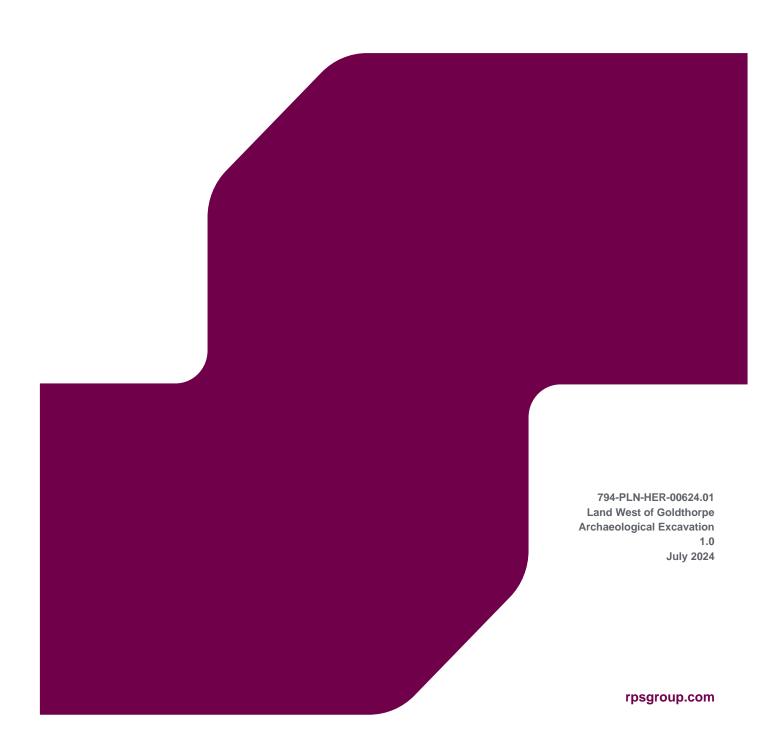


LAND WEST OF GOLDTHORPE, BARNSLEY SOUTH YORKSHIRE

Written Scheme of Investigation for archaeological excavation Hybrid Planning Application 2023/1105



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Prepared by:	Prepared for:

RPS Newlands

Chris Harrison BSc MA MCIfA Associate Director - Heritage

Sherwood House Sherwood Avenue Newark on Trent Notts NG24 1QQ

01636 642707

Chris.Harrison@rpsgroup.com

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1 BACKGROUND

1.1 Site Location

- 1.1.1 The Site is principally located to the western edge of the settlements of Goldthorpe and Bolton upon Dearne (Figure 1). It currently comprises multiple agricultural fields in arable use which are separated by hedgerows, a linear strip of woodland is located within the north-eastern part of the Site.
- 1.1.2 The northern boundary of the Site is formed by the A635 and wraps around two cottages, the southern boundary by Carr Head Lane and Carr Dike, and the eastern boundary by the adjoining commercial and residential development. The northern section of the western boundary does not correspond to any field boundaries but crosses a field between the Carr Dike and the A635 on a broadly north-south alignment.
- 1.1.3 The British Geological Survey (BGS) 1:50,000 records the geology within the site as sandstone along the northern boundary, and mudstone, siltstone and sandstone, both of the Pennine Middle Coal Measures Formation across the middle of the site. To the south of Carr Dike the geology is recorded as Mexborough Rock sandstone. Superficial deposits of Alluvium are recorded along both sides of the Carr Dike (but more prevalent to the north) (https://geologyviewer.bgs.ac.uk/ -accessed 21.10.2022)
- 1.1.4 The Cranfield Soil and Agrifood Institute identifies the soils of the majority of the study site as slowly permeable seasonally wet acid loamy and clayey soils with impeded drainage (Soilscape 17, Soilscape5; http://www.landis.org.uk/soilscapes/ accessed 21.10.2022). The archaeological excavation work at the Aldi site to the east suggests a topsoil level of between 0.3 and 0.5m aOD.
- 1.1.5 The site descends from c. 35m aOD in the north to 25m aOD along Carr Dike, before again rising to 40m aOD in the south.

1.2 Context of the Project

Planning Context

- 1.2.1 Outline Planning Permission is being sought for the construction of Storage and Distribution (Use Class B8) and General Employment (Use Class B2) space at Land to the south of Dearne Valley Parkway, Goldthorpe, S72 0JE. (Application reference 2023/1105).
- 1.2.2 The application is currently undetermined, but it is anticipated that conditions relating to archaeology will be attached to planning permission.
- 1.2.3 In their recommendation to the local planning authority (LPA), following on from the results of non-intrusive and intrusive archaeological evaluation, the archaeological advisor (South Yorkshire Archaeology Service or SYAS) to Barnsley Metropolitan Borough Council (the LPA) confirmed that there is archaeological interest in the development site and that archaeological fieldwork to safeguard that interest through preservation by record should be secured by condition. They proposed a draft condition as follows:

Part A (pre-commencement)

No development, including any demolition and groundworks, shall take place until the applicant, or their agent or successor in title, has submitted a Written Scheme of Investigation (WSI) that sets out a strategy for archaeological investigation and this has been approved in writing by the Local Planning Authority. The WSI shall include:

- The programme and method of site investigation and recording.
- The requirement to seek preservation in situ of identified features of importance.

- The programme for post-investigation assessment.
 - The provision to be made for analysis and reporting.
 - The provision to be made for publication and dissemination of the results.
 - The provision to be made for deposition of the archive created.
 - Nomination of a competent person/persons or organisation to undertake the works.
 - The timetable for completion of all site investigation and post-investigation works.

Part B (pre-occupation/use)

Thereafter the development shall only take place in accordance with the approved WSI and the development shall not be brought into use until the Local Planning Authority has confirmed in writing that the requirements of the WSI have been fulfilled or alternative timescales agreed.

- 1.2.4 This WSI has been prepared to comply with the draft condition wording but to also provide an overarching methodology by and location withing which the works will take place.
- 1.2.5 It is proposed that the condition wording is changed to include that work will be undertaken in line with this WSI once agreed and that works will be designed to enable the condition to be discharged on a phased basis, recognising that the development will be undertaken in phases or subphases, and plots will become live at different times.
- 1.2.6 This Written Scheme of Investigation (WSI) requires that implementation and dissemination of the archaeological work required within each phase or subphase will be detailed prior to development, including any demolition and groundworks within a plot. A Phase/Plot specific method statement (PSMS) will be agreed with SYAS by the appointed archaeological fieldwork contractor prior to the works commencing as secured by this WSI and include:
 - The programme and method of site investigation and recording in accordance with this WSI.
 - The requirement to seek preservation in situ of identified features of importance.
 - The programme for post-investigation assessment.
 - The provision to be made for analysis and reporting.
 - The provision to be made for publication and dissemination of the results.
 - The provision to be made for deposition of the archive created.
 - Nomination of a competent person/persons or organisation to undertake the works.
 - The timetable for completion of all site investigation and post-investigation works.

1.3 Timetable/work stages

- 1.3.1 The fieldwork programme identifies a series of locations within the development site which require archaeological excavation and are of Archaeological Interest. These will be undertaken as each phase or subphase of development becomes live. A supplementary archaeological phase-specific method statement (PSMS) will be prepared and submitted prior to the start of each phase of works. The PSMS submitted for a phase or subphase will present a detailed timetable of the works, and will be approved by SYAS prior to implementation.
- 1.3.2 No archaeological fieldwork will be required outside of the areas identified in figure 2 or detailed in section 2.2 of this WSI.
- 1.3.3 The fieldwork programme for each area shown on figure 2 and detailed in section 2.2 will be detailed in the PSMS.
- 1.3.4 Preparation of the post-ex assessment report will take up to 6 months following the completion of fieldwork, dependent on specialist availability.
- 1.3.5 The final report and publication text for each phase may take up to 24 months each to complete depending upon the nature and extent of specialist involvement and availability.
- 1.3.6 Archive deposition will be made within six months of completion of the final phase of fieldwork (subject to the archives being open and available to receive depositions).
- 1.3.7 This timetable is summarised in the table below and will be updated in the phase specific method statements:

No.	Task	Date	Duration
0	Submission of Written scheme of Investigation (this document) for SYAS agreement	July 2024	2 weeks for approval
1	Submission of phase-specific archaeological method statement (PSMS) for agreement		At least 15 working days prior to works starting
2	Notification to Council Archaeologist and Museum Curator		At least 5 working days before start
3	Fieldwork	TBC	TBC
4	Processing of excavated data, preparation of draft post excavation report	Following completion of fieldwork	6 months after fieldwork
5	Issue of final Report and publication text	post-ex works	work subject to receipt of Council Archaeologist comments and specialist reports
6	Deposition of Archive	Following report sign off	Within 6 months of completion of final reporting

1.3.8 Any revision to the timeframe will be agreed in writing and communicated to all stakeholders.

1.4 Review Points

- 1.4.1 Where unexpected findings are uncovered a review of the timetable and tasks/methodology will be undertaken. This will be an iterative process developed through the fieldwork programme and reactive to its findings. Any such changes will need to be agreed in advance by all key stakeholders including the Client, RPS and SYAS.
- 1.4.2 Frequent site meetings will be undertaken to review the findings. This will be undertaken from the point where the mechanical excavation of the areas is nearing completion and a pre-excavation plan has been made available unless representations can be made that excavation work should cease earlier (either for archaeological reasons or health and safety reasons).
- 1.4.3 The excavation work will be driven by the research questions of the project. Standard sampling percentages are included in section 4 but these should be used as a guide not a rule and overridden both in reduction of work and an increase where the research questions govern such. Where possible this will be undertaken as a trade-off to makes sure the budget is stable and the proportionality of the excavation work is maintained.
- 1.4.4 It may be that the Post Excavation Assessment identifies analytical techniques that are warranted or not that were otherwise included or not by the results of the evaluation. Any such changes will be discussed and agreed between the key stakeholder including the Client, RPS, and SYAS.
- 1.4.5 Minor changes to an agreed WSI or PSMS will be submitted to SYAS for written approval but major changes will require the preparation of an updated WSI for submission to the approving body (SYAS or planning authority as appropriate).

1.5 Monitoring Arrangements

- 1.5.1 The aims of monitoring are to ensure that the archaeological works are undertaken within the limits set by the project design and to the satisfaction of the Local Planning Authority and the developer client.
- 1.5.2 SYAS will be given at least 5 working days' advance notice of the date of commencement of each phase of the archaeological programme and will be free to visit at any reasonable time to monitor the implementation of the works on behalf of the local planning authority.
- 1.5.3 The archaeological aspects of the project will be managed on behalf of the developers by Chris Harrison, RPS Associate Director Heritage, with assistance from other RPS staff as required.

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1.6 Archaeological Background

- 1.6.1 The following is a summary of the archaeological potential of the site, based on the documents submitted with the planning application: 'An Archaeological Desktop Assessment of land west of Goldthorpe, Barnsley, South Yorkshire' , which includes the results of an archaeological geophysical survey² and an aerial photo survey³. The results of these were tested by a Trial Trench evaluation in March- April 2024⁴
- Immediately to the east of the site, in advance of the development within an industrial estate and car park archaeological work (HER ESY1317, ESY210 and 04634) has revealed a Iron Age-Roman field system as well as a pit possibly dating to the Mesolithic period. The field systems largely existed on a southwest northeast alignment in contrast to the vaguely north south later field systems. One of the ditches diverted around an **Early Bronze Age cairn/barrow** suggesting the layout of the field system may have been influence by earlier features, or at least used earlier landscape markers as points of reference. A second possible small **Mid-Late Bronze Age** barrow was identified at the northwest corner of the site and appears to have been within the corner of a field near to a field boundary and not have the field boundary jink around it. This may suggest the boundaries, or at least the main framework were originally laid out in the mis-late Bronze Age Excavations at Hatfield near Doncaster have also revealed that some of the ditches of a similar coaxial system may have been laid out in the Bronze Age (ASWYAS 2019)⁵.
- 1.6.3 It is notable that these features are clearly visible on the greyscale geophysical survey for the Aldi site. The jink around the cairn is striking and the area in the northwest where the smaller Barrow was uncovered shows an area of pitting.
- 1.6.4 Cropmarks of enclosures and field systems, believed to date the <u>Iron Age/Romano-British</u> period, were identified from aerial photographs within the site and local landscape. The geophysical survey confirmed that the rectilinear enclosure identified from aerial photography survives in the south of the site. The geophysical survey has also revealed that the enclosures are located within a probable Romano-British brickwork patterned field system of land division which extends across the site but is most evident towards the south. The excavations to the east revealed a small corner enclosure which was the focus of activity again picked up the geophysical survey.
- The excavations to the immediate east did radiocarbon date the later fills of one of the coaxial field systems to the Early Medieval period and also revealed the below-ground remains of two early medieval corn-drying ovens, each located in the corner of a field. The ovens were figure-of-eight-shaped, comprising adjoining fire and drying chambers, set within shallow, roughly rectangular pits, in which a superstructure was presumably housed. The fills contained a large quantity of charred grain, with burnt clay and willow providing evidence for collapse of the oven. Radiocarbon dates taken from the charred grain ranged from the early 5th–6th centuries AD, providing significant evidence for the continuation of the Roman field system.
- The Domesday Survey of 1086 records the settlements of Goldthorpe and Billingley. The name Goldthorpe (Goldetorp in the Domesday Book) means outlying farm or hamlet of a man called Golda, whilst Billingley (Bilingeleia) means 'Woodland clearing of the family or followers of a man called Bill or Billa. The settlements are small and possible in the case of Billingley unoccupied. The centres of both places are well outside the study site which would have sat in the open fields or pasture along the Carr Dike. The Dike has formed the boundary between the lands associated with each settlement for some time and is likely it defined the open fields between both.
- 1.6.7 Evidence of medieval and/or post-medieval ridge and furrow cultivation was uncovered in the excavations to the immediate east of the site showing that the land was outside of the settlement areas.
- 1.6.8 The HER records <u>Post Medieval</u> Bell Pits at the western edge of the Search Area (over 1km away from the site 04531/01, ESY228). These were uncovered during trial excavations but were not able to be dated. They post-dated the ridge and furrow and were located along the line of outcropping coal similar to the study site where it was targeted in the 1940's for open cast extraction.

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The DBA included review of historic map evidence: The earliest mapping consulted are the Tithe maps for Billingley (1839) and Bolton upon Dearne & Goldthorpe (1837). This shows the study site formed part of a large number of fields split between the two parishes. The route of the Carr Dike (not labelled) can be seen running through the central and north-eastern parts of the study site and continuing west where it forms the southern boundary of this area of the study site. In general, the names of the fields relate to their position/distance from Carr Dike, Billingley Green, or Billingley Bridge. A number of allotments are positioned in the north of the site as well as two dwellings which also functioned as Inns or Shops at Billingley Green. These are the much smaller enclosures just off the A635 near to Billingley Bridge

Trial Trenching

- 1.6.10 A scheme of trial trenching was undertaken in March-April 2024. It was successful confirming the results of the previous non-intrusive surveys and revealed the presence of a large co-axial field system, formed of eighteen ditches. No corner enclosures, corrals or evidence of working areas or settlement were revealed in any of the trenches this was consistent with the surveys.
- 1.6.11 The earliest feature on site can be dated to the late Roman period based on pottery recovered from a ditch in Trench 57. The pottery was present within the upper fill of the ditch. This date is consistent with the extensive ditched field systems that extend across the wider landscape and which have been previously recorded within the fields to the east and northeast of site.
- 1.6.12 The main co-axial trunk (Ditch 1 in the trial trenching report aligned north-south in the east of the site and continuing into the Aldi site to the north) had been uncovered during excavations to the north-east. Dating evidence from the Aldi excavations dated the ditch to the late Iron Age/Roman period. It is assumed that Ditch 1 also dates to the late Iron Age/early Roman period.
- 1.6.13 A possible stone revetment wall was uncovered within the ditch in Trench 86 although it is somewhat unclear what the provenance or function of the stone was.
- 1.6.14 The features investigated are evidence of an agricultural landscape of field systems. The fields investigated represent the continuation of systems identified during previous excavations to the east and northeast of the current site. Recuts present throughout the ditches, as well as the addition of a possible later trackway, provide evidence for the longevity of the field system overtime.
- 1.6.15 Evidence of post-medieval agricultural practices were demonstrated by plough furrows, gullies and field drains, a well as modern quarrying most commonly recorded in the northern part of site.
- 1.6.16 No discrete features were present in the southern area suggesting fields for agricultural use rather than domestic occupation. This is consistent with the known historical record in that the north of the site was open cast mined for coal, whilst the southern area remained as field systems.

2 PROJECT DETAILS

2.1 Aims and Objectives

- 2.1.1 The aim of the programme of archaeological excavation will be to mitigate the loss of significant archaeological remains identified by the scheme of trial trenching through a scheme of preservation by record.
- 2.1.2 The aims will be realised through the achievement of the following specific objectives:
 - To investigate the enclosures through targeted excavation of junctions of the field systems where excavations to the north have shown archaeological remains to be present.
 - To retrieve up to 10 OSL samples from the fieldsystem to date it if no other forms of dating are available.
 - To establish the location, extent, date, character, condition, significance and quality of any archaeological remains within the excavation areas
 - To retrieve the artefactual and environmental remains that will further enhance our understanding of the site where they appear to be present
 - To place the findings within the context of the South Yorkshire Historic Environment Research framework –particularly in relation to Iron Age and Roman field patterning,
 - To produce a site archive for deposition with an appropriate museum and to provide information for accession to the South Yorkshire HER.
- 2.1.3 The previous site investigations identified significant archaeological remains dating to the Iron Age and Roman periods.
- 2.1.4 The work detailed in this WSI will provide information that can contribute towards research agendas associated with the rural settlement and landscape and its management in the Iron Age and Roman period. Agenda items which raise research questions on the form function and date of the field systems (Iron Age section on Field Systems and trackways and Roman section on Landscape). It could be that the excavations provide evidence for rural economy, utilisation and links into the wider world through the material culture they have.
- 2.1.5 The targeting of ditch junctions within the field system should provide information on the stratigraphic relationship between different sections in the hope that this will add information as to how the systems were laid out and utilised; previous work to the north and east at the Aldi site also demonstrated that the corners of the field system are key points where significant archaeology is located.
- 2.1.6 There is potential for further excavation and analysis on the ditches that form the Romano-British field system. The ditches could be excavated with the aim of gaining datable material to determine which period they originated in and to contribute to the existing knowledge of the development of the field boundary systems (SYHERF 2023). Additionally, dating evidence may help add to the emerging picture that the field system prolifeterated into the Early Medieval period as at the Aldi site to the north and east instea of the current interpretaiton that the ditched system went out of use in the 3rd century AD and particularly examine if there is more than one phase of activity occurring on site during the Romano-British period
- 2.1.7 The research aims will be refined throughout the project and an assessment of the potential for the site to answer these questions, and/or other research questions that become apparent depending on finding will be provided in the post-excavation assessment report as well as in each individual phase method statement.
- 2.1.8 This WSI has been designed in accordance with current best archaeological practice and the appropriate national and regional standards and guidelines including:
 - Code of Conduct: professional ethics in archaeology (Chartered Institute for Archaeologists, published 2014, most recently revised October 2022);
 - Standard and Guidance for Archaeological Excavation (Chartered Institute for Archaeologists, 2014, updated October 2020);

- Standard and Guidance for the collection, documentation, conservation and research of archaeological materials (*Chartered Institute for Archaeologists, 2014, updated October 2020*)
- Standard and Guidance for the creation, compilation, transfer and deposition of archaeological archives (Chartered Institute for Archaeologists, 2014, updated June 2020)
- Renaissance Yorkshire: Archaeological archive deposition policy for museums in Yorkshire and the Humber. MLA Renaissance Yorkshire (*Turnpenny*, *M.* 2012)
- Archaeological Field Evaluation Standards and Guidance (SYAS 2022)
- Yorkshire, the Humber and the North East: A Regional Statement of Good Practice for Archaeology in the Development Process (SYAS 2018).
- 2.1.9 In order that the investigation supplies information of the required quality, the above Codes, Standards and Guidance issued by the Chartered Institute of Field Archaeologists (CifA) form a requirement of this specification.

2.2 Excavation Rationale

- 2.2.1 The excavation strategy has been prepared in consultation with the Council Archaeologist.
- 2.2.2 The excavations will comprise excavation of 17 Areas. The areas are located to investigate further the findings identified in the trial trenching and mitigate their loss to the development. Area locations are shown in Figure 2 and 3. The rationale for the Areas is tabulated below:

Area No(s)		Reason
1-3	1600m2 each or	Mitigate the loss of the main trunk ditch of the enclosure
	40x40m	system. The junctions are specifically targeted given the
		findings to the north and east where significant
		archaeological remains were located in the corner of fields.
4	1600m2 or	To mitigate the loss of the ditch where stone revetment
	40x40m	was uncovered and to further understand why stone was
		used to solidify the ditch here.
5-14	800m2 or	Investigate the junctions of the field system to see if they
	20x20m	were set out concurrently or not and provided dating where
		possible
15	0.47ha	Mitigate the 'v' shaped ditch which appears curvilinear
16	0.27ha	Mitigate the area where Roman Pottery was recovered
		from the ditch
17	0.21	Mitigate the corner of a field near to the evidence
		uncovered in the Aldi site to the north and east.
Evaluation Trenches	50x1.8m each	To evaluate an area that was inaccessible during the
131 and 132		evaluation
TOTAL Mitigation	2.39ha	

- 2.2.3 A contingency of the equivalent of 5% of the area of excavation will be held in case further clarification of the initial results is required to adequately achieve the aims detailed in this WSI.
- 2.2.4 If significant findings are made in evaluation trenches 131 and 132 that were inaccessible during the evaluation, further mitigation measures may be warranted and this WSI will be updated to reflect. In addition, a phase specific method statement and if necessary phase specific WSI will be submitted and agreed with SYAS at least 15 days prior to the fieldwork commencing. A contingency of two 40x40m areas each centred on findings within tr 131 and 132 will be held.

2.2.5 A project archive, including finds and records, will be prepared and deposited with Experience Barnsley - Barnsley Museum and Archives Centre (physical archive) and the Archaeological Data Service (ADS – digital).

2.3 Outputs and Dissemination

- 2.3.1 The fieldwork results will be detailed in an illustrated report, to be provided to the Council Archaeologist, and the Planning Authority in compliance with the planning condition requirements. Copies of the report will be issued to the South Yorkshire HER and uploaded to the Archaeology Data Service's OASIS portal.
- 2.3.2 A project archive, including finds and records, will be prepared, and deposited with Experience Barnsley Barnsley Museum and Archives Centre (physical archive) and the Archaeological Data Service (ADS digital).
- 2.3.3 It is likely that the results will as a minimum require a note within a local journal. It is further likely that a short article should be written for inclusion in the Yorkshire Archaeological Journal.
- A scheme of outreach should be undertaken that goes beyond 'presenting at South Yorkshire Archaeology Day', although this should be undertaken. As such, as a minimum the archaeological contractor will allow for a specialist community archaeologist to produce an information pack for the local schools as well as provide one tour day for the local school at the end of Carr Lane most likely when area 15 is open. The site tours will comprise a tour of the open excavation areas and discuss the pertinent findings. The tours will comprise 10 invitees per visit to be accompanied by a representative from RPS and the archaeological contractor and be fully risk assessed prior to being undertaken. Further outreach opportunities should be put forward in the phase specific method statements and identified during the post excavation processing.

3 FIELDWORK METHODOLOGY

3.1 Statement of Conformity

- 3.1.1 In the absence of a SYAS document for the guidance of excavation work in South Yorkshire, the standards for evaluation will be adhered to where applicable, It is the intention that SYAS standards for archaeological work will be adhered to in full. A copy of the standards is provided in appendix 1.
- 3.1.2 If it becomes apparent that the project warrants deviation from these, this will be agreed in writing with SYAS in advance. Every effort will be made to achieve the project aims where achievable and excavation work should be undertaken with this in mind. As such excavations should not follow a prescriptive 'dig by numbers' system, although it should use the agreed percentages as a guide, but in response to the findings and the questions that can be answered. In this way the excavation work should be responsive to its findings.
- 3.1.3 RPS will inform the Council Archaeologist at least five working days in advance of the commencement of fieldwork.
- 3.1.4 The fieldwork contractor will contact the relevant local receiving museum prior to the start of fieldwork and complete the required project initiation form which will be supplied to the museum and Council Archaeologist.
- 3.1.5 The location of any environmental constraints, such as root protection zones along hedgerows and around retained trees, will be provided to the fieldwork contractor to ensure that archaeological works do not adversely affect the ecological resource.

3.2 Sampling Strategy

3.2.1 Given the results of the trial trenching, the following sample levels are to be undertaken:

Feature Class	Proportion to be excavated
Pre-modern linear features not associated with structural remains	10% of the length unless scientific dating is unfeasible then 20% of length. This should
with structural remains	be responsive to the information potentially
	retrievable and sections should be placed
	where fills look different or surface finds
	are noted.
Structural components	Recorded sections to include all terminals
	and other relationships. Initially 50% then
	100% unless agreed is unwarranted. All structural remains should be excavated to
	confirm if zonation can be identified in
	surrounding gulley's etc.
Layers/spreads/stratified deposits	Excavation in spits using running sections,
	quadrants or half section or grid system as
	appropriate
Discrete features and pits	50-100% excavation
Post built structures	100% of each post hole
Ring ditches or gullies	50% of fill with particular care to identify
	any zonation, then 100% if warranted
Linear features associated with structures	Minimum of 20% of length to include all
	intersections and terminals and at least
	one profile slot.
Human Remains	100%

- 3.2.2 Field system junctions, should be excavated as a minimum of 1 intersection slot, and a profile slot for each ditch entering the intersection.
- 3.2.3 The environmental potential for the site is low based on the evidence from the trial trenching. However, it was moderate in the Aldi excavations to the north and east. The sampling strategy will include the routine sampling of deposits for the retrieval and assessment of the preservation conditions and potential for analysis of all biological remains, and will be developed/revised in consultation with an environmental specialist and the Council Archaeologist. This site-specific environmental sampling strategy will be reviewed as the project progresses. Areas of obvious organic preservation should be targeted.
- 3.2.4 The environmental specialist will conduct or commission, as appropriate, programmes of scientific investigation in conjunction with the fieldwork, the results of which will be presented in the final publication or report. They will also ensure that, where time allows, the strategy evolves on site by seeking to ensure that bulk samples taken in the initial stages of the project are processed quickly and the results fed back to inform the excavation strategy. All environmental work will be undertaken in accordance with current Historic England guidelines (see "Environmental Archaeology: A guide to the theory and practice of methods, from sampling and recovery to post-excavation (second edition)" Campbell, G., Moffett, L, and Straker, V. 2011, English Heritage).
- 3.2.5 Bulk samples will be taken at the time of initial excavation, not after a feature has been half-sectioned. Sample sizes will normally be 40-60 litres unless the deposit is smaller in volume in which case 100% of the feature fill will be recovered as the sample. Samples will be directed to a representative range of context type from each phase, and examine:
 - Survival of material
 - Key archaeological contexts
 - Potential
- 3.2.6 A suitable specialist will, if necessary, make a site visit to advise on deposits suitable for environmental sampling and/or geoarchaeological assessment. If necessary, the regional Historic England scientific advisor should be consulted.
- 3.2.7 Where taken, sampling methods for macrofossils and microfossils will follow the document Environmental Archaeology: A Guide to the Theory and Practice of Methods from Sampling and Recovery to Post-excavation, Second edition (Campbell, Moffett & Straker, 2011, English Heritage). Charred plant samples will be wet sieved with flotation using a 0.5mm mesh. All residues will be checked.
- 3.2.8 Should waterlogged deposits be encountered they will be left in situ and the advice of a specialist sort in terms of lifting and conservation. However, it is not expected that waterlogged remains will be encountered.
- 3.2.9 Samples will be taken for scientific dating (principally radiocarbon and OSL dating), where dating by artefacts is insecure and where dating is necessary to fulfil the aims of the project. Where in situ timbers are found to survive in good condition, samples will be taken for dendrochronological determination following procedures presented in the Historic England guidelines 'Dendrochronology: guidelines on producing and interpreting dendrochronological dates' (June 1998, English Heritage).
- 3.2.10 Where there is evidence for industrial activity, macroscopic technological residues (or a sample of them) will be collected by hand. Separate samples (c.10ml) will be collected for micro-slags (hammer-scale and spherical droplets). Excavation and sampling of such deposits will be in accordance with Historic England guidelines 'Archaeometallurgy: Guidelines for Best Practice' April 2015.

4 POST-INVESTIGATION ASSESSMENT, ANALYSIS AND REPORTING

4.1 Statement of conformity and/or details of divergence from SYAS standards

- 4.1.1 It is the intention that SYAS standards for archaeological work will be adhered to in full. A copy of the standards is provided in appendix 1.
- 4.1.2 If it becomes apparent that the project warrants deviation from these, this will be agreed in writing with SYAS in advance.

5 ARCHIVE

5.1 Statement of conformity and/or details of divergence from SYAS standards

- 5.1.1 It is the intention that SYAS standards for archaeological work will be adhered to in full. A copy of the standards is provided in appendix 1.
- 5.1.2 If it becomes apparent that the project warrants deviation from these, this will be agreed in writing with SYAS in advance.

5.2 Recipient Museum

- 5.2.1 An integrated project archive (including both artefacts/ecofacts and project documentation) will be prepared upon completion of the project, if necessary. The integrated archive will be deposited with Experience Barnsley Barnsley Museum and Archives Centre. A selection strategy will be provided by the contractor and appended to their phase specific method statement.
- 5.2.2 The archaeological contractor will submit the project initiation, mid-point review and completion of works forms detailing the archive and it size preceding during and after any works. All works will be archived under this accession number and the archaeological contractor will complete the required archive deposition forms.
- 5.2.3 The archive of finds and records generated during the project will be kept secure at all stages of the project. All records and materials produced will be archived in accordance with SYAS and Experience Barnsley Barnsley Museum and Archives Centre (SYAS 2022 and Turnpenny 2012) guidance, and industry best practice (Brown 2011, English Heritage 2006, CIfA 2014 and SMA 1993). Condition and arrangements of the deposition of the archive will be obtained by the archaeological contractor from Experience Barnsley Barnsley Museum and Archives Centre on the completion of the project.
- 5.2.4 Born-digital material will be archived digitally and deposited with a Trusted Digital Repository in line with SYAS and Experience Barnsley Barnsley Museum and Archives Centre's archive deposition procedures. The archive will be deposited with Archaeology Data Service unless otherwise agreed with Experience Barnsley Barnsley Museum and Archives Centre and the Council Archaeologist. The Council Archaeologist and the museum curator will be notified on completion of deposition of the digital archive, and a link to the archive provided. A Data Management plan will be included in the PSMS.
- 5.2.5 In the event that artefacts are retrieved from the site, the transfer of the ownership of the finds will be made to the Experience Barnsley Barnsley Museum and Archives Centre, assuming the landowner gives their approval.
- 5.2.6 An online OASIS form at http://www.oasis.ac.uk/ will also be completed as part of the project. This will be on the understanding that this information will be made available through the above website, unless otherwise agreed.
- 5.2.7 If no other publication is recommended, a brief site summary in text format will be provided for Yorkshire Archaeological Journal's annual fieldwork round-up. This will be sent to the journal editor at the same time as submitting the final report to South Yorkshire SMR.
- 5.2.8 Provision will be made for updating the South Yorkshire Historic Environment Research Framework (SYHERF) where the results of a fieldwork project contribute towards agenda topics. This will be done using the interactive digital resource at https://researchframeworks.org/syrf/ and noted explicitly in the conclusions of the relevant report.

5.3 **Archive selection strategy**

- 5.3.1 An archive selection strategy is will be appended to the fieldwork contractors phase specific method statement and provide to SYAS for agreement prior to the fieldwork commencing. It will be based on the CIfA Toolkit for Selection Archaeological Archives (https://www.archaeologists.net/selection-toolkit).
- 5.3.2 On the completion of fieldwork, the relevant specialists and recipient museum will be consulted to update the selection strategy set out in the phase specific method statement in accordance with best practice guidance (https://www.archaeologists.net/selection-toolkit).
- This will consider all documents, finds, samples, and digital files generated during the project, 5.3.3 including illustrations.
- 5.3.4 The aim of this process is to produce a project archive that allows a full re-examination and interpretation of all the results of the project whilst avoiding replication, repetition, or the retention of materials not considered germane to future analysis.

5.4 **Digital Management Plan**

- 5.4.1 A digital management plan (DMP) will be complied by the appointed contractor and appended to their phase specific method statement, no less than 10 working days prior to commencement of the fieldwork program.
- 5.4.2 A generic DMP can be provided on request.

6 STAFFING

6.1 Personnel

- 6.1.1 Fieldwork will be undertaken by a Registered Archaeological Organisation of the CIfA working under the overall direction of RPS Group. RPS is a Registered Organisation with the Chartered Institute for Archaeologists.
- 6.1.2 The work will be directed for and manged by the archaeological contractor by appropriately qualified and experienced staff. The site work supervised by an experienced PO or Supervisor. The site team will utilise a pool of suitably experienced staff by the contractor. All staff will be added into the phase specific method statements and communicated in writing to SYAS at least 10 working days prior to the site works commencing. Other persons to be used by the archaeological contractor will include the internal and external specialists (and will be similarly communicated to SYAS in writing 10 working days prior to site work starting) to be listed in the below table specialists where necessary:
- 6.1.3 Chris Harrison MCIfA of RPS, will manage implementation of the programme of works on behalf of the developers.
- 6.1.4 Contact details for the site team will be held in the RAMS and disseminated to the project team prior to the work starting.

7 INSURANCE & HEALTH AND SAFETY

7.1 Insurance

7.1.1 The archaeological contractor will produce evidence of Public Liability Insurance to the minimum value of £5m and Professional Indemnity Insurance to the minimum of £2m.

7.2 **Health and Safety**

- 7.2.1 All works will be in compliance with the Health and Safety at Work Act (1974) and all applicable regulations and Codes of Practice.
- 7.2.2 All archaeological staff will undertake their operations in accordance with safe working practices.
- 7.2.3 A site-specific risk assessment will be undertaken and recorded prior to the commencement of work on site.
- 7.2.4 A continuous process of dynamic risk assessment will be undertaken and if significant hazards are identified a specific risk assessment will be undertaken and recorded. Control measures will be implemented as required in response to specific hazards.
- 7.2.5 Safe working will take priority over the desire to record archaeological features or remains, and where it is considered that recording is dangerous, any such features or remains will be recorded by photography, at a safe distance.

