

## 8 Cultural Heritage

---

### 8.1 Introduction

8.1.1 This chapter of the ES was prepared by Oxford Archaeology (OA) and presents an assessment of the likely significant effects of the Proposed Development on the archaeological and cultural heritage resource within the Site and its wider surroundings. Mitigation measures are identified, where appropriate, to avoid, reduce or offset any significant adverse effects identified and/or to enhance any likely beneficial effects. The nature and significance of the likely residual effects are reported.

8.1.2 The chapter is supported by the following appendices:

- Appendix 8.1: Begbroke Innovation District, Begbroke, Oxfordshire Archaeological Desk-Based Assessment (DBA) (OA 2023);
- Appendix 8.2: Begbroke Innovation District, Begbroke, Oxfordshire Heritage Assessment (OA 2023);
- Appendix 8.3: Geophysical Survey Report, Begbroke, Oxfordshire (Magnitude Survey 2022);
- Appendix 8.4: Begbroke Innovation District, Oxfordshire, The Developable Site, Archaeological Evaluation Report (OA 2023);
- Appendix 8.5: Relevant correspondence; and
- Appendix 8.6: Begbroke Innovation District. Written Scheme of Investigation, Archaeological Evaluation (OA 2023).

8.1.3 The following figures are located at the end of this ES Chapter:

- Figure 8.1: Designated assets;
- Figure 8.2: Designated and non-designated assets (built heritage scoped in);
- Figure 8.3: National Mapping Programme (NMP) showing archaeological potential;
- Figure 8.4: Archaeological assets as identified by geophysical survey;
- Figure 8.5: Archaeological assets as evaluated by trial trenches; and
- Figure 8.6: Historical landscapes.

8.1.4 Further archaeological trial trenching will be undertaken at the end of August 2023 in the east of the Site (see paras. 8.3.13 – 8.3.15, and Figure 8.5 for further details). The results of this evaluation will be provided in an ES Addendum in Autumn 2023, with an appropriate mitigation strategy to be agreed through consultation with OCC.

### Competence

8.1.5 The principal author of this assessment was Domiziana Rossi. Domiziana is a heritage professional with over ten years' experience working on archaeological and cultural assessment. Her education background includes an Archaeology BA (Rome University), an Archaeology MA (Bologna University), an Ancient History MA (Cardiff University), and an ongoing PhD in Archaeology (Cardiff University).

- 8.1.6 The assessment draws heavily upon the Heritage Assessment and Archaeological DBA prepared by Linzi Harvey. Linzi is a heritage professional with over two decades of experience in British archaeology. She has a wealth of fieldwork, post-excavation, finds and research experience, including extensive report and article writing. Her educational background includes an Archaeological Science BSc (University of Sheffield) and a Palaeoanthropology MSc (University of Sheffield).
- 8.1.7 This assessment has been managed, overseen, and approved by Ianto Wain. Ianto is the Head of OA's Heritage Management Service. He is a Member of the Chartered Institute for Archaeologists (MCIFA) and has over 30 years of project management experience within the cultural heritage sector. Ianto has considerable experience of the Environmental Assessment process and numerous major projects. He has worked upon or managed the cultural heritage and archaeological chapters for a wide range of residential, road and rail EIA projects across Berkshire, Cornwall, Essex, Hertfordshire, Kent, Oxfordshire, and Surrey.

## 8.2 Legislation, Planning Policy and Guidance

### Legislation Context

8.2.1 The following legislation is relevant to the Proposed Development:

- Historic Buildings and Ancient Monuments Act (1953)<sup>1</sup>;
- Ancient Monuments and Archaeological Areas Act (1979)<sup>2</sup>;
- Planning (Listed Buildings and Conservation Areas) Act (1990)<sup>3</sup>; and
- The Hedgerows Regulations 1997 (amended 2003)<sup>4</sup>.

### Planning Policy Context

8.2.2 The following national, regional, and local planning policy is relevant to the Proposed Development:

#### National

- National Planning Policy Framework (2021)<sup>5</sup>; and
- Draft Levelling-up and Regeneration Bill (2022)<sup>6</sup>.

#### Local

- Cherwell District Council. The Cherwell Local Plan 2011 – 2031 – Part 1 (Adopted 20 July 2015)<sup>7</sup>; and
- The Cherwell Local Plan 2011 – 2031 – Part 1. Partial Review – Oxford's Unmet Housing Need.<sup>8</sup>

### Guidance

8.2.3 The following guidance is relevant to the Proposed Development:

- Chartered Institute for Archaeologists (CIfA), Standards and Guidance for Historic Environment Desk-based Assessments (2020)<sup>9</sup>;
- Historic England, Good Practice Advice in Planning 1. The Historic Environment in Local Plans (2015a)<sup>10</sup>;

- Historic England, Good Practice Advice in Planning 2. Managing Significance in Decision-Taking in the Historic Environment (2015b)<sup>11</sup>;
- Historic England, Good Practice Advice in Planning 3. The Setting of Heritage Assets (2017)<sup>12</sup>;
- Historic England, Advice Note 12 (2019)<sup>13</sup>; and
- Planning Practice Guidance (2021) - Historic Environment, published by the Ministry of Housing, Communities and Local Government<sup>14</sup>.

### 8.3 Assessment Methodology

#### Consultation

##### Pre-Application Consultation

- 8.3.1 Since May 2022, pre-application consultation had been undertaken by OA for the cultural heritage assessment with the relevant statutory consultees, including the Oxfordshire County Council Archaeological Services (OCCAS). The most relevant correspondence in the communication exchanges had been summarised as follows:

Table 8.1: Consultation Response Summary

Consultee and Comment	Response
<i>OCCAS May-October 2022, e-mail correspondence on geophysical survey</i>	
OA asked to OCCAS for a Written Scheme of Investigation (WSI) to be approved prior to the commencement of the geophysical survey	On 19/05/22, OA prepared and sent a WSI from Magnitude Surveys for a combined electromagnetic (EM) induction and gradiometer survey at the Site. This was accepted by OCCAS on 15/06/22. The results of the survey are included in Appendix 8.3. The survey was carried out in October 2022.
<i>OCCAS October-December 2022, e-mail correspondence on Trial Trenches Evaluation</i>	
Following the results of the geophysical survey OCCAS and OA required an Archaeological Field Evaluation, and OCCAS provided a Design Brief <sup>15</sup> which included the outline framework and the specific requirements for the evaluation	OA prepared and sent a WSI for a Trial Trenches Evaluation to be carried out in the proposed developable areas of the Site to OCCAS which was accepted on 22/11/22. OA commenced a Trial Trench Evaluation on 5/12/22 following the specific requirements requested by the Design Brief: 'A trenching sample of 2% of the total developable area, 298 30m by 1.8m trenches, plus a further 1% contingency which can be deployed if there are any features at the evaluation stage, will need to be undertaken across the Site. The trenches will need to target both the anomalies and 'blank' areas identified by the geophysical survey.' These results are provided in Appendix 8.4.
<i>OCAS December 2022 – March 2023 – visits on site and email exchanges</i>	

Consultee and Comment	Response
OCAS was informed of every progress and findings during the trenching fieldwork	Frequent visits were received from OCCAS to the Site to monitor the excavations and sign off the trenches. OA sent a weekly report during the trenching fieldwork (a period of (10 weeks). Every report included a trench plan update and photos of the excavations. At the end, 298 trenches were originally specified, of which twenty-one were not accessible, so 277 were excavated and backfilled. An extra trench was added during week 7 (27/01/23), as agreed with OCAS and the Applicant, to investigate presence of a possible roundhouse. Key correspondence, in the form of weekly reports, is appended in Appendix 8.5.
<i>Design Conservation November 2023 – visits on site and email exchanges</i>	
OA enquired about the overview/guidance information of the Register of Local Heritage Assets, and whether there were any 'locally listed buildings'	The Conservation Officer of the Design Conservation office for Cherwell District answered that <i>'there is no formal list yet although there are some buildings that have been highlighted within some of the conservation area appraisals.'</i> These buildings have been scoped in for assessment in this ES chapter.

### EIA Scoping Opinion

- 8.3.2 A request for an EIA Scoping Opinion was submitted by the Applicant to CDC on 9<sup>th</sup> December 2022. An EIA Scoping Report (the 'Scoping Report') accompanied the request (Appendix 3.2). An EIA Scoping Opinion was issued by CDC (Appendix 3.3) which included comments from statutory consultees. Table 8.2 summarises key comments raised by consultees of relevance to this assessment in the EIA Scoping Opinion and how the assessment has responded to them.

Table 8.2: EIA Scoping Opinion Response

Consultee and Comment	Response
<i>Historic England (30 January 2023)</i>	
It is important that the assessment is designed to ensure that all impacts are fully understood. Section drawings and techniques such as photomontages are a useful part of this.	Photomontages showing the designated and non-designated assets are included as Figures within this chapter to ensure that all impacts are fully understood. In particular, Figure 8.1 shows the designated assets within a 3km study area; Figure 8.2 shows the scoped in designated and non-designated built heritage in relation with the developed and undeveloped Site areas; Figure 8.3 shows a photomontage of the National Mapping Programme (NMP) with the archaeological assets as identified; Figure 8.4 shows a photomontage of the geophysical



Consultee and Comment	Response
	survey with the archaeological assets as identified; Figure 8.5 is a montage of the archaeological assets as indagated by trial trenches; and Figure 8.6 shows the Historical Landscapes in relation with the developed and undeveloped Site areas.
Take account of the potential impact which associated activities (such as construction, servicing and maintenance, and associated traffic) might have upon perceptions, understanding and appreciation of the heritage assets in the area.	The potential impact of these scheme elements is a core facet of the heritage impact assessment included in this chapter and the Heritage Assessment (Appendix 8.2).
The assessment should also consider, where appropriate, the likelihood of alterations to drainage patterns that might lead to in situ decomposition or destruction of below ground archaeological remains and deposits and can also lead to subsidence of buildings and monuments.	This had been assessed in the archaeological desk-based assessment (Appendix 8.1) and further archaeological trial trenching (Appendix 8.4) to evaluate the presence and nature of surviving archaeological deposits which may be affected by changes to the drainage pattern particularly within eastern extent of the Site within the floodplain.
<i>[CDC Scoping Opinion] (30 January 2023)</i>	
The ES should consider the potential impacts on non-designated features of historic, architectural, archaeological, or artistic interest since these can also be of national importance and make an important contribution to the character and local distinctiveness of an area and its sense of place.	Non-designated assets have been scoped in and included as the receptors, as appropriate, accordingly to the archaeological desk-based assessment (Appendix 8.1) and Heritage Assessment (Appendix 8.2). These scoped in non-designated assets are included in this ES chapter. The undesigned built heritage is shown on Figure 8.2, the archaeological non-designated assets are shown on Figure 8.3, 3.4, and 8.5, and the historical landscapes assets on Figure 8.6.
Section 6.23 should also include the forthcoming results of the trenched evaluation, as well as the geophysical survey results, in the assessment of the archaeological potential of the Site.	The geophysical survey is included to this chapter as Appendix 8.3. An evaluation report of trial trenching in the developable areas is included as Appendix 8.4. Both these reports have informed this ES chapter. Additional trial trenching will be carried out in Autumn 2023 in the non-developable areas in the east of the Site, with the evaluation report to be submitted in an ES Addendum.

### Summary of Assessment Scope

- 8.3.3 As outlined within the EIA Scoping Report (Appendix 3.2), and as agreed with CDC via the EIA Scoping Opinion (Appendix 3.3), the scope of this ES chapter is limited to the following assessment of effects upon these groups of receptors (which together will be referred to as the 'Cultural Heritage Resource'):
- Archaeological sites and known areas of archaeological potential;
  - Historic buildings and structures; and
  - Historic landscapes.
- 8.3.4 Every receptor (asset) of the Cultural Heritage Resource will be identified with a sensitivity (value), in accordance with the criteria identified in Table 8.3.

### Non-Significant Effects

- 8.3.5 All other cultural heritage effects were scoped out of further assessment within this ES through the EIA scoping process. Section 5: Cultural Heritage of the EIA Scoping Report (Appendix 3.2) provides further details and justification.

### Study Area

- 8.3.6 A 2km study area around the Site forms the study area for the archaeological resource. This area is considered sufficient to characterise and understand the archaeological and historic context and assess its archaeological potential. This study area was agreed with Oxfordshire County Council Archaeological Services.
- 8.3.7 A 3km study area around the Site forms the study area for built heritage, especially to identify designated heritage assets (World Heritage Sites, Scheduled Monuments, Listed Buildings, Conservation Areas, Registered Parks and Gardens, and Registered Battlefields) which could be indirectly affected by the Proposed Development. This wider study area ensures that all heritage assets within the visibility viewshed of the Site are identified and any potential impacts assessed. This study area was agreed with Oxfordshire County Council Archaeological Services.
- 8.3.8 The study areas are the same for construction and operational phases of the Proposed Development.

### Establishing Baseline Conditions

- 8.3.9 The baseline conditions, as defined by the historical, cultural, and archaeological conditions, had been established through the following stages:

#### *Archaeological Desk-based assessment (November 2022)*

- 8.3.10 An assessment of the archaeological potential of the Site was carried out by OA, with the production of Archaeological DBA, included as Appendix 8.1. This assessment involved the analysis of designated heritage assets (provided by the National Heritage List for England, NHLE); non-designated heritage assets and previous archaeological events (both provided by OCC Historic Environment Record (HER)); Ordnance Survey maps (as provided by Groundsure); LiDAR data (as held by the Environment Agency); historic aerial photographs (as held by the Historic England Archives); geo-technical data (as held by the British

Geological Survey); other relevant primary and secondary sources included published and unpublished works (as held by OA and the Oxfordshire History Centre);

- 8.3.11 The desk-based assessment informed a Heritage Assessment included as Appendix 8.2. This assessment describes the current built heritage conditions within the Site and its environs from a historical point of view. This identifies the potential for impacts from the Proposed Development on designated and non-designated built heritage and has been used to inform this ES Chapter.

#### *Geophysical Survey*

- 8.3.12 In tandem with the DBA, a non-intrusive geophysical survey has been carried out, starting on 22/08/2022 and completed after 4 weeks, with the report included as Appendix 8.3. This survey was designed to further clarify and assess the nature of the below ground archaeological resource potentially affected by the Proposed Development. The results of this survey confirmed the existence of at least two principal areas of archaeological activity.

#### *Trial Trenching*

- 8.3.13 The Site is currently the subject of a detailed archaeological evaluation designed to identify and categorise the nature and significance of the archaeological resource, in consultation with the OCCAS. This phasing of evaluation had been subdivided into two areas of investigations: the 'Developable Zone' and the 'Floodplain Zone', based on the Development Areas and Land Use Parameter Plan. Evidence from the archaeological deposits investigated in the trenches will form the basis of any proposals for appropriate mitigation measures that may seek to limit the damage to significant archaeological deposits and will aim to define any research.
- 8.3.14 In October 2022, OCCAS accepted the WSI related to this evaluation trenching carried out within the Developable Zone. This WSI outlined how OA implemented the requirements designed by OCC's design briefs regarding the evaluation methodology and requirements. Between November 2022 and March 2023, a trial trench evaluation was carried out by OA within the portions of the Site that will be affected by the Proposed Development, as required by the OCC design briefs. This evaluation aimed to establish the presence/absence, extent, condition, character, and date of any archaeological deposits within the developable application area (see Appendix 8.4).
- 8.3.15 A second stage of trenching will be carried out in the Floodplain Zone within the Site. This area of the Site – located east of the railway line – has not been investigated to-date owing to underground water issues preventing commencement of trenching works. The WSI outlining how OA would implement the requirements of OCC's design briefs was sent on 7<sup>th</sup> July 2023 and approved by OCCAS in July 2023 (see Appendix 8.6).

#### *Ground Investigation (March 2023)*

- 8.3.16 The Site had been subject to a desk review and ground investigation carried out by Hydrock in March 2023 (see Chapter 15: Ground Condition and Contamination and associated appendices). The results of this investigation informed the baseline conditions of this chapter.

#### **Assessing Likely Significant Effects**

- 8.3.17 The methodology follows the general assessment methodology as presented in Chapter 3: EIA Methodology, although some changes and topic specific criteria are added in order to

assess the particular criteria for levels of receptor sensitivity, impact magnitude, and effect significance. The assessment methodology stages can be outlined as follows:

- Identify and assess the relative importance (significance) of the heritage receptors, as provided by the heritage assessment (Appendix 8.2) and the archaeological DBA (Appendix 8.1), confirmed by geophysical survey (Appendix 8.3), and the evaluation trenching (Appendix 8.4);
- Identify and assess every heritage asset's sensitivity based on the significance (using the criteria in Table 8.3);
- Identify and assess the importance and magnitude of impact (using the criteria in Table 8.4). The impacts had been subdivided into direct and indirect, with direct impacts related to the receptors' physical qualities, while indirect impacts are defined as the impacts on the receptors' settings and curtilage, character, context, and landscape. The WHS Management Plan and the Conservation Areas Appraisals have informed this assessment on identified views, and a walkover survey had been carried out in order to check the designated assets' views with reference to the Zone of Theoretical Visibility (ZTV) and the Zone of Visual Intervisibility (ZVI); and
- Assessment of the Proposed Development's effects upon the Cultural Heritage Resource using a matrix-based (using the criteria in Table 8.5) approach and adopting a holistic approach based on professional judgement.

8.3.18 Detailed analysis of the potential effect of the Proposed Development upon the setting of individual assets was carried out as part of the research for this chapter and has not been confirmed on a case-by-case basis with the statutory consultees.

### Construction

8.3.19 In accordance with best practice, a worst-case assessment has been undertaken in order to identify the likely significant effects. A holistic approach has been used, and the effects at peak construction taken into account in assessing the likely significant effects in relation to a worst-case scenario of demolition and construction works. The importance and magnitude of effects has been identified and assessed using the criteria in Table 8.4.

8.3.20 Although a phasing of the Proposed Development is yet to be confirmed, it is anticipated that construction will commence in 2025 and will be completed in 2033, with an approximate build-out period of eight years.

### Completed Development

8.3.21 The importance and magnitude of the effects has been identified and assessed using the criteria in Table 8.4. These effects are assumed to be permanent, and the Proposed Development's details were assessed against the Parameter Plans, Development Specification, and Strategic Design Guide.

8.3.22 Whilst an overlap between the construction and operational phases is expected, for the purposes of this assessment the operational phase of the Proposed Development will begin when all construction works have been completed. No different impacts/effects in respect of archaeology or cultural heritage are predicted to occur as a result of overlapping construction and occupation.

### Cumulative Effects

- 8.3.23 The schedule of cumulative schemes, as set out in Appendix 3.4, has been reviewed in the context of the zone of influence of the Proposed Development. The assessment of indirect cumulative effects considered both the construction and operational phases of the Proposed Development. This assessment was conducted by comparing it against the details outlined in Chapter 9: Transport and Access, Chapter 10: Noise and Vibration, and the visual assessment documented in Volume II: Landscape and Visual Impact Assessment.
- 8.3.24 Given the proximity of the developments to the Site and the Cultural Heritage Resource affected by the Proposed Development, professional judgment has been applied to scope in the following cumulative schemes as having potential to affect heritage receptors:
- Buildings 8-11, Oxford;
  - Former Piggery and Land North of Woodstock Road, situated adjacent to the south of the Site; and
  - Yarnton Lane Level Crossing and Sandy Lane Crossing, situated within the Site.
- 8.3.25 These three development schemes are anticipated to have an overlapping construction programme and will be in operation at the same time as the Proposed Development. The other cumulative developments identified in Appendix 3.4 are separated from the Site by intervening topography and development. There is no historic connection or intervisibility linking these developments to the cultural heritage receptors affected by the Proposed Development. Accordingly, it is unlikely that there will be any cumulative effects upon any off-site cultural heritage receptors during the construction or operation phases of the Proposed Development and they are scoped out of the cumulative assessment. Detailed analysis of the potential effect of the Proposed Development upon the setting of individual assets was carried out as part of the research for this chapter and has not been confirmed on a case-by-case basis with the statutory consultees.

### Determining Effect Significance

- 8.3.26 The effect significance had been determined following a holistic approach and professional judgment. Table 8.5 provides a matrix to identify the effect significance in relation to the receptor sensitivity and the magnitude of impact. Although the criteria are similar to the generic criteria set out in Chapter 3: EIA Methodology, a 'no change' criteria and related 'neutral' significance are added for the magnitude of impact column for this assessment. Also, the significance is more nuanced than that provided in Chapter 3: EIA Methodology. These topic-specific amendments are more appropriate for analysing the combined significance of the heritage assets, which takes into account more ephemeral features, such as the potential impact upon the setting of designated heritage assets.

### Sensitivity of Receptor

- 8.3.27 The sensitivity of the receptors is based on the relative importance (or significance in NPPF terms) of the heritage asset, as outlined in Table 8.3.
- 8.3.28 The assessment methodology presented here has been adapted from that outlined in the Design Manual for Roads and Bridges (DMRB), section 3, parts 1 and 2 in the amended document LA 104, Environmental assessment and monitoring<sup>16</sup>. Although this was originally written for road schemes, it is now generally accepted as a suitable assessment

methodology for the appraisal of all types of development. Although similar to the criteria as defined by Chapter 3: EIA Methodology, the following criteria takes into account the three typologies of receptors included within the Cultural Heritage Resource. The evaluation of significance has been undertaken in accordance with the definitive standards and legislation that categorise the different typologies of heritage assets.

Table 8.3: Receptor Sensitivity Receptors

Value (Sensitivity)	Receptor: Historic Landscapes	Receptor: Archaeological Assets	Receptor: Historical Buildings
High	<p>Designated historic landscapes of outstanding interest (i.e., World Heritage Sites, Grade I and II* registered parks and gardens)</p> <p>Undesignated landscapes of outstanding interest.</p> <p>Grade II registered parks and gardens which can be shown to be of national importance as a result of their special architectural, artistic, and historic interests.</p> <p>Undesignated landscapes of high quality and importance and of demonstrable national value.</p> <p>Well preserved historic landscapes exhibiting considerable coherence, time-depth, or other critical factors.</p>	<p>World Heritage Sites</p> <p>Scheduled Monuments (including proposed sites).</p> <p>Undesignated assets of schedulable quality and importance.</p> <p>Assets that can contribute significantly to acknowledged national research objectives.</p>	<p>World Heritage Sites</p> <p>Scheduled Monuments with standing remains. Grade I, and Grade II* Listed Buildings.</p> <p>Grade II Listed Buildings which can be shown to be of national importance as a result of exceptional quality of their architecture, fabric, or historical associations.</p> <p>Conservation Areas containing very important buildings.</p> <p>Undesignated structures of clear national importance.</p>
Medium	<p>Undesignated designed landscapes that can be shown to be of regional importance as a result of their surviving design, layout, associated historic structures and historic associations.</p> <p>Moderately well-preserved historic landscapes with reasonable coherence, time-depth, or other critical factors</p>	<p>Heritage assets that contribute to regional research objectives.</p>	<p>Historic buildings that can be shown to be of regional importance as a result of the high quality of their architecture, fabric, or historical associations.</p> <p>Conservation Areas containing buildings that contribute significantly to the historic character.</p>



Value (Sensitivity)	Receptor: Historic Landscapes	Receptor: Archaeological Assets	Receptor: Historical Buildings
			Historic townscape or built-up areas with important historic integrity in their buildings or built settings (e.g., including street furniture and other structures).
Low	<p>Robust undesigned historic landscapes.</p> <p>Historic landscapes with importance to local interest groups.</p> <p>Historic landscapes whose value is limited by poor preservation and/or poor survival of contextual associations.</p>	<p>Heritage assets of local importance.</p> <p>Assets compromised by poor preservation and/or poor survival of contextual associations.</p> <p>Assets of limited value, but with potential to contribute to local research objectives</p>	<p>'Locally listed' buildings.</p> <p>Historic unlisted buildings of modest quality in their fabric or historical association.</p> <p>Historic townscape or built-up areas of limited historic integrity in their buildings or built settings (e.g., including street furniture and other structures).</p>
Negligible	Landscapes with little or no significant historical interest	Assets with very little or no surviving archaeological interest	Buildings of no architectural or historical note; buildings of an intrusive character

### Magnitude of Impact

8.3.29 These following definitions are based upon the DMRB, section 3, parts 1 and 2 in the amended document LA 104, Environmental assessment and monitoring. The magnitude of an impact will be described as major, moderate, minor, negligible or no change. Such terms are relative to the receptor affected by the impact (i.e., a particular impact can result in a beneficial effect on one receptor and an adverse effect on another). Impacts may be direct or indirect. The effects during construction are anticipated to be short to medium term duration (temporary) while post-construction effects are anticipated as being of long-term duration (permanent) unless otherwise stated. The exception to this is direct construction effects upon the archaeological resource within the Site which will be permanent.

Table 8.4: Magnitude of Impact Descriptors

Impact Magnitude (degree of change)		Descriptors		
		Historical landscapes	Archaeological Assets	Historic Buildings
Major	Adverse	Change to most or all key historic landscape elements, parcels, or components; extreme visual effects; gross change of noise or change to sound quality; fundamental changes to use or access; resulting in total change to historic landscape character unit.	Change to most or all key archaeological materials, such that the resource is totally altered.  Comprehensive changes to setting.	Change to key historic building elements, such that the resource is totally altered.  Comprehensive changes to the setting.
	Beneficial	Large scale or major improvement of resource quality; extensive restoration or enhancement; major improvement of attribute quality.		
Moderate	Adverse	Changes to many key historic landscape elements, parcels or components, visual change to many key aspects of the historic landscape, noticeable differences in noise or sound quality, considerable changes to use or access; resulting in moderate changes to historic	Changes to many key archaeological materials, such that the resource is clearly modified.  Considerable changes to setting that affect the character of the asset.	Change to many key historic building elements, such that the resource is significantly modified.  Changes to the setting of an historic building, such that it is significantly modified.

		Descriptors		
Impact Magnitude (degree of change)		Historical landscapes	Archaeological Assets	Historic Buildings
		landscape character.		
	Beneficial	Benefit to, or addition of, key characteristics, features, or elements; improvement of attribute quality.		
Minor	Adverse	Changes to few key historic landscape elements, parcels or components, slight visual changes to few key aspects of historic landscape, limited changes to noise levels or sound quality; slight changes to use or access resulting in limited changes to historic landscape character.	Changes to key archaeological materials, such that the asset is slightly altered.  Slight changes to setting.	Change to key historic building elements, such that the asset is slightly different.  Change to setting of an historic building, such that it is noticeably changed.
	Beneficial	Minor benefit to, or addition of, one (maybe more) key characteristics, features, or elements; some beneficial impact on attribute or a reduced risk of negative impact occurring.		
Negligible	Adverse	Very minor changes to key historic landscape elements, parcels or components, virtually unchanged visual effects, very slight changes in noise levels or sound quality; very slight changes to use or access; resulting	Very minor changes to archaeological materials or setting.	Slight changes to historic buildings elements or setting that hardly affect it.

		Descriptors		
Impact Magnitude (degree of change)		Historical landscapes	Archaeological Assets	Historic Buildings
		in a very small change to historic landscape character.		
	Beneficial	Very minor benefit to or positive addition of one or more characteristics, features, or elements.		
No Change		No loss or alteration of characteristics, features, or elements; no observable impact in either direction		

### Assessing Significance

8.3.30 The relative significance of an effect is largely a product of the value and sensitivity of the identified receptor and the magnitude and duration of the impact. However, the assessment is moderated by professional judgement, and this is discussed/clarified in the text. The significance of effect matrix is provided in Table 8.5. It is assumed for the purposes of this assessment that any effects of moderate significance or greater are significant in EIA terms.

Table 8.5: Significance of Effect Matrix

Environmental value (sensitivity)	Magnitude of impact (degree of change)				
	No change	Negligible	Minor	Moderate	Major
Very High	Neutral	Slight	Moderate or Large	Large or Very Large	Very Large
High	Neutral	Slight	Slight or Moderate	Moderate or Large	Large or Very Large
Medium	Neutral	Neutral or Slight	Slight	Moderate	Moderate or Large
Low	Neutral	Neutral or Slight	Neutral or Slight	Slight	Slight or Moderate
Negligible	Neutral	Neutral	Neutral or Slight	Neutral or Slight	Slight

## Assumptions and Limitations

- 8.3.31 Data used to compile this report consist of secondary information derived from a variety of sources. The assumption is made that these data are reasonably accurate.
- 8.3.32 The records held by OCC HER are not a record of all surviving heritage assets, but a record of the discovery of a wide range of archaeological and historical components of the historic environment. The information held within it is not complete and does not preclude the subsequent discovery of further heritage assets that are, at present, unknown.
- 8.3.33 The Site is subject to a phased programme of trial trenching which has examined the whole developable area. This has been reported upon and the report is provided as Appendix 8.4. The results of the remaining phase will be submitted to CDC and OCC in Autumn 2023.

## 8.4 Baseline Conditions

### Land Use, Topography, and Geology

- 8.4.1 The Site is situated six miles north-west of Oxford and lies within the civil parishes of Begbroke and Yarnton, Oxfordshire. It comprises approximately 170 hectares of agricultural land, woodland, and a science park, and includes roadways and farmsteads. To the north and north-east, the boundaries of the Site are defined by Rowel Brook, by the Oxford Canal to the east, by Flit Solar Farm to the south, and by the A44, residential and commercial properties, including Yarnton Garden Centre, and allotments to the west. It is characterised by a plateau in the west and centre of the Site at c 67m above Ordnance Datum (AOD) sloping away to the north towards Rowel Brook, where it reaches 63m AOD, and to the east and south reaching c 61m AOD.
- 8.4.2 The Site lies partly on the Summertown-Radley gravel terrace and partly on the floodplains of the Rowell Brook, a natural stream that pre-dated the Oxford Canal, both tributaries of the Thames whose floodplains converge within the Site. The following geological ground conditions had been based upon ES Chapter 15: Ground Conditions and Contamination and confirmed by the evaluation trial trenches carried out on-site (Appendix 8.4). Around the Parkers Farm's buildings (OA 380), the tracks, and the area of the landfill, the topsoil is on average 0.24m thick and covers some landfill made ground. In the rest of the Site, the topsoil is agriculturally disturbed, and on average 0.31m thick. Alluvium is present underlying the agriculturally disturbed topsoil in the north of the Site, the southern boundary of the Site, and in the east of the Site, to depths between 0.45m and 3.15 below-ground level (bgl). Hand and River Terrace deposits were encountered underlying the agriculturally disturbed topsoil in the other areas. A lens of Glacial Washout Till was encountered to the east of the railway. The bedrock geology of the Site is mainly Oxford Clay Formation and West Walton Formation mudstone, with Kellaways Clay Member, Kellaways Sand Member, and Cornbrash Limestone formation in the northern part of the Site. The Forest Marble Formation (mudstone and limestone) was encountered underlying the Cornbrash Limestone Formation across the Site and underlying superficial deposits in the far north-east of the Site. In-field geoarchaeological investigation has also revealed the presence of small pockets of potentially in-situ Pleistocene supranatural deposits, particularly to the south of Sandy Lane (see Appendix 8.4, section 3.6.4). These sediments comprise fine-grained sands and silts of likely aeolian deposition, and thus fall under the broad category of Pleistocene 'covers' and/or 'brickearth' deposits. It also seems likely that certain distinctive yellow-brown, clayey soils found elsewhere across the Site may also derive from colluvially reworked materials originating from these fine-grained supranatural deposits.

Lastly, excavations across the north-western quadrant of the Site also revealed the presence of more mixed colluvial sediments that are likely also Pleistocene in date, and which in this case most probably constitute head deposits derived from solifluction and/or other periglacial displacement processes.

### Archaeology

- 8.4.3 A detailed discussion of the archaeological background and potential of the Site is presented in the Archaeological Desk-based assessment (Appendix 8.1). This has been supplemented by the results of a geophysical survey carried out in August 2022 (Appendix 8.3) and the subsequent archaeological trial trenching (Appendix 8.4) carried out across the Developable Zones of the Site in late 2022 / early 2023 which have been used to inform the assessment.

### Archaeological Sites and Known Areas of Archaeological Potential: Scheduled Monuments

- 8.4.4 There are no Scheduled Monuments within the Site. Six Scheduled Monuments have been identified within the 3km study area. The locations of these assets are shown in Figure 8.2. Scheduled Monuments are nationally important archaeological sites with a high level of archaeological and historic interest. In accordance with the criteria in Table 8.3 they are considered to be of high sensitivity (value). These assets comprise:
- Bladon Camp (OA 212), a hillfort on Bladon Heath located 1.3km west of Site;
  - Thrupp Cross (OA 213), a potentially medieval and relatively undisturbed standing cross located in the centre of the hamlet, 1.6 km north of Site;
  - Shipton-on-Cherwell Cross (OA 215) just over 2km north of the Site;
  - The deserted medieval village of Hampton Gay (OA 216) located 2.4km north of Site;
  - A palimpsest of ditches, barrows, and enclosures (OA 217) which indicate consecutive periods of human activity throughout the Bronze Age and Iron Age periods, located 2.6km south of Site on Wolvercote Common; and
  - Blenheim Villa (OA 214), a Roman villa and associated field system approximately 3km north-west of Site.
- 8.4.5 These Scheduled Monuments share no intervisibility with the Site and are separated from it by distance of between 1.4 and 3km, the surrounding topography, existing planting, and development. Due to these factors, which effectively separate the Site in both spatial and visibility terms, it is considered that the Proposed Development is unlikely to have an impact upon the setting of these assets and accordingly they have been scoped out from further assessment.
- 8.4.6 The hillfort known as Bladon Camp is situated on high ground overlooking the Thames Valley and the Site. Due to the woodland which covers and surrounds the Scheduled Monument there are currently no views between the scheduled monument and the Site, although prior to the creation of the woodland such views may have existed. The Site in its current form is thus considered to make a neutral setting of the hillfort.



## Archaeological Sites and Known Areas of Archaeological Potential: Non-designated Archaeological Remains within the Site

8.4.7 The following features had been excavated and assessed in the past, as identified in the Archaeological DBA (Appendix 8.1, Figures 5-7):

- Iron Age huts, ditches, and pits (OA 279) with broadly dated prehistoric findspots and scatters (OA 266-7) and Romano-British settlement (OA 280) were identified in the Sandy Lane gravel pit in the 1920s. These assets had been removed from the Site and are thus of negligible sensitivity (value).
- Leaf-shaped and hollow-based arrowheads (OA 268, and 273-4) were recovered as individual artefacts from findspots around the Begbroke Science Park, as well as a substantial lithic scatter (OA 275, and 277) including 789 artefacts and a Neolithic pottery sherd (OA 278), Roman pottery (OA 281), medieval and post-medieval pottery and other finds (OA 335, and 339) were recovered in 1960s. These assets had been removed from the Site and are of negligible sensitivity (value).
- An anti-aircraft gun site (OA 375) is known to have been located on the Site during the Second World War. This asset had been removed from the Site and is of negligible sensitivity (value).
- The undated ditches and post-medieval field boundary (OA 333) had been excavated and recorded during a previous phase of archaeological work carried out within the Site by MoLA in 2008.<sup>17</sup> These assets had been partly excavated and removed from the Site and are of negligible sensitivity (value).
- Possible Bronze Age enclosures (OA 269) and post-medieval ditch and gully features (OA 315) were identified as cropmarks and partly excavated by Cotswold Archaeology in 2011.<sup>18</sup> These assets had been partly excavated and removed from the Site and are of negligible sensitivity (value).

8.4.8 The Archaeological DBA (Appendix 8.1; Figures 5-7) identified several archaeological features within the Site, which are also shown on Figures 8.3 and 8.4, thanks to the concentration of cropmarks and the geophysical survey (see Appendix 8.3). The trial-trenching is shown on Figure 8.5 (see also Appendix 8.4). The trial trenching evaluation within the developable area subdivided the evaluated Site into areas A, B, and C and has identified the following archaeological features, shown on Figure 8.5:

- Area A: Mid to Late Bronze Age activity, consisting of two possible barrows and possibly related penannular ring ditch (OA 269; see trench 226 in Appendix 8.4), of pit groups (see trenches 259 and 271 in Appendix 8.4), and ring-ditches (OA 270, see trench 226 in Appendix 8.4); Iron Age activity comprising pits, ditches, and postholes (OA 371 and 270; see trenches 227, 228, 230, 233 and 299 in Appendix 8.4) that may possibly cover an area of 2ha; and a possible Anglo-Saxon enclosure interpreted as a possible hall-type building (OA 374 see trench 138 in Appendix 8.4). These assets are considered to be of medium sensitivity (value).
- Area B: Late Bronze Age pits (see trenches 259, 271 in Appendix 8.4); track/drove way system to the north of Sandy Lane clearly related with farmstead B and possibly in use from Iron Age to Saxon periods (see trenches 75, 81-2, 114, 120, 255, 264–267 and 277 in Appendix 8.4); possibly Iron Age square enclosure interpreted as a stock enclosure (see trenches 124-7 in Appendix 8.4); and complex farmstead B covering a 2.8ha area with the main intensive period of settlement dated to the mid

Roman period (OA 378, see trenches 71-9, 81-4, 89, and 91-3 in Appendix 8.4). These assets are considered to be of medium sensitivity (value).

- Area C: complex farmstead C covering a 5.5ha area with the main intensive period of settlement dated to the mid Roman period possibly reused until Anglo-Saxon period (OA 376 see trenches 5–6, 8, 10–26, 28–32 and 44 in Appendix 8.4). This asset is considered to be of medium sensitivity (value).
- An undated enclosure, a linear feature, and a pit (OA 370) have been identified within the Site. These features had not been investigated by the geophysical survey (Appendix 8.1, Fig. 24; see area between Areas 8 and 9 in Appendix 8.3, Figs. 2-12) because it is not included within the developable area, as defined by the Developable Areas and Land Use Parameter Plan (see Appendix 5.1).

8.4.9 In addition to the known archaeological remains identified within the Site, there is also the potential for previously unidentified archaeological remains to be present. A full analysis of the archaeological potential of the Site is provided in Appendix 8.1, section 10. In summary, the Site is considered to have a high potential to contain Bronze Age, Iron Age, and Roman remains, associated with the cropmarks identified on the National Mapping Programme (NMP) and confirmed by the geophysical survey, included in Appendix 8.3. The potential of the Site is being further clarified through the programme of archaeological evaluation, with results for the developable area included in Appendix 8.4.

### Built Heritage

8.4.10 There is one Grade II designated Listed Building within the Site: Begbroke Hill Farmhouse (OA 1) located within the Begbroke Science Park (further details are provided in section 8.4.27). The 3km study area contains one World Heritage Site which is also a Registered Park and Garden, another Registered Park and Garden, 13 Conservation Areas, two Grade I Listed Buildings, ten Grade II\* Listed Buildings, and 199 Grade II Listed Buildings. Figure 8.1 shows the location of these assets.

### Built Heritage: World Heritage Site

8.4.11 Blenheim Palace is a World Heritage Site (OA 220) and also a Registered Park and Garden (OA 219). In accordance with the criteria outlined in Table 8.3, World Heritage Sites are considered to be of high sensitivity (value) as they have international significance.

8.4.12 It is located 3km north west of the Site. The Site is not visible from this asset and there are no return views from the Site taking in Blenheim Palace, as informed by the walkover survey (see Appendix 8.2, section 6.3; also, Volume II: Landscape and Visual Impact Assessment, section 4.5.1). Therefore, the Site does not contribute to the wider setting of the World Heritage Site. The lands within the Site are not substantially connected in a visual or historical sense. Current analysis would suggest that the WHS is sufficiently separated from the Site as to not suffer any impacts, either visually or in terms of changes in noise or traffic movements. Chapter 9: Transport and Access, Chapter 10: Noise and Vibration, and Volume II: Landscape and Visual Impact Assessment indicate that there will be no indirect effects on the Blenheim Palace WHS. The road passing the Site and the WHS is already very busy, and it is indicated that it is unlikely that increased traffic due to the completed Proposed Development will markedly increase this.

### Built Heritage: Registered Park and Gardens

- 8.4.13 In addition to Blenheim Palace Registered Park and Garden (OA 219), the study area also contains the Grade II Yarnton Manor Registered Park and Garden (OA 218). This consists of a late 19<sup>th</sup>-century formal garden laid out within the framework of an early 17<sup>th</sup>-century layout and a park of 10ha, located 900m south of the Site. In accordance with the criteria outlined in Table 8.3, Yarnton Manor Registered Park and Garden is considered to be of medium sensitivity (value). Although substantial in size, the Park and Gardens themselves are separated from the Site by Yarnton village, which lies between this heritage asset and the Site. There is no historic or visual connection between the Site and Yarnton Manor (see also Volume II: Landscape and Visual Impact Assessment, section 4.5.1). Accordingly, this heritage asset has been scoped out and will not be further assessed in this chapter.

### Built Heritage: Conservation Areas

- 8.4.14 There are 13 Conservation Areas within 3km of the Site. These comprise:
- Begbroke;
  - Bladon;
  - Cassington;
  - Hampton Gay, Shipton-on-Cherwell and Thrupp;
  - Hampton Poyle;
  - Islip;
  - Kidlington-Langford Lane Wharf, The Rookery, High Street, Crown Street and Church Street;
  - Oxford Canal; and
  - Wolvercote with Godstow.
- 8.4.15 All the 13 Conservation Areas are considered to be of medium sensitivity (value) as they contain historic buildings which contribute significantly to their character. Their location is shown on Figure 8.1.
- 8.4.16 Bladon, Cassington, Hampton Gay, Shipton-on-Cherwell, Thrupp, Hampton Poyle, Islip, Langford Lane Wharf, High Street, Church Street, and Wolvercote with Godstow are situated over 1km from Site. At this distance, along with the intervening development, infrastructure, landscape and planting, there are limited views to or from the Site and no historic connections with the Site which could reasonably affect the setting of these heritage assets. Two of the Kidlington Conservation Areas (Crown Road and The Rookery) are situated closer, around 350m east, but are similarly obscured from view by modern development. As such, all but two of the Conservation Areas within the 3km study area (Begbroke and Oxford Canal) have been scoped out.
- 8.4.17 The Begbroke and Oxford Canal Conservation Areas have been scoped in due to their geographical proximity. Area 18 (Roundham Lock to Kidlington Green Lock) of the Oxford Canal Conservation Area is adjacent to the Site's eastern boundary, and Begbroke Conservation Area is located 140m north-west of Site, as shown on Figure 8.1.

### *Oxford Canal Conservation Area*

8.4.18 The Oxford Canal Conservation Area covers a section of the Oxford Canal that runs through Cherwell District and a small part of South Northamptonshire District. As a single man-made feature of one period, the canal and its associated infrastructure of locks and bridges form the basis of its special character as defined in the Oxford Canal Conservation Area Appraisal<sup>19</sup>. The section of the conservation area most relevant to the Site is Area 18, which runs between Roundham Lock to Kidlington Green Lock, which forms much of the eastern border of the Site. Area 18 is described as ‘sitting between open fields and modern housing’ with few *‘opportunities for views through the towpath hedge’*. Parts of the Site are depicted in the Conservation Area Appraisal (Figures 45-47) as including positive vistas, important trees, and important areas of open space, as shown on Figure 8.2. These include:

- A vista from Roundham Lock towards the top north-eastern part of Site between the canal and Rowell Brook;
- A vista south-west from Bridge 227 (Buller’s Bridge) towards the eastern most part of Site, above Sandy Lane, labelled as ‘important green space’;
- A vista south-west from Bridge 228 (Yarnton Lane Bridge), along Kidlington Lane, between two areas of ‘important green space’;
- A vista south from the towpath between Bridge 228 and Kidlington Green Lock, across the top field in the easternmost part of Site (below Kidlington Lane) which is also labelled as ‘important green space’;
- A vista north from the canal south of Kidlington Green Lock across fields in the easternmost part of Site (below Kidlington Lane); and
- ‘Important trees’ line the towpath along parts of the Site’s eastern border, along Kidlington Lane and the field boundary/hedgerow in the top field of the easternmost part of Site (below Kidlington Lane).

8.4.19 In accordance with the criteria in Table 8.3, this heritage asset is considered to be of high sensitivity (value).

8.4.20 The Site is only intermittently visible from Oxford Canal Conservation Area, although it does form a green backdrop through the towpath hedge and adds to key views from the conservation area. The *‘rural setting of most of the canal’* is described as a positive factor that enhances the conservation area. Therefore, the views of the Site from the Conservation Area currently make a low positive contribution to the setting of Oxford Canal Conservation Area.

### *Begbroke Conservation Area*

8.4.21 Begbroke Conservation Area, which constitutes the historic core of the village, is located 140m north-west of Site, across the A44 Woodstock Road, as shown on Figure 8.1 and 8.2. This dual carriageway now forms a physical and visual barrier between the historic core and the suburban residential development to the west. This conservation area contains nine Grade II Listed Buildings (OA 40-8), and one Grade II\*, the Church of St Michael (OA 202). The special character of Begbroke Conservation Area is associated with the *‘use of local materials in traditional styles within maturely vegetated plots...and stone walls’* (Begbroke Conservation Area Appraisal, 2008)<sup>20</sup>. It includes the unusual presence of two different by neighbouring religious orders represented by St Michael’s Church (OA 202) and St Philip’s Priory (OA 47). There are three further non-listed buildings that are considered to make a positive contribution to the character and appearance of the area (the School House,

Orchard House, and Lodge House). There is no street frontage, and no public amenities within the conservation area. Five key views were identified by the Begbroke Conservation Area Appraisal, which include views along St Michael's Lane towards the church, views to and from the conservation area and fields to the north and views in both directions along Spring Hill in the southern part of the settlement, which is framed by mature horse-chestnut trees on either side of the road. This is the entrance and exit of the conservation area. In accordance with the criteria in Table 8.3, this heritage asset is considered to be of high sensitivity (value).

- 8.4.22 Despite Begbroke Conservation Area's proximity to the Site, there is little to no ground-level intervisibility between the Site and Begbroke Conservation Area. The special character of the area is largely associated with features of the historic core of Begbroke, including the proximity of two churches, the lack of smaller residential dwellings due to historic clearance of such properties and the lack of public amenities and street frontage. Heavy tree planting along Spring Hill Road and within the gardens of St Phillip's Priory forms a 'pleasing' aspect to the Conservation Area from the east, which is bound by the A44 and the modern extension of Begbroke across it. There are no key views between Conservation Area and site, and they are separated by the busy road and, as such, the Site in its current form makes a neutral contribution to the setting of Begbroke Conservation Area.

#### Built Heritage: Listed Buildings

- 8.4.23 There is one Grade II designated Listed Building within the Site, Begbroke Hill Farmhouse, shown on Figure 8.1 and 8.2. Due to its location this building has been scoped in as key receptor. Due to its location this building has been scoped in as key receptor. Detailed analysis of the potential effect of the scheme upon the setting of individual assets was carried out as part of the research for this chapter and has not been confirmed on a case-by-case basis with the statutory consultees. No works are proposed to the farmhouse and this is illustrated in the Development Specification (Principle DP13.2) and shown in the Indicative Demolition Plan. However, the Maximum Height Parameter Plan shows that Begbroke Hill Farmhouse will be surrounded by up to 22m of height structures, and thus there is potential for changes to its rural setting. Sympathetic design of the Proposed Development, as shown in the sections 3.1: Open space and landscape character and 4.1: The Farmstead of the Strategic Design Guidelines, sets out the principles of preservation of the BSP hedge to the north of the farmhouse, creation of two green arteries connecting the Farmhouse to Rowel Brook Park, and the retainment of existing trees and gardens to the east. Further detailed assessment of the settings and impact on this Listed Building is below in paras. 8.4.28-9.
- 8.4.24 The 3km study area contains two Grade I Listed Buildings (OA 2-3), ten Grade II\* listed buildings (OA 202-211), and 199 Grade II Listed Buildings (OA 1, and 4-201). In accordance with the criteria in Table 8.3, all these buildings are considered to be of high sensitivity (value) and are shown on Figure 8.1.
- 8.4.25 The majority of Listed Buildings within the study area are Grade II buildings, concentrated in town and village groupings in the wider environs of the Site. These include:
- A cluster of Grade II Listed Buildings (OA 25-33) is located 3km south-west of Site, within the Cassington Conservation Area, which is typified by small scale, simple form buildings, the majority of which are 'modest cottages'<sup>21</sup>.



- A grouping of Grade II Listed Buildings (OA 97, 99, 101, 103, 106-108, 121-122, 128, 138-140, 147, 149, 152-3, 158 and 178) is located 3km south of Site, in Wolvercote which form part of the Wolvercote with Godstow Conservation Area and range from 17<sup>th</sup> and 18<sup>th</sup>-century vernacular cottages with irregular façades to more ordered Georgian and Victorian architectural styles<sup>22</sup>.
- One Grade II Listed Buildings (OA 201) lies within Islip Conservation Area, at 2.8km to the east of the Site.
- A cluster of Grade II Listed Buildings (OA 4-21) lies within the Bladon Conservation Area, 2.2km north-west of Site, and largely consist of simple, vernacular buildings which represent the 18<sup>th</sup> and 19<sup>th</sup>-century development of the village<sup>23</sup>.
- A small grouping of Listed Buildings (Grade II, OA 171, 173, 184, 187, 189, Grade II\* OA 209) is located at Hampton Poyle, a village just under 2km north-east of Site form part of the Hampton Poyle Conservation Area and include farmhouses, outbuildings, manor houses and the 13<sup>th</sup>-century Grade I listed Church of St Mary (OA 209).
- A grouping of listed structures (Grade II, OA 71-75, 77-81, 86, 88-90, 95, 110-112, 118, Grade II\* OA 204-205) is located around Thrupp, 1.4km north of Site. This area forms part of the Hampton Gay, Shipton-on-Cherwell, and Thrupp Conservation Area. These buildings cover three distinct areas and are generally represented vernacular, small-scale structures. The Grade II\* structures (OA 204-205) are the medieval standing crosses described above, which are also listed as Scheduled Monuments (OA 213 and 215).

8.4.26 There are no shared views or historical connection linking the Site with these buildings, as assessed by the walkover survey informed by the ZTV. Accordingly, all these assets have been scoped out of this assessment and will not be considered further. Closer to the Site, the following clusters of Listed Buildings are present:

- A large number of Listed Buildings are included within Kidlington, a major village located directly east of the Site. Some of these buildings lie within the five conservation areas that cover parts of the village. Most of the Listed Buildings are located within High Street and Church Street Conservation Areas (Grade I, OA 3, Grade II\* 207-8, Grade II, 124-7, 129-36, 142-6, 148, 150-1, 154-6, 169-70, 172, 174-7, 179-83, 185-6), whilst a few Grade II buildings are within the Rookery Conservation Area (OA 105, 109, 113, 115, 117, 119) and Crown Road Conservation Area (OA 83). Modern development separates the Site from the Listed Buildings in Kidlington. There are no shared views or historical connection linking the Site with the majority of these buildings. Accordingly, most of these buildings have been scoped out of this assessment and will not be considered further. A single exception to this, is the Grade I listed Church of St Mary in Kidlington, which is located around 1.6km north-east of the Site. Due to its height, the church spire is partially visible from the Site and has been scoped in as a key receptor and discussed in more detail below.
- The village of Begbroke is located at the Site's north-western corner. The historic core of the village and associated conservation area lie across Woodstock Road and contain a number of Grade II Listed Buildings (OA 40-48) and the 12<sup>th</sup>-century Grade II\* listed St Michael's Church (OA 202). Given the proximity of these buildings to the Site, those that lie within Begbroke Conservation Area are scoped into the assessment, i.e., Grade II Church of St Philip (OA 47) and St Philip's Priory (OA 48), the Old Rectory (OA 43) and the Old Rectory coach house and stable (OA 44). Buildings further west are shielded from the Site by those in Begbroke Conservation



Area, and consequently Hall Farm and its associated outbuildings (OA 288-290) have been scoped out.

- The Oxford Canal Conservation Area includes nine Grade II Listed Buildings (OA 76, 87, 98, 100, 104, 114, 116, 120, 123). All of these had been scoped out from this assessment due to the fact that do not share inter visibility with the Site or any historical connections except for four Grade II structures that are Site adjacent. These are, from north to south along the canal: Roundham Lock (OA 87); Bridge 227 (OA 98), known as Bullar's Bridge; Bridge 228 (OA 116), known as Yarnton Lane Bridge; Kidlington Green Lock (OA 123). These buildings have been scoped into this assessment and are discussed in more detail below.
- There are three Grade II Listed Buildings in proximity to the Site which are located on the east side of the A44 Woodstock Road: Tudor Cottage (OA 60); Rose Cottage and attached cottage (OA 82); and Grapes Inn (OA 84, now the Turnpike Inn) which is further south. Views between the Grapes Inn and the Site are interrupted by planting, other green spaces, and a railway line. Due to proximity, and the potential for changes to their setting, these buildings have all been scoped in as key receptors.
- Other Listed Buildings within the study area which do not fall into the groupings described above have also been scoped out due to their distance from the Site. Intervening planting, development, and infrastructure between these buildings and the Site that makes a visual connection impossible or unlikely at ground level. Return views were considered during the Site walkover and most structures that could be observed from Site were modern developments to the east and north of Site.

8.4.27 A list of the scoped-in heritage assets, informed by the site visit, is provided in the heritage assessment (Appendix 8.2).

#### *Grade II listed Begbroke Hill Farmhouse (OA 1)*

8.4.28 The Grade II listed Begbroke Hill Farmhouse is a two-storey limestone building. This farmhouse was built c 1604 for Humphrey Fitzherbert, the owner of Begbroke manor at the time. It was possibly first used as a new manor house and later transformed into a farmhouse (Baggs *et al.* 1990b).<sup>24</sup> The tarmacked roadway that connects the farmhouse to Sandy Lane follows the line of what would have been the historic approach to the farmhouse, which is indicated by the 1811 Woodstock Ordnance Survey Drawing (Appendix 8.1, Fig.11), although modern access to the complex is now along Begbroke Hill Road to the west which connects to the A44 Woodstock Road. A low stone wall delineates the modern extent of the gardens around the farmhouse. This building is considered to be of national heritage significance for its architectural and historic interests, which are largely derived from its age, fabric, and its historic associations to the prominent local family in the 17<sup>th</sup> and 18<sup>th</sup> centuries. In accordance with the criteria in Table 8.3, Begbroke Hill Farmhouse is considered to be of high sensitivity (value).

8.4.29 Begbroke Hill Farmhouse is situated centrally within the Site and is now part of a complex of buildings associated with Begbroke Science Park, as shown on Figure 8.2 (see Appendix 8.2, Plates 1-3). This complex includes buildings associated with the historic farmhouse as well as more substantial modern development. The immediate setting of the farmhouse is defined by the small garden to the south and east of the building, and other stone buildings of various dates located to the west of the farmhouse, which likely formed part of the original farmstead. These farm buildings and gardens make a high positive contribution to its setting, allowing it to be understood as a farmhouse. The roadway to the south also makes a positive contribution to the setting of the farmhouse, allowing its historic approach to be

appreciated. To the north of the farmhouse are several large buildings that form the modern extension of the Begbroke Science Park. Views from the farmhouse over the agricultural land to the south (within the Site) allow the farm to be appreciated in its original rural context as an agricultural building. This building was originally a manor house but underwent a transformation into a farmhouse, and it is currently being used as offices. Its importance lies in its historical and architectural significance, with the passage of time and various uses over the centuries leaving their mark on the historical setting. The Site incorporates land to the south of the farmhouse, and long-range views of Begbroke Hill Farmhouse are limited by planting around the perimeter of much of the science park. As a result, the Site makes a low positive contribution to the setting and significance of Begbroke Hill Farmhouse (see Appendix 8.2, plates 1-4).

#### *Grade I listed St Mary, Church in Kidlington (OA 3)*

- 8.4.30 St Mary is a Grade I listed church, which was probably built in the 12<sup>th</sup> century and remodelled into its current cruciform plan during the mid-13<sup>th</sup> century. The aisles and the north-east and south-east chapels had been added by Abbot Thomas of Osney Abbey in 1330, and the clerestory dates to the 15<sup>th</sup> century. Other remodelling activity is attested until the 19<sup>th</sup> century. Its walls are built in squared and coursed limestone and coursed limestone rubble, while the south-east chapel, transept, chancel, and porch roofs are made of stone-coped, gabled stone slate. The window in this wall between the doorway and the pulpit is of the decorated period, around 1330, although the stonework of the tracery seems to have been renewed in Victorian times when the stained glass was added. The window was copied from Sir Joshua Reynold's famous window in New College Chapel, and shows Faith, Hope and Charity. On the east and west walls of the north transept are 15<sup>th</sup>-century painted fragments of a narrative scene including the Virgin and the Child. The church contains memorials to Reverend Joseph Smith and his wife, May (Anne Hargreaves (d.1762) and John Philips (d.1719). The Smiths were chiefs of the manor of Kidlington in the 18<sup>th</sup> century. Its distinctive 50m, 15<sup>th</sup>-century spire is colloquially known as 'Our Lady's Needle'. Because of its height, the church is a highly visible monument and a well-known visual landmark in the landscape around Kidlington.
- 8.4.31 St Mary has a high level of architectural and historic interest, which is preserved within its built form, surviving architectural features, 12<sup>th</sup>–19<sup>th</sup>-century historic fabrics and its historic connection to prominent local families. As a Grade I Listed Building, the Church of St Mary is considered to be of more than special interest. In accordance with the criteria in Table 8.3, St Mary's Church is considered to be of high sensitivity (value).
- 8.4.32 The Site is located about 1.6km south west of St Mary's Church, as shown on Figure 8.2. The church is situated in an enclosed churchyard in the north-eastern extremity of Kidlington, surrounded by vernacular cottages and alms houses. Routes converge from all directions at the church, and it is the dominant feature in this area. Key views include views of the approach to the church along Church Street, views towards the church spire from water meadows to the east and south-east, and the *'expansive vistas out of the church yard west, north and east over the flat landscape'* as stated in the Kidlington Conservation Areas Appraisal.<sup>25</sup> The spire is described as a landmark *'particularly from across the Cherwell Valley'*, largely east of the church, and the Site. Although the church spire is visible from parts of the Site beyond the later residential development in Kidlington, it is not a planned view, nor one from within the settlement that the church is a part of. Views across the Site towards the spire are not defined as key views in the Kidlington Conservation Areas Appraisal. Nevertheless, the church's spire stands out prominently in the surrounding landscape of Kidlington when viewed from a distance, making it an easily recognisable and

significant historical landmark. Thus, the current views of the Site in its current form make a low positive contribution to the setting of the church, primarily due to its recognition as a landmark. There is no ground-level visibility from the church looking towards the Site.

*Grade II\* St Michael's Church (OA 202)*

- 8.4.33 St Michael's Church is a Grade II\* listed church standing in Begbroke Conservation Area, as shown on Figure 8.2. It is constructed with coursed limestone rubble with ashlar dressings, which is notable for being largely of 12<sup>th</sup>-century date, with some 19<sup>th</sup>-century restorations.
- 8.4.34 The view along St Michael's Lane towards the church has been identified as a key view in Begbroke Conservation Area Appraisal (2008, 17)<sup>26</sup> due to the preservation of the rural character of the lane and its framing of the church. Its immediate setting, along with its architectural and historic interests are what make this heritage asset significant. St Michael's Church has a high level of architectural and historic interest which is preserved within its built form, surviving architectural features, 12<sup>th</sup>–19<sup>th</sup>-century fabrics and its historic connection to prominent local people, including the Fitzherberts and the artist, Thomas Willement. As a Grade II\* Listed Building, St Michael's is considered to be of more than special interest. In accordance with the criteria in Table 8.3, it is considered to be of high sensitivity (value).
- 8.4.35 The Site is located 300m to the south east of the church, beyond the historic village of Begbroke, the modern development in Begbroke, and the A44. The Site has no visual or particular historic connection with the church and thus makes a neutral contribution to the church's setting.

*Grade II listed Church of St Philip (OA 47), St Philip's Priory (OA 48), the Old Rectory (OA 43), Old Rectory coach house and stable (OA 44).*

- 8.4.36 These Grade II Listed Buildings are grouped together because of their historical connections. They all lie within the Begbroke Conservation Area and contribute to its character (see above), and their position is located on Figure 8.2. St Philip's Priory was the former manor house built in coursed limestone rubble in the mid-17<sup>th</sup> century, now used as Servite priory. It was refronted and extended to rear c. 1730 for Benjamin Swete, and c. 1896-9 a coursed limestone extension to the left was added by Sir Leonard Stokes. The house was bought by Charles Robertson in 1896 and given to Servites in same year, as thanksgiving for his conversion to the Roman Catholic Church by a Servite Father in 1891. The Church of St Philip was built by Sir Leonard Stokes in the 19<sup>th</sup> century. The Old Rectory was built in 1723 for the rector of Begbroke and the vicar of Yarnton and was remodelled during the 19<sup>th</sup> century. During the same century, the coach house and stable were added to this complex.
- 8.4.37 The importance of this complex of religious buildings is determined by the level of architectural and historic interest, which is preserved within their built form, surviving architectural features, 17<sup>th</sup>–19<sup>th</sup>-century historic fabrics and its historic connection to prominent local families, including the Robertsons, and the artist Sir Leonard Stokes. It consists also of a testimony of the shift of function of the former manorial house, and the importance of the Servite Order in the area. As Grade II Listed Buildings, these assets are considered to be of special interest. In accordance with the criteria in Table 8.3, they are considered to be of high sensitivity (value).

- 8.4.38 The Site is situated c. 250m to the south-east of these heritage assets. They do not share intervisibility with the Site, which in its current form is considered to make a neutral contribution to the setting of the Listed Buildings within Begbroke Conservation Area.

*Grade II listed Roundham Lock (OA 87), Bridge 227 (OA 98), Bridge 228 (OA 116), Kidlington Green Lock (OA 123)*

- 8.4.39 These Grade II Listed Buildings are grouped together because of their historical and location positions, and their position is shown on Figure 8.2. They include two locks and two bridges located within the Oxford Canal Conservation Area and contribute to the historical character of the conservation area (see above). From north to south along the canal there are: Roundham Lock, a mid-19<sup>th</sup>-century lock with retaining walls of English bond brick with limestone ashlar coping. It lies between modern development to the east and a green open area to the west; Bridge 227, also known as Bullar's Bridge. Early 19<sup>th</sup> century, it is built with coursed limestone rubble with squared stone to piers and coping. It is characterised by a stilted and keyed segmental arch with ashlar voussoirs. It lies between modern development to the east and a green open area to the west; Bridge 228, also known as Yarnton Lane Bridge. Early 19<sup>th</sup> century, its masonry is similar to Bridge 227 except for some red brick mid-19<sup>th</sup> century repairs. It lies at the intersection of the canal with Yarnton Lane; and last but not least, Kidlington Green Lock, a mid-19<sup>th</sup>-century lock with retaining walls of English bond brick with limestone ashlar coping. It lies between modern development to the east and a green open area to the west.
- 8.4.40 These structures are described in the Oxford Canal Conservation Area Appraisal as *'the interface between the canal and other forms of transport as well as the historic divisions of earlier field systems'*. The significance of these structures derives from their built form and surviving historic fabric, as well as their connection with surrounding historical transportation routes. The Oxford Canal and its associated towpath form their immediate setting and it is from this area that the historic and architectural interests of the canal structures can be best appreciated. These structures are significant to the character of the Conservation Area and make a high positive contribution to its setting. As Grade II Listed Buildings, these assets are considered to be of special interest. In accordance with the criteria in Table 8.3, they are considered to be of high sensitivity (value).
- 8.4.41 The Site, which borders these monuments and the Conservation Area within which they sit, currently makes a low positive contribution to the setting of the listed structures by forming a green backdrop through the towpath hedge. This is similar to the landscape as it would have been during the construction of the canal.

*Grade II listed Tudor Cottage (OA 60)*

- 8.4.42 The Grade II Tudor Cottage is a 17<sup>th</sup>-century cottage located on the corner of Gravel Pits Lane, as shown on Figure 8.1 and 8.2, 90m to the west of the Site. The property lies across Gravel Pits Lane from Ivy House (OA 382), an unlisted building described below, and its garden wall. Modern development lies to the north of the Tudor Cottage. Tudor Cottage is built of colour-washed coursed limestone rubble with a gabled thatched roof. Its Historic England list description notes its Sun Alliance fire insurance plaque and interior features, such as an open fire and chamfered beam.
- 8.4.43 The reasons for its listing are due to its historic and architectural interest. The immediate setting of Tudor Cottage is its enclosed garden and Gravel Pits Lane, which extends next to and beyond the property. The historic and architectural interests of the building can be best appreciated from these areas, which make a high positive contribution to its setting.

The relationship between Ivy House and Tudor Cottage allows the historic development of the settlement along Gravel Pits lane to be understood, this making a low positive contribution to the setting of Tudor Cottage. As a Grade II Listed Building Tudor Cottage is considered to be of special interest. In accordance with the criteria in Table 8.3, it is considered to be of high sensitivity (value).

- 8.4.44 Tudor Cottage was located 90m to the west of the Site, and for this reason scoped in by the Heritage Assessment (Appendix 8.2). Tudor Cottage is situated on the corner of Woodstock Road and Gravel Pits Lane. Its primary relationship was with the road rather than the surrounding rural landscape. Accordingly, the Site is considered to make a neutral contribution to the setting of this heritage asset.

*Grade II listed Rose Cottage and attached Cottage (OA 82)*

- 8.4.45 Rose Cottage comprises two cottages dating to the late 17<sup>th</sup> and early 18<sup>th</sup> centuries. These two cottages are located further east from Tudor Cottage along Woodstock Road. These Grade II listed cottages have mid-19<sup>th</sup>-century two-storey bays, a gabled thatch roof, and are built in roughcast over limestone rubble. The reasons for its listing are due to the historic and architectural interests of the cottages. Their immediate settings are their enclosed garden and Woodstock Road, which extends next to and beyond the property. As a Grade II Listed Building, Rose Cottage and its attached cottage are considered to be of special interest. In accordance with the criteria in Table 8.3, it is of high sensitivity (value).

- 8.4.46 These buildings are located close to the Site, 400m to the south. Rose Cottage and the attached cottage are separated from the Site by an area of tree and scrub as well as the Littlemarsh Playing Field and the railway line, which interrupt views between the two. The Site in its current form does not share a visual or historic connection with the Listed Building and therefore makes a neutral contribution to the setting of this heritage asset.

*Grade II listed Grapes Inn, now the Turnpike Inn (OA 84)*

- 8.4.47 Grapes Inn, now the Turnpike Inn, is further south along Woodstock Road. This Grade II listed inn was a former house dating to 17<sup>th</sup> or 18<sup>th</sup> centuries, with later alterations. It is built in coursed limestone rubble, roughcast to the first floor, and it has a gabled artificial stone slate roof. The Historic England list description notes its interior chamfered beams and central open fireplace and that once was described as the ‘finest pub’ in Oxfordshire by John Betjeman. The reasons for its listing are due to these historic and architectural interests. Its immediate settings consist of the A44, faced by the building, and its garden, the rear of which is bordered by trees and shrubs. However, its function as an inn suggests that its historical setting is associated with the road rather than the rural landscape. As a Grade II Listed Building, Grapes Inn is considered to be of special interest and, in accordance with the criteria in Table 8.3, it is of high sensitivity (value).

- 8.4.48 This building is located near to the Site, approximately 500m to the south. Grapes Inn is separated from the Site by planting, other green spaces, and a railway line. Thus, views between the Site and the Listed Building are interrupted by planting, other green spaces, and a railway line. The Site in its current form does not share a visual or historic connection with the Listed Building and therefore makes a neutral contribution to the setting of this heritage asset.



### Non-designated built heritage assets

8.4.49 A small number of non-designated built heritage assets have been identified within the Site and in its proximity which have the potential to receive affects to their setting from the Proposed Development, and their location is shown on Figure 8.2. As undesignated buildings, these structures are considered to be of local interest; and, in accordance with the criteria in Table 8.3, they are of low sensitivity (value). These non-designated assets have been scoped into this assessment and comprise:

- Two buildings associated with the railway crossings close to Site. These include ‘Crossing Cottage’ (OA 383), a small dwelling located at the Sandy Lane railway crossing, which may be 19<sup>th</sup> century in date, and ‘Yarnton Crossing Cottage’ (OA 384), a similar dwelling located on Green Lane. Both of these buildings are present as small buildings on 19<sup>th</sup>-century maps, appearing with the introduction of the railway. These buildings are of local significance as a result of their historic date, surviving historic fabric and association with the railway, and accordingly are considered of low sensitivity (value). Their immediate setting in both cases is the railway, which is adjacent to both buildings. The Site forms part of the wider setting of both of these buildings (although more so for Crossing Cottage to the east of the Site). Both of these non-designated assets are isolated from the surrounding settlements and, historically, were primarily associated with the railway and key road-crossing points. The historic isolation from near-by settlement allows their relationship with the railway to be appreciated, and thus makes a low positive contribution to their setting. The agricultural land within the Site helps to preserve this separation and sense of isolation. As such, the Site in its current form makes a low positive contribution to these assets.
- Ivy House (OA 382) is located 90m to the west of the Site. It consists of a two-storey stone-built house on the corner of Gravel Pits Lane and Woodstock Road, in 1842 for Thomas Robinson, a Mayor of Oxford, and was originally L-shaped. The west wing was removed in the 1930s ahead of the widening of the road (Baggs *et al.* 1990b)<sup>27</sup>. This building is of some local heritage significance due to its 19<sup>th</sup>-century origins (and surviving 19<sup>th</sup>-century fabric) and historic association with the Mayor of Oxford. Accordingly, it is considered of low sensitivity (value). The immediate setting of this building is defined by the small hedge and stone-wall-lined rear garden in which it is set and from which it can be best appreciated, since it now ostensibly fronts the busy A44 (although the houses original frontage appears to be its south-east facing elevation). Open green space east of the garden contributes to the rural and isolated feel of the property. The views of the agricultural land within the Site from the cottage makes a low positive contribution to its setting and significance, allowing it to be appreciated within a rural setting. The Site in its current form makes a low positive contribution to this asset.
- A pair of semi-detached houses on the southern side of Sandy Lane (OA 381), dated to 1883 from a plaque on their northern elevation are noted on historic maps from 1900 onwards as a pair of houses in the corner of a field that later became an extraction site. These buildings are of local historic significance as a late 19<sup>th</sup>-century domestic dwelling in a partially rural, partially industrial setting, and are accordingly, considered to be of low sensitivity (value). Although the building currently exists in isolation in the largely agricultural nature of the Site, given its domestic nature, and position on a busy road with a history of adjacent gravel extraction, the Site in its current form is assessed to make a neutral contribution to the buildings setting and heritage significance.



- Parker's Farm (OA 380), located just east of the Begbroke Science Park, currently consists of several modern agricultural buildings and some ruined sections of earlier buildings. The farmstead is present on historic maps from 1844 onwards. It was expanded from two to three buildings in the early 20<sup>th</sup> century and appears to have remained much the same until the large modern barns were constructed sometime after the 1950s. The 19<sup>th</sup>-century farm buildings have been partially demolished and survive as ruins. These remains have some limited historic interest, are of local significance, and are considered to be of low sensitivity (value). The 1950s buildings are not considered to be of historic environment interest and are considered to be of negligible sensitivity (value). The agricultural land of the Site surrounding the farmstead makes a low positive contribution to the setting of the 19<sup>th</sup>-century ruins by preserving their agricultural setting. The significance of this contribution is lessened by the limited survival of the 19<sup>th</sup>-century farm buildings.

#### *Historic Landscape Character*

- 8.4.50 The Oxfordshire Historic Landscape Characterisation (see Appendix 8.1, section 8.12.1, and Figure 8; Tompkins 2017)<sup>28</sup> records the Site as predominantly 'reorganised enclosures' and 'prairie/amalgamated enclosure'. The historical landscape character is shown on Figure 8.6. There are two areas of orchard and horticulture/allotment. Begbroke Science Park is characterised as commercial–business park. The reorganised enclosure is the most common landscape in Oxfordshire as it covers 27.3% of the enclosed lands within the county and is considered to be of low sensitivity (value). Prairie/amalgamated enclosure is also a common landscape type in Oxfordshire, usually indicating the 20<sup>th</sup>-century or post-war aggregation of fields to aid industrialisation and it covers 20.3% of the territory and is thus considered to be of low sensitivity (value).

#### *Historic Hedgerows*

- 8.4.51 Some of the field boundaries within the Site are present on early maps of the area (Appendix 8.1, Figure 14.5), and a number of hedgerows shown on Figure 8.6 may class as historically important hedgerows according to the Hedgerow Regulations (1997)<sup>29</sup>. Of particular note are hedgerows which have been present for more than 30 years and mark parts of historic parish boundaries that existed before 1850 and are shown on Figure 8.6. Further cross-reference with Chapter 13: Ecology would enable the ecological value of these identified historic hedgerows to be demonstrated.
- 8.4.52 The Site lies predominantly between the parishes of Begbroke and Yarnton and retains some of these parish boundaries, indicated in Figure 8.6. This includes stretches of the easternmost portion of Site along the Oxford Canal, and a short section north of Sandy Lane which originally formed the boundary for a detached portion of Begbroke (OA 389), as well as a short section to the south of Site (OA 388) and along the present day Begbroke Hill access road (OA 386). The northern border of the Site, along much of Rowel Brook is also part of the historic Begbroke boundary (OA 387). As such, hedgerows in these areas are considered to be historically important and of medium sensitivity (value) and any alterations or removal will be an issue addressed during planning process.
- 8.4.53 Other hedgerows across the Site may appear on early maps and are of some historical interest but are unlikely to be classed as historically important hedgerows according to these regulations. Accordingly, these are considered of low sensitivity (value).

## Future Baseline

- 8.4.54 There are three consented schemes which are presumed to be complete by 2033 and defined as part of the Future Baseline scenario, as follows:
- Begbroke Science Park (ref: 18/00803/OUT, as amended), situated within the Site;
  - Begbroke Science Park (ref: 21/03195/F, as amended), situated within the Site; and
  - Land East of Woodstock, Oxford Road (ref: 18/02574/RES), south of the Site;
- 8.4.55 Given the intervening topography and development that separates the Oxford Road scheme from the Site, only the two committed developments on the Begbroke Science Park within the Site are considered to influence the future baseline of the Site.
- 8.4.56 If these two developments come forward, they will affect the setting of the Grade II Listed Building of Begbroke Hill Farmhouse by further reducing the rural character of the Site (from the existing baseline). The rural character of the Farmhouse, which had been already impinged by the Science Park, will be further diminished. Consequently, these additional developments will continue to erode the significance of its settings, resulting in an indirect impact.

## Summary of Receptors and Sensitivity

- 8.4.57 A summary of the potential sensitive Cultural Heritage Resource receptors scoped into the assessment and their sensitivity is provided in Table 8.6. The receptors have been grouped following the receptor types as identified in Table 8.3.

Table 8.6: Summary of Receptor Sensitivity

Receptor Type	Receptor	Sensitivity (Value)
<i>Existing</i>		
Historical Landscapes: Conservation Areas	Begbroke Conservation Area; Oxford Canal Conservation Area	High
Historic Buildings: Grade I Listed Buildings	St Mary's Church	High
Historic Buildings: Grade II* Listed Buildings	St Michael's Church	High
Historic Buildings: Grade II Listed Buildings	Begbroke Hill Farmhouse (within the Site); Church of St Philip; St Philip's Priory; the Old Rectory; Old Rectory coach house and stable; Roundham Lock; Bridge 227; Bridge 228; Kidlington Green Lock; Tudor Cottage; Rose Cottage and attached cottage; Grapes Inn, now the Turnpike Inn.	High
Archaeological assets: Scheduled Monument	Bladon Camp	High
Archaeological assets: heritage assets that	Mid to Late Bronze Age barrows and possibly related penannular ring ditch (Area A), two	Medium

Receptor Type	Receptor	Sensitivity (Value)
contribute to regional research objectives	areas of Late Bronze Age pits (Areas A and B), and two Bronze Age ring-ditches (Area A); Iron Age pits, ditches, and postholes (Area A); a possible Anglo-Saxon hall-type building (Area A); track/drove way system to the north of Sandy Lane (Area B); possibly Iron Age square enclosure (Area B); complex farmstead B; and complex farmstead C.	
Historic Landscapes: Undesignated landscape that can be shown to be of regional importance as a result of their historic associations	Historically important hedgerows marking historic parish boundaries (OA 386-9).	Medium
Historic Buildings: 'locally' listed buildings	Ivy House; 'Crossing Cottage'; 'Yarnton Crossing Cottage'; Sandy Lane cottages.	Low
Historic Landscapes: historic landscape with importance to local interest groups	Other hedgerows across the Site.	Low
Historic Landscapes: Robust undesignated historic landscape	Undesignated Heritage Landscape Character typologies within the Site.	Low
Archaeological assets: Assets with no surviving archaeological interest	Leaf-shaped and hollow-based arrowheads (OA 268, 273-4); a substantial lithic scatter (OA 275 and 277) including 789 artefacts; a Neolithic pottery sherd (OA 278), Medieval and post-medieval pottery and other finds (OA 335, 339); an anti-aircraft gun site (OA 375); an Iron Age huts, ditches, and pits (OA 279) with broadly dated prehistoric findspots and scatters (OA 266-7); Romano-British settlement (OA 280); Roman pottery (OA 281).	Negligible (already removed)
Historic Buildings: Buildings of no architectural or historical note	Parker's Farm and associated 1950's buildings.	Negligible
Archaeological assets: Assets with very little surviving archaeological interest	An undated enclosure, a linear feature, and a pit (OA 370).	Unknown

## 8.5 Embedded Mitigation (Scheme Design and Management)

### Construction

- 8.5.1 Measures will be undertaken during the construction phase in order to minimise disruption and manage the impacts of the Proposed Development, with the implementation of a Construction Environmental Management Plan (CEMP), which will be secured by planning condition. An Outline CEMP is provided as Appendix 6.1 of this ES. Detailed CEMP(s) will be prepared prior to the commencement of the construction phases and will set out measures to protect the environment during the construction phase of the Proposed Development, to be secured by a suitably worded planning condition and agreed with CDC. The CEMPs will identify key heritage assets and provide details on the procedures and methods to be followed to minimise potential adverse impacts of construction on the Cultural Heritage Resource.
- 8.5.2 The following measures had been included for the protection of heritage in the Outline CEMP:
- Historic hedgerows outside the Development Zones are to be protected from accidental damage during construction process;
  - Location of construction compounds and access roads outside the development footprint to be archaeologically assessed prior to location, in order to prevent accidental damage to archaeological deposits; and
  - Noise and dust caused by construction processes are to be monitored and reduced close to the Grade II Listed Tudor Cottage and Grade II Listed Begbroke Hill Farm, in order to reduce short term temporary effect upon the Listed Buildings.

### Completed Development

- 8.5.3 The Proposed Development, as described in Chapter 5: Description of Development, includes a number of inherent design mitigation measures which are considered within this chapter. These are defined in the Parameter Plans, Development Specification, and Strategic Design Guide.
- 8.5.4 The following embedded design measures represent primary mitigation of relevant to the cultural heritage assessment:
- Implementation of building-height controls to minimise the visual impact of the scheme upon surrounding heritage assets, principally through the Maximum Building Heights Parameter Plan and Development Specification. The majority of tall development within the Proposed Development will range between four and five storeys around the Begbroke Science Park (with a maximum ridge height of 22m from ground level). This mitigation will reduce setting impacts on heritage assets, with a special consideration for the preservation of long-range views of the spire of the Grade I listed St Mary's Church within the Site.
  - The Development Specification identifies protective measures for development in the vicinity of the Grade II Listed Begbroke Hill Farmhouse. In particular, Development Area Briefs and RMAs will be prepared with particular regard for the enhancement and preservation of the setting of Begbroke Hill Farmhouse.

- Introduction of a green space buffer in the form of a retained and enhanced habitat on three sides of the Site, except for that adjacent to Yarnton. As specified on the Green Infrastructure Parameter Plan and section 3.2 of SDG, green arteries and retained and enhanced vegetation will be partly retained around the following heritage assets: Sandy Lane Cottages, Begbroke Hill Farmhouse, and Crossing Cottage. This will minimise potential impacts of the Proposed Development upon these known heritage assets within the Site and will further reduce the visual impact of the Proposed Development upon heritage assets to the east and north of the Site.
- As specified on the Green Infrastructure Parameter Plan and section 3.2 of SDG, the creation of a nature reserve in the east of the Site, which would screen Kidlington and Oxford Canal with the related designated heritage assets, and the retention of the section of the historically important hedgerow (OA 389), which partly runs along the eastern Site boundary.
- Retention of existing hedgerows (OA 387) and part of other two (OA 388-9) indicated as retained in Green Infrastructure Parameter Plans and section 3.2 of SDG as landscape buffers.
- The creation of hedgerows and considerable planting along the boundaries of the Proposed Development as shown on Green Infrastructure Parameter Plan and section 3.2 of SDG.
- As specified on the Green Infrastructure Parameter Plan and section 3.5 of SDG, the Site boundaries in the environs of Tudor House and Ivy House include a setback zone between these assets and the Proposed Development.
- As specified on the Green Infrastructure Parameter Plan and section 3.2 of SDG, the retention in its current form of the green space to the west of the Oxford Canal Conservation Area and the Grade II listed canal structures within it, aiming to maintain and respect important vistas and the historically rural setting of this Conservation Area, will not be directly affected by the Proposed Development. This area is indicated to be divided into 'Railway Marshes' and 'Canalside Park'.

## 8.6 Assessment of Effects - Construction Stage

- 8.6.1 This section provides a discussion of the impacts and likely significant effects resulting from the construction phase of the Proposed Development. The effects during construction are anticipated to be of short- or medium-term duration (temporary) unless otherwise stated. Impacts are only considered in detail where there is a reasonable likelihood of a significant effect on an identified receptor.
- 8.6.2 The assessment has assumed a notional 'likely-worst case' scenario with respect to the envisaged construction methods, location (proximity to sensitivity receptors) and timing as outlined in Chapter 6: Construction. General commentary on the construction programme and method is provided in Chapter 6: Construction.
- 8.6.3 The effects of the construction and operational phase on each receptor of the Cultural Heritage Resource will be identified accordingly to the degrees of change of the identified receptor due to the construction activities' worst-case scenarios. This magnitude of impact has been assessed in accordance with the criteria described in Table 8.4. The significance effects are the product of the value of the identified receptor and the magnitude and duration of the impact, in this case of eight years (temporary). This relative significance has been assessed in accordance with Table 8.5.

## Archaeology

- 8.6.4 The Proposed Development will not affect any designated archaeological assets, such as Scheduled Monuments, as there are none within the Site.
- 8.6.5 The Site contains several non-designated archaeological assets and has the potential to contain further previously unidentified remains. These assets are likely to be affected by ground works and excavations carried out as part of the Proposed Development including:
- The creation of the substructure of buildings, including piling, foundations, and the installation of below ground services;
  - Hard landscaping; and
  - Excavation and creation of new roads, drainage, and scheme infrastructure.
- 8.6.6 The construction activities will involve significant ground works including the excavation of foundation trenches and piling and hard landscaping works as required. The depth and location of groundworks within the Site will be determined during the detailed design phases, but any of these activities could potentially have a direct major adverse impact upon archaeological assets within the Site.
- 8.6.7 The Archaeological DBA and trial trenching evaluation has indicated that the Site has the potential to contain a number of archaeological deposits or concentration of deposits including a possible Mid to Late Bronze Age barrows and possibly related penannular ring ditch (Area A), two areas of Late Bronze Age pits (Areas A and B), and two Bronze Age ring-ditches (Area A); Iron Age pits, ditches, and postholes (Area A); a possible Anglo-Saxon hall-type building (Area A); track/drove way system to the north of Sandy Lane (Area B); possibly Iron Age square enclosure (Area B); complex farmstead B; and complex farmstead C. These are shown on Figure 8.5.
- 8.6.8 Ground works associated with changes associated with construction could potentially truncate or remove any remaining archaeological features, resulting in change to most of all key archaeological materials, such that the resource is totally altered. The significance of the Developable Zone archaeological assets had been assessed (see Appendix 8.4), and these assets through have been assessed through a programme of field evaluation and subsequent analysis and research undertaken on the Site. Evaluation of the developable area is complete; evaluation of the floodplain zone is still to be carried out and the results of this survey will need to be considered in due course. The works carried out in the developable area and geophysical survey carried out in the floodplain suggest that the Site contains archaeological deposits of sensitivity ranging from negligible to medium. For the purposes of this survey, the impact upon the deposits have been categorised based on worst case scenario, deposits of medium sensitivity. As laid out in Table 8.4, the magnitude of the impact will be major adverse on the medium sensitivity receptor. The significance of potential effect is considered to be large adverse. Although the results of the floodplain zone are not available as yet (see Appendix 8.6) and will be the subject of an ES Addendum, there is no evidence for finding any archaeological remain more significant than medium sensitivity.
- 8.6.9 Due to intervening topography, distance, and further settlement the majority of construction phase activities carried out within the Site will not to be visible from Bladon Camp, although it is possible that cranes or similar tall temporary structures may be visible. Accordingly,



construction of the Proposed Development will result in a temporary slight adverse significance.

## Built Heritage

### *On-Site Receptors*

- 8.6.10 The Site contain one high sensitivity designated historic building, listed Grade II: Begbroke Hill Farmhouse. This asset will be retained and will not be directly affected by the construction phase of the Proposed Development.
- 8.6.11 However, the setting of the Grade II listed Begbroke Hill Farmhouse may be indirectly affected by the following construction phase activities:
- Site clearance and loss of agricultural land, woodland, and hedgerows;
  - Potential removal of up to six modern buildings in the Begbroke Science Park located in the immediate proximity of the asset;
  - Introduction of new planting within the green corridors and open spaces into the setting of built heritage asset;
  - Introduction of additional noise and lighting associated with construction plant, temporary vision of cranes, site huts and vehicle movement within the Site; and
  - The phased introduction of built structures in the setting of built heritage assets that will develop during construction.
- 8.6.12 During construction, the agricultural land within the Site will be progressively stripped back and site compounds and access roads will be constructed to facilitate construction. The construction phase activities will also introduce additional noise and lighting (associated with plant movement and construction) into the already impinged agricultural setting of the designated building. The loss of agricultural land within the Site and the increase in lighting and construction noise will change the rural setting of the historic Begbroke Hill Farmhouse although this has already been affected by the presence of the Science Park and will be further affected by the committed developments (see para. 8.4.53). Therefore, with reference to the matrix at Table 8.5, the effects at Begbroke Hill Farmhouse will be temporary and of slight to moderate adverse significance.
- 8.6.13 Parker's Farm and associated buildings, which are an asset of negligible sensitivity may be possibly demolished, as specified in the Indicative Demolition Plan. In case of removal of this asset, it will result in a change of the built heritage, and the resource will be significantly altered. With reference to Table 8.4, the magnitude of the impact will be permanent, major, and adverse on the negligible sensitivity receptor. The effect on the properties will therefore be of permanent slight adverse significance.
- 8.6.14 The Site is in proximity of two low significance buildings, comprising the semi-detached 19<sup>th</sup>-century dwellings on Sandy Lane. Although outside the Site, these buildings will be located within the north west corner of the proposed Central Park. As specified in the Indicative Demolition Plan, the semi-detached 19<sup>th</sup>-century dwellings on Sandy Lane will be retained and will not be directly affected by the Proposed Development. Although the building now occupies a more isolated position in an agricultural setting, its historical significance and setting comes from its association with Sandy Lane and the adjacent historic extraction site. As such, the construction phase will constitute of a minor impact. The effects will be temporary and of slight adverse significance.

### *Off-site Receptors*

- 8.6.15 During the construction phase, the following activities could affect built heritage assets in proximity to the Site:
- Site clearance, including loss of agricultural land, woodland, and hedgerows within the setting of heritage assets;
  - The introduction of plant, access roads, site huts and vehicles required to carry out the construction activities, into the setting of built heritage assets;
  - The phased introduction of new built structures into the setting of built heritage assets; and
  - Introduction of new planting within the green corridors and open spaces into the setting of built heritage assets.
- 8.6.16 The Proposed Development has the potential to affect the setting of one Grade I Listed Building, one Grade II\* Listed Buildings, three Grade II Listed Buildings, and one group of non-designated heritage assets. These assets had been assessed below following case-by-case scenarios. The remaining built heritage assets within the 2km study area have been scoped out from further assessment.

### *Grade I and II\* listed*

- 8.6.17 The Grade I listed St Mary Church's in Kidlington is located c1.6km to the north-east of the Site and has been scoped into this assessment following the Site visit, during which views of the church's spire was visible. As a Grade I Listed Building this asset is considered to be of high sensitivity. The 13<sup>th</sup>-century Grade I Listed Parish Church of St Mary the Virgin is the focal point of this character area, located on the northern extremity of Kidlington, prominent in views from across the flood meadows of the River Cherwell. Although the church spire is visible from parts of the Site beyond the later residential development in Kidlington, it is not a planned or key view, nor one from within the settlement that the church is part of as designed in the Kidlington Conservation Areas Appraisal. However, long-distance views of the church across the Site allow the visual prominence of the church spire within the landscape surrounding Kidlington to be appreciated, allowing it to be better understood as a prominent historical landmark. There is no ground level visibility from the church looking towards the Site and thus there is no change on a high sensitivity receptor.
- 8.6.18 The Grade II\* listed St Michael's Church at Begbroke is located 300m to the north west of the Site. As a Grade II\* Listed Building this asset is considered to be of high sensitivity. The Site is separated from the church by the A44 (road) and a band of agricultural land. The planting along the churchyard wall and that along the A44 restrict views between the church and the surrounding landscape, while the intervening topography, distance, and settlement further prevent any views between the church and the Site. The construction phase activities carried out within the Site will not largely be visible from this asset, although it is possible that cranes or similar tall temporary structures will be visible from St Michael's Church. A temporary adverse effect may also occur from the increase in construction vehicles movements along Woodstock Road, which had been assessed as 'negligible to minor adverse' in Chapter 9: Transport and Access. Accordingly, this construction of the Proposed Development will result in a temporary slight adverse significance of effect.

### *Grade II listed*

- 8.6.19 The Church of St Philip; St Philip's Priory; The Old Rectory; and Old Rectory coach house and stable are Grade II Listed Buildings located within the Begbroke Conservation Area and, as such, are considered to be of high sensitivity. The Site is situated c 250m to the south-east of these heritage assets. The Site is separated from these assets by the A44 (road) and a band of agricultural land. The planting along St Michael's Lane restricts views between these assets and the surrounding landscape, while the intervening topography, distance and settlement further prevent any views between these assets and the Site. The majority of construction phase activities carried out within the Site will not be visible from these assets, although it is possible that cranes or similar tall temporary structures may be visible. A temporary adverse effect may also occur from the increase in construction vehicles movements along Woodstock Road, which had been assessed as 'negligible to minor adverse' in Chapter 9: Transport and Access. Accordingly, construction of the Proposed Development will result in a temporary slight adverse significance of effect.
- 8.6.20 Roundham Lock; Bridge 227; Bridge 228; Kidlington Green Lock are a group of Grade II Listed Buildings which are considered to be of high sensitivity. The Site, which borders these assets and Oxford Canal Conservation Area within which they sit, currently makes a low positive contribution to the setting of the listed structures by forming a green backdrop through the towpath hedge. Most of the construction phases of the Proposed Development will be focusing to the west of the canal, as the band of land to the west of the canal will be kept as 'retained and enhanced' habitat, as defined by the Green Infrastructure Parameter Plan. However, some construction activity will be carried out within the view of these assets. According to section 3.8 of SDG, three proposed pedestrian and cycle accesses to the Site are planned to be located over the Canal: one at the junction with Roundham Lock, one along Bridge 228, and the third within the southerly view of Kidlington Green Lock. The introduction of plants, cranes, access roads, site huts, and other structures will likely become visible from these four Listed Buildings. Construction activities will also result in increased noise levels associated with excavation works but it will not affect the traffic levels in the close by roads as the locks are pedestrian, except for the roads in proximity of Bridge 228, i.e., Yarnton Road and Sandy Lane.
- 8.6.21 The increased noise levels will be temporary, lasting the length of the construction phase. The setting of the two bridges, i.e., Bridge 227; Bridge 228 currently includes existing development and accordingly, there is already a degree of traffic noise audible from the Listed Buildings. The construction phase will temporarily increase these noise levels, resulting in an indirect negligible adverse impact on the setting of the Listed Buildings, which will last for the duration of the construction phase. This will result in an effect of slight adverse significance. The visible construction activity will temporarily reduce the rural setting of the locks and bridges, with particular reference to the construction of the proposed bridge over the canal. However, the eastern part of the Site will be retained and enhanced as green open and amenity space. Accordingly, it is anticipated that this area will be temporarily changed during construction, with a minor adverse impact in the form of change to setting of an historic building. The construction phase activities carried out within the Site will be localised at the access points over the canal and will result in a temporary, long-term effect ranging from slight to moderate adverse significance.
- 8.6.22 The Grade II listed Tudor Cottage is considered to be of high sensitivity. The majority of construction phase activities carried out within the Site will not be visible from this asset, although it is possible that cranes or similar tall temporary structures may be visible. Given the close distance of this asset to the Site, the construction works will result in increased

noise levels, associated with building and excavation works and increased traffic levels along Woodstock Road. Accordingly, this phase construction of the Proposed Development will result in a temporary slight adverse significance of effect.

- 8.6.23 Rose Cottage and attached cottage and Grapes Inn, now the Turnpike Inn are grouped together as they are located within c 50m of one another. These are Grade II Listed Buildings which are considered to be of high sensitivity. The Site, which is located 500m to the north of these buildings, makes a neutral contribution to the setting of these heritage assets. The Site is separated from these assets it by the Littlemarsh Playing Field and a band of agricultural land. The planting along the rear gardens restricts views between these assets and the surrounding landscape, while the intervening topography and distance further prevent any views between these assets and the Site. The majority of construction phase activities carried out within the Site will not be visible from this asset, although it is possible that cranes or similar tall temporary structures may be visible from these assets. Accordingly, this construction of the Proposed Development will result in a temporary slight adverse significance of effect.

#### *Non-designated heritage assets*

- 8.6.24 The non-designated building, Ivy House is considered to be of low sensitivity. Although the roadside setting of the cottage is more important than the agricultural land on the back of the garden, the Site is separated from this asset by the planting along the back garden, a band of agricultural land enclosed in a wall, and a non-tarmacked track. The construction phase of the Proposed Development will result in the removal of agricultural land and field boundaries from the Site and the potential for introduction of plant, access roads, site huts, and other structures. Construction activities are to be carried out along the western edge of the Site and the majority will not be visible from this asset, although it is possible that cranes or similar tall temporary structures may be visible. The construction phase will also result in increased noise levels, associated with building and excavation works and increased traffic levels along Woodstock Road. The increased noise levels will be temporary, lasting the length of the construction phase resulting in an indirect negligible adverse impact on the setting of the non-listed building, which will last for the duration of the construction phase. This will result in a minor adverse impact. Construction phase activities localised in the proximity of Ivy House will result in an effect ranging from neutral to slight adverse significance.
- 8.6.25 The two cottages, i.e., 'Crossing Cottage' and 'Yarnton Crossing Cottage' are located close to the Site boundary, and as non-designated cottages are considered to be of low sensitivity. Their immediate setting in both cases is the railway, which is adjacent to both buildings. The Site forms part of the wider setting of both of these buildings although more so for Crossing Cottage which is adjacent to the Site boundaries. The construction phase activities carried out within the Site are unlikely to be visible from Yarnton Crossing Cottage due to intervening distance and topography. Accordingly, this phase of the Proposed Development will result in no change to the setting of this building and a neutral significance of effect. In the case of 'Crossing Cottage', the construction activities will be visible and audible, especially during the construction of the proposed bridge over canal. This will result in a temporary minor adverse impact that will result in a potential effect of slight adverse significance.

## Historic Landscapes

### *On-Site*

- 8.6.26 Possible effects upon the Historic Landscape within the Site during construction are likely to be associated with the following activities:
- Site clearance, including loss of agricultural land, woodland, and hedgerows;
  - Introduction of plant, site huts and vehicles required to carry out the construction activities;
  - The phased introduction of built structures that will develop during the construction stages; and
  - Introduction of new planting within the green corridors and open spaces that will permeate through the built development under construction.
- 8.6.27 The Oxfordshire Historic Landscape Characterisation has divided the Site into the following historic landscape character types, 'reorganised enclosures', 'prairie/amalgamated enclosures', and 'commercial – Business Park'. As specified on the Green Infrastructure Parameter Plan, the 19<sup>th</sup>-century field boundaries in this area will be removed during the construction phase of the Proposed Development and new access roads and site compounds will be introduced into the Site. This will change the local character of the area from agricultural to urban resulting in a direct, permanent major magnitude of impact and a slight adverse significance of effect.
- 8.6.28 The hedgerows meeting the criteria for historically important hedgerows (OA 386-9) are considered of medium sensitivity and are shown on Figure 8.6. As specified in the Green Infrastructure Parameter Plan, the hedgerow (OA 387) along the canal that screens Rowel Brook is to be retained. There will be no change to these assets and a neutral significance of effect.
- 8.6.29 As specified in the Green Infrastructure Parameter Plans the two historically important hedgerows situated on the eastern part of the Site (OA 388-9) will be partly retained and partly removed. This will have a moderate adverse impact, creating a potential effect of permanent moderate adverse significance.
- 8.6.30 As specified in the Green Infrastructure Parameter Plans, the historically important hedgerow (OA 386) located along the present day Begbroke Hill access road will be removed, leading to a major adverse impact. This results in a potential effect of permanent moderate to large adverse significance.
- 8.6.31 Other hedgerows across the Site may appear on early maps and are of some historical interest. Some of the field boundaries within the Site are present on early maps of the area but are unlikely to be classified as historic hedgerows according to The Historic Hedgerows Regulations (1997). Accordingly, these are considered of low sensitivity. The construction phase will result in a removal and total change to historic landscape character unit within the developable area and a loss of character and field boundaries where is the proposed construction of the bridge over canal. This is considered a major adverse magnitude of impact leading to a permanent effect of slight adverse significance.



### *Off-site*

- 8.6.32 The construction phase of the Proposed Development will not affect any off-site historic landscapes.

### **Additional Mitigation, Monitoring and Residual Effects**

- 8.6.33 The residual effects will align with what has been reported at paras 8.6.5 – 8.6.32, as all relevant variabilities and scenarios have already been considered. For this reason, additional mitigation and monitoring are suggested as follows:

### *Archaeology*

#### *On-site*

- 8.6.34 OA will develop a mitigation plan for the developable parts of the Site, to take place following the granting of planning permission. It is envisaged that mitigation will take the form of a series of open area excavations. In order to minimise the movement of spoil it is expected that the archaeological excavations will be integrated as closely as possible with construction earthworks. The excavations will be targeted on parts of the Site that a) are to be affected by substantive groundworks and b) have proven potential to contain significant archaeological remains, as demonstrated by the geophysical surveys and/or trial trenching. The trial trenching and mitigation for the floodplain areas of the Proposed Development will follow on as separate, but closely connected stages of work.

### *Built Heritage*

- 8.6.35 Potential effects are initially defined based on Tables 8.3 and 8.4. Professional judgement has been used to further clarify and refine these judgements and to determine whether these residual effects are slight or moderate and therefore whether they represent a significant effect. The foreseeable (secondary) mitigation is inherent to the sympathetic design of the Proposed Development, especially in the proximity of Begbroke Hill Farmhouse.

#### *On-site*

- 8.6.36 The construction phase will have a temporary slight or moderate effect upon the setting of the Grade II listed Begbroke Hill Farmhouse. Besides the existence of the standard CEMP measures, additional measures, such as the siting of construction compounds and haul roads away from the farmhouse, and temporary screening or protection measure of the farmhouse, should also be implemented to mitigate the potential effects, as detailed in the Outline CEMP. Although the construction phase will result in a loss of agricultural land surrounding Begbroke Hill Farmhouse, and the increase in lighting and construction noise will change the rural setting of the historic building, this receptor has been already affected by the presence of the Science Park and will be further affected by the presence of the two committed schemes which will be complete by 2033 on Begbroke Science Park (see Appendix 3.4).
- 8.6.37 The introduction of green corridors and the retention of green spaces around the asset, as defined on the Green Infrastructure Parameter Plan and Development Specification will mitigate the erosion of the rural character of the farmhouse. Accordingly, it is anticipated that the significance of effect resulting from construction will be slight rather than moderate adverse and it will not therefore result in a significant effect.



- 8.6.38 The potential demolition of Parker’s Farm and the associated ruined remains of a historic farmstead will be mitigated by archaeologically recording the remaining walls of the older farm buildings via a photographic survey.

#### Off-site

- 8.6.39 Construction will have a temporary from slight to moderate effect upon Grade II listed Roundham Lock; Bridge 227; Bridge 228; Kidlington Green Lock. The construction phase will result in a temporary loss of ‘tranquillity’ of these assets, due to the introduction of plants, access roads, site huts, and other structures, and the increase in lighting and construction noise which will change the rural setting of these historic buildings. Additional measures such as the siting of construction compounds and haul roads, away from the Site boundaries, and temporary screening or protection measures, should also be implemented to assist in mitigating the potential effects, as detailed in the Outline CEMP. The short duration of the construction works, and the mitigation provided by adherence to the Outline CEMP and such additional measures, would suggest that the significance of effect resulting from construction will be slight rather than moderate adverse and it will not therefore result in a significant effect.

#### Historic Landscapes

- 8.6.40 The construction phase will have a permanent moderate adverse effect upon some of the historically important hedgerows (OA 388-9) and a permanent moderate to large adverse upon another (OA 386). A mitigation strategy that will alleviate the adverse impact of the Proposed Development over the receptors. This will include a photographic survey of the sections in situ, excavation, together with an excavation aimed to investigate the parish boundaries and a sampling strategy aimed to date the boundary. With this mitigation, it will reduce the significance of effect from the construction phase to slight rather than moderate adverse and it will not therefore result in a significant effect.
- 8.6.41 Table 8.7 provides a summary of the residual effects resulting from the construction phase of the Proposed Development following the implementation of mitigation. The residual effect takes into account the sensitivity (value) of the receptor and the degree of change affecting it.

Table 8.7: Residual Cultural Heritage Effects (Construction)

Receptor	On/Off Site	Residual Effects
<i>Archaeological assets</i>		
Bladon Camp	Off site, high sensitivity (value)	Temporary Slight adverse
Mid to Late Bronze Age barrows and possibly related penannular ring ditch (Area A)	On Site, medium sensitivity (value) – removed	Permanent Slight adverse
Two areas of Late Bronze Age pits (Areas A and B)	On Site, medium sensitivity (value) – removed	Permanent Slight adverse
Two Bronze Age ring-ditches (Area A)	On Site, medium sensitivity (value) – removed	Permanent Slight adverse
Iron Age pits, ditches, and postholes (Area A);	On Site, medium sensitivity (value) – removed	Permanent Slight adverse

Receptor	On/Off Site	Residual Effects
A possible Anglo-Saxon hall-type building (Area A)	On Site, medium sensitivity (value) – removed	Permanent Slight adverse
Track/drove way system to the north of Sandy Lane (Area B)	On Site, medium sensitivity (value) – removed	Permanent Slight adverse
Possibly Iron Age square enclosure (Area B)	On Site, medium sensitivity (value) – removed	Permanent Slight adverse
Complex farmstead B	On Site, medium sensitivity (value) – removed	Permanent Slight adverse
Complex farmstead C	On Site, medium sensitivity (value) – removed	Permanent Slight adverse
Hitherto undetected archaeological deposits	On Site -likely medium sensitivity	Permanent Slight adverse
<i>Built Heritage:</i>		
Grade I Listed Building St Mary's Church	Off-site, high sensitivity (value)	Neutral
Grade II* Listed Building St Michael's Church	Off-site, high sensitivity (value)	Temporary Slight adverse
Grade II Listed Building Begbroke Hill Farmhouse	On-site, high sensitivity (value)	Temporary Slight adverse
Grade II Listed Building Church of St Philip; St Philip's Priory; The Old Rectory; Old Rectory coach house and stable	Off-site, high sensitivity (value)	Temporary Slight adverse
Grade II Listed Building Roundham Lock; Bridge 227; Bridge 228; Kidlington Green Lock	Off-site, high sensitivity (value)	Temporary Slight adverse
Grade II Listed Building Tudor Cottage	Off-site, high sensitivity (value)	Temporary Slight adverse
Grade II Listed Building Rose Cottage and attached cottage; Grapes Inn, now the Turnpike Inn	Off-site, high sensitivity (value)	Temporary Slight adverse
Begbroke Conservation Area	Off site, high sensitivity (value)	Temporary, slight adverse
Oxford Canal Conservation Area	Off site, high sensitivity, (value)	Temporary, slight adverse
Non-designated Building Ivy House	Off-site, low sensitivity (value)	Temporary Slight adverse

Receptor	On/Off Site	Residual Effects
Non-designated Building 'Crossing Cottage'	Off-site, low sensitivity (value)	Temporary Slight adverse
Non-designated 'Yarnton Crossing Cottage'	Off-site, low sensitivity (value)	Neutral
Non-designated semi-detached 19 <sup>th</sup> century dwelling on Sandy Lane	Off-Site, low sensitivity (value)	Temporary Slight adverse
Buildings of no architectural or historical note Parker's Farm and associated 1950's buildings	On Site, negligible sensitivity (value) – removed	Permanent Slight adverse
<i>Historical landscapes:</i>		
Historic Landscapes: historically important hedgerows (OA 388-9)	On Site, medium sensitivity (value) – partly removed	Permanent Slight adverse
Historic Landscapes: historically important hedgerows (OA 386)	On Site, medium sensitivity (value) – removed	Permanent Slight adverse
Historic Landscapes: historically important hedgerows (OA 387)	On Site, medium sensitivity (value) – entirely retained	Neutral
Historic Landscapes: Other hedgerows across the Site	On Site, low sensitivity (value)	Neutral
Historic Landscapes: HLC typologies within the Site	On Site, low sensitivity (value)	Neutral

## 8.7 Assessment of Effects - Completed Development

### Archaeology

- 8.7.1 There will be no residual effects upon the archaeological resource during operation as it is anticipated that all the archaeological receptors potentially affected would be subject to an agreed programme of mitigation measures designed to reduce or remove any potentially significant effects. The potential for preserved palaeo-environmental waterlogged deposit within the Floodplain Zone will be investigated during the forthcoming archaeological evaluation, currently timetabled for August 2023 (see Appendix 8.6).
- 8.7.2 The Proposed Development will introduce new modern development into the landscape to the south-east of Bladon Camp. This area currently includes Oxford Airport and a mix of agricultural land the Begbroke Science Park and the residential development associated with Kidlington, Begbroke, and Yarnton. No adverse significant effect had been identified in Chapter 10: Noise and Vibration. Due the distance of the Site from the hillfort and the dense woodland surrounding it, the Proposed Development is unlikely be visible from the hillfort and would be unlikely to affect its setting or significance and it will have a neutral impact.

## Built Heritage

- 8.7.3 This section provides a discussion of the impacts and significant effects resulting from the Proposed Development during operation phases on built heritage assets. The effect during this phase is anticipated as being of long-term duration (permanent) unless otherwise stated. Impacts are only considered in detail where there is a reasonable likelihood of a significant effect on an identified receptor.

### On Site: Built Heritage

- 8.7.4 Professional judgement has been used to further clarify and refine these judgements. The Maximum Heights Parameter Plan makes provision for the Proposed Development to include buildings up to 22m in height in the view of Begbroke Farmhouse. According to the Strategic Design Guidelines, the Farmstead *“will provide a main point of contact for different members of the emerging community as well as the existing neighbouring ones. It will cluster different forms of amenity and will be directly connected to all neighbourhoods and surrounding villages”*. Sympathetic design of the Proposed Development, as shown in the sections 3.1: Open space and landscape character and 4.1: The Farmstead of the Strategic Design Guidelines, sets out the principles of preservation of the BSP hedge to the north of the farmhouse, creation of two green arteries connecting the Farmhouse to Rowel Brook Park, and the retainment of existing trees and gardens to the east. This would result in a slight adverse permanent effect.

### Off-Site: Built Heritage

- 8.7.5 Begbroke Conservation Area and its associated Listed Buildings (including the Grade II\* St Michael’s Church); the Oxford Canal Conservation Area and associated Grade II Listed Buildings are situated within the environs of the Site. The non-designated Crossing Cottage, Ivy House, and Sandy Lane cottages are located in close proximity to the Site. Whilst these assets will not receive direct impacts from the Proposed Development, it is possible that indirect (setting) impacts to these assets could arise from the introduction of new development into a previously more agricultural area, such as increased traffic and lighting. This assessment was conducted by comparing it against the details outlined in Chapter 10: Noise and Vibration, Chapter 9: Transport and Access, and the visual assessment documented in Volume II: Landscape and Visual Impact Assessment and case-by-case scenarios were analysed below. No adverse significant effect had been identified in Chapter 10: Noise and Vibration besides the predicted pitch noise from the proposed schools. However, it was concluded that *‘At each receptor the identified effects would be permanent, although they would only arise when the playground or pitches are in use, and therefore the effects would not be continuous over time, however they would occur regularly.’* (see section 10.7.14). The effects of the Proposed Development on the off-site built heritage has been addressed below following the consideration of case-to-case scenarios. It is predicted that the Proposed Development will not be visible and will not impact the WHS and Bladon Camp Scheduled Monument.
- 8.7.6 The Oxford Canal Conservation Area borders much of the easternmost part of the Site. The canal’s Grade II Listed Buildings, including locks, bridges, and overall infrastructure contribute significantly to the special character of the area. Combined with the predominantly rural surroundings along the canal, these features positively enhance the conservation area. Some parts of the Site’s eastern section are visible from the towpath hedge and listed structures that cross the canal, offering important green spaces and key vistas. This agricultural land and greenery contribute positively to the conservation area’s

setting. The illustrative plans indicate that this part of the Site is intended to remain as green space, preserving its rural landscape and avoiding negative impacts on the conservation area. However, it's important to note that views through the hedging along the Oxford Canal Conservation Area and some tree lines may be disrupted if development occurs in this area. Such development could potentially have a negative impact on the conservation area, affecting the link between the canal, its locks, bridges, and the existing rural surroundings. The indirect permanent effect is considered to be minor adverse over high sensitivity assets. Accordingly, the significance of effect is from slight to moderate adverse and permanent. However, the role of Railway Marshes and Canalside Park as main 'Nature-focused' area in the Proposed Development (see sections 4.13 and 4.14 of the SDG), including the retainment/inclusions of wet habitats to strengthen the Oxford Canal corridor, the integration of existing woodland patches, the limited and controlled access, the inclusion of appropriate new hedgerows, and the enhancement of these green areas for the public fruition and enjoyment, might balance the impact related to the Proposed Development, resulting in a slight permanent adverse effect, thus not significant impact on the setting and significance of these assets.

- 8.7.7 The visual assessment conducted in Volume II: Landscape and Visual Impact Assessment revealed a minor negative impact on certain sections of the A44 road located to the north and south of the Site. The Begbroke Conservation Area, along with its associated Listed Buildings, falls within this visual area. The Proposed Development could potentially have a negative impact on the conservation area and associated listed buildings. The indirect permanent effect is considered to be minor adverse over high sensitivity assets. Accordingly, the significance of effect is from slight to moderate adverse and permanent. However, these designated assets are positioned farther west from the A44, and the road itself acts as a barrier between these assets and the Proposed Development. Chapter 9: Transport and Access concluded that there would be no impact on the A44. A Framework Lighting Strategy (Appendix 5.6) will ensure that lighting is delivered sensitively, especially adjacent to the green buffer between the development area and Begbroke. Car use will be discouraged through a range of design measures. These will help reduce and mitigate any potential harm that could be caused to the setting of Begbroke Conservation Area. These measures will result in resulting in a permanent slight adverse (not significant) effect on the setting and significance of these assets.
- 8.7.8 Non-designated built heritage includes Ivy House, the Crossing Cottage, and Sandy Lane cottages which may receive a direct slight adverse permanent effect from the Proposed Development due to the change of settings, resulting in an indirect slight adverse permanent effect from the Proposed Development.

### **Additional Mitigation, Monitoring and Residual Effects**

- 8.7.9 Table 8.8 provides a summary of the residual effects resulting from the full operational Proposed Development following the implementation of the design. The residual effect takes into account the sensitivity (value) of the receptor and the degree of change affecting it.

Table 8.8: Summary of Residual Effects (Operation Phase)

Receptor	On/Off Site	Residual Effects
<i>Archaeology</i>		
Scheduled Monument: Bladon Camp	Off-site, high sensitivity (value)	Neutral
<i>Built Heritage</i>		
Conservation Area: Begbroke Conservation Area	Off-site, high sensitivity (value)	Permanent Slight adverse
Conservation Area: Oxford Canal Conservation Area	Off-site, high sensitivity (value)	Permanent Slight adverse
Grade I Listed Building St Mary' Church	Off-site, high sensitivity (value)	Neutral
Grade II* Listed Building St Michael's Church	Off-site, high sensitivity (value)	Permanent Slight adverse
Grade II Listed Building Begbroke Hill Farmhouse	On-site, high sensitivity (value)	Permanent Slight adverse
Grade II Listed Buildings Church of St Philip; St Philip's Priory; The Old Rectory; Old Rectory coach house and stable	Off-site, high sensitivity (value)	Permanent Slight adverse
Grade II Listed Buildings Roundham Lock; Bridge 227 Bridge 228; Kidlington Green Lock	Off-site, high sensitivity (value)	Permanent Slight adverse
Grade II Listed Building Tudor Cottage	Off-site, high sensitivity (value)	Neutral
Grade II Listed Buildings Rose Cottage and attached cottage; Grapes Inn, now the Turnpike Inn	Off-site, high sensitivity (value)	Neutral
Non-designated Building Ivy House	Off-site, low sensitivity (value)	Permanent Slight adverse
Non-designated Building 'Crossing Cottage'	Off-site, low sensitivity (value)	Permanent Slight adverse
Non-designated Building 'Yarnton Crossing Cottage'	Off-site, low sensitivity (value)	Neutral



Receptor	On/Off Site	Residual Effects
Non-designated Building semi-detached 19 <sup>th</sup> century dwelling on Sandy Lane	Off-Site, low sensitivity (value)	Permanent Slight adverse
<i>Historical landscapes:</i>		
Historic Landscapes: historically important hedgerows (OA 388-9)	On Site, medium sensitivity (value)	Neutral
Historic Landscapes: historically important hedgerows (OA 386)	On Site, medium sensitivity (value)	Neutral
Historic Landscapes: Other hedgerows across the Site	On Site, low sensitivity (value)	Neutral

## 8.8 Cumulative Effects

- 8.8.1 For archaeology, the construction phase of these developments will involve significant groundworks which will potentially damage or remove archaeological remains present. It is anticipated that the cumulative effects of these schemes will be minimised through pre-construction programmes of archaeological mitigation. This assessment has suggested that the Proposed Development will have no effect greater than a permanent minor adverse effect upon the archaeological resource and the cumulative effect of the other schemes in the area will not increase this. There will be no further impacts upon any archaeological remains during the operation phase of the schemes.
- 8.8.2 For built heritage, the four schemes scoped into the cumulative assessment are analysed individually with the Proposed Development and then cumulatively, subdividing the effect due to the construction and operational phases.
- 8.8.3 This assessment was conducted by comparing it against the details outlined in Chapter 10: Noise and Vibration, Chapter 9: Transport and Access, and the visual assessment documented in Volume II: Landscape and Visual Impact Assessment and the case-by-case scenarios were analysed below.

### Construction

#### Yarnton Lane Level Crossing and Sandy Lane Crossing

- 8.8.4 Yarnton Lane Level Crossing and Sandy Lane Crossing is situated within the Site. The only built heritage assets which may receive cumulative from the two developments is the non-designated Crossing Cottage (low sensitivity). The construction activity associated with the Yarnton Lane Level Crossing and Sandy Lane Crossing development is likely to be visible from this asset. Accordingly, there will be increased visual impact, noise, and construction traffic, resulting from the cumulative construction of the two developments. While the construction noise would be experienced against the background traffic noise from the

railway activity, the additional noise resulting from the two contemporary construction phases levels may result in an increased major adverse cumulative effect on these assets; therefore, the overall cumulative effect of the two developments will potentially be temporary from slight to moderate adverse.

- 8.8.5 The remaining built heritage assets within the environs of the Site are located some distance away from the Yarnton Lane Level Crossing and Sandy Lane Crossing. Due to the intervening topography and existing development that screen the Site from the rest of the built heritage, it is predicted that will be unlikely to be affected by the cumulative construction phase of these developments.
- 8.8.6 The cultural heritage receptors within the Site will be affected by this development. However, it will not result in additional cumulative effects upon the on-Site historical landscape, and archaeological receptors. The impacts upon these developments will have been assessed and where appropriate mitigated as part of the individual developments.
- 8.8.7 The construction of this development will not affect any off-site cultural heritage receptors.

#### Former Piggery and Land North of Woodstock Road

- 8.8.8 Due to its proximity to both the Site and the Former Piggery and Land North of Woodstock Road the only built heritage assets which may receive cumulative effects from these schemes are the Grade II Listed Buildings Rose Cottage and attached cottage and Grapes Inn, now Turnpike Inn. The construction activity associated with the Former Piggery and Land North of Woodstock Road development is likely to be visible from these assets, but due to the green open amenity space along the southern edge of the Site, construction activity associated with the Proposed Development will not be visible with the exception of tall temporary structures, such as cranes. The two developments will also introduce additional construction noise and construction traffic into the environs of these Listed Buildings, which would be experienced against the background traffic noise from the Woodstock Road. Accordingly, there might be increased visual and auditive impact resulting from the construction of the two developments will disturb the rural setting of these assets and will result in an increased temporary from slight to moderate adverse cumulative effect.
- 8.8.9 The remaining built heritage assets within the environs of the Site are located some distance away from the Former Piggery and Land North of Woodstock Road and will be unlikely to be affected by the construction phase of this development.

#### Buildings in 8-11, Oxford

- 8.8.10 Due to its proximity to the Site and Buildings in 8-11, Oxford, the only built heritage assets which may receive cumulative effects from the two developments is the Grade II Listed Building Begbroke Hill Farmhouse. However, due to the green planting retained along the northern edge of the Site, and intervening distance, the construction activity associated with this development will not be visible. Accordingly, there will be no increased visual impact resulting from the construction of the two developments. The two developments will however introduce additional construction noise and construction traffic into the environs of Begbroke Hill Farmhouse. The additional noise resulting from the two contemporary construction phases levels may result in an increased temporary slight adverse cumulative effect on this asset.

- 8.8.11 The remaining built heritage assets within the environs of the Site are located some distance away from Buildings in 8-11, Oxford and will be unlikely to be affected by the construction phase of this development due to intervening distance shielding the assets from the Site.
- 8.8.12 In summary, given the additional construction noise and traffic as predicted to be resulting from the cumulative proposed developments, the heritage assets in the proximity that will have a temporary slight adverse cumulative effect will be:
- the Grade II listed building Kidlington Green Lock, Rose Cottage and attached cottage and Grapes Inn, now Turnpike Inn;
  - Begbroke Hill Farmhouse;
  - Begbroke Conservation Area and its Listed Buildings (Grade II\* 202; Grade II OA 43-4, 47-8); and
  - Undesignated Crossing Cottage.

### Completed Development

- 8.1.1 The predicted cumulative effects upon built heritage in proximity to the Site during operation may be associated with:
- Views of the built residential dwellings; and
  - Increased lighting levels associated with the developments.
- 8.8.13 The Framework Lighting Strategy will ensure that lighting of the Proposed Development is delivered sensitively. The views of the Proposed Development built residential dwellings impacting the built heritage assets are not shared with the other three developments, and accordingly there will be no cumulative impacts upon any off-site and on-site built heritage.
- 8.8.14 There will be no cumulative impacts upon any off-site built heritage, or archaeological receptors during cumulative operation of the four cumulative schemes and the Proposed Development. Any effects on these receptors will be reduced or mitigated as part of the individual development proposals.
- 8.8.15 The Proposed Development will have a slight adverse effect upon the Historic Landscapes of the Site, and such similar effects are predicted within each individual scheme, with a loss of Historical Rural Landscapes, Although there is no functional co-relation between the areas of landscape affected by these schemes the cumulative effect of the loss of three areas of rural historic landscape of low sensitivity is likely to have from slight to moderate adverse permanent cumulative significance upon the historic landscape resource of the area. This will occur because the overall effect of each individual proposed development in combination will result in a moderate reduction of historical landscape within the area of villages of Begbroke, Yarnton, and Kidlington.

## 8.9 Summary

- 8.9.1 There is one designated heritage asset within the Site, the Grade II listed building Begbroke Hill Farmhouse, a former manor house. Given their proximity, one Grade I Listed Building, one Grade II\* Listed Building, eleven Grade II Listed Buildings, one Scheduled Monument, and two Conservation Areas had been scoped in. Detailed analysis of the potential effect of the scheme upon the setting of individual assets was carried out as part of the research

for this chapter and has not been confirmed on a case-by-case basis with the statutory consultees.

- 8.9.2 Although always maintaining a rural character, the Site has seen much change in the last two centuries, with the Oxfordshire Historic Landscape Character Assessment defining the majority of the Site as reorganised or amalgamated enclosures. The Site lies between the Parishes of Begbroke and Yarnton and thus retains some of these parish boundaries. Four hedgerows had been identified as following the historic boundaries of these parishes and thus considered historically important under the Hedgerow Regulations (1997).
- 8.9.3 Previous archaeological investigations have been carried out within the Site in different areas, and a further trial trenching evaluation will be carried out in the floodplain zone and will be the subject of an ES Addendum. Depending upon the results of the evaluation trial trenching there may be a requirement for further archaeological investigation and recording. The archaeological evaluation and any subsequent archaeological work as required, will constitute preservation by record which will minimise the effects of the Proposed Development upon the archaeological receptors within the Site. Current analysis would suggest that the WHS and the Bladon Camp Scheduled Monument are sufficiently separated from the Site as to not suffer any impacts, either visually or in terms of changes in noise or traffic movements.
- 8.9.4 With reference with the expected mitigation, embedded and foreseeable, the construction activities will have a temporary slight adverse effect upon the Grade II Begbroke Hill Farmhouse; a permanent slight adverse effect upon the historically important hedgerows that will be removed as part of the Proposed Development; a temporary slight adverse effect upon the Grade II Roundham Lock, Bridge 227, Bridge 228, Kidlington Green Lock, Tudor Cottage; a temporary slight adverse effect upon the non-designated Ivy House, Crossing Cottage, and the semidetached 19<sup>th</sup>-century dwelling on Sandy Lane; and a permanent slight adverse effect upon the buildings of no historical note at Parker's Farm and associated 1950's buildings.
- 8.9.5 With reference to the due mitigation, embedded and foreseeable, during operation the Proposed Development will have a permanent slight adverse effect on Begbroke Hill Farmhouse, permanent slight to moderate adverse effect upon Oxford Canal Conservation Area and its associated Grade II listed buildings, Begbroke Conservation Area and associated; a permanent slight adverse effect upon the non-designated Crossing Cottage, Ivy House, and the semidetached 19<sup>th</sup>-century dwelling on Sandy Lane.
- 8.9.6 Overall, following mitigation, there will be no significant (moderate or higher) adverse effects resulting from the Proposed Development. A summary of the assessment is set out in Table 8.9.

Table 8.9: Summary of Effects

Effect	Receptor (Sensitivity)	Geographic & Temporal Scale	Magnitude of Impact	Significance of Effect	Additional Mitigation and Monitoring	Significance of Residual Effect
<b>Construction</b>						
Removal due to groundworks	Mid to Late Bronze Age barrows and possibly related penannular ring ditch (Area A), two areas of Late Bronze Age pits (Areas A and B), and two Bronze Age ring-ditches (Area A); Iron Age pits, ditches, and postholes (Area A); a possible Anglo-Saxon hall-type building (Area A); track/drove way system to the north of Sandy Lane (Area B); possibly Iron Age square enclosure (Area B); complex farmstead B; and complex farmstead C. (Medium).	On site, permanent	Major adverse	Large adverse	Agreed programme of mitigation measures intended to record archaeological deposits prior to disturbance.	Slight adverse
Removal due to groundworks	Unidentified archaeological remains (Unknown)	On site, permanent	Major adverse	Large adverse	Agreed programme of mitigation measures intended to record archaeological deposits prior to disturbance.	Slight adverse

Effect	Receptor (Sensitivity)	Geographic & Temporal Scale	Magnitude of Impact	Significance of Effect	Additional Mitigation and Monitoring	Significance of Residual Effect
It is possible that cranes or similar tall temporary structures may be visible	Bladon Camp (High)	Off-site, temporary	Indirect, negligible adverse	Slight adverse	None proposed	Temporary, slight. adverse
Site clearance, loss of agricultural land, woodland, and hedgerows; removal of six modern buildings in its environs; introduction of new planting within the green corridors and open spaces; introduction of additional noise and lighting associated with plant, site huts and vehicle movement within the Site; and phased introduction of built structures in the setting	Begbroke Hill Farmhouse (high)	On site, temporary	Minor adverse	Moderate or slight adverse	Besides the existence of the standard CEMP measures, additional measures, such as the siting of construction compounds and haul roads away from the farmhouse, and temporary screening or protection measure of the farmhouse, should also be implemented to mitigate the potential effects	Slight adverse
Removal of the asset	Parker's Farm and associated buildings (negligible)	On site, permanent	Major adverse	Slight adverse	Photographic survey of historic elements	Slight adverse



Effect	Receptor (Sensitivity)	Geographic & Temporal Scale	Magnitude of Impact	Significance of Effect	Additional Mitigation and Monitoring	Significance of Residual Effect
Change of local character of the area from agricultural to urban	Historic landscape types (low)	On site, permanent	Major adverse	Slight adverse	None proposed	Slight adverse
Partial removal	Historically important hedgerows (OA 388-9) (medium)	On site, permanent	Moderate adverse	Moderate adverse	Agreed programme of recording and sampling.	Slight, adverse
Removal	Historically important hedgerows (OA 387) (medium)	On site, permanent	Moderate or large adverse	Moderate adverse	Agreed programme of recording and sampling.	Slight adverse
Removal	Other non-historical hedgerows (low)	On-site, permanent	Major adverse	Slight adverse	Non proposed	Slight adverse
Introduction of additional noise and lighting associated with plant, site huts and vehicle movement within the Site; temporarily reduce the rural setting of the locks and bridges	Grade II listed buildings Roundham Lock; Bridge 227; Bridge 228; Kidlington Green Lock; Oxford Canal Conservation Area (high)	Off site, temporary	Indirect, minor adverse	Slight to moderate adverse	The short duration of the Construction works, and the mitigation provided by the CEMP	Slight adverse
It is possible that cranes or similar tall temporary structures may be visible	Grade II* Church of St Philip; Grade II St Philip's Priory; The Old Rectory; and Old Rectory coach house and stable, Begbroke Conservation Area (high)	Off site, temporary	Indirect, negligible, adverse	Slight adverse	None proposed	Slight adverse

Effect	Receptor (Sensitivity)	Geographic & Temporal Scale	Magnitude of Impact	Significance of Effect	Additional Mitigation and Monitoring	Significance of Residual Effect
No change	Grade I listed building St Mary's Church (high)	Off site, temporary	No Change	Neutral	None proposed	Neutral
Increased noise levels, it is possible that cranes or similar tall temporary structures may be visible	Grade II listed building Tudor Cottage, Rose Cottage and attached cottage, and Grapes Inn (now Turnpike Inn) (high)	Off site, temporary	Indirect, negligible, adverse	Slight adverse	None proposed	Slight adverse
Increased noise levels, It is possible that cranes or similar tall temporary structures may be visible	non-designated Ivy House (low)	Off site, temporary	Indirect, minor, adverse	Neutral or slight adverse	The increased noise levels will be temporary, lasting the length of the construction phase	Slight adverse
Site clearance, loss of agricultural land, woodland, and hedgerows; introduction of new planting within the green corridors and open spaces; introduction of additional noise and lighting associated with plant, site huts and vehicle	non-designated Crossing Cottage	Off site, temporary	Indirect, minor adverse	Slight adverse	None proposed	Slight adverse

Effect	Receptor (Sensitivity)	Geographic & Temporal Scale	Magnitude of Impact	Significance of Effect	Additional Mitigation and Monitoring	Significance of Residual Effect
movement within the Site; and phased introduction of built structures in the setting						
<b>Completed Development</b>						
Erosion of rural setting	Grade II listed buildings Roundham Lock; Bridge 227; Bridge 228; Kidlington Green Lock; Oxford Canal Conservation Area (high)	Off site, permanent	Indirect, Minor adverse	Slight to moderate adverse	The introduction of hedgerows and green corridors will shield and preserve the historical setting; sympathetic design of the Proposed Development. By implementing a considerate design for the route that restricts private car access, it will be possible to minimise the impact on the Oxford Canal Conservation Area and its associated Listed Buildings; the role of the Railway Marshes and the Canal Parkland within the Nature-focused landscape will balance the disturbance related to the new road	Slight adverse
Erosion of setting; introduction of a road within a quiet and green setting;	Begbroke Hill Farmhouse (high)	On site, permanent	Minor, adverse	Slight to moderate adverse	Sympathetic design of the Proposed Development, as shown in the sections 3.1: Open space and landscape character and 4.1: The	Slight adverse

Effect	Receptor (Sensitivity)	Geographic & Temporal Scale	Magnitude of Impact	Significance of Effect	Additional Mitigation and Monitoring	Significance of Residual Effect
disruption of some important views					Farmstead of the Strategic Design Guidelines, sets out the principles of preservation of the BSP hedge to the north of the farmhouse, creation of two green arteries connecting the Farmhouse to Rowel Brook Park, and the retainment of existing trees and gardens to the east.	
Increased level of traffic	Grade II listed buildings Roundham Lock; Bridge 227; Bridge 228; Kidlington Green Lock; Oxford Canal Conservation Area (high)	Off site, permanent	Indirect, negligible adverse	Slight adverse	None required.	Slight adverse
Removal of historic setting, increased level of traffic	semi-detached 19 <sup>th</sup> -century dwellings on Sandy Lane, Ivy House, Crossing Cottage (low sensitivity)	Off site, permanent	Indirect, moderate adverse	Slight adverse	None proposed	Slight adverse

## References

---

- <sup>1</sup> *Historic Buildings and Ancient Monuments Act (1953)*. Available at: <https://www.legislation.gov.uk/ukpga/Eliz2/1-2/49>. Last accessed: 21/03/23
- <sup>2</sup> *Ancient Monuments and Archaeological Areas Act (1979)*. Available at: <https://www.legislation.gov.uk/ukpga/1979/46>. Last accessed: 21/03/23
- <sup>3</sup> *Planning (Listed Buildings and Conservation Areas) Act (1990)*. Available at: <https://www.legislation.gov.uk/ukpga/1990/9/contents>. Last accessed: 21/03/23
- <sup>4</sup> *The Hedgerows Regulations (1997; amended 2003)*. Available at: <https://www.legislation.gov.uk/uksi/1997/1160/contents/made>. Last accessed: 21/03/23
- <sup>5</sup> Ministry for Housing, Communities and Local Government, (2021). *National Planning Policy Framework*. Available at: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/1005759/NPPF\\_July\\_2021.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1005759/NPPF_July_2021.pdf). Last accessed: 21/03/23
- <sup>6</sup> Department for Levelling Up, Housing & Communities, (2022). *Levelling-up and Regeneration Bill Consultation*. Available at: <https://bills.parliament.uk/bills/3155>. Last accessed: 24/04/23
- <sup>7</sup> Cherwell District Council (2015). *The Cherwell Local Plan 2011 – 2031 – Part 1*. Available at: <https://www.cherwell.gov.uk/downloads/download/45/adopted-cherwell-local-plan-2011-2031-part-1-incorporating-policy-bicester-13-re-adopted-on-19-december-2016>. Last accessed: 21/03/23
- <sup>8</sup> Cherwell District Council (2020). *The Cherwell Local Plan 2011 – 2031 – Part 1. Partial Review – Oxford’s Unmet Housing Need*. Available at: <https://www.cherwell.gov.uk/info/83/local-plans/215/partial-review-of-cherwell-local-plan-2011-2031-part-1-oxfords-unmet-housing-need>. Last accessed: 24/04/23
- <sup>9</sup> Chartered Institute for Archaeologists (CIfA), (2020). *Standards and Guidance for Historic Environment Desk-based Assessments*. Available at: [https://www.archaeologists.net/sites/default/files/CIfAS%26GDBA\\_4.pdf](https://www.archaeologists.net/sites/default/files/CIfAS%26GDBA_4.pdf). Last accessed: 21/03/23
- <sup>10</sup> Historic England, (2015a). *Good Practice Advice in Planning 1. The Historic Environment in Local Plans*. Available at: <https://historicengland.org.uk/images-books/publications/gpa1-historic-environment-local-plans/gpa1/>. Last accessed: 21/03/23
- <sup>11</sup> Historic England, (2015b). *Good Practice Advice in Planning 2. Managing Significance in Decision-Taking in the Historic Environment*. Available at: <https://historicengland.org.uk/images-books/publications/gpa2-managing-significance-in-decision-taking/gpa2/>. Last accessed: 21/03/23
- <sup>12</sup> Historic England, (2017). *Good Practice Advice in Planning 3. The Setting of Heritage Assets*. Available at: <https://historicengland.org.uk/images-books/publications/gpa3-setting-of-heritage-assets/heag180-gpa3-setting-heritage-assets/>. Last accessed: 21/03/23
- <sup>13</sup> Historic England, (2019). Advice Note 12. *Statements of Heritage Significance: Analysing Significance in Heritage Assets*. Available at: <https://historicengland.org.uk/images->

books/publications/statements-heritage-significance-advice-note-12/heag279-statements-heritage-significance/. Last accessed: 21/03/23

<sup>14</sup> Ministry of Housing, Communities and Local Government, (2021). Planning Practice Guidance, Historic Environment. Available at: <https://www.gov.uk/guidance/conserving-and-enhancing-the-historic-environment>. Last accessed: 21/03/23

<sup>15</sup> Oxfordshire County Archaeological Services 2022. *Land South-East of Begbroke, Design Brief for archaeological field evaluation*.

<sup>16</sup> *Design Manual for Roads and Bridge, 2020. LA 104 Environmental assessment and monitoring*. Available at: <https://standardsforhighways.co.uk/prod/attachments/0f6e0b6a-d08e-4673-8691-cab564d4a60a?inline=true>. Last accessed: 21/03/23

<sup>17</sup> MoLAS, (2008). *Begbroke Science Park Access Road, Begbroke, Oxfordshire. An Archaeological Evaluation*. MoLAS unpublished report. Available at: <https://archaeologydataservice.ac.uk/library/browse/issue.xhtml?recordId=1117825&recordType=GreyLitSeries>. Last accessed: 24/03/23

<sup>18</sup> Cotswold Archaeology, (2011). *Begbroke Science Park Access Road, Begbroke, Oxfordshire. Archaeological Evaluation*. Cotswold Archaeology unpublished report, project number 3291

<sup>19</sup> Cherwell District Council, (2012). *Oxford Canal Conservation Area Appraisal*. Available at: <https://www.cherwell.gov.uk/directory-record/1818/oxford-canal---part-1>. Last accessed: 23/03/23

<sup>20</sup> Cherwell District Council, (2008). *Begbroke Conservation Area Appraisal*. Available at: <https://www.cherwell.gov.uk/directory-record/1787/begbroke>. Last accessed: 23/03/23

<sup>21</sup> West Oxfordshire District Council, (n/a). *Conservation Area Character Appraisal. Cassington*. Available at: <https://www.westoxon.gov.uk/media/nfyj1j5j/cassington-conservation-area-character-appraisal.pdf>. Last accessed: 23/03/23

<sup>22</sup> Oxford City Council, (2007). *Conservation Area Appraisal. Wolvercote with Godstow*. Available at: [https://www.oxford.gov.uk/downloads/file/266/wolvercote\\_with\\_godstow\\_conservation\\_area\\_appraisal](https://www.oxford.gov.uk/downloads/file/266/wolvercote_with_godstow_conservation_area_appraisal). Last accessed: 23/03/23

<sup>23</sup> West Oxfordshire District Council, (n/a). *Conservation Area Character Appraisal. Bladon*. Available at: <https://www.westoxon.gov.uk/media/5qofp2vq/bladon-conservation-area-character-appraisal.pdf>. Last accessed: 23/03/23

<sup>24</sup> Baggs, A P, Blair, W J, Chance, E, et al. (1990b). 'Begbroke: Manors and other estates', in *A History of the County of Oxford: Volume 12, Wootton Hundred (South) Including Woodstock*, pp. 10-13. Available at: <http://www.british-history.ac.uk/vch/oxon/vol12/pp10-13>. Last accessed: 24/03/23

<sup>25</sup> Cherwell District Council, (2009). *Kidlington Conservation Area Appraisal*. Available at: <https://www.cherwell.gov.uk/directory-record/1810/kidlington-church-street-high-street-the-rookery-crown-road-and-langford-lane-wharf-church-street---part-1>. Last accessed: 24/03/23

<sup>26</sup> Cherwell District Council, (2008). *Begbroke Conservation Area Appraisal*. Available at: <https://www.cherwell.gov.uk/directory-record/1787/begbroke>. Last accessed: 23/03/23

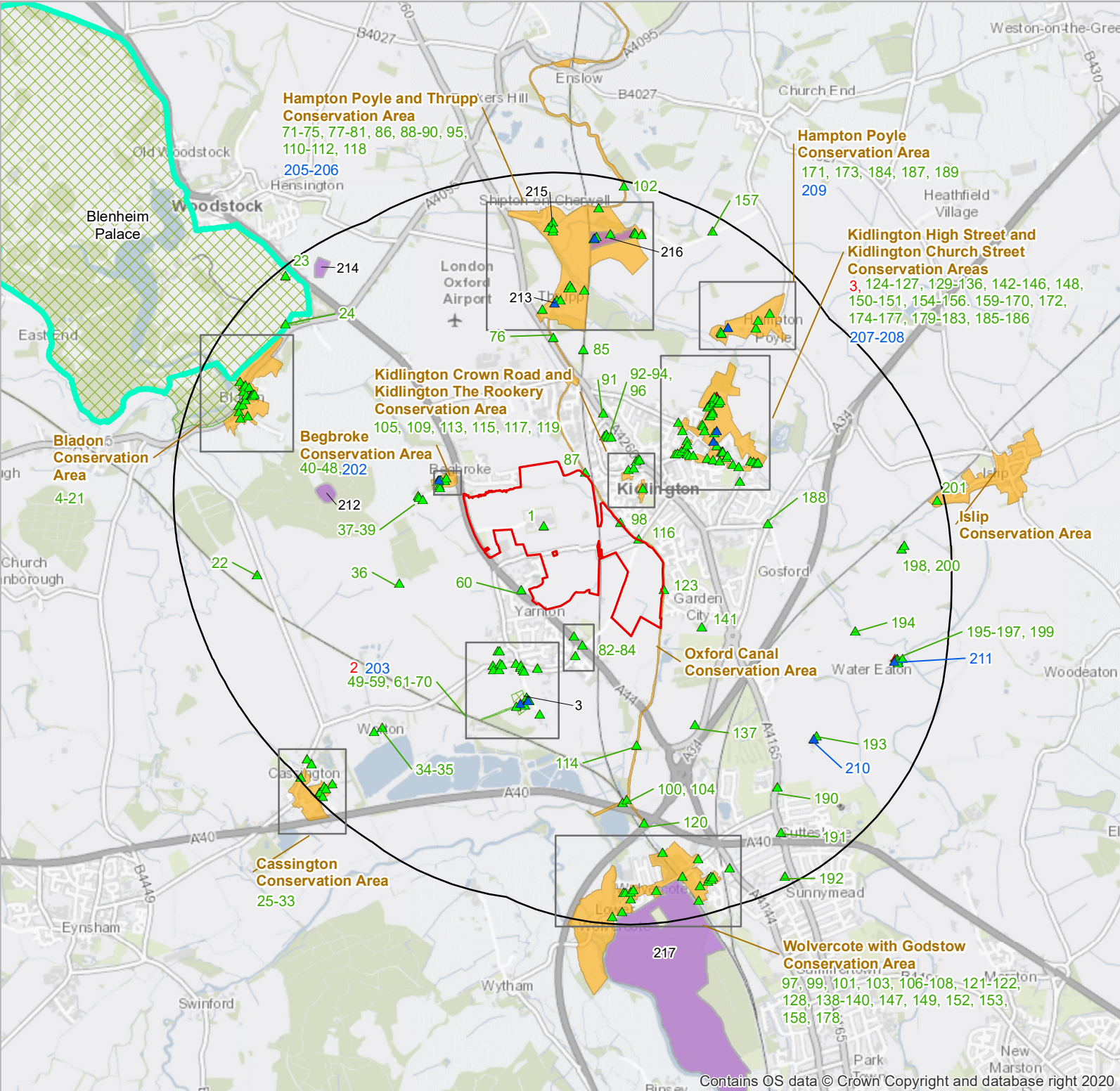


---

<sup>27</sup> Baggs, A P, Blair, W J, Chance, E, et al. (1990b). 'Begbroke: Manors and other estates', in *A History of the County of Oxford: Volume 12, Wootton Hundred (South) Including Woodstock*, pp. 10-13. Available at: <http://www.british-history.ac.uk/vch/oxon/vol12/pp10-13>. Last accessed: 24/03/23

<sup>28</sup> Tompkins, A. (2017). *Oxfordshire Historic Landscape Characterisation Project Full Report*, for Oxfordshire County Council. Available at: <https://www.oxfordshire.gov.uk/residents/environment-and-planning/archaeology/landscape-characterisation>. Last accessed: 24/03/23

<sup>29</sup> *The Hedgerows Regulations* (1997; amended 2003). Available at: <https://www.legislation.gov.uk/uksi/1997/1160/contents/made>. Last accessed: 21/03/23



### Legend

- Site
- Study area (3km)
- World Heritage Site
- Scheduled Monument
- Registered Park & Garden
- ▲ Grade I Listed Building
- ▲ Grade II Listed Building
- ▲ Grade II\* Listed Building
- Conservation Area

© Historic England 2021.  
 © Crown Copyright and database right 2022  
 All rights reserved.  
 The Historic England GIS Data contained in this material was obtained on 03/05/2022.  
 The most publicly up to date Historic England GIS Data can be obtained from <http://www.HistoricEngland.org.uk>.  
 Contains public sector information licensed under the Open Government Licence v3.0.

**Figure 8.1: Designated assets**



Date: April 2023      Created by: Quod

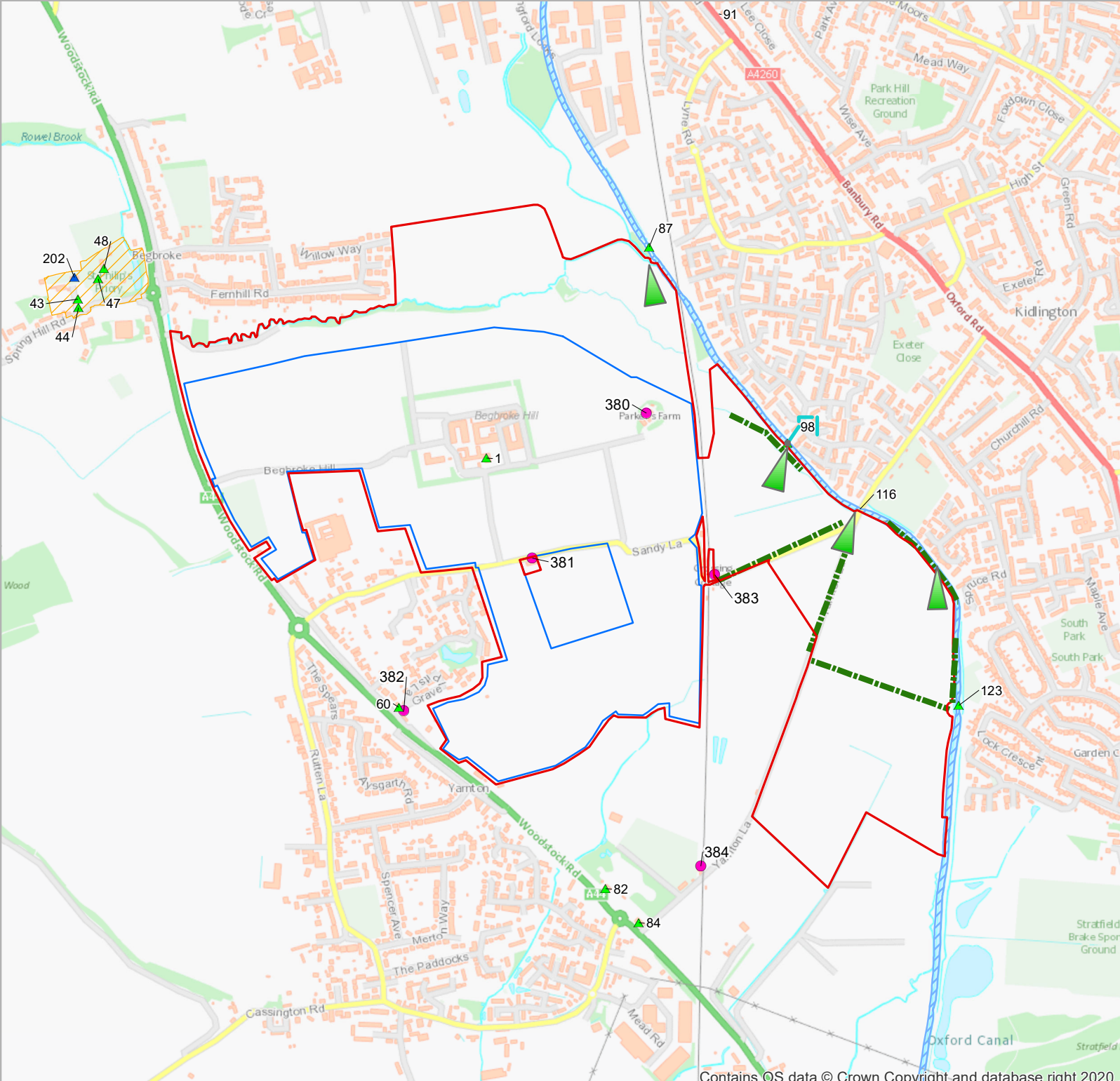
Scale: 1:55000 @A4

8-14 Meard Street  
London

W1F 0EQ

020 3597 1000  
[www.quod.com](http://www.quod.com)





### Legend

- Site boundary
- New development area
- ▲ Grade II\* Listed Building
- ▲ Grade II Listed Building
- Non-designated built heritage
- Begbroke Conservation Area
- Oxford Canal Conservation Area
- Positive vista\*
- Important area of trees\*

© Historic England 2021.  
 © Crown Copyright and database right 2022  
 All rights reserved.  
 The Historic England GIS Data contained in this material was obtained on 03/05/2022.  
 The most publicly up to date Historic England GIS Data can be obtained from <http://www.HistoricEngland.org.uk>.  
 Contains public sector information licensed under the Open Government Licence v3.0.

\* From Oxford Canal Conservation Area Appraisal

## Figure 8.2: Designated and non-designated assets (built heritage scoped in)

0.25 0 0.25 Km

Date: April 2023 Created by: Quod

Scale: 1:14000 @A4

**Quod**

8-14 Meard Street  
London  
W1F 0EQ  
  
020 3597 1000  
[www.quod.com](http://www.quod.com)



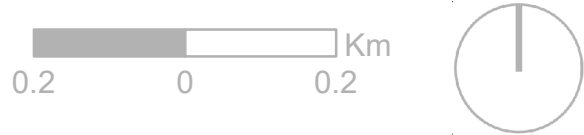


### Legend

- Site
- New development area


© Historic England 2021.  
 © Crown Copyright and database right 2022  
 All rights reserved.  
 The Historic England GIS Data contained in  
 this material was obtained on 03/05/2022.  
 The most publicly up to date Historic England GIS Data  
 can be obtained from <http://www.HistoricEngland.org.uk>.  
 Contains public sector information licensed under  
 the Open Government Licence v3.0.

**Figure 8.3: National Mapping Programme (NMP) showing identified cropmarks sites**



Date: March 2023 Created by: Quod

Scale: 1:10000 @A4



8-14 Meard Street  
London

W1F 0EQ

020 3597 1000  
[www.quod.com](http://www.quod.com)



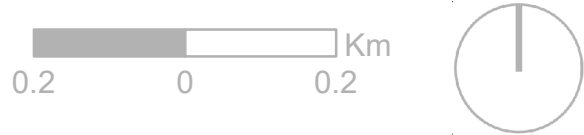


## Legend

- Site
- New development area


© Historic England 2021.  
 © Crown Copyright and database right 2022  
 All rights reserved.  
 The Historic England GIS Data contained in  
 this material was obtained on 03/05/2022.  
 The most publicly up to date Historic England GIS Data  
 can be obtained from <http://www.HistoricEngland.org.uk>.  
 Contains public sector information licensed under  
 the Open Government Licence v3.0.

**Figure 8.4: Archaeological assets as identified by geophysical survey**



Date: March 2023 Created by: Quod

Scale: 1:10000 @A4

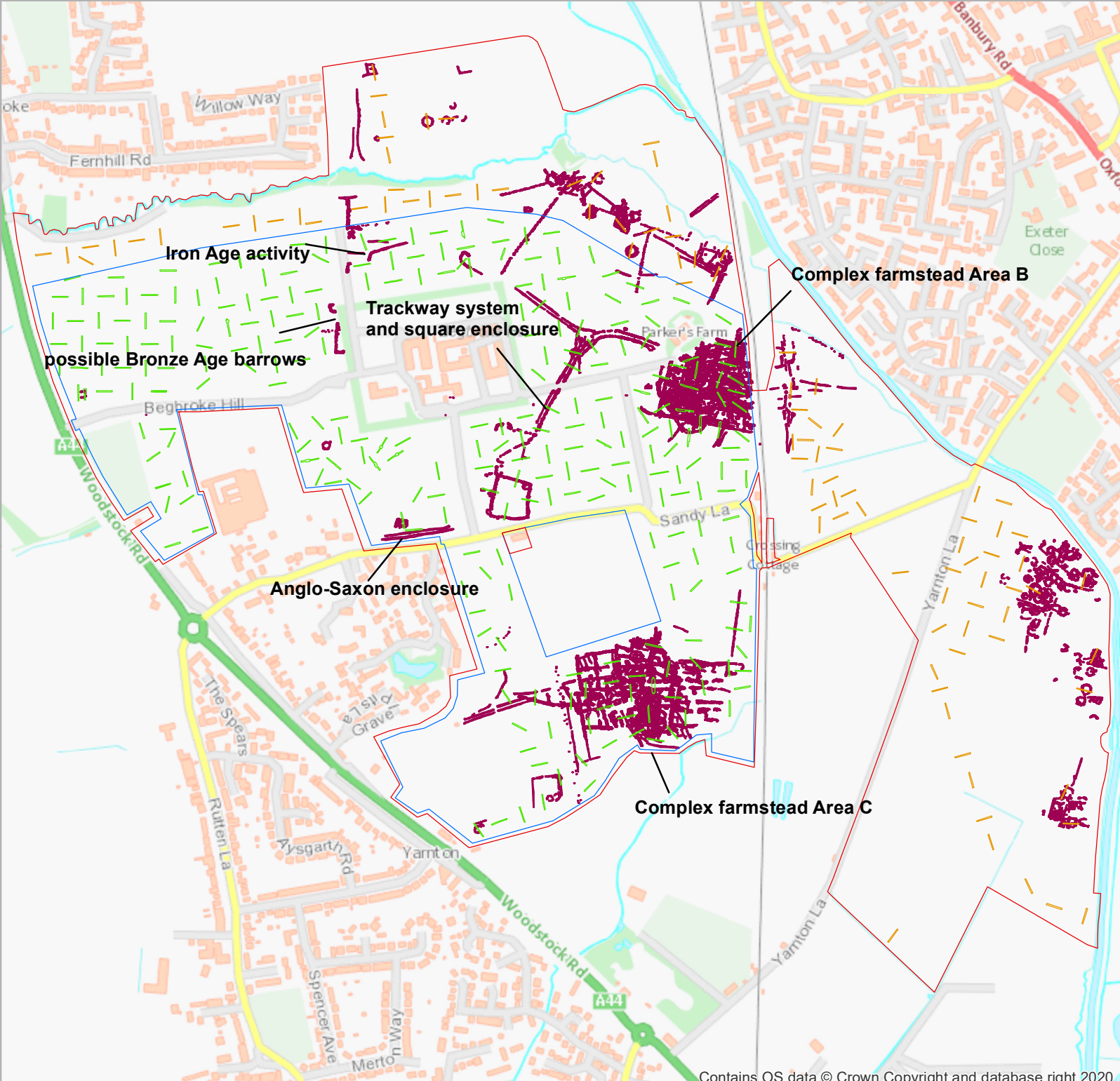


8-14 Meard Street  
 London

W1F 0EQ

020 3597 1000  
[www.quod.com](http://www.quod.com)



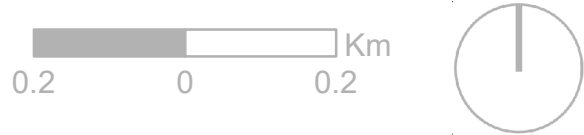


### Legend

- Site
- New development area
- Phase 1: excavated trenches
- Phase 2: proposed trenches
- Magnetometry interpretation

© Historic England 2021.  
 © Crown Copyright and database right 2022  
 All rights reserved.  
 The Historic England GIS Data contained in this material was obtained on 03/05/2022.  
 The most publicly up to date Historic England GIS Data can be obtained from <http://www.HistoricEngland.org.uk>.  
 Contains public sector information licensed under the Open Government Licence v3.0.

**Figure 8.5: Archaeological assets as evaluated by trial trenches**



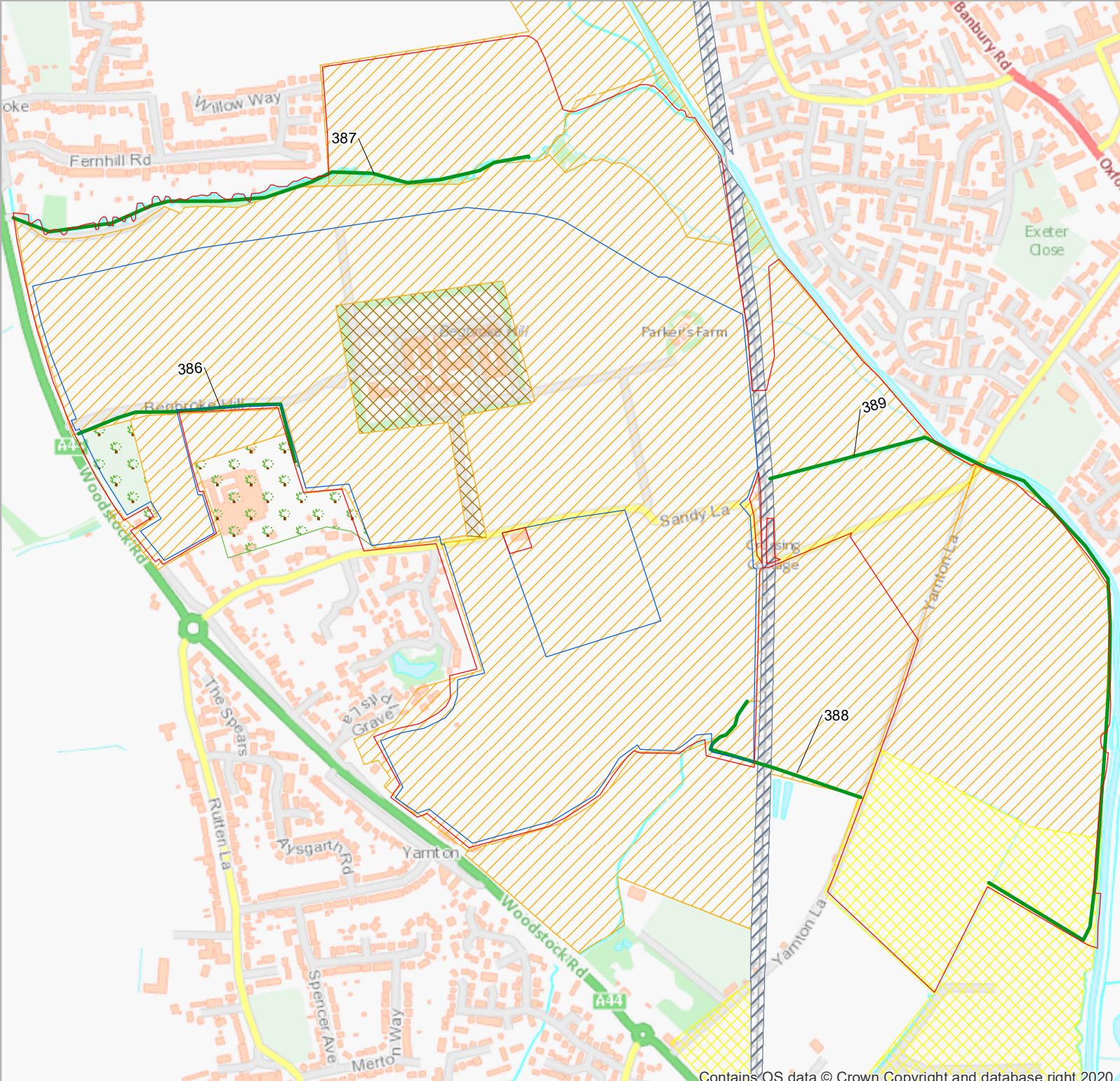
Date: March 2023      Created by: Quod

Scale: 1:10000 @A4



8-14 Meard Street  
 London  
 W1F 0EQ  
 020 3597 1000  
 www.quod.com



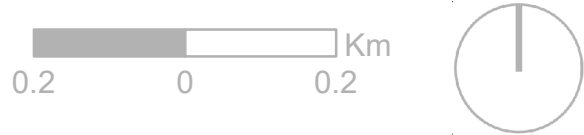


### Legend

- Site
- New development area
- Railway
- Commercial
- Amalgamated enclosures
- Reorganised enclosures
- Orchard and Horticulture
- Historically important hedgerows


© Historic England 2021.  
 © Crown Copyright and database right 2022  
 All rights reserved.  
 The Historic England GIS Data contained in this material was obtained on 03/05/2022.  
 The most publicly up to date Historic England GIS Data can be obtained from <http://www.HistoricEngland.org.uk>.  
 Contains public sector information licensed under the Open Government Licence v3.0.

### Figure 8.6: Historical landscapes



Date: March 2023      Created by: Quod

Scale: 1:10000 @A4



8-14 Meard Street  
London  
W1F 0EQ  
020 3597 1000  
[www.quod.com](http://www.quod.com)