IIA 8 (climate change adaptation). This reflects the potential for these areas of growth to be more dispersed, combined with the potential for these options to provide a single area of larger growth, where issues around transportation or climate change could be tackled at a strategic level.

7.8 As set out in relation to the vision and objectives, adverse effects are mostly uncertain at this stage in recognition of the fact that significant measures will be taken to avoid and minimise such adverse effects through the plan-making and development management process.

7.9 The IIA recommends that a combination of options is likely to be the most appropriate, based on the initial appraisal and considering the capacity of each spatial option to deliver the required amount of development.

7.10 This IIA report will be published alongside the Basildon Local Plan Issues and Options Consultation Document in the summer of 2023. Responses to the consultation will be reviewed and reflected within the next iteration of the IIA Report.

7.11 As the Basildon Local Plan is drafted, its policies (and any allocations) and reasonable alternatives to these will be subject to appraisal against the IIA framework presented in **Chapter 5**. Additional IIA reports (incorporating the later stages of the IIA process) will be produced and made available to stakeholders and the public for consultation alongside an additional Regulation 18 and subsequently Regulation 19 Local Plan consultation.

LUC

June 2023

Appendix A

Review of relevant plans, policies and programmes

A.1 This appendix is largely organised in the same order of topics covered in main body of the IIA Scoping Report (February 2023). The majority of relevant plans, policies and programmes opperate at the national level but relevant international and sub-national documents are referenced where appropriate.

General international

A.2 United Nations Declaration on Sustainable Development (the '**Johannesburg Declaration'**) (2002) **[See reference 174]**: Sets broad framework for international sustainable development, including building a humane, equitable and caring global society aware of the need for human dignity for all, renewable energy and energy efficiency, sustainable consumption and production and resource efficiency.

A.3 United Nations Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (the '**Aarhus Convention**') (1998) **[See reference 175]**: Establishes a number of rights of the public (individuals and their associations) with regard to the environment. The Parties to the Convention are required to make the necessary provisions so that public authorities (at national, regional, or local level) will contribute to these rights to become effective.

Climate change adaptation and mitigation

International

A.4 United Nations Paris Climate Change Agreement (2015) **[See reference 176]**: International agreement to keep global temperature rise this century well below 2 degrees Celsius above pre-industrial levels.

National

A.5 The NPPF is supported by **Planning Practice Guidance** relating to:

- **Flood risk and coastal change** (2021) **[See reference 177]** – Provides guidance on how the planning process can assess, avoid, manage and mitigate the risks associated with flooding and coastal change.
- **Climate change** (2019) **[See reference 178]** – Advises how to identify suitable mitigation and adaptation measures in the planning process to address the impacts of climate change.
- **Renewable and low carbon energy** (2015) **[See reference 179]** – Outlines guidance for developing a strategy for renewable and low carbon energy, and particular planning considerations for hydropower, solar technology, solar farms and wind turbines.
- **Community Infrastructure Levy** (2014) **[See reference 180]** – Provides guidance on the Community Infrastructure Levy and how it operates. The levy can be used to fund a wide range of infrastructure, including flood defences.

A.6 The **Environment Act 2021** **[See reference 181]** sets statutory targets for the recovery of the natural world in four priority areas: air quality, biodiversity,

water, and resource efficiency and waste reduction. The Environment Act will deliver:

A.7 Long-term targets to improve air quality biodiversity, water, and waste reduction and resource efficiency;

- A target on ambient PM2.5 concentrations;
- A target to halt the decline of nature by 2030;
- Environmental Improvement Plans, including interim targets;
- A cycle of environmental monitoring and reporting;
- Environmental Principles embedded in domestic policy making; and
- Office for Environmental Protection to uphold environmental law.

A.8 The **British Energy Security Strategy** (2022) **[See reference 182]** sets out how the UK will enhance its energy security, setting out plans for future deployment of wind, new nuclear, solar and hydrogen, and for supporting the production of domestic oil and gas in the nearer term. The strategy builds on the Prime Minister's 'Ten point plan for a green industrial revolution', and the 'Net zero strategy'. Key aims and commitments include:

- New commitments to supercharge clean energy and accelerate deployment, which could see 95% of Great Britain's electricity set to be low carbon by 2030.
- Supporting over 40,000 more jobs in clean industries, totalling 480,000 jobs by 2030.
- Accelerated expansion of nuclear, wind, solar, hydrogen, oil and gas, including delivering the equivalent to one nuclear reactor a year instead of one a decade.
- Offshore wind – aim of providing up to 50GW by 2030, of which 5GW is planned to be from floating offshore wind in deeper seas. This is aimed to be underpinned by new planning reforms to cut the approval times for new offshore wind farms from 4 years to 1 year and an overall streamlining

which will aims to reduce the time it takes for new projects to reach construction stages while improving the environment.

- Oil and gas – a licensing round for new North Sea oil and gas projects is planned to launch in Autumn, with a new taskforce providing bespoke support to new developments.
- Onshore wind – The Government plant to consult on developing partnerships with a limited number of supportive communities who wish to host new onshore wind infrastructure in return for guaranteed lower energy bills.
- Heat pump manufacturing: The Government aim to run a Heat Pump Investment Accelerator Competition in 2022 worth up to £30 million to make British heat pumps, with hopes to reduce demand for gas.

A.9 The **Net Zero Strategy: Build Back Greener** (2021) **[See reference 183]** sets out policies and proposals for decarbonising all sectors of the UK economy to meet net zero targets by 2050. It sets out strategies to keep the UK on track with carbon budgets, outlines the National Determined Contribution (NDC) and sets out the vision for a decarbonised economy in 2050. Its focus includes:

- Policies and proposals for reducing emissions across the economy in key sectors (power, fuel supply and hydrogen, industry, heat and buildings, transport, natural gas and waste); and
- Policies and proposals for supporting transition across the economy through innovation, green investment, green jobs, embedding net-zero in government, local climate action, empowering people and businesses, and international leadership and collaboration.

A.10 The Industrial Decarbonisation Strategy (2021) **[See reference** 184**]** aims to support existing industry to decarbonise and encourage the growth of new, low carbon industries to protect and create skilled jobs and businesses in the UK encouraging long-term investment in home-grown decarbonisation technology. The strategy builds in the Prime Minister's 10 Point Plan for a Green Industrial Revolution and sets out the government's vision for building a competitive, greener future for the manufacturing and construction sector and is part of the government's path to net zero by 2050.

A.11 The strategy aims to reduce emissions by two-thirds in just 15 years and support up to 80,000 jobs over the next thirty years and includes measures to produce 20 terawatt hours of the UK industry's energy supply from low carbon alternatives by 2030. It also aims to introduce new rules on measuring the energy and carbon performance of the UK's largest commercial and industrial buildings, providing potential savings to businesses of around £2 billion per year in energy costs in 2030 and aiming to reduce annual carbon emissions by over 2Mt – approximately 10% of their current emissions.

A.12 Other key commitments within the Strategy include:

- The use of carbon pricing to drive changes in industry to focus on emissions in business and investment decisions;
- To establish a policy framework to accelerate the switch from fossil fuels to low carbon alternatives such as hydrogen, electricity, or biomass;
- New product standards, enabling manufacturers to clearly distinguish their products from high carbon competitors;
- To ensure the land planning regime is fit for building low carbon infrastructure;
- Support the skills transition so that the UK workforce benefits from the creation of new green jobs;
- An expectation that at least 3 megatons of CO2 is captured within industry per year by 2030; and
- That by 2050, there will be zero avoidable waste of materials across heavy industries.

A.13 The **Heat and Buildings Strategy** (2021) **[See** reference 185**]** sets out the government's plan to significantly cut carbon emissions from the UK's 30 million homes and workplaces. This strategy aims to provide a clear direction of travel for the 2020s, set out the strategic decisions that need to be taken this decade, and demonstrate how the UK plans to meet its carbon targets and remain on track for net zero by 2050.

A.14 Key aims of the strategy include:

- Reduce direct emissions from public sector buildings by 75% against a 2017 baseline by the end of carbon budget 6;
- Significantly reduce energy consumption of commercial, and industrial buildings by 2030;
- Phase out the installation of new natural gas boilers beyond 2035;
- Significantly grow the supply chain for heat pumps to 2028: from installing around 35,000 hydronic heat pumps a year to a minimum market capacity of 600,000 per year by 2028;
- Reduce the costs of installing a heat pump by at least 25-50% by 2025 and to ensure heat pumps are no more expensive to buy and run than gas boilers by 2030;
- Achieve 30-fold increase in heat pumps manufactured and sold within the UK by the end of the decade;
- Grow the market for heat pumps notably via a £450 million Boiler Upgrade Scheme to support households who want to switch with £5,000 grants;
- Improve heat pump appeal by continuing to invest in research and innovation, with the £60 million Net Zero Innovation Portfolio ‘Heat Pump Ready’ Programme supporting the development of innovation across the sector;
- Ensure all new buildings in England are ready for Net Zero from 2025. To enable this, new standards will be introduced through legislation to ensure new homes and buildings will be fitted with low-carbon heating and high levels of energy efficiency;
- Establish large-scale trials of hydrogen for heating, including a neighbourhood trial by 2023;
- Ensure as many fuel poor homes in England, as reasonably practicable, achieve a minimum energy efficiency rating of band C by the end of 2030;
- Support social housing, low income and fuel poor households via boosting funding for the Social Housing Decarbonisation Fund and Home Upgrade Grant, which aim to improve the energy performance of low income

households' homes, support low carbon heat installations and build the green retrofitting sector to benefit all homeowners; and

- Scale up low-carbon heat network deployment and to enable local areas to deploy heat network zoning – Heat Network Transformation Programme of £338 million (over 2022/23 to 2024/25).

A.15 The **UK Hydrogen Strategy** (2021) **[See reference 186]** sets out the approach to developing a substantial low carbon hydrogen sector in the UK and to meet the ambition for 5GW of low carbon hydrogen production capacity by 2030.

A.16 The **Energy Performance of Buildings Regulations** (2021) **[See reference 187]** seek to improve the energy efficiency of buildings, reducing their carbon emissions and lessening the impact of climate change. The Regulations require the adoption of a standard methodology for calculating energy performance and minimum requirements for energy performance, reported through Energy Performance Certificates and Display Energy Certificates.

A.17 The **Energy White Paper: Powering our net zero future** (2020) **[See reference** 188**]** builds on the Prime Minister's Ten point plan for a green industrial revolution. The white paper addresses the transformation of the Uks energy system, promoting high-skilled jobs and clean, resilient economic growth during its transition to net-zero emissions by 2050.

A.18 Key aims of the paper include:

- Supporting green jobs – The government aims to support up to 220,000 jobs in the next 10 years. Several will be supported via a "major programme" that will see the retrofitting of homes for improved energy efficiency and clean heat.
- Transforming the energy system – To transform its electricity grid for net-zero, the white paper highlights how this will involve changing the way the country heats its homes, how people travel, doubling the electricity use, and harnessing renewable energy supplies.

- Keeping bills affordable – The government aims to do this by making the energy retail market "truly competitive". This will include offering people a method of switching to a cheaper energy tariff and testing automatically switching consumers to fairer deals to tackle "loyalty penalties".
- Generating emission-free electricity by 2050 – The government aims to have "overwhelmingly decarbonised power" in the 2030s to generate emission-free electricity by 2050.
- Establishing UK Emissions Trading Scheme – The government aims to establish a UK Emissions Trading Scheme (UK ETS) from 1 January 2021 to replace the current EU ETS at the end of the Brexit Transition Period.
- Exploring new nuclear financing options – The government is continuing to explore a range of financing options for new nuclear with developers including the Regulated Asset Base (RAB) funding model.
- Further commitments to offshore wind – The white paper lays out plans to scale up its offshore wind fleet to 40 gigawatts (GW) by 2030, including 1GW of floating wind, enough to power every home in the country.
- Carbon capture and storage investments – Including £1bn worth of investments in state-of-the-art CCS in four industrial clusters by 2030. With four low-carbon clusters set up by 2030, and at least one fully net-zero cluster by 2040.
- Kick-starting the hydrogen economy – The government plans to work with industry to aim for 5GW of production by 2030, backed up by a new £240m net-zero Hydrogen Fund for low-carbon hydrogen production.
- Investing in electric vehicle charge points – The government plans to invest £1.3bn to accelerate the rollout of charge points for electric vehicles as well as up to £1bn to support the electrification of cars, including for the mass-production of the batteries needed for electric vehicles.
- Supporting the lowest paid with their bills – The government aims to support those with lower incomes through a £6.7bn package of measures that could save families in old inefficient homes up to £400. This includes extending the Warm Home Discount Scheme to 2026 to cover an extra three quarters of a million households and giving eligible households £150 off their electricity bills each winter.

- Moving away from fossil fuel boilers – The government aims, by the mid-2030s, for all newly installed heating systems to be low-carbon or to be appliances that it is confident can be converted to a clean fuel supply.
- Supporting North Sea oil and gas transition – The white paper notes the importance of supporting the North Sea oil and gas transition for the people and communities most affected by the move away from fossil fuels. The government aims to achieve this by ensuring that the expertise of the oil and gas sector be drawn on in developing CCS and hydrogen production to provide new green jobs for the future.

A.19 Flood and Coastal Erosion Risk Management: Policy Statement (2020) **[See reference 189]**: This policy statement sets out the government's long-term ambition to create a nation more resilient to future flood and coastal erosion risk, and in doing so, reduce the risk of harm to people, the environment and the economy. The Policy Statement sets out five policy areas which will drive this ambition. These are:

- Upgrading and expanding our national flood defences and infrastructure;
- Managing the flow of water more effectively;
- Harnessing the power of nature to reduce flood and coastal erosion risk and achieve multiple benefits;
- Better preparing our communities; and
- Enabling more resilient places through a catchment-based approach.

A.20 The **Flood and Water Management Act** (2010) **[See reference 190]** and The **Flood and Water Regulations** (2019) **[See reference 191]** sets out measures to ensure that risk from all sources of flooding 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).

A.21 A Green Future: Our 25 Year Plan to Improve the Environment [See reference 192]: Sets out goals for improving the environment within the next 25 years. It details how the Government will work with communities and businesses to leave the environment in a better state than it is presently. Actions relating to climate change are as follows:

- Using and managing land sustainably:
- Take action to reduce the risk of harm from flooding and coastal erosion including greater use of natural flood management solutions.
- Protecting and improving our global environment:
  - Provide international leadership and lead by example in tackling climate change and protecting and improving international biodiversity.

A.22 The **National Adaptation Programme and the Third Strategy for Climate Adaptation Reporting**: Making the country resilient to a changing climate **[See reference 193]**: Sets out visions for the following sectors:

- People and the Built Environment – "To promote the development of a healthy, equitable and resilient population, well placed to reduce the harmful health impacts of climate change...buildings and places (including built heritage) and the people who live and work in them are resilient and organisations in the built environment sector have an increased capacity to address the risks and make the most of the opportunities of a changing climate."
- Infrastructure – "An infrastructure network that is resilient to today's natural hazards and prepared for the future changing climate."
- Natural Environment – "The natural environment, with diverse and healthy ecosystems, is resilient to climate change, able to accommodate change and valued for the adaptation services it provides."
- Business and Industry – "UK businesses are resilient to extreme weather and prepared for future risks and opportunities from climate change."
- Local Government – "Local Government plays a central role in leading and supporting local places to become more resilient to a range of future risks and to be prepared for the opportunities from a changing climate."

A.23 UK Climate Change Risk Assessment 2017 [See reference 194]: Sets out six priority areas needing urgent further action over the next five years. These include:

- Flooding and coastal change risks to communities, businesses and infrastructure;
- Risks to health, well-being and productivity from high temperatures;
- Risks of shortages in the public water supply, and for agriculture, energy generation and industry, with impacts on freshwater ecology;
- Risks to natural capital, including terrestrial, coastal, marine and freshwater ecosystems, soils and biodiversity;
- Risks to domestic and international food production and trade; and
- New and emerging pests and diseases, and invasive non-native species, affecting people, plants and animals.

A.24 The **Energy Efficiency Strategy: The Energy Efficiency Opportunity in the UK [See reference 195]**: Aims to realise the wider energy efficiency potential that is available in the UK economy by maximising the potential of existing dwellings by implementing 21st century energy management initiatives on 19th century homes.

A.25 The **National Flood and Coastal Erosion Risk Management Strategy for England [See reference 196]**: This Strategy sets out the national framework for managing the risk of flooding and coastal erosion. It sets out the roles for risk management authorities and communities to help them understand their responsibilities. The strategic aims and objectives of the Strategy are:

- climate resilient places: working with partners to bolster resilience to flooding and coastal change across the nation, both now and in the future in the face of climate change;
- today's growth and infrastructure resilient in tomorrow's climate: making the right investment and planning decisions to secure sustainable growth and environmental improvements, as well as infrastructure resilient to flooding and coastal change;

- a nation ready to respond and adapt to flooding and coastal change: ensuring local people understand their risk to flooding and coastal change and know their responsibilities and how to act.

A.26 The **UK Low Carbon Transition Plan**: **National Strategy for Climate and Energy** (2009) **[See reference 197]**: sets out a five-point plan to tackle climate change. The points are as follows: protecting the public from immediate risk, preparing for the future, limiting the severity of future climate change through a new international climate agreement, building a low carbon UK and supporting individuals, communities and businesses to play their part.

A.27 The **UK Renewable Energy Strategy** (2009) **[See reference 198]**: Sets out the ways in which we will tackle climate change by reducing our CO_2 emissions through the generation of a renewable electricity, heat and transport technologies.

A.28 Climate Change Act 2008 [See reference 199]: Sets targets for UK greenhouse gas emission reductions of at least 100% by 2050, against a 1990 baseline (this was previously 80% but was updated to a net zero target in June 2019).

A.29 Planning and Energy Act 2008 [See reference 200]: enables local planning authorities to set requirements for carbon reduction and renewable energy provision. It should be noted that while the Housing Standards Review proposed to repeal some of these provisions, at the time of writing there have been no amendments to the Planning and Energy Act.

Sub-national

A.30 Essex Climate Action Plan: Essex County Council's response to Net Zero: Making Essex Carbon Neutral (2022) [See reference 201]: This plan sets out recommendations to 2050 and outlines the immediate actions that the Council is taking directly and in concert with partners to drive effective progress against the Essex Climate Action Commission's (ECAC) recommendations. The

plan follows the structure of the Commission report under the key themes of land use and green infrastructure, energy, built environment, transport, waste, and community engagement.

A.31 South East Inshore Marine Plan [See reference 202**]**: The Plan introduces a strategic approach to planning within the inshore waters between Suffolk and Kent, including the Thames Estuary. This includes building resilience and adaptations to climate change, as well as consideration of renewable energy and potential for carbon capture and storage.

A.32 Thames Estuary 2100 [See reference 203**]**: The document sets out the Environment Agency's recommendations for flood risk management for London and the Thames Estuary through to the end of the century and beyond. The Plan sets out the future shape of flood risk management, strategic action that is needed and options to achieve this, local actions that are needed, and how the impact of rising sea levels needs to be addressed. Action Zones 5, 6, 7and 8 covers the sub-region. Actions have been identified which include hard and soft measures including a floodplain management programme, partnership arrangements to ensure that new development is safe, review and maintain future partnership arrangements and principles and management of defences.

A.33 The Thames Estuary 2100 Plan includes policy recommendations for public realm and access improvements, coinciding with other initiatives such as the Thames Gateway Parklands vision, which envisages improved access and connections with local communities. The Plan introduces the riverside strategy approach. This integrates improvements to flood risk management defences into wider redevelopment, enhancing the social, environmental and commercial aspects of the riverside.

A.34 The Plan is also an example of a managed adaptive strategy approach for varying rates of climate change, which is made up of a combination of different interventions that act together to achieve the recommended policy.

A.35 Essex Local Flood Risk Management Strategy (2018) **[See reference** 204**]**: The Essex Flood Risk Management Strategy (LFRMS) has been

produced by Essex County Council as Lead Local Flood Authority (LLFA). The Flood Water Management Act places a legal duty on each LLFA to produce a LRMS and this document creates a framework around which flood risk management will be undertaken by the LLFA.

A.36 South Essex Surface Water Management Plan (2012) **[See reference** 205**]**: The Surface Water Management Plan identifies and assesses surface water flood risk across South Essex. It recognises the importance of considering the potential impacts on flood risk that will arise from climate change. The Action Plan 2020 **[See reference** 206**]** sets out various actions to manage flood risk throughout South Essex.

A.37 Surface Water Management Plan (2015) **[See reference** 207**]**: The Surface Water Management Plan for each of the Local Authorities identifies and assesses surface water flood risk across each respective Authority, including the potential impacts arising from climate change.

A.38 Green Essex Strategy (2019) **[See reference** 208**]**: This Strategy seeks to enhance, protect and create an inclusive and integrated network of high-quality green infrastructure in Greater Essex. The Strategy promotes the use of the green infrastructure network for sustainable modes of transport such as public transport, walking and cycling.

A.39 South Essex Green and Blue Infrastructure Strategy: Resilient by Nature (2020) **[See reference** 209**]**: This strategy sets out a vision for and integrated green and blue infrastructure (GBI) network across South Essex and sets out key objectives and projects to achieve this. This includes improving connectivity within and across the landscape through active travel links, such as walking and cycling.

A.40 Sustainable Drainage Systems Design Guide for Essex (2020) **[See reference** 210**]**: This design guide sets out parameters for the integration of SUDs into new development to minimise the coverage of impermeable surfaces in the boroiugh, and manage run-off.

Implications of the policy review for the Local Plan and IIA: In order to align with other relevant policy documents, the Local Plan should seek to:

- Ensure that new development reduces carbon emissions, is energy efficient, and promotes the use of renewable energy sources and sustainable construction methods and materials;
- Encourage new development to be designed to adapt to climate change for the increased likelihood of extreme weather events including overheating as a result of temperature rise;
- Ensure that risk from all sources of flooding as a result of climate change is avoided where possible, and where this is not possible, that the risks are managed effectively to ensure that development is resilient to future flooding; and
- Encourage a modal shift towards public transport, walking and cycling, and reduce the need to travel by car.

The IIA is able to respond to this through the inclusion of IIA objectives relating to the mitigation of climate change and adaptation to climate change, sustainable construction, flooding and sustainable transport.

Transport

National

A.41 The NPPF is supported by **Planning Practice Guidance** relating to:

- **Transport evidence bases in plan making and decision taking** (2015) **[See reference 211]** – Provides guidance to help local authorities assess and reflect transport needs in Local Plan making.

- **Travel Plans, Transport Assessments and Statements** (2014) **[See reference 212]** – Provides advice on when Transport Assessments and Transport Statements are required, and what they should contain.
- A target on ambient $PM_{2.5}$ concentrations.

A.42 The **White Paper Levelling Up the United Kingdom** (2022) **[See reference 213]** sets out how the UK Government will spread opportunity more equally across the UK. It comprises 12 UK-wide missions to achieve by 2030, which includes the following key mission relating to transport and travel:

- By 2030, local public transport connectivity across the country will be significantly closer to the standards of London, with improved services, simpler fares and integrated ticketing.

A.43 The **Environment Act 2021** **[See reference 214]** sets statutory targets for the recovery of the natural world in four priority areas: air quality, biodiversity, water, and resource efficiency and waste reduction. It also establishes the Office for Environmental Protection which will act as an impartial and objective body for the protection and improvement of the environment. The Act sets out legislation which covers local air quality management frameworks and the recall of motor vehicles.

A.44 Decarbonising Transport: A Better, Greener Britain (2021) **[See reference 215]** The Decarbonisation Transport Plan (DTP) sets out the Government's commitments and the actions needed to decarbonise the entire transport system in the UK. It follows on from the Decarbonising Transport: Setting the Challenge report published in 2020. The DTP commits the UK to phasing out the sale of new diesel and petrol heavy goods vehicles by 2040, subject to consultation, in addition to phasing out the sale of polluting cars and vans by 2035. The DPT also sets out how the government will improve public transport and increase support for active travel, as well as creating a net zero rail network by 2050, ensuring net zero domestic aviation emissions by 2040, and a transition to green shipping.

A.45 The **Cycling and Walking Investment Strategy Report to Parliament** (2022) **[See reference 216]** sets out the objectives and financial resources for cycling and walking infrastructure. It states the Government's long-term ambition is to make walking and cycling the natural choices for shorter journeys. It aims to double cycling by 2025, increase walking activity, increase the percentage of children that usually walk to school and reduce the number of cyclists killed or seriously injured on England's roads.

A.46 Decarbonising Transport: Setting the Challenge (2020) **[See reference 217]** sets out the strategic priorities for the new Transport Decarbonisation Plan (TDP), published in July 2021. It sets out in detail what government, business and society will need to do to deliver the significant emissions reduction needed across all modes of transport, putting us on a pathway to achieving carbon budgets and net zero emissions across every single mode of transport by 2050. This document acknowledges that while there have been recently published strategies to reduce greenhouse gas emissions in individual transport modes, transport as a whole sector needs to go further and more quickly, therefore the TDP takes a coordinated, cross-modal approach to deliver the transport sector's contribution to both carbon budgets and net zero.

A.47 The Road to Zero (2018) **[See reference 218]**: Sets out new measures towards cleaner road transport, aiming to put the UK at the forefront of the design and manufacturing of zero emission vehicles. It explains how cleaner air, a better environment, zero emission vehicles and a strong, clean economy will be achieved. One of the main aims of the document is for all new cars and vans to be effectively zero emission by 2040.

A.48 Transport Investment Strategy [See reference 219]: Sets out four objectives that the strategy aims to achieve:

- Create a more reliable, less congested, and better connected transport network that works for the users who rely on it;
- Build a stronger, more balanced economy by enhancing productivity and responding to local growth priorities;

- Enhance our global competitiveness by making Britain a more attractive place to trade and invest; and
- Support the creation of new housing.

A.49 Highways England Sustainable Development Strategy and Action Plan (2017) **[See reference 220]**: This strategy is designed to communicate the company's approach and priorities for sustainable development to its key stakeholders. Highways England aims to ensure its action in the future will further reduce the impact of its activities seeking a long-term and sustainable benefit to the environment and the communities it serves. The action plan describes how Highways England will progress the aspirations of their Sustainable Development and Environment Strategies. It describes actions that will enable the company to deliver sustainable development and to help protect and improve the environment.

A.50 Door to Door: A strategy for improving sustainable transport integration (2013) **[See reference 221]**: Focuses on four core areas which need to be addressed so that people can be confident in choosing greener modes of transport. These are as follows:

- Accurate, accessible and reliable information about different transport options;
- Convenient and affordable tickets;
- Regular and straightforward connections at all stages of the journey and between different modes of transport; and
- Safe and comfortable transport facilities.

A.51 The strategy also includes details on how the Government is using behavioural change methods to reduce or remove barriers to the use of sustainable transport and working closely with stakeholders to deliver a better-connected transport system.

Sub-national

A.52 Sustainable Modes of Travel Strategy [See reference 222]: The Sustainable Modes of Travel Strategy aims to reduce the number of private vehicles using the highway network and increase the use of more active and sustainable modes available to businesses, residents and schools within Essex. A key objective is to manage congestion during peak times and improve the environment by reducing the need to travel by car and potentially reducing CO_2 and other emissions.

A.53 Transport East Transport Strategy (2022) [See reference 223] The Transport Strategy outlines a collective vision for the future of transport in the region and sets out key investment priorities needed to deliver it. The overarching vision is underpinned by four strategic priorities: decarbonisation to net-zero, connecting growing towns and cities, energising coastal and rural communities, and unlocking international gateways. The four strategic priorities overlap and together form an integrated strategy for the region. The Transport Strategy sets out the pathways and key goals needed for the delivery of their Vision, which include goals focused around improving sustainable and active travel options, reducing demand for travel via digital connectivity, encouraging behaviour change, increasing access for coastal and rural communities, improving efficiency of freight transport, and creating better connected ports and airports to unlock international gateways.

A.54 Section 5 of the Transport Strategy highlights place-based strategic corridors which link key destinations with the region. For Basildon, this includes improved links with South Essex, London, Thurrock and Southend, referred to as the South Essex corridor. The Strategy identifies the corridor as a major location for economic growth, particularly by expanding on the accessibility of Basildon, which has the largest local economy in Essex. At present, the corridor is heavily congested which acts as a major barrier to growth. The Strategy identifies the need for improved road, freight capacity, passenger rail and bus networks to support economic and population growth in the region.

A.55 Essex Transport Strategy [See reference 224]: The Essex Transport Strategy outlines the County Council's priorities and strategic objectives for improving the transport network across Essex, including by encouraging a modal shift towards public transport, walking and cycling over single occupancy car journeys. The Plan supports the use of cleaner, lower carbon transport technologies, and car share schemes.

A.56 Essex Sustainable Modes of Travel Strategy (2019) **[See reference 225]**: The Sustainable Modes of Travel Strategy aims to reduce the number of private vehicles using the highway network and increase the use of more active and sustainable modes available to businesses, residents and schools within Essex.

A.57 Essex Cycling Strategy Refresh (2022) **[See reference 226]**: This strategy outlines the overall aspiration to support cycling across the County. It sets out nine areas of strategic action that are necessary to delivering growth in cycling throughout the County. It also outlines funding priorities and opportunities.

A.58 Greater Essex Growth and Infrastructure Framework 2016-2036 [See reference 227]:To better understand the scale of the infrastructure challenges facing Essex, all local authorities in Essex commissioned the creation of a Growth and Infrastructure Framework (GIF) for the county and two unitaries. The framework presents an overview of growth patterns to 2036, evidences the infrastructure required, and estimates likely costs and funding gaps.

A.59 This report presents an overview of growth patterns and the infrastructure projects needed to support such growth, their costs, how much funding has already been secured or is expected toward their delivery and the funding gap for the period up to 2036.

Implications of the policy review for the Local Plan and IIA: In order to align with other relevant policy documents, the Local Plan should:

- Encourage sustainable modes of transport in order to improve air quality, minimise climate change and reduce congestion; and
- Encourage walking, wheeling and cycling as alternative modes of transport by locating key services and employment opportunities close to where people live and by providing safe and attractive walking, wheeling and cycling infrastructure, as well as recognise the multiple benefits they bring in terms of physical and mental health, reducing carbon emissions and reducing air pollution.

The IIA is able to respond to this through the inclusion of IIA objectives relating to the mitigation of climate change, improving air quality, public health and wellbeing, and the provision of sustainable transport.

Population, health and wellbeing

National

A.60 The NPPF is supported by **Planning Practice Guidance** relating to:

- **Housing needs of different groups** (2021) **[See reference 228]** – Provides advice on planning for affordable, private rented, self-build, student and rural housing needs.
- **Healthy and safe communities** (2019) **[See reference 229]** – Provides guidance on achieving healthy, safe and inclusive communities, estate regeneration and school place provision.
- **Housing supply and delivery** (2019) **[See reference 230]** – Sets out guidance on five-year land supply and Housing Delivery Test.
- **Housing for older and disabled people** (2019) **[See reference 231]** – Provides guidance on preparing planning policies for accessible and adaptable housing and inclusive design.

- **Noise** (2019) **[See reference 232]** – Advises on how planning can manage potential noise impacts in new development.
- **Light pollution** (2019) **[See reference 233]** – Advises on how to consider artificial light within the planning system.
- **Open space, sports and recreation facilities, public rights of way and local green space** (2014) **[See reference 234]** – Provides key advice on open space, sports, recreation, public rights of way, National Trails and Local Green Space designation.

A.61 The Equality Act 2010 **[See reference 235]** requires public authorities to work to eliminate discrimination and promote equality in all their activities. Under Section 149 of the Equality Act a public authority has a duty to ensure that all decisions are made in such a way as to minimise unfairness, and do not have disproportionately negative impacts on people because of their protected characteristics or background. It protects everyone against unfair treatment, on the basis of protected characteristics: age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, sex, and sexual orientation.

A.62 The **White Paper Levelling Up the United Kingdom** (2022) **[See reference 236]** sets out how the UK Government will spread opportunity more equally across the UK. It comprises 12 UK-wide missions to achieve by 2030. Missions which relate to population, health and wellbeing state that by 2030:

- The gap in Healthy Life Expectancy (HLE) between local areas where it is highest and lowest will have narrowed, and by 2035 HLE will rise by five years;
- Well-being will have improved in every area of the UK, with the gap between top performing and other areas closing;
- Homicide, serious violence, and neighbourhood crime will have fallen, focused on the worst-affected areas;
- Pride in place, such as people's satisfaction with their town centre and engagement in local culture and community, will have risen in every area

of the UK, with the gap between the top performing and other areas closing;

- The number of primary school children achieving the expected standard in reading, writing and maths will have significantly increased. In England, this will mean 90% of children will achieve the expected standard, and the percentage of children meeting the expected standard in the worst performing areas will have increased by over a third; and
- Renters will have a secure path to ownership with the number of first-time buyers increasing in all areas; and the Government's ambition is for the number of non-decent rented homes to have fallen by 50%, with the biggest improvements in the lowest performing areas.

A.63 National Design Guide (2021) **[See reference** 237**]**: sets out the Government's priorities for well-designed places in the form of ten characteristics: context, identity, built form, movement, nature, public spaces, uses, homes and buildings, resources and lifespan.

A.64 Build Back Better: Our Plan for Health and Social Care (2021) **[See reference 238]** sets out the government's new plan for health and social care. It provides an overview of how this plan will tackle the electives backlog in the NHS and put the NHS on a sustainable footing. It sets out details of the plan for adult social care in England, including a cap on social care costs and how financial assistance will work for those without substantial assets. It covers wider support that the government will provide for the social care system, and how the government will improve the integration of health and social care. It explains the government's plan to introduce a new Health and Social Care Levy.

A.65 COVID-19 Mental Health and Wellbeing Recovery Action Plan (2021) **[See reference 239]** sets out the Government's plan to prevent, mitigate and respond to the mental health impacts of the pandemic during 2021 and 2022. Its main objectives are to support the general population to take action and look after their own mental wellbeing; to take action to address factors which play a crucial role in shaping mental health and wellbeing outcomes; and, to support services to meet the need for specialist support.

A.66 Planning for the Future White Paper (2020) **[See reference 240]**: Sets out a series of potential reforms to the English planning system, to deliver growth faster. The White Paper focuses on the following:

- Simplifying the role of Local Plans and the process of producing them;
- Digitising plan-making and development management processes;
- Focus on design, sustainability and infrastructure delivery; and
- Nationally determined, binding housing requirements for local planning authorities to deliver through Local Plans.

A.67 The Charter for Social Housing Residents: Social Housing White Paper (2020) **[See reference 241]** sets out the Government's actions to ensure residents in social housing are safe, listened to, live in good quality homes and have access to redress when things go wrong.

A.68 A fairer private rented sector White Paper (2022) **[See reference 242]** aims to build upon the vision of the Levelling Up White Paper and reform the Private Rented Sector and improve housing quality. It outlines that everyone deserves a secure and decent home and outlines measures to improve the experience of renters in the Private Rented Sector.

A.69 Using the planning system to promote healthy weight environments (2020) **[See reference 243]**, **Addendum** (2021) **[See reference 244]** provides a framework and starting point for local authorities to clearly set out in local planning guidance how best to achieve healthy weight environments based on local evidence and needs, by focusing on environments that enable healthier eating and help promote more physical activity as the default. The Addendum provides updates on the implications for planning for a healthier food environment, specifically on the hot food takeaways retail uses, and sets out recommended actions in light of changes to the Use Class Order (UCO) in England from 1 September 2020.

A.70 Public Health England**, PHE Strategy 2020-25** (2019) **[See reference 245]**: identifies PHE's priorities upon which to focus over this five-year period to protect people and help people to live longer in good health.

A.71 A Green Future: Our 25 Year Plan to Improve the Environment [See reference 246]: Sets out goals for improving the environment within the next 25 years. It details how the Government will work with communities and businesses to leave the environment in a better state than it is presently. Identifies six key areas around which action will be focused. Those of relevance to the topics of population growth, health and wellbeing are 'using and managing land sustainably' and 'connecting people with the environment to improve health and wellbeing'. Actions that will be taken as part of these two key areas are as follows:

- Using and managing land sustainably:
  - a) Embed an 'environmental net gain' principle for development, including housing and infrastructure.
- Connecting people with the environment to improve health and wellbeing:
  - b) Help people improve their health and wellbeing by using green spaces including through mental health services.
  - c) Encourage children to be close to nature, in and out of school, with particular focus on disadvantaged areas.
  - d) 'Green' our towns and cities by creating green infrastructure and planting one million urban trees.

A.72 Homes England Strategic Plan 2018 to 2023 [See reference 247]: Sets out a vision to ensure more homes are built in areas of greatest need, to improve affordability, and make a more resilient and diverse housing market.

A.73 The Environmental Noise Regulations [See reference 248] apply to environmental noise, mainly from transport. The regulations require regular noise mapping and action planning for road, rail and aviation noise and noise in large urban areas. They also require Noise Action Plans based on the maps for road and rail noise and noise in large urban areas. The Action Plans identify

Important Areas (areas exposed to the highest levels of noise) and suggest ways the relevant authorities can reduce these. Major airports and those which affect large urban areas are also required to produce and publish their own Noise Action Plans separately. The Regulations do not apply to noise from domestic activities such as noise created by neighbours; at workplaces; inside means of transport; or military activities in military areas.

A.74 The Housing White Paper 2017 (Fixing our broken housing market) **[See reference 249]** sets out ways to address the shortfall in affordable homes and boost housing supply. The White Paper focuses on the following:

- Planning for the right homes in the right places – Higher densities in appropriate areas, protecting the Green Belt while making more land available for housing by maximising the contribution from brownfield and surplus public land, regenerating estates, releasing more small and medium-sized sites, allowing rural communities to grow and making it easier to build new settlements.
- Building homes faster – Improved speed of planning cases, ensuring infrastructure is provided and supporting developers to build out more quickly.
- Diversifying the Market – Backing small and medium-sized house builders, custom-build, institutional investors, new contractors, housing associations.
- Helping people now – Supporting home ownership and providing affordable housing for all types of people, including the most vulnerable.

A.75 Planning Policy for Traveller Sites **[See reference 250]**: sets out the Government's planning policy for traveller sites, replacing the older version published in March 2012. The Government's overarching aim is to ensure fair and equal treatment for travellers, in a way that facilitates the traditional and nomadic way of life of travellers while respecting the interests of the settled community.

A.76 Select Committee on Public Service and Demographic Change Report Ready for Ageing? **[See reference 251]**: warns that society is

underprepared for the ageing population. The report states “longer lives can be a great benefit, but there has been a collective failure to address the implications and without urgent action this great boon could turn into a series of miserable crises”. The report highlights the under provision of specialist housing for older people and the need to plan for the housing needs of the older population as well as younger people.

A.77 Fair Society, Healthy Lives [See reference 252]: investigated health inequalities in England and the actions needed in order to tackle them. Subsequently, a supplementary report was prepared providing additional evidence relating to spatial planning and health on the basis that there is “overwhelming evidence that health and environmental inequalities are inexorably linked and that poor environments contribute significantly to poor health and health inequalities”.

A.78 Marmot Review 10 Years On [See reference 253] revisits Fair Society, Healthy Lives. It found that, since 2010, life expectancy in England has stalled, which suggests society has stopped improving. In addition, there are marked regional differences in life expectancy – the more deprived the area, the shorter the life expectancy. Mortality rates are increasing in those aged 45-49, child poverty has increased and there is a housing crisis and rise in homelessness.

A.79 Laying the foundations: A housing strategy for England [See reference 254]: Aims to provide support to deliver new homes and improve social mobility.

A.80 Healthy Lives, Healthy People: Our strategy for public health in England [See reference 255]: Sets out how the Government’s approach to public health challenges will:

- Protect the population from health threats – led by central Government, with a strong system to the frontline;
- Empower local leadership and encourage wide responsibility across society to improve everyone’s health and wellbeing and tackle the wider factors that influence it;

- Focus on key outcomes, doing what works to deliver them, with transparency of outcomes to enable accountability through a proposed new public health outcomes framework;
- Reflect the Government's core values of freedom, fairness and responsibility by strengthening self-esteem, confidence and personal responsibility; positively promoting healthy behaviours and lifestyles; and adapting the environment to make healthy choices easier; and
- Balance the freedoms of individuals and organisations with the need to avoid harm to others, use a 'ladder' of interventions to determine the least intrusive approach necessary to achieve the desired effect and aim to make voluntary approaches work before resorting to regulation.

A.81 Technical Housing Standards – Nationally Described Space Standard (2015) **[See reference 256]**: this document sets out the Government's new nationally described space standard. The standard deals with internal space within new dwellings and sets out requirements for the Gross Internal (floor) Area of new dwellings at a defined level of occupancy, as well as floor areas and dimensions for key parts of the home.

Sub-national

A.82 Levelling Up Essex: An Essex White Paper [See reference 257] In line with the UK Government announcing it's 'Levelling Up' agenda, which sets out to spread opportunity more equally across the UK, Essex County Council has produced its own Levelling Up White Paper. While Essex is a relatively affluent region in the south east of England, the strategy aims to tackle inequalities that exist within the country and spread opportunity and support across all areas. It presents five main focus areas for the agenda, which are: the economy, the environment, health and wellbeing, education and skills, and families and communities. The strategy outlines the Council's role in delivering the agenda, the role that devolution of powers down to local government and local communities will play, and how progress will be monitored and evaluated over time.

A.83 Everyone's Essex 2021-2025 [See reference 258]: A plan to level up the county through twenty commitments. These commitments fall across four categories, similar to those announced in the Levelling Up Essex White Paper. These include the economy (good jobs, infrastructure, growth and investment, green growth and levelling up the economy), the environment (moving towards net zero, minimising waste, creating green communities, levelling up the environment, and creating sustainable transport and built environment), health (healthy lifestyles, promoting independence, place-based working, carers and levelling up health), and family (creating family resilience and stability, improving outcomes for vulnerable children, family resilience and stability, education outcomes and levelling up outcomes for families).

A.84 Essex Joint Health and Wellbeing Strategy 2022 – 2026 [See reference 259]: This strategy outlines how, alongside partners, Essex County Council aim to improve the health and wellbeing outcomes for people of all ages. Including a reduction in health inequalities, by having a focus on supporting poor health prevention and promoting health improvement.

A.85 Essex Domestic Abuse Commissioning Strategy 2021-24 [See reference 260]: In line with the Domestic Abuse Act (2021), this commissioning strategy sets out the County Council's intentions over three years up to 2025 whereby the Council aim to create sustainable change across the system through continued partnership work and further by increasing the existing types of provision of offer to all victims in safe accommodation. The domestic abuse agenda has been a priority for the Council for many years, and it has invested capacity and financial investment into a long-standing Southend Essex and Thurrock Domestic Abuse Board (SETDAB) to create arrangements and the provision of a single point of access to support and community-based services for victims. The work of SETDAB is underpinned by their similar 2020 five-year strategy.

A.86 The Essex Plan for Working Families [See reference 261]: This plan sets the council's ambition to be on the side of working families and to make Essex one of the most familyfriendly counties in England. It outlines research and policy responses to the challenges working families are facing. It articulates the policy initiatives the County Council will deliver, as well as further

exploratory work to see where else we can adapt existing services to help make life easier for working families. Five priority areas emerged through the research as the key issues affecting working families and as areas of action to support working families to improve medium and longer-term outcomes: childcare (creating the conditions for working families to access both affordable and flexible childcare to meet their needs), housing (supporting working families to avoid situations where their housing costs (affordability) or security of tenure impact on their financial stability and mental well-being), information, advice and guidance (ensuring working families can access the right information, advice, guidance and support to make the right decisions for themselves and their families), skills and employment (working with employers to embed family-friendly thinking into good employment practices and help working parents develop their skills and prospects) and living costs (helping working families to make their income go further and to cope with spikes in expenditure that can be de-stabilising, without recourse to public assistance).

Implications of the policy review for the Local Plan and IIA: In order to align with other relevant policy documents, the Local Plan should seek to:

- Provide open space and green infrastructure of sufficient quantity and quality to meet the needs of the Plan area;
- Encourage healthy and active lifestyles;
- Create fair, safe and inclusive communities;
- Reduce inequality in health and wellbeing;
- Improve the sustainable transport network within the Plan area;
- Create and maintain safe and attractive public spaces that encourage people to walk and cycle, promote a sense of place and reduce the need to travel; and
- Provide opportunities for education, skills and employment that will help all to succeed in life and advance equality of opportunity.

The Local Plan should seek to ensure the provision of goods, services, facilities, public functions, the disposal and management of premises, education and associations, meet the Equality Act 2010 requirements.

The IIA is able to respond to this through the inclusion of IIA objectives relating to health and wellbeing, social inclusion, and sustainable transport.

Economy

National

A.87 The NPPF is supported by **Planning Practice Guidance** relating to:

- **Town centres and retail** (2020) **[See reference 262]** – Provides guidance on planning for town centre vitality and viability, permitted development, change of use and out of town centre development.

A.88 The **White Paper Levelling Up the United Kingdom** (2022) **[See reference 263]** sets out how the UK Government will spread opportunity more equally across the UK. It comprises 12 UK-wide missions to achieve by 2030. Missions which relate to economy and employment state that by 2030:

- Pay, employment and productivity will have risen in every area of the UK, with each containing a globally competitive city, with the gap between the top performing and other areas closing;
- The number of people successfully completing high-quality skills training will have significantly increased in every area of the UK. In England, this will lead to 200,000 more people successfully completing high-quality skills training annually, driven by 80,000 more people completing courses in the lowest skilled areas;
- Domestic public investment in Research & Development outside the Greater South East will increase by at least 40% and at least one third

over the Spending Review period, with that additional government funding seeking to leverage at least twice as much private sector investment over the long term to stimulate innovation and productivity growth; and

- Every part of England that wants one will have a devolution deal with powers at or approaching the highest level of devolution and a simplified, long-term funding settlement.

A.89 Build Back Better: Our Plan for Growth (2021) **[See reference 264]**: Sets out a plan to 'build back better' tackling long-term problems to deliver growth that delivers high-quality jobs across the UK while supporting the transition to net zero. This will build on three core pillars of growth: infrastructure, skills and innovation.

A.90 Agriculture Act 2020 [See reference 265]: sets out how farmers and land managers in England will be rewarded in the future with public money for "public goods" – such as better air and water quality, thriving wildlife, soil health, or measures to reduce flooding and tackle the effects of climate change, under the Environmental Land Management Scheme. These incentives will provide a vehicle for achieving the goals of the government's 25 Year Environment Plan and commitment to reach zero emissions by 2050. The Act will help farmers to stay competitive, increase productivity, invest in new technology and seek a fairer return from the marketplace.

A.91 Agricultural Transition Plan 2021 to 2024 [See reference 266]: aims to drive competitiveness, increase productivity, reduce carbon emissions, and generate fairer returns across the agricultural industry. The Transition Plan introduces several new schemes to improve the environment, animal health and welfare, and farm resilience and productivity (e.g., grants will be available for sustainable farming practices, creating habitats for nature recovery and making landscape-scale changes such as establishing new woodland and other ecosystem services).

A.92 UK Industrial Strategy: Building a Britain fit for the future (2018) **[See reference 267]** lays down a vision and foundations for a transformed economy. Areas including artificial intelligence and big data; clean growth; the future of

mobility; and meeting the needs of an ageing society are identified as the four 'Grand Challenges' of the future.

Sub-national

A.93 South Essex Economic Development Needs Assessment [See reference 268]: This assessment provides an evidenced, guidance compliant analysis of the economic and employment land opportunities and challenges for South Essex and establishes a strategic, multi-authority strategy for realising the area's economic opportunity.

A.94 South Essex Productivity Strategy [See reference 269]: The strategy sets out four programmes to improve productivity across South Essex over a five-year period. These programmes are as follows: Vibrant Places; Enterprise Growth; Future Work; and Data Transformation.

A.95 Essex Sector Development Strategy [See reference 270]: The Sector Development Strategy is a long-term strategy to support Essex County Council, public sector partners, and businesses to effectively plan together for the future economy of the county. The strategy has identified five economic sectors with significant growth potential that could be realised in Essex: Construction and Retrofit; Clean Energy; Advanced Manufacturing and Engineering; Digitech; and Life Sciences (including med-tech and care-tech). The strategy seeks to realise this growth through achieving three strategic goals. These are a thriving economy, an economy for everyone, and an economy fit for the future.

A.96 Digital Strategy for Essex (2022) [See reference 271]: This strategy outlines the Council's ambition to unite the Essex public sector in the spirit of shared strategic principles. Essex County Council seek to align the area's digital ambitions and combine the Council's purchasing power. The strategy clearly defines the area's needs and addresses the government and the commercial market with 'one voice'. In support of the Everyone's Essex agenda, this strategy sets out the Council's approach over the next four years (up to 2025) to enable inclusive digital growth, support people in getting the best start in life and

ageing well, helpig to create a great place to live and work, and to transform local public services to achieve ‘more with less’.

A.97 Economic Plan for Essex (2014) **[See reference** 272**]**: The Economic Plan for Essex sets out plans for unlocking economic growth across the County. The Plan seeks to improve workforce skills across Essex, focus infrastructure investment on strategic growth corridors, and enhance productivity within the Essex economy.

A.98 South Essex Productivity Strategy (2019): The strategy sets out four programmes to improve productivity across South Essex over a 5 year period. These programmes are as follows: Vibrant Places; Enterprise Growth; Future Work; and Data Transformation.

A.99 South East Inshore Marine Plan (2021) **[See reference** 273**]**: The Plan introduces a strategic approach to planning within the inshore waters between Suffolk and Kent, including the Thames Estuary. The Plan includes policies on managing commercial activities in the marine area to achieve a sustainable marine economy.

A.100 A127 – Corridor for Growth: An Economic Plan (2014) **[See reference** 274**]**: This strategy demonstrates the importance of the A127 corridor to the economic growth and financial well-being of the Thames Gateway South East (TGSE) region. It provides a coordinated approach to improve conditions along the length of the A127 including junction upgrades and improvements, maintenance, signing, lighting and safety camera installation.

A.101 Greater Essex Growth and Infrastructure Framework 2016-2036 (2017) **[See reference** 275**]**: The Growth and Infrastructure Framework outlines the emerging development and infrastructure requirements, including education, to support growth from 2016 to 2036.

Implications of the policy review for the Local Plan and IIA: To align other relevant policy documents, the Local Plan should support the

sustainable growth of income and employment as well as the enhancement of productivity and investment within the Basildon economy.

The IIA is able to respond to this through the inclusion of IIA objectives relating to economic growth and employment.

Historic environment

International

A.102 Valletta Treaty (1992) formerly the European Convention on the Protection of the Archaeological Heritage (Revisited) **[See reference 276]**: Aims to protect the European archaeological heritage "as a source of European collective memory and as an instrument for historical and scientific study".

A.103 European Convention for the Protection of the Architectural Heritage of Europe (1985) **[See reference 277]**: Defines 'architectural heritage' and requires that the signatories maintain an inventory of it and take statutory measures to ensure its protection. Conservation policies are also required to be integrated into planning systems and other spheres of Government influence as per the text of the convention.

A.104 UNESCO World Heritage Convention (1972) **[See reference 278]**: Requires signatories to identify and conserve World Heritage sites situated on its territory and protect its national heritage. The States Parties are encouraged to integrate the protection of the cultural and natural heritage into regional planning programmes, set up staff and services at their sites, and undertake scientific and technical conservation research.

National

A.105 The NPPF is supported by **Planning Practice Guidance** relating to:

- **Historic environment** (2019) **[See reference 279]** – Advises on enhancing and conserving the historic environment through planning, decision-making, designation, listed building consent processes and consultation.

A.106 The **Environment Act 2021** **[See reference 280]** sets out the UK's new framework for environmental protection. It includes the creation of Conservation Covenant agreements between a landowner and a responsible body for the purposes of conservation. This can include to preserve land as a place of 'archaeological, architectural artistic, cultural or historic interest'.

A.107 The **Heritage Statement 2017** **[See reference 281]**: Sets out how the Government will support the heritage sector and help it to protect and care for our heritage and historic environment, in order to maximise the economic and social impact of heritage and to ensure that everyone can enjoy and benefit from it.

A.108 Sustainability Appraisal and Strategic Environmental Assessment, Historic England Advice Note 8 **[See reference 282]**: Sets out requirements for the consideration and appraisal of effects on the historic environment as part of the Sustainability Appraisal/Strategic Environmental Assessment process.

A.109 The **Government's Statement on the Historic Environment for England 2010** **[See reference 283]**: Sets out the Government's vision for the historic environment. It calls for those who have the power to shape the historic environment to recognise its value and to manage it in an intelligent manner in light of the contribution that it can make to social, economic and cultural life. Includes reference to promoting the role of the historic environment within the Government's response to climate change and the wider sustainable development agenda.

A.110 Planning (Listed Buildings & Conservation Areas) Act 1990 [See reference 284]: An Act of Parliament that changed the laws for granting of planning permission for building works, with a particular focus on listed buildings and conservation areas.

A.111 Ancient Monuments & Archaeological Areas Act 1979 [See reference 285]: a law passed by the UK government to protect the archaeological heritage of England & Wales and Scotland. Under this Act, the Secretary of State has a duty to compile and maintain a schedule of ancient monuments of national importance, in order to help preserve them. It also creates criminal offences for unauthorised works to, or damage of, these monuments.

A.112 Historic Buildings and Ancient Monuments Act 1953 [See reference 286]: An Act of Parliament that makes provision for the compilation of a register of gardens and other land (parks and gardens, and battlefields).

Sub-national

A.113 Essex Historic Landscape Characterisation Project [See reference 287]: This project seeks to characterise the distinctive historic dimension of the current rural landscape. The project identifies 54 Historic Landscape Characterisation (HLC) types across Essex which are broadly categorised into 10 categories (enclosed land, open land, woodland, parks & gardens, coastal, settlement, industrial, horticulture, military and land use).

A.114 Thames Estuary Growth Commission 2050 Vision [See reference 288]: The 2050 Vision for the Thames Estuary seeks to celebrate the character and heritage of the Thames Gateway area, including the rivers and recognises that heritage assets can help build economic prosperity and create quality of life.

Implications of the policy review for the Local Plan and IIA: In order to align with other relevant policy documents, the Local Plan should seek to conserve and enhance the historic environment, including heritage and cultural assets both designated and undesignated, and to protect local character and distinctiveness. Particular regard should be given to protecting heritage assets which have been identified as being 'at risk' (both at the national and local level). Policies should be included to address these issues and site options should be considered with regard to the potential for adverse effects on the historic environment.

The IIA Framework should include objectives relating to the conservation and enhancement of the historic environment and the character of landscapes and townscapes. The IIA should appraise both policy and site options in terms of the potential for effects on the historic environment, considering climate change. It should identify those locations at which development would have the greatest potential to adversely impact the historic environment.

Landscape

International

A.115 The **European Landscape Convention** (2000) **[See reference 289]**: Promotes landscape protection, management and planning. The Convention is aimed at the protection, management and planning of all landscapes and raising awareness of the value of a living landscape.

National

A.116 The NPPF is supported by **Planning Practice Guidance** relating to:

- **Natural environment** (2019) **[See reference 290]** – Highlights key issues in implementing policy to protect and enhance the natural environment, agricultural land, soils and brownfield land of environmental value, green infrastructure, biodiversity, geodiversity, ecosystems and landscapes.
- **Green Belt** (2019) **[See reference 291]** – Provides advice on the role of the Green Belt in the planning system, removal of land from the Green Belt and compensatory improvements.

A.117 The **Environment Act 2021 [See reference 292]** sets out the UK's new framework for environmental protection. It includes the creation of Conservation Covenant agreements between a landowner and a responsible body for the purposes of conservation of the natural environment of the land or its natural resources, or to conserve the place or setting of the land for its 'archaeological, architectural, artistic, cultural or historic interest'.

A.118 A Green Future: Our 25 Year Plan to Improve the Environment [See reference 293]: Sets out goals for improving the environment within the next 25 years. It details how the Government will work with communities and businesses to leave the environment in a better state than it is presently. Identifies six key areas around which action will be focused. Those of relevance to this chapter are 'recovering nature' and 'enhancing the beauty of landscapes'. Actions that will be taken as part of this key area are as follows:

- Working with AONB authorities to deliver environmental enhancements; and
- Identifying opportunities for environmental enhancement of all England's Natural Character Areas, and monitoring indicators of landscape character and quality.

A.119 Countryside and **Rights of Way Act 2010 [See reference 294]:** An Act of Parliament to make new provision for public access to the countryside.

A.120 National Parks and Access to the Countryside Act 1949 [See reference 295]: An Act of Parliament to make provision for National Parks and the establishment of a National Parks Commission; to confer on the Nature Conservancy and local authorities' powers for the establishment and maintenance of nature reserves; to make further provision for the recording, creation, maintenance and improvement of public paths and for securing access to open country.

Sub-national

A.121 While not a plan or policy, the **Essex Design Guide [See reference 296]** provides a reference to help create high quality places with an identity specific to its Essex context. The Design Guide covers a number of aspects of environmental and socio-economic considerations and therefore relates to a number of sustainability topics, including landscape.

Implications of the policy review for the Local Plan and IIA: In order to align with other relevant policy documents, the Local Plan should seek to:

- Protect and enhance designated and valued landscapes;
- Protect and enhance the quality and distinctiveness of natural landscapes and townscapes;
- Promote high quality design that respects and enhances local character; and
- Ensure tourism is compatible with protection of biodiversity, landscapes and townscapes.

The IIA is able to respond to this through the inclusion of IIA objectives relating to the character of landscapes and townscapes and green infrastructure.

Biodiversity

International

A.122 United Nations Declaration on Forests and Land Use (COP26 Declaration) (2021) **[See reference 297]**: international commitment to halt and reverse forest loss and land degradation by 2030 while delivering sustainable development and promoting an inclusive rural transformation.

A.123 International Convention on Biological Diversity (1992) **[See reference 298]**: International commitment to biodiversity conservation through national strategies and action plans.

A.124 European Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) (1979) **[See reference 299]**: Aims to ensure conservation and protection of wild plant and animal species and their natural habitats, to increase cooperation between contracting parties, and to regulate the exploitation of those species (including migratory species).

A.125 International Convention on Wetlands (Ramsar Convention) (1976) **[See reference 300]**: International agreement with the aim of conserving and managing the use of wetlands and their resources.

National

A.126 The NPPF is supported by **Planning Practice Guidance** relating to:

- **Natural environment** (2019) **[See reference 301]** – Highlights key issues in implementing policy to protect and enhance the natural environment, agricultural land, soils and brownfield land of environmental value, green infrastructure, biodiversity, geodiversity, ecosystems and landscapes.

A.127 The **Environment Act 2021** **[See reference 302]** sets statutory targets for the recovery of the natural world in four priority areas: air quality, biodiversity, water, and resource efficiency and waste reduction. Biodiversity elements in the Act include:

- Strengthened biodiversity duty. Both onsite and offsite enhancements must be maintained for at least 30 years after completion of a development;
- Biodiversity net gain to ensure developments deliver at least 10% increase in biodiversity;
- Local Nature Recovery Strategies to support a Nature Recovery Network;
- Duty upon Local Authorities to consult on street tree felling;
- Strengthen woodland protection enforcement measures;
- Conservation Covenants;
- Protected Site Strategies and Species Conservation Strategies to support the design and delivery of strategic approaches to deliver better outcomes for nature;
- Prohibit larger UK businesses from using commodities associated with wide-scale deforestation; and
- Requires regulated businesses to establish a system of due diligence for each regulated commodity used in their supply chain, requires regulated businesses to report on their due diligence, introduces a due diligence enforcement system.

A.128 A Green Future: Our 25 Year Plan to Improve the Environment **[See reference 303]**: Sets out goals for improving the environment within the next 25 years. It details how the Government will work with communities and businesses to leave the environment in a better state than it is presently. Identifies six key areas around which action will be focused. Those of relevance to this chapter are recovering nature and enhancing the beauty of landscapes; securing clean, productive and biologically diverse seas and oceans; and protecting and improving our global environment. Actions that will be taken as part of these three key areas are as follows:

- Recovering nature and enhancing the beauty of landscapes:
  - Develop a Nature Recovery Network to protect and restore wildlife and provide opportunities to re-introduce species that have been lost from the countryside.
- Securing clean, healthy, productive and biologically diverse seas and oceans:
  - Achieve a good environmental status of the UK's seas while allowing marine industries to thrive and complete our economically coherent network of well-managed marine protected areas.
- Protecting and improving our global environment:
  - Provide international leadership and lead by example in tackling climate change and protecting and improving international biodiversity.
  - Support and protect international forests and sustainable agriculture.

A.129 The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 **[See reference 304]** protect biodiversity through the conservation of natural habitats and species of wild fauna and flora, including birds. The Regulations lay down rules for the protection, management and exploitation of such habitats and species, including how adverse effects on such habitats and species should be avoided, minimised and reported.

A.130 Biodiversity Offsetting in England Green Paper [See reference 305]: Biodiversity offsets are conservation activities designed to compensate for residual losses. The Green Paper sets out a framework for offsetting.

A.131 England Biodiversity Strategy Climate Change Adaptation Principles (2008) **[See reference 306]**: sets out principles to guide adaptation to climate change. The principles are to take practical action now; maintain and increase ecological resilience; accommodate change; integrate action across all sectors; and develop knowledge and plan strategically. The precautionary principle underpins all of these.

A.132 Natural Environment and Rural Communities Act 2006 **[See reference 307]**: Places a duty on public bodies to conserve biodiversity.

A.133 Green Infrastructure Framework and associated **15 GI Principles** (2023) **[See reference** 308**]**: The '15 minute neighbourhood' concept is encouraged as part of the new GI standards. Development should be designed to meet the 15 Green Infrastructure Principles. The GI Standards can be used to inform the quality, quantity and type of green infrastructure to be provided.

Sub-national

A.134 South Essex Green and Blue Infrastructure Strategy: Resilient by Nature [See reference 309**]**: This strategy sets out a vision for and integrated green and blue infrastructure (GBI) network across South Essex and sets out key objectives and projects to achieve this. This includes improving connectivity within and across the landscape through active travel links such as walking and cycling.

A.135 Green Essex Strategy [See reference 310**]**: This Strategy seeks to enhance, protect and create an inclusive and integrated network of high-quality green infrastructure in Greater Essex, to create a county-wide understanding of green infrastructure – its functions and values, and to identify opportunities for implementing green infrastructure. The Strategy promotes the use of the green infrastructure network for sustainable and active modes of transport such as walking and cycling.

A.136 Essex Coast Recreational disturbance Avoidance and Mitigation Strategy (RAMS) 2018-2038 [See reference 311**]** This Strategy aims to deliver the mitigation necessary to avoid significant adverse effects from 'in-combination' impacts of residential development that is anticipated across Essex; thus protecting the European sites on the Essex coast, including the Thames Estuary and Marshes Ramsar site and Special Protection Area, from adverse effects on site integrity. This includes a detailed programme of strategic mitigation measures which are to be funded by developer contributions from all

new residential developments within the zone of influence. The **Essex Coast RAMS Supplementary Planning Document** **[See reference** 312**]** prepared in 2020 accompanies the strategic approach to mitigation set out in the RAMS 2018-2038.

Implications of the policy review for the Local Plan and IIA: In order to align with other relevant policy documents, the Local Plan should seek to manage, protect and enhance ecological features and biodiversity and encourage habitat restoration or creation. The Local Plan should also seek to ensure that environmental pollution is minimised in order to protect land, water and air quality.

The IIA is able to respond to this through the inclusion of IIA objectives relating to the protection and enhancement of biodiversity, air pollution, water quality and contaminated land.

Air, land and water quality

National

A.137 The NPPF is supported by **Planning Practice Guidance** relating to:

- **Air quality** (2019) **[See reference 313]** – Provides guidance on air quality considerations planning needs to consider.
- **Effective use of land** (2019) **[See reference 314]** – Provides guidance on making effective use of land, including planning for higher density development.
- **Green Belt** (2019) **[See reference 315]** – Provides advice on the role of the Green Belt in the planning system, removal of land from the Green Belt and compensatory improvements.

- **Land affected by contamination** (2019) **[See reference 316]** – Outlines guiding principles on how planning can deal with land affected by contamination.
- **Land stability** (2019) **[See reference 317]** – Sets out advice on how to ensure that development is suitable to its ground condition and how to avoid risks caused by unstable land or subsidence.
- **Natural environment** (2019) **[See reference 318]** – Highlights key issues in implementing policy to protect and enhance the natural environment, agricultural land, soils and brownfield land of environmental value, green infrastructure, biodiversity, geodiversity, ecosystems and landscapes.
- **Water supply, wastewater and water quality** (2019) **[See reference 319]** – Advises on how planning can ensure water quality and the delivery of adequate water and wastewater infrastructure.
- **Brownfield land registers** (2017) **[See reference 320]** – Provides guidance on the purpose, preparation, publication and reviewing of brownfield land registers.
- **Minerals** (2014) **[See reference 321]** – Outlines guidance for planning for mineral extraction in the plan-making and application process.

A.138 The **Environment Act 2021** **[See reference 322]** sets statutory targets for the recovery of the natural world in four priority areas: air quality, biodiversity, water, and resource efficiency and waste reduction. It also establishes the Office for Environmental Protection which will act as an impartial and objective body for the protection and improvement of the environment. The Act sets out legislation which covers:

- Resource efficiency, producer responsibility, and the management, enforcement and regulation of waste;
- Local air quality management frameworks and the recall of motor vehicles etc; and
- Plans and proposals for water resources, drainage and sewerage management, storm overflows, water quality and land drainage.

A.139 The Waste (Circular Economy) (Amendment) Regulations [See reference 323] seek to prevent waste generation and to monitor and assess the implementation of measures included in waste prevention programmes. They set out requirements to justify not separating waste streams close to source for re-use, recycling or other recovery operations, prohibit incineration and landfilling of waste unless such treatment process represent the best environmental outcome in accordance with the waste hierarchy. The Regulations set out when waste management plans and in waste prevention programmes are required. The Regulations focus on the circular economy as a means for businesses to maximise the value of waste and waste treatment.

A.140 Clean Air Strategy 2019 [See reference 324]: The strategy sets out the comprehensive action that is required from across all parts of Government and society to meet these goals. This will be underpinned by new England-wide powers to control major sources of air pollution, in line with the risk they pose to public health and the environment, plus new local powers to take action in areas with an air pollution problem. These will support the creation of Clean Air Zones to lower emissions from all sources of air pollution, backed up with clear enforcement mechanisms. The UK has set stringent targets to cut emissions by 2020 and 2030.

A.141 A Green Future: Our 25 Year Plan to Improve the Environment [See reference 325]: Sets out goals for improving the environment within the next 25 years. It details how the Government will work with communities and businesses to leave the environment in a better state than it is presently. Identifies six key areas around which action will be focused. Those of relevance to this chapter are:

- Using and managing land sustainably:
  - a) Embed a ‘net environmental gain’ principle for development, including natural capital benefits to improved and water quality.
  - b) Protect best agricultural land.
  - c) Improve soil health and restore and protect peatlands.
- Recovering nature and enhancing the beauty of landscapes:

    - d) Respect nature by using our water more sustainably.
- Increasing resource efficiency and reducing pollution and waste:
    - e) Reduce pollution by tackling air pollution in our Clean Air Strategy and reduce the impact of chemicals.

A.142 The **Environmental Noise Regulations** (2018) **[See reference 326]** apply to environmental noise, mainly from transport. The regulations require regular noise mapping and action planning for road, rail and aviation noise and noise in large urban areas. They also require Noise Action Plans based on the maps for road and rail noise and noise in large urban areas. The Action Plans identify Important Areas (areas exposed to the highest levels of noise) and suggest ways the relevant authorities can reduce these. Major airports and those which affect large urban areas are also required to produce and publish their own Noise Action Plans separately. The Regulations do not apply to noise from domestic activities such as noise created by neighbours; at workplaces; inside means of transport; or military activities in military areas.

A.143 The Road to Zero (2018) **[See reference 327]**: Sets out new measures towards cleaner road transport, aiming to put the UK at the forefront of the design and manufacturing of zero emission vehicles. It explains how cleaner air, a better environment, zero emission vehicles and a strong, clean economy will be achieved. One of the main aims of the document is for all new cars and vans to be effectively zero emission by 2040.

A.144 Our Waste, Our Resources: A strategy for England (2018) **[See reference 328]** aims to increase resource productivity and eliminate avoidable waste by 2050. The Strategy sets out key targets which include: a 50% recycling rate for household waste by 2020, a 75% recycling rate for packaging by 2030, 65% recycling rate for municipal solid waste by 2035 and municipal waste to landfill 10% or less by 2035.

A.145 The **Water Environment Regulations** **[See reference 329]** protect inland surface waters, transitional waters, coastal waters and groundwater, and outlines the associated river basin management process. These Regulations

establish the need to prevent deterioration of waterbodies and to protect, enhance and restore waterbodies with the aim of achieving good ecological and chemical status.

A.146 The **UK Plan for Tackling Roadside Nitrogen Dioxide Concentrations** **[See reference 330]**: Sets out the Government's ambition and actions for delivering a better environment and cleaner air, including £1 billion investment in ultra-low emission vehicles, a £290 million National Productivity Investment Fund, a £11 million Air Quality Grant Fund and £255 million Implementation Fund to help Local Authorities to prepare Air Quality Action Plans and improve air quality, an £89 million Green Bus Fund, £1.2 billion Cycling and Walking Investment Strategy and £100 million to help improve air quality on the National road network.

A.147 The **Nitrate Pollution Prevention Regulations** **[See reference 331]** provides for the designation of land as nitrate vulnerable zones and imposes annual limits on the amount of nitrogen from organic manure that may be applied or spread in a holding in a nitrate vulnerable zone. The Regulations also specify the amount of nitrogen to be spread on a crop and how, where and when to spread nitrogen fertiliser, and how it should be stored. It also establishes closed periods during which the spreading of nitrogen fertiliser is prohibited.

A.148 The **Water Supply (Water Quality) Regulations** **[See reference 332]** focus on the quality of water for drinking, washing, cooking and food preparation, and for food production. Their purpose is to protect human health from the adverse effects of any contamination of water intended for human consumption by ensuring it is wholesome and clean.

A.149 The **Environmental Permitting Regulations** **[See reference 333]** streamline the legislative system for industrial and waste installations into a single permitting structure for those activities which have the potential to cause harm to human health or the environment. They set out how to prevent or, where that is not practicable, to reduce emissions into air, water and land and to

prevent the generation of waste, in order to achieve a high level of protection of the environment and human health.

A.150 The **Air Quality Standards Regulations** **[See reference 334]** set out limits on concentrations of outdoor air pollutants that impact public health, most notably particulate matter (PM_{10} and $PM_{2.5}$) and nitrogen dioxide (NO_2). It also sets out the procedure and requirements for the designation of Air Quality Management Areas (AQMAs).

A.151 National Planning Policy for Waste (NPPW) (2014) **[See reference 335]**: Key planning objectives are identified within the NPPW, requiring planning Authorities to:

- Help deliver sustainable development through driving waste management up the waste hierarchy;
- Ensure waste management is considered alongside other spatial planning concerns;
- Provide a framework in which communities take more responsibility for their own waste;
- Help secure the recovery or disposal of waste without endangering human health and without harming the environment; and
- Ensure the design and layout of new development supports sustainable waste management.

A.152 Water White Paper (2012) **[See reference 336]**: Sets out the Government's vision for the water sector including proposals on protecting water resources and reforming the water supply industry. It states outlines the measures that will be taken to tackle issues such as poorly performing ecosystem, and the combined impacts of climate change and population growth on stressed water resources.

A.153 National Policy Statement for Waste Water (2012) **[See** reference **337]**: sets out Government policy for the provision of major waste water infrastructure. The policy set out in this NPS is, for the most part, intended to

make existing policy and practice in consenting nationally significant waste water infrastructure clearer and more transparent.

A.154 Building Regulations (2010) **[See reference 338]**: requires that reasonable precautions are taken to avoid risks to health and safety cause by contaminants in ground to be covered by building and associated ground.

A.155 Safeguarding our Soils – A Strategy for England (2009) **[See** reference **339]**: Sets out how England's soils will be managed sustainably. It highlights those areas which Defra will prioritise and focus attention on tackling degradation threats, including better protection for agricultural soils; protecting and enhancing stores of soil carbon; building the resilience of soils to a changing climate; preventing soil pollution; effective soil protection during construction and dealing with contaminated land.

A.156 Future Water: The Government's Water Strategy for England (2008) **[See reference 340]**: Sets out how the Government wants the water sector to look by 2030, providing an outline of steps which need to be taken to get there. These steps include improving the supply of water; agreeing on important new infrastructure such as reservoirs; proposals to time limit abstraction licences; and reducing leakage. The document also states that pollution to rivers will be tackled, while discharge from sewers will be reduced.

A.157 The **Air Quality Strategy for England, Scotland, Wales and Northern Ireland** (2007) **[See reference 341]**: Sets out a way forward for work and planning on air quality issues by setting out the air quality standards and objectives to be achieved. It introduces a new policy framework for tackling fine particles and identifies potential new national policy measures which modelling indicates could give further health benefits and move closer towards meeting the Strategy's objectives. The objectives of the Strategy are to:

- Further improve air quality in the UK from today and long term; and
- Provide benefits to health quality of life and the environment.

A.158 The **Urban Waste Water** Treatment **Regulations** (2003) **[See reference 342]** protect the environment from the adverse effects of urban waste water discharges and certain industrial sectors, notably domestic and industrial waste water. The regulations require the collection of waste water and specifies how different types of waste water should be treated, disposed and reused.

Sub-national

A.159 Essex Minerals Local Plan [See reference 343**]**: The Plan provides a policy framework for all parties involved in future minerals and minerals related development as it provides a picture of how Essex County Council see minerals development in the County taking place up to 2029, the steps needed to make this happen and the measures necessary to assess progress on the way

A.160 Essex and Southend Waste Local Plan (2017) **[See reference** 344**]**: The plan sets out how Essex and Southend-on-Sea aim to manage waste for its duration. It also seeks to deal with waste more sustainably, encouraging recycling and reducing reliance on landfill. Waste planning in Thurrock is guided by the relevant policies in the adopted Core Strategy and Policies for Management of Development.

A.161 Joint Municipal Waste Management Strategy for Essex (2007 to 2032) **[See reference** 345**]**: This Joint Municipal Waste Management Strategy (JMWMS) has been developed by the thirteen waste authorities of Essex, comprising Essex County Council, as the Waste Disposal Authority (WDA), and the twelve District and Borough Councils, as the Waste Collection Authorities (WCAs), in Essex. The strategy sets out key targets and objectives for the Essex Waste Partnership, including to reduce the amount of waste produced and to achieve high levels of recycling.

A.162 Air Quality Management Plan – A127 (2018) **[See reference** 346**]**: As a result of high volumes of traffic and congestion, three locations along the A127 route in Basildon Borough and Rochford District have been identified by the Department for the Environment, Food and Rural Affairs (Defra) Pollution

Climate Mapping (PCM) model as likely exceeding EU air quality thresholds for Nitrogen Oxide (NO_2). Due to increasing evidence that air quality has an important effect on public health, the economy, and the environment, this Strategic Outline Case (SOC) supports the proposed Air Quality Management Plan (AQMP) for the A127 route in Basildon and Rochford. The strategy seeks to deliver a scheme that leads to likely compliance with the annual mean NO_2 concentration Limit Value on the PCM network.

Implications of the policy review for the Local Plan and IIA: In order to align with other relevant policy documents, the Local Plan should seek to minimise the contamination of land, water and air, and to ensure the effective management of waste and water and the efficient extraction of minerals.

The IIA Is able to respond to this through the inclusion of IIA objectives relating to air pollution, water quality, land contamination, waste management, and the efficient use of land.

Appendix B

Consultation comments

B.1 This Appendix sets out the consultation comments received in relation to consultation on the previous stages of IIA, namely the IIA Scoping Report (February 2023).

B.2 The bullet points below set out the comment received and the sub-bullet points set out how the comment has been addressed within the IIA, or if no action has been taken, why not.

SA Scoping Report (February 2023)

Environment Agency

- TE2100 Policy for this area currently is ‘to continue with existing or alternative actions to manage flood risk. We will continue to maintain flood defences at their current level accepting that the likelihood and/or consequences of a flood will increase because of climate change’. This means that whilst the area may be defended now, this standard of protection may reduce over time and any future planning decisions will need to consider the long-term sustainability of development within this area, which may see an increase in flood risk in the future.
    - Reference to the fact that defences at this location could be overtopped in the future if defences are not raised in line with climate change has been added to Chapter 4
- The Council should be mindful that the PPG states that if ‘proposed development cannot be made safe throughout its lifetime without increasing flood risk elsewhere, it should not be permitted’ and that avoidance of flood risk areas should be the primary consideration. It may therefore be prudent to expand this section to reiterate the government

recommendations to avoid flood risk areas before considering minimising or mitigating risks.

- Reference to planning practice guidance has been added to Chapter 4.

- Paragraph 052 of the PPG: Development and Flood Risk states that 'the local planning authority may have a Local Plan policy on what changes of use will be acceptable in areas at risk of flooding'. In areas of the District already developed, there are often pressures to regenerate with alternative uses to those originally permitted. This can lead to applications for higher vulnerability uses than those originally considered appropriate and the local plan should provide a clear steer on how new or regenerated development can meet longer term sustainability objectives in flood risk terms.

  - Reference to planning practice guidance has been added to Chapter 4.

- We recommend that the Local Plan makes it clear to developers that an assessment of the risk of overtopping will need to accompany and planning applications, which have already passed the sequential test, to enable the exception test to be considered. This should be applied for both tidal and fluvial risks across the district.

  - Relayed to the Council for consideration in the plan-making process.

- It should be noted that the SFRA was last updated in 2018 and climate change allowances and planning advice has been updated since then. The local plan should be mindful the flood extents may have increased since the publication of the SFRA, as climate change allowances have been revised. It should also be noted that the advice within the PPG is that the extent for functional floodplain should generally be based upon the 1 in 30 year annual probability flood (3.3%), which would be a deviation from the advice within the SFRA, which refers to the 1 in 20 year annual probability flood. It is for local planning authorities to define the extent of functional floodplain, and this is something that should be given further consideration within the plan, so that the intent of the Council is understood for any development within the areas, being mindful of the current planning advice within table 2 of the PPG: Development and Flood Risk on flood zone 'incompatibility'.

  - Relayed to the Council for consideration in the plan-making process.
- There should be a stronger emphasis on the need for developers to provide Biodiversity net gain.
  - Further emphasis added on the importance of biodiversity net gain to in Chapter 5.

Historic England

- Paragraphs 199 and 200 of the NPPF make it clear that great weight should be given to the conservation of heritage assets, and that any harm to, or loss of, the significance of a designated heritage assets should require clear and convincing justification. However, we often see IIA's concluding 'uncertain effects' in relation to potential site allocations because there isn't sufficient information to understand what impact development would have on the significance of nearby heritage assets. Our Advice Note 3 'The Historic Environment and Site Allocations in Local Plans' (HEAN 3) sets out a suggested approach to assessing sites and their impact on heritage assets. We recommend that this methodology is applied to the assessment and selecting of sites within the Basildon Borough Local Plan, and therefore request that HEAN3 be added to the review of relevant plans, policies and programmes in the report.
  - The advice note will be reviewed to inform the development of appropriate historic environment site assessment criteria.

Natural England

- We query the limit of 5km for the identification of international sites which may be affected by the Local Plan and refer you to Essex Coast Recreational disturbance Avoidance and Mitigation Strategy (RAMS) which has identified Zones of Influence (ZoIs) for coastal internationally designated sites.

  - Future distance buffers for the screening of effects on international sites reported in the IIA Report will be in line with those used in the Habitats Regulations Assessment Report.

- Regarding IIA objective 2 we are pleased to see reference to accessible, new, high quality, multifunctional open spaces, blue and green infrastructure (GI) etc... The '15 minute neighbourhood' concept is encouraged as part of the new GI standards. This seeks to ensure that everyone has access to good quality natural greenspace within 15 minutes walking distance from their homes, in line with the Accessible Natural Greenspace Standards and Green Flag Criteria.
  - Reference to the 15-minute neighbourhood concept has been added to Chapter 4.
- Regarding IIA objective 2 development should also be designed to meet the 15 Green Infrastructure Principles. The GI Standards can be used to inform the quality, quantity and type of green infrastructure to be provided.
  - Reference to Natural England's Green Infrastructure Framework and Principles has been added to Appendix A.
- Regarding IIA objective 7 please note that brownfield/previously developed land may have high biodiversity interest, particularly for invertebrates, and this should be taken account of by the Local Plan/development.
  - IIA objective 7 appraisal question updated to reference potential biodiversity value of brownfield land in Chapter 5.
- Regarding IIA objective 10 consideration should be given to going beyond the minimum 10% biodiversity net gain target.
  - IIA objective 7 appraisal question changed to above 10% biodiversity net gain in Chapter 5
- Regarding the future Habitats Regulations Assessment, Natural England recommend a strategic approach to mitigation along the Essex coast to enable the conclusion of 'no adverse effect on the integrity of the international designated sites' regarding in-combination recreational effects, namely Essex Coast RAMS. Much of Basildon borough falls within the overall ZoI, so new housing in this zone will be required to contribute

financially to Essex Coast RAMS. Other potential impact pathways arising from the local plan, such as changes to water quality and quantity and air quality at the designated sites will also need to be appraised.

  - This recommendation has been noted for the Habitats Regulations Assessment (HRA).

- Basildon is a relatively urbanised borough which is likely to give rise to recreational pressure on wildlife sites with public access, including SSSIs.

  - Reference to this risk has been added to Chapter 4.

- There may also be opportunities to improve the connectivity of wildlife sites and habitats as part of a Nature Recovery Network.

  - Reference to this opportunity has been added to IIA objective 7 appraisal question in Chapter 45.

References

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