

Statutory Consultation 2022

Preliminary Environmental Information Report

Volume 3: Appendix 10.1

Cultural Heritage Desk-based Assessment

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1 INTRODUCTION

- 1.1.1 This document presents a desk-based assessment (DBA), which sets out the cultural heritage baseline conditions and is included as an Appendix to **Chapter 10** Cultural Heritage of the Preliminary Environmental Information Report (PEIR).
- 1.1.2 The Proposed Development is located across the Main Application Site, Off-site Car Parks, Off-site Highways Interventions and Off-site Planting (hereafter referred to as “the Application site”) as described in **Chapter 2** of the PEIR, and shown on **Figure 2.2** in Volume 4 of the PEIR.
- 1.1.3 This assessment identifies all known designated and non-designated heritage assets within defined study areas surrounding the Application Site, to assess the archaeological potential of the Application Site and to identify key heritage considerations. It places the Application Site within its wider heritage context to inform the assessment of significance of cultural heritage assets. Cultural heritage in this context means the above and below-ground archaeology, built heritage, the historic landscape and any other elements which may contribute to the historic and cultural heritage of the area.

1.2 Proposed Development Site Location and Proposed Development

- 1.2.1 The Proposed Development site, centred on NGR 12626 21530, is located approximately 45km north-west of London and approximately 2km to the east of Luton Town Centre. The Application Site straddles the local authority boundaries of Central Bedfordshire Council and Hertfordshire County Council. Land to the west and north of the Application Site is largely residential and industrial with rural arable fields to the east and south.
- 1.2.2 The Proposed Development will include the refurbishment of the existing terminal, creation of a new terminal, replacement and additional car parks, an extension to the Luton Direct Air-Rail Transit (DART), highway network improvements and replacement of existing / planned public open space and amenities.
- 1.2.3 The Main Application Site comprises approximately 472ha of land including the existing airport and land immediately to the east consisting of arable land and woodland.
- 1.2.4 The Off-site Car Parks consist of two locations to the south west of the airport, within a commercial area dominated by existing transport infrastructure. The Midland Mainline Railway passes between the two Car Parks.
- 1.2.5 Off-site Highways Interventions comprises several sites where highway improvements are required to facilitate the increase in airport capacity. Each of these interventions is in an urban context and restricted, as far as possible, to existing highway boundaries.
- 1.2.6 Off-site Planting is to be undertaken and would take place on agricultural field margins to the north and south of the Main Application Site.

1.3 Scope and Structure

1.3.1 This desk-based assessment has been prepared in order to define the cultural heritage baseline. The baseline is used to inform the potential impact of the Proposed Development on cultural heritage assets and identify any mitigation measures that may be appropriate where heritage assets are affected.

1.3.2 This report is structured into the following sections:

- a. the legislative and planning policy framework is provided in Section 2 (Legislation and Planning Policy) which also includes an overview of Historic England policy and guidance;
- b. the methodology for the determination of the study areas, the baseline and the assessment of the heritage potential and significance is set out in Section 3 (Assessment Methodology);
- c. the heritage baseline including designated and non-designated heritage assets within the Application Site and study area and a description of the Proposed Development site's historical and archaeological background is set out in Section 4 (Heritage Baseline);
- d. Section 5 provides an assessment of known and potential heritage assets which have the potential to be impacted by the Proposed Development (Assessment of Baseline); and
- e. Section 6 summarises the results of the assessment (Conclusions).

2 LEGISLATION AND PLANNING POLICY

2.1 Legislation

Planning (Listed Buildings and Conservation Areas) Act (1990)

- 2.1.1 The Act (Ref. 1) sets out the principal statutory provisions which must be considered in the determination of any application affecting either listed buildings or conservation areas.
- 2.1.2 Section 16 (2) of the Act states that in considering whether to grant listed building consent for any works the local planning authority or the Secretary of State shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses.
- 2.1.3 Section 66 of the Act states that in considering whether to grant planning permission for development which affects a listed building or its setting, the local planning authority or, as the case may be, the Secretary of State shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses. By virtue of Section 1(5) of the Act a listed building includes any object or structure within its curtilage.
- 2.1.4 Section 72 of the Act states that with respect to buildings or land within a conservation area, special attention should be paid to the desirability of preserving or enhancing the character or appearance of that area.

Ancient Monuments and Archaeological Areas Act 1979

- 2.1.5 The Ancient Monuments and Archaeological Areas Act (Ref. 2) imposes a requirement for Scheduled Monument Consent for any works of demolition, repair, and alteration that might affect a designated Scheduled Monument.

2.2 Policies

National Planning Policy Framework (NPPF; MHCLG 2021)

- 2.2.1 The NPPF (Ref. 3) sets out the Government's planning policies for England and how these should be applied to contribute to the achievement of sustainable development. While the EIA methodology forms part of a separate planning regime, the planning decision still takes account of national guidance. As such, it is important to understand where the development fits within this.
- 2.2.2 Section 16 of the NPPF deals specifically with the historic environment. Where changes are proposed, the NPPF sets out a clear framework to ensure that heritage assets are conserved, and where appropriate enhanced, in a manner that is consistent with their significance.
- 2.2.3 The NPPF sets out the importance of being able to assess the significance of heritage assets that may be affected by a development. Significance is defined in Annex 2 as being the, "value of a heritage asset to this and future generations because of its heritage interest. That interest may be

archaeological, architectural, artistic or historic". Significance is not only derived from an asset's physical presence, but also from its setting. The setting of a heritage asset is defined in Annex 2 as, "the surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve".

- 2.2.4 Paragraph 194 of the NPPF states that in determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance. Similarly, paragraph 195 includes a requirement on local planning authorities, having assessed the particular significance of any heritage asset that may be affected by a proposal, to take this into account when considering the impact of a proposal on a heritage asset.
- 2.2.5 In determining planning applications, local planning authorities should take account of the following points:
- a. the desirability of sustaining and enhancing the significance of heritage assets and putting them to viable uses consistent with their conservation;
 - b. the positive contribution that conservation of heritage assets can make to sustainable communities including their economic vitality; and
 - c. the desirability of new development making a positive contribution to local character and distinctiveness (paragraph 192).
- 2.2.6 Paragraphs 199 to 203 of the NPPF introduce the concept that heritage assets can be harmed or lost through alteration, destruction or development within their setting. This harm ranges from less than substantial through to substantial. With regard to designated assets, paragraph 199 states that great weight should be placed on its conservation, irrespective of whether any potential harm is considered to be substantial or less than substantial. The paragraph goes further to say that the more important the asset, the greater the weight should be on its conservation. In paragraph 200, a distinction is made in respect of those assets of the highest significance (e.g. scheduled monuments, Grade I and Grade II* listed buildings) where substantial harm to or loss should be wholly exceptional.
- 2.2.7 Paragraph 201 states that in instances where development would cause substantial harm to or total loss of significance of a designated asset, consent should be refused unless it can be demonstrated that it is necessary to achieve substantial public benefits that outweigh that harm or loss. Paragraph 202 says in instances where development would cause less than substantial harm to the significance of a designated asset, the harm should be weighed against the public benefits of the proposal to provide a balanced judgement.
- 2.2.8 With regard to non-designated assets, paragraph 203 states that the effect of the application on the significance of the asset should be taken into account in determining the application. A balanced judgement will be required having regard to the scale of any harm or loss and the significance of the heritage asset.

Planning Practice Guidance (PPG; MHCLG 2019)

- 2.2.9 The Planning Practice Guidance (Ref. 4) provides further advice and guidance that expands the policy outlined in the NPPF. It expands on terms such as 'significance' and its importance in decision making. The PPG clarifies that being able to properly assess the nature, extent and the importance of the significance of the heritage asset and the contribution of its setting, is crucial to understanding the potential impact and acceptability of development proposals (paragraph 007; Reference ID: 18a-007-20190723).
- 2.2.10 The PPG states that in relation to setting a thorough assessment of the impact on setting needs to take in to account, and be proportionate to, the significance of the heritage asset under consideration and the degree to which proposed changes enhance or detract from that significance and the ability to appreciate it (paragraph 013; Reference ID: 18a-013-20190723).
- 2.2.11 The PPG discusses how to assess if there is substantial harm. It states that what matters in assessing if a proposal causes substantial harm is the impact on the significance of the asset. It is the degree of harm to the asset's significance rather than the scale of the development that is to be assessed (paragraph 018; Reference ID: 18a-018-20190723).
- 2.2.12 The NPPF indicates that the degree of harm should be considered alongside any public benefits that can be delivered by development. The PPG states that these benefits should flow from the proposed development and should be of a nature and scale to be of benefit to the public and not just a private benefit and would include securing the optimum viable use of an asset in support of its long-term conservation (paragraph 020; Reference ID: 18a-020-20190723).

Airports National Policy Statement (2018)

- 2.2.13 The Airports National Policy Statement (ANPS) (Ref. 5) does not have effect in relation to an application for development consent for an airport development not comprised of an application relating to the Heathrow Northwest Runway. Nevertheless, as set out within paragraph 1.41 of the ANPS, the Secretary of State considers that the contents of the ANPS will be both important and relevant considerations in the determination of such an application, particularly where it relates to London or the south east of England.
- 2.2.14 Accordingly, whilst the ANPS does not have effect in relation to the Proposed Development, it will be an important and relevant consideration in the determination of Luton Rising's (a trading name of London Luton Airport Limited) application for development consent.
- 2.2.15 In relation to cultural heritage, the policy states:
- "As part of the environmental statement, the applicant should provide a description of the significance of the heritage assets affected by the proposed development, and the contribution of their setting to that significance. The level of detail should be proportionate to the asset's importance, and no more than is sufficient to understand the potential impact of the proposal on the significance of the asset. At a minimum, the relevant Historic Environment Record should be*

consulted and the heritage assets assessed using appropriate expertise. Where a site on which development is proposed includes or has the potential to include heritage assets with archaeological interest, the applicant should include an appropriate desk-based assessment and, where necessary, a field evaluation. The applicant should ensure that the extent of the impact of the proposed development on the significance of any heritage asset affected can be adequately understood from the application and supporting documents.” (Paragraphs 5.193 to 5.195).

North Hertfordshire District Council Local Plan No.2 1996 and North Hertfordshire District Council Local Plan 2011 – 2031

- 2.2.16 The North Hertfordshire District Council Local Plan No.2 adopted in 1996 contains saved Policies 15 – 21 which outlines the guidance for development proposals which may affect heritage assets.
- 2.2.17 The Council will normally refuse planning permission for development proposals that would adversely affect Scheduled Monuments and their setting. For Areas of Archaeological Significance or other Archaeological Areas, the Council may require a preliminary evaluation of any potential archaeological remains before deciding to permit or refuse development proposals. For Listed Buildings, the Council will apply a strong presumption in favour of preservation. Consent will be refused for the demolition of any Listed Building or structure unless a strong case can be made and justified. Any conversion, alteration or extension should preserve the character, historic fabric and setting of the Listed Buildings and ensure its continued use and maintenance. The Council will refuse development proposals which destroy or result in any loss of the value of Historic Parks and Gardens. For Conservation Areas, the Council will only permit development proposals which will maintain or enhance their character. The Council will also maintain the landscape and open space patterns in towns.
- 2.2.18 The North Hertfordshire District Council Local Plan 2011 – 2031 (Ref. 6) proposed submission contains guidance on the historic environment and as an emerging plan, the policies within it can be given weight in the planning process. Policy HE1 recognises the significance of designated heritage assets within the District and the contribution they make to defining local character, providing a sense of place and achieving sustainable development. Planning permission will be granted for development proposals affecting designated heritage assets where they enable the heritage asset to be used in a manner that secures its conservation and preserves its significance and also incorporates a palette of materials that make a positive contribution to local character or distinctiveness, where it is appropriate and justified. Designated heritage assets include Scheduled Monuments, Listed Buildings, Conservation Areas and Registered Parks and Gardens.
- 2.2.19 Particular care will be required when considering the scale, layout, design and materials of development proposals within or adjacent to Conservation Areas. They must be designed to harmonise with their surroundings and in Conservation Areas preserve or enhance the character or appearance of the heritage asset.

- 2.2.20 As part of its heritage strategy, the Council will maintain and review a list of heritage assets at risk and work with Historic England, homeowners and occupiers to find new, appropriate uses and solutions to secure the future of heritage assets as per Policy HE2.
- 2.2.21 Planning permission will be granted for development proposals that seek to restore or provide new uses for designated heritage assets identified on the national register, or the local risk register maintained by the Council, that are justified and appropriate to the significance of the asset to return a heritage asset to beneficial use. Proposals that harm the significance of heritage assets included on national and local registers will be resisted unless the need for, and the benefits of, the development proposal in that location clearly outweigh that harm, taking account of the asset's significance and importance, and all feasible solutions to avoid and mitigate that harm have been fully implemented.
- 2.2.22 North Hertfordshire has a rich heritage of designed landscapes and historic buildings, many of which are not designated but contribute to a strong sense of place and contribute much to the character of historic towns, villages and wider countryside. Buildings of local interest are those identified on Registers of Buildings of Local Interest adopted by the Council and Policy HE3 outlines that permission for the loss of a building of local interest will only be granted where the replacement building contributes to preserving the local character distinctiveness of the area and a continuous contract for the development of the site has been secured, unless there are justifiable grounds for not developing the site.
- 2.2.23 Policy HE4 outlines where permission for development proposals affecting heritage assets with archaeological interest will be granted. Developers must submit an appropriate desk-based assessment and where justified, an archaeological field evaluation. They must demonstrate how archaeological remains will be preserved and incorporated into the layout of that development, if in-situ preservation of important archaeological remains is considered preferable. Where the loss of the whole or material part of important archaeological remains is justified, appropriate conditions are applied to ensure that the archaeological recording, reporting, publication and archiving of the results of such archaeological work is undertaken before it is damaged or lost. A full report of this recording work and any findings should be submitted to the local planning authority for approval before an application can be determined.

Central Bedfordshire Local Plan 2015 – 2035

- 2.2.24 The Central Bedfordshire Local Plan 2015 – 2035 (Ref. 7) adopted in 2021 contains three policies which outline guidance on the historic environment. Policy HE1 states that where development proposals will impact upon archaeological heritage assets, where possible, the Council will seek the preservation of those remains in situ. Where this cannot be achieved, a scheme of archaeological investigation, recording, analysis and publication (i.e. preservation by record) will be required prior to the completion of the development. The Council will support proposals that include provision for the enhancement, conservation and enjoyment of the historic environment by the creation of appropriate management and interpretation schemes. The Council

will refuse development proposals that cause substantial harm to the significance of archaeological heritage assets or their settings, whether designated or non-designated, unless the application demonstrates that the public benefits which the development will bring substantially outweigh the loss of the significance.

- 2.2.25 Central Bedfordshire contains a high number of historic parks and gardens including 13 registered parks and gardens of exceptional interest and international importance. Policy HE2 states that the Council will support development proposals that encourage the conservation, enhancement and restoration of the historic parks and gardens (both designated and non-designated). Development proposals that would degrade the character, appearance and setting resulting in the loss of significance of registered parks and gardens will be refused unless it can be demonstrated that the public benefits which the development will bring substantially outweighs the loss of significance.
- 2.2.26 Policy HE3 recognises the need to conserve and enhance the built heritage of the area. The Council will grant development proposals provided they preserve, sustain and enhance the special character, significance, appearance and locally distinctive features of the heritage asset(s) whether it be a Listed Building, Conservation Area or non-designated building/structure in terms of scale, form, proportion, design, materials and the retention of features. Consideration must be given to the potential impact on the setting or significance of the heritage asset(s) by the development proposal.
- 2.2.27 The Council encourage development proposals that will result in a reduction of the number of heritage assets on the Heritage@Risk Register.

Luton Local Plan 2011-2031

- 2.2.28 The Luton Local Plan 2011 – 2031 (Ref. 8) adopted in 2017, contains guidance on the historic environment with Policy LLP30 which outlines how they intend to protect, conserve and enhance Luton's unique and rich heritage, identity and sense of place. Development proposals must take account of the character, setting and local distinctiveness (including materials and detailing) of local affected heritage assets and features of particular importance within the borough, including: the manufacturing industry and hat industry, ; registered parks and gardens, including Luton Hoo and Wardown Park, ; historic landscape features such as the Chilterns and River Lea; and prominent listed buildings including within the town centre, the medieval street patterns, the Town Hall and the Parish Church of St. Mary.
- 2.2.29 Any degree of harm and benefit arising from development proposals will be assessed against the significance of any affected heritage assets including designated and non-designated heritage assets such as Listed Buildings, Conservation Areas, Scheduled Monuments, Registered Parks and Gardens, and Locally Listed Buildings and archaeology.
- 2.2.30 There will be a presumption in favour of retention of heritage assets and development proposals will be supported where they conserve heritage assets. Substantial harm or loss of a designated heritage asset should be exceptional

depending on the significance of the affected heritage asset. It will only be permitted where there are substantial public benefits that outweigh the harm or loss, or the nature of the heritage asset is such that no reasonable alternative use including conversion can be found, and that appropriate marketing or options for grant-funding or charitable/public ownership have been exhausted.

- 2.2.31 If non-designated heritage assets of archaeological interest are of equivalent value to a designated asset, they would need to be subject to the same policies for designated heritage assets.
- 2.2.32 The loss of a building or other element that makes a positive contribution to the significance of a Conservation Area should be avoided and treated as substantial harm or less than substantial harm depending on the circumstances.

2.3 Guidance

Historic England Guidance

- 2.3.1 Historic England have published a series of Good Practice Advice (GPA) of which those of most relevance to this appraisal are GPA2 Managing Significance in Decision-taking (Ref. 9), GPA3 The Setting of Heritage Assets (Ref. 10) and Advice Note 12: Statements of Heritage Significance (Ref. 11).
- 2.3.2 GPA2 emphasises the importance of having a knowledge and understanding of the significance of heritage assets likely to be affected by the development and that the 'first step for all applicants is to understand the significance of any affected heritage asset and, if relevant the contribution of its setting to its significance' (para 4). Early knowledge of this information is also useful to a local planning authority in pre-application engagement with an applicant and ultimately in decision making (paragraph 7).
- 2.3.3 GPA3 provides detail on the setting of heritage assets and provides general advice on understanding setting, and how it may contribute to the significance of heritage assets and allow that significance to be appreciated. The document also provides advice on how views contribute to setting. Paragraph 8 of the advice note confirms that the extent of the setting, as defined in the NPPF, is not fixed and may change as the asset and its surroundings evolve. Paragraph 9 states that although the setting is not itself a heritage asset, nor a heritage designation, land comprising a setting may itself be designated. The concept of a 'core', 'wider' and 'extended' setting is introduced in the same paragraph (under the section on Designated Views); however, it is acknowledged that there is no formal definition for these terms, and they will only apply in certain cases.
- 2.3.4 GPA3 also provides a broad approach to assessing the impact of a Proposed Development on the setting of heritage assets, and outlines a series of steps that can be applied proportionately to the complexity of the case:
- a. Step 1 is to identify the heritage assets and their settings which have the potential to be impacted;

- b. Step 2 comprises assessing the degree to which these settings make a contribution to the significance of the heritage assets, or allow significance to be appreciated;
- c. Step 3 is to assess the effects of the Proposed Development on that significance or allow significance to be appreciate;
- d. Step 4 comprises exploring ways to maximise enhancement and avoid or minimise harm; and
- e. Step 5 should be making and documenting the decision and monitoring the outcomes.

2.3.5 Advice Note 12 outlines a recommended approach to assessing the significance of heritage assets in line with the requirements of NPPF. It includes a suggested reporting structure for a 'Statement of Heritage Significance', as well as guidance on creating a statement that is proportionate to the asset's significance (heritage value) and the potential degree of impact of a Proposed Development.

2.3.6 The Advice Note also offers an interpretation of the various forms of heritage interest that an asset can possess, based on the terms provided in the NPPF Glossary (Annex 2: Glossary) as follows:

- a. Archaeological Interest – there will be archaeological interest in a heritage asset if it holds, or has the potential to hold, evidence of past human activity worthy of expert investigation at some point;
- b. Architectural and Artistic Interest – these are interests in the design or general aesthetics of a place. They can arise from conscious design or fortuitously from the way the heritage asset has evolved. More specifically, architectural interest is an interest in the art or science of the design, construction, craftsmanship and decoration of buildings and structures of all types. Artistic interest is an interest in other human creative skills, such as sculpture.
- c. Historic Interest – An interest in past lives and events (including pre-historic). Heritage assets can illustrate or be associated with them. Heritage assets with historic interest not only provide a material record of our nation's history but can also provide meaning for communities derived from their collective experience of a place and can symbolise wider values such as faith and cultural identity.

Chartered Institute for Archaeologists (CIfA)

2.3.7 The baseline assessment has been undertaken in accordance with guidance published by the Chartered Institute for Archaeologists (CIfA), specifically the Standard and Guidance for Historic Environment Desk-Based Assessment (Ref. 12) and the Code of Conduct (Ref. 13).

IEMA Principles of Cultural Heritage Assessment in the UK

2.3.8 Principles of Cultural Heritage Impact Assessment in the UK (Ref. 14) is a guide to good practice in cultural heritage impact assessment published jointly by the Institute of Environmental Management and Assessment (IEMA), the Institute of

Historic Building Conservation (IHBC) and the Chartered Institute for Archaeologists (CIfA). The document provides guidance on understanding cultural heritage assets and evaluating the consequences of change.

- 2.3.9 Understanding cultural heritage assets is split into three stages: Description, Significance and Importance. The description arrives at a factual statement that establishes the nature of the asset. The heritage values of the asset are then analysed (the guidance stresses that these include but are not limited to aesthetic, historic, scientific, social or spiritual values) and a statement of cultural significance given. Finally, the importance of the asset is assessed, and a conclusion drawn as to the level of protection that the asset merits in planning policy and cultural heritage legislation. The guidance notes that unlike cultural significance, importance is scaled and can be described as high, medium or low.
- 2.3.10 The process of evaluating the consequences of change is split into three stages: understanding change, assessing impact and weighting the effect. All aspects of a proposal that have the ability to change a cultural heritage asset or its setting are first explained. If these changes affect the cultural significance of the asset, the resulting impact (which could be positive or negative) and its magnitude is then assessed. The effect is a combination of the magnitude of the impact and the cultural heritage asset's importance and the scale of the effect will determine by how much the issue should influence the design of the proposal and whether the proposal is acceptable and will be permitted.

3 ASSESSMENT METHODOLOGY

3.1 Study Area

- 3.1.1 The heritage assets within this assessment including designated and non-designated heritage assets are identified by their unique identification number assigned by the NHLE for designated assets, and by the HER for non-designated assets. All assets are identified within the text using their unique identifier and can be cross-referenced to the gazetteers in **Appendix 10.2** and located on **Figures 10.1 to 10.3** in Volume 4 of this PEIR.

Designated Heritage Assets

2km study area

- 3.1.2 A study area of 2km from the Main Application Site is used to provide historical and archaeological context and to identify designated heritage assets with the potential to be affected by the Proposed Development (refer to **Figures 10.1** and **10.2**).
- 3.1.3 The 2km study area also includes the Off-site Car Parks and Off-site Planting areas. The 2km study area also includes Off-site Highways Interventions, where they fall within the study area. Off-site Highways interventions that are located beyond the 2km study area are subject to a separate study area.

250m study area

- 3.1.4 Where Off-site Highways Interventions are located beyond the 2km study area, a 250m study area has been applied (refer to **Figure 10.1** and **10.2**). The 250m study area is considered appropriate as the interventions comprise localised junction improvement works only, such as signalisation or layout alterations. The works are located within urban settings and restricted to existing highways boundaries, as far as possible.

Wider study area (beyond the 2km study area)

- 3.1.5 Designated heritage assets beyond the 2km study area have been considered in this assessment where there is a potential for them to be affected by visual and/or aural intrusion (refer to **Figures 10.6 to 10.9** and **10.11**). Such assets include churches, country houses or assets in isolated locations where their setting contributes to their significance. This wider study area has been informed by noise contour data, the ZTV, and the results of walkover surveys carried out as part of the baseline assessment.

Non-designated Heritage Assets

1km study area

- 3.1.6 The study area for the collation of information on non-designated heritage assets was defined as 1km from the Main Application Site boundary (refer to **Figure 10.3**). This distance has been judged as appropriate to identify known archaeological assets and assess the potential for the survival of archaeological remains within the Proposed Development site, given its nature, size and

location and has been agreed with the Archaeological Advisors for Hertfordshire County Council and Central Bedfordshire Council.

3.2 Data and Information Sources

3.2.1 The following sources of information have been reviewed and form the basis of the assessment:

- a. Central Bedfordshire and Luton Historic Environment Record (HER) [Data acquired 25 November 2020] for information relating to non-designated heritage assets and previous fieldwork events.
- b. Hertfordshire Historic Environment Record (HER) [Data acquired [18 December 2020] for information relating to non-designated heritage assets, historic landscape characterisation, and previous fieldwork events.
- c. National Heritage List for England (NHLE) (Ref. 15) for data relating to designated heritage assets.
- d. National Record of the Historic Environment held by Historic England.
- e. Bedfordshire and Luton Archives and Records Service for historical maps, photographs and local history.
- f. Hertfordshire Archives and Local Studies for historical maps, photographs and local history.
- g. Local authority websites for information about conservation areas (Ref. 16) and (Ref. 17).
- h. National Library of Scotland (NLS) (Ref. 18) for historic Ordnance Survey mapping.
- i. British Geological Survey (BGS) Geology of Britain Viewer (Ref. 19).
- j. Aerial photographs viewed online via the National Collection for Aerial Photographs (Ref. 20) and Britain from Above (Ref. 21) websites.
- k. Archaeology Data Service (Ref. 22) for information on previous cultural heritage assessments and fieldwork surveys.
- l. LiDAR data viewed online via The Environment Agency online database (Ref. 23).

3.3 Walkover Survey

3.3.1 A walkover survey and visual assessment of heritage assets within the Application Site and study areas was undertaken on 8 – 11 October 2018. An additional walkover survey of designated heritage assets was undertaken on 13 May 2019. The walkover surveys were undertaken to:

- a. Identify known archaeological sites within the Proposed Development site.
- b. Identify historic buildings and related assets including listed buildings, conservation areas and locally listed buildings within the Application Site and study areas.

- c. Identify areas with the potential to contain any previously unidentified archaeological or historical remains.
- d. Identify and assess the setting of heritage assets within and outside of the study areas.
- e. Identify the location, extent and severity of modern ground disturbance and previous construction impacts.
- f. Assess ground conditions and the suitability of the Application Site for evaluation.

3.4 Significance of Heritage Assets

- 3.4.1 An assessment of the significance of assets and their setting has been undertaken in consideration of guidance and good practice issued by Historic England. Historic England GPA3 provides the basis of a methodology for the assessment of setting.
- 3.4.2 The NPPF defines significance as ‘the value of a heritage asset to this and future generations because of its heritage interest. That interest may be archaeological, architectural, artistic or historic. Significance derives not only from a heritage asset’s physical presence, but also from its setting’.. Historic England’s Advice Note 12 also offers an interpretation of the various forms of heritage interest that an asset can possess, based on the terms provided in the NPPF Glossary.
- 3.4.3 Significance is often established by statutory designations such as listed buildings, scheduled monuments and conservation areas. More particular advice as to what makes up significance is set out in Conservation Principles, which set out a method for thinking consistently about the heritage values that can be ascribed to a place.
- 3.4.4 The terminology used in this statement relates to the terminology used by NPPF, Advice Note 12, referring to significance in terms of heritage interest and not heritage values.
- 3.4.5 The significance of heritage assets has been determined based on professional judgement guided by designations, national and local policies, guidance documents and research frameworks.

3.5 Archaeological Potential

- 3.5.1 Archaeological potential assesses the possibility that unrecorded archaeological remains may exist within the Application Site in addition to the known archaeological resource identified in the baseline. The potential for unrecorded archaeological remains to exist within the Application Site has been determined by professional judgement guided by an assessment of the existing heritage resource and the impact of previous modern development or disturbance at the Proposed Development site.
- 3.5.2 Assessment of the archaeological resources draws on two factors:

- a. An assessment of the potential survival of any known or unknown archaeological deposits to remain extant within the Application Site based on an evaluation of previous ground disturbance.
- b. An assessment for the potential for archaeological deposits to exist within the Application Site based on the results of the baseline study.

3.5.3 The level of disturbance to buried archaeological remains caused by historic development has been assessed based on available data listed above, with particular attention paid to historic boreholes and available data obtained from previous archaeological evaluations and excavations in the study area.

3.5.4 The potential for an area to contain archaeological remains is rated 'high', 'medium', 'low', 'negligible', or 'unknown'. This rating is based on an understanding of the archaeological resource as a whole and takes into account the Proposed Development site's geological and topographical setting. The rating also considers the number and proximity of known and predicted archaeological/historical sites or find spots within the Application Site and its surrounding study area.

3.6 Consultation

3.6.1 Consultation was undertaken with statutory and non-statutory bodies as part of the assessment process in order to develop the assessment scope and methodology including the study areas. This included Historic England, the Archaeological Advisor for Central Bedfordshire Council, the Archaeological Advisor for Hertfordshire County Council, the Central Bedfordshire County Council Conservation Officer and The Luton Borough Council Conservation Officer. More details of the consultation process are included in the main PEIR Cultural Heritage **Chapter 10**.

3.6.2 Further consultation was undertaken with Historic England on 23 April 2020 in order to provide an opportunity for comments to be received on the draft DBA. These comments have been reviewed and incorporated into the final DBA.

3.6.3 Additional consultation was undertaken with Central Bedfordshire Council between May and August 2021 in order to determine the scope of works for the trial trench evaluation to be undertaken in 2021. As a result of this, comments were received with regards to the baseline and have been reviewed and incorporated into the final DBA.

4 HERITAGE BASELINE

4.1 Proposed Development Site Conditions

Geology and Topography

- 4.1.1 The Application Site is located on a north - south aligned ridge within the Chilterns. The topography of the area varies with Luton Airport Parkway Railway Station, located immediately to the west of the Main Application Site being 113m above ordnance datum (AOD) and the existing London Luton Airport lying on a plateau at 157m AOD. The Main Application Site is bounded to the north by Eaton Green Road and to the west by Vauxhall Way. New Airport Way is located to the south-west of the Main Application Site, terminating within the boundary of the Main Application Site. The Application Site sits on a series of dry valleys and lies at an elevation ranging from approximately 120m AOD to 160m AOD, with the northern and central areas of the Main Application Site having the highest elevations.
- 4.1.2 The underlying geology across most of the Application Site is recorded as undifferentiated Lewes Nodular Chalk Formation and Seaford Chalk Formation with bands of Holywell Nodular Chalk Formation, New Pit Chalk Formation and Chalk Rock Member running along the eastern and western extents of the Proposed Development site. These chalk formations are a sedimentary bedrock formed during the Cretaceous Period. Overlying these chalk formations are Clay-with-flints Formation deposits, superficial deposits formed in the Quaternary and Neogene Periods from the dissolution of bedrock strata of the Chalk Group and Palaeogene Formations. This deposit is dominated by an orange/red-brown sandy clay with abundant nodules and rounded pebbles of flint with a variable thickness but can be up to 10m thick. Superficial Head deposits consisting of clay, silt, sand and gravel are present in the dry valleys to the east of the Application Site and were formed in the Quaternary Period.

Walkover Survey

- 4.1.3 The walkover surveys were undertaken on 8 – 11 October 2018 and 13 May 2019 in dry and sunny conditions and photographs taken during the walkover surveys are presented in Annex A of this report.
- 4.1.4 The walkover surveys incorporated assessing land to the east of the existing airport as it had been assessed as having potential to contain archaeological remains, as well as assessing designated heritage assets. The results of these surveys are incorporated into the baseline and **Section 5**, Assessment of Baseline.
- 4.1.5 Access to the area was gained through Wigmore Valley Park, an area of managed amenity parkland in use by the public. The Wigmore Valley Park Pavilion and a skate park is located in this area. The western part of the parkland is formed on the reinstated site of a landfill area. The park is under mown open grassland, scrub grassland, woodland, allotments, a playpark, skate park, car park and a pavilion building.

- 4.1.6 The southern end of the park is bounded by an unmetalled track which is flanked by earth banks and ditches. This track runs north- south and joins Eaton Green Road at the northern end. Access to the track is barred by a gate. At the southern end, the track leads to an emergency access from the outer perimeter fence of the airport. There is an area of scrubland at the northern end of the track, adjoining Eaton Green Road on which there are a number of burnt out abandoned vehicles.
- 4.1.7 Two fields lie to the to the east of the boundary track, comprising a series of gently rolling dry valleys and ridgelines (Photo 4). The entire area was found to be covered with reseeded oil seed rape and a mixture of wildflowers that had been seeded in order to bring the former arable land into use as replacement parkland (P. Dunlop, Landscape architect, GL Hearn pers comm).
- 4.1.8 The northern of the two fields is dominated by a ridge line running east to west, with slopes descending into dry valleys on either side. The northern boundary of the field is formed by a mature hedgerow with occasional standard trees. This runs into an area of woodland which occupies the north eastern boundary of the northern field (Photo 5). The field beyond to the north was ploughed at the time of the visit.
- 4.1.9 The southern field is delineated by a relict hedge line which now consists of some isolated clumps of hedgerow trees and a dry (at the time of the visit) ditch. This field is low lying at the centre of its northern extent, rising steeply to meet the edge of the scarp on top of which sits the airfield. An area of mature ancient woodland marks the south eastern extent of this field. The county boundary between Bedfordshire and Hertfordshire (unmarked) runs along the eastern extent of the two fields.
- 4.1.10 Further to the east lies an area of uncultivated rough pasture, beyond which lies a number of cultivated fields which flank Winch Hill Lane to the east and west and are demarcated by relict hedge lines, interspersed with mature trees and areas of woodland (Photo 6 and Photo 7).

LiDAR Data and Aerial Photograph Analysis

- 4.1.11 Analysis of LiDAR data shows the dry valleys which extend across the eastern portion of the Site and the plateau in which the existing airport sits. A number of circular pit-like features can be seen within the fields to the east of the existing airport, some of which correlate with assets recorded within the HER. Those assets that do not correlate with existing HER assets have been assigned a unique identifier (AEC001; AEC002).
- 4.1.12 Analysis of aerial photographs dated from 1968 onwards shows the development and expansion of Luton Airport, as well as the expansion of residential development to the north and west of the airport and the undeveloped agricultural land to the east of the airport throughout the late 20th century.
- 4.1.13 The area now covered by Wigmore Valley Park and the eastern-most car park within the airport was previously a landfill site, in use between 1937 and 1978, and this area of landfill can be seen on aerial photographs dated 1968 to 1981.

Wigmore Valley Park was created in the 1980s when the Wigmore estate was created towards the north of the airport and the park can be seen on aerial photographs dating from 1991. Heritage Assets

Designated Heritage Assets

- 4.1.14 There are no World Heritage sites or registered battlefields within the Application Site or study areas.
- 4.1.15 The following designated heritage assets are located within the defined study areas and are presented in the Gazetteer (**Appendix 10.2**) and shown on **Figures 10.1** and **10.2**.
- 2km study area*
- 4.1.16 There is one scheduled monument that falls within the 2km study area. This is Someries Castle (NHLE 1008452) located approximately 250m south of the Main Application Site. The scheduled monument includes upstanding and buried foundations of the late medieval residence known as Someries Castle and the adjacent garden earthworks to the south west.
- 4.1.17 There are two Registered Parks and Gardens (RPG) that fall partly within the 2km study area:
- a. Grade II* Luton Hoo RPG (NHLE 1000578), located approximately 200m south west of the Main Application Site. Luton Hoo is a landscaped park that was first enclosed in 1623 and enlarged and remodelled by Lancelot Brown in 1764-74.
 - b. Grade II Putteridge Bury RPG (NHLE 1000917) is located 4km north east of the centre of Luton and approximately 2km north of the Main Application Site. The landscaped park was laid out c. 1820, subsequently extended southwards to its present boundaries by 1884.
- 4.1.18 Although only part of the two RPGs fall within the 2km study area, they are each considered in their entirety for the purposes of this assessment.
- 4.1.19 There are 87 listed buildings within the 2km study area, four of which are Grade I listed, and one that is Grade II* listed. The remaining listed buildings are Grade II listed.
- 4.1.20 Winch Hill Farmhouse (NHLE 1307881), a Grade II listed farmhouse dating to c. 1600, was located within the Main Application Site. However, the building was demolished following listed building consent by North Hertfordshire District Council (18/03263/LBC) on 8 March 2019. Therefore, this building is not discussed further in this assessment and does not form part of the baseline.
- 4.1.21 The four Grade I listed buildings are the Church of St. Mary (NHLE 1102475) in Kings Walden, the Parish Church of St. Mary (NHLE 1114615) in Luton, the Luton Hoo house (NHLE 1321301) and associated garden houses and walls (NHLE 1158944).
- 4.1.22 The Church of St. Mary (Grade I, NHLE 1102475) is located in Kings Walden, approximately 2km north east of the Main Application Site. The church has 12th

century origins with a 17th century brick mortuary chapel. It was restored in the 19th century by Eden Nesfield.

- 4.1.23 The Parish Church of St. Mary (Grade I, NHLE 1114615) is located in the town of Luton, approximately 1.6km west of the Main Application Site. It mainly dates to the 14th and 15th century and was restored in the second half of the 19th century. It is constructed of flint and stone with some decorative chequerwork.
- 4.1.24 Luton Hoo house (Grade I, NHLE 1321301) is the principal building at Luton Hoo RPG, located approximately 1.7km south-west of the Main Application Site. It was designed by Robert Adam for the Earl of Bute in the 1760s with contributions by Robert Smirke. Following a fire in 1843, the house was repaired and subsequently remodelled by Charles Mewès for Sir Julius Wernher in 1903. It is constructed of ashlar stone and has a mansard roof. Luton Hoo Stables (NHLE 1114713) is a Grade II* building that falls outside of the 2km study area, but was considered in the assessment due to its associative relationship with Luton Hoo house and RPG.
- 4.1.25 The Garden Houses and retaining walls to terraced gardens at Luton Hoo (Grade I, NHLE 1158944) are located to the south-east of the principal house. The terraced gardens are arranged on three levels and include an ornamental pool with a statue and two temple-style garden houses.
- 4.1.26 The Grade II* listed building comprises the Old Homestead (NHLE 1176170) which is a medieval house that dates to the early 17th century, of timber-framed construction with plaster panels and some brick casing, located approximately 0.6km east of the Main Application Site.
- 4.1.27 The Grade II listed buildings are dispersed across the 2km study area. The majority of the Grade II listed buildings are located within the existing settlement areas of Luton and Breachwood Green, whilst others comprise discrete buildings, or small groups of buildings. Many of these buildings comprise farmhouses and are indicative of the agricultural heritage of the study area, such as Wigmore Hall Farmhouse (NHLE 1321368) which is located just outside the northern extent of the Main Application Site boundary. The building dates to the early 19th century and is now used as Wigmore Hall Conference Centre. The hamlet of Wandon End, located just outside the north-eastern boundary of the Main Application Site, includes Wandon End Farmhouse (NHLE 1102448), a timber-framed farmhouse that dates to the 16th century and Wandon End House (NHLE 1307874), a brick-built house dating to the early 18th century.
- 4.1.28 There are six conservation areas within the 2km study area. Four of these areas are historic areas of Luton designated for their special historic and architectural interest. These comprise the following:
- a. High Town Conservation Area which is the core of Luton's earliest suburb.
 - b. Luton Town Centre Conservation Area encompasses the historic core of the town with most of the historic buildings dating to the 19th century.

Residential, commercial and public buildings coexist, contributing to the vibrant character of the conservation area.

- c. Luton South Conservation Area which is located to the south of the centre of Luton town. The character of this conservation area is residential and includes a number of Victorian terraces along Stockwood Crescent and London Road as well as detached and semi-detached properties along West Hill Road. The conservation area encompasses Luton Hoo Memorial Park, to the south east.
- d. Plaiter's Lea Conservation Area which is located on the northern fringes of Luton's commercial district.
- e. Luton Hoo (Hyde) Conservation Area which is located within the Luton Hoo RPG.
- f. Bendish Conservation Area which encompasses the historic core of the hamlet in the parish of St. Paul's Walden, on the eastern edge of the 2km study area.

250m study area

- 4.1.29 There are no scheduled monuments or RPGs located within the 250m study areas of the Off-site Highways Interventions, outside of the 2km study area.
- 4.1.30 There are two conservation areas within the 250m study areas of the Off-site Highways Interventions, that are located beyond the 2km study area. These comprise Hitchin Conservation Area and Hitchin Hill Path Conservation Area.
- 4.1.31 There are 124 listed buildings that fall within the 250m study areas of the Off-site Highways Interventions, that are located beyond the 2km study area. This number comprises one Grade I building, six Grade II* listed buildings and 117 Grade II listed buildings. All of these listed buildings fall within Hitchin and Hitchin Hill Path Conservation Areas.

Wider study area (beyond the 2km study area)

- 4.1.32 There are three scheduled monuments within the wider study area. Six Hills Roman barrows is located in Stevenage, over 10km north east of the Main Application Site, and falls within the noise contour data which shows the predicted changes in airborne noise. The remaining two scheduled monuments fall within the ZTV and are located close to the village of Lilley on the suburban outskirts of Luton. The scheduled monuments comprise:
 - a. Six Hills Roman barrows (NHLE 1015579) consisting of earthwork features that form the largest surviving group of Roman burial mounds in England. The monument stands within an area of publicly accessible common land.
 - b. A Barrow at Telegraph Hill (NHLE 1012449), located approximately 6km north-east of the Main Application Site. It includes a hemispherical earth mound, the northern edge of which has been altered slightly by the trackway which runs alongside it.

- c. A Neolithic enclosure known as Waulud's Bank (NHLE 1015558), located approximately 6km north-west of the Main Application Site, in the suburban outskirts of Luton. The surviving earthworks define a large D-shaped enclosure.

- 4.1.33 Seven RPGs are located in the Wider Study Area. These include the Grade I St Paul's Walden Bury (NHLE 1000150) located approximately 4km to the east of the Main Application Site; the Grade II* Knebworth (NHLE 1000255) located approximately 8.5km east of the Main Application Site; the Grade II* Temple Dinsley (NHLE 1000919), located approximately 4km east of the Main Application Site; the Grade II* The Improvement Garden (NHLE 1468798) located approximately 2.5km west of the Main Application Site; the Grade II Wardown Park (NHLE 1001445) located approximately 3km north-west of the Main Application Site; the Grade II Ayot House (NHLE 1000905) which is located approximately 6.7 km to the south-east of the Main Application Site and the Grade II The Hoo, Kimpton (NHLE 1000912) which is located approximately 4.5km east of the Main Application Site.
- 4.1.34 There are four Grade I and 22 Grade II* listed buildings located within the wider study area. The majority of these buildings comprise churches located within existing areas of settlement.

Non-designated Heritage Assets

1km study area

- 4.1.35 There are 108 non-designated heritage assets located within the 1km study area and there are 25 non-designated heritage assets which are located within the Application Site boundary (refer to **Figure 10.3** and **Appendix 10.2**).
- 4.1.36 The 25 non-designated heritage assets located within the Application Site include the locations of former assets that no longer survive, such as the site of the Hospital of St. Mary Magdalene (HER 362), and historic landscape features such as the site of former quarry pits (HER 6733).
- 4.1.37 Assets that are recorded on the HER as surviving within the Application Site comprise:
- a. the site of Iron Age and Roman settlement-related activity (HER 10808).
 - b. the site of a possible Roman building (HER 7358).
 - c. cropmark evidence of potential archaeological origin (HER 12422).
 - d. cropmarks which may relate to late prehistoric or Roman activity (HER 17218) and (HER 17219).
 - e. post-medieval to modern linear earthwork associated with Century Park (HER 20507).
 - f. 20th century Luton Airport Fire Station (HER 19823).
 - g. WWII Airfield Battle Headquarters, the majority of which is located underground (HER 17921).

- h. 20th century earthworks and military earthworks (HER 12423) and (HER 12424).

- 4.1.38 Asset (HER 12422) was initially recorded as a potential archaeological feature; however, subsequent field evaluation confirmed that the asset was in fact a geological anomaly which has no heritage value and as such it is no longer considered in this assessment. Assets (HER 12423) and (HER 12424) were identified from aerial photographs but are located in areas now occupied by hardstanding. Subsequent development is likely to have removed the earthworks features and it is assumed that they are no longer extant. Therefore, they are not discussed further in this report.
- 4.1.39 There are also three Areas of Archaeological Significance located within the 1km study area with two located within the Main Application Site boundary. Asset (HER 7358), the site of a possible Roman building, is located within one of the areas.

4.2 Previous Archaeological Investigations

- 4.2.1 There have been 11 archaeological investigations previously undertaken within the Application Site and 15 archaeological investigations previously undertaken within the study area. These are illustrated in the Gazetteer (**Appendix 10.2**) and shown on **Figure 10.4** in Volume 4 to the PEIR.
- 4.2.2 Fieldwalking (EHT4338), geophysical survey (EHT4336) and a trial trench evaluation (EHT4337) were undertaken on land at Winch Hill Farm, King's Walden in 1990 which identified a series of Roman features (HER 7358) probably representing a farmstead. Further fieldwalking (EBD692) was undertaken in 1996 which identified the site of a possible Roman building. The surface evidence identified during the survey suggested the site of at least one substantial building, with perhaps a hypocaust and/or bath house.
- 4.2.3 Fieldwalking (EBD1241) was undertaken around north-east Luton including at Wigmore Park and fields between Cockernhoe and Tea Green in 1989-1990. This survey identified Mesolithic and late Neolithic – Bronze Age flint scatters, scatters of Iron Age, Roman and medieval pottery and ridge and furrow earthworks and ploughed out lynchets.
- 4.2.4 In 1997 a trench was excavated by Luton Borough Council in Wigmore Valley Park (EBD1242) which cut through an extensive range of Roman occupation features including flint surfaces, pits and ditches and produced finds of Roman tile and late Iron Age – Roman pottery sherds. A subsequent geophysical survey (EBD1243) was undertaken in 2004 which identified evidence for a substantial structure.
- 4.2.5 In 2005, a desk-top assessment (EBD553) was undertaken for the runway replacement options for London Luton Airport and its potential impacts on cultural heritage.
- 4.2.6 In 2008, a geophysical survey (EBD692) was undertaken on an area measuring approximately 41ha to the north-east of Luton Airport, adjacent to Wigmore Valley Park and Eaton Green Road, including the Proposed Development site.

The survey identified a small complex of magnetic responses which are probably a component of a small Roman site. The possible Roman site has previously been recorded on the HER (HER 10808) and identified through earlier archaeological investigations including the fieldwalking in 1996, the trial trench in 1997, the geophysical survey in 2004, and later confirmed by the trial trenching in 2019. The anomalies were not very well defined which suggests that the features may have been damaged by ploughing. Elsewhere, natural magnetic responses reflected localised changes in the chalk bedrock and soils.

- 4.2.7 In 2018 and 2019, two phases of geophysical survey were undertaken for the Proposed Development on land to the east of Luton Airport. The 2018 survey was undertaken by SUMO (**Appendix 10.3**) on land within Bedfordshire which identified a small complex of ditches and pit-like anomalies that were interpreted as probably a component of a small Roman site and correlates with an enclosure recorded in the HER record (HER 10808). A possible pit alignment was also identified. Features that correlated with asset HER 12422 were confirmed to be of geological origin.
- 4.2.8 The 2019 geophysical survey was undertaken by TigerGeo (**Appendix 10.4**) on land within Hertfordshire which identified a small number of possible ditches across the surveyed area, but none forming groups or having diagnostic character.
- 4.2.9 In 2019, a trial trench evaluation was undertaken for the Proposed Development at land to the east of Luton Airport (**Appendix 10.5**). The scope of the trial trench evaluation was based on the results of the geophysical survey undertaken by SUMO in 2018 with trenches designed to target the possible Roman site and the possible pit alignment. The evaluation identified a single pit of Neolithic date and confirmed the presence of Late Iron Age / Early Roman and Roman activity in the form of a number of ditches which seemingly formed an enclosure encompassing the remains of a small building (correlating with HER 10808) and a series of rubbish pits.
- 4.2.10 Further phases of trial trench evaluation within Bedfordshire and Hertfordshire are programmed to be undertaken in 2022, the scope of which has been agreed with Central Bedfordshire Council and will be agreed with Hertfordshire County Council.

4.3 Archaeological and Historical Background

Early Prehistoric (up to 4,000 BC)

- 4.3.1 The Lower and Middle Palaeolithic Period in the area is not well understood in modern terms with most of the finds being made in the 19th or early 20th century during gravel or brickearth extraction. Hand-axes form the majority of finds from these sites. A site at Caddington (located approximately 4km south-west of the Main Application Site) provided evidence for Lower-Palaeolithic flint-working areas including over 3500 flints and 150 hand-axes which was interpreted as evidence for occupation around temporary lakes and ponds. A site at Round Green, Luton (approximately 3km north of the Main Application Site) was similar in nature to the Caddington site, producing nearly 300 flints,

including 21 handaxes. Important Palaeolithic deposits have been identified in the Great Ouse Valley and Chiltern brickearth regions and there is the potential for other river valleys in the region to contain Palaeolithic remains. There is currently very little evidence for Upper Palaeolithic activity in the area with settlement in Britain at this time appearing to be episodic and focused on caves and fissures often in more highland regions.

- 4.3.2 The Mesolithic Period in the area is identified mainly from surface collection of lithic scatters with a small number of excavated sites. The Mesolithic evidence is largely concentrated in river valleys and uplands areas providing good vantage points including the Greensand Ridge and Chilterns regions. An assemblage of Mesolithic worked flints was recovered during investigations at a gravel quarry in Tyttenhanger, approximately 16km south-east of the Main Application Site and a Mesolithic flint core and truncated blade were found during fieldwalking at Great Bramingham Farm, approximately 6km north of the Main Application Site.
- 4.3.3 The only evidence for early prehistoric activity identified within the 1km study area is a Mesolithic flint scatter (HER 15052) located approximately 500m north of the Main Application Site, just south of Brickkiln Wood, Cockernhoe.

Late Prehistoric (c. 4,000 BC – AD43)

- 4.3.4 Evidence for Earlier Neolithic activity in the area is relatively rare. A Neolithic causewayed enclosure is located approximately 8km west of the Main Application Site, masked by the later Iron Age hillfort of Maiden Bower. There have been some important sites identified including flint scatters at Biddenham Loop, a monument complex at Cardington and pits at Broom (all approximately 20-30km north of the Main Application Site) however extensive investigations at these sites provided little firm evidence for settlement activity. An archaeological investigation undertaken in 2008 on land to the north-east of Luton Airport, approximately 600m north of the Main Application Site boundary, identified a pit containing Neolithic pottery sherds (HER 16290). An archaeological trial trench evaluation undertaken on land to the east of Luton Airport (refer to **Appendix 10.5**) within the Main Application Site boundary also identified a single pit of Neolithic date.
- 4.3.5 As with the earlier Neolithic, evidence for Later Neolithic – Early Bronze Age activity is dominated by field monuments with little systematic modern archaeological investigation recording archaeology of these periods. Round barrows are known to exist in the chalk uplands identified during investigations during the 19th and early 20th century. Waulud's Bank, located approximately 5km north-west of the Main Application Site, is a possible Neolithic henge monument that is still extant in the landscape; however, it is usually cited as an earthwork enclosure rather than henge due to its size, its absence of entrances, and the presence of an internal bank. Galley Hill, located approximately 5km north of the Main Application Site, is the location of a number of Neolithic – Early Bronze Age barrows, including two bowl barrows, the largest of which saw extensive re-use in later periods, including the insertion of 18 burials in the Roman period. Other evidence in the area dating to this period exists in the form of findspots (including artefacts scatters and isolated finds of Beaker

pottery, axes and metalwork), cropmarks and earthworks. Extensive fieldwalking in the area identified multiple Late Neolithic / Early Bronze Age flint scatters (HER 16076; HER 12600; HER 15053; HER 15054). The increased number of flint scatters dated to this period in comparison to those dated to the Late Mesolithic/Early Neolithic suggests increased occupation by larger social groups.

- 4.3.6 The Late Bronze Age is characterised by the distribution of barrows along river valleys and by the continued existence of monument complexes on the lower river terraces. There is evidence of Late Bronze Age settlement in Totternhoe, Sewell (both approximately 10km west of the Main Application Site), Biddenham (approximately 30km north of the Main Application Site), Leighton Buzzard and Felmersham with structural evidence of settlement identified through excavation at Biddenham, Broom and Stotfold. These settlements are predominantly located on river terraces or high on the clay ridge overlooking the river valley. This distribution may be a reflection of modern development patterns as this area has been extensively quarried during the past 40 years with most of these sites being discovered as a result of this.
- 4.3.7 A geophysical survey undertaken at Butterfield Green, Luton, approximately 3km north of the Main Application Site, produced evidence for a rectilinear and possible sub-circular ditched enclosure. A subsequent excavation identified a boundary ditch and pits dating to the late Bronze Age / early Iron Age and a number of Neolithic and Bronze Age flints.
- 4.3.8 Archaeological excavations undertaken as part of the A5 – M1 link road scheme, located approximately 10km north-west of the Main Application Site, identified evidence for middle - late Bronze Age settlement activity (Ref. 24). Approximately 115 pits and postholes were identified on a hilltop within the link road scheme boundary, of which 33 contained pottery dated to the middle - late Bronze Age and the remainder were dated to the same period by association. The features indicated the presence of a significant settlement, in the form of a series of structures and land divisions. Further isolated middle – late Bronze Age pits and postholes as well as land divisions / boundary ditches were identified across the rest of the link road scheme.
- 4.3.9 Further Bronze Age settlements including roundhouses, cremations and evidence for arable agriculture have been identified at the Hatfield Aerodrome development and the Cole Green Bypass, both located approximately 15km south-east of the Main Application Site.
- 4.3.10 A Bronze Age funerary complex was identified during archaeological evaluation at Baldock Bypass, approximately 15km north-east of the Main Application Site, with evidence of secondary burials dating to between the Iron Age and Saxon periods (Ref. 25).
- 4.3.11 Cropmarks located approximately 300m south of the Main Application Site were identified during aerial photograph analysis (EBD447) of land south of Luton Airport. A trapezoidal enclosure was identified, with other features nearby, including a circular feature intersected by two parallel features and other linear features (HER 15090). These are likely to date from the late Bronze Age / Early

Iron Age to Roman and a late Iron Age saddle quern was found during fieldwalking of the area.

- 4.3.12 For the early Iron Age, settlement evidence has been identified alongside the appearance of early hillforts. Maiden Bower is a univallate Iron Age hillfort on the Chiltern slopes, approximately 8km west of the Main Application Site, with evidence of activity dating back to the Neolithic. The largest example of an Iron Age hillfort in Eastern England is located at Ravensburgh Castle in Hexton, approximately 8km north-east of the Main Application Site. During the Late Bronze Age / Early Iron Age, land boundaries start to appear with three distinct types: dykes, ditched boundaries and post hole alignments.
- 4.3.13 Settlement patterns in the middle Iron Age still indicate a preference for higher ground, with occupation of the sides of river valleys and higher ground, however they begin to lose their association with early barrow sites and are commonly found in areas where no evidence of previous activity is found. There is still evidence for the re-use of sites such as at Biddenham and Salford (both approximately 25-28km north of the Main Application Site) where it appears sites have been re-occupied either by the re-foundation of or in the same location as earlier settlement.
- 4.3.14 Significant evidence of Iron Age occupation was also identified during archaeological excavations for the A5 – M1 link road scheme with multiple areas of occupation identified across the scheme, comprising concentrated pit clusters, dispersed unenclosed roundhouses, scattered pits and small enclosures. Field systems attached to the settlement areas were also identified. A small amount of disarticulated human bone was also identified within the settlement areas, being found within pits and ditches.
- 4.3.15 Throughout the late Iron Age, there was an increase in the complexity and scale of land-use which could relate to an increasing population density. Larger, more extensive boundary systems started to appear and with that, also came evidence of tribes.
- 4.3.16 Three major tribes are identified in the Ouse basin: the Trinovantes, the Iceni and the Catuvellauni with much of the territory of Bedfordshire and Hertfordshire in the late Iron Age falling under the control of the Catuvellauni who were actively engaged in trading. Their main settlement was Verlamion, located on the River Ver near present-day St Albans, approximately 14km south of the Main Application Site. The Devil's Dyke may have been built as a defensive earthwork for this settlement. Cassivellaunus was the leader of the Catuvellauni when the Romans first attempted to invade Britain in 55BC and their headquarters were located near Wheathampstead, north of St Albans. The Catuvellauni were forced to surrender and Caesar returned to Rome without leaving a garrison and in 9 or 10AD, Cunobelinus became king of the Catuvellauni and built a defensive earthwork, Beech Bottom Dyke, at St Albans.
- 4.3.17 The major Iron Age transport corridor, the Icknield Way ran from Dorset to Norfolk, running past the west of Luton, with Neolithic Waulud's Bank being situated at the point where the Icknield Way crossed the River Lea.

- 4.3.18 An archaeological investigation at Wigmore Valley Park (EBD1242), located within the Main Application Site boundary comprised a single trench excavation undertaken in 1997. This investigation exposed a number of features, notably two double ditches, both containing late Iron Age and Roman pottery sherds.
- 4.3.19 In 2019, a trial trench evaluation was undertaken on land to the east of Luton Airport (refer to **Appendix 10.5**) which identified a number of ditches which seemingly formed an enclosure encompassing the remains of a small building and a series of rubbish pits, which contained Late Iron Age – Early Roman transitional period pottery.
- 4.3.20 A survey of earthworks (EHT6748) within Brickkiln Wood, approximately 900m north of the Main Application Site, identified a possible late Iron Age – late Roman enclosure (HER 16645). An archaeological investigation during the construction of a pipeline, approximately 900m north of the Main Application Site, identified a number of features related to late Iron Age occupation and which produced late Iron Age pottery and a single urned cremation (HER 7359). Further Iron Age activity is identified by spot finds of Iron Age pottery sherds (HER 10810).
- 4.3.21 A small late Iron Age rural settlement was also identified during archaeological excavations for the A5 – M1 link road scheme, along with a cremation cemetery and burials in a loose circular arrangement.

Roman (AD 43 – 410)

- 4.3.22 The Romans defeated the Catuvellauni again in 43AD and their settlement was renamed as Verulamium. Verulamium became one of Roman Britain's major cities, the third largest and the only to be granted self-governing status. Boudica burned the city to the ground in 61AD however it was rebuilt and was occupied into the 5th century.
- 4.3.23 With the Roman conquest in 43AD came significant landscape development. Major roads were constructed including Watling Street and Ermine Street and with these came the infrastructure of imperial posting stations. This resulted in the growth of small towns such as those at Dunstable and Sandy, which each developed a hinterland of villas and smaller settlements. Whilst there has been no Roman settlement identified within the historic core of Luton, a Roman settlement is known to have existed at Limbury, located approximately 4km north of the modern centre of Luton. Several settlement forms are identified in the countryside of Bedfordshire and Hertfordshire including linear row settlements, focussed/nucleated farmsteads and substantial farms/ villa sites. The substantial farms/ villa sites are concentrated in two areas, along the Great Ouse Valley upstream from Tempsford and in a band between Eyeworth and Totternhoe.
- 4.3.24 The Iron Age cemetery identified during the A5 – M1 link road scheme archaeological excavations continued in use during the Roman period and two rectangular early Roman enclosures were also created in the vicinity of the cemetery.

- 4.3.25 At Butterfield Green, Roman field systems were identified during trial trench evaluation and evidence for a Roman pottery kiln was identified in a field north of Bramingham Road, approximately 5km north-west of the Main Application Site.
- 4.3.26 In 1997 a trench was excavated by Luton Borough Council in Wigmore Valley Park (EBD1242), located within the Main Application Site boundary. This cut through an extensive range of Roman occupation features including flint surfaces, pits and double ditches and produced finds of Roman tile and late Iron Age – Roman pottery sherds. A subsequent geophysical survey (EBD1243) was undertaken in 2004 which identified evidence for a substantial structure. A possible Roman occupation site (HER 10808) was known to exist in this area since an analysis of aerial photographs undertaken in 1976 identified two ring-ditches and a linear feature. Further fieldwalking (EBD692) of the area revealed pottery and tile, including tegulae, imbrex, flue and hypocaust tiles, indicating the possible location of a Roman building. In 2019, a trial trench evaluation was undertaken on the same land (refer to **Appendix 10.5**) which identified evidence of Late Iron Age / Early Roman and Roman activity in the form of a number of ditches which seemingly formed an enclosure encompassing the remains of a small building and a series of rubbish pits.
- 4.3.27 A series of archaeological investigations (EHT4336; EHT4337) were undertaken at Winch Hill Farm, located to the east of Luton Airport and within the Main Application Site boundary, which identified a number of Roman features probably representing a farmstead (HER 7358). Later fieldwalking of the site revealed a large amount of Roman and medieval pottery (EHT4338).
- 4.3.28 In 2000, a few Iron Age/ Roman pottery sherds were identified in the backfill of a cable trench on Pasture Lane, and subsequent fieldwalking in 2008 in the field to the east identified a small scatter of Roman pottery sherds (HER 10810). Roman pottery sherds were also identified within a ditch (HER 1466) during construction works at the Luton Airport site in 1960. Further Roman activity has been identified in the form of findspots of Roman pottery sherds and building material (HER 11461; HER 11584; HER 12600), Roman coin (HER 1949), a copper alloy pin (HER 18285), and Roman extraction pits (HER 16293).

Early Medieval (410 – 1066)

- 4.3.29 Following the Anglo-Saxon invasion of Britain, this area formed part of the Kingdom of Mercia and was part of the territory of the Hicce tribe.
- 4.3.30 A Saxon settlement was established at Luton by at least 475 AD, the exact whereabouts of this settlement is unknown but it is assumed to be in the vicinity of Argyll Avenue, approximately 1.5km north of the modern centre of Luton, due to the discovery in 1925 of an extensive Saxon cemetery in this area.
- 4.3.31 By the time of the 6th century, an Anglo-Saxon settlement is known to have existed in the area of Limbury, approximately 4km north of the modern centre of Luton (Ref. 26). Saxon cemeteries containing 5th century burials have also been identified at Kempton and Sandy, all in the vicinity of known small Roman towns.

- 4.3.32 A probable female inhumation (HER 1248), dated to c. 670, was found in 1913 by workmen on land between Breachwood Green and Darley Hall, King's Walden, approximately 100m east of the Main Application Site boundary. Multiple Anglo-Saxon finds were identified including four brooches however no human remains were located. In addition, an isolated inhumation cemetery dated to the mid-late 7th century was identified during the A5 – M1 link road scheme comprising nine burials. There was no known associated Saxon settlement identified nearby.
- 4.3.33 A number of Saxon cemeteries have also been identified at Toddington, approximately 12km north-west of the Main Application Site. The first cemetery was identified in 1819 towards the south of the village and dated to the 5th and 6th centuries AD. In 1829-30 a large number of human bones were found outside of the village towards the north-east. The existence of these two cemeteries suggests that there may have been a Saxon settlement within the town boundaries. Two further cemeteries have been found within the parish of Toddington and have been dated to the 6th century AD. Additionally, two Saxon cemeteries dated to the 6th and 7th centuries AD have been identified at Leighton Buzzard, approximately 20km north-west of the Main Application Site.
- 4.3.34 In the late 8th century, the Hicce and their lands eventually came under the rule of Offa, King of Mercia. King Offa built a church at Hitchin, approximately 7km north-east of the Main Application Site, but it burnt down in 910 and the monks moved to St Albans, a monastery built in 793. The nearby parish of Offley, approximately 3km north-east of the Main Application Site, is thought to derive its name from the belief that Offa died here and is thought to mean Offa's clearing or wood, with origins in at least the 10th century.
- 4.3.35 Under the terms of the Danelaw treaty of 878 AD, Luton found itself on the Saxon – Danelaw boundary and was probably taken over by the Danes, as the Anglo-Saxon Chronicles states that Luton was reclaimed from the Danes in 917 AD. A Saxon settlement was established at Luton (*Lyg-tun*) by the late 10th century when the Danelaw collapsed and when the original church at the site of the present St. Marys Parish Church was built.

Medieval (1066 – 1540)

- 4.3.36 The Domesday Survey of 1086 reflects the changes in land ownership following the Norman Conquest of 1066. The survey lists 180 settlements in Hertfordshire and 163 settlements in Bedfordshire with the most populated areas being Hitchin, Luton and Ware. Bedfordshire is largely described as mainly nucleated with some dispersed settlement with agriculture dominating the local economy. Hertfordshire was among England's most densely wooded counties in the medieval period which is thought to be a marked change from an earlier landscape characterised by open farmland. The economy of Hertfordshire developed through trade rather than agriculture.
- 4.3.37 By the time of the 1086 Domesday survey, Luton (or *Loitone*) was a well-established settlement. Loitone is listed as a royal manor of the king with six mills, extensive meadows and woodlands, and a toll and market. Luton manor itself was a royal manor, one of the largest in the country, though the actual

location of the main manor house is unknown. By 1240, the town is recorded as Leueton and held an annual fair, with a second fair being granted in 1338 due to the growth of the town. Much of Luton was destroyed by a great fire in 1336 but it was soon rebuilt, although archaeological evidence of this fire is yet to be discovered. Throughout the medieval period, Luton continued to be a quiet market town, serving the surrounding countryside.

- 4.3.38 The medieval period is characterised by much greater visibility and physical presence of sites, including mottes, moats, monasteries and fishponds which emerged as developments within an existing landscape. Deserted medieval villages and shrunken medieval villages are evident in the landscape and provide information on shifting settlement patterns and settlement decline during the period of economic decline in the 14th century.
- 4.3.39 The parish of King's Walden is located approximately 1.5km to the east of the Main Application Site and has Saxon origins. The settlement comprised the church of St. Mary which adjoined the manor house of King's Waldenbury with the village being near and off the road. At a later date, the inhabitants migrated towards the road and the village became established where it is today.
- 4.3.40 Wandon End (HER 1837) is an area located on the northern extent of the Main Application Site boundary within the parish of King's Walden and is purported to be a deserted medieval village, being recorded in the Domesday Book as having six households. The place-name however implies not a village but a scatter of buildings around the many ends and greens characteristic of the areas dispersed settlement pattern such as that at Crawley Green (HER 12403) and (HER 17102). Cockernhoe is a parish located approximately 1.2km north of the Main Application Site and from the 14th century, the manor of Cockernhoe was held along with the manor of Offley by the St. Ledger family.
- 4.3.41 There are a number of mottes found throughout Bedfordshire and Hertfordshire with some being mottes without baileys which probably represent early Norman mounds capped with wooden towers; most are beside rivers. A motte and bailey castle was constructed at Luton in 1139, being demolished in 1154, giving its name to the present-day Castle Street.
- 4.3.42 The probable site of St. Anne's Tower and Chapel (HER 361), thought to have been built in the early 12th century is located approximately 800m west of the Main Application Site boundary. The land was owned by the Abbots of St. Albans with the chapel being demolished in the 17th century and the tower being demolished in the early 18th century.
- 4.3.43 The site of the Hospital of St. Mary Magdalene (HER 362) is located within the Main Application Site boundary. It is thought to have been a leper hospital founded by Thomas Becket before 1170 and dissolved in c.1540. It was located to the east of Spittlesey / Spittlesea Wood, an area now occupied by Luton Airport. Spittlesea Wood is visible on historic OS mapping dated from 1885 through to 1955 with remnants of the wood still remaining as part of the current Luton Airport site.
- 4.3.44 In the early 13th century, King John hired a mercenary soldier, Falkes de Breaute, to act on his behalf. When Falkes married, he acquired his wife's

house which came to be known as Fawkes Hall, later corrupted to Foxhall and then Vauxhall. In return for his services, the King granted Falkes the manor of Luton. He was also granted the right to bear his own coat of arms, with the mythical griffin chosen as his emblem. Thus, the griffin has become associated with both Vauxhall and Luton in the early 13th century. During an archaeological investigation for the redevelopment of the Park Square campus for the University of Bedfordshire, evidence was identified to suggest that this area was the site of a castle built by Fulke de Breaute (Ref. 27).

- 4.3.45 Someries Castle (NHLE 1008452) is a late-medieval 15th century fortified manor house located approximately 250m south of the Main Application Site boundary. The remains of the original medieval manor house and gardens are now only visible as earthworks, although remains of the gatehouse, incorporating the chapel and lodge, are still partially standing (HER 360). The name Someries Castle is derived from William de Someries whose residence stood on the site in the 13th century. Sir John Wenlock built Someries Castle in the 15th century and the garden earthworks are in the style of formal gardens of the 16th and 17th centuries. The estate passed to Thomas Rotheram after Sir Wenlock's death and later passed to the Archbishop of York. The house was never completed with much of the building demolished in 1742. This is reinforced by 18th century prints which show the ruins largely as they stand today (**Inset 4.1**).

Inset 4.1: Watercolour print of the gatehouse and chapel at Someries Castle. Someries Farm can be seen on the left. '*Remains of the Tower at Luton, Bedfordshire. March 1778*'. Copyright © Bedfordshire Archive Services.



- 4.3.46 During the medieval period, the main economic activity in the area was agriculture. This is evidenced in extant medieval buildings, such as those at Breachwood Green which include Manor Farm (Grade II, NHLE 1102444) that dates to the 16th century or possibly earlier and Heath Farmhouse (Grade II, NHLE 1366120), a late 15th century farmhouse.
- 4.3.47 There are a number of ancient woodlands with medieval origins within the study area including George Wood (HER 13172) and Kidney/Bulls Wood (HER 13242), both located approximately 600m to the south-west of the Main Application Site boundary. There are also a number of sites of possible medieval rabbit warrens located within the study area. One at Coney Ground (HER 12372) near Someries Farm and one at Kimpton Lane (HER 12371) which is within the eastern extent of the Main Application Site boundary.
- 4.3.48 Further evidence for medieval activity within the study area consists of cropmarks representing former field boundaries of medieval origin (HER 12441) and (HER 12442). There are also finds spots including a silver-gilt purse hanger (HER 19324) and pottery sherds (HER 13792; HER 9679).

Post-medieval (1540 – 1900)

- 4.3.49 The agricultural base of Luton changed in the 16th century with leather-working and early brickmaking developing in the rural/agricultural regions with most parishes having at least one brickyard and kiln; and some larger estates even having their own pits and kilns. By the 17th century, Luton was a centre for the developing straw-plaiting and hat-making industries. Lacemaking was supposedly introduced by Flemish refugees in the late 16th century. It was carried out mainly by women and children of farming families up to the end of the 19th century when the introduction of lace-making machines in and around Nottingham brought about the decline of lace-making in Bedfordshire. In the 17th century, hat-making became synonymous with the town and by the 18th century it dominated the town as its only significant industry.
- 4.3.50 Bedfordshire played a key role in the Agricultural Revolution of the 18th and 19th centuries with the countryside being far more industrialised than the towns and innovations such as the steam plough being developed here. Farms were built like factories and hedgerows and fields were re-fashioned to fit the new machines. The River Lea Navigation Act of 1739 led to the river being improved and becoming navigable, which increased the amount of trade between Hertfordshire and London. Advanced farming techniques and soil improvement programmes had enabled farmers to work Hertfordshire's land to better effect since the early medieval period.
- 4.3.51 About half of Bedfordshire was still farmed under the open field system until the introduction of enclosures in the 18th and 19th centuries. The area has a mixture of dispersed and nucleated rural settlement and in the Chilterns, there are numerous single farmsteads and 'end' place names which are usually seen to be of medieval origin, but some almost certainly originated in the post-medieval period. Deserted and shrunken villages are well known from the medieval period however many settlements were partially deserted in the post-

medieval period mainly due to agricultural workers being drawn to larger towns for work.

- 4.3.52 The site of a model farm (HER 15586) is located west of the Main Application Site. Model farms were designed to research and demonstrate improvements in agricultural techniques, efficiency and building layout. The site was demolished in the 20th century to make way for the expansion of Vauxhall Motors. Medlow House (HER 15134) is a 19th century farmstead located approximately 250m east of the Main Application Site. The layout and materials used for the construction of the buildings suggest a planned layout although not using one of the contemporary model farm plans.
- 4.3.53 There are also a number of post-medieval farmsteads east of the Main Application Site which highlight the continued agricultural activity in this area as opposed to the industrialisation of Luton to the west. Wandon End Farm (HER 15464) is a post-medieval farmstead with a 16th century farmhouse (Grade II, NHLE 1102448), and range of barns, located on the northern extent of the Main Application Site boundary. Wandon End House (Grade II, NHLE 1307874) dates to the early 18th century and is constructed of brick, is located approximately 200m to the east of Wandon End Farm. Other post-medieval farmsteads include Heath Farm (HER 15138), Bailey's Farm (HER 15136) and Crouchmoor Farm (HER 11026), all of which have earlier medieval farmhouses. Located towards the north of Someries Castle is Someries Farm (HER 2027) which is an 18th century farmhouse with 19th century renovations
- 4.3.54 To the north-east, east and south, the Main Application Site is surrounded mainly by countryside with hamlets and small villages. The parish of King's Walden, to the east, includes scattered farmhouses and cottages as well as the village of Breachwood Green and the hamlets of Wandon End and Lawrence End to the south. The Enclosure Act took effect in King's Walden in 1797 with the land being surveyed and re-allotted while the common land was enclosed by an award in 1802. As a result, the farms in Breachwood Green and King's Walden had taken shape which has remained relatively unaltered until today
- 4.3.55 Many of the cottages and farmhouses in the village of Breachwood Green date back to the 17th and 18th centuries. Amongst these are The Old Homestead (Grade II*, NHLE 1176170) which has a very rare 17th century wall painting of a floral design on its plaster wall. Other 17th century houses include the Coleman's Farmhouse (Grade II, NHLE 1176193) and Moss Cottage (Grade II, NHLE 1102477).
- 4.3.56 There are three listed buildings in the hamlet of Lawrence End including the main house of Lawrence End (Grade II, NHLE 1102755), a country house constructed of chequered red brick, c1841 in a late Georgian style. Associated listed outbuildings include stable blocks, stables and a coach house and were also built c1841.
- 4.3.57 To the south-west of the Main Application Site extends the parish of Hyde formed in 1843, which includes the hamlet of Chiltern Green. Two 17th century farmhouses are located here; Chiltern Green Farmhouse (Grade II, NHLE 1114711) and Laburnum Farmhouse (Grade II, NHLE 1321300), constructed of

various materials including timber frame and brick with slated and old clay tiled roofs.

- 4.3.58 Wigmore Hall Farmhouse, an early 19th century grade II listed building (Grade II, NHLE 1321368) is situated just outside of the northern boundary of the Main Application Site (on the south side of Eaton Green Road). It was originally part of a larger farm complex which included Wigmore Hall and a series of farm buildings and a yard which lay on the north side of Eaton Green Road. This was demolished during the late 20th century when the area was redeveloped for housing. Wigmore Hall Farmhouse is now used as Wigmore Hall Conference Centre. It is of stucco with a hipped Welsh slate roof and arranged around a square double pile plan. The main elevation faces onto Eaton Green Road to the north.
- 4.3.59 Substantial wooded areas around Luton include Stockwood Park to the south and Luton Hoo park to the south-east as well as wooded areas on the slopes of St. Anne's Hill to the east.
- 4.3.60 Luton Hoo (RPG, Grade II*, NHLE 1000578) is an 18th century landscaped park encompassing the 18th century country house (Luton Hoo, Grade I, NHLE 1321301) which is the main focus of the park, surrounded by early 20th century gardens. Luton Hoo takes its name from the Anglo Norse term "Hoo" which means "spur of the hill" and refers to the hill south of Luton and where much of Hyde Parish sits. Luton Hoo RPG lies to the south of the town with the River Lea forming its eastern boundary. Sir Robert Napier bought the Luton Hoo estate c. 1600 and during the 17th century, he enclosed a 150ha park and built a medium-sized house. In 1762, the estate was bought by the third Earl of Bute who undertook a series of changes in the estate (**Inset 4.2**).

Inset 4.2: Print of Luton Hoo. 'Luton in Bedfordshire the seat of the Earl of Bute. 1785'.
Copyright © Bedfordshire Archive Services.



- 4.3.61 The Earl employed Robert Adam to rebuild the house while the park was enlarged. Lancelot Brown was appointed to design the park in a programme that was undertaken from 1764 until 1774. Brown dammed the River Lea to create two lakes that cover most of the eastern part of the park. To the east of the river, a thick belt of trees provides some screening from its surroundings further east. The rest of the park is also enclosed by woodland; to the west by a narrow belt of trees, while additional park trees are to the west and north of the house. The house that had been rebuilt by the Earl was burnt in 1843. In the following year, the second Marquess of Bute sold the estate to John Shaw Leigh who rebuilt the house. Sir Julius Wernher, a diamond merchant, bought the estate in 1903 and remodelled it during the early 20th century, including the construction of a formal garden to the south of the main house, according to the designs of Charles Mewès. During the Second World War, the estate and mansion house were used by Eastern Command and played an important role in wartime operations testing tanks built at the Vauxhall works.
- 4.3.62 The second Marquess of Bute is recorded on the 1842 Tithe Map of Luton Parish as the owner of a large amount of land and buildings including houses and plots within Luton town centre, Luton Hoo including the house, the park and nearby surrounding land plots, as well as most of the land located between the eastern extent of the park and Someries Castle, including Someries Castle itself. Luton Hoo park and house are recorded as being occupied by the second Marquess of Bute, however, Someries Castle and the surrounding land

between the River Lea and the castle is occupied by 'John Howe' with the land-use being arable and pasture fields, except for areas of woodland (including George Wood) which are recorded as being occupied by the second Marquess of Bute.

- 4.3.63 In c. 1788, John Sowerby of Hatton Garden acquired the manors of Lilley, Putteridge and Horwellbury. In Putteridge, there was a Regency mansion built in 1812, replacing an earlier structure destroyed in 1808. A landscape park (RPG, Grade II, 1000917) was laid out shortly afterwards, c. 1820 and extended southwards to its present boundaries by 1884. Members of the Sowerby family were keen naturalists and horticulturists and made changes to the park including the formation of informal gardens and pleasure grounds. In 1908, the house was acquired by Thomas Meadows Clutterbuck, a brewer who lived in Chequers from 1898 to 1909. The old house was pulled down and the mansion at Putteridge Bury (Grade II, NHLE 1347083) was rebuilt in Elizabethan style by architects Sir Ernst George and Alfred Yates. At the same time, Edwin Lutyens and Gertrude Jekyll were employed to remodel parts of the garden. Following the death of Clutterbuck in 1919, the house was acquired by Sir Felix Cassel and during the 1920s was frequently visited by George V and Queen Mary. In 1965, the house was acquired by Luton Corporation who converted into a college of higher education.
- 4.3.64 The introduction of the railways in Bedfordshire and Hertfordshire marks the beginning of the industrial period with large towns like Bedford and Luton expanding and thriving. Historic OS mapping between 1885 and 1955 shows the study area within Hertfordshire largely unchanged. The residential areas of Wandon End and Breachwood Green do not appear to have grown in size and the farmsteads noted on the 1885 OS map are still noted on the 1955 OS map with no additions. In contrast to this, the town of Luton has expanded extensively in all directions from its historic core, predominantly towards the north-west. The Hatfield, Luton and Dunstable Branch of the Great Northern Railway (HER 14086) runs north to south to the east of the Main Application Site and is visible on historic OS mapping dating from 1885. Foundries and engineering works started to appear in the early 19th century including a brick and tile works (HER 6732) at Eaton Green, on the north-western extent of the Main Application Site boundary and the site of Cockernhoe brickworks (HER 13723) which is located approximately 1km to the north-east of the Main Application Site. The area has also undergone extensive quarrying due to its good source of basic raw materials, with clay being the most intensively extracted to provide raw material for the brickworks. A number of quarry pits are located in the study area (HER 6733; HER 12420; HER 12421; HER 12429; HER 18063).
- 4.3.65 In the town of Luton, buildings from the 19th century, associated with the hat making industry are located within the Plaiters' Lea Conservation Area. There were no buildings in the area before c.1840 however, during the following 150 years, there was rapid development where factories and other industrial buildings associated with the hat industry were established. From the 1880s onwards, pier and panel design was adopted, incorporating the use of modern cast-iron construction, contributing to a more industrial character and

appearance in the area. Historic buildings that survive from that period include no 61 Bute Street dating to the 1860s. The building combined domestic and commercial elements to form an eclectic local vernacular style.

- 4.3.66 The sharing of certain key characteristics within a diverse mixture of architectural styles gave a rather cohesive appearance to the area. Historic buildings that survive from that period include no 61 Bute Street (Grade II, NHLE 1321364) that dates to the 1860s. The building combined domestic and commercial elements to form an eclectic local vernacular style.
- 4.3.67 Economic growth and development in the area as well as good transport links led to the establishment of suburban development around the historic core of Luton. One of the earliest suburbs in Luton history is to the north of Luton town centre. This area is designated as High Town Conservation Area. The first buildings here started to appear by 1834. The development of the area is contributed to the Primitive Methodists who established themselves in the area in 1838. Buildings associated with the Methodists include the High Town Methodist Church (Grade II, NHLE 1114627) and High Town Methodist Hall (Grade II, NHLE 1114628).
- 4.3.68 A cluster of listed buildings in Neo-classical style is located between Wellington Street and Hastings Street and the Ceylon Baptist Church and Hall (Grade II, NHLE 1114641), dating to 1848, and associated buildings as well as Ebenezer Chapel (Grade II, NHLE 1114626) that dates to 1870s. Falconer's Hall (HER 17790) was a post-medieval mansion which was demolished at the end of the 19th century with the area now covered by the current footprint of Luton Airport. It is visible on historic OS mapping from 1885 until 1937 where it appears as an area of rubble. Within the study area, there are also a number of possible sites of post-medieval buildings (HER 15061) and (HER 15063), which have been identified by find spots of concentrations of tile and pottery.
- 4.3.69 Adjacent to the site of the medieval hospital of St Mary Magdalene is the site of Spittlesea Hospital for Infectious Diseases (HER 17778) which was opened in 1891. The hospital was closed in 1968 with only the 1920s administration block remaining extant today. The hospital site is visible on historic OS mapping in its entirety until 1968.
- 4.3.70 Other evidence for post-medieval activity within the study area includes linear earthworks and cropmarks representing former field boundaries (HER 10287; HER 20425; HER 20427), a human skeleton (HER 17792) identified during car park extensions at Luton Parkway Station, a cemetery (HER 8929) located on Crawley Green Road and a possible location of a dovecote (HER 12359) which was identified based on place-name evidence of the nearby Dovehouse Hill.

Modern (1901 – present)

- 4.3.71 In the early 20th century, new factories continued to establish in the hatting district within the Plaiter's Lea Conservation Area. These include 40 Guildford Street (Grade II, NHLE 1114625) an imposing hat factory that was built in 1905 using a cast iron frame. The building rises to five storeys being one of the tallest buildings within the conservation area.

- 4.3.72 Additional buildings in Luton that date to the early 20th century include the Hart Lane Water Tower (Grade II, NHLE 1146452), constructed of Luton grey bricks with red brick and terracotta dressings. The tower has an octagonal plan and conical roof and rises up to four storeys. The Bailey Hill Water Tower (Grade II, NHLE 1321343) on West Hill Road also survives from the early 20th century. It is also constructed of Luton grey bricks and is of Arts and Crafts style.
- 4.3.73 The hat making industry in Luton fell into decline later in the 20th century. However, new industries had already been established in the town including Vauxhall, a car manufacturer which came to the town in 1905. Vauxhall Iron Works, later Vauxhall Motors, moved their production line to Luton, making it the largest car manufacturing site in the country. A number of buildings are still extant which formed part of the Vauxhall Motors Complex including the office block (Grade II, NHLE 1249000), one of the main production buildings Block AA (HER 15580) and other associated buildings (HER 15390; HER 15391; HER 15392). A war memorial (HER 16976) was unveiled in 1992 on Kimpton Street to commemorate the men and women who worked at Vauxhall Motors and who died during the First and Second World Wars. Defensive installations in the 20th century, particularly airfields, had a considerable impact on the landscape.
- 4.3.74 Luton was a vital town during World War Two (WWII) as Vauxhall Motors produced military equipment including vehicles such as tanks. As such, Luton was heavily bombed and the town suffered extensive damage, with over 1,500 homes damaged or destroyed.
- 4.3.75 In 1938, Luton Airport (HER 9271) was opened and owned by the Borough of Luton. The Airport was also utilised during the war, being used by the Royal Air Force as a military training airfield. A fighter squadron were based there as well as a manufacturing site where military aircraft was designed and built. Further assets related to the defensive installations at Luton Airport include an airfield battle headquarters (HER 17921) which is located largely underground, towards the northern extent of the Main Application Site boundary, in Wigmore Park, a pillbox (HER 17922) which is now demolished, earthworks including gun emplacements (HER 12423) and the site of a prisoner of war camp (HER 17937), now demolished.
- 4.3.76 In 1952, civil use of the airport resumed and a new control tower was opened. During the next ten years, the 'package' holiday was developed and Luton Airport played an important role in the development of the package holiday business in the UK. By 1969, a fifth of all flights from the UK departed from Luton Airport and by 1972, it was Britain's most profitable airport. In the 1990's, the airport infrastructure and facilities were upgraded and expanded with passenger levels increasing rapidly, making the airport the UK's fastest-growing major airport.
- 4.3.77 During a series of archaeological investigations at Luton Hoo in 2006, there was evidence identified throughout the estate for the use of Luton Hoo as a military centre during WWII. After the war, Luton and the surrounding area was developed, with a number of large residential estates being built.
- 4.3.78 In 2002, Vauxhall announced the end of car production in Luton and the Vauxhall Motors plant was closed. The site of the former Vauxhall Motors plant

is currently under development as a new suburb of Luton called Napier Park, after the Napier family who resided at nearby Luton Hoo in the 17th and 18th centuries.

- 4.3.79 Further assets related to the modern period in the study area include 20th century churches (HER 13547; HER 13550), earthworks (HER 20507) and Luton Airport Fire Station (HER 19823) which is part of the Luton Airport complex.

Features of unknown date

- 4.3.80 A number of cropmarks and soilmarks are visible to the south of Winch Hill Farm, within the Main Application Site boundary. The cropmarks and soilmarks consist of faint traces of possible enclosures and an extraction pit (HER 17218), possible enclosures, pits and ditched features (HER 17219) and evidence of settlement and boundaries (HER 17234). These are all currently undated, but may be associated with known Iron Age and Roman activity in this area. Further undated cropmarks of linear features (HER 18458) are located to the south-east of Luton Airport.
- 4.3.81 Additional assets of unknown date have been identified through analysis of historic maps, LiDAR data and aerial photography. These comprise pit-type features (AEC001; AEC002) which are located towards the eastern extent of the Main Application Site and areas of former woodland (AEC025; AEC005) which were located within the Main Application Site but removed during the construction of the existing airport. A number of areas of woodland (AEC006; AEC008; AEC010; AEC016) and chalk / clay pits (AEC009; AEC018; AEC021) have also been identified within the study area.

250m study area

- 4.3.82 The Off-site Highways Interventions that do not fall within the 2km study area are located close to the town of Hitchin, to the north east of the Main Application Site and to the west of Luton Hoo RPG, near Junction 10 of the M1. All of the listed buildings around the Off-site Highways Interventions in the Hitchin area are located within Hitchin Conservation Area and Hitchin Hill Path Conservation Area.
- 4.3.83 The Hitchin Conservation Area encompasses the historic town centre as well as parkland and residential suburbs. From the 12th century onwards, the market town of Hitchin started to develop and grow, including the construction of St Mary's Church (Grade I, NHLE 1296273) on the site of a Saxon predecessor. During the medieval period, the town's prosperity relied on wool, and the growing and selling of grain crops. Between 1500 and 1800, Hitchin continued to be an important market town, reinforcing its role by the construction of a large number of inns and hotels in the town centre. Distinctive characteristic of many of which were hidden courtyards, incorporated into the design, accessed from the street through narrow carriageways. These include the Sun Hotel (Grade II*, NHLE 1102139) dating c.1700. In 1850, with the established of the Great Northern Railway to Hitchin, a period of urban growth began, particularly on the east and north side of the town. Development continued over the next centuries

and despite the introduction of modern development, the town has retained its historic character and appearance.

- 4.3.84 Hitchin Hill Path Conservation Area encompasses a small cluster of mainly early to mid-19th century buildings that lie at the meeting place of two historic routes into Hitchin on the summit of Hitchin Hill. Historically, there was a gap between Hitchin Hill and the market town of Hitchin, however modern 20th century development has merged the two historical settlements and Hitchin Hill now forms part of the larger modern town of Hitchin.
- 4.3.85 The Church of St. Andrew (Grade II, NHLE 1114661) is also located within 250m of the Junction 10. The church was constructed in 1889-90, in the Early English Gothic style. The church was constructed of Luton grey brick with limestone dressings for the Crawley family.

Wider study area (beyond the 2km study area)

- 4.3.86 The wider study area encompasses a number of settlements around the Main Application Site, the history of many of which has already been discussed.

4.4 Historic Landscape Characterisation

- 4.4.1 The Application Site lies within the National Character Area of the Chilterns (NCA Profile 110), described as extensively wooded and farmed, underlain by chalk bedrock that rises up from the London Basin to form a north-west facing escarpment offering low views over the adjacent vales, with extensive urban fringe and growth areas such as Luton (Ref. 28).
- 4.4.2 The Application Site lies within the two counties of Hertfordshire and Bedfordshire. Historic Landscape Characterisation data has not been provided by Central Bedfordshire HER however information was supplied by the Historic Environment Information Officer for Central Bedfordshire Council.
- 4.4.3 Much of the Application Site which lies within the county of Bedfordshire is largely 20th century and later development which includes Luton Airport and ancillary structures, part of Luton's built up area and industrial buildings in the vicinity of Luton Parkway Station, predominantly those of Vauxhall Motors. Luton Hoo registered park and garden is located to the south-west of the Main Application Site and land between the B653 (to the east of Luton Hoo) and the county boundary with Hertfordshire largely comprises post-19th century irregular enclosures. At the time of Domesday, this area formed part of the largest woodland recorded in the county. During the 12th and 13th centuries, this area was fundamentally an assart landscape with irregular enclosures and isolated farms, hamlets and woodland remnants. Today, the woods have been reshaped and the majority of hedgerows have been removed with the only surviving remnant of the medieval landscape being the farm sites and road pattern.
- 4.4.4 The Application Site lies within the North Hertfordshire Landscape Character Areas 200 Peters Green Plateau and 201 Kimpton and Whiteway Bottom (Ref. 29).

- 4.4.5 Character Area 200 Peters Green Plateau extends from the southern and eastern boundaries of Luton Airport to Kimpton Valley in the south. It is defined as a gently rolling landscape plateau with steep sided incised valleys to the east, west and south. It is mainly large exposed arable fields with smaller pockets of grazing around settlements and occasional scattered dwellings. The field pattern is degraded with relatively few remaining hedgerows. The Character Area is truncated by the man-made landscape features associated with Luton Airport.
- 4.4.6 Character Area 201 Kimpton and Whiteway Bottom extends from the eastern edge of Luton Airport to a point west of Kimpton, where the valley joins the Whitwell valley. It is defined as steeply sided dry valleys with predominantly arable use and scattered woodland parcels along the top edge of the valley sides.
- 4.4.7 11 broad-type categories of land-use have been assigned by the Historic Landscape Characterisation of Hertfordshire HER for the Application Site and study area (refer to **Figure 10.5** in Volume 4 to the PEIR); these are:
- a. Pre-18th century Irregular Enclosure.
 - b. Post-1950 Boundary Loss.
 - c. Ancient Woodland.
 - d. 18th – 20th century Woodland Plantation.
 - e. 20th century Enclosure.
 - f. Built-up Area – Urban Development.
 - g. Informal Parkland.
 - h. Allotments.
 - i. Leisure / Recreation.
 - j. Industrial.
 - k. Piecemeal Enclosure by Agreement – post-18th century.
- 4.4.8 Within the Main Application Site, the land is largely characterised as ‘Pre-18th century Irregular Enclosure’ and ‘Post-1950 Boundary Loss’ with small areas of ‘Ancient Woodland’ and ‘18th – 20th century Woodland Plantation’.
- 4.4.9 The ‘Pre-18th century Irregular Enclosure’ character area relates to the farm land associated with Winch Hill Farm and the ‘Post-1950 Boundary Loss’ relates to the rest of the farm land to the east of Winch Hill Farm which has undergone late 20th century alterations and the loss of hedgerows, as can be seen on historic OS maps dated from 1888 to 1949 which show this land divided into smaller parcels.
- 4.4.10 The ‘Ancient Woodland’ character area relates to the remnants of Winch Hill Wood, which had been largely removed by the development of the runway for the current Luton Airport site. Winch Hill Wood is visible on historic OS maps dated from 1885 to 1949 with no visible change. The ‘18th – 20th century Woodland Plantation’ character area relates to the small parcels of woodland to

the north and south of Winch Hill Farm and these areas are not marked on the 1949 OS map.

- 4.4.11 The wider landscape within the Main Study Area is largely characterised as 'Pre-18th century Irregular Enclosure' and 'Post-1950 Boundary Loss' with small areas of 'Built-up Area – Urban Development' which represents the residential areas of Wandon End, Tea Green and Breachwood Green to the north and east of the Proposed Development site. The 'Leisure / Recreation' character area relates to the 20th century golf course at Wandon End and the 'Allotment' character area relates to the 20th century allotment at Breachwood Green.

5 ASSESSMENT OF BASELINE

5.1 Designated Heritage Assets

2km study area

Somerles Castle (Scheduled Monument, NHLE 1008452)

- 5.1.1 Somerles Castle comprises the ruins of a late medieval magnate's residence which includes upstanding structures consisting of a gatehouse with a chapel and a vestibule to the east (Photo 3). Joints and markings in the fabric of the existing upstanding walls indicate the location of the main range and inner courtyard. Adjacent to the chapel and gatehouse, to the south-west lie garden earthworks, typical of the design of formal gardens of the 16th and 17th centuries. The asset's heritage significance derives from its historic, archaeological and architectural interests.
- 5.1.2 The asset has historic significance as a late medieval magnates' residence of high status. As such it comprises a rare form of monument due to its special social status. Its domestic rather than military character also adds to its historic interest. The presence of the castle articulates the status of late medieval society in this part of England and contributes to an understanding of how political power was organised and displayed. The castle therefore represents an important aspect of social, political and economic history. Somerles Castle also has historic interest that derives from its historical associations with notable historical figures such as James I.
- 5.1.3 Archaeological interest derives from the potential of the asset to contribute to the understanding of the development and construction techniques in brick. The earthworks of the attached formal gardens that are usually found in association with high status dwellings further confirm the status of the 15th century building and allow for the study of the two sites in conjunction with each other. The potential of the existence of buried foundations and archaeological features contribute to the high archaeological interest of the asset.
- 5.1.4 The setting of the castle is defined by the extent of its upstanding and buried remains. The castle derives limited heritage value from its rural setting. The landscape around the castle would have provided the historical and functional setting for the castle. The contemporary landscape around the castle would have been a predominantly assart landscape containing isolated farms and woodland remnants. However, this setting has been eroded by loss of woodland, designed woodland planting, post-medieval enclosure, and modern development. The visual setting of the castle is enclosed, and long-range views from the castle across the surrounding countryside do not form part of its setting or contribute to its value. Views are impeded to the west and south-west by planting and to the north by large modern structures, the latter of which detract from the asset's setting. The setting of the castle has been eroded further by the construction of Luton Airport in the 20th century, approximately 250m to the north (Photo 2). As a result of this, the monument experiences noise relating to aviation traffic and visual intrusion by passing aircraft.

- 5.1.5 Luton Hoo is located approximately 2km to the south-west of Someries Castle and both formed part of the Luton estate owned by the second Marquess of Bute, as recorded on the tithe map dated 1842. During the remodelling of Luton Hoo RPG in the 18th century, a number of areas of woodland were either created or enhanced in the landscape, including George Wood (HER 13172) to the south-west of Someries Castle. Views towards Luton Hoo are restricted by George Wood to the south-west, as well as the planting which bounds Someries Castle on all sides (**Inset 5.1** and **Inset 5.2**). Therefore, it can be assumed that Someries Castle was not incorporated into or intended to be a part of the park and its designed views.
- 5.1.6 The asset has the potential to undergo change to its setting as a result of the Proposed Development and is therefore assessed in **Chapter 10** Cultural Heritage in Volume 2 of the PEIR.

Inset 5.1: OS One-Inch map series 1885-1900. *Copyright National Library of Scotland.*



Inset 5.2: OS 1:10,560 map series 1949-60. *Copyright National Library of Scotland.*



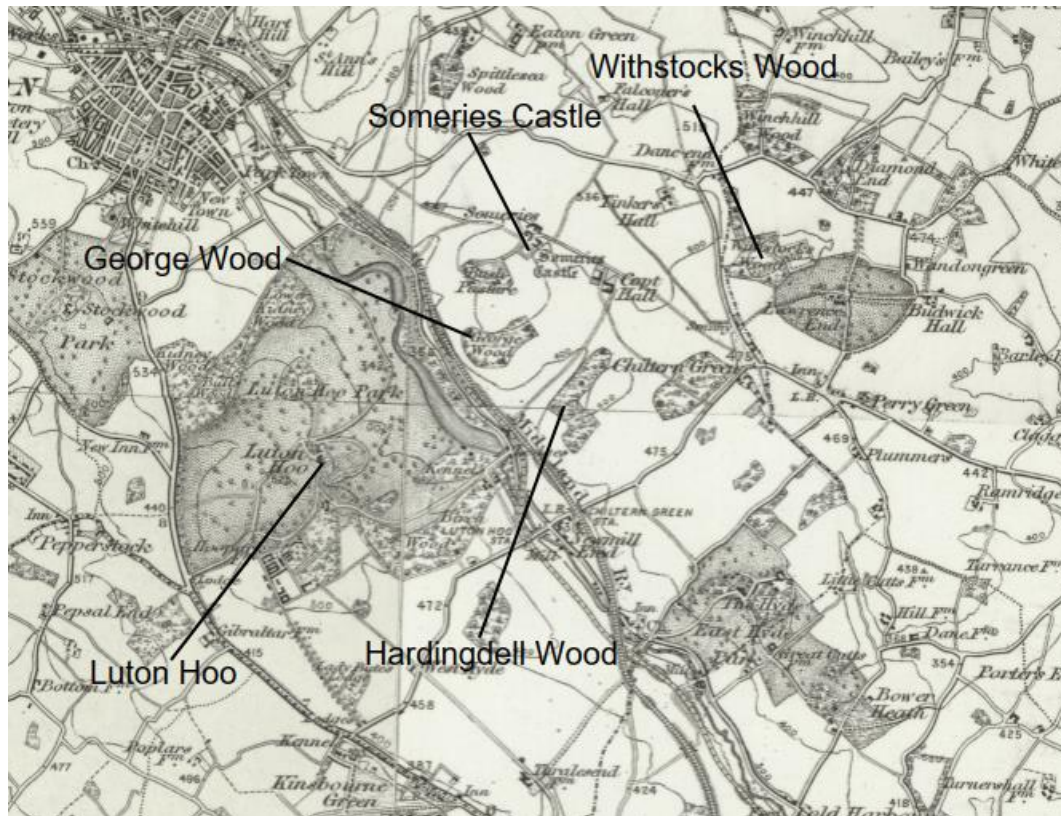
Luton Hoo (Grade II* RPG NHLE 1000578) and associated assets, including Luton Hoo house (Grade I, NHLE 1321301) Luton Hoo Conservation Area and listed buildings

- 5.1.7 Luton Hoo (is a Grade II* listed landscaped park that was first enclosed in 1623 and enlarged and remodelled by Lancelot Brown in 1764-74. The principal building within the park is Luton Hoo house (Grade I, NHLE 1321301) which dates to the 19th century. The dominant landscape feature within the park is the River Lea and its two associated lakes, created by Brown. The river and lakes run along the whole length of the park, close to its eastern boundary (Photo 1). Drives from the main house lead to the four main directions while trees are dispersed within the parkland to the west and north of the house. The south lake terminates close to Warren Hill Lodges (Grade II, NHLE 1114715), where the east drive is carried by the 1830s cast iron bridge (Grade II, NHLE 1114717). To the east of the river, a thick belt of trees provide screening from its surroundings. Formal gardens were added to the southern front of the house in the early 20th century, bounded by garden houses and retaining walls (Grade I, NHLE 1158944). They were designed by Charles Mewes and laid out by William Romaine-Walker. The ground within the park is undulated and apart from the trees and landscape features, a number of subsidiary buildings can be

found. These include the stable yard and associated buildings (Grade II*, NHLE 1114713) which date to the 18th century. The stables were designed by Robert Adam who was also responsible for the original design of Luton Hoo. The stable buildings are located further south of the house and the formal gardens and are surrounded by woodland. The buildings within the park have historic interest as they illustrate the various phases of Luton Hoo estate. They offer an insight into social and economic life of 18th and 19th centuries and history of English country houses for wealthy owners. Historic interest also derives from their association with notable architects such as Robert Adam and Robert Smirke. The buildings have architectural interest which derives from the appreciation of their design, their classical revival style as well as later additions such as the mansard roof that was added to Luton Hoo in the early 20th century.

- 5.1.8 Architectural and aesthetic interest derives from the appreciation of the design of the park, the careful location of its features, including buildings, structures and planted trees and gardens. Architectural and aesthetic interest also derives from the careful positioning of the house and associated subsidiary buildings within the landscape. This includes designed views within the parkland and planned landscape features such as the formal gardens to the south of Luton Hoo and the lakes to the east of the park. The house lies in a prominent position, at the top of a hill, overlooking the park and surrounding landscape, facing eastwards. Woodland and belts of trees planted along the boundaries of the park helps to provide screening from its surroundings. Several areas of woodland along the eastern hillside, including George Wood and Hardingdell Woods, outside of the designed landscape, define the views across the farmland which are particularly noticeable from the north drive and from the east of the house. Withstocks Wood is located approximately 3km to the east of the house on the valley ridge and terminates the views towards the east. It is likely that Brown created or developed these woodland features during the remodelling of the park in the 18th century, to enhance the views across the valley from the house, although not drawing the hillside into the park. Views from the house looking east appear to have been designed to be confined between George Wood and Hardingdell Woods, across the agricultural landscape and terminating at Withstocks Wood (**Inset 5.3**). Someries Castle is located approximately 2km to the north-east of Luton Hoo and formed part of the Luton estate owned by the second Marquess of Bute, however views in this direction are restricted by George Wood, as well as the planting which bounds Someries Castle on all sides. Therefore, it can be assumed that Someries Castle was not incorporated into or intended to be a part of the park and its designed views.

Inset 5.3: OS One-Inch map series 1885 - 1900. Copyright National Library of Scotland.

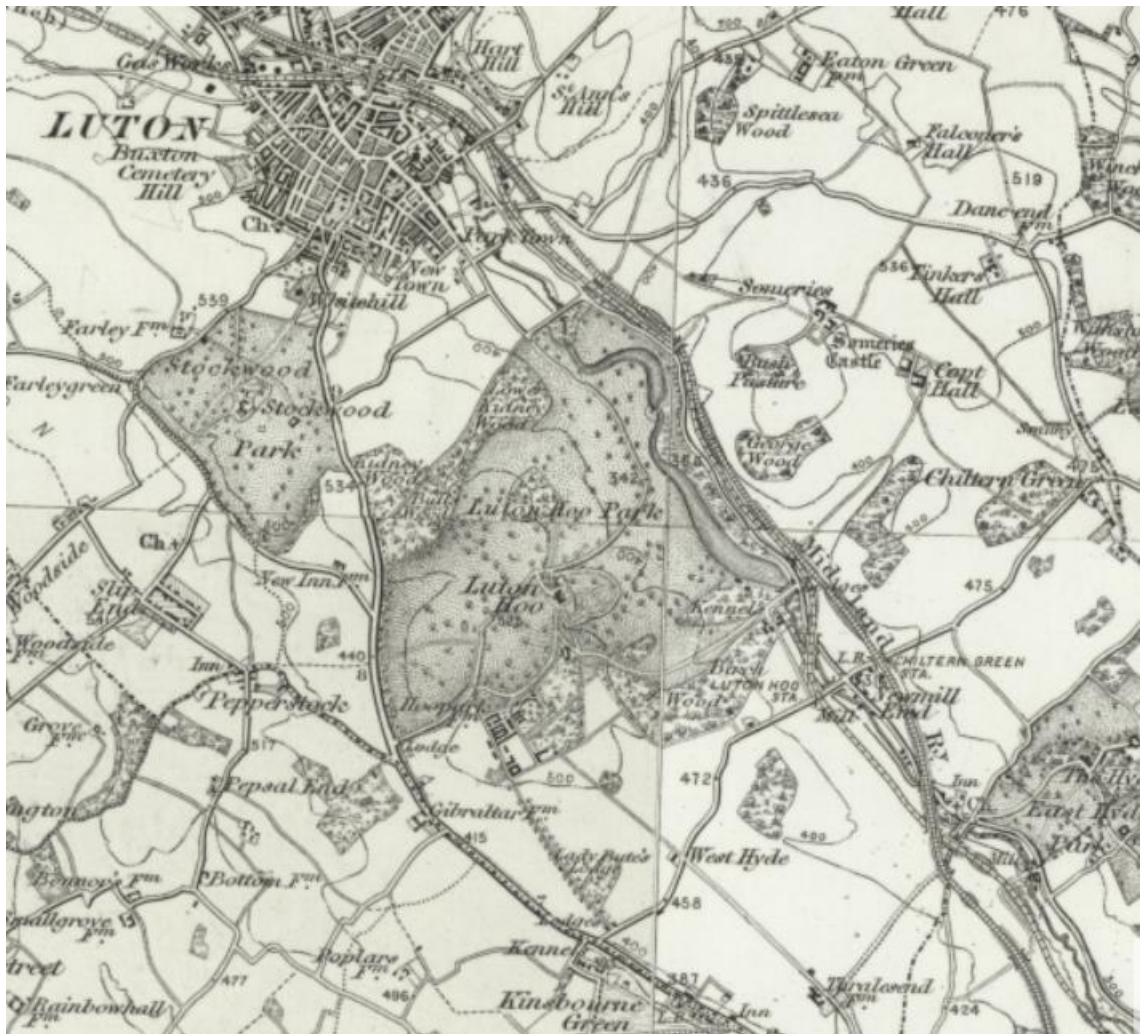


- 5.1.9 Luton Hoo park has historic interest as a 17th century park that was remodelled by Brown in the 18th century. Historic interest also derives from later additions in the park such as the formal gardens to the south of the house.
- 5.1.10 The semi-rural location of the park contributes to the setting of the asset through the partial preservation of a historical rural context for the asset, separate from the urban expansion of Luton town to the north.
- 5.1.11 Originally, the location of the park was rural however this has changed to some extent due to the expansion of the urban area of Luton to the south of the town centre. The rural setting of the park was also eroded to some extent by the construction of the M1, to the west and Luton Airport, to the north-east (**Inset 5.4** and **Inset 5.5**). The change in setting of the park from rural to semi-rural is not likely to have affected the significance of the asset, as whilst the character of the surrounding landscape may have changed, this has not detracted from the internal integrity of the park. Furthermore, dense woodland and tree belts on the boundaries of the park to the north and east restricts views towards Luton town and Luton Airport in these directions. The designed views across agricultural land towards the east and the woodland areas which frame views in this direction have not been eroded.
- 5.1.12 The principal building within the park is the Grade I listed Luton Hoo house (NHLE 1321301). One of the principal designed views from the house extends eastwards across the park, across the River Lea and the agricultural landscape beyond, which reinforces Brown's ambitions for the designed landscape. Shared views between features within the park are generally limited due to the

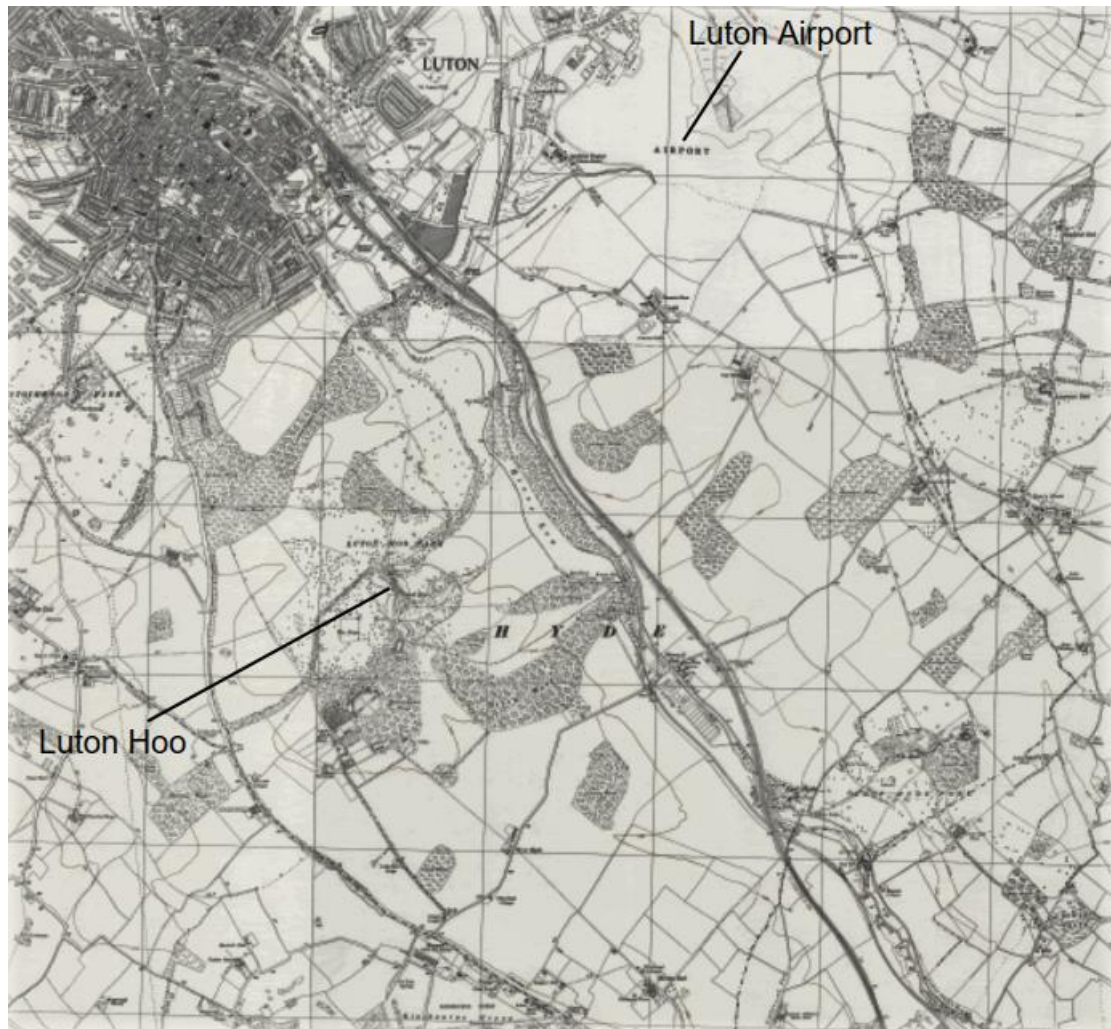
woodland planting. The boundaries of the park are typically well-defined by tree belts, woodland or estate walls and there are few clear views into the parkland.

- 5.1.13 The listed buildings contained within the park including the lodges (NHLE 1114715; NHLE 1114716), the stable yard and associated buildings (NHLE 1114713), as well as the cast iron bridge (NHLE 1114717), boathouse (NHLE 1159067) and garden houses and retaining walls (NHLE 1158944) provides the functional setting and historical context of the RPG and the group value of these assets contributes to their significance. The assets have the potential to undergo change to their setting as a result of the Proposed Development and are therefore assessed in **Chapter 10** of the PEIR.

Inset 5.4: OS One-Inch map series 1885-1900. *Copyright National Library of Scotland.*



Inset 5.5: OS 1:10,560 map series 1949-69. Copyright National Library of Scotland.



Putteridge Bury (Grade II RPG NHLE 1000917) and associated assets

- 5.1.14 Putteridge Bury is a Grade II listed park located approximately 2km to the north of the Main Application Site. The park was created in the 18th and 19th centuries and surrounds Putteridge Bury (Grade II, NHLE 1347083), a former country house that is now the Luton College of Higher Education. The house was constructed in the 20th century in order to replace an older house on the site. In the early 20th century, Edwin Lutyens and Gertrude Jekyll were also commissioned to remodel parts of the garden. The park has historic interest as an 18th and 19th century park that was laid out to surround a county house. Additional historic interest derives from the association of the park to the renowned architect Edwin Lutyens and Gertrude Jekyll, a noted Victorian gardener. The setting of the park is largely rural. Mid to late 20th century development on the outskirts of Luton, to the south-west, is visible from the western half of the park. The A505 forms the north-western boundary of the park. Mature woodland and a belt of trees provide screening to the park from most sides. However, some of the undulating ground falls away to the north-east of the main north drive allowing for long views from the park to the north-east.

- 5.1.15 The listed buildings contained within the park, including Putteridge Bury house; the former stables, walls of adjoining walled garden and vaulted alcove; and Home Farm and associated buildings, provides their functional setting and historical context and the group value of these assets contributes to their significance. The assets have the potential to undergo change to their setting as a result of the Proposed Development and are therefore assessed in **Chapter 10** of the PEIR.

Church of St. Mary, King's Walden (Grade I, NHLE 1102475)

- 5.1.16 The Church of St. Mary is a 12th – 13th century Grade I listed parish church located in King's Walden, approximately 2km north-east of the Main Application Site. The church has undergone additions and restorations throughout its lifetime including the addition of a west tower in the 14th century, a clearstorey in the 15th century and restorations to the nave and chancel in 1868. The original Saxon settlement was located near to the church, however it eventually migrated to the south, to what is now Breachwood Green. The setting of the church is rural and is defined by its location within Kingswalden Park, surrounded by agricultural land on all sides. Kingswalden Park was a medieval deer park with a mansion at its centre, however the mansion was substantially rebuilt in 1889-90 and replaced completely in 1969-70 by a neo-Georgian mansion. The setting of the asset does not extend into the Proposed Development site. No impacts are anticipated as a result of the Proposed Development and therefore the asset is scoped out of further assessment.

Old Homestead (Grade II*, NHLE 1176170)

The Old Homestead is a medieval open-hall house that dates to the early 17th century, of timber-framed construction with plaster panels and some brick casing, located in the village of Breachwood Green. The house also has a very rare 17th century wall painting of a floral design on its plaster wall. The significance of the house lies in its historic interest as an early 17th century open-hall house and the very rare wall painting (dated 1600-1625) on the northern wall. The house is set back from Chapel Road and does not visually share, or contribute to, the streetscape of Breachwood Green. The principal house faces east onto a mature garden, bounded by hedgerows and hedgerow trees which forms a green buffer between the house and Chapel Road. The house's position, set back from the road and from neighbouring houses, results in an almost secluded character. A separate, detached ancillary building is located to the rear of the house and frames views across large open fields to the west. The house's semi-rural and secluded location contributes to its setting. Components of the Proposed Development may be visible in views to the west, from the rear of the property. These views are unlikely to change the setting of the asset but this will be assessed further in **Chapter 10** of the PEIR.

Wigmore Hall Farmhouse, (Grade II, NHLE 1321368)

- 5.1.17 Wigmore Hall Farmhouse is located just outside of the Main Application Site boundary, to the north-east. The building dates to the 19th century, of two storeys with a hipped Welsh slate roof and stuccoed façade. It was a former farmhouse that is now used as Wigmore Hall Conference Centre. The

significance of the former farmhouse lies in its historic interest as an early 19th century farmhouse and its architectural interest that derives from the appreciation of its symmetrical façade and Georgian appearance. The setting of the asset has significantly eroded, following the demolition of its associated farm buildings and the construction of the 20th century development to its north. The setting of the asset was further eroded with the construction of Luton Airport to its south-west; however, some of its rural context was retained by Wigmore Park. The asset has the potential to undergo change to its setting as a result of the Proposed Development and is therefore assessed in **Chapter 10** of the PEIR.

Wandon End Farmhouse (Grade II, NHLE 1102448) and Wandon End House (Grade II, NHLE 1307874)

- 5.1.18 Wandon End Farmhouse and Wandon End House are two of the numerous farm buildings that are scattered over the countryside to the east and south of the Main Application Site boundary. The assets have historic interest as they illustrate the agricultural history of the area from the early 16th century to the 18th and 19th century. Architectural interest derives from the design and construction of the properties. The properties are located in the hamlet of Wandon End, to the north-east of the Main Application Site. They have retained most of their rural setting. However, modern suburban development to the east has eroded that setting to some extent. The assets have the potential to undergo change to their setting as a result of the Proposed Development and are therefore assessed in **Chapter 10** of the PEIR.

Woodside Cottage (Grade II, NHLE 1347432)

- 5.1.19 Woodside Cottage is located to the north of the hamlet of Lawrence End, to the south-east of the existing Luton Airport. The cottage dates to the 18th century and is constructed of brick with black weatherboarding on the first floor. The cottage has a half-hipped red tile roof and a central brick chimney. It has historic interest as an 18th century cottage and illustrates the agricultural history of the area. Architectural interest derives from the appreciation of its vernacular domestic style. The setting of the asset is rural. The cottage is surrounded by mature woodland to the west, north and south and is well-screened and secluded from its surroundings with views to agricultural land to the east. The Application Site does not contribute to the setting of the asset. No impacts are anticipated as a result of the Proposed Development and therefore the asset is scoped out of further assessment.

Vauxhall Office block (Grade II, NHLE 1249000)

- 5.1.20 The office block for Vauxhall Iron works has historic interest as an early 20th century building associated with an important car manufacturer. Architectural interest lies in the appreciation of the design of the building. Its setting is defined by its location within the Vauxhall site, at the edge of the town of Luton. The Application Site does not contribute to the setting of the asset. No impacts are anticipated as a result of the Proposed Development and therefore the asset is scoped out of further assessment.

Listed buildings at Breachwood Green

- 5.1.21 Breachwood Green is a village located approximately 2.5 km from the existing eastern boundary of Luton Airport, approximately 500m east of the Main Application Site. The setting of the village is rural as it is surrounded by countryside. There are 17 listed buildings in the village, of which eight are located on the western side of the Chapel Road/Heath Road. These properties experience views from their rear gardens towards the countryside to the west, some of which include the existing Luton Airport. The setting of the rest of the listed buildings is defined by their location within the village of Breachwood Green. The listed buildings in the village date mainly to the medieval and post-medieval periods and illustrate the agricultural history of the village at that time. Apart from their historic interest, architectural interest derives from the appreciation of the different styles and materials from vernacular style and timber-framed construction, Georgian symmetrical facades and Victorian red brick buildings. Their rural setting with views over the countryside to the west contributes to their significance. The Application Site does not contribute to the setting of the assets. No impacts are anticipated as a result of the Proposed Development and therefore the assets are scoped out of further assessment.

Bendish Conservation Area and associated listed buildings

- 5.1.22 Bendish is a hamlet in the parish of St. Paul's Walden. The Bendish Conservation Area encompasses a small cluster of buildings, around the Green, located approximately 2.5km east of the Main Application Site. These include the Green Farm on the east side of the Green (Grade II, NHLE 1102434); the Barn at the entrance to Green Farm on the east side of the Green (Grade II, NHLE 1176812); and the Harrow Public House (Grade II, NHLE 1347449), all of which date to the 16th century, of timber-framed construction with later alterations. The conservation area has historic interest due to its medieval origins, illustrating the history of the area. Architectural interest derives from the medieval buildings that survive in the area, that although altered, they still retain their vernacular character. The informal arrangement of the buildings around the village green, contributes to the special character of the area. The setting of the conservation area is rural and apart from a number of farm buildings to the north, it is surrounded by countryside. The Application Site does not contribute to the setting of the assets. No impacts are anticipated as a result of the Proposed Development and therefore the assets are scoped out of further assessment.

Isolated farm buildings within the 2km study area

- 5.1.23 Dispersed within the countryside that surrounds the Main Application Site are a number of listed buildings. These buildings have historic interest as they illustrate the agricultural history of the area, from the 16th to the 20th century. Architectural interest derives from the appreciation of their design and materials. Their rural setting contributes to their significance. This rural setting has been eroded to some extent by modern development in the area, including the construction of Luton Airport; a solar panel farm to the east of Chiltern Green Road; and modern buildings and industrial estates. No impacts are anticipated

as a result of the Proposed Development and therefore the assets are scoped out of further assessment.

Conservation Areas and listed buildings within Luton Town

- 5.1.24 The history of Luton is illustrated by a number of historic buildings that survive within the town. Areas of special architectural and historic interest that illustrate specific aspects of the development of the town have been designated as Conservation Areas to reflect that.
- 5.1.25 The Town Centre Conservation Area encompasses the historic core of the town with most of the historic buildings dating to the 19th century. Residential, commercial and public buildings coexist contributing to the vibrant character of the conservation area.
- 5.1.26 The Luton South Conservation Area is located to the south of the centre of Luton town. The character of this conservation area is residential and includes a number of Victorian terraces along Stockwood Crescent and London Road as well as detached and semi-detached properties along West Hill Road. The conservation area encompasses Luton Hoo Memorial Park, to the south east.
- 5.1.27 The former hatting district in the town is encompassed by Plaiter's Lea Conservation Area on the northern fringes of Luton's commercial district. There were no buildings in the area before c. 1840 and during the following 150 years, there was rapid development where factories and other industrial buildings associated with the hat industry were established.
- 5.1.28 The High Town Road Conservation Area includes the core of Luton's earliest suburb. The first buildings here started to appear by 1834 and the development of the area was contributed to the Primitive Methodists who established in the area in 1838.
- 5.1.29 In terms of the listed buildings and conservation areas within Luton town, their setting is defined by their urban location and the contribution they make to understanding and appreciating the historic evolution of the area and its changing fashions. The setting of the conservation areas is restricted to their defined areas and views outside of them do not contribute to their setting. No impacts are anticipated as a result of the Proposed Development and therefore the assets are scoped out of further assessment.

250m study area

Hitchin Conservation Area

- 5.1.30 The Hitchin Conservation Area encompasses the historic core of the historic market town of Hitchin, one of the oldest continually inhabited towns in the county of Hertfordshire. The special historic interest of the area derives from the long history of the settlement as an agricultural, market and service centre for the region, as well as due to its more limited industrial heritage. The survival of medieval burgage plots to the western side of High Street, and to both sides of Bancroft, which in places are reflected by the creation of alleyways, carriage entrances and courts. The undulating topography and the River Hiz create an interesting townscape and sense of place. To the interest of the townscape

adds the use of timber framing or red brick for many of the historic buildings. Development associated with the railway, comprising the late 19th century residential suburb based on The Avenue, to the east of the town centre, illustrates the developmental history of the area. A number of open spaces such as Priory Park, Windmill Hill and Bancroft Recreation Ground also contribute to the special interest of the area. The conservation area is surrounded by modern residential development as the historic town expanded in more recent years. It therefore has an urban setting. The proposed works associated with the Off-site Highways Interventions comprise improvement works to the existing road network; therefore, the overall character of the conservation area would not be altered. No impacts are anticipated as a result of the Proposed Development and therefore the asset is scoped out of further assessment.

Hitchin Hill Path Conservation Area

- 5.1.31 The Hitchin Hill Path Conservation Area encompasses a small cluster of buildings mainly dating from early to mid-19th century buildings. There is a variety of detached, semi-detached, or short terraces which follow a single building line, creating a sense of cohesiveness. Building materials and details are characteristic of the age of the buildings, including red or brown brick, stucco, steeply pitched slated or tiled roofs, original sash windows and decorative brick chimney stacks. High brick walls dating to the 19th century contribute to a sense of seclusion and privacy, in contrast to the busy main roads which lie on either side of the conservation area. Mature trees and thick shrubbery enhance the setting of the area's historic buildings and also have considerable impact in views from the surrounding streets. The conservation area is surrounded by roads and mostly modern development. Although the location of the conservation area, at the meeting place of two historic routes into Hitchin on the summit of Hitchin Hill is of some historic significance, its setting makes little contribution to that significance. The proposed works associated with the Off-site Highways Interventions comprise improvement to the existing road network; therefore, the overall character of the Conservation Area would not be altered. No impacts are anticipated as a result of the Proposed Development and therefore the asset is scoped out of further assessment.

Wider study area (beyond the 2km study area)

Six Hills Roman barrows (SM, NHLE 1015579)

- 5.1.32 The scheduled monument is located approximately 9km north-east of the Main Application Site. The monument includes six Roman barrows known as 'The Six Hills' and the archaeologically sensitive area between them situated in an area of grassland formerly known as Sixpenny Common. The barrow mounds are very similar in appearance and size, being on average 18m in diameter and 3m in height and are spaced at intervals of approximately 5-10m in a line running north to south. The current setting of the scheduled monument does not represent its original setting. It is now located within an extensive urban area in Stevenage new town, approximately 120m west of London Road and immediately south of its junction with Six Hills Way. The setting of the asset does not extend into the Proposed Development site. However, the asset falls

within the noise contour data that informs the wider study area and it is therefore included in this PEIR.

Whomerley Wood moated site (SM, NHLE 1012052)

- 5.1.33 The monument includes the well-preserved remains of a medieval moat and its associated outworks. The moat measure approximately 73m across and is roughly square in form. The scheduled monument is located in Whomerley Wood, Stevenage, located approximately 10km to the east of the Main Application Site and is covered and surrounded by dense woodland. The protection afforded by the dense woodland restricts views towards the urban development of Stevenage on all sides. The setting of the asset does not extend into the Proposed Development site. No impacts are anticipated as a result of the Proposed Development and therefore the asset is scoped out of further assessment.

Earthworks in Boxwood (SM, NHLE 1005241)

- 5.1.34 The scheduled monument comprises the earthworks that are associated with the settlement of Box Wood, located just outside the bounds of the ancient parish of Stevenage in the territory of Walkern. Historic England scheduled monument entry data was not available at the time of writing. The scheduled monument is located approximately 13km to the east of the Main Application Site. The scheduled monument is covered in dense trees and is bounded by the urban development of Stevenage on its western edge and by rural agricultural fields on its eastern edge. The setting of the asset does not extend into the Proposed Development site. No impacts are anticipated as a result of the Proposed Development and therefore the asset is scoped out of further assessment.

Barrow at Telegraph Hill (SM, NHLE 1012449)

- 5.1.35 Although slightly disturbed, the barrow is largely intact and will retain considerable potential for the preservation of archaeological and environmental science. The barrow is situated on the south shoulder of Telegraph Hill, Hitchin, approximately 6km to the north of the Main Application Site. The setting of the barrow is defined by the extent of its physical remains as well as its prominent position in the landscape. The barrow is located on higher ground overlooking the lower fields surrounding it, however the fields on all sides are bounded by dense trees which restricts views across the wider landscape. The setting of the asset does not extend into the Proposed Development site. No impacts are anticipated as a result of the Proposed Development and therefore the asset is scoped out of further assessment.

Neolithic enclosure known as Waulud's Bank (SM, NHLE 1015558)

- 5.1.36 The SM is located approximately 5km to the north-west of the Main Application Site. Waulud's Bank lies towards the northern end of a broad valley which transects the chalk ridge of the Chiltern Hills, in an area now occupied by the suburban outskirts of Luton. The surviving earthworks define a large D-shaped enclosure measuring 250m north-east to south-west by 350m transversely. The scheduled monument has remained under pasture since the 1880s although

urban development has continued on all sides except for the western edge of the asset's boundary which is bounded by mature trees and hedgerows. The setting of the asset does not extend into the Proposed Development site. No impacts are anticipated as a result of the Proposed Development and therefore the asset is scoped out of further assessment.

St. Paul's Walden Bury (Grade I RPG, NHLE 1000150), The Bury (Grade II*, NHLE 1307601)

- 5.1.37 St. Paul's Walden Bury is located approximately 5km to the east of the Main Application Site and comprises largely unaltered formal gardens and wooded pleasure grounds surrounding an early 18th century country house, with associated landscape park. Restoration of the gardens and pleasure grounds in the mid-20th century included works by Sir Geoffrey Jellicoe from the 1930s to the 1990s. The setting of the park is rural and it is bounded largely by agricultural land and woodland. Designed views extending from the park contribute to the parks setting, including views extending south from the house across the valley and the distant countryside landscape. The setting of the asset does not extend into the Proposed Development site. However, the park falls partially within the noise contour data that informs the wider study area and is therefore included in this PEIR.

Temple Dinsley (Grade II* RPG, NHLE 1000919), Temple Dinsley house (Grade II*, NHLE 1307766) and associated listed buildings

- 5.1.38 Temple Dinsley is located approximately 5km to the north-east of the Main Application Site and comprises a formal garden and parkland which surrounds an early 18th century country house. An earlier house and garden were located on the site in the 17th century, being rebuilt in 1714 following the sale of the manor. The park is bounded to the east, south and west by mature trees and hedgerows and the northern boundary is marked by agricultural land. To the west of the park lies the small village of Preston which contains a number of 17th – 18th century listed buildings. During the 13th and 14th centuries, the manor was the property of the Knights Templars and a small religious community was established here. A preceptory was built and the manor became the Knights Templars most important estate in south-eastern England. Temple Dinsley house and associated listed buildings provides the historical and functional setting of the park and the group value of these assets contributes to their significance. The historic and continued link with the settlement also contributes to their significance. The setting of the park is defined by its rural location and the views are afforded across the agricultural landscape, north towards Letchworth. The setting of the asset does not extend into the Proposed Development site. No impacts are anticipated as a result of the Proposed Development and therefore the asset is scoped out of further assessment.

Knebworth (Grade II* RPG, NHLE 1000255)

- 5.1.39 The park is located approximately 8km south-east of the Main Application Site and comprises a mid-19th century formal garden, surrounding an early 16th century country house, set within a former mid-17th century deer park and

woodland which was landscaped in the early 19th century. The garden was remodelled in 1908 alongside the refurbishment of the interior of the house. The house and gardens stand on high ground, skirted to the north-west and north-east by a valley which runs through the park. Woodland and parkland extent north from the valley bottom. The setting of the park is largely rural, with long views north-west and north-east from the House and adjacent parkland. The view north-east is interrupted in the middle distance by Stevenage's late 20th century industrial developments. The setting of the asset does not extend into the Proposed Development site. No impacts are anticipated as a result of the Proposed Development and therefore the asset is scoped out of further assessment.

The Improvement Garden (Grade II* RPG, NHLE 1468798)

- 5.1.40 The Improvement Garden is a sculpture garden opened in 1991 within Stockwood Park. Stockwood Park is a former country estate, now a public park, located approximately 1.5km south-west of Luton town centre. The sculpture garden was designed collaboratively between Ian Hamilton Finlay who produced the master plan for the sculptures in 1986, and Bob Burgoyne, Master Gardener at Luton Borough Council. The setting of the garden is characterised by its location within Stockwood Park and dense tree lines and garden walls restrict views outside of the garden in all directions. The setting of the asset does not extend into the Proposed Development site. However, the park falls within the noise contour data that informs the wider study area and is therefore included in **Chapter 10** of the PEIR.

Wardown Park (Grade II RPG, NHLE 1001445)

- 5.1.41 Wardown Park is an early 20th century municipal park, overlying the landscape park and pleasure grounds of a 19th century country house. During the mid-19th century, the land was agricultural and in 1847, a small farmhouse was built on the land. In 1868, a local man bought the house and a number of adjacent land parcels to the north and south. He then built a new mansion on the land as well as other associated estate buildings and gardens and pleasure grounds were laid out around the mansion, with further features and a park being added in the late 19th century. In the early 20th century, the estate was sold, and the pleasure gardens opened to the public in 1905. Over the following years, new features were laid out with the addition of a network of paths, a small lake, bowling greens and a grandstand. The park remains open to the public. The setting of the park is largely a 20th century suburban residential area with views extending east from the south-east corner of the park, up the valley side to the wooded summit, where the views terminate. The setting of the asset does not extend into the Proposed Development site. No impacts are anticipated as a result of the Proposed Development and therefore the asset is scoped out of further assessment.

Ayot House (Grade II RPG, NHLE 1000905)

- 5.1.42 Ayot House is a mid to late 18th century landscape park surrounding a country house and pleasure grounds. The park is bounded to the south by the main lane leading generally from west to east through Ayot St Lawrence, to the west

partly by Prior's Wood, and on the other sides largely by agricultural land. The park occupies a plateau above the valley of the River Mimram to the east and the setting of the park is rural, with views east from the eastern half of the park and north-east drive over the Mimram valley. The setting of the asset does not extend into the Proposed Development site. No impacts are anticipated as a result of the Proposed Development and therefore the asset is scoped out of further assessment.

The Hoo, Kimpton (Grade II RPG, NHLE 1000912)

- 5.1.43 The Hoo, Kimpton is an 18th century landscape park, formerly surrounding a 17th to 18th century country house (now demolished), with work by Lancelot Brown. The Hoo estate overlies low rolling hills at the northern end of the Chiltern range between Luton and Stevenage. The site of the former house occupies a plateau towards the centre of the estate, overlooking much of the park. The setting of the park is rural, with views from the house to the south, east and north, particularly towards St Paul's Walden Byry. The setting of the asset does not extend into the Proposed Development site. No impacts are anticipated as a result of the Proposed Development and therefore the asset is scoped out of further assessment.

5.2 Non-designated Heritage Assets

The site of Iron Age and Roman settlement-related activity (HER 10808)

- 5.2.1 The site of Iron Age and Roman settlement-related activity is located within the Main Application Site to the east of Wigmore Park. The area was evaluated in 2019 and was characterised as the remains of Iron Age/ Early Roman to Roman settlement and enclosure, which included several pits and a Roman building. The building remains had been truncated by previous ploughing, but the retrieval of painted wall plaster, box flue and roof tile suggest the building may have been of some status. The asset is of archaeological and historic significance due to its ability to inform on several regional research aims relating to Iron Age and Roman settlement activity. The Proposed Development has the potential to result in physical impacts to the asset and is therefore assessed in the Cultural Heritage chapter of the PEIR (**Chapter 10**).

The site of a possible Roman building (HER 7358)

- 5.2.2 The site of a possible Roman building is located to the east of Winch Hill, within the Main Application Site. An archaeological watching brief associated with the installation of the Prax fuel pipeline identified significant quantities of Roman pottery and building material which suggested the presence of a building in the vicinity. The asset is of archaeological and historic significance due to its ability to inform on several regional research aims relating to Roman settlement activity. The Proposed Development has the potential to result in physical impacts to the asset and is therefore assessed in the Cultural Heritage chapter of the PEIR (**Chapter 10**).

Cropmarks which may relate to late prehistoric or Roman activity (HER 17218) and (HER 17219)

- 5.2.3 Cropmarks which may relate to late prehistoric or Roman activity are located within the Main Application Site, on either side of the lane that leads to Winch Hill. Both assets relate to cropmark evidence identified from aerial photographs comprising linear and curvilinear features that may relate to late prehistoric or Roman activity, due to their proximity to known and potential remains. If the features are archaeological, they are likely to relate to enclosure or trackway features. The assets are of archaeological and historical significance if they are shown to be associated with the two areas of known Roman activity, or with earlier prehistoric settlement. The Proposed Development has the potential to result in physical impacts to the asset and therefore this is assessed in the Cultural Heritage chapter of the PEIR (**Chapter 10**).

Post-medieval to modern linear earthworks associated with Century Park (HER 20507)

- 5.2.4 Post-medieval to modern 2m wide linear earthwork of low banks either side of a ditch in a woodland belt on the eastern side of a footpath which are incorporated into the current landscape design, located on the eastern extent of the existing Wigmore Valley Park, within the Main Application Site. The Proposed Development incorporates this asset into its design. No impacts are anticipated as a result of the Proposed Development and therefore the asset is scoped out of further assessment.

Luton Airport Fire Station (HER 19823)

- 5.2.5 Modern 20th century Fire Station at Luton Airport. The Proposed Development incorporates this asset into its design. No impacts are anticipated as a result of the Proposed Development and therefore the asset is scoped out of further assessment.

WWII Airfield Battle Headquarters (HER 17921)

- 5.2.6 World War II Airfield Battle Headquarters, the majority of which is located underground, located towards the north of the Main Application Site, within the existing Wigmore Valley Park. The Proposed Development will result in no physical impacts to this asset and therefore the asset is scoped out of further assessment.

Possible Pit-type Features (AEC001) and (AEC002)

- 5.2.7 A number of possible pit-type features have been identified through analysis of LiDAR data, which are located towards the eastern extent of the Main Application Site. These features are likely related to geological anomalies or post-medieval extraction activity. The Proposed Development has the potential to result in physical impacts to these assets and are therefore assessed in the Cultural Heritage Chapter of the PEIR (**Chapter 10**).

5.3 Previous Ground Disturbance

- 5.3.1 Previous ground disturbance is restricted to the current Luton Airport site, Wigmore Valley Park, the eastern-most car park of the current Luton Airport site and the Off-site Highways Interventions. The remainder of the Proposed Development site, including the replacement open space to the east of Wigmore Valley Park appears to have been largely used as agricultural land since the medieval period. Ground disturbance is therefore expected to be limited to the depth of the plough soil in this area. Analysis of historic borehole data within the Application Site and its vicinity shows the topsoil measuring approximately 0.2-0.4m thick and directly overlying clay-with-flint deposits. Archaeological features are therefore expected to be found relatively shallowly and are likely to have been impacted by historic agricultural practices. Recent excavations to the south of Wigmore Valley Park, within the Proposed Development site, confirmed the shallow nature of archaeological remains, with features typically set into the underlying clay-with-flint deposits and truncated by ploughing. Some remnants of subsoil were preserved in natural hollows and undulations in the surface and this material had presumably been removed elsewhere through plough truncation.
- 5.3.2 An area of historic landfill is located within the study area and is now part of Wigmore Valley Park and the eastern-most car park at Luton Airport has been constructed over some of it. It was operated by Luton Borough Council between 1937 and 1978. Part of the Proposed Development will be constructed over the disused landfill. The construction and operation of the landfill as well as the redevelopment into Wigmore Valley Park and the Luton Airport car park is likely to have resulted in significant disturbance to any subsurface archaeological deposits.
- 5.3.3 The construction of the current Luton Airport site and existing highways is likely to have resulted in significant disturbance to any subsurface archaeological deposits in these areas.

5.4 Archaeological Potential

- 5.4.1 This section assesses the archaeological potential of the Proposed Development site. The assessment of archaeological potential is based on the data available at the time of writing and takes into consideration the known archaeological assets within the Application Site and study areas and historical and cartographic evidence presented in the baseline. The lack of recorded evidence relating to particular archaeological periods within the Application Site and study areas may reflect limited archaeological investigation to date, rather than a genuine absence of activity. The archaeological potential for the Application Site has been assessed as follows:

Early prehistoric (Palaeolithic and Mesolithic): Palaeolithic and Mesolithic remains within the wider landscape are largely concentrated in river valleys and upland areas, such as the Chilterns. A number of important Palaeolithic finds have been identified in the area around Luton with the site at Caddington providing evidence for short-term Palaeolithic activity around ponds and watering holes. The Application Site lies within a valley within the Chilterns, with

a ridge lined with woodland running through the middle and has the potential for similar geology as that at Caddington. Despite the Proposed Development site's location within a valley there have been no Palaeolithic finds within the 1km study area and only one Mesolithic asset in the form of a flint scatter. However, the archaeological investigations in this area have been limited and largely non-intrusive. Therefore, there is a **medium** potential for early prehistoric remains within previously undisturbed parts of the Proposed Development site.

Late prehistoric (Neolithic, Bronze Age and Iron Age): Late prehistoric settlement activity has been identified within the wider landscape in the form on Bronze Age barrows and Iron Age hillforts along river valleys and monument complexes on the lower river terraces. A major Iron Age settlement is located near St Albans and the major Iron Age trade corridor Icknield Way runs west of Luton. The only asset identified within the Application Site dated to the late prehistoric is Iron Age pottery sherds which were identified within a trench excavation at Wigmore Valley Park. However, within the 1km study area, evidence for late prehistoric activity includes Late Neolithic / Early Bronze Age flint scatters, Neolithic pits and a possible Late Iron Age enclosure identified by earthworks within Brickkiln Wood. Additionally, an investigation during the construction of a pipeline identified a number of Late Iron Age occupation features and there are further findspots of Iron Age pottery. Therefore, there is a **medium to high** potential for late prehistoric remains within previously undisturbed parts of the Proposed Development site.

Roman: The major Iron Age settlement near present-day St Albans became a Roman settlement after the Roman occupation and was one of Britain's major cities. The Application Site would have likely formed part of the wider hinterland with villas and smaller settlements within the Roman landscape. Evidence for Roman activity within the 1km study area is restricted to find spots of pottery sherds, coins and extractions pits. However, Roman occupation evidence has been identified within the Application Site including a substantial Roman settlement site at Wigmore Valley Park where archaeological investigations in 2019 identified an enclosure encompassing the remains of a building and domestic rubbish pits. Furthermore, investigations at Winch Hill Farm identified Roman occupation features which probably represent a farmstead. There are known Roman remains within parts of the Application Site and there is a **high** potential for further evidence of Roman activity to be present within previously undisturbed parts of the Proposed Development site.

Anglo-Saxon / Early medieval: With the foundation of Luton in the 6th century, the Application Site would have likely formed part of its hinterland. There is no evidence for Anglo-Saxon / Early medieval activity within the Application Site and only one asset identified within the 1km study area which was a probable Anglo-Saxon burial although no skeletal remains were found. There is a known Anglo-Saxon cemetery at Luton and the nearby parish of Offley has evidence of being linked to the Anglo-Saxon King Offa. Therefore there is considered to be a **low to medium** potential for Anglo-Saxon / Early medieval remains within previously undisturbed parts of the Proposed Development site.

Medieval: Luton was one of the most populated areas in Bedfordshire at this time and was most likely largely wooded, with a number of Ancient Woodlands

still visible in the landscape. There are small medieval parishes within close proximity to the Application Site with the surrounding land likely forming part of the hinterland of these parishes. A medieval leper hospital was located within the Proposed Development site. This was demolished as part of the construction of the current Luton Airport site. Medieval assets identified within the 1km study area are restricted to Ancient Woodland, former field boundaries and sparse find spots. Due to the Proposed Development site's proximity to the medieval town of Luton and the surrounding medieval parishes, there is a **medium to high** potential for medieval remains within previously undisturbed parts of the Proposed Development site.

Post-medieval: The land to the east of the current Luton Airport site is largely agricultural with post-medieval farmsteads scattered throughout. Within the 1km study area, post-medieval evidence has been identified in the form of brickworks, extraction pits, former field boundaries and a cemetery. A number of post-medieval buildings, now demolished, were located within the footprint of the current Luton Airport site and find spots of brick and tile have been identified in the area to the east providing evidence for further demolished buildings. Due to the post-medieval expansion of Luton and the number of post-medieval farmsteads to the east of the Proposed Development site, there is a **high** potential for post-medieval remains within previously undisturbed parts of the Proposed Development site.

Modern: Due to the known use of Luton Airport during WWII as a military training ground, as well as the WWII material found within the Luton Hoo estate, there is a **high** potential for modern remains within the Proposed Development site.

- 5.4.2 This desk-based assessment has identified the known archaeological resource within the Main Study Area and has predicted the archaeological potential within the Proposed Development site. There is however, still a risk that unexpected archaeological remains of all periods may be discovered within previously undisturbed parts of the Proposed Development site.

Statement of Heritage Significance

- 5.4.3 The NPPF stresses the importance of identifying and assessing the significance of any heritage asset and its setting that may be affected by a proposed development. Once significance has been established, the impact of any proposal can be appropriately assessed.
- 5.4.4 This DBA has identified the potential for archaeological assets of all periods to exist within the Proposed Development site, outside areas of modern development and disturbance.
- 5.4.5 Potential remains dating to the early prehistoric are likely to relate to flint-working sites and evidence for temporary/seasonal occupation activity and likely to be of local and regional significance. If identified, it is considered they would be of medium value as they would contribute to our understanding of early human activity.

- 5.4.6 Potential remains dating to the late prehistoric and Roman periods are likely to relate to settlement activity and likely to be of local and regional significance. If identified, it is considered they would be of medium value as they would contribute to our understanding of early settlement patterns.
- 5.4.7 Potential remains dating to the early medieval, medieval and post-medieval periods are likely to relate to agricultural activities and likely to be of local significance. If identified, it is considered they would be of low value as they would contribute to our understanding of local farming practices.
- 5.4.8 Potential remains dating to the modern period are likely to relate to WWII and likely to be of local significance. If identified, it is considered they would be of low value. Summary of Assets Scoped In / Scoped Out of Further Assessment
- 5.4.9 A summary of assets scoped in / scoped out of further assessment is provided in **Table 1**. Those assets that are scoped in for further assessment are discussed in **Chapter 10** of the PEIR.

Table 1: Summary of assets scoped in / scoped out of further assessment

Asset	Impact	Scoped In / Scoped Out
Somerles Castle (SM, NHLE 1008452)	The asset has the potential to undergo change to its setting as a result of the Proposed Development.	Scoped In
Six Hills Roman barrows (SM, NHLE 1015579)	The setting of the asset does not extend into the Proposed Development site. However, the site falls within the noise contour data, which informs the wider study area, and will be included in the PEIR.	Scoped In
St. Paul's Walden Bury (Grade I RPG, NHLE 1000150) and The Bury (Grade II*, NHLE 1307601)	The setting of the assets does not extend into the Proposed Development site. However, the site falls within the noise contour data, which informs the wider study area, and will be included in the PEIR.	Scoped In
Luton Hoo (Grade II* RPG , NHLE 1000578) and associated assets, including Luton Hoo house (Grade I, NHLE 1231301), Luton Hoo Conservation Area and listed buildings	The assets have the potential to undergo change to their setting as a result of the Proposed Development.	Scoped In
The Improvement Garden (Grade II* RPG, NHLE 1468798)	The setting of the asset does not extend into the Proposed Development site. However, the site falls within the noise contour data, which informs the wider	Scoped In

Asset	Impact	Scoped In / Scoped Out
	study area, and will be included in the PEIR.	
Putteridge Bury (Grade II RPG, NHLE 1000917)	The asset has the potential to undergo change to its setting as a result of the Proposed Development.	Scoped In
The Old Homestead (Grade II*, NHLE 1176170)	The asset has the potential to undergo change to its setting as a result of the Proposed Development.	Scoped In
Wigmore Hall Farmhouse (Grade II, NHLE 1321368)	The asset has the potential to undergo change to its setting as a result of the Proposed Development.	Scoped In
Wandon End Farmhouse (Grade II, NHLE 1102448) and Wandon End House (Grade II, NHLE 1307874)	The assets have the potential to undergo change to their setting as a result of the Proposed Development.	Scoped In
Church of St. Mary, King's Walden (Grade I, NHLE 1102475)	The setting of the asset does not extend into the Proposed Development site. No impacts are anticipated as a result of the Proposed Development.	Scoped Out
Woodside Cottage (Grade II, NHLE 1347432)	The Application Site does not contribute to the setting of the asset. No impacts are anticipated as a result of the Proposed Development.	Scoped Out
Vauxhall Office block (Grade II, NHLE 1249000)	The Application Site does not contribute to the setting of the asset. No impacts are anticipated as a result of the Proposed Development.	Scoped Out
Listed buildings at Breachwood Green	The Application Site does not contribute to the setting of the assets. No impacts are anticipated as a result of the Proposed Development.	Scoped Out
Bendish Conservation Area and associated listed buildings	The Application Site does not contribute to the setting of the assets. No impacts are anticipated as a result of the Proposed Development.	Scoped Out
Isolated farm buildings within the 2km study area	The rural setting of these buildings has been eroded by modern development in the area. No impacts are anticipated as a result of the Proposed Development.	Scoped Out
Conservation Areas and listed buildings within Luton Town	The setting of the conservation areas and listed buildings is restricted to their defined areas and views outside of	Scoped Out

Asset	Impact	Scoped In / Scoped Out
	them do not contribute to their setting. No impacts are anticipated as a result of the Proposed Development.	
Hitchin Conservation Area	The proposed works comprise improvement works to the existing road network; therefore, the overall character of the conservation area would not be altered. No impacts are anticipated as a result of the Proposed Development.	Scoped Out
Hitchin Hill Path Conservation Area	The proposed works comprise improvement works to the existing road network; therefore, the overall character of the conservation area would not be altered. No impacts are anticipated as a result of the Proposed Development.	Scoped Out
Whomerley Wood moated site (SM, NHLE 1012052)	The setting of the asset does not extend into the Proposed Development site. No impacts are anticipated as a result of the Proposed Development.	Scoped Out
Earthworks in Boxwood (SM, NHLE 1005241)	The setting of the asset does not extend into the Proposed Development site. No impacts are anticipated as a result of the Proposed Development.	Scoped Out
Barrow at Telegraph Hill (SM, NHLE 1012449)	The setting of the asset does not extend into the Proposed Development site. No impacts are anticipated as a result of the Proposed Development.	Scoped Out
Neolithic enclosure known as Waulud's Bank (SM, NHLE 1015558)	The setting of the asset does not extend into the Proposed Development site. No impacts are anticipated as a result of the Proposed Development.	Scoped Out
Temple Dinsley (Grade II* RPG, NHLE 1000919), Temple Dinsley house (Grade II*, NHLE 1307766) and associated listed buildings	The setting of the assets does not extend into the Proposed Development site. No impacts are anticipated as a result of the Proposed Development.	Scoped Out
Knebworth (Grade II* RPG, NHLE 1000255)	The setting of the asset does not extend into the Proposed Development site. No impacts are anticipated as a result of the Proposed Development.	Scoped Out
Wardown Park (Grade II RPG, NHLE 1001445)	The setting of the asset does not extend into the Proposed Development site. No	Scoped Out

Asset	Impact	Scoped In / Scoped Out
	impacts are anticipated as a result of the Proposed Development.	
Ayot House (Grade II RPG, NHLE 1000905)	The setting of the asset does not extend into the Proposed Development site. No impacts are anticipated as a result of the Proposed Development.	Scoped Out
The Hoo, Kimpton (Grade II RPG, NHLE 1000912)	The setting of the asset does not extend into the Proposed Development site. No impacts are anticipated as a result of the Proposed Development.	Scoped Out
Non-designated Heritage Assets		
The site of Iron Age and Roman settlement-related activity (HER 10808)	The Proposed Development has the potential to result in physical impacts to the asset.	Scoped In
The site of a possible Roman building (HER 7358)	The Proposed Development has the potential to result in physical impacts to the asset.	Scoped In
Cropmarks which may relate to late prehistoric or Roman activity (HER 17218) and (HER 17219)	The Proposed Development has the potential to result in physical impacts to the asset.	Scoped In
Possible pit-type features (AEC001) and (AEC002)	The Proposed Development has the potential to result in physical impacts to these assets.	Scoped In
Post-medieval to modern linear earthworks associated with Century Park (HER 20507)	The Proposed Development incorporates this asset into its design. No impacts are anticipated as a result of the Proposed Development.	Scoped Out
Luton Airport Fire Station (HER 19823)	The Proposed Development incorporates this asset into its design. No impacts are anticipated as a result of the Proposed Development.	Scoped Out
WWII Airfield Battle Headquarters (HER 17921)	The Proposed Development will result in no physical impacts to this asset and therefore the asset is scoped out of further assessment.	Scoped Out

6 CONCLUSIONS

- 6.1.1 The Proposed Development has the potential to affect a number of designated and non-designated heritage assets, either through physical impacts or through changes to their settings. The Proposed Development also has the potential to affect non-designated archaeological remains from all periods and which (if present) are assessed to be of local and regional significance.
- 6.1.2 Three non-designated assets within the Application Site would not be impacted by the construction or operation of the Proposed Development and further assessment is not required. These assets comprise:
- a. post-medieval to modern banked enclosure earthworks associated with Century Park which are incorporated into the current landscape design (HER 20507).
 - b. 20th century Luton Airport Fire Station which would not be affected physically by the Proposed Development (HER 19823).
 - c. WWII Airfield Battle Headquarters, located adjacent to Wigmore Valley Park Community Centre and Skate Park (HER 17921).
- 6.1.3 Designated assets that require further assessment comprise:
- a. Someries Castle scheduled monument (NHLE 1008452).
 - b. Six Hills Roman barrows, scheduled monument (NHLE 1015579).
 - c. St Paul's Walden Bury RPG, Grade I (NHLE 1000150).
 - d. Luton Hoo Grade II* RPG (NHLE 1000578) and associated assets, including Luton Hoo house (Grade I, NHLE 1231301), Luton Hoo Conservation Area and listed buildings.
 - e. The Improvement Garden, Grade II* (NHLE 1468798).
 - f. Putteridge Bury Grade II RPG (NHLE 1000917).
 - g. The Old Homestead (Grade II*, NHLE 1176170).
 - h. Wigmore Hall Farmhouse (Grade II, NHLE 1321368).
 - i. Wandon End Farmhouse (Grade II, NHLE 1102448).
 - j. Wandon End House (Grade II, NHLE 1307874).
- 6.1.4 Non-designated assets that require further assessment comprise:
- a. the site of Iron Age and Roman settlement-related activity (HER 10808).
 - b. the site of a possible Roman building (HER 7358).
 - c. cropmarks which may relate to late prehistoric or Roman activity (HER 17218) and (HER 17219).
- 6.1.5 The impacts to these heritage assets are considered in **Chapter 10** of the PEIR.

ANNEX A: WALKOVER SURVEY PHOTOS

Photo 1: View looking north-east from northern extent of Luton Hoo RPG towards Luton Airport.



Photo 2: View looking north-west from Someries Castle towards the western edge of Luton Airport.



Photo 3: Someries Castle, view looking south towards gatehouse and chapel.



Photo 4: Fields bounding Wigmore Valley Park on the eastern extent, looking south towards Luton Airport.



Photo 5: Fields bounding Wigmore Valley Park on the eastern extent, looking east across agricultural fields.



Photo 6: Agricultural fields to the east of Wigmore Valley Park, looking south-west towards Luton Airport.



Photo 7: Agricultural fields to the east of Wigmore Valley Park, looking north.



Photo 8: Land to the east of Wigmore Valley Park, looking south towards the eastern edge of Luton Airport.



Photo 9: View looking north-west from northern extent of Luton Hoo RPG, towards Luton town centre.



Photo 10: View from the drive at Luton Hoo RPG, looking east towards Someries Castle.



Photo 11: View looking south of the main approach to Luton Hoo, with iron gates, piers and railings and two late 19th – early 20th century lodges flanking the drive.



Photo 12: Wigmore Hall Farmhouse (Grade II, NHLE 1321368).



Photo 13: View looking north-west through gatehouse at Someries Castle, towards Luton Airport.



Photo 14: Remains of gatehouse and chapel at Someries Castle. View looking south-east.



Photo 15: Remains of gatehouse and chapel at Someries Castle. View looking east.



Photo 16: Remains of gatehouse and chapel at Someries Castle. View looking east.



GLOSSARY AND ABBREVIATIONS

Term	Definition
AOD	Above Ordnance Datum
BGS	British Geological Survey
CIfA	Chartered Institute for Archaeologists
DBA	Desk-based Assessment
EIA	Environmental Impact Assessment
GPA	Good Practice Advice
HER	Historic Environment Record
Luton Rising	A trading name for London Luton Airport Limited
NHLE	National Heritage List for England
NLS	National Library of Scotland
NPPF	National Planning Policy Framework
OS	Ordnance Survey
PPG	Planning Practice Guidance
RPG	Registered Park and Garden
SM	Scheduled Monument

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