



maparch

MAP Archaeological Practice

Land off Hemingfield Road
Hemingfield
South Yorkshire

MAP Site Code 05-39-23
Planning Reference- 2024/0122

Written Scheme of Investigation-Archaeological Evaluation
by Trial Trenching



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MAP Archaeological Practice

Client Hargreaves Land Limited

Work Type Archaeological Evaluation by
Trial Trenching

Address Land off Hemingfield Road

LPA Archaeologist Andy Lines - South Yorkshire
Archaeology Service

NGR SE 39255 01856

What3Words /// snips.trainers.trombone

Site Code 05-16-24

Planning Reference 2024/0122

Project Manager Charlie Puntorno

Version History	Edited/QA by	Notes
A-250924	Max Stubbings	

Land off Hemingfield Road
Hemingfield
South Yorkshire

Archaeological Evaluation by Trial Trenching

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Read & Understood by	Revision	Initial and Date

1. Background

- 1.1 The site is located to the north and west of Hemingfield Road and south of the Dearne Valley Parkway (centred at SE 39255 01856, Fig. 1). Currently utilised as agricultural land, the site is bounded to the east by further arable land.

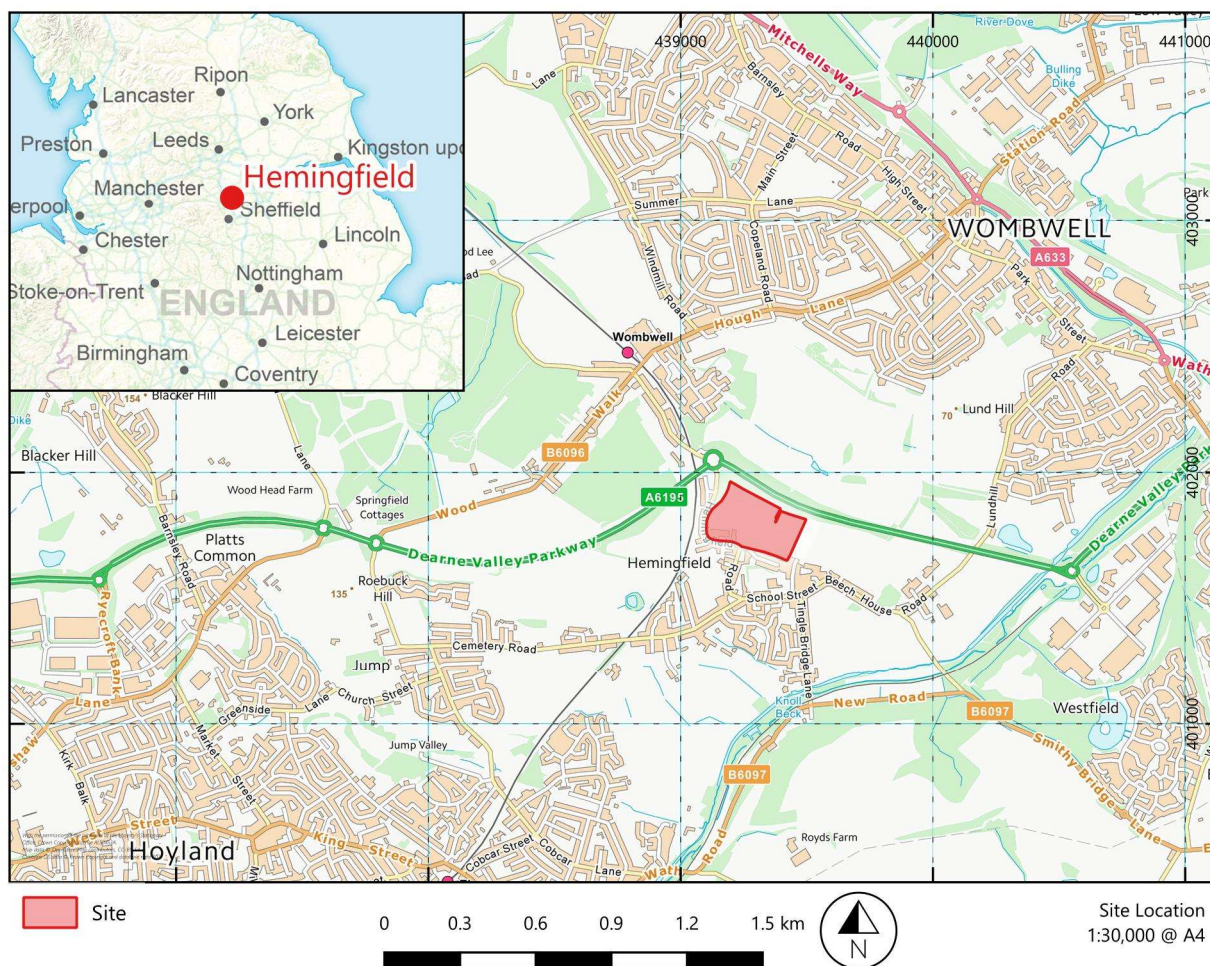


Figure 1: Site Location

- 1.2 An outline planning application has been made to Barnsley Metropolitan Borough Council for the 'demolition of existing structures and erection of residential dwellings with associated infrastructure and open space. All matters reserved apart from access into the site'.
- 1.3 The work will be monitored under the auspices of the Archaeologist at South Yorkshire Archaeology Service (henceforth SYAS), who also oversees the Barnsley area. SYAS will be consulted at least one week before the commencement of site works. Where necessary the regional Science Advisor at Historic England may also be contacted about the work.

- 1.4 MAP will adhere to the principles of the ClfA Code of Conduct: professional ethics in archaeology (ClfA. 2022) throughout the project and to the ClfA standards and Universal guidance for Archaeological Field Evaluations (ClfA. 2023).
- 1.5 The project will be continuously reviewed in order to monitor the projects progress towards meeting its aims, objectives and with adherence to the SYAS Standards for Archaeological Field Evaluation. As a minimum the results of the evaluation will be assessed as the fieldwork is taking place, to allow for any necessary changes to the agreed methodology. Any deviance from the methodology outlined in this document must be agreed by SYAS.

2. Site Information

2.1 Land Use, Topology and Geology

- 2.1.1 The site currently consists of two former arable fields, bisected by a public right of way.
- 2.1 Bedrock geology within the site boundary consists of Woolley Edge Rock (BGS. 2024). No superficial geology is recorded by BGS although Soilsmap (2024) records '*slowly permeable seasonally wet acid loamy and clayey soils*'.

2.2 Archaeological Potential

- 2.2.1 A Desk Based Assessment was carried out by MAP Archaeological Practice Ltd and should be consulted for a wider archaeological background.
- 2.2.2 Prehistoric activity is well recognised within the vicinity of the site, particularly at Wombwell Woods to the north-west of the site. Flints of Mesolithic date was recovered from land to the west of the woodland (Historic England Monument Number 52441), whilst implements have also been recovered from an outcrop within the woods (Historic England Monument Number 52441).
- 2.2.3 Iron Age and Romano-British activity is well recognised within Wombwell Woods, an area of which is designated as a Scheduled Monument (NHLE 1004796). The complex, which comprises settlement features, enclosures, a trackway and field systems, is visible as earthworks (Historic England. 2023) and can clearly be discerned in LiDAR data.
- 2.2.4 Archaeological work including Geophysical Survey, Watching Briefs and Trial Trenching was carried out in advance of the construction of the Dearne Valley Parkway. Trial Trenching, carried out to the

south of Wombwell Woods, and approximately 320m west of the site, targeted features which had been identified in the Geophysical Survey. Features which were interpreted as field boundaries, which did not conform to the current field system, were identified. Although no dating evidence was available, given the prevalence of prehistoric or Romano-British activity within the vicinity, it is likely that these features are comparable (WYAS. 1995)

- 2.2.5 Archaeological features, including pits, gullies and a ditch, of potential late prehistoric or Romano-British date have also been identified at School Street, approximately 250m south of the site. Although no datable material was recovered from the features, their stratigraphic relationships and the nature of their fills was suggestive of potential late prehistoric or Romano-British origin (ASWYAS. 2007).
- 2.2.6 A Geophysical Survey was carried out across the site which identified anomalies which are likely to be of archaeological origin, with former field boundaries and agricultural anomalies also noted (Magnitude. 2024). Features thought to be of archaeological origin include a ditch flanked trackway, ring ditches and possible enclosures.
- 2.2.7 Shallow coal mining works are recorded within the north-eastern corner of the site although this is not reflected in the results of the Geophysical Survey and therefore it is unlikely this activity impacted archaeological features.

3. Project Details

3.1 Aims and Objectives

3.1.1 The aim of the Archaeological Trial Trenching is to determine the presence and/or absence of archaeological features. Should archaeological features be encountered, their extent, depth, character and/or significance will be investigated and recorded to enable an assessment of the archaeological potential. This will allow the Archaeologist at SYAS to make a reasoned decision regarding any required mitigation.

3.1.2 Based on known archaeological activity within the vicinity of the site, and the results of the Geophysical Survey, the evaluation has the potential to inform the following research questions outlined in the South Yorkshire Historic Environment Research Framework;

- QSY0029: Can we characterise different types of Iron Age and Romano-British field systems in different landscape zones and environments?
- QSY0030: What were the economic, social or political roles of Iron Age and Romano-British field systems?
- QSY0034: What were the reasons for variations in the form, shape, and size of Iron Age and Romano-British field systems and fields?
- QSY0040: What were the economic, social or political roles of linear trackways?
- QSY0041: What may we deduce from studies of trackways with respect to changes in the agrarian landscape? What can we say about any relationships or discontinuities between Iron Age and Romano-British routeways and roads?
- QSY0042: Can we identify more tangible physical traces of past human and animal movements through the landscape?
- QSY0043: Can any spatial patterning be identified within roundhouses in South Yorkshire?
- QSY0044: Can any clear traditions of the internal use of space within roundhouses and rectangular buildings be identified?
- QSY0045: Is it possible to distinguish between roundhouses occupied on a permanent basis, or examples inhabited seasonally?
- QSY0046: How can we better understand depositional patterns within and around roundhouses?

3.2 Excavation Rationale

Seventeen trenches are proposed, positioned in order to assess features identified in the results of the Geophysical Survey, but also in areas supposedly devoid of features (Fig 2). With the exception of Trench 3 which measures 50m x 2m, all trenches measure 40m x 2m.

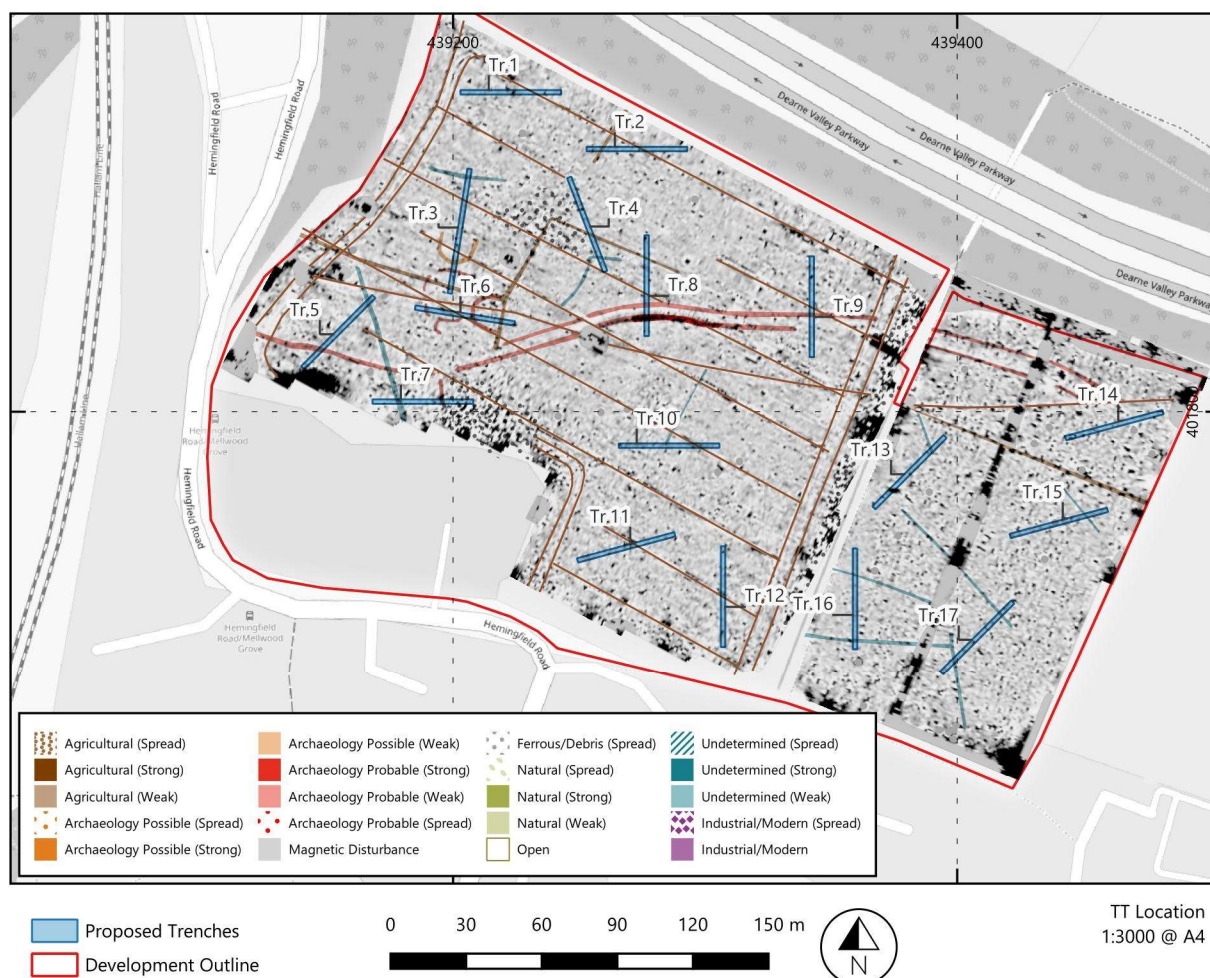


Figure 2: Trench Location Plan

3.3 Output and Dissemination

3.3.1 It is anticipated that the project will produce the following output

Data type	Detail
Physical Archive	<p>Drawn plans and sections- permatrace</p> <p>Site indices (context, photograph, drawing, samples)</p> <p>Finds collected during the evaluation</p> <p>Environmental material retained from samples collected during the evaluation</p>
Digital Archive	Diggit derived data (PDF context sheets and indices. .xlsx indices)

Data type	Detail
	GIS ESRI Shapefile (.shp & .shx & .dbf, plus associated files) Photographs .jpg, .raw (to be deposited as .tiff). to include all photographs taken during the project Reports (.docx & PDF). WSI, evaluation report and all associated specialist reports
Reports	Printed evaluation report

3.3.2 All digital data will be curated in line with the attached Data Management Plan.

3.3.3 MAP undertake public engagement for all appropriate projects. This will be offered in numerous ways to reflect the nature of the archaeological works. It is likely that public engagement will be via site notices and discussions with the public during the duration of the fieldwork. A copy of the evaluation report will be submitted to the local Historic Environment Record for public access.

4. Fieldwork Methodology

4.1 *Excavation Methodology*

4.1.1 The positions of all trenches will be located using a Trimble GPS Rover and necessary precaution will be taken over underground services and overhead lines.

4.1.2 All overburden, topsoil and any subsequent subsoils will be carefully removed by mechanical excavator using a wide toothless blade, under archaeological supervision, to the top of archaeological features or layers. Excavated soils will be separated and placed either side of the trenching; all spoil will be stored and managed in line with the standards of the Construction Code of Practice for Sustainable Use of Soils on Construction Sites (DEFRA. 2009).

4.1.1 Minor adjustments may be undertaken to avoid previously unknown obstacles such as vegetation or services, or to enable machine manoeuvring. Trenches located to target specific features will not be moved without prior agreement of SYAS.

4.1.2 Should trenches require stepping or shoring to reach their required depth for reasons of access and egress, the base of the trench will reflect their original size specified in section 3.2. However, SYAS may also request an extension of any such trenching to investigate deep and/or significant archaeology pursuant to a better understanding at the evaluation stage; this would be within the contingency sums supplied to the Client.

4.1.3 Archaeological deposits will be cleaned and excavated by hand using appropriate tools. The stratigraphy of all trenches will be recorded, regardless of a lack of archaeological features.

4.1.4 The recommended excavation sampling policy, outlined in the Standards for Archaeological Field Evaluation is:

- An initial half section of all discrete features. Where justified further excavation may be deemed necessary;
- 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;
- All junctions/intersections and corners of linear features will be investigated, and their stratigraphic relationships determined – if necessary, using box sections. All termini will be examined;
- Funerary contexts, buildings and industrial features will be subject to sufficient excavation to establish the objectives of the evaluation;
- No archaeological deposit will be entirely removed unless this is necessary to meet the aims of the project.

4.2 Recording Methodology

4.2.1 All archaeological deposits and features will be recorded in written format using Diggit Archaeology, a digital recording system which is compatible with the MoLAS recording system. All indices will be produced using MAP's pro forma sheets.

4.2.2 Drawn records of archaeological material will be undertaken through hand drawn plans and sections, scaled appropriately to the excavated feature.

4.2.3 Digital photography will be undertaken in accordance with standards set by Historic England and the recipient archive. All digital photography will be undertaken using a high quality camera recommended to have no less than an APS-C or DX size sensor of 10 megapixels and to be capable of generating images in RAW to be converted to TIFF for archive and JPEG for reporting. Appropriately sized scales will be used in all photography.

4.3 Sampling Strategy

- 4.3.1 A sampling strategy for the recovery for environmental remains has been formulated in accordance with an Environmental Strategy written by an Environmental Consultant (Diane Aldritt, Appendix 2).
- 4.3.2 Where necessary provision will be made for relevant specialists to visit the site.
- 4.3.3 Bulk samples will be taken from all securely stratified deposits using a strategy which combines systematic and judgement sampling, but which also follows the methodologies outlined in the English Heritage (2011) *'Environmental Archaeology: A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation (Second Edition)'* guidance. As standard a 40-litre sample will be taken, where this is not possible, entire contexts may be sampled. Positive features will also be sampled; retention of structural material such as bricks will be implemented where necessary.
- 4.3.4 Sampling will also be considered for those features where dating by other methods (for example pottery and artefacts) is uncertain. Such sampling may be carried out at the request of SYAS or following advice from the Historic England Science Advisor and may include, but is not restricted to, radiocarbon dating, luminescence dating and archaeomagnetic dating.
- 4.3.5 Animal bones will be hand collected, and bulk samples collected from contexts containing a high concentrations of bone. Spot finds of other material will be recovered where applicable.
- 4.3.6 Flotation samples and samples taken for coarse-mesh sieving from dry deposits will be processed at the time of the fieldwork, or as soon as possible thereafter, partly to permit variation of sampling strategies.

4.4 Human Remains

- 4.4.1 Should any inhumation or cremation burials be encountered, their extent, number and state of preservation will be established and the Archaeologist at SAYS will be notified to discuss an appropriate strategy for their management. Remains should not be removed or chased beyond the existing limits of excavation prior to agreement with the SAYS, and not without a licence.
- 4.4.2 It is considered best practice to not remove the remains during evaluation, however, this should be considered at a site-specific level. If it is deemed necessary to remove human remains, this will be carried out under the conditions of, and after the receipt of, licences for the removal of human

remains (issued by the Ministry of Justice) and in accordance with the Burial Act (1857), 'Updated Guidelines to the Standards for Recording Human Remains' (Brickley & McKinley. 2017), ClfA guidelines 'Excavation and Post-Excavation Treatment of Cremated and Inhumed Human Remains' (McKinley & Roberts. 1993), and all Historic England and Advisory Panel on the Archaeology of Burials in England (APABE) guidance, to ensure that they are treated with due dignity. The preferred option would be for them to be adequately recorded using the aforementioned recording systems and photogrammetry, before lifting, and then carefully removed for scientific study, and long-term storage with an appropriate museum; however, the burial licence may specify reburial or cremation as a requirement.

4.5 Artefact recovery

- 4.5.1 All stratified archaeological artefacts and ecofacts will be collected, except for modern (mid-20th century or later) finds from topsoil and subsoil contexts unless it is determined that they are of archaeological interest. All artefacts will be bagged and labelled by type and context.
- 4.5.2 Removal, packaging, and labelling of finds will be undertaken in accordance with 'First Aid for Finds' and specific Historic England guidance as required.
- 4.5.3 Artefacts defined as treasure under the Treasure Act 1996 (as supplemented by the Treasure (Designation) Order 2002) will be treated in accordance with the Treasure Act 1996 Code of Practice. All finds of treasure must be reported to the local coroner within 14 days of discovery. In the first instance, it is recommended that details of the find are provided to the local Portable Antiquities Scheme Finds Liaison Officer to confirm that it constitutes treasure; they will be able to apply for a Treasure Reference Number and declare the find to the coroner. SYAS will also be notified. A short Treasure Report will be compiled for submission to the coroner.
- 4.5.4 Where recovery of treasure cannot be undertaken on the same working day as the discovery, suitable security measures will be taken to protect the finds from theft.

5. Post-Investigation Assessment, Analysis and Reporting

5.1 Assessment & Analysis

- 5.1.1 Upon completion of the evaluation, the artefacts, soil samples and stratigraphic information will be assessed as to their potential and significance for further analysis.

- 5.1.2 A rapid scan of all excavated material will be undertaken by conservators and finds researchers in collaboration. Material considered vulnerable will be selected for stabilisation after specialist recording.
- 5.1.3 Where intervention is necessary, consideration will be given to possible investigative procedures (e.g. glass composition studies, residues in or on pottery, and mineral preserved organic material).
- 5.1.4 Allowance will be made for preliminary conservation and stabilisation of all objects and an assessment of long term conservation and storage needs.
- 5.1.5 Assessment of artefacts will include inspection of X-radiographs of all iron objects, a selection of non-ferrous artefacts (including coins), and a sample of any industrial debris relating to metallurgy.
- 5.1.6 Once assessed, all material will be packed and stored in optimum conditions, as described in First Aid for Finds.
- 5.1.7 Waterlogged organic materials will be dealt with, following Historic England documents, Guidelines for the care of waterlogged archaeological leather, and guidelines on the recording, sampling, conservation and curation of waterlogged wood.
- 5.1.8 Processing of all samples collected for biological assessment, or subsamples of them, will be completed. Bulk and site-riddled samples from dry deposits will have been processed during excavation, where possible.
- 5.1.9 The preservation state, density and significance of material retrieved will be assessed, following methods presented in Environmental Archaeology (Historic England. 2011). Unprocessed subsamples will be stored in conditions specified by the appropriate specialists.
- 5.1.10 Assessments for any technological residues will be undertaken. Any required samples for dating will be submitted to laboratories promptly, so as to ensure that results are available to aid development of specifications for subsequent mitigation strategies.
- 5.1.11 Basic stratigraphic information will be supplied to the project specialists' outlines in section 7.

5.2 Reporting

- 5.2.1 A brief, interim report may be required shortly after the completion of fieldwork.

5.2.2 On completion of the post-excavation assessment, an assessment report will be prepared, to include the following as a minimum:

- An introduction including background information (with planning application details, where appropriate);
- The original research aims and objectives and rationale for selected area of investigation;
- An archaeological and historical baseline;
- A description of results;
- A report of all find and sample categories to assessment level, by appropriate specialists, including their research potential;
- The results of any scientific dating;
- A discussion of the results including a phased interpretation of the site;
- A summary of the results in their local, regional, and national context, and the extent to which the work has addressed the project aims and objectives;
- An assessment of the effectiveness of the evaluation strategy, including earlier stages of work;
- Recommendations for any further investigation, specialist analysis or conservation, recording and/or preservation of in situ archaeological remains, to be determined in consultation with SYAS;
- Supporting illustrations, including as a minimum:
 - A detailed location map;
 - A detailed site plan showing all trenches, as excavated;
 - Plans for all trenches where archaeological features were identified;
 - Detailed plans of archaeological features;
 - Detailed sections of archaeological features;
 - An overall (phased) site plan showing all archaeological features recorded;
 - Selection of photographs of work in progress;
 - Select artefact illustrations and/or photographs.
- Supporting tables of data;
- Acknowledgements identifying those involved in the project.

5.2.3 Where an updated WSI is necessary, the updated document should contain:

- Any changes to the aims and objectives of the project;
- The requirement and content of the final analysis report;
- Any changes to the archive arrangements, including details of proposed specialist conservation;
- Any updates to the Selection Strategy and Data Management Plan.

5.2.1 Copies of the report will be submitted to the commissioning body and the Local Planning Authority within 3 months of the completion of the evaluation, unless an alternative timescale is agreed.

5.2.2 We will provide a physical and digital copy of the report to the Historic Environment Record. A digital copy will also be lodged with OASIS.

5.2.3 Printed copies of reports will be included with the physical archive to the recipient museum (see section 6).

5.2.4 Unless the individual/organisation commissioning the project wishes to state otherwise, the copyright of any written, graphic or photographic records and reports rests with MAP.

6. Archive

6.1 *Working Archive*

6.1.1 All material (whether digital or physical) recovered or generated through the duration of the field evaluation project will be appropriately and securely stored in a working project archive. This will be undertaken in accordance with the selection strategy and digital data management plan set out at the commencement of the project (Appendix 1).

6.1.2 All physical documents or drawings will be indexed, collated, and stored in a secure location when not in use.

6.1.3 Secure digital security copies will be made of physical and born digital records at regular intervals, to be stored and backed up in a secure location. Documents and drawings will be scanned at an appropriate resolution (see Appendix 1).

6.2 *Archive Deposition*

- 6.2.1 The requirements for archive preparation and deposition must be addressed and undertaken in a manner agreed with the recipient museum, who will be contacted before commencement of fieldwork. The museum will also be contacted during a mid-point review of the project during which information will be passed to the museum regarding the archive and the proposed timescale for deposition and following the completion of work.
- 6.2.2 Guidance set out in the ClfA Toolkit for Selecting Archives (2019) will be followed, prior to the commencement of fieldwork in order to establish project-specific strategies for the retention or discarding of material. The retention of material will also be discussed with the Museum with regards to the significance and research potential of the archive.
- 6.2.1 At the time of writing Barnsley Museum has been contacted in regard to their Archive deposition strategy and to arrange an accession number. The timetable for deposition shall be agreed on completion of the site archive and narrative. A copy of the archive receipt will be provided to the SYAS.
- 6.2.2 The digital archive will be deposited with the Archaeology Data Service (ADS) at the University of York.

7. **Staffing**

- 7.1 All Project Officers and Project Managers hold a valid First Aid at Work Certificate and Site Supervisor Safety Training qualifications.
- 7.2 At the time of writing the field work team is to be confirmed, however as a minimum the following contacts will be relevant for the duration of the project.
- Charlie Puntorno – Archaeology and Heritage Manager
Telephone – 07879791369
Email – charlie@maparchltd.co.uk
 - Andy Lines- Archaeologist- SYAS
Telephone – 0114 2736354
Email – andrew.lines@sheffield.gov.uk

- Andy Hammon-Historic England Science Advisor

Telephone- 07747486255

Email- andy.hammon@historicengland.org.uk

7.3 The following Specialists have been contacted as are available to work on the project:

- Prehistoric pottery – T. Manby
- Medieval & Post-medieval pottery – M R Stephens (MAP)
- Roman pottery – Dr David Griffith
- Flint – F. Foulds
- Animal Bone – Jane Richardson
- Environmental Sampling – Diane Alldritt
- Conservation – York Archaeology
- Human Remains – York Osteoarchaeology
- Ceramic Building Material – Dr David Griffith
- Clay Tobacco Pipe – M R Stephens (MAP)

8. Bibliography

British Geological Society. Geology of Britain Viewer. Available at:
<http://mapapps.bgs.ac.uk/geologyofbritain/home.html> [accessed 24.09.24]

ClfA. 2023. Standard for archaeological field evaluation

ClfA. 2023. Universal guidance for archaeological field evaluation

Magnitude Surveys. 2024. Geophysical Survey Report of Hemingfield Road, Barnsley

MAP. 2022. Land off Hemingfield Road, Hemingfield, South Yorkshire. Archaeology and Heritage
Desk Based Assessment

West Yorkshire Archaeological Services. 1995. Dearne Towns Link Road: Archaeological Evaluation

Archaeological Services West Yorkshire Archaeological Services. 2007. Land off School Street,
Hemingfield, South

Appendix 1: Digital Data Management Plan

Project Administration	
Project Name	Land off Hemingfield Road
Site Code	5.39.23
Project Description (E.g., number of trenches, area of excavation)	Excavation of 17 archaeological trenches
OASIS ID	maparcha1-526721
Museum Name & Accession code (where applicable)	Bassetlaw Museum Accession Code TBC
Client/ Landowner (where applicable)	Hargreaves Land Limited
Project Lead	TBC
Project Manager	Charlie Puntorno
Date & Version	VA 24.09.24

Data Collection

Geophysical survey has previously been undertaken at the site and will be used to inform the evaluation strategy. The data images including interpretation are likely to be included within the project report with permission, but the original data copyright resides with the original researchers (Magnitude Surveys) and will not be deposited with this project archive.

Data to be Collected/ Created (to be updated throughout duration of project)		
Type	Format	Volume
GIS	ESRI Shapefile (.shp & .shx & .dbf, plus associated files) (Metadata to be deposited as .csv)	WSI= 2 shapefiles
CAD	.dwg, .dxf (Metadata to be deposited as .csv)	
Spreadsheets & databases	Excel (.xlsx) Access (.accdb) (to be deposited as .csv)	
Images	.jpg, .raw (to be deposited as .tiff)	WSI=1 .jpg
Text/ Documents	Word (.docx) PDF (.pdf)	WSI = 3.docx & 5 pdf

- All data will be collected in line with the project specific Written Scheme of Investigation, *Guides to Good Practice* produced by the ADS and MAP's guidance on the *Creation and Treatment of Documentary, Digital and Material Archives*.
- The digital archive will be stored in an appropriately named project specific folder which will be regularly backed up. All data raw data will be stored in the appropriate folder. Version control will be maintained throughout the project.

Documentation and Metadata

- Data collected will include standard formats which maximise opportunities for use and reuse in the future
- Data documentation will meet the requirement of the Museum Deposition Guidelines, Digital Repository Guidelines and the methodology described in the Written Scheme of Investigation. Following the completion of the project all paper-based material will be digitised and included within the archive.
- A metadata form consistent with ADS examples will be completed for each dataset and included within the final archive. As a minimum the metadata will include a file name, keywords & dates, creator & date of creation, copyright holder, location (site address or coordinates as appropriate), software and version
- An archive catalogue documenting both physical and digital archive products will be maintained and submitted with both the Museum and Trusted Digital Repository (ADS).

Ethics and Legal Compliance

- MAP staff must only participate in work which conforms to accepted ethical standards and which they are able to competently perform. Where there is any doubt, which should be raised with management.
- MAP places an emphasis on internal peer review of documents and the discussion of results. All Written Schemes of Investigations are reviewed by the relevant Local Authority Archaeologists prior to submission. Where confidentiality is requested by a client, this is strictly upheld by MAP.

- The project archive will include the names of all individuals who contributed to the project unless it is requested otherwise. No personal data will be held within the project archive.
- MAP have a GDPR compliant Privacy Policy underpins the management of all personal data. Such data is not retained in project specific folders and is not accessible to unauthorised staff nor will it be shared with any third-party companies.
- Unless otherwise agreed at the inception of a project, the copyright of all data collected throughout the project belongs to MAP. The inclusion of data derived from external specialists and/or contractors is secured at the point of agreement of their participation on the project.
- By depositing an archive with an HER or museum MAP gives permission for the material presented to be used by the recipient, in perpetuity, although MAP retains the right to be identified as the author of all project documentation and reports as specified in the Copyright, Designs and Patents Act 1988 (Chapter IV, section 79).
- All relevant licences and permissions to reproduce external data are discussed in the site-specific Written Scheme of Investigation and all subsequent reporting, including Desk Based Assessment. Where site specific licences are required (i.e. for the removal of human remains), licence numbers and dates will also be included within site reports and a copy of the licence held within the archive.

Data Security: Storage and Backup

- MAP's current IT infrastructure is divided between SharePoint for documents and an NAS (Network Attached Storage) drive for larger data files (acting as back up of locally held files on work laptops). Both require username and password intrinsic to the individual users.
- Digital Recording is currently provided by DiggitArchaeology.com, who provide access to their mobile app and web app via email and password login. The backup of recorded material is provided by Diggit's use of the three-point server system with automatic backups working in tandem. Diggit's data is encrypted in transit and stored and backed up on a MongoDB Atlas server cluster of 3 replicate nodes in the Republic of Ireland (in the GDPR-compliant EEA). In the rare event that one server is down, a

replicate node instantly replaces it with no perceptible change in behaviour or functionality. These servers are backed up daily, and the datacentres housing them are accredited to ISO 27001 (2005) or higher. In the very unlikely scenario that data must be restored from a backup, we estimate the Recovery Time Objective (RTO) for restoring this data to be approximately 10 minutes of downtime. At the close of the site material will be downloaded and stored using SharePoint.

- In regard to filing within the SharePoint and NAS, a folder template sets out the associated locations of files; these folders should be appropriately named and populated with file names for field data stored on the NAS. See section on "Naming Conventions"
- SharePoint is maintained/delivered under licence by Practical Networks with in-house maintenance by the Commercial Director. The NAS drive is a WD PR2100 and is maintained by the Archaeology and Geomatics Manager with weekly backups and checks of the data; field data such as photographs and survey data to be uploaded weekly by the Project Officer.
- Field and in-house access to the SharePoint and the NAS drive is limited/restricted by user email and password.
- Files such as databases, tables and documents required by the external specialists and in-house post-excavation team will be distributed using the SharePoint system. Any further data such as photographs, AutoCAD files, QGIS projects etc will be distributed via secure alternative means (WeTransfer or similar) to protect the integrity of the NAS Drive.

Selection and Preservation

- A selection strategy and the DMP for each project will be considered from the inception of the work. The process of selection should be devised in consultation with LPA frameworks, guidance and individual stakeholders, reviewed by the Appointed Project Manager at each milestone of a project's lifespan; inclusive a peer review and appropriate consultation with stakeholders to provide quality assurance.
- The strategy should dictate which parts of the archive, both digital and analogue, are relevant and would provide future generations with a soundly curated archive.

Documents and Data should be quality assured prior to deposition, checking for consistency and following any deposition guidance of the eventual repository

- All costs relating to the digital archiving have been factored into the original quote and intended repository will be notified. At each milestone costing considerations must be undertaken to ensure that deposition is not out of pocket or unexpectedly above factored levels.

Data Sharing

- A summary of the site will be made available at the earliest opportunity, latterly curated and adapted at each major milestone to reflect most up to date information regarding the site.
- All reports relevant to the site will also be curated and added to the OASIS record, updated at pertinent milestones of the project; the final report must be lodged with the HER in the first instance.
- Any archive material must be authorised for dissemination by the relevant stakeholders, primarily this is likely to be the client; though any such action will only be temporary, and usually as a result of planning issues.

Responsibilities

- The appointed Project Manager shall ensure the DMP is correctly followed, reviewed and adapted (where appropriate) at each milestone. In the unlikely event that the project changes hands, the responsibility will ultimately rest with the Managing Director, who will ensure the needs of the DMP are addressed and properly handed over to the next Project Manager.
- Curation of the field data, data synthesis/analysis, quality assurance should be the responsibility of senior figures of the project team, usually the Project Officer/Supervisor. They will make sure that all data is stored correctly and backed up to minimise any loss of integrity of the archive.
- Reports both internal and external shall be subject to MAP's ideal naming preferences of project files. It is the responsibility of each department to ensure their curated

report/work is correct, quality assured and seek clarification from the authors (external or otherwise) of any document which contains errors.

- All work will be latterly audited by the Project Manager working towards creating an archive and level of reporting which is both ethically sound, accurate and reliable for future use by anyone internal or external to the company.

Naming Conventions

- Files and Folders should be named consistently throughout the project folder. The use of an _ (underscore) should be used to separate words instead of spaces e.g. use Pott_Asmnt instead of Pottery Assessment. File names vary according to the content of the file, the _ rule still applies here.
- There should be no spaces in any file naming
- No symbols (e.g. #?,) should be used as they are not ADS compliant
- Full stops in file names are not accepted, except between file name and file type
- Abbreviate where possible, losing extraneous vowels and consonants, as file paths are cumulative and cannot exceed a certain number of characters
- Naming Examples.

- Reports and digitised registers

Should follow the structure of: Site Code, Type of Work (Adding excavation Phase if required), Component, Version. Varied slightly for digitised registers as per example:

e.g. 05-08-20-TT_FINALReport_A210622

05-26-19-EXC_PhsB_App01_CtxtListing

- Digital Photographs and Black & White Photographs

Should include the Site Code, Type of Work (Adding excavation Phase if required), and Frame No, varied slightly for B&W film:

e.g. 05-08-20-TT_Digi_001

05-26-19-EXC_PhsB_BW_FLM01-001

NB be aware that jpegs and raw (as well as selected archive tiff's) should be in separate folders and be concurrent with each other

- Scanned Site Registers
Should be scanned in pdf format and be formatted as: Site Code, Type of Work (Adding excavation Phase if required), Register Name.
e.g. 05-08-20-TT_CtxtReg
05-26-19-EXC_PhB_DrawReg

- Scanned Context Sheets & other site sheets
Should be scanned in pdf format and be formatted as: Site Code, Type of Work (Adding excavation Phase if required), Type of Sheet, Sheet Nos.
e.g. 05-08-20-TT_Ctxt-0001-0050
05-26-19-EXC_PhB_Ctxt0001-0050

- Site Drawings and Plans
Should be scanned as TIFF's and be formatted as: Site Code, Type of Work (Adding excavation phase if required), Drw, Sheet No
e.g. 05-08-20-TT_Drw_Sh-001
05-26-19-EXC_PhB_Drw_Sh-001

NB. The phase of work or field numbers may only be relevant at the time the work was undertaken, if work is part of a larger continuing outline, check where the next tranche of numbers will start and bare that in mind or check with PM prior to archiving reports.

List of Abbreviations

Registers

Ctxt

Drw

Digi

BW

Env

SF

Specialist Reports

Pott Pottery

ABn Animal Bone

FeR Iron Waste Residues

Crbn Carbonised Plant Remains

Cnsrv Conservation

Appendix 2: Environmental Strategy

By Diane Alldrit

The on-site environmental sampling strategy will systematically seek to recover a representative sample of botanical, molluscan (both terrestrial and aquatic), avian and mammalian evidence from the full range of contexts encountered during the excavation. This will enable, at the assessment stage, the possibility for radiocarbon dating material to be obtained, and for an initial analysis of the economic and environmental potential of the site. In order to achieve this, a bulk sample (BS, Dobney *et al* 1992) comprising an optimum size of 40litre of sediment (where possible) should be taken from **every stratigraphically secure and archaeologically significant context**. In practice it may not always be possible to obtain 28l of sediment from certain features during the assessment stage, for instance from partially excavated pits or post-holes, in which case a single bucket sample, c.10 to 14litre should be taken at the site supervisors' discretion. Deposits of mixed origin, for instance topsoil, wall fills and obvious areas of modern contamination, should be avoided where possible, as these will contain intrusive material and not provide secure radiocarbon dates.

All buckets and other sampling equipment must be clean and free of adherent soil in order to prevent cross-contamination between samples. If dry soil is to be stored for any length of time it should be kept in cool, dry conditions, and away from strong light sources. However, it is preferable to process samples as soon as possible after excavation.

Bulk soil samples shall be processed using an Ankara-type water flotation machine (French 1971) for the recovery of carbonised plant remains and charcoal. The flotation tank should contain a >1mm mesh for collection of the retent or 'residue' portion of the sample (which may contain pottery, lithics and animal / bird bone, in addition to the heavier fragments of charcoal which do not float). The 'flot' portion of the sample, which may include carbonised seeds, cereal grain, charcoal and sometimes mollusc shell, should be captured using a nest of >1mm and >300micron Endicot sieves. Flotation equipment, including sieves, meshes, brushes and so forth must be meticulously cleaned between samples in order to prevent contamination of potential radiocarbon dating material. All material resulting from flotation will be dried prior to microscopic examination. Flotation is not suitable for the recovery of pollen or for processing waterlogged samples, which shall be discussed below.

Where there is potential for waterlogged preservation, shown for instance by the presence of wood and other organic or wet material, then a 5 to 10litre size sample should be taken (GBA sample, Dobney *et al* 1992). This material is to be retained for later processing using laboratory methods to enable the recovery of waterlogged plant material and insects. For assessment purposes a 1litre sub-sample of the organic sediment from each potential waterlogged sample shall be processed using laboratory wash-over methods, and once processed **kept wet**. All waterlogged samples awaiting processing should be kept damp, preferably stored in plastic sealable tubs, and in cool conditions. Where large waterlogged timbers are recovered these should be stored under refrigerated conditions and an appropriate conservator consulted.

There is the possibility that the waterlogged deposits may require parasite egg analysis. It is proposed that the 'squash' technique is adapted, this would require small lumps of raw sediment approximately 3mm in diameter taken from three separate points from within the sample and homogenised in a little water by shaking. After allowing coarse particles to settle for a few moments, a drop of the supernatant was removed. This work would be undertaken by either John Carrott or Harry Kenwood if necessary.

If sediment suitable for pollen analysis is encountered, for instance rich organic peaty deposits, or deep ditch sections with organic preservation, the archaeobotanical specialist is to be consulted prior to any sampling taking place. These deposits would require sampling with large kubiena tins and require the specialist to be on-site. Pollen analysis, even at assessment level, would subsequently impose a considerable cost implication should it be carried out.

The specialist is available to provide consultation and advice on the environmental sampling strategy throughout the course of the excavation and during post-excavation processing if required.

References

- Dobney, K. D., Hall, A. R., Kenward, H. K. and Milles, A. 1992 A working classification of sample types for environmental archaeology. *Circaea* 9 24-26.
- French, D. H. 1971 An Experiment in Water Sieving. *Anatolian Studies* 21 59-64.
- MAP. 2024 Land North of Grove Road, Retford, Nottinghamshire. Archaeology and Heritage Desk Based Assessment

Appendix 3: Conservation Strategy

By Ian Panter of York Archaeological Trust

Artefacts from all categories and all periods will be recovered as a matter of routine during the excavation. When retrieved from the ground finds will be kept in a finds tray or appropriate bags in accordance with **First Aid for Finds**. Where necessary, a conservator may be required to recover fragile finds from the ground depending upon circumstances.

If waterlogged conditions are encountered a wide range of organic materials may be recovered, including wood, leather and textiles. Advice will be sought from a conservator to discuss optimum storage requirements before any attempt is made to retrieve organic finds and structural timbers from the ground.

After the completion of the fieldwork stage, a conservation assessment will be undertaken which will include the X-radiography of all the ironwork (after initial screening to separate obviously modern debris), and a selection of the non-ferrous finds (including all coins). A sample of slag may also be X-rayed to assist with identification and interpretation. Wet-packed material, including glass, bone and leather will be stabilised and consolidated to ensure their long-term preservation. All finds will be stored in optimum conditions in accordance with **First Aid for Finds** and **Guidelines for the Preparation of Excavation Archives for Long-Term Storage** (Walker, 1990).

Waterlogged wood, including structural elements will be assessed following the English Heritage guidelines, **Waterlogged wood: sampling, conservation and curation of structural wood** (Brunning 1996). The assessment will include species identification, technological examination and potential for dating.

The conservation assessment report will include statements on condition, stability and potential for further investigation (with conservation costs) for all material groups. The conservation report will be included in the updated project design prepared for the analysis stage of the project.

**Land off Hemingfield Road
Hemingfield
South Yorkshire**

**Evaluation by Trial Trenching
VA 05-39-23
Selection Strategy**

Project Information

Project Management

Project Manager	Charlie Puntorno Charlie@maparchltd.co.uk	
Archaeological Archive Manager	Kelly Hunter kelly@maparchltd.co.uk	
Organisation	MAP Archaeological Practice	
Stakeholders		Date Contacted
Collecting Institution(s)	Barnsley Museums Archaeological Data Service	25.09.24
Project Lead / Project Assurance	Collections Team (Barnsley Museums) Collections Development Manager (ADS)	25.09.24
Landowner / Developer	Hargreaves Land Limited	
Other		

Resources

Resources required

Describe the resources required to implement this Selection Strategy, particularly if unusual resources are required.

No additional resources required outside of the norm

Context

The full aims and objectives are outlined in the attached WSI. The primary aim of the project is to assess the archaeological potential of the site prior to development. The trial trenching follows a desk based assessment

The selection strategy will be guided by the aims and objectives of the project as outlined in the WSI.

MAP. 2024. Land off Hemingfield Rd, Hemingfield, South Yorkshire. Archaeology and Heritage Desk Based Assessment

South Yorkshire Historic Environment Research Framework. Available at <https://researchframeworks.org/syrf/> [accessed 25.09.24]

A full bibliography and details of best practice and guidance documents are provided in the WSI.

1 – Digital Data

Stakeholders

Name the individual(s) responsible for the Digital Data Selection decisions (i.e. Archaeological Archive Manager, Project Manager, Collections Curator).

Charlie Puntorno (MAP- Archaeology and Heritage Manager), Max Stubbings (MAP- Archaeology and Geomatics Manager), Kelly Hunter (MAP, Post Excavation Manager)

Selection

Location of Data Management Plan (DMP)

All digital data will be collected, stored and selected in lines with MAP's Data Management Plan (attached to the WSI), located on MAP's servers (available on request).

- 1.1 Strict version control will be applied throughout the project in line with the Data Management Plan (DMP). It is proposed that only the final version of all born digital documents (reports, databases, images-including those created by specialists) will be selected for inclusion in the Archive. Digital photographs will be assessed during post ex and selection based on the principles set out in the DMP and HE guidelines. All raw and processed survey data will be included in the archive.
- 1.2 The digital data will be reviewed following data gathering and analysis to check that data is being properly preserved and version control upheld in-line with the DMP. The final decision about selection for inclusion in the Archive will be made (by the Archaeology and Geomatics Manager) following the reporting stage of the project and enacted during archive completion. A metadata form consistent with ADS examples will be completed for each dataset and included within the final archive.
- 1.3 The following standards/ guidelines will guide the selection of digital data:
- 1.4 Map Archaeological Practice. 2022.. Data Management Plan.
ADS Guides to good practice. <https://guides.archaeologydataservice.ac.uk/g2gp/Main>
ADS Guidelines for Depositors <http://archaeologydataservice.ac.uk/advice/guidelinesForDepositors>
ADS Guidance for the selection of material for deposit and archive
Historic England (2015a) Digital Image Capture and File Storage

De-Selected Digital Data

The procedure for dealing with De-selected digital data and what specialist advice informed this process should be recorded in your DMP. Please copy this information here or attach your DMP as an appendix to

this document.

All stakeholders will be consulted on the fate of all de-selected material. It is envisaged that the de-selected material will be retained on the MAP servers for 2 years following the completion of the project at which point they will be reviewed and deleted as necessary in line with the DMP.

Amendments

Date	Amendment	Rationale	Stakeholders

2 – Documents

Stakeholders

Name the individual(s) responsible for the Documents Selection decisions (i.e. Archaeological Archive Manager, Project Manager, Repository Representative).

Charlie Puntorno (MAP- Archaeology and Heritage Manager), TBC (MAP-Project Officer), Barnsley Museums Archives Team

Selection

2.1 All original documentary material created during data gathering (including those created by specialists) will be selected for inclusion in the archive. Duplicates, photocopies of originals and research materials will be discarded during archive completion in line with the Clifton Park Museum's Deposition Standards.

2.2 The documentary archive will be reviewed following analysis an again at archive completion in order to select for the inclusion in the archive. The site derived archive will be reviewed and curated continuously by the on site Project Offer.

2.3 The following standards/ guidelines will guide the selection of digital data:

MAP Archaeological Practice. 2022. Data Management Plan.

Map. 2022. Post-excavation finds processing, retention and discard procedures

De-Selected Documents

It is envisaged that the material de-selected from inclusion in the preserved archive will be duplicates or re-productions created during the analysis phase of the project. De-selected material will therefore, either be retained to by MAP or recycled.

Amendments

Date	Amendment	Rationale	Stakeholders

3 – Materials

Note: This step should be completed for each material component of the archaeological archive. Copy this table for the various materials as required, providing the 'Material Type' and a section identifier (eg. '3.1') for each.

Material type	Bulk finds (pottery, CBM, animal bone, metal working debris, flint etc) Small finds including; (Decorated/Stamped/Graffiti on pottery and CBM, Coins and Jettons, Metal jewellery, dress accessories (including buttons) and buckles personal objects, Metal tools and knives, Clay tools and work items, Decorated bone, worked bone and bone tools, Stone tools, querns, worked items and architectural fragments, Leather items). All finds regarded as treasure under the Treasure Act, will be reported and initially recorded as a small find.	Section 3.	1
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Stakeholders

Charlie Puntorno (MAP- Archaeology and Heritage Manager), Kelly Hunter (MAP-Post-Excavation Manager TBC (MAP-Project Officer), Barnsley Museums Archives Team

The following Specialists have been contacted as are available to work on bulk finds

Pottery - T G Manby (Prehistoric),
 M R Stephens (medieval and Post-medieval)
 P A Ware (Roman)
 Flint - P Makey
 Animal Bone – Jane Richardson
 Ceramic Building Material – Dr Phil Mills

Selection

3.1.1 In line with MAPS Post-excavation finds processing, retention and discard procedures, all artefacts (items made or used by humans) will be retained in the first instance during excavation. Excavators, especially novices, are instructed to err on the side of caution by retaining everything they think may even possibly be of interest.

All material gathered during the evaluation will be returned to the MAP offices for cleaning and assessment, under the management and guidance of the Post Excavation Manager. Where immediate conservation is required, finds will be transported to York Archaeology's conservation department in York. All finds considered to be 'small finds' will be retained and, where appropriate, fully recorded on site.

Examples of 'small finds' include;

- Decorated/Stamped/Graffiti on pottery and CBM
- Coins and Jettons
- Metal jewellery, dress accessories (including buttons) and buckles personal objects
- Metal tools and knives
- Clay tools and work items
- Decorated bone, worked bone and bone tools

- Stone tools, querns, worked items and architectural fragments
- Composite Objects (organic/inorganic/metal)
- Medieval & Roman Glass
- Waterlogged wood, structures and objects: Structural wood and objects should be kept wet and advice sought immediately from a specialist.
- Leather items

3.1.2 Following analysis by relevant specialists, the entirety of the material archive will be returned to MAP. Following the analysis stage all stakeholders will assess the material and recommendations made by relevant specialists, including recommendations for retention or discard of material. No material will be discarded until all analysis and subsequent reporting (including publication where applicable) has been completed. The Heritage Manager at North Lincolnshire Museum will be kept informed of all decisions regarding the retention or discard of material, and the effect this will have on the final archive.

3.1.3 Advice will be sought by all relevant material specialists (listed above) prior to the archive completion stage of the project. A full list of relevant guidance and best practice documents are included within the WSI.

Map. 2022. Post-excavation finds processing, retention and discard procedures

De-Selected Material

All material will be analysed by a relevant specialist during the assessment and reporting stages of the project.

All de-selected material will, with the agreement of all stakeholders, including developers/landowners, will be reburied or, where appropriate, recycled. A small amount of material may be retained by MAP for use as a reference and/or educational collection.

Amendments

Date	Amendment	Rationale	Stakeholders

Material type

Environmental remains

Section 3.

2

Stakeholders

Kelly Hunter (MAP-Post-Excavation Manager), Tom Broomfield (MAP- Environmental Processing Supervisor), Barnsley Museums Archives Team

The following Specialists have been contacted as are available to work on environmental material
Carbonised Plant Macrofossils and Charcoal-Diane Alldritt

Geoarchaeology- Kristina Krawiec (York Archaeology)
 Pollen Dr Tom Hill (independent)
 Diatoms Dr Tom Hill (independent)
 Ostracods Dr John Whittaker (independent)
 OSL Dr Phil Toms (University of Gloucester)
 Plant macrofossils Stacey Adams (York Archaeology)
 Insects Dr David Smith (University of Birmingham)

Selection

3.2.1 All environmental samples will be processed by suitably experienced personnel, and all remains will be sent to relevant specialists (outlined above) for analysis. Specimens to be included in the working project archive may include: glass microscope slides (pollen samples, sediment thin sections), samples in vials (archaeobotanical remains eg seeds; pollen sample residues; insect remains; molluscs), resin-embedded sediment blocks and dendrochronology samples (dry wood blocks/cores).

3.2.2 The selection strategy for the retention of environmental material will be decided in collaboration with all relevant specialists throughout the duration of the project. No material will be discarded until the analysis and reporting stage of the project has been completed and any discarded material will be based on recommendations made by specialists. It is possible that material derived from environmental samples, or sub samples thereof, may be retained for future analysis, including scientific

3.2.3 A full list of relevant guidance and best practice documents are included within the WSI.
 Dunne, J. (ed.) 2017 Organic residue analysis and Archaeology: guidance for good practice Swindon: Historic England
 Dunne, J. (ed.) 2017 Organic residue analysis and Archaeology: supporting information Swindon: 8 Historic England
 Historic England 2008 Guidelines for the Curation of Waterlogged Macroscopic Plant and Invertebrate Remains Swindon: Historic England
 Historic England (2011) Environmental archaeology: a guide to the theory and practice of methods, from sampling and recovery to post-excavation (second edition) Swindon: Historic England
 Historic England (2014) Animal bones and archaeology: guidance for dealing with archaeological animal bones and teeth, from project planning through to post-excavation Swindon: Historic England
 Historic England 2015 Geoarchaeology: Using earth sciences to understand the archaeological record Swindon: Historic England

De-Selected Material

All material will be analysed by a relevant specialist during the assessment and reporting stages of the project.

All de-selected material will, with the agreement of all stakeholders, will be discarded. material from samples will be retained by the specialists or by MAP for inclusion in their handling and teaching collections

Amendments

Date	Amendment	Rationale	Stakeholders



MODEL BRIEF FOR ARCHAEOLOGICAL EVALUATION BY TRIAL TRENCHING

1 SUMMARY

1.1 There is reason to believe that archaeological remains exist on the site but little is known as to their character, extent and state of preservation. South Yorkshire Archaeology Service (SYAS) has advised that the archaeological implications of the proposal cannot be adequately assessed on the basis of the available information. It has been recommended, therefore, that an archaeological field evaluation will be carried out. This recommendation is in line with government guidance as set out in the *National Planning Policy Framework* (MHCLG 2018).

1.2 All archaeological work undertaken will comply with:

- The “*Regional statement of good practice for archaeology in the development process, Yorkshire, the Humber & the north east*” (available for download from the ‘Guidance for archaeological projects’ page of the SYAS website as the ‘Good practice guide’);
- relevant English Heritage/Historic England best practice guidance documents;
- relevant ClfA Standard and Guidance documents.

2 REQUIREMENT FOR AN EVALUATION

2.1 Proposed works may damage or destroy any archaeological remains that may be present on the site. It has, therefore, been recommended that an archaeological evaluation will take place, to obtain further information on the significance of any archaeological deposits.

2.2 The aim of the evaluation will be to gather sufficient information to establish presence/absence, character, extent, state of preservation and date of any archaeological deposits within the areas of proposed development and to report the results.

2.3 The evaluation will investigate the whole of the proposal area and any areas to be affected by associated activities, e.g. creation of storage compounds.

2.4 The results of the evaluation will be used by SYAS to assess the suitability of the site for the proposed scheme and the need for, and scope of, any further archaeological investigation.

3 EVALUATION STRATEGY

3.1 The fieldwork strategy chosen will be selected to cause the minimum amount of destruction and will naturally operate with due regard to health and safety regulations.

3.2 The amount of trenching required will be dependent upon the nature of the site and the amount and quality of data from any previous non-intrusive investigations. Where such work has been carried out, an appropriate level of trenching will be targeted to test anomalies, apparently blank areas and any areas un-surveyed. Where no such work has been carried out, a minimum 5% sample of the site will be tested.

3.3 In case the extent and nature of features needs to be clarified, an additional 10% of trenching will be allowed for as a contingency.

3.4 The rationale for each trench location will be set out in the written scheme of investigation. Any subsequent changes to trench location will need to be agreed with SYAS.

4 WRITTEN SCHEME OF INVESTIGATION

4.1 A detailed written scheme of investigation (WSI) will be submitted to SYAS for approval. The WSI will include:

- Consideration of any previous work at the site and its immediate environs, geology, topography, etc;
- The methodology for site investigation and recording, including sampling strategies (see section 5 below);
- Details of trench location, with the rationale for each;
- The methodology for post-excavation assessment and reporting;
- The timetable for completion of all site investigation and post-excavation works;
- The contingencies made for full analysis and reporting;
- Details of the arrangements made for deposition of the site archive (see section 9 below).

4.2 The work shall be carried out by appropriately qualified and experienced staff. Details of staff numbers, their roles and relevant experience will be included. Staff CVs will be included (unless already supplied to SYAS in previous project specifications). Any sub-contracted specialists will be subject to the same provisions.

4.3 Prior to submission of the WSI, the proposed works must be discussed with the appropriate Science Advisor (SA) for Historic England. The SA's comments will then be incorporated into the WSI.

4.4 Once agreed, any changes to the WSI will need to be discussed with, and agreed by, SYAS before implementation.

5 EXCAVATION GUIDELINES

5.1 Where trenches are to be opened by machine, the following guidelines will be observed.

5.2 An appropriate machine will be used. The choice will be influenced by the prevailing site conditions, and the machine must carry out a clean and safe job.

5.3 An appropriate bucket will be used.

5.4 All machining will be carried out under the direct supervision of an archaeologist and will be halted if archaeological deposits are encountered.

5.5 All topsoil or recent overburden will be removed down to the first significant archaeological horizon in successive level spits. Under no circumstances will the machine be used to cut arbitrary trenches down to natural deposits.

5.6 All features need to be investigated. Discrete features will be half-sectioned in the first instance; linear features will be sampled a minimum of 20% 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. No archaeological deposit will be entirely removed unless this is unavoidable to meet the aims of the fieldwork.

5.7 The deposits at junctions or interruptions in linear features will be sufficiently excavated for the relationship between components to be established. All termini will be investigated.

5.8 Trenches will be recorded according to accepted principles of stratigraphic excavation.

5.9 The stratigraphy of each trial trench is to be recorded, even where no archaeological deposits have been identified.

5.10 Any human remains that are revealed must initially be left *in situ* and, if removal is necessary, this must comply with the relevant Ministry of Justice, Diocesan and other regulations, as appropriate.

5.11 All finds that are 'treasure' (in terms of the Treasure Act 1996) will be reported to the Coroner and appropriate procedures then followed.

5.12 The trenches, as excavated, and any features within them, must be accurately located on a site plan and recorded by photographs, summary scale drawings, and written descriptions.

5.13 All record photographs will be on black and white film and 35mm colour slide film.

5.14 Digital photography can only be used to supplement the photographic record; it must not form any part of the primary archive.

5.15 All trenches will be planned at 1:50, with individual features being planned at 1:20 where additional detail is required. One representative long section of each trench will be produced, at an appropriate scale. Sections and profiles of each feature sampled will be drawn at 1:10 or 1:20, depending on the size of the feature. Sections will normally be drawn perpendicular to the feature. All plans, sections and profiles will be related to Ordnance Datum, in metres.

5.16 Illustrated notices will be displayed around the site (with the client's agreement), explaining what work is in progress and why, to keep members of the public informed. The notice will be a minimum of A3 size, with font at a minimum size of 16 point.

5.17 Appropriate specialists will visit the site to advise on sampling strategies and their suggested strategies will then be implemented.

5.18 Provision will be made to recover material suitable for scientific dating. Contingency sums will be made available to undertake such dating.

5.19 Further contingency provision will be made for additional specialist advice, e.g. for finds analysis and conservation.

6 POST-EXCAVATION GUIDELINES

6.1 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. Samples must 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.

6.2 All finds are to be treated in accordance with current best practice guidance, including English Heritage's '*Investigative Conservation*'. Finds are to be cleaned and marked, according to accepted principles and in line with appropriate period/material guidelines.

6.3 For ceramic assemblages, recording shall be carried out in a manner compatible with existing typological series in local pottery reference collections, e.g. the South Yorkshire and north Derbyshire medieval ceramics reference collection: http://archaeologydataservice.ac.uk/archives/view/ceramics_eh_2003/

6.4 The guidelines for handling Post Roman Ceramics produced by the Medieval Pottery Research Group are also to be followed, for relevant material: MPRG, 2001 "*Minimum Standards for the Processing, Recording, Analysis and Publication of Post-Roman Ceramics*" Medieval Pottery Res Group Occ Paper 2.

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

6.6 Where material suitable for scientific dating was recovered, sufficient dating will be undertaken to meet the aims of the evaluation.

6.7 Where further fieldwork is not to be undertaken and assessment has identified the need for further analysis, this will be completed drawing upon the contingency allowed.

6.8 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*".

7 MONITORING

7.1 SYAS will be responsible for monitoring the evaluation. A minimum of one week's notice of the commencement of fieldwork must be given by the archaeological contractor to the SYAS in order that arrangements for monitoring the fieldwork may be made.

7.2 Site inspections will be arranged so that the general site stratigraphy can be assessed in the initial stage of trial trenching and/or so that the site can be inspected when fieldwork is near to completion but before any trenches have been backfilled.

7.3 An interim note will be submitted to SYAS within a fortnight of fieldwork finishing. This will include:

- A brief summary of fieldwork results
- A basic description of material recovered
- An initial assessment of character and significance
- A sketch plan of archaeological features on the site
- An updated post-excavation timetable

7.4 A progress update will be supplied to SYAS, in writing, on a monthly basis following this until submission of the full report on the evaluation.

8 REPORTING

8.1 The evaluation will result in a report including background information (with planning application details, where appropriate), methods, detailed results, discussion and conclusions and suitable acknowledgements for those involved, including SYAS.

8.2 Illustrations to be included are:

- a detailed location map;
- a detailed site plan showing all trenches, as excavated;
- all trench plans and trench sections;
- detailed plans of relevant features, as excavated;
- detailed sections of all features, as excavated;
- an overall (phased) site plan showing all archaeological features recorded;
- selection of photographs of work in progress;
- select artefact illustrations and/or photographs.

8.3 The results of assessment of all find categories, by appropriate specialists, will be included in the evaluation report.

8.4 The results of assessment of palaeo-environmental, industrial and other samples, by appropriate specialists, will be included in the evaluation report.

8.5 The results of any scientific dating undertaken will be included in the evaluation report.

8.6 The evaluation report will include a phased interpretation of the site, if possible, and consider the results in their local and regional context.

8.7 A recommendation on whether further investigation or preservation is considered appropriate will first be discussed with SYAS and then be clearly expressed in the report.

8.8 The evaluation report will include a detailed context index and an index to the archive.

8.9 A printed and bound copy of the report must be supplied to SYAS for incorporation into the South Yorkshire Sites and Monuments Record. A digital copy of the report must also be supplied to SYAS and to the HE Science Advisor.

8.10 A summary report of an appropriate length, accompanied by illustrations (at 300dpi resolution), must be prepared and submitted in digital format, for publication in the appropriate volume of *Archaeology in South Yorkshire*.

8.11 Provision will be made for publicising the results of the work locally, e.g. by presenting a paper at South Yorkshire Archaeology Day and talking to local societies.

8.12 The archaeological contractor must complete the online OASIS form at <http://ads.ahds.ac.uk/project/oasis/>.

8.13 Where further fieldwork is not to be undertaken and further analysis is completed, contingency will be made for the preparation and submission of a separate report on the results.

8.14 Where further fieldwork does not take place, a contingency will be made for the preparation and publication, in a local, regional or national journal, of the results of the evaluation.

9 DEPOSITION OF ARCHIVE AND FINDS

9.1 Arrangements for the deposition of the finds and site archive will be made with the relevant museum service **in advance of commencement of fieldwork**. The relevant service can be found via the '*Archaeological Collections Areas Database and Map*' on the ADS website.

9.2 "*Archaeological Archive Deposition Policy for Museums in Yorkshire and the Humber*", produced by Renaissance Yorkshire, created a uniform region-wide approach to the preparation and deposition of archaeological archives. The resulting formal process requires the completion and submission of forms to the relevant museum service at the project initiation, mid-point review and completion stages

(template forms are available for download from the 'Technical Documents' page of the SYAS website).

9.3 The archaeological contractor will contact the museum's archaeological curator or collections manager to discuss archaeological archiving requirements at the initial stage of preparation of the written scheme of investigation. Following agreement with the client, details of archiving arrangements will be incorporated into the written scheme of investigation. This will include confirmation that a budget to cover the museum's deposition charge has been allowed for.

9.4 The South Yorkshire museum services do not accept digital archives; digital archiving will need to be discussed with ADS (or equivalent service) and appropriate costs allowed for.

9.5 Archiving is expected to be carried out as specified, in a timely manner, unless further fieldwork is undertaken and it is agreed that the archives from the separate phases can be amalgamated. On completion of archiving, confirmation of deposition will be supplied to SYAS.

South Yorkshire Archaeology Service
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