2 ASSESSMENT SCOPE AND METHODOLOGY

2.1 INTRODUCTION

2.1.1 This chapter explains the methodology used to prepare the technical chapters of this ES and describes its structure and content. In particular, it sets out the process of identifying and assessing the likely significant environmental effects of the Proposed Development.

2.2 GENERAL APPROACH TO ENVIRONMENTAL STATEMENT

- 2.2.1 This Environmental Impact Assessment has been prepared in accordance with the Town and Country Planning (Environmental Impact Assessment) Regulations 2017. These Regulations came into force in May 2017 and supersede the previous 2011 Regulations and the (Amendment) Regulations 2015.
- 2.2.2 In accordance with the EIA Regulations (Regulation 18 (3) and (5)), an Environmental Statement means:
 - "(3) An environmental statement is a statement which includes at least –
 - (a) a description of the proposed development comprising information on the site, design, size and other relevant features of the development;
 - (b) a description of the likely significant effects of the proposed development on the environment;
 - (c) a description of any features of the proposed development, or measures envisaged in order to avoid, prevent or reduce and, if possible, offset likely signifineant adverse effects on the environment:
 - (d) a description of the reasonable alternatives studies by the developer, which are relevant to the proposed development and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the development on the environment;
 - (e) a non-technical summary of the information referred to in sub-paragraphs (a) to (d); and
 - (f) any additional information specified in Schedule 4 relevant to the specific characteristics of the particular development or type of development and to the environmental features likely to be significantly affected...
 - (5) In order to ensure the completeness and quality of the environmental statement-
 - (a) The developer must ensure that the environmental statement is prepared by competent experts; and

- (b) The environmental statement must be accompanied by a statement from the developer outlining the relevant expertise or qualifications of such experts."
- 2.2.3 Accordingly, in summary this ES comprises the following information in accordance with Regulation 18 and Schedule 4:
 - A description of the development proposed comprising information about the site including the nature, size and scale of the development;
 - The data necessary to identify and assess the main effects which the development is likely to have on the environment with a reference list of the relevant sources of information used;
 - A description of the likely significant effects resulting from inter alia, the
 construction (including demolition works and/or change of use where
 relevant) and existence of the Proposed Development covering, direct effects
 and any indirect, secondary, cumulative, transboundary, short, medium and
 long term, permanent and temporary, positive and negative effects,
 explained by reference to the possible effect of the Proposed Development
 on: population, human health, biodiversity, land, soil, water, air, climate,
 material assets, cultural heritage, including architectural and archaeological
 aspects and landscape and the interaction between any of the foregoing
 material assets (as appropriate);
 - Where significant adverse effects are identified with respect to any of the foregoing, mitigation measures will be proposed in order to avoid, prevent, reduce or offset those effects and any proposed monitoring arrangements stated:
 - A description of the expected significant effects of the development and measures envisaged to prevent them derived from the vulnererability of the Proposed Development to relevant risks of major incidents and/or disasters;
 - A summary in non-technical language of the information specified above;
 and
 - A statement outlining the relevant experience of the experts who have undertaken the assessment and prepared the technical chapters within the Environmental Statement.

2.3 DEVELOPMENT PARAMETERS

- 2.3.1 The Proposed Development, which has been the subject of this EIA, is described in more detail within **Chapter 4**: The Proposed Development and Alternatives Considered. To ensure that the Proposed Development, as it evolves with the benefit of subsequent approvals and/or reserved matters, will remain the same as that assessed within this ES, Development Parameters and an accompanying Parameter Plan has been established and assessed. Together, these contain the parameters and controls defining those aspects of the Proposed Development capable of having significant environmental effects, as defined in the EIA Regulations.
- 2.3.2 The matters encapsulated within the Development Parameters and Parameter Plans include:
 - Application boundary;
 - Demolition and change of use;
 - Land use;
 - Quantum of development (number of dwellings/non-residential floor space);
 - Building heights;
 - Principal means of vehicle access;
 - Public Rights of Way connectivity;

- Green Infrastructure; and
- Surface water attenuation.

2.4 CONSIDERATION OF ALTERNATIVES

- 2.4.1 Schedule 4 (Part 2), of the EIA Regulations requires that the ES contain "A description of the reasonable alternatives (for example in terms of development design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects". Furthermore, the published National Planning Practice Guidance (NPPG) on EIA (Paragraph 033) states that "Where alternative approaches to development have been considered, the Environmental Statement should include an outline of the main alternatives studied and the main reasons for the choice made, taking into account the environmental effects".
- 2.4.2 Accordingly, this ES contains a section setting out the main alternative locations, development proposals (i.e. land uses) and/or design iterations (i.e. layouts, appearance, materials etc.), as appropriate, as considered by the Applicant.

2.5 SCOPE OF ENVIRONMENTAL IMPACT ASSESSMENT

- 2.5.1 As set out within the Introduction (**Chapter 1**), the Proposed Development was not screened by CDC. Instead the planning agent involved in this application concluded that the proposals would constitute EIA Development when considered against Schedule 2 of the EIA Regualtions 2017 and therefore an EIA was required.
- 2.5.2 Considerable pre-planning consultation has taken place with statutory consulttees during the preparation of the development parameters and the Composite Parameter Plan (**Figure 4.2**). As a result it was determined that no formal scoping process would take place with CDC. The content of these pre-planning discussions are outlined in the relevant technical chapters within the Environmental Statement.
- 2.5.3 Opinion was sought from CDC on the location and nature of sites that should be assessed as 'Cumulative Development' within the Environmental Statement. The request for this opinion was submitted to CDC on the 4th September 2017 (see **Appendix 2.1**). CDC identified two further cumulative sites (email dated 14th November 2017, **Appendix 2.2**), but the appropriateness of these sites was questioned for the reasons set out in a further letter submitted on behalf of the Applicant dated 12th December 2017 (**Appendix 2.3**). A response has not been received from CDC to the 12th December 2017 letter, and therefore as set out in that letter, the Applicant has not considered the two further CDC cumulative sites. Details of cumulative sites that have been assessed can be seen later in this chapter.
- 2.5.4 Given the nature and intended longevity of the Proposed Development's operational life, decommissioning has not been considered as part of this study. Accordingly, this EIA focuses on the potential likely significant effects of the Proposed Development during the construction and operational phases only.
- 2.5.5 Accordingly, the environmental themes scoped into or out of the EIA are given in **Table 2.1.**

Table 2.1: Environmental Themes Scoped In / Out

| Environmental Theme | Scoped In/Out | How/ Where Addressed / Reason for Scoping Out | |
|---|------------------|--|--|
| Population | Scoped In | The population increase from the development and the impact on the local economy will be considered within Chapter 6: Transport and Access of the ES, the Travel Plan and Chapter 5: Socio Economic Issues. | |
| Human Health | Scoped In | The population increase from the development and impacts on the local health service requirements will be considered in Chapter 5: Socio Economic Issues and the possible health implications from construction and traffic movements through the operation of the development will be considered with Chapter 12: Air Quality and Chapter 13: Noise and Vibration . | |
| Biodiversity | Scoped in | There is considerable recent information about the ecology the site due to ongoing survey work that has been taking place. This information, will be assessed within Chapter 8: Ecology . | |
| Land | Scoped In | The alterations to the current land use for the Proposed Development will be considered in the relevant environmental assessments. | |
| Soil | Scoped In | The geology and ground conditions of the site will be assessed in Chapter 11: Ground Conditions and Geology . | |
| Water | Scoped In | The ground water runoff and flood risk potential of this development will be assessed in Chapter: 10: Hydrology and Flood Risk and will be supported by an accompanying Flood Risk Assessment. | |
| Air | Scoped In | There will be an increase in traffic in the local area due to the increase in population from construction of these new homes. This will be assessed in Chapter 12: Air Quality . | |
| Climate | Scoped out | Chapter 12: Air Quality and Chapter 10: Hydrology and Flood Risk all consider the potential effects on climate from this Proposed Development. | |
| Material Assets | Scoped In | The Applicant seeks demolition of buildings/structures (no Listed buildings or Scheduled Monuments), with further Permitted Development demolitions. The effects of demolition will be assessed in Chapter 7: Landscape and Visual Impact and in Chapter 9: Archaeology and Cultural Heritage to determine the effect of this alteration to the material assets and character of the site. | |
| Cultural Heritage including Architectural and Archaeological | Scoped In | The impacts on the cultural heritage of the Site and surrounding area will be considered within Chapter 9: Archaeology and Cultural Heritage of the ES. | |

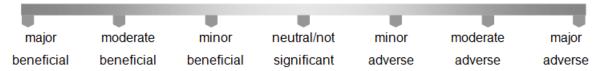
| Environmental Theme | Scoped In/Out | How/ Where Addressed / Reason for Scoping Out |
|--|------------------|--|
| Landscape | Scoped In | To be assessed in Chapter 7: Landscape and Visual Impact of the Environmental Statement. |
| Inter-relationship between above factors | Scoped In | The cumulative and interrelationship impacts of each environmental assessment will be considered within the Environmental Statement. |

2.6 ENVIRONMENTAL IMPACT ASSESSMENT METHODOLOGY

- 2.6.1 The content of the ES is based on the following:
 - Review of the baseline situation through existing information, including data, reports, site surveys and desktop studies;
 - Consideration of the relevant National Planning Policy Framework (NPPF) and accompanying NPPG, and the statutory extant and emerging development plan policies;
 - Consideration of potential sensitive receptors;
 - Identification of likely significant environmental effects and an evaluation of their duration and magnitude;
 - Expert opinion;
 - Modelling;
 - Use of relevant technical and good practice guidance; and
 - Specific consultations with appropriate bodies.
- 2.6.2 Environmental effects have been evaluated with reference to definitive standards and legislation where available. Where it has not been possible to quantify effects, assessments have been based on available knowledge and professional judgment.

2.7 DETERMINING SIGNIFICANCE

- 2.7.1 The purpose of the EIA is to identify the likely 'significance' of environmental effects (beneficial or adverse) arising from a Proposed Development. In broad terms, environmental effects are described as:
 - Adverse detrimental or negative effects to an environmental resource or receptor;
 - Beneficial advantageous or positive effect to an environmental resource or receptor; or
 - Negligible a neutral effect to an environmental resource or receptor.
- 2.7.2 It is proposed that the significance of environmental effects (adverse, negligible/neutral or beneficial) would be described in accordance with the following 7-point scale:



- 2.7.3 Significance reflects the relationship between two factors:
 - The magnitude or severity of an effect (i.e. the actual change taking place to the environment); and

- The sensitivity, importance or value of the resource or receptor.
- 2.7.4 The broad criteria for determining magnitude are set out in **Table 2.2**.

Table 2.2: Degrees of Magnitude and their Criteria

| Magnitude of Effect | Criteria |
|---------------------|---|
| High | Total loss or major/substantial alteration to elements/features of the baseline (pre-development) conditions such that the post development character/composition/attributes will be fundamentally changed. |
| Medium | Loss or alteration to one or more elements/features of the baseline conditions such that post development character/composition/attributes of the baseline will be materially changed. |
| Low | A minor shift away from baseline conditions. Change arising from the loss/alteration will be discernible / detectable but the underlying character / composition / attributes of the baseline condition will be similar to the pre-development. |
| Negligible | Very little change from baseline conditions. Change not material, barely distinguishable or indistinguishable, approximating to a 'no change' situation. |

2.7.5 The sensitivity of a receptor is based on the relative importance of the receptor using the scale in **Table 2.3**.

Table 2.3: Degrees of Sensitivity and their Criteria

| Sensitivity | Criteria |
|-------------|--|
| High | The receptor / resource has little ability to absorb change without fundamentally altering its present character, or is of international or national importance. |
| Medium | The receptor / resource has moderate capacity to absorb change without significantly altering its present character, or is of high and more than local (but not national or international) importance. |
| Low | The receptor / resource is tolerant of change without detrimental effect, is of low or local importance. |
| Negligible | The receptor / resource can accommodate change without material effect, is of limited importance. |

2.7.6 Placement within the 7-point significance scale would be derived from the interaction of the receptor's sensitivity and the magnitude of change likely to be experienced (as above), assigned in accordance with **Table 2.4** below, whereby effects assigned a rating of Major or Moderate would be considered as 'significant'.

| 0) | Sensitivity of Receptor | | | | | | |
|-----------|-------------------------|------------|----------------------|----------------------|------------|--|--|
| Change | | High | Medium | Low | Negligible | | |
| _ | High | Major | Major | Moderate | Negligible | | |
| nde of | Medium | Major | Moderate | Minor to Moderate | Negligible | | |
| Magnitude | Low | Moderate | Minor to Moderate | Minor | Negligible | | |
| 2 | Negligible | Negligible | Negligible | Negligible | Negligible | | |

Table 2.4: Degrees of Significance

- 2.7.7 The above magnitude and significance criteria are provided as a guide for specialists to categorise the significance of effects within the ES. Where discipline-specific methodology has been applied that differs from the generic criteria above, this is clearly explained within the given chapter under the heading of Assessment Approach.
- 2.7.8 As can be seen from Table 2.4 when an environmental effect is assessed as having a major or moderate degree of significance it is deemed to be "significant". These are the shaded cells in Table 2.4. When such a significant effect occurs consideration of mitigation solutions or enhancements to minimise the effect (which can include design alterations) will be considered. Once these mitigations and enhancements have been assessed the degree of significance may decrease to minor/moderate, minor or negligible. If such a level of environmental effect occurs the Proposed Development is no longer considered as creating a "significant effect". If an environmental effect remains "significant" (i.e. major/moderate) the relevant planning authority must weigh up the planning balance and determine if this significant, negative environmental effect is outweighed by some other planning gain prior to determining the planning application.
- 2.7.9 A significance of effects would be assigned both before and after mitigation.

2.8 MITIGATION

- 2.8.1 Standard measures and the adoption of construction best practice methods to avoid, minimise or manage adverse environmental effects, or to ensure realisation of beneficial effects, are assumed to have been incorporated into the design of the Proposed Development and the methods of its construction from the outset. Further information on the standard measures and construction best practice is detailed in **Chapter 4**: The Proposed Development and Alternatives Considered. Where outlined, the assessment is of the Proposed Development incorporating these measures.
- 2.8.2 Where mitigation measures are proposed that are specific to an environmental theme (i.e. ecological measures incorporated into the landscaping scheme, exclusion of areas of archaeological significance from development etc.) and incorporated into the design, these are also outlined within **Chapter 4**, and highlighted within the relevant technical chapter.
- 2.8.3 Where the assessment of the Proposed Development has identified potential for adverse environmental effects, the scope for mitigation of those effects, for example by way of compensatory measures, has been considered and is outlined in the appropriate technical chapter. It is assumed that such measures would be subject to appropriate planning conditions or obligations, and that a Construction Environmental Management Plan (CEMP) will be submitted to CDC prior to construction commencing in a particular phase or parcel that will set out responsibilities with regard to compliance with

legislation, and to implement any mitigation measures set out within the ES that are necessary to avoid, minimise, or mitigate environmental impacts arising from the construction phase of the development.

2.8.4 Where the effectiveness of the mitigation proposed has been considered uncertain, or where it depends upon assumptions of operating procedures, then data and/or professional judgment has been introduced to support these assumptions.

2.9 CUMULATIVE AND IN-COMBINATION EFFECTS

Cumulative Effects

- 2.9.1 Within EIA, cumulative effects are generally considered to arise from the combination of effects from the Proposed Development and from other proposed or permitted schemes in the vicinity, acting together to generate elevated levels of effects. Examples of these kinds of effects that can be readily appreciated could include:
 - Traffic generated from developments, affecting the surrounding road network;
 - · Air quality effects from developments; and
 - Discharges to the water environment.
- 2.9.2 Correspondence with CDC regarding the list of developments to be considered with regards cumulative effects is described at 2.5.3 above. The schemes that have been subject to cumulative assessment are summarised in **Table 2.5** and shown in **Figure 2.1**.

Table 2.5: Projects Considered in the Cumulative Assessment

| Site | Nature of Development/Planning Status | | |
|--|---|--|--|
| Village Centre North, Heyford | 17/00895/F – Detailed planning sought – awaiting approval Comprises of the demolition of 2 buildings and the partial demolition of a 3 rd , 2 x 4 storey buildings to the north of Camp Road and a further 1x 4 storey building to the south of Camp Road. These buildings will house 511m² convenience store, 11 A1 Units (1,186m²) and 66 residential units (28x 1 bed units and 38x 2 bed units). | | |
| Pye Homes, Upper Heyford | 15/01357/F – Detailed planning sought – 'Resolved to Grant' September 2017. Creation of 79 new dwellings | | |
| Land South west of Camp Road, Heyford | 16/02446/F – Detailed Planning Sought, Awaiting Approval. Comprises of 297 new dwellings, new vehicle access off Camp Road, POS and demolition of existing buildings on site. | | |
| Parcel 15, Heyford Park Masterplan | This section of land is within the Policy Villages 5 allocation and is located directly to the north of the Pye Homes development. Due to it being part of the Policy Villages 5 allocation it needs to be assessed cumulatively, although currently there is no planning application or agreement with the landowner to promote this parcel. This parcel has the capacity for 49 dwellings. | | |
| North-west Bicester | 10/01780/Hybrid – Exemplar/Elmsbury, Application 1 14/01384/OUT, Application 2 14/01641/OUT and 14/02121/OUT for Himley Village In combination, these developments will lead to 3,293 new dwellings and 35,000m ² of new employment space. | | |

| Site | Nature of Development/Planning Status | | |
|---|---|--|--|
| Land at Whitelands Farm, Kingsmere | 06/00967/OUT- Application Granted in June 2008 Comprises of up to 1,585 new dwellings, a health village, an elderly nursing home, B1 and B2 employment space, local centre, 2 primary schools, 1 secondary school, hotel, sports pavilion, open space, link road between the A41 and Middleton Stoney Road/Howes Lane junction and associated works. | | |
| Network Bicester | 14/01675/OUT – Allowed on Appeal 29 th November 2017 (APP/C3105/W/16/3163551) Comprises of 53,000m2 of employment floor space (b1, B2 and B8), new access off Middleton Stoney Road (B4030), 4.5ha of residential land and associated infrastructure. | | |
| Bicester Gateway | 16/02505/OUT- Planning Sought – Application Granted in November 2017 Comprises of 4x class A1 retail units, 1x class A3 (cafe/restaurant unit), a class D2 (gym) unit, parking access and services. | | |
| Land South of Building 296/297, Heyford Park | 17/01680/F – Application Granted 31st October 2017 Temporary early years days care nursery and new footpath access with associated works. | | |

- 2.9.3 Planning applications for two proposed employment use developments on the Southern Bomb Stores (SBS) within the Application Site have not been considered within the cumulative assessment. The reference numbers for these two planning applications are 15/0047/OUT and 16/02269/OUT. To date neither of these applications have been determined by Cherwell Disitrict Council.
- 2.9.4 Within the Proposed Development that this ES assesses, land within SBS is to be used for a combination of residential, Public Open Space (POS) and for filming activites. The Applicant has therefore confirmed that if the Proposed Development was to gain planning consent neither 15/0047/OUT nor 16/02269/OUT would be progressed and so they have been excluded from the assessment of cumulative effects.

In-Combination Effects

- 2.9.5 In-combination effects arise where effects from one environmental element bring about changes in another environmental element. These effects are also reviewed in each of the technical chapters of this ES. Examples of the main types of interactive effects are as follows:
 - Effects of traffic on noise:
 - Effects of traffic on air quality;
 - Effects of water discharges on biodiversity;
 - Effects of landscaping on biodiversity;
 - · Effects of waste on traffic; and
 - Effects of land contamination on air and water quality.

2.10 GENERAL ASSUMPTIONS AND LIMITATIONS

- 2.10.1 The principal assumptions that have been made and any limitations that have been identified in preparing this ES are set out below:
 - All of the principal land uses adjoining the Application Site remain as present day, except where redevelopment proposals have been granted planning

- consent. In those cases it is assumed the redevelopment proposals will be implemented or would but for the development being implemented;
- Information received from third parties is complete and up to date;
- The design, construction and completed stages of the Proposed Development will satisfy legislative requirements; and
- Conditions will be attached to the planning permission with regards mitigation of effects, where considered necessary to make the development environmentally acceptable.

STRUCTURE OF TECHNICAL CHAPTERS

- 2.10.2 Throughout the EIA process, the likely significant environmental effects of the Proposed Development will be assessed. Within each of the technical chapters the information which will inform the EIA process has generally been set out in the following way:
 - Introduction to introduce the topic under consideration, state the purpose of undertaking the assessment and set out those aspects of the Proposed Development material to the topic assessment;
 - Assessment Approach to describe the method and scope of the assessment undertaken and responses to consultation in relation to method and scope in each case pertinent to the topic under consideration;
 - **Baseline Conditions** a description of the baseline conditions pertinent to the topic under consideration including baseline survey information;
 - Assessment of Likely Significant Effects identifying the likely effects, evaluation of those effects and assessment of their significance, considering both construction and operational and direct and indirect effects;
 - Mitigation and Enhancement describing the mitigation strategies for the significant effects identified and noting any residual effects of the proposals;
 - Cumulative and In-combination Effects consideration of potential cumulative and in-combination effects with those of other developments; and
 - **Summary** a non-technical summary of the chapter, including baseline conditions, likely significant effects, mitigation and conclusion.

Figure 2.1

Cumulative Assessment Sites