

Stonestreet Green Solar

Archaeological Management Strategy

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1 Introduction

Introduction

- 1.1 This Archaeological Management Strategy ('AMS') has been prepared on behalf of EPL 001 Limited ('the Applicant') to set out the scope, guiding principles and methods for the planning and implementation of further archaeological mitigation works in relation to the Development Consent Order ('DCO') application for Stonestreet Green Solar ('the Project'), which is located in Ashford, Kent.
- 1.2 The Project comprises the construction, operation, maintenance, and decommissioning of solar photovoltaic ('PV') arrays and energy storage, together with associated infrastructure and an underground cable connection to the existing Sellindge Substation.
- 1.3 The Project will include a generating station (incorporating solar arrays) with a total capacity exceeding 50 megawatts ('MW'). The agreed grid connection for the Project will allow the export and import of up to 99.9 MW of electricity to the grid. The Project will connect to the existing National Grid Sellindge Substation via a new 132 kilovolt ('kV') substation constructed as part of the Project and cable connection under the Network Rail and High Speed 1 ('HS1') railway.
- 1.4 The location of the Project is shown on **ES Volume 3, Figure 1.1: Site Location Plan (Doc Ref. 5.3)** [\[APP-043\]](#). The Project will be located within the Order limits (the land shown on the **Works Plans (Doc Ref. 2.3 (B))** [\[REP1-003\]](#) within which the Project can be carried out). The Order limits plan is provided as **ES Volume 3, Figure 1.2: Order Limits (Doc Ref. 5.3)** [\[APP-043\]](#). Land within the Order limits is known as the 'Site'.
- 1.5 Areas where infrastructure development is proposed are identified by field numbers, which are shown on **ES Volume 3, Figure 2.1: Field Boundaries and Site Area Plan (Doc Ref. 5.3)** [\[APP-044\]](#). The areas of the Site where infrastructure development is proposed are referred to as follows:
 - South Western Area (Fields 1 to 9);
 - Central Area (Fields 10 to 19 and 23 to 25);
 - South Eastern Area (Fields 20 to 22);
 - Northern Area (Fields 26 to 29);
 - Project Substation (location of the Project Substation, in the north western section of Field 26);
 - 'Cable Route Corridor' (export of electricity from the Project at 132kV via underground cables (the 'Grid Connection Cable') to the Sellindge Substation) and 'Cable Route Crossing' (use of an existing cable duct under the HS1 railway or through Horizontal Directional Drilling ('HDD') beneath HS1 for the Grid Connection Cable); and

- Sellindge Substation (location of the existing Sellindge Substation).

- 1.6 This AMS follows the approach to mitigation as set out in the Kent County Council ('KCC') specification, set out in **Appendix A**, and details the archaeological mitigation proposed to reduce the impact of the Project on archaeological resources.
- 1.7 On 17 January 2024, the revised Overarching National Policy Statement for Energy (EN-1) ('NPS EN-1'), National Policy Statement for Renewable Energy Infrastructure (EN-3) ('NPS EN-3') and National Policy Statement for Electricity Networks Infrastructure (EN-5) ('NPS EN-5') came into force. These NPSs are the relevant NPSs that have effect in relation to the development to which the DCO application relates.
- 1.8 As set out in NPS EN-1¹, the determination of NSIPs must have regard to the following policy tests:

'In considering the impact of a proposed development on any heritage assets, the Secretary of State should consider the particular nature of the significance of the heritage assets and the value that they hold for this and future generations' (para 5.9.24);

'The Secretary of State should consider the desirability of sustaining and, where appropriate, enhancing the significance of heritage assets, the contribution of their settings and the positive contribution that their conservation can make to sustainable communities...' (para 5.9.25);

'When considering the impact of a proposed development on the significance of a designated heritage asset, the Secretary of State should give great weight to the asset's conservation. The more important the asset, the greater the weight should be.' (para 5.9.27); and

'The Secretary of State should give considerable importance and weight to the desirability of preserving all heritage assets. Any harm or loss of significance of a designated heritage asset (from its alteration or destruction, or from development within its setting) should require clear and convincing justification' (para 5.9.28).

- 1.9 This document presents the approach to engagement, field work management and project management that will be carried out pre-construction and during the post-excavation analysis and publication stages to inform the final design of the Project. Once the archaeological mitigation works have been completed a post excavation assessment providing the detail on the analysis to be carried out and research aims to identify and enhance knowledge following national and regional guidance will be provided to KCC by the Archaeological Contractor with a reasonable time period. This will enable to construction works to continue as programmed and provide assurance that the correct amount of post excavation analysis will be undertaken. It is considered that this will ensure any archaeological potential is fully mitigated and ensure the final design of the Project mitigates any residual risk.
- 1.10 This AMS also summarises, where applicable, the extent of previous investigations and describes the proposed mitigation works and methods that will be implemented.

- 1.11 The measures set out in this AMS are derived from the mitigation proposals presented in **ES Volume 2, Chapter 7: Cultural Heritage (Doc. Ref. 5.2 (A))** [\[AS-011\]](#).

Consultation

- 1.12 Pre-application discussions have been undertaken with KCC throughout the pre-application stage of the DCO process. A number of meetings have been held with KCC's Senior Archaeological officer, including discussions relating to the approach to the built heritage and archaeological assessments supporting the **Environmental Statement ('ES') (Doc Ref. 5.2)**. This included agreeing the written scheme of investigation ('WSI') for the targeted pre-submission archaeological evaluation (trial trenching) (**Appendix B**) and the supporting information that was provided within **ES Volume 4, Appendix 7.2: Heritage Statement (Doc Ref. 5.4)** [\[APP-072\]](#) .
- 1.13 The pre-submission evaluation fieldwork (trial trenching) was undertaken for the area of the proposed Project Substation and along the alignment of Roman Road to the southwest of the Site to help inform the design of the Project and the assessment included within **ES Volume 2, Chapter 7: Cultural Heritage (Doc. Ref. 5.2(A))** [\[AS-011\]](#). The programme of trial trenching was undertaken in accordance with the agreed WSI (**Appendix B**).
- 1.14 Post-submission a second WSI (**Appendix C**) was agreed with KCC to further inform this Archaeological Management Strategy. A total of 62 trenches were undertaken across the Site, primarily targeted at known archaeological anomalies identified from the geophysical survey results as well as "blank" areas.
- 1.15 Archaeological mitigation within this AMS has been informed by the results of the geophysical survey, targeted pre-submission evaluation fieldwork (trial trenching) (**Appendix B**) and targeted geoarchaeological test pit (**ES Volume 4, Appendix 7.1: Archaeological Desk Based Assessment (Doc Ref. 5.4)**) [\[APP-070\]](#), [\[APP-071\]](#) , the results of which have been included in **ES Volume 2, Chapter 7: Cultural Heritage (Doc. Ref. 5.2(A))** [\[AS-011\]](#) and further post-submission evaluation fieldwork (trial trenching), the results of which are provided in the **Supplementary Archaeological Trial Trenching Report (Doc Ref. 8.23)**.
- 1.16 This AMS has been prepared following discussions with KCC. This AMS is submitted for approval and forms part of the suite of management plans, included with **Book 7: Other Reports and Management Plans**, submitted in support of the Project.

Aim of the Document

- 1.17 The overarching aim of this AMS is to identify a strategy which will reduce the impact of the Project on the archaeological resource and preserve and record archaeological features. This will be achieved through a programme of multi-phased archaeological works ensuring detailed mitigation (to include evaluation, safe-guarding measures and/or excavation, watching brief, reporting) prior to construction. The AMS will: :
- Secure the review of potential archaeological assets that may be recorded, and where archaeological assets of a high archaeological significance are

encountered, and where possible and proportionate to the significance of the asset, the preservation of the asset *in-situ* will be considered, following discussion with KCC (as outlined within Section 4 of this AMS);

- Ensure preservation through recording and documentation of the archaeological resources uncovered during the trial trench evaluation, including the appropriate level of excavation; the level of mitigation being dependent upon the significance of the archaeology and the extent of harm on the archaeological resource in question; and
- Conduct a programme of post excavation assessment, analysis and publication on the results adhering to Management of Research Projects in the Historic Environment² ('MORPHE') and Historic England guidance on projects. This would be in line with paragraph 211 of the National Planning Policy Framework ('NPPF') (2023)³, which states: *"Local planning authorities should require 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 the impact, and to make this evidence (and any archive generated) publicly accessible"*.

1.18 This AMS sets out the scope, guiding principles and methods for the planning and implementation of a phased programme of archaeological mitigation which is likely to comprise evaluation; excavation; watching brief (monitoring and record); post excavation and publication. Each phase of work will require a standalone WSI post DCO consent, as secured by a Requirement in the **Draft Development Consent Order (Doc Ref. 3.1(F))** [[REP5-003](#)].

Roles and Responsibilities

1.19 The Archaeological Contractor will be appointed by the undertaker who will be made responsible for the delivery of the archaeological mitigation programme as set out in this AMS. The undertaker will aim to appoint a single contractor, however given the size and as yet unconfirmed work programme, additional contractors may be required to assist in the delivery of this programme. The undertaker will aim to ensure that the appointed Archaeological Contractor and any additional subcontracted organisations have a proven track record of working on the archaeology of Kent and to the KCC Specifications for archaeological fieldwork and reporting. This responsibility will include all on-site and off-site works, including preparation of the WSI, post-fieldwork reporting and publication.

2 Principles and Objectives

- 2.1 This section of the document describes the principles and objectives that will apply to archaeological mitigation for the Project. The principles and objectives will be applied to all archaeological work carried out across the entire Project. Archaeological mitigation (archaeological recording/preservation of archaeological remains) is required where there will be an unavoidable impact on archaeological remains and associated deposits.

Principles

- 2.2 The principles set out below seek to guide actions to ensure the conservation of heritage assets throughout the Order limits:

- The consideration of the cultural heritage of the Project as a whole should be inclusive and include archaeological remains from Palaeolithic remains up to and including remains of the last century, as well as palaeo-environmental evidence and archaeological landscape remains;
- Archaeological works should be undertaken to a high standard that adequately reflects the significance of the heritage assets within the Site;
- The design of mitigation works should take into account applicable Government guidelines on planning and archaeology, including the relevant NPS, NPPF and National Planning practice Guidance⁴;
- The Historic England series of Guidelines for Best Practice will be consulted when applicable; and
- Organisations and individuals undertaking archaeological work for the Project should do so within the ethical and professional standards set out in the Chartered Institute for Archaeologists ('CIfA') as outlined within **Section 4** of this report.

- 2.3 The archaeological mitigation approach in this AMS will be developed and implemented through an iterative phased programme of work each having a standalone WSI in line with the following parameters:

- Observe professional codes, guidance and standards;
- Adhere to the KCC Specifications for archaeological fieldwork and reporting;
- Ensure that all field staff involved in the mitigation programme are aware of the significance of the heritage assets within the Site through provision of a Project specific induction;
- Review and assess the considerable information already available from relevant prior investigations, included within **ES Chapter 7: Cultural Heritage (Doc. Ref. 5.2(A))** [\[AS-011\]](#), before designing any new works;
- Consider archaeological evidence from all periods and its contribution to the understanding of the historic landscape and its use over time;

- Only undertake trial trenching and geoarchaeological test pits in areas where there will be a direct impact through development, or where there is a need to consider management issues;
- Utilise the information provided by other disciplines (for example, geotechnical investigations/biodiversity); and
- All works must take account of all statutory designations, as well as non-designated assets identified in the Historic England Records ('HER') and during the previous phases of work.

Objectives

2.4 All those undertaking archaeological work associated with the Project will:

- Ensure a detailed iterative phased programme of archaeological work is in place to appropriately mitigate impacts of any archaeological remains due to the Project;
- Promote high quality research linked to the South East Regional Framework ('SERF') using excavation methodologies and scientific techniques to explore a transect through the landscape and investigate past settlement patterns, develop new research questions and feed back into the relevant research strategies;
- The results of archaeological investigation will be published within an appropriate publication following assessment and analysis (see Section 4 and 5 below for further details). The results of fieldwork interventions should be combined into a single report; and
- Ensure that the results of the investigations are made publicly available in an appropriate format for assimilation into the relevant HER, Online Access to the Index of Archaeological Investigations ('OASIS') and the Archaeological Data Service ('ADS').

3 Summary Of Geological, Historical and Archaeological Background

Location and Geological Background

- 3.1 The Site is located approximately 6.5km south east of Ashford, Kent and predominantly consists of agricultural land and pasture. The High Speed 1/Channel Tunnel Rail Link ('HS1') is located to the north of the Order limits. A railway line operated by Network Rail as part of the Kent Route between Ashford and Westenhanger is located adjacent to the HS1 railway line.
- 3.2 The M20 motorway lies to the north of HS1 but is significantly further north towards the west of the Site. On the opposite side of the HS1 railway line (between HS1 and the M20 motorway), there is the UK Power Networks ('UKPN') and National Grid ('NG') Sellindge Substation and a sewage treatment works. Residential dwellings of the village of Aldington are located predominantly to the south and east of the Site and residential dwellings within Stonestreet Green are located to the east. There are several watercourses passing through the Site, the largest of which is the East Stour River which passes through the area in a roughly east to west direction.
- 3.3 The underlying geology is mapped as Weald Clay (Mudstone). This is a sedimentary bedrock formed in the Cretaceous period between 133.9 and 126.3 million years ago. Variations of geology on the Site also comprise Atherfield Clay (Sandy Mudstone) and Hythe Formation (interbedded sandstone and limestone), which are both sedimentary bedrocks formed during the Cretaceous Period, between 126.3 and 113 million years ago (British Geological Survey, 2023⁵). The majority of the Site has no mapped superficial geology. Those fields which are partially or wholly located near to the East Stour River largely lie on alluvium (clay, silt, sand and gravel), ⁵. **ES Volume 3, Figure 10.5: Superficial Geology** and **Figure 10.6: Bedrock Geology (Doc Ref. 5.3)** [[APP-052](#)] provide mapping of the superficial and bedrock geology in the vicinity of the Order limits.

Historical and Archaeological Background

- 3.4 An archaeological desk-based assessment (WA 2023a⁶) (the 'DBA') (**ES Volume 4, Appendix 7.1: Archaeological Desk-Based Assessment (Doc Ref. 5.4)**) [[APP-070](#), [APP-071](#)] has been produced and submitted as part of the DCO application to investigate the known historical and archaeological background of the Site and its immediate vicinity, up to 5km in distance. The DBA was informed by a geophysical survey (Magnitude Surveys 2023⁷ also included within the DCO application as **Annex 5 to Appendix 7.1: Archaeological Desk-Based Assessment (Doc Ref. 5.4)**) [[APP-070](#), [APP-071](#)], Light Detection and Ranging ('LiDAR') data⁸ and a Site walkover. It also includes the results of targeted archaeological evaluation comprising trial trenching and geoarchaeological test pits (WA 2023b⁹, as further discussed below); and archaeological monitoring of ground investigation works (WA 2023c¹⁰). The locations of archaeological evaluations currently undertaken within the Site, overlain

on the interpretative geophysical survey results, are shown on **ES Volume 3, Figure 7.11: Summary of Archaeological Evaluations Undertaken (Doc Ref. 5.3) [APP-048]** and is provided as part of this AMS. It is not intended to repeat the same information here and what follows is a brief overview of that document, for more information please refer to the DBA (WA 2023a) included at **ES Volume 4, Appendix 7.1: Archaeological Desk-Based Assessment (Doc Ref. 5.4) [APP-070, APP-071]**.

- 3.5 The Kent HER records 18 entries within the Order limits; of these recorded entries, 15 are findspots largely found through metal detecting and are of Roman to Post Medieval date. The remaining three entries comprise Bank Road / Roman Road which bisects the central and western part of the Site and follows the alignment of a projected Roman road (HER TR 04 SE 120), and two Post Medieval farmsteads (HER MKE88378 and MKE88379). All entries are discussed in more detail in the aforementioned DBA included at **ES Volume 4, Appendix 7.1: Archaeological Desk-Based Assessment (Doc Ref. 5.4) [APP-070, APP-071]**.

Geophysical Survey

- 3.6 Geophysical (fluxgate gradiometer) survey was undertaken in 2022 (Magnitude Surveys 2023) to inform the Project and is included at **Annex 5 to ES Volume 4, Appendix 7.1: Archaeological Desk-Based Assessment (Doc Ref. 5.4) [APP-070, APP-071]**. The whole Site was surveyed, other than c.3.63 hectares of land which was not suitable for survey owing to ground conditions, or inaccessible areas such as Sellindge Substation and small areas owing to minor changes to the final Order limits.
- 3.7 The survey identified possible features of archaeological origin within the south-west of the Site (Fields 1 and 2, 4, 5, 7 and 8), including fragmented partial enclosures (Field 1) and similar more concentrated features (Field 2), possibly indicating the presence of former field systems; a possible enclosure and possible associated anomalies surrounding the enclosure (Fields 4 and 5); and two possible double-ditched trackways (Fields 7 and 8), one appearing to culminate at a sub-rectilinear enclosure. These features are undated, although their form suggests Prehistoric to Medieval date.
- 3.8 Anomalies of agricultural origin were identified, including drainage features and evidence of modern ploughing, along with mapped and unmapped field boundaries and tracks, likely of Post Medieval or Modern origin.
- 3.9 Anomalies of an undetermined origin were also identified across the Site. These may relate to archaeological, agricultural, Modern or natural origins. The impact of Modern activity was identified around field edges, surrounding pylons and buried services which may have obscured weaker anomalies. Natural variations were also identified across the area, likely from topographical changes and changes in underlying geology.

Trial Trenching (Pre-Submission)

- 3.10 Included within **Appendix B** is the WSI which was approved by KCC for targeted evaluation works at the Site during the pre-application stages of the Project. The report on trial trenching (WA 2023b) is included at **Annex 7 to ES Volume 4, Appendix 7.1: Archaeological Desk-Based Assessment (Doc Ref. 5.4) [APP-070, APP-071]**. The archaeological evaluation by trial trenching was undertaken to provide a targeted

evaluation of the Project Substation location and test for archaeological features alongside the projected route of a Roman road. This initial phase of archaeological evaluation comprised thirteen trenches, each measuring 50m by 1.8m; and four test pits, targeting the footprint of the Project Substation and its immediate environs, and the area around Roman Road.

- 3.11 The evaluation revealed evidence of activity dating to the Bronze Age (Field 26), comprising struck flint, recovered from two ditches and small pit, which could relate either to settlement or early agriculture.
- 3.12 The evaluation also found evidence of Roman settlements at Bank Farm, represented by a series of pits and postholes and two ditches cut into a deposit containing a flint blade. These pits and ditches are all aligned with anomalies identified on the geophysical survey, suggesting a likely Roman enclosure on the southwestern side of Roman Road. Roman pottery and iron nails were recovered from the deposits, suggesting settlement activity. Further Roman activity was indicated by a series of three pits and a large, shallow sub rectangular feature on the northeastern side of Roman Road, from which Roman pottery was recovered.
- 3.13 Modern deposits relating to the construction of the railway bank were also encountered. Further undated features opposite the modern farmyard for Bank Farm, may be related to Post Medieval agricultural activity.

Trial Trenching (Post-Submission)

- 3.14 Included within **Appendix C** is the WSI which was approved by KCC for targeted evaluation works at the Site post-submission of the Project. This was undertaken to provide a targeted evaluation of potential archaeological features identified by the geophysical survey, LiDAR, historical records and aerial photography to ensure a reasonable assessment of the potential archaeology within the Site was completed.
- 3.15 This phase of archaeological evaluation comprised sixty-two trenches across the Site: sixteen measured 20m in length x 1.8m in width, thirty-six 30m x 1.8m, eight 50m x 1.8m, one 40m x 1.8m and one 26m x 1.8m.
- 3.16 The evaluation revealed evidence of activity dating to the Bronze Age (Field 26), Iron Age (Field 10), Iron Age/Romano British activity (Field 2) and Medieval spread (Field 2 and Late and or Post Medieval activity within (Field 9). A number of other features including field boundaries and agricultural features were also revealed that are datable to the post medieval and modern periods. Further details are included in the **Supplementary Archaeological Trial Trenching Report (Doc Ref. 8.23)**.

4 Strategy Of Archaeological Mitigation

Mitigation Options

4.1 There are several methods by which preservation by record can be achieved:

- Evaluation
- Preservation *in-situ*;
- Watching Brief; and / or
- Archaeological Excavation.

4.2 These are discussed in more detail below.

Evaluation

4.3 An archaeological evaluation will, if necessary, precede mitigation works and provide and understanding of the condition, extent and character of archaeological features within defined mitigation areas.

Preservation *in-situ*

4.4 Should archaeological assets be recorded of a high (national value/importance) archaeological significance the archaeology will be preserved *in situ* by design, either through construction method mitigation measures or avoided entirely. Such measures would be proportionate to the significance of the asset indicating preservation of such significant assets *in-situ* will be considered following discussion with KCC. This approach could utilise micro siting of infrastructure around the said significant asset in consultation with KCC.

4.5 Should an area be selected for preservation *in-situ*, and Project infrastructure not sited above it, a fenced buffer zone will be constructed around the area selected and maintained during the construction phase of the Project. This measure is secured within the **Outline Construction Environmental Management Plan ('CEMP')** (Doc Ref. 7.8(A)) [[REP1-044](#)].

Watching Brief

4.6 Watching briefs represent a continuous procedure aimed at the proactive identification, examination, and documentation of archaeological remnants during the construction phase of the Project. These briefs are executed concurrently with groundwork operations, during the implementation of construction works requiring excavation of foundation trenches and utility trenching.

4.7 Typically, this method is used for locations that have displayed certain archaeological potential based on prior examinations, background research, and other factors, yet without sufficient justification for extensive procedures like strip, map, and sample excavations, or detailed excavations.

- 4.8 Watching briefs would generally entail the presence of a single certified archaeologist who monitors all intrusive groundwork activities until either the work is finished or the possibility of uncovering archaeological remains has been thoroughly explored within the agreed remit of a WSI.
- 4.9 If an archaeological discovery is made during the process, it would necessitate discussions with both the undertaker and the Archaeological advisor. Adequate time and resources would need to be allocated to facilitate the appropriate excavation and documentation of this discovery before construction activities can resume.
- 4.10 Subsequent to discussions with the Archaeological advisor, the watching brief would cease in cases where no archaeological features and /or deposits have been identified through monitoring and the area would be handed over directly to the construction teams responsible for the development.

Archaeological Excavation

- 4.11 If archaeological remains are present, field evaluation defines their character, extent, quality and preservation, reports on them and enables an assessment of their significance in a local, regional, national or international context as appropriate' (ClfA 2023a¹¹). Archaeological excavation involves a programme of intrusive fieldwork with defined research objectives which examines, records and interprets archaeological deposits, features and structures and, as appropriate, retrieves artefacts, ecofacts and other remains within a specified area or site on land, in an inter-tidal zone or under water (2023b¹⁷).
- 4.12 The location of any trial trenches (generally between 25 m and 30 m in length, and up to 1.8 m wide) will be dependent on ecological, utilities and ground condition constraints.
- 4.13 Following the backfilling of the trenches, any records (written, drawn, photographic, digital etc., as well as environmental samples and artefacts) generated during the evaluation will be subject to a programme of assessment, followed by appropriate analysis and reporting.
- 4.14 A structured programme of palaeoenvironmental sampling appropriate to the specific aims of the Project will be implemented. The strategy and methodology for the sampling of deposits will be in accordance with English Heritage Centre for Archaeology Guidelines "*Environmental Archaeology – A guide to the theory and practice of methods, from sampling and recovery to post-excavation*" (2011)¹².
- 4.15 An archive suitable for long-term storage will be prepared and placed within an appropriate repository. The results will be made available to the public and be submitted on the Online Access to the OASIS and ADS database. A final report of the evaluation will be sent to KCC.

Written Scheme of Investigation

4.16 A WSI is a document that relates to elements of archaeological fieldwork and details specific measures to be applied or adopted as part of the programme of archaeological mitigation works. The WSI will:

- Identify the aims and objectives for each element of the archaeological works;
- Summarise the archaeological and historical background, including the results of the work undertaken to date;
- Detail the proposed methodologies that will be implemented and form the central basis by which the investigation can be measured;
- Provide details on the provision of site welfare and plant equipment, in accordance with archaeological requirements and relevant Health and Safety legislation as appropriate;
- Include details of a proposed timetable/programme for archaeological works, post excavation and reporting following completion of works;
- Detail proposed archiving;
- Provide details of company Health and Safety Policy, evidence of insurance and a risk assessment for the Project; and
- Provide details of any external specialists and other third parties to be used in the preparation of the fieldwork reports.

4.17 The WSI will conform to guidelines and standards set out in the following documents, or such equivalent applicable standards as may be in place at the time of the works being carried out:

- Standard for archaeological field evaluation, Chartered Institute for Archaeologists: Reading (CIfA 2023a)¹³;
- Standards and guidance for the collection, documentation, conservation and research of archaeological materials, Chartered Institute for Archaeologists: Reading (CIfA 2020a¹⁴);
- Code of conduct: professional ethics in archaeology, Chartered Institute for Archaeologists: Reading (CIfA 2022¹⁵);
- Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives, Chartered Institute for Archaeologists: Reading (CIfA 2020b¹⁶);
- Standard and guidance for archaeological excavation, Chartered Institute for Archaeologists: Reading (CIfA 2023b¹⁷);
- Standard and guidance for an archaeological watching brief, Chartered Institute for Archaeologists: Reading (CIfA 2023c¹⁸); and,
- Management of Research Projects in the Historic Environment: The MoRPHE Project Managers' Guide, Historic England: London (HE 2015¹⁹).

4.18 In addition, the following KCC specifications will be adhered to, or such equivalent specifications as may be in place at the time of the works being carried out:

- KCC Heritage Specification for an archaeological watching brief forming a phase of programme of archaeological works;
- KCC Manual of Specifications Part B: Mitigation – Specification for detailed palaeolithic excavation;
- KCC Manual of Specifications Part B: Specification for preliminary evaluation of quaternary deposits and palaeolithic potential;
- KCC Manual of Specifications Part B: Generic specification requirements for desk-based assessment of geoarchaeological potential;
- KCC Manual of Specifications Part B: Mitigation – strip, map and sample requirements;
- KCC Manual of Specifications Part B: Evaluation – trial trenching requirements; and
- KCC Palaeolithic watching brief Part C: Mitigation – palaeolithic archaeological watching brief.

Approach to Mitigation

- 4.19 The assessment undertaken to date has identified low to moderate archaeological potential across the majority of the Site. The geophysical assessment identified a number of areas of potential archaeology which were assessed by the targeted trial-trenching with only limited areas of archaeology identified.
- 4.20 An approach to mitigation where archaeology was identified, Fields 2, 9, 10, and 26, will be agreed with KCC prior to any construction activities. This may include preservation in-situ, preservation in record or watching brief.
- 4.21 The post DCO consent archaeological investigation works in areas where archaeology has not been identified will be limited to a reasonable number of informed trenches and/or geo-archaeological test pits across the Site at locations to be agreed with KCC.
- 4.22 An Archaeological Contractor will be commissioned to undertake this work and will submit the detailed WSIs to the local planning authority for approval prior to commencement, such approval to be following consultation with KCC.
- 4.23 Interpretation boards will be included at agreed locations along the existing Public Rights of Way network to enable the local community to better understand the archaeology of the area.

Decommissioning

- 4.24 Archaeological mitigation will be assessed following review of the decommissioning works and will be agreed with KCC prior to decommissioning works being undertaken.

5 General Mitigation Methodologies

- 5.1 The following methodologies will be applicable to both the archaeological monitoring and excavation and will be reflected in any WSI submitted to the local planning authority for approval. All fieldwork will be managed by a full member (MCIfA) of the ClfA with the archaeological fieldwork delivery undertaken by a Registered Archaeological Organisation ('RAO') to ensure quality of fieldwork delivery. All fieldwork will follow the KCC specification for archaeological fieldwork and reporting, set out in **Appendix A** as will specialist guidance from the Historic England series "Guidelines for Best Practice".

Programme

- 5.2 Prior to commencement of construction of any phase of the authorised development, the undertaker / Archaeological Contractor will identify any areas where a programme of archaeological investigation is required within that phase and the measures to be taken to protect, record or preserve any significant archaeological remains that may be found. Details of this will be submitted to ABC and KCC. These details will include information on the proposed start and end dates for on Site works, as well as the proposed duration per mitigation area. The programme will also account for any post-excavation assessment and reporting.

Health and Safety

- 5.3 All work will be carried out in accordance with the Health and Safety at Work etc. Act 1974 and the Management of Health and Safety at Work Regulations 1999, and all other relevant Health and Safety legislation, regulations and codes of practice in force at the time for the fieldwork.
- 5.4 Prior to commencement of construction, a Risk Assessment and Method Statement ('RAMS') for the work will be prepared by the Archaeological Contractor and submitted to the undertaker for review and acceptance. A copy can be issued to KCC upon request.
- 5.5 Personal protective equipment ('PPE') requirements will be subject to review by the undertaker; however, these will be in line with Health and Safety requirements and will be confirmed following the appointment of an Archaeological Contractor.

Access

- 5.6 Access will be arranged by the undertaker for the Archaeological Contractor to undertake archaeological investigations, following identification of relevant hazards, restrictions, permits and relevant qualifications, in advance of commencement of the construction phase.

Machine and Hand Excavation

- 5.7 All type of archaeological works and methodologies will be detailed within appropriate written scheme of investigation (WSI). For example, evaluative measures will require appropriate WSIs and methodology, the same with mitigation measure such as strip, map and sample (SMS) and watching brief will require appropriate WSIs. All excavation measures will be detailed within a phase programme of works showing the reasoning behind the mitigation strategy, defining appropriate conservation measures, preservation in situ or preservation by record, archaeological excavation and investigation.
- 5.8 Machine excavation will be under the instruction of a sufficiently experienced and qualified archaeologist, with mechanical excavators equipped with a toothless ditching bucket and under constant archaeological supervision.
- 5.9 The archaeological features and deposits encountered will be excavated by hand, and hand cleaning will also replace mechanical excavation in all instances where very sensitive features or finds are encountered to prevent unnecessary damage.
- 5.10 Exposed archaeology must be investigated sufficiently to establish its nature, extent and date, unless deemed to be of sufficient importance to require preservation *in-situ*, in which case the undertaker and KCC will be contacted by the Archaeological Contractor to discuss any additional measures (ballast system) that may be required.
- 5.11 Sampling of archaeological features will be dependent on feature type but will be sufficient to enable a basic understanding of the feature.
- 5.12 The depth and complexity of archaeological features and deposits within each area exposed will be ascertained unless Health and Safety constraints deem otherwise. Where features cannot be hand excavated the undertaker and KCC will be informed by the Archaeological Contractor.

Recording and Sampling

- 5.13 All excavated archaeological contexts will be recorded in full through detailed written context records, which will include details of extent, location, relationships, samples, finds, and cross-references to any relevant contexts.
- 5.14 All features will be planned at an appropriate scale, either digitally or by hand, as well as feature cross sections, and photographed accordingly. These plans and the photographic record will be included in any final reporting.
- 5.15 In addition, all finds, and environmental samples will be retained and recorded in order to provide dates and assist in the interpretation of form and function of any archaeological features or deposits identified.
- 5.16 All finds and samples will be collected and treated in accordance with the relevant guidance, including:

- Standard and guidance for the collection, documentation, conservation and research of archaeological materials (ClfA 2020a);
- Standards in the Museum Care of Archaeological Collections (Museums and Galleries Commission 1992)²⁰; and
- Environmental Archaeology: a guide to theory and practice of methods, from sampling and recovery to post-excavation (Historic England 2011)²¹.

Human Remains and Treasure

- 5.17 Details of the treatment of human remains or treasure discovered the construction phase are set out in the **Outline CEMP (Doc Ref. 7.8(A))** [\[REP1-044\]](#).

Post-Excavation Analysis and Reporting

- 5.18 Post-excavation analysis and reporting will be undertaken in accordance with the requirements of the ClfA's Standard and guidance for archaeological excavation and Standard and guidance for the collection, documentation, conservation and research of archaeological materials (ClfA 2020a) and the KCC Specification for archaeological fieldwork and reporting. It is recognised that post ex requirements for evaluation are very different to those needed for excavation and therefore this will be indicated within the individual WSIs and will follow the criteria set out by KCC regrading archaeological investigation and post excavation assessment.

Archive Preparation and Deposition

- 5.19 Adequate resources will be provided during fieldwork to ensure that records adhere to the ClfA's Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives (ClfA 2020b).
- 5.20 Upon completion of the finalised report, the report and any data or other documentation produced during the post-excavation assessment process will be integrated into the Site archive. The Site archive will include all applicable Project records and cultural material produced by the evaluation and will be prepared in accordance with Guidelines for the Preparation of Excavation Archives for Long Term Storage (Brown 2011) and A Standard Guide to Best Practice for Archaeological Archiving in Europe (Perrin et al 2014).
- 5.21 The results, including should no archaeology be revealed, will be uploaded onto the online OASIS form at <http://oasis.ac.uk/>, or such equivalent website as may be in place at the time of the works being completed, and once the reporting is in the public domain by submission to the KCC and Historic England National Record of the Historic Environment.

Appendix A: KCC Specifications

EVALUATION – TRIAL TRENCHING REQUIREMENTS

1. Introduction

- 1.1 Archaeological trial trenching involves the sampling of a site to determine whether archaeological remains are present and if so, to assess their character, extent, date, condition and potential importance. Trial trenching will aim to determine, as far as is practicable and without comprising the integrity of important archaeological deposits, the full stratigraphic sequence at the site, including information on the 'natural' substrate and soil conditions.

2. General Requirements

- 2.1 Trial trenching will be carried out by archaeological organisations (from here on referred to as 'the Archaeological Contractor') acceptable to the relevant Local Planning Authority, with recognised experience and expertise in the specified type of work to be undertaken. Registration with the Institute of Field Archaeologists (IFA) as a Registered Archaeological Organisation (RAO) will normally be considered as an indicator, but not a prerequisite, of such expertise and experience. A good working knowledge of the archaeology of Kent will also be considered highly desirable.
- 2.2 Prior to any work being undertaken the Archaeological Contractor will inform the County Archaeologist and communicate details of the proposed team, including (if required) CVs for senior staff and specialists. Senior staff and specialists will need to demonstrate an appropriate level of experience and expertise and should preferably be, where appropriate, Members of the Institute of Field Archaeologists (IFA).
- 2.3 Prior to undertaking the trial trenching the Archaeological Contractor will need to demonstrate that the necessary resources are in place to undertake the work, through to reporting. The Archaeological Contractor will have available appropriate specialists necessary to support the successful completion of the archaeological fieldwork and post-excavation work.
- 2.4 The work will be supervised on site at all times by a member of staff with the required level of experience and who will be responsible for the conduct of on-site work.

3. Pre-site Requirements

- 3.1 Prior to undertaking trial trenching the Archaeological Contractor will have gathered and considered the following information:
- Relevant information on the County Historic Environment Record (HER) held by Kent County Council and maintained by the Heritage Conservation Team;
 - Any earlier reports of fieldwork relevant to the site;

- Solid and drift geology;
- Geotechnical site investigation data (if available);
- Any desk-based studies of the site.

3.2 In certain circumstances the following will also be considered:

- Relevant published secondary sources
- Relevant historic maps held at the Centre for Kentish Studies
- Aerial photographs where cropmarks are considered to indicate archaeology on or close to the site.

3.3 The Archaeological Contractor will ensure that all reasonable measures have been taken to identify any constraints to undertaking the evaluation trenching. The Archaeological Contractor will seek information on the presence of services, any ecological constraints, the presence of Public Rights of Way, the presence of contaminated land or any other risks to health and safety.

3.4 The Archaeological Contractor will make provisional arrangements for the deposition of the site archive with an appropriate museum or suitable repository agreed with the County Archaeologist. The Archaeological Contractor will obtain a provisional accession number for the site archive from the recipient museum (except where the museum prefers to issue an accession number following completion of fieldwork) and any guidelines from the recipient museum regarding deposition of the site archive.

3.5 Full copies of the Specification must be issued to the field officer responsible for on-site work and a copy of the agreed Specification and any additional method statements must be available on site at all times. The team carrying out the trial trenching must be familiar with the Specification and have access on site to any previous evaluation or survey reports.

3.6 The Archaeological Contractor will inform the County Archaeologist of the start date of the work (at least five working days before) and arrange for monitoring visits to be undertaken, using the Site Fieldwork Notification Form (see Appendix II). The Archaeological Contractor will continue to keep the County Archaeologist informed of the progress of work and will notify the County Archaeologist immediately if particularly important archaeological remains are encountered.

4. Objectives

4.1 The purpose of the evaluation is to establish whether there are any significant archaeological deposits at the site that may be affected by the proposed development.

4.2 The evaluation is thus to

- a) ascertain the extent, depth below ground surface, depth of deposit, character, date, significance and condition of any archaeological remains on site;

- b) establish the extent to which previous development and/or other processes have affected archaeological deposits at the site; and
- c) establish the likely impact on archaeological deposits of the proposed development.

5. Scope of trial trenching

- 5.1 The layout and number of trenches excavated will be in accordance with the Specification, details of which are given in Part A. Any amendment to trench design due to on-site constraints will be agreed with the County Archaeologist in advance of the work being undertaken.
- 5.2 Particular issues that will be addressed by the evaluation are set out in part A of this specification.

6. Machine and Hand Excavations

- 6.1 All machine excavation of trial trenches will be carried out under constant archaeological direction by a suitably experienced archaeologist familiar with the ground conditions anticipated on the investigation site.
- 6.2 Machine excavation of trial trenches will be undertaken by a mechanical excavator using a flat-bladed bucket. No mechanical excavators, earthmoving or other vehicles will travel within any excavated trench until it has been signed off by the County Archaeologist or specific agreement has been reached to enable re-stripping.
- 6.3 The Archaeological Contractor will maintain a constant watch and closely inspect on an ongoing basis surfaces exposed during the course of machining. Surfaces will be maintained clear of loose spoil.
- 6.4 Subject to additional requirements of the landowner or client, turf, topsoil and other distinct deposits will be stored separately and at least 1 metre from the edge of the evaluation trench.
- 6.5 Machine-excavated deposits and the exposed surface will be regularly scanned for the presence and collection of artefacts. Exposed surfaces and excavated spoil will be scanned by metal detector.
- 6.6 The excavation by machine is to be taken down to the top of any significant archaeological level or to the top of 'natural' subsoil where no archaeological deposits have been found at a higher level. In the event of significant archaeological deposits being encountered the County Archaeologist is to be informed immediately. Some further limited excavation may be required to clarify the nature, character and date of the archaeological deposits but the primary objective is to establish the presence/absence of archaeological deposits, their depth and extent.

- 6.7 Where complex archaeological stratification is encountered, deposits will be left in situ and measures to assess the depth of this stratification agreed with the County Archaeologist. Where modern features are seen to truncate the archaeological stratification, then these will be carefully removed without damage to surrounding deposits to enable the depth of stratification to be assessed.
- 6.8 If archaeological remains of limited significance are found to be present cutting through or overlying soils (e.g. colluvium) which conceal lower archaeological horizons then these will need to be recorded and investigated prior to removal of the underlying soil with the agreement of the County Archaeologist.
- 6.9 Machine excavation from the surface must be taken down in spits of no more than 100mm thickness to ensure that deposits and features are not over-excavated and that any artefacts/biological evidence in the soil are recorded.
- 6.10 Test sondages may need to be excavated through 'natural' subsoil in trial trenches to confirm that the solid geology has been reached. Such sondages will be positioned to avoid damage to archaeological remains.

7. Investigation and Sampling Strategy

- 7.1 Archaeological features will generally only be sampled sufficiently to characterise and date them. Full excavation of features will not be undertaken at this stage unless otherwise agreed with the County Archaeologist. Care will be taken not to damage archaeological deposits through excessive use of mechanical excavation.
- 7.2 Where necessary the surface and sections of trenches will be hand cleaned to define archaeological deposits and features clearly.
- 7.3 Measures will be taken to protect particularly significant, valuable or sensitive archaeological remains from exposure, accidental damage and / or theft.
- 7.4 Exposed surfaces will be left for a minimum of 48 hours to allow weathering-out of features to occur. No trenches will be backfilled until agreed with the County Archaeologist.

Burial Remains

- 7.5 Inhumation and cremation burials will normally be left in-situ for the purposes of evaluation. Subject to agreement with the County Archaeologist, graves may be partially excavated to confirm the presence of human remains and their state of preservation but skeletal remains will be left in situ. Graves will be scanned by metal detector to assess whether any grave objects are likely to be present.
- 7.6 Inhumation and cremation burials which are in a fragile state and are likely to

be damaged by the reinstatement of evaluation trenches will be excavated and lifted subject to agreement with the County Archaeologist.

- 7.7 The Archaeological Contractor will put in place arrangements to ensure the security, protection from deterioration and damage, and the respectful treatment of human remains and burial goods.
- 7.8 On sites where burial remains are expected the Archaeological Contractor will submit to and agree with the County Archaeologist detailed procedures for the assessment, recording and, where necessary, the excavation of inhumation and cremation burials.
- 7.9 The Archaeological Contractor will have available within the team or on call an appropriately qualified and experienced osteoarchaeologist to supervise the excavation and removal of any human remains (where this is necessary) from the site. The Archaeological Contractor will use an appropriately qualified and experienced archaeological conservator to assist, where appropriate, the lifting of human remains and grave goods / cremation vessels.
- 7.10 In the event that human burials are discovered, a Ministry of Justice Licence will be required (in accordance with Section 25 of the Burial Act 1857) before the remains can be lifted. The need for a Ministry of Justice Licence applies to both inhumation and cremated remains. Application for a Licence will be made by the Archaeological Contractor. The Archaeological Contractor is to comply with the conditions of the Licence and discuss any requirements of that Licence which conflict with the agreed method of investigation with the County Archaeologist.

8. Finds recovery processing and treatment

- 8.1 All artefacts recovered during the excavations on the site are the property of the Landowner. They are to be suitably bagged, boxed and marked in accordance with the United Kingdom Institute for Conservation, *Conservation Guidelines no.2* and on completion of the archaeological post-excavation programme the landowner will arrange for them to be deposited in a museum or similar repository agreed with the County Archaeologist and the Local Planning Authority.
- 8.2 Artefacts will be excavated carefully by hand. The Archaeological Contractor will use an appropriately qualified and experienced archaeological conservator to assist in the lifting of fragile finds of significance and / or value.
- 8.3 Artefacts will be collected and bagged by archaeological context. The location of special finds will be recorded in three dimensions. Three-dimensional recording of in-situ flint working deposits will be carried out.
- 8.4 Where appropriate to address the research objectives of the archaeological evaluation, sieving of deposits will be undertaken to maximise recovery of

small artefacts. A strategy for such sieving will be agreed in advance with the County Archaeologist.

- 8.5 Records of artefact assemblages will clearly state how they have been recovered, sub-sampled and processed.
- 8.6 Excavated artefacts will be bagged upon recovery or placed in finds trays. They must not be left loose on site.
- 8.7 **Treatment of treasure** - Finds, discovered by the Archaeological Contractor, falling under the statutory definition of Treasure (as defined by the Treasure Act of 1996 and its revision of 2002) will be reported immediately to the relevant Coroner's Office, the Kent Finds Liaison Officer (FLO) who is the designated treasure co-ordinator for Kent, the landowner and the County Archaeologist. A Treasure Receipt (obtainable from either the FLO or the DCMS website) must be completed and a report submitted to the Coroner's Office and the FLO within 14 days of understanding the find is Treasure. Failure to report within 14 days is a criminal offence. The Treasure Receipt and Report must include the date and circumstances of the discovery, the identity of the finder (put as unit/contractor) and (as exactly as possible) the location of the find.
- 8.8 All metal objects, other than late post medieval objects, will be X-rayed unless otherwise agreed with the County Archaeologist.

9. Archaeological Science and Environmental Sampling

- 9.1 A structured programme of environmental sampling appropriate to the aims of the evaluation will be implemented. The strategy and methodology for the sampling, recording, processing, assessment, analysis and reporting of deposits with environmental archaeology potential will be in accordance with English Heritage Centre for Archaeology Guidelines "Environmental Archaeology – A guide to the theory and practice of methods, from sampling and recovery to post-excavation" (March 2002). Any variation to this guidance will be agreed in advance with both the County Archaeologist and the English Heritage Regional Scientific Advisor. Particular note will be taken of the following requirements.
- 9.2 The Archaeological Contractor will use an appropriately qualified and experienced geo-archaeologist to record any deposits of particular significance such as buried soils or advise on depositional processes.
- 9.3 An appropriately qualified and experienced environmental archaeologist will devise and supervise the implementation of the environmental sampling strategy.
- 9.4 The advice of the English Heritage Regional Scientific Advisor is to be sought regarding specialist sampling requirements and any scientific applications relevant to the archaeological evaluation of this site.

- 9.5 Where deposits are dry, bulk samples for the recovery of charred plant remains, small bones and finds, will be taken from sealed and datable features such as pits, ditches, hearths and floors. Each context will normally be sampled. The size of the sample is expected to be in the range of 40-60 litres per context or 100% of smaller contexts. Samples will not be taken from the intersection of features.
- 9.6 For large features / spreads appropriate consideration will be given to sampling on a grid system if this fits in with the aims of the evaluation.
- 9.7 Where good conditions for the preservation of bone have been identified, all large bones will be collected by hand and sieving of bulk samples up to 100 litres will be undertaken as appropriate.
- 9.8 Mollusc samples of 2 litres each will be taken vertically from appropriate sections to investigate the changes of vegetation through time.
- 9.9 Where deposits are wet, waterlogged or peaty, monoliths will be taken along cleaned vertical surfaces for the retrieval of pollen, diatoms, ostracods and foraminifera. The numbers to be taken will be agreed with the County Archaeologist.
- 9.10 For wet, waterlogged or peaty deposits, bulk samples of 20 litres will be taken from visible layers or spits for the retrieval of plant macro-remains and insects.
- 9.11 Environmental samples from dry deposits will normally be processed by flotation following the evaluation fieldwork and the residues will be sorted to retrieve small bones, small finds and charcoal that has not floated. Environmental samples from wet deposits will normally be sent to specialists for processing in laboratory conditions. The Archaeological Contractor will agree with the County Archaeologist any necessary delay in completion of the reporting of the evaluation to enable provisional results to be included.
- 9.12 The Archaeological Contractor will make appropriate provision for the application of scientific dating techniques such as radiocarbon, dendrochronology, archaeomagnetic dating, OSL and thermoluminescence dating. The advice of the English heritage regional Scientific Advisor will be sought in advance of the application of these techniques. The Archaeological Contractor will agree with the County Archaeologist any necessary delay in completion of the reporting of the evaluation to enable provisional results to be included.
- 9.13 Where appropriate the guidance in the following English Heritage papers will be followed:
- "Guidelines on the recording, sampling, conservation, and curation of waterlogged wood" 1996

- “Dendrochronology – guidelines on producing and interpreting dendrochronological dates” 1997
- “Archaeometallurgy” 2001
- “Environmental Archaeology: A guide to the theory and practice of methods, from sampling and recovery to post-excavation” 2002
- “Human bones from Archaeological Sites: Guidelines for Producing Assessment Documents and Analytical Reports” 2004
- “Geoarchaeology” 2004
- “Wet Wood and Leather”
- “Archaeomagnetic Dating: Guidelines on producing and interpreting archaeomagnetic dates” 2006
- “Guidelines on the X-radiography of archaeological metalwork” 2006

10. Recording

- 10.1 All trenches, structures, deposits and finds will be recorded according to accepted professional standards. Sufficient data must be recorded to allow the required level of assessment and reporting (see section 11).
- 10.2 Recording must be carried out to a sufficiently high standard to provide a full record of the deposits evaluated, including in trenches where no archaeology is identified.
- 10.3 All features, deposits and finds are to be recorded according to accepted professional standards.
- 10.4 All archaeological contexts are to be recorded individually on context record sheets. A further more general record of the work, comprising a description and discussion of the archaeology, is to be maintained as appropriate. Context sheets are to be primarily filled in by the archaeologist excavating the feature or deposit.
- 10.5 A plan to indicate the location of the boundaries of the evaluated area and the site grid is to be drawn at a scale of 1:1250 (or a similar appropriate scale). Plans indicating the location of the excavated trenches and the location of all archaeological features encountered are to be drawn at an appropriate scale. An overall site plan is to be maintained at a scale of 1:100 or larger scale where appropriate. Sections will be drawn at a scale of 1:10. Significant archaeological features will normally be drawn in plan at a scale of 1:20 or 1:10 if appropriate. All detailed plans and sections are to be related to the 1:100 or 1:1250 plans. The 1:1250 and 1:100 plans are to be accurately related to the National Grid.
- 10.6 Long Sections indicating the full stratigraphic sequence will be drawn for all trenches. Where a very simple sequence is revealed representative sections (minimum 1m wide) at each end of the trench will be sufficient, but where more complex stratigraphy is encountered, complete trench sections will be drawn. In the case of complex stratigraphy, all four sections will be drawn.

- 10.7 All plans and sections are to be levelled with respect to OD.
- 10.8 All plans and sections are to be drawn on polyester based drafting film and clearly labelled.
- 10.9 A full black and white and colour (35mm transparency) photographic record of the work is to be kept. The photographic record is to be regarded as part of the site archive.
- 10.10 The Archaeological Contractor will keep a day to day digital photographic record of the investigation.
- 10.11 The Archaeological Contractor will ensure that the complete site archive including finds and environmental samples are kept in a secure place throughout the period of evaluation and post excavation works.
- 10.12 The site archive is to be consolidated after completion of the evaluation, with all site drawings inked-in, and records and finds collated and ordered as a permanent record.

11. Reinstatement and completion of fieldwork

- 11.1 On completion, trenches will be backfilled, reinstated and left in a safe state to the requirements of the landowner / client.
- 11.2 Where vulnerable archaeological deposits remain within trial trenches these will be appropriately protected from damage as part of the reinstatement. Consideration will be given to providing a marker in backfilled trenches to highlight vulnerable archaeological deposits should re-excavation be necessary.
- 11.3 On completion of fieldwork the Archaeological Contractor will complete the relevant section of the Fieldwork Notification Form and submit it to the County Archaeologist.

12. Reporting

- 12.1 Within three weeks of completion of the evaluation fieldwork (or longer in case of complex sites as agreed with the County Archaeologist) the Archaeological Contractor will produce a report, copies of which (as a minimum) are to be provided to:
 - the Developer
 - the County Archaeologist
 - the Local Planning Authority
 - the Local Archaeological Society

- 12.2 When submitting the report to the County Archaeologist the Archaeological Contractor will provide written confirmation that the report has been submitted to the above parties.
- 12.3 If the Archaeological Contractor is required, contractually, only to submit reports directly to the developer or their agent, the Archaeological Contractor must inform the County Archaeologist in writing that they have completed the report and whom it has been forwarded to. The Archaeological Contractor must ensure that the developer is made aware of the need to circulate the report as in 12.1 above.
- 12.4 The Archaeological Contractor may determine the general style and format of the evaluation report but it must be completed in accordance with this specification. The report must provide sufficient information and assessment to enable the County Archaeologist and the Local Planning Authority to reach an informed decision regarding any further mitigation measures that may be required and to stand as an appropriately detailed report on the archaeological fieldwork for future research.
- 12.5 Reports that do not provide sufficient information or that have not been compiled in accordance with the relevant sections of this specification will be returned to the Archaeological Contractor for revision and resubmission.
- 12.6 The report will be submitted to the County Archaeologist in a heat-bound hard-copy and in digital format. The digital copy will be supplied in .pdf format and will contain all text, images and plans present in the hard-copy report in a single .pdf file. The medium will be a CD-ROM formatted according to ISO 9660:1999.
- 12.7 **Report Format** - The final evaluation report will include as a minimum:
- 12.7.1 An **Abstract** summarising the scope and results of the archaeological evaluation.
- 12.7.2 An **Introduction** including:
- the location of the site with a National Grid Reference for the centre sufficient to locate the site to 1m accuracy (e.g. TQ 55555 77777 or easting: 555555, northing: 177777);
 - an account of the background and circumstances of the work;
 - a description of the development proposals, planning history and planning reference together with the archaeological condition (where appropriate);
 - the nature of potential impacts arising from the proposals;
 - the scope and date of the fieldwork, the personnel involved and who commissioned it;
- 12.7.3 An account of the **Archaeological Background** of the development site including:
- geology, soils and topography;

- any known existing disturbances on the site;
- background archaeological potential of the site. This will include a summary of the known Historic Environment Record entries within 500m of the boundaries of the site (or wider where appropriate). The HER entries will be quoted with their full KHER identifier (e.g. TR 36 NW 12);
- summary of any previous phases of archaeological investigation at the development site;

12.7.4 The **Methodology** employed during the evaluation must be detailed in the report. Any aims and objectives specified in the specification will be included as will any further objectives identified during the course of the evaluation. Constraints on the evaluation will also be described.

12.7.5 The report will include a quantification of the project archive contents, their state and future location.

12.7.6 The **Results** of the evaluation field work will be described trench by trench. This description must include for each trench:

- the dimensions of the trench;
- the nature and depth of overburden soils encountered;
- description of all archaeological features and finds encountered in each trench, their dimensions, states of preservation and interpretation;
- a description of the geological subsoil encountered in each trench;
- heights related to Ordnance Datum for a sufficient number of features and deposits. Where the trench results are complex a table showing the dimensions and heights of features and deposits will be included for each trench.
- for complex stratigraphy a Harris Matrix diagram.

12.7.7 The **Finds** recovered during the course of the evaluation will be described, quantified and assessed by artefact type within the evaluation report. The report will also provide an indication of the potential of each category of artefact for further analysis and research. For each category of artefact the report will describe the method of processing, any sub-sampling, conservation and assessment undertaken. Where appropriate local reference collections will be referred to for descriptive and analytical consistency. Any implications for future archive, conservation or discard of the artefacts will also be set out.

12.7.8 The report will include a table showing, per trench, the contexts, classes and quantity of artefacts recovered, together with their date and interpretation.

12.7.9 The evaluation report will include an assessment of the **Environmental** potential of the site. Details will be provided of any environmental sampling undertaken in connection with the fieldwork and the results of any processing and assessment of the samples. The report will describe the method of processing, any sub-sampling and assessment. Any potential for future analysis of the samples or environmental remains recovered from the evaluation will be described. Implications for future archive, conservation or discard of environmental samples or remains will be detailed.

- 12.7.10 The report will include, as appropriate, tables summarising environmental samples taken, together with the results of processing and assessment.
- 12.7.11 Any results from the application of archaeological scientific techniques e.g. specialist dating will be included in the evaluation report.
- 12.7.12 An **Interpretation** of the archaeology of the site will be provided, including its location, extent, date, condition, significance and importance. This will be a synthesis of the stratigraphic, finds and environmental results of the investigation and will include, even if no archaeology is identified as present on the site, description of areas of disturbance, non-archaeological deposits and changes in geological subsoil where appropriate. This section of the report will be supported by a phased interpretative plan of the site, clearly showing the major areas and periods of archaeological activity.
- 12.7.13 An **Impact Assessment** will consider the potential effects of the development on the archaeological remains. This will summarise the archaeological results, describe how any identified archaeological potential identified relates to the site and how the development proposals will affect that archaeology. The report will highlight any areas of sensitivity within the site. Particular note will be made of any variations in the depth of overburden covering any archaeological deposits revealed.
- 12.7.14 The **Conclusion** will summarises the method, results, interpretation and impact assessment.
- 12.7.15 The evaluation report will assess the potential for preservation at the site to inform decisions about mitigation strategies. It will not include any recommendations on preservation measures or further work unless otherwise agreed with the County Archaeologist.
- 12.7.16 The evaluation report will include comments on the effectiveness of the methodology employed and the confidence of the results and interpretation.
- 12.7.17 **Figures / illustrations** – The report will include sufficient illustrations to support descriptions and interpretations within the report text. Figures are to be fully cross-referenced within the document text. As a minimum the evaluation report will include the following figures:
- a site location plan tied into the Ordnance Survey at 1:1250. The plan will also include at least two National Grid points to 1m accuracy and show the site boundary;
 - trench location plans at an appropriate scale showing the layout of archaeological features, coloured by phases or period. The plan will show the location of all trenches and features. A copy of the plan will be overlain on the proposed development plan where this is known. Where possible, projection of archaeological features outside of the trench areas will be included on the plan. This plan will also include two National Grid points;

- plans of the features revealed in each of the trenches at a larger scale e.g. 1:20 or 1:50; such plans are to also illustrate areas of disturbance, change in subsoil and location of sections; The location of significant finds and samples taken will also be indicated;
- relevant section drawings and trench soil profiles as appropriate;
- illustrations and/or photographs of significant finds.

12.7.18 All report illustrations must be fully captioned and scale drawings must include a bar scale. Standard archaeological drawing conventions must be used. Plan and section illustrations must include the numbers of all contexts illustrated. North must be included on all plans and will be consistent. Sections must indicate the orientation of the section and the Ordnance Datum height of the section datum.

12.7.19 Black & White or Colour photographs will be included to illustrate key archaeological features, trenches and site operations. All photographs will be appropriately captioned.

13. Archive Preparation & Deposition

13.1 The site archive, to include all project records and cultural material produced by the project, is to be prepared in accordance with *Guidelines for the preparation of excavation archives for long-term storage (UKIC 1990)*. On completion of the project the Archaeological Contractor will arrange for the archive to be deposited in accordance with the provisional arrangements made with a suitable museum or repository at the onset of fieldwork. Any alternative arrangements will be agreed with the County Archaeologist and the Local Planning Authority.

14 Monitoring and Liaison

14.1 The Archaeological Contractor is to allow the site records to be inspected and examined at any reasonable time, during or after the evaluation fieldwork, by the client/developer, the County Archaeologist or any designated representative of the Local Planning Authority

14.2 Once the trenches have been evaluated and an initial assessment of the archaeology carried out, there will be an on-site meeting with the County Archaeologist to determine if further evaluation work is appropriate in order to meet the objectives.

14.3 The Archaeological Contractor will liaise closely with the County Archaeologist throughout the course of the evaluation and will arrange for on-site meetings at key decision points.

14.4 The Archaeological Contractor is to make contact with the local archaeological society and keep them informed on the progress of the evaluation. Subject to

health and safety constraints the Archaeological Contractor will afford opportunity to the local archaeological society to visit the evaluation site. Copies of all reports will be provided to the local archaeological society.

- 14.5 The Archaeological Contractor is to circulate a completed Fieldwork Notification Form (Appendix 2) at the start and completion of fieldwork and at the completion of post excavation reporting stages.

15. Copyright and data protection

- 15.1 Information submitted to the County Archaeologist in conjunction with planning applications automatically becomes publicly accessible and can be viewed by anyone at any time. In addition, the Local Planning Authority and Kent County Council are subject to the requirements of the Freedom of Information Act (2000) and Environmental Information Regulations (2004). Information may be subject to Fol or EIR requests and any documentation submitted in connection with the project may be made publicly available unless doing so contravenes the Data Protection Act (1998).
- 15.2 While copyright of reports and other information arising from the fieldwork remains with the originator, the Archaeological Contractor will undertake to make this information available to interested parties. The Archaeological Contractor will agree to allow reports of the fieldwork to be copied and made available to interested parties for archaeological research. The reports may be made available on the Internet no sooner than three months after the submission of the report. Archaeological Contractors who believe that there are special reasons for not publishing the report on the Internet should reach a separate agreement with the County Archaeologist.

16. Health and Safety

- 16.1 The Archaeological Contractor will conduct the work in compliance with the Health and Safety at Work etc Act 1974. The Archaeological Contractor will also follow the guidance set out in "Health and Safety in Field Archaeology" Standing Conference of Archaeological Unit Managers 1997.
- 16.2 The Archaeological Contractor is expected to maintain a Health and Safety Policy and a procedures manual and have available appropriate expertise in Health and Safety advice. Site staff will have an appropriate level of training to enable them to carry out fieldwork safely.
- 16.3 The Archaeological Contractor will maintain the site in a safe condition. All hazards will be appropriately identified and managed. Deep excavations will be appropriately fenced.
- 16.4 The Archaeological Contractor will carry out a risk assessment prior to commencement of fieldwork and where appropriate a COSHH assessment.

Risks and measures to reduce risk will be communicated to all working on and visiting the site.

- 16.5 The Archaeological Contractor will have available suitable site accommodation, welfare and toilet facilities.

17. KCC HER

- 17.1 The Archaeological Contractor is to provide the Kent Historic Environment Record with copies of all reports in both heat-bound hard-copy and digital format (see 12.6 above).
- 17.2 Upon completion of the excavation the Archaeological Contractor will supply the Kent Historic Environment Record with a completed HER form (see Appendix 1)
- 17.3 The Archaeological Contractor will supply the Kent Historic Environment Record with the following digital datasets:
- A .dxf file containing polygon data that describes in detail all excavated/ watched area boundaries, whether trenches, test pits, excavated areas or areas examined by watching brief. This .dxf file must be internally geo-referenced (i.e. the co-ordinate system used in the file must be the Ordnance Survey co-ordinate system).
 - A separate .dxf file that contains a number of Layers. Each Layer should represent a different phase of the archaeological remains on site. The name of each Layer must be the phase number used on the site accompanied by a date range (e.g. “2, from –2000 to –800”, “7A, from 410 to 700” etc). Each layer must contain only the features relevant to that phase digitized as polylines. Where the dating is based on scientific dating methods such as radiocarbon, the dates must be calibrated calendar dates.
- 17.4 A guidance document has been produced for Kent County Council that will inform contractors as to how this information can be produced within AutoCad. This document is available from the County Archaeologist and Kent County Council Historic Environment Record.
- 17.5 The Archaeological Contractor should also provide a representative selection of digital site photographs illustrating the archaeology of the site and the operations of the investigation. These will be in .jpg format at a minimum 300dpi. These will be deposited with the County HER and will be used for presentations on aspects of the archaeology of Kent.
- 17.6 It is to be understood that photographs and notes taken by KCC Archaeological Officers in connection with the work that do not identify individuals or site locations may be used by KCC for outreach and publicity purposes, including on social media sites such as Facebook, Twitter etc. The Archaeological

Contractor should, **preferably in advance** of the works, raise with the KCC Archaeological Officer any concerns that they or their client may have over the use and dissemination of images or information for outreach purposes. In such cases the Archaeological Contractor and their client will agree a protocol with the KCC Archaeological Officer for the appropriate dissemination and use of images and information which balances the concerns of the contractor and/or client with the objective of ensuring that the people of Kent are kept informed of the archaeological discoveries in the county.'

18 General

18.1 In carrying out the work the Archaeological Contractor is to abide by:

- all statutory provisions and by-laws relating to the work in question,
- the Institute of Field Archaeologists *Code of Conduct*,
- the Institute of Field Archaeologists *Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology*.

APPENDIX 1

Kent County Council HER summary form

Site Name:		
Site Address:		
Summary: (50 words max)		
District/Unitary:		Parish:
Period(s):		
NGR (centre of site : 8 figures): (NB if large or linear site give multiple NGRs)		
Type of archaeological work (underline)		
Evaluation:	Watching Brief	Field Walking
Documentary study	Building recording	Earthwork
survey		
Excavation:	Geophysical Survey	Field Survey
Geoarchaeological investigation		
Date of Recording:		
Unit undertaking recording:		
Geology:		
Title and author of accompanying report:		
Summary of fieldwork results (begin with earliest period first, add NGRs where appropriate) (200 words max)		
		(cont on attached sheet)
Location of archive/finds:		

Contact at Unit:	Date:
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APPENDIX 2 - FIELDWORK NOTIFICATION FORM

Guidance for Completing the Kent Archaeological Fieldwork Notification Form**Purpose**

The purpose of the form is to improve the notification, tracking and monitoring of archaeological fieldwork in Kent. Its primary purpose relates to archaeological work being undertaken for the purposes of planning and development but it is hoped that it will be also usable by archaeological societies and other bodies undertaking fieldwork in the county.

Approach

- The archaeological body undertaking the fieldwork should fill in the form. Sections A and B should be filled in before fieldwork starts and submitted to the County Archaeologist. This may be submitted in digital copy to speed things along but a signed copy should follow in the post.
- Section A contains details of the project while Section B refers specifically to the onset of the phase of fieldwork. In signing section B the Archaeological Contractor is confirming that the necessary funds and resources to complete the works to the specification have been made available.
- The form should not be filled in separately for each period of an intermittent watching brief but should be filled in for major stages of fieldwork, for example separate phases of evaluation and excavation.
- Section C should be submitted at the completion of the fieldwork stage and should if known indicate whether further work is anticipated. This section sets out a brief summary of findings and what reports are to be submitted. For excavations these will include interim, assessment and full reports. Again the form may be submitted digitally with a signed copy to follow in the post. (The details of Sections A and B should remain filled in on the same form).
- Section D should be submitted as reports are submitted to the County Archaeologist. For excavations the form need not be submitted with interim reports but should be submitted with assessment and full reports.

Appendix B: WSI for Archaeological Evaluation, April 2023



EVOLUTION POWER LIMITED

STONESTREET GREEN SOLAR

WRITTEN SCHEME OF INVESTIGATION FOR ARCHAEOLOGICAL EVALUATION

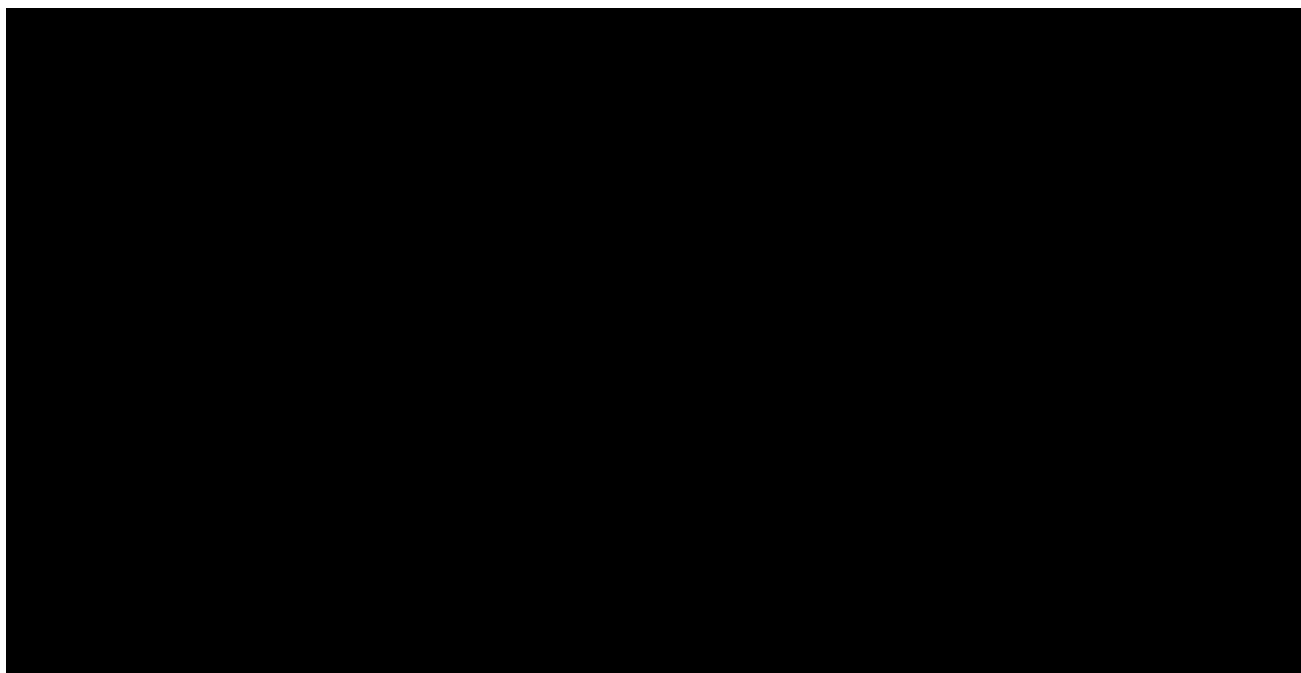
JUNE 2023

DATE ISSUED: June 2023
JOB NUMBER: GM12014
ORDNANCE GRID REF: NO.: TR 05834 37447
REPORT NUMBER AND STATUS: 0016 (0.3) Final

EVOLUTION POWER LIMITED

STONESTREET GREEN SOLAR

WRITTEN SCHEME OF INVESTIGATION FOR ARCHAEOLOGICAL EVALUATION



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ENERGY AND CLIMATE CHANGE
ENVIRONMENT AND SUSTAINABILITY
INFRASTRUCTURE AND UTILITIES
LAND AND PROPERTY
MINING AND MINERAL PROCESSING
MINERAL ESTATES
WASTE RESOURCE MANAGEMENT

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Appendix 2	Kent County Council Manual of Specifications Part B, Specification for Preliminary Evaluation of Quaternary Deposits and Palaeolithic Potential

DRAWINGS

DRAWING No.	TITLE
GM12014-058	Figure 1: Proposed pre-determination trench plan with test pit locations (Sheets 1 and 2)

1 INTRODUCTION AND PROJECT BACKGROUND

- 1.1.1 Wardell Armstrong LLP (WA) have been commissioned by EPL 001 Limited (hereafter referred to as 'the Client') to prepare a Written Scheme of Investigation (WSI) for a targeted archaeological evaluation by targeted trial trenching and geoarchaeological test pits at Stonestreet Green, Ashford, Kent, centred at National Grid Reference (NGR): TR 05834 37447 (GM12014-057). The archaeological evaluation is required to inform upon the potential archaeological resource within the area of the proposed substation and within the proximity to Roman Road which bisects the central and western part of the Site and which is identified on the Kent Historic Environment Record as a projected Romano-British road (HER TR 04 SE 120).
- 1.1.2 The evaluation is also required to inform upon the potential impact upon any archaeological resource from the development proposals associated with the proposed solar farm, onsite energy storage and associated infrastructure and an underground cable connection to the existing National Grid ('NG') substation at Sellindge. The Client will submit an application for the proposed Stonestreet Green Solar development to the Planning Inspectorate ('PINS') under Section 37 of the Planning Act 2008. The Application will seek a Development Consent Order ('DCO') from the Secretary of State for Energy Security and Net Zero for the construction, operation and maintenance, and decommissioning of a proposed solar farm generating station known as Stonestreet Green Solar (the 'Proposed Development') on land located to the north and west of the village of Aldington, Kent (the 'Site').
- 1.1.3 An archaeological evaluation is defined as 'A limited programme of non-intrusive and/or intrusive fieldwork which determines the presence or absence of archaeological features, structures, deposits, artefacts or ecofacts and their research potential, within a specified area or site on land, in an inter-tidal zone or underwater. If such archaeological remains are present, field evaluation defines their character, extent, quality and preservation, reports on them and enables an assessment of their significance in a local, regional, national or international context as appropriate' (CIfA 2020a).
- 1.1.4 This document provides the methodology to be employed during the course of the targeted archaeological evaluation and has been developed in response to advice provided in consultation with Wendy Rogers, Archaeological Advisor at Kent County Council (KCC). In addition, this WSI conforms to guidelines and standards set out in the following documents;
- *Standard and guidance for archaeological field evaluation*, Chartered Institute for

Archaeologists: Reading (ClfA 2020a);

- *Code of conduct: professional ethics in archaeology*, Chartered Institute for Archaeologists: Reading (ClfA 2022);
- *Standards and guidance for the collection, documentation, conservation and research of archaeological materials*, Chartered Institute for Archaeologists: Reading (ClfA 2020b);
- *Management of Research Projects in the Historic Environment: The MoRPHE Project Managers' Guide*, Historic England: London (HE 2015);
- *Wardell Armstrong Technical Manual No.1 Excavation Manual (V0.3)*, Wardell Armstrong LLP, Unpublished internal document (WA 2020a);
- *Wardell Armstrong Technical Manual No.2: Post-Excavation Handbook*, Wardell Armstrong LLP, Unpublished internal document (WA, 202b);
- *Manual of Specifications Part B, Specification for Preliminary Evaluation of Quaternary Deposits and Palaeolithic Potential*. Kent County Council (2023);
- *Manual of Specification Part B: Evaluation – Trial Trenching Requirements*. Kent County Council (2023)

1.1.5 It is proposed that further evaluation and necessary mitigation be undertaken post-determination as a DCO requirement. The post-determination works will be set out within a mitigation strategy presented within a WSI to be included within the ES submission.

2 BACKGROUND

2.1 Location and Geological Context

2.1.1 The Site is located approximately 5 miles southeast of Ashford, Kent and predominantly consists of agricultural land and pasture (GM12014-058). The High Speed 1/Channel Tunnel Rail Link (HS1) is located to the north of the Site boundary and is within 100m at its closest point. A railway line operated by Network Rail as part of the Kent Route between Ashford and Westenhanger is located adjacent to the HS1 railway line. The M20 motorway lies approximately 45m further to the north of HS1 at this point but is significantly further north towards the west of the Site. On the opposite side of the HS1 railway line (between HS1 and the M20 motorway), there is a UK Power Networks (UKPN) and National Grid (NG) substation, and a sewage treatment works. Residential dwellings of the village of Aldington are located predominantly to the south and east of the Site and residential dwellings within Stonestreet Green are located to the east. There are several watercourses passing through the Site, the largest of which is the East Stour which passes through the area in a roughly east to west direction.

2.1.2 The underlying geology is mapped as Weald Clay (Mudstone). This is a sedimentary bedrock formed in the Cretaceous period between 133.9 and 126.3 million years ago. Variations of geology on the site also comprise Atherfield Clay (Sandy Mudstone) and Hythe Formation (interbedded sandstone and limestone), which are both sedimentary bedrocks formed during the Cretaceous Period, between 126.3 and 113 million years ago (BGS 2023). The majority of the Site has no mapped superficial geology. Those fields which are partially or wholly located near to the East Stour, largely lie on alluvium (clay, silt, sand and gravel), formed up to two million years ago, and represent a local environment previously dominated by rivers (*Ibid.*).

2.2 Historical and Archaeological Background

2.2.1 An archaeological desk-based assessment (WA 2022) has been produced to investigate the known historical and archaeological background of the Site and immediate vicinity, up to 5km in distance. This was undertaken alongside geophysical survey and a site walkover to inform upon the archaeological potential of the Site. It is not intended to repeat the same information here and what follows is a brief overview of that document, for more information please refer to the original report.

2.2.2 Located within the eastern part of the Site, there is a crash site of a Messerschmitt Bf109E-4 (HER DKE22255), which has been designated as Protected Military Remains (PMR). Within the 5km search area from the Site, designated heritage assets of an

archaeological nature include a Scheduled Bronze Age Barrow Cemetery which lies approximately 880m south-east of the site. Two further Scheduled barrows lie to the east of the cemetery beyond the 5km search area.

- 2.2.3 The Kent Historic Environment Record (HER) records 26 entries within the Site boundary; of these recorded entries, 23 are findspots largely found through metal detecting and are of Roman to post-medieval date. The remaining three entries comprise Bank Road / Roman Road which bisects the central and western part of the Site and follows the alignment of a projected Roman road (HER TR 04 SE 120), and two post-medieval farmsteads (HER MKE88378 and MKE88379). All entries are discussed in more detail in the aforementioned desk-based assessment (WA 2022).

2.3 Prehistoric

- 2.3.1 There are several prehistoric assets in the vicinity of the site. The first asset is a group of scheduled bowl barrows located at the North Downs, located 4.5km north-east of the site. The second asset is a barrow cemetery located 2.8km east of the site and consists of seven barrows on and around the summit of low hill (situated at 80m aOD) to the west of the settlement of Barrowhill. Recent archaeological investigations at the barrows have identified the buried remains of cremation pits and have dated one of these to the Late Bronze Age. These two asset groups are representative of the wider prehistoric funerary landscape in the vicinity.

2.4 Romano-British

- 2.4.1 There is one Romano-British asset in the vicinity of the Site. This monument comprises a Roman villa which survives as buried remains and is representative of Roman settlement in this area. It is also part of the wider Roman landscape, with the Maidstone to Dover Roman Road being located approximately 550m to the south of the villa.

2.5 Early Medieval

- 2.5.1 There are no known early medieval assets in the vicinity of the Site.

2.6 Medieval

- 2.6.1 There are 18 medieval heritage assets in the vicinity of the Site. These consist of Grade I and II farmhouses, churches and priories, such as Bilsington Priory (NHLE 1018877 & 1362769), located 1.5km south-west of the Site. The priory consists of a scheduled monastery, and the Grade I priory, and dates to AD 1253.

2.7 **Post-medieval**

- 2.7.1 There are nine post medieval heritage assets in the vicinity of the Site, which consist of historic houses, farmhouses and a mill. Assets from this period also include the Adlington Clap Hill Conservation Area, which has the potential for earlier medieval associations, where Adlington was affected by the Black Death.

2.8 **Modern**

- 2.8.1 The Messerschmitt plane crash site is within the site boundaries (HER DKE22255). Although the wreckage is thought to have been removed at the time of the crash, shrapnel may remain.

3 AIMS AND OBJECTIVES

3.1.1 The purpose of the targeted archaeological evaluation by trial trenching is to investigate the potential of the archaeological resource within the area of the proposed substation and Roman road, and where present, to characterise and date it. This information will then be used to inform decisions on the requirement for any further archaeological work within this area, should it be required, and the methodologies to be employed.

3.1.2 The general aims of the archaeological evaluation by trial trenching are to:

- determine the presence or absence of buried or upstanding archaeological remains within the area of the proposed substation and around Roman road;
- determine the character, date, extent and distribution of any archaeological deposits revealed as well as their potential significance;
- determine levels of disturbance to any archaeological deposits from plough damage or from any other agricultural/industrial practices or later building activities;
- determine the likely impact on any archaeological deposits present as a result of substation associated with the development;
- disseminate the results of the fieldwork through an appropriate level of recording.

3.1.3 The purpose of the test pits is to inform upon the palaeolithic potential of the Site to understand the broad pattern of behavioural dynamics, and how key elements of the archaeological landscape (sites, activities, deposits and finds) relate to each other spatially, functionally and chronologically.

3.1.4 The specific aims of the archaeological evaluation are to:

- Confirm the presence of archaeological remains within the area of the proposed substation and around Roman road;
- To contribute to research questions raised in the South East Regional Research Framework.

4 METHOD STATEMENT

4.1 General Methodologies

- 4.1.1 The location of the trenches and the test pits are identified on figures GM12014-058 sheet 1 and 2.
- 4.1.2 **Trial Trenching:** A scheme for an archaeological evaluation by trial trenching has been designed to satisfy the stated objectives of the project as set out under Section 3 above and has been prepared in accordance with the standard requirements for trial trenching as set out KCC within their *Manual of Specifications Part B, Specification for Evaluation – Trial Trenching*, a copy of which is included within Appendix 1 of this WSI.
- 4.1.3 The archaeological evaluation by trial trenching is intended to provide an appropriate data set to allow for the full characterisation of the proposed development area to be established. This is to be undertaken using a combination of intrusive evaluation techniques across the Site. An initial phase of trenching will be undertaken in pre-determination to inform the planning application and will comprise 13 no. trenches; 4 targeting the footprint of the substation and its immediate environs, each measuring 50m by 1.8m in size and 9 targeting the identified geophysical anomalies and blank areas within the proximity of the Roman road, each measuring 50m by 1.8m in size. This would be followed by a second stage of evaluation including a further suggested 1% trial trenching sample of the Site over known cropmarks, geophysical anomalies and areas thought at present to be 'blank', as well as targeted geoarchaeological test pits to assess the palaeoenvironmental potential of areas of alluvium identified within the Site. This second stage of works would be confirmed in consultation with the Planning Archaeologist at KCC following the results of the first stage of intrusive evaluation.
- 4.1.4 In advance of any fieldwork, WA will request the Client has demonstrated that all reasonable measures have been taken to identify any constraints and that they have provided all reasonable information regarding the presence of services, any ecological constraints, the presence of Public Rights of Way (PRoW), any areas of potentially contaminated land and/or any other known risks to health and safety.
- 4.1.5 WA will undertake the opening of the excavation area using a mechanical excavator equipped with a toothless / flat-bladed ditching bucket to maximise the chance for identification of the archaeological remains. Should substantial obstructions be encountered a toothed bucket may be employed on the understanding that it will be removed again once the obstacle has been removed. All mechanical works will be supervised by a suitably experienced archaeologist who will control the depth of

excavation and stop machining at the top of the first potentially significant archaeological horizon, or the top of the natural substrate, whichever is encountered first.

- 4.1.6 No mechanical excavators, earthmoving or other vehicles will travel within any excavated trench until it has been signed off by the Archaeological Advisor at KCC or specific agreement has been reached to enable re-stripping.
- 4.1.7 WA will maintain a constant watch and closely inspect on an ongoing basis surfaces exposed during the course of machining. Surfaces will be maintained clear of loose spoil.
- 4.1.8 All trenches will be cleaned by hand, photographed and recorded as appropriate. Once cleaned, all trenches will be inspected and potential features/deposits excavated to retrieve artefactual and ecofactual material, as well as determine their character, significance and date. All trenches will be inspected again after sufficient weathering to ensure that no potential features or deposits are missed.
- 4.1.9 **Test Pits:** Test pits will be excavated and recorded in accordance with KCC *Manual of Specifications Part B, Specification for Preliminary Evaluation of Quaternary Deposits and Palaeolithic Potential*, a copy of which is included within Appendix 2 of this report.
- 4.1.10 A Machine excavated test pit will be excavated at a location within each trench in accordance with the KCC specification for Preliminary Evaluation of Quaternary Deposits and Palaeolithic Potential (Section 5.6 KCC, 2023).
- 4.1.11 Each test pit will be excavated by a tracked 10-20 tonne 360° mechanical excavator with a toothless bucket of the same width as the trial trench. Each test pit will be 3-4m long and up to 5m deep, excavated in spits of between 5-10cm. A toothed bucket may be used where the deposits are too tough, however, this must be kept to a minimum reverting to the toothless bucket as soon as possible. Excavation will cease at a shallower depth if it is clear that Quaternary deposits are not present, and that the pre-Quaternary deposits have been reached. Care will be taken to ensure that the presence of Quaternary deposits has not been masked by pre-Quaternary deposits having been redeposited on top of in situ Quaternary deposits. Excavation will cease if primary context Palaeolithic evidence is encountered and the KCC archaeologist will be informed.
- 4.1.12 The excavation of each test pit will be directed by a recognised Palaeolithic specialist with experience of recording and interpreting Pleistocene sediments, who will record and number the sequence of sedimentary units as excavation progresses following

standard descriptive practices. The textural characteristics will be recorded, and the shape and nature of their lithographic contacts.

4.1.13 Test pits will be entered at a maximum safe depth, to record the upper stratigraphy, beyond which, recording will typically take place without entering the test pit. It may, however, be necessary to step the test pit to ensure safe artefact/ fossil recovery, to investigate for the presence of an undisturbed land surface, or for controlled sediment sampling.

4.1.14 Prior to backfilling, all deposits, including the trench sides will be again inspected for artefactual material to ensure that finds are recovered from as many contexts as possible regardless of date.

4.2 Investigation and Sampling Strategy

4.2.1 Archaeological features will be sampled sufficiently to characterise, date them and determine their significance i.e. 10% of fills of linear features (unless the linear features are substantial in which case an alternative sampling strategy will be discussed with KCC) and 50% of pit fills. Smaller discrete features such as postholes will be 100% sampled.

4.2.2 Any remains of substantial buildings/structures of archaeological interest will be cleaned, photographed and recorded in-situ, with sample excavation undertaken as necessary in order to determine their form, construction methods and dating. Any substantial structures may also be subject to a programme of photogrammetric recording where appropriate, and where it meet the project's objectives.

4.2.3 Measures will be taken to protect particularly significant, valuable or sensitive archaeological remains from exposure, accidental damage and/or theft. Upon the discovery of sensitive material (e.g., human remains or particularly significant features), excavation shall cease, and the archaeological contractor will establish a clearly visible cordon around the area of discovery, to ensure protection from exposure, accidental damage and / or theft.

4.3 Recording

4.3.1 Archaeological deposits and features will be recorded according to accepted professional standards using the format set out in the WA archaeological field manual (WA 2020a) and will comply with the Ashford Local Plan 2030, which requires appropriate provision for preservation by record where in situ preservation is not possible, and sufficient data will be recorded to allow for a full characterisation of the context and its relationships to be made and allow for future studies to query and

compare the dataset with confidence.

- 4.3.2 All written records will utilise the WA pro-forma record sheets. Plans and sections will be drawn on water resistant permatrace. Plans will be drawn to a scale of 1:20 and sections at 1:10. A full photographic record of all contexts will be maintained in both .JPG and .TIFF digital formats. All photographs will include a clearly visible, graduated metric scale. A register of all photographs will be maintained. A combination of multi and single context planning will be utilised where necessary.
- 4.3.3 All features will be recorded using a Trimble TSC3 GPS unit (or equivalent) with sub-centimetre accuracy with each point recorded in relation to the OSGB36 geod model and coded to an internal database to provide a dataset that records feature type, context number, associated drawing numbers and any other feature specific information that may be relevant.
- 4.3.4 Plans will be drawn to a scale of 1:20 and sections at 1:10. If appropriate, trench plans will be produced at a scale between 1:50 and 1:100 to show the location of all features, sections and any other information appropriate.
- 4.3.5 A representative section will be drawn at a scale 1:20 from each test pit.
- 4.3.6 All plans and sections will be levelled in respect to metres aOD and are to be drawn on polyester based drafting film and clearly labelled.
- 4.3.7 A full digital photographic record of the work is to be kept. The photographic record must include a representative section from each test pit. All images are to be taken using a digital camera with appropriate megapixel resolution. The photographic record is to be regarded as part of the site archive and the digital files will be labelled appropriately and cross-referenced in relation to a site specific photography register.
- 4.3.8 WA will ensure that the complete site archive including finds and palaeoenvironmental samples is kept in a secure location throughout the period of fieldwork and post-excavation process.

4.4 Human Remains

- 4.4.1 In the event that human remains, both inhumations and/or cremations, are exposed during the course of the archaeological evaluation then all works are to cease immediately, and the local police and coroner informed. The area will be screened from view and discussions will be held with the Client and KCC on options for their appropriate preservation in situ or for their removal in accordance with professional standards and guidelines once the antiquity of the remains has been suitably proven.

4.4.2 Wardell Armstrong will have an appropriately qualified and experienced osteoarchaeologist available to supervise the excavation and removal of any human remains (where this is necessary) from the Site.

4.4.3 In the event that human burials are discovered, before any further work can be undertaken and/or the remains can be lifted, a Ministry of Justice Licence will be required (in accordance with Section 25 of the Burial Act 1857). The need for a Ministry of Justice Licence applies to both inhumation and cremated remains.

4.4.4 Archaeological excavation and removal of human remains will be undertaken in accordance with the standards and guidance set out by the *Advisory Panel on the Archaeology of Burials in England* (APABE 2017).

4.5 Finds Recovery and Processing

4.5.1 All artefacts recovered during the course of the archaeological evaluation are the property of the landowner/Client. They will be suitably bagged, boxed and marked in accordance with the *Standards and Guidance for the Collection, Conservation and Research of Archaeological Materials* (ClfA 2020b), the United Kingdom Institute for Conservation, *Conservation Guidelines no.2*, and the *Standard and Guide to Best Practice for Archaeological Archiving in Europe* (Perrin et al. 2014).

4.5.2 All artefacts revealed will be recovered regardless of date so that the provisional dating of as many contexts as possible can be ascertained. In circumstances where the quantity of finds present preclude total recovery then a representative sample will be taken and this noted on the context sheet.

4.5.3 On completion of the project modern material and objects that have been assessed as having no obvious grounds for retention will be discarded after a period of six months, unless there is a specific request to retain them.

4.5.4 The primary archive records will clearly state how all artefact assemblages have been recovered, sub-sampled and processed.

4.6 Treatment of Treasure

4.6.1 Finds falling under the statutory definition of treasure (as defined by the Treasure Act of 1996 and its revision of 2023) will be reported immediately to the relevant Coroner's Office, the landowner/Client and KCC. A treasure receipt (obtainable from either the FLO or the DCMS website) will be completed and a report submitted to the Coroner's Office and the FLO within 14 days of understanding that the find is treasure. Failure to report within 14 days of discovery is a criminal offence.

4.6.2 The treasure receipt and report will include the date and circumstances of the discovery in addition to the identity of the finder (put as WA/Site contractor) and the location of the find in relation to Ordnance Survey.

4.7 **Palaeoenvironmental Sampling**

4.7.1 A structured programme of palaeoenvironmental sampling appropriate to the specific aims of the project will be implemented. The strategy and methodology for the sampling of deposits will be in accordance with English Heritage Centre for Archaeology Guidelines *“Environmental Archaeology – A guide to the theory and practice of methods, from sampling and recovery to post-excavation”* (2011).

4.7.2 Where deposits are dry, bulk samples for the recovery of charred plant remains, small bones and finds, will be taken from sealed and datable features such as pits, ditches, hearths and floors. Each context will be sampled in isolation. The size of the sample is expected to be in the range of 40-60 litres per context or 100% of smaller contexts. Samples will not be taken from the intersection of features or where context horizons are not fully defined.

4.7.3 Mollusc samples of two litres each will be taken vertically from appropriate sections to investigate the changes of vegetation through time.

4.7.4 Where deposits are wet, waterlogged or peaty, monoliths will be taken along cleaned vertical surfaces for the retrieval of pollen, diatoms, ostracods and foraminifera. The numbers to be taken will be agreed with the Client and KCC. Where bulk samples are to be taken a minimum of 20 litres will be taken from visible layers or spits for the retrieval of plant macro-remains and insects.

4.7.5 **Test Pits:** Spit samples of at least 150 litres will be taken at 25cm intervals of each test pit. At least 100litres of each sample will be dry sieved on site through a c.1cm mesh for recovery of lithic artefacts and faunal remains. If the sediment is unsuitable for sieving, excavation will proceed at 5cm spits for careful inspection, taking note of the presence of any archaeological evidence. The remainder of the spit sample may be sampled for paleoenvironmental biological remains or clast lithology as directed by the Palaeolithic/Quaternary specialist.

4.7.6 The Palaeolithic specialist will consider whether sediments are suitable for Chronometric dating. Sediments should ideally be taken with in-situ dosimetry readings using a portable gamma ray spectrometer, however samples should still be retained for optically Stimulated Luminescence dating (OSL) for use at a later date.

4.7.7 The processing of palaeoenvironmental samples will be undertaken in accordance

with WA's Technical Manual No.2: Post-Excavation Handbook (WA 2020b). Environmental samples from dry deposits will normally be processed by floatation following the fieldwork and the residues will be sorted to retrieve small bones, small finds and charcoal that has not floated. Environmental samples from wet deposits will normally be sent to specialists for processing in laboratory conditions.

- 4.7.8 Where guidance is relevant the appropriate English Heritage papers will be followed (EH 2005, 2007 & 2011).

4.8 Reporting

- 4.8.1 Upon completion of the archaeological evaluation, WA will produce an appropriate report, a draft of which be supplied to the Client for comment in the first instance. Once approved by the client a copy of the report will be forwarded to the Archaeological Advisor at KCC.
- 4.8.2 Should little or no archaeology be revealed during the archaeological investigations then it is expected that the production and submission of a suitable report will be completed within 4/5 weeks of the completion of the fieldwork. If significant and/or substantial archaeological deposits are revealed, then the submission may take longer to allow for necessary specialist input. In this event, discussions will be held with KCC about the possibility of submitting an interim report to aid in the discharge of the planning condition.
- 4.8.3 External specialists will only be called upon during the compilation of the report if the of the archaeological resource cannot be adequately determined without their input.
- 4.8.4 The report of the results of trial trenching and test pits will include the following as a minimum:
- An Abstract summarising the scope and results of the archaeological evaluation;
 - A HER Summary form;
 - An Introduction including:
 - The location of the site with a National Grid Reference for the centre sufficient to locate the site to 1m accuracy;
 - An account of the background and circumstances of the work;
 - A description of the development proposals, planning history and planning reference together with the archaeological condition (where appropriate);

- The nature of potential impacts arising from the proposals;
- The scope and date of the fieldwork, the personnel involved and who commissioned it;
- An account of the Archaeological Background of the development site including
- The Methodology employed during the evaluation including the aims and objectives as will any further objectives identified during the course of the evaluation;
- A quantification of the project archive contents, their state and future location;
- The Results of the evaluation field work will be described trench by trench including the dimensions of the trench, the nature and depth of overburden soils encountered and a description of all archaeological features and finds encountered in each trench, their dimensions, states of preservation and interpretation;
- A description of the geological subsoil encountered in each trench;
- The Finds recovered during the course of the evaluation will be described, quantified and assessed by artefact type within the evaluation report. The report will also provide an indication of the potential of each category of artefact for further analysis and research. For each category of artefact the report will describe the method of processing, any sub-sampling, conservation and assessment undertaken. Where appropriate local reference collections will be referred to for descriptive and analytical consistency. Any implications for future archive, conservation or discard of the artefacts will also be set out;
- A table showing, per trench, the contexts, classes and quantity of artefacts recovered, together with their date and interpretation;
- An assessment of the Environmental potential of the site;
- An Interpretation of the archaeology of the site; and
- A conclusion.

4.8.5 The report will be accompanied by figures and illustrations in accordance with KCC Manual of Specification Part B: Evaluation – Trial Trenching Requirements.

4.9 **Archive Preparation and Deposition**

4.9.1 WA will make provisional arrangements for the deposition of the site archive with

Dover Museum and Bronze Age Boat Gallery and all documents, artefacts and any other material associated with the project will be marked with a HER reference number. Following completion of the fieldwork preparation of the site archive will follow guidelines from the recipient museum regarding deposition. Any variation will be agreed with the Local Planning Authority before being implemented.

4.9.2 In addition, WA will use an internal site code during the course of the archaeological investigations which shall also be placed on all documents, artefacts and any other items that may be associated with the project.

4.9.3 The site archive will include all project records and cultural material produced by the evaluation, and will be prepared in accordance with *Guidelines for the Preparation of Excavation Archives for Long Term Storage* (Brown 2011) and *A Standard Guide to Best Practice for Archaeological Archiving in Europe* (Perrin et al 2014).

4.9.4 Should no archaeology be revealed then the final report will be provided to the local HER and entered into the online access to the index of archaeological investigations database (See below).

4.10 **Monitoring and Liaison**

4.10.1 WA will allow the site records to be inspected and examined at any reasonable time during or after the archaeological fieldwork by the Client or any designated representative of KCC or the LPA

4.10.2 Once the trenches have been evaluated and an initial assessment of the archaeology carried out, there will be an on-site meeting with the County Archaeologist to determine if further evaluation work is appropriate in order to meet the objectives.

4.10.3 WA will liaise closely with KCC throughout the course of the project and will arrange for onsite meetings at key decision points.

4.11 **Dissemination**

4.11.1 This project has been registered with the **Online Access to the Index of archaeological investigations (OASIS)** and a digital copy of the archaeological report will be made available upon its completion.

4.11.2 A summary of the work will be submitted to the editor of any relevant journals agreed with KCC should the results of the fieldwork warrant this.

4.12 **Health and Safety**

4.12.1 WA maintains a Health and Safety Policy and has appropriate expertise in Health and Safety Advice available. Site staff will have an appropriate level of training to enable

them to carry out fieldwork safely.

4.12.2 WA will abide by the client's health and safety methodology as well as producing their own internal task-specific risk assessment as required, all WA staff will assist the Client in maintaining the Site in a safe condition. Hazards will be appropriately identified and managed including identification of buried and above ground services/utilities.

4.12.3 In addition to the risk assessment, where appropriate a COSHH assessment will also be undertaken. Once on site these documents will be assessed, and any variations will be highlighted and added to the appropriate assessment. These will be re-evaluated periodically during the course of the fieldwork to make sure that they remain consistent to the site specific risks. All members of WA and visitors will be required to be inducted and sign these documents on first arrival to site to show that they have read and understood the contents and any variations will be communicated as required.

4.12.4 During the fieldwork appropriate safety clothing will be worn by WA staff at all times. The Client will be requested to provide details of their own risk assessment before fieldwork commences. If there is conflict between the Client's risk assessment and that of WA then the Client's will take priority, unless it is perceived to be placing the field team at greater risk.

4.12.5 The Client will be asked to provide all information reasonably obtainable on contamination and the location of live services before the archaeological works commence.

4.12.6 Test pits will be back filled as soon as possible following excavation and recording, no test pits will be left unattended or open overnight unless specifically required to so by the KCC archaeologist. If a test pit is to remain open overnight, adequate fencing and warning signage must be utilised to make safe.

4.13 Staffing

4.13.1 The project will be directly managed by a member of the Chartered Institute for Archaeologists or an archaeologist of equivalent standing. CVs of WA staff members can be forwarded to the Client and KCC as required.

4.13.2 The standards as stipulated within the code of conduct of the Chartered Institute for Archaeologists will be adhered to at all times.

4.13.3 WA will provide appropriate specialists as required and their details and experience can be provided on request.

4.13.4 The excavation and recording of test pits will be directed by a designated specialist with Palaeolithic and Quaternary geological expertise, whose identities will be agreed with KCC county archaeologist prior to work commencing.

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APPENDICES

**Appendix 1 Kent County Council Manual of Specifications Part B: Evaluation – Trial
Trenching Requirements**

EVALUATION – TRIAL TRENCHING REQUIREMENTS

1. Introduction

- 1.1 Archaeological trial trenching involves the sampling of a site to determine whether archaeological remains are present and if so, to assess their character, extent, date, condition and potential importance. Trial trenching will aim to determine, as far as is practicable and without comprising the integrity of important archaeological deposits, the full stratigraphic sequence at the site, including information on the 'natural' substrate and soil conditions.

2. General Requirements

- 2.1 Trial trenching will be carried out by archaeological organisations (from here on referred to as 'the Archaeological Contractor') acceptable to the relevant Local Planning Authority, with recognised experience and expertise in the specified type of work to be undertaken. Registration with the Institute of Field Archaeologists (IFA) as a Registered Archaeological Organisation (RAO) will normally be considered as an indicator, but not a prerequisite, of such expertise and experience. A good working knowledge of the archaeology of Kent will also be considered highly desirable.
- 2.2 Prior to any work being undertaken the Archaeological Contractor will inform the County Archaeologist and communicate details of the proposed team, including (if required) CVs for senior staff and specialists. Senior staff and specialists will need to demonstrate an appropriate level of experience and expertise and should preferably be, where appropriate, Members of the Institute of Field Archaeologists (IFA).
- 2.3 Prior to undertaking the trial trenching the Archaeological Contractor will need to demonstrate that the necessary resources are in place to undertake the work, through to reporting. The Archaeological Contractor will have available appropriate specialists necessary to support the successful completion of the archaeological fieldwork and post-excavation work.
- 2.4 The work will be supervised on site at all times by a member of staff with the required level of experience and who will be responsible for the conduct of on-site work.

3. Pre-site Requirements

- 3.1 Prior to undertaking trial trenching the Archaeological Contractor will have gathered and considered the following information:
- Relevant information on the County Historic Environment Record (HER) held by Kent County Council and maintained by the Heritage Conservation Team;
 - Any earlier reports of fieldwork relevant to the site;

- Solid and drift geology;
- Geotechnical site investigation data (if available);
- Any desk-based studies of the site.

3.2 In certain circumstances the following will also be considered:

- Relevant published secondary sources
- Relevant historic maps held at the Centre for Kentish Studies
- Aerial photographs where cropmarks are considered to indicate archaeology on or close to the site.

3.3 The Archaeological Contractor will ensure that all reasonable measures have been taken to identify any constraints to undertaking the evaluation trenching. The Archaeological Contractor will seek information on the presence of services, any ecological constraints, the presence of Public Rights of Way, the presence of contaminated land or any other risks to health and safety.

3.4 The Archaeological Contractor will make provisional arrangements for the deposition of the site archive with an appropriate museum or suitable repository agreed with the County Archaeologist. The Archaeological Contractor will obtain a provisional accession number for the site archive from the recipient museum (except where the museum prefers to issue an accession number following completion of fieldwork) and any guidelines from the recipient museum regarding deposition of the site archive.

3.5 Full copies of the Specification must be issued to the field officer responsible for on-site work and a copy of the agreed Specification and any additional method statements must be available on site at all times. The team carrying out the trial trenching must be familiar with the Specification and have access on site to any previous evaluation or survey reports.

3.6 The Archaeological Contractor will inform the County Archaeologist of the start date of the work (at least five working days before) and arrange for monitoring visits to be undertaken, using the Site Fieldwork Notification Form (see Appendix II). The Archaeological Contractor will continue to keep the County Archaeologist informed of the progress of work and will notify the County Archaeologist immediately if particularly important archaeological remains are encountered.

4. Objectives

4.1 The purpose of the evaluation is to establish whether there are any significant archaeological deposits at the site that may be affected by the proposed development.

4.2 The evaluation is thus to

- a) ascertain the extent, depth below ground surface, depth of deposit, character, date, significance and condition of any archaeological remains on site;

- b) establish the extent to which previous development and/or other processes have affected archaeological deposits at the site; and
- c) establish the likely impact on archaeological deposits of the proposed development.

5. Scope of trial trenching

- 5.1 The layout and number of trenches excavated will be in accordance with the Specification, details of which are given in Part A. Any amendment to trench design due to on-site constraints will be agreed with the County Archaeologist in advance of the work being undertaken.
- 5.2 Particular issues that will be addressed by the evaluation are set out in part A of this specification.

6. Machine and Hand Excavations

- 6.1 All machine excavation of trial trenches will be carried out under constant archaeological direction by a suitably experienced archaeologist familiar with the ground conditions anticipated on the investigation site.
- 6.2 Machine excavation of trial trenches will be undertaken by a mechanical excavator using a flat-bladed bucket. No mechanical excavators, earthmoving or other vehicles will travel within any excavated trench until it has been signed off by the County Archaeologist or specific agreement has been reached to enable re-stripping.
- 6.3 The Archaeological Contractor will maintain a constant watch and closely inspect on an ongoing basis surfaces exposed during the course of machining. Surfaces will be maintained clear of loose spoil.
- 6.4 Subject to additional requirements of the landowner or client, turf, topsoil and other distinct deposits will be stored separately and at least 1 metre from the edge of the evaluation trench.
- 6.5 Machine-excavated deposits and the exposed surface will be regularly scanned for the presence and collection of artefacts. Exposed surfaces and excavated spoil will be scanned by metal detector.
- 6.6 The excavation by machine is to be taken down to the top of any significant archaeological level or to the top of 'natural' subsoil where no archaeological deposits have been found at a higher level. In the event of significant archaeological deposits being encountered the County Archaeologist is to be informed immediately. Some further limited excavation may be required to clarify the nature, character and date of the archaeological deposits but the primary objective is to establish the presence/absence of archaeological deposits, their depth and extent.

- 6.7 Where complex archaeological stratification is encountered, deposits will be left in situ and measures to assess the depth of this stratification agreed with the County Archaeologist. Where modern features are seen to truncate the archaeological stratification, then these will be carefully removed without damage to surrounding deposits to enable the depth of stratification to be assessed.
- 6.8 If archaeological remains of limited significance are found to be present cutting through or overlying soils (e.g. colluvium) which conceal lower archaeological horizons then these will need to be recorded and investigated prior to removal of the underlying soil with the agreement of the County Archaeologist.
- 6.9 Machine excavation from the surface must be taken down in spits of no more than 100mm thickness to ensure that deposits and features are not over-excavated and that any artefacts/biological evidence in the soil are recorded.
- 6.10 Test sondages may need to be excavated through 'natural' subsoil in trial trenches to confirm that the solid geology has been reached. Such sondages will be positioned to avoid damage to archaeological remains.

7. Investigation and Sampling Strategy

- 7.1 Archaeological features will generally only be sampled sufficiently to characterise and date them. Full excavation of features will not be undertaken at this stage unless otherwise agreed with the County Archaeologist. Care will be taken not to damage archaeological deposits through excessive use of mechanical excavation.
- 7.2 Where necessary the surface and sections of trenches will be hand cleaned to define archaeological deposits and features clearly.
- 7.3 Measures will be taken to protect particularly significant, valuable or sensitive archaeological remains from exposure, accidental damage and / or theft.
- 7.4 Exposed surfaces will be left for a minimum of 48 hours to allow weathering-out of features to occur. No trenches will be backfilled until agreed with the County Archaeologist.

Burial Remains

- 7.5 Inhumation and cremation burials will normally be left in-situ for the purposes of evaluation. Subject to agreement with the County Archaeologist, graves may be partially excavated to confirm the presence of human remains and their state of preservation but skeletal remains will be left in situ. Graves will be scanned by metal detector to assess whether any grave objects are likely to be present.
- 7.6 Inhumation and cremation burials which are in a fragile state and are likely to

be damaged by the reinstatement of evaluation trenches will be excavated and lifted subject to agreement with the County Archaeologist.

- 7.7 The Archaeological Contractor will put in place arrangements to ensure the security, protection from deterioration and damage, and the respectful treatment of human remains and burial goods.
- 7.8 On sites where burial remains are expected the Archaeological Contractor will submit to and agree with the County Archaeologist detailed procedures for the assessment, recording and, where necessary, the excavation of inhumation and cremation burials.
- 7.9 The Archaeological Contractor will have available within the team or on call an appropriately qualified and experienced osteoarchaeologist to supervise the excavation and removal of any human remains (where this is necessary) from the site. The Archaeological Contractor will use an appropriately qualified and experienced archaeological conservator to assist, where appropriate, the lifting of human remains and grave goods / cremation vessels.
- 7.10 In the event that human burials are discovered, a Ministry of Justice Licence will be required (in accordance with Section 25 of the Burial Act 1857) before the remains can be lifted. The need for a Ministry of Justice Licence applies to both inhumation and cremated remains. Application for a Licence will be made by the Archaeological Contractor. The Archaeological Contractor is to comply with the conditions of the Licence and discuss any requirements of that Licence which conflict with the agreed method of investigation with the County Archaeologist.

8. Finds recovery processing and treatment

- 8.1 All artefacts recovered during the excavations on the site are the property of the Landowner. They are to be suitably bagged, boxed and marked in accordance with the United Kingdom Institute for Conservation, *Conservation Guidelines no.2* and on completion of the archaeological post-excavation programme the landowner will arrange for them to be deposited in a museum or similar repository agreed with the County Archaeologist and the Local Planning Authority.
- 8.2 Artefacts will be excavated carefully by hand. The Archaeological Contractor will use an appropriately qualified and experienced archaeological conservator to assist in the lifting of fragile finds of significance and / or value.
- 8.3 Artefacts will be collected and bagged by archaeological context. The location of special finds will be recorded in three dimensions. Three-dimensional recording of in-situ flint working deposits will be carried out.
- 8.4 Where appropriate to address the research objectives of the archaeological evaluation, sieving of deposits will be undertaken to maximise recovery of

small artefacts. A strategy for such sieving will be agreed in advance with the County Archaeologist.

- 8.5 Records of artefact assemblages will clearly state how they have been recovered, sub-sampled and processed.
- 8.6 Excavated artefacts will be bagged upon recovery or placed in finds trays. They must not be left loose on site.
- 8.7 **Treatment of treasure** - Finds, discovered by the Archaeological Contractor, falling under the statutory definition of Treasure (as defined by the Treasure Act of 1996 and its revision of 2002) will be reported immediately to the relevant Coroner's Office, the Kent Finds Liaison Officer (FLO) who is the designated treasure co-ordinator for Kent, the landowner and the County Archaeologist. A Treasure Receipt (obtainable from either the FLO or the DCMS website) must be completed and a report submitted to the Coroner's Office and the FLO within 14 days of understanding the find is Treasure. Failure to report within 14 days is a criminal offence. The Treasure Receipt and Report must include the date and circumstances of the discovery, the identity of the finder (put as unit/contractor) and (as exactly as possible) the location of the find.
- 8.8 All metal objects, other than late post medieval objects, will be X-rayed unless otherwise agreed with the County Archaeologist.

9. Archaeological Science and Environmental Sampling

- 9.1 A structured programme of environmental sampling appropriate to the aims of the evaluation will be implemented. The strategy and methodology for the sampling, recording, processing, assessment, analysis and reporting of deposits with environmental archaeology potential will be in accordance with English Heritage Centre for Archaeology Guidelines "Environmental Archaeology – A guide to the theory and practice of methods, from sampling and recovery to post-excavation" (March 2002). Any variation to this guidance will be agreed in advance with both the County Archaeologist and the English Heritage Regional Scientific Advisor. Particular note will be taken of the following requirements.
- 9.2 The Archaeological Contractor will use an appropriately qualified and experienced geo-archaeologist to record any deposits of particular significance such as buried soils or advise on depositional processes.
- 9.3 An appropriately qualified and experienced environmental archaeologist will devise and supervise the implementation of the environmental sampling strategy.
- 9.4 The advice of the English Heritage Regional Scientific Advisor is to be sought regarding specialist sampling requirements and any scientific applications relevant to the archaeological evaluation of this site.

- 9.5 Where deposits are dry, bulk samples for the recovery of charred plant remains, small bones and finds, will be taken from sealed and datable features such as pits, ditches, hearths and floors. Each context will normally be sampled. The size of the sample is expected to be in the range of 40-60 litres per context or 100% of smaller contexts. Samples will not be taken from the intersection of features.
- 9.6 For large features / spreads appropriate consideration will be given to sampling on a grid system if this fits in with the aims of the evaluation.
- 9.7 Where good conditions for the preservation of bone have been identified, all large bones will be collected by hand and sieving of bulk samples up to 100 litres will be undertaken as appropriate.
- 9.8 Mollusc samples of 2 litres each will be taken vertically from appropriate sections to investigate the changes of vegetation through time.
- 9.9 Where deposits are wet, waterlogged or peaty, monoliths will be taken along cleaned vertical surfaces for the retrieval of pollen, diatoms, ostracods and foraminifera. The numbers to be taken will be agreed with the County Archaeologist.
- 9.10 For wet, waterlogged or peaty deposits, bulk samples of 20 litres will be taken from visible layers or spits for the retrieval of plant macro-remains and insects.
- 9.11 Environmental samples from dry deposits will normally be processed by flotation following the evaluation fieldwork and the residues will be sorted to retrieve small bones, small finds and charcoal that has not floated. Environmental samples from wet deposits will normally be sent to specialists for processing in laboratory conditions. The Archaeological Contractor will agree with the County Archaeologist any necessary delay in completion of the reporting of the evaluation to enable provisional results to be included.
- 9.12 The Archaeological Contractor will make appropriate provision for the application of scientific dating techniques such as radiocarbon, dendrochronology, archaeomagnetic dating, OSL and thermoluminescence dating. The advice of the English heritage regional Scientific Advisor will be sought in advance of the application of these techniques. The Archaeological Contractor will agree with the County Archaeologist any necessary delay in completion of the reporting of the evaluation to enable provisional results to be included.
- 9.13 Where appropriate the guidance in the following English Heritage papers will be followed:
- "Guidelines on the recording, sampling, conservation, and curation of waterlogged wood" 1996

- “Dendrochronology – guidelines on producing and interpreting dendrochronological dates” 1997
- “Archaeometallurgy” 2001
- “Environmental Archaeology: A guide to the theory and practice of methods, from sampling and recovery to post-excavation” 2002
- “Human bones from Archaeological Sites: Guidelines for Producing Assessment Documents and Analytical Reports” 2004
- “Geoarchaeology” 2004
- “Wet Wood and Leather”
- “Archaeomagnetic Dating: Guidelines on producing and interpreting archaeomagnetic dates” 2006
- “Guidelines on the X-radiography of archaeological metalwork” 2006

10. Recording

- 10.1 All trenches, structures, deposits and finds will be recorded according to accepted professional standards. Sufficient data must be recorded to allow the required level of assessment and reporting (see section 11).
- 10.2 Recording must be carried out to a sufficiently high standard to provide a full record of the deposits evaluated, including in trenches where no archaeology is identified.
- 10.3 All features, deposits and finds are to be recorded according to accepted professional standards.
- 10.4 All archaeological contexts are to be recorded individually on context record sheets. A further more general record of the work, comprising a description and discussion of the archaeology, is to be maintained as appropriate. Context sheets are to be primarily filled in by the archaeologist excavating the feature or deposit.
- 10.5 A plan to indicate the location of the boundaries of the evaluated area and the site grid is to be drawn at a scale of 1:1250 (or a similar appropriate scale). Plans indicating the location of the excavated trenches and the location of all archaeological features encountered are to be drawn at an appropriate scale. An overall site plan is to be maintained at a scale of 1:100 or larger scale where appropriate. Sections will be drawn at a scale of 1:10. Significant archaeological features will normally be drawn in plan at a scale of 1:20 or 1:10 if appropriate. All detailed plans and sections are to be related to the 1:100 or 1:1250 plans. The 1:1250 and 1:100 plans are to be accurately related to the National Grid.
- 10.6 Long Sections indicating the full stratigraphic sequence will be drawn for all trenches. Where a very simple sequence is revealed representative sections (minimum 1m wide) at each end of the trench will be sufficient, but where more complex stratigraphy is encountered, complete trench sections will be drawn. In the case of complex stratigraphy, all four sections will be drawn.

- 10.7 All plans and sections are to be levelled with respect to OD.
- 10.8 All plans and sections are to be drawn on polyester based drafting film and clearly labelled.
- 10.9 A full black and white and colour (35mm transparency) photographic record of the work is to be kept. The photographic record is to be regarded as part of the site archive.
- 10.10 The Archaeological Contractor will keep a day to day digital photographic record of the investigation.
- 10.11 The Archaeological Contractor will ensure that the complete site archive including finds and environmental samples are kept in a secure place throughout the period of evaluation and post excavation works.
- 10.12 The site archive is to be consolidated after completion of the evaluation, with all site drawings inked-in, and records and finds collated and ordered as a permanent record.

11. Reinstatement and completion of fieldwork

- 11.1 On completion, trenches will be backfilled, reinstated and left in a safe state to the requirements of the landowner / client.
- 11.2 Where vulnerable archaeological deposits remain within trial trenches these will be appropriately protected from damage as part of the reinstatement. Consideration will be given to providing a marker in backfilled trenches to highlight vulnerable archaeological deposits should re-excavation be necessary.
- 11.3 On completion of fieldwork the Archaeological Contractor will complete the relevant section of the Fieldwork Notification Form and submit it to the County Archaeologist.

12. Reporting

- 12.1 Within three weeks of completion of the evaluation fieldwork (or longer in case of complex sites as agreed with the County Archaeologist) the Archaeological Contractor will produce a report, copies of which (as a minimum) are to be provided to:
- the Developer
 - the County Archaeologist
 - the Local Planning Authority
 - the Local Archaeological Society

- 12.2 When submitting the report to the County Archaeologist the Archaeological Contractor will provide written confirmation that the report has been submitted to the above parties.
- 12.3 If the Archaeological Contractor is required, contractually, only to submit reports directly to the developer or their agent, the Archaeological Contractor must inform the County Archaeologist in writing that they have completed the report and whom it has been forwarded to. The Archaeological Contractor must ensure that the developer is made aware of the need to circulate the report as in 12.1 above.
- 12.4 The Archaeological Contractor may determine the general style and format of the evaluation report but it must be completed in accordance with this specification. The report must provide sufficient information and assessment to enable the County Archaeologist and the Local Planning Authority to reach an informed decision regarding any further mitigation measures that may be required and to stand as an appropriately detailed report on the archaeological fieldwork for future research.
- 12.5 Reports that do not provide sufficient information or that have not been compiled in accordance with the relevant sections of this specification will be returned to the Archaeological Contractor for revision and resubmission.
- 12.6 The report will be submitted to the County Archaeologist in a heat-bound hard-copy and in digital format. The digital copy will be supplied in .pdf format and will contain all text, images and plans present in the hard-copy report in a single .pdf file. The medium will be a CD-ROM formatted according to ISO 9660:1999.
- 12.7 **Report Format** - The final evaluation report will include as a minimum:
- 12.7.1 An **Abstract** summarising the scope and results of the archaeological evaluation.
- 12.7.2 An **Introduction** including:
- the location of the site with a National Grid Reference for the centre sufficient to locate the site to 1m accuracy (e.g. TQ 55555 77777 or easting: 555555, northing: 177777);
 - an account of the background and circumstances of the work;
 - a description of the development proposals, planning history and planning reference together with the archaeological condition (where appropriate);
 - the nature of potential impacts arising from the proposals;
 - the scope and date of the fieldwork, the personnel involved and who commissioned it;
- 12.7.3 An account of the **Archaeological Background** of the development site including:
- geology, soils and topography;

- any known existing disturbances on the site;
- background archaeological potential of the site. This will include a summary of the known Historic Environment Record entries within 500m of the boundaries of the site (or wider where appropriate). The HER entries will be quoted with their full KHER identifier (e.g. TR 36 NW 12);
- summary of any previous phases of archaeological investigation at the development site;

12.7.4 The **Methodology** employed during the evaluation must be detailed in the report. Any aims and objectives specified in the specification will be included as will any further objectives identified during the course of the evaluation. Constraints on the evaluation will also be described.

12.7.5 The report will include a quantification of the project archive contents, their state and future location.

12.7.6 The **Results** of the evaluation field work will be described trench by trench. This description must include for each trench:

- the dimensions of the trench;
- the nature and depth of overburden soils encountered;
- description of all archaeological features and finds encountered in each trench, their dimensions, states of preservation and interpretation;
- a description of the geological subsoil encountered in each trench;
- heights related to Ordnance Datum for a sufficient number of features and deposits. Where the trench results are complex a table showing the dimensions and heights of features and deposits will be included for each trench.
- for complex stratigraphy a Harris Matrix diagram.

12.7.7 The **Finds** recovered during the course of the evaluation will be described, quantified and assessed by artefact type within the evaluation report. The report will also provide an indication of the potential of each category of artefact for further analysis and research. For each category of artefact the report will describe the method of processing, any sub-sampling, conservation and assessment undertaken. Where appropriate local reference collections will be referred to for descriptive and analytical consistency. Any implications for future archive, conservation or discard of the artefacts will also be set out.

12.7.8 The report will include a table showing, per trench, the contexts, classes and quantity of artefacts recovered, together with their date and interpretation.

12.7.9 The evaluation report will include an assessment of the **Environmental** potential of the site. Details will be provided of any environmental sampling undertaken in connection with the fieldwork and the results of any processing and assessment of the samples. The report will describe the method of processing, any sub-sampling and assessment. Any potential for future analysis of the samples or environmental remains recovered from the evaluation will be described. Implications for future archive, conservation or discard of environmental samples or remains will be detailed.

- 12.7.10 The report will include, as appropriate, tables summarising environmental samples taken, together with the results of processing and assessment.
- 12.7.11 Any results from the application of archaeological scientific techniques e.g. specialist dating will be included in the evaluation report.
- 12.7.12 An **Interpretation** of the archaeology of the site will be provided, including its location, extent, date, condition, significance and importance. This will be a synthesis of the stratigraphic, finds and environmental results of the investigation and will include, even if no archaeology is identified as present on the site, description of areas of disturbance, non-archaeological deposits and changes in geological subsoil where appropriate. This section of the report will be supported by a phased interpretative plan of the site, clearly showing the major areas and periods of archaeological activity.
- 12.7.13 An **Impact Assessment** will consider the potential effects of the development on the archaeological remains. This will summarise the archaeological results, describe how any identified archaeological potential identified relates to the site and how the development proposals will affect that archaeology. The report will highlight any areas of sensitivity within the site. Particular note will be made of any variations in the depth of overburden covering any archaeological deposits revealed.
- 12.7.14 The **Conclusion** will summarises the method, results, interpretation and impact assessment.
- 12.7.15 The evaluation report will assess the potential for preservation at the site to inform decisions about mitigation strategies. It will not include any recommendations on preservation measures or further work unless otherwise agreed with the County Archaeologist.
- 12.7.16 The evaluation report will include comments on the effectiveness of the methodology employed and the confidence of the results and interpretation.
- 12.7.17 **Figures / illustrations** – The report will include sufficient illustrations to support descriptions and interpretations within the report text. Figures are to be fully cross-referenced within the document text. As a minimum the evaluation report will include the following figures:
- a site location plan tied into the Ordnance Survey at 1:1250. The plan will also include at least two National Grid points to 1m accuracy and show the site boundary;
 - trench location plans at an appropriate scale showing the layout of archaeological features, coloured by phases or period. The plan will show the location of all trenches and features. A copy of the plan will be overlain on the proposed development plan where this is known. Where possible, projection of archaeological features outside of the trench areas will be included on the plan. This plan will also include two National Grid points;

- plans of the features revealed in each of the trenches at a larger scale e.g. 1:20 or 1:50; such plans are to also illustrate areas of disturbance, change in subsoil and location of sections; The location of significant finds and samples taken will also be indicated;
- relevant section drawings and trench soil profiles as appropriate;
- illustrations and/or photographs of significant finds.

12.7.18 All report illustrations must be fully captioned and scale drawings must include a bar scale. Standard archaeological drawing conventions must be used. Plan and section illustrations must include the numbers of all contexts illustrated. North must be included on all plans and will be consistent. Sections must indicate the orientation of the section and the Ordnance Datum height of the section datum.

12.7.19 Black & White or Colour photographs will be included to illustrate key archaeological features, trenches and site operations. All photographs will be appropriately captioned.

13. Archive Preparation & Deposition

13.1 The site archive, to include all project records and cultural material produced by the project, is to be prepared in accordance with *Guidelines for the preparation of excavation archives for long-term storage (UKIC 1990)*. On completion of the project the Archaeological Contractor will arrange for the archive to be deposited in accordance with the provisional arrangements made with a suitable museum or repository at the onset of fieldwork. Any alternative arrangements will be agreed with the County Archaeologist and the Local Planning Authority.

14 Monitoring and Liaison

14.1 The Archaeological Contractor is to allow the site records to be inspected and examined at any reasonable time, during or after the evaluation fieldwork, by the client/developer, the County Archaeologist or any designated representative of the Local Planning Authority

14.2 Once the trenches have been evaluated and an initial assessment of the archaeology carried out, there will be an on-site meeting with the County Archaeologist to determine if further evaluation work is appropriate in order to meet the objectives.

14.3 The Archaeological Contractor will liaise closely with the County Archaeologist throughout the course of the evaluation and will arrange for on-site meetings at key decision points.

14.4 The Archaeological Contractor is to make contact with the local archaeological society and keep them informed on the progress of the evaluation. Subject to

health and safety constraints the Archaeological Contractor will afford opportunity to the local archaeological society to visit the evaluation site. Copies of all reports will be provided to the local archaeological society.

- 14.5 The Archaeological Contractor is to circulate a completed Fieldwork Notification Form (Appendix 2) at the start and completion of fieldwork and at the completion of post excavation reporting stages.

15. Copyright and data protection

- 15.1 Information submitted to the County Archaeologist in conjunction with planning applications automatically becomes publicly accessible and can be viewed by anyone at any time. In addition, the Local Planning Authority and Kent County Council are subject to the requirements of the Freedom of Information Act (2000) and Environmental Information Regulations (2004). Information may be subject to Fol or EIR requests and any documentation submitted in connection with the project may be made publicly available unless doing so contravenes the Data Protection Act (1998).
- 15.2 While copyright of reports and other information arising from the fieldwork remains with the originator, the Archaeological Contractor will undertake to make this information available to interested parties. The Archaeological Contractor will agree to allow reports of the fieldwork to be copied and made available to interested parties for archaeological research. The reports may be made available on the Internet no sooner than three months after the submission of the report. Archaeological Contractors who believe that there are special reasons for not publishing the report on the Internet should reach a separate agreement with the County Archaeologist.

16. Health and Safety

- 16.1 The Archaeological Contractor will conduct the work in compliance with the Health and Safety at Work etc Act 1974. The Archaeological Contractor will also follow the guidance set out in "Health and Safety in Field Archaeology" Standing Conference of Archaeological Unit Managers 1997.
- 16.2 The Archaeological Contractor is expected to maintain a Health and Safety Policy and a procedures manual and have available appropriate expertise in Health and Safety advice. Site staff will have an appropriate level of training to enable them to carry out fieldwork safely.
- 16.3 The Archaeological Contractor will maintain the site in a safe condition. All hazards will be appropriately identified and managed. Deep excavations will be appropriately fenced.
- 16.4 The Archaeological Contractor will carry out a risk assessment prior to commencement of fieldwork and where appropriate a COSHH assessment.

Risks and measures to reduce risk will be communicated to all working on and visiting the site.

- 16.5 The Archaeological Contractor will have available suitable site accommodation, welfare and toilet facilities.

17. KCC HER

- 17.1 The Archaeological Contractor is to provide the Kent Historic Environment Record with copies of all reports in both heat-bound hard-copy and digital format (see 12.6 above).
- 17.2 Upon completion of the excavation the Archaeological Contractor will supply the Kent Historic Environment Record with a completed HER form (see Appendix 1)
- 17.3 The Archaeological Contractor will supply the Kent Historic Environment Record with the following digital datasets:
- A .dxf file containing polygon data that describes in detail all excavated/ watched area boundaries, whether trenches, test pits, excavated areas or areas examined by watching brief. This .dxf file must be internally geo-referenced (i.e. the co-ordinate system used in the file must be the Ordnance Survey co-ordinate system).
 - A separate .dxf file that contains a number of Layers. Each Layer should represent a different phase of the archaeological remains on site. The name of each Layer must be the phase number used on the site accompanied by a date range (e.g. “2, from –2000 to –800”, “7A, from 410 to 700” etc). Each layer must contain only the features relevant to that phase digitized as polylines. Where the dating is based on scientific dating methods such as radiocarbon, the dates must be calibrated calendar dates.
- 17.4 A guidance document has been produced for Kent County Council that will inform contractors as to how this information can be produced within AutoCad. This document is available from the County Archaeologist and Kent County Council Historic Environment Record.
- 17.5 The Archaeological Contractor should also provide a representative selection of digital site photographs illustrating the archaeology of the site and the operations of the investigation. These will be in .jpg format at a minimum 300dpi. These will be deposited with the County HER and will be used for presentations on aspects of the archaeology of Kent.
- 17.6 It is to be understood that photographs and notes taken by KCC Archaeological Officers in connection with the work that do not identify individuals or site locations may be used by KCC for outreach and publicity purposes, including on social media sites such as Facebook, Twitter etc. The Archaeological

Contractor should, **preferably in advance** of the works, raise with the KCC Archaeological Officer any concerns that they or their client may have over the use and dissemination of images or information for outreach purposes. In such cases the Archaeological Contractor and their client will agree a protocol with the KCC Archaeological Officer for the appropriate dissemination and use of images and information which balances the concerns of the contractor and/or client with the objective of ensuring that the people of Kent are kept informed of the archaeological discoveries in the county.'

18 General

18.1 In carrying out the work the Archaeological Contractor is to abide by:

- all statutory provisions and by-laws relating to the work in question,
- the Institute of Field Archaeologists *Code of Conduct*,
- the Institute of Field Archaeologists *Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology*.

APPENDIX 1

Kent County Council HER summary form

Site Name:		
Site Address:		
Summary: (50 words max)		
District/Unitary:		Parish:
Period(s):		
NGR (centre of site : 8 figures): (NB if large or linear site give multiple NGRs)		
Type of archaeological work (underline)		
Evaluation:	Watching Brief	Field Walking
Documentary study	Building recording	Earthwork
survey		
Excavation:	Geophysical Survey	Field Survey
Geoarchaeological investigation		
Date of Recording:		
Unit undertaking recording:		
Geology:		
Title and author of accompanying report:		
Summary of fieldwork results (begin with earliest period first, add NGRs where appropriate) (200 words max)		
		(cont on attached sheet)
Location of archive/finds:		

Contact at Unit:	Date:
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APPENDIX 2 - FIELDWORK NOTIFICATION FORM

Guidance for Completing the Kent Archaeological Fieldwork Notification Form**Purpose**

The purpose of the form is to improve the notification, tracking and monitoring of archaeological fieldwork in Kent. Its primary purpose relates to archaeological work being undertaken for the purposes of planning and development but it is hoped that it will be also usable by archaeological societies and other bodies undertaking fieldwork in the county.

Approach

- The archaeological body undertaking the fieldwork should fill in the form. Sections A and B should be filled in before fieldwork starts and submitted to the County Archaeologist. This may be submitted in digital copy to speed things along but a signed copy should follow in the post.
- Section A contains details of the project while Section B refers specifically to the onset of the phase of fieldwork. In signing section B the Archaeological Contractor is confirming that the necessary funds and resources to complete the works to the specification have been made available.
- The form should not be filled in separately for each period of an intermittent watching brief but should be filled in for major stages of fieldwork, for example separate phases of evaluation and excavation.
- Section C should be submitted at the completion of the fieldwork stage and should if known indicate whether further work is anticipated. This section sets out a brief summary of findings and what reports are to be submitted. For excavations these will include interim, assessment and full reports. Again the form may be submitted digitally with a signed copy to follow in the post. (The details of Sections A and B should remain filled in on the same form).
- Section D should be submitted as reports are submitted to the County Archaeologist. For excavations the form need not be submitted with interim reports but should be submitted with assessment and full reports.

Appendix 2 Kent County Council Manual of Specifications Part B, Specification for Preliminary Evaluation of Quaternary Deposits and Palaeolithic Potential

SPECIFICATION FOR PRELIMINARY EVALUATION OF QUATERNARY DEPOSITS AND PALAEOLITHIC POTENTIAL

1. Introduction

- 1.1 A preliminary evaluation for Quaternary deposits and Palaeolithic potential involves limited intrusive investigation of a site to determine initially whether Quaternary deposits are present/absent, and to provide a preliminary indication of their nature, distribution and Palaeolithic potential.
- 1.2 A preliminary evaluation is much more restricted in scope and intensity than a standard field evaluation. However, if/when Quaternary deposits are found, then they will be subject to similar methods of investigation and standards of recording, as specified below.
- 1.3 If/when Quaternary deposits are found, then the preliminary evaluation will typically be followed by a more intensive field evaluation to investigate their nature, distribution and Palaeolithic potential in more detail.
- 1.4 A preliminary investigation will typically use any, or a combination of, four methods of investigation: (a) window-samples, (b) cable/percussion boreholes, (c) cleaning/recording of standing sections and (d) machine-excavated test pits.
- 1.5 The approach, or approaches, required are specified in the site-specific Part A of the Kent County Council project specification.

2. General requirements

- 2.1 Preliminary evaluation will be carried out by archaeological organisations (from here on referred to as 'the Archaeological Contractor') with recognised experience and expertise in the specified type of work to be undertaken. Registration with the Chartered Institute for Archaeologists (CIfA) as a Registered Organisation (RO) will normally be considered as an indicator, but not a prerequisite, of such expertise and experience. A good working knowledge of the archaeology of Kent will also be considered highly desirable.
- 2.2 The work will be supervised on site at all times for the Contractor by a member of staff with the required level of experience and who will be responsible for the conduct of on-site work.
- 2.3 A designated specialist (or specialists) with Palaeolithic and Quaternary geological expertise should be engaged to supervise the work in the field in conjunction with the Contractor, and to carry out subsequent reporting of the results. A relevant PhD or equivalent research experience and a suitable body of previous work and practical experience, including good working knowledge of the Quaternary deposits of the study region, would normally be considered a pre-requisite to demonstrate suitable expertise. CVs should be provided for any specialists.
- 2.4 The identity of the specialist (or specialists) and the scope of their work should be agreed with the County Archaeologist before the work commences, and then

the named specialist/s should carry out the agreed work. If it then becomes necessary for the agreed specialist/s to be replaced or for parts of the agreed work to be carried out by anyone other than the agreed specialist/s, then these variations should also be agreed in advance with the planning authority.

- 2.5 Prior to any work being undertaken the Archaeological Contractor will inform the County Archaeologist and communicate details of the proposed team, including (if required) CVs for senior staff and specialists. Senior staff and specialists will need to demonstrate an appropriate level of experience and expertise and should preferably be, where appropriate, Members of the Chartered Institute for Archaeologists (MCIfA).
- 2.6 Prior to undertaking the preliminary evaluation the Archaeological Contractor will need to demonstrate that the necessary resources are in place to undertake the work, through to reporting. The Archaeological Contractor will have available appropriate specialists necessary to support the successful completion of the archaeological fieldwork and post-excavation work.

3. Pre-site requirements

- 3.1 Prior to undertaking preliminary evaluation the Archaeological Contractor will have gathered and considered the following information:
- relevant information on the Kent Historic Environment Record (HER) held by Kent County Council and maintained by the Heritage Conservation group
 - any earlier reports of fieldwork relevant to the site
 - Solid and Drift geology
 - geotechnical site investigation data (if available)
 - British Geological Survey on-line borehole data
 - any desk-based studies of the site
- 3.2 In certain circumstances the following will also be considered:
- relevant published secondary sources
 - relevant historic maps held at the Centre for Kentish Studies
 - aerial photographs where cropmarks are considered to indicate archaeology on or close to the site
- 3.3 The Archaeological Contractor will ensure that all reasonable measures have been taken to identify any constraints to undertaking the preliminary evaluation work. The Archaeological Contractor will seek information on the presence of services, any ecological constraints, the presence of Public Rights of Way, the presence of contaminated land or any other risks to health and safety. Attention will be paid to avoiding any trees, protected or otherwise, that are to be retained or to avoid damage to the roots thereof. Prior to the commencement of fieldwork, the Archaeological Contractor shall agree with the developer, or their agent, any fencing required during the works and requirements for reinstatement at completion. The Archaeological Contractor shall ensure that arrangements are in place for appropriate reinstatement prior to the commencement of any excavations.

- 3.4 The Archaeological Contractor will make provisional arrangements for the deposition of the site archive with an appropriate museum or suitable repository agreed with the County Archaeologist. The Archaeological Contractor will obtain a provisional accession number for the site archive from the recipient museum (except where the museum prefers to issue an accession number following completion of fieldwork) and any guidelines from the recipient museum regarding deposition of the site archive.
- 3.5 Full copies of the Specification must be issued to the field officer responsible for on-site work and a copy of the agreed Specification and any additional method statements must be available on site at all times. The team carrying out the preliminary evaluation must be familiar with the Specification and have access on site to any previous evaluation or survey reports.
- 3.6 The Archaeological Contractor will inform the County Archaeologist of the start date of the work (at least five working days before) and arrange for monitoring visits to be undertaken, using the Fieldwork Notification Form & HER Summary Form (see Appendix 1). The Archaeological Contractor will continue to keep the County Archaeologist informed of the progress of work and will notify the County Archaeologist immediately if particularly important archaeological remains are encountered.

4. Aims and objectives

- 4.1 The general aims of the preliminary evaluation are to:
- establish the broad presence/absence, nature, character, distribution, extent and depth of Quaternary deposits across the site and, where necessary, to correlate these as a deposit model
 - develop a preliminary assessment of the possible Palaeolithic potential of the site
 - establish a broad preliminary model for the site's archaeological potential, by identifying preliminary Historic Environment Areas (HEAs) of different character and potential (see section 9.7 below)
- 4.2 More-specific objectives of the preliminary evaluation are thus to:
- ascertain (where Quaternary deposits are encountered) their extent, depth below ground surface, character, date and Palaeolithic potential
 - establish the extent to which previous development and/or other processes have affected Quaternary deposits at the site
 - establish the likely impact on any surviving Quaternary deposits of the proposed development
 - determine the presence and potential of lithic artefact evidence and faunal remains in the sediments encountered
 - determine the presence and potential of palaeoenvironmental evidence in the sediments encountered
 - determine the presence of, or potential for, undisturbed primary context Palaeolithic occupation surfaces in the sediments encountered

- interpret the depositional and post-depositional history of any artefactual or biological evidence found
- establish correlations of any Pleistocene deposits found with reference to adjacent and regional sequences and to national frameworks
- assess in local, regional and national terms, the archaeological and geological significance of any Pleistocene deposits encountered, and their potential to fulfil current research objectives
- establish whether there is a need for further, more-detailed, field evaluation to clarify the Palaeolithic potential, and if so to make recommendations on the methods and location of further intrusive or non-intrusive works

4.3 Further site-specific aims and objectives may be specified in Part A.

5. Scope and methods

5.1 The preliminary evaluation will involve any, or a combination of, the following four methods of investigation: (a) window-samples, (b) cable/percussion boreholes, (c) cleaning/recording of standing sections and (d) machine-excavated test pits. The site-specific specification (Part A) will determine which of these methods is applicable for the current site, and the number and location of interventions.

5.2 Generic specifications for the application of these methods are given below, but only those specified for this specific site (see Part A) need be followed in carrying out the preliminary evaluation.

5.3 Window samples

5.3.1 The layout and number of window samples will be in accordance with the site-specific specification (see Part A). Window sample locations may on occasion need to be slightly moved at discretion of the on-site field supervisor and Palaeolithic specialist to avoid post-Palaeolithic remains or for other circumstances such as the presence of services or features such as trees, overhead cables, etc.

5.3.2 Window sample locations will be laid out initially following the locations previously determined (Part A), and the NGR and ground-surface height accurately located with a differential GPS system or Total Station. Augering will not take place where there is a risk of contaminating groundwater.

5.3.3 Window-sampling will be carried out by an experienced contractor using a tracked terrier rig under primary supervision of the Archaeological Contractor with the Palaeolithic/Quaternary specialist/s also in attendance.

5.3.4 Window samples will be dug to 5m deep, unless otherwise specified. The first metre at each window sample location will be hand-dug to verify that natural sediments are present and there is no risk of encountering services, and the revealed sequence logged. If a starter pit larger than 20cm width is required, it will be treated as a test pit (see section 5.6 below). If significant archaeology is

encountered within the starter pit excavation will cease, the exposed features or deposits carefully cleaned and recorded, and the County Archaeologist informed. The subsequent 4 m will be recovered as 4 x 1 m plastic tubes, which will be slit open on site, cleaned, digitally photographed and logged by the Palaeolithic/Quaternary specialist/s following standard sedimentary recording procedures.

- 5.3.5 Photographs of window samples will include one image with all four 1m tubes aligned parallel with a hand-tape (or other tape) with 1cm scale divisions, with the top of each tube facing in the same direction, and with a board or other label giving the window sample unique identifier. Close-up views should also be taken of important sedimentary features and junctions.
- 5.3.6 Any archaeological and/or faunal remains encountered will be recovered. Samples may also be taken to evaluate for palaeoenvironmental biological remains, if thought appropriate.
- 5.3.7 The ground surface at all window sample locations will be independently surveyed, and tied in with the OS Grid and Ordnance Datum with horizontal and vertical accuracy of $\pm 2\text{cm}$.
- 5.3.8 Voids left by sampling will be backfilled to the client/landowner's requirements. Where required a bentonite grout will be used to fill the void left through augering, otherwise clean material will be used to backfill the void left by the sampling to ground level

5.4 Cable percussion boreholes

- 5.4.1 The layout and number of cable percussion boreholes will be in accordance with the site-specific specification (see Part A). Boreholes may on occasion need to be slightly moved at discretion of the on-site field supervisor and Palaeolithic specialist to avoid post-Palaeolithic remains or for other circumstances such as the presence of services or features such as trees, overhead cables, etc.
- 5.4.2 Cable percussion drilling will be carried out by an experienced contractor using an A-Frame rig under the primary supervision of the drilling operative as advised by the Archaeological Contractor with the Palaeolithic/Quaternary specialist/s also in attendance.
- 5.4.3 Cable percussion boreholes will be drilled to a depth agreed with the County Archaeologist. Ideally this will span the full depth of Quaternary deposits at the borehole location, proving the underlying pre-Quaternary geology to a depth of at least 1m. The first 1.2m, or other depth based on an assessment of the ground conditions by a competent person, at each borehole location will be hand-dug to verify that natural sediments are present and there is no risk of encountering services, and the revealed sequence in this inspection pit will be logged, and where necessary, sampled. To avoid contamination or collapse, all cable percussion holes should be cased as they progress.

- 5.4.4 Regular, accurate depth measurement should be made by the driller and communicated to the Palaeolithic/Quaternary specialist. These should be made whenever arisings are logged and sampled, and at each recorded interface between two sedimentary deposits. The log should include details of deposit colour, matrix, coarse component descriptions (clast size-range, degree of angularity roundedness, material and percentage of deposits) as well as any observed sedimentary structures. A series of working shots will also be maintained during the course of the fieldwork.
- 5.4.5 Subsequent drilling methodology will depend on the nature of the deposits encountered. Where deposits containing gravels within otherwise cohesive sediments, of low archaeological potential, are encountered, a clay cutter may be most appropriate tool to use. This will provide bulk samples which should be logged and retained where appropriate at 0.25-0.5m intervals. Wet gravels are best drilled using a shell bailer; these can similarly be logged and sub-sampled at agreed intervals (e.g. 0.25-0.5m).
- 5.4.6 Where fine-grained deposits with apparent or demonstrated palaeoenvironmental or archaeological potential are encountered, sealed U100 samples should be taken. These will provide both the sealed 45cm long U100 tube and a further 0.1m long bulk sample from the cutter attachment. Logs should be made on the basis of the observed sediments in either of the U100 tube and the bulk sample. The U100 core should be carefully labelled, indicating the uppermost end of the core. Where continuous U100 samples are to be taken, extra care must be given during the subsequent cleaning phase not to over-cut into undisturbed sediments. Sleeves will be labelled appropriately and handled with care, voids will be packed, splits taped, and cores will be stacked and carried horizontally.
- 5.4.7 Where agreed, U100 tubes should be opened off-site immediately after field work to provide detailed logs of their contents. Photographs of the U100 cores using an appropriate scale with 1cm scale divisions and with a board or other label giving the U100 sample's unique should be made.
- 5.4.8 Any archaeological and/or faunal remains encountered will be recovered and recorded as small finds.
- 5.4.9 Voids left by sampling will be backfilled to the client/landowner's requirements. Where required a bentonite grout will be used to fill the void left through augering, otherwise clean material will be used to backfill the void left by the sampling to ground level.

5.5 Recording of standing sections

- 5.5.1 Standing sections will be cleaned, recorded and sampled if appropriate at the locations given in the site-specific specification (see Part A).
- 5.5.2 Prior to recording and sampling sections will be cleaned using hand tools to create clear, vertical exposures through the sedimentary sequence. Where sections are deep, stepped sections should be used where practical to allow for safe access and recording.

- 5.5.3 The section should be photographed with the inclusion of appropriate photographic scales and a marked-up board indicating the site code, position and orientation of the section. Large sections should be photographed both in their entirety and as composite sections using a high-resolution camera.
- 5.5.4 Sections should be drawn at a scale appropriate to their size and complexity. For example, small sections or exposures should be drawn at 1:10 or 1:20, larger running sections at 1:50 or greater. All plans and sections are to be levelled with respect to OD and are to be drawn on polyester based drafting film and clearly labelled.
- 5.5.5 Drawings should show surveyed section lines and nail positions, the upper and lower surface of the section as well as all major sedimentary boundaries and associated archaeological features. The section should also indicate the position of exposed archaeological finds and faunal material; the position of clasts should be added as appropriate.
- 5.5.6 Drawings should be annotated with unit numbers and, where appropriate, sedimentary descriptions. Unit/Context, find and sample numbers should correlate to the appropriate records in the site archive.
- 5.5.7 Sampling from the section should be undertaken once the first drawn and photographic records are complete. A further photographic record should be made after sampling and the sample locations added to the drawn record of the section.

5.6 Machine-excavated test pits

- 5.6.1 The layout and number of test pits will be in accordance with the site-specific specification (see Part A). Test pits may on occasion need to be slightly moved at discretion of the on-site field supervisor and Palaeolithic specialist to avoid post-Palaeolithic remains or for other circumstances such as the presence of services or features such as trees, overhead cables, etc.
- 5.6.2 Each test pit will be dug by a tracked 10-20 tonne 360° mechanical excavator (or other suitable type to be agreed with the County Archaeologist) with a toothless bucket of the same width as the trial trenches. Each test pit will be one bucket-width wide, 3-4m long and up to 5m deep. If sediments are too tough for excavation to be achieved with a toothless bucket, then it is acceptable to switch to a toothed bucket, although the toothless bucket must be reverted to whenever possible. Excavation will cease at a shallower depth if it is clear that Quaternary deposits are not present, and that pre-Quaternary deposits have been reached; care will be taken to ensure that the presence of Quaternary deposits has not been masked by pre-Quaternary deposits having been redeposited on top of in situ Quaternary deposits. Excavation will cease if primary context Palaeolithic evidence is encountered, and the County Archaeologist informed.
- 5.6.3 Each test pit will be taken down in horizontal spits of 5-10cm, respecting the interface between sedimentary units when unit changes are encountered. The work will be directed by a recognised Palaeolithic specialist with experience of

recording and interpreting Pleistocene sediments, who will record and number the sequence of sedimentary units as excavation progresses following standard descriptive practices. The textural characteristics (grain-size, consolidation, colour, material and sedimentary structures) of sedimentary units will be recorded, and the shape and nature of their lithostratigraphic contacts (dip, conformity and overall geometry). Test pits will be entered at the maximum safe depth (based on an assessment of the ground conditions by a competent person) to record the upper stratigraphy. After excavation has progressed beyond this depth, recording will typically take place without entering the test pit. It may, however, be occasionally necessary to widen and step out the upper part of a test pit to allow direct access to its lower part, for instance for controlled artefact/fossil recovery, to investigate for the presence of an undisturbed landsurface, or for controlled sediment sampling.

- 5.6.4 On-site spit/sieve sampling. Spit-samples of at least 150 litres will be numbered, their position in the stratigraphic sequence recorded, and set aside at regular c. 25cm intervals as excavation progresses. At least 100 litres from each spit-sample will be dry-sieved on site through a c. 1cm mesh for recovery of lithic artefacts and faunal remains. If the sediment encountered is not suitable for dry-sieving (i.e. too clayey), excavation will proceed in shallower spits of c. 5cm, looking carefully for the presence of any archaeological evidence, and the spit samples will also be carefully investigated by hand (using archaeological trowels) for any archaeological evidence. The remainder of the spit-sample may be sampled for palaeoenvironmental biological remains (see details below) or clast lithology, if appropriate.
- 5.6.5 Palaeoenvironmental sampling. The presence/potential for palaeoenvironmental micro-biological evidence such as pollen, insects, molluscs and small vertebrates will be assessed for each sediment unit by field inspection by the Palaeolithic/Quaternary specialist. He/she will consider the potential of the sediments encountered, and guide sampling as appropriate (including specifying any special needs for off-site processing methods). Provision should be built into the archaeological programme for processing any samples taken and reporting on the results at the evaluation stage.
- 5.6.6 Chronometric dating. Consideration will be given to the suitability of any sediment units encountered for optically stimulated luminescence dating (OSL). Samples for analysis should ideally be taken with *in situ* dosimetry readings using a portable gamma ray spectrometer. This can be done under the guidance of the Palaeolithic specialist in the field at the evaluation stage, if the appropriate equipment is available, or carried out subsequently. If suitable sediment is encountered it is advisable to take an OSL sample anyway, even without *in situ* dosimetry measurement, as this sample can still provide a date, in case there is no future opportunity for renewed investigation.
- 5.6.7 Section drawing and photography. A representative section from each test pit will be drawn at a scale of 1:20 and photographed in colour (digital) once excavation has reached its full depth, and at appropriate stages in the course of excavation if features of interest are revealed. Other sections will also be drawn and/or photographed as appropriate, particularly where more complex stratigraphy is encountered. A series of working shots will also be maintained during the course of the fieldwork.

- 5.6.8 Backfilling. Each test pit will be dug in turn and backfilled as soon as possible following excavation and the completion of recording. No test-pits will be left open untended or overnight. In exceptional circumstances (for instance by special request of the County Archaeologist) Palaeolithic test pits may be left open for longer periods if deemed safe to do so, but these will then have to be fenced off and marked with clear warning signs. The Archaeological Contractor shall ensure that arrangements are in place for appropriate reinstatement prior to the commencement of any excavations.
- 5.6.9 Post-Palaeolithic features. Careful attention will be paid to the presence of any post-Palaeolithic features or remains in the upper part of natural deposits. If post-Palaeolithic archaeological remains are encountered excavation will cease, the exposed features or deposits carefully cleaned and recorded; the County Archaeologist will be informed if significant remains are encountered. Where vulnerable archaeological deposits have been identified these will be appropriately protected from damage prior to backfilling. Consideration will be given to providing a marker in backfilled trenches to highlight vulnerable archaeological deposits should re-excavation be necessary. The Palaeolithic test pit will then be located in a different place to avoid affecting more recent remains.
- 5.6.10 Service avoidance. Before excavation begins the statutory authorities will be consulted, where this has not already been done, for information regarding the presence of any below/above ground services. The site will be walked over and inspected to visually identify, where possible, the location of above and below ground services. Test pit locations will be scanned before excavation commences with a Cable Avoidance Tool (CAT) to verify the absence of any live underground services. Any site procedures concerning permissions to dig will be followed.

6. Finds recovery, processing and treatment

- 6.1 All artefacts recovered during the excavations on the site are the property of the Landowner. They are to be suitably bagged, boxed and marked in accordance with the United Kingdom Institute for Conservation, *Conservation Guidelines no.2* and on completion of the archaeological post-excavation programme the landowner will arrange for them to be deposited in a museum or similar repository agreed with the County Archaeologist and the Local Planning Authority.
- 6.2 Artefacts will be excavated carefully by hand. The Archaeological Contractor will use an appropriately qualified and experienced archaeological conservator to assist in the lifting of fragile finds of significance and/or value.
- 6.3 Artefacts will be collected and bagged by archaeological context. The location of special finds will be recorded in three dimensions. Three-dimensional recording of in-situ flint working deposits will be carried out.

- 6.4 Where appropriate to address the research objectives of the archaeological evaluation, sieving of deposits will be undertaken to maximise recovery of small artefacts. A strategy for such sieving will be agreed in advance with the County Archaeologist.
- 6.5 Records of artefact assemblages will clearly state how they have been recovered, sub-sampled and processed.
- 6.6 Excavated artefacts will be bagged upon recovery or placed in finds trays. They must not be left loose on site.
- 6.7 All metal objects, other than late post medieval objects, will be X-rayed unless otherwise agreed with the County Archaeologist.
- 6.8 Treatment of treasure. Finds falling under the statutory definition of Treasure (as defined by the Treasure Act of 1996 and its revision of 2002) will be reported immediately to the relevant Coroner's Office, the Kent Finds Liaison Officer (FLO) who is the designated treasure co-ordinator for Kent, the landowner and the County Archaeologist. A Treasure Receipt (obtainable from either the FLO or the DCMS website) must be completed and a report submitted to the Coroner's Office and the FLO within 14 days of understanding the find is Treasure. Failure to report within 14 days is a criminal offence. The Treasure Receipt and Report must include the date and circumstances of the discovery, the identity of the finder (put as unit/contractor) and (as exactly as possible) the location of the find.
- 6.9 Scientific dating. The Archaeological Contractor will make appropriate provision for the application of scientific dating techniques such as radiocarbon, dendrochronology, palaeomagnetic dating, OSL and thermoluminescence dating. The advice of the Historic England regional Scientific Advisor will be sought in advance of the application of these techniques. The Archaeological Contractor will agree with the County Archaeologist any necessary delay in completion of the reporting of the evaluation to enable provisional results to be included.
- 6.10 Where appropriate the guidance in the following Historic England papers will be followed:
- "Guidelines on the recording, sampling, conservation, and curation of waterlogged wood" (1996)
 - "Dendrochronology – guidelines on producing and interpreting dendrochronological dates" (1998)
 - "[Centre for Archaeology Guidelines: Archaeometallurgy](#)" (2015)
 - "Environmental Archaeology: A guide to the theory and practice of methods, from sampling and recovery to post-excavation (second edition)" (2011)
 - "Animal Bones and Archaeology" (2014)
 - "[Guidelines for the Curation of Waterlogged Macroscopic Plant and Invertebrate Remains](#)" (2008)
 - "Human bones from Archaeological Sites: Guidelines for Producing Assessment Documents and Analytical Reports" (2004)

- “Geoarchaeology” (2015)
- “Archaeomagnetic Dating: Guidelines on producing and interpreting archaeomagnetic dates” (2006)
- “Guidelines on the X-radiography of archaeological metalwork” (2006)
 - “Waterlogged Organic Artefacts: Guidelines on their Recovery, Analysis and Conservation” (2012)

7. Surveying and recording

- 7.1 All interventions (test pits, boreholes, window samples and/or cleaned sections), deposits and finds will be recorded according to accepted professional standards. Sufficient data must be recorded to allow the required level of assessment and reporting (see section 9).
- 7.2 As a minimum, the locations and ground-surface level of all interventions need to be surveyed to 1cm accuracy.
- 7.3 All interventions should be recorded individually on separate record sheets, with each record sheet including details of the location co-ordinates (NGR to 0.01m) and ground surface height (OD), the sediment sequence encountered, and any finds made and/or sampling carried out. A further, more general record of the work, comprising a description and discussion of the archaeology, is to be maintained as appropriate.
- 7.4 A plan to indicate the location of the boundaries of the evaluated area and the site grid is to be drawn at a scale of 1:1250 (or a similar appropriate scale). Plans indicating the locations of the interventions are to be drawn at an appropriate scale. Sections will typically be drawn at a scale of 1:20, although can also be drawn at 1:10 or 1:50 if appropriate.
- 7.5 All section drawings will include a horizontal datum line, with both ends (and intervening points along the line if appropriate) tied in with the OS grid to 0.01m accuracy, and with its height above OD surveyed to the same level of accuracy. All plans and sections are to be levelled with respect to OD.
- 7.6 All plans and sections are to be drawn on polyester based drafting film and clearly labelled.
- 7.7 A full colour digital photographic record of the work is to be kept, including general shots of work in progress and a day-to-day digital photographic record of the investigation. The photographic record is to be regarded as part of the site archive.
- 7.8 The Archaeological Contractor will ensure that the complete site archive including finds and environmental samples are kept in a secure place throughout the period of evaluation and post excavation works.
- 7.9 The site archive is to be consolidated after completion of the evaluation work, with all records and finds collated and ordered as a permanent record.

8. Reinstatement and completion of fieldwork

- 8.1 On completion, all interventions will be backfilled or otherwise reinstated and left in a safe state to the requirements of the landowner / client.
- 8.2 Palaeolithic test pits should by default be backfilled directly after excavation of each has been completed, and before excavation of further test pits commences. In exceptional circumstances (for instance by special request of the County Archaeologist) Palaeolithic test pits may be left open for longer periods if deemed safe to do so, but these will then be fenced off and marked with clear warning signs.
- 8.3 Where vulnerable archaeological deposits remain in the ground these will be appropriately protected from damage as part of the reinstatement. Consideration will be given to providing a marker to highlight vulnerable archaeological deposits should re-excavation be necessary.
- 8.4 On completion of fieldwork the Archaeological Contractor will complete the relevant section of the Fieldwork Notification Form and submit it to the County Archaeologist.

9. Reporting

- 9.1 Within three weeks of completion of the fieldwork (or longer in case of complex sites as agreed with the County Archaeologist) the Archaeological Contractor and specialist/s will produce a report, copies of which (as a minimum) are to be provided to:
- the Developer
 - the County Archaeologist
 - the Local Planning Authority
 - the Local Archaeological Society
- 9.2 When submitting the report to the County Archaeologist the Archaeological Contractor will provide written confirmation that the report has been submitted to the above parties.
- 9.3 If the Archaeological Contractor is required, contractually, only to submit reports directly to the developer or their agent, the Archaeological Contractor must inform the County Archaeologist in writing that they have completed the report and whom it has been forwarded to. The Archaeological Contractor must ensure that the developer is made aware of the need to circulate the report as in 9.1 above.
- 9.4 The Archaeological Contractor may determine the general style and format of the evaluation report, but it must be completed in accordance with this specification. The report must provide sufficient information and assessment to enable the County Archaeologist and the Local Planning Authority to reach an informed decision regarding any further mitigation measures that may be required and to stand as an appropriately detailed report on the archaeological fieldwork for future research.

- 9.5 Reports that do not provide sufficient information or that have not been compiled in accordance with the relevant sections of this specification will be returned to the Archaeological Contractor for revision and resubmission.
- 9.6 The report will be submitted to the County Archaeologist in a hard-bound hard-copy and in digital format. The digital copy will be supplied in .pdf format and will contain all text, images and plans present in the hard-copy report in a single .pdf file.
- 9.7 **Report Format** - The final preliminary evaluation report will include as a minimum:
- 9.7.1 An **Abstract** summarising the scope and results of the preliminary evaluation.
- 9.7.2 An **Introduction** including:
- a map showing the site location, with OS grid lines and a linear scale
 - the location of the site with National Grid Reference for the centre sufficient to locate the site to 1m accuracy (e.g. TQ 44444 77777, or 12-figure NGR 544444 177777)
 - an account of the background and circumstances of the work
 - a description of the development proposals, planning history and planning reference together with the archaeological condition (where appropriate)
 - the nature of potential impacts arising from the proposals
 - the scope and date of the fieldwork, the personnel involved and who commissioned it
- 9.7.3 An account of the **Archaeological Background** of the development site including:
- geology, soils and topography, including a description of the likely pre-Quaternary and Quaternary geology of the proposed development site and the surrounding area up to 3km from the site boundary, so far as could be interpreted prior to the preliminary evaluation work
 - any known existing disturbances on the site
 - background archaeological potential of the site for (a) Lower/Middle Palaeolithic, and (b) Upper Palaeolithic. This will include a review of known Historic Environment Record (HER) entries and other relevant records within the site, and for up to 3km from the site boundary. The HER entries will be quoted with their full KHER identifier (e.g. TR 36 NW 12)
 - summary of any previous phases of archaeological investigation at the development site
- 9.7.4 A review of the **Aims and objectives** of the evaluation as specified in the site-specific (Part A) and generic (Part B) specifications must be detailed in the report, together with any further objectives identified during the course of the evaluation.
- 9.7.5 The **Methodology** employed during the preliminary evaluation must be detailed in the report, including a description of the range and quantity of different interventions and a site layout plan showing all interventions. Any constraints on

the evaluation will also be described. Simply referring to the methodology outlined in the specification is not acceptable.

- 9.7.6 The **Results** of the preliminary evaluation will be described for each trench/test-pit, borehole or standing section, including location, dimensions, nature of deposit encountered. The report will include, as appropriate, tables summarising environmental samples taken, together with the results of processing and assessment.
- 9.7.7 Any results from the application of archaeological scientific techniques e.g. specialist dating will be included in the evaluation report.
- 9.7.8 An integrated **Quaternary stratigraphic framework** and deposit phases across the site, with interpretation of formation processes and deposit date, supported by (a) fence diagrams showing representative stratigraphic cross-sections across the site and (b) an appendix with full sedimentary descriptions of the sequence in each test pit, the ground surface height (mOD) at each test pit, the depth and thickness of each sedimentary unit identified during excavation, the sampling of each sedimentary unit, the finds and palaeoenvironmental evidence recovered from each sedimentary unit, and a representative photo of the full sequence in each test pit.
- 9.7.9 **Finds recovery**, including lithic artefacts and any larger mammalian fossils, including sub-sections (supported by tables as appropriate) covering:
- on-site sieve sampling for, and recovery of, artefacts tied in with the integrated Quaternary stratigraphic framework
 - a summary report on any lithic artefacts recovered, describing their technology and typology, assessing their condition and degree of disturbance, their importance and relevance to Palaeolithic research priorities, and their potential for further analysis
 - summary reports on any mammalian bones and other palaeoenvironmental remains recovered, assessing their condition and degree of disturbance, their importance and relevance to Palaeolithic/Quaternary research priorities, and their potential for further analysis, supported by any relevant specialist reports as appendices
- 9.7.10 A **Quaternary dating and stratigraphic framework**, tied in with the global MIS framework and any key site-specific regional horizons and nearby sites.
- 9.7.11 A **Preliminary site model of deposit character and Palaeolithic potential**, dividing the site into Palaeolithic Historic Environment Areas (HEAs) of differing character and potential, supported by an appendix giving attribute details for each separate Palaeolithic HEA of its characteristic Quaternary deposits, its potential significance for Palaeolithic remains (including palaeoenvironmental remains) and suitable approaches to further investigation.
- 9.7.12 The area covered by the HEA model should include a buffer zone of 50m around the site boundary, although it is recognised that modelling of the buffer zone may be based on less substantive data than within the site.

- 9.7.13 An **Impact Assessment** will consider the potential effects of the development on the sub-surface Quaternary deposits and any likely remains. The report will highlight any areas of sensitivity within the site. Particular note will be made of any variations in the depth of overburden covering any Quaternary deposits.
- 9.7.14 The **Conclusion** will summarise the method, results, interpretation and impact assessment.
- 9.7.15 The conclusion will assess the potential of the site for preservation of Palaeolithic remains at the site, and the likely importance of any remains with reference to regional and national research priorities. It will then identify any priorities for further, more detailed Palaeolithic evaluation, and make recommendations for suitable approaches to further intrusive or non-intrusive investigation to achieve a satisfactory understanding of the Palaeolithic potential of the site.
- 9.7.16 The evaluation report will include comments on the effectiveness of the methodology employed and the confidence of the results and interpretation.
- 9.7.17 The report will include a quantification of the project archive contents, their state and future location.
- 9.7.18 **Figures / illustrations** – The report will include sufficient illustrations to support descriptions and interpretations within the report text. Figures are to be fully cross-referenced within the document text. As a minimum the evaluation report will include the following figures:
- a site location plan tied into the Ordnance Survey at 1:1250 and showing the site boundary. The plan will also include at least two National Grid points to 1m accuracy, north arrow and a linear scale
 - a site layout plan showing all intervention locations at an appropriate scale and the distribution of Palaeolithic HEAs. A copy of the plan will be overlain on the proposed development plan where this is known. Projections of HEAs for 50m beyond the site boundary will be shown on the plan. This plan will also include two National Grid points, north arrow and a linear scale
 - relevant section drawings as appropriate
 - illustrations and/or photographs of significant finds
- 9.7.19 All report illustrations must be fully captioned and scale drawings must include a linear scale. Standard archaeological drawing conventions must be used. North must be included on all plans and will be consistent. Sections must indicate the orientation of the section and the Ordnance Datum height of the section datum.
- 9.7.20 Black & White or Colour photographs will be included to illustrate key archaeological features, interventions and site operations. All photographs will be appropriately captioned.

10. Archive preparation & deposition

- 10.1 The site archive, to include all project records and cultural material produced by the project, is to be prepared in accordance with *Guidelines for the preparation*

of excavation archives for long-term storage (UKIC 1990). On completion of the project the Archaeological Contractor will arrange for the archive to be deposited in accordance with the provisional arrangements made with a suitable museum or repository at the onset of fieldwork. Any alternative arrangements will be agreed with the County Archaeologist and the Local Planning Authority.

11. Monitoring and liaison

- 11.1 The Archaeological Contractor is to allow the site records to be inspected and examined at any reasonable time, during or after the evaluation fieldwork, by the client/developer, the County Archaeologist or any designated representative of the Local Planning Authority
- 11.2 Once the preliminary evaluation fieldwork has been carried out, there will be an on-site meeting with the Archaeological Contractor, the specialist/s and the County Archaeologist to determine if further evaluation work is appropriate in order to meet the objectives.
- 11.3 The Archaeological Contractor will liaise closely with the County Archaeologist throughout the course of the evaluation and will arrange for on-site meetings at key decision points.
- 11.4 The Archaeological Contractor is to make contact with the local archaeological society and keep them informed on the progress of the evaluation. Subject to health and safety constraints the Archaeological Contractor will afford opportunity to the local archaeological society to visit the evaluation site. Copies of all reports will be provided to the local archaeological society.
- 11.5 The Archaeological Contractor is to circulate a completed Fieldwork Notification & HER Summary Form (Appendix 1) at the start and completion of fieldwork and at the completion of post excavation reporting stages.

12. Copyright and data protection

- 12.1 Information submitted to the County Archaeologist in conjunction with planning applications automatically becomes publicly accessible and can be viewed by anyone at any time. In addition, the Local Planning Authority and Kent County Council are subject to the requirements of the Freedom of Information Act (2000) and Environmental Information Regulations (2004). Information may be subject to Fol or EIR requests and any documentation submitted in connection with the project may be made publicly available unless doing so contravenes the Data Protection Act (1998).
- 12.2 While copyright of reports and other information arising from the fieldwork remains with the originator, the Archaeological Contractor will undertake to make this information available to interested parties. The Archaeological Contractor will agree to allow reports of the fieldwork to be copied electronically and made available to interested parties for archaeological research. The reports may be made available on the Internet no sooner than three months after the submission of the report. Archaeological Contractors who believe that

there are special reasons for not publishing the report on the Internet should reach a separate agreement with the County Archaeologist.

13. Health and Safety

- 13.1 The Archaeological Contractor will conduct the work in compliance with the Health and Safety at Work etc Act 1974. The Archaeological Contractor will also follow the guidance set out in "Health and Safety in Field Archaeology" Standing Conference of Archaeological Unit Managers 1997 (now Federation of Archaeological Managers & Employers).
- 13.2 The Archaeological Contractor is expected to maintain a Health and Safety Policy and a procedures manual and have available appropriate expertise in Health and Safety advice. Site staff will have an appropriate level of training to enable them to carry out fieldwork safely.
- 13.3 The Archaeological Contractor will maintain the site in a safe condition. All hazards will be appropriately identified and managed. Deep excavations will never be left open untended and will typically be backfilled shortly after excavation. If not backfilled, they will be appropriately fenced and signed.
- 13.4 The Archaeological Contractor will carry out a risk assessment prior to commencement of fieldwork and where appropriate a COSHH assessment. Risks and measures to reduce risk will be communicated to all working on and visiting the site.
- 13.5 The Archaeological Contractor will have available suitable site accommodation, welfare and toilet facilities.

14. KCC Historic Environment Record

- 14.1 The Archaeological Contractor is to provide the Kent Historic Environment Record (HER) with copies of all reports in both hard-bound hard-copy and digital format (see 9.6 above).
- 14.2 Upon completion of the excavation the Archaeological Contractor will supply the Kent Historic Environment Record with a completed Fieldwork Notification & HER form (see Appendix 1)
- 14.3 The Archaeological Contractor will supply the Kent Historic Environment Record with the following digital datasets:
 - A .dxf file containing polygon data that describes in detail all excavated/monitored area boundaries, whether trenches, test pits, excavated areas or areas examined by watching brief. This .dxf file must be internally geo-referenced (i.e. the co-ordinate system used in the file must be the Ordnance Survey co-ordinate system).
 - A separate .dxf file that contains a number of Layers. Each Layer should represent a different phase of the archaeological remains on site. The name of each Layer must be the phase number used on the site accompanied by a date range (e.g. "2, from -2000 to -800", "7A, from

410 to 700" etc). Each layer must contain only the features relevant to that phase digitized as polylines. Where the dating is based on scientific dating methods such as radiocarbon, the dates must be calibrated calendar dates.

- 14.4 A guidance document has been produced for Kent County Council that will inform contractors as to how this information can be produced within AutoCAD. This document is available from the County Archaeologist and Kent County Council Historic Environment Record.
- 14.5 The Archaeological Contractor should also provide a representative selection of digital site photographs illustrating the archaeology of the site and the operations of the investigation. These will be in .jpg format at a minimum 300dpi. These will be deposited with the County HER and will be used for presentations on aspects of the archaeology of Kent.
- 14.6 It is to be understood that photographs and notes taken by KCC Archaeological Officers in connection with the work that do not identify individuals or site locations may be used by KCC for outreach and publicity purposes, including on social media sites such as Facebook, Twitter etc. The Archaeological Contractor should, **preferably in advance** of the works, raise with the KCC Archaeological Officer any concerns that they or their client may have over the use and dissemination of images or information for outreach purposes. In such cases the Archaeological Contractor and their client will agree a protocol with the KCC Archaeological Officer for the appropriate dissemination and use of images and information which balances the concerns of the contractor and/or client with the objective of ensuring that the people of Kent are kept informed of the archaeological discoveries in the county.

15. General

- 15.1 In carrying out the work the Archaeological Contractor is to abide by:
- all statutory provisions and by-laws relating to the work in question
 - the Chartered Institute of Field Archaeologists *Code of Conduct*
 - the Chartered Institute of Field Archaeologists *Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology*.

APPENDIX 1. KENT COUNTY COUNCIL HER SUMMARY AND FIELDWORK NOTIFICATION FORM

HER & Fieldwork Notification Form

Sections **A** and **B** to be sent digitally to KCC Heritage Conservation Group **in advance of the start of fieldwork**.

Section **C** to be completed and sent **at end of fieldwork**.

Section **D** to be filled in and sent with completed report.

SECTION A - PROJECT DETAILS

Site/Project Name:		NGR:	

Site Address:

Archaeological Contractor (inc name and address of project contact):

Commissioning Body/Client:

Development Proposals/Reason for Fieldwork:

Planning Reference:

SECTION B - COMMENCEMENT OF FIELDWORK

Type of Archaeological Fieldwork:

Site Supervisor:

Site Contact Details:

Specification for Works?:

Local Museum Notified:

Site Code:

Date:

Local Arch Soc Notified:

Date:

START DATE:

ANTICIPATED DURATION:

days/weeks

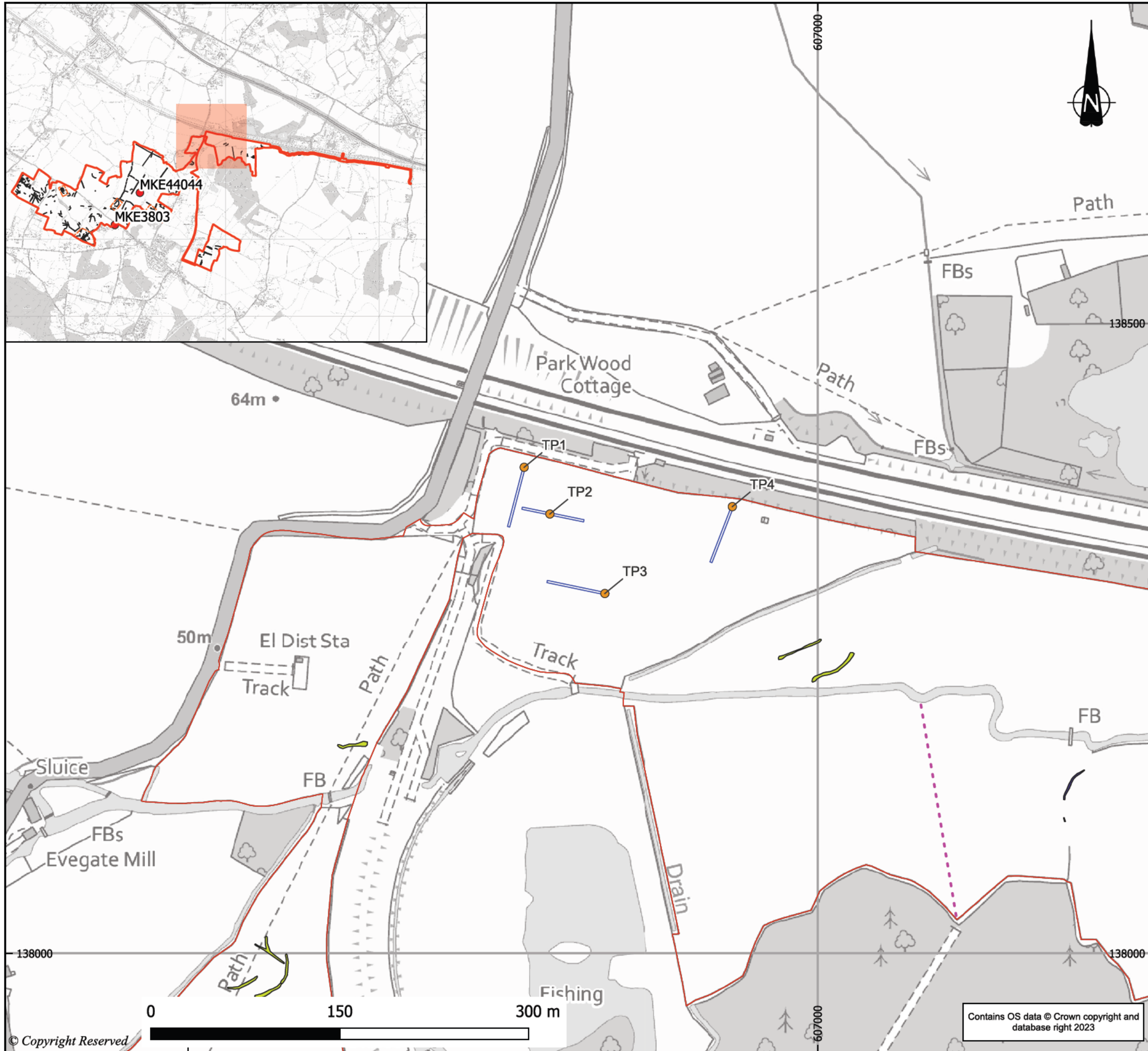
I (archaeological contractor) confirm that all necessary provision has been made for the resources to complete the archaeological fieldwork, post-excavation analysis and reporting in accordance with the agreed specification.

Name:			
On behalf of:			
Signed:		Date:	
SECTION C - COMPLETION OF FIELDWORK			
Date Fieldwork Completed:		Was fieldwork monitored by KCC/EH/Other?	
Further Fieldwork Anticipated:		Who?	
Map attached showing site location and extent of intervention?			
Summary of results (Continue on separate sheet if necessary): 			
Agreed Reporting Stages and Program: 			

Name:							
On behalf of:							
Signed:						Date:	
SECTION D - COMPLETION OF POST-EXCAVATION ANALYSIS & REPORTING							
Reports Submitted (Titles)	Copies to: (Number)						
	KCC	LPA	Arch Soc	Client	EH	Other	Digital Copies
HER Data:							
Digital Mapping Data?			Notes:				
Location and Destination of Archive:							
Name:							
On behalf of:							

Signed:		Date:	
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DRAWINGS



DO NOT SCALE FROM THIS DRAWING

Key

- Site Boundary
- Evaluation trenches
- Undetermined (Weak)
- Proposed Test Pits

REVISION	DETAILS	DATE	DRN	CHKD	APPD
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CLIENT

Evolution Power Limited

PROJECT

Stonestreet Green Solar

DRAWING TITLE

Figure 1; Proposed Pre-determination trench plan showing test pit locations (sheet 1)

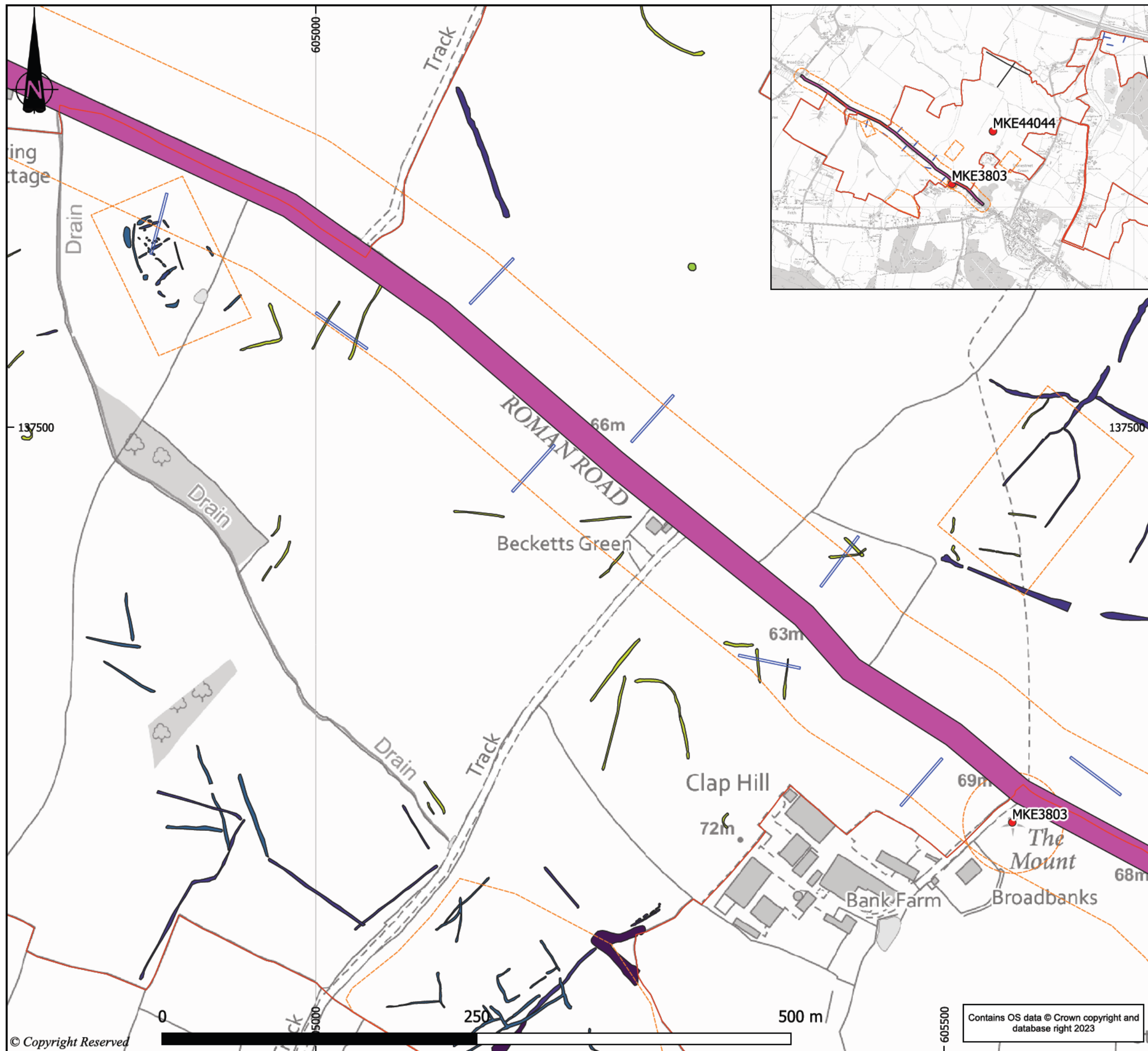
DRG No.	REV	SUIT.
GM12014-058	A	-

DRG SIZE	SCALE	DATE
A3	1:3,000	June 2023

DRAWN	CHECKED BY	APPROVED BY
HP	MB	LG



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DO NOT SCALE FROM THIS DRAWING

Key

- Site Boundary
- WA Trenches
- Zones of high potential
- Roman Road
- Heritage Assets
- Geophysical Anomalies
 - Agricultural (Spread)
 - Agricultural (Strong)
 - Agricultural (Weak)
 - Archaeology Possible (Strong)
 - Archaeology Possible (Weak)
 - Undetermined (Strong)
 - Undetermined (Weak)

REVISION	DETAILS	DATE	DRN	CHKD	APPD
CLIENT					
Evolution Power Limited					
PROJECT					
Stonestreet Green Solar					
DRAWING TITLE					
Figure 1; Proposed pre-determination trench plan (sheet 2)					
DRG No.	GM12014-058		REV	A	SUIT. -
DRG SIZE	A3	SCALE	1:1		DATE June 2023
DRAWN	MM	CHECKED BY	APPROVED BY		



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Appendix C: WSI for Archaeological Evaluation, January - April 2025



EVOLUTION POWER LIMITED

STONESTREET GREEN SOLAR

**WRITTEN SCHEME OF INVESTIGATION FOR A PRE-DETERMINATION ARCHAEOLOGICAL TRIAL
TRENCH EVALUATION (PHASE 2 TRENCHING)**

JANUARY 2025

DATE ISSUED: January 2025
JOB NUMBER: GM12014
OS GRID REF: TR 05834 37447
REPORT NUMBER: 0001

EVOLUTION POWER LIMITED

STONE STREET GREEN SOLAR

**WRITTEN SCHEME OF INVESTIGATION FOR A PRE-DETERMINATION ARCHAEOLOGICAL
TRIAL TRENCH EVALUATION (PHASE 2)**

JANUARY 2025

PREPARED BY:

Keeley-jade Bingham Associate Director



APPROVED BY:

Anthony Hanna Technical Director

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ENERGY AND CLIMATE CHANGE
ENVIRONMENT AND SUSTAINABILITY
INFRASTRUCTURE AND UTILITIES
LAND AND PROPERTY
MINING AND MINERAL PROCESSING
MINERAL ESTATES
WASTE RESOURCE MANAGEMENT

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DRAWINGS	TITLE	SCALE
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APPENDICES

Appendix 1	Proposed Trench Plans
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Appendix 3	KCC's <i>Manual of Specifications Part B, Specification for Evaluation</i>

1 INTRODUCTION AND CONTEXT HISTORY

- 1.1.1 Wardell Armstrong LLP (WA), a Registered Organisation with the Chartered Institute for Archaeologists, has been commissioned by Evolution Power Limited hereafter referred to as ‘the Client’) to prepare a Written Scheme of Investigation (WSI) for an Archaeological Trial Trench Evaluation on land at Stonestreet Green, Ashford, Kent (hereafter referred to as ‘the Site’). The Site is centred on NGR: TR 05834 37447 (Fig. 1).
- 1.1.2 The proposed development comprises the construction, operation, maintenance, and decommissioning of solar photovoltaic (‘PV’) arrays and energy storage, together with associated infrastructure and an underground cable connection to the existing National Grid Sellindge Substation.
- 1.1.3 This proposed programme of archaeological works follows a previous programme of archaeological trenching and geoarchaeological test pits carried out by WA in July-August 2023. Further trenching is required to further inform upon the potential resource within the proposed development area.
- 1.1.4 In tandem with the new phase of archaeological trenching, WA will review existing ground investigation data to inform a geoarchaeological deposit model. This will form part of the AMS to inform and understand the Palaeo and early prehistoric landscape close to the River Stour.
- 1.1.5 This document forms the required Written Scheme of Investigation for the proposed archaeological trial trench evaluation and provides the methodology to be employed during the course of the trial trenching.
- 1.1.6 This WSI conforms to guidelines and standards set out in the following documents;
- *Standard and Universal Guidance for archaeological field evaluation*. Chartered Institute for Archaeologists: Reading (CIfA 2023a & b).
 - *Code of conduct: professional ethics in archaeology*, Chartered Institute for Archaeologists: Reading (CIfA 2022);
 - *Standards and guidance for the collection, documentation, conservation and research of archaeological materials*, Chartered Institute for Archaeologists: Reading (CIfA 2020b);
 - *Management of Research Projects in the Historic Environment: The MoRPHE Project Managers’ Guide*, Historic England: London (HE 2015);

- *Wardell Armstrong Technical Manual No.1 Excavation Manual (V0.3)*, Wardell Armstrong LLP, Unpublished internal document (WA 2020a);
- *Wardell Armstrong Technical Manual No.2: Post-Excavation Handbook*, Wardell Armstrong LLP, Unpublished internal document (WA, 2020b);
- *Manual of Specification Part B: Evaluation – Trial Trenching Requirements*. Kent County Council (2023a)
- *Manual of specification Part B: Specification for preliminary evaluation of Quaternary deposits and Palaeolithic potential*. Kent County Council (2023b)

2 BACKGROUND

2.1 Location and Geological Context

2.1.1 The Site is located at National Grid Reference (NGR): TR 05834 37447. The Site is located approximately 5 miles southeast of Ashford, Kent and predominantly consists of agricultural land and pasture. The High Speed 1/Channel Tunnel Rail Link (HS1) is located to the north of the Site boundary and is within 100m at its closest point. A railway line operated by Network Rail as part of the Kent Route between Ashford and Westenhanger is located adjacent to the HS1 railway line.

2.1.2 The M20 motorway lies approximately 45m further to the north of HS1 at this point but is significantly further north towards the west of the Site. On the opposite side of the HS1 railway line (between HS1 and the M20 motorway), there is a UK Power Networks (UKPN) and National Grid (NG) substation, and a sewage treatment works. Residential dwellings of the village of Aldington are located predominantly to the south and east of the Site and residential dwellings within Stonestreet Green are located to the east. There are several watercourses passing through the Site, the largest of which is the East Stour River which passes through the area in a roughly east to west direction.

2.1.3 The underlying geology is mapped as Weald Clay (Mudstone). This is a sedimentary bedrock formed in the Cretaceous period between 133.9 and 126.3 million years ago. Variations of geology on the Site also comprise Atherfield Clay (Sandy Mudstone) and Hythe Formation (interbedded sandstone and limestone), which are both sedimentary bedrocks formed during the Cretaceous Period, between 126.3 and 113 million years ago (BGS, 2023). The majority of the Site has no mapped superficial geology. Those fields which are partially or wholly located near to the East Stour River, largely lie on alluvium (clay, silt, sand and gravel), formed up to two million years ago, and represent a local environment previously dominated by rivers (Ibid.). The natural substrate encountered on Site, which ranged from firm mid orangey brown clay to firm mid blueish grey clay, or mid greenish grey clayey sand, as well as gravels, is consistent with the mapped geologies above.

2.2 Historical and Archaeological Background

2.2.1 An initial desk-based assessment (DBA) was produced to assess the known historical and archaeological background of the Site and the surrounding landscape to a distance

of 5km (Wardell Armstrong, 2022). The desk based assessment was supported by an Archaeological Landscape Assessment (Wardell Armstrong 2023). This was undertaken alongside geophysical survey (Magnitude Surveys, 2023) and a site walkover to inform upon the archaeological potential of the Site. It is not intended to repeat that information here and what follows is a brief overview, **for further details please refer to the original documents referenced above.**

- 2.2.2 This DBA report identified HER records within the Site; mostly of findspots largely found through metal detecting and are of Roman to post-medieval date. The significance of the projected Roman road was again highlighted by the Archaeological Landscape Assessment. HER records not relating to findspots comprise Bank Road/Roman Road which bisects the central and western part of the Site and follows the alignment of a projected Roman road (HER TR 04 SE 120), and two post-medieval farmsteads (HER MKE88378 and MKE88379). All entries are discussed in more detail in the archaeological desk-based assessment (WA 2022).
- 2.2.3 Within the 5km search area from the Site, designated heritage assets of an archaeological nature include a Scheduled Bronze Age Barrow Cemetery which lies approximately 880m south-east of the Site. Two further Scheduled barrows lie to the east of the cemetery beyond the 5km search area.
- 2.2.4 **Prehistoric (up to AD 43):** There are several prehistoric assets in the vicinity of the Site. The first is a group of scheduled bowl barrows located at the North Downs, located 4.5km north-east of the Site. The second asset is a barrow cemetery located 2.8km east of the Site and consists of seven barrows on and around the summit of low hill (situated at 80m aOD) to the west of the settlement of Barrowhill. Recent archaeological investigations at the barrows have identified the buried remains of cremation pits and have dated one of these to the Late Bronze Age. These two asset groups are representative of the wider prehistoric funerary landscape in the vicinity.
- 2.2.5 **Roman (AD 43 – c.410):** The projected route of a Roman road (HER TR 04 SE 120), discussed above, bisects the central and western part of the Site. There is also a Romano-British villa 1.7km to the east of Field 22, which is a scheduled monument (NHLE 1004216) and survives as buried remains. This is representative of Roman settlement in the area. It is also part of the wider Roman landscape, with the Maidstone to Dover Roman Road being located approximately 550m to the south of the villa.

2.2.6 Medieval (AD 1066 – c.1540): There are 18 medieval heritage assets in the vicinity of the Site. These consist of Grade I and II farmhouses, churches and priories, such as Bilsington Priory (NHLE 1018877 & 1362769), located 1.5km south-west of the Site. The priory consists of a scheduled monastery, and the Grade I priory, and dates to AD 1253.

2.2.7 Post-medieval (AD c.1540 – 1901): There are nine post medieval heritage assets in the vicinity of the Site, which consist of historic houses, farmhouses and a mill. Assets from this period also include the Adlington Clap Hill Conservation Area, which has the potential for earlier medieval associations, where Adlington was affected by the Black Death.

2.2.8 Modern (AD 1901 – present): The Messerschmitt plane crash site is within the eastern part of the Site (HER DKE22255). Although the wreckage is thought to have been removed at the time of the crash, shrapnel may remain. The crash site has been designated as Protected Military Remains (PMR).

2.3 Previous Archaeological Investigations

2.3.1 Archaeological trenching was undertaken by WA between 19th July – 2nd August 2023. A total of thirteen trenches and four geoarchaeological test pits were opened. Four of these trenches were located in Field 26, a sub-rectangular field alongside the Kent Rail route, whilst the remaining nine were positioned either side of the Roman road which bisects Bank Farm land.

2.3.2 The four trenches in Field 26 exposed evidence of Bronze Age activity, represented by struck flint, including possible ‘horned’ scraper recovered from two ditches and a small pit in Trench 1.

2.3.3 Roman activity was evidenced in Trench 9 with a series of pits and postholes and two ditches cut into an older deposit containing a flint blade. These features aligned with the geophysical survey carried out in 2023, suggesting their origin as Roman enclosure ditches. Finds included Roman pottery and nails, suggesting nearby settlement activity. Trench 6 revealed three more pits and a large sub-rectangular feature, each containing Roman pottery. The results suggested that settlement/s may be present along this section of Roman road.

2.3.4 Modern deposits related to the construction of the railway bank were encountered in Trench 4. A large natural depression was encountered in Trench 10 and undated

features, possibly medieval in date, were uncovered in Trench 8, opposite the modern farmyard for Bank Farm.

3 INFORMATIVE TRENCHING: PROJECT DESIGN

3.1 Aims and Objectives

3.1.1 The purpose of the trial trench evaluation is to further investigate the potential of the archaeological resource and the impact of the proposed development plans. Where archaeological remains are present, to characterise, record and date them.

3.1.2 The general aims of the archaeological evaluation by trial trenching are to:

- determine the presence or absence of buried or upstanding archaeological remains within the Site;
- determine the character, date, extent and distribution of any archaeological deposits revealed as well as their potential significance;
- determine levels of disturbance to any archaeological deposits from plough damage or from any other agricultural/industrial practices or later building activities;
- Summarise the findings in relation to the geophysical survey data and to the results of the previous archaeological trenching;
- determine the likely impact on any archaeological deposits present as a result of the proposed development;
- disseminate the results of the fieldwork through an appropriate level of recording.

4 METHOD STATEMENT

4.1 General Methodologies

- 4.1.1 The location of the trenches are identified on plans produced by the client (Appendix 1) under the guidance of WA's Technical Director for Heritage & Archaeology, Anthony Hanna and drawn following advice and recommendations provided by Wendy Rogers, Senior Archaeological Advisor to KCC.
- 4.1.2 **Trial Trenching:** A scheme for an archaeological evaluation by trial trenching has been designed to satisfy the stated objectives of the project as set out under Section 3 above and has been prepared in accordance with the standard requirements for trial trenching as set out KCC within their *Manual of Specifications Part B, Specification for Evaluation – Trial Trenching*, a copy of which is included within Appendix 3 of this WSI.
- 4.1.3 The archaeological evaluation by trial trenching is intended to provide an appropriate data set to allow for further characterisation of the proposed development area to be established pre-determination. WA propose the opening of a further 68no. 20m x 1.8m trenches across the site (Figure 2). The trenches are positioned to target known archaeological anomalies as well as 'blank' areas, as indicated by LiDAR, aerial photography and the geophysical survey results. Trenches will be extended up to 30m as necessary to expose full profiles/ relationships of features.
- 4.1.4 In advance of any fieldwork, WA will request the Client has demonstrated that all reasonable measures have been taken to identify any constraints and that they have provided all reasonable information regarding the presence of services, any ecological constraints, the presence of Public Rights of Way (PRoW), any areas of potentially contaminated land and/or any other known risks to health and safety.
- 4.1.5 WA will undertake the opening of the excavation area using a mechanical excavator equipped with a toothless / flat-bladed ditching bucket to maximise the chance for identification of the archaeological remains. Should substantial obstructions be encountered a toothed bucket may be employed on the understanding that it will be removed again once the obstacle has been removed. All mechanical works will be supervised by a suitably experienced archaeologist who will control the depth of excavation and stop machining at the top of the first potentially significant archaeological horizon, or the top of the natural substrate, whichever is encountered first.

- 4.1.6 Trenches will be machined to a maximum safe depth of 1.2m to allow access for hand-excavation and recording. Deeper excavation could be undertaken, where practicable in terms of space, provided the trench sides are stepped or battered and/or suitable trench support is used.
- 4.1.7 No mechanical excavators, earthmoving or other vehicles will travel within any excavated trench until it has been signed off by the Archaeological Advisor at KCC or specific agreement has been reached to enable re-stripping.
- 4.1.8 If there is a potential for deeper deposits within any given trench a sondage/slot may be excavated by machine. Agreement will be obtained from the archaeological advisor at KCC to deepen the trenches with the machine, if necessary.
- 4.1.9 WA will maintain a constant watch and closely inspect on an ongoing basis surfaces exposed during the course of machining. Surfaces will be maintained clear of loose spoil.
- 4.1.10 All trenches will be cleaned by hand, photographed and recorded as appropriate. Once cleaned, all trenches will be inspected and potential features/deposits excavated to retrieve artefactual and ecofactual material, as well as determine their character, significance and date. All trenches will be inspected again after sufficient weathering to ensure that no potential features or deposits are missed.
- 4.1.11 Prior to backfilling, all deposits, including the trench sides will be again inspected for artefactual material to ensure that finds are recovered from as many contexts as possible regardless of date.
- 4.1.12 Upon completion of trenches, and following approval by the archaeological advisor at KCC, trenches will be backfilled appropriately, with material reinstated in the same order that it had been excavated. No further provision for reinstatement has been provided for.
- 4.1.13 Trenches will not be backfilled without approval from KCC.
- 4.1.14 Wardell Armstrong will ensure that access to the investigations is granted at all times to representatives of the Client, and KCC.
- 4.1.15 Any variations to this WSI will be agreed with the archaeological advisor at KCC prior to carrying them out.

4.2 General Investigation and Sampling Strategy

4.2.1 Archaeological features will be sampled sufficiently to determine their extent, condition, character, significance and date, i.e. 10% of fills of linear features (unless the linear features are substantial in which case an alternative sampling strategy will be discussed with KCC) and 50% of pit fills. Smaller discrete features such as postholes will be 100% sampled.

4.2.2 Any remains of substantial buildings/structures of archaeological interest will be cleaned, photographed and recorded in-situ, with sample excavation undertaken as necessary in order to determine their form, construction methods and dating. Any substantial structures may also be subject to a programme of photogrammetric recording where appropriate, and where it meet the project's objectives.

4.2.3 Measures will be taken to protect particularly significant, valuable or sensitive archaeological remains from exposure, accidental damage and/or theft.

4.3 Recording

4.3.1 All features will be recorded using a Leica GPS unit (or equivalent) with sub-centimetre accuracy with each point recorded in relation to the OSGB36 geodetic co-ordinate reference system and coded to an internal database to provide a dataset that records feature type, context number, associated drawing numbers and any other feature specific information that may be relevant.

4.3.2 All written records will utilise pro-forma record sheets. Plans will be drawn to a scale of 1:20 and sections at 1:10 on polyester based drafting film and clearly labelled. All plans and sections will be levelled in respect to aOD. A combination of multi and single context planning will be utilised as appropriate.

4.3.3 A full photographic record of all contexts will be maintained in digital formats. All images are to be taken using a digital SLR camera with a minimum megapixel resolution of 10mp (and fitted with an APS-C or larger sensor). All photographs will include a clearly visible, graduated metric scale and north arrow. Graduated metric scales of appropriate lengths should be used, ensuring the use of vertical scales against deep sections in combination with horizontal scales. The photographic record is to be regarded as part of the site archive and the digital files will be labelled appropriately and cross-referenced in relation to a site-specific photography register detailing as a minimum feature number, location, and direction of shot. Both feature specific and general photographs will be included within the record. The digital archive should

comprise of high quality DNG or TIFF files.

- 4.3.4 Wardell Armstrong will ensure that the complete site archive including finds and paleoenvironmental samples is kept in a secure place throughout the period of fieldwork and post-excavation process.

4.4 Human Remains

- 4.4.1 In the event that human remains, both inhumations and/or cremations, are exposed during the course of the archaeological trenching then all works are to cease immediately and both the Client and KCC will be informed. The local police and coroner will be informed if appropriate. Human remains will be left *in situ* except in those cases where damage or desecration are anticipated, or where analysis of the remains is considered to be a necessary requirement for satisfactory evaluation of the site. Discussions will be held with the Client and KCC on options for their appropriate preservation *in situ* or for their removal in accordance with professional standards and guidelines once the antiquity of the remains has been suitably proven. The area will be screened from view.
- 4.4.2 Wardell Armstrong will have an appropriately qualified and experienced osteoarchaeologist available to consult for excavation and sampling strategies and will supervise the excavation and removal of any human remains (where this is necessary) from the Site.
- 4.4.3 In the event that human burials are to be removed, a Ministry of Justice Licence will be required (in accordance with Section 25 of the Burial Act 1857) before the remains can be lifted. The need for a Ministry of Justice Licence applies to both inhumation and cremated remains. The need for a Ministry of Justice Licence applies to both inhumation and cremated remains. Application for a Licence will be made by Wardell Armstrong.
- 4.4.4 Human remains will be treated at all stages with care and respect.
- 4.4.5 The Archaeological Contractor will adhere to the following guidelines when dealing with human remains: *Code of Ethics* (BABAO online 2019a), *Code of Practice* (BABAO online 2019b), *Guidelines to the Standards for Recording Human Remains* (Brickley and McKinley 2004), *Updated Guidelines to the Standards for Recording Human Remains* (Mitchell & Brickley 2017), *The Role of the Human Osteologist in an Archaeological Fieldwork Project* (HE 2018a) and *Guidance for best practice for treatment of human*

remains excavated from Christian burial grounds in England (APABE 2017).

4.5 Metal Detecting

- 4.5.1 Topsoil, subsoil or other overburden will be scanned with a metal detector before and during its excavation, including when it is excavated by machine.
- 4.5.2 Exposed features and layers should be scanned by metal detector prior to, and periodically during, their excavation.
- 4.5.3 The detector will not be set to discriminate against iron. Metal detected finds will be plotted on suitable area plans.
- 4.5.4 The metal detecting will be carried out by an experienced member of the field team suitably experienced in the use of metal detectors and retention methodologies.

4.6 Treatment of Treasure

- 4.6.1 Finds falling under the statutory definition of treasure (as defined by the Treasure Act of 1996 and its revisions of 2002 and 2023) will be reported directly to the Treasure team at the British Museum (treasure@britishmuseum.org) and to the Finds Liaison Officer (FLO) of the Portable Antiquities Scheme. The Client and KCC will also be informed. Advice and guidance on compliance with the Treasure Act are obtainable from the FLO. The find will be reported to the Coroners Office, within 14 days of understanding that the find is treasure. Failure to report within 14 days of discovery is a criminal offence.
- 4.6.2 A Treasure Receipt form, including the date, location and circumstances of the discovery, a description of the object(s), and details of the finder (Wardell Armstrong) and landowner will be submitted to the British Museum.

4.7 Finds Recovery and Processing

- 4.7.1 All artefacts revealed will be recovered regardless of date so that the provisional dating of as many contexts as possible can be ascertained. However, in circumstances where the quantity of finds present preclude total recovery then a representative sample will be taken in agreement with KCC and this will be noted on the relevant context sheet.
- 4.7.2 All artefacts recovered during the course of the archaeological trenching are the property of the landowner/Client. They will be suitably bagged, boxed and marked in accordance with the *Standards and Guidance for the Collection, Conservation and*

Research of Archaeological Materials (CIFA 2020a) and the *Standard and Guide to Best Practice for Archaeological Archiving in Europe* (Perrin et al. 2014).

- 4.7.3 The primary archive records will clearly state how all artefact assemblages have been recovered, sub-sampled and processed. Once assessed, all retained material must be packed and stored in optimum conditions, as described in *First Aid for Finds* (Watkinson and Neal 2001).
- 4.7.4 On completion of the project modern material, unstratified remains and objects that have been assessed as having no obvious grounds for retention will be discarded after a period of six months, unless there is a specific request to retain them. No finds will be discarded without the prior approval of KCC.
- 4.7.5 The primary archive records will clearly state how all artefact assemblages have been recovered, sub-sampled and processed

4.8 Paleoenvironmental Sampling

- 4.8.1 The strategy and methodology for the sampling of deposits will be in accordance with *Environmental Archaeology – A guide to the theory and practice of methods, from sampling and recovery to post-excavation* (HE 2011). Where deemed appropriate the advice of the relevant Historic England Regional Science Advisor will be sought in relation to the collection of palaeoenvironmental material, industrial residues or other relevant scientific material. Historic England's guidance on geoarchaeology will also be referred to as necessary (HE 2015b) as will their guidance on animal bones and archaeology (HE 2019).
- 4.8.2 Where deposits are dry, bulk samples for the recovery of charred plant remains, small bones and finds, will be taken from sealed and datable features such as pits, ditches, hearths and floors. Each context will be sampled in isolation. The size of the sample is expected to be in the range of 40-60 litres per context or 100% of smaller contexts. Samples will not be taken from the intersection of features or where context horizons are not fully defined.
- 4.8.3 Mollusc samples of two litres each will be taken vertically from appropriate sections to investigate the changes of vegetation through time.
- 4.8.4 Where deposits are wet, waterlogged or peaty, monoliths will be taken along cleaned vertical surfaces for the retrieval of pollen, diatoms, ostracods and foraminifera. The numbers to be taken will be agreed with the client and KCC. Where bulk samples are

to be taken a minimum of 20 litres will be taken from visible layers or spits for the retrieval of plant macro-remains and insects.

4.8.5 Environmental samples from dry deposits will normally be processed by floatation following the fieldwork and the residues will be sorted to retrieve small bones, small finds and charcoal that has not floated. Environmental samples from wet deposits will normally be sent to specialists for processing in laboratory conditions.

4.8.6 Waterlogged organic deposits are not anticipated but in the event that waterlogged wood or other delicate organic deposits are uncovered Historic England's guidance (2010, 2018b) will be followed.

4.9 Timetable and Staffing

4.9.1 It is anticipated that the trenching program on Site will be completed within 25 to 50 days depending on the quantity, size and depth of any archaeological features or deposits encountered and any need for contingency trenching. Thereafter we would expect the assessment report to be complete within 4-6 weeks of the completion of fieldwork (dependant on specialist input).

4.9.2 Details of Wardell Armstrong staff likely to be involved with the trial trenching project are provided in Appendix 2.

4.9.3 Up to five members of Wardell Armstrong staff would be on site during fieldwork, depending on the quantity, depth and significance of archaeological remains uncovered during the initial cutting of the trenches. The field team will be drawn from a pool of experienced field staff, as determined by availability at the time, fully competent in the recognition and recording of archaeological stratigraphy, features and finds. Details of the field Project Officer will be forwarded to KCC prior to the commencement of fieldwork.

4.10 Health and Safety

4.10.1 WA will produce an internal RAMS document for the project which will be read by all site staff, in conjunction with this WSI, prior to the commencement of fieldwork.

4.10.2 The Client will be asked to provide all information reasonably obtainable on contamination and confirm the location of any known services before the archaeological works commence.

4.10.3 Site staff will have an appropriate level of training to enable them to carry out

fieldwork safely. Appropriate PPE as directed by the Client will be worn by field staff at all times.

- 4.10.4 The Client will be requested to provide details of their own risk assessment and specify PPE required before fieldwork commences if appropriate.
- 4.10.5 WA will abide by the Client's health and safety methodology if provided. If there is conflict between the Client's risk assessment and that of WA then the Client's will take priority, unless it is perceived to be placing the field team at greater risk.
- 4.10.6 All staff will assist the Client in maintaining the Site in a safe condition. Hazards will be appropriately identified and managed including identification of buried and above ground services/utilities.
- 4.10.7 In addition to the RAMS, where appropriate a COSHH assessment will also be undertaken. Once onsite, these documents will be assessed, and any variations will be highlighted and added to the appropriate assessment. These will be re-evaluated periodically during the course of the fieldwork to make sure that they remain consistent to the Site-specific risks. All staff and visitors will be required to be inducted and sign these documents on first arrival to Site to show that they have read and understood the contents and any variations will be communicated as required.
- 4.10.8 WA maintains appropriate insurance cover for the project, including Public and Employers Liability (£10 million each) and Professional Indemnity cover of £2m as standard.

5 REPORTING AND DISSEMINATION

- 5.1.1 Upon completion of the archaeological evaluation, WA will produce an appropriate report, a draft of which be supplied to the Client for comment in the first instance. Once approved by the client a copy of the report will be forwarded to the Archaeological Advisor at KCC.
- 5.1.2 Should little or no archaeology be revealed during the archaeological investigations then it is expected that the production and submission of a suitable report will be completed within 4/5 weeks of the completion of the fieldwork. If significant and/or substantial archaeological deposits are revealed, then the submission may take longer to allow for necessary specialist input. In this event, discussions will be held with KCC about the possibility of submitting an interim report to aid in the discharge of the planning condition.
- 5.1.3 External specialists will only be called upon during the compilation of the report if the of the archaeological resource cannot be adequately determined without their input.
- 5.1.4 The report of the results of trial trenching will include the following as a minimum:
- An Abstract summarising the scope and results of the archaeological evaluation;
 - A HER Summary form;
 - An Introduction including:
 - The location of the site with a National Grid Reference for the centre sufficient to locate the site to 1m accuracy;
 - An account of the background and circumstances of the work;
 - A description of the development proposals, planning history and planning reference together with the archaeological condition (where appropriate);
 - The nature of potential impacts arising from the proposals;
 - The scope and date of the fieldwork, the personnel involved and who commissioned it;
 - An account of the Archaeological Background of the development site including

- The Methodology employed during the evaluation including the aims and objectives as will any further objectives identified during the course of the evaluation;
- A quantification of the project archive contents, their state and future location;
- The Results of the evaluation field work will be described trench by trench including the dimensions of the trench, the nature and depth of overburden soils encountered and a description of all archaeological features and finds encountered in each trench, their dimensions, states of preservation and interpretation;
- A description of the geological subsoil encountered in each trench;
- The Finds recovered during the course of the evaluation will be described, quantified and assessed by artefact type within the evaluation report. The report will also provide an indication of the potential of each category of artefact for further analysis and research. For each category of artefact the report will describe the method of processing, any sub-sampling, conservation and assessment undertaken. Where appropriate local reference collections will be referred to for descriptive and analytical consistency. Any implications for future archive, conservation or discard of the artefacts will also be set out;
- A table showing, per trench, the contexts, classes and quantity of artefacts recovered, together with their date and interpretation;
- An assessment of the Environmental potential of the site;
- An Interpretation of the archaeology of the site; and
- A conclusion.

5.1.5 The report will be accompanied by figures and illustrations in accordance with KCC Manual of Specification Part B: Evaluation – Trial Trenching Requirements.

5.2 **Dissemination/Publication**

5.2.1 Each stage of mitigatory fieldwork will be registered with the Online AccesS to the index of archaeological InvestigationS (OASIS) via <http://oasis/.ac.uk>. At the end of each project, prior to submission of a draft report, the OASIS record will be completed. Following approval the OASIS summary will be attached as an appendix and a digital copy of the archaeological report uploaded.

5.2.2 A digital copy of all reports (a single.PDF file) will be supplied to KCC and to the Client. Hard copies will be available on request.

5.2.3 A copy of each report, as an unbound hard copy and in .pdf/a format on CD, will be issued to KCC for passing to the Kent Historic Environment Record.

5.2.4 A summary of each stage of fieldwork will be submitted to the editor of any relevant journals agreed with KCC should the results of the fieldwork warrant this.

5.3 Archive Preparation and Deposition

5.3.1 WA will make provisional arrangements for the deposition of the site archive with Dover Museum and Bronze Age Boat Gallery and all documents, artefacts and any other material associated with the project will be marked with a HER reference number. Following completion of the fieldwork preparation of the site archive will follow guidelines from the recipient museum regarding deposition. Any variation will be agreed with the Local Planning Authority before being implemented.

5.3.2 In addition, WA will use an internal site code during the course of the archaeological investigations which shall also be placed on all documents, artefacts and any other items that may be associated with the project.

5.3.3 The site archive will include all project records and cultural material produced by the evaluation, and will be prepared in accordance with *Guidelines for the Preparation of Excavation Archives for Long Term Storage* (Brown 2011) and *A Standard Guide to Best Practice for Archaeological Archiving in Europe* (Perrin et al 2014).

5.3.4 Should no archaeology be revealed then the final report will be provided to the local HER and entered into the online access to the index of archaeological investigations database (See below).

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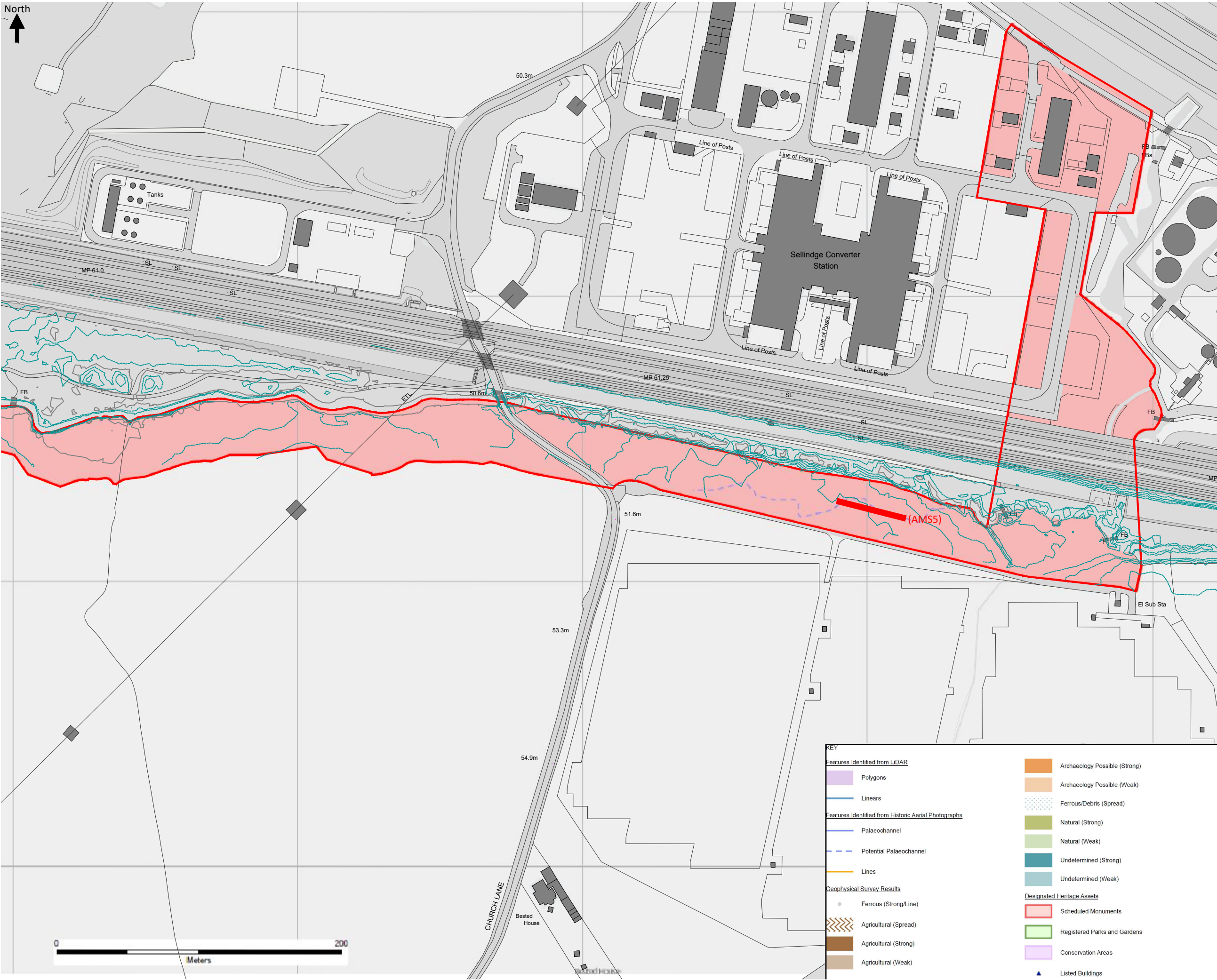
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APPENDICES

APPENDIX 1. PROPOSED TRENCH PLANS



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Notes:

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- KEY
- Site Boundary
 - Proposed Layout
 - Works 7 - Composite
 - Works 3 - Main Substation
 - Works 4 - Cable Route
 - PSWG
 - Water Tanks
 - Array Boxes
 - Fence - ISS20
 - Acoustic Fencing - Full Wrap
 - Drainage-Proposed Pond-Buffer
 - Drainage-Depression Storage
 - Drainage-Swale
 - Batteries
 - Inverter
 - Batteries Bunds
 - Proposed Trench Locations
 - Additional Trench Locations
 - Additional Trench Locations within Aldington Flood Storage Area



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Project Name:
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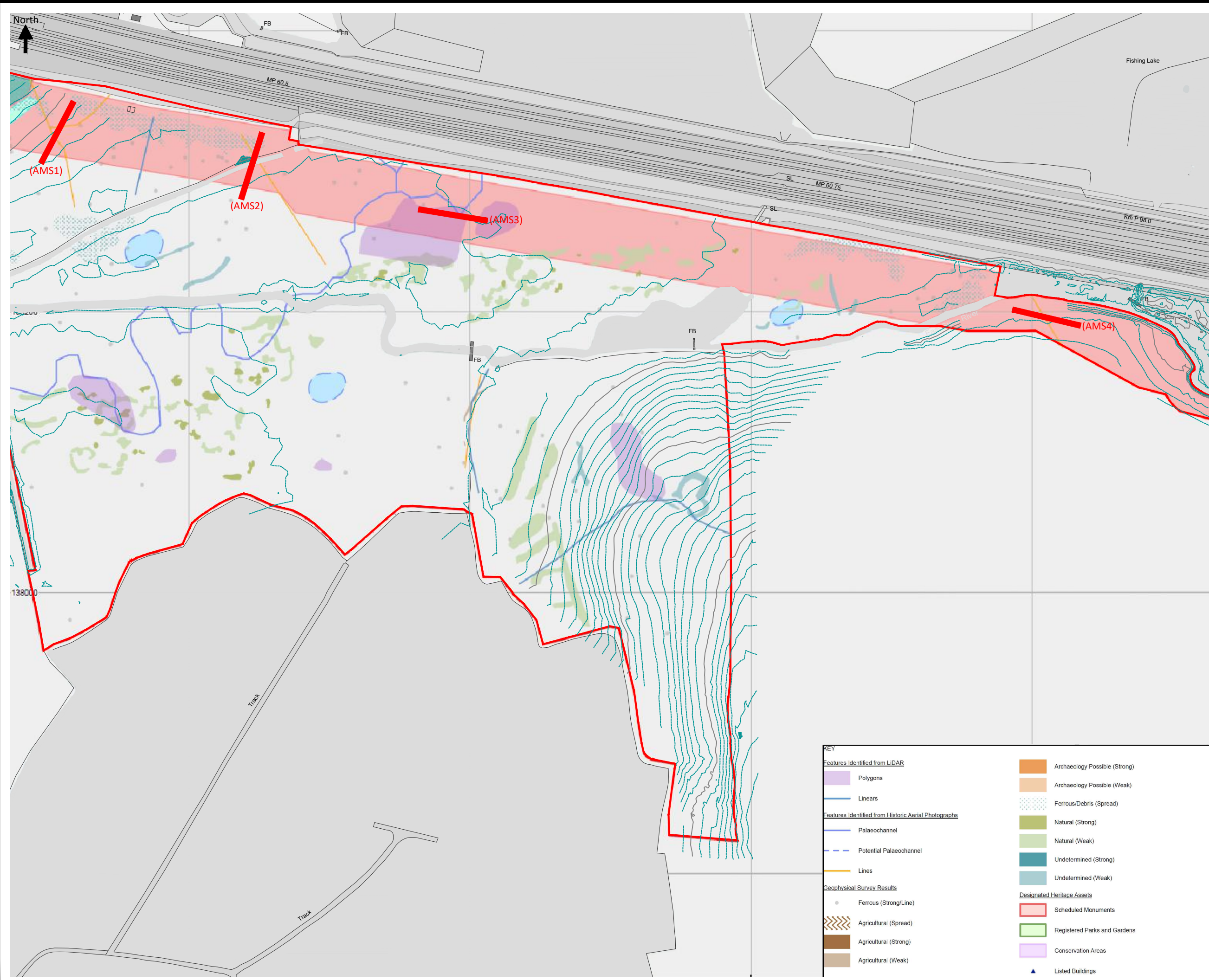
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- KEY
- Features Identified from LIDAR
- Polygons
 - Linears
- Features Identified from Historic Aerial Photographs
- Palaeochannel
 - Potential Palaeochannel
 - Lines
- Geophysical Survey Results
- Ferrous (Strong/Line)
 - Agricultural (Spread)
 - Agricultural (Strong)
 - Agricultural (Weak)
- Archaeology Possible (Strong)
 - Archaeology Possible (Weak)
 - Ferrous/Debris (Spread)
 - Natural (Strong)
 - Natural (Weak)
 - Undetermined (Strong)
 - Undetermined (Weak)
- Designated Heritage Assets
- Scheduled Monuments
 - Registered Parks and Gardens
 - Conservation Areas
 - Listed Buildings



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KEY

Site Boundary

Proposed Layout

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- Polygons
- Linears

Features Identified from Historic Aerial Photographs

- Palaeochannel
- Potential Palaeochannel
- Lines

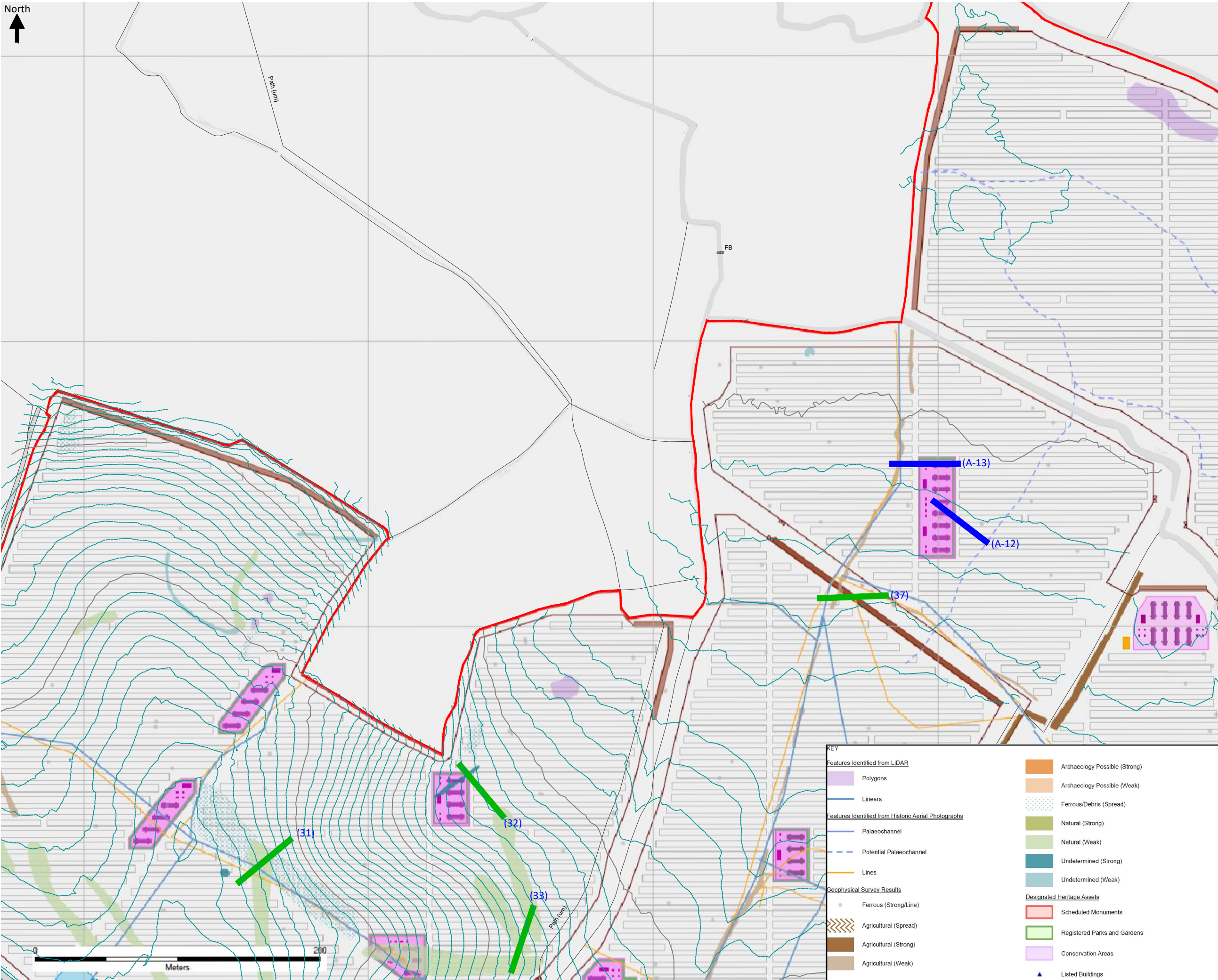
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- Agricultural (Spread)
- Agricultural (Strong)
- Agricultural (Weak)

- Archaeology Possible (Strong)
- Archaeology Possible (Weak)
- Ferrous/Debris (Spread)
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- Natural (Weak)
- Undetermined (Strong)
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Designated Heritage Assets

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- KEY
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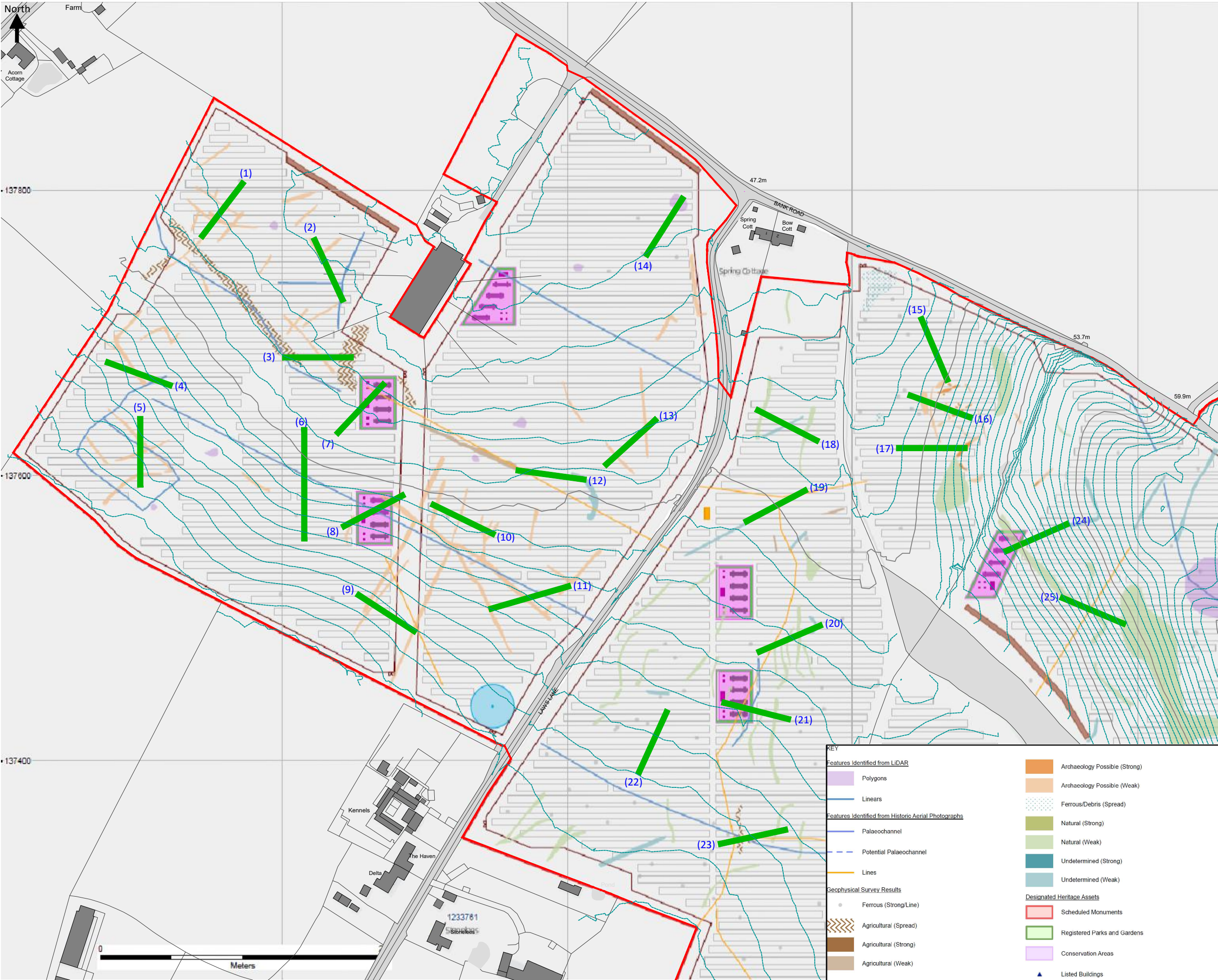
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- KEY
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- Polygons
 - Linears
- Features Identified from Historic Aerial Photographs**
- Palaeochannel
 - Potential Palaeochannel
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- Geophysical Survey Results**
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Notes:

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- KEY
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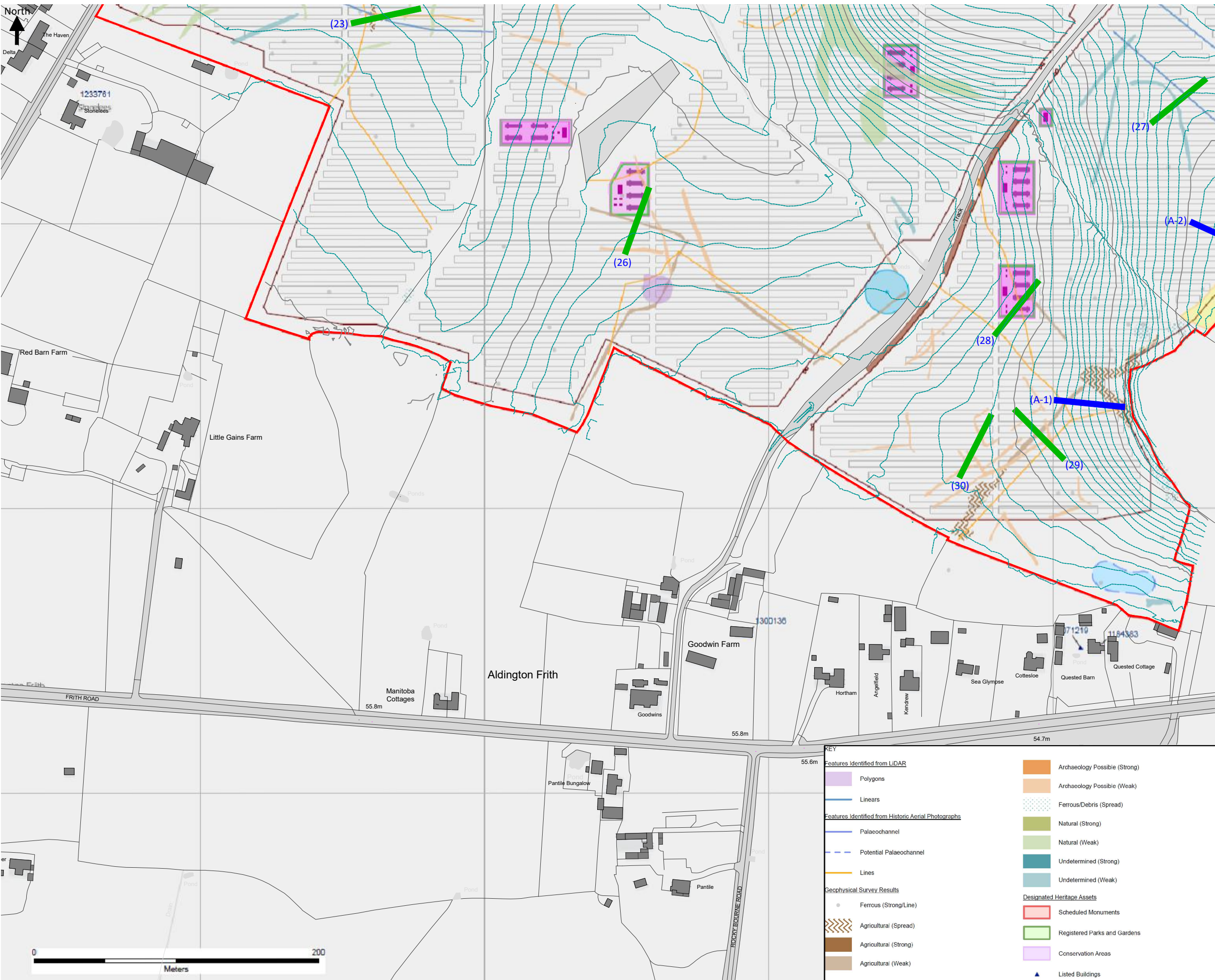
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- KEY
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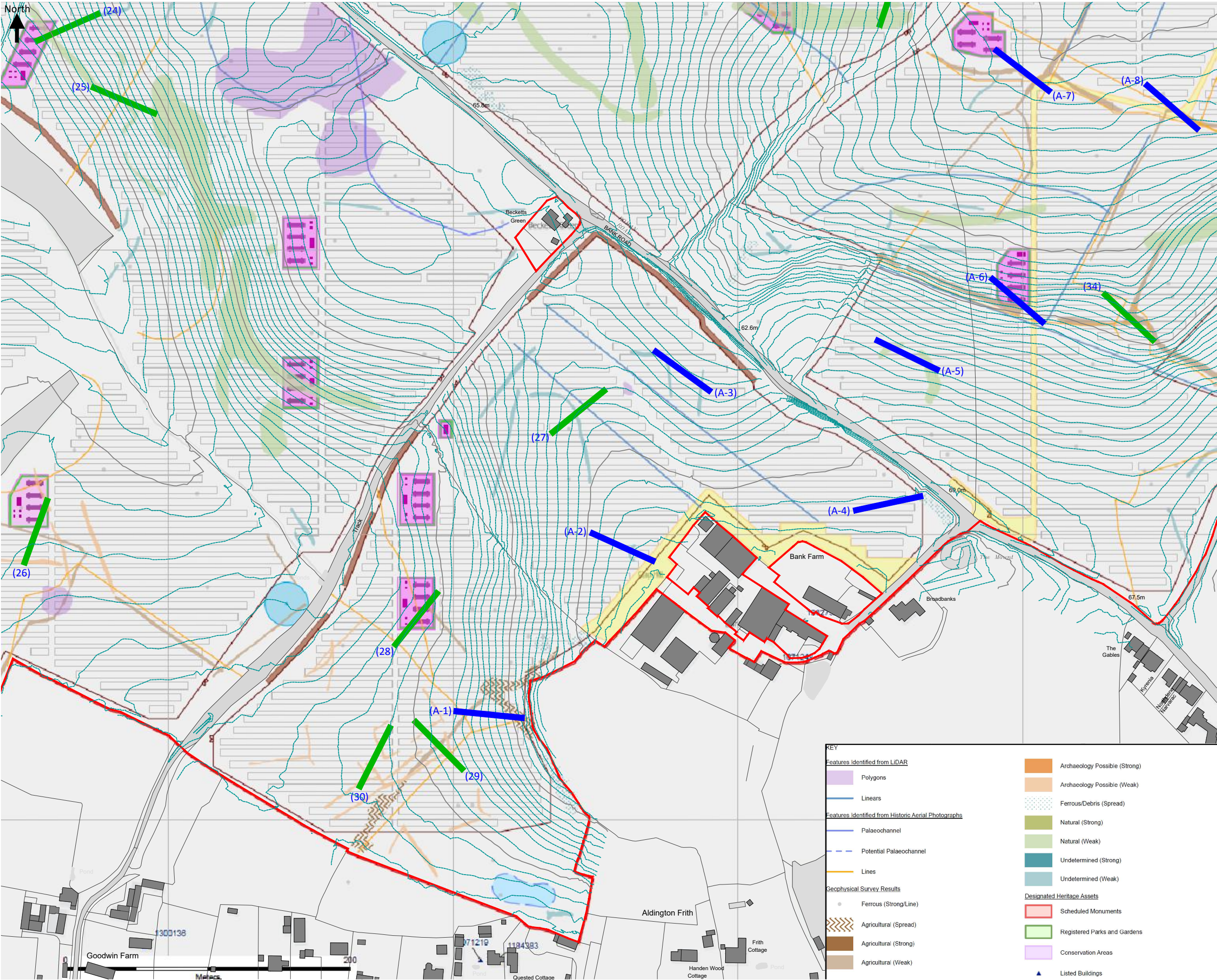
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- KEY
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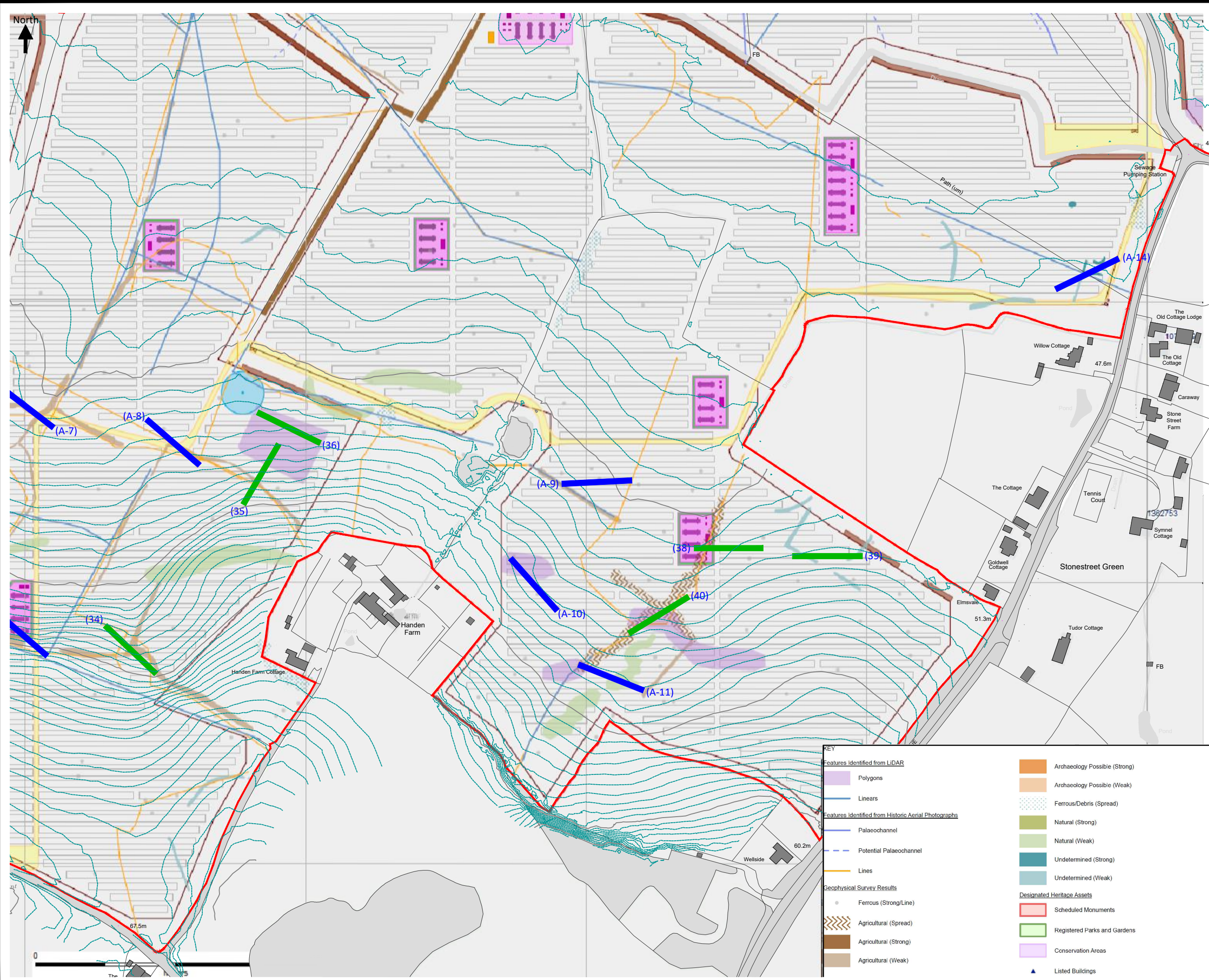
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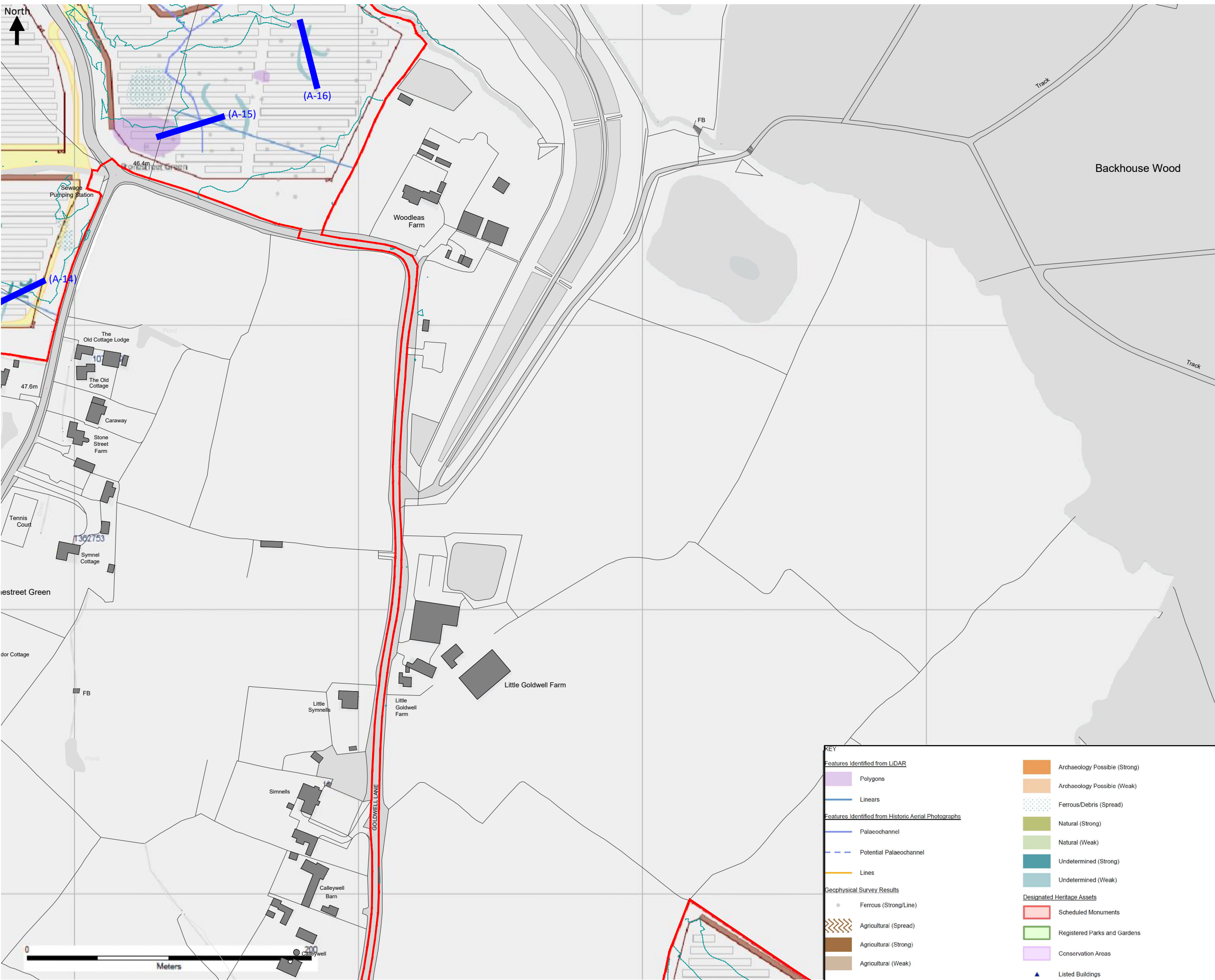
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Locations - pg8**

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- KEY
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Locations - pg9

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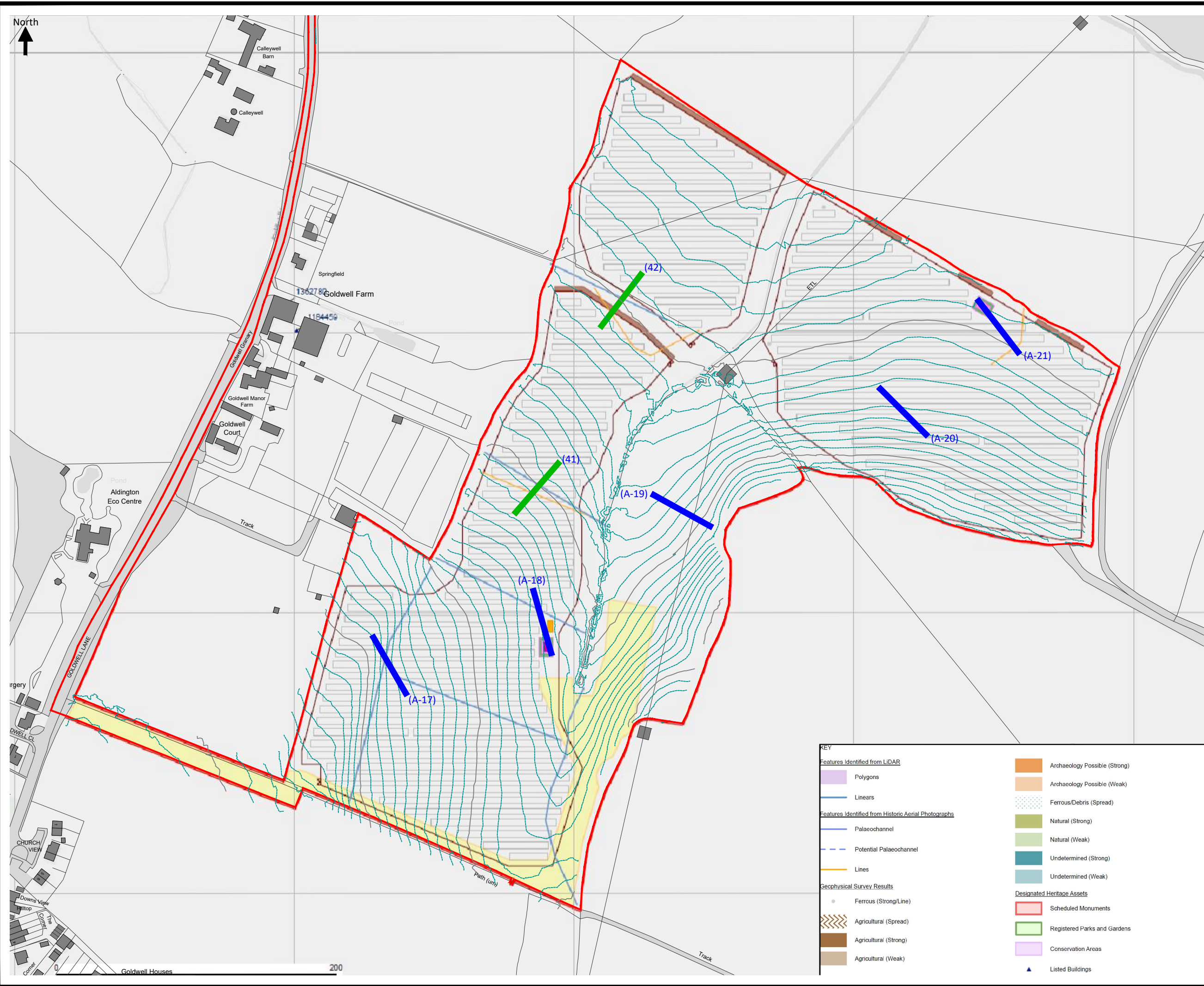
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Locations - pg10

Document Reference #:
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Postcode: TN25 7HP W3W: paints.embodied.warp

KEY

Site Boundary

Proposed Layout

- Works 7 - Composite
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Document Name:
Proposed Trench Locations - pg11

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KEY

Features Identified from LIDAR

- Polygons
- Linears

Features Identified from Historic Aerial Photographs

- Palaeochannel
- Potential Palaeochannel
- Lines

Geophysical Survey Results

- Ferrous (Strong/Line)
- Agricultural (Spread)
- Agricultural (Strong)
- Agricultural (Weak)

- Archaeology Possible (Strong)
- Archaeology Possible (Weak)
- Ferrous/Debris (Spread)
- Natural (Strong)
- Natural (Weak)
- Undetermined (Strong)
- Undetermined (Weak)

Designated Heritage Assets

- Scheduled Monuments
- Registered Parks and Gardens
- Conservation Areas
- Listed Buildings

APPENDIX 2. STAFF PROFILES

REGIONAL DIRECTOR

Dr Rhodri Gardner PhD MSc BA MCifA

Qualifications: PhD, Archaeology, UCL (2000)

MSc, Bioarchaeology & Geoarchaeology (Distinction), UCL, (1993)

BA Hons, Archaeological Studies, University of Leicester (1993)

Experience: Rhodri has been a professional Archaeologist for over 20 years. He is currently a Technical Director for Archaeology within Wardell Armstrong based at the Bury St Edmunds Office. He was previously Head of Cotswold Archaeology's Suffolk Office and their Head Fieldwork.

Rhodri is an experienced senior manager who has worked on a large variety of archaeological projects throughout East Anglia for several different leading commercial contractors in the region. He is responsible for the delivery and overall quality of our archaeological projects undertaken in the East of England.

In a c.23 year career he has built up a wide range of experience on variety of rural and urban sites, including complex multi-period urban excavations in Ipswich and London as well as large rural projects across East Anglia. These have included a number of Road Schemes in Suffolk and Norfolk (e.g. Bury St Edmunds eastern relief Road for SCC and the recent A47 evaluation works for Highways England/Galliford Try). Predominantly working in the south of England, he has experience of all periods.

Rhodri is also an experienced osteologist and zooarchaeologist and has worked as both a human and animal bone specialist.

ASSOCIATE DIRECTOR - PROJECT MANAGER

John Craven BA MCifA

Qualifications: BA Hons, Ancient History and Archaeology, University of Birmingham (2001)

Experience: John has been working as a professional Archaeologist in East Anglia since the mid 1990's, in various roles at Suffolk County Council, Suffolk Archaeology, Cotswold Archaeology and AOC Archaeology, before joining Wardell Armstrong in 2021 where he is responsible for the management of projects from initial client contact to completion.

An experienced field archaeologist and Project Manager John has previously assisted on, directed or managed a wide range of archaeological fieldwork and related heritage projects in the region, including extensive multi-period sites in west Suffolk across the airbases of RAF Lakenheath and RAF Mildenhall, for a broad range of commercial, private and public clients. He has an extensive record of producing project designs, desk-based assessments, post-excavation assessments and client reports and of team-wide archaeological data management and quality assurance.

John also takes an interest in disseminating the results of archaeological investigation to a wide variety of audiences and has managed several well-received Heritage Lottery funded community projects.

ASSOCIATE DIRECTOR - POST-EXCAVATION MANAGER & ARTEFACT SPECIALIST (POTTERY, LITHICS AND CBM RESEARCHER)

Andrew Peachey BA MCifA

Qualifications: BA Hons, Archaeology and History, University of Reading (2001)

Experience: Andrew has been working as a specialist across East Anglia and adjacent regions since 2002, with a particular interest in prehistoric and Roman pottery and ceramic building materials, as well as in the prehistoric technology and use of struck flint. Working as an internal specialist for Archaeological Solutions Ltd/Wardell Armstrong and accepting work as an external specialist for other contracting archaeological units has afforded Andrew a diverse and wide-ranging portfolio of projects and experience. Projects have included Neolithic pit groups at Coxford and flint assemblages from Blakeney Norfolk, extensive Neolithic to Iron Age assemblages from a riverside site at Dernford, Cambs and an important fenland occupation and ritual site at Sawtry, Cambs. Significant Roman pottery and CBM assemblages have included a large farmstead complex and pottery production site at Stowmarket, Suffolk and a Roman villa at Bottisham, Cambs; as well as from intensive agro-industrial sites at Soham, Cambs; Beck Row and Newmarket, Suffolk. A large pottery production and industrial site at East Winch Norfolk has recently been published as an East Anglian Archaeology monograph, while other kiln sites have included early Roman production at Snape, Suffolk (published in the Journal of Roman Pottery Studies) and Horningsea, Cambs (published in the Proceedings of the Cambridge Antiquarian Society). Andrew is a long-standing committee member and contributor to the Study Group for Roman Pottery.

ASSOCIATE DIRECTOR & ENVIRONMENTAL ARCHAEOLOGIST

Dr John Summers PhD MSc BSc

Qualifications: PhD "The Architecture of Food", University of Bradford (2010)

MSc, Biological Archaeology, University of Bradford (2006)

BSc Hons, Bioarchaeology, University of Bradford (2005)

Experience: John is an archaeobotanist with a primary specialism in the analysis of carbonised plant macrofossils and charcoal. He has undertaken archaeobotanical analyses for numerous excavations, mainly in the Eastern region, including assemblages from a number of large Romano-British, medieval and multi-phased sites. In addition to work on Archaeological Solutions Ltd/Wardell Armstrong projects, John undertakes archaeobotanical assessment and analysis for a number of other archaeological units. He also maintains a connection with research projects in Scotland, including recent work with the University of

Bradford's Covesea Caves Project. In addition to archaeobotanical investigations, John is responsible for co-ordinating field survey with GPS and total station, as well as in house magnetic gradiometer surveys. With Archaeological Solutions Ltd/Wardell Armstrong, he has co-ordinated and written up a number of gradiometer surveys, including a number of large areas (up to 140ha) and cart-based surveys, in conjunction with our external consultant.

ASSOCIATE DIRECTOR - PROJECT MANAGER

Keeley-jade Bingham BA ACIfA

Qualifications: BA Hons, Archaeology and Geography, University of Southampton (2017)

Experience: Keeley-jade has over 5 years' experience supervising and coordinating archaeological fieldwork and geophysics projects across East Anglia. She has led numerous small to large trial trench evaluations, excavations and geophysical surveys (both handheld and cart based). Keeley-jade plays a leading role in geophysics at the Bury St Edmunds office and has trained multiple members of staff to correctly use magnetometry and GPS equipment.

Keeley now assists with the preparation of quotes, written schemes of investigation and the day-to-day management of the field team.

ARCHAEOLOGIST - ARCHIVES CO-ORDINATOR & FINDS MANAGER

Luke Harris

Qualifications: A-Level History, English Literature and Language and AS-Level Government and Politics, Northampton College (2006)

Experience: Since completing his advanced education, Luke has held a number of professional administrative roles with companies and institutions including Nationwide Building Society (2007–2011) and Civica (2013–2014). His duties and responsibilities in these posts included the supervision and coordination of co-workers, the handling of customer enquiries and the categorisation, collation and digitalisation of paper records. Luke has also gained valuable clerical experience through voluntary roles and work experience. Since joining Archaeological Solutions Ltd/Wardell Armstrong Luke has received training in finds recognition, finds and environmental processing/ storage, archiving and the deposition of archaeological archives.

PRINCIPAL ARCHAEOLOGIST - PROJECTS MANAGER (POST-EXCAVATION)

Andrew Newton MPhil PCIFA

Qualifications: MPhil, University of Bradford (2004)

BSc (Hons), Archaeology, University of Bradford (2003)

Dip Professional Archaeological Studies, University of Bradford (2002)

Experience: Andrew has carried out geophysical surveys for GeoQuest Associates on sites throughout the UK and has worked as a site assistant with BUFAU. During 2001 he worked as a researcher for the Yorkshire Dales Hunter-Gatherer Research Project, a University of Bradford and Michigan State University joint research programme, and has carried out voluntary work with the curatorial staff at Beamish Museum in County Durham. Andrew is a member of the Society of Antiquaries of Newcastle-upon-Tyne and a Practitioner Member of the Institute for Archaeologists. Andrew joined Archaeological Solutions Ltd/Wardell Armstrong in 2005 as Project Officer writing desk-based assessments, he has since gained considerable experience in post-excavation work and his principal role is conducting post-excavation research and authoring site reports for publication. Significant post-excavation projects he has been responsible for include the Ingham Quarry Extension, Fornham St. Genevieve, Suffolk – a site with large Iron Age pit clusters arranged around a possible wetland area; the late Bronze Age to early Iron Age enclosure and early Saxon cremation cemetery at the Chalet Site, Heybridge, Essex; and, the high status Anglo-Saxon cemetery at Burwell Road, Exning, Suffolk. Andrew's work on the Iron Age settlement at Black Horse Farm, Sawtry, Cambridgeshire was recently published by BAR and he co-authored the recent *East Anglian Archaeology* monograph on the Romano-British industrial site at East Winch, Norfolk. Andrew also writes and co-ordinates Environmental Impact Assessments and has worked on a variety of such projects across southern and eastern England. In addition to his research responsibilities, Andrew undertakes outreach and publicity work and carries out some fieldwork.

PRINCIPAL ARCHAEOLOGIST - PROJECT OFFICER (POST-EXCAVATION)

Lindsay Lloyd-Smith BSc MPhil PhD

Qualifications: PhD, Archaeology, University of Cambridge (2008)

MPhil, Archaeological Research, University of Cambridge (2005)

BSc (Hons), Archaeology, Institute of Archaeology, UoL (1992)

Experience: Lindsay has over 25 years' experience in archaeology working on a wide variety of contract and research projects. As well as working in East Anglia for the Norfolk Archaeological Unit (1992), the Cambridge Archaeology Unit (repeatedly between 1995 and 2010), and most recently for Pre-Construct Archaeology (2016-2018), Lindsay's work and research has taken him to Belize (1992), the Netherlands (1992-1995), Sweden (1997-2004), India (1996-2005), Egypt (2002-2004), Malaysia (2000-2017), the Philippines (2006), Vietnam (2009), and South Korea (2011-2015). He was a member of the Niah Caves Project, Borneo (University of Cambridge, 2000-2004), which led on to his post-graduate research (MPhil,

PhD) into later prehistorical mortuary practice in Island Southeast Asia. Following this, he was a Post-Doctoral Research Associate on the Cultured Rainforest Project, University of Cambridge (2007-2011), responsible for archaeological fieldwork investigating the prehistory of the central highlands of Borneo. He spent four years (2011-2015) working as an Assistant Professor at the Institute for East Asian Studies, Sogang University, Seoul, South Korea, where he taught Area Studies and Southeast Asian Archaeology and directed the Early Central Borneo Project (2013-2016). During this time he also was lead editor for the newly launched journal *TRANS: Trans –Regional and –National Studies of Southeast Asia* published by Cambridge University Press. Returning to the UK in 2015, Lindsay worked at Leicester University as an Associate Tutor in the School of Archaeology and Ancient History where he designed and wrote a Distance Learning Masters Module in Archaeology and Education. Lindsay joined Archaeological Solutions Ltd/Wardell Armstrong in June 2018 and is responsible for the post-excavation management of large excavation projects, from the assessment, interpretation and synthesis of site data to the production of archaeological reports from assessment to publication level.

PRINCIPAL ARCHAEOLOGIST - POTTERY RESEARCHER

Peter Thompson MA

Qualifications: MA, Landscape Archaeology, University of Bristol (1999)
BA (Hons), Archaeology, University of Bristol (1998)

Experience: Peter has over two years commercial site excavation experience mainly with Bristol and Region Archaeological Services and the Bath Archaeological Trust. Peter joined HAT (now Archaeological Solutions Ltd/Wardell Armstrong) in 2002 to specialise in Anglo-Saxon and Medieval pottery research covering East Anglia and the Greater London areas, and also has good knowledge of Prehistoric pottery identification. Publications include pottery assemblages from a Late Bronze Age and Early Iron Age enclosure and Early Saxon cemetery at Heybridge, Essex (*Essex Archaeology and History 2008, Vol 39*); Saxon and Medieval settlement at Marham, Norfolk (*Norfolk Archaeology 2012, Vol 46*); Iron Age settlement and burials and Early Anglo-Saxon settlement from Harston Mills, Cambs (*East Anglian Archaeology 2016 Vol 157*); two rural Suffolk Anglo-Saxon sites at Snape and Oulton (*Anglo-Saxon Studies in Archaeology and History 2018, Vol 21*); A Medieval Grimston ware pottery assemblage at Pott Row, Norfolk (*Norfolk Archaeology 2014 Vol 48*); a medieval rural landscape at Stone, Bucks (*Records of Buckinghamshire 2018, Volume 58 part 1*); and a late medieval kiln site at Stowmarket, Suffolk (*forthcoming*). Peter has also written more than 100 Desk-Based Assessments primarily for commercial developers in both rural and urban locations. These include particularly archaeologically sensitive sites such as a double Scheduled Ancient Monument site at Kings Langley, Herts, and The Great Hospital in Norwich.

PRINCIPAL ARCHAEOLOGIST – SMALL FINDS SPECIALIST

Ruth Beveridge BA MA PhD

Qualifications: PhD, Archaeology, Institute of Archaeology, University College London (2000)
MA, Archaeology, Institute of Archaeology, University College London (1992)
BA (Hons), Archaeology, University of Exeter (1987)

Experience: Ruth has been a professional archaeologist for over 30 years, beginning her career at the Museum of London as a field archaeologist working on urban excavations in central London. Moving into post-excavation she has been working with artefact assemblages on a range of sites across the country, with particular focus on East Anglia. Since 2008 she has worked as a metalwork and small finds specialist, beginning as freelance and then working full time for both Suffolk Archaeology CIC and Cotswold Archaeology. Ruth has reported on a wide variety of assemblages from multi-period urban sites in Norwich, Ipswich and Bury St Edmunds to a range of rural settlements of all periods across the eastern region. More recently Ruth has written publication reports on medieval urban metalwork assemblages from Gloucester and Bristol. In addition to working on Wardell Armstrong projects, Ruth undertakes assessment and analysis on small finds for other archaeological units.

Ruth undertook seven seasons of fieldwork in Vietnam between 1994 to 2000, ranging from excavation to survey and museum-based studies. She has maintained contact with the European Association of South-East Asian Archaeologists and the Indo-Pacific Prehistoric Association, for whom she has regularly provided conference presentations, most recently in 2018 in Hue, Vietnam

In addition to her specialist work, Ruth has considerable experience with archaeological archiving and the reporting, recording and closing of archaeological treasure cases.

PRINCIPAL ARCHAEOLOGIST - HISTORIC BUILDING RECORDING

Tansy Collins BSc MSt

Qualifications: MSt Building History, University of Cambridge (2015)
BSc (Hons), University of Sheffield, Archaeological Sciences (2002)

Experience: Tansy's archaeological experience has been gained on diverse sites throughout England, Ireland, Scotland and Wales. Tansy joined Archaeological Solutions Ltd/Wardell Armstrong in 2004 where she developed skills in graphics, backed by her grasp of archaeological interpretation and on-site experience, to produce hand drawn illustrations of pottery, and digital illustrations using a variety of packages such as AutoCAD, Corel Draw and Adobe Illustrator.

She is a historic building specialist with over fifteen years experience investigating and recording historic buildings, and is skilled in all aspects of such projects including technical analysis, research, drawn and photographic surveys. Tansy's knowledge was consolidated by completing, with Distinction, the MSt in Building History at the University of Cambridge. Her

dissertation focused on the under-researched topic of the marking of Baltic timber imported into Britain in the 18th and 19th centuries.

She has authored over 150 historic building reports from pre-application appraisals and impact assessments through to condition-based recording with monitoring during planned works that adhere to Levels 1 to 4 as outlined in guidance documents by Historic England. These projects include a number of regionally and nationally significant buildings, for example a previously unrecognised medieval aisled barn belonging to a small group of nationally important agricultural buildings, one of the earliest surviving domestic timber framed houses in Hertfordshire, a Cambridgeshire house retaining formerly hidden 17th century decorative paint schemes. Larger projects include The King Edward VII Sanatorium in Sussex, RAF Bentley Priory in London as well as the Grade I Listed Balls Park mansion in Hertfordshire.

SENIOR ARCHAEOLOGIST - HISTORIC BUILDING RECORDING

Liam Podbury BA

Qualifications: BA (Hons), Archaeology, Newcastle University (2016)

Experience: Throughout his higher education, Liam has gained extensive practical archaeological experience, assisting in the excavation of the Hasting Hill Neolithic Monument Complex in Sunderland and the excavation of an early Bronze Age metallurgy site in Sicily with the *Case Bastione Project*. After graduating Liam trained in the practical conservation of historic structures with the *National Heritage Training Group* and went on to work as a project manager, restoring and renovating numerous listed historic buildings. Liam joined Archaeological Solutions Ltd/Wardell Armstrong as a field archaeologist, working on a variety of commercial fieldwork projects, developing his practical skills and gaining a good understanding of various archaeological periods across the East of England. In 2019 he joined the historic buildings team, since then Liam has authored reports for a wide range of building types; both timber-framed and brick-built buildings with date ranges varying from the medieval period to the 20th century. Liam also conducts background research and contributes to archaeological report writing. He is CSCS certified and is trained in Emergency First Aid at Work.

SENIOR ARCHAEOLOGIST - DESK-BASED ASSESSMENTS

Kate Higgs MA (Oxon)

Qualifications: MA (Oxon), Archaeology & Anthropology, St Hilda's College University of Oxford (2004)

Experience: Kate has archaeological experience dating from 1999, having taken part in clearance, surveying and recording of stone circles in the Penwith area of Cornwall. During the same period, she also assisted in compiling a database of archaeological and anthropological artefacts from Papua New Guinea, which were held in Scottish museums.

Kate has varied archaeological experience from her years at Oxford University, including participating in excavations at a Roman amphitheatre and an early church at Marcham/Frilford in Oxfordshire, with the Bamburgh Castle Research Project in Northumberland, which also entailed the excavation of human remains at a Saxon cemetery, and also excavating, recording and drawing a Neolithic chambered tomb at Prissé, France. Kate has also worked in the environmental laboratory at the Museum of Natural History in Oxford, and as a finds processor for Oxford's Institute of Archaeology. Since joining Archaeological Solutions Ltd/Wardell Armstrong in November 2004, Kate has researched and authored a variety of reports, concentrating on desk-based assessments in advance of archaeological work and historic building recording.

PRINCIPAL SPECIALISTS LIST

GEOPHYSICAL SURVEYS

Dr David Bescoby

Dr John Summers

AIR PHOTOGRAPHIC ASSESSMENTS

Aerial-Cam Ltd – SUMO Aerial Surveys

PHOTOGRAPHIC SURVEYS

K Henry

PREHISTORIC POTTERY

A Peachey MCIfA

ROMAN POTTERY

A Peachey MCIfA

SAXON & MEDIEVAL POTTERY

P Thompson

POST-MEDIEVAL POTTERY

P Thompson

FLINT

A Peachey MCIfA

GLASS

H Cool

COINS

R Henry

SMALL FINDS

Dr R Beveridge

SLAG

A Newton

ANIMAL BONE

J Curl

HUMAN BONE:

S Anderson

ENVIRONMENTAL CO-ORDINATOR

Dr J Summers

POLLEN AND SEEDS:

Dr R Scaife

CHARCOAL/WOOD

Dr J Summers

SOIL MICROMORPHOLOGY

Dr R MacPhail, Dr C French

CARBON-14 DATING:

SUERC Radiocarbon Laboratory

CONSERVATION

Drakon Heritage and Conservation

PRINCIPAL ARCHAEOLOGIST - SENIOR PROJECT OFFICER

Kerrie Bull BSc

Qualifications: BSc Archaeology, University of Reading (2011)

Experience: During her undergraduate degree at the University of Reading Kerrie worked on the Lyminge Archaeological Project (2008), the Silchester 'Town Life' Project (2009) and the Ecology of Crusading Research Programme (2011). Through her academic and professional career, Kerrie has gained good experience of archaeological fieldwork and post-excavation techniques. Since joining Archaeological Solutions Ltd/Wardell Armstrong Kerrie has gained enhanced experience of commercial archaeological practice, and has managed the fieldwork elements of various large projects, including the excavation of Chilton Leys, Stowmarket. Kerrie's other responsibilities include the training and management of field staff, and professional liaison with clients and local authority representatives. Kerrie has contributed towards the dissemination of project outcomes through the production of 'grey' literature and published works. Kerrie is CSCS certified.

PRINCIPAL ARCHAEOLOGIST - SENIOR PROJECT OFFICER

Gareth Barlow MSc BA

Qualifications: MSc, Environmental Archaeology & Palaeoeconomy, University of Sheffield, (2003)
BA (Hons), Archaeology, King Alfred's College, Winchester (2002)

Experience: Gareth worked on a number of excavations in Cambridgeshire before pursuing his degree studies and worked on many archaeological projects across the UK during his university days. Gareth joined Archaeological Solutions Ltd/Wardell Armstrong in 2003 and has worked on numerous archaeological projects throughout the South East and East Anglia. Gareth is CSCS and First Aid at Work (St Johns Ambulance) qualified.

PRINCIPAL ARCHAEOLOGIST – PROJECT OFFICER

John Haygreen

Experience: John has extensive experience of working within the construction sector, including as a company director of a landscaping business. His duties and responsibilities in these posts included the supervision and coordination of co-workers, liaising with stakeholders to determine specific project design elements and managing projects to ensure deadlines were realised. Since joining Archaeological Solutions Ltd/Wardell Armstrong John has worked on a variety of commercial fieldwork projects, developing his knowledge and excavation, surveying and supervisory skills. John is a CPCS trained operator of 360 Excavators. John is also CSCS certified, passed the CITB Health and Safety Awareness Course and is trained in Emergency First Aid.

PRINCIPAL ARCHAEOLOGIST – PROJECT OFFICER

Christian Burgess BSc

Qualifications: BSc (Hons), Archaeology, Bournemouth University (2018)

Experience: During his Undergraduate degree, Christian worked with several universities and professional companies across multiple sites in the U.K and in the western Hebrides, most notable of which was on the island of Islay on several Mesolithic, Neolithic and Bronze Age sites including; ‘Sloch Mesach’, a Neolithic Clyde Cairn used through to the Bronze Age and ‘Rubha Port an t-Seilich’, a Mesolithic campsite. During his time at university Christian also worked in Dorset with the Durotriges project, a Bournemouth university led excavation, investigating the transition from the Iron Age to Roman Britain. Since leaving university and joining Wardell Armstrong as a site assistant Christian has worked on a great many projects in the East Anglian area, these include an Anglo-Saxon cemetery at Oulton, Suffolk and a Bronze Age ring ditch at Thorley, Hertfordshire. Christian has gained valuable experience in site coordinating, excavation strategies and efficient and professional interpreting and recording systems. As a Supervisor his duties include the carrying out of Watching Briefs and direction of small/medium scale evaluations, management and supervision of site staff, liaison with clients and local authority representatives and managing fieldwork timescales with deadlines. Christian also assists in the creation of ‘grey’ literature and published literature during the post excavation processes. He is CSCS qualified and has completed a First Aid at Work Course.

SENIOR ARCHAEOLOGIST - SUPERVISOR

Shannon Lucas BA, PCIfA

Qualifications: BA (Hons), Archaeology, University of York (2019)

Experience: Shannon has over four years’ experience in commercial archaeology, working on a variety of projects within North Yorkshire and across East Anglia. Shannon has an extensive knowledge of Osteology through university studies, analysing monastic cemeteries in Yorkshire to produce skeletal reports. This has transferred to the field where she spent time excavating a large Anglo-Saxon cemetery in Oulton, Suffolk. Since joining Archaeological Solutions Ltd/Wardell Armstrong in 2019, she has been involved in small and large trial trenching evaluations, excavations and monitoring construction projects. Shannon has led several trial trench evaluations and excavations, including large quarry projects. She is proficient in supervising geophysical projects using the handheld methodologies, GPS and total station in order to stakeout or survey fieldwork projects. Shannon regularly liaisons with clients, county archaeologists and communicates with project staff to create a happy working environment, ensuring projects are completed to schedule. She often assists in writing archaeological reports of her own sites. Shannon frequently takes responsibility for the training and development of staff on site. Shannon has a CSCS card and Emergency First Aid training.

APPENDIX 3. KCC MANUAL

EVALUATION – TRIAL TRENCHING REQUIREMENTS

1. Introduction

- 1.1 Archaeological trial trenching involves the sampling of a site to determine whether archaeological remains are present and if so, to assess their character, extent, date, condition and potential importance. Trial trenching will aim to determine, as far as is practicable and without comprising the integrity of important archaeological deposits, the full stratigraphic sequence at the site, including information on the 'natural' substrate and soil conditions.

2. General Requirements

- 2.1 Trial trenching will be carried out by archaeological organisations (from here on referred to as 'the Archaeological Contractor') acceptable to the relevant Local Planning Authority, with recognised experience and expertise in the specified type of work to be undertaken. Registration with the Institute of Field Archaeologists (IFA) as a Registered Archaeological Organisation (RAO) will normally be considered as an indicator, but not a prerequisite, of such expertise and experience. A good working knowledge of the archaeology of Kent will also be considered highly desirable.
- 2.2 Prior to any work being undertaken the Archaeological Contractor will inform the County Archaeologist and communicate details of the proposed team, including (if required) CVs for senior staff and specialists. Senior staff and specialists will need to demonstrate an appropriate level of experience and expertise and should preferably be, where appropriate, Members of the Institute of Field Archaeologists (IFA).
- 2.3 Prior to undertaking the trial trenching the Archaeological Contractor will need to demonstrate that the necessary resources are in place to undertake the work, through to reporting. The Archaeological Contractor will have available appropriate specialists necessary to support the successful completion of the archaeological fieldwork and post-excavation work.
- 2.4 The work will be supervised on site at all times by a member of staff with the required level of experience and who will be responsible for the conduct of on-site work.

3. Pre-site Requirements

- 3.1 Prior to undertaking trial trenching the Archaeological Contractor will have gathered and considered the following information:
- Relevant information on the County Historic Environment Record (HER) held by Kent County Council and maintained by the Heritage Conservation Team;
 - Any earlier reports of fieldwork relevant to the site;

- Solid and drift geology;
- Geotechnical site investigation data (if available);
- Any desk-based studies of the site.

3.2 In certain circumstances the following will also be considered:

- Relevant published secondary sources
- Relevant historic maps held at the Centre for Kentish Studies
- Aerial photographs where cropmarks are considered to indicate archaeology on or close to the site.

3.3 The Archaeological Contractor will ensure that all reasonable measures have been taken to identify any constraints to undertaking the evaluation trenching. The Archaeological Contractor will seek information on the presence of services, any ecological constraints, the presence of Public Rights of Way, the presence of contaminated land or any other risks to health and safety.

3.4 The Archaeological Contractor will make provisional arrangements for the deposition of the site archive with an appropriate museum or suitable repository agreed with the County Archaeologist. The Archaeological Contractor will obtain a provisional accession number for the site archive from the recipient museum (except where the museum prefers to issue an accession number following completion of fieldwork) and any guidelines from the recipient museum regarding deposition of the site archive.

3.5 Full copies of the Specification must be issued to the field officer responsible for on-site work and a copy of the agreed Specification and any additional method statements must be available on site at all times. The team carrying out the trial trenching must be familiar with the Specification and have access on site to any previous evaluation or survey reports.

3.6 The Archaeological Contractor will inform the County Archaeologist of the start date of the work (at least five working days before) and arrange for monitoring visits to be undertaken, using the Site Fieldwork Notification Form (see Appendix II). The Archaeological Contractor will continue to keep the County Archaeologist informed of the progress of work and will notify the County Archaeologist immediately if particularly important archaeological remains are encountered.

4. Objectives

4.1 The purpose of the evaluation is to establish whether there are any significant archaeological deposits at the site that may be affected by the proposed development.

4.2 The evaluation is thus to

- a) ascertain the extent, depth below ground surface, depth of deposit, character, date, significance and condition of any archaeological remains on site;

- b) establish the extent to which previous development and/or other processes have affected archaeological deposits at the site; and
- c) establish the likely impact on archaeological deposits of the proposed development.

5. Scope of trial trenching

- 5.1 The layout and number of trenches excavated will be in accordance with the Specification, details of which are given in Part A. Any amendment to trench design due to on-site constraints will be agreed with the County Archaeologist in advance of the work being undertaken.
- 5.2 Particular issues that will be addressed by the evaluation are set out in part A of this specification.

6. Machine and Hand Excavations

- 6.1 All machine excavation of trial trenches will be carried out under constant archaeological direction by a suitably experienced archaeologist familiar with the ground conditions anticipated on the investigation site.
- 6.2 Machine excavation of trial trenches will be undertaken by a mechanical excavator using a flat-bladed bucket. No mechanical excavators, earthmoving or other vehicles will travel within any excavated trench until it has been signed off by the County Archaeologist or specific agreement has been reached to enable re-stripping.
- 6.3 The Archaeological Contractor will maintain a constant watch and closely inspect on an ongoing basis surfaces exposed during the course of machining. Surfaces will be maintained clear of loose spoil.
- 6.4 Subject to additional requirements of the landowner or client, turf, topsoil and other distinct deposits will be stored separately and at least 1 metre from the edge of the evaluation trench.
- 6.5 Machine-excavated deposits and the exposed surface will be regularly scanned for the presence and collection of artefacts. Exposed surfaces and excavated spoil will be scanned by metal detector.
- 6.6 The excavation by machine is to be taken down to the top of any significant archaeological level or to the top of 'natural' subsoil where no archaeological deposits have been found at a higher level. In the event of significant archaeological deposits being encountered the County Archaeologist is to be informed immediately. Some further limited excavation may be required to clarify the nature, character and date of the archaeological deposits but the primary objective is to establish the presence/absence of archaeological deposits, their depth and extent.

- 6.7 Where complex archaeological stratification is encountered, deposits will be left in situ and measures to assess the depth of this stratification agreed with the County Archaeologist. Where modern features are seen to truncate the archaeological stratification, then these will be carefully removed without damage to surrounding deposits to enable the depth of stratification to be assessed.
- 6.8 If archaeological remains of limited significance are found to be present cutting through or overlying soils (e.g. colluvium) which conceal lower archaeological horizons then these will need to be recorded and investigated prior to removal of the underlying soil with the agreement of the County Archaeologist.
- 6.9 Machine excavation from the surface must be taken down in spits of no more than 100mm thickness to ensure that deposits and features are not over-excavated and that any artefacts/biological evidence in the soil are recorded.
- 6.10 Test sondages may need to be excavated through 'natural' subsoil in trial trenches to confirm that the solid geology has been reached. Such sondages will be positioned to avoid damage to archaeological remains.

7. Investigation and Sampling Strategy

- 7.1 Archaeological features will generally only be sampled sufficiently to characterise and date them. Full excavation of features will not be undertaken at this stage unless otherwise agreed with the County Archaeologist. Care will be taken not to damage archaeological deposits through excessive use of mechanical excavation.
- 7.2 Where necessary the surface and sections of trenches will be hand cleaned to define archaeological deposits and features clearly.
- 7.3 Measures will be taken to protect particularly significant, valuable or sensitive archaeological remains from exposure, accidental damage and / or theft.
- 7.4 Exposed surfaces will be left for a minimum of 48 hours to allow weathering-out of features to occur. No trenches will be backfilled until agreed with the County Archaeologist.

Burial Remains

- 7.5 Inhumation and cremation burials will normally be left in-situ for the purposes of evaluation. Subject to agreement with the County Archaeologist, graves may be partially excavated to confirm the presence of human remains and their state of preservation but skeletal remains will be left in situ. Graves will be scanned by metal detector to assess whether any grave objects are likely to be present.
- 7.6 Inhumation and cremation burials which are in a fragile state and are likely to

be damaged by the reinstatement of evaluation trenches will be excavated and lifted subject to agreement with the County Archaeologist.

- 7.7 The Archaeological Contractor will put in place arrangements to ensure the security, protection from deterioration and damage, and the respectful treatment of human remains and burial goods.
- 7.8 On sites where burial remains are expected the Archaeological Contractor will submit to and agree with the County Archaeologist detailed procedures for the assessment, recording and, where necessary, the excavation of inhumation and cremation burials.
- 7.9 The Archaeological Contractor will have available within the team or on call an appropriately qualified and experienced osteoarchaeologist to supervise the excavation and removal of any human remains (where this is necessary) from the site. The Archaeological Contractor will use an appropriately qualified and experienced archaeological conservator to assist, where appropriate, the lifting of human remains and grave goods / cremation vessels.
- 7.10 In the event that human burials are discovered, a Ministry of Justice Licence will be required (in accordance with Section 25 of the Burial Act 1857) before the remains can be lifted. The need for a Ministry of Justice Licence applies to both inhumation and cremated remains. Application for a Licence will be made by the Archaeological Contractor. The Archaeological Contractor is to comply with the conditions of the Licence and discuss any requirements of that Licence which conflict with the agreed method of investigation with the County Archaeologist.

8. Finds recovery processing and treatment

- 8.1 All artefacts recovered during the excavations on the site are the property of the Landowner. They are to be suitably bagged, boxed and marked in accordance with the United Kingdom Institute for Conservation, *Conservation Guidelines no.2* and on completion of the archaeological post-excavation programme the landowner will arrange for them to be deposited in a museum or similar repository agreed with the County Archaeologist and the Local Planning Authority.
- 8.2 Artefacts will be excavated carefully by hand. The Archaeological Contractor will use an appropriately qualified and experienced archaeological conservator to assist in the lifting of fragile finds of significance and / or value.
- 8.3 Artefacts will be collected and bagged by archaeological context. The location of special finds will be recorded in three dimensions. Three-dimensional recording of in-situ flint working deposits will be carried out.
- 8.4 Where appropriate to address the research objectives of the archaeological evaluation, sieving of deposits will be undertaken to maximise recovery of

small artefacts. A strategy for such sieving will be agreed in advance with the County Archaeologist.

- 8.5 Records of artefact assemblages will clearly state how they have been recovered, sub-sampled and processed.
- 8.6 Excavated artefacts will be bagged upon recovery or placed in finds trays. They must not be left loose on site.
- 8.7 **Treatment of treasure** - Finds, discovered by the Archaeological Contractor, falling under the statutory definition of Treasure (as defined by the Treasure Act of 1996 and its revision of 2002) will be reported immediately to the relevant Coroner's Office, the Kent Finds Liaison Officer (FLO) who is the designated treasure co-ordinator for Kent, the landowner and the County Archaeologist. A Treasure Receipt (obtainable from either the FLO or the DCMS website) must be completed and a report submitted to the Coroner's Office and the FLO within 14 days of understanding the find is Treasure. Failure to report within 14 days is a criminal offence. The Treasure Receipt and Report must include the date and circumstances of the discovery, the identity of the finder (put as unit/contractor) and (as exactly as possible) the location of the find.
- 8.8 All metal objects, other than late post medieval objects, will be X-rayed unless otherwise agreed with the County Archaeologist.

9. Archaeological Science and Environmental Sampling

- 9.1 A structured programme of environmental sampling appropriate to the aims of the evaluation will be implemented. The strategy and methodology for the sampling, recording, processing, assessment, analysis and reporting of deposits with environmental archaeology potential will be in accordance with English Heritage Centre for Archaeology Guidelines "Environmental Archaeology – A guide to the theory and practice of methods, from sampling and recovery to post-excavation" (March 2002). Any variation to this guidance will be agreed in advance with both the County Archaeologist and the English Heritage Regional Scientific Advisor. Particular note will be taken of the following requirements.
- 9.2 The Archaeological Contractor will use an appropriately qualified and experienced geo-archaeologist to record any deposits of particular significance such as buried soils or advise on depositional processes.
- 9.3 An appropriately qualified and experienced environmental archaeologist will devise and supervise the implementation of the environmental sampling strategy.
- 9.4 The advice of the English Heritage Regional Scientific Advisor is to be sought regarding specialist sampling requirements and any scientific applications relevant to the archaeological evaluation of this site.

- 9.5 Where deposits are dry, bulk samples for the recovery of charred plant remains, small bones and finds, will be taken from sealed and datable features such as pits, ditches, hearths and floors. Each context will normally be sampled. The size of the sample is expected to be in the range of 40-60 litres per context or 100% of smaller contexts. Samples will not be taken from the intersection of features.
- 9.6 For large features / spreads appropriate consideration will be given to sampling on a grid system if this fits in with the aims of the evaluation.
- 9.7 Where good conditions for the preservation of bone have been identified, all large bones will be collected by hand and sieving of bulk samples up to 100 litres will be undertaken as appropriate.
- 9.8 Mollusc samples of 2 litres each will be taken vertically from appropriate sections to investigate the changes of vegetation through time.
- 9.9 Where deposits are wet, waterlogged or peaty, monoliths will be taken along cleaned vertical surfaces for the retrieval of pollen, diatoms, ostracods and foraminifera. The numbers to be taken will be agreed with the County Archaeologist.
- 9.10 For wet, waterlogged or peaty deposits, bulk samples of 20 litres will be taken from visible layers or spits for the retrieval of plant macro-remains and insects.
- 9.11 Environmental samples from dry deposits will normally be processed by flotation following the evaluation fieldwork and the residues will be sorted to retrieve small bones, small finds and charcoal that has not floated. Environmental samples from wet deposits will normally be sent to specialists for processing in laboratory conditions. The Archaeological Contractor will agree with the County Archaeologist any necessary delay in completion of the reporting of the evaluation to enable provisional results to be included.
- 9.12 The Archaeological Contractor will make appropriate provision for the application of scientific dating techniques such as radiocarbon, dendrochronology, archaeomagnetic dating, OSL and thermoluminescence dating. The advice of the English heritage regional Scientific Advisor will be sought in advance of the application of these techniques. The Archaeological Contractor will agree with the County Archaeologist any necessary delay in completion of the reporting of the evaluation to enable provisional results to be included.
- 9.13 Where appropriate the guidance in the following English Heritage papers will be followed:
- "Guidelines on the recording, sampling, conservation, and curation of waterlogged wood" 1996

- “Dendrochronology – guidelines on producing and interpreting dendrochronological dates” 1997
- “Archaeometallurgy” 2001
- “Environmental Archaeology: A guide to the theory and practice of methods, from sampling and recovery to post-excavation” 2002
- “Human bones from Archaeological Sites: Guidelines for Producing Assessment Documents and Analytical Reports” 2004
- “Geoarchaeology” 2004
- “Wet Wood and Leather”
- “Archaeomagnetic Dating: Guidelines on producing and interpreting archaeomagnetic dates” 2006
- “Guidelines on the X-radiography of archaeological metalwork” 2006

10. Recording

- 10.1 All trenches, structures, deposits and finds will be recorded according to accepted professional standards. Sufficient data must be recorded to allow the required level of assessment and reporting (see section 11).
- 10.2 Recording must be carried out to a sufficiently high standard to provide a full record of the deposits evaluated, including in trenches where no archaeology is identified.
- 10.3 All features, deposits and finds are to be recorded according to accepted professional standards.
- 10.4 All archaeological contexts are to be recorded individually on context record sheets. A further more general record of the work, comprising a description and discussion of the archaeology, is to be maintained as appropriate. Context sheets are to be primarily filled in by the archaeologist excavating the feature or deposit.
- 10.5 A plan to indicate the location of the boundaries of the evaluated area and the site grid is to be drawn at a scale of 1:1250 (or a similar appropriate scale). Plans indicating the location of the excavated trenches and the location of all archaeological features encountered are to be drawn at an appropriate scale. An overall site plan is to be maintained at a scale of 1:100 or larger scale where appropriate. Sections will be drawn at a scale of 1:10. Significant archaeological features will normally be drawn in plan at a scale of 1:20 or 1:10 if appropriate. All detailed plans and sections are to be related to the 1:100 or 1:1250 plans. The 1:1250 and 1:100 plans are to be accurately related to the National Grid.
- 10.6 Long Sections indicating the full stratigraphic sequence will be drawn for all trenches. Where a very simple sequence is revealed representative sections (minimum 1m wide) at each end of the trench will be sufficient, but where more complex stratigraphy is encountered, complete trench sections will be drawn. In the case of complex stratigraphy, all four sections will be drawn.

- 10.7 All plans and sections are to be levelled with respect to OD.
- 10.8 All plans and sections are to be drawn on polyester based drafting film and clearly labelled.
- 10.9 A full black and white and colour (35mm transparency) photographic record of the work is to be kept. The photographic record is to be regarded as part of the site archive.
- 10.10 The Archaeological Contractor will keep a day to day digital photographic record of the investigation.
- 10.11 The Archaeological Contractor will ensure that the complete site archive including finds and environmental samples are kept in a secure place throughout the period of evaluation and post excavation works.
- 10.12 The site archive is to be consolidated after completion of the evaluation, with all site drawings inked-in, and records and finds collated and ordered as a permanent record.

11. Reinstatement and completion of fieldwork

- 11.1 On completion, trenches will be backfilled, reinstated and left in a safe state to the requirements of the landowner / client.
- 11.2 Where vulnerable archaeological deposits remain within trial trenches these will be appropriately protected from damage as part of the reinstatement. Consideration will be given to providing a marker in backfilled trenches to highlight vulnerable archaeological deposits should re-excavation be necessary.
- 11.3 On completion of fieldwork the Archaeological Contractor will complete the relevant section of the Fieldwork Notification Form and submit it to the County Archaeologist.

12. Reporting

- 12.1 Within three weeks of completion of the evaluation fieldwork (or longer in case of complex sites as agreed with the County Archaeologist) the Archaeological Contractor will produce a report, copies of which (as a minimum) are to be provided to:
- the Developer
 - the County Archaeologist
 - the Local Planning Authority
 - the Local Archaeological Society

- 12.2 When submitting the report to the County Archaeologist the Archaeological Contractor will provide written confirmation that the report has been submitted to the above parties.
- 12.3 If the Archaeological Contractor is required, contractually, only to submit reports directly to the developer or their agent, the Archaeological Contractor must inform the County Archaeologist in writing that they have completed the report and whom it has been forwarded to. The Archaeological Contractor must ensure that the developer is made aware of the need to circulate the report as in 12.1 above.
- 12.4 The Archaeological Contractor may determine the general style and format of the evaluation report but it must be completed in accordance with this specification. The report must provide sufficient information and assessment to enable the County Archaeologist and the Local Planning Authority to reach an informed decision regarding any further mitigation measures that may be required and to stand as an appropriately detailed report on the archaeological fieldwork for future research.
- 12.5 Reports that do not provide sufficient information or that have not been compiled in accordance with the relevant sections of this specification will be returned to the Archaeological Contractor for revision and resubmission.
- 12.6 The report will be submitted to the County Archaeologist in a heat-bound hard-copy and in digital format. The digital copy will be supplied in .pdf format and will contain all text, images and plans present in the hard-copy report in a single .pdf file. The medium will be a CD-ROM formatted according to ISO 9660:1999.
- 12.7 **Report Format** - The final evaluation report will include as a minimum:
- 12.7.1 An **Abstract** summarising the scope and results of the archaeological evaluation.
- 12.7.2 An **Introduction** including:
- the location of the site with a National Grid Reference for the centre sufficient to locate the site to 1m accuracy (e.g. TQ 55555 77777 or easting: 555555, northing: 177777);
 - an account of the background and circumstances of the work;
 - a description of the development proposals, planning history and planning reference together with the archaeological condition (where appropriate);
 - the nature of potential impacts arising from the proposals;
 - the scope and date of the fieldwork, the personnel involved and who commissioned it;
- 12.7.3 An account of the **Archaeological Background** of the development site including:
- geology, soils and topography;

- any known existing disturbances on the site;
- background archaeological potential of the site. This will include a summary of the known Historic Environment Record entries within 500m of the boundaries of the site (or wider where appropriate). The HER entries will be quoted with their full KHER identifier (e.g. TR 36 NW 12);
- summary of any previous phases of archaeological investigation at the development site;

12.7.4 The **Methodology** employed during the evaluation must be detailed in the report. Any aims and objectives specified in the specification will be included as will any further objectives identified during the course of the evaluation. Constraints on the evaluation will also be described.

12.7.5 The report will include a quantification of the project archive contents, their state and future location.

12.7.6 The **Results** of the evaluation field work will be described trench by trench. This description must include for each trench:

- the dimensions of the trench;
- the nature and depth of overburden soils encountered;
- description of all archaeological features and finds encountered in each trench, their dimensions, states of preservation and interpretation;
- a description of the geological subsoil encountered in each trench;
- heights related to Ordnance Datum for a sufficient number of features and deposits. Where the trench results are complex a table showing the dimensions and heights of features and deposits will be included for each trench.
- for complex stratigraphy a Harris Matrix diagram.

12.7.7 The **Finds** recovered during the course of the evaluation will be described, quantified and assessed by artefact type within the evaluation report. The report will also provide an indication of the potential of each category of artefact for further analysis and research. For each category of artefact the report will describe the method of processing, any sub-sampling, conservation and assessment undertaken. Where appropriate local reference collections will be referred to for descriptive and analytical consistency. Any implications for future archive, conservation or discard of the artefacts will also be set out.

12.7.8 The report will include a table showing, per trench, the contexts, classes and quantity of artefacts recovered, together with their date and interpretation.

12.7.9 The evaluation report will include an assessment of the **Environmental** potential of the site. Details will be provided of any environmental sampling undertaken in connection with the fieldwork and the results of any processing and assessment of the samples. The report will describe the method of processing, any sub-sampling and assessment. Any potential for future analysis of the samples or environmental remains recovered from the evaluation will be described. Implications for future archive, conservation or discard of environmental samples or remains will be detailed.

- 12.7.10 The report will include, as appropriate, tables summarising environmental samples taken, together with the results of processing and assessment.
- 12.7.11 Any results from the application of archaeological scientific techniques e.g. specialist dating will be included in the evaluation report.
- 12.7.12 An **Interpretation** of the archaeology of the site will be provided, including its location, extent, date, condition, significance and importance. This will be a synthesis of the stratigraphic, finds and environmental results of the investigation and will include, even if no archaeology is identified as present on the site, description of areas of disturbance, non-archaeological deposits and changes in geological subsoil where appropriate. This section of the report will be supported by a phased interpretative plan of the site, clearly showing the major areas and periods of archaeological activity.
- 12.7.13 An **Impact Assessment** will consider the potential effects of the development on the archaeological remains. This will summarise the archaeological results, describe how any identified archaeological potential identified relates to the site and how the development proposals will affect that archaeology. The report will highlight any areas of sensitivity within the site. Particular note will be made of any variations in the depth of overburden covering any archaeological deposits revealed.
- 12.7.14 The **Conclusion** will summarises the method, results, interpretation and impact assessment.
- 12.7.15 The evaluation report will assess the potential for preservation at the site to inform decisions about mitigation strategies. It will not include any recommendations on preservation measures or further work unless otherwise agreed with the County Archaeologist.
- 12.7.16 The evaluation report will include comments on the effectiveness of the methodology employed and the confidence of the results and interpretation.
- 12.7.17 **Figures / illustrations** – The report will include sufficient illustrations to support descriptions and interpretations within the report text. Figures are to be fully cross-referenced within the document text. As a minimum the evaluation report will include the following figures:
- a site location plan tied into the Ordnance Survey at 1:1250. The plan will also include at least two National Grid points to 1m accuracy and show the site boundary;
 - trench location plans at an appropriate scale showing the layout of archaeological features, coloured by phases or period. The plan will show the location of all trenches and features. A copy of the plan will be overlain on the proposed development plan where this is known. Where possible, projection of archaeological features outside of the trench areas will be included on the plan. This plan will also include two National Grid points;

- plans of the features revealed in each of the trenches at a larger scale e.g. 1:20 or 1:50; such plans are to also illustrate areas of disturbance, change in subsoil and location of sections; The location of significant finds and samples taken will also be indicated;
- relevant section drawings and trench soil profiles as appropriate;
- illustrations and/or photographs of significant finds.

12.7.18 All report illustrations must be fully captioned and scale drawings must include a bar scale. Standard archaeological drawing conventions must be used. Plan and section illustrations must include the numbers of all contexts illustrated. North must be included on all plans and will be consistent. Sections must indicate the orientation of the section and the Ordnance Datum height of the section datum.

12.7.19 Black & White or Colour photographs will be included to illustrate key archaeological features, trenches and site operations. All photographs will be appropriately captioned.

13. Archive Preparation & Deposition

13.1 The site archive, to include all project records and cultural material produced by the project, is to be prepared in accordance with *Guidelines for the preparation of excavation archives for long-term storage (UKIC 1990)*. On completion of the project the Archaeological Contractor will arrange for the archive to be deposited in accordance with the provisional arrangements made with a suitable museum or repository at the onset of fieldwork. Any alternative arrangements will be agreed with the County Archaeologist and the Local Planning Authority.

14 Monitoring and Liaison

14.1 The Archaeological Contractor is to allow the site records to be inspected and examined at any reasonable time, during or after the evaluation fieldwork, by the client/developer, the County Archaeologist or any designated representative of the Local Planning Authority

14.2 Once the trenches have been evaluated and an initial assessment of the archaeology carried out, there will be an on-site meeting with the County Archaeologist to determine if further evaluation work is appropriate in order to meet the objectives.

14.3 The Archaeological Contractor will liaise closely with the County Archaeologist throughout the course of the evaluation and will arrange for on-site meetings at key decision points.

14.4 The Archaeological Contractor is to make contact with the local archaeological society and keep them informed on the progress of the evaluation. Subject to

health and safety constraints the Archaeological Contractor will afford opportunity to the local archaeological society to visit the evaluation site. Copies of all reports will be provided to the local archaeological society.

- 14.5 The Archaeological Contractor is to circulate a completed Fieldwork Notification Form (Appendix 2) at the start and completion of fieldwork and at the completion of post excavation reporting stages.

15. Copyright and data protection

- 15.1 Information submitted to the County Archaeologist in conjunction with planning applications automatically becomes publicly accessible and can be viewed by anyone at any time. In addition, the Local Planning Authority and Kent County Council are subject to the requirements of the Freedom of Information Act (2000) and Environmental Information Regulations (2004). Information may be subject to Fol or EIR requests and any documentation submitted in connection with the project may be made publicly available unless doing so contravenes the Data Protection Act (1998).
- 15.2 While copyright of reports and other information arising from the fieldwork remains with the originator, the Archaeological Contractor will undertake to make this information available to interested parties. The Archaeological Contractor will agree to allow reports of the fieldwork to be copied and made available to interested parties for archaeological research. The reports may be made available on the Internet no sooner than three months after the submission of the report. Archaeological Contractors who believe that there are special reasons for not publishing the report on the Internet should reach a separate agreement with the County Archaeologist.

16. Health and Safety

- 16.1 The Archaeological Contractor will conduct the work in compliance with the Health and Safety at Work etc Act 1974. The Archaeological Contractor will also follow the guidance set out in "Health and Safety in Field Archaeology" Standing Conference of Archaeological Unit Managers 1997.
- 16.2 The Archaeological Contractor is expected to maintain a Health and Safety Policy and a procedures manual and have available appropriate expertise in Health and Safety advice. Site staff will have an appropriate level of training to enable them to carry out fieldwork safely.
- 16.3 The Archaeological Contractor will maintain the site in a safe condition. All hazards will be appropriately identified and managed. Deep excavations will be appropriately fenced.
- 16.4 The Archaeological Contractor will carry out a risk assessment prior to commencement of fieldwork and where appropriate a COSHH assessment.

Risks and measures to reduce risk will be communicated to all working on and visiting the site.

- 16.5 The Archaeological Contractor will have available suitable site accommodation, welfare and toilet facilities.

17. KCC HER

- 17.1 The Archaeological Contractor is to provide the Kent Historic Environment Record with copies of all reports in both heat-bound hard-copy and digital format (see 12.6 above).
- 17.2 Upon completion of the excavation the Archaeological Contractor will supply the Kent Historic Environment Record with a completed HER form (see Appendix 1)
- 17.3 The Archaeological Contractor will supply the Kent Historic Environment Record with the following digital datasets:
- A .dxf file containing polygon data that describes in detail all excavated/ watched area boundaries, whether trenches, test pits, excavated areas or areas examined by watching brief. This .dxf file must be internally geo-referenced (i.e. the co-ordinate system used in the file must be the Ordnance Survey co-ordinate system).
 - A separate .dxf file that contains a number of Layers. Each Layer should represent a different phase of the archaeological remains on site. The name of each Layer must be the phase number used on the site accompanied by a date range (e.g. “2, from –2000 to –800”, “7A, from 410 to 700” etc). Each layer must contain only the features relevant to that phase digitized as polylines. Where the dating is based on scientific dating methods such as radiocarbon, the dates must be calibrated calendar dates.
- 17.4 A guidance document has been produced for Kent County Council that will inform contractors as to how this information can be produced within AutoCad. This document is available from the County Archaeologist and Kent County Council Historic Environment Record.
- 17.5 The Archaeological Contractor should also provide a representative selection of digital site photographs illustrating the archaeology of the site and the operations of the investigation. These will be in .jpg format at a minimum 300dpi. These will be deposited with the County HER and will be used for presentations on aspects of the archaeology of Kent.
- 17.6 It is to be understood that photographs and notes taken by KCC Archaeological Officers in connection with the work that do not identify individuals or site locations may be used by KCC for outreach and publicity purposes, including on social media sites such as Facebook, Twitter etc. The Archaeological

Contractor should, **preferably in advance** of the works, raise with the KCC Archaeological Officer any concerns that they or their client may have over the use and dissemination of images or information for outreach purposes. In such cases the Archaeological Contractor and their client will agree a protocol with the KCC Archaeological Officer for the appropriate dissemination and use of images and information which balances the concerns of the contractor and/or client with the objective of ensuring that the people of Kent are kept informed of the archaeological discoveries in the county.'

18 General

18.1 In carrying out the work the Archaeological Contractor is to abide by:

- all statutory provisions and by-laws relating to the work in question,
- the Institute of Field Archaeologists *Code of Conduct*,
- the Institute of Field Archaeologists *Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology*.

APPENDIX 1

Kent County Council HER summary form

Site Name:		
Site Address:		
Summary: (50 words max)		
District/Unitary:		Parish:
Period(s):		
NGR (centre of site : 8 figures): (NB if large or linear site give multiple NGRs)		
Type of archaeological work (underline)		
Evaluation:	Watching Brief	Field Walking
Documentary study	Building recording	Earthwork
survey		
Excavation:	Geophysical Survey	Field Survey
Geoarchaeological investigation		
Date of Recording:		
Unit undertaking recording:		
Geology:		
Title and author of accompanying report:		
Summary of fieldwork results (begin with earliest period first, add NGRs where appropriate) (200 words max)		
		(cont on attached sheet)
Location of archive/finds:		

Contact at Unit:	Date:
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APPENDIX 2 - FIELDWORK NOTIFICATION FORM

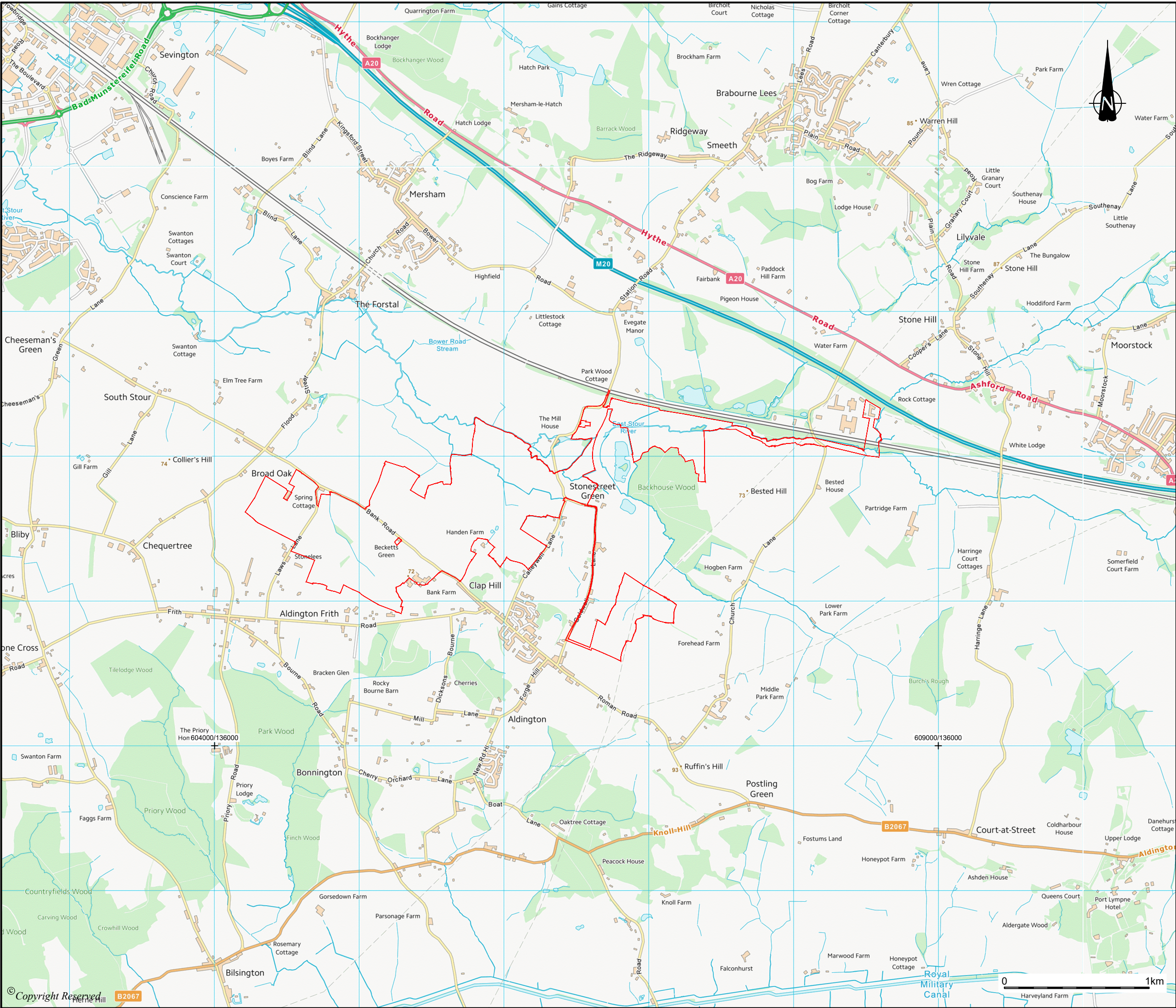
Guidance for Completing the Kent Archaeological Fieldwork Notification Form**Purpose**

The purpose of the form is to improve the notification, tracking and monitoring of archaeological fieldwork in Kent. Its primary purpose relates to archaeological work being undertaken for the purposes of planning and development but it is hoped that it will be also usable by archaeological societies and other bodies undertaking fieldwork in the county.

Approach

- The archaeological body undertaking the fieldwork should fill in the form. Sections A and B should be filled in before fieldwork starts and submitted to the County Archaeologist. This may be submitted in digital copy to speed things along but a signed copy should follow in the post.
- Section A contains details of the project while Section B refers specifically to the onset of the phase of fieldwork. In signing section B the Archaeological Contractor is confirming that the necessary funds and resources to complete the works to the specification have been made available.
- The form should not be filled in separately for each period of an intermittent watching brief but should be filled in for major stages of fieldwork, for example separate phases of evaluation and excavation.
- Section C should be submitted at the completion of the fieldwork stage and should if known indicate whether further work is anticipated. This section sets out a brief summary of findings and what reports are to be submitted. For excavations these will include interim, assessment and full reports. Again the form may be submitted digitally with a signed copy to follow in the post. (The details of Sections A and B should remain filled in on the same form).
- Section D should be submitted as reports are submitted to the County Archaeologist. For excavations the form need not be submitted with interim reports but should be submitted with assessment and full reports.

DRAWINGS



DO NOT SCALE FROM THIS DRAWING



Contains Ordnance Survey data.
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REVISION	DETAILS	DATE	DRN	CHKD	APP'D

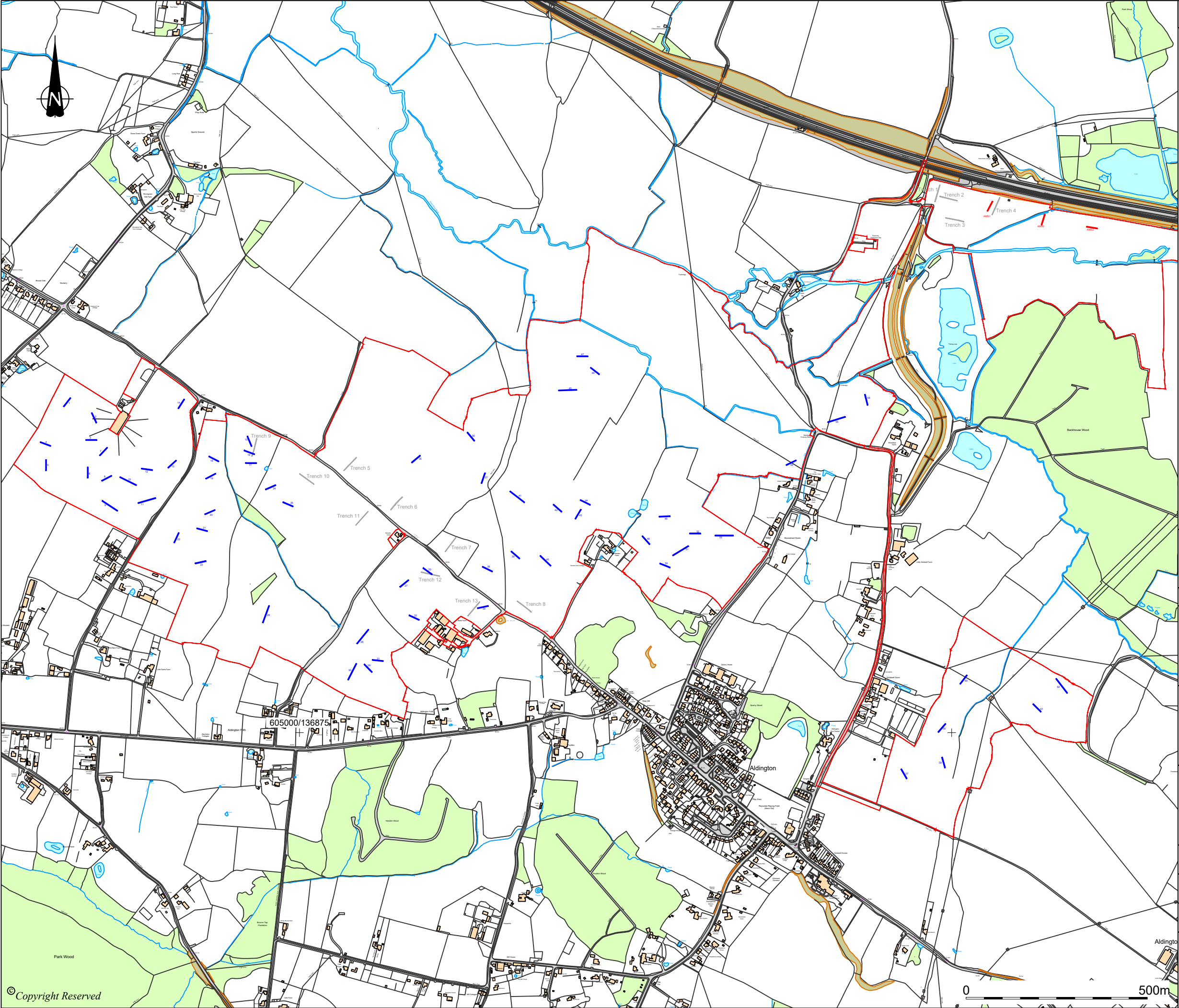
CLIENT
Evolution Power Limited

PROJECT
Stonestreet Green Solar

DRAWING TITLE
Figure 1: Site location

DRG No.	GM12014-065	REV	A	SUIT.	-
DRG SIZE	A3	SCALE	1:25,000	DATE	Sept 2023
DRAWN BY	HP	CHECKED BY	RB	APPROVED BY	MB





DO NOT SCALE FROM THIS DRAWING

REVISION	DETAILS	DATE	DRN	CHKD	APP'D

CLIENT	Evolution Power Limited
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PROJECT	Stonestreet Green Solar
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DRAWING TITLE	Figure 2 Trench location plan
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DRG No.	GM12014-066	REV	B	SUIT.	-
DRG SIZE	A3	SCALE	1:10,000	DATE	13/01/2025
DRAWN BY	JS	CHECKED BY	KJB	APPROVED BY	RG



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