OTTERPOOL PARK

Environmental Statement Appendix 9.7 – Bronze Age Barrows Statement of Significance Addendum, 2022

MARCH 2022

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1 Introduction

1.1.1 This document provides an update to the Statement of Significance on the prehistoric barrows which was provided in 2018.

2 Update March 2022

2.1.1 Since 2018, when the Statement of Significance of the barrows was written, the Otterpool project commissioned Historic England to carry out a designation screening of all the barrows within the OPA boundary. This resulted in in all nine barrows (**44, 58, 113, 114, 115, 130, 131, 135** and **136**) being scheduled in May 2021. Their National Heritage List for England ID numbers are 1475132, 1475133 and 1475688. All nine are considered by Historic England to be of national (**high** in EIA terms) significance due to their survival, documentation, diversity, potential and group value. The values assigned to each barrow in the Statement of Significance (**medium** and **high**) have not been changed. However, the Environmental Statement has been updated to reflect the change in assessment of value. Therefore the Environmental Assessment lists all nine as **high** value.

2.1.2 Three further barrows have been discovered since 2018 through subsequent geophysics and trial trenching carried out by Wessex Archaeology in 2020. These three have also been screened by Historic England but have not been scheduled as a result.

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OTTERPOOL PARK ENVIRONMENTAL STATEMENT

Appendix 9.7 – Bronze Age Barrows Statement of Significance

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VERSION CONTROL

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003	13/12/2018	LB	KC	JW	Technical review
004/D01	17.12.2018	LB	KC	JW	Update following review
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D03	24.1.2019	LB	KC	JW	Issue for client comments
D04	25.01.2019	LB	KC	JW	Legal Review
Issue	26.02.2019	LB	KC	JW	Issue (for ES)
D05	11.03.2019	LB	KC		Updates following legal review

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Otterpool Park is a proposed new garden settlement accommodating up to 8,500 homes (use class C2 and C3) and use class D1, D2, A1, A2, A3, A4, B1a, B1b, B2, C1 development with related highways, green and blue infrastructure (access, appearance, landscaping, layout and scale matters to be reserved.

This report presents an assessment of the significance of the nine probable early Bronze Age round barrows located within the Otterpool Park site. The barrows have been identified and investigated by aerial photograph and LiDAR assessment, geophysical survey. Seven of the barrows have been investigated by trial trench evaluation. The two barrows that were not evaluated (58 and 113) have the largest upstanding mounds and are therefore expected to be the best preserved, consequently their preservation was prioritised over investigation by trial trenching. All but one of the barrows are represented by ring ditches and five of the barrows include preserved mound material. On the basis of the current evidence one of the barrows (136) does not have a surrounding ring ditch and is only represented by mound layers. One of the barrows appears to be of bell barrow form (44), with a berm of up to 7m between the surviving mound material and the ring ditch. This barrow also contains a possible palisade trench that may represent a revetment of the mound. Another of the barrows (114) is represented by a double ring ditch. The other six barrows are classed as bowl barrows with single ring ditches, ranging in diameter from 12m – 60m.

The significance of the barrows primarily derives from their archaeological interest and their group value. Barrow 44 is of national significance due to the rarity of its form as a bell barrow with evidence for a palisade revetted mound and its archaeological potential. Barrows 58, 113, 114 and 135 are also of national significance, in their case due to their group value as a barrow cemetery, archaeological potential, survival and combination of rarer barrow forms and large sizes. Barrow 136 displays quite good preservation and is representative of early Bronze Age barrows in the region, making it of regional significance. Barrows 131, 130 and 115 are small examples and are typical of early Bronze Age barrows found locally and regionally and are therefore of regional significance.

The rural settings of the barrows within the site inform their significance as it has enabled preservation of archaeological remains and allows views between some of the barrows within the site and towards the locations of other barrows on the edge of the North Downs. The relationships between the barrows, particularly between barrows 58, 113, 114 and 135 and between 44 and 136 are important factors in the others' settings and contribute to their significance. Viewshed analysis indicates that views from all of the barrows (except 130 which has limited short-range views to the south) towards the high ground beyond the site to the north and east are important and may have influenced the siting of the barrows. This analysis also indicated that the central four barrows (58, 113, 114, 135) in the group of seven to the west of Barrow Hill, Sellindge are located in the most prominent position with the greatest theoretical outward visibility. Interestingly the three barrows that surround them (131, 115, 130) have the least intervisibility with barrows both within and outside the site. Barrow 130 does not have visibility to any other barrows and 115 and 131 only have theoretical visibility to barrow 156 to the south west of the site.

However, the real-world visibility between barrows is less than that indicated by the viewshed analysis. There is no clear visibility between the group of barrows to the west of Barrow Hill, Sellindge and barrows 44 and 136 located to the east. This is due to the nature of the field boundaries in this area and, in some cases, the buildings in the settlement of Barrow Hill. It does appear that barrow 136 and barrow 44 are intervisible and in the western group of barrows, the central four barrows (58, 113, 135 and 114) are definitely intervisible.

1 Introduction

1.1 Project Background

1.1.1 Arcadis Consulting (UK) Limited (Arcadis) was commissioned by Otterpool Park LLP (the 'applicant') to produce a Statement of Significance regarding the prehistoric barrows at Otterpool, Lympne, Kent (the site) with regard to the proposed Otterpool Park development. The Statement of Significance assesses the significance of the barrows within their current local and regional context. It responds to recommendations from statutory consultees (Historic England/Kent County Council) to improve understanding of the significance of these heritage assets to inform the proposed Development outline design, further assessment and mitigation. It considers the contribution made to significance by the potential presence of archaeological remains, as well as in the context of setting and views.

1.1.2 This report follows on from a Cultural Heritage Desk-Based Assessment (ES Appendix 9.2) of the entire application study area carried out by Arcadis in 2016/17, forming RIBA design Stage 1 of the project, and is informed by LiDAR analysis, geophysical survey and trial trenching.

1.1.3 The planning application seeks permission for a new garden settlement accommodating up to 8,500 homes (Use Classes C2 and C3) and Use Class E, F, B2, C1, Sui Generis development, including use of retained buildings as identified, with related infrastructure, highway works, green and blue infrastructure, with access, appearance, landscaping, layout and scale matters to be reserved (the proposed Development).

1.2 The Site

1.2.1 The outline planning application site for Otterpool Park comprises a 580ha area which is located within the Folkestone & Hythe district of Kent and is approximately 2.4km to the west of Hythe. The site lies directly to the south of the High Speed 1 (HS1) rail link (formerly known as the Channel Tunnel Rail Link) and Junction 11 of the M20 motorway and is crossed by the A20 Ashford Road (Figure 2). The site covers agricultural, recreational, residential, industrial and commercial areas of usage, with the topography being gently undulating, reflecting the river valley nature of this area. Topographic levels AOD range from 65-70m around Westenhanger Castle to 100-105m AOD at the south-east corner between Lympne Industrial Park and the village of Lympne.

1.2.2 The underlying geology of the site is sandstone, siltstone and mudstone of the Sandgate Formation formed approximately 112 to 125 million years ago in the Cretaceous Period in an environment that was previously dominated by shallow seas. Superficial deposits are head deposits consisting of clay and silt formed up to 3 million years ago in the Quaternary Period in a local environment previously dominated by subaerial slopes. The site lies on the application site boundary of an area of superficial deposits consisting of alluvium laid down by the East Stour River (British Geological Survey 2017).

1.3 Aims and Objectives

1.3.1 The overall aim of this statement is to enhance understanding of the significance of the prehistoric barrows within the Otterpool Park site, this will be achieved by:

- Assessing the character and nature of archaeological deposits associated with the prehistoric barrows.
- Describing the contribution to significance made by the settings of the barrows, including their topographic locations and current and possible prehistoric views.

- Describing the known prehistoric activity of the site and study area, to inform understanding of the local and regional context of the barrows.
- Describing the sensitivity of each barrow and their settings to harm to their significance arising from physical impacts or change to setting.
- Describing how the significance of the barrows might inform master-planning and design decisions.
- Determining the parameters of positive and acceptable change arising from the Otterpool Park project in terms of settings, views and group value of assets.

1.3.2 This detailed appraisal supports the Environmental Impact Assessment (EIA) and resultant Environmental Statement that has been submitted in support of the Otterpool Park outline planning application.

2 Methodology

2.1.1 This Statement of Significance presents the baseline information relating to the prehistoric barrows within the site and a surrounding 5km study area. The report structure:

- sets out the methodology that has been followed in the determining the baseline condition of the barrows and assessment of significance;
- places the significance in the context of national, regional and local legislation, planning policy, guidance and advice;
- describes the walkover survey of the barrows within the site;
- describes the known information regarding the barrows, including their setting, sensitivity and archaeological potential; and
- assesses their significance with reference to Historic England's *Conservation Principles* and attempts to define the parameters for acceptable change and impact to the barrows.

2.2 Sources

2.2.1 The DBA prepared RIBA Stage 1 of the project for the site (Arcadis 2016/17) included research of historic maps, obtained Historic Environment Record (HER) data from Kent County Council and documentary sources from relevant archives and local studies centres. Further to this a variety of sources have been consulted to inform this report. These include:

- Kent Historic Environment Record (HER), for further information regarding recorded barrows in the Site and study area.
- Historic England's National Heritage List for England (NHLE), for information regarding designated barrows and related monuments within the study area.
- The South East Research Framework, seminar notes and papers relating to the Neolithic and Bronze Age periods.
- Historic England published guides, including Introduction to Prehistoric Barrows and Burial Mounds (2011a) and relevant scheduling selection guides Commemorative and Funerary Scheduling Selection Guide (2018).
- Historic England advice, including Conservation Principles, Polices and Guidance for the Sustainable Management of the Historic Environment (2008/2017), Good Practice Advice in Planning Note 2 (2015) and 3 (2017).
- Environment Agency LiDAR data.
- Documentary sources including relevant archaeological monographs of related sites and research papers related to the topic.
- Information from geophysical survey and trial trench evaluation, undertaken to inform the EIA for the project and presented in reports by Headland Archaeology, Sumo Surveys and Oxford Archaeology.
- Ministry of Housing, Communities and Local Government, for *National Planning Policy Framework* (NPPF) (2018) and policy guidance.
- Department for Culture, Media and Sport, for Scheduled Monuments and Nationally Important but Non-scheduled Monuments (2013).
- FHDC website for information on planning and heritage policy.

2.3 Assessment Criteria

2.3.1 Assessment of the significance of a site and its heritage potential looks to identify how particular parts of a place and different periods in its evolution contribute to, or detract from, identified heritage values associated with the site. This approach considers the present character of the site based on the chronological sequence of events that produced it and allows management strategies to be developed that sustain and enhance the significance of heritage assets.

2.3.2 Significance (for heritage policy) is defined in NPPF Annex 2 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.'*

2.3.3 Current national guidance for the assessment of the significance of heritage assets is provided by Historic England in the document *Conservation Principles, Policies and Guidance for the Sustainable Management of the Historic Environment* (2008) in which significance is weighed by consideration of the potential for the asset to demonstrate four value criteria (evidential, historic, aesthetic, communal). This report has given due weight to the emerging document *Conservation Principles, Policies, and Guidance for the Sustainable Management of the Historic Environment (Draft)* (2017) in which significance is weighed by consideration of the potential for the asset to demonstrate the following interest criteria:

- Archaeological interest (evidential value) - deriving from the potential of a place to yield evidence about past human activity. This is sometimes called evidential or research value. There will be archaeological interest in a heritage asset if it holds, or potentially may hold, evidence of past human activity that could be revealed through investigation at some point. Archaeological interest in this context includes above-ground structures as well as earthworks and buried or submerged remains more commonly associated with the study of archaeology.
- Historic interest (historical value) - Deriving from the ways in which past people, events and aspects of life can be connected through a place to the present. It tends to be illustrative or associative. A heritage asset is most commonly valued for its historic interest because of the way in which it can illustrate the story of the past. Historic value also includes communal interest which derives from the meanings of a place for the people who relate to it, or for whom it figures in their collective experience or memory. Communal values are closely bound up with historical (particularly associative) and aesthetic values but tend to have added and specific aspects.
- Architectural and artistic interest (aesthetic value) - Deriving from the ways in which people draw sensory and intellectual stimulation from a place. This can be the result of conscious design, including artistic endeavour or technical innovation, or the seemingly fortuitous outcome of the way in which a place has evolved and been used over time. 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 derived from the use of human imagination and skill to convey meaning through all forms of creative expression.

2.3.4 In light of the emerging *Conservation Principles* document, the term interest has been used throughout this report when describing the significance of a heritage asset.

2.3.5 The aim of this report is to contribute to meeting Principle 3 of the emerging *Conservation Principles* document by giving an understanding of the value and significance of heritage assets. This report will aid in meeting Principle 4 of the emerging *Conservation Principles* that states that heritage assets should be managed to sustain their heritage values, by

identifying how the assets significance is vulnerable to change. It will also contribute to Principle 5, which states that:

"Decisions about change in the historic environment demand the application of expertise, experience and judgement, in a consistent and transparent process which is as accessible as possible. They need to take account of views of those who have an interest in the assets affected and/or the changes being proposed."

2.3.6 In addition to *Conservation Principles* the DCMS Policy Statement on *Scheduled Monuments and Nationally Important but Non-Scheduled Monuments* (2013) includes principles of selection for scheduled monuments (Annex 1), which provide additional detail on determination of significance. This document also defines significance in terms of archaeological, architectural, artistic, historic or traditional interest and the explanations of these align with those in *Conservation Principles* (2017).

2.3.7 In addition, eight principles are used to inform the determination of national importance in terms of period, rarity, documentation/finds, group value, survival/condition, fragility/vulnerability, diversity and potential. In the case of prehistoric barrows these principles are considered in conjunction with Historic England's *Commemorative and Funerary Scheduling Selection Guide* (2018), which provides guidance for the types of monument and characteristics that demonstrate national importance and warrant scheduling.

2.3.8 The above criteria will be used alongside the advice and methods set out in Historic Environment *Good Practice Advice in Planning 2: Managing significance in decision taking in the historic environment* (GPA 2) (Historic England 2015) and *The Setting of Heritage Assets: Historic Environment Good Practice Advice in Planning Note 3* (second edition) (GPA 3) (Historic England 2017) which set out advice for robust assessment of heritage assets. The steps recommended in GPA 3 are:

- Step 1: Identify which heritage assets and their settings are affected.
- Step 2: Assess the degree to which these settings and views contribute to the significance of the heritage asset(s) or allow significance to be appreciated.
- Step 3: Assess the effects of the proposed Development, whether beneficial or harmful, on the significance or on the ability to appreciate it.
- Step 4: Explore ways to maximise enhancement and avoid or minimise harm.
- Step 5: Make and document the decision and monitor outcomes.

2.3.9 This assessment will primarily focus on steps 1 and 2 of this method. In addition to GPA 3 the method described as 'Phase A Baseline Analysis' in Seeing the History in the View (Historic England 2011b) has informed this assessment. This is also a five-step process:

- Step 1: Establish importance of a view;
- Step 2: Identifying which heritage assets in a view merit consideration;
- Step 3: Assessing the significance of individual heritage assets;
- Step 4: Assessing the overall heritage significance in a view;
- Step 5: How can heritage significance be sustained?

2.3.10 The subsequent 'Phase B' of the analysis would assess the impact from development to the identified views. However, that is beyond the scope of this report which is focussed upon assessing the significance of the barrows.

2.3.11 The assessment of heritage assets and their significance has also been undertaken with reference to the methodology described in DMRB Volume 11 Section 3 Part 2 Cultural Heritage (HA 208/07). DMRB provides guidance on the assessment and management of environmental effects. To understand the level of any effect that a proposed development may have on a heritage asset, an understanding of the 'heritage value' or significance of that asset needs to be achieved. The following table (Table 1) aids in the assessment of the significance of heritage assets.

Table 1: Heritage significance, derived from DMRB HA208/07

Significance	Factors Determining Significance
International	World Heritage Sites Assets of recognised international importance Assets that contribute to international research objectives
National	Scheduled Monuments Non-designated assets of the quality and importance to be designated Assets that contribute to national research agendas
Regional	Assets that contribute to regional research objectives
Local	Assets of local importance or with potential to contribute to local research objectives Assets compromised by poor preservation and/or poor survival of contextual associations
Negligible	Assets with little or no surviving archaeological interest
Unknown	The importance of the asset has not been ascertained from available evidence

2.3.12 While the information set out in Table 1 gives a guide for the assessment of the significance of heritage assets these may vary based on the outcomes of research, consultation, or based on professional opinion.

2.3.13 In order to determine an overall level of significance for each of the barrows considered in this assessment the following terminology will be used:

- Level A – exceptional significance in a broad context;
- Level B – considerable significance (deserving inclusion on a national list of heritage assets);
- Level C – some significance;
- Level D – little significance.

2.3.14 This is as per Historic England advice received from the Inspector of Ancient Monuments (pers. comm. Peter Kendall, 20 September 2018). This is informed by the methodology set out above and forms the final stage of assessment of significance. Significance is described in terms of the interests described in *Conservation Principles* and the scheduling selection criteria, which is informed by consideration of setting and views. On the basis of this assessment the scale at which the assets have significance, as per Table 1 (e.g. local, regional or national), is also described. The results of this assessment are expressed in terms of the levels described above, with an equivalence between Level A and international significance, Level B and national significance, Level C and regional significance and Level D and local significance.

2.4 Archaeological Potential

2.4.1 An assessment of the archaeological potential of the site has also be undertaken as part of this assessment. Archaeological potential is the potential for places, structures, or landscapes to hold information regarding previously unknown archaeological or historic knowledge which would enhance the understanding of a place and its development. This is informed by all the known heritage assets within a chosen study area.

2.4.2 In this document archaeological potential is classified as:

- **High** for areas where there is a strong likelihood of finding archaeological remains of a given period or type.
- **Medium** for areas where there is a likelihood of finding archaeological remains of a given period or type.
- **Low** for areas where there is little likelihood of finding archaeological remains of a given period or type.

2.5 Study Area

2.5.1 The study areas comprising the site include a 1km radius and a 5km radius. A small number of recorded assets outside the 5km study area are included to provide context for the assessment of significance of the barrows within the site (Figure 2). This area includes the southern edge of the North Downs, which is visible from the site and along which the small number of recorded assets outside the 5km study area are located. This study area and the assets considered in assessment were determined following a site visit and based on professional judgement.

2.6 Viewshed Analysis

2.6.1 In order to improve understanding of the visibility from and to the barrows within the site viewshed analysis was undertaken. A LiDAR digital terrain model (DTM) was acquired from the Environment Agency through their online portal (Figure 3). The data was at 1m resolution, which was acceptable for assessment. The data was converted from ASCII files into a raster format which was subsequently mosaicked to form a single raster which formed the friction surface for the viewshed analysis. An observer height of 1.7m was used for the analysis, this was considered to be an appropriate height for an individual as it is considered to be an average height of a person in the prehistoric period (Chapman 2006, 85). This is believed to form a reasonable estimate of real-world viewpoint.

2.6.2 As the viewshed analysis was undertaken on a DTM as opposed to a Digital Surface Model (DSM) the analysis does not account for the effect of vegetation and buildings on real world views. Due to current knowledge regarding the Bronze Age landscape and environment in the site and surrounding area, a DTM is considered to be an adequate guide to both modern and prehistoric visibility, rather than providing a precise reconstruction.

2.6.3 The original heights of the barrows have not been estimated, the viewshed analysis is based on their current heights as recorded by the DTM. Each barrow will have eroded differently, due to topographic and environmental factors, and to date there is limited information regarding the mound preservation and spread from excavation from which to build a more detailed model. Due to the many variables that will have affected both the original constructed height and the preservation of the mounds the current ground height has been treated as the base for modelling viewsheds. This method facilitates understanding of the potential past visibility (and the current visibility) from and to the barrows.

2.7 Site Walkover Survey

2.7.1 Three site visits were undertaken to view the locations of the barrows within the site, their general surroundings and key barrows and viewpoints in the wider area. The visits were undertaken on the 22 February, 14 August and 30 August 2018. The site visits were conducted on foot and a photographic record made of:

- The above ground condition of the barrows within the site.
- The settings of the barrows and views between barrows in the site.
- Views from the surrounding landscape towards the barrows in the site.

2.8 Assumptions and Limitations

2.8.1 Data used to compile this report includes secondary information derived from a variety of sources, only some of which have been directly examined for the purposes of this assessment. The assumption is made that this data is reasonably accurate.

2.8.2 Further information has been obtained by trial trench evaluation of the barrows and this intentionally did not target the central areas of the barrows and, due to the nature of trenching, only sampled a small proportion of the total area of the barrows. Therefore, the archaeological information available is a sample of the total resource and there is potential for other significant archaeological information to be present that has not been identified to date.

2.9 Consultation

2.9.1 Ongoing consultation has been undertaken with the archaeological advisor to Kent County Council and Historic England's Inspector of Ancient Monuments for the south east of England in relation to the assessment of barrows within the site. Feedback has been received from both in relation to the format and content of this Statement of Significance, specifically regarding suitable guidance and methodology that should be used in the assessment and comparative barrows sites to inform the assessment. These recommendations have been adopted in this report. ES Chapter 9: Cultural Heritage contains further detail of all consultation regarding cultural heritage that has been undertaken.

3 Legislation, Policy and Guidance

3.1 Regulation

The Ancient Monuments and Archaeological Areas Act 1979

3.1.1 The legislation protecting scheduled monuments is the Ancient Monuments and Archaeological Areas Act 1979. The Act gives statutory protection to any structure, building or work considered to be of particular historic or archaeological interest and regulates any activities which may affect such areas. This is known as scheduling. Under the Act any work that is carried out on a scheduled monument must first obtain Scheduled Monument Consent (SMC). The Act does not define or provide statutory protection to the setting of monuments, however the National Planning Policy Framework (MHCLG 2018) identifies that scheduled monuments and their setting are a material consideration for a planning application. Additionally, the DCMS Policy Statement on *Scheduled Monuments and Nationally Important but Non-Scheduled Monuments* (2013) states that works impacting the setting of a scheduled monument but not the monument itself, do not require SMC but may require other consents.

3.2 Policy

National Policy

3.2.1 Present government planning policy is contained within the National Planning Policy Framework (MHCLG 2019). Section 16 of the NPPF, entitled *Conserving and Enhancing the Historic Environment* provides guidance for the conservation and investigation of heritage assets and requires local authorities to take the following into account:

- the desirability of sustaining and enhancing the significance of heritage assets and putting them to viable uses consistent with their conservation.
- the wider social, cultural, economic and environmental benefits that conservation of the historic environment can bring.
- the desirability of new development making a positive contribution to local character and distinctiveness.
- opportunities to draw on the contribution made by the historic environment to the character of a place.

3.2.2 NPPF Section 16 *Conserving and enhancing the historic environment* sets out the principal national policy on the importance, management and safeguarding of heritage assets within the planning process.

3.2.3 The aim of NPPF Section 16 is to ensure that Regional Planning Bodies and Local Planning Authorities, developers and owners of heritage assets adopt a consistent and holistic approach to their conservation and to reduce complexity in planning policy relating to proposals that affect them.

3.2.4 To summarise, government policy provides a framework which:

- requires applicants to provide proportionate information on the significance of heritage assets affected by the proposals and an impact assessment of the proposed Development on that significance. This should be in the form of a desk-based assessment and, where necessary, a field evaluation.
- considers the desirability of sustaining and enhancing the significance of heritage assets and their setting.
- places weight on the conservation of designated heritage assets (which include World Heritage Sites, Scheduled Monuments, Listed Buildings, Protected Wreck Sites, Registered Parks and Gardens, Registered Battlefields or Conservation Areas).

- requires developers to record and advance understanding of the significance of any heritage assets to be lost (wholly or in part) in a manner proportionate to their importance and impact, and to make this evidence (and any archive generated) publicly accessible.

3.2.5 Policy concerning non-designated heritage assets is as follows:

- Paragraph 197 - The effect of an application on the significance of a non-designated heritage asset should be taken into account in determining the application. In weighing applications that directly or indirectly affect non-designated heritage assets, a balanced judgement will be required having regard to the scale of any harm or loss and the significance of the heritage asset.
- Paragraph 198 - Local planning authorities should not permit the loss of the whole or part of a heritage asset without taking all reasonable steps to ensure the new development will proceed after the loss has occurred.
- Footnote 63 - Non-designated heritage assets of archaeological interest, which are demonstrably of equivalent significance to scheduled monuments, should be considered subject to the policies for designated heritage assets.

Local Policy

3.2.6 Local policy for the site is provided by Folkestone & Hythe District Council. Current planning policy is comprised of the Saved policies of the Local Plan Review (2006), *Core Strategy* (2013 and Consultation Draft March 2018) and *Places and Policies Local Plan* (Submission Draft February 2018), which was submitted for examination in September 2018. The *Core Strategy* is currently being reviewed in order to update the 2013 plan.

3.2.7 The *Places and Policies Local Plan* is an emerging document which has been given due consideration in this assessment. Relevant policies are detailed in Table 2.

Table 2: Heritage policies from Places and Policies Local Plan

Policy Number	Policy Text
Policy HE1 (Heritage Assets)	The Council will grant permission for proposals which promote an appropriate and viable use of heritage assets, consistent with their conservation and their significance, particularly where these bring at risk or under-used heritage asset back into use or improve public accessibility to the asset.
Policy HE2 (Archaeology)	Important archaeological sites, together with their settings, will be protected and, where possible, enhanced. Development which would adversely affect them will not be permitted. Proposals for new development must include an appropriate description of the significance of any heritage assets that may be affected, including the contribution of their setting. The impact of the development proposals on the significance of the heritage assets should be sufficiently assessed using appropriate expertise where necessary. Desk-based assessment, archaeological field evaluation and/or historic building assessment may be required as appropriate to the case. Where the case for development affecting a heritage asset of archaeological interest is accepted, the archaeological remains should be preserved in situ as the preferred approach. Where this is not possible or justified, appropriate provision for preservation by record may be an acceptable alternative. Any archaeological investigation and recording should be undertaken in accordance with a specification and programme of work (including details of a suitable archaeological body to carry out the work) to be submitted to and approved by the Council in advance of development commencing.

3.2.8 The *Core Strategy Review* (2019) is an emerging document which has been given due consideration in this assessment. Relevant policies are detailed in Table 3.

Table 3: Heritage policies from the Core Strategy Review

Policy Number	Policy Text
SS7 (5) Enhanced heritage assets	a. A heritage strategy shall be agreed that identifies how the development will enhance local heritage assets and their setting, including the Grade I listed Scheduled Monument of Westenhanger Castle (and its associated barns, stables and outbuildings), the Grade II listed Otterpool Manor Farm and Upper Otterpool and any other designated or non-designated heritage assets identified. The application shall be supported by a detailed heritage strategy, setting out how the long term, viable use of heritage assets will be established and where necessary providing mechanisms for their integration into the development. The Heritage Strategy shall be informed by a Conservation Management Plan (CMP) setting out the management and re-use of the site in relation to Westenhanger Castle, Manor and Barns. The implementation of the Heritage Strategy and undertaking of works on site with potential to affect heritage assets will need careful management; consideration should be given to appointing a Historic Environment Clerk of Works to fulfil this role; b. The heritage strategy should include an archaeology strategy, with an initial archaeological assessment guiding archaeological works and to inform decisions about preservation in situ or investigation. The archaeology strategy should then be kept under active review; c. The provision of public art should be an integral part of the heritage strategy; d. Westenhanger Castle and its setting shall become a focal point for the new settlement that informs its character. The development shall provide an enhanced setting for the Castle, including generous public open space through the delivery of a new park, and shall protect key historic views. Proposals shall explore the opportunity to recreate the historic southern approach to the Castle and provide mechanisms for its integration with the development; e. Other archaeological and heritage assets will be evaluated, protected and, where possible, enhanced. Proposals must include an appropriate description of the significance of any heritage assets that may be affected, including the contribution of their setting; and f. Proposals should explore the potential for: i. Renovating the existing buildings and barns to conserve the heritage assets at Westenhanger Castle and improve the setting of the building; ii. ii. Providing space for appropriate sustainable uses for the asset and its setting; and iii. Enhancing and positively contributing to the conservation of all relevant heritage assets both within and outside the allocation boundary, such as the setting of Lympne Castle and the Lympne Conservation Area where appropriate.

Draft Folkestone & Hythe Heritage Strategy

3.2.9 The *Folkestone & Hythe Heritage Strategy* is currently being drafted. Part of the draft strategy, *Appendix 1: Theme 11 Archaeology*, has been forwarded by KCC. It includes an overview of past archaeological investigations in the district, descriptions of heritage assets, a statement of significance, vulnerabilities, opportunities and current activities. The description of heritage assets includes a section on the Late Neolithic and Bronze Age and states that the most common monument of the late Neolithic and early Bronze Age is the round barrow and that a significant number are known from across the district. They comprise the second largest proportion of scheduled monuments within the District and although damage from ploughing and agricultural activity is common, they have generally survived well, with approximately 40% of the county's designated round barrows located within this district.

3.4 Guidance and Advice

3.4.1 Further guidance on many aspects of the NPPF is provided on the Planning Practice Guidance website which includes a section entitled *Conserving and enhancing the historic environment*.

3.4.2 This assessment was undertaken with regard to all relevant industry guidance, principally the Code of Conduct, Standard and guidance for archaeological desk-based assessments, and Standard and guidance for commissioning work or providing consultancy advice on archaeology and the historic environment (CIfA 2014; 2017).

4 Walkover Survey

4.1 Location and Condition

4.1.1 Nine barrows are located within the site and were visited during the site visits. A further four barrows are located immediately outside the site, two of which were visited during the site visits. Relevant photos of the barrows and their surroundings are included in this section and links to 360° photos from the barrow locations are available in the gazetteer in Appendix A.

4.1.2 Barrow 44 is located in the north of the site between the HS1 rail line and the A20, to the east of the settlement of Barrow Hill, Sellindge. It is located in a large arable field, bordered by the East Stour River to the west and south. It is located on a low hill at approximately 70m AOD. On the ground the barrow was difficult to discern from the natural topography, it was possibly slightly visible from the west as a very low spread mound (Plate 1).

Plate 1: Barrow 44, view facing east south east with location of barrow in centre middle distance

Plate 2: Barrow 46, view facing west

4.1.3 Barrow 136 is located in the centre of the site, south of the A20. It is located on a north facing slope at approximately 80m AOD. The barrow is located within a former field boundary, visible as a slight lynchet. Consequently, it was very difficult to distinguish the barrow as a separate feature from the former field boundary during the site visit.

4.1.4 The two barrows in the settlement of Barrow Hill, Sellindge, 46 and 116, are outside the site. They are located to the east of the A20 and west of the East Stour River in an area of slightly higher ground at approximately 70m AOD. The East Stour River separates these two barrows from barrow 44. Barrow 46 was visible as a low mound within a garden (Plate 2) and barrow 116 is located in a small field at the southern end of the village but was not visible above ground.

4.1.5 To the west of Barrow Hill, Sellindge there is a group of seven barrows, six of these are located in one very large arable field and the other is located in a smaller arable field to the south. The most northerly of this group is barrow 131, located at approximately 73m AOD, which had been ploughed out and no above ground evidence of the barrow was visible.

Plate 3: Barrow 58, view facing south east

4.1.6 Barrows 58, 113, 135 and 114 are all located south of barrow 131, on the top of the low, gradually sloping hill to the west of Barrow Hill, Sellindge at approximately 80m AOD. Barrow 58 is the best preserved of the barrows within the site, with a spread mound visible to a height of approximately 1.5m (Plate 3). Barrow 113 was visible as a low spread mound of approximately 1m in height. Barrows 114 and 135 were ploughed out with no evidence of above ground remains.

Plate 4: Barrow 130, panoramic view facing east and south

4.1.7 Barrows 115 and 130 are located to the south of the other barrows in the group to the west of Barrow Hill, Sellindge. Barrow 115 is located just to the south of the hilltop at approximately 78m AOD and barrow 130 is located in the field to the south, further downslope at 75m AOD (Plate 4). Both of these barrows have been ploughed out and there was no visible evidence for them on the ground during the site visit.

4.2 Setting and Views

4.2.1 Barrow 44 is in an open location in the middle of a large field. The field is bordered by mature trees to the south and west, as are many of the fields in the area. This vegetation and the buildings in Barrow Hill, Sellindge mean that there is no ability to view the locations of the group of barrows to the west of Barrow Hill. Although it is difficult to discern barrow 136, it is possible that there is a view to its location.

4.2.2 Barrow 136 is also located in a large field. From barrow 136 there is a view towards barrow 44, although the precise location of barrow 44 is difficult to discern from the location of barrow 136 as there is little above ground evidence by which to identify the barrow. Due to several field boundaries incorporating large trees there is no view from barrow 136 to the group of barrows to the west of Barrow Hill.

4.2.3 Barrow 46 is located in a large garden with screening from a thick high hedge and trees to the west (along the road) and large mature trees and intermittent hedge along the application site boundary to the east. This creates an enclosed feel to the location of the barrow with no views out from the barrow beyond its immediate area.

4.2.4 Barrow 116 is located in a small field, which is open to the road to the west but longer-range views in this direction are not possible due to the houses along the west side of the road in Barrow Hill. To the east and south the field is bordered by large mature trees and a hedge. As with barrow 46 this creates a reasonably enclosed feel to the location of the barrow with no views available to any areas beyond the settlement of Barrow Hill, Sellindge.

4.2.5 Barrow 131 is located on a north west facing slope of the low hill to the west of Barrow Hill, with views to the west and north. However, from this barrow there are no views to the other barrows in the group to the west of Barrow Hill, due to the direction of slope (Plate 5). There are also no views to the barrows in Barrow Hill or barrows 44 and 136, as they are located on the other side of the hill.

Plate 5: View from Barrow 131 facing south

4.2.6 Barrows 58 and 113 have clear views in all directions from their hilltop position and views to barrows 135 and 114. However, the intermittent trees bordering the field to the east, trees and buildings along the A20 in Barrow Hill, Sellindge and in other field boundaries prevent views to barrows 44, 136, 46 and 116. Barrows 114 and 135 have a slightly more limited view as they are closer to the eastern boundary of the field, which is formed of intermittent but mature hedgerow and mature trees. They have views to barrows 58 and 113, but no views to the other barrows in the site or Barrow Hill, Sellindge due to the intervening vegetation and topography.

Plate 6: View from barrow 114 towards barrows 135 and 58, view facing north west

4.2.7 Barrow 115 has no clear views to any of the other barrows within the site, although it was not in an enclosed location. The topography of the hill means that from the location of barrow 115 the barrows to the north are over the brow of the hill and barrow 130 is downslope and not visible due to the drop of 1-2m at the field boundary, which screens it from view. The barrows in Barrow Hill and to the east of the settlement are not visible due to the intervening vegetation. Barrow 130 is located on a south facing slope with views to Harringe Brooks Wood to the south. This topographic position prevents views to the other barrows in the site.

4.2.8 The two barrows located in Barrow Hill, Sellindge (46 and 116), located outside the application site boundary, have enclosed surroundings due to the mature vegetation that surrounds them and the buildings adjacent to them. Consequently, they do not have any views that extend beyond Barrow Hill, Sellindge, either to the barrows in the site or the wider surrounding landscape. In contrast the nine barrows located within the site are in open locations in arable fields, with views to the surrounding landscape although the exact extent of this varies. The ability to obtain views between these barrows also varies. There is no clear visibility between the larger group of barrows to the west of Barrow Hill, Sellindge and barrows 44 and 136 located to the east of it. This is due to the nature of the field boundaries in this area and, in some cases, the buildings in the settlement of Barrow Hill, Sellindge. It does appear to be possible to view barrow 136 from barrow 44 and vice versa. In the western group of barrows, the central four barrows (58, 113, 135 and 114) are intervisible. However, the northernmost and southernmost barrows (131 and130) do not have views to any other barrows in the site due to their locations on north west and south facing slopes respectively.

5 Baseline Resource

5.1 Introduction

5.1.1 The barrows discussed in this report are referred to by project identification numbers that are consistent with those used in the DBA (Arcadis 2016/17). The locations of the barrows assessed in this report are shown, labelled with these numbers, in Figure 1. Details of all of the barrows are contained within a gazetteer in Appendix A. This section of the report describes all known information about the barrows, based on information from Kent HER, LiDAR data, aerial photographs, geophysical survey and trial trenching. The barrows are then discussed in their local and regional context in relation to earlier prehistoric activity in the area and to other barrows and features of Bronze Age date. This information, along with that obtained from the site visit (section 4) and viewshed analysis, is used to inform the understanding of the settings of the barrows and the key views in relation to them. The sensitivity and the archaeological potential of the barrows is then discussed, in order to inform the assessment of significance in section 7.

5.2 Scope of Research

5.2.1 Much of the information regarding the barrows within the site has been obtained through geophysical survey and trial trenching undertaken in advance of the submission of the outline planning application for development of the Otterpool Park site. The results of these investigations are presented in full in reports produced by Headland Archaeology, Sumo Surveys and Oxford Archaeology (Headland Archaeology 2018, Sumo Survey 2018, Oxford Archaeology 2018a, Oxford Archaeology 2018b, Oxford Archaeology 2018d, Oxford Archaeology 2018e). This report makes reference to these primary reports and reproduces information from them where relevant. Five of the barrows within the site were recorded by the HER, four of these due to cropmarks evidence and one due to previous excavation. There is limited information from documentary or cartographic sources regarding the barrows.

5.3 The Barrows within the Site

Barrow 44

5.3.1 Barrow 44 is recorded by Kent HER, which states that it was excavated in 1931 when a 'scrap of red ochre' is said to have been found. This barrow is recorded as a circular earthwork on the 1st edition Ordnance Survey map. The HER records the barrow with a diameter of 41m and a maximum height of 0.7m, but states there are no traces of a ditch. LiDAR and aerial photo analysis support the presence of a barrow in this location. The LiDAR imagery indicates a circular mound and aerial photos show a circular cropmark (Plate 7). Geophysical survey in 2017 identified a roughly circular area of magnetic enhancement, corresponding with the recorded location of the barrow (Headland Archaeology 2018, 4). This is described as a very faint circular trend, 37m in diameter, with discrete anomalies in the interior of the feature possibly representing pits (*ibid.*) (Plate 8).

5.3.2 Trial trenching of barrow 44, undertaken in 2018, also supports the interpretation of the feature as a barrow. Three trenches were opened across the barrow, which identified a ring ditch of 36m diameter and an internal mound with a maximum height of 0.4m. The ditch was 3.95m – 5.4m wide and 0.52m – 0.75m deep. The mound was separated from the inner edge of the ditch by a berm of varying widths; 2.6m, 6.5m and 7m in each of the trenches. In one of the trenches a palisade ditch appeared to have been constructed after construction of the ring ditch, as it cut a mound layer adjacent to the ring ditch that is thought to have possibly formed an internal circular bank inside the ditch. Four subsequent layers of mound were identified inside the probable palisade, indicating a complex sequence of mound construction. A ditch in the expected position of the palisade ditch in one of the other trenches was thought to be related to the barrow but a piece of iron, possibly from a bucket, was found

in the upper fill and therefore its dating remains uncertain. Three features were cut into the mound; a pit and two features in the central area. Both of these features are thought to be modern as, although located under the subsoil, one produced a shotgun cartridge and one was located in the centre of the barrow and may indicate the antiquarian investigation recorded by the HER (Oxford Archaeology 2018d, 6-7).

Plate 7: 2013 Google Earth imagery showing barrow 44, location circled in green

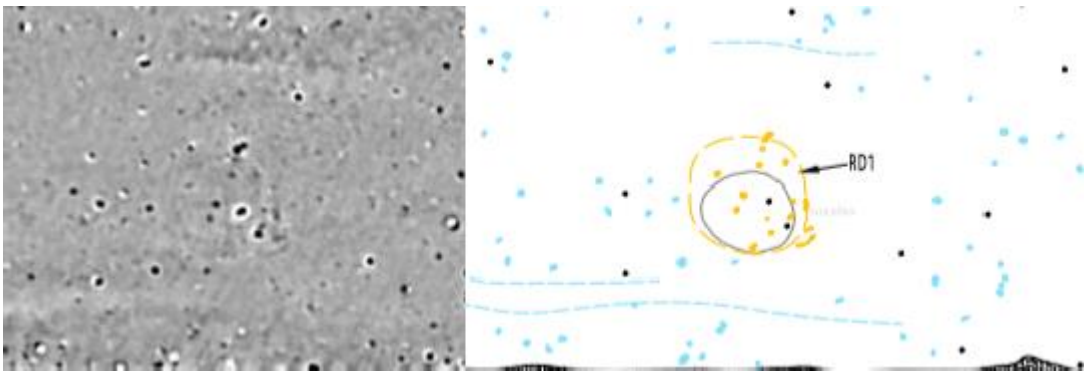

Plate 8: Greyscale plot and interpretation of geophysical survey of barrow 44 (Headland Archaeology 2018)

5.3.3 In one of the lower fills of the ring ditch a small quantity of iron slag were found. Larger deposits of iron slag and hammer scale were found in the upper layer of the mound and in a pit cut into the mound. The iron slag recovered from the lower ditch fill comprised small pieces and is consequently thought to be intrusive, possibly due to animal or root disturbance that was not noticed during evaluation. The larger quantities of slag on top of the mound included tap slag from smelting and, together with the hammer scale, this indicates the presence of a metalworking site very close to the barrow. No pottery was recovered although a concentration of worked flint was identified in and around the barrow, with probably early Bronze Age tools and earlier pieces. In addition, spelt wheat was identified in one of the

mound layers and this indicates that the barrow is unlikely to be earlier in date than early Bronze Age (Oxford Archaeology 2018d,10-11).

Barrow 136

5.3.4 Barrow 136 was identified through trial trenching in 2018. Analysis of aerial photos did not reveal any indication of a barrow in this location, although there was a slight rise extending beyond the route of the field boundary visible on LiDAR imagery. Geophysical survey, undertaken in 2017, identified ferrous or magnetic disturbance in this location but this did not clearly indicate archaeological anomalies in a form consistent with a barrow (Plate 9).

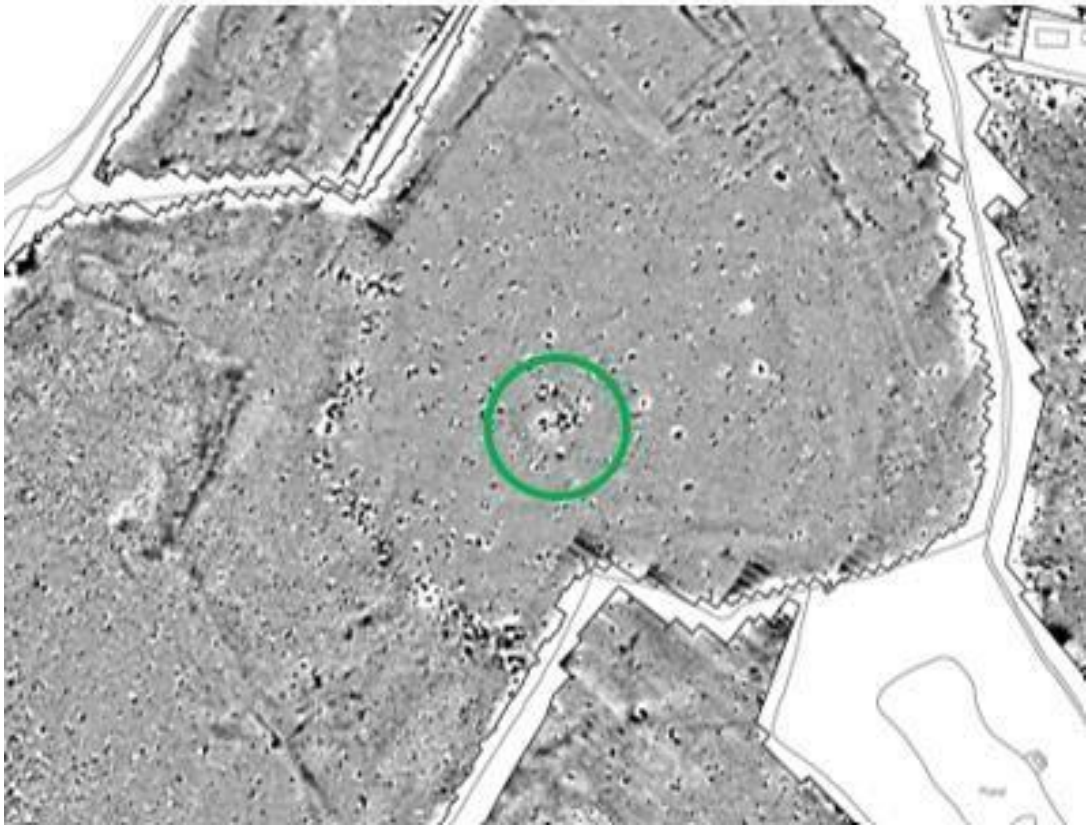

Plate 9: Greyscale plot of geophysical survey of barrow 136, location circled in green (Sumo Survey 2018)

5.3.5 Two trenches identified a layer of probable mound material over an area of at least 35m. This layer ranged in depth from 0.10m to 0.56m. It overlay two buried soil horizons, the upper of these was up to 0.18m thick and the lower was up to 0.10m thick. The mound and buried soils contained sherds of Beaker pottery and Neolithic/early Bronze Age flints, providing an indication of the date after which construction of the barrow must have occurred (Oxford Archaeology 2018a, 25-6). The soils sealed by the barrow contained an assemblage of probably early Mesolithic flint and it is thought that further scatters of this date are likely to be preserved beneath the barrow. No evidence of a ditch associated with the barrow was found. In one of the trenches a ditch 1.68m wide and 0.47m deep was identified and this corresponds with the location of a application site boundary shown on the tithe map (*ibid.*).

5.3.6 It is likely that the lack of a ditch associated with the barrow explains why the barrow was not identified by any remote sensing methods, when these techniques have proven accurate for other barrows within the site on comparable geology. The later field boundary that crosses the barrow is also likely to have truncated and obscured the remains of the barrow mound, both in terms of surface visibility and detection by survey.

Barrow 131

5.3.7 Barrow 131 was initially identified by geophysical survey undertaken in 2017 and confirmed by trial trenching in 2018. The geophysical survey identified a ring ditch in this location, measuring approximately 17m in diameter (Sumo Survey 2018, 5) (Plate 10).

5.3.8 The trial trenching undertaken in 2018 confirmed the results of the geophysical survey and demonstrated that this feature is very likely to be a barrow. It was identified as a ring ditch approximately 18m in diameter. The northern arc of the ring ditch was 3.11m wide and 0.91m deep and the southern arc was exposed but not excavated. There was no evidence of mound material between the two ditches. The upper fills of the ditch produced worked flint, including two scrapers, and one sherd of early-middle Iron Age pottery. Although datable material from this barrow is lacking on the basis of its form it is likely to be early Bronze Age (Oxford Archaeology 2018e, 9).

Barrow 58

5.3.9 Barrow 58 was recorded by Kent HER as a cropmark of a large ring ditch, visible on Google Earth images from 2013. They record the diameter as approximately 60m and the ring ditch as wide and unbroken, with a lighter appearance to the centre of the ring ditch that may indicate mound material being ploughed down (Plate 11). The barrow mound is visible in LiDAR imagery as a roughly circular positive feature.

5.3.10 Geophysical survey, undertaken in 2017, confirmed the presence of a large single ring ditch in this location. The feature is approximately 60m in diameter, with tentative interpretation identifying curving ditches/gullies inside the outer ring ditch (Sumo Survey 2018, 5) (Plate 10). Due to the survival of visible mound material this barrow was not excavated by trial trenching in order to preserve the remaining archaeological material and because the results of remote sensing all strongly support the interpretation of this feature as a barrow.

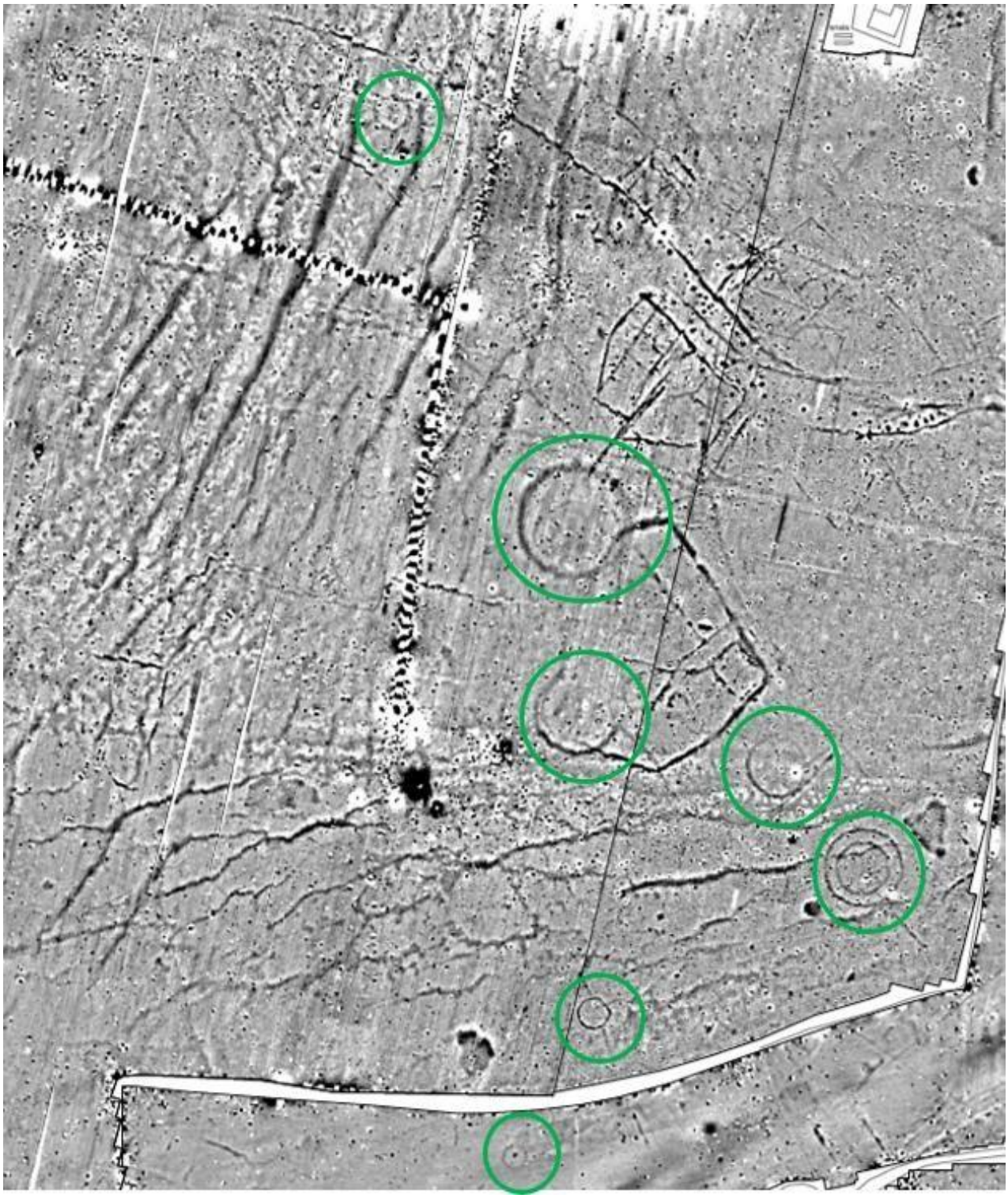

Plate 10: Greyscale plot of geophysical survey of barrows 131, 58, 113, 135, 114, 115 and 130, numbered from north to south and locations circled in green (Sumo Survey 2018)

Plate 11: 2013 Google Earth imagery showing barrows 58, 113, 114 and 115, numbered from north to south and locations circled in green

Barrow 113

5.3.11 This barrow was recorded by Kent HER as a large ring ditch visible on Google Earth images from 2013 (Plate 11), with an apparently uninterrupted ring ditch of approximately 40m diameter. As with barrow 58 the centre of the ring ditch appears lighter, which may be due to mound material being ploughed down. The barrow mound is slightly visible in LiDAR imagery as a positive feature. Geophysical survey identified an annular response in this location of approximately 40-45m in diameter. Only the southern side is visible magnetically and there may be an internal gully/ditch (Sumo Survey 2018, 5) (Plate 10).

5.3.12 Due to the survival of visible mound material this barrow was not excavated by trial trenching in order to preserve the remaining archaeological material and because the results of remote sensing all strongly support the interpretation of this feature as a barrow.

Barrow 135

5.3.13 Barrow 135 was identified by geophysical survey in 2017 and confirmed by trial trenching in 2018. The geophysical survey identified a single, slightly irregular ring ditch of approximately 30m in diameter (Sumo Survey 2018, 5) (Plate 10). It is not visible as a cropmark or in LiDAR imagery.

5.3.14 Trial trenching identified a ring ditch of approximately 30m in diameter. The ditch ranged from 2.5 - 3.33m in width and 0.75 - 1m in depth in the two trenches that intersected it. The fill pattern in the two sections of ditch was different with the middle fill of the western ditch arc containing two flint flakes and the upper fill containing five flint flakes and a sherd of late Iron Age/early Roman pottery. In the southern arc of the ditch the basal fill appeared to have slumped from the inside of the enclosed area and only the upper fill produced finds, comprising worked flint and a sherd of early prehistoric pottery. There was no evidence of an internal mound or features within the trenches excavated (Oxford Archaeology 2018e, 26-27). Although material to date the construction of the ring ditch is lacking, on the basis of its form it is likely to be of early Bronze Age date.

Barrow 114

5.3.15 This barrow is recorded by Kent HER as a large double ring ditch, visible on Google Earth images from 2013 (Plate 11). It describes the outer ring ditch as apparently unbroken and measuring approximately 40m across and the inner ring ditch as less clearly defined and approximately 26m in diameter. The geophysical survey also identified anomalies consistent with a double ring ditch in this location, with an outer ditch measuring approximately 40m and an inner ditch of approximately 30m in diameter (Sumo Survey 2018, 5) (Plate 10).

5.3.16 Trial trenching undertaken in 2018 identified an inner ring ditch of 27m diameter, which ranged from 1.84m - 2.61m wide and 0.66m – 0.7m deep, it had seven fills in the north eastern arc sampled by the evaluation trench and only the uppermost contained finds. These comprised five worked flints including a blade and a microdenticulate. The south western arc contained three fills; the lower fill produced two flint flakes and the middle fill contained a large number of limestone pieces. No evidence of a mount was found within the inner ring ditch (Oxford Archaeology 2018e, 29).

5.3.17 The outer ring ditch was 41m in diameter and ranged from 1.9m – 2.02m wide. The north eastern arc was not fully excavated but the south western arc was 1.1m deep. On site the uppermost fill of the north eastern arc was observed to contain charcoal and possible small fragments of cremated bone. However, the sample taken from this fill produced charcoal, hazelnut fragments and ten sherds of late Iron Age/Roman pottery but no cremated bone was identified, suggesting that the material was misidentified. The south western arc of the ditch contained nine fills; a middle fill contained a large number of limestone pieces, the fill second from top contained two flint flakes and the upper fill produced a large deposit of cockle shells. Although this upper fill did not contain datable finds the equivalent layer in the north eastern arc appeared to date to the late Iron Age/Roman period on the basis of pottery (*ibid.*).

Barrow 115

5.3.18 Barrow 115 is recorded by Kent HER as a ring ditch visible as a cropmark in Google Earth images from 2013 (Plate 11), measuring approximately 15m in diameter with an apparently unbroken circular ditch. Geophysical survey supported this with identification of a single, slightly irregular ring ditch of approximately 17m in diameter (Sumo Survey 2018, 5) (Plate 10).

5.3.19 Trial trenching identified a ring ditch of approximately 16m diameter and was between 1.1 – 1.32m wide and 0.5m deep. One section of the ditch was excavated, revealing four fills. The lower fill contained three pieces of fired clay from an oven or hearth, a middle fill contained a worked flint and unworked stone that may be from a quern and the upper fill contained four pieces of worked flint (including a blade, bladelet and scraper), fired clay, a sherd of early prehistoric pottery and a probable beaver tooth. In the other, unexcavated, section of the ring ditch nine pieces of worked flint and 18 sherds of early prehistoric pottery was recovered from the top of the upper fill (Oxford Archaeology 2018e, 32).

Barrow 130

5.3.20 This barrow was identified by geophysical survey undertaken in 2017, which identified a ring ditch measuring approximately 12m in diameter with possible adjoining ditches although these were poorly defined (Sumo Survey 2018, 3) (Plate 10).

5.3.21 There is no cropmark or LiDAR evidence for this barrow. The interpretation of the geophysical survey was supported by the results of trial trenching undertaken in 2018.

5.3.22 One trench was positioned to cross the eastern edge of the ring ditch and this revealed what is provisionally interpreted as the barrow mound, surviving to a maximum depth of 0.15m (Oxford Archaeology 2018b, 10). On the surface of this mound material was a small amount of middle Bronze Age pottery and fragments of cremated bone, middle Bronze Age pottery was also recovered from the subsoil and is thought to have been disturbed from the mound context by ploughing. Two small circular or oval features were observed cut into the mound material and due to the colour of the fills and presence of charcoal, in conjunction with the cremated bone found on the surface of the mound, they were interpreted as potential cremation pits and left unexcavated (*ibid.*).

5.3.23 On the northern side of the mound material a ditch was observed that was interpreted as the northern arc of the barrow ditch, measuring approximately 2.8m wide and 0.64m deep. The ditch contained one fill and from this middle Bronze Age pottery, scattered cremated human remains and flint tools were recovered (*ibid.*). Although a ditch was identified to the south of the mound material this did not appear to curve and did not match the dimensions of the northern section of ditch, consequently it has been interpreted as a middle Bronze Age ditch related to other features of this type identified by trial trenching in the same field. However, no finds were recovered from this ditch and so it has not been securely dated (Oxford Archaeology 2018b, 11). Although the extent of excavation was not sufficient to date the construction of this barrow the cremation pits cut into the mound and ditch have been dated to the middle Bronze Age and therefore an early Bronze Age date of construction and initial use is likely (Oxford Archaeology 2018b, 23).

Disproven Barrow Features

5.3.24 There are two circular features within the site that were initially interpreted as barrows, based on a combination of LiDAR and geophysical survey, but subsequent trial trenching has demonstrated that this interpretation is incorrect.

5.3.25 Feature 132 is located to the west of Barrow Hill, Sellindge, south east of barrow 131 and north east of barrow 58. A small ring ditch was identified from geophysical survey, measuring 15m in diameter and poorly defined on the southern side (Sumo Survey 2018, 5). Trial trenching identified a feature in this location, but late Iron Age/Roman pottery recovered from the basal fill of the ring ditch indicates that this is a much later ring ditch possibly associated with domestic activity (Oxford Archaeology 2018e, 19).

5.3.26 Feature 134 is located to the east of Barrow Hill, Sellindge, north west of barrow 44. The feature appears from LiDAR imagery to be a low, small circular mound but no evidence of archaeological features was identified by geophysical survey in this location. Trial trenching recorded variations in the natural geology and a single post hole in the general area of the feature but no evidence for a ring ditch or mound was identified. Therefore, it is assumed that the LiDAR records the natural topography and there is no barrow in this location (Oxford Archaeology 2018d, 5).

5.4 The Barrows in their Local and Regional Context

Non-Designated Barrows in the Study Area

5.4.1 Figure 2 shows the locations of the barrows within the site along with the locations of recorded designated and non-designated barrows in the 5km study area surrounding the site.

5.4.2 There are four non-designated probable barrows recorded in close proximity to the site. Two of these are in Barrow Hill, Sellindge adjacent to the site (46, 116) and were visited during the site visits (section 4) and two (155, 156) are located to the southwest of the site, to the south of Harringe Brooks Wood. Barrow 46 is recorded by Kent HER and is visible as an upstanding mound, approximately 44m in diameter and 2m in height, and is clearly visible in LiDAR imagery. Barrow 116, to the south of barrow 46, has been ploughed out but is recorded by Kent HER as a ring ditch visible as a partial circular cropmark of a ditch in Google Earth imagery from 2008. The barrows are located on level ground within the settlement of Barrow Hill, Sellindge. Barrows 155 and 156 lie approximately 250m and 800m respectively to the south west of the site. Both features appear to be upstanding mounds on LiDAR imagery, although both lie within arable land and have likely been affected by ploughing. Barrow 156 is also visible on aerial photographs as a cropmark of a ring ditch with a diameter of 36m. These barrows are located on level open ground in a slightly elevated position.

5.4.3 There are seven sites of non-designated probable barrows recorded by Kent HER between 1.5km and 5km from the site. They are located in the area to the east and north of the site, mostly along the southern edge of the North Downs. The closest of these is an undated mound at Willow Wood, 1.5km to the east of the site. This is a circular mound approximately 18m in diameter and 1.8m in height and is thought on this basis to be a barrow. This barrow is located on a gently sloping west facing slope.

5.4.4 To the north east of this and approximately 2km east of the site is an early/middle Bronze Age funerary landscape at Saltwood, excavated in advance of construction of HS1. This area had five early Bronze Age ring ditches suggesting the denuded remains of round barrows, although one of these may have been a mortuary enclosure rather than a barrow. They were arranged in an east – west alignment and ranged in diameter from 15.8m to 42.5m. One of the ring ditches contained a central crouched burial and another crouched burial was located between the two western barrows. These barrows were located on fairly level ground. In some places in Kent Bronze Age barrows were reused in early Anglo-Saxon period cemeteries, as was the case with these barrows at Saltwood. No evidence for this type of reuse has been found within the site.

5.4.5 Just over 3km north east of the site is the location of a possible barrow on Summerhouse Hill. There is a small circular mound, approximately 11m in diameter and 0.3m in height and there are faint traces of a ditch around this. On top of this are footings of a small circular building but there has been no excavation of the site to determine if the mound if contemporary with the building or earlier. However, on the basis of place name evidence, the hill used to be called ‘Bitchborrow Mount’, it is thought that the mound is a barrow. This possible barrow is located on top of a steep sided hill on the edge of the North Downs, around 900m to the south east of the designated barrows on Tolsford Hill.

5.4.6 Approximately 2.7km to the north of the site a slight mound is visible in a field and this was labelled ‘The Barrow’ on a map of 1687. Although it has not been excavated it is thought to

be a Bronze Age barrow. It is located on a south west facing slope, at the foot of the steep scarp of the North Downs.

5.4.7 Approximately 4.7km north east of the site a barrow and beaker burial were excavated in Lyminge in 2014. The beaker burial was a crouched inhumation with associated pottery vessel and bone toggle. The barrow was visible as a ring ditch of 20m in diameter, with cremation burials recovered from the centre of the ring ditch and various finds from the ditch. The site of the barrow is located in a field in the settlement of Lyminge.

5.4.8 The earthwork remains of a probable barrow is located just over 5km north of the site, at the top of the steep slope on the edge of the North Downs and around 500m east of the designated barrow on Swinyard's Hill. It is 24m in diameter and 0.5m in height and from its appearance, position and proximity to known barrows is thought to be the ploughed out remains of a barrow. The ploughed out remains of another barrow are located near Combe Wood on the high ground on the edge of the North Downs, approximately 1.3km west of the designated barrow on Swinyard's Hill and 5km north of the site.

Designated Barrows in the Study Area

5.4.9 There are eight scheduled barrows within approximately 5km of the site, although none of these are located within 2km of the site. One of these is located approximately 2.5km to the south west of the site and the scheduling description records it as the Aldington Knoll Roman barrow and later beacon (list entry 1012216) that was used as an anti-aircraft emplacement in the Second World War. However, Kent HER also records that it may have originally been an early Neolithic long barrow that was subsequently altered. It has only been excavated by antiquarian investigations in 1755 but from current knowledge it seems unlikely that this barrow dates to the Bronze Age or is contemporary with the barrows located within the site.

5.4.10 The other seven designated barrows within the study area are described as bowl barrows and considered to be of early Bronze Age date. They are located to the north and north east of the site along the southern edge of the North Downs. Six of them are located on high ground; four on Tolsford Hill approximately 3km north east of the site, one on Arpinge Range, north east of the site, and one on Swinyard's Hill, north of the site, both of which are located around 5km from the site. The other designated barrow is located on low ground at the foot of the North Downs ridge, 90m north of Stowting Court and 4.1km north of the site.

5.4.11 Bowl barrows are the most common type of Bronze Age round barrow and take the form of inverted pudding bowl shaped mounds with varying slope profiles, some have a surrounding ditch and occasionally an outer bank and they can vary from 5-6m in diameter to 40m (Historic England 2011a, 3). The surviving height of the mound will depend on the degree of cultivation, erosion and later use of the landscape but recorded examples can be up to 4m in height (*ibid.*).

5.4.12 The barrow on Arpinge Range (list entry 1009009) has an oval mound measuring 23m by 17.5m and survives to a height of 2m, with a surrounding ditch surviving as a buried feature 3m wide. The barrow is located on the western edge of a ridge, with the land falling steeply away to the west and south. The land rises again to the west to Summerhouse Hill and Tolsford Hill, between this barrow and the site.

5.4.13 The northernmost barrow on Tolsford Hill (list entry 1012269) has a surviving mound measuring 7m in diameter and survives to a height of 1.6m above ground with traces of a surrounding ditch visible as a slight hollow 2m wide with an overall diameter thought to be 25m. The two bowl barrows to the south of this (list entry 1012271) are close together, with the mound of the eastern one surviving to a height of 1.4m and 17m in diameter with a surrounding ditch of 2.5m in width. The western barrow is approximately 20m from the eastern and has been more severely damaged. The remaining mound survives to approximately 1m in height and covers an area of 10m by 7m, however, the surrounding ditch defines an area of 56m by 21m. The easternmost barrow on Tolsford Hill (list entry 1012275)

is the best preserved with a mound surviving to 3m in height and 17m in diameter with a surrounding circular ditch of up to 5m in width. The overall diameter of the barrow is 27m. These four barrows are located close to the summit of the hill with the land dropping steeply away to the south, west and east. This forms the edge of the North Downs area of higher ground.

5.4.14 The barrow on Swinyard's Hill (list entry 1012259) has an overall diameter of 47m, the surviving mound has a diameter of 31m and a height above ground of between 0.7m and 2m. The surrounding ditch is approximately 3m wide. This barrow is located on the edge of a south facing slope, on the southern edge of the North Downs with lower ground to the south.

5.4.15 The barrow 90m north of Stowting Court (list entry 1013144) was partially destroyed, on the south and east sides, by construction of a barn which has now been removed. The remaining element of the barrow measures 25m north east – south west and survives to a height of 2m. The barrow is located at the foot of the North Downs on gently sloping ground, down a small valley from the barrow on Swinyard's Hill.

The Prehistoric Landscape within the Site

5.4.16 In addition to the barrows discussed, Kent HER records 15 other prehistoric assets within the site and immediately surrounding area, which are discussed in more detail in the DBA (Arcadis 2016/17). They are mentioned here to provide context for the barrows. Ten of these are find spots, two located within the site and eight within 500m. Within the site a Mesolithic blade was found just south of Westenhanger (55) and a Neolithic axe (47) was found in the centre of the site, south of the A20. In the area surrounding the site there are records of flint and pottery finds (10, 11) of general prehistoric date, a tranchet axe (50) of Mesolithic date, two arrowheads (103, 119) of Neolithic date, and prehistoric buried soil (24) and worked flint (105) both of Neolithic or Bronze Age date.

5.4.17 Of the five assets that are not find spots, two are located within the site to the north of Lympne Industrial Park and comprise an area of Bronze Age occupation (26) and a ditch and post holes (121), also probably of Bronze Age date. It is thought that the ditches recorded by both of these records probably formed a field system. This area of occupation lies at a high point within the landscape where the valley of the East Stour River, to the north, meets the Aldington ridge, to the south, which marks the edge of Romney Marsh. These features are located on some of the highest ground in the site, to the south of and on higher ground than the barrows within the site.

5.4.18 To the north of the site further ditches and pits (21) of middle Bronze Age date were recorded, associated with the findspots of Neolithic or Bronze Age worked flint (105) and the buried soil (24), and 500m to the east of the site a cropmark of a circular feature, possibly a ring ditch (13), is located in Sandling Park. No dating evidence is available for this feature. The other prehistoric asset is a possible palaeochannel (68) located close to Barrow Hill. It is likely that this is a former course of the East Stour River that lies 22m to the south-east of the current East Stour River channel as it passes through Barrow Hill, Sellindge.

5.4.19 In addition to the information currently recorded by the HER the trial trenching undertaken in 2018 has added further to our knowledge of prehistoric activity within the site. The trial trenching in Fields 1 and 4, in the south west of the site, has found a substantial amount of Neolithic flintwork and there is also a substantial assemblage of Neolithic pottery from Field 1. However, this material is mainly redeposited within later features and is therefore residual. These finds suggest the presence of a Neolithic site of some importance within this area although it has yet to be located.

5.4.20 Small pits of probable late Neolithic/early Bronze Age date have been found in Fields 2 and 3, in the west of the site and south west of Barrow Hill, Sellindge. Late Neolithic to late Bronze Age flint has been found spread across Fields 2 and 3 suggesting that further features of this

date might be found in this area should further work be undertaken. Field 4 also yielded significant quantities of flint of this date, although mostly within later features.

5.4.21 Fields 2 and 3 contained middle Bronze Age ditches thought to be part of a field system that was contemporary with the barrows. Certain other undated ditches on a similar alignment in this field are also possibly contemporary. Field 2 also contained pits, an L-shaped ditch and an adjacent ring ditch all of middle Bronze Age date. The ring ditch may represent an unusual type of barrow (with no internal mound) but is more likely to have a domestic function or to have enclosed a collection of cremation burials. Taken together with the barrows, the middle Bronze Age features in Fields 2 and 3 form part of a middle Bronze Age landscape incorporating domestic, agricultural and funerary features. The northern part of Field 4 also contained a middle Bronze Age (or late Bronze Age) pit and ditch.

5.4.22 Middle Bronze Age activity is not just confined to the western part of the site. In Field 6, east of Stone Street and south-east of Westenhanger Castle, a probable middle Bronze Age enclosure and field system ditches were found during trial trenching. The enclosure can be clearly seen on aerial photographs and was recorded on the HER (112) but was not detected by geophysics. If proved to be of middle Bronze Age date this enclosure and its related middle Bronze Age field system is rare regionally as only three or four other possible enclosures of this date have been found in Kent. There is evidence within the south east region that some field system ditches were filled in during the middle Bronze Age and some field systems were reorganised during the late Bronze Age with others begun at this time. It is generally difficult to discern a coherent pattern of settlement in the early and middle Bronze Age, although there seems to be a trend for a greater number of enclosures in eastern Kent, with activity further west in Surrey and Sussex seeming to contain more unenclosed settlement within field systems (Champion & Weekes 2007, 9). The possible middle Bronze Age enclosure in Field 6 would therefore seem to fit with this broad geographical trend.

5.4.23 To the east of Barrow Hill, Sellindge in Field 8 a ring ditch (133) was identified by geophysical survey, which reported a negative sub-circular anomaly approximately 24m in diameter (Headland Archaeology 2018, 4). Trial trenching targeting this feature identified a ring ditch approximately 25m in diameter. The single fill in one trench produced worked flints of Neolithic and Bronze Age date and five sherds of medieval pottery. The lower fill in the other trench produced worked flints and the upper fill produced worked flints and a post medieval gun flint. There is a lack of secure dating for this feature, but it is possible that this represents the ring ditch of a barrow and the medieval and post medieval finds are intrusive, or this may be a much later feature and the prehistoric finds are residual. Due to the inconclusive evidence for a prehistoric date and lack of evidence for funerary activity this asset is not considered to be a barrow.

5.4.24 Late Bronze Age cremation burials in the north-western corner of Field 2 and a possible late Bronze Age cremation burial in the south eastern corner of Field 10, west of Barrow Hill, Sellindge, indicate that burial did not just take place within barrows. Funerary activity seems to be more limited in the middle Bronze Age, with the probable middle Bronze Age cremations from the mound and ditch of barrow 130 (in Field 2) the best evidence for this period. However, the evidence for cremation burials continuing into the late Bronze Age suggests that this became the dominant practice in this area, although this activity was in some cases focused on the early Bronze Age barrows.

5.4.25 It is clear that the barrows within the site were not in isolated locations. Although no specific site of Neolithic activity has so far been identified it appears likely that there was late Neolithic activity in this area and so the barrows were constructed within a landscape with a history of human intervention. Dating evidence from the barrows is variable in terms of its detail and reliability but generally indicates construction in the late Neolithic/early Bronze Age or early Bronze Age. This indicates that the barrow construction was followed by a landscape of agricultural activity, as represented by the field system ditches, and probable domestic activity, within which the barrows were probably focal points and landmarks. Funerary activity

continued in a non-monumental form into the late Bronze Age with the deposition of cremation burials in close proximity to the barrows, and possibly within the mounds themselves as in the case of barrow 130. There is less direct evidence for agricultural and domestic activity in the late Bronze Age but continued use of the existing systems may have occurred and the cremation burials indicate there was activity in the area. The middle and late Bronze Age field systems within the site respect the locations of the barrows which indicates that the barrows were still visible and relevant to people at this time. It is also notable that the middle Iron Age – Roman activity within the site, and particularly that to the west of Barrow Hill, Sellindge, generally avoids the Bronze Age barrows.

5.4.26 Within the wider south east region, it appears that survival of early Bronze Age barrows is poor in Kent in comparison with Surrey and Sussex, with huge destruction resulting from plough damage not just of recent date. In some places middle Bronze Age activity has cut early Bronze Age features demonstrating the longevity of agricultural impact (Champion & Weekes 2007, 9). Interestingly this does not appear to be the case within the site and this may be in contrast with the situation in other parts of the region.

The Wider Prehistoric Context

5.4.27 There are several other examples of Bronze Age barrow cemeteries in eastern Kent, such as Castle Hill near Folkestone, Monkton Mount Pleasant, near Ramsgate, and North Foreland on the Isle of Thanet, as well as the groups of five at Saltwood and four on Tolsford Hill mentioned above. The evidence indicates that barrows can have had many phases and be remodelled over time. One of the larger identified cemeteries is at Monkton Mount Pleasant, where one of the ring ditches could have been a henge monument in its first phase and was subsequently remodelled into a more traditional barrow monument. It was also surrounded by later barrows as the site continued to be a focus for ceremonial activity into the middle Bronze Age (Champion & Weekes 2007, 15-16).

5.4.28 The excavations at the Monkton Mount Pleasant site identified eleven ring ditches in total. Thanet has a number of these monuments but is lacking settlement features, which is typical of the local and regional situation. Most of the known examples in this area are on relatively high ground on the chalk ridge, although five of the ring ditches identified at Monkton were at lower levels. The average size of the area enclosed by the ring ditches was between 17m – 25m, although one was only 5m in diameter and one 36m (the possible henge). Five of the ring ditches were single ditched and the others had double ditches, which may indicate different phases of construction (Oxford Wessex Archaeology 2017, 3). The possible henge comprised a circular ditch with opposing entrances which had been almost completely dug away by a ring ditch associated with an early Bronze Age barrow. Dating evidence for construction of the barrow was poor but a middle Bronze Age burial was dug into the upper fills of the ditch (Oxford Wessex Archaeology 2017, 2-3).

5.4.29 All of the barrows had been ploughed out with no surviving mounds. One ring ditch had a central oval pit that did not contain human bone while other ring ditches had inhumation burials within the interiors or ditches. One contained a central cremation burial (Oxford Wessex Archaeology 2017, 3-4). Barrow construction at Monkton stopped in the late Bronze Age and the ceremonial area was apparently given over to farming (Champion & Weekes 2007, 15-16).

5.4.30 Also in east Kent, near Sandwich, is the site where the Ringlemere gold cup was recovered through metal detecting from a low mound. Excavation revealed that this was a complex site with a ditched enclosure that appeared to be a henge, within which a mound to apparently create a barrow was constructed. This monument is located in a low-lying position at the bottom of a long, shallow north-east facing slope (Parfitt 2007, 1). The main period of activity began with the construction of an enclosure with a single entrance and an internal diameter of 42m, the ditch was 4m – 5m wide and almost 2m deep. The pattern of fills in the ditch indicate the presence of a new destroyed external bank. Within the enclosure two L-shaped

slots represent the location of a small rectangular timber structure and other internal features may represent pit/post hole alignments and settings. This appears to indicate several phases of activity with pottery ranging from late Neolithic grooved ware to late Neolithic/early Bronze Age beaker ware (Parfitt 2007, 2-3).

5.4.31 Excavation revealed that rather than creating a barrow the central mound appears to have created a low platform to support a timber structure, replacing that in the centre of the enclosure. In addition, despite complete excavation, no prehistoric burials were identified (Parfitt 2007, 4). Remote sensing and targeted excavation revealed that the henge feature is surrounded by a variety of other ring ditches, at least some of which appear to represent barrows. However, one of the ring ditches had a narrow flat based profile that may have held a timber palisade, although no evidence of post pipes was observed (Parfitt 2007, 5). Field boundary ditches of Roman date avoided the ring ditches and indicate that they continued to be visible, presumably as mounds, and were still significant features within the landscape. Anglo-Saxon graves were also discovered around the ring ditches, as seen at Saltwood (Parfitt 2007, 6).

5.4.32 The evidence from other barrow sites in east Kent demonstrates that barrow cemeteries could have complex histories of construction and may have involved different monument forms, for example developing around henge monuments as at Monkton and Ringlemere, with these henges themselves sometimes transformed into barrows. The excavation of Ringlemere and some of the barrows at Monkton demonstrate that barrows could be located in low lying settings, in comparable topographic locations to that seen with the barrows within the site.

5.4.33 Further afield there are also examples of prehistoric landscapes containing barrow cemeteries in broadly comparable low-lying topographic locations. For example, the well documented site at Barrow Hills, near Radley in Oxfordshire which is located on the gravel terrace of the Thames valley. In this area was an early Neolithic causewayed enclosure and 24 barrows of mostly early Bronze Age date (Barclay & Halpin 1998). The excavation demonstrated that a variety of activity occurred in the area of the barrows during the late Neolithic – Bronze Age, with some of the earliest comprising a series of Beaker flat inhumation graves. There was also a series of pits forming a linear cremation cemetery (some of which contained collared urns) and pits and post holes that did not form a clear pattern (some of which probably post-date the Bronze Age use of the area) (Barclay & Halpin 1998, 311-314). The investigations revealed that construction and use of the barrows were just one of a variety of activities taking place, some of which were much less archaeologically visible than the barrows.

5.5 Setting and (Pre)historic Views

5.5.1 The settings and key views associated with the barrows in the site have been investigated through walkover survey and viewshed analysis. Figure 3 illustrates the extend of the DTM that was used to model the viewsheds in relation to the site and 5km study area.

5.5.2 The nine barrows within the site are all located in a rural area, within fields currently in arable cultivation. Five of the barrows (44, 58, 113, 114, 135) are located on broad areas of higher ground between approximately 70-80m AOD. The other four barrows are on gently sloping ground, with barrows 115, 130 and 131 downslope from the group of barrows to the west of Barrow Hill, Sellindge. The landscape of the site and its immediately surrounding area is gently undulating and the barrows have been sited on the higher ground within this landscape. Their settings are informed by their rural surroundings, which are broadly peaceful with some background traffic noise and occasional farm machinery. The nature of the topography and open rural character allows quite wide-ranging views to the surrounding landscape, particularly towards the higher ground of the North Downs to the north and east. The only barrow within the site with more limited views is barrow 130, which is located on a south facing slope to the south west of Barrow Hill, Sellindge and south of the group of

barrows. The rural location of the barrows informs their settings and contributes to their significance as it has enabled preservation of archaeological remains and allows views between some of the barrows within the site and towards the locations of other barrows on the edge of the North Downs.

5.5.3 Their settings are also informed by their relationships with each other, particularly in the case of the group of seven barrows to the west of Barrow Hill, Sellindge. Although the majority of the barrows are not clearly visible above ground now the knowledge of their locations in relation to each other informs their setting. This aspect of their setting contributes to their significance. In the case of the group of seven barrows their significance is enhanced by their group value and therefore their relationships with each other, and the ability to appreciate that on the ground due to the open ground between them, makes a key contribution to their significance. Barrows 44 and 136, to the east of Barrow Hill, Sellindge, are in slightly more isolated locations from the focus of Bronze Age activity. However, they are located on either side of the shallow valley of the East Stour River and therefore are intervisible and an important aspect of the others setting, which contributes to their significance.

5.5.4 The two barrows located in Barrow Hill, Sellindge (46 and 116), located outside the site, have enclosed surroundings due to the mature vegetation that surrounds them and the buildings adjacent to them. Consequently, they do not have any views that extend beyond Barrow Hill, Sellindge, either to the barrows in the site or the wider surrounding landscape. Barrow 46 is located within a large garden and barrow 116 within a small field. Their settings are informed by their village edge location but due to their enclosed surroundings it is difficult to appreciate their spatial relationship with the barrows in the site and surrounding area. Consequently, their settings allow some appreciation of their proximity to each other and, as they are in open green spaces, have preserved archaeological remains but only make a minor contribution to their significance.

5.5.5 The probable barrows located to the south west of the site (155 and 156) are in open rural locations, on higher ground than those within the site at approximately 100m AOD. Their settings are predominantly informed by their rural surroundings and by their relationship with each other, as they are approximately 540m apart. They have a less direct relationship with the barrows within the site, which are at least 1.2km away, as there is limited intervisibility and a variety of intervening land uses, including woodland and buildings. Their rural surroundings and relationship with each other contribute to their significance.

5.5.6 Viewshed analysis has been undertaken from and to all of the barrows within the site to provide more detail regarding the potential intervisibility of the barrows and a consideration of how this informs their settings and significance. All of the barrows within the site have wide ranging views with the exception of 130. Plate 12 illustrates the viewshed from barrow 58, in the group to the west of Barrow Hill. This extent is fairly typical for the other five barrows in the western group, with the exception of 130. It also demonstrates the greatest extent of the viewshed from barrows 44 and 136. This demonstrates that visibility from the barrows in the site to the wider landscape is orientated to the north, towards the high ground of the North Downs. This means that theoretically, assuming no vegetation, the locations of a number of the barrows in the 5km study area are visible from 8 of the barrows within the site. The designated bowl barrow on Swinyard's Hill, the bowl barrow north of Stowting Court, the bowl barrow on Arpinge range and probably the four bowl barrows on Tolsford Hill are within this viewshed. In addition, the non-designated bowl barrow near Combe Wood, probable barrow to the east of the designated barrow on Swinyard's Hill, the probable barrow on Bitchborrow Mount and the site of the former barrow near Horton Park Farm are theoretically visible. The DTM used to model the viewshed does not cover the area of Tolsford Hill but given its topography and location in relation to the site, along with the viewshed to the neighbouring Summerhouse Hill, it is assumed that at least three of the four barrows are theoretically visible from the site.

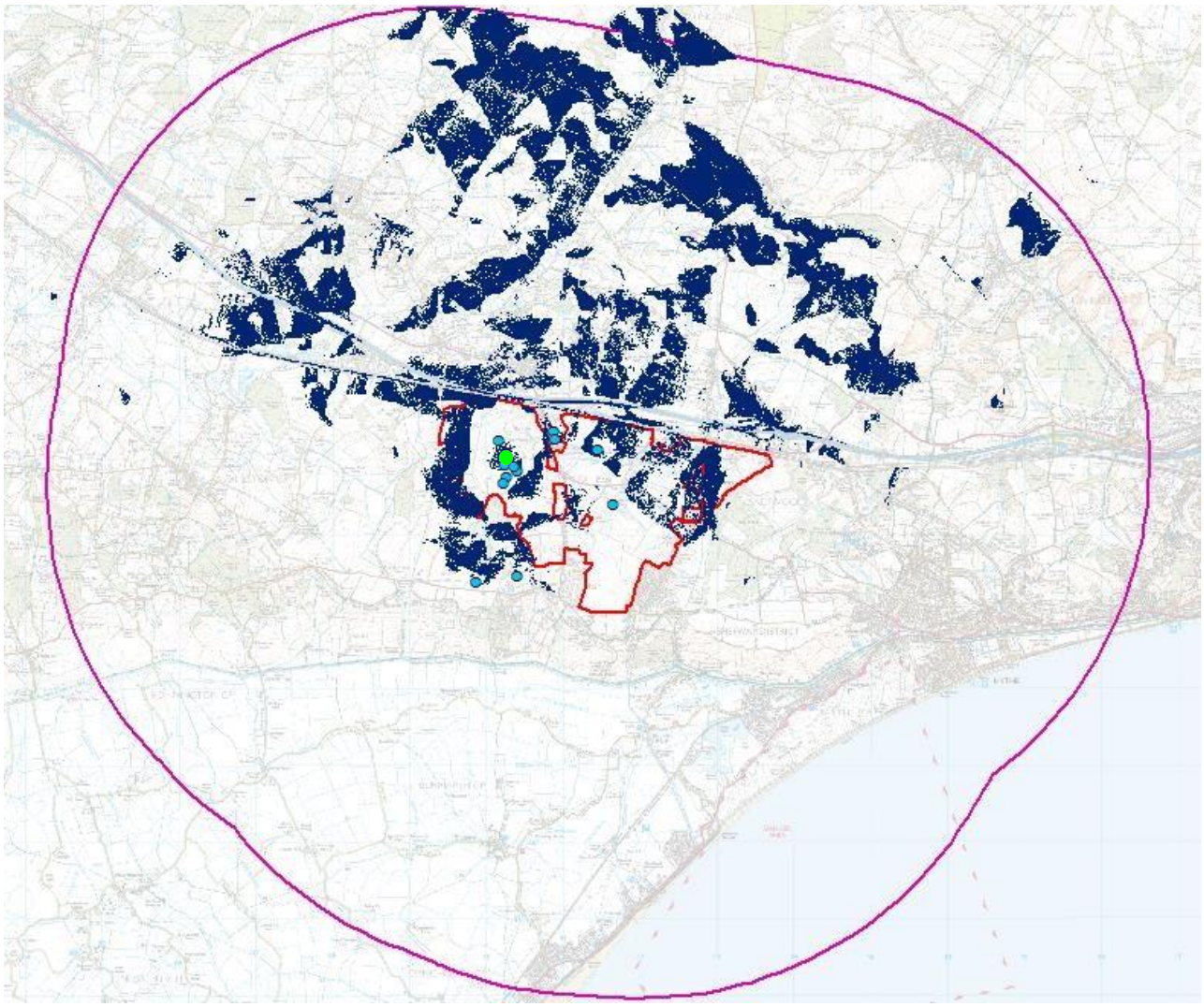

Plate 12: Viewshed modelled from barrow 58 (green), showing the 5km study area (pink line) and areas visible from the barrow in blue

5.5.7 When the viewsheds to the barrows within the site were modelled this was more limited than the visibility from them. Five of the barrows are theoretically visible from at least one of the barrows in the wider landscape; barrows 113, 114, 131, 135 and 136. Four of these are in the western group, on top of the hill or on its northern edge, and barrow 136 is on a north facing slope. In addition, there are no views from or to the low ground of Romney Marsh which implies a lack of interaction and connection with that landscape, which in the Bronze Age is likely to have been sea. Although the modern coastline is approximately 4km from some of the barrows in the site there are no views from or to the sea now.

5.5.8 The viewsheds of the barrows to the wider landscape are focused towards the north however the site visits demonstrated that real world visibility and the ability to perceive features over a distance of several kilometres are more limited. It is probable that in the early Bronze Age the size of the barrow mounds would have made them more prominent features in the landscape. In terms of views from the barrows in the site towards those on higher ground to the north and east, it is possible that if these barrows on higher ground were considerably larger than they are currently they would be visible against the skyline. However, in views from these barrows during the site visit towards those in the site it was difficult to distinguish their locations, and the nature of the lower lying landscape suggests that they may never have been such prominent landscape features when viewed from a distance. Consequently, it is likely that they were sited with a consideration of the views from their locations to the

wider landscape but not necessarily with the intention of their locations being prominent in views towards them.

5.5.9 In terms of the shorter-range views between the barrows within the site, seven of the barrows have theoretical views to at least one other barrow within the site. The northernmost and southernmost barrows of the western group (131 and130) do not have views to any other barrows in the site due to their locations on north west and south facing slopes respectively, although from barrow 131 there is theoretically a view to barrow 156 to the south west of the site. Plate 13 illustrates the viewshed from barrow 130, which is the only barrow with no visibility to any other barrows. Of the other barrows in the site 114 (Plate 14: Viewshed modelled from barrow 114, areas visible from the barrow are shown in greenPlate 14) and 135 have viewsheds that extend to the greatest number of other barrows, both theoretically having views to eight other barrows, including the barrows beyond the application site boundary in Barrow Hill, Sellindge (44 and 116) and those to the south west of the site (155 and 156).

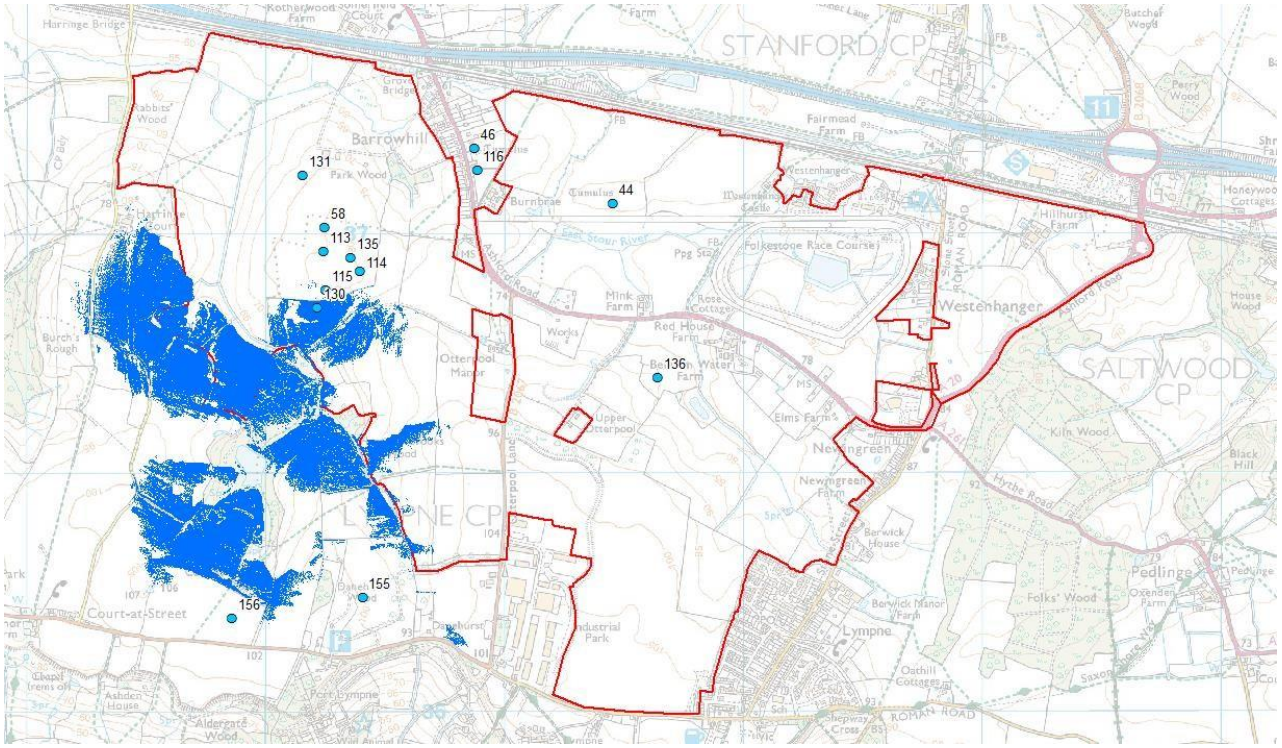

Plate 13: Viewshed modelled from barrow 130, areas visible from the barrow are shown in blue

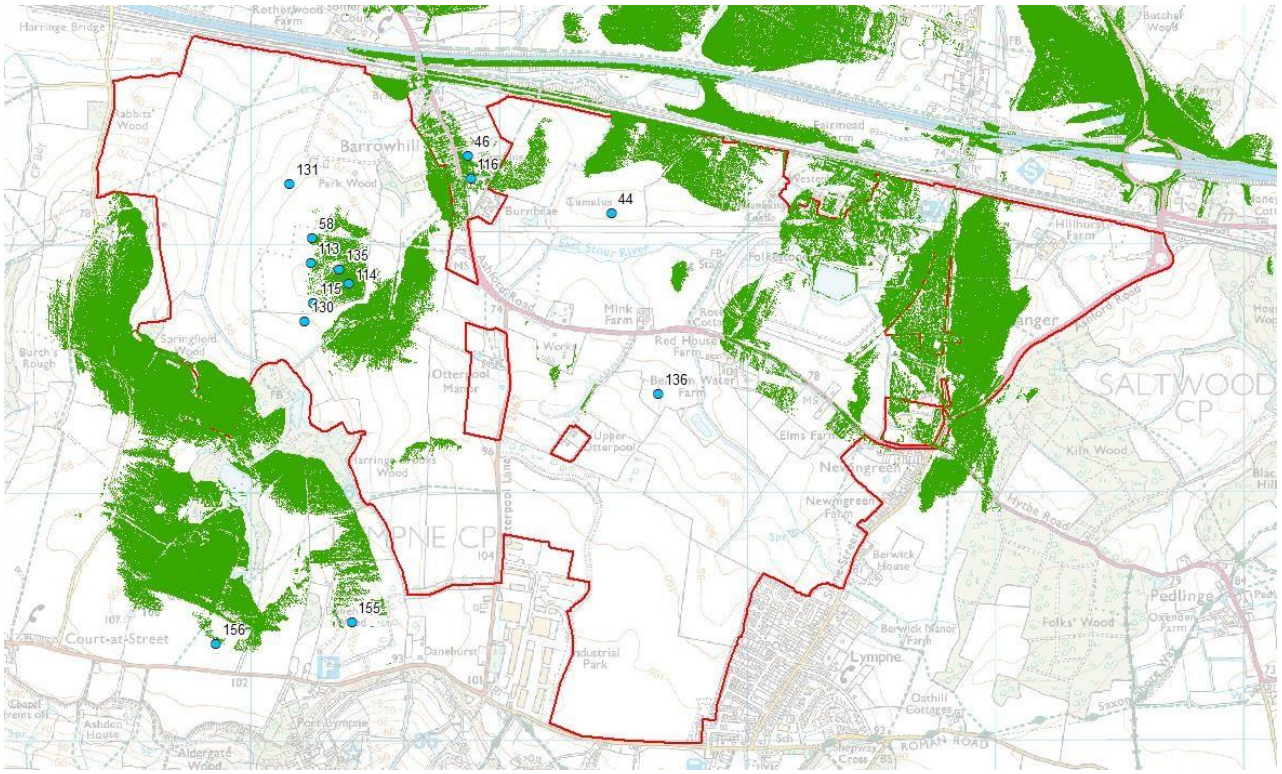

Plate 14: Viewshed modelled from barrow 114, areas visible from the barrow are shown in green

5.5.10 Barrows 58 and 113 have viewsheds that extend to seven other barrows, both within and immediately outside the site. Barrows 58, 113 and 135 are also theoretically intervisible with barrow 44 (Plate 15) to the east of Barrow Hill, Sellindge. This demonstrates that the central four barrows within the group of seven to the west of Barrow Hill, Sellindge are located in the most prominent position with the greatest theoretical outward visibility. Interestingly the three barrows that surround them (131, 115 and 130) have the least intervisibility with barrows both within and outside the site. As discussed above 130 does not have visibility to any other barrows and 115 and 131 have theoretical visibility to barrow 156 to the south west of the site.

5.5.11 Barrows 44 and 136 are intervisible and both have views to barrows 46 and 116 outside the site in Barrow Hill, Sellindge. Barrow 136 does not have views to any of the barrows in the group to the west of Barrow Hill, Sellindge (Plate 16). Barrows 46 and 116 in Barrow Hill, Sellindge are visible from six of the barrows in the site, the eastern barrows 44 and 136 and the central four barrows (58, 113, 114, 135).

5.5.12 As discussed in the walkover survey above (section 4.2), the real-world visibility between barrows is less than that indicated by the viewshed analysis. There is no clear visibility between the group of barrows to the west of Barrow Hill and barrows 44 and 136 located to the east. This is due to the nature of the field boundaries in this area and, in some cases, the buildings in the settlement of Barrow Hill. It does appear that barrow 136 and barrow 44 are intervisible and in the western group of barrows, the central four barrows (58, 113, 135 and 114) are definitely intervisible.

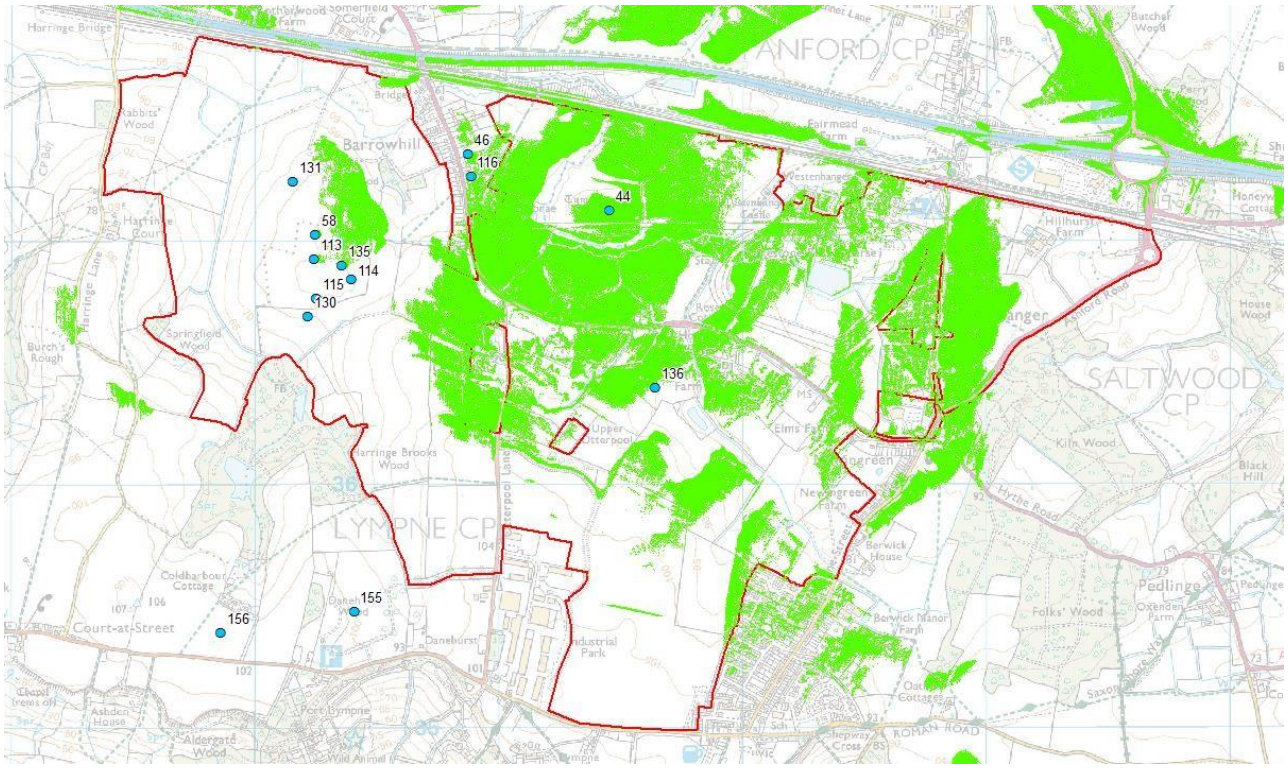

Plate 15: Viewshed modelled from barrow 44, areas visible from the barrow are shown in green

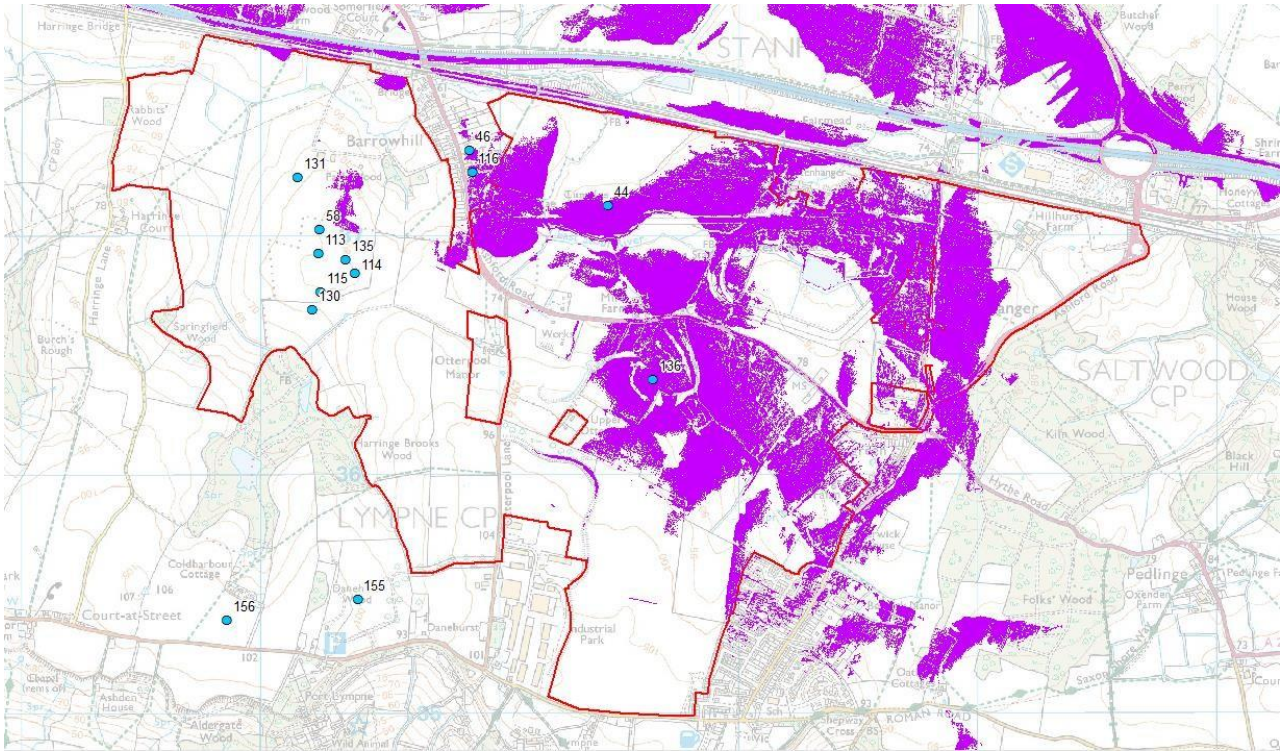

Plate 16: Viewshed modelled from barrow 136, areas visible from the barrow are shown in purple

5.6 Sensitivity

5.6.1 All of the barrows within the site are sensitive to physical impacts that could disturb or alter the buried archaeological remains. As they are all located within fields that have been subject to arable cultivation the survival of the mound material for all the barrows has already been

compromised and any further degradation of this material could result in its complete loss. Any buried land surfaces surviving beneath mound material and the remains of any surrounding ditches are slightly less sensitive to physical impacts as they are afforded a small amount of protection by any overlying mound and subsoil. However, very little or no mound material survives for four of the nine identified barrows within the site and, assuming mounds were originally present, these barrows are both already more degraded and consequently more sensitive to further damage that would remove even more of the already truncated remains.

5.6.2 The evaluation undertaken to date has not revealed evidence for any waterlogged or particularly sensitive environmental remains and therefore the barrows are not sensitive to minor changes in the hydrogeology of the site.

5.6.3 The relationships and any existing views between the barrows within the site and immediately outside are sensitive to changes to their settings that affect their significance. The current rural landscape allows some views between the barrows, and although the nature of this landscape is unlikely to resemble the barrows contemporary landscape it does allow an appreciation of the relationships between them. Consequently, the barrows are sensitive to changes that radically alter this character or obstruct the existing limited views between the barrows.

5.7 Archaeological Potential

5.7.1 The barrows all have high archaeological potential as geophysical survey and trial trenching have demonstrated that archaeological remains are preserved in these locations. The two barrows that were not excavated by trial trenching were visible in the geophysical survey as anomalies consistent with ring ditches and preserved mound material and are visible on the surface as low mounds, indicating that they have possibly the highest archaeological potential of all the barrows within the site and have been the least disturbed.

5.7.2 The barrows that contain preserved mound material may reveal evidence for later reuse of the site through deposition in pits cut into the mound. Where mound material survives there is also potential for preservation of buried land surfaces, that may contain environmental evidence and evidence of past use of the landscape. Deposits within ditches may provide evidence of activity occurring during the construction and use of the barrow and the subsequent use of the landscape from later ditch fills. Investigation at other barrows has demonstrated that some were surrounded by associated activity, either immediately preceding, contemporary with or following the construction of the barrows while some are in locations where either activity did not occur or was not of a nature to be preserved in the archaeological record. At the site there is evidence for middle Bronze Age field systems and possible domestic activity and therefore there is medium potential for other associated activity to be present within the immediate environs of the barrows that has not been identified to date.

6 Assessment of Significance

6.1 Introduction

6.1.1 The significance of the barrows has been considered in terms of their archaeological, historic, architectural and artistic interest and their group value.

6.2 Archaeological Interest

6.2.1 The barrows within the site all have archaeological interest. They include one probable bell barrow with a possible palisade revetted mound (44), one non-ditched barrow (136) and seven probable bowl barrows, one of which is double ditched (114). All have high archaeological potential and include archaeological remains that can inform our understanding of this period of prehistory and, in conjunction with evidence for contemporary activity in the site and environmental evidence, can inform our understanding of the use of this landscape. Archaeological interest is inherently related to archaeological potential and therefore those barrows that have the greatest degree of preservation, in particular barrows 58 and 113 that have visible surviving mound material but were not excavated by trial trenching, and barrows 130, 44 and 136 that were investigated by trial trenching which confirmed the survival of mound material. In addition, barrows 44, 136 and 114 were revealed to have complex and/or unusual features in their construction; a possible palisade revetted mound, a ditchless barrow and a doubled ditched barrow respectively. Therefore, all of the barrows have archaeological interest as they can provide evidence about funerary and ritual activity in the early Bronze Age. Barrows 58, 113, 130, 44 and 136 have greater archaeological interest as they appear to be better preserved and/or to contain more unusual features relating to their construction and use.

6.2.2 No evidence for central inhumation or cremation burials has been revealed but the trial trenching intentionally did not target the central areas of the barrows and only sampled a small proportion of the total area of the barrows, so there is potential for direct evidence of the past population in the form of skeletal material to be present. No evidence of cremation pyres has been identified to date, but these could easily be missed by evaluation. Although there are not a large number of cremation burials identified within the site so far, the possibility of evidence for this associated activity remains. Pyres may have been spatially separate from the locations of depositions so may not be immediately adjacent to the barrows or the identified middle and late Bronze Age activity.

6.2.3 Buried land surfaces beneath or within surviving mound material and ditch fills may contain palaeoenvironmental evidence of the landscape and conditions contemporary with the construction of the barrows and, in the case of ditch fills, during the subsequent use of the landscape. This potential contributes to the archaeological interest of the barrows.

6.2.4 At four of the seven excavated barrows no mound material was identified by the trial trenching and this raises the possibility that they may never have included a mound but may have formed mortuary enclosures. It is also possible, particularly given the history of cultivation in the area, that any evidence of a mound has been lost but that one did exist originally. It is also noted that, given the lack of secure dating for barrows 131, 135, 114 and 115 there is a small possibility that one or more may be ring ditches representing henges rather than barrows. However, henges are characterised by enclosures with ditches and an outer bank, although some early examples are the reverse of this. The ditches can be segmented but if continuous have one or often two entrances and can be up to 110m in diameter, although ‘mini-henges’ of only 15-20m are known (Historic England 2011c, 2-3). Currently there is no evidence for any entrances or breaks in the circuits of the ring ditches within the site, nor evidence for significant recuts that could have removed former entrances and obscured this past use.

6.2.5 Generally, henges tend not to be well dated, but the larger sites occur in the period 3000-2200 BC, with intensity of activity between 2800-2200 BC (associated with late Neolithic Grooved ware and late Neolithic/early Bronze Age Beaker pottery). But smaller examples continue to be built in the early Bronze Age, often of a similar scale to barrows of the period, and there are a very small number of late Bronze Age examples (Historic England 2011c, 5). The distribution of henges, although they are rarer in the south east, does not exclude the area of the site and the evidence from Monkton and Ringlemere in east Kent illustrate that henges did occur in the wider area and could be altered over time, sometimes converted into barrows. Consequently, there is overlap in the chronological and spatial distribution between henges and round barrows and in the scale of the ring ditches associated with the two types of monument. However, based on the available evidence the ring ditches within the site do not exhibit the key characteristics associated with henges and are therefore classed as evidence of early Bronze Age round barrows.

6.2.6 The variety of round monuments during this period of prehistory show the difficulties of establishing hard-and-fast categories for societies which drew differentially on local traditions and external influences, and periodically added to or remodelled monuments (Historic England 2011c, 7). Consequently, the comparatively large number of such monuments within the site and the potential for preservation of associated activity in the landscape between them enhances their archaeological interest as it provides potential for research into this subject.

6.3 Historic Interest

6.3.1 There are no known associations with specific individuals who were buried in the barrows. There is a record of antiquarian excavation at barrow 44, although records of the evidence generated from this are very limited, and no recorded evidence of previous investigations exist for any of the other barrows. Consequently, there is little evidence of associative historic interest in the barrows. However, they are illustrative of early Bronze Age funerary and ritual activity and provide an indication of the use and organisation of the landscape in this area at that time. With more refined dating it may be possible to reconstruct the sequence of construction, use and any subsequent reuse of the barrows which would build a more ‘historic’ style narrative of this period of activity. Overall, this provides a limited amount of historic interest in the barrows in the site as a group.

6.4 Architectural and Artistic Interest

6.4.1 The barrows within the site have no clear architectural or artistic interest, based on current knowledge.

6.5 Group Value

6.5.1 There is clear group value to the group of barrows to the west of , which form an irregular barrow cemetery. The exact development of this is currently unknown, but there is likely to be a sequential chronology with clear visibility between the four barrows within the centre of the group (58, 113, 135, 114) a key feature, especially when the mounds were larger. Assuming that there were covering mounds to all seven barrows in this group there is potential that the three outlying barrows (131, 115, 130) may have had intervisibility with the central four, particularly if access onto the barrow mound was permitted. The three largest barrows in the site (58 at 60m diameter, 113 at 40-45m diameter and 114 with the diameter of the outer ring ditch at 41m) are located within this group, which also include the double ring ditch of barrow 114.

6.5.2 The size and complexity of the four barrows in the central group of barrows and their proximity to each other, as they are located between 60m and 115m apart, gives them high group value. The three barrows that surround them are located slightly further away, between 160m

(barrow 115) and 230m (barrows 130 and 131) away from the nearest of the four central barrows. They are also smaller, ranging in size from 12m – 18m in diameter. They are part of this barrow cemetery group and their significance is enhanced by this association and they provide a lesser contribution to the significance of the larger central barrows.

6.5.3 The two barrows within the site to the east and south east of Barrow Hill, Sellindge (44 and 136) have less obvious group value but do have relationships with the other barrows in the landscape. Barrow 136 has views to and is visible from barrow 44 and probably barrows 46 and 116 outside the site in Barrow Hill, Sellindge. It is in a comparatively isolated location at the south eastern edge of the identified Bronze Age activity within the site and so these relationships make only a small contribution to its significance.

6.5.4 Barrow 44 is located in a prominent position with theoretical intervisibility with three of the central barrows in the western group (58, 113, 135), the two barrows in Barrow Hill, Sellindge (46, 116) and barrow 136 to the south. Therefore, while this barrow is in a comparatively isolated location its theoretical former visual relationships with other barrow within and immediately outside the site enhances its significance. However, buildings in the settlement of Barrow Hill, Sellindge and vegetation in field boundaries means that the only surviving visual relationship is with barrow 136.

6.5.5 The barrows on the edge of the North Downs and to the east of the site do not have a direct group relationship with those in the site, although it is highly likely that the people living in this area would have been aware of the locations of other barrows, settlements and a variety of other landscape features. However, the intervening distance means that even the barrows that are theoretically visible would have been difficult to distinguish from those in the site.

6.6 Overall Assessment of Significance

6.6.1 The significance of the barrows within the site derives primarily from their archaeological interest and group value. The settings of these barrows allow an appreciation of their archaeological interest and group value and consequently their settings contribute to their significance. On this basis they are all of at least regional significance.

6.6.2 Barrow 44 is, based on current knowledge, of a nationally rare form of round barrow as it is a bell barrow with a berm separating the mound from the ring ditch. There are approximately 350 recorded bell barrows in England, out of the estimated 30,000 round barrows of bowl form (Historic England 2018, 22). In addition, the presence of a possible palisade trench that may have formed a revetment to the mound is also rare. Due to its period, rarity and archaeological potential this barrow is of national significance and potentially eligible for designation.

6.6.3 Barrow 136 is represented by the remains of a mound, but no ditch has been identified in association with this barrow. The mound is preserved to a maximum height of 0.56m. This ditchless form is a slightly more unusual form of round barrow, although far more common than bell barrows. The mound is quite well preserved and overall the barrow is representative of round barrows of early Bronze Age date and is of regional significance.

6.6.4 The central group of four barrows to the west of Barrow Hill (58, 113, 114, 135) are large in diameter at 60m, 40-45m, 41m and 30m respectively. Barrows 58, 113 and 135 appear on the basis of current knowledge to be single ditched barrows and 58 and 113 appear to have surviving mound material, possibly to a height of 1m (although this has not been investigated by excavation). Barrow 114 is double ditched but excavation of both this barrow and 135 failed to identify any evidence for mound material. This may be a result of degradation from plough damage or may indicate that mounds were never constructed within these ring ditches. These barrows have clear group value and appear to represent a group of unusually large barrows, based on the diameter of the ring ditches, with a more complicated form of barrow construction represented by the doubled ditched example. Their proximity also means there is high potential for evidence of associated activity in the area between and surrounding

them. This group clearly forms a barrow cemetery and has high archaeological potential which could reveal further details of chronology and sequence of use. Consequently, they are of national significance in large part due to their group value as well as their survival and combination of rarer forms and sizes.

6.6.5 The three barrows surrounding the central group to the west of Barrow Hill (131, 115, 130) are small examples, with single ring ditches, one of which had surviving mound material into which a middle Bronze Age cremation burial has been cut (130). They are typical of the early Bronze Age round barrows found locally and within the region and are therefore of regional significance.

6.6.6 In terms of the Historic England levels of significance barrows 44, 58, 113, 114 and 135 are considered to be Level B and barrows 136, 131, 130 and 115 are considered to be Level C. This is summarised in

6.6.7 Table 4 below

Table 4: Summary of assessment of barrow significance

Barrow Number	Historic England Significance Level	Justification
44	B	Bell barrows are a nationally rare form. Due to its period, rarity, survival and archaeological potential this is of national significance and potentially eligible for designation.
58	B	Large diameter with survival of mound material and therefore assumed to have high archaeological potential, both for the barrow and the surrounding area. Group value with 113, 114, 135, 115, 130 and 131. Due to period, rarity, group value, survival and potential this is of national significance.
113	B	Large diameter with survival of mound material and therefore assumed to have high archaeological potential, both for the barrow and the surrounding area. Group value with 58, 114, 135, 115, 130 and 131. Due to period, rarity, group value, survival and potential this is of national significance.
114	B	Large diameter with double ring ditch, high archaeological potential for the barrow and the surrounding area. Group value with 58, 113, 135, 115, 130 and 131. Due to period, rarity, group value, survival and potential this is of national significance.
135	B	Large diameter, high archaeological potential for the barrow and the surrounding area. Group value with 58, 113, 114, 115, 130 and 131. Due to period, rarity, group value, survival and potential this is of national significance.
136	C	Reasonable preservation and archaeological potential, slightly rarer form of barrow (ditchless) and generally a good representative example. Due to period, survival and potential this is of regional significance.

Barrow Number	Historic England Significance Level	Justification
115	C	Small diameter, single ring ditch with high archaeological potential. Typical of local and regional examples. Due to period, survival and potential this is of regional significance.
130	C	Small diameter, single ring ditch with surviving mound material containing a cremation burial. High archaeological potential. Typical of local and regional examples. Due to period, survival and potential this is of regional significance.
131	C	Small diameter, single ring ditch with high archaeological potential. Typical of local and regional examples. Due to period, survival and potential this is of regional significance.

7 Parameters for Acceptable Impact

7.1 Recommendations for Preservation in Situ and Preservation by Record

7.1.1 As with all archaeological remains the policy position is that there should be a presumption in favour of preservation in situ, particularly if the asset is of equal value to designated assets. Consequently barrows 44, 58, 113, 114 and 135, which are of national significance, should be preserved in situ in order to provide them the same physical protection as would be received by a scheduled monument. Preservation in situ would also allow the appreciation of the group value of and spatial relationship between barrows 58, 113, 114 and 135.

7.1.2 In the case of barrows 131, 130 and 115 full excavation and preservation by record will provide valuable information regarding their construction, dating and address the question of whether mounds were originally present in the cases of barrows 131 and 115. Given the preservation of middle Bronze Age cremation burials in barrow 130, more extensive excavation could reveal whether the barrows contained central early Bronze Age inhumation or cremation burials. Therefore, while preservation in situ might be suggested as desirable, the excavation and recording of these assets will enhance understanding of the contribution they make to the historic environment.

7.1.3 The mound of barrow 136 covered two buried land surfaces which have the potential to provide palaeoenvironmental evidence for the area prior to the construction of the barrow. This would add to the information derived from worked flint artefacts recovered during evaluation from the mound material and help to build a picture of the late Neolithic, and possibly earlier, use of the landscape along with the conditions during construction of the barrow.

7.2 Recommendations for Acceptable Change to Setting

7.2.1 One of the key elements of the barrows settings that contribute to their significance is the ability to appreciate the relationships between the central four barrows (58, 113, 114, 135) in the group to the west of Barrow Hill. Given the large diameter of the ring ditches of these barrows they are likely to have been visually imposing when first constructed and preserving open space around this group allows a continued appreciation of their spatial relationship and the scale of the monuments.

7.2.2 The intervisibility between barrows 44 and 136 is the only surviving visual relationship between each of these barrows and any other barrow within the site and surrounding area. This is particularly important for barrow 44 as the viewshed analysis indicates that theoretically it may have been intervisible with six of the barrows in the site and in Barrow Hill, Sellindge before modern buildings and vegetation obstructed these views. If possible, this visual link should be preserved.

7.2.3 In addition, the settings of all of the barrows, except 130, are informed by the views from them to the wider landscape. In particular the high ground of the North Downs, which is a dominant landscape feature, to the north and east. Where possible these long-range views should be preserved.

7.2.4 The rural character of the barrows setting contributes to their significance because the open character allows an appreciation of the relationship between the barrows. The rural character itself is of lesser importance but development that affects the understanding of the relationship between the barrows would affect this aspect of their significance. However, this aspect of their setting is only contributing a relatively minor element of their significance, which is mostly derived from their archaeological interest, group value and some particular views.

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Ref 2	Barclay, A & Halpin, C 1998. Excavations at Barrow Hills, Radley, Oxfordshire. Volume I: The Neolithic and Bronze Age Monument Complex. Oxford Archaeological Unit Thames Valley Landscapes Volume 11. Oxbow Books: Oxford
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Ref 12	Headland Archaeology 2018. Otterpool Park, Kent. Geophysical Survey (OPHK17)
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Reference	Title
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Ref 19	Historic England 2008/2017. Conservation Principles, Policies and Guidance for the Sustainable Management of the Historic Environment
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Ref 27	Oxford Archaeology 2018d. Field 9, Otterpool Park, Sellindge, Kent. Archaeological Evaluation Report (STOT17)
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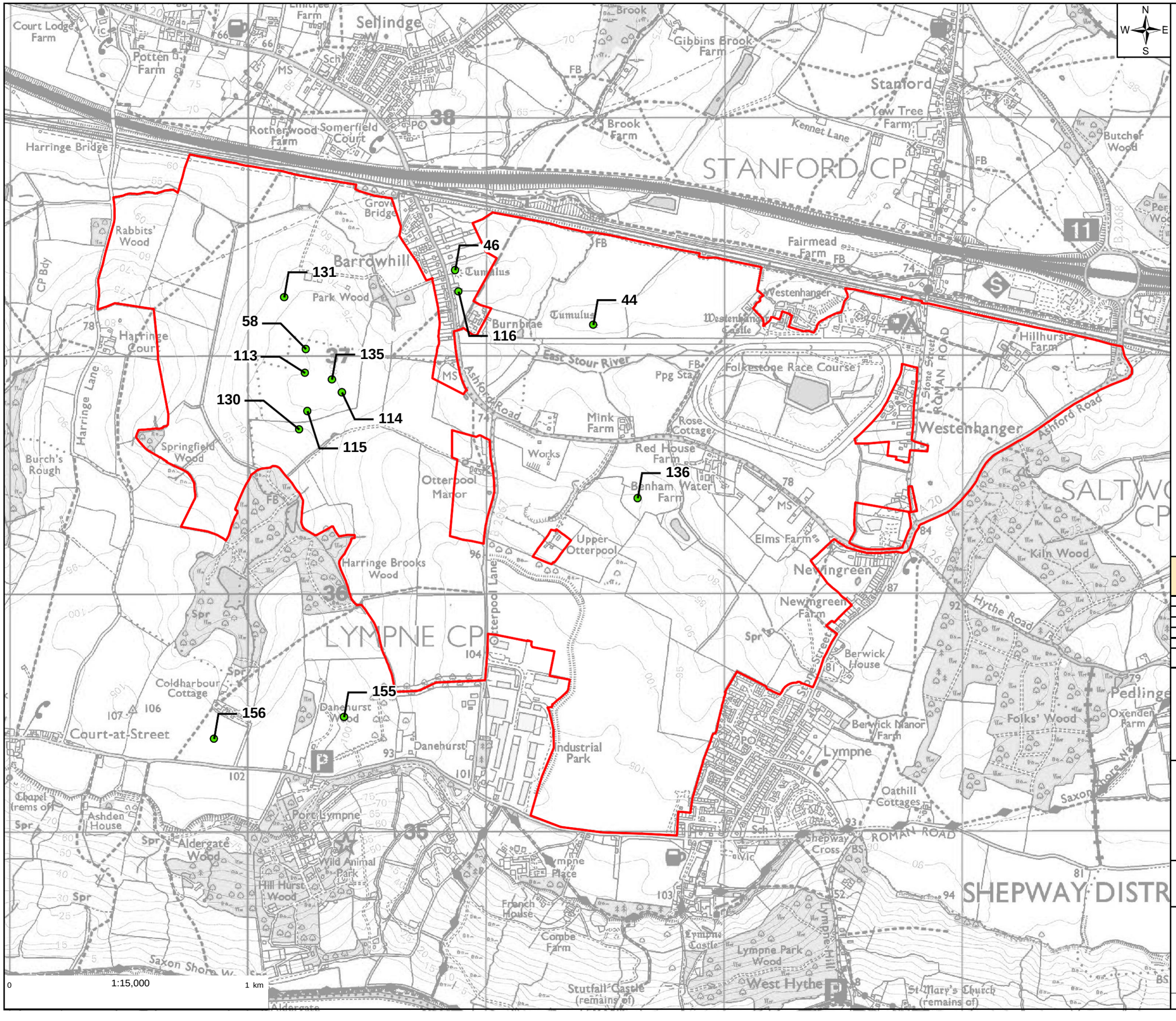
APPENDIX A Figures



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Rev	Date	Description	Drawn	Check	Approv
Rev1	24 OCT18	FIRST ISSUE	PN	LB	KC

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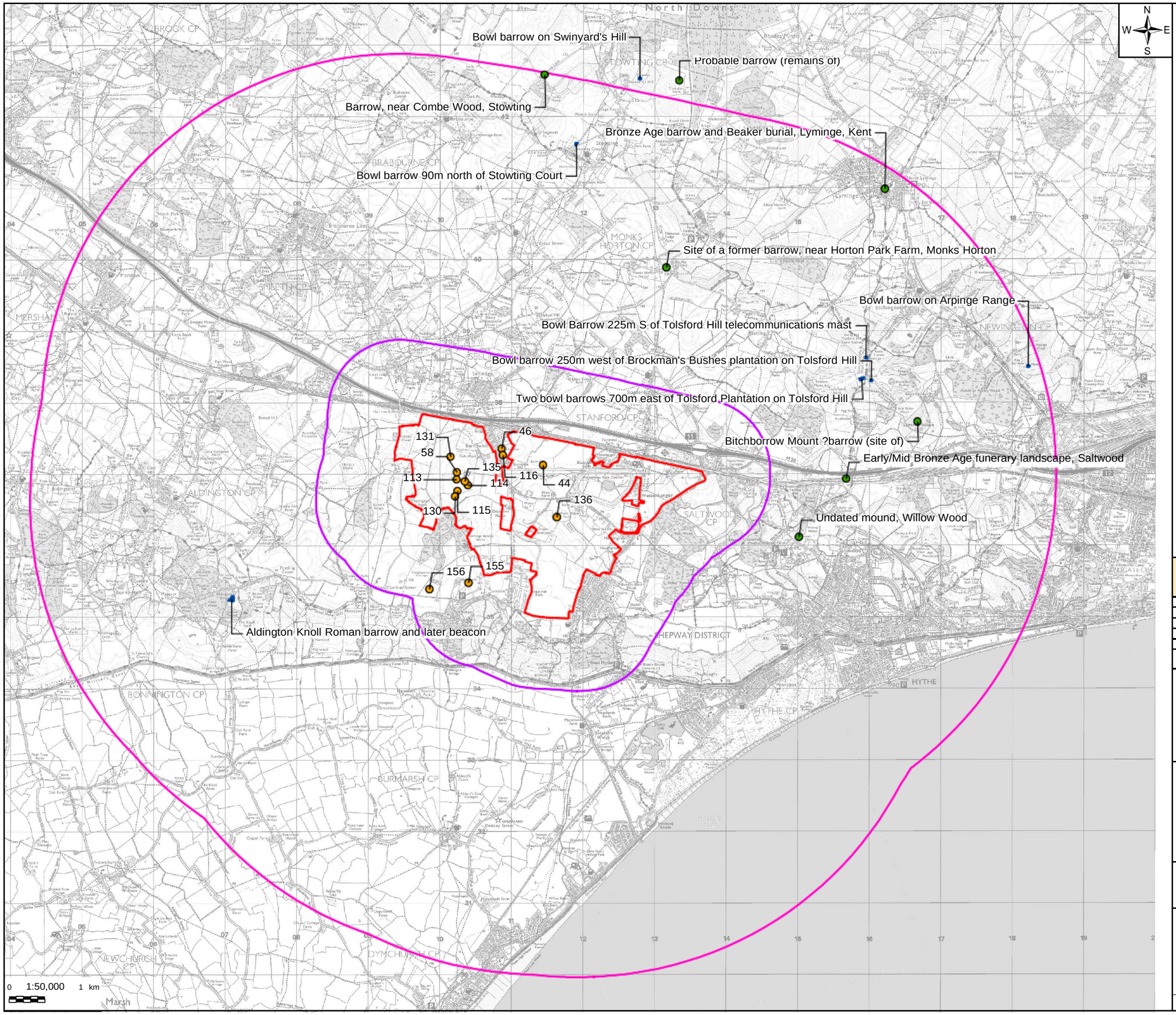
OTTERPOOL PARK

Figure 1
Barrows in the Otterpool Site

scale	original size	datum	grid
1:15,000	A3	Sx	BNG



Legend

- Non designated barrows
- Barrows identified for assessment
- Designated barrows
- 5km Radius
- 1km Radius
- Outline Planning Application Boundary (OPA)

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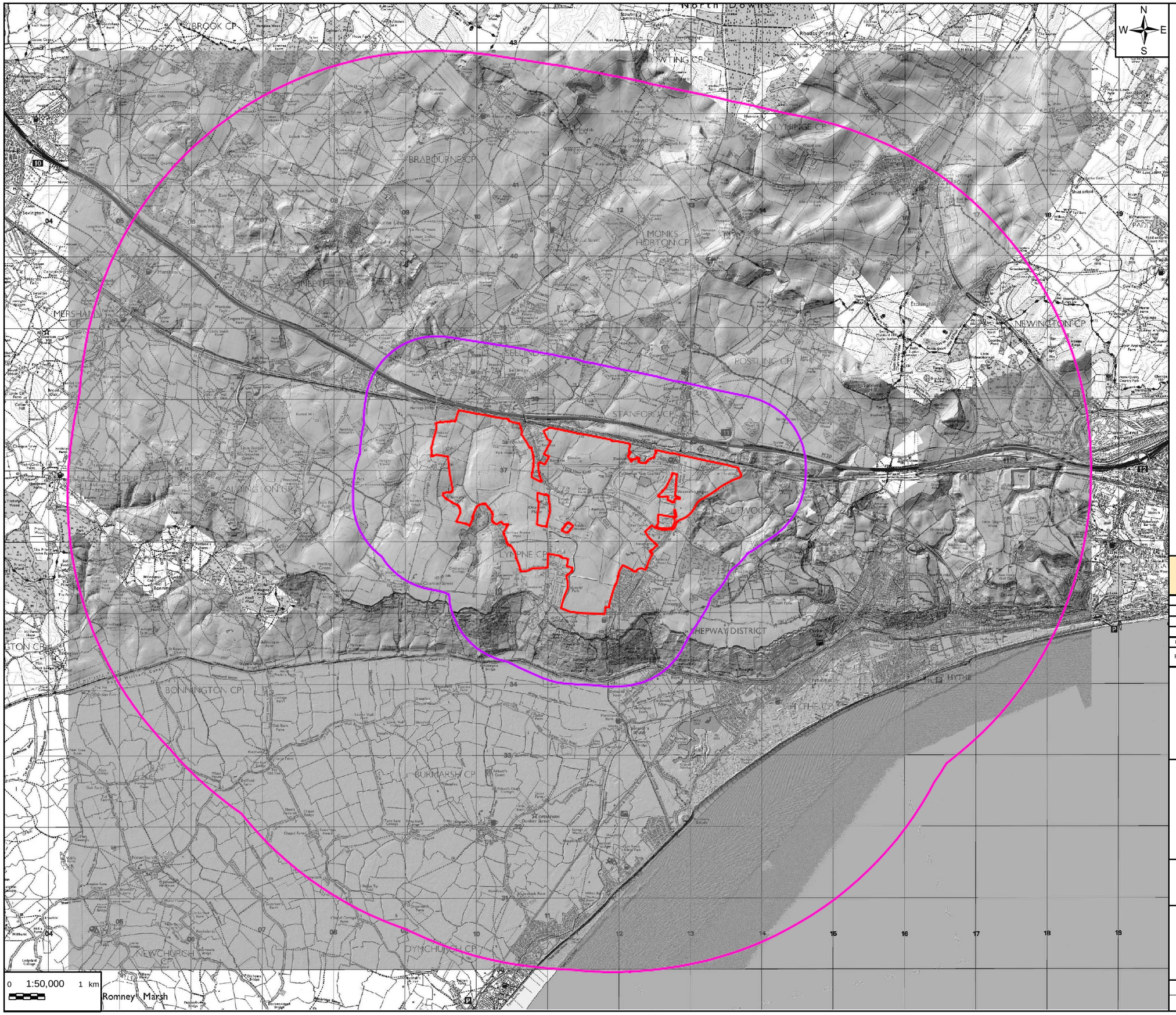
Figure 2
Barrows in 5km Study Area

scale	original size	datum	grid
1:50,000	A3	Sx	BNG



Legend

- 5km Radius
- 1km Radius
- Outline Planning Application Boundary (OPA)

Hillshade

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Figure 3
Extent of Viewshed Analysis

scale	original size	datum	grid
1:50,000	A3	Sx	BNG

APPENDIX B

Gazetteer of Barrows in the Site

Project ID Number	HER Number	Geophysics Number	Easting	Northing	Description	Site Visit Notes	Source	Within Site	Confirmed as barrow by fieldwork	Link to 360° photos
44	TR 13 NW 1	RD1	611450	137130	Bronze Age Bowl Barrow (Burial Mound), east of Barrow Hill. Excavated in 1931. Marked as 'tumulus' on OS maps and excavated in 1931. A scrap of red ochre is said to have been found.	Looks partially upstanding on LIDAR but on the ground it's hard to make out from the natural rise. Possibly slightly visible from the west, maximum height 1m and very spread. Possible view to barrow 136. No view to barrows in/west of Barrow Hill as screened by mature trees and buildings.	AP, LIDAR, Headland geophysics, trial trenching	Yes	Yes	https://theta360.com/s/bJEcfzj0Jle5XhAa4sWtjRpey
46	TR 13 NW 9	NA	610870	137360	Bronze Age burial mound, in a garden, Barrow Hill. Marked as 'tumulus' on OS maps.	Upstanding	AP, LIDAR	No	-	-

Project ID Number	HER Number	Geophysics Number	Easting	Northing	Description	Site Visit Notes	Source	Within Site	Confirmed as barrow by fieldwork	Link to 360° photos
58	TR 13 NW 186	23	610242	137029	Cropmark of a large ring ditch, to the southwest of Barrow Hill	Partially upstanding. Spread mound approx. 1.5m high max. Appears to be located at highest point of hill, clear views in all directions. No clear view to barrow 44 or 136 due to trees and buildings.	AP, LIDAR, SUMO geophysics	Yes	-	https://theta360.com/s/inW5B391wokl0jjarWPeGJEnI
113	TR 13 NW 187	24	610239	136928	Cropmark of a large ring ditch, to the southwest of Barrow Hill	Slightly upstanding. Very spread mound approx. 1m high max. Appears to be located just to south of hilltop. No clear view to barrow 44 or 136 due to trees and buildings.	AP, LiDAR, SUMO geophysics	Yes	-	https://theta360.com/s/qkPT5XpdfVLTNf31lSEamuGAa

Project ID Number	HER Number	Geophysics Number	Easting	Northing	Description	Site Visit Notes	Source	Within Site	Confirmed as barrow by fieldwork	Link to 360° photos
114	TR 13 NW 188	26	610393	136847	Cropmark of a large double ring ditch, to the southwest of Barrow Hill. Trenching revealed possible entrance, indicating possibility that monument began as a henge.	Ploughed out. Views to barrows 58, 113, 10 and possibly 115. No clear view to barrow 44 or 136 due to trees and buildings.	AP, SUMO geophysics, trial trenching	Yes	Yes	https://theta360.com/s/jN9PHhsU0SHQ94qCvUUlGb9rU
115	TR 13 NW 189	27	610249	136768	Cropmark of a ring ditch, to the southwest of Barrow Hill	Ploughed out. No clear view to barrows 58 or 113 due to topography. No clear view to barrow 44 or 136 due to trees and buildings.	AP, SUMO geophysics, trial trenching	Yes	Yes	https://theta360.com/s/cSNk5egpI5YfdXZKoMRr4lWfw
116	TR 13 NW 190	NA	610884	137270	Cropmark of a possible ring ditch, to the south of Barrow Hill	Ploughed out.	AP	No	-	-
134	NA	NA	611372	137187	Possible cropmark east of Barrow Hill. Does not show on geophysics.	Ploughed out. Cannot distinguish from the natural rise. If	LiDAR possibly shows on AP, trial trenching	Yes	No	https://theta360.com/s/2UBkr0JWwcWgIF67OZR9wrlb6

Project ID Number	HER Number	Geophysics Number	Easting	Northing	Description	Site Visit Notes	Source	Within Site	Confirmed as barrow by fieldwork	Link to 360° photos
					Trial trenching failed to locate any evidence of ditch or mound, trench completely blank.	it survives it is very spread.				
133	NA	RD2	611023	137317	Ring ditch east of Barrow Hill. Does not show as a cropmark. Trial trenching recovered post medieval finds, not considered to be a barrow.	Ploughed out.	Headland geophysics, trial trenching	Yes	No	-
135	NA	25	610352	136901	Ring ditch west of Barrow Hill. Does not appear to show as a cropmark.	Ploughed out. Clear views to barrows 58,113 and 114. No clear view to barrow 44 or 136 due to trees and buildings.	SUMO geophysics, trial trenching	Yes	Yes	https://theta360.com/s/mgr3Xy44CQsYbEljkbX3VU0uW
130	NA	1	610214	136691	Ring ditch west of Barrow Hill. Does not appear to show as a cropmark.	Ploughed out. Excavated in Trench 80 of evaluation. On gentle slope down to south, towards watercourse. No clear view	SUMO geophysics, trial trenching	Yes	Yes	https://theta360.com/s/gWP5uSYQdVGL6DBxo9zl1ZBpo

Project ID Number	HER Number	Geophysics Number	Easting	Northing	Description	Site Visit Notes	Source	Within Site	Confirmed as barrow by fieldwork	Link to 360° photos
						to other barrows due to field boundaries and topography.				
131	NA	21	610151	137246	Ring ditch west of Barrow Hill. Does not appear to show as a cropmark. Probable barrow due to trenching results.	Ploughed out. No view to other barrows in site due to location on slope facing away from them.	SUMO geophysics, trial trenching	Yes	Yes	https://theta360.com/s/dm207YEk5trDuowFA9F80iEQi
132	NA	13	610372	137149	Ring ditch west of Barrow Hill. Does not appear to show as a cropmark. Trenching revealed Iron Age pottery indicating it is IA ring ditch.	Ploughed out.	SUMO geophysics, trial trenching	Yes	No	-
156	TR 03 NE 200	NA	609856	135392	Cropmark of a ring ditch, a possible barrow, location identified from 1990 and 2008 aerial photographs and LiDAR	-	AP, LiDAR	No	-	-

Project ID Number	HER Number	Geophysics Number	Easting	Northing	Description	Site Visit Notes	Source	Within Site	Confirmed as barrow by fieldwork	Link to 360° photos
155	NA	NA	610402	135483	Possible barrow, location identified from LiDAR	-	LiDAR	No	-	-
136	NA	NA	611637	136403	Barrow identified through trial trenching. Cover soil spread over c. 35m, overlying two buried soils. No ditch associated with barrow.	-	Trial trenching	Yes	Yes	-

Gazetteer of Designated Barrows in 5km Study Area

List Entry Number	Name	Scheduled Date	Amended Date	Legacy UID	NGR	Capture Scale	Easting	Northing	Area (ha)
1009009	Bowl barrow on Arpinge Range	26/10/1994 00:00		24404	TR 18232 38517	1:10000	618232	138517	0.068
1012216	Aldington Knoll Roman barrow and later beacon	01/06/1961 00:00	28/02/1991 00:00	12822	TR 07081 35258	1:10000	607089	135259	0.308
1012269	Bowl Barrow 225m S of Tolsford Hill telecommunications mast	19/10/1964 00:00	25/02/1991 00:00	12806	TR 15962 38634	1:10000	615962	138634	0.064

List Entry Number	Name	Scheduled Date	Amended Date	Legacy UID	NGR	Capture Scale	Easting	Northing	Area (ha)
1012271	Two bowl barrows 700m east of Tolsford Plantation on Tolsford Hill	19/10/1964 00:00	25/02/1991 00:00	12807	TR 15904 38341	1:10000	615904	138341	0.180
1012275	Bowl barrow 250m west of Brockman's Bushes plantation on Tolsford Hill	19/10/1964 00:00	25/02/1991 00:00	12808	TR 16035 38316	1:10000	616035	138316	0.061
1013144	Bowl barrow 90m north of Stowting Court	28/02/1974 00:00	18/07/1991 00:00	12839	TR 11911 41625	1:10000	611909	141625	0.068
1012259	Bowl barrow on Swinyard's Hill	30/01/1952 00:00	30/12/1899 00:00:00	12823		1:10000	612792	142540	0.201

Gazetteer of Non-Designated Barrows in 5km Study Area

HER Number	Name	HER Description
TR 13 NE 20	Undated mound, Willow Wood	At the junction of two old field boundaries, upon a slight eminence, is a circular mound about 18.0m in diameter and 1.8m in height. There is no visible ditch. It is probably a bowl barrow.

HER Number	Name	HER Description
TR 13 NE 214	Early/Mid Bronze Age funerary landscape, Saltwood	Excavations carried out between 1998-2001 at the Saltwood Tunnel and Stone Farm Bridleway sites, by Canterbury Archaeology Trust and Wessex Archaeology, as part of the CTRL works. An early/mid Bronze Age funerary landscape and possible associated settlement and agricultural activity. 5 early Bronze Age ring-ditches which suggest the denuded remains of round-barrows. 3 were annular, 1 probably originally penannular, 1 was not fully revealed by the excavation. The penannular ditch may have initially been a mortuary enclosure rather than a barrow. 4 are equally spaced c.170m apart (centre-to-centre) in a roughly E-W alignment, with the fifth spaced only 75m to the east of its neighbour. They range in diameter from 15.8m to 42.5m. Only one of the barrows contained a burial - a centrally-placed crouched burial. A further crouched inhumation was located equidistant between the westernmost two barrows. Non-funary evidence consists of a single pottery-filled pit, and a N-S aligned ditch with aligns with the easternmost barrow is tentatively assigned to this phase (though as at least three of the barrows must have remained prominent features in the landscape into the Saxon period due to the Saxon cemeteries that formed around them (TR 13 NE 223), this assumption seems ill-formed).
TR 14 SE 216	Bronze Age barrow and Beaker burial, Lyminge, Kent	A Bronze Age Beaker Burial and a barrow were unexpectedly discovered in an excavation at Tayne Field, Lyminge as part of the Anglo-Saxon oriented Lyminge Archaeological Project in 2014. The Beaker burial was located in Trench 2. It was a crouched bruial with a pottery 'accessory' vessel and a perforated bone toggle. The barrow had first revealed iytself as a 20m diameter ring ditch in the geophysical survey on the site and was confirmed in April 2014 during a trial excavation. Urned and un-urned cremations were found in the midpoint of the barrow. A host of associated finds were recovered after cutting across the ring ditch including a Bronze Age copper alloy rapier or dirk, diagnostic flint and a small assemblage of animal bone as well as a copper alloy tanged chisel.
TR 13 NW 27	Site of a former barrow, near Horton Park Farm, Monks Horton	A map in Horton Priory, titled 'A Map of Land in Horton 1687' and drawn by Thomas Morris, shows a large mound with 'The Barrow' adjoining. From above and on the same level nothing is today discernible, but from below a slight rise in the ground can be seen. As the ground slopes to the south and west ploughing may have eroded its greater part away.
TR 14 SW 18	Probable barrow (remains of)	A low mound approx 24m in diameter and 0.5m in height situated on high ground above a deep combe. Its appearance, position and proximity to known barrows suggest it is the ploughed out remains of a barrow. Position surveyed at 1:2500.
TR 13 NE 12	Bitchborrow Mount ?barrow (site of)	A round barrow at Saltwood is listed by the authors who give the wrong O.S. 6" sheet (XXVI N.W.) and state that a tower is on the site. Their small distribution map shows this barrow about one and a half miles east of south of the Tolsford Hill barrows. On the highest point of Summerhouse Hill at TR 16693773 there are the footings of a small circular building measuring 3.7m in external diameter. The building is placed upon a low circular mound measuring 11.0m in diameter and 0.3m in height around which there are faint traces of a ditch. On a 'Map of Hythe' dated 1685 the building is shown as a small tower with a cupola-roof on a hill called "Bitchborrow Mount". Without excavation it is difficult to determine whether the mound is contemporary with the tower, but the name "Bitchborrow" (now Beachborough) suggests a barrow. A tumulus is listed in Saltwood.

HER Number	Name	HER Description
TR 14 SW 31	Barrow, near Combe Wood, Stowting	The vestigial remains of a barrow occur as a ridge between the road leading from Bradbourne to Stowting Common and the field behind. This is north-west of the road and from the field entrance traces of the ploughed-out portion can be seen.

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