CONTENTS

8.1 INTRODUCTION

8.1.1 This chapter of the ES, prepared by the Environmental Dimension Partnership Ltd (EDP), assesses the likely significant effects of the Proposed Development in terms of landscape and visual amenity at Gavray Drive, Bicester, hereafter referred to as 'The Site'. This chapter has been prepared by Adam Hughes a Chartered Member of the Landscape Institute with 10 years' experience.

8.1.2 The assessment includes a summary of the current landscape and visual baseline conditions found within and surrounding the Application Site and identifies measures to avoid, minimise and/or compensate, where appropriate, for significant effects that may arise as part of the Proposed Development. It has been prepared in accordance with the Guidelines for Landscape and Visual Impact Assessment – Third Edition 2013.

8.1.3 The chapter should be read in conjunction with the following Technical Appendices:

- Appendix 8.1: Landscape and Visual Baseline (and associated annexes);
- Appendix 8.2: Landscape and Visual Effects;
- Appendix 8.3: Arboricultural Impact Assessment.

8.2 RELEVANT POLICY

National Planning Policy Framework (NPPF)

8.2.1 At the heart of the NPPF is a presumption in favour of sustainable development; this being the golden thread running throughout the document and the development of NPPF policies. Pursuing sustainable development involves seeking positive improvements in the quality of the built, natural and historic environment, as well as improving people's quality of life, including inter alia, moving from a net loss of biodiversity to achieving net gains for nature, replacing poor design with better design and improving the conditions in which people live, work, travel and take leisure.

8.2.2 Considering this broad aim alongside the three dimensions to sustainable development, and in particular that relating to environmental matters, the role of the Landscape and Visual Impact Assessment (LVIA) is key in the creation of successful places in which to live and work. Through the development and design of integrated open space, allied to the protection or enhancement of the natural environment, the LVIA considers the challenges of the NPPF head-on.

8.2.3 Paragraph 170 states that the planning system should contribute to and enhance the natural and local environment by inter alia "protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan)" and "recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland".

Adopted Local Plan

8.2.4 In order to properly assess the effects of the proposal in landscape terms, EDP has conducted a review of relevant planning policy and landscape designations to identify what 'value' these might infer. This review focuses on local plan policy, since such policy is (a) more specific to the site and (b) reflects the regional and national advice regarding landscape issues.

8.2.5 The Adopted Cherwell Local Plan 2011-2031 includes over-arching general development policies, against which the development proposals will be tested. The Local Plan is split into five parts, including a vision for the district as a whole, policies for development as a whole and site-specific policies. Policies that are specific to the site in landscape and visual terms are:

- Policy BSC 10: Open space, Outdoor Sport and Recreation Provision – Sufficient quantity and quality of open space, sport and recreation is considered with appropriate access;

- Policy BSC 11: Local Standards of Provision – Development will contribute to the provision of open space, sport and recreation, together with secure arrangements for its management and maintenance;

- Policy ESD 10: Protection and Enhancement of Biodiversity and the Natural Environment – This will be achieved through a number of measures including a net gain in biodiversity, protecting and planting additional trees and the requirement of monitoring and management plan to ensure long term management is protected;

- Policy ESD 13: Local Landscape Protection and Enhancement – Secure the enhancement of the character and appearance of the landscape, particularly in urban fringe locations. This will be achieved through restoration, management or enhancement of existing features;

- Policy ESD 17: Green Infrastructure (GI) – Maintain and enhance the district's green infrastructure network, through protecting and enhancing existing features and ensuring GI forms an integral component in the planning of new development; and

- Policy Bicester 13: Gavray Drive (re-adopted) – Housing site of 23 ha for 300 dwellings and 30% affordable.

8.3 ASSESSMENT METHODOLOGY

8.3.1 Provided within this section is an abridged methodology for the LVIA. An unabridged version and Glossary of Terms can be found at Appendix 8.1: Annex EDP 1 and 2 respectively.

Relevant Guidance

8.3.2 The assessment methodology for assessing landscape and visual effects prepared by EDP is principally based on the following best practice guidance:

- Guidelines for Landscape and Visual Impact Assessment – Third Edition (LI/IEMA, 2013);
- Landscape Character Assessment – Guidance for England and Scotland (Swanick & LUC, 2002) produced on behalf of the Countryside Agency and Scottish Natural Heritage; and

- Technical Guidance Note 06/19 Visual Representation of development proposals.

8.3.3 The nature of landscape and visual assessment requires both objective analysis and subjective professional judgement. Accordingly, the following assessment is based on the best practice guidance listed above and information and data analysis techniques.

8.3.4 It uses subjective professional judgement and quantifiable factors wherever possible and is based on clearly defined terms (see Glossary of Terms, Appendix 8.1: Annex EDP 2).

Landscape Assessment

8.3.5 Potential landscape effects derive from changes in the physical landscape fabric that may contribute to changes in its character and how this is experienced. These effects need to be considered in line with changes already occurring within the landscape, and which help define the character of it.

8.3.6 Potential effects upon the wider landscape resource, i.e. the landscape surrounding the development, requires an assessment of visibility of the proposals from adjacent landscape character areas, but this still remains an assessment of landscape character and not visual amenity.

Visual Assessment

8.3.7 The assessment of potential effects on visual amenity draws on the predicted effects of the Proposed Development, the landscape and visual context, and the visibility and viewpoint

analysis. It considers the significance of the overall effects of the Proposed Development on the visual amenity of the main visual receptor types in the study area.

Identifying Landscape and Visual Receptors

8.3.8 This assessment has sought to identify the key landscape and visual receptors that may be affected by the changes proposed.

8.3.9 The assessment of effects on landscape (as a resource in its own right) draws on the description of the development, the landscape context and the visibility and viewpoint analysis to identify receptors, which, for the Proposed Development may include, but not be limited to, the following:

- The landscape fabric of the Application Site;
- The key landscape characteristics of the local context;
- The 'host' landscape character area, which contains the proposed development;
- The 'non-host' landscape character areas where there is the potential for secondary effects beyond the host landscape character area (this is only undertaken where effects may extend beyond the host character area); and
- Landscape designations on a national, regional or local level (where relevant).

8.3.10 The locations and types of visual receptors within the defined study areas are identified from Ordnance Survey (OS) maps and other published information (such as walking guides), from fieldwork observations and from local knowledge provided during the consultation process. Examples of visual receptors may include, but not be limited to, the following:

- Settlements and private residences;
- Users of National Cycle Routes and National Trails;
- Users of local/regional cycle and walking routes;
- Those using local rights of way – walkers, horse riders, cyclists;
- Users of open spaces with public access;
- People using major (motorways, A and B) roads;
- People using minor roads; and
- People using railways.

Assessment of Landscape and Visual Effects

8.3.11 The assessment of effects on the landscape resource includes consideration of the potential changes to those key elements and components that contribute towards recognised landscape character or the quality of designated landscape areas, these features are termed

'landscape receptors'. The assessment of visual amenity requires the identification of potential visual receptors that may be affected by the Proposed Development.

8.3.12 As noted above, following the identification of these various landscape and visual receptors, the effect of the Proposed Development on each of them is assessed through consideration of a combination of:

- "Their overall sensitivity to the proposed form of development that includes the value attached to the receptor following the baseline appraisal, combined with the susceptibility of the receptor to the change proposed, determined during the assessment stage; and

- The overall magnitude of change that will occur - based on the size and scale of the change, its duration and its reversibility."

Defining Receptor Sensitivity

8.3.13 A number of factors influence professional judgement when assessing the degree to which a particular landscape or visual receptor can accommodate change arising from a particular development. Sensitivity is made up of judgements regarding the 'value' attached to the receptor, which is determined at baseline stage, and the 'susceptibility' of the receptor, which is determined at the assessment stage when the nature of the proposals, and therefore the susceptibility of the landscape and visual resource to change, is better understood.

8.3.14 Susceptibility indicates "the ability of a defined landscape or visual receptor to accommodate the specific Proposed Development without undue negative consequences"[1]. Susceptibility of visual receptors is primarily a function of the expectations and occupation or activity of the receptor. A degree of professional judgement applies in arriving at the susceptibility for both landscape and visual receptors and this is clearly set out in the technical annexes to this assessment.

8.3.15 A location may have different levels of sensitivity according to the types of visual receptors found there and any one receptor type may be accorded different levels of sensitivity at different locations.

8.3.16 Therefore, where the susceptibility of a receptor to the type of development proposed may result in a change to the 'inherent' value of that receptor or location, this is made explicit within the assessment text contained at Appendix 8.1: Annex EDP 1.

[1] Landscape Institute and Institute of Environmental Management and Assessment (2013) Guidelines for Landscape and Visual Impact Assessment, Third Edition Page 158.

8.3.17 Table 8.1 (below) provides an indication of the criteria by which the overall sensitivity of a landscape receptor is judged within this assessment and considers both value and susceptibility independently.

Table 8.1: Landscape Sensitivity

Landscape Baseline - Overall Sensitivity	
Very High	*Value:* Nationally/Internationally designated/valued countryside and landscape features; strong/distinctive landscape characteristics; absence of landscape detractors.
	Susceptibility: Strong/distinctive landscape elements/aesthetic/perceptual aspects; absence of landscape detractors; landscape receptors in excellent condition. Landscapes with clear and widely recognised cultural value. Landscapes with a high level of tranquillity.
High	*Value:* Locally designated/valued countryside (e.g. Areas of High Landscape Value, Regional Scenic Areas) and landscape features; many distinctive landscape characteristics; very few landscape detractors.
	Susceptibility: Many distinctive landscape elements/aesthetic/perceptual aspects; very few landscape detractors; landscape receptors in good condition. The landscape has a low capacity for change as a result of potential changes to defining character.
Medium	*Value:* Undesignated countryside and landscape features; some distinctive landscape characteristics; few landscape detractors.
	Susceptibility: Some distinctive landscape elements/aesthetic/perceptual aspects; few landscape detractors; landscape receptors in fair condition. Landscape is able to accommodate some change as a result.
Low	*Value:* Undesignated countryside and landscape features; few distinctive landscape characteristics; presence of landscape detractors.
	Susceptibility: Few distinctive landscape elements/aesthetic/perceptual aspects; presence of landscape detractors; landscape receptors in poor condition. Landscape is able to accommodate large amounts of change without changing these characteristics fundamentally.
Very Low	*Value:* Undesignated countryside and landscape features; absence of distinctive landscape characteristics; despoiled/degraded by the presence of many landscape detractors.
	Susceptibility: Absence of distinctive landscape elements/aesthetic/perceptual aspects; presence of many landscape detractors; landscape receptors in very poor condition. As such landscape is able to accommodate considerable change.

8.3.18 For visual receptors, judgements of susceptibility and value are more closely interlinked considerations. For example, the most valued views are those that people go and visit because of the available view – and it is at those viewpoints that their expectations will be highest and thus most susceptible to change.

8.3.19 For this reason, the sensitivity of visual receptors is rated in a single step process, which combines both susceptibility and value as indicated by the criteria in Table 8.2 below.

Table 8.2: Visual Sensitivity

Visual Baseline - Overall Sensitivity	
Very High	*Value/Susceptibility:* View is designed/has intentional association with surroundings; is recorded in published material; from a publicly accessible heritage asset/designated/promoted viewpoint; national/internationally designated right of way; protected/recognised in planning policy designation.
	Examples: May include views from residential properties, National Trails; promoted holiday road routes; designated countryside/landscape features with public access; visitors to heritage assets of national importance; Open Access Land.
High	*Value/Susceptibility:* View of clear value but may not be formally recognised e.g. framed view of scenic value or destination/summit views; inferred that it may have value for local residents; locally promoted route or PROW
	Examples: May include from recreational locations where there is some appreciation of the visual context/landscape e.g. golf, fishing; themed rights of way with a local association; National Trust land; panoramic viewpoints marked on OS maps; road routes promoted in tourist guides and/or for their scenic value.
Medium	*Value/Susceptibility:* View is not widely promoted or recorded in published sources; may be typical of those experienced by an identified receptor; minor road routes through rural/scenic areas.
	Examples: May include people engaged in outdoor sport not especially influenced by an appreciation of the wider landscape e.g. pitch sports; views from minor road routes passing through rural or scenic areas.
Low	*Value/Susceptibility:* View of clearly lesser value than similar views from nearby visual receptors that may be more accessible.
	Examples: May include major road routes; rail routes; receptor is at a place of work but visual surroundings have limited relevance.
Very Low	*Value/Susceptibility:* View may be affected by many landscape detractors and unlikely to be valued.
	Examples: May include people at their place of work, indoor recreational or leisure facilities or other locations where views of the wider landscape have little of no importance.

8.3.20 The tables above offer a template for assessing overall sensitivity of any landscape or visual receptor, as determined by combining judgements of their susceptibility to the type of change or development proposed and the value attached to the landscape or view as set out at paragraph 5.38 of GLVIA 3rd Edition (2013).

8.3.21 However, the narrative in this report demonstrates that assessment of overall sensitivity can change on a case-by-case basis. For example, a high susceptibility to change and a low value may result in a medium overall sensitivity, unless it can be demonstrated that the receptor is unusually susceptible or is in some particular way more valuable. A degree of professional judgement applies in arriving at the overall sensitivity for both landscape and visual receptors.

Magnitude of Change

8.3.22 The magnitude of any landscape or visual change is determined through a range of considerations particular to each receptor. The three attributes considered in defining the magnitude are:

- Scale of change;
- Geographical extent; and
- Duration and reversibility/proportion.

8.3.23 Receptor locations from which views of the Proposed Development are not likely to occur will receive no change and therefore no effect. With reference to the Zone of Theoretical Visibility (ZTV) and site survey, the magnitude of change is defined for receptor locations from where visibility of the Proposed Development is predicted to occur.

8.3.24 Table 8.3 provides an indication of the criteria by which the size/scale of change at a landscape or visual receptor is judged within this assessment.

Table 8.3: Scale of Change Criteria

Category	Landscape Receptor Criteria	Visual Receptor Criteria
Very High	Total loss of or major alteration to key elements/features/characteristics of the baseline condition. Addition of elements which strongly conflict with the key characteristics of the existing landscape.	There would be a substantial change to the baseline, with the Proposed Development creating a new focus and having a defining influence on the view.

Category	Landscape Receptor Criteria	Visual Receptor Criteria
High	Notable loss of or alteration to one or more key elements/features/-characteristics of the baseline condition. Addition of elements that are prominent and may conflict with the key characteristics of the existing landscape.	The Proposed Development will be clearly noticeable and the view would be fundamentally altered by its presence.
Medium	Partial loss or alteration to one or more key elements/ features /characteristics of the baseline condition. Addition of elements that may be evident but do not necessarily conflict with the key characteristics of the existing landscape.	The Proposed Development will form a new and recognisable element within the view, which is likely to be recognised by the receptor.
Low	Minor loss or alteration to one or more key elements/ features/ characteristics of the baseline landscape. Addition of elements that may not be uncharacteristic within the existing landscape.	The Proposed Development will form a minor constituent of the view being partially visible or at sufficient distance to be a small component.
Very Low	Barely discernible loss or alteration to key elements/ features/ characteristics of the baseline landscape. Addition of elements not uncharacteristic within the existing landscape.	The Proposed Development will form a barely noticeable component of the view, and the view whilst slightly altered would be similar to the baseline situation.

8.3.25 Table 8.4 provides an indication of the criteria by which the geographical extent of the area will be affected within this assessment.

Table 8.4: Geographic Extent

Landscape Receptors	Visual Receptor Criteria
Large scale effects influencing several landscape types or character areas.	Direct views at close range with changes over a wide horizontal and vertical extent.
Effects at the scale of the landscape type or character areas within which the proposal lies.	Direct or oblique views at close range with changes over a notable horizontal and/or vertical extent.

Landscape Receptors	Visual Receptor Criteria
Effects within the immediate landscape setting of the site.	Direct or oblique views at medium range with a moderate horizontal and/or vertical extent of the view affected.
Effects at the site level (within the Application Site itself).	Oblique views at medium or long range with a small horizontal/vertical extent of the view affected.
Effects only experienced on parts of the site at a much localised level.	Long range views with a negligible part of the view affected.

8.3.26 The third, and final, factor in determining the predicted magnitude of change is a combination of duration and reversibility. Duration and reversibility are separate but linked considerations. Duration is judged according to the defined terms set out below, whereas reversibility is a judgement about the prospects and practicality of the particular effect being reversed in, for example, a generation. The categories used in this assessment are set out below:

Duration

- Long term (20 years+);
- Medium to long term (10 to 20 years);
- Medium term (5 to 10 years);
- Short term (1 year to 5 years); and
- Temporary (less than 12 months).

Reversibility

8.3.27 Reversibility is defined as:

- Permanent with unlikely restoration to original state, e.g. major road corridor, power station, urban extension etc.;
- Permanent with possible conversion to original state, e.g. agricultural buildings, retail units;
- Partially reversible to a different state, e.g. mineral workings;
- Reversible after decommissioning to a similar original state, e.g. wind energy development; or
- Quickly reversible, e.g. temporary structures.

Assessment of Significance

8.3.28 The purpose of the EIA process is to identify the likely significant environmental effects (both beneficial and adverse) arising from development proposals. Schedule 4 to the EIA Regulations specifies the information to be included in all ES, which should include a description of:

"…the likely significant effects on the factors specified in regulation 4(2) should cover the direct effects and any indirect, secondary, cumulative, transboundary, short-term, medium-term and long-term, permanent and temporary, positive and negative effects of the development. ..."

8.3.29 In order to consider the likely level of any effect, the sensitivity of each receptor is combined with the predicted magnitude of change, with reference also made to the geographical extent, duration and reversibility of the effect within the assessment.

8.3.30 Having taken such a wide range of factors into account when assessing sensitivity and magnitude at each receptor, the level of effect can be derived by combining the sensitivity and magnitude in accordance with the matrix in Table 8.5.

Table 8.5: Level of Effects Matrix

OVERALL SENSITIVITY	**OVERALL MAGNITUDE OF CHANGE**				
	Very High	**High**	**Medium**	**Low**	**Very Low**

Very High	**Substantial**	**Major**	**Major/-Moderate**	**Moderate**	Moderate/-Minor
High	**Major**	**Major/-Moderate**	**Moderate**	Moderate/Minor	Minor
Medium	**Major/-Moderate**	**Moderate**	Moderate/-Minor	Minor	Minor/-Negligible

Low	**Moderate**	Moderate/-Minor	Minor	Minor/-Negligible	Negligible
Very Low	Moderate/-Minor	Minor	Minor/-Negligible	Negligible	Negligible/-None

8.3.31 Each effect is described and evaluated individually through the combination of all of the relevant factors and assessed as either **significant** or **not significant**. Landscape and visual effects identified at substantial, major, major/moderate or moderate levels (bold type within the matrix above) are generally considered to be significant, whereas those effects assessed at moderate/minor, minor, minor/negligible or negligible level are considered to be not significant.

8.3.32 In certain cases, where additional factors may arise, a further degree of professional judgement may be applied when determining whether the overall change in the view will be significant or not and, where this occurs, this is explained in the assessment.

Definition of Effects

8.3.33 Taking into account the levels of effect described above, and with regard to effects being either adverse or beneficial, Table 8.6 represents a description of the range of effects likely at any one receptor.

Table 8.6: Definition of Effects Matrix

Effect	Definition
Substantial	Changes resulting in a complete variance with the landscape resource or visual amenity.
Major	Changes resulting in a fundamental change to the landscape resource or visual amenity.
Moderate	A material but non-fundamental change to the landscape resource or visual amenity.
Minor	A slight but non-material change to the landscape resource or visual amenity.
Negligible	A detectable but non-material change to the landscape resource of visual amenity.
None	No detectable change to the landscape resource or visual amenity.

Nature of Effect

8.3.34 Effects can be adverse (negative), beneficial (positive) or neutral. The landscape effects will be considered against the landscape baseline, which includes published landscape strategies or policies if they exist. Changes involving the addition of large scale man-made objects are typically considered to be adverse, as they are not usually actively promoted as part of published landscape strategies. Accordingly, landscape effects as a result of these aspects of the Proposed Development will be assumed to be adverse, unless otherwise stated within the assessment.

8.3.35 Visual effects are more subjective as people's perception of development varies through the spectrum of negative, neutral and positive attitudes. In the assessment of visual effects, the assessor will exercise objective professional judgement in assessing the level of effects and, unless otherwise stated, will assume that all effects are adverse, thus representing the worst-case scenario.

Cumulative Effects

8.3.36 Cumulative effects generally occur where there may be combined or sequential visibility of two or more developments of the same type and scale, or where the consideration of other schemes would increase an effect identified. Where other schemes are relevant, these are considered in conjunction with the proposed scheme (see Chapter 2 for the full list of sites initially considered). For landscape and visual matters, the cumulative effects are considered in combination with the following sites which have been agreed with the LPA as those developments requiring consideration in the context of cumulative impacts as part of this EIA:

- Res104: Graven Hill (Bicester 2);
- Res105: Kingsmere SW Bicester Phase 1;
- Res109: North West Bicester (Bicester 1);
- Res110: NWB Phase 2 (Bicester 1)
- Res111: South East Bicester (Bicester 12);
- Res112: South West Bicester Phase 2 (Bicester 3);
- Res117: Cattlemarket;
- Emp101: North West Bicester (Bicester 1);
- Emp102: Graven Hill (Bicester 2);
- Emp103: Bicester Business Park (Bicester 4);
- Emp104: Bicester Gateway Business Park (Bicester 10);
- Emp106: Wretchwick Green (Bicester 12);
- Emp107: South East Bicester (Bicester 12); and
- Emp115: Bicester Gateway (Bicester 3).

Field Surveys

8.3.37 A number of field assessments of local site circumstances, including photographic survey of the character and visual context of the development site and its surroundings, and an assessment of Rights of Way, have been undertaken between April 2020 and April 2021 in order to gather robust baseline information. Field assessments were undertaken in winter conditions and have, therefore, been undertaken, as far as is practicable, in accordance with best practice guidance which states that such assessments should be undertaken when the leaves are absent from the majority of trees/vegetation and visibility is at its greatest.

8.3.38 These field-based assessments were undertaken by a Chartered Landscape Architect, during good weather conditions.

Limitations and Assumptions

8.3.39 Baseline conditions have been established using existing assessments, available documentation and field assessment; it is important to note that this information may change before or during the construction and operation of the Proposed Development.

8.3.40 Within reasonable limits, the assessment is undertaken in consideration of the 'worst case' scenario for the development, i.e. those potential outcomes, situations or location that would result in the most elevated effect on landscape and visual receptors. It therefore identifies the greatest degree of change likely to accrue and may be subject to mitigating factors or alternative conditions that might reduce those effects. For example, visual effects are considered in both summer and winter context; although the magnitude of change and effect

is expressed for winter landscape conditions when trees are bare of leaf cover and the visibility of development is at its greatest. Where this is the case, the assessment identifies alternative conditions or further mitigation which might result in impacts being less pronounced.

8.3.41 The assessment applies a pre-determined methodology to arrive at conclusions (Appendix 8.1: Annex EDP 1). This procedure brings a degree of objective, procedural rigor into what otherwise might be judged to be 'personal opinion'. Professional judgement still plays its part, but the purpose of adopting a methodology is to make the process as clear and logical as possible.

8.3.42 This assessment has been undertaken with regard to the phases of development and assumed build rate therein, as presented in the Design and Access Statement (DAS). The Illustrative Masterplan, submitted with the planning application, illustrates proposed planting and hard surfaces and treatment of other open areas, and assumes any planting would be managed in line with an appropriate management plan, agreed with the Council.

Consultations

8.3.43 Consultation principally involved discussions regarding the selection of representative viewpoints, assessment methodology and the landscape response.

8.3.44 During the EIA scoping process, Cherwell District Council were consulted on the methodology and associated terminology for undertaking the LVIA and selected locations for representative viewpoints. This correspondence included the best practice by which EDP prepares all its assessments.

8.3.45 Furthermore, discussions on landscape matters have been undertaken as part of the formal pre-application process.

8.4 BASELINE CONDITIONS

Landscape Character

National Landscape Character

8.4.1 The site is situated within National Character Area NCA 108: Upper Thames Clay Vales. While the NCA is broadly representative of the site's landscape context, it is far too generic to reliably inform an assessment of the suitability of the proposals in landscape terms. Of much greater use are the more localised, district and County-specific assessments described below.

Regional Landscape Character

8.4.2 The Oxfordshire Wildlife and Landscape Study 2004 (OWLS) classify the site being situated in the Vale of Aylesbury regional landscape character area within the urban area of Bicester, adjacent to the Clay Vale landscape type which lies immediately east of the site.

District Landscape Character

8.4.3 At a local level, Cherwell District Council identifies the site as being located in the Otmoor Lowlands landscape character area, and within transitional landscape type T5 Urban Fringe. This character assessment was produced in 1995 on behalf of CDC and appears to have been archived. Given the time that has passed since this assessment was produced, it is considered that that OWLS is the most relevant to the site and its context.

Key Features at the Site

8.4.4 The site forms a linear strip of land immediately north of Gavray Drive and can be generally split by land use. To the west are two arable fields, separated by a north-south aligned hedgerow with trees. These fields are bounded by hedgerow and Langford Brook to the east, a hedgerow to the south, adjacent to Gavray Drive, with the embankment of the London-Birmingham railway forming its northern perimeter. The northern and western boundary comprise security fencing separating the site from the recently constructed Bicester-London line.

8.4.5 The eastern section comprises a mixture of large areas of heathland, scrub, woodland and grassland in varying conditions. The northern boundary comprises a security fence to the railway line, with the eastern boundary formed by a mature tree belt running alongside the A4421. Gavray Drive, running along the southern boundary is separated from the site by a

number of groups of mature trees, interspersed with two bell mouth road junctions and a number of informal pedestrian accesses.

8.4.6 Two rectilinear meadows lie towards the eastern half of the site, which are generally bound by mature hedgerows with occasional hedgerow trees. Informal routes have established through and around the perimeters of the meadows.

8.4.7 The site forms part of a broadly rectangular wedge of undeveloped open space between a large area of residential development (Langford Village) to the south and the railway and industrial/commercial land uses to the north. To the east lies the A4421, forming part of the ring road, which girdles Bicester.

Landscape Sensitivity

8.4.8 The Cherwell Local Plan - Bicester Landscape Sensitivity and Capacity Assessment (2014) has concluded that an overall landscape sensitivity of medium – to – low at the site and a low susceptibility to landscape change.

Landscape Capacity

8.4.9 The Cherwell Local Plan - Bicester Landscape Sensitivity and Capacity Assessment (2014) has concluded an overall landscape capacity of medium for residential development. In this study the Authority also noted that the site "in the future lends itself as an extension to the residential area…"

Landscape Designations

8.4.10 There are no nationally or locally designated landscapes covering or adjacent to the site.

Heritage Matters

8.4.11 Heritage assets can influence the visual character of the landscape and enrich its historic value. This LVIA addresses heritage assets only insofar as they are components of the wider contemporary landscape – not in terms of their significance and value as heritage assets, which is a matter addressed by the separate Heritage assessment (ES Chapter 6).

8.4.12 Within the wider study area, the following heritage assets are components of the contemporary landscape:

- Bicester Conservation Area lies approximately 425m to the south-east and contains a number of Listed Buildings, however it is considered that it does not have a physical or visual connection with the site;

- Wretchwick deserted medieval settlement, a Scheduled Monument lies approximately 375m south, but again this is not considered to have a physical or visual connection with the site; and

- A further group of Listed Buildings lie within the village of Launton approximately 700m east. Intervening vegetation and around the existing byway results in no visual or physical connection between the site and the listed building.

Ecology Matters

8.4.13 A separate Ecology Assessment (ES Chapter 5) considers the ecological assets on the site and within the study area. The site does not lie within or adjacent to a nationally or internationally designated site, however the site itself is designated as 'Gavray Drive Meadows' Local Wildlife Site (LWS).

Arboricultural Matters

8.4.14 A separate Arboricultural Assessment (Appendix 8.3) considers the arboricultural assets on the site and within the study area. In summary, the site contains a small number of Category A and B trees and Category B tree groups, a number of which are covered by a Tree Preservation Order (TPO).

Public Access and Rights of Way

8.4.15 A review of the Definitive Map reveals the following public rights of way and open access land within the Study Area (see also Appendix 8.1: Figure 8.2):

- Bicester Footpath 3 enters the site at the north-western corner and runs north along the line of a hedgerow towards the railway line. The footpath crosses the newer railway line over a footbridge, before running under the main line further north. It then continues north-east along the route of the railway line into Bicester Distribution Park;

- Bicester Footpath 4 runs east to west generally along the line of Gavray Drive, entering the site adjacent to Langford Brook on the southern boundary and heads east towards the A4421;

- Launton Footpath 4 heads east from the A4421 adjacent to the site's south-eastern corner and towards the landscape to the east, however the crossing over the railway appears to be closed, truncating this PRoW;

- Launton Footpath 3 runs broadly north to south further east, approximately 700m east of the site, connecting the village of Launton to the north with the A41 to the south. The route runs under the railway line, which has resulted in an informal route connecting this footpath with Launton Footpath 4 above. To the north of the railway, the footpath connects to Launton and a small network of PRoWs on the southern edge of the village;

- Island Pond Wood, an area of open access land, lies on the southern edge of Launton approximately 775m east of the site;

- A small network of footpaths traverses the landscape immediately south of the village of Launton, including Launton Footpaths 5, 6, 7 and 8;

- Ambrosden Footpath 4 heads south from the A4221 adjacent to the site's south-eastern corner, providing access to the Wretchwick deserted medieval settlement Scheduled Monument approximately 375m south of the site. Continuing past Middle Wretchwick Farm, this footpath runs parallel to the A4421 and connects to the A41 approximately 1km south of the site;

- From Middle Wretchwick Farm, Ambrosden Footpath 5 heads south-easterly connecting to Launton Footpath 3 approximately 1.1km south of the site;

- Further east, Blackthorn Bridleway 9 traverses the slightly elevated landscape around Blackthorn Hill adjacent to Mill house Farm, approximately 1.6km south-east of the site; and

- To the south, Bicester Footpath 5 runs broadly east to west through the centre of Langford Village crossing the linear open space central to the village, approximately 600m to the south of the site.

Key Settlements and Residences

8.4.16 There are a number of areas of existing settlement, or individual residences, in proximity to the site and can be grouped as follows; (see Appendix 8.1: Figure 8.4):

- Group A – Residential areas to the south of Gavray Drive;
- Group B – Residential areas immediately west of the railway extension;

- Group C – The remainder of residential areas within Bicester;
- Group D – Satellite villages surrounding Bicester;
- Group E – Isolated individual or small groups of dwellings outside Bicester; and
- Group F – Development at Graven Hill.

Primary and Secondary Public Roads

8.4.17 The Site sits to the north of the western end of Gavray Drive, a local distributor road, from which the proposed development would be accessed. Development to the south of this road comprises residential dwellings and a linear open space.

8.4.18 The A4421 forms the eastern arc of the Bicester ring road, feeding the major radial routes emanating from Bicester. Bicester is neatly contained by this and the other routes forming the ring road (A4095, A41 and B4030), such that there is a clear distinction between urban development on the 'inside' of the ring, and a largely rural landscape on the 'outside'. Although there are two large villages 'attached' to the outer edge of the ring road, the ring road forms a logical limit to development within Bicester.

8.4.19 The A41 links the M40 (to the south-west of Bicester) with London, via Aylesbury to the east, following the Roman Road known as Akeman Street. To the north, the A4421 leaves the ring road to join the A421 near Buckingham, also following the route of a Roman Road.

Railway Routes

8.4.20 There are two railway lines that pass through the general study area, and both within close proximity of the Site; the primary link (London – Birmingham line) is situated to the northern site boundary on an elevated embankment.

8.4.21 The recently constructed Bicester-London link runs along the sites western and northern boundaries, rising gently in elevation to eventually link to the main east to west primary route at the sites north-eastern corner.

National Trails / Long Distance Walking Routes

8.4.22 The nearest National Trail is the Cross Bucks Way (National Trail) which is situated approximately 3.75km north east of the site (at its closest point). The site is not readily discernible in the wider view due to inherent screening by the mature landscape setting.

National Cycle Routes and Other Long Distance Recreational Routes

8.4.23 National Cycle Route 51 passes through the wider, general, study area in a north-east to south-west alignment between Pounden and Wendlebury, via Bicester town centre. For the most part, this route follows minor rural roads, but passes the site along Gavray Drive and the A4421.

Visual Amenity Baseline

8.4.24 With reference to Appendix 8.1: Figure 8.4, it is considered that it would be inevitable within the immediate area of the Site that there would be some degree of visibility from the wider area. Being a potential urban extension development, it is also inevitable that there are a number of areas of existing settlement, or individual residences, in proximity.

8.4.25 Following a thorough site assessment, it is considered the site is largely self-contained and enclosed visually from the wider surrounding area of Bicester as follows:

- The northern site boundary adjoins an existing railway 'stand-off' with an embankment. The railway embankment rises in excess of 5 metres above the existing topography of the site and screens wider views. Nonetheless the view would be seen from the users of the railway when looking south from this elevated position;

- Beyond the railway track is a further railway embankment with the existing large commercial buildings and Bicester Distribution Park which further screen views of the site to the north;

- The eastern site boundary is defined by a mature belt of trees and scrub adjacent to the A4421 Charlbridge Road, which is enclosed on both sides by mature vegetation restricting opportunities for views further east of the site;

- There are dense tree groupings (some arranged on raised earthworks) along the southern site boundary with Gavray Drive. Glimpsed views into the site are only permissible at the existing gateways from Gavray Drive;

- The western site boundary comprises a tall security fence, separating the site from the recently constructed Bicester-London railway line.

Rights of Way Users

8.4.26 Public Rights of Way are generally limited to the landscape to the east of the site, with a small number found within or adjacent to the site itself. The following routes have been considered as part of this assessment, Photoviewpoints refer to Appendix 8.1: Figure 8.7:

- Open views are afforded from the southern section of Bicester Footpath 3 as it enters the site from Gavray Drive (Photoviewpoint EDP 1) and heads towards the footbridge over the Bicester-London railway line (Photoviewpoints EDP 2 and 3). As the footpath continues north beyond the London-Birmingham line, views are screened by the landform and vegetation associated with the elevated railway line;

- Running along the northern extent of Gavray Drive, Bicester Footpath 4 is afforded glimpsed views towards the 2 arable fields at the northern end of the site through boundary vegetation (Photoviewpoint EDP 4), with an incidental open view afforded where vegetation stops adjacent to Langford Brook (Photoviewpoint EDP 5). As the footpath enters the site, vegetation helps to create a sense of enclosure, truncating experiences to the wider site and landscape;

- To the north, Launton Footpath 8 traverses the landscape to the south of the village of Launton, however views towards the site are screened by intervening built form and vegetation (Photoviewpoint EDP 6). The upper extent of large industrial units at Bicester Distribution Park can be identified in the winter view;

- East of the A4421, a single view is afforded from the western extent of Launton Footpath 4, where the mature vegetation along the site's eastern boundary screens views further into the site (Photoviewpoint EDP 7). As the footpath continues east, views from this receptor and Launton Footpath 3 are further restricted by intervening vegetation (Photoviewpoint EDP 8);

- Further east, views from the elevated Blackthorn Bridleway 9 are screened by the mature vegetation surrounding the site, with the large industrial units north of the site identifiable in the overall view (Photoviewpoint EDP 9);

- To the south, views from Ambrosden Footpath 5 as it heads south-easterly connecting to Launton Footpath 3 approximately 1.1km south of the site are screened by intervening built form and vegetation with the large industrial units at Bicester Distribution Park to the north identifiable in the background (Photoviewpoint EDP 10); and

- Views from Bicester Footpath 5 as it runs through the open space corridor at Langford Village are screened by intervening vegetation, built form and the generally flat topography (Photoviewpoint EDP 11).

Road Users

8.4.27 The application site sits to the north of Gavray Drive, a local distributor road, from which the proposed development would be accessed. Development to the south of this road comprises residential dwellings and a linear open space. Views from the road itself are generally well filtered by boundary vegetation (Photoviewpoint EDP 5), however occasional transient glimpses are afforded where boundary planting is gappy (Photoviewpoint EDP 4).

8.4.28 The A4421 forms the eastern arc of the Bicester ring road, feeding the major radial routes emanating from Bicester. Bicester is neatly contained by this and the other routes forming the ring road (A4095, A41 and B4030), such that there is a clear distinction between urban development on the 'inside' of the ring, and a largely rural landscape on the 'outside'. Views from this receptor are generally well screened by vegetation along the sites eastern boundary (Photoviewpoint EDP 7).

8.4.29 The A41 links the M40 (to the south-west of Bicester) with London, via Aylesbury to the east, following the Roman Road known as Akeman Street. Intervening vegetation and built form screen any potential views from this route.

8.4.30 Mallards Way lies directly south of the site and forms a local road off Gavray Drive where users of the road approaching Gavray Drive are afforded a single view towards the southern boundary, where the arable fields in the sites eastern extent can be identified in the winter view (Photoviewpoint EDP 12).

8.4.31 To the west, Launton Road forms a busy local route providing access to amenities in the south-eastern extent of Bicester. Views from this route are screened by intervening built form (Photoviewpoint EDP 13).

8.4.32 Unclassified or minor B-class rural roads have a generally medium sensitivity, due to the typical nature of rural views that can be enjoyed on such routes. A-class roads and motorways have a generally low sensitivity because of the general purpose and speed of travel. Local suburban roads also have a low sensitivity due to the nature of the local environment and the purpose of use.

8.4.33 However, roads are usually assessed individually, as lower class roads can be found in urban environments, and higher class (A and motorway) roads often traverse through open countryside. The key to the sensitivity is the landscape and visual context through which a

road passes, and any designation it may possess, such as promoted tourist route status. None of the routes through the detailed study area are officially designated as tourist routes.

Residential Dwellings/Groups

8.4.34 Being a potential urban extension development, it is inevitable that there are a number of areas of existing settlement, or individual residences, in proximity. The site survey revealed a number of areas where the interrelationship between existing dwellings and the application site are notable, and these are described below. It is important to note that views are predicated at ground level and from public locations. It is, therefore, not possible to ascertain with a high degree of certainty the nature of views from individual residences. Views from upper storeys are generally likely to include more of the site than from ground level, although it is not possible to verify this 'rule of thumb'.

Group A – Residential Areas to the South of Gavray Drive

8.4.35 This group comprises those properties with views towards the application site, across Gavray Drive. Most ground floor views are screened by garden boundary vegetation (trees lining the southern side of Gavray Drive), and the site's own vegetated boundary. There are upper storey views into the interior of the site from those houses adjacent to Gavray Drive, subject to some filtering by the site boundary. Views tend to be either direct (rear) or side-on. Views of the site from properties behind those immediately adjacent to Gavray Drive are unlikely due to screening by neighbouring buildings, although glimpsed upper storey views between buildings may be possible from some properties.

Group B - Residential Areas immediately West of the Railway Extension

8.4.36 Despite their close proximity to the application site, views from houses in this group are unlikely to include the site due to intervening development and vegetation. Although upper storey glimpses may be possible, they are unlikely to be notable.

Group C - The Remainder of Residential Areas within Bicester

8.4.37 Views of the application site from this group are highly unlikely, and in the vast majority of cases certainly non-existent, due to screening by intervening development.

Group D - Satellite Villages Surrounding Bicester

8.4.38 This group comprises the principal villages that surround Bicester. Within the detailed study area, however, it is unlikely that any, even Launton, would have views of the site due to screening by local scrub woodland, the well-wooded parcel of land to the immediate east of the site, the London-Birmingham railway embankment to the north and commercial buildings to the north-east of the site.

Group E - Isolated Individual or Small Groups of Dwellings outside Bicester

8.4.39 There are individual properties/farms to the east of the site that could potentially experience views of the application site. However, screening by hedgerows and trees in the wider landscape, the well-wooded parcel of land to the east of the site, and other urban development, would result in little, if any, intervisibility of the site.

Group F – Development at Graven Hill

8.4.40 Approximately 1.2km south of the site lies a new mixed used development site including residential uses located at Graven Hill. Despite the elevated nature of the property group, views from this area are screened by intervening built form and vegetation.

The Projected Future Baseline

8.4.41 The impact of climate change on the landscape and visual resource is assessed through consideration of a potential future baseline scenario and considers how potential climate change may alter the predicted landscape and visual effects contained within this Chapter. Whilst it is unlikely that completely new direct impacts would arise as a result of climate change based on the current conditions, the geographic spread or scale of potential impacts might be changed when considered against the future baseline conditions.

8.4.42 The changes to temperature and precipitation predicted would be likely, in time, to change the landscape around us, in a number of ways. However, it is unlikely that the subtle changes would lead to wholescale change to the future landscape baseline within the lifetime of the Project. Changes might include certain tree species or grasslands becoming more dominant/prevalent, but given the character of the surrounding landscape, which contains mature trees and hedgerow boundaries, these changes would not have a prominent impact. Changes to the landscape effects predicted is considered appropriate.

8.4.43 For visual effects, the future baseline under a climate change scenario would not lead to any greater, or different, effects to those predicted.

8.5 POTENTIAL EFFECTS

Construction Stage

8.5.1 This section details the likely significant effects which are un-mitigated and arise from either construction activities on site or from the proposed development itself.

8.5.2 As a consequence of the change in land use of the developed land, construction activities will result in adverse landscape and visual effects on the fabric and character of the landscape and on visual amenity within a limited local area. Construction activities introduce direct and indirect disturbance to both the fabric of the landscape and the surrounding area. These effects could potentially be perceived by people living, working or travelling through the area, while these effects are temporary in nature, and can be partially mitigated against.

8.5.3 At this outline planning application stage, construction methods and timescales cannot be defined at this stage. The main elements of the construction operations considered being of importance to the landscape and visual assessment are described below:

- Demolitions. There are no existing structures currently on the site; therefore, there would be no effects from demolition;

- Construction-related traffic. This includes vehicle movements associated with the import of building materials, machinery and labour. Construction traffic is likely to access the site from the A4421 (Charbridge Lane) via Gavray Drive with traffic being directed from further along the A4421 to the north and east, A41 roadway to the south and M40 motorway to the west. Transportation issues are discussed fully in ES Chapter 4 Transportation;

- Earthworks. Noise effects (discussed in ES Chapter 10 Noise and Vibration) have the potential to affect landscape character and residential amenity;

- Construction Activities. Subject to the preferences of individual contractors, it is expected that generic methods will be employed in the implementation of the scheme. Traditional residential building methods are anticipated although the periodic use of large cranes and construction platforms (rising above the height of buildings) may be necessary; and

- Construction related effects: temporary on site lighting for illumination outside of daylight or in poor weather conditions, noise, dust and vibration from the movement of plant and vehicles.

8.5.4 The Construction Programme is referred to in ES Chapter 2 and it is anticipated it will include a number of primary mitigation measures recognising best practice in modern construction techniques. Further details will be provided in a Phasing Plan and Construction Environmental Management Plan (CEMP) which will also be subject to a condition.

8.5.5 It is inherent in the use of conditions that issues specific to landscape and visual effects, such as screening and retention of landscape features, best practice site management, maintenance and housekeeping will be implemented to minimise effects during the demolition and construction works. Such measures may include the erection of suitable site hoarding and protective tree/hedgerow fencing, although the incongruous (but temporary) sight of scaffolding is an unavoidable consequence of modern construction practices and mitigation of such effects is not anticipated.

8.5.6 It is not possible at this stage to make any definitive statement of where such mitigation would be required, nor what the specific reduction in effect would be at individual locations.

8.5.7 Landscape and visual amenity effects resulting from the construction stages are considered to be consistently adverse. However, these effects would be temporary, short term, not long lasting and consistent with the phasing set out in ES Chapter 5 the CEMP/Phasing Plan.

8.5.8 Tables in Appendix 8.2 describe the effects of the construction phase of the proposed development on landscape character and visual amenity with these summarised below. Effects on residential areas, PRoWs, other recreational routes and public highways are also described below.

Landscape Character

8.5.9 Cherwell District Council have assessed the site as having a medium – to – low sensitivity as per the Authority's 'Bicester Landscape Sensitivity and Capacity assessment: Assessment Addendum' (August 2014), which EDP agree with.

8.5.10 Within the context of the site, the likely significance of the construction effects on the landscape character is described in the tables within in Appendix 8.2 and relate to the activities summarised below:

- Construction of new built form;
- Construction related traffic, noise, vibration, dust and lighting;
- Stockpiling of excavated soil from earthworks;
- Storage of plant, machinery and building supplies;
- Perimeter fencing / hoarding.

8.5.11 Indirect effects would relate to the changes to the wider landscape character area during this temporary, short term period. However, given the wider scale of the surrounding landscape character areas and the limited extent of proposed built form, the likely effects would not be significant upon this wider area.

8.5.12 These direct and indirect effects on landscape character would only be within the Site and areas local to the site. These effects would arise as a consequence of the loss of open landscape adjacent to an existing urban area. Principally, these effects would represent a new residential development and extension to the existing urban area which is the immediate context of the site.

8.5.13 Within the Site, the construction works would lead to a loss of some trees and hedgerows, where access would be necessary, and include localised ground remodelling. Some of the effects would be temporary in nature, as it is proposed that the ground disturbed during the creation of the attenuation feature is returned to grassland. The works would require temporary lighting where previously there was little street lighting.

8.5.14 Construction activities will be stark and not benefit from the softening effects of strategic landscape planting. Taking these matters into account, the overall magnitude of change at the level of the parcel is considered to be very high at site level (effects on the wider landscape reduce quickly).

8.5.15 Given the relatively small area of land being developed within the wider parcel and the retained features and habitats across the site, the overall magnitude of change is considered to be high leading to a moderate/minor adverse (and not significant) direct effect.

8.5.16 Within the wider area the likely effect of the proposed development would be, at worst, minor (but not significant). These effects are anticipated to rapidly diminish as distance from the site increases due to the inherent mitigation of intervening landscape features, mature and robust vegetation, existing built form and topography.

Arboricultural Resources

8.5.17 Tree loss would be minimal to facilitate good urban design. A significant number of existing trees and tree groups would be retained and protected in line with best national practice BS5837:2012.

8.5.18 Trees which are removed are very limited in number and would not adversely affect the integrity and continuity of the landscape infrastructure. Therefore, it is anticipated the proposed development would retain the existing inherent benefits of landscape mitigation during the construction phase.

Key Settlements and Residences

8.5.19 The effect on residences would be localised. It is anticipated these effects would vary from major adverse (and significant) – to minor adverse (and not significant) during the construction phase. Inevitably the worst case would be experienced at residences which are local to the proposed development i.e. Herons Drive, Mergansar Drive and Sheerwater Drive. It is likely these effects would be temporary and short term, and result from the movement and activities of construction vehicles and operations.

8.5.20 The construction effects would be less elevated upon the wider settlements and residences due to being inherently mitigated by the mature landscape setting and intervening built form and rail link (with embankment). For example, views from outlying villages such as Launton to the north-east of the site are also screened by the existing mature landscape setting, railway embankment and existing built form north of the site at Charbridge way. All effects in the wider area would be not significant at the construction stage.

Primary and Secondary Public Roads

8.5.21 The primary public roads that have the potential to be affected by constructing the proposed development are set out in Appendix 8.1: Figure EDP 2. Construction effects would not be significant on these routes due to the inherent mitigation afforded by the setting of the Site which offsets or reduces impacts. For example, the nearest primary public route A4421 Charbridge Road is inherently mitigated by the mature landscape setting, residual lighting and noise generated from the vehicle route. Additionally, along this route to the north direct views of the site are inherently screened by the existing railway embankment (in excess of 8 metres in height) and large scale buildings at Bicester Distribution Park.

8.5.22 Gavray Drive to the south of the site would be affected by the proposed development during the construction phase as the site access would be located along this route. Nonetheless, views of the wider site area would be heavily filtered, if not fully screened (during summer) through the retention of existing mature landscape features to the site boundary. It is anticipated these effects would vary from moderate adverse (and significant) – to – minor adverse (and not significant) during the construction phase where views are possible, given the roads low sensitivity.

8.5.23 Elsewhere (and particularly along secondary routes) the intervening landform, urban development and a mature landscape setting combine with the overall distance to filter and screen views. This inherent screening restricts visual effect to minor adverse (and not significant) or less with no discernible effects experienced from the wider area in many situations.

Railway Lines

8.5.24 There will be glimpsed views across the north-eastern parcels of from the Bicester-London line during the construction phase, within which effects would be discernible but fleeting during this temporary phase. The existing scrubby vegetation along the line would filter views.

8.5.25 There would be more direct views of the site during construction from the London-Birmingham line with views from the embankment across the site. As part of the current railway improvement works the embankment would be planted with landscape buffer planting which would take time to establish not affording benefit during this stage of the proposed development. It is anticipated these effects would vary from moderate adverse (and significant) – to – minor adverse (and not significant) during the construction phase where views are possible, given the railways low sensitivity.

Public Rights of Way

8.5.26 The construction effects experienced on Bicester Footpath 3 running through the north-western parcels and the section of Bicester Footpath 4 running through the south-eastern parcel of the site would be major, adverse and significant. However, the significance of these effects would diminish the further from the site a public right of way is located. The sections of the above PRoW running along Gavray Drive within close range of the site would benefit from inherent mitigation by the existing robust hedge and groups of mature trees which enclose the site boundary. Additionally, the effects of noise and lighting on the site (during construction) would be inherently mitigated by the baseline conditions of vehicle movements along illuminated vehicle routes (Gavray Drive and the A4421) which would offset to an extent the effects of the construction phase i.e. background noise and lighting.

8.5.27 There are a number of public rights of way in the wider landscape to the east, the north, north-east and east of the site around the settlements of Straton Audley and Launton. Effects on these routes would be negligible and not significant due to inherent screening by the mature landscape setting, railway embankment earthworks and also the relatively flat topography surrounding the site. Additionally, the baseline conditions of intervening vehicle routes would offset construction lighting, noise and vibration i.e. background noise and lighting from intervening routes.

8.5.28 Overall, it is considered the proposed development would not have any significant effects PRoW within the wider landscape during the temporary construction phase (see Schedule of Landscape and Visual Effects Tables at Appendix 8.2).

Summary of Effects at the Construction Stage

8.5.29 The highest levels of effect would be experienced by the removal the existing greenfield / agricultural landscape for a new residential land use with the associated built form and ancillary development. This direct effect would inevitably be major – moderate, adverse and significant and would be largely limited to the Site area through the retention of mature landscape features for inherent mitigation and operational mitigation measures to offset and reduce potential indirect effects to the wider landscape area and visual receptors.

8.5.30 The construction of the proposed development would not lead to any significant effects upon designated landscape resources, transport routes, PRoW beyond the site, or upon surrounding settlements and residences.

Post-completion Stage

8.5.31 This section details the anticipated effects of the proposed development from Year 1 to Year 15 to demonstrate the likely effect of the scheme over the short to medium term.

8.5.32 In practical terms, the 'operational lifetime' of the proposed development is measured in decades, as it will result in a permanent change to the character of Site. Given that the proposed development includes landscape proposals which will take time to mature, and that all new development can seem 'raw' until it has softened into its landscape context, the assessment of operational effects for specific areas and views will consider the effects at two distinct points in time:

- At the completion of the proposed development (referred to here as Year 1); and
- At 15 years after completion of the proposed development (such that mitigation planting may have matured and materials weathered).

8.5.33 It is often the case that initial (Year 1) effects will be more elevated than those at Year 15 due to the limited initial effect of the strategic landscape proposals incorporated into the proposed development during the design process.

8.5.34 It is anticipated that by Year 15 substantial growth would have occurred and these features should be fulfilling their roles more effectively. Furthermore, enhanced mitigation should be achieved in future years as trees, in particular, reach mature size.

Landscape Character

8.5.35 The overall effect on landscape character upon the Bicester Urban Area Character Area would be minor adverse (and not significant) and direct at Year 1 due to the loss of what are currently undeveloped green fields across a limited extent of the overall site parcel. This effect would be more elevated at completion / Year 1 awaiting the effect of mitigation measures, and would reduce at Year 15 to minor/negligible adverse and not significant as

the proposed development would increasingly be visible as an extension of residential built form at the existing urban edge of Bicester.

Arboricultural Resources

8.5.36 Over the intervening time period from Year 1, the retention of mature trees and hedges, the maturing of mitigation landscape planting and other green enhancement would culminate in a positive or beneficial change from Year 1. The 'setting' of the site would mature bring with it further mitigation benefits whilst reinforcing landscape character where possible.

Key Settlements and Residences

8.5.37 **Residences:** It is anticipated that following the construction of the proposed development, the magnitude of change would not notably alter until after the establishment and maturity of landscape mitigation and ancillary planting (undertaken at the end of the construction stage). Establishment would be within the short term i.e. initial year after completion, and through appropriate landscape management, maturity would progress expediently thereafter. It is anticipated by Year 15 landscape planting would be sufficient to buffer and filter / screen views from the wider area, i.e. young mature shrubs and trees.

8.5.38 Through appropriate design and responsive mitigation measures it is considered unlikely that the proposed development would result in a significant (or overbearing) effect upon the amenity of the surrounding residential settlements and residences. Moreover, the new land use within the Site would be experienced as compatible with the surrounding residential land use within the urban edge setting of Bicester.

8.5.39 The effects of the proposed development would not be significant for the following reasons:

- Residential development closest to the site to the south off Gavray Drive (i.e. Heron Drive and Peregrine Way) would experience views, albeit filtered by intervening built form and mature tree cover along Gavray Drive and to the southern site boundary;

- Views from the residential development to the west (i.e. along Laughton Road) are heavily filtered, if not screened by the intervening built form and mature landscape setting including mature tree planting; and

- Where views are possible, these would be limited in magnitude by inherent screening which would reduce over time through the effect of maturing landscape mitigation and would remain generally not significant.

8.5.40 See Appendix 8.2 Schedule of Effects Photoviewpoints 4, 5, 11 and 12 for residences situated within Bicester and the immediate urban areas of the site i.e. within close range of the Site

(0.5km of the site boundary). These representative viewpoints (assessed from ground level within public open space) demonstrate the anticipated effect is moderate – to - minor adverse (not significant) during construction, diminishing to minor adverse (not significant) at Year 1 and diminishing further to minor – negligible adverse (not significant) residually at Year 15.

8.5.41 In terms of further residences within close range of the Site including residential dwellings situated south of Gavray Drive, it is anticipated this residential area of predominantly two storey dwellings would receive moderate – to - minor adverse not significant effects during construction, diminishing to minor adverse (not significant) effects at Year 1 and diminishing further to minor – negligible adverse (not significant) residually at Year 15. However, in this area the density of built and non-direct / oblique orientation of dwellings would contain visual effects to those dwellings closest to the Site.

8.5.42 In summary, the anticipated effects of the proposed development on residences surrounding the Site (within close range) would be not significant for the lifetime of the proposed development (including construction stage and residually after 15 years).

8.5.43 **Settlements:** Settlements surrounding the Site within the wider assessment area either to the northern suburbs of Bicester or outlying satellite settlements outside of the urban area of Bicester. The site is particularly well screened (inherently) so as to mitigate any anticipated effects at construction phase, Year 1 or residually for the lifetime of the proposed development i.e. 15 years. It is considered the level of effect throughout the lifetime of the proposed development would be negligible adverse (not significant) if any at all (including the construction phase). Photoviewpoints 6 and 8 in particular demonstrate the inherent mitigation afforded to the Site.

8.5.44 In summary, the anticipated effects of the proposed development on settlements surrounding the Site (within the wider landscape) would be not significant for the lifetime of the proposed development (including construction stage and residually after 15 years).

Primary and Secondary Public Roads

8.5.45 It is considered the proposed development would not be discernible from the surrounding primary road network as the site is inherently screened by mature tree groups and existing vegetation on the boundary of the Site i.e. A4421 Charbridge Road.

8.5.46 Similarly there would be no discernible views along primary and secondary vehicle routes in the urban area of Bicester, whilst effects to the wider area are offset or mitigated inherently by the combination of the rail link embankment (London – Birmingham line), intervening built form or the lack of any topographic vantage points.

8.5.47 It is anticipated that effects on Gavray Drive would be moderate/minor adverse (and not significant) at Year 1 due to the effect of new built form and a largely immature / almost nude landscape within the existing mature setting. However, by Year 15 mitigation planting and ancillary landscaping would establish a more beneficial situation and effects would be reduced to minor adverse and not significant through inherent mitigation and the establishment of mitigation measures embedded within the design of the proposed development.

8.5.48 In summary, the anticipated effect of the proposed development on primary and secondary roads surrounding the Site (within close range of the site and the wider landscape) would be not significant for the lifetime of the proposed development (including construction stage and residually after 15 years); see Appendix 8.2 Schedule of Effects Photoviewpoints 4, 5, 7 and 12.

Railway Routes

8.5.49 Adverse effects would be experienced by visual receptors on the elevated rail link (London – Birmingham line) and adjacent London – Bicester route when adjoining or within close range of the Site. This rail line is currently undergoing work and all intervening vegetation has been removed. New planting would take time to establish and mature and the effect of new built form with an immature / almost bare landscape within the existing mature setting would appear incongruous at Year 1, leading to moderate/minor adverse and not significant effects. However, by Year 15 mitigation planting and ancillary landscaping would establish a more beneficial situation and effects would be minor adverse and not significant. Visual receptors on this rail route would be transient and only afford glimpsed views.

8.5.50 There would be no anticipated adverse effects to the wider rail link outside of the Site area or as it travels through the wider urban area of Bicester and the surrounding landscape area.

Public Rights of Way

8.5.51 Bicester Footpath 3 which crosses the north-western parcel and Bicester Footpath 4 to the south would be integrated within the proposed development from Year 1 permanently. These PRoW would experience moderate, adverse and significant effects permanently over the lifetime of the development. The impact of new built form with an immature / almost bare landscape within the existing mature setting would appear incongruous at Year 1, leading to major adverse and significant effects. However, by Year 15 mitigation planting and ancillary landscaping would establish a more beneficial situation and effects would be reduced to major/moderate adverse (significant).

8.5.52 It is anticipated there would be adverse effects on the section of Bicester Footpath 4 as it runs along Gavray Drive south of the site. This effect would be moderate adverse and

significant at Year 1 due to the retention of existing mature landscape features to the site boundary to filter and screen the proposed development at this stage.

8.5.53 The establishment and expedient maturity of landscape mitigation measures within the proposed development would further reduce these effects to minor adverse and not significant level at Year 15.

8.5.54 Public rights of way further to the north, east and south east would be mitigated by the existing railway embankment and existing built form along Charbridge Drive and no significant effects are predicted.

Summary

8.5.55 Generally, the landscape and visual effects during the operational phases of the Proposed Development would be difficult to mitigate due to the nature of these operations. However, as described above, the adoption of approved best practice construction methods will aid in reducing the perception of construction activities for those receptors most likely to be affected.

8.5.56 At no receptor that would experience a significant unmitigated effect would mitigation reduce the effect to a non-significant level. The adoption of the above measures would result in the significance of the effect at some receptors reducing to a limited degree.

8.5.57 The critical issue in considering operational effects is that the mitigation strategies are yet to be fully established. To summarise, residual significant effects would apply to the following receptors during the operational stage of the project:

- Bicester Footpath 3 within the site; and
- Bicester Footpath 4 within the site.

8.6 MITIGATION MEASURES

8.6.1 Mitigation measures to overcome, reduce or offset potential landscape and visual effects include the following at each stage of the proposed development:

Construction Stage

8.6.2 The following measures would be adhered to during construction:

- The adoption of an approved Construction Environmental Management Plan (CEMP) with allowance for appropriate road sweeping action to ensure any deleterious material is cleansed;
- The adoption of an approved Arboricultural Method Statement (AMS) incorporating best practice guidance set out in British Standard 5837: 2012 Trees in Relation to Design, Demolition and Construction which will ensure retained trees and other vegetation are not adversely affected during the construction process;
- The adoption of an approved topsoil and earthworks management plan (Soil Management Plan) including dust control measures;
- The use of visual screening, such as hoardings for more sensitive visual receptors in proximity to the development site, including residential receptors that have the greatest potential to be affected by the proposed development; and
- Existing residents that live within close range of the site would be more sensitive to construction lighting due to the proximity, direction and type of receptor. Mitigation measures for construction lighting are likely to include directional fittings and restricted hours of operation.

Post-completion Stage

8.6.3 The proposed masterplan has been developed iteratively through the production of a Landscape Visual Impact Assessment. This approach has been key to ensure the proposed development succinctly integrates with its setting and landscape character area. The masterplan has incorporated existing landscape features for inherent mitigation, as well as facilitating additional mitigation measures as detailed below.

Primary Mitigation

8.6.4 Despite the unavoidable loss of an open landscape area, the current condition and key characteristics of the landscape have been considered throughout the design of the proposed development and integrated into the layout where permissible. These measures include the following:

- The retention and enhancement (where possible) of existing trees and hedgerows to the site perimeter with preference for those of greatest value;

- Detailed masterplanning of the site to retain and integrate existing hedgerows and trees succinctly in to the residential and / or public open space area with preference for those of greatest value and connectivity; and

- The design of the proposed development to reflect the current topography of the site to ensure that any new built form is either screened or filtered by the existing mature landscape setting as far as practicable.

Secondary Mitigation

8.6.5 The following mitigation measures have been integrated within the layout of the proposed masterplan and the likely vernacular of the new built form:

- The design of the masterplan to establish 3 storey dwellings along the northern boundary, with 2.5 storey dwellings within the core of the site and 2 storey dwellings around the outer edge and the southern parcel of the proposed development; the lower height of new built form to the outer edge of the site would be afforded visual filtering / screening by the mature landscape features around the boundary (and / or earthworks to the northern area) effectively reducing the opportunity to see new built form over and above these elements;

- Formation of green corridors along main arterial routes from Gavray Drive with ancillary and buffer planting;

- Utility of existing access points used for main vehicular routes into the site negating the need to remove existing tree groups and hedgerows to the southern site boundary (retaining mitigation and mature landscape setting);

- Ensure built form is set back from existing tree groups and vegetation along the southern site boundary to protect and retain;

- Provision of access to new dwellings from access routes running inside the existing southern boundary to reduce the need for installing new access points within the existing tree groups and vegetation (retaining mitigation and mature landscape setting);

- Provision of sight lines from Gavray Drive to focus on new public open space within the proposed development with ancillary and mitigation planting;

- The establishment of new landscape mitigation planting which would become expediently established over the initial 15 years of the proposed development.; and

- Landscape planting including buffer shrub and tree planting to the northern site boundary where applicable to further filter and eventually screen views from the adjacent railway line.

8.6.6 In summary, the landscape elements specific to the detailed design of the proposed development would be the retention and enhancement of existing features as well as the establishment of new measures that would provide:

- Retention and continuity of typical landscape features to reinforce landscape character and provide a distinctive sense of place;

- Visual screening of the proposed development;

- Creation of new public and private amenity; and

- Contribution to green networks and enhancement of habitat connectivity and ecological value.

8.7 RESIDUAL EFFECTS

8.7.1 This section details the anticipated residual effects of the proposed development in the medium term (i.e. from 15 years), thus representing the 'permanent' effect of the proposed development.

8.7.2 The most elevated landscape effects would be experienced within the site area, through the change of land use from a greenfield / agricultural site to an urban landform with the construction of new built form and ancillary development. These direct effects would be at worst minor/negligible adverse and not significant.

8.7.3 The most elevated visual effects would also be experienced by receptors within the site area. In relation to those effects on Bicester Footpaths 3 and 4, direct effects would be at worst major/moderate adverse and significant.

8.7.4 Effects on designated landscape resources, conservation areas, PRoW outside of the site and surrounding settlements and residences are not considered to be of sufficient magnitude to lead to effects which are significant in EIA terms, due to them being largely temporary and reversible in nature.

8.7.5 Indirect landscape and visual effects would be limited to a small area predominantly south of the site area due to the buffering effect of the existing rail link embankment (London – Birmingham line) which inherently mitigates the proposed development from Year 1 to Year 15. What indirect impacts are experienced would diminish over the lifetime of the proposed development through the maturity of the site setting and the effectiveness of mitigation measures. Furthermore, these effects would rapidly diminish with distance from the site where intervening topography, the mature landscape setting and existing built form afford inherent mitigation in the wider landscape setting.

Summary of Effects

8.7.6 A mitigation strategy has been identified within this ES Chapter to offset or reduce impacts through pro-active management (during the construction stage), the application of best national practice, the utility of inherent mitigation and the introduction of new mitigation measures.

8.7.7 What indirect effects are experienced are predicted to diminish over the time of the proposed development through the maturity of the site setting and the effectiveness of mitigation measures. Effects by Year 15 would reduce and would be not significant in EIA terms over the lifetime of the proposed scheme.

8.7.8 The effects identified as significant are summarised in **Table 8.7** below:

Table 8.7: Summary of effects

Receptor	Significance (pre-mitigation)	Mitigation measure	Significance of residual effect
Construction stage			
Bicester Footpath 3 at sites north-eastern corner	N/A	Primary: Construction Environmental Management Plan (CEMP) Arboricultural Method Statement (AMS) Soil Management Plan Visual screening such as hoardings Directional fittings and restricted hours of operation.	**Major adverse**
Bicester Footpath 3 along sites northern boundary	N/A		**Major adverse**
Bicester Footpath 3 over railway footbridge	N/A		**Major adverse**
Bicester Footpath 4 running along the foot/cycleway along Gavray Drive	N/A		**Major adverse.**
Bicester Footpath 4 running along the foot/cycleway along Gavray Drive	N/A		**Major adverse.**
Post-completion stage			
Bicester Footpath 3 at sites north-eastern corner	**Major adverse**	Establish 3 storey dwellings along the northern boundary, with 2.5 storey dwellings within the core of the site and 2 storey dwellings around the outer edge and the southern parcel of the proposed development; Formation of green corridors along main arterial routes from Gavray Drive with ancillary and buffer planting; Utility of existing access points along Gavray Drive Ensure built form is set back from existing tree groups and vegetation along the southern site boundary to protect and retain; Provision of access to new dwellings from access routes running inside the existing southern boundary to reduce the need for installing new access points within the existing tree groups	**Major / Moderate adverse.**
Bicester Footpath 3 along sites northern boundary	**Major adverse**		**Major / Moderate adverse.**
Bicester Footpath 3 over railway footbridge	**Major adverse**		**Major / Moderate adverse.**
Bicester Footpath 4 running along the foot/cycleway along Gavray Drive	**Major / Moderate adverse.**		**Moderate**
Bicester Footpath 4 running along the foot/cycleway along Gavray Drive	**Major/Moderate adverse.**		**Moderate**

Receptor	Significance (pre-mitigation)	Mitigation measure	Significance of residual effect
		and vegetation (retaining mitigation and mature landscape setting); Provision of sight lines from Gavray Drive to focus on new public open space within the proposed development with ancillary and mitigation planting; The establishment of new landscape mitigation planting which would become expediently established over the initial 15 years of the proposed development.; and Landscape planting including buffer shrub and tree planting to the northern site boundary where applicable to further filter and eventually screen views from the adjacent railway line.	

8.8 CUMULATIVE EFFECTS

8.8.1 Cumulative effects can arise from the intervisibility of operational or proposed developments and/or from the combined effects of individual components of the Proposed Development occurring in different locations or over a period of time. The separate effect of such individual components or developments may not be significant, but together they may create a degree of adverse effect on the landscape resource or visual receptors within their combined visual envelopes.

8.8.2 In this cumulative assessment, the focus is on the additional effects of the site. Baseline schemes may have significant effects in their own right, but significant cumulative effects do not automatically arise following the addition of the proposed development; the significance is determined by the degree of change that the proposed development would introduce into the theoretical cumulative baseline.

8.8.3 Cumulative effects arise in two principal ways – in combination and sequentially. Combined effects occur when: 1) two or more schemes appear simultaneously in the same arc of view without the need for an observer to turn; and 2) in succession, where it is necessary for the observer to turn the head to see the various schemes. Sequential effects occur where the observer has to move from one location to another to be able to see the different developments, and typically arise when the observer is travelling through a landscape, for example on a road or footpath.

8.8.4 Through consultation with the co-ordinating Planning Consultant for this application the following possible future schemes have been considered for potential significant cumulative effects (source information from Cherwell District Council's Local Plan Trajectory (2011-2031)). These schemes are numbered for conciseness:

- Res104: Graven Hill (Bicester 2);
- Res105: Kingsmere SW Bicester Phase 1;
- Res109: North West Bicester (Bicester 1);
- Res110: NWB Phase 2 (Bicester 1)
- Res111: South East Bicester (Bicester 12);
- Res112: South West Bicester Phase 2 (Bicester 3);
- Res117: Cattlemarket;
- Emp101: North West Bicester (Bicester 1);
- Emp102: Graven Hill (Bicester 2);
- Emp103: Bicester Business Park (Bicester 4);
- Emp104: Bicester Gateway Business Park (Bicester 10);
- Emp106: Wretchwick Green (Bicester 12);
- Emp107: South East Bicester (Bicester 12); and

- Emp115: Bicester Gateway (Bicester 3).

8.8.5 The Site for the proposed development is situated within an existing urban edge on the eastern edge of Bicester, a context of which is an existing well established residential area. This assessment has already established that the likely intervisibility of the Site is inherently mitigated through the combination of gently undulating topography, the mature landscape setting and intervening built form on the outer edge of the existing urban edge of Bicester. For instance, see Photoviewpoints 6, 8, 9 and 10, which illustrate typical medium to long range views towards the site.

8.8.6 Similarly, within close range of the application site, the site area is currently screened by the intervening railway embankment from receptors situated to the north west-north and north east of the site; for instance, see Photoviewpoint 6 and 8, Additionally, the current mature landscape features including robust tree groupings and lack of any notably elevated topography within Bicester or its surrounding area would also inherently screen the proposed development. Furthermore, across this distance the intervening built form of the existing urban scene would inherently screen the proposed development to a significant degree.

8.8.7 Based upon the distribution of landscape and visual receptors for the site, and the likely extent of landscape and visual effects presented within this Chapter, it is only in combination with the following scheme that any cumulative effects are likely to occur:

- Res111, Emp106 and Emp107 (Bicester 12 – South East Bicester)

8.8.8 Although defined as separate PRoW due to parish boundaries and the crossing of the A4421, Bicester Footpath 4 and Launton Footpath 4 form a pedestrian route between the eastern edge of Bicester and the village of Launton further east. Launton Footpath 4 runs through the northern edge of Policy Bicester 12, although it is not considered that there will be any in-combination effects as a result of both developments due to intervening mature vegetation, users of the route will be subject to sequential effects along the route. Given the urban nature of the western extent of Bicester Footpath 4 along Gavray Drive, development along this route would be considered 'in-keeping' with expected views within the local context.

8.8.9 Withstanding no finalised site layout or landscape mitigation plan for Res111, Emp106 and Emp 107 (Bicester 12), it is anticipated that the cumulative visual effect of these sites would initially appear moderate adverse (significant) at construction stage (diminishing at Year 1) and further diminishing through the initial 15 years of occupancy to a residual cumulative effect of minor-negligible adverse (not significant). The retention of existing site boundary planting and the undertaking of "embedded mitigation" measures within development would

offset and reduce the likely visual impacts of these schemes, combined with the relative limited visual envelope of the Application Site itself.

8.8.10 The remaining schemes, listed below, are too distant, obscured by intervening development, topography and vegetation, and any cumulative effect would be minimal, if experienced at all.

- Res104 and Emp102 (Bicester 2 – Graven Hill);
- Res105 and Emp115 (Bicester 3 – South West Bicester Phase 1);
- Res109 (Bicester 1 – North West Bicester Eco-town);
- Res110 and Emp101 (Bicester 1 – North West Bicester Phase 2);
- Res112 (Bicester 3 – South West Bicester Phase 2);
- Res117 (Cattle market);
- Emp103 (Bicester 4 – Bicester Business Park);
- Emp104 (Bicester 10 – Bicester Gateway Business Park);