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Archaeological Services

Written Scheme of Investigation for Archaeological Field Excavation

Site: Land at Spittlegate Level, Grantham, Lincolnshire

NGR: SK 9184 3278

Client: Glencar Construction

Planning Authority: South Kesteven District Council

Planning Ref: Pre-app

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Written scheme of investigation for Archaeological Field evaluation

1. Introduction

Definition and scope of the project

- 1.1 This document is a Written Scheme of Investigation (WSI) for a programme of archaeological excavation Land at Spittlegate Level, Grantham, Lincolnshire in accordance with *National Planning Policy Framework (NPPF): Section 16 Conserving and Enhancing the Historic Environment* (MHCLG 2021) and will be submitted to the Planning Archaeologist for approval prior to any archaeological work taking place.
- 1.2 The archaeological advisor (for South Kesteven District Council) at Heritage Lincolnshire has advised that six areas require archaeological excavation. This WSI was commissioned by Glencar Construction and details the fieldwork and post-excavation analysis required, intended to provide a record of the archaeological remains in mitigation of the impact of the proposed development. It addresses the requirements of the Local Planning Authority for a scheme of work comprising archaeological excavation.

2. Background

Context of the Project

- 2.1 The Proposed Development Area (PDA) is located c.1.2 kilometres north of Little Ponton and around 3.5 kilometres south of Grantham town centre (Fig.1).
- 2.2 Planning permission is being sought for a mixed Business, General Industrial and Storage facility (Fig. 2). A desk-based assessment was undertaken for the PDA (Kipling & Beamish 2020) that concluded that there is high potential for remains of Bronze Age and Iron Age date. This was followed by geophysical survey (Fradgley 2021, Mawdsley 2023), that showed likely archaeological features within the PDA. In early 2023 a trial trench evaluation confirmed several areas of archaeological deposits, mostly of Iron Age date (Huxley 2023). Consequently, the Planning Archaeologist at Heritage Lincolnshire has advised South Kesteven District Council that a mitigation strategy comprising archaeological excavation is required within six areas of the PDA. This WSI details the strategy.

Topography and Geology

- 2.3 The site comprises two arable bounded by the A1 (The Grantham Bypass) to the west, and Spittlegate, The Great North Road (B1174) to the east.
- 2.4 The eastern side of the fields appear relatively flat, with a slight fall to the south. The western side of the north field drops moderately towards the A1. The land falls slightly to the south from around 95m aOD to 79m aOD. The River Witham lies some 500m to the east of site flowing from south to north. No streams are mapped within the proposed area.
- 2.5 The British Geological Survey website indicates that the underlying geology of the assessment area is likely to be Lower Lincolnshire Limestone Member overlain by Mid Pleistocene Glaciofluvial Deposits of sand and gravel. The Soilscape website indicates that the soils, will be freely draining slightly acid loamy soils (Soilscape 6) and Shallow lime-rich soils over chalk or limestone (Soilscape 3) <http://www.landis.org.uk/soilscales>.

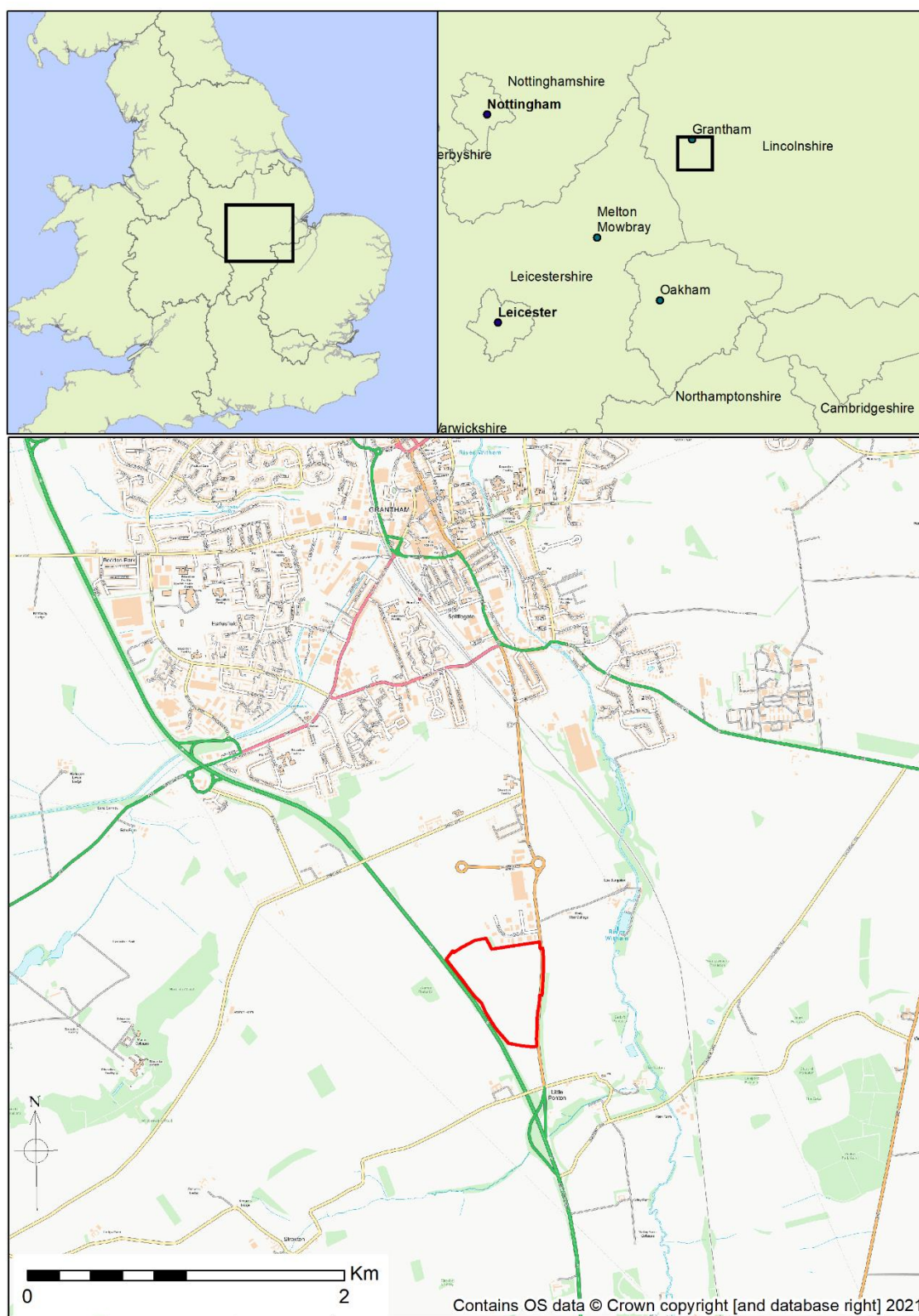




Figure 2: Proposed site plan. Provided by client.

Historical and Archaeological Background

2.6 A desk-based assessment has been undertaken for the site (Kipling & Beamish 2020) which concluded that there is high potential for remains of Bronze Age and Iron Age date. The following is a summary of the key results:

- The nearest intrusive work to the site was undertaken in the adjoining field to the north-west of the study area as part of the present scheme of development and consisting of preliminary archaeological survey in 2008, follow up field evaluation and full excavation in 2018 (Collins 2018), which revealed Iron Age occupation. Further Iron Age activity was recorded 900m to the north in 2001 (ELI1735, ELI1944).
- A prehistoric bowl barrow (Scheduled Monument List Entry 1013900) is located 150m to the south-east of the proposed area and northwest of St Guthlac's Church on the western slope of the valley of the River Witham. It is prominently situated on the crest of the slope. The grassy mound has a rounded summit and gently sloping sides and shows no sign of any disturbance. It is c.50m in diameter and stands to a height of approximately 2m above the surrounding pasture. The monument was the subject of geophysical survey in 2004-7 Geophysical survey has been undertaken on a Scheduled Monument, a Bronze Age bowl barrow, some 120m south-east of the proposed area.
- In the south of the proposed area, and extending to the south bounded by the line of the Great North Road and the Grantham bypass are a series of cropmarks recorded in 1982 in oblique aerial photos, and mapped in the National Mapping Programme. These have tentatively been interpreted as a possible oval enclosure with double ditches, and the ring ditch from a Bronze Age round barrow. Other cropmarks include an enclosure and a linear feature. The cropmarks of further

probable Bronze Age barrows have been recorded 650m north-east, and 250m north-east of the proposed area. Ring ditches possibly from further burial monuments are recorded from cropmarks 650m north and 450m to the south-east. A probable barrow with double ditch and a possible causeway is known from a cropmark 880m south-east.

- Undated features and the cropmark of an enclosure are recorded 900m to the north. A cropmark of a double-ditched round enclosure has been recorded 750m north-west of the application area. A flattening of the southern side and rows of adjacent ditches have been interpreted as possible defended entrance. The cropmarks of another enclosure are recorded 280m north-east.
- Roman burials were excavated 600m to the northeast in 1995 with historic excavations between 1885 and 1915 further to the east. Evaluative work alongside ‘Salters Way’ on the west side of the River Witham was undertaken in 1993 and 1997. A Roman small town ‘Saltersford’ has been identified from excavation and finds spots to the north-east of the proposed area. Archaeological investigation has identified evidence of buildings and road surfaces 550m to the northeast of the study area and including an inhumation cemetery located just outside the western limit of the town and in use during the 3rd century when the town appears to have undergone a major expansion. Evidence of the settlement has been found on both sides of the River Witham.

2.7 Within the proposed area, Geophysical survey (Fradgley 2021) has identified the clear remains of a rectangular enclosure 30m x 22m, with south-west facing entrance. The survey suggested the presence of post pits at the entrance to the enclosure and also within the enclosure. Much less strong indications of a second enclosure were recorded to the immediate north. A number of linear and curvilinear features were identified across the site, possibly the remains of field systems. A follow up geophysical survey in 2023 in the southern part of the site located several linear trends of uncertain origin have been detected in the northern and eastern parts of the site, as well as discrete pit-like anomalies. A faint partial rectangular response also has an uncertain origin, and various bands of increased response have been detected across the site which are likely to be of natural origin (Mawdsley 2023).

2.8 A trial trench evaluation was undertaken for the site in June 2023 by ULAS (Huxley 2023). A total of 117 trenches were machined across two fields. The trenches targeted both anomalies and blank areas identified during a geophysical survey. Seventeen trenches contained archaeological features and four contained possible archaeological features. In the northern field, prior to the scheme of Trial Trenching, the area where a small rectangular enclosure had been identified during the geophysical survey was subject to a Metal detector survey. The survey produced a handmade iron nail, two fragments of medieval window lead and modern artefacts.

The trial trenching subsequently confirmed the geophysical anomaly as a ditched enclosure dating to the mid-late Iron Age. Concentrations of domestic waste, slag and other artefacts were found in the enclosure ditch and internal pit. Features were also found outside the enclosure suggesting the activity was not confined within it. Iron Age pits were also found to the north which resemble quarry pits. Elsewhere in Area, the presence of a large modern quarry pit and a modern field boundary, that were recorded on the First edition OS map, were confirmed through the trenching.

A north-west to south-east orientated ditch identified during the geophysics was confirmed in both fields. It contained Iron Age pottery, and animal bone. The ditch is likely to be a land division. In the north-eastern corner of the southern field it truncated

a buried soil layer containing Iron Age pottery and worked flints. An undated ditch was found in the north-western corner of the southern field and nearby were two intercutting pits containing Iron Age pottery and animal bones. In the south-western corner of the southern field a small group of trenches contained ditches, pits and post holes dated to the Iron Age. Free-threshing wheat was found in one feature which may be associated with elite culture. Iron Age pits and undated ditches were also found in the centre of the southern field. A small undated pit and a gully were found in the south and shallow undated linear features in the south-east. These were either shallow ditches or deep furrows and contained heated ironstone.

3. Aims and Objectives

- 3.1 The main aim of the investigation is to mitigate the effects of the development by providing evidence to understand the nature, date, function, and character of the archaeological remains present at the site in their cultural and environmental setting and to preserve them by record.
- 3.2 The objectives of the archaeological work are:
- To identify the presence/absence of any archaeological deposits and provide evidence of the nature and extent of surviving archaeological remains on the site.
 - To characterise the extent, date range, character, condition and significance of any archaeological deposits to be affected by the proposed ground works.
 - To excavate and record significant archaeological deposits whose future integrity may be compromised by groundworks associated with the proposed construction works.
 - To record any archaeological deposits and produce an archive and report of any results.
 - To advance understanding of the heritage assets

Research Objectives

- 3.3 The earlier archaeological investigations show that excavation of the archaeological remains present on the site has the potential to contribute towards research objectives set within *The Historic Environment Research Frameworks for the East Midlands*: <https://researchframeworks.org/emherf/>, particularly:
4. Iron Age
- 4C Characterise the Late Bronze Age and Early Iron Age settlement resource and investigate intra-regional variability
 - 4E Assess the evidence for the evolution of settlement hierarchies
 - 4F Investigate intra-regional variations in development of fields and linear boundaries
 - 4G Study the production, distribution and use of artefacts
- 3.4 These research aims have been identified based on the current state of knowledge within the area of the scheme. The research aims will be re-assessed and updated during the course of the fieldwork.

4. Constraints

- 4.1 There are no known underground or overhead services present, service checks were undertaken by the client.
- 4.2 There is a known badger sett in the middle of the site. This is well away from most of the excavation and operating areas, with the exception of Area 4. Client to confirm

status of badgers. Avoid all operations within a 30m area. There are no other known ecological constraints.

5. Methodology

- 5.1 All work will be carried out in accordance with the Chartered Institute for Archaeologists (CifA) *Standard and Guidance for Archaeological Field Excavation* (CifA 2020c), and adhere to their *Code of Conduct* (CifA 2021).
- 5.2 Any significant variations to the proposed methodology set out below will be discussed and agreed with the planning archaeologist and client in advance of implementation.
- 5.3 The accession number (2023.63 SPLG23) will be used to identify all records and artefacts.
- 5.4 Prior to machining of the areas, general photographs of the site will be taken.
- 5.5 The excavation area will be set out on OS National Grid (NGR) co-ordinates using GPS.
- 5.6 Six areas will be excavated, approximately 2.8ha, containing mainly Iron Age features, such as an enclosure, linear boundaries, and other archaeological features (Figure 3).

Table 1 Details of archaeological excavation areas

Area	Type	Location	Size	Archaeology	Heritage archaeological comments	Lincolnshire advisor
1	Open-area excavation	T60+61	72x67m c.4800m ²	Iron Age enclosure (29m x 25m)	Minimum buffer around the enclosure ditch of 20m. To be extended if further archaeological features on edge of strip.	
2	Open-area excavation	T55	45x70m c.3200m ²	Area of the pit/quarry	20m buffer around in order to understand the nature of the activity.	
3	Strip, map, sample	T83	55x47m c.2600m ²	Hollow with buried soil and Iron Age ditch	Includes a sample stretch along the boundary ditch either side and to include the 'break' in the geophysical anomaly.	
4	Strip, map, sample	T90, 91, 100	c.7755m ²	Iron Age ditches and other features	Extend from known archaeology to east to see if T100 ditch continues north (has a relationship with the E-W boundary). If no further archaeology seen after 20m from ditch reduce strip size down.	
5	Strip, map, sample	T94, 96	92x45m c.4200m ²	Two pits and ditch	A strip to determine if these are isolated features or if there are elements of a field system / land division suggested by the geophysical survey but often not seen in the trenches.	
6	Strip, map, sample	T77-78	85x65m c.5700m ²	Iron Age pits, post-hole, ditch	A strip to include features seen in these trenches and to include a stretch of the possible linear detected on the geophysical survey but not seen in the trenches.	
			28,255 ha			

- 5.7 Excavation will be carried out with a machine, appropriate for the work fitted with a flat-bladed bucket to expose the underlying strata. The machine will not track over any surfaces until the archaeologist has inspected and cleared the area.
- 5.8 The project will involve an initial phase of machine stripping of the topsoil and any overburden across the areas defined following the results of the geophysical survey and evaluation supervised by an experienced professional archaeologist.

- 5.9 The archaeologist will control and supervise the topsoil and overburden stripping in order to obtain an adequate record of any archaeological deposits or finds which would be disturbed or exposed by groundworks associated with the development.
- 5.10 Topsoil and overburden will be removed carefully in level spits, under continuous archaeological supervision. The assessment area will be excavated down to the top of archaeological deposits or natural undisturbed ground, whichever is reached first. Where structures, features or finds appear to merit preservation in situ, they will be adequately protected from deterioration.
- 5.11 The ULAS recording manual will be used as a guide for all recording. Individual descriptions of all archaeological strata and features excavated or exposed will be entered onto pro-forma recording sheets.
- 5.12 A record of the full extent in plan of all archaeological deposits encountered will be made using an appropriate system related to the Ordnance Survey National Grid. Measured drawings of all archaeological features will be prepared and tied into the overall site plan. Relevant OD heights will be taken as appropriate.
- 5.13 A photographic record of the investigations will be prepared. This will include photographs illustrating in both detail and general context the principal features and finds discovered. The photographic record will also include 'working shots' to illustrate more generally the nature of the archaeological work.
- 5.14 All photographs (except general or publicity shots) will be taken with a high-resolution digital camera and will include a suitable scale bar, north arrow and information to identify the site and where appropriate the context.
- 5.15 The photographic record will follow the standards set out in Historic England 2015, Digital Image Capture and File Storage and the standards required by Archaeology Data Service (ADS) for storage and archiving: <https://archaeologydataservice.ac.uk/advice/Downloads.xhtml>
- 5.16 This record will be compiled and checked during the course of the excavations, and all site records and finds will be kept securely.

Areas 1-2 Specific Methodology 'Open-Area Excavation'

- 5.17 All exposed features will be investigated. Any archaeological deposits encountered will be recorded and excavated using standard ULAS procedures. Particular emphasis will be placed upon retrieving a stratigraphic sequence and upon obtaining details of the phasing of the site. Sufficient proportions of any archaeological features or deposits will be hand excavated in order to provide the stratigraphic and chronological sequence of deposits, recognising and excavating structural evidence and recovering economic, artefactual and any environmental evidence.
- 5.18 The following sample excavation strategy will include:

Discrete archaeological features (e.g. postholes, slots, pits)	50% of will be excavated unless their common / repetitious nature suggests they are unlikely to yield significant new information or unless their size or content suggests that 100% would be preferable.
Linear features (boundary features, ditches, trackways, pathways etc.)	10% although work will only be undertaken as necessary to advance the understanding of the significance of the asset. In areas outside the main foci of interest, where the nature and significance of remains is understood, the sampling rate may be considerably reduced in agreement with the Planning Archaeologist. All excavation slots will be at least 1m wide and will include intersections and terminals. A flexible approach will be adopted to the location of excavation samples e.g. areas with higher artefact or ecofact content may be targeted.

Bulk horizontal deposits	10% after which a decision may be taken in conjunction with the Planning Archaeologist to remove the remainder with machinery. Priority will be attached to features which yield sealed assemblages which can be related to the chronological sequence of the site.
Stone structures or other buildings	These will be excavated in sufficient detail to establish their construction sequence and sequence of repairs or extensions. All stratigraphic associations will be recorded.
Funerary/ritual activity and domestic/industrial deposits including potential ovens and hearths	Fully excavated and sampled for analysis. Furnaces or kilns are not anticipated but should these be encountered they will be left in situ until a strategy for their excavation has been developed.
Tree throw holes/ possible natural or geological features	A sample will be excavated sufficient to establish the nature of the features.

Areas 3-6 Specific Methodology ‘Strip, Map, Sample’

- 5.19 All areas will be marked out prior to any construction, to ensure that no inadvertent damage (for example, from enabling works, access routes, temporary compounds / storage, services/ drainage) is caused to any areas highlighted for archaeological mitigation prior to the investigation taking place. The areas will be clearly marked out and protected. All site contractors will be made aware of this.
- 5.20 All exposed features will be investigated. Should significant archaeological remains be identified a programme of excavation and recording may be necessary, using additional personnel as necessary. Archaeological deposits encountered will be recorded and excavated using standard ULAS procedures. The areas will be mapped. A select sample of archaeological features or deposits will be hand excavated in order to provide the stratigraphic and chronological sequence of deposits, recognising and excavating structural evidence and recovering economic, artefactual and environmental evidence.
- 5.21 Standard sample excavation within Areas 3-6 will include:
- 50% of most discrete pit-like features, postholes, etc.
 - 5% of each linear feature, targeting terminals and intersections, with slots measuring at least 1m. in width wherever possible.
 - 100% of special features/deposits including burials, structural remains, kilns, etc.

Contingency Provisions

- 5.22 While ULAS attempts to foresee and make allowances for all possible site specific constraints, there may on occasion be unusual circumstances which have not been included in the programme or quote, which may entail additional costs and/or time for the client. These could include: unavoidable delays due to bad weather, vandalism, poor ground conditions, areas requiring shoring or stepping, unknown contamination or services, further work required by the Planning Archaeologist (e.g. extensions to excavation area, extra areas or changes to excavation sample sizes) or significant archaeological deposits that may require specialist input.
- 5.23 In the event of potentially significant archaeological deposits being found or further work being required for which the resources allocated are not sufficient or which are of sufficient significance to merit an alternative approach the archaeologist will inform the client, the planning archaeologist and the planning authority in order for detailed discussion between all relevant parties to take place. Following assessment of the archaeological remains ULAS shall, if required, implement an amended scheme of investigation on behalf of the client as appropriate.

Monitoring

- 5.24 Notification of the start of the site works will be made to the Planning Archaeologist prior to commencement of the archaeological work in order that monitoring arrangements can be made. All monitoring shall be carried out in accordance with the *CIfA Standard and Guidance for Archaeological Field Excavations* (2020c).
- 5.25 Internal monitoring procedures will be undertaken including visits to the site by the project manager. These will ensure that project targets are met and professional standards are maintained. Provision will be made for external monitoring meetings with the Planning Archaeologist, Planning Authority and the Client, if required, subject to the health and safety requirements of the site.
- 5.26 Monitoring points are expected to be as follows:
- Notice of the start date of fieldwork
 - Following stripping of the topsoil/overburden
 - Regular visits during excavation of archaeological features
 - Following completion of excavation and before sign off/backfilling.
 - Completion of the draft report
 - Production of the final report and deposition of the archive



Figure 3: Mitigation excavation area plan, with trial trenching and geophysical survey results

6. Finds

- 6.1 All finds and samples will be bagged separately, marked with the accession number/site code and related to the context record. All artefacts will be recovered and retained for processing and analysis in accordance with *Standard and guidance for the collection, documentation, conservation and research of archaeological materials* (CifA 2020a, 2020b).
- 6.2 All identified finds and artefacts are to be retained, although certain classes of building material will, in some circumstances, be discarded after recording with the approval of the Planning Archaeologist.
- 6.3 All objects or remains of archaeological interest, discovered in or under the Site during the carrying out of the project by ULAS or during works carried out on the Site by the Client other than articles subject to the Treasure Act, shall be deemed to be the property of ULAS provided that ULAS after due examination shall transfer ownership of all Archaeological Discoveries unconditionally to the appropriate authority for storage in perpetuity.

Treasure

- 6.4 In the event of discovery of artefacts that might constitute Treasure under the definition of The Treasure Act 1996 and its revisions (Treasure (Designation) Order 2002), these will be excavated and removed to a safe place. The client, Coroner, the Planning Archaeologist and the Finds Liaison Officer (FLO) will be informed immediately. A treasure receipt will be completed and submitted to the Coroner's Office and the FLO within 14 days.

Human Remains

- 6.5 If human remains are encountered they will be left in situ. ULAS will inform the client and the Planning Archaeologist immediately. If excavation of human remains is required ULAS will obtain a Ministry of Justice License (Section 25 of the Burial Act 1857). All excavation and post-excavation will also be in accordance with the standards set out in CifA *Technical Paper 7: Guidelines to the Standards for Recording Human remains* (CifA 2004) and *Updated Guidelines to the Standards for Recording Human Remains* (CifA 2017). The final placing of human remains following analysis will be subject to the requirements of the Ministry of Justice License.

7. Environmental Samples

- 7.1 All environmental work will be undertaken in accordance with Historic England guidelines (*Environmental Archaeology: A guide to the theory and practice of methods, from sampling and recovery to post-excavation*, 2011).
- 7.2 The following environmental sampling strategy will be adopted, following consultation with the ULAS Environmental Officer.
- A range of features to represent all feature types, areas and phases will be selected on a judgmental basis. The criteria for selection will be that deposits are datable, well-sealed and with little intrusive or residual material.
 - Any buried soils or well-sealed deposits with concentrations of carbonised material present will be intensively sampled taking a known proportion of the deposit.
 - Spot samples will be taken where concentrations of environmental remains are located.
 - Waterlogged remains, if present, will be sampled for pollen, plant macrofossils, insect remains and radiocarbon dating provided that they are uncontaminated.
 - Waterlogged remains, if present, will be sampled for pollen, plant macrofossils, insect remains and radiocarbon dating provided that they are uncontaminated.
- 7.3 All collected samples will be labelled with the accession number/site code, context and sequential sample numbers.
- 7.4 Appropriate contexts (i.e. datable) will be bulk sampled (50 litres or the whole context depending on size) for the recovery of carbonised plant remains and insects.
- 7.5 Recovery of small animal bones, bird bone and large molluscs will normally be achieved through processing other bulk samples or 50 litre samples may be taken specifically to sample particularly rich deposits.
- 7.6 Wet sieving with flotation will be carried out using a sieving tank with a 0.5mm mesh and a 0.3mm flotation sieve. The small size mesh will be used initially as flotation of plant remains may be incomplete and some may remain in the residue. The residue >0.5mm from the tank will be separated into coarse fractions of over 4mm and fine fractions of >0.5-4mm. The coarse fractions will be sorted for finds. The fine fractions and flots will be evaluated and prioritised; only those with remains apparent will be sorted. The prioritised flots will not be sorted until the analysis stage when phasing information is available. Flots will be scanned and plant remains from selected contexts

will be identified and further sampling, sieving and sorting targeted towards higher potential deposits.

- 7.7 Where evidence of industrial processes are present (e.g. indicated by the presence of slag or hearth bases), samples will be taken for the analysis of industrial residues (e.g. hammer scale).

Scientific Dating

- 7.8 Due care will be taken to identify deposits and structures which may have potential for scientific dating. Suitable samples for radiocarbon dating will be subsampled from the processed and identified plant remains in the bulk samples and monolith sample (if taken) as deemed appropriate. Consideration will also be given to the use of Dendrochronology, Archaeomagnetic dating, Thermoluminescence and Optical Luminescence Dating (TL and OSL). Specialists will be consulted in this regard and where deemed appropriate to provide advice and where necessary supervise sampling, take readings and undertake post-excavation reporting.

8. Timetable and Personnel

- 8.1 The start date is likely to be Autumn 2023 for Areas 1+2, subsequent areas 3-6 will follow during construction. This is subject to approval of the WSI.
- Areas 1+2 prior to any development on the PDA
 - Areas 3-6 ('strip, map and sample' excavation) are to be undertaken prior to the commencement of any development in those areas of the site (although construction may proceed in other areas outside of these). The site stripping to be carried out under archaeological supervision and control as set out in this WSI.
- 8.2 This project will be under the management of Dr Gavin Speed (MCIfA). The Project Manager will direct the overall conduct of the excavation as required during the period of fieldwork. Day to day responsibility will rest with the Site Supervisor who will be on-site throughout the project.
- 8.3 The site supervisor will carry out the post-excavation work, with time allocated within the costing of the project for analysis of any artefacts found on the site by the relevant in-house specialists at ULAS.
- 8.4 ULAS uses in-house and external specialists for post-excavation work as follows:

Environmental analysis and reporting:	Rachel Small MA Will Johnson MA
Prehistoric and Roman Pottery:	Nicholas Cooper BSc, Dip post-ex, FSA, MCIfA Elizabeth Johnson BSc MA (Roman pottery) member SGRP
Post-Roman Pottery:	Paul Blinkhorn BA (external)
Animal bone	Jennifer Browning BA, MA, MCIfA (Animal Bone) Rachel Small MA Will Johnson MA
Human bone	Jennifer Browning BA, MA, MCIfA Rachel Small BSc York Osteological Unit (external)
Small Finds	Nicholas Cooper BSc, Dip post-ex, FSA, MCIfA
Industrial residues and building materials	Heidi Addison BA
Wood/Geoarchaeology	Matthew Beamish, MA (cantab), MCIfA
Lithics	Wayne Jarvis MA MCIfA

9. Post Excavation Analysis and Reporting

- 9.1 Following completion of fieldwork, all artefacts and samples will be processed, assessed, conserved and packaged in accordance with CIfA (2020b), ULAS procedures, and the relevant Museums for transferring archaeological archives (Jennings 2019, *Lincolnshire County Council Archaeological Handbook*, Section 17 and Appendix). This includes the results and finds from the trial trench evaluation, the results of which will be integrated into the mitigation post-excavation report, including review or re-examination of the cultural material from the evaluation as required. Reference will be made to the recommendations made in the specialist reports from the evaluation stage (Huxley 2023).
- 9.2 A draft version of the assessment report will normally be presented within six months of completion of site works. The full report in A4 format will usually follow within eight months. Copies will be provided for the client and the Local Planning Authority and deposited with the Historic Environment Record.
- 9.3 A draft assessment report will include:
- A non-technical summary
 - Introduction (location, topography, background)
 - The aims and methods adopted in the course of the excavation
 - Summary of the excavation results
 - A quantitative and qualitative assessment of the potential of the archive for further analysis leading to full publication, following guidelines in *Management of Archaeological Projects* (English Heritage).
 - Updated project design
 - Proposal for analysis, publication, and archive
 - OASIS record
- 9.4 Following assessment, the finds and stratigraphic record will be subject to full analysis, as detailed in the assessment report. The full report will include:
- A non-technical summary
 - Introduction (location, topography, background)
 - Archaeological and historical background
 - The aims and methods
 - The nature, location and extent of any structural, artefactual and environmental material uncovered.
 - Reports on the artefacts, specialist reports and a consideration of the evidence within its local, regional, national context.
 - Appropriate illustrative material including maps, plans, sections, drawings and photographs.
 - Discussion
 - The location and size of the archive.
 - OASIS record
- 9.5 A draft digital version of the report will be provided for the client, the Planning Archaeologist and the Local Planning Authority for approval. Once approved the final report will be deposited with the Historic Environment Record on the understanding that it will become a public document after an appropriate period of time.
- 9.6 An indexed site archive will be prepared and deposited with the agreed museum in accordance with *Archaeological Archives: A Guide to Best Practice in Creation, Compilation, Transfer and Curation* (Brown 2011), CIfA 2020, Standard and guidance

for the creation, compilation, transfer and deposition of Archaeological Archives, and the relevant museum guidelines (Jennings 2019, *Lincolnshire County Council Archaeological Handbook*, Section 17 and Appendix).

Publication and dissemination of results

- 9.7 The copyright of all original finished documents shall remain vested in ULAS and ULAS will be entitled as of right to publish any material in any form produced as a result of its investigations.
- 9.8 Arrangements will be made for an appropriate level of academic publication of the results of the excavations. A summary report will be published in the local journal where available. Where wider dissemination is appropriate and the significance of the results warrant, a full copy of the report in an appropriate format shall be submitted for publication in relevant academic journals.
- 9.9 ULAS supports the Online Access to the Index of Archaeological Investigations (OASIS) project. An online OASIS form will be completed detailing the results of the project. Once a report has become a public document following its incorporation into the HER it will be uploaded onto the web-site.

10. Public Engagement and Publicity

- 10.1 The work is not anticipated to be suitable for public involvement or participation during the course of the fieldwork. However, the results will be made available via the ADS website, publication and if significant archaeological deposits are found talks and presentations to the local population can be provided.
- 10.2 ULAS shall acknowledge the contribution of the Client in any displays, broadcasts or publications relating to the site or in which the report may be included.

11. Health and Safety

- 11.1 All work will be conducted in accordance with the Health and Safety at Work Act 1974 and all subsequent Health and Safety legislation, University of Leicester Statement Of Safety Policy Health and Safety and Environmental policies as well as any Principal Contractor's policies or procedures. A site specific Risk Assessment and Method Statement (RAMS) will be formulated prior to commencement of fieldwork. This will be monitored on site and updated as necessary.
- 11.2 The safety of ULAS staff will take priority over the desire to record archaeological deposits.

12. Insurance

- 12.1 All ULAS work is covered by the University of Leicester's Public Liability, Professional Indemnity and Employers Liability Insurance as documented in the RAMS.

13. Quality Assurance

- 13.1 ULAS is a Registered Organisation (RO) with the Chartered Institute for Archaeologists. All ULAS Project Managers hold Member status and all ULAS Projects are overseen by the Project Manager who is responsible for the quality of the project.

14. Staff Training and CPD

- 14.1 All ULAS staff are subject to University of Leicester's Personal Development Discussion (PDD) strategy which reviews personal performance, identifies targets and areas for improvement and identified the need for appropriate. All members of staff are required to maintain a Personal Development Plan and log.

15. Bibliography

Archaeology Data Service <https://archaeologydataservice.ac.uk/advice/Downloads.xhtml>

British Geological Survey <https://www.bgs.ac.uk/map-viewers/geology-of-britain-viewer/>

CifA (Chartered Institute for Archaeologists) 2004, *Technical Paper 7: Guidelines to the Standards for Recording Human remains*.

CifA (Chartered Institute for Archaeologists) 2017, *Updated Guidelines to the Standards for Recording Human Remains*.

CifA (Chartered Institute for Archaeologists) 2020a, *Standard and guidance for the collection, documentation, conservation and research of archaeological materials*.

CifA (Chartered Institute for Archaeologists) 2020b, *Standard and guidance for the creation, compilation, transfer and deposition of Archaeological Archives*

CifA (Chartered Institute for Archaeologists) 2020c, *Standard and Guidance for Field Excavation*.

CifA (Chartered Institute for Archaeologists) 2021, *Code of Conduct*.

DCMS (Department for Culture, media and sport) 1996, *The Treasure Act 1996 Code of Practice*.
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/77532/TreasureAct1996CodeofPractice2ndRevision.pdf

Fradgley, R., 2021, *Spittlegate, Grantham, Lincolnshire*. SUMO survey report 01713.

Mawdsley, C. 2023, *Spittlegate, Grantham, Lincolnshire*. SUMO survey report 12139.

Historic England, 2011, *Environmental Archaeology: A guide to the theory and practice of methods, from sampling and recovery to post-excavation*.

Historic England 2015, *Digital Image Capture and File Storage*.

Historic England Research Frameworks Network: East Midlands Historic Environment Research Framework (<https://researchframeworks.org>).

Huxley, R. 2023, *An Archaeological Evaluation of Land at Spittlegate Level, Grantham, Lincolnshire LCNCC:2023.63. Interim Report*. ULAS report 2023-059.

Jennings, L. 2019, *Lincolnshire County Council Archaeology Handbook* (revised) Lincolnshire County Council.

MHCLG (Ministry of Housing, Communities and Local Government) 2021, (Rev.), *National Planning Policy Framework*.

OASIS <https://www.oasis.ac.uk/>

Soilscapes: <http://www.landis.org.uk/soilscapes/>