



Land East of Eakring Road, Bilsthorpe,
Nottinghamshire
Written Scheme of Investigation – Archaeological
Evaluation

Client: Keepmoat Homes Ltd

Local Planning Authority: Newark and Sherwood District Council

Planning Reference: 20/00873/FULM

NGR: NGR SK 64926, 61428

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1.0 Introduction

- 1.1 Keepmoat Homes Ltd is seeking planning permission for residential development on a land East of Eaking Road, Bilsthorpe, Nottinghamshire (NGR SK 64926, 61428, see Figure 1). A consultation with the Historic Environment Officer (HEO) at Lincolnshire County Council, who are the archaeological advisors to Newark and Sherwood District Council on archaeological matters, has identified that trial trenching is required in order that the archaeological potential of the Site can be clarified prior to determination.
- 1.2 This Written Scheme of Investigation (WSI) has been prepared by Prospect Archaeology Ltd and details the staffing, methodology and timetable of the programme of works for trial trenching. It complies with the Chartered Institute for Archaeologists' (CIfA) *Standard and guidance for archaeological field evaluation* (CIfA 2020), the *Lincolnshire Archaeological Handbook* (LCC 2016) and the documents: *Geoarchaeology. Using earth sciences to understand the archaeological record* (Historic England 2015b); and *Management of Research Projects in the Historic Environment: The MoRPHE Projects Managers' Guide* (Historic England 2015c).
- 1.3 The proposed trenching is part of a phased programme of archaeological work designed to mitigate the impacts of development on the archaeological resource. Following the completion and reporting of the works defined in this document, the HEO will make a decision on the need for further investigation and recording of any archaeological remains prior to the commencement of development. Any future stages of work will be the subject of a separate written scheme of investigation which will require approval by the HEO prior to commencement.

2.0 Site Location and Description

- 2.1.1 The site is located on land east of Eaking Road in Bilsthorpe parish, Nottinghamshire, centred at NGR SK 64926, 61428. The main site is bounded to the north by the cutting for the Bilsthorpe Colliery branch railway, the west by Eaking Road, the south by a concrete and wire fence and to the east by the railway embankment for the Colliery site. The site consists of a single arable field of c. 3.9 hectares.
- 2.1.2 The site is situated on Nottingham Castle Sandstone Formation, consisting of Mudstone, Siltstone and Sandstone. The very southern edges of the site touches on the Haigh Moor Rock Sandstone (bgs.ac.uk/geologyofbritain). The site sits about a half a mile east of the Rainworth Water at c. 70m OD.

3.0 Previous Archaeological Work

- 3.1.1 There are no recorded assets within the site, except for the linear ditch and possible areas of burning identified during the geophysical survey which are of unknown date. The study area contains prehistoric finds and a Roman Road as well as undated cropmark sites and the wider area contains Iron Age and Roman camps, finds of prehistoric and Roman material as well as further cropmarks of potential settlement sites that are characteristic of the later prehistoric or

Roman periods. The projection of the Roman road would take it close to, or through, the site, but no evidence was found during the geophysical survey (Bonnor, 2019).

4.0 Scope of Works

4.1 In discussion with the HEO a programme of evaluation excavation has been proposed to better understand the nature of any archaeological resource and to better define a mitigation strategy to be implemented in advance of development. The evaluation comprises the excavation of 9no. trenches measuring 50m x 1.8m and 1no. trench of 30m x 1.8m, as shown in Figure 2.

5.0 Aims and Objectives

5.1 The purpose of the intrusive evaluation will be to gather sufficient information for the HEO to be able to formulate a policy for the management of the archaeological resources present on the Site.

5.2 Evidence shall be gathered to establish the presence/absence, nature, date, depth, quality of survival and importance of any archaeological deposits to enable an assessment of the potential and significance of the archaeological remains, and to allow for the determination of any appropriate strategies to mitigate the effect of the proposed development upon the archaeological resource.

6.0 Method

6.1 Fieldwork will be undertaken by a team from Allen Archaeology Associates. All groundworks will be supervised by an appropriately experienced archaeologist. All features encountered will be plotted and then excavated according to the sampling strategy.

6.2 The trenches will be excavated by a JCB excavator or similar using a toothless ditching bucket under continuous archaeological supervision. Overburden will be removed to the first significant archaeological horizon or to natural, whichever is encountered soonest. All features encountered will be plotted and then excavated according to the sampling strategy. A similar methodology will be used on the watching brief on the access road.

6.3 Once completed, permission will be sought from the HEO prior to the backfilling of trenches, such permission not to be unreasonably withheld, and will be backfilled to ground level by machine using the arisings

7.0 Excavation and Recording

7.1 Following the identification of archaeological deposits, all further excavation will be by hand, by experienced/qualified archaeologists to natural undisturbed deposits. Sufficient of each feature will be excavated to determine its date and function.

7.2 Linear features will be sampled a minimum of 10% along their length (each sample section to be not less than 1m), or a minimum of a 1m sample section, if the feature is less than 5m long. Junctions and terminals will be targeted with regard to the objectives in Section 5.2.

- 7.3 All small discrete features (postholes, stakeholes) will be fully excavated, or a sample if large numbers are encountered, larger features will half-sectioned.
- 7.4 All structures and zones of specialised activity (e.g. industrial, agricultural processing, ceremonial, funerary) will be noted and only excavated with regard to the objectives in Section 5.2 or where full excavation is required because the stability of the deposits has been compromised.
- 7.5 A metal detector will be used on Site to scan spoil heaps for ferrous and other metal objects. These will be retrieved and treated as unstratified finds.
- 7.6 A drawn record will be maintained, comprising a site plan showing the locations of the area excavation within the Site, an overall site plan, feature plans and section drawings as appropriate. These will be produced at appropriate scales, normally 1:100, 1:50, 1:20 and/or 1:10, as the complexity of the drawing requires. Detailed plans will be made of key features and section or elevation drawings provided of cut features and upstanding structures as appropriate. All drawings will be referenced to the overall site plan.
- 7.7 A photographic record of the project and of each feature will be made and photographs illustrating the relationships between groups of features and general progress will also be taken. Archival record shots will be b/w film and colour digital shots will be used to supplement the record but will not form part of the formal archive.
- 7.8 All context, drawing and photographic registers will be cross-referenced.
- 7.9 Finds will be bagged and labelled according to their context of origin. All finds will be treated in accordance with the recommendations contained in *First Aid for Finds* (Watkinson & Neale 1998, 3rd edition). Advice will be taken on any finds requiring immediate specialist treatment.

Environmental Sampling

- 7.10 An appropriate level of environmental samples will be taken from deposits that can be securely dated and/or placed in the Site's stratigraphic sequence and in accordance with the *Historic England Environmental Archaeology* (Campbell, Moffett & Straker, 2011). Samples will be no less than 40 litres (where possible). If samples are required from discrete features that are not proposed for 100% excavation they will be taken from the unexcavated 50%. Sampling of stakeholes or small features will require the excavation of 100% of the feature.
- 7.11 Sampling will focus on deposits that have the potential to assist with the project objectives. The potential for scientific dating of industrial residues or structures will be considered as a contingency item.
- 7.12 Should waterlogged remains be encountered they will be treated in accordance with *Waterlogged Wood. Guidelines on the recording, sampling, conservation and curation of waterlogged wood, 3rd edition*, (English Heritage) Historic England 2010.

Scientific Dating

- 7.13 Opportunities for scientific dating will be identified as appropriate and discussed with the curator and/or the Regional Science Advisor.

Industrial Remains

- 7.14 The possibility of industrial material is recognised. Slag, coal, fired clay etc will be collected for examination. All environmental samples will be screened for micro-slugs (hammer-scale and spherical droplets) or separately collected, if appropriate, in accordance with the guidelines set out in Historic England's *Archaeometallurgy* (2015a).

Human Remains

- 7.1 Should human remains be encountered the consultant, curator and coroner should be informed. Removal of human remains will only take place in accordance with a Ministry of Justice licence (which may be required under the 1857 Burials Act). Where a licence is issued, all human skeletal remains will be properly removed in accordance with the terms of that licence. The remains will be adequately recorded in situ before lifting in accordance with ClfA Technical Paper 13, *Excavation and post-excavation treatment of cremated and inhumed human remains*, Historic England 2017 *Guidance for Best Practice for Treatment of Human Remains Excavated from Christian Burial Grounds in England* and English Heritage 2004 *Human Bones from Archaeological Sites: Guidelines for Producing Assessment Documents and Analytical Reports*.

Treasure

- 7.2 The possibility of encountering items of treasure, as defined in the Treasure Act (1996), is noted and provision will be made for informing the necessary authorities, and providing appropriate security measures, should the need arise.

8.0 Post-excavation processing

- 8.1 Finds and records will be returned to the contracted unit for processing. Records will be checked and entered into a computerised database. All finds will be treated in accordance with current HE best practice, including 'Investigative Conservation'. Finds will be cleaned (where appropriate) and marked and boxed for transfer to the relevant specialists according to accepted principles and in line with appropriate period/ material guidelines. Environmental samples will be washed and assessed by an environmental archaeologist.
- 8.2 Where material suitable for scientific dating is recovered, sufficient dating will be undertaken to meet the aims of the project.
- 8.3 For all categories of material recovered, including finds, palaeo-environmental, industrial and other specialist samples, an assessment by an appropriately experienced specialist will be undertaken.

8.4 Environmental samples will be processed and sorted, and any artefacts recovered provided to the appropriate specialist(s) to be considered alongside the hand-recovered material. Basic stratigraphic information will be supplied to the project specialists.

8.5 Where assessment has identified the need for further analysis, this will be completed drawing upon the contingency allowed.

8.6 All ferrous objects and a selection of non-ferrous objects (including all coins), will be x-radiographed.

9.0 Reporting

9.1 A report will be produced within 3-5 weeks of the completion of fieldwork. Up to four (4) paper copies and a digital copy of the report will be supplied to Prospect Archaeology for distribution to the client and Lincolnshire HER as appropriate. A digital copy of the report will also be sent to the Heritage Science Advisor for the region.

9.2 The report will contain the following sections:

- Executive Summary, brief summary of the reasons for the work, methods used and results.
- Introduction, describing the scope and circumstances of the work, archaeological background and structure of the report
- Methodology
- descriptive account of the recording methods used and the results, together with an assessment of their archaeological importance, their possible relationship to relevant known features adjacent to the Development Site and estimated reliability of the results
- a phased interpretation of the features
- Discussion of the results and their significance in relation to local, regional and national sites, as appropriate
- Conclusions
- specialists' reports on all categories of artefacts recovered (except modern items). Full archive lists will accompany the specialists' finds reports.
- specialists' reports on environmental samples taken (if taken)
- a complete context list with short description
- Illustrations and plates as appropriate. Illustrations to be included are: a detailed location map, a detailed site plan showing all trenches, all trench plans and sections and detailed plans and sections of features, select artefact illustrations and a selection of scanned photographs; an overall site plan showing all (phased) archaeological features will also be included.
- References
- OASIS summary

9.3 A summary report of an appropriate length, accompanied by illustrations (at 300dpi resolution), will be prepared and submitted in digital format, for publication in the appropriate volume of the Lincolnshire History and Archaeology Journal.

9.4 A contingency will be made for the preparation and publication of the results of the investigations in a local, regional or national journal.

10.0 Monitoring

10.1 The HEO will be informed of the proposed start date and will be kept informed of progress throughout the field and post-excavation work. A member of Prospect Archaeology staff will monitor the excavation and post-excavation work on behalf of the client. Site monitoring visits will be co-ordinated by Prospect Archaeology.

11.0 Health and Safety

11.1 All Site work will be carried out in accordance with the relevant current Health and Safety legislation. A copy of the Health and Safety Document is available on request and a Risk Assessment will be prepared prior to commencement of work on Site.

12.0 Insurance

12.1 PA and its sub-contractors are fully covered by Employers and Public Liability and Professional Indemnity insurances, copies of which are available for inspection on request.

13.0 Archiving

13.1 The Site archive will be prepared in accordance with the UKIC's document *Guidelines for the Preparation of Excavation Archives for Long Term Storage* and the ClfA's *Standard and Guidance for the creation, compilation, transfer and deposition of archaeological archives 2014*.

13.2 Ultimately the ordered and checked archive, along with artefacts, ecofacts and relevant documents will be deposited with The Collection, Lincoln in accordance with the *Lincolnshire Archaeology Handbook*. This excludes finds that are subject to the Treasure Act 1996 (and later amendments), the deposition of which will be determined separately. A budget to cover the museum's deposition charge has been allowed for in the project costs to the client. The Museum will be contacted for an accession number by the contractor at the appropriate time.

13.3 An electronic copy of the archive will be deposited with ADS

14.0 Programme & Staffing

14.1 Fieldwork will be undertaken by Allen Archaeology Associates. It is anticipated that this will take around 2 weeks days depending upon the quantity of archaeological remains revealed. This will be followed by 3-5 weeks for reporting depending on the need for specialist assessments.

Specialists

Early prehistoric pottery	Sarah Percival
Later prehistoric and Roman pottery	Alice Beesley
Post-Roman pottery	Paul Blinkhorn
Flint	Sarah Bates
Environmental	Val Fryer
Faunal analyst	Jen Wood
Human bone	Natasha Powers
Other Artefacts	Adam Daubney
Conservation	WH Conservation

15.0 References

Bonnor 2020 *Land East of Eaking Road, Bilsthorpe, Nottinghamshire. Archaeological Desk-based Assessment* Prospect Archaeology Ltd Report ref KEE01-01v4

Campbell, G, Moffett, L and Straker, V 2011 *Environmental Archaeology. A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation (second edition)*. Portsmouth: English Heritage

CIfA 2020 *Standard and Guidance for Archaeological Evaluation*, Chartered Institute for Archaeologists, Reading

English Heritage 2004 *Human Bones from Archaeological Sites: Guidelines for Producing Assessment Documents and Analytical Reports*

English Heritage 2011 *Environmental Archaeology: a guide to the theory and practice of methods, from sampling and recovery to post-excavation*

Historic England 2015a *Archaeometallurgy. Guidelines for Best Practice*

Historic England 2015b *Geoarchaeology. Using earth sciences to understand the archaeological record*

Historic England 2015c *Management of Research Projects in the Historic Environment: The MoRPHE Projects Managers' Guide*.

Historic England 2017 *Guidance for Best Practice for Treatment of Human Remains Excavated from Christian Burial Grounds in England*

LCC, 2016, *Lincolnshire Archaeological Handbook: a manual of archaeological practice*. Lincoln, Lincolnshire County Council, Built Environment Department

Ministry of Housing, Communities and Local Government 2018 *Revised National Planning Policy Framework (NPPF)*

16.0 Figures

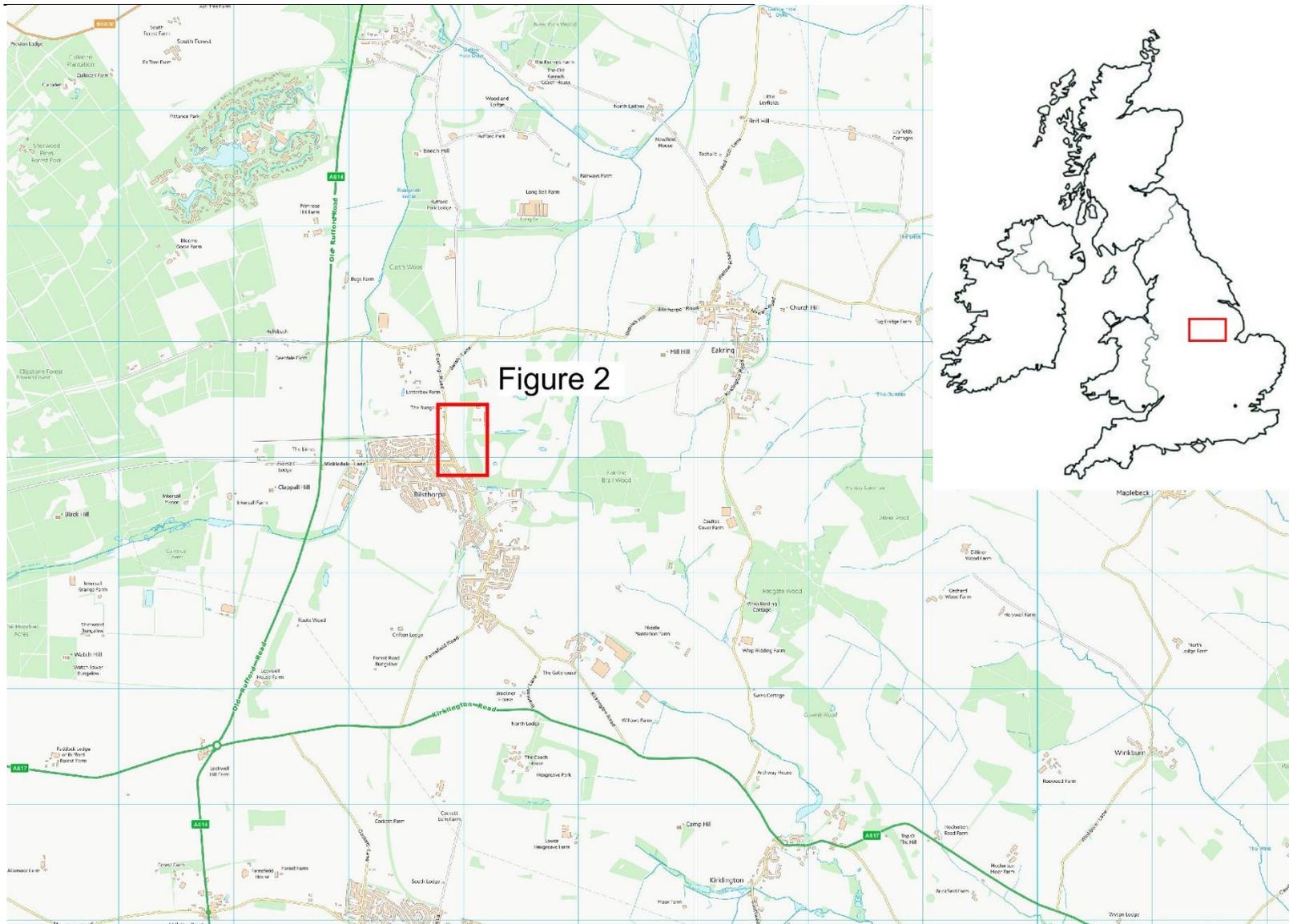


Figure 1: Site Location (OS OpenData)



Fig. 2: Greyscale image of processed data

Figure 2: Trench layout