

# Strategic Environmental Assessment for the Chetwynd: Toton and Chilwell Neighbourhood Development Plan

Environmental Report to accompany Regulation  
16 Consultation on the Neighbourhood  
Development Plan

Chetwynd: The Toton and Chilwell Neighbourhood Forum

September 2021

## Quality information

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| V4       | September 2021 | Final Report                     | Alastair Peattie | Associate Director       |

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# Non-Technical Summary

## What is strategic environmental assessment?

A strategic environmental assessment has been undertaken to inform the Chetwynd: Toton and Chilwell (CTTC) Neighbourhood Development Plan (NDP). This process is required by the SEA Regulations.

NDP groups use SEA to assess Neighbourhood Plans against a set of sustainability / environmental objectives developed in consultation with interested parties. The purpose of the assessment is to avoid adverse environmental and socio-economic effects through the NDP and identify opportunities to improve the environmental quality of the area covered by the NDP and the quality of life of residents.

## What is the CTTC NDP?

The CTTC NDP presents a plan for the Chetwynd, Toton and Chilwell area within the administrative area of Broxtowe Borough Council for the period of 2020 to 2040. Prepared to be in conformity with the Broxtowe Local Plan, it sets out a vision and a range of policies for the NDP area. These relate to a range of topics, including, but not limited to, housing, open space, recreation, accessibility and employment.

## Purpose of the Environmental Report

This Environmental Report, which accompanies the current consultation on the CTTC NDP, is the second document to be produced as part of the SEA process. The first document was the SEA Scoping Report (April 2021).

The purpose of the Environmental Report is to:

- Identify, describe and evaluate the likely significant effects of the CTTC NDP and alternatives; and
- Provide an opportunity for consultees to offer views on any aspect of the SEA process which has been carried out to date.

The Environmental Report contains:

- An outline of the contents and main objectives of the CTTC NDP and its relationship with other relevant policies, plans and programmes;
- Relevant aspects of the current and future state of the environment and key sustainability / environmental issues;
- The SEA Framework of objectives against which the CTTC NDP has been assessed;
- The appraisal of alternative approaches for the CTTC NDP;
- The likely significant environmental effects of the CTTC NDP;
- The measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects as a result of the CTTC NDP; and
- Potential monitoring measures.

## Scoping

The scoping stage involves the collection of information relating to:

- the state of the environment in the plan area; *and*
- relevant objectives and targets set out within plans, policies and programmes.

This information allowed for a range of key issues to be identified, and to establish what topics should be the focus of the SEA. The scoping process led to the following topics being scoped in or out of the SEA. These topics then formed the basis of an SEA Framework, which is the basis for appraising the NDP.

- Air Quality - **SCOPED OUT**
- Biodiversity - **SCOPED IN**
- Climatic factors (including Flood risk) - **SCOPED OUT**
- Historic Environment - **SCOPED IN**
- Landscape - **SCOPED IN**
- Waste - **SCOPED OUT**
- Minerals - **SCOPED OUT**
- Land, Soil and Water Resources - **SCOPED OUT**
- Population and Housing - **SCOPED IN**
- Health and Wellbeing - **SCOPED OUT**
- Travel and Transportation - **SCOPED IN**

## Assessment of alternative approaches for the CTTC NDP

A key element of the SEA process is the appraisal of 'reasonable alternatives' for the CTTC NDP.

The NDP does not seek to influence the overall scale of growth. The growth strategy is set out in the Broxtowe Local Plan, which identifies Chetwynd Barracks and the Toton Strategic location for Growth as key development opportunities. The principle of growth in these locations is established, and a substantial amount of new homes will be delivered both in the plan period and beyond. It is not considered necessary to look at additional or alternative site options in the NDP area. Likewise, in terms of the amount of growth involved, no alternatives have been identified.

The Broxtowe Local Plan sets out the need for a strategic masterplan to guide delivery at Chetwynd Barracks. The NDP seeks to influence the masterplanning process by setting out a series of guiding principles and policies. There are different ways in which the masterplan area could be configured, including how buildings are used, where new facilities are placed, infrastructure requirements and so on. The NDP sets out how the community would like to see the masterplan area configured and the type of development that would be supported. Though there may be choices to make with regards to these factors, it is considered that there are no strategic alternatives in relation to the delivery of the masterplan.

On this basis, it is considered that there are no reasonable alternatives in relation to the submission version of the CTTC NDP.

## Assessment of the current version of the CTTC NDP

The draft CTTC NDP has been assessed against each of the environmental objectives in the SEA Framework. In undertaking the assessment, each of the policies in the NDP has been considered individually and collectively. A summary of the findings is presented below.

| <i>Biodiversity</i>    | <i>Historic Environment</i> | <i>Landscape</i> | <i>Population and Housing</i> | <i>Travel and Transportation</i> |
|------------------------|-----------------------------|------------------|-------------------------------|----------------------------------|
| <b>Significant +ve</b> | <b>Positive</b>             | <b>Minor +ve</b> | <b>Minor +ve</b>              | <b>Minor +ve</b>                 |

The plan is broadly predicted to have positive effects, with significant positive effects predicted for Biodiversity, as the NDP policies set out detailed guidance to deliver a number of improvements which should collectively achieve a significant ecological enhancement to the local area compared to the established baseline set by the Local Plan.

## Mitigation

A number of recommendations have been identified to enhance the positive effects of the draft NDP and mitigate any negatives. These are summarised below:

- Policy ENV01 could be strengthened by designating the sites identified as candidate sites as Local Green Space. The policy could further be strengthened by clarifying how the plan making process will support the identification and designation of other green spaces, although this may be more appropriate to address in supporting text.
- Policy HAS02 could be strengthened by referencing and requiring development proposals to accord with a detailed mix of housing types and sizes supported by recent and neighbourhood area specific evidence. Flexibility could also be incorporated in the policy to ensure long-term sustainability by allowing variations to the housing mix where justified by more up-to-date evidence at the local scale.
- Policy LHC02 could be improved by designating the identified significant assets (listed in the supporting text and Appendix II) as local listed buildings and features. This should add an additional level of protection to these buildings. The policy could further be strengthened by setting out measures to require new development to preserve and where possible enhance the historic significance of these assets. A presumption in favour of their protection or requirement for substantial public benefit to offset any harm or loss of the heritage asset would be desirable.

## Monitoring

The SEA regulations require 'measures envisaged concerning monitoring' to be outlined in this report. This refers to the monitoring of likely significant effects of the NDP to identify any unforeseen effects early and take remedial action as appropriate.

It is anticipated that monitoring of effects of the NDP will be undertaken by Broxtowe Borough Council as part of the process of preparing its Annual Monitoring Report (AMR).

The SEA has not identified any potential for significant negative effects that would require closer review or monitoring.

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# 1. Introduction

## 1.1 Background

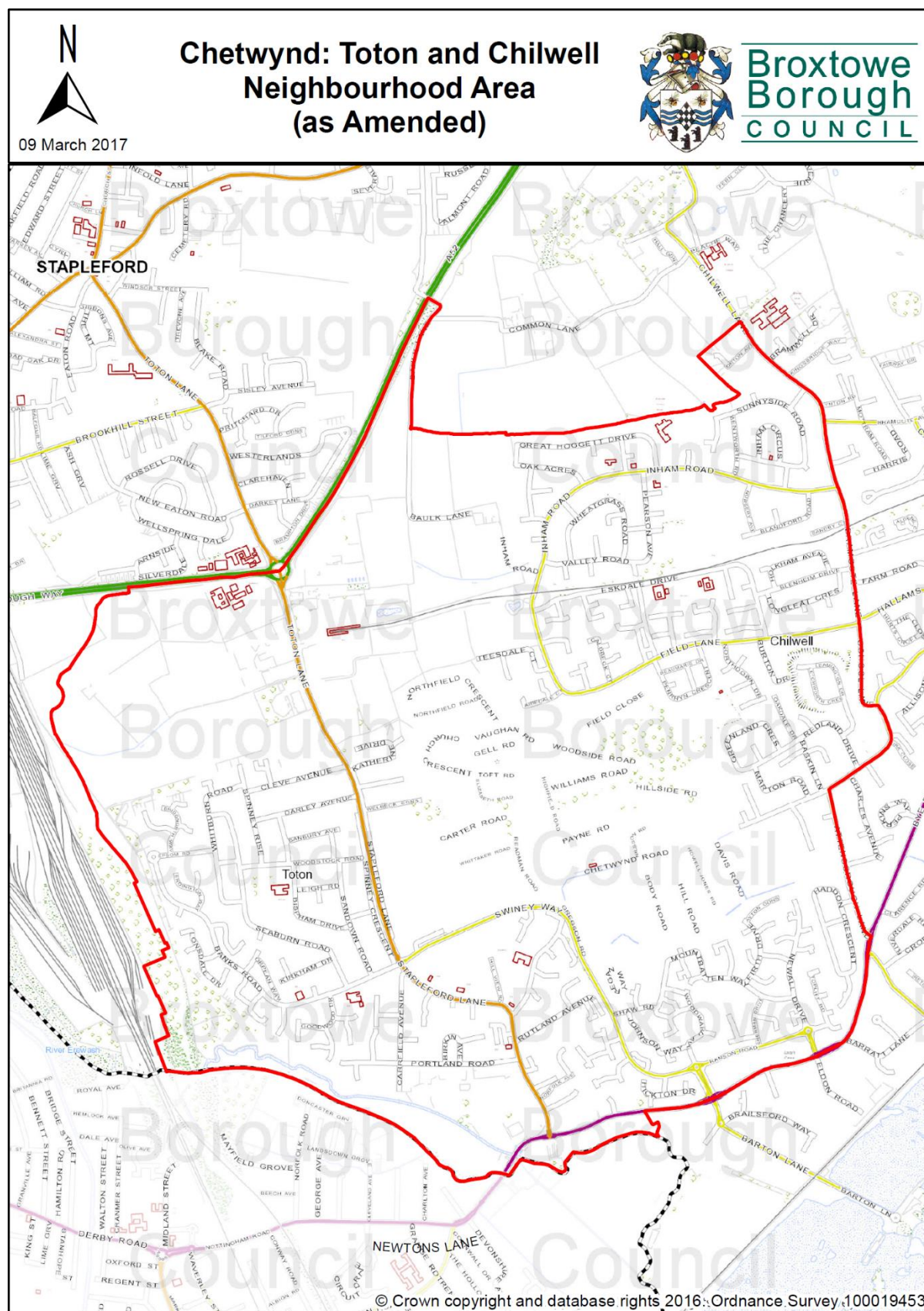
- 1.1.1. Chetwynd: The Toton and Chilwell Neighbourhood Forum is in the process of preparing a Neighbourhood Development Plan (NDP) for the sustainable future growth of the Toton and Chilwell area. AECOM has been commissioned to undertake a Strategic Environmental Assessment (SEA) in support of Chetwynd: The Toton and Chilwell (CTTC) NDP on behalf of the Neighbourhood Forum.
- 1.1.2. The CTTC NDP is being prepared under the Localism Act 2011 and the Neighbourhood Planning (General) Regulations 2012, and in the context of the adopted and emerging Local Plan for Broxtowe Borough. Relevant documents of the adopted Local Plan consist of the **Greater Nottingham Aligned Core Strategies Part 1 Local Plan**<sup>1</sup> (2014) and **Broxtowe Part 2 Local Plan**<sup>2</sup> (2019). The NDP will cover a period between 2020 to 2040.
- 1.1.3. The NDP will form part of the development plan for the Toton and Chilwell area in Broxtowe Borough, alongside the Local Plan. NDPs are required to be in general conformity with the strategic policies of the adopted Local Plan and can develop policies and proposals to address local place-based issues. In this way it is intended for the Local Plan to provide a clear overall strategic direction for development in Broxtowe Borough, whilst enabling finer detail to be determined through the Neighbourhood Planning process where appropriate.
- 1.1.4. The NDP area is illustrated in Figure 1.1 below.

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<sup>1</sup> Broxtowe Borough Council et al (2014) Greater Nottingham Aligned Core Strategies Part 1 Local Plan [online] available at: [www.broxtowe.gov.uk/media/2160/broxtowe-aligned-core-strategy.pdf](http://www.broxtowe.gov.uk/media/2160/broxtowe-aligned-core-strategy.pdf)

<sup>2</sup> Broxtowe Borough Council (2019) Broxtowe Part 2 Local Plan [online] available at: [www.broxtowe.gov.uk/media/7088/part-2-local-plan-adopted-october-2019.pdf](http://www.broxtowe.gov.uk/media/7088/part-2-local-plan-adopted-october-2019.pdf)

**Figure 1.1: The Chetwynd: The Toton and Chilwell NDP Area**



## 1.2 SEA explained

- 1.2.1. The CTTC NDP was 'screened-in' as requiring an SEA. The Screening Report prepared by Broxtowe Borough Council in February 2021 identifies potential for significant environmental effects to occur from the implementation of the NDP that have not been considered and dealt with by the Sustainability Appraisal of the Broxtowe Aligned Core Strategy or Part 2 Local Plan. Specifically, these environmental effects relate to additional development at and to the north of the Chetwynd Barracks site.
- 1.2.2. SEA is a mechanism for considering and communicating the likely significant effects of an emerging plan, and potential reasonable alternatives in terms of key environmental issues. The aim of SEA is to inform and influence the plan-making process with a view to avoiding and mitigating negative environmental effects and maximising positive effects. Through this approach, the SEA for the CTTC NDP seeks to maximise the emerging plan's contribution to sustainable development.
- 1.2.3. The SEA has been prepared in line with the procedures prescribed by the Environmental Assessment of Plans and Programmes Regulations 2004 (the SEA Regulations).
- 1.2.4. The SEA Regulations require that a report is published for consultation alongside the draft plan that 'identifies, describes and evaluates' the likely significant effects of implementing 'the plan, and reasonable alternatives'. The report must then be taken into account, alongside consultation responses, when finalising the plan.
- 1.2.5. In line with the SEA Regulations this Environmental Report must essentially answer four questions:
  - What is the scope of the SEA?
  - What has plan-making/SEA involved up to this point?
    - 'Reasonable alternatives' must have been appraised for the plan.
  - What are the appraisal findings at this stage?
    - i.e. in relation to the draft plan.
  - What happens next?
- 1.2.6. These questions are derived from Schedule 2 of the SEA Regulations, which present 'the information to be provided within the report'. **Table 1.1** presents the linkages between the regulatory requirements and the four SEA questions.

## 1.3 Structure of this Environmental Report

1.3.1. This document is the Environmental Report for the CTTC NDP and hence needs to answer all four of the questions listed above with a view to providing the information required by the SEA Regulations.

1.3.2. Each of the four questions is answered in turn within this report, as follows:

**Table 1.1: Questions that must be answered by the Environmental Report in order to meet regulatory<sup>3</sup> requirements**

| Environmental Report question                              | In line with the SEA Regulations, the report must include... <sup>4</sup>  |
|--|--|
| What is the plan seeking to achieve?                       | <ul style="list-style-type: none"> <li>An outline of the contents, main objectives of the plan and relationship with other relevant plans and programmes</li> </ul>  |
| What is the sustainability 'context'?                      | <ul style="list-style-type: none"> <li>The relevant environmental protection <b>objectives</b>, established at international or national level</li> <li>Any existing environmental <b>problems</b> which are relevant to the plan including those relating to any areas of a particular environmental importance</li> </ul>  |
| <b>What's the scope of the SEA?</b>                        | <ul style="list-style-type: none"> <li>The relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan</li> <li>The environmental characteristics of areas likely to be significantly affected</li> <li>Any existing environmental <b>problems</b> which are relevant to the plan including those relating to any areas of a particular environmental importance</li> </ul>                               |
| What are the key issues & objectives?                      | <ul style="list-style-type: none"> <li>Key <b>problems/issues</b> and <b>objectives</b> that should be a focus of (i.e. provide a 'framework' for) assessment</li> </ul>   |
| <b>What has plan making/SEA involved up to this point?</b> | <ul style="list-style-type: none"> <li>Outline reasons for selecting the <b>alternatives</b> dealt with (and thus an explanation of the 'reasonableness' of the approach)</li> <li>The likely significant effects associated with <b>alternatives</b></li> <li>Outline reasons for selecting the preferred approach in-light of <b>alternatives</b> appraisal/a description of how environmental objectives and considerations are reflected in the draft plan.</li> </ul> |

<sup>3</sup> Environmental Assessment of Plans and Programmes Regulations 2004

<sup>4</sup> NB this column does not quote directly from Schedule II of the Regulations. Rather, it reflects a degree of interpretation.

| Environmental Report question                           | In line with the SEA Regulations, the report must include... <sup>4</sup>   |
|---|---|
| What are the assessment findings at this current stage? | <ul style="list-style-type: none"> <li>The likely significant effects associated with <b>the draft plan</b></li> <li>The measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects of implementing <b>the draft plan</b></li> </ul> |
| What happens next?                                      | <ul style="list-style-type: none"> <li>The next steps for plan making/SEA process.</li> </ul>   |

## 1.4 Local Plan context for the CTTC NDP

- 1.4.1. The CTTC NDP area falls within the borough of Broxtowe. The adopted Local Plan relevant to the NDP area consists of the Greater Nottingham Aligned Core Strategies Local Plan Part 1 (2014)<sup>5</sup> and the Broxtowe Local Plan Part 2 (2019)<sup>6</sup>. The adopted Local Plan is for the period up to 2028 and the CTTC NDP has been prepared in the context of this plan. However, the NDP seeks to influence development for a 20-year period from 2020 to meet local aspirations to influence the long-term growth of the area, and therefore plans growth to 2040.
- 1.4.2. The adopted Local Plan proposes substantial growth in the NDP area to address wider housing and employment needs and maximise opportunities from the proposed HS2 station at Toton. The proposed growth includes two strategic growth sites at Toton and Chetwynd Barracks. The site at Toton is proposed to accommodate between 500 and 800 homes during the Local Plan period, with an overall capacity of around 3,000 homes. This site is also proposed to accommodate 18,000 square metres of mixed employment space. Part of this site to the west falls outside the NDP area. The Chetwynd Barracks site is proposed to accommodate 500 homes during the plan period, with an overall capacity for 1,500 homes. The site is also proposed to accommodate employment uses, a small retail/service centre, primary school and medical centre.

<sup>5</sup> Broxtowe Borough, Gedling Borough and Nottingham City (2014) Greater Nottingham Aligned Core Strategies Local Plan Part 1. Adopted September 2014.

<sup>6</sup> Broxtowe Borough (2019) Broxtowe Local Plan Part 2 2018-2028. Adopted October 2019.



## 1.5 Vision for the Chetwynd: The Toton and Chilwell NDP

1.5.1. The vision statement for the CTTC NDP, which was developed during earlier stages of plan development, is as follows:

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“ Protect and enhance the wellbeing of people who live and work in our Area. To innovate and adopt strategies that promote a sustainable, diverse place which is attractive for people to live and work.

Deliver a community focused Plan that sets new standards in Britain for a sustainable ‘sense of place’ and innovative commerce.

Provide the framework to encourage world class development of regional significance in response to the unique opportunities presented by East Midlands Hub Station, the Chetwynd ‘Garden Village’, and the Innovation Campus. ”

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Chetwynd: Toton and Chilwell NDP vision statement

1.5.2. To support the Neighbourhood Development Plan’s vision statement, the CTTC NDP sets out a number of objectives, as follows:

### Environment

- Protect and improve existing green space to enhance the quality of life and wellbeing of the residents and enrich the biodiversity of the Area.
- Create new multifunctional blue/green infrastructure to establish good linkage between larger areas of green space.
- Protect, enhance and create wildlife habitats with particular emphasis on veteran and ancient trees.

### Infrastructure/ Getting Around

- Improve traffic management in order to ease congestion and handle future growth from within the Area and from adjacent areas.
- New developments must provide safe pedestrian and cycle access to, from, within and throughout the Area.
- Promote schemes to help reduce congestion on local roads and add flexibility to transport options.

### Housing and Sustainability

- Provide a range of affordable/low cost housing across all tenures.
- Appropriately sized homes needed across the range of all tenures but especially for first time buyers and ‘last time’ buyers/retirement living.
- Encourage innovative, energy efficient, sustainable and well-connected homes.

## Urban Design

- Build on the current suburban character to encourage new families to live and work in the Neighbourhood Area.
- New garden village areas to introduce smart design [I] principles and leading-edge technologies.
- The Innovation Campus to be a mix of commercial and residential development and aim to have a 'small city' appearance.
- Small scale, infill developments within the existing residential area to reflect existing architecture and design.

## Leisure, Heritage and Community

- Provide new neighbourhood retail centre(s) designed to become focal points for the community.
- Respect the heritage of the Barracks (and wider area) by creating a 'heritage trail'.
- Ensure there are adequate facilities such as schools/nurseries, medical facilities, sports facilities (including a potential off-road 'Park Run' option), green spaces and allotments.

## Employment and Business

- Design new mixed business zones that encourage people to work and live 'on site'.
- Encourage leading-edge companies that focus on smart building technologies into the area.
- Create neighbourhood-scale shopping area(s) in the Area - especially in the Barracks, ideally with small-scale traders, to generate a 'village' feel.

## 2. The Scope of the SEA

### 2.1 SEA Scoping Report

2.1.1. The SEA Regulations require that: “*When deciding on the scope and level of detail of the information that must be included in the report, the responsible authority shall consult the consultation bodies*”. In England, the consultation bodies are Natural England, the Environment Agency and Historic England.<sup>7</sup> These authorities were consulted on the scope of the CTTC NDP SEA for a 5 week period from 20<sup>th</sup> April 2021.

2.1.2. The purpose of scoping was to outline the key issues that the SEA should focus on through setting out:

- A context review of the key environmental and sustainability objectives of national, regional and local plans and strategies relevant to the NDP;
- Baseline data against which the NDP can be assessed;
- The key sustainability / environmental issues for the NDP; and
- An ‘SEA Framework’ of objectives against which the NDP can be assessed.

2.1.3. Natural England and Historic England provided a response to the Scoping Report. The comments made and how they have been considered and addressed, are presented in **Table 2.1** below.

**Table 2.1: Consultation responses received on the SEA Scoping Report**

| Statutory Consultees | How the response was considered and addressed   |
|----------------------|---|
| Environment Agency   | No response received.   |
| Historic England     | <p>Historic England advised that they have no comments regarding the scope of the report. Historic England have recommended that we engage with the local planning authority planning and conservation team and the county council archaeological advisory service who look after the Historic Environment Record.</p> <p>This response been considered in the appraisal and a copy of the Historic Environment Record has been obtained and considered in the appraisal.</p> |
| Natural England      | <p>Natural England advised that they welcome the scoping report and consider the methodology, policy context, and baseline information used to inform the report to appear to meet the requirements of the SEA Directive (2001/42/EC) and associated guidance.</p> <p>This has been noted.</p>  |

<sup>7</sup> In-line with Article 6(3).of the SEA Directive, these consultation bodies were selected because ‘*by reason of their specific environmental responsibilities,[they] are likely to be concerned by the environmental effects of implementing plans and programme*’.



## 2.2 Key sustainability / environmental issues

- 2.2.1. The full Scoping Report is attached as Appendix A to this report. This section sets out a summary of the key issues that were identified through scoping.
- 2.2.2. Drawing on the review of the policy context and baseline information, the SEA Scoping Report was able to identify a range of sustainability / environmental issues that should be a particular focus of SEA.
- 2.2.3. The selected environmental themes incorporate the 'SEA topics' suggested by Annex I(f) of the SEA Directive<sup>8</sup>. These were refined to reflect a broad understanding of the anticipated scope of plan effects (drawing from the screening opinion and local knowledge).
- 2.2.4. The scoping process allowed for some sustainability topics to be 'scoped out'; as it was considered the Plan is unlikely to have significant effects on certain factors. Environment Agency, Natural England and Historic England have not raised any concerns in regards the scoping out of any sustainability topics.
- 2.2.5. The following environmental themes present the sustainability / environmental issues identified at the scoping stage with their scoping outcome:

### Air quality

- There are no Air Quality Management Areas within the NDP area. Air quality in the NDP area is generally good and improving, with no significant issues identified.
- Traffic and congestion from pre-planned growth in the area have the potential to increase emissions and deteriorate air quality in the NDP area.
- Environment Agency have not raised any concerns on the scoping out of this objective.

### SCOPED OUT

### Biodiversity

- The Attenborough Gravel Pits SSSI is in close proximity to the NDP area. The NDP area also includes a natural ecologically-rich corridor consisting of a LNR and LWS between Toton and Toton Sidings and a LWS in Chilwell.
- There are no NNR, SACs, SPAs, pSPAs or Ramsar sites within or in the vicinity of the NDP area.
- The NDP area contains Priority Habitat areas of Deciduous Woodland, Broadleaved Woodland and Good quality semi-improved grassland.

### SCOPED IN

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<sup>8</sup> The SEA Directive is 'of a procedural nature' (para 9 of the Directive preamble) and does not set out to prescribe particular issues that should and should not be a focus, beyond requiring a focus on '*the environment, including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors*' [our emphasis]

## Climate Change (including Flood risk)

- Average CO2 emissions per capita are declining in Broxtowe borough.
- The NDP area falls predominantly within Flood Zone 1, although there is an area of Flood Zone 2 and 3 that accords with water courses and bodies along the southern boundary of the Plan area.
- Development could exacerbate climate change and flooding from fluvial and non-fluvial sources. However, there are opportunities for mitigation.
- Statutory consultees have not raised any concerns on the scoping out of this objective.

### SCOPED OUT

## Historic Environment

- The NDP area contains a Grade II Listing Building, part of a conservation area and numerous locally identified buildings and features, which could be affected by policies and proposals within the plan (either positively or negatively).
- An insensitive approach that does not seek to conserve and enhance heritage assets could result in the erosion of the townscape quality.

### SCOPED IN

## Landscape

- The NDP area is predominantly urbanised with gently rolling open countryside in the north and north west and a steep slope to the west to Toton Sidings.
- Local Plan site allocations in the NDP area could result in harm or the loss of important landscape features.
- Existing Development Plan policies offer a degree of protection to landscape assets and their settings but insensitive development could have a disruptive impact on landscape.

### SCOPED IN

## Waste

- A range of kerbside waste and recycling services are provided by the Council. The Plan is unable to influence issues in relation to waste to a significant extent. Key issues relating to waste will be to ensure adequate access for waste collection, and storage that does not affect the street scene.
- The statutory consultees have not raised any concerns on the scoping out of this objective.

### SCOPED OUT

## Minerals

- The NDP area does not fall within a Minerals Safeguarding Area or Consultation Areas. Therefore, the plan does not pose any sterilisation risk to mineral resources and it is unlikely that any resources can be recovered.
- The statutory consultees have not raised any concerns on the scoping out of this objective.

## SCOPED OUT

## Land, Soil and Water Resources

- The NDP area is mostly urbanised but includes sizable areas of Grade 2 and Grade 3 agricultural land.
- River Erewash flows to the south and west of the NDP area and intersects the area along the south west boundary.
- The NDP area falls within the River Erewash from Gilt Brook to River Trent NVZ; River Trent from River Soar to Carlton-on-Trent NVZ; and Attenborough NNR Eutrophic lake NVZ.
- Development planned in the NDP area would result in loss of soil resources and could adversely affect water quality. However, the NDP is unlikely to significantly change the quantum or quality of soil resources or water quality.
- The statutory consultees have not raised any concerns on the scoping out of this objective.

## SCOPED OUT

## Population and Housing

- The population of the NDP area has increased by 2.67% between 2011 and 2019 to 16,490 people.
- Net completion trends in Broxtowe borough fall considerably below the housing target (430 dwellings per annum) set in the Local Plan.
- Average house prices in the NDP area align with that of Broxtowe borough and are considerably lower than the national average.
- The NDP area is undergoing change due to the pandemic and HS2. This is likely to alter the local population and housing need.

## SCOPED IN

## Health and Wellbeing

- Broxtowe borough has a broadly healthy population with higher than national average life expectancy.
- The NDP area has lower than average levels of deprivation when compared to areas nationally, although there are some pockets of higher deprivation within the plan area.

- There are several health and recreational facilities and open spaces within and nearby the NDP area.
- Increased population growth will require additional provision for health and recreational facilities. Additional provision could be delivered through developer contributions.
- Statutory consultees have not raised any concerns on the scoping out of this objective.

### **SCOPED OUT**

#### **Travel and Transportation<sup>9</sup>**

- The NDP area is served by a comprehensive network of highways, pedestrian, cycle and public transport provision that provide good inter and intra connectivity including to important services and centres including Nottingham and Derby.
- New development is likely to increase traffic and movement in the NDP area but is also likely to be supported with improvements to transport infrastructure and capacity.

### **SCOPED IN**

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<sup>9</sup> The environmental theme title has been changed from 'Transportation' (as set out in the SEA Scoping Report) to 'Travel and Transportation' on request of the NP Steering Group.

## 2.3 SEA Framework

- 2.3.1. The SEA framework has been established through the identification of key issues and environmental objectives as part of the scoping exercise. This draws upon the baseline position and policy context that has been prepared for a range of SEA topics.
- 2.3.2. The framework consists of a set of headline objectives and ancillary questions, which has been used to appraise the environmental effects of the draft Plan (and any reasonable alternatives).
- 2.3.3. **Table 2.2** outlines the full SEA Framework, which focuses on those issues that have been identified as the most important to consider in the preparation of the Plan; but acknowledging the limited influence that the Plan can have in some areas.
- 2.3.4. These issues were then translated into an ‘SEA Framework’. This SEA Framework provides a methodological framework for the appraisal of likely significant effects on the baseline.

**Table 2.2: The SEA Framework for CTTC NDP**

| SEA Objective   | Supporting Questions  |
|---|---|
| <b>1. Biodiversity</b><br><br>Protect, maintain and enhance the quality, function and connectivity of biodiversity habitats and species; achieving a net environmental gain and stronger ecological networks. | Will the option/proposal help to: <ul style="list-style-type: none"> <li>• Avoid impacts on the Attenborough Gravel Pits SSSI?</li> <li>• Protect and where possible enhance the Toton Fields LNR, Toton Sidings LWS and Priority Habitats?</li> <li>• Support connections between habitats in the NDP area?</li> <li>• Achieve a net gain in biodiversity?</li> <li>• Support access to, interpretation and understanding of biodiversity?</li> <li>• Increase the resilience of biodiversity in the NDP area to the effects of climate change?</li> </ul>   |
| <b>2. Historic Environment</b><br><br>Protect, enhance and manage the historic environment within and surrounding the CTTC NDP area.  | Will the option/proposal help to: <ul style="list-style-type: none"> <li>• Conserve and enhance buildings and structures of architectural or historic interest, both designated and non-designated, and their settings?</li> <li>• Conserve and enhance the character of Chilwell Conservation Area?</li> <li>• Conserve and enhance the special interest and character of locally important features and their settings?</li> <li>• Protect the integrity of the historic setting of key monuments of cultural heritage interest as listed in the Nottinghamshire HER?</li> <li>• Support the undertaking of early archaeological investigations and, where appropriate, recommend mitigation strategies?</li> <li>• Support access to, interpretation and understanding of the historic evolution and character of the NDP area?</li> </ul> |

### 3. Landscape

Protect, enhance and manage the distinctive character and appearance of landscapes.

Will the option/proposal help to:

- Conserve, better reveal the significance and enhance landscape assets?
- Contribute to better management of landscape assets?
- Identify and protect/enhance features of local importance?
- Support access to, interpretation and understanding of the surrounding landscape?
- Improve linkages to open space and the countryside?
- Seek to minimise a sense of coalescence with other urban areas?

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### 4. Population and Housing

Ensure housing growth is aligned with the needs of all residents in the NDP area and is supported by the appropriate and timely provision of infrastructure.

Will the option/proposal help to:

- Provide everyone with the opportunity to live in good quality and affordable housing?
- Support the provision of a range of housing types and sizes targeted at aligning the housing stock with local need?
- Provide flexible and adaptable homes that meet people's changing needs?
- Create sustainable new communities with good access to a range of local services and facilities?

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### 5. Travel and Transportation

Promote sustainable transport use and reduce the need to travel.

Will the option/proposal help to:

- Encourage more use of sustainable transport modes including tram and bus?
- Encourage the uptake of active travel opportunities?
- Extend or improve active travel networks?
- Enable sustainable transport infrastructure improvements?
- Ensure sufficient road capacity to accommodate new development?
- Facilitate on-going high levels of home and remote working?
- Improve road safety?
- Reduce impacts on residents from the road network?

### 3. What has plan making / SEA involved to this point?

#### 3.1 Introduction

3.1.1. In accordance with the SEA Regulations the Environmental Report must include:

- An outline of the reasons for selecting the alternatives dealt with; and
- The likely significant effects on the environment associated with alternatives / an outline of the reasons for selecting the preferred approach in light of alternatives appraised.

3.1.2. The 'narrative' of plan-making / SEA up to this point is told within this part of the Environmental Report. Specifically, this section explains how preparation of the CTTC NDP has been informed by an assessment of alternative site options.

#### 3.2 Overview of plan making / SEA work undertaken

3.2.1. Broxtowe Borough Council formally designated the area around Chetwynd Barracks, Toton and Chilwell as an NDP area in March 2017.

3.2.2. Since designation, the NDP Steering Group have gathered a range of evidence and undertaken significant consultation with local communities and other key stakeholders to identify the issues and opportunities that need to be addressed in the NDP. This includes a Regulation 14<sup>10</sup> (pre-submission) consultation between 15th July and 20th September 2019.

3.2.3. The Plan was submitted to Broxtowe Borough Council on the 18th June 2020. A screening exercise undertaken by Broxtowe Borough Council in February 2021 identified that an SEA is required. This SEA Environmental Report accompanies the submission version of the NDP. The findings of the SEA have informed and influenced the development of the submission version of the NDP.

3.2.4. The first step in the SEA process was the development of a Scoping Report, which was published for consultation in April 2021. The SEA process is being delivered by AECOM as part of the Locality Technical Support Programme.

3.2.5. Subsequently, AECOM worked alongside the NDP Steering Group to identify any reasonable alternatives, to ensure that the SEA helps to inform the approaches and policies within the draft Plan. A thorough exercise to identify potential reasonable alternatives concluded that there are no alternatives.

3.2.6. The next step involved the development of an Environmental Report which involved an assessment of the submission version (Regulation 15)<sup>11</sup> of the NDP.

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<sup>10</sup> Regulation 14 of the Neighbourhood Planning (General) Regulations 2012) (as amended).

<sup>11</sup> Regulation 15 of the Neighbourhood Planning (General) Regulations 2012) (as amended).

### 3.3 Assessment of reasonable alternatives for the Neighbourhood Plan

- 3.3.1. A key element of the SEA process is the appraisal of 'reasonable alternatives' for the CTTC NDP. The SEA Regulations<sup>12</sup> are not prescriptive as to what constitutes a reasonable alternative, stating only that the Environmental Report should present an appraisal of the '*plan and reasonable alternatives taking into account the objectives and geographical scope of the plan*'.
- 3.3.2. The NDP does not seek to influence the overall scale of growth. The growth strategy is set out in the Broxtowe Local Plan, which identifies Chetwynd Barracks and the Toton Strategic location for Growth as key development opportunities. The principle of growth in these locations is established, and a substantial amount of new homes will be delivered both in the plan period and beyond. It is not considered necessary to look at additional or alternative site options in the NDP area. Likewise, in terms of the amount of growth involved, no alternatives have been identified.
- 3.3.3. The Broxtowe Local Plan sets out the need for a strategic masterplan to guide delivery at Chetwynd Barracks. The NDP seeks to influence the masterplanning process by setting out a series of guiding principles and policies. There are different ways in which the masterplan area could be configured, including how buildings are used, where new facilities are placed, infrastructure requirements and so on. The NDP sets out how the community would like to see the masterplan area configured and the type of development that would be supported. Though there may be choices to make with regards to these factors, it is considered that there are no strategic alternatives in relation to the delivery of the masterplan.
- 3.3.4. On this basis, it is considered that there are no reasonable alternatives in relation to the submission version of the CTTC NDP.

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<sup>12</sup> Environmental Assessment of Plans and Programmes Regulations 2004



## 4. What are the appraisal findings at this current stage?

### 4.1 Introduction

- 4.1.1. The aim of this chapter is to present appraisal findings and recommendations in relation to the submission (Regulation 15) version of the CTTC NDP.

### 4.2 Current approach in the Neighbourhood Plan and the development of Neighbourhood Plan policies

| Core Objective  | NDP Policies                              |
|---|---|
| <b>Environment</b>  |   |
| Protect and improve existing green space to enhance the quality of life and wellbeing of the residents and enrich the biodiversity of the Area. | ENV01<br>ENV02                            |
| Create new multifunctional blue/green infrastructure to establish good linkage between larger areas of green space.                             | ENV03<br>ENV04<br>ENV05                   |
| Protect, enhance and create wildlife habitats with particular emphasis on veteran and ancient trees.  | ENV06<br>ENV07<br>ENV08                   |
| <b>Infrastructure / Getting Around</b>  |   |
| Improve traffic management in order to ease congestion and handle future growth from within the Area and from adjacent areas.                   | INF01<br>INF02                            |
| New developments must provide safe pedestrian and cycle access to, from, and within the Area.   | INF03<br>INF04                            |
| Promote schemes to help reduce congestion on local roads and add flexibility to transport options.  | INF05<br>INF06<br>INF07<br>INF08<br>INF09 |
| <b>Housing and Sustainability</b>   |   |
| Provide a range of affordable/low cost housing across all tenures.  | HAS01                                     |
| Appropriately sized homes needed across the range of all tenures but especially for first time buyers and 'last time' buyers/retirement living. | HAS02                                     |

|   |       |
|---|-------|
| Encourage innovative, energy efficient, sustainable and well-connected homes. | HAS03 |
|   | HAS04 |
|   | HAS05 |
|   | HAS06 |
|   | HAS07 |

### Urban Design

|   |       |
|---|-------|
| Build on the current suburban character to encourage new families to live and work in the Neighbourhood Area. | URB01 |
|   | URB02 |
|   | URB03 |

|  |       |
|--|-------|
| New garden village areas to introduce smart design [1] principles and leading-edge technologies. | URB04 |
|--|-------|

|  |       |
|--|-------|
| The Innovation Campus to be a mix of commercial and residential development and aim to have a 'small city' appearance. | URB05 |
|--|-------|

|   |       |
|---|-------|
| Small scale, infill developments within in the existing residential area to reflect existing architecture and design. | URB06 |
|---|-------|

### Leisure, Heritage and Community

|   |       |
|---|-------|
| Provide new neighbourhood retail centre(s) designed to become focal points for the community. | LHC01 |
|---|-------|

|   |       |
|---|-------|
| Respect the heritage of the Barracks (and wider area) by creating a 'heritage trail'. | LHC02 |
|   | LHC03 |

|  |       |
|--|-------|
| Ensure there are adequate facilities such as schools/nurseries, medical facilities, sports facilities (including a potential off-road 'Park Run' option), green spaces and allotments. | LHC04 |
|  | LHC05 |
|  | LHC06 |
|  | LHC07 |
|  | LHC08 |

### Employment and Business

|   |       |
|---|-------|
| Design new mixed business zones that encourage people to work and live 'on site'. | EMP01 |
|   | EMP02 |
|   | EMP03 |

|   |       |
|---|-------|
| Encourage leading-edge companies that focus on smart building technologies into the area. | EMP04 |
|---|-------|

|   |       |
|---|-------|
| Create neighbourhood-scale shopping area(s) in the Area - especially in the Barracks, ideally with small-scale traders, to generate a 'village' feel. | EMP05 |
|---|-------|

## 4.3 Approach to the appraisal

- 4.3.1. The appraisal is structured under each of the SEA Objectives that are set out in the SEA Framework.
- 4.3.2. For each Objective, 'significant effects' of the current version of the plan on the baseline are predicted and evaluated. Account is taken of the criteria presented within Schedule 2 of the Regulations.<sup>13</sup> So, for example, account is taken of the probability, duration, frequency and reversibility of effects as far as possible. These effect 'characteristics' are described within the assessment as appropriate.
- 4.3.3. Every effort is made to identify / evaluate effects accurately. The ability to predict effects accurately is limited by understanding of the baseline and the nature of future planning applications. Because of the uncertainties involved, there is a need to exercise caution when identifying and evaluating significant effects and ensure all assumptions are explained. In many instances it is not possible to predict significant effects, but it is possible to comment on merits (or otherwise) in more general terms.

## 4.4 SEA Objective 1: Biodiversity

- 4.4.1. The NDP does not promote additional growth beyond what is earmarked in the current Local Plan. In this respect, it is unlikely that significant negative effects upon biodiversity will arise in relation to nearby designated sites or locally important features. However, several policies in the NDP add locally specific detail in relation to biodiversity protection and enhancement. In this regard, Policies ENV03 and ENV04 and their supporting text set out new detail for green infrastructure corridors and spaces on the strategic growth sites in Toton and Chetwynd Barracks. This should guide development on these strategic sites to provide important ecologically-rich habitats to support onsite biodiversity and wildlife, whilst helping to sustain ecological connectivity across the site and between habitats nearby including the LWS and green spaces. Although, effects could potentially be undermined from requirements for pedestrian and cycle access along such corridors in Policies ENV03, INF03 and local plan policies which could cause some recreational harm.
- 4.4.2. The NPPF (2021) states that planning policies and decisions should contribute to and enhance the natural and local environment by 'minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks', with paragraph 32 outlining that local plans and spatial development strategies should demonstrate how opportunities for net gains have been addressed. An environmental net gain principle for development is also embedded within the goals and policies of the UK Government's 25-Year Environment Plan (2018) and the forthcoming Environment Bill, which would require the pre-development biodiversity value of land to be exceeded by 10% and for this to be measured through a metric published by DEFRA.

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<sup>13</sup> *Environmental Assessment of Plans and Programmes Regulations 2004*

- 4.4.3. In this regard, Policy ENV07 states that ‘any development within the Area should be supported by a green landscaping plan including infill and green boundaries which should, where possible, include the planting of native species and the creation and improvement of wildlife habitats in line with at least a 10% biodiversity gain (using the DEFRA metric)’.
- 4.4.4. Requirements for development to be supported by a green landscaping plan should help identify and deliver opportunities for habitat creation and enhancement and requiring a minimum 10% biodiversity net gain should help secure such benefits. The policy should further safeguard against any weakening of requirements for 10% biodiversity gain in secondary legislation on sites such as previously developed sites or small development proposals which may go on to have some level of exception. Cumulatively, this has potential to derive significant positive effects. However, the application of this policy to all development of more than 10 homes within the NDP area is uncertain and dependant on development proposals and implementation on individual sites.
- 4.4.5. The protection of biodiversity features is further supported by policy provisions which seek to safeguard open spaces and green infrastructure. For example, Policy ENV01 sets out a number of ‘candidates to be designated as Local Green Spaces’ and therefore identifies important green spaces. However, as the policy does not afford protection to these sites, positive effects above the existing baseline are not fully realised. Policy ENV06 safeguards ‘mature trees including TPOs, veteran and ancient trees’ and requires development to seek to minimise the loss of other trees. The policy further requires ‘habitat lost to development must be replaced by equivalent species plus the necessary biodiversity gain’. This should support the preservation of important habitats and requirements in Policy ENV06 for any habitat lost to be replaced by equivalent species and Policy ENV07 for development to where possible plant native species along boundaries should support the preservation of biodiversity through the replanting of native species.
- 4.4.6. The enhancement of biodiversity features is supported in the plan by requiring new development with potential to increase the use of existing green space and existing/potential rights of way to make a financial contribution to enhance these green spaces. Although similar protection is afforded under Policy 28 of the Local Plan Part 2, extending protection to rights of ways presents opportunities to improve ecological connectivity and habitat quality along these corridors.
- 4.4.7. A number of policies support the preservation and enhancement of biodiversity features, but whilst being positive in principle, these do not deviate substantially from the baseline set in local and national planning policy. These policies include Policy ENV05 which seeks the long-term preservation of green infrastructure by requiring the ‘maintenance and management of new green space assets to be agreed with the Council prior to development being undertaken’ and for the creation of a Memorial Garden within Chetwynd Barracks. This also includes Policy ENV08 which requires development to have ‘positive impact on connectivity between ecological assets’ such as LNRs, the LWS and SSSI. Whilst these measures are positive, such protection is already afforded through the local plan and therefore no significant effects are envisaged.

- 4.4.8. In order to address accessibility and road capacity constraints as a result of growth at the strategic growth sites in Toton and Chetwynd Barracks, the NDP proposes a new north-south access road to connect Chetwynd Barracks to the A52. In the absence of detail design to illustrate the alignment of the road and detailed studies to fully understand the ecological value of the road route, the potential effects of the proposed access road on biodiversity is unclear. However, the new access road is likely to cause additional noise and air pollution along its route which has potential to cause localised disturbances. However, measures in other NDP policies and the Local Plan should help mitigate potential adverse effects and support the introduction of new features to reduce the severity of impact.

#### Overall (cumulative) effects

- 4.4.9. Overall, the NDP is predicted to have a **significant positive effect** with regards to biodiversity. It provides specific local measures and design guidance that should help to preserve and enhance existing biodiversity, support biodiversity net gain (although the extent to which it does this in practice is unclear) and ensure enhanced ecological connectivity between green spaces and habitats.

## 4.5 SEA Objective 2: Historic Environment

- 4.5.1. Whilst there are already provisions in the Broxtowe Local Plan that provide protection for heritage assets, the NDP adds local detail that will help to guide development, particularly at Chetwynd Barracks. In this regard, Policies LHC02 and LHC03 require the development of the Chetwynd Barracks site to 'respect its heritage and seek to conserve/re-purpose its significant assets where feasible' and support the creation of a heritage trail, heritage museum and the repurposing of important buildings in this location. This should help protect and better reveal the historic significance of the local area and local features of heritage interest.
- 4.5.2. Policy LHC01 supports the development of a retail centre next to the Memorial Gardens in the Chetwynd Barracks site. Whilst the gardens are not a designated heritage asset, they are of historic significance and considered to form part of the wider setting of the Grade II listed Memorial to workers of National Shell Filling Factory No.6, which falls to the south of the gardens along Chetwynd Road. In the absence of detailed design proposed through an independent masterplanning exercise, the potential for the development of a retail centre to have effects on the character and setting of the listed building and Memorial Gardens are unclear. However, other policy provisions in the NDP, local and national planning policy, including requirements in Policy 3.1 of the Local Plan Part 2 for the provision of public space to the south of the memorial, should help protect and where possible enhance the historic significance and setting of these important heritage assets.

- 4.5.3. The supporting text accompanying Policy LHC02 and Appendix II of the NDP set out the significant assets protected through the policy. Identifying buildings and structures of local heritage interest should make positive contributions towards conserving the historic environment and local features of historic importance. However, the effectiveness of the NDP to protect and support the enhancement of these locally identified heritage assets is undermined as these assets are not designated through planning policy and detailed measures to seek their preservation and potential enhancements are missed.
- 4.5.4. Effects of development on the local historic environment and townscape are likely to be further managed indirectly through policies which promote active travel, green infrastructure and seeks to reduce car traffic and on street car parking, as these should help to reduce indirect adverse effects of development on heritage assets and the character of the built environment. Similarly, Policy URB06 requires infill development to 'maintain or enhance the amenity of the existing area' and sets out measures which should safeguard local character. These measures positively respond to protecting the distinct character of heritage assets and the built environment of the NDP area.

#### Overall (cumulative) effects

- 4.5.5. Overall, a potential **positive effect** is predicted, particularly if the NDP is successful in influencing the establishment of a new heritage centre and heritage trail at Chetwynd Barracks. However, the significance of effects could be enhanced through the designation and detailed measures to seek the preservation and enhancement of locally identified heritage assets.

## 4.6 SEA Objective 3: Landscape

- 4.6.1. The NDP does not allocate any land or set targets that will result in significant effects upon landscape. The major developments in the area are already committed through the Local Plan, and therefore the potential landscape effects from their development are already 'locked in'. However, Policies ENV03 and ENV04 provide important detail and support the further incorporation of green infrastructure and spaces on the strategic growth sites in Toton and Chetwynd Barracks. This should help further reduce the landscape impact of development on these site allocations and therefore has potential to have minor positive effects.
- 4.6.2. The NDP includes a number of policies that seek to protect and, in some cases, introduce new locally important landscape features which are intrinsic to the local landscape character. In particular, Policy ENV06 seeks to preserve existing trees and the replacement of any habitat loss by equivalent species. These policies are predicted to have positive effects on landscape character as these measures will help sustain and strengthen the intrinsic qualities of the local landscape character.

- 4.6.3. The protection of local landscape character and appearance is further supported through a number of policies that set out measures that directly or indirectly protect landscape character and sensitivity through design. In particular, Policy URB06 seeks to maintain or enhance the amenity of existing residential areas with features including open space, large rear gardens, mature trees and other landscaping. This should help preserve important landscape features which are intrinsic to the existing townscape and character of the urban area and characterise the wider natural and built environment to the south west of Nottingham.

#### Overall (cumulative) effects

- 4.6.4. Overall, it is considered that in the absence of site allocations and additional growth, the NDP has limited scope to have significant effects on landscape character. However, requirements for the incorporation of green infrastructure corridors and spaces should indirectly help reduce adverse effects from development on strategic growth sites on landscape character. The NDP policies further support the preservation of landscape features elsewhere across the Plan area and therefore residual **minor positive effects** are predicted.

## 4.7 SEA Objective 4: Population and Housing

- 4.7.1. Though the NDP does not allocate housing sites or set a housing target, it should have an influence on the phasing and types of housing to be delivered. For example, Policy HAS02 makes specific reference to the need for smaller homes and bungalows to meet identified local needs and requires large housing developments to ensure that 'the number of all dwellings of all sizes (new and existing) meets the future needs of residents in the Area'. This should support the delivery of a mix of housing that address locally identified housing needs including the identified need for first-time and last-time buyers and should contribute towards widening housing choices. However, the effects are somewhat restricted in that they only apply to large developments of 50 or more homes, do not provide a clear breakdown of local need and extend significantly beyond the requirements set out in the Local Plan.
- 4.7.2. The NDP policies support the delivery of affordable housing and requires a minimum of 30% of housing units to be 'affordable' which accords with requirements set out in the Local Plan. However, Policy HAS01 further requires this to include a mix of 'Affordable to Rent' and 'Affordable to Buy' properties. Whilst this should help diversify local affordable housing provision, the policy goes on to state that 'developments should not significantly change the Area's existing proportions of social rented, market rented and owner-occupied dwellings'. This is likely to undermine affordable housing delivery, in particular for tenures such as shared ownership and affordable rent, as demand for these tenures are likely to increase.



- 4.7.3. The NDP includes a range of policies that specify how the strategic growth sites in Toton and Chetwynd Barracks should be developed and aspects that should be included in the masterplan. These include infrastructure routes, open space and design requirements. These measures could add to the cost of development, potentially delaying delivery of homes. However, the principles are not vastly different from the Broxtowe Local Plan, and there will also be a need to take viability into account. Therefore, effects are unlikely to be significant, although some positive effects are likely.
- 4.7.4. The NDP sets out a number of measures to ensure Chilwell, Toton and Chetwynd remain an active and thriving place to live and to ensure existing and new communities have good access to local services and facilities. Notably, this is addressed through Policies LHC05 - LHC08 which proactively seek improvements to existing sports facilities and provision for a new primary school, medical centre, leisure centre and allotments/communal gardens. Furthermore, policies in the NDP support the creation of a 'plaza-style neighbourhood shopping centre in Chetwynd Barracks', new infrastructure including transport and high-speed broadband provision and employment growth. These policies are likely to deliver long-term positive effects by supporting sustainable new communities through new employment opportunities, local services and facilities.
- 4.7.5. Similarly, Policy HAS03 sets out a requirement for new homes to meet the 'BREEAM Home Quality Mark 3 star or better'. This should support the delivery of high-quality housing particularly in relation to resource efficiency, safety and user wellbeing, and the delivery of resilient housing which is adaptable to changing consumer needs. Although, the potential effects of these measures on viability and subsequent housing delivery are unclear.

#### Overall (cumulative) effects

- 4.7.6. Overall, the NDP is predicted to have residual **minor positive effects** on population and housing. The NDP provides some detail and sets out some requirements for development which have potential for positive effects, but the potential significance of most effects could be strengthened and made more effective by providing comprehensive detailing supported by neighbourhood area specific evidence. Furthermore, plan policies are also likely to undermine the delivery of a range of affordable housing types, which has potential to have adverse effects.

## 4.8 SEA Objective 5: Travel and Transportation

- 4.8.1. The Local Plan and other plans proposing growth on strategic growth sites within the NDP area set out a number of policy requirements and proposals to deliver improvements to transport infrastructure and provision including new walking and cycling links to the proposed HS2 station and across the neighbourhood area, new bus routes and links to the tram network. The NDP builds upon this through Policy INF01 by requiring an infrastructure masterplan with 'detailing proposals to manage increased traffic from both within the Area as well as known new developments near to the Area'. A holistic approach to address local infrastructure requirements as a result of numerous independent developments should help deliver effective mitigation strategies and identify appropriate transport infrastructure to address need,



but the effectiveness of the policy is unclear as the policy does not set out clear delivery timescales or afford responsibility to a particular stakeholder.

- 4.8.2. Policy INF02 sets out a requirement for a 'north-south primary access road' to link Chetwynd Barracks to the A52, relieving otherwise pressure from Stapleford Lane and providing additional capacity to facilitate proposed growth. Proposals for the access road are pre-established in the emerging Toton and Chetwynd Barracks Strategic Masterplan<sup>14</sup> and detailed design for the road is being prepared. The Local Plan policies further support opportunities for a north-south road link within Chetwynd Barracks to the Toton Park and Ride (Policy 3.1), and for a masterplan for the Toton strategic growth site to consider how the site will connect to Chetwynd Barracks and necessary highway improvements to provide acceptable access to both sites (Policy 3.2). Whilst the aspirations of the policy for a new access road are pre-established, outlining the requirement for the access road in the NDP should help ensure its delivery and therefore safeguard the planned enhancement of road and associated transport connectivity and capacity in the local area.
- 4.8.3. Similarly, Policy INF07 seeks to extend beyond local plan requirements for the development of the strategic growth sites to preserve and enhance existing bus services in addition to encouraging the re-routing of bus service through the area. This should help protect existing accessibility and provision of bus services in the NDP area and support the delivery of new provision within the strategic growth sites.
- 4.8.4. Short-term pressures on the road network are likely to be further addressed through Policy HAS07 which requires developers to demonstrate how they intend to minimise on-site construction times through the use of modern construction methods such as modular homes. However, the policy provides a degree of flexibility and is unlikely to substantially influence the nature of future development on housing sites.
- 4.8.5. Active and sustainable travel is supported by a number of policies which support enhancements to pedestrian and cycle connectivity and infrastructure provision. In particular, the provisions in Policies INF03 and INF04 for new dedicated cycle routes which are separated from motor vehicles and in some cases utilise proposed green corridors should encourage cycling and practical modes for travel. Similarly, requirements in Policies URB03 and indirectly through INF08 for new development to provide space for pedestrians and other users, and in Policies ENV02 - ENV04 for improvements to existing and provision of new rights of way and accessible green space, should facilitate and encourage walking, recreation and active travel. These policies should also have positive effects in terms of road safety, particularly through measures which reduce street parking and support segregated pedestrian and cycle routes.

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<sup>14</sup> Nottinghamshire County Council and Broxtowe Borough Council are in the process of preparing a strategic masterplan for the Toton and Chetwynd Barracks area to support the delivery of the two strategic growth sites in the area. An initial consultation exercise has been undertaken in October 2020. It is envisaged that the masterplan will take form as a supplementary planning document and become part of the development plan.

- 4.8.6. A number of NDP policies indirectly support more sustainable transport and reduced need for travel. In this regard, Policy INF09 supports development proposals that 'make use of or apply appropriate technological solutions to reduce travel demand (car sharing, car clubs) and demand-responsive public transport'. Similarly, Policy HAS07 requires large developments including on the strategic growth sites to provide high-speed internet connectivity which should facilitate home-working and reduce the need to travel into work. Policy LHC01 also supports the establishment of one or more retail centres and in a fairly central location within the neighbourhood area, whilst other policies support the provision of educational and leisure facilities, improving local provision to services and reducing the need for non-active travel.
- 4.8.7. A number of policies support sustainable transport and improved accessibility in the NDP area, but do not set out the detail required or deviate substantially from local and national planning policy to have any significant effects. In particular, Policy INF05 expects proposals to reduce traffic congestion and pollution to arise as a result of growth proposed at the strategic growth sites but does not set out measures to address these issues.

Overall (cumulative) effects

- 4.8.8. Whilst the NDP adds some additional detail in respect of transport measures, the principle of sustainable connections, improvements to infrastructure and walkable neighbourhoods are already established in the Local Plan, and hence, only **minor positive effects** are predicted in this respect.

## 4.9 Conclusions at this current stage

### Summary of effects

- 4.9.1. This section summarises the overall effects of the NDP against each of the SEA Topics. It is important to differentiate between significant effects, which are predicted to lead to changes in the baseline position, and those effects that are broadly positive or negative, but are less likely to lead to substantial changes.
- 4.9.2. Table 4.1 summarises the overall effects of the policies within the draft NDP for each SEA topic. Overall, positive effects are predicted across each SEA topic, with significant positive effects likely for Biodiversity, as the NDP policies set out detailed guidance to deliver a number of improvements which should collectively achieve a significant ecological enhancement to the local area compared to the established baseline set by the Local Plan.

**Table 4.1: Summary of overall effects for each SEA Topic.**

| <i>Biodiversity</i>    | <i>Historic Environment</i> | <i>Landscape</i> | <i>Population and Housing</i> | <i>Travel and Transportation</i> |
|------------------------|-----------------------------|------------------|-------------------------------|----------------------------------|
| <b>Significant +ve</b> | <b>Positive</b>             | <b>Minor +ve</b> | <b>Minor +ve</b>              | <b>Minor +ve</b>                 |

## 4.10 Recommendations

- 4.10.1 A number of recommendations have been identified to enhance the positive effects of the draft NDP and mitigate any negatives. These are summarised below:
- Policy ENV01 could be strengthened by designating the sites identified as candidate sites as Local Green Space. The policy could further be strengthened by clarifying how the plan making process will support the identification and designation of other green spaces, although this may be more appropriate to address in supporting text.
  - Policy HAS02 could be strengthened by referencing and requiring development proposals to accord with a detailed mix of housing types and sizes supported by recent and neighbourhood area specific evidence. Flexibility could also be incorporated in the policy to ensure long-term sustainability by allowing variations to the housing mix where justified by more up-to-date evidence at the local scale.

- Policy LHC02 could be improved by designating the identified significant assets (listed in the supporting text and Appendix II) as local listed buildings and features. This should add an additional level of protection to these buildings. The policy could further be strengthened by setting out measures to require new development to preserve and where possible enhance the historic significance of these assets. A presumption in favour of their protection or requirement for substantial public benefit to offset any harm or loss of the heritage asset would be desirable.

4.10.2 It is considered that the above changes would help improve the performance of the NDP. Recommendations were also made to the NDP at the scoping stage of the SEA. These are set out in the Scoping Report attached as Appendix A to this report.

## 5. What are the next steps?

### 5.1 Plan Finalisation

- 5.1.1. A round of consultation (Regulation 16) will be undertaken on the draft NDP.
- 5.1.2. Subject to the Borough Council's agreement, the NDP will then be subject to independent examination. The Examiner will consider whether the plan is appropriate having regard to national policy and whether it is in general conformity with local policies.
- 5.1.3. The Examiner will be able to recommend that the CTTC NDP is put forward for a referendum, or that it should be modified or that the proposal should be refused. Broxtowe Borough Council will then decide what should be done in light of the Examiner's report. Where the report recommends modifications to the plan, Broxtowe Borough Council will invite the CTTC NDP Steering Group to make modifications to the plan, which will be reflected in an updated Environmental Report. Where the Examiner's Report recommends that the proposal is to be refused, Broxtowe Borough Council will do so.
- 5.1.4. Where the examination is favourable, the CTTC NDP will then be subject to a referendum, organised by Broxtowe Borough Council.
- 5.1.5. If more than 50% of those who vote agree with the plan, then it will be passed to Broxtowe Borough Council with a request it is 'made'. Once 'made', the CTTC NDP will become part of the Development Plan for the borough.

### 5.2 Monitoring

- 5.2.1. The SEA regulations require 'measures envisaged concerning monitoring' to be outlined in this report. This refers to the monitoring of likely significant effects of the NDP to identify any unforeseen effects early and take remedial action as appropriate.
- 5.2.2. It is anticipated that monitoring of effects of the NDP will be undertaken by Broxtowe Borough Council as part of the process of preparing its Annual Monitoring Report (AMR).
- 5.2.3. The SEA has not identified any potential for significant negative effects that would require closer review or monitoring.

## **Appendix A: SEA Scoping Report**

# Chetwynd: Toton and Chilwell NDP

## Strategic Environmental Assessment Scoping Report

Chetwynd: The Toton and Chilwell Neighbourhood Forum

April 2021

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# 1. Introduction

## 1.1 Background

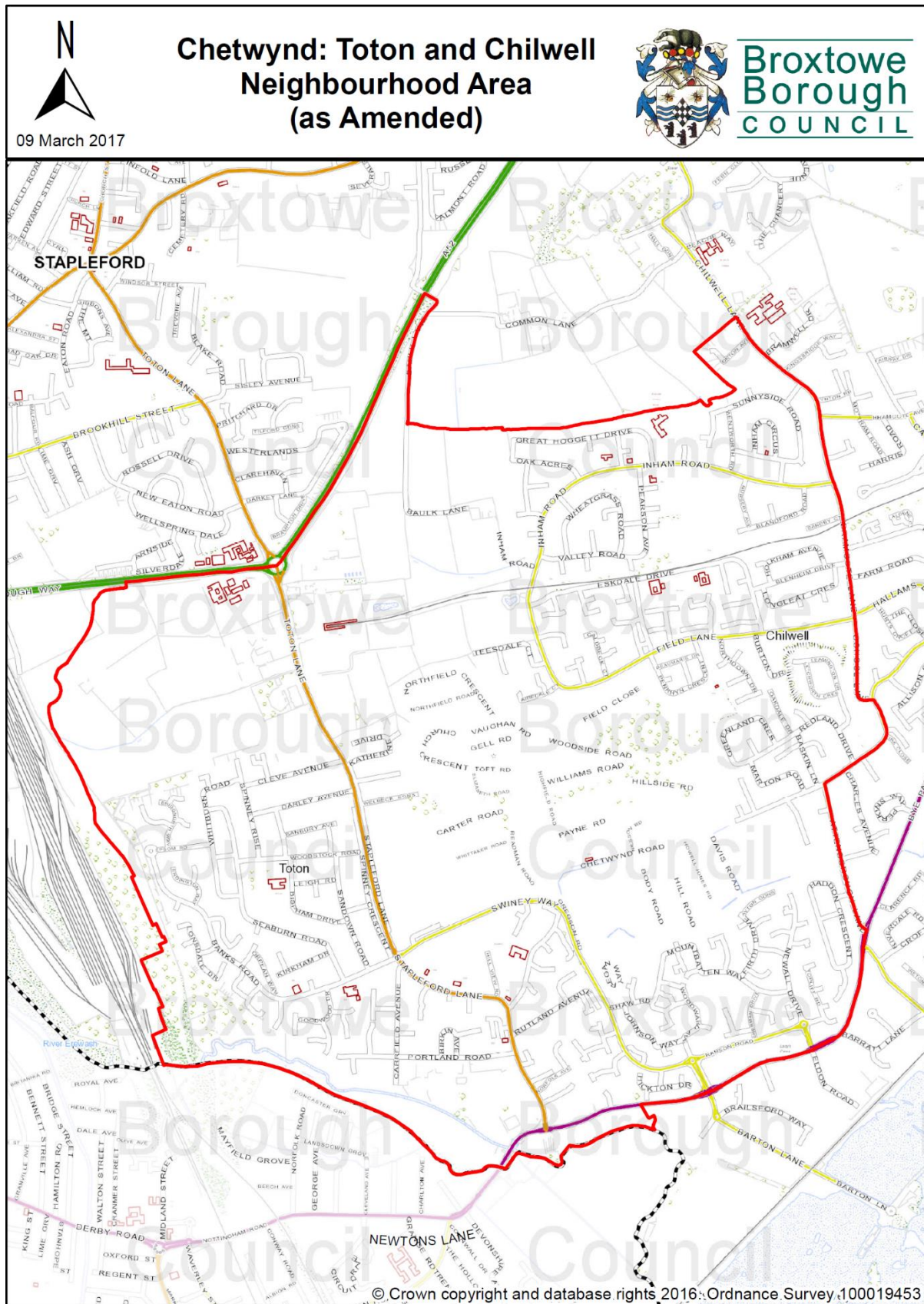
- 1.1.1. Chetwynd: The Toton and Chilwell Neighbourhood Forum is in the process of preparing a Neighbourhood Development Plan (NDP) for the sustainable future growth of the Toton and Chilwell area. AECOM has been commissioned to undertake a Strategic Environmental Assessment (SEA) in support of Chetwynd: The Toton and Chilwell (CTTC) NDP on behalf of the Neighbourhood Forum.
- 1.1.2. The CTTC NDP is being prepared under the Localism Act 2011 and the Neighbourhood Planning (General) Regulations 2012, and in the context of the adopted and emerging Local Plan for Broxtowe Borough. Relevant documents of the adopted Local Plan consist of the **Greater Nottingham Aligned Core Strategies Part 1 Local Plan**<sup>1</sup> (2014) and **Broxtowe Part 2 Local Plan**<sup>2</sup> (2019). The NDP will cover a period between 2020 to 2040.
- 1.1.3. The NDP will form part of the development plan for the Toton and Chilwell area in Broxtowe Borough, alongside the Local Plan. NDPs are required to be in general conformity with the strategic policies of the adopted Local Plan and can develop policies and proposals to address local place-based issues. In this way it is intended for the Local Plan to provide a clear overall strategic direction for development in Broxtowe Borough, whilst enabling finer detail to be determined through the Neighbourhood Planning process where appropriate.
- 1.1.4. The NDP area is illustrated in Figure 1.1 below.

---

<sup>1</sup> Broxtowe Borough Council et al (2014) Greater Nottingham Aligned Core Strategies Part 1 Local Plan [online] available at: [www.broxtowe.gov.uk/media/2160/broxtowe-aligned-core-strategy.pdf](http://www.broxtowe.gov.uk/media/2160/broxtowe-aligned-core-strategy.pdf)

<sup>2</sup> Broxtowe Borough Council (2019) Broxtowe Part 2 Local Plan [online] available at: [www.broxtowe.gov.uk/media/7088/part-2-local-plan-adopted-october-2019.pdf](http://www.broxtowe.gov.uk/media/7088/part-2-local-plan-adopted-october-2019.pdf)

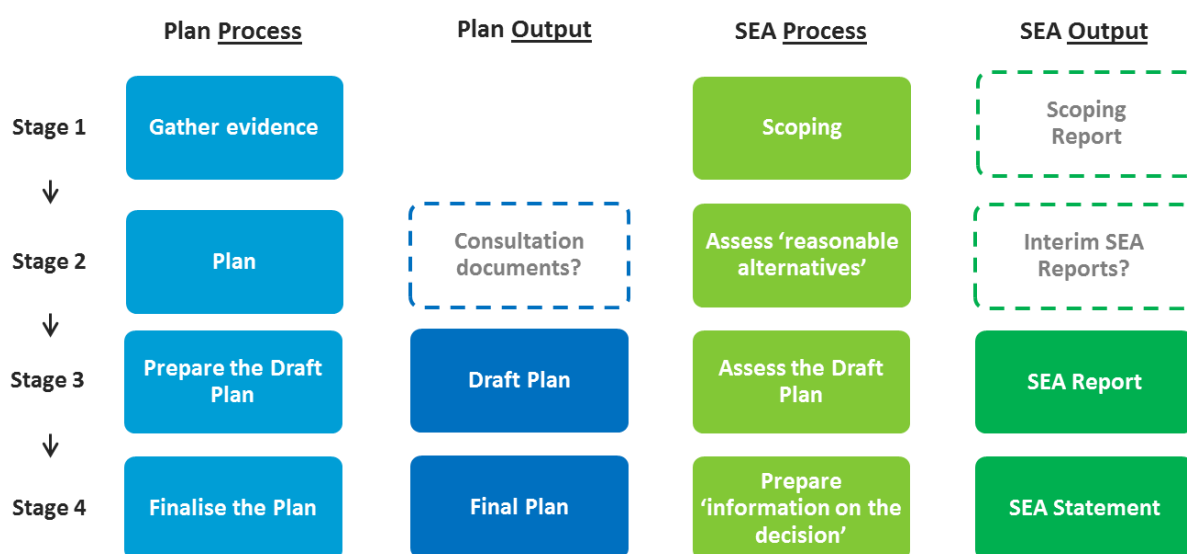
Figure 1.1: The Chetwynd: The Toton and Chilwell NDP Area



## 1.2 SEA explained

- 1.2.1. SEA is a mechanism for considering and communicating the likely significant effects of an emerging plan, and potential reasonable alternatives in terms of key environmental issues. The aim of SEA is to inform and influence the plan-making process with a view to avoiding and mitigating negative environmental effects and maximising positive effects. Through this approach, the SEA for the CTTC NDP seeks to maximise the emerging plan's contribution to sustainable development.
- 1.2.2. The Environmental Assessment of Plans and Programmes Regulations 2004 (otherwise known as the SEA Regulations), require an environmental assessment to be carried out on certain plans and programmes that are likely to have a significant effect upon the environment. The CTTC NDP has been determined to require a Strategic Environmental Assessment.
- 1.2.3. SEA can be viewed as a four-stage process that produces a number of statutory and non-statutory outputs. As illustrated in Figure 1.2 below, 'Scoping' is a mandatory process under SEA Regulations, but the publication of a scoping report is a voluntary (but useful) output.

**Figure 1.2: SEA as a four step process**



## 1.3 Screening outcomes

- 1.3.1. A screening exercise undertaken by Broxtowe Borough Council has determined that a SEA is required. Responses received from Historic England and Natural England as part of this process are summarised below:
- Historic England is of the view that a SEA is not likely to be required.
  - Natural England has advised that there is potential for significant effects arising from the NDP policies and therefore a SEA is required. However, the Plan would be unlikely to result in any significant effect to European Sites, either alone or in combination.
- 1.3.2. A response was not received from the Environment Agency.



## 1.4 Introduction to scoping

- 1.4.1. One of the first stages in the SEA process is to establish what the key issues are that the appraisal should focus on. This is called ‘scoping’, and involves a review of relevant policies, plans and programmes (a ‘contextual review’) and information about the current and future state of the environment (the ‘baseline’). This information is then used to set out a framework for undertaking strategic environmental assessment as the plan is developed.
- 1.4.2. The Regulations<sup>3</sup> require that certain statutory bodies are consulted on the scope of a SEA. This can be done in a number of ways, but most often a Scoping Report is produced that presents the key information and a methodology for how future appraisals will be undertaken. Statutory Consultees have 5 weeks to comment on the scope of the appraisal. In England, the statutory consultees are Natural England, the Environment Agency and Historic England.
- 1.4.3. Developing the scope for the SEA as presented in this report has involved the following steps:
- Defining the broader context for the CTTC NDP and associated SEA (i.e. UK Government and local policy and commitments), to summarise the regulatory and legislative landscape;
  - Establishing the baseline for the SEA, (i.e. the current and future situation in the area in the absence of the CTTC NDP) in order to help identify the plan’s likely significant effects;
  - Identifying particular problems or opportunities (‘issues’) that should be a focus of the SEA; and
  - Developing a SEA Framework comprising objectives and appraisal questions on the basis of these issues which can then be used to appraise the draft plan.

## 1.5 Scoping outcomes

- 1.5.1. The SEA Regulations encourage proportionate assessment and therefore it is important to scope out issues where it is apparent that the NDP will not lead to significant effects. An initial scoping sifting exercise has been undertaken, building upon the information presented in the Screening Opinion.
- 1.5.2. As a result, a number of SEA topic areas have been scoped-out without the need to establish a more detailed context review or baseline position.
- 1.5.3. For all other topics, further detail was gathered through the scoping process, which led to additional topics being **SCOPED OUT**.
- 1.5.4. Only Biodiversity, Historic Environment, Landscape, Population and Housing, and Transportation have been identified for further assessment at the next stages of the SEA.
- 1.5.5. The relevant SEA topic areas and the reasons for the scoping decisions are set out in Table 1.2 below.

---

<sup>3</sup> The Environmental Assessment of Plans and Programmes Regulations 2004

**Table 1.2: Scoping outcomes**

| SEA topic area                        | Scoping Outcomes  |
|---------------------------------------|---|
| Air Quality                           | Considered in greater detail through the scoping process, but subsequently <b>SCOPED OUT</b>  |
| Biodiversity                          | Considered in greater detail through the scoping process and subsequently <b>SCOPED IN</b> .  |
| Climate Change (including Flood risk) | Considered in greater detail through the scoping process, but subsequently <b>SCOPED OUT</b>  |
| Historic Environment                  | Considered in greater detail through the scoping process and subsequently <b>SCOPED IN</b> .  |
| Landscape                             | Considered in greater detail through the scoping process and subsequently <b>SCOPED IN</b> .  |
| Waste                                 | The Plan is unable to influence this to a significant extent and therefore this topic area can be <b>SCOPED OUT</b> .<br>Key issues relating to waste will be to ensure adequate access for waste collection, and storage that does not affect the street scene.                  |
| Minerals                              | The NDP area does not fall within a Minerals Safeguarding Area or Consultation Areas. Therefore, the plan does not pose any sterilisation risk to mineral resources and it is unlikely that any resources can be recovered. Therefore, this topic area can be <b>SCOPED OUT</b> . |
| Land, Soil and Water Resources        | Considered in greater detail through the scoping process, but subsequently <b>SCOPED OUT</b>  |
| Population and Housing                | Considered in greater detail through the scoping process and subsequently <b>SCOPED IN</b>  |
| Health and Wellbeing                  | Considered in greater detail through the scoping process, but subsequently <b>SCOPED OUT</b>  |
| Transportation                        | Considered in greater detail through the scoping process and subsequently <b>SCOPED IN</b>  |

## 1.6 Structure of this Scoping Report

1.6.1. The outcomes of the scoping exercise for the topic areas further considered in the scoping process following the initial sift have been presented as follows:

- Chapter 2: Air Quality;
- Chapter 3: Biodiversity;
- Chapter 4: Climate Change (including Flood risk);
- Chapter 5: Historic Environment;
- Chapter 6: Landscape;
- Chapter 7: Land, Soil and Water Resources;
- Chapter 8: Population and Housing;
- Chapter 9: Health and Wellbeing; and
- Chapter 10: Transportation.

1.6.2. The final chapters of the report summarise the overarching sustainability issues, set out the SEA Framework and document the next stages in the process.

## 2. Air Quality

### Focus of theme:

The theme focuses on air pollution, in particular, sources of air pollution, air quality hotspots and areas known to exceed objectives for air quality.

### 2.1 Policy Context

- 2.1.1. Table 2.1 presents the most relevant documents identified in the policy review for the purposes of the SEA.

**Table 2.1: Plans, policies and strategies reviewed in relation to air quality**

| Document Title   | Year of publication | Weblink   |
|--|---------------------|---|
| National Planning Policy Framework (NPPF)                            | 2019                | <a href="https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/810197/NPPF_Feb_2019_revised.pdf">assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/810197/NPPF_Feb_2019_revised.pdf</a>         |
| The Clean Air Strategy   | 2019                | <a href="https://www.gov.uk/government/publications/clean-air-strategy-2019">www.gov.uk/government/publications/clean-air-strategy-2019</a>   |
| UK plan for tackling roadside nitrogen dioxide concentrations        | 2017                | <a href="https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/633269/air-quality-plan-overview.pdf">assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/633269/air-quality-plan-overview.pdf</a> |
| A Green Future: Our 25 Year Plan to Improve the Environment          | 2018                | <a href="https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/693158/25-year-environment-plan.pdf">assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/693158/25-year-environment-plan.pdf</a>   |
| Local Air Quality Management Technical Guidance                      | 2018                | <a href="https://laqm.defra.gov.uk/documents/LAQM-TG16-February-18-v1.pdf">laqm.defra.gov.uk/documents/LAQM-TG16-February-18-v1.pdf</a>   |
| Air Quality Strategy for Nottingham and Nottinghamshire              | 2020                | <a href="https://nottinghaminsight.org.uk/Document-Library/Document-Library/63682">nottinghaminsight.org.uk/Document-Library/Document-Library/63682</a>   |
| Greater Nottingham Aligned Core Strategies Part 1 Local Plan         | 2014                | <a href="https://www.broxtowe.gov.uk/media/2160/broxtowe-aligned-core-strategy.pdf">www.broxtowe.gov.uk/media/2160/broxtowe-aligned-core-strategy.pdf</a>   |
| Broxtowe Part 2 Local Plan   | 2019                | <a href="https://www.broxtowe.gov.uk/media/7088/part-2-local-plan-adopted-october-2019.pdf">www.broxtowe.gov.uk/media/7088/part-2-local-plan-adopted-october-2019.pdf</a>   |
| Broxtowe Borough Council 2020 Air Quality Annual Status Report (ASR) | 2020                | <a href="https://www.broxtowe.gov.uk/media/8190/2020-air-quality-annual-status-report-for-broxtowe-borough-council-241120.pdf">www.broxtowe.gov.uk/media/8190/2020-air-quality-annual-status-report-for-broxtowe-borough-council-241120.pdf</a>                                 |

- 2.1.2. The CTTC NDP will be required to be in general conformity with the NPPF, which predominantly seeks early planning to reduce/ mitigate air quality impacts in development and to take advantage of opportunities to improve air quality. Measures to improve air quality include traffic and travel management and green infrastructure provision. Strategic development is expected to be focused in locations that have or will be provided with high levels of accessibility; supporting both a reduced need to travel and offering a genuine choice of transport modes. Smaller-scale development should consider the potential for cumulative effects in relation to air quality.



- 2.1.3. The CTTC NDP will also be required to be in general conformity with the Local Plans covering the CTTC NDP area which contain policies directly relating to air quality.
- 2.1.4. Air Quality Management Areas (AQMA) are declared in areas which exceed national objectives for levels of particulates, nitrogen dioxide, sulphur dioxide, ozone, benzene, polycyclic aromatic hydrocarbons, butadiene, carbon monoxide, lead and/ or nitrogen oxides. The Broxtowe Air Quality ASR demonstrates that poor air quality in the borough is mainly derived from the M1 motorway, but the air quality levels are below the objective of  $40\mu\text{g}/\text{m}^3$  for all of the monitoring locations throughout the Borough. An area encompassing twenty properties on parts of Iona Drive and Tiree Close next to the M1 motorway in Trowell is declared as an AQMA due to high levels of nitrogen dioxide.
- 2.1.5. To improve air quality across the UK, national strategies have in the last few decades focused on regulatory frameworks, investment by industry in cleaner processes and a shift in the fuel mix towards cleaner forms of energy (largely at point sources). Whilst there are dedicated strategies to reducing roadside emissions (as a significant source of nitrogen dioxide emissions), recent objectives outlined in the Clean Air Strategy seek to recognise wider sources (including smaller contributors and diffuse sources) that contribute to poor air quality. These includes power generation, heating our homes, producing food, manufacturing consumer goods and powering transport.

## 2.2 Baseline information

### Summary of current baseline

- 2.2.1. There are currently no Air Quality Management Areas (AQMA) within the NDP area. The nearest AQMA ( $\text{NO}_2$ ) are located in the built up area of Nottingham approximately 1.8km east and along the M1 motorway including in Trowell approximately 2.8km north, west of Sandiacre approximately 1.52km west and in Long Eaton approximately 1.85km west of the NDP area.
- 2.2.2. According to the Broxtowe Borough Council Air Quality Annual Status Report (2020), the main pollutant of concern in the borough is Nitrogen Dioxide ( $\text{NO}_2$ ). Emissions from vehicles are the main source of  $\text{NO}_2$  emissions, and air quality hotspots can arise in areas prone to traffic congestion. In the borough, areas prone to emissions include the M1 and the A52. However, monitoring indicates that  $\text{NO}_2$  levels are consistently below the national objective of  $40\mu\text{g}/\text{m}^3$ .
- 2.2.3. Accordingly, the main pollutant of concern in the NDP area and surrounds is  $\text{NO}_2$ . Air quality is monitored by Broxtowe Brough Council at a number of locations across the borough including the NDP area which provide a good indication of the likely air quality.
- 2.2.4. Table 2.2 sets out the average annual levels of  $\text{NO}_2$  concentration at diffusion tube monitoring locations at roadside locations across the NDP area. The data suggests that air quality along key road routes have consistently remained below the  $40\mu\text{g}/\text{m}^3$  national target. Trends also indicate a gradual reduction in  $\text{NO}_2$  emissions over a 5 year period at locations across the NDP area.

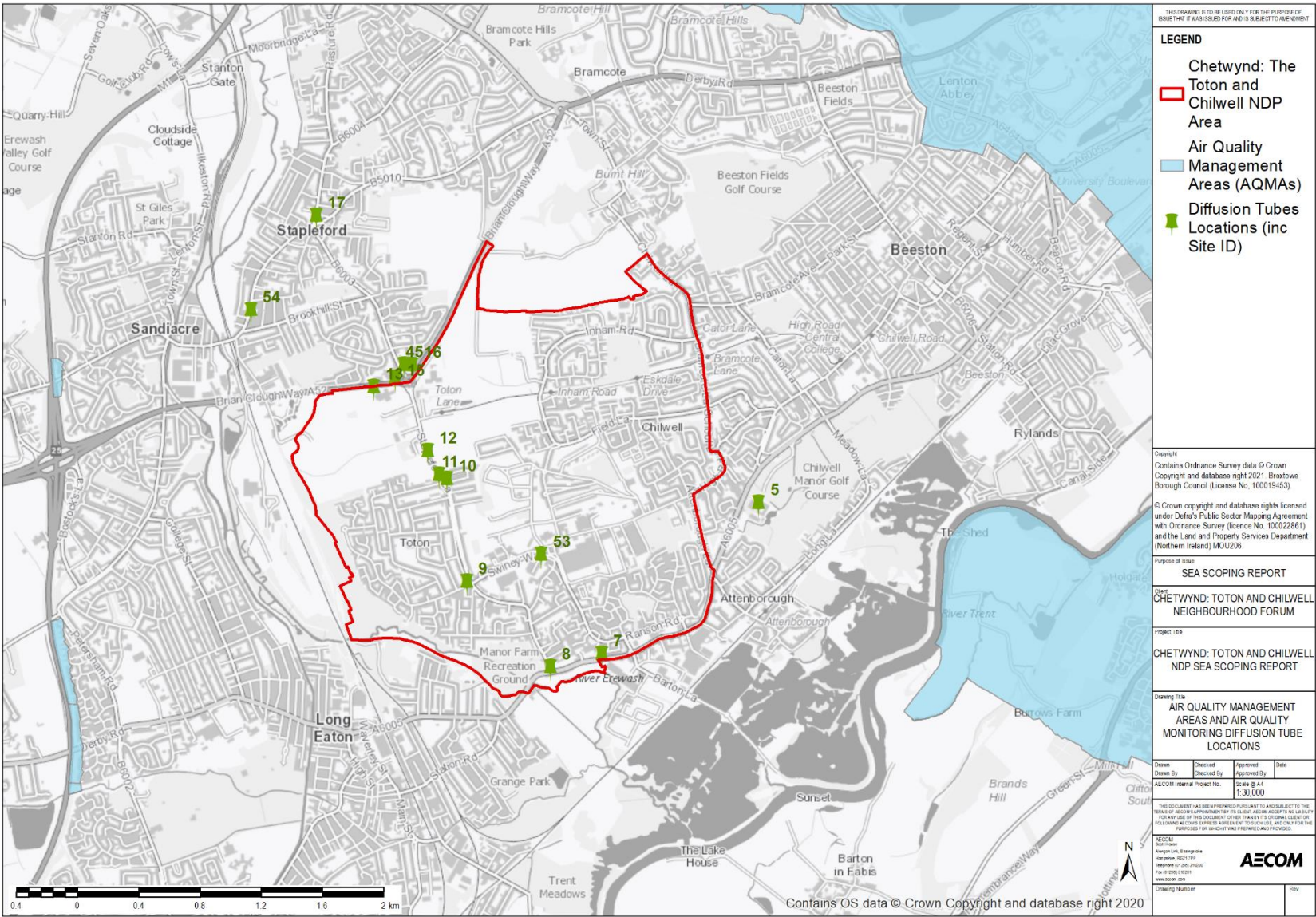
**Table 2.2: Annual average Nitrogen Dioxide concentration ( $\mu\text{g}/\text{m}^3$ ) at monitoring locations within the NDP area (Source: DEFRA)**

| Site Name and ID                    | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|-------------------------------------|------|------|------|------|------|------|
| 127 Attenborough Lane, Chilwell (6) | -    | 28.1 | 27.8 | -    | -    |      |
| 31 Hickton Drive, Chilwell (7)      | 26   | 28.5 | 29.7 | 24.3 | 26   | 17.8 |
| The Manor Pub, Toton (8)            | -    | 32.9 | 32.3 | 28.9 | 29.1 | 24.6 |
| Toton branch Surgery, Toton (9)     | -    | 25.9 | 23.5 | 23.1 | 23.8 | 18.8 |
| 1 Katherine Drive, Toton (10)       | -    | 27.6 | 28.8 | 23.9 | 26   | -    |
| 269 Stapleford Lane, Toton (11)     | -    | 31.9 | 33.1 | 27.9 | 30.2 | 24.2 |
| Stapleford Lane, Toton (12)         | -    | 30.7 | 28.4 | 25.3 | 26.1 | 19.4 |
| George Spencer School, Toton (13)   | -    | 32.8 | 37.1 | 27.1 | 27.5 | 21.1 |
| 134 Bramcote Lane, Chilwell (42)    | -    | 24.6 | -    | -    | -    |      |
| 1 Calverton Close, Chilwell (53)    | -    | -    | -    | 20.1 | 22.1 | 15.6 |

2.2.5. The proximity of the NDP area to AQMAs and location of monitoring points is illustrated in Figure 2.1 below.

2.2.6. In regard to Particulate Matter, modelled background level of  $\text{PM}_{2.5}$  provided by Defra for Broxtowe borough indicated levels between  $8\mu\text{g}/\text{m}^3$  and  $11\mu\text{g}/\text{m}^3$  for 2019, with the annual mean for 2019 being  $9.73\mu\text{g}/\text{m}^3$ . This is below the World Health Organisation guideline level of  $10\mu\text{g}/\text{m}^3$ . Broxtowe borough does not currently monitor particulates in the borough or NDP area.

Figure 2.1: AQMAs and Air quality monitoring locations in and around the NDP area



## Summary of future baseline

- 2.2.7. Whilst no significant air quality issues currently exist in the NDP area, new housing provision may create adverse effects on air quality through increasing traffic flows and associated levels of pollutants such as NO<sub>2</sub> and particulates.
- 2.2.8. The construction of the HS2 line and station at Toton and development of the Chetwynd Barracks site may also temporarily increase air pollution (particularly NO<sub>2</sub> levels associated with construction traffic) in the NDP area.
- 2.2.9. The move towards hybrid and electric vehicles and good existing public transport provision in the NDP area (particularly in Chilwell) will likely offset some potential adverse effects on air quality.

## 2.3 Key headline issues

2.3.1. The key issues are as follows:

- There are no Air Quality Management Areas within the NDP area. Air quality in the NDP area is generally good and improving, with no significant issues identified.
- Traffic and congestion from pre-planned growth in the area have the potential to increase emissions and deteriorate air quality in the NDP area.

## 2.4 Scoping outcome

- 2.4.1. The NDP does not intend to allocate sites and is unlikely to propose changes that would significantly generate more road trips in the plan area (and associated particulates and NO<sub>2</sub>). The NDP area also does not include AQMAs or any known significant issues in relation to poor air quality. Therefore, due to the absence of significant and tangible air quality issues in the NDP area, air quality has been **SCOPED OUT** for the purposes of the SEA process. This means that the plan will not be assessed for its performance against air quality objectives (given that no significant issues or opportunities are expected to arise through the CTTC NDP).
- 2.4.2. Nevertheless, positive planning could be beneficial for air quality through opportunities to improve accessibility, particularly in terms of active travel and encouraging more local journeys and sustainable connections. Therefore, opportunities which address issues such as accessibility and sustainable communities whilst also enhancing air quality are encouraged.



### 3. Biodiversity

#### Focus of theme:

This theme focuses on nature conservation designations, habitats and species within and surrounding the NDP area.

#### 3.1 Policy Context

- 3.1.1. Table 3.1 presents the most relevant documents identified in the policy review for the purposes of the SEA.

**Table 3.1: Plans, policies and strategies reviewed in relation to biodiversity**

| Document Title   | Year of publication | Weblink   |
|--|---------------------|---|
| National Planning Policy Framework (NPPF)                    | 2019                | <a href="https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/810197/NPPF_Feb_2019_revised.pdf">assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/810197/NPPF_Feb_2019_revised.pdf</a>       |
| A Green Future: Our 25 Year Plan to Improve the Environment  | 2018                | <a href="https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/693158/25-year-environment-plan.pdf">assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/693158/25-year-environment-plan.pdf</a> |
| Nottinghamshire Local Biodiversity Action Plan               | 1998                | <a href="http://www.merseysidebiodiversity.org.uk/species-plans/">www.merseysidebiodiversity.org.uk/species-plans/</a>  |
| Greater Nottingham Aligned Core Strategies Part 1 Local Plan | 2014                | <a href="http://www.broxtowe.gov.uk/media/2160/broxtowe-aligned-core-strategy.pdf">www.broxtowe.gov.uk/media/2160/broxtowe-aligned-core-strategy.pdf</a>  |
| Broxtowe Part 2 Local Plan                                   | 2019                | <a href="http://www.broxtowe.gov.uk/media/7088/part-2-local-plan-adopted-october-2019.pdf">www.broxtowe.gov.uk/media/7088/part-2-local-plan-adopted-october-2019.pdf</a>  |
| Broxtowe Green Infrastructure Strategy 2015-2030             | 2015                | <a href="http://www.broxtowe.gov.uk/media/4829/green-infrastructure-strategy-2015-2030.pdf">www.broxtowe.gov.uk/media/4829/green-infrastructure-strategy-2015-2030.pdf</a>  |

- 3.1.2. The CTTC NDP will be required to be in general conformity with the NPPF, which provides significant emphasis on improving biodiversity and securing measurable net gains in development, alongside protection and conservation of designated sites and important species and habitats. This includes utilising a strategic approach to maintaining and enhancing networks of habitats and green infrastructure at the wider catchment or landscape scale. Support is given to establishing coherent ecological networks that are more resilient to current and future pressures, particularly in consideration of climate change.
- 3.1.3. During the last decade, UK policy and guidance documents (such as Biodiversity 2020) have demonstrated a move from traditional approaches of protecting biodiversity, to a wider landscape approach of enhancing biodiversity, as part of the overall aims to halt biodiversity loss.

- 3.1.4. The 25 Year Environment Plan places emphasis on improvements to the natural environment; identifying the need to ‘replenish depleted soil, plant trees, support wetlands and peatlands, rid seas and rivers of rubbish, reduce greenhouse gas emissions, cleanse the air of pollutants, develop cleaner, sustainable energy and protect threatened species and habitats’. Working at a landscape scale transformation is expected to connect habitats into larger corridors for wildlife.
- 3.1.5. The emerging Environment Bill will provide further provisions in relation to biodiversity when granted royal assent. The Bill will set parameters for biodiversity gain as a condition of planning permission, as well as biodiversity gain site registers and biodiversity credits. The Bill identifies a general duty to conserve and enhance biodiversity, including through biodiversity reports and local nature recovery strategies. Local nature recovery strategies will identify biodiversity priorities for the strategy area as well as a local habitat map. Furthermore, habitat maps are expected to include recovery and enhancement areas which are or could become of importance for biodiversity.
- 3.1.6. The Nottinghamshire Local Biodiversity Action Plan sets out a strategy to protect and enhance biodiversity in the region. It identifies and seeks to protect key habitats and species which are contained in the individual habitat and species action plans. These set out the importance of the species and habitat, identify their local status, threats to them and opportunities to help their recovery.
- 3.1.7. The Broxtowe Green Infrastructure Strategy seeks to safeguard and enhance Green Infrastructure networks in the borough with an environmental focus to support ecological connectivity and provide important wildlife habitats.
- 3.1.8. The CTTC NDP will also be required to be in general conformity with the Local Plans covering the NDP area which contain policies directly relating to biodiversity and geodiversity.

## 3.2 Baseline Information

### Summary of current baseline

- 3.2.1. Nottinghamshire supports a range of wildlife species and habitats. A number of these are protected sites; the designation of which helps to preserve the biodiversity and the character of these areas. Biodiversity designations in and around the NDP area are set out and illustrated in Figure 3.1.
- 3.2.2. There are over 4,100 Sites of Specific Scientific Importance (SSSI) in England, which covers around 8% of the country’s land area. SSSIs are recognised as the country’s very best wildlife and geological sites.
- 3.2.3. The Attenborough Gravel Pits SSSI falls in close proximity to the south of the NDP area. The SSSI area is also designated as a Nature Reserve and Local Wildlife Site (LWS).
- 3.2.4. The Attenborough Gravel Pits SSSI comprises lowland eutrophic open waters with emergent vegetation, wet floodplain woodland, unimproved floodplain grassland, a rich assemblage of breeding birds associated with lowland open waters and their margins, and wintering shoveler *Anas clypeata* and bittern *Botaurus stellaris*.

3.2.5. Table 3.2 below shows the condition of the Attenborough Gravel Pits SSSI in comparison to national average. The SSSI consists of 8 units. Other than unit 004 (Delta Carr and Works Pond) and 005 (Beeston Pond), at the time of the last survey in 2017/18, the units were classified as ‘unfavourable recovering’, with units 001, 002 and 003 being considered to be at high risk. Unit 005 was classified as ‘unfavourable no change’ and a recent assessment of unit 004 in 2020 has maintained its ‘favourable’ status since 2000.

**Table 3.2: SSSI condition (Source: Natural England<sup>4</sup>)**

| Area                          | % area meeting PSA target | % area favourable | % area unfavourable recovering | % area unfavourable no change | % area unfavourable declining | % area destroyed / part destroyed |
|-------------------------------|---------------------------|-------------------|--------------------------------|-------------------------------|-------------------------------|-----------------------------------|
| Attenborough Gravel Pits SSSI | 94.40%                    | 14.56%            | 79.85%                         | 5.6%                          | 0%                            | 0%                                |
| England                       | 91.07                     | 38.24             | 52.83                          | 5.15                          | 3.47                          | 0.05                              |

3.2.6. With the SSSI being fairly close to the NDP area, depending on the proximity and the scale of development, Natural England may be required to be consulted on the likely risks of development. However, residential development in and around Chetwynd Barracks, Toton and northern parts of Chilwell do not require consultation other than for 100 or more houses outside existing urban areas.

3.2.7. There are a total of 225 National Nature Reserves (NNRs) across England. Their purpose is to help manage habitats, species and significant geology. Most reserves also offer the opportunity for the public to experience England’s national heritage. There are no NNRs within the NDP area or within a 15km radius. There are also no Areas of Outstanding Natural Beauty, Special Areas of Conservation (SAC), Special Protection Areas (SPAs), possible SPAs or Ramsar sites within or in proximity to the NDP area.

3.2.8. Within the NDP area itself, the Toton Fields Local Nature Reserve (LNR) and Toton Sidings Local Wildlife Site (LWS) form a natural corridor between the built-up area of Toton and Toton Sidings to the south west of the NDP area. The NDP area further includes a LWS consisting of a herb-rich sward in a small horse-grazed paddock at Chilwell Ordnance Depot.

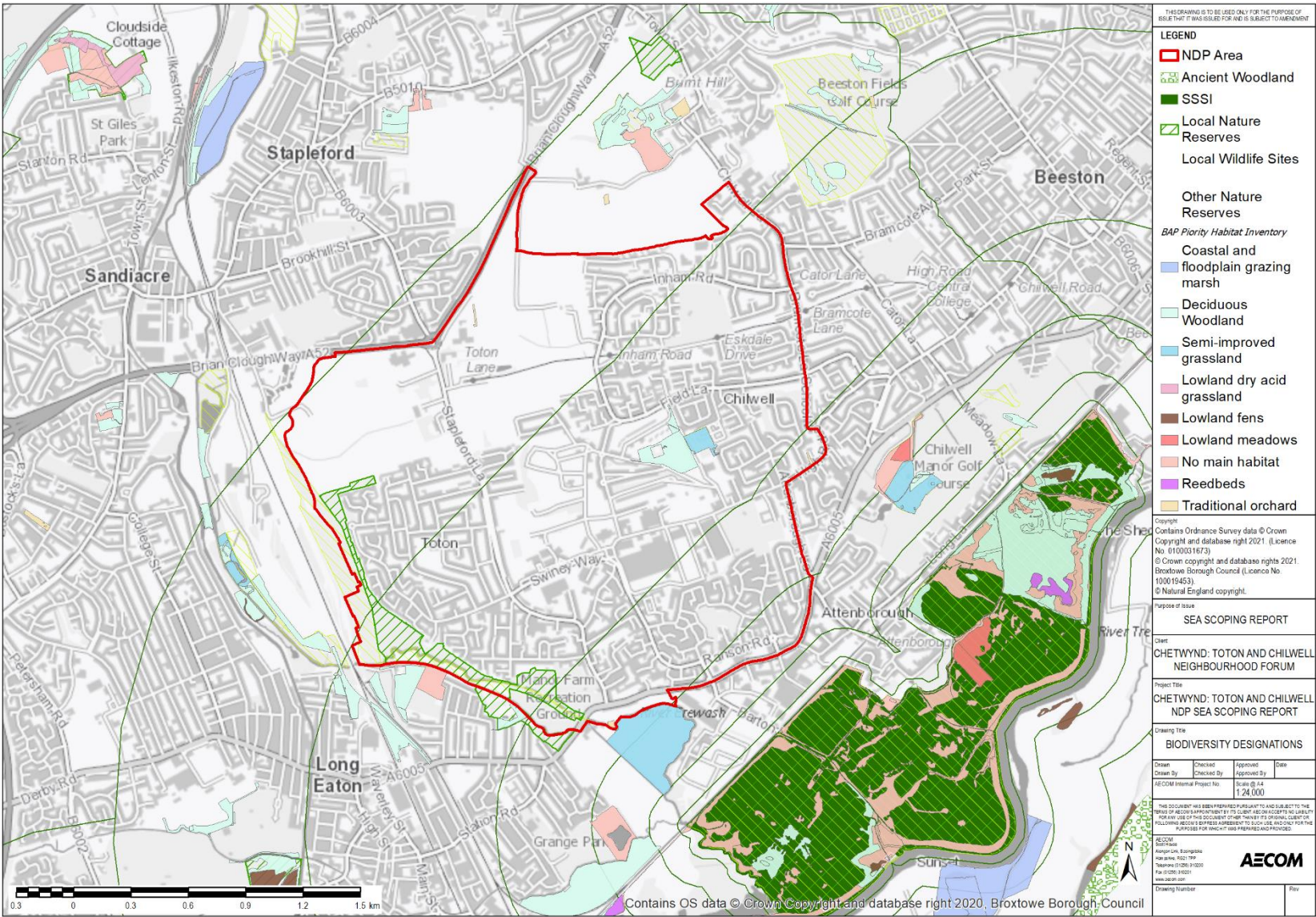
3.2.9. The NDP area contains Priority Habitat areas of Deciduous Woodland, Broadleaved Woodland and Good quality semi-improved grassland (which is also designated as the Chilwell Ordnance Depot LWS).

3.2.10. The NDP area also falls adjacent to lowland dry acid grassland and areas of deciduous woodland to the south west and an area of semi-improved grassland to the south. These habitats are illustrated in Figure 3.1.

<sup>4</sup> Information in relation to the condition of SSSIs throughout the area has been taken from the Natural England website. Accessed from <http://www.naturalengland.org.uk/ourwork/conservation/designatedareas/sssi/default.aspx>



Figure 3.1: Biodiversity Designations in and nearby the NDP area





### Summary of future baseline

- 3.2.11. Atmospheric pollution (such as acid precipitation and nitrogen deposition) and increased flood risk that may arise as a result of climate change, could pose a risk to the habitats and species present within the NDP area.
- 3.2.12. Increased development in the NDP area, particularly from development related to HS2 and at Chetwynd Barracks, will place increased pressure on areas of biodiversity value due to land take for development and an increase in population. An increase in population is likely to lead to an increase in leisure and recreational pressure and increased demand for natural resources such as water. New development may lead to an increase in disturbance through human activity, loss of habitat, increased predation (e.g. from domestic pets), atmospheric, land and water-based pollution.
- 3.2.13. On the contrary, habitats and species are likely to continue to be afforded protection through higher level planning policy and whilst these areas face increasing pressures from future development, planning policy should safeguard the most valued areas and protect ecological networks.

### 3.3 Key headline issues

3.3.1. The key issues are as follows:

- The Attenborough Gravel Pits SSSI is in close proximity to the NDP area. The NDP area also includes a natural ecologically-rich corridor consisting of a LNR and LWS between Toton and Toton Sidings and a LWS in Chilwell.
- There are no NNR, SACs, SPAs, pSPAs or Ramsar sites within or in the vicinity of the NDP area.
- The NDP area contains Priority Habitat areas of Deciduous Woodland, Broadleaved Woodland and Good quality semi-improved grassland.

### 3.4 Scoping outcome

- 3.4.1. The SEA topic 'Biodiversity' has been **SCOPED IN** to the SEA.
- 3.4.2. The NDP does not propose to allocate sites for housing or employment use and therefore is unlikely to cause harm or the loss of important habitats or significantly undermine ecological connectivity.
- 3.4.3. The NDP presents opportunities to enhance ecological networks across the Plan area and support ecological connectivity with the Attenborough Gravel Pits SSSI, LWS and other habitats including green spaces in and around the NDP area. It will also be important to ensure that species do not rely upon habitats outside of designated habitat areas.

### 3.5 What are the SEA objectives and appraisal questions for the Biodiversity SEA theme?

3.5.1. The SEA topic 'Biodiversity' has been scoped in to the SEA. Table 3.3 presents the SEA objective and appraisal questions that will be used to assess the plan in relation to this theme.

**Table 3.3: SEA Framework of objectives and assessment questions: Biodiversity**

| SEA Objective   | Supporting Questions   |
|---|--|
| Protect, maintain and enhance the quality, function and connectivity of biodiversity habitats and species; achieving a net environmental gain and stronger ecological networks. | <p>Will the option/proposal help to:</p> <ul style="list-style-type: none"> <li>• Avoid impacts on the Attenborough Gravel Pits SSSI?</li> <li>• Protect and where possible enhance the Toton Fields LNR, Toton Sidings LWS and Priority Habitats?</li> <li>• Support connections between habitats in the NDP area?</li> <li>• Achieve a net gain in biodiversity?</li> <li>• Support access to, interpretation and understanding of biodiversity?</li> <li>• Increase the resilience of biodiversity in the NDP area to the effects of climate change?</li> </ul> |

## 4. Climate Change (including Flood risk)

### Focus of theme:

This theme focuses on activities in the NDP area that contribute to climate change and climate change mitigation, as well as the effects of climate change, including flood risk, and climate change adaptation.

### 4.1 Policy Context

4.1.1. Table 4.1 presents the most relevant documents identified in the policy review for the purposes of the SEA.

**Table 4.1: Plans, policies and strategies reviewed in relation to climate change**

| Document Title   | Year of publication | Weblink   |
|--|---------------------|---|
| National Planning Policy Framework (NPPF)                    | 2019                | <a href="https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/810197/NPPF_Feb_2019_revised.pdf">assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/810197/NPPF Feb 2019 revised.pdf</a>   |
| Clean Air Strategy   | 2019                | <a href="https://www.gov.uk/government/publications/clean-air-strategy-2019">www.gov.uk/government/publications/clean-air-strategy-2019</a>   |
| Clean Growth Strategy  | 2017                | <a href="https://www.gov.uk/government/publications/clean-growth-strategy">www.gov.uk/government/publications/clean-growth-strategy</a>   |
| A Green Future: Our 25 Year Plan to Improve the Environment  | 2018                | <a href="https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/693158/25-year-environment-plan.pdf">assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/693158/25-year-environment-plan.pdf</a>   |
| Decarbonising Transport: Setting the Challenge               | 2020                | <a href="https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/932122/decarbonising-transport-setting-the-challenge.pdf">assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/932122/decarbonising-transport-setting-the-challenge.pdf</a> |
| UK (second) National Adaptation Programme 2018 to 2023       | 2018                | <a href="https://www.gov.uk/government/publications/climate-change-second-national-adaptation-programme-2018-to-2023">www.gov.uk/government/publications/climate-change-second-national-adaptation-programme-2018-to-2023</a>   |
| River Trent Catchment Flood Management Plan (CFMP)           | 2009                | <a href="https://www.gov.uk/government/publications/river-trent-catchment-flood-management-plan">www.gov.uk/government/publications/river-trent-catchment-flood-management-plan</a>   |
| Greater Nottingham Aligned Core Strategies Part 1 Local Plan | 2014                | <a href="https://www.broxtowe.gov.uk/media/2160/broxtowe-aligned-core-strategy.pdf">www.broxtowe.gov.uk/media/2160/broxtowe-aligned-core-strategy.pdf</a>   |
| Broxtowe Part 2 Local Plan                                   | 2019                | <a href="https://www.broxtowe.gov.uk/media/7088/part-2-local-plan-adopted-october-2019.pdf">www.broxtowe.gov.uk/media/7088/part-2-local-plan-adopted-october-2019.pdf</a>   |
| Broxtowe Climate Change and Green Futures Programme          | 2020                | <a href="https://www.broxtowe.gov.uk/media/8437/climate-change-and-green-futures-programme-combined-doc.pdf">www.broxtowe.gov.uk/media/8437/climate-change-and-green-futures-programme-combined-doc.pdf</a>   |

- 4.1.2. The CTTC NDP will be required to be in general conformity with the NPPF, which requires proactive planning to both mitigate and adapt to climate change. Planning policies are expected to improve the resilience of communities and infrastructure to climate change impacts, avoid inappropriate development in the flood plain, and support the move to a low carbon economy. The NPPF recognises the potential for planning to shape places in ways that contribute to radical reductions in greenhouse gas emissions and deliver long-term resilience, including through reuse, regeneration and conversion.
- 4.1.3. The Clean Growth Strategy, Clean Air Strategy and the 25-year Environment Plan are a suite of documents which seek to progress the government's commitment under the UK Climate Change Act to becoming net zero by 2050. The documents set out detailed proposals on how the government will tackle all sources of air pollution, whilst maintaining an affordable energy supply and increasing economic growth. This parallels with the 25-year Environment Plan, which further seeks to manage land resources sustainably, recover and reinstate nature, protect soils and habitats, increase resource efficiency, improve water quality, and connect people with the environment. The documents also interlink with the government's commitment to decarbonising transport, a recognised challenge that needs more work in a timely manner if government are to achieve net zero targets. Furthermore, the decarbonisation plan recognises the twinned need to undertake action to adapt the transport sector and increase resilience to climate change risks; and this challenge is more directly addressed through the UK's National Adaptation Programme
- 4.1.4. The River Trent CFMP forms one of 77 CFMPs for England and Wales. The document provides an overview of the flood risk within the River Trent catchment area and sets out the preferred plan for sustainable flood risk management over the next 50-100 years.
- 4.1.5. The CTTC NDP will also be required to be in general conformity with the Local Plans covering the area which contain policies relating to climate change mitigation and adaptation, including flood risk, green infrastructure development, resource efficiency, air quality, water quality, sustainable transport and accessibility.
- 4.1.6. Additionally, the Broxtowe Climate Change and Green Futures programme sets localised key targets following a climate change emergency declaration by the borough council in July 2019. The targets help to achieve an overarching vision to reduce carbon emissions to zero by 2027, invest in parks and open spaces and increase recycling and composting.

## 4.2 Baseline Information

### Summary of current baseline

4.2.1. In 2019, Broxtowe Borough Council declared a climate emergency and committed to be carbon neutral by 2027. In order to achieve this, the Council has produced a Climate Change and Green Futures programme (2020) which sets out a number of actions to reduce their carbon emissions. Key achievements thus far include:

- 55% reduction in emissions from diesel engines through the transfer to Euro 6 standard engines (from Euro 5) in 2014 compared to 2009.
- 53% reduction in emissions from Council buildings between 2009/10 and 2018/19 through reduced offices and energy efficiency measures.
- The planting of 100,000 trees between 2009 and 2016 and the planting of 2,102 trees in 2019/20.

### Climate Change mitigation

4.2.2. In relation to greenhouse gas (GHG) emissions, source data shows that Broxtowe borough has lower per capita emissions compared to the rest of the East Midlands region, but the decline in emissions since 2005 in comparison to England has been slower (Table 4.2). The highest contributors to GHG emissions in Broxtowe are the Industrial / Commercial and Transport sectors. The figures also show a trend of decreasing per capita emissions from all sources, with transport emissions plateauing.

**Table 4.2: Per capita local CO<sub>2</sub> emission estimates; industry, domestic and transport sectors (kt CO<sub>2</sub>)<sup>5</sup>**

|                         | 2005       | 2007       | 2009       | 2011       | 2013       | 2015       | 2017       |
|-------------------------|------------|------------|------------|------------|------------|------------|------------|
| <b>Broxtowe</b>         |            |            |            |            |            |            |            |
| Industrial & Commercial | 2.5        | 2.5        | 2.4        | 2.2        | 2.0        | 2.3        | 2.0        |
| Domestic                | 2.6        | 2.5        | 2.2        | 2.1        | 2.2        | 1.8        | 1.6        |
| Transport               | 3.0        | 3.1        | 2.7        | 2.6        | 2.6        | 2.6        | 2.6        |
| <b>Total per capita</b> | <b>8.2</b> | <b>8.1</b> | <b>7.2</b> | <b>6.9</b> | <b>6.7</b> | <b>6.6</b> | <b>6.3</b> |
| <b>East Midlands</b>    |            |            |            |            |            |            |            |
| Industrial & Commercial | 4.3        | 4.0        | 3.3        | 3.2        | 3.3        | 2.8        | 2.5        |
| Domestic                | 2.6        | 2.5        | 2.2        | 2.1        | 2.1        | 1.7        | 1.6        |
| Transport               | 2.6        | 2.6        | 2.3        | 2.2        | 2.2        | 2.2        | 2.3        |

<sup>5</sup> National Statistics UK local authority and regional carbon dioxide emissions national statistics: 2005 to 2017  
<https://www.gov.uk/government/statistics/uk-local-authority-and-regional-carbon-dioxide-emissions-national-statistics-2005-to-2017>

|                         |            |            |            |            |            |            |            |
|-------------------------|------------|------------|------------|------------|------------|------------|------------|
| <b>Total per capita</b> | <b>9.5</b> | <b>8.9</b> | <b>7.8</b> | <b>7.4</b> | <b>7.5</b> | <b>6.7</b> | <b>6.2</b> |
| <b>England</b>          |            |            |            |            |            |            |            |
| Industrial & Commercial | 3.8        | 3.6        | 3.0        | 2.7        | 2.8        | 2.3        | 1.8        |
| Domestic                | 2.5        | 2.4        | 2.1        | 2.0        | 2.0        | 1.6        | 1.5        |
| Transport               | 2.3        | 2.2        | 2.0        | 1.9        | 1.9        | 1.9        | 1.9        |
| <b>Total per capita</b> | <b>8.5</b> | <b>8.1</b> | <b>7.0</b> | <b>6.6</b> | <b>6.6</b> | <b>5.7</b> | <b>5.1</b> |

4.2.3. Electric Vehicles (EVs) do not burn fuel and create almost no noise. They are battery powered and have the potential to be 'zero-emission vehicles' (ZEVs) if powered by renewable electricity. As of April 2020, there were 28 public electric charging devices in Broxtowe borough, 7 of which are rapid charging, equating to 24.7 charging devices per 100,000 population. In nearby Nottingham, there were a total of 128 public charging devices, 28 of which are rapid charging<sup>6</sup>. Within the NDP area, there are electric charging points at Toton Lane Park & Ride (rapid, fast and slow) and Tesco Extra Toton (fast)<sup>7</sup>.

4.2.4. In terms of renewable energy, the Department for Business, Energy and Industrial Strategy publishes annual statistics on renewable energy generation, disaggregated by Local Authority<sup>8</sup>. The most recent data (2019) shows that Broxtowe has a total of 1,588 renewable energy (electricity) installations. These mainly consist of photovoltaics (1,584), but the borough includes 2 onshore wind installations and 2 sewage gas installations.

### Climate Change adaptation

4.2.5. Climate change projections for the United Kingdom published as part of the UKCP18<sup>9</sup> programme provide detailed probabilistic projections of climate change. Although there is uncertainty in climate change predictions; the projected general trend is a move towards warmer, wetter winters and hotter, drier summers. However, natural variations mean that some cold winters, some dry winters, some cool summers and some wet summers will still occur. The following changes are likely to have taken place by 2070s. The changes mentioned below relate to an area in central England based on the 10-90th percentile range (low to high emissions) of emission scenario<sup>10</sup>:

<sup>6</sup> Department for Transport (2020) Electric vehicle charging device statistics: April 2020 [online] available at: <https://www.gov.uk/government/statistics/electric-vehicle-charging-device-statistics-april-2020>

<sup>7</sup> Zap Map (2021) [online] available at: <https://www.zap-map.com/live/>

<sup>8</sup> DBEIS (2020) Regional Renewable Statistics - Renewable electricity by local authority 2014 to 2019 [online] available at: <https://www.gov.uk/government/statistics/regional-renewable-statistics>

<sup>9</sup> Further information on the UKCP18 programme is available from: <https://www.metoffice.gov.uk/research/collaboration/ukcp>.

<sup>10</sup> Projections from UKCP18 Climate Change Over Land, which correspond to two emissions scenarios (Low and High). The key characteristics of each of these scenarios are:

Medium emissions Scenario - describes a world that has rapid economic growth, quick spreading of new and efficient technologies, and a global population that reaches 9 billion mid-century and then gradually declines. It also relies on a balance between different energy sources.

High emissions Scenario - similar economic and population trends as the Medium emission scenario but more emphasis on power generation from fossil fuels.

Low emissions scenario - represents a more integrated ecologically friendly world, characterised by clean and resource efficient technologies, and lower global greenhouse gas emissions.

- In UKCP18, the probabilistic projections provide local low, central and high changes across the UK, corresponding to 10%, 50% and 90% probability levels. These local values can be averaged over the UK to give a range of average warming between the 10% and 90% probability levels. By 2070, in the high emission scenario, this range amounts to 0.7°C to 4.2°C in winter, and 0.9°C to 5.4°C, in summer. For precipitation, corresponding ranges of UK average changes are -1% to +35% for winter, and -47% to +2% for summer, where positive values indicate more precipitation and negative values indicate reduced precipitation (drier summers).
- Hot summers are predicted to become more common, with the probability of a hot summer rising from the current 20-25% to up to 50% by the middle of the century.

4.2.6. Based on the above, in the future the NDP area is likely to experience a warmer climate, with drier summers and potentially wetter winters, which means that extreme events such as floods and droughts are likely to become less predictable and possibly more frequent.

#### Flood risk

- 4.2.7. Flood Zone 1 is defined as having a 'Low Probability' of flooding (from fluvial sources) and incorporates areas where the annual probability of flooding is lower than 0.1% (a 1 in 1000 year flood event). Flood Zone 2 is defined as having a 'Medium Probability' of flooding, with an annual probability of flooding between 0.1% and 1.0% for fluvial flooding (between a 1 in 1000 year and 1 in 100 year flood event) or 0.1% and 0.5% for tidal and coastal flooding (between a 1 in 1000 year and 1 in 100 year flood event). Flood Zone 3 is defined as having a 'High Probability' of flooding, with an annual probability of beyond 1.0% for fluvial floods and beyond 0.5% for tidal and coastal floods.
- 4.2.8. As illustrated in Figure 4.1, most of the NDP area falls in Flood Zone 1, with the exception of a densely built-up area along the southern boundary of Flood Zones 2 and 3. This aligns with the route of the River Erewash and River Trent.
- 4.2.9. Surface water flooding occurs when excess water runs off across the surface of the land. Several areas of high and medium surface water flood risk exist in the NDP area; however, these are dispersed with large areas of very low flood risk in between and broadly aligned to waterbodies.







Figure 4.2: Surface water flood risk in the NDP area



## Summary of future baseline

- 4.2.10. There is potential for climate change to increase the occurrence of extreme weather events in the NDP area. Such weather events are likely to increase the risks associated with climate change (including fluvial flooding) with an increased need for resilience and adaptation.
- 4.2.11. In terms of the exacerbation of climate change, GHG emissions could decrease through the adoption of energy efficient measures and cleaner energy (especially in transport and industry, which is a key contributor in the wider region). However, increases in population and the number of households could counteract this.
- 4.2.12. With regards to transport emissions, the uptake of Ultra Low Emission Vehicles (ULEVs) will contribute positively towards the reduction of road transport related emissions. In line with assumptions made by the Department for Transport's 'Road to Zero' Report (2018)<sup>11</sup>, it is assumed that ULEV uptake will increase rapidly in the coming decade and aside from Heavy Goods Vehicles (HGVs), all vehicles could be ultra-low emission (powered either by hydrogen or electricity) by 2030.
- 4.2.13. Flood risk at any specific location may be influenced by local factors such as existing formal or informal flood defences and the capacity of existing drainage systems or road/rail culverts. The adoption of SUDs and introduction of Green Infrastructure within development schemes may reduce the speed of surface water run-off and have positive effects in terms of flood risk. Green Infrastructure presents opportunities to address multiple issues through multi-functional spaces.
- 4.2.14. Development in any instance has the potential to exacerbate flood risk within and in the vicinity of the NDP area by increasing the volume of surface water run-off, or by introducing areas of hard standing which could increase the speed of surface water run-off. The risk would be most increased if development were to locate in proximity of Flood Zone 2 or Flood Zone 3 areas, but this is unlikely due to these areas being within densely built-up and not within Local Plan site allocations.

## 4.3 Key headline issues

4.3.1. The key issues are as follows:

- Average CO<sub>2</sub> emissions per capita are declining in Broxtowe borough.
- The NDP area falls predominantly within Flood Zone 1, although there is an area of Flood Zone 2 and 3 that accords with water courses and bodies along the southern boundary of the Plan area.
- Development could exacerbate climate change and flooding from fluvial and non-fluvial sources. However, there are opportunities for mitigation.

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<sup>11</sup> HM Gov (2018) The Road to Zero – Next steps towards cleaner road transport and delivering our Industrial Strategy [online] available at: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/739460/road-to-zero.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/739460/road-to-zero.pdf)



## 4.4 Scoping outcome

4.4.1. With regards to climate change, it is unlikely that the NDP will have significant effects on levels of GHG emissions as the Plan does not seek to allocate sites and any growth involved is likely to be relatively minor. Furthermore, standards for energy and water efficiency are established nationally and at strategic level. The scope for the NDP to deliver substantial improvements is therefore unlikely to be significant. Therefore, Climate Change has been **SCOPED OUT** of the SEA.

4.4.2. Whilst part of the NDP area falls within Flood Zones 2 and 3 and areas at risk of surface water flooding, the Plan does not seek to allocate sites and where growth is proposed, it is unlikely to deviate significantly from the protection afforded through national and local planning policy. Therefore, Flood risk has been **SCOPED OUT** of the SEA, but the following recommendations are highlighted at this stage to help inform the NDP's development:

- Development should avoid Flood Zones 2 and 3 and should not increase the risk of fluvial flooding.
- The NDP should encourage the sustainable management of surface water run-off and drainage (where possible) through measures such as SuDS, ensuring that the risk of flooding is not increased either within the Plan area or downstream.

## 5. Historic Environment

### Focus of theme:

This theme focuses on designated and non-designated heritage assets and features (including archaeology) and their setting.

### 5.1 Policy Context

5.1.1. Table 5.1 presents the most relevant documents identified in the policy review for the purposes of the SEA.

**Table 5.1: Plans, policies and strategies reviewed in relation to historic environment**

| Document Title   | Year of publication | Weblink   |
|--|---------------------|---|
| National Planning Policy Framework (NPPF)  | 2019                | <a href="https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/810197/NPPF_Feb_2019_revised.pdf">assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/810197/NPPF_Feb_2019_revised.pdf</a>               |
| A Green Future: Our 25 Year Plan to Improve the Environment  | 2018                | <a href="https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/693158/25-year-environment-plan.pdf">assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/693158/25-year-environment-plan.pdf</a>         |
| The National Design Guide  | 2019                | <a href="http://www.gov.uk/government/publications/national-design-guide">www.gov.uk/government/publications/national-design-guide</a>  |
| Historic England Advice Note 1: Conservation Area Appraisal, Designation and Management                    | 2019                | <a href="https://historicengland.org.uk/images-books/publications/conservation-area-appraisal-designation-management-advice-note-1/">historicengland.org.uk/images-books/publications/conservation-area-appraisal-designation-management-advice-note-1/</a>                           |
| Historic England Advice Note 3: The Setting of Heritage Assets   | 2017                | <a href="https://historicengland.org.uk/images-books/publications/gpa3-setting-of-heritage-assets/">historicengland.org.uk/images-books/publications/gpa3-setting-of-heritage-assets/</a>   |
| Historic England Advice Note 8: Sustainability Appraisal (SA) and Strategic Environmental Assessment (SEA) | 2016                | <a href="https://historicengland.org.uk/images-books/publications/sustainability-appraisal-and-strategic-environmental-assessment-advice-note-8/">historicengland.org.uk/images-books/publications/sustainability-appraisal-and-strategic-environmental-assessment-advice-note-8/</a> |
| Historic England Advice Note 11: Neighbourhood Planning and the Historic Environment                       | 2018                | <a href="https://historicengland.org.uk/images-books/publications/neighbourhood-planning-and-the-historic-environment/">historicengland.org.uk/images-books/publications/neighbourhood-planning-and-the-historic-environment/</a>   |
| Greater Nottingham Aligned Core Strategies Part 1 Local Plan   | 2014                | <a href="http://www.broxtowe.gov.uk/media/2160/broxtowe-aligned-core-strategy.pdf">www.broxtowe.gov.uk/media/2160/broxtowe-aligned-core-strategy.pdf</a>  |
| Broxtowe Part 2 Local Plan   | 2019                | <a href="http://www.broxtowe.gov.uk/media/7088/part-2-local-plan-adopted-october-2019.pdf">www.broxtowe.gov.uk/media/7088/part-2-local-plan-adopted-october-2019.pdf</a>  |
| Chetwynd: The Toton and Chilwell Heritage and Character Assessment   | 2019                | <a href="https://drive.google.com/file/d/1EckwsY_ZX5q3LYAdMkz1yhVvVKFnYrdw/view">https://drive.google.com/file/d/1EckwsY_ZX5q3LYAdMkz1yhVvVKFnYrdw/view</a>   |
| Chilwell Conservation Area Character Appraisal   | (no date)           | <a href="http://www.broxtowe.gov.uk/media/1926/chilwell-conservation-area-appraisal-web.pdf">www.broxtowe.gov.uk/media/1926/chilwell-conservation-area-appraisal-web.pdf</a>  |

- 5.1.2. The CTTC NDP will be required to be in general conformity with the NPPF, which ultimately seeks to conserve and enhance the historic environment assets in a manner appropriate to their significance. The NPPF seeks planning policies and decisions which are sympathetic to local character and history without preventing or discouraging appropriate innovation of change. Planning Practice Guidance expands on the NPPF recognising the proactive rather than passive nature of conservation.
- 5.1.3. The role of the historic environment, as part of healthy and thriving ecosystems, landscapes and cultural values, including settlement identity, is reiterated through the key messages of the 25 Year Environment Plan and National Design Guide.
- 5.1.4. Historic England's Advice Notes provide further guidance in relation to the conservation and enhancement of the historic environment. Of particular relevance for the CTTC NDP is the emphasis on the importance of:
- Understanding the different types of special architectural and historic interest which underpin designations, as well as how settings and/ or views contribute to the significance of heritage assets;
  - Recognising the value of implementing controls through neighbourhood plans, conservation area appraisals and management plans; and
  - Appropriate evidence gathering, including clearly identifying those issues that threaten an area or assets character or appearance and that merit the introduction of management measures.
- 5.1.5. The CTTC NDP will also be required to be in general conformity with the Local Plans covering the NDP area which contain policies directly relating to the historic environment. The plan would also need to consider the character appraisal of the Chilwell Conservation Area which identifies features of historic importance, issues and threats to its significance and opportunities for enhancements.

## 5.2 Baseline Information

### Summary of current baseline

- 5.2.1. The Toton and Chilwell are both mentioned in the 11th century Domesday Book. However, little is known about the history of the area during the following centuries other than both areas initially being small villages dominated by agriculture, surrounded by fields and orchards. The historic village cores captured in Sanderson's Map of 1835 provide an early illustration of the two separate villages (shown in Figure 5.1)<sup>12</sup>.
- 5.2.2. The west of the NDP area is characterised by Toton Sidings. Established in 1856, it has played an important role in the development the Erewash valley, although associated housing was primarily to the west in Long Eaton. Later, in 1915, the construction of the National Shell Filling Factory No. 6 (current Chetwynd Barracks), between Toton, to the west and Chilwell, to the east led to considerable further development within the centre of the area.

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<sup>12</sup> Nottinghamshire HER

- 5.2.3. The majority of housing in the NDP area was constructed from around the 1930s onwards, as plot development of fields and orchards.

#### Designated Heritage Assets

- 5.2.4. The NDP area contains numerous heritage features, with some recognised through designations, including a statutory listed building (Memorial to workers of National Filling Factory No.6, Chilwell) and Chilwell Conservation Area which partly intersects the NDP area (see Figure 5.1).
- 5.2.5. The Memorial to workers of National Filling Factory No.6, Chilwell constitutes a Grade II listed building and was built by the factory workmen to commemorate those who had died in accidents at the factory, unveiled on 13 March 1919 by the Duke of Portland.
- 5.2.6. The monument takes the form of a large truncated pyramid surmounted by an obelisk. The concrete pyramid has a vermiculated surface and stands on a three-stepped base. Shell casings mounted on the upper step carry a chain enclosing the memorial, with an opening to the front. Rectangular panels on the pyramid faces carry the dedications and commemorated names.
- 5.2.7. There are no registered parks and gardens, Scheduled Ancient Monuments, or registered battlefields within the NDP area.
- 5.2.8. Historic England is the statutory consultee for certain categories of listed building consent. The historic environment is protected through the planning system, via conditions imposed on developers and other mechanisms.

#### Chilwell Conservation Area

- 5.2.9. The Conservation Area was designated in 1978. The area partly includes the site of the former Chilwell Hall, which was the County House of the village of Chilwell since the time of Henry VI. An important feature of the conservation area is the grouping of small cottages around The Green, formerly China Row, which are some of the oldest in Chilwell and, although considerably altered, is original mud and wattle daub buildings. The Conservation Area also includes 5 Listed Buildings.
- 5.2.10. The Conservation Area has an appraisal aimed to preserve and enhance its character. The appraisal identifies three main character zones and sets out key features and issues including opportunities for enhancement.

#### Locally Listed building and features

- 5.2.11. An informal local list compiled by Broxtowe Borough Council identify the following buildings to be of historical interest:
- No. 49 School Lane, a formal school building that contributes to local distinctiveness.
  - Wheatgrass Farm, isolated farmstead consisting of red brick farmhouse.
- 5.2.12. The NDP group have identified Mortuary (Building 13, Chetwynd Barracks) as a building of merit.

5.2.13. Buildings of merit identified in the Chetwynd: The Toton and Chilwell HCA (with input from the NDP group) include:

- Orchard Cottage, 62 Chetwynd Road;
- Woodside House (Building 101, Chetwynd Barracks);
- WW1 Red Cross Nurses Building (Building 137, Chetwynd Barracks);
- WW1 Filled Shell Store (Building 157, Chetwynd Barracks);
- Building 125 (Chetwynd Barracks);
- Williams Barracks (Building 102, Chetwynd Barracks);
- Hobgoblin Wood (Chetwynd Barracks);
- WW1 Tunnel (Chetwynd Barracks);
- Playing fields (Chetwynd Barracks);
- Chetwynd Road gates (Chetwynd Barracks);
- Chapel window (Chetwynd Barracks);
- Gatehouse (Chetwynd Barracks); and
- Chilwell Crest lamp posts.

Heritage at Risk

5.2.14. Since 2008, Historic England has released an annual Heritage at Risk Register. The Heritage at Risk Register highlights some of the Grade I, Grade II and Grade II\* listed buildings, scheduled monuments, conservation areas, wreck sites and registered parks and gardens in England deemed to be 'at risk'. There are no heritage assets identified in the Heritage at Risk Register within the NDP area. However, as the Register does not cover all Grade II listed buildings, buildings in conservation areas and non-designated heritage assets, it is possible that some locally significant heritage may be at risk.

Archaeology and other historic records

5.2.15. Several archaeological studies and watching briefs have been undertaken within the NDP area, with the following findings noted<sup>13</sup>:

- 59 Highfield Road, Chilwell: Roman coin found.
- Toton Park and Ride terminus: north south aligned medieval and post-medieval furrows and ditches observed across the site indicating medieval/post-medieval arable or pastoral farming use.

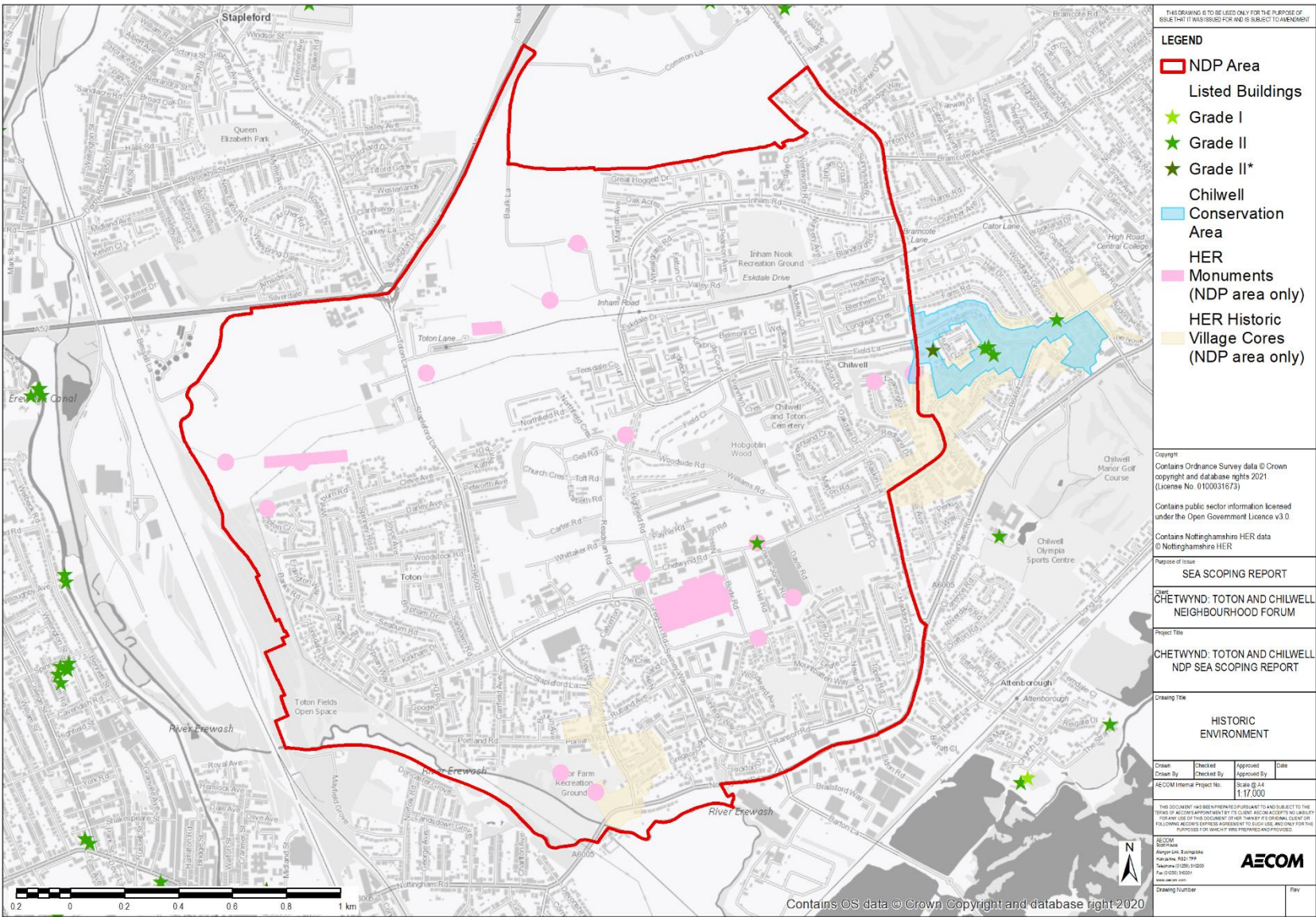
5.2.16. A search of the Historic Environment Record has been undertaken by Nottinghamshire County Council and the findings will help to inform the appraisal of the NDP (and any reasonable alternatives). The Nottinghamshire HER identifies 19 monuments and 7 events in the NDP area.

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<sup>13</sup> Source: Archaeology Data Service.



Figure 5.1: Historic Environment Designations in the CTTC NDP area (includes Nottinghamshire HER data)





## Summary of future baseline

- 5.2.17. New development in the NDP area has the potential to impact on the fabric and setting of heritage assets and upon the character of the townscape. This may incur negative effects, such as the adoption of unsympathetic design and material choice, or positive effects through targeted redevelopment of derelict and underused land and buildings.
- 5.2.18. It should be noted that existing historic environment designations and the historic environment based policies within the NPPF and the Development Plan will offer a degree of protection to heritage assets and their settings.

## 5.3 Key headline issues

5.3.1. The key issues are as follows:

- The NDP area contains a Grade II Listing Building, part of a conservation area and numerous locally identified buildings and features, which could be affected by policies and proposals within the plan (either positively or negatively).
- An unsensitive approach that does not seek to conserve and enhance heritage assets could result in the erosion of the townscape quality.

## 5.4 Scoping outcome

5.4.1. Historic Environment has been **SCOPED IN** to the SEA. The NDP does not seek to allocate sites. However, the NDP has potential to influence the design and character of development on Local Plan site allocations including Chetwynd Barracks which could have positive effects on historic features (and their settings) and the character of the built and natural environment.

## 5.5 What are the SEA objectives and appraisal questions for the Historic Environment SEA theme?

5.5.1. The SEA topic 'Historic Environment' has been scoped in to the SEA. Table 5.2 presents the SEA objective and appraisal questions that will be used to assess the plan in relation to this theme.

**Table 5.2: SEA Framework of objectives and assessment questions: Historic Environment**

| SEA Objective  | Supporting Questions  |
|--|---|
| Protect, enhance and manage the historic environment within and surrounding the CTTC NDP area. | <p>Will the option/proposal help to:</p> <ul style="list-style-type: none"> <li>• Conserve and enhance buildings and structures of architectural or historic interest, both designated and non-designated, and their settings?</li> <li>• Conserve and enhance the character of Chilwell Conservation Area?</li> <li>• Conserve and enhance the special interest and character of locally important features and their settings?</li> <li>• Protect the integrity of the historic setting of key monuments of cultural heritage interest as listed in the Nottinghamshire HER?</li> </ul> |

- Support the undertaking of early archaeological investigations and, where appropriate, recommend mitigation strategies?
  - Support access to, interpretation and understanding of the historic evolution and character of the NDP area?
-

## 6. Landscape

### Focus of theme:

This theme focuses on designated and protected landscapes within or near to the NDP area, as well as landscape character, landscape quality and visual amenity.

### 6.1 Policy Context

6.1.1. Table 6.1 presents the most relevant documents identified in the policy review for the purposes of the SEA.

**Table 6.1: Plans, policies and strategies reviewed in relation to landscape**

| Document Title   | Year of publication | Weblink   |
|--|---------------------|---|
| National Planning Policy Framework (NPPF)                          | 2019                | <a href="https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/810197/NPPF_Feb_2019_revised.pdf">assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/810197/NPPF_Feb_2019_revised.pdf</a>   |
| A Green Future: Our 25 Year Plan to Improve the Environment        | 2018                | <a href="https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/693158/25-year-environment-plan.pdf">assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/693158/25-year-environment-plan.pdf</a>   |
| The National Design Guide  | 2019                | <a href="https://www.gov.uk/government/publications/national-design-guide">www.gov.uk/government/publications/national-design-guide</a>   |
| National Character Area Profiles                                   | 2012                | <a href="https://www.gov.uk/government/publications/national-character-area-profiles-data-for-local-decision-making/national-character-area-profiles#ncas-in-east-midlands">www.gov.uk/government/publications/national-character-area-profiles-data-for-local-decision-making/national-character-area-profiles#ncas-in-east-midlands</a> |
| Greater Nottingham Landscape Character Assessment                  | 2009                | <a href="http://www.nottinghaminsight.org.uk/insight/handler/downloadHandler.ashx?node=94091">http://www.nottinghaminsight.org.uk/insight/handler/downloadHandler.ashx?node=94091</a>   |
| Greater Nottingham Aligned Core Strategies Part 1 Local Plan       | 2014                | <a href="https://www.broxtowe.gov.uk/media/2160/broxtowe-aligned-core-strategy.pdf">www.broxtowe.gov.uk/media/2160/broxtowe-aligned-core-strategy.pdf</a>   |
| Broxtowe Part 2 Local Plan   | 2019                | <a href="https://www.broxtowe.gov.uk/media/7088/part-2-local-plan-adopted-october-2019.pdf">www.broxtowe.gov.uk/media/7088/part-2-local-plan-adopted-october-2019.pdf</a>   |
| Chetwynd: The Toton and Chilwell Heritage and Character Assessment | 2019                | <a href="https://drive.google.com/file/d/1EckwsY_ZX5q3LYAdMkz1yhVvVKFnYrdw/view">https://drive.google.com/file/d/1EckwsY_ZX5q3LYAdMkz1yhVvVKFnYrdw/view</a>   |

6.1.2. The CTTC NDP will be required to be in general conformity with the NPPF which gives great weight to conserving and enhancing protected landscapes, as well as landscape character and scenic beauty. The NPPF recognises the role of green infrastructure in landscape settings, as well as the importance of designated biodiversity sites, habitats, woodland, historic features, agricultural land and cultural landscapes. The positive contribution that land remediation can make in terms of addressing despoiled, degraded, derelict, contaminated and unstable land is also recognised.

- 6.1.3. The 25-year Environment Plan and National Design Guide complement each other with their aims for a cleaner, greener country which puts the environment first and celebrates the variety of natural landscapes and habitats. Design is focused on beautiful, enduring and successful places, which respond to local character and provide a network of high quality green open spaces.
- 6.1.4. The Greater Nottingham Landscape Character Assessment identifies areas of distinct landscape character across Nottinghamshire. These areas are described in detail with regard to geology, topography, soils, biodiversity, woodland, human and historic influences, landform, land use and built form. It further sets out specific guidelines for the management of each of the landscape character areas presented.
- 6.1.5. The CTTC NDP will also be required to be in general conformity with the Local Plans covering the NDP area, which contains policies specifically relating to valued landscapes, landscape character, settlement identity, green infrastructure and design.

## 6.2 Baseline Information

### Summary of current baseline

#### National Landscape Character

- 6.2.1. The NDP area lies within the Sherwood (49) and Trent Valley Washlands (69) National Character Areas (NCA). The spatial context of the NCA is illustrated in Figure 6.1.
- 6.2.2. The Sherwood NCA consists of gently rolling hills, historically managed as woodlands and remaining as a well wooded area. Woodland is a distinctive feature of the area with a mosaic of broadleaved, mixed and coniferous woodlands, including ancient oak wood pasture and parkland, and pine plantations. Large estate parklands, heathland, open arable land and a strong mining heritage also characterise the area.
- 6.2.3. The Trent Valley Washlands NCA comprises the river flood plain corridors of the middle reaches of the River Trent's catchment. It is a low-lying landscape clearly delineated at its edges by higher ground, and it is largely comprised of the flat flood plains and gravel terraces of the rivers. Arable crops are by and large located on the freely draining soils of the river terraces and on the higher ground where fields are big and hedgerows are small with few trees. Woodland cover in the Washlands is very limited, although riparian trees, especially willows, provide an important component of the landscape.

#### Regional Landscape Character

- 6.2.4. The Greater Nottingham Landscape Character Assessment provides a detailed assessment at a regional level of the landscape character of the NDP area. The NDP area falls partially within the Beeston and Stapleford Urban Fringe and Erewash River Corridor character areas. The spatial context of the area is illustrated in Figure 6.2.

- 6.2.5. The Beeston and Stapleford Urban Fringe consists of flat to gently undulating landform, sloping down to the west. The landscape is heavily influenced by the urban environment with residential areas prominent on the edges. The area is largely enclosed on all sides by built development with connecting linear roadways dissecting the area. The area functions as a green buffer preventing merging of adjacent urban areas.
- 6.2.6. Land use in the character area is agricultural, predominantly arable due to presence of high-grade agricultural land. There is a geometric field pattern of mainly medium to large sized fields, bounded by neatly trimmed hedgerows. Small groups of trees and areas of linear woodland provide screening along urban edges and the combination of small woodlands and hedgerow trees within agricultural fields give perception of a wooded landscape.
- 6.2.7. The Erewash River Corridor is characterised by a narrow low floodplain lying in a broad valley. The meandering river channel of the Erewash is not visually prominent although the effects of its presence are clearly seen in the landscape (such as wetland habitats). Typical wetland habitats such as reeds, rushes, ponds and open water are characteristic features. Native woodland dominated by wet woodland species such as alder and willow are characteristics of the area. Young regeneration scrub is also common.
- 6.2.8. Belts of linear woodland are often used on the valley sides and along the railway corridor to screen and filter views of infrastructure and buildings.

#### Local Landscape and Built Character

- 6.2.9. The Chetwynd: The Toton and Chilwell Heritage and Character Assessment provides the most detailed assessment of the landscape and built character of the NDP area. The NDP area falls within the Erewash Corridor, Toton and Chilwell Residential, Chetwynd Barracks, and Toton and Chilwell Green Fringe character areas. The character areas are illustrated in Figure 6.3
- 6.2.10. The Erewash Corridor is characterised by a narrow largely north-south oriented linear green space that runs broadly parallel to the River Erewash, partly along the river valley and partly on higher ground. The area has a semi-managed appearance and has relatively dense network of paths connecting open spaces and residential areas. The area also includes vegetation that comprises a mosaic of young woodland, mown amenity grassland, meadows, scrub, localised ornamental planting and river bank vegetation.
- 6.2.11. The Toton and Chilwell Residential area consist of low density, predominantly post-war residential development and older buildings of historic value on Chetwynd Road and within the eastern fringe of Chilwell Conservation Area.
- 6.2.12. The Chetwynd Barracks area is characterised by buildings in a variety of architectural ages and styles predominantly of a functional 20th Century 'MOD' character and military housing, but also older features that offer tangible evidence of a distinctive unique historic site. Steep topography towards the north of the area allows extensive views across the Trent Valley.
- 6.2.13. The Toton and Chilwell Green Fringe consists of largely actively-farmed medium scale arable fields with high degree of openness, bounded by hedgerows and trees, contrasting with and surrounded on all sides by built-up areas for which it avoids coalescence.



Figure 6.1: National Character Areas covering the NDP area

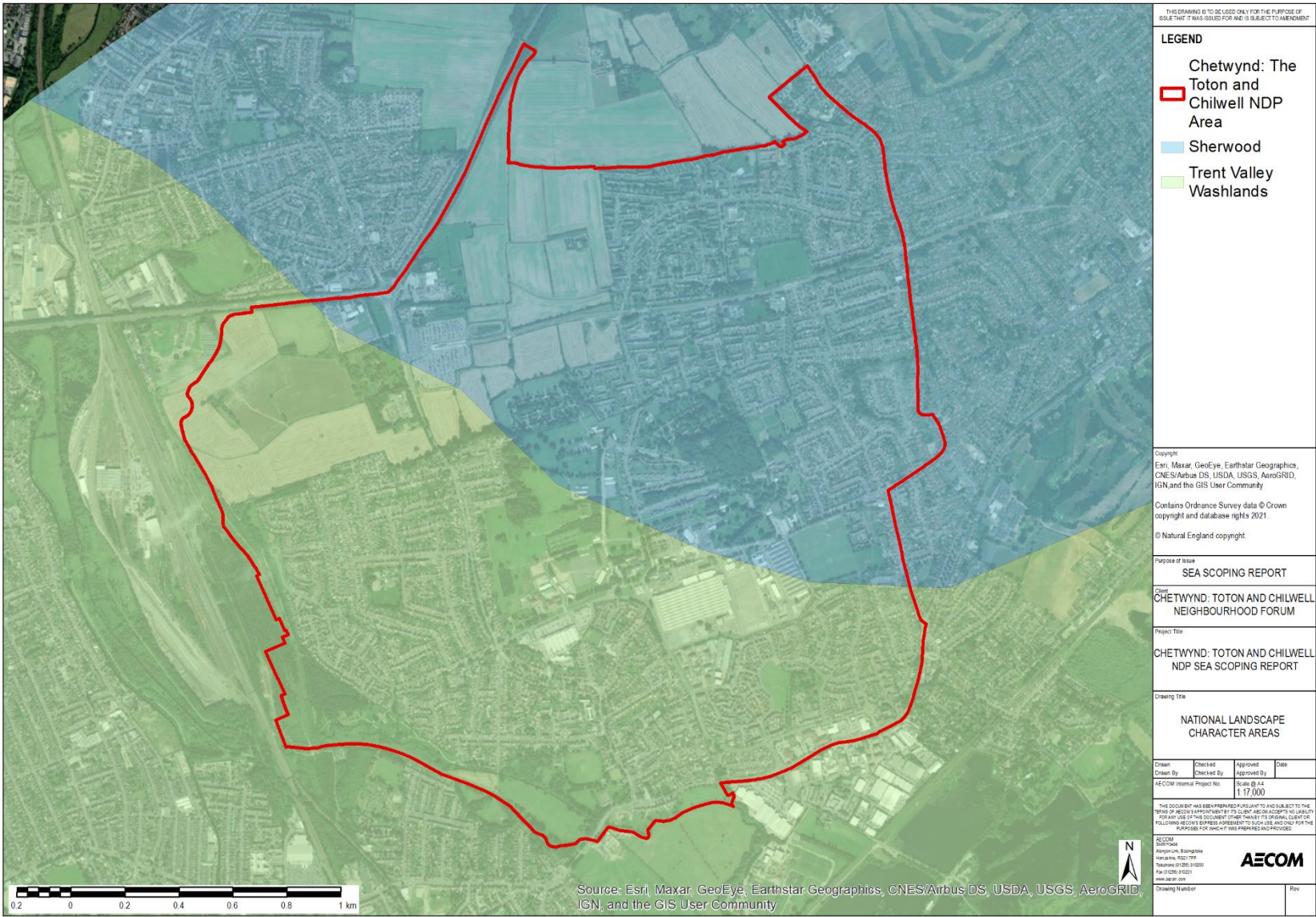


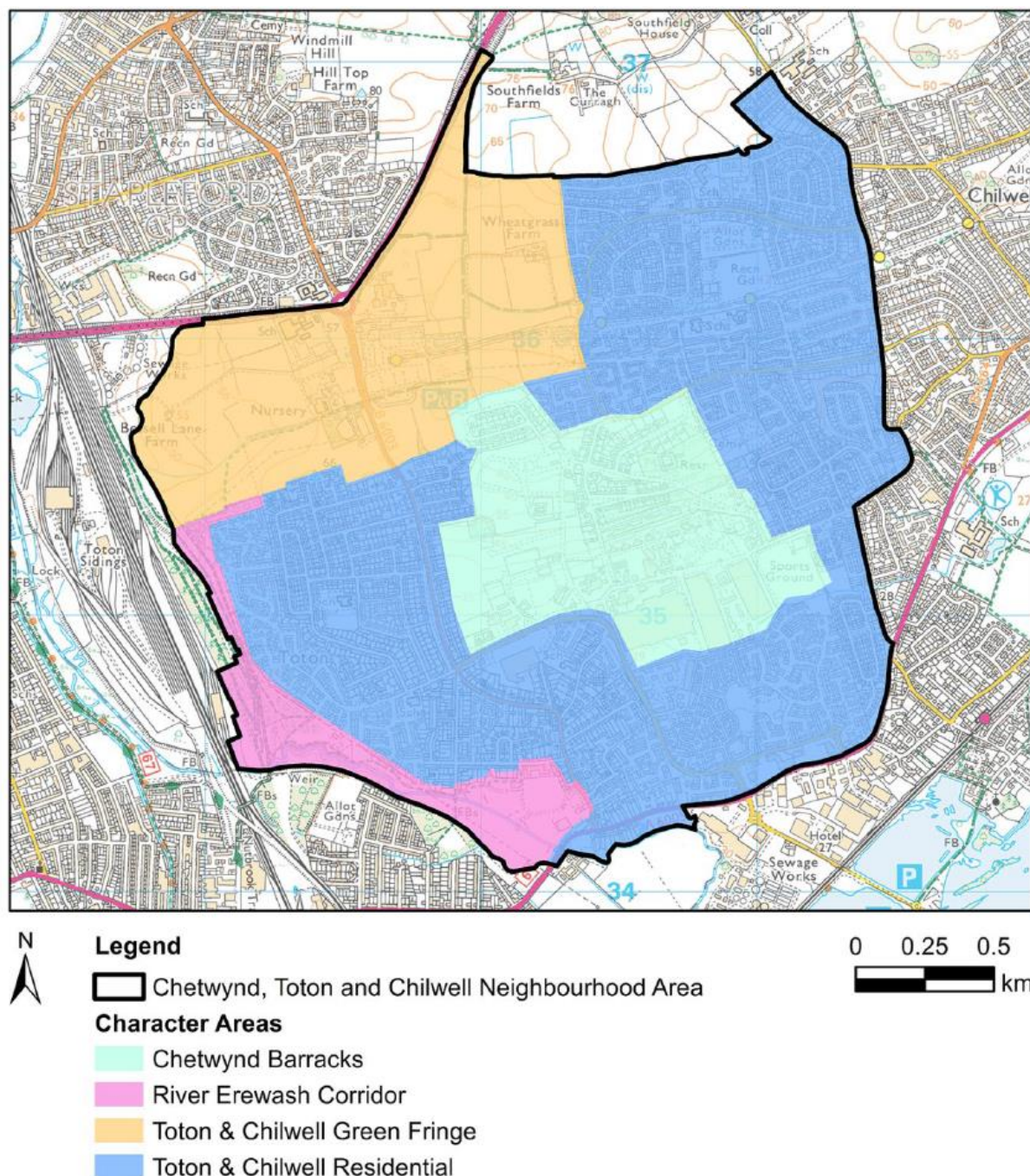


Figure 6.2: Greater Nottingham Landscape Character Areas covering the NDP area





**Figure 6.3: The Chetwynd: The Toton and Chilwell HCA Character Areas**



Character Area Overview - Reproduced from Ordnance Survey digital map data © Crown copyright 2018. All rights reserved. Licence number 100019453. Contains Ordnance Survey Data © Crown Copyright and database right 2018.

### Summary of future baseline

6.2.14. Local Plan site allocations in the NDP area including the land in agricultural use north of Toton and Chetwynd Barracks is likely to have effects on landscape character, increase coalescence with Stapleford and could result in harm or the loss of important landscape features.

6.2.15. Existing Development Plan policies will offer some protection to landscape assets and their settings. However, depending on the scale and nature of development, a lack of vision and framework could result in the delivery of different development styles, layouts and material choices. This could have a disruptive impact on the landscape through the lack of cohesive development.

6.2.16. Insensitive development could also result in the loss of landscape features and visual impact. In contrary, sensitive development presents an opportunity to enhance the existing townscape character of the NDP area whilst respecting the key characteristics of the landscape.

## 6.3 Key headline issues

6.3.1. The key issues are as follows:

- The NDP area is predominantly urbanised with gently rolling open countryside in the north and north west and a steep slope to the west to Toton Sidings.
- Local Plan site allocations in the NDP area could result in harm or the loss of important landscape features.
- Existing Development Plan policies offer a degree of protection to landscape assets and their settings but insensitive development could have a disruptive impact on landscape.

## 6.4 Scoping outcome

6.4.1. Landscape has been **SCOPED IN** to the SEA as there is potential for significant effects upon the character of landscapes. The NDP does not propose to allocate sites for housing and the NDP is unlikely to encourage non-housing development outside the existing built area and Local Plan site allocations. However, there is potential for positive effects on landscape character as policies in the NDP may influence site allocations in the Local Plan with potential to have adverse effects on landscape character.

## 6.5 What are the SEA objectives and appraisal questions for the Landscape SEA theme?

6.5.1. The SEA topic 'Landscape' has been scoped in to the SEA. Table 6.2 presents the SEA objective and appraisal questions that will be used to assess the plan in relation to this theme.

**Table 6.2: SEA Framework of objectives and assessment questions: Landscape**

| SEA Objective   | Supporting Questions   |
|---|--|
| Protect, enhance and manage the distinctive character and appearance of landscapes. | <p>Will the option/proposal help to:</p> <ul style="list-style-type: none"> <li>• Conserve, better reveal the significance and enhance landscape assets?</li> <li>• Contribute to better management of landscape assets?</li> <li>• Identify and protect/enhance features of local importance?</li> <li>• Support access to, interpretation and understanding of the surrounding landscape?</li> <li>• Improve linkages to open space and the countryside?</li> <li>• Seek to minimise a sense of coalescence with other urban areas?</li> </ul> |

## 7. Land, Soil and Water Resources

### Focus of theme:

This theme focuses on the quality of soil resources, the extent of mineral resources, water supply resources and water quality in the NDP area.

### 7.1 Policy Context

7.1.1. Table 7.1 presents the most relevant documents identified in the policy review for the purposes of the SEA.

**Table 7.1: Plans, policies and strategies reviewed in relation to land, soil and water resources**

| Document Title   | Year of publication | Weblink   |
|--|---------------------|---|
| National Planning Policy Framework (NPPF)                    | 2019                | <a href="https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/810197/NPPF_Feb_2019_revised.pdf">assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/810197/NPPF_Feb_2019_revised.pdf</a>                                   |
| A Green Future: Our 25 Year Plan to Improve the Environment  | 2018                | <a href="https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/693158/25-year-environment-plan.pdf">assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/693158/25-year-environment-plan.pdf</a>                             |
| Safeguarding our Soils: A strategy for England               | 2009                | <a href="http://www.gov.uk/government/publications/safe-guarding-our-soils-a-strategy-for-england">www.gov.uk/government/publications/safe-guarding-our-soils-a-strategy-for-england</a>  |
| Future Water: The government's water strategy for England    | 2011                | <a href="http://www.gov.uk/government/publications/future-water-the-government-s-water-strategy-for-england">www.gov.uk/government/publications/future-water-the-government-s-water-strategy-for-england</a>  |
| Water for Life   | 2011                | <a href="https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/228861/8230.pdf">assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/228861/8230.pdf</a>   |
| The National Waste Management Plan                           | 2013                | <a href="https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/265810/pb14100-waste-management-plan-20131213.pdf">assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/265810/pb14100-waste-management-plan-20131213.pdf</a> |
| Severn Trent Water's Water Resources Management Plan (WRMP)  | 2019                | <a href="http://www.severntrent.com/content/dam/stw-plc/our-plans/severn-trent-water-resource-management-plan.pdf">www.severntrent.com/content/dam/stw-plc/our-plans/severn-trent-water-resource-management-plan.pdf</a>  |
| Greater Nottingham and Ashfield Outline Water Cycle Study    | 2010                | <a href="http://www.ashfield.gov.uk/media/8d8501e3cd60ecd/greater_nottingham_and_ashfield_outline_water_cycle_study.pdf">www.ashfield.gov.uk/media/8d8501e3cd60ecd/greater_nottingham_and_ashfield_outline_water_cycle_study.pdf</a>  |
| Greater Nottingham Scoping Water Cycle Study                 | 2009                | <a href="http://www.nottinghamshireinsight.org.uk/d/aAXDA70">www.nottinghamshireinsight.org.uk/d/aAXDA70</a>  |
| Nottinghamshire and Nottingham Waste Core Strategy Part 1    | 2013                | <a href="http://www.nottinghamshireinsight.org.uk/d/aAXCSuf">www.nottinghamshireinsight.org.uk/d/aAXCSuf</a>  |
| Nottinghamshire Minerals Local Plan                          | 2021                | <a href="http://www.nottinghamshire.gov.uk/planning-and-environment/minerals-local-plan/new-minerals-local-plan">www.nottinghamshire.gov.uk/planning-and-environment/minerals-local-plan/new-minerals-local-plan</a>  |
| Greater Nottingham Aligned Core Strategies Part 1 Local Plan | 2014                | <a href="http://www.broxtowe.gov.uk/media/2160/broxtowe-aligned-core-strategy.pdf">www.broxtowe.gov.uk/media/2160/broxtowe-aligned-core-strategy.pdf</a>  |



| Document Title                                      | Year of publication | Weblink  |
|---|---------------------|--|
| Broxtowe Part 2 Local Plan                          | 2019                | <a href="http://www.broxtowe.gov.uk/media/7088/part-2-local-plan-adopted-october-2019.pdf">www.broxtowe.gov.uk/media/7088/part-2-local-plan-adopted-october-2019.pdf</a>                                   |
| Broxtowe Climate Change and Green Futures Programme | 2020                | <a href="http://www.broxtowe.gov.uk/media/8437/climate-change-and-green-futures-programme-combined-doc.pdf">www.broxtowe.gov.uk/media/8437/climate-change-and-green-futures-programme-combined-doc.pdf</a> |

- 7.1.2. The CTTC NDP will be required to be in general conformity with the NPPF, which seeks to protect high quality soil resources and improve the water environment, recognising the wider benefits of natural capital are derived from ecosystem services. Furthermore, the NPPF recognises the need to take account of the long-term implications of climate change and build resilience. The NPPF encourages efficient land use, utilising brownfield land opportunities and land remediation schemes where appropriate and delivering environmental gains.
- 7.1.3. The 25-year Environment Plan presents a focus for environmental improvement with aims to achieve clean air, clean and plentiful water and reduced risk from environmental hazards. This includes measures to improve soil quality, restore and protect peatlands, use water more sustainably, reduce pollution, maximise resource efficiency and minimise environmental impacts. This leads on from and supports the soil strategy for England (Safeguarding our soils) which seeks to ensure that all England's soils will be managed sustainably and degradation threats tackled successfully by 2030, as well as the national water strategies which seek to secure sustainable and resilient water resources and improve the quality of waterbodies, and the national waste plan which seeks to identify measures being taken to move towards a zero waste economy.
- 7.1.4. Seven Trent Water's WRMP further highlights the acute stresses that the catchment faces in the coming years and the challenges we face in terms of securing water resources into the future and managing the forecasted significant deficit in supply and demand. The plan outlines how Seven Trent Water aim to confront and manage these issues to ensure the timely provision of clean water to all residents over a 25-year period. The Water Cycle Studies provide further insight to the constraints associated with planned development in terms of water supply capacity, wastewater capacity and associated environmental capacity.
- 7.1.5. The CTTC NDP will also be required to be in general conformity with the Nottinghamshire Minerals and Waste Local Plans, which form part of the Development Plan for the NDP area. These plans identify and safeguard sites and resources important to the continued sustainable management of mineral extractions and waste arisings.
- 7.1.6. Furthermore, the CTTC NDP will also be required to be in general conformity with the Local Plans covering the NDP area, which contain policies specifically relating to efficient land use, the sustainable use of resources, the efficient use of water, and protection for water quality.

## 7.2 Baseline Information

### Summary of current baseline

- 7.2.1. The Agricultural Land Classification classifies land into six grades (plus 'non-agricultural' and 'urban'), where Grades 1 to 3a are the 'best and most versatile' land and Grades 3b to 5 are of poorer quality.
- 7.2.2. The NDP area is mainly urban but consists of mainly Grade 2 and Grade 3 agricultural land along the urban fringe (as illustrated in Figure 7.1 below).
- 7.2.3. The NDP area includes a number of water features. The River Erewash flows to the south and west of the NDP area, intersecting the plan area along the south west boundary before flowing into the River Trent at the Attenborough Nature Reserve. Whilst outside the NDP area, the Nature Reserve consists of a number of large lakes formed by flooded pits in-between areas of native willow and woodland. The northern parts of the NDP area in agricultural use include a number of water ditches and ponds associated with the land use.
- 7.2.4. Groundwater Source Protection Zones (SPZs) have been designated by the Environment Agency in England and Wales to protect groundwater sources such as wells, boreholes and springs that are used for public drinking water supply. The zones show the risk of contamination from activities that might cause groundwater pollution in the area. There are no such zones designated by the Environment Agency in the NDP area.
- 7.2.5. Nitrate Vulnerable Zones (NVZs) are areas where groundwaters have nitrate concentrations of more than 50 mg/l nitrate or are thought to be at risk of nitrate contamination. Action plans are required in these areas in order to reduce and prevent further nitrate contamination. The NDP area falls within the following NVZ:
- River Erewash from Gilt Brook to River Trent (316) NVZ;
  - River Trent from River Soar to Carlton-on-Trent (320) NVZ; and
  - Attenborough NNR Eutrophic lake (149) NVZ.





## Summary of future baseline

- 7.2.6. With regard to agricultural land and soil resources, land south of the A52 and the tramway including Toton sidings is allocated as a mix use allocation in the Local Plan to facilitate the HS2 station and associated growth. Other important soil resources fall within and are protected by Green Belt. In the current absence of a Green Belt review, the scope for the NDP to significantly influence land use beyond the existing baseline which could result in harm or loss of soil resources is limited. However, it is likely with pressures associated with HS2 that soil resources are lost during the NDP period.
- 7.2.7. In terms of water quality, the safeguarding of areas with nitrate concentrations or considered at risk of nitrate contamination is likely to lead to continued improvements to water quality in watercourses in the wider area. Water quality could also be affected by pollution incidents in the area, the presence of non-native species and physical modifications to water bodies.
- 7.2.8. Water availability in the area may be affected by increases in population and an increased occurrence of drought exacerbated by the effects of climate change, but this is likely to be negligible.
- 7.2.9. Development which requires sewage treatment may, if not designed correctly or located appropriately, result in an increased risk of pollution to groundwater and surface water. Development will therefore need to have due consideration to the capacity of sewage works.

## 7.3 Key headline issues

7.3.1. The key issues are as follows:

- The NDP area is mostly urbanised but includes sizable areas of Grade 2 and Grade 3 agricultural land.
- River Erewash flows to the south and west of the NDP area and intersects the area along the south west boundary.
- The NDP area falls within the River Erewash from Gilt Brook to River Trent NVZ; River Trent from River Soar to Carlton-on-Trent NVZ; and Attenborough NNR Eutrophic lake NVZ.
- Development planned in the NDP area would result in loss of soil resources and could adversely affect water quality. However, the NDP is unlikely to significantly change the quantum or quality of soil resources or water quality.

## 7.4 Scoping outcome

- 7.4.1. The topic of 'Land, Soil and Water Resources' has been **SCOPED OUT** of the SEA, as the NDP is unlikely to have a significant effect on soil / agricultural land and water quality.
- 7.4.2. There are important soil resources in the NDP area that ought to be protected. Whilst approximately 60 hectares of agricultural land is proposed for development, this is pre-established in the Local Plan and the NDP does not seek to allocate sites. Proposals in the NDP for the loss of soil resources is unlikely to exceed 5ha (given that the plan does not seek to allocate sites and Green Belt constraints), and so a significant effect upon soil resources is considered unlikely in any event. Soil is thus scoped out of the SEA.
- 7.4.3. Despite the NDP area being covered by NVZs, it is considered unlikely that significant effects upon water quality would occur as a result of the NDP. The scope of the plan and scale of growth is not major, and changes to land use are not anticipated to increase nitrate pollution. With regards to waste water treatment and drainage, the plan is not expected to cause issues to existing and planned infrastructure, and so significant effects in this respect are also unlikely. Consequently, water quality has been scoped out of the SEA.



## 8. Population and Housing

### Focus of theme:

This theme focuses on the demographics and households of the population and housing types, needs and affordability in the NDP area.

### 8.1 Policy Context

8.1.1. Table 8.1 presents the most relevant documents identified in the policy review for the purposes of the SEA.

**Table 8.1: Plans, policies and strategies reviewed in relation to population and housing**

| Document Title   | Year of publication | Weblink   |
|--|---------------------|---|
| National Planning Policy Framework (NPPF)                          | 2019                | <a href="https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/810197/NPPF_Feb_2019_revised.pdf">assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/810197/NPPF_Feb_2019_revised.pdf</a> |
| Greater Nottingham Aligned Core Strategies Part 1 Local Plan       | 2014                | <a href="http://www.broxtowe.gov.uk/media/2160/broxtowe-aligned-core-strategy.pdf">www.broxtowe.gov.uk/media/2160/broxtowe-aligned-core-strategy.pdf</a>  |
| Broxtowe Part 2 Local Plan   | 2019                | <a href="http://www.broxtowe.gov.uk/media/7088/part-2-local-plan-adopted-october-2019.pdf">www.broxtowe.gov.uk/media/7088/part-2-local-plan-adopted-october-2019.pdf</a>  |
| Greater Nottingham Housing Market and Economic Prospects           | 2012                | <a href="http://www.nottinghamshireinsight.org.uk/d/aAXDBEL">www.nottinghamshireinsight.org.uk/d/aAXDBEL</a>  |
| Greater Nottingham Household Projections Background Paper          | 2012                | <a href="http://www.nottinghamshireinsight.org.uk/d/aAXDzjl">www.nottinghamshireinsight.org.uk/d/aAXDzjl</a>  |
| Greater Nottingham Household Projections Background Paper Addendum | 2013                | <a href="http://www.nottinghamshireinsight.org.uk/d/aAXDRUD">www.nottinghamshireinsight.org.uk/d/aAXDRUD</a>  |
| Broxtowe Strategic Housing Land Availability Assessment            | 2017                | <a href="http://www.broxtowe.gov.uk/media/4505/shlaa-2017_2018.pdf">www.broxtowe.gov.uk/media/4505/shlaa-2017_2018.pdf</a>  |
| Broxtowe Housing Strategy 2020-2024                                | 2020                | <a href="http://www.broxtowe.gov.uk/media/8123/housing-strategy-2020-2024-020920.pdf">www.broxtowe.gov.uk/media/8123/housing-strategy-2020-2024-020920.pdf</a>  |
| Broxtowe Sustainable Community Strategy                            | 2010                | <a href="http://www.broxtowe.gov.uk/media/1407/sustainable-community-strategy-for-2010-2020.pdf">www.broxtowe.gov.uk/media/1407/sustainable-community-strategy-for-2010-2020.pdf</a>  |
| South Nottinghamshire Homelessness Strategy                        | 2017                | <a href="http://www.broxtowe.gov.uk/media/6351/homelessness-strategy-2017-2021.pdf">www.broxtowe.gov.uk/media/6351/homelessness-strategy-2017-2021.pdf</a>  |

8.1.2. The CTTC NDP will be required to be in general conformity with the NPPF, which on the whole seeks to retain and enhance access to community services and facilities, including health facilities, educational facilities and open space. The framework seeks to protect settlement and community identities, including through the protection and retention of Green Belt land. Furthermore, the NPPF recognises the benefits of creating cohesive communities, in safe environments where crime and the fear of crime do not undermine the quality of life of residents.

- 8.1.3. The CTTC NDP will also be required to be in general conformity with the Local Plans covering the NDP which contain policies specifically relating to housing, community services and facilities, accessibility and infrastructure requirements.
- 8.1.4. The housing, homelessness and community strategies each seek to support the appropriate delivery of housing and community infrastructure. The strategies recognise the importance of targeting resources at those most at risk/ most vulnerable and supporting all residents needs for affordable, safe and good quality housing in the right places. Furthermore, the strategies recognise the need to create choice in terms of securing a long-term stable home and create adaptable homes supported by high levels of accessibility.

## 8.2 Baseline Information

### Summary of current baseline

- 8.2.1. In 2019, the population of the NDP area was 16,490, having grown by 2.67% since 2011 (16,061)<sup>14</sup>. In comparison, Broxtowe borough has seen a 3.92% increase in population since 2011.
- 8.2.2. Table 8.2 shows the age structure of the local population in comparison with the borough and national averages. The NDP area has a similar age structure to that of the borough, but with a higher proportion of people aged under 14 which resonates greater with the national average. The NDP area also has a slightly higher than average proportion of 45-64 year old population, but this is somewhat offset when compared against the borough average by a lower than average proportion of 65-84 year olds. Both Broxtowe Borough and the NDP area have a higher than average over 45 year old population in comparison to national averages suggesting an overall ageing population.

**Table 8.2: Age Structure in 2019 (ONS Population Estimates)**

|                         | NDP area <sup>15</sup> | Broxtowe borough | England    |
|-------------------------|------------------------|------------------|------------|
| <b>0-14</b>             | 18.1%                  | 16.1%            | 18.1%      |
| <b>15-24</b>            | 10.1%                  | 10.9%            | 11.7%      |
| <b>25-44</b>            | 26.1%                  | 25.2%            | 26.2%      |
| <b>45-64</b>            | 28.2%                  | 26.6%            | 25.6%      |
| <b>65-84</b>            | 17.4%                  | 18.4%            | 15.9%      |
| <b>85+</b>              | 2.8%                   | 2.8%             | 2.5%       |
| <b>Total population</b> | 16,061                 | 114,033          | 56,286,961 |

<sup>14</sup> ONS Population Estimates 2019. Census 2011. AECOM calculations of LSOAs (Broxtowe 013A, 013B, 013C, 013D, 013E, 015A, 015B, 015C, 015D and 015E).

<sup>15</sup> AECOM calculations of LSOAs (Broxtowe 013A, 013B, 013C, 013D, 013E, 015A, 015B, 015C, 015D and 015E).

8.2.3. With regards to housing delivery, Table 8.3 shows that over the last 5 years 253 dwellings were completed per annum on average; which is considerably lower than the target set out in the Local Plan. A variation in delivery rates is also apparent with the highest number recorded in 2017/18 (331) and the lowest two years earlier in 2015/16. The recent trend in net completions suggests a gradual decline in housing delivery in the borough since 2017.

**Table 8.3: Net Housing Completions in Broxtowe borough (Source: Broxtowe Borough Council)**

|                             | 2011/12          | 2014/15 | 2015/16 | 2016/17 | 2017/18 | 2018/19 | 2019/20 |
|-----------------------------|------------------|---------|---------|---------|---------|---------|---------|
| <b>Completions (net)</b>    | 140              | 139     | 109     | 291     | 331     | 302     | 232     |
| <b>Housing requirements</b> | 100 <sup>1</sup> | 360     | 360     | 360     | 360     | 430     | 430     |
| <b>Supply</b>               | +40              | -221    | -251    | -69     | -29     | -128    | -198    |

<sup>1</sup> Broxtowe borough housing requirement established in the Aligned Core Strategy, minimum of 6,150 between years 2011 and 2028.

8.2.4. With regards to housing tenure, the NDP area has a higher number of owned households compared to the borough average and the rest of England (see Table 8.4). Subsequently, there are fewer households which were classified under socially rented and private rented.

**Table 8.4: Housing Tenure in 2011 (ONS Housing Tenure)**

|                         | NDP area<br>(numbers) | (%)   | Broxtowe<br>borough (%) | England<br>(%) |
|-------------------------|-----------------------|-------|-------------------------|----------------|
| <b>All Categories</b>   | 6,706                 | -     | -                       | -              |
| <b>Owned (Total)</b>    | 4,976                 | 74.2% | 73.2%                   | 63.3%          |
| <b>Shared Ownership</b> | 40                    | 0.6%  | 0.36%                   | 0.8%           |
| <b>Socially Rented</b>  | 770                   | 11.5% | 11.1%                   | 17.7%          |
| <b>Private Rented</b>   | 841                   | 12.5% | 14.1%                   | 16.8%          |
| <b>Living Rent Free</b> | 79                    | 1.2%  | 1.22%                   | 1.3%           |

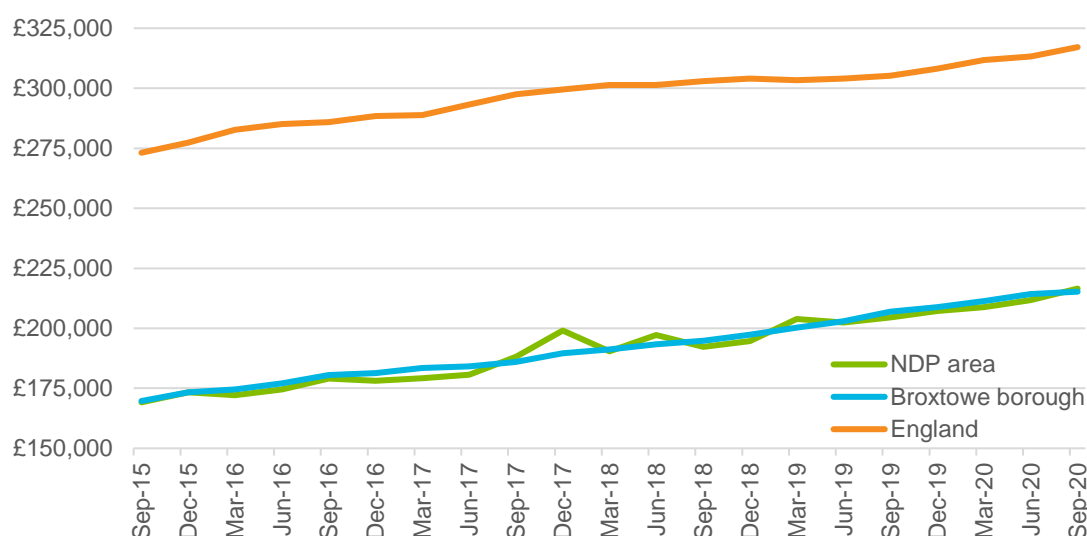
8.2.5. The average house price over a year period ending September 2020 in the NDP area was £216,540, an 5.9% increase from September 2019 (£204,549)<sup>16</sup>. As illustrated in Figure 8.1, the average house price resonates with the borough average and has followed a similar level of growth with some fluctuations since 2015. This correlates with national growth in house prices, although house prices in the NDP area and the borough are significantly lower than the national average.

<sup>16</sup> ONS HPSSA data and AECOM calculations.

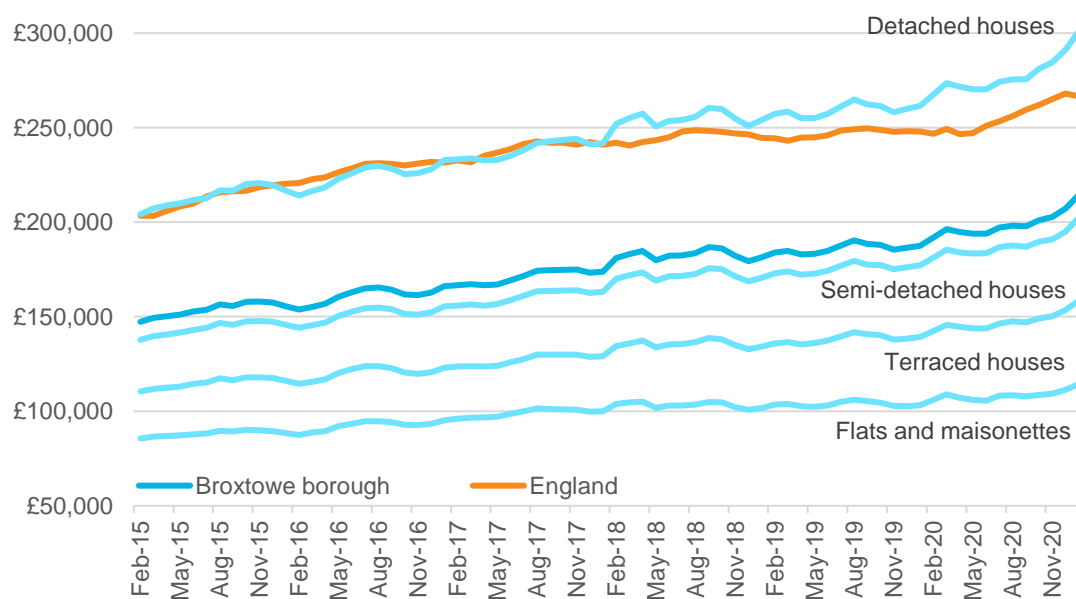


- 8.2.6. The average house price in Broxtowe borough in January 2021 (£214,357) showed a 14.3% increase on January 2020 and a more modest but significant 37.8% increase since January 2016 (see Figure 8.2)<sup>17</sup>. Whilst the gap between the average house price in the borough and the national average is narrowing, house prices were still 19.6% lower in Broxtowe in January 2021.
- 8.2.7. The average detached house price in Broxtowe borough in January 2021 was £300,858, a 15% annual increase from £261,571. The average semi-detached house price in January 2021 was £202,401, the average terrace was £158,491, and average flat or maisonette £114,362.
- 8.2.8. The recent significant increase in house prices correlate with the positive outlook considered to be mostly attributed to the cut in stamp duty.

**Figure 8.1: Year ending average house price paid for all property types September 2015 to September 2020 (Source: ONS HPSSA and AECOM calculations)**



**Figure 8.2: Average house prices for all property types including house type breakdown for Broxtowe borough, January 2015 to January 2021 (Source: UK HPI)**



<sup>17</sup> HM Land Registry house price data.

## Summary of future baseline

- 8.2.9. Population trends in the NDP area indicate an aging population. This is evident through the higher than average proportion of people aged over 45 years. However, a higher than average proportion of people aged 14 and below also indicate a long-term growth of a working age population.
- 8.2.10. Considering the ongoing pandemic, homeworking is likely to become a more prevalent trend, and this is likely to alter the housing need, commuting patterns and access trends of residents into the future. Whilst uncertainty remains, the NDP provides opportunities to guide development which accommodates for changing working patterns and lifestyles, and places greater emphasis on access to local services, facilities and employment options and strategic connectivity.
- 8.2.11. The introduction of HS2 services will significantly improve the accessibility of the area to other areas and centres and provide important national rail connectivity at Toton Sidings. Whilst services are unlikely to be operational within the plan period, associated improvements in transport infrastructure and increase in employment and housing uses is likely to result in an increase in local population and increase house prices.

## 8.3 Key headline issues

8.3.1. The key issues are as follows:

- The population of the NDP area has increased by 2.67% between 2011 and 2019 to 16,490 people.
- Net completion trends in Broxtowe borough fall considerably below the housing target (430 dwellings per annum) set in the Local Plan.
- Average house prices in the NDP area align with that of Broxtowe borough and are considerably lower than the national average.
- The NDP area is undergoing change due to the pandemic and HS2. This is likely to alter the local population and housing need.

## 8.4 Scoping outcome

- 8.4.1. The SEA topic 'Population and Housing' has been **SCOPED IN** to the SEA. Whilst the NDP does not seek to allocate sites for housing. The NDP provides the opportunity for enhanced policy provisions which seek to deliver the right mix of housing types, tenures and sizes and affordable housing according to local needs. The NDP also provides opportunities for design development and masterplanning on Local Plan housing allocations and the delivery of other infrastructures and services which could help unlock their development potential and help deliver and sustain sustainable communities.

## 8.5 What are the SEA objectives and appraisal questions for the Population and Housing SEA theme?

8.5.1. The SEA topic 'Population and Housing' has been scoped in to the SEA. Table 8.5 presents the SEA objective and appraisal questions that will be used to assess the plan in relation to this theme.

**Table 8.5: SEA Framework of objectives and assessment questions: Population and Housing**

| SEA Objective  | Supporting Questions   |
|--|--|
| Ensure housing growth is aligned with the needs of all residents in the NDP area and is supported by the appropriate and timely provision of infrastructure. | <p>Will the option/proposal help to:</p> <ul style="list-style-type: none"> <li>• Provide everyone with the opportunity to live in good quality and affordable housing?</li> <li>• Support the provision of a range of housing types and sizes targeted at aligning the housing stock with local need?</li> <li>• Provide flexible and adaptable homes that meet people's changing needs?</li> <li>• Create sustainable new communities with good access to a range of local services and facilities?</li> </ul> |

## 9. Health and Wellbeing

### Focus of theme:

This theme focuses on health indicators and deprivation, healthcare provision in the NDP area and influences on resident health and wellbeing, including access to open space and the countryside.

### 9.1 Policy Context

9.1.1. Table 9.1 presents the most relevant documents identified in the policy review for the purposes of the SEA.

**Table 9.1: Plans, policies and strategies reviewed in relation to health and wellbeing**

| Document Title   | Year of publication | Weblink   |
|--|---------------------|---|
| National Planning Policy Framework (NPPF)                    | 2019                | <a href="https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/810197/NPPF_Feb_2019_revised.pdf">assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/810197/NPPF Feb 2019 revised.pdf</a>       |
| A Green Future: Our 25 Year Plan to Improve the Environment  | 2018                | <a href="https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/693158/25-year-environment-plan.pdf">assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/693158/25-year-environment-plan.pdf</a> |
| Health Equity in England: The Marmot Review 10 Years On      | 2020                | <a href="https://www.health.org.uk/publications/reports/the-marmot-review-10-years-on">www.health.org.uk/publications/reports/the-marmot-review-10-years-on</a>   |
| Greater Nottingham Aligned Core Strategies Part 1 Local Plan | 2014                | <a href="https://www.broxtowe.gov.uk/media/2160/broxtowe-aligned-core-strategy.pdf">www.broxtowe.gov.uk/media/2160/broxtowe-aligned-core-strategy.pdf</a>   |
| Broxtowe Part 2 Local Plan                                   | 2019                | <a href="https://www.broxtowe.gov.uk/media/7088/part-2-local-plan-adopted-october-2019.pdf">www.broxtowe.gov.uk/media/7088/part-2-local-plan-adopted-october-2019.pdf</a>   |
| Nottinghamshire Joint Health and Wellbeing Strategy          | 2018                | <a href="https://www.nottinghamshire.gov.uk/media/129223/the-joint-health-and-wellbeing-strategy-2018-2022.pdf">www.nottinghamshire.gov.uk/media/129223/the-joint-health-and-wellbeing-strategy-2018-2022.pdf</a>   |
| Broxtowe Green Infrastructure Strategy 2015-2030             | 2015                | <a href="https://www.broxtowe.gov.uk/media/4829/green-infrastructure-strategy-2015-2030.pdf">www.broxtowe.gov.uk/media/4829/green-infrastructure-strategy-2015-2030.pdf</a>   |
| Broxtowe Playing Pitch Strategy 2016-2028                    | 2016                | <a href="https://www.broxtowe.gov.uk/media/3137/bbc-pps-full-final-may-2016-adopted-version-jan-2017-unlocked.pdf">www.broxtowe.gov.uk/media/3137/bbc-pps-full-final-may-2016-adopted-version-jan-2017-unlocked.pdf</a>   |
| Broxtowe Play Strategy 2017-2025                             | 2017                | <a href="https://www.broxtowe.gov.uk/media/4327/broxtowe-borough-council-play-strategy-2017-2025.pdf">www.broxtowe.gov.uk/media/4327/broxtowe-borough-council-play-strategy-2017-2025.pdf</a>   |
| Broxtowe Sustainable Community Strategy                      | 2010                | <a href="https://www.broxtowe.gov.uk/media/1407/sustainable-community-strategy-for-2010-2020.pdf">www.broxtowe.gov.uk/media/1407/sustainable-community-strategy-for-2010-2020.pdf</a>   |

9.1.2. The CTTC NDP will be required to be in general conformity with the NPPF, which seeks to enable and support healthy lifestyles through provision of appropriate infrastructure, services and facilities.

- 9.1.3. This includes green infrastructure, access to healthier food, allotments and layouts that encourage walking and cycling. The NPPF recognises the role of development plans in helping to deliver access to high quality open spaces and opportunities for sport and physical activity which contribute to the health and wellbeing of communities. The health benefits of access to nature, green spaces and green infrastructure is further reiterated through the 25-year Environment Plan.
- 9.1.4. The 2020 Health Equity in England report identifies that the health gap between less and more deprived areas has grown in the last decade, where more people can expect to spend more of their lives in poor health, and where improvements to life expectancy have stalled, or even declined for the poorest 10% of women.
- 9.1.5. The CTTC NDP will also be required to be in general conformity with the Local Plans covering the area, which contain policies directly relating to access to healthcare, green infrastructure and open spaces, and design that support active travel opportunities.
- 9.1.6. The Nottinghamshire Joint Health and Wellbeing Strategy, the Broxtowe Sustainable Community Strategy and other borough strategies identify local health challenges and disparities whilst recognising the role that leisure opportunities and other factors play in contributing to a wider range of health determinants.

## 9.2 Baseline Information

### Summary of current baseline

#### Health indicators

- 9.2.1. According to the Broxtowe Health Profile 2019<sup>18</sup>, the health of people in the borough is generally better than the England average. Variations include:
- The life expectancy for both males and females and the under 75 mortality rates is better in the borough than the regional average and life expectancy and under 75 mortality rate is significantly better than England averages.
  - Life expectancy is 6.6 years lower for men and 5.5 years lower for women in the most deprived areas of Broxtowe Borough than in the least deprived areas.
  - In School Year 6, 17.2% (193) of children are classified as obese, which is better than the regional (19.7%) and England (20.2%) averages. In the contrary, the percentage of adults classified as overweight or obese (64.5%) is similar to regional (64.4%) but greater the national average (62%). This is despite the borough having significantly higher rates of physically active adults (73.4%).
  - The rate of alcohol-related harm hospital admissions are higher than the regional and national averages.

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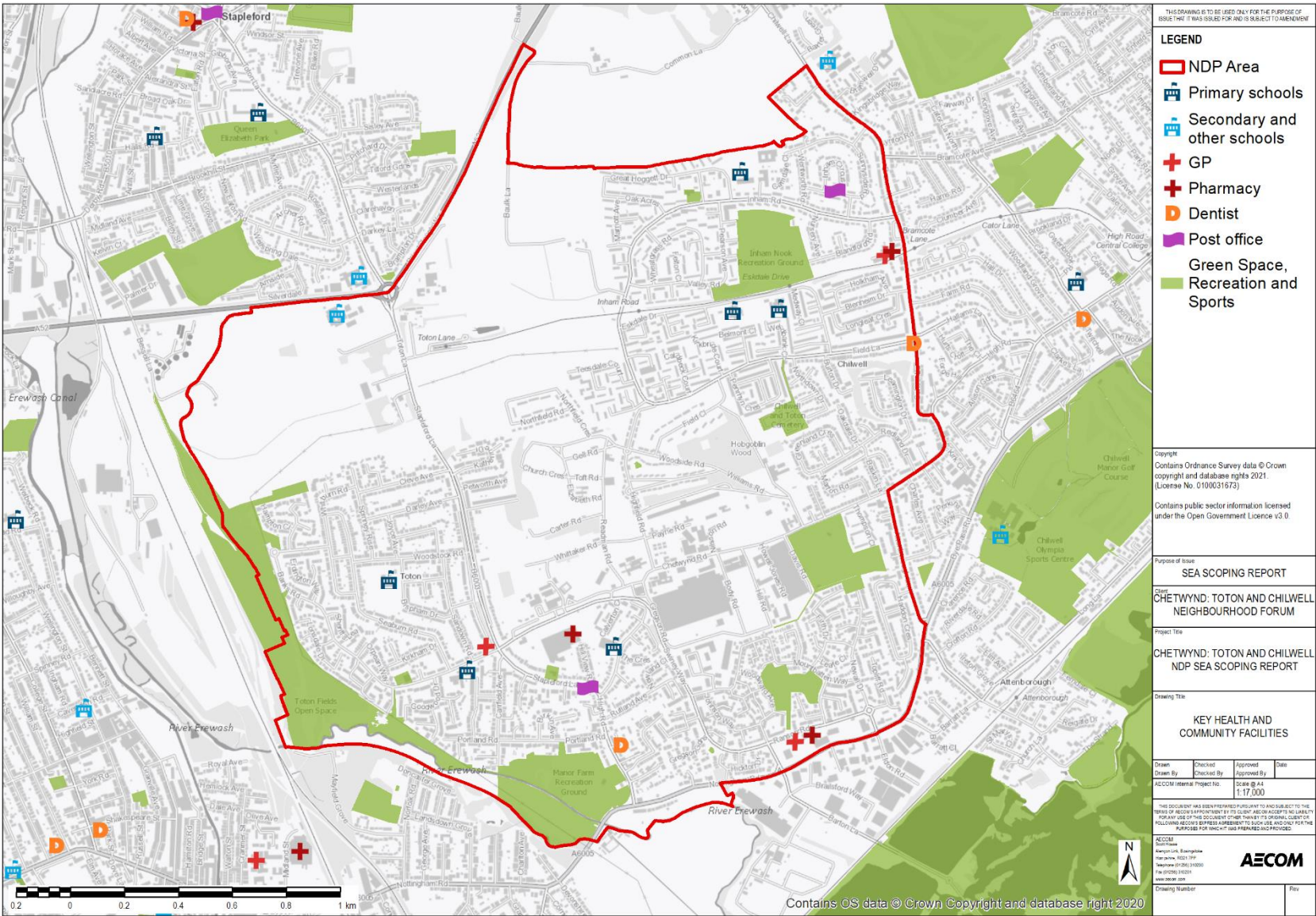
<sup>18</sup> Public Health England (2019) Broxtowe Local Authority Health Profile 2019 [online] available at: <https://fingertips.phe.org.uk/profile/health-profiles>

- The rates of new sexually transmitted infections, killed and seriously injured on roads and new cases of tuberculosis are better than the England average.

- 9.2.2. The closest hospital, Nottingham University Hospital's Queen's Medical Centre and Nottingham City Hospital campus, is located approximately 3 miles east from the NDP area and is directly connected to the Plan area via the tram. The Queen's Medical Centre includes A&E services and the Nottingham City Hospital specialises in cancer, heart and stroke services.
- 9.2.3. There are two GP practices in the Chilwell area, The Valley Surgery near the Bramcote Lane tram stop to the north and Chilwell Meadows Surgery to the south. In addition, Toton Branch Surgery provides medical services in the Toton area. All GP practices are also supported with nearby pharmacies.
- 9.2.4. Key health and wellbeing facilities in the NDP area are illustrated in Figure 9.1.
- 9.2.5. With the NDP area being urbanised and in proximity to Nottingham and Long Eaton, the area is well served by schools, community facilities, shops and services.
- 9.2.6. Access to open space and green infrastructure is widely recognised to have a positive effect on health by encouraging and facilitating outdoor activity. The NDP area includes several playing fields/ sports facilities, green open spaces and is nearby the Attenborough Nature Reserve.



Figure 9.1: Key Health and Community Facilities and Green Space



## Deprivation

9.2.7. The Index of Multiple Deprivation 2019 (IMD) is an overall relative measure of deprivation constructed by combining seven domains of deprivation according to their respective weights, as described below. The seven deprivation domains are as follows:

- **Income:** The proportion of the population experiencing deprivation relating to low income, including those individuals that are out-of-work and those that are in work.
- **Employment:** The proportion of the working-age population in an area involuntarily excluded from the labour market, including those who would like to work but are unable to do so due to unemployment, sickness / disability, or caring responsibilities.
- **Education, Skills and Training:** The lack of attainment and skills in the population.
- **Health Deprivation and Disability:** The risk of premature death and the impairment of quality of life through poor physical or mental health. Morbidity, disability and premature mortality are also considered.
- **Crime:** The risk of personal and material victimisation at local level.
- **Barriers to Housing and Services:** The physical and financial accessibility of housing and local services.
- **Living Environment:** The quality of the local environment, including the quality of housing stock, air quality and road traffic incidents.

Two indices, subsets of the Income deprivation domain, are also included:

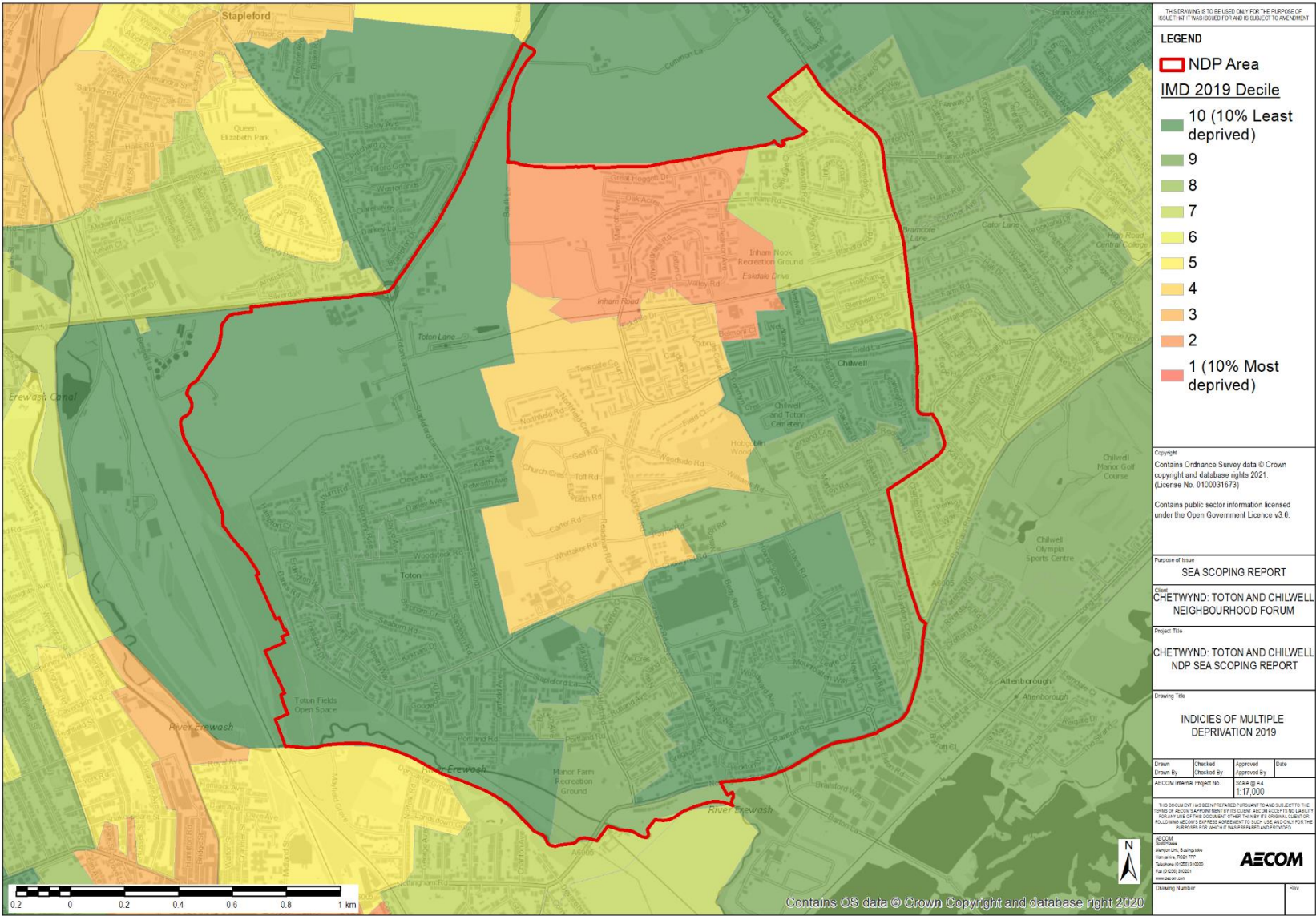
- **Income Deprivation Affecting Children Index:** The proportion of all children aged 0 to 15 living in income deprived families.
- **Income Deprivation Affecting Older People Index:** The proportion of all those aged 60 or over who experience income deprivation.

9.2.8. As illustrated in Figure 9.2 below, most of the NDP area falls within the least deprived areas in England, with a higher level of deprivation recorded in the Chetwynd Barracks area (40% most deprived) and a significantly higher level of deprivation (20% most deprived) recorded in Chilwell in the area to the north of the tramway near the Inham Road tram stop. This illustrates significant disparities in deprivation across the NDP area.

9.2.9. As there is a strong correlation between deprivation and health, the low levels of deprivation across most of the NDP area corroborates the findings of the Health Profiles and suggests a higher than average level of health and wellbeing for most people.



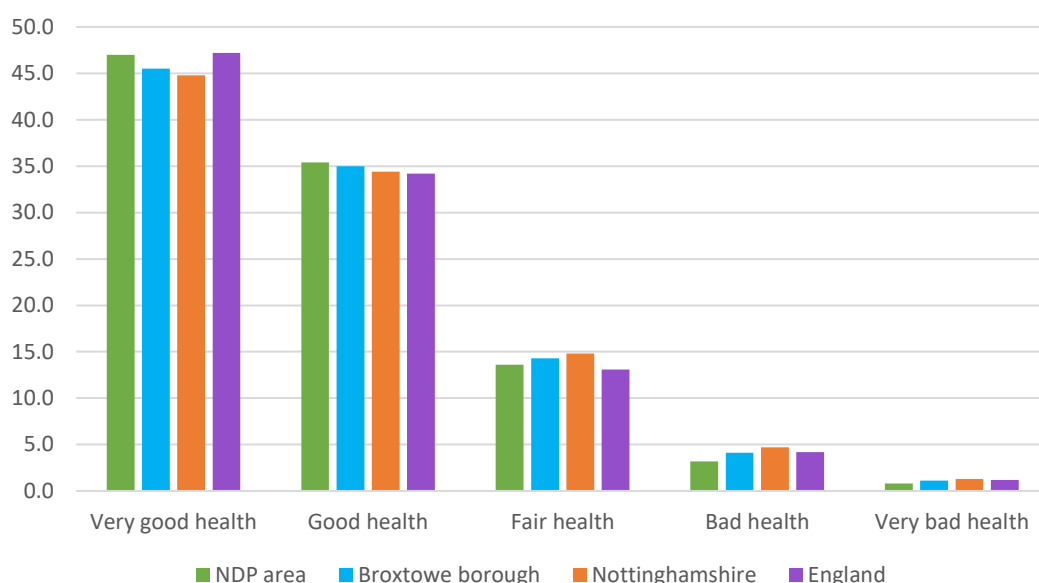
Figure 9.2: Indices of Multiple Deprivation 2019 in the NDP area



9.2.10. A self-assessment of health by residents in the NDP area indicates that most residents in the NDP area consider themselves to be in very good health (47%), followed by good health (35.4%), and that only 4% of residents consider their health to be bad or very bad.

9.2.11. These trends are similar to regional and national patterns with key exceptions being that those in the NDP area considering themselves to be of very good health align closer with the national percentage in comparison to lower levels in the borough and Nottinghamshire. The NDP area also has a notably lower proportion of residents who consider their health to be bad or very bad compared to all other geographies. This aligns with other health indicators which suggest a higher than average level of health and wellbeing.

**Figure 9.3: Residents General Health (Census 2011: KS301EW)**



### Summary of future baseline

9.2.12. It is likely that with increased population growth there will be a higher demand for health, fitness and leisure facilities and open space provision within and nearby the NDP area. This could support additional facilities but could equally add further strain to existing facilities and open spaces in the local area.

## 9.3 Key headline issues

9.3.1. The key issues are as follows:

- Broxtowe borough has a broadly healthy population with higher than national average life expectancy.
- The NDP area has lower than average levels of deprivation when compared to areas nationally, although there are some pockets of higher deprivation within the plan area.
- There are several health and recreational facilities and open spaces within and nearby the NDP area.

- Increased population growth will require additional provision for health and recreational facilities. Additional provision could be delivered through developer contributions.

## 9.4 Scoping outcome

9.4.1. The SEA topic 'Health and Wellbeing' has been **SCOPED OUT** of the SEA.

9.4.2. The NDP does not propose to allocate sites for housing, employment or other land uses. Growth is proposed in the plan area in the Local Plan which would increase some demand for local health and recreational facilities. However, Local Plan site allocations are supported with policy provisions to safeguard existing and deliver new educational, community, health and open space provision locally to mitigate pressures from the increase in local population.

9.4.3. The NDP area has relatively good provision of health, wellbeing and recreational facilities. There are opportunities for further enhancement through the NDP from further protection to existing and improved provision and accessibility to existing and new provision. However, in the absence of site allocations and major deprivation issues, the scope for the plan to have effects on health and wellbeing is unlikely to be significant. There are also no known groups that are likely to experience effects of the NDP disproportionately.

## 10. Transportation

### Focus of theme:

This theme focuses on transport infrastructure, transport usage, traffic flows and congestion, and accessibility levels in the NDP area.

### 10.1 Policy Context

10.1.1. Table 10.1 presents the most relevant documents identified in the policy review for the purposes of the SEA.

**Table 10.1: Plans, policies and strategies reviewed in relation to transportation**

| Document Title   | Year of publication | Weblink   |
|--|---------------------|---|
| National Planning Policy Framework (NPPF)                              | 2019                | <a href="https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/810197/NPPF_Feb_2019_revised.pdf">assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/810197/NPPF_Feb_2019_revised.pdf</a>   |
| The Transport Investment Strategy – Moving Britain Ahead               | 2017                | <a href="https://www.gov.uk/government/publications/transport-investment-strategy">www.gov.uk/government/publications/transport-investment-strategy</a>   |
| The Department for Transport's Cycling and Walking Investment Strategy | 2016                | <a href="https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/512895/cycling-and-walking-investment-strategy.pdf">assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/512895/cycling-and-walking-investment-strategy.pdf</a>             |
| Decarbonising Transport: Setting the Challenge                         | 2020                | <a href="https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/932122/decarbonising-transport-setting-the-challenge.pdf">assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/932122/decarbonising-transport-setting-the-challenge.pdf</a> |
| East Midlands HS2 Growth Strategy                                      | 2017                | <a href="https://www.emcouncils.gov.uk/write/East_Midlands_HS2_Growth_Strategy_-_September_2017.pdf">www.emcouncils.gov.uk/write/East_Midlands_HS2_Growth_Strategy_-_September_2017.pdf</a>   |
| Accessible Settlements Study for Greater Nottingham                    | 2010                | <a href="https://www.nottinghamshireinsight.org.uk/d/aAXDyiQ">www.nottinghamshireinsight.org.uk/d/aAXDyiQ</a>   |
| Greater Nottingham and Ashfield Infrastructure Capacity Study          | 2009                | <a href="https://www.nottinghamshireinsight.org.uk/d/aAXDCxX">www.nottinghamshireinsight.org.uk/d/aAXDCxX</a>   |
| Greater Nottingham Infrastructure Deliver Plan                         | 2013                | <a href="https://www.nottinghamshireinsight.org.uk/d/aAXDAOI">www.nottinghamshireinsight.org.uk/d/aAXDAOI</a>   |
| Nottinghamshire Local Transport Plan                                   | 2011                | <a href="https://www.nottinghamshire.gov.uk/transport/public-transport/plans-strategies-policies/local-transport-plan">www.nottinghamshire.gov.uk/transport/public-transport/plans-strategies-policies/local-transport-plan</a>   |
| Greater Nottingham Aligned Core Strategies Part 1 Local Plan           | 2014                | <a href="https://www.broxtowe.gov.uk/media/2160/broxtowe-aligned-core-strategy.pdf">www.broxtowe.gov.uk/media/2160/broxtowe-aligned-core-strategy.pdf</a>   |
| Broxtowe Part 2 Local Plan   | 2019                | <a href="https://www.broxtowe.gov.uk/media/7088/part-2-local-plan-adopted-october-2019.pdf">www.broxtowe.gov.uk/media/7088/part-2-local-plan-adopted-october-2019.pdf</a>   |



- 10.1.2. The CTTC NDP will be required to be in general conformity with the NPPF, which seeks the consideration of transport issues from the earliest stages of plan-making and development proposals to address any known issues and maximise opportunities to increase accessibility, particularly by walking, cycling and public transport. Larger developments are expected to be delivered in areas which are or can be made sustainable by limiting the need to travel and offering a genuine choice of transport modes.
- 10.1.3. National transport strategies set out investment priorities which ultimately all seek to improve the connectivity, effectiveness and reliability of transport networks, whilst reducing impacts on the natural environment (including through decarbonisation). Furthermore, they place great emphasis on making cycling and walking the natural choice for shorter journeys, or as part of a longer journeys. This includes investment in new and upgraded infrastructure, changing perceptions and increasing safety. The NDP area also falls adjacent to the proposed High Speed 2 (HS2) Toton rail station which will connect the NDP area and the wider area to the national high-speed rail network.
- 10.1.4. The Local Transport Plan and other regional transport strategies sets out priorities and strategies for the improvement of transport infrastructure throughout Nottinghamshire. These ultimately complement the aims of the national strategies discussed above and include supporting economic growth, supporting a low carbon and sustainable transport network, improving access to jobs and services and promoting healthier travel opportunities. Alongside the transport and access policies of the Local Plans covering the NDP area, the CTTC NDP will be required to be in general conformity with the strategic policy aims.

## 10.2 Baseline Information

### Summary of current baseline

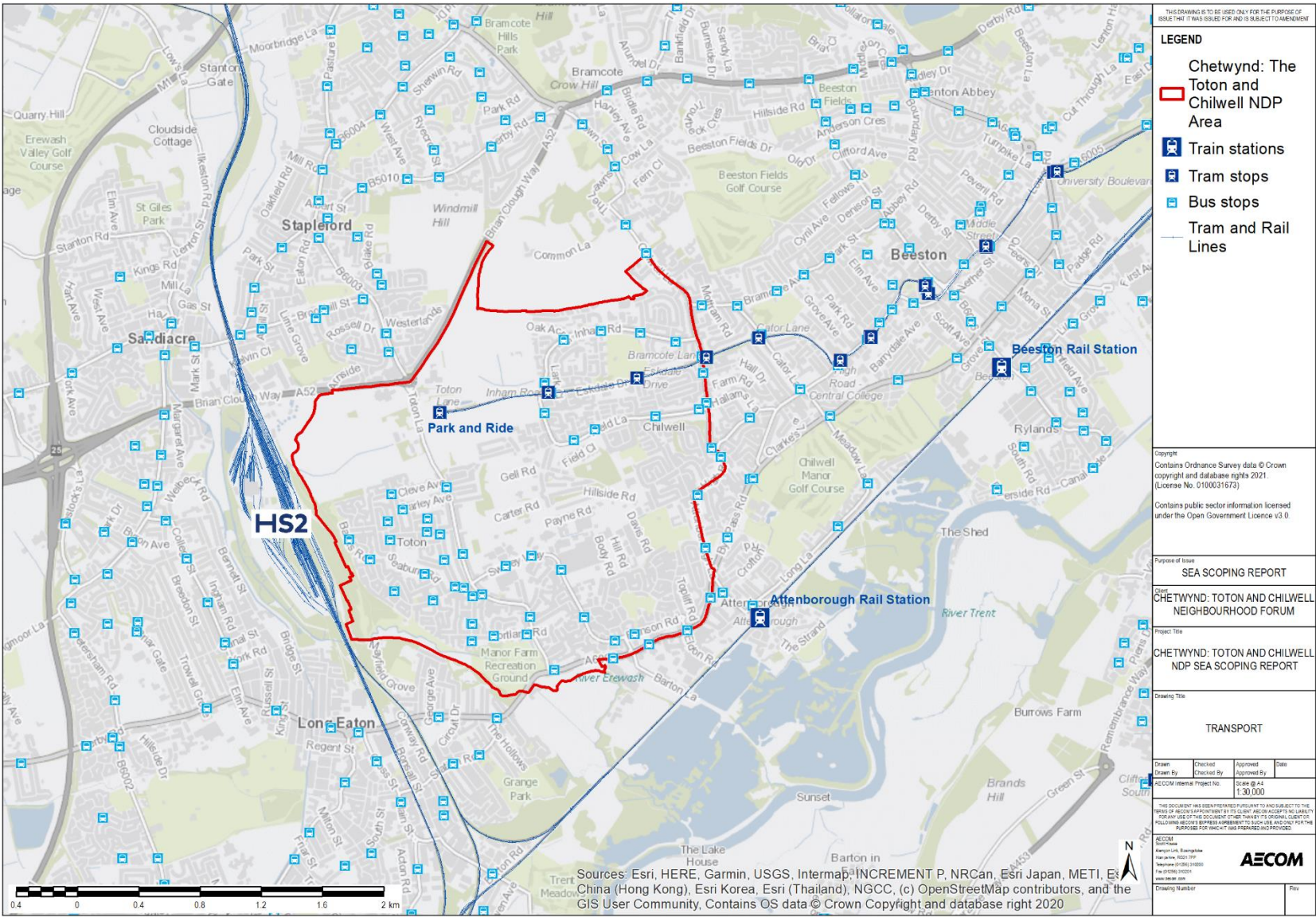
- 10.2.1. The NDP area is served by a network of highways that run through and connect the plan area to nearby settlements including Beeston, Nottingham, Long Eaton and Stapleford. The A52 along the northern boundary of the NDP area, supported by the B6003 which forms the main thoroughfare for Toton, provide good access to the M1 and the national highway network. The highway and public transport network serving the NDP area is illustrated in Figure 10.1.
- 10.2.2. Whilst the NDP area does not include a train station, Attenborough Station to the south east of the Plan area provides frequent direct services to Nottingham, Leicester, Derby, East Midlands Parkway and Birmingham. Whilst Mainline services to Leeds, Sheffield and London run through at high speed and do not stop at the station, fast connections to major interchanges at Nottingham and Derby provide good national rail connectivity.
- 10.2.3. The northern part of Chilwell including the area north of Chetwynd Barracks is served by a frequent tram link into Nottingham city centre, via Nottingham University, local hospital and Nottingham train station. A Park and Ride terminus at Toton Lane, which falls within 0.3 miles of the built-up area of Toton, provides a good public transport link into the city centre.

- 10.2.4. The NDP area is inter and intra connected by a number of bus services. The spatial distribution of bus stops throughout the NDP area is illustrated in Figure 10.1. The NDP area is also inter and intra connected with a number of walking and cycle routes and includes several Public Right of Ways (PRoWs).
- 10.2.5. According to Census data, local residents in the NDP area were less likely to travel to work by sustainable modes of transport such as public transport other than bus and bicycle (see Table 10.2) when compared with the national average. A greater proportion of people also drive a car or a van. The higher proportion of people travelling to work by bus or cycle relate to the area being urbanised and close to Nottingham, including the nearby University, hospital and Attenborough Station (which does not have car parking provision). A greater proportion of people travelling to work by car reflects the close proximity of the area to the M1 motorway and thus suited to those working in out of town locations or further afield.
- 10.2.6. The very low level of tram travel accords with the NDP area not being served by light rail in 2011. With the extension of the tram network to Toton in 2015, it is likely that the use of the tram to travel to work has increased significantly. It is probable with the introduction of the tram, the use of bus and private car to travel into work has reduced.

**Table 10.2: Methods of travel to work (Census 2011)**

|   | NDP area | England and Wales | Difference |
|---|----------|-------------------|------------|
| <b>Work mainly from home</b>                  | 4.3%     | 5.4%              | -1.1%      |
| <b>Underground, metro, light rail or tram</b> | 0.1%     | 3.9%              | -3.8%      |
| <b>Train</b>                                  | 1.6%     | 5.2%              | -3.6%      |
| <b>Bus, minibus or coach</b>                  | 10.1%    | 7.3%              | +2.8%      |
| <b>Taxi</b>                                   | 0.3%     | 0.5%              | -0.2%      |
| <b>Motocycle, scooter or moped</b>            | 0.9%     | 0.8%              | +0.1%      |
| <b>Driving a car or a van</b>                 | 64%      | 57.5%             | +6.5%      |
| <b>Passenger in a car or a van</b>            | 4.4%     | 5.1%              | -0.7%      |
| <b>Bicycle</b>                                | 4.9%     | 2.9%              | +2%        |
| <b>On foot</b>                                | 8.9%     | 10.7%             | -1.8%      |
| <b>Other</b>                                  | 0.6%     | 0.7%              | -0.1%      |

Figure 10.1: Highway and Public Transport Connectivity





## Summary of future baseline

- 10.2.7. New development proposed in the NDP area in the Local Plan is likely to result in higher amounts of traffic along the local road network and on key thoroughfares that connect the plan area to Nottingham, Long Eaton and the M1. Policy provisions in the Local Plan is likely to support the delivery of an enhanced network of pedestrian, cycle, road and public transport infrastructure geared towards capitalising on improved accessible from HS2 and accommodating the significant amounts of proposed growth. The scale of transport improvements and potential change in the capacity of new and existing infrastructure is currently unknown.
- 10.2.8. The introduction of HS2 services will significantly improve the accessibility of the area to other areas and centres and provide important national rail connectivity at Toton Sidings. Whilst it is uncertain if services will be operational within the plan period, associated improvements in transport infrastructure is likely to occur during the plan period. It is also likely that the construction of HS2 and delivery of the Local Plan site allocations will increase congestion in the NDP area, although this is likely to be concentrated in the Toton area.
- 10.2.9. A higher local population and subsequent demand for public transport could also provide opportunities to increase tram capacity and bus provision.

## 10.3 Key headline issues

- 10.3.1. The key issues are as follows:

- The NDP area is served by a comprehensive network of highways, pedestrian, cycle and public transport provision that provide good inter and intra connectivity including to important services and centres including Nottingham and Derby.
- New development is likely to increase traffic and movement in the NDP area but is also likely to be supported with improvements to transport infrastructure and capacity.

## 10.4 Scoping outcome

- 10.4.1. The SEA topic 'Transportation' has been **SCOPED IN** to the SEA.
- 10.4.2. The NDP does not propose to allocate sites and policies and proposals in the plan are not likely to generate traffic and movement in the NDP area to an extent that would have significant effects. However, significant growth is proposed in the NDP area therefore there are opportunities for the plan to holistically address inter and intra vehicular, pedestrian, cycle and public transport provision and capacity. There are also opportunities for the NDP to encourage a modal shift to more sustainable forms of travel including measures such as home and remote working and improving local public transport provision and access (including in relation to HS2).

## 10.5 What are the SEA objectives and appraisal questions for the Population and Housing SEA theme?

10.5.1. The SEA topic 'Transportation' has been scoped in to the SEA. Table 10.3 presents the SEA objective and appraisal questions that will be used to assess the plan in relation to this theme.

**Table 10.3: SEA Framework of objectives and assessment questions: Transportation**

| SEA Objective  | Supporting Questions   |
|--|--|
| Promote sustainable transport use and reduce the need to travel. | <p>Will the option/proposal help to:</p> <ul style="list-style-type: none"> <li>• Encourage more use of sustainable transport modes including tram and bus?</li> <li>• Encourage the uptake of active travel opportunities?</li> <li>• Extend or improve active travel networks?</li> <li>• Enable sustainable transport infrastructure improvements?</li> <li>• Ensure sufficient road capacity to accommodate new development?</li> <li>• Facilitate on-going high levels of home and remote working?</li> <li>• Improve road safety?</li> <li>• Reduce impacts on residents from the road network?</li> </ul> |



## 11. The SEA Framework and Methodologies

### 11.1 The SEA Framework

- 11.1.1. The SEA framework has been established through the identification of key issues and environmental objectives as part of the scoping exercise. This draws upon the baseline position and policy context that has been prepared for a range of SEA topics (as set out in Chapters 2-10).
- 11.1.2. The framework consists of a set of headline objectives and ancillary questions, which will be used to appraise the environmental effects of the draft NDP (and any reasonable alternatives).
- 11.1.3. Table 11.1 below outlines the full SEA Framework, which brings together the objectives and questions that have been set out at the end of each SEA topic chapter. The Framework focuses on those issues that have been identified as the most important to consider in the preparation of the NDP; but acknowledging the limited influence that the Plan can have in some areas.

**Table 11.1: The SEA Framework**

| SEA Objective   | Supporting Questions ( Will the option/proposal help to: )   |
|---|--|
| Protect, maintain and enhance the quality, function and connectivity of biodiversity habitats and species; achieving a net environmental gain and stronger ecological networks. | <p>Will the option/proposal help to:</p> <ul style="list-style-type: none"> <li>• Avoid impacts on the Attenborough Gravel Pits SSSI?</li> <li>• Protect and where possible enhance the Toton Fields LNR, Toton Sidings LWS and Priority Habitats?</li> <li>• Support connections between habitats in the NDP area?</li> <li>• Achieve a net gain in biodiversity?</li> <li>• Support access to, interpretation and understanding of biodiversity?</li> <li>• Increase the resilience of biodiversity in the NDP area to the effects of climate change?</li> </ul>   |
| Protect, enhance and manage the historic environment within and surrounding the CTTC NDP area.  | <p>Will the option/proposal help to:</p> <ul style="list-style-type: none"> <li>• Conserve and enhance buildings and structures of architectural or historic interest, both designated and non-designated, and their settings?</li> <li>• Conserve and enhance the character of Chilwell Conservation Area?</li> <li>• Conserve and enhance the special interest and character of locally important features and their settings?</li> <li>• Protect the integrity of the historic setting of key monuments of cultural heritage interest as listed in the Nottinghamshire HER?</li> <li>• Support the undertaking of early archaeological investigations and, where appropriate, recommend mitigation strategies?</li> <li>• Support access to, interpretation and understanding of the historic evolution and character of the NDP area?</li> </ul> |

|  |  |
|--|--|
| Protect, enhance and manage the distinctive character and appearance of landscapes.  | <p>Will the option/proposal help to:</p> <ul style="list-style-type: none"> <li>• Conserve, better reveal the significance and enhance landscape assets?</li> <li>• Contribute to better management of landscape assets?</li> <li>• Identify and protect/enhance features of local importance?</li> <li>• Support access to, interpretation and understanding of the surrounding landscape?</li> <li>• Improve linkages to open space and the countryside?</li> <li>• Seek to minimise a sense of coalescence with other urban areas?</li> </ul>   |
| Ensure housing growth is aligned with the needs of all residents in the NDP area and is supported by the appropriate and timely provision of infrastructure. | <p>Will the option/proposal help to:</p> <ul style="list-style-type: none"> <li>• Provide everyone with the opportunity to live in good quality and affordable housing?</li> <li>• Support the provision of a range of housing types and sizes targeted at aligning the housing stock with local need?</li> <li>• Provide flexible and adaptable homes that meet people's changing needs?</li> <li>• Create sustainable new communities with good access to a range of local services and facilities?</li> </ul>   |
| Promote sustainable transport use and reduce the need to travel.   | <p>Will the option/proposal help to:</p> <ul style="list-style-type: none"> <li>• Encourage more use of sustainable transport modes including tram and bus?</li> <li>• Encourage the uptake of active travel opportunities?</li> <li>• Extend or improve active travel networks?</li> <li>• Enable sustainable transport infrastructure improvements?</li> <li>• Ensure sufficient road capacity to accommodate new development?</li> <li>• Facilitate on-going high levels of home and remote working?</li> <li>• Improve road safety?</li> <li>• Reduce impacts on residents from the road network?</li> </ul> |

## 12. Next Steps

### 12.1 Subsequent stages for the SEA process

12.1.1. Scoping (the current stage) is the second stage in a six-stage SEA process:

- Screening (NPPG Stage A)
- Scoping (NPPG Stage B)
- Assess reasonable alternatives, with a view to informing preparation of the draft plan (NPPG Stage C)
- Assess the draft plan and prepare the Environmental Report with a view to informing consultation and plan finalisation (NPPG Stage D/E)
- Publish a 'statement' at the time of plan adoption in order to 'tell the story' of plan-making/SEA (and present 'measures decided concerning monitoring') (NPPG Stage F)

12.1.2. The next stage will involve consideration and appraisal of alternatives for the Plan (Should any be found to be reasonable). This will most likely involve consideration of different policy approaches for the Plan (given that there will be no site allocations or strategic choices relating to land use).

12.1.3. The findings of the appraisal of these alternatives will be fed back so that they can be considered when preparing the draft Plan.

### 12.2 Consultation on the Scoping Report

12.2.1. Public involvement through consultation is a key element of the SEA process. At this scoping stage, the SEA Regulations require consultation with statutory consultation bodies but not full consultation with the public. The statutory consultation bodies are the Environment Agency, Historic England and Natural England. The Scoping Report has been released to these three statutory consultees.

12.2.2. Consultees are invited to comment on the content of this Scoping Report, in particular the evidence base for the SEA, the identified key issues and the proposed SEA Framework.

12.2.3. Comments on the Scoping Report should be sent to:

Ishaq Khan, *AECOM Ltd, 1 New York Street, Manchester, M1 4HD*

Email address: [Ishaq.Khan@aecom.com](mailto:Ishaq.Khan@aecom.com)

12.2.4. All comments received on the Scoping Report will be reviewed and will influence the development of the SEA where appropriate.

## 13. Glossary

**Agricultural Land** - Agricultural land is classified into five grades. Grade one is best quality and grade five is poorest quality. A number of consistent criteria are used for assessment which include climate (temperature, rainfall, aspect, exposure, frost risk), site (gradient, micro-relief, flood risk) and soil (depth, texture, stoniness).

**Index of Multiple Deprivation (IMD)** – This is a measure of deprivation in England, for every local authority and super output area seven domains of deprivation are measured: (Income, Employment, Health deprivation and Disability, Education Skills and Training, Barriers to Housing and Services, Crime the Living Environment). This allows all 32,482 SOAs to be ranked according to how deprived they are relative to each other. This information is then brought together into one overall Index of Multiple Deprivation 2004.

**LNR** – Local Nature Reserves (LNRs) are for both people and wildlife. They are places with wildlife or geological features that are of special interest locally. They offer people special opportunities to study or learn about nature or simply to enjoy it.

**NNR** - Many of the finest sites in England for wildlife and geology are National Nature Reserves (NNR). There are currently 224 across the country and almost all are accessible and provide great opportunities for people to experience nature.

**Objective** – A statement of what is intended, specifying the desired direction of change in trends Option For the purposes of this guidance option is synonymous with 'alternative' in the SEA Directive Plan For the purposes of the SEA Directive this is used to refer to all of the documents to which this guidance applies, including Development Plan Documents. Supplementary Planning Documents are not part of the statutory Development Plan but are required to have a sustainability appraisal.

**RAMSAR** – Ramsar sites are wetlands of international importance designated under the Ramsar Convention.

**Locally Important Geological Sites** – LIGs are designated by locally developed criteria and are currently the most important designated sites for geology and geomorphology outside statutorily protected areas such as SSSIs.

**SAC** – Special Areas of Conservation (SACs) are strictly protected sites designated under the EC Habitats Directive. Article 3 of the Habitats Directive requires the establishment of a European network of important high-quality conservation sites that will make a significant contribution to conserving the 189 habitat types and 788 species identified in Annexes I and II of the Directive

**Scheduled Monument** - A 'nationally important' archaeological site or historic building, which is given protection against unauthorised change.

**Scoping** – The process of deciding the scope and level of detail of a Sustainability Appraisal.

**Screening** – The process of deciding whether a document requires a SA.

**SEA Directive** – European Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment

**SEA Regulations** – The Environmental Assessment of Plans and Programmes Regulations 2004 (which transposed the SEA Directive into law).

**SPA** – Special Protection Areas (SPAs) are strictly protected sites classified in accordance with Article 4 of the EC Birds Directive, which came into force in April 1979. They are classified for rare and vulnerable birds (as listed on Annex I of the Directive), and for regularly occurring migratory species.

**SSSI** – SSSIs are the country's very best wildlife and geological sites. They include some of our most spectacular and beautiful habitats - large wetlands teeming with waders and waterfowl, winding chalk rivers, gorse and heather-clad heathlands, flower-rich meadows, windswept shingle beaches and remote uplands moorland and peat bog.

**Super Output Area (SOA)** – SOAs are a new geographic hierarchy designed to improve the reporting of small area statistics in England and Wales. Three layers of SOA have been devised: Lower Layer - Minimum population 1000; mean 1500. Built from groups of SOAs (typically 4 to 6) and constrained by the boundaries of the Standard Table (ST) wards used for 2001 Census outputs. Middle Layer - Minimum population 5000; mean 7200. Built from groups of Lower Layer SOAs and constrained by the 2003 local authority boundaries used for 2001 Census outputs. Upper Layer - To be determined; minimum size c.25, 000.

**Strategic Environmental Assessment (SEA)** – Generic term used internationally to describe environmental assessment as applied to policies, plans and programmes. In the UK, SEA is increasingly used to refer to an environmental assessment in compliance with the 'SEA Directive'

**Sustainability Appraisal (SA)** – Generic term used to describe a form of assessment which considers the economic, social and environmental effects of an initiative. SA, as applied to Local Development Documents, incorporates the requirements of the SEA Directive.

**Sustainability Issues** – The full cross-section of sustainability issues, including social, environmental and economic factors.



