

**LAND OFF HALL GARDENS, BRIERLEY, BARNSLEY,
SOUTH YORKSHIRE, S72 9HT**

ARCHAEOLOGICAL EVALUATION REPORT

Central NGR: SE 41103 11240
Planning Authority: Barnsley District Council
Planning Ref: 2019/1530
PCAS site code: HGBC 21
PCAS job no.: 2498
OASIS ID: preconst3-429731

Prepared for

Saul Homes

by

J. Sleap

July 2021



PCAS Archaeology Ltd
47, Manor Road
Saxilby
Lincoln
LN1 2HX

Tel. 01522 703800
e-mail info@pcas-archaeology.co.uk

©PCAS Archaeology Ltd

Contents

Summary	3
1.0 Introduction	4
2.0 Location and Description	4
3.0 Geology and Topography	4
4.0 Planning Background	5
5.0 Archaeological and Historical Background	6
6.0 Methodology	7
7.0 Results	8
8.0 Discussion and Conclusion	13
9.0 Acknowledgements	13
10.0 Effectiveness of Methodology	13
11.0 References	13

Appendix 1: Context Summary

Appendix 2: Environmental Report

Appendix 3: OASIS Form

Illustrations

Fig. 1: Site location at scale 1:25,000

Fig. 2: Plan of Site development proposals. Not to scale.

Fig. 3: Extract from 1854 OS map.

Fig. 4: Trench Location Plan at scale 1:500

Fig. 5: Trench Plans & Sections at scale 1:200 & 1:20

Colour Plates

Plate 1: Site location looking northeast.

Plate 2: Ditch [204] looking northeast.

Plate 3: Trench 2 showing ditch [204] towards northwest end of trench. Looking southeast.

Plate 4: Possible ditch or furrow [304]. Looking southwest.

Plate 5: Ditch [404] looking northwest.

Plate 6: Pit [504] looking northwest.

Plate 7: Trench 6 looking northeast.

Plate 8: Pit/Tree bowl [604] looking northwest.

Plate 9: Pit/Tree bowl [606] looking southeast.

Plate 10: Trench 8 looking northwest showing gradient and ditch [804] towards northern end.

Plate 11: Ditch [804] looking northeast.

Summary

PCAS Archaeology Ltd. was commissioned by Saul Homes to undertake a scheme of archaeological evaluation trenching to prefigure and support an application for residential development on land off of Hall Gardens, Brierley, Barnsley, South Yorkshire. A total of 8 30m by 2m trial trenches were excavated to determine the presence or absence of archaeology over the proposed development footprint.

The site lies behind Hall Gardens, a recent development within the garden of Brierley Hall, a Grade II manor house that dates from the 18th century but may have replaced an earlier late medieval structure. The Site lies in the historic core of the village, in an area likely to have been divided in tofts in the medieval period. Geophysical survey of the Site has identified both linear and discrete anomalies that are sampled by the trenching scheme.

The evaluation revealed four small ditches, for the most part pertaining to an undated, right angled enclosure and 3 possible pits or potential tree bowls, also undated.

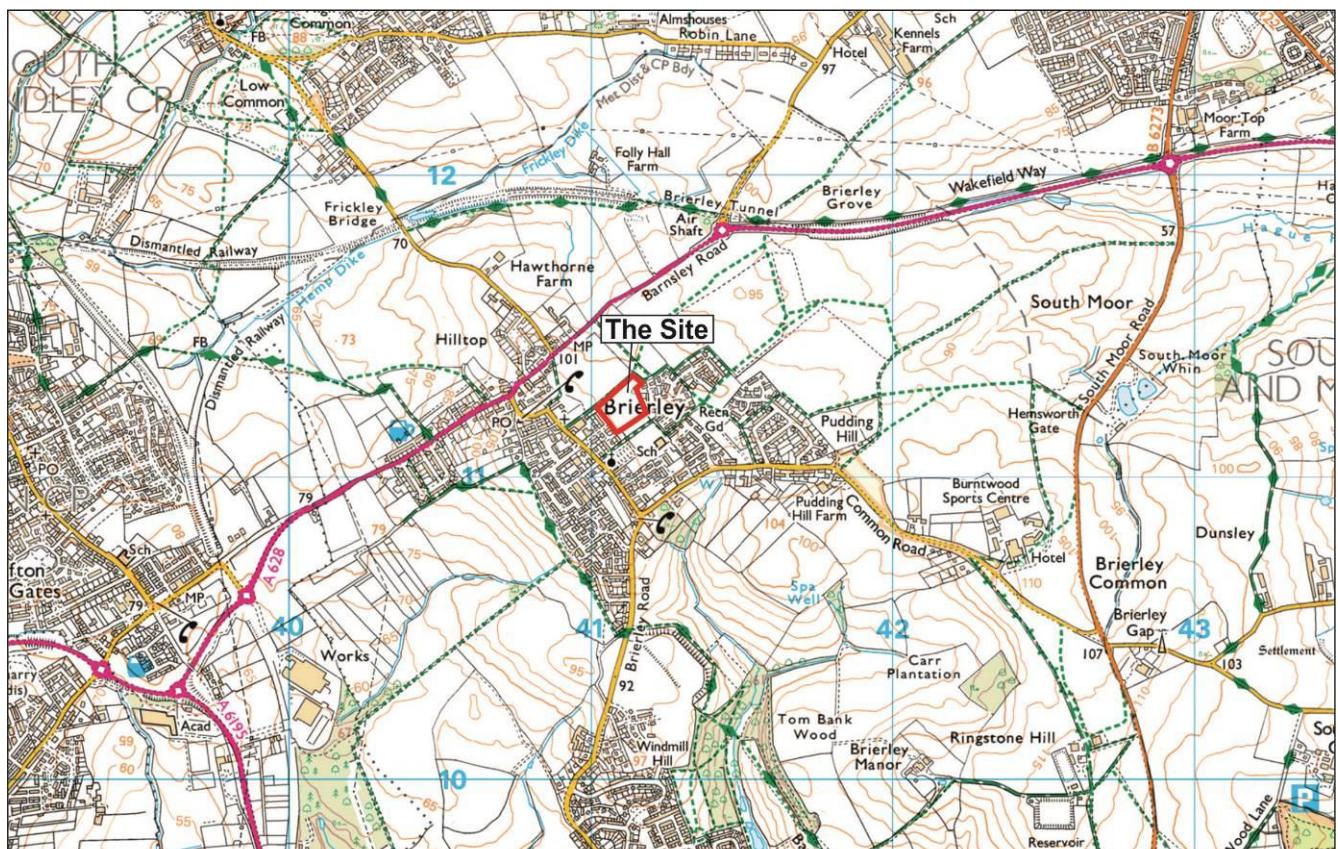


Figure 1: Site location map at scale 1:25,000. OS Explorer map sheet 278. Site location is shown in red. (OS mapping © Crown copyright. All rights reserved. PCAS licence no. 100049278).

1.0 Introduction

PCAS Archaeology Ltd. (PCAS) was requested by Saul Homes to prepare a specification for a scheme of archaeological evaluation trenching on land northeast of Hall Gardens, Brierley, to inform and advise a planning application for residential development.

A geophysical survey on the Site has identified a number of magnetic anomalies interpreted as likely buried archaeological features. This evaluation targets and samples these anomalies to investigate character and dating of any revealed features.

This WSI (Written Scheme of Investigation) details the methodology to be employed during the fieldwork, and the post-excavation reporting and archiving procedures. It follows current best practice and appropriate national guidance including:

- NPPF, National Planning Policy Framework (2019);
- ClfA Code of Conduct (2019);
- ClfA Standards and Guidance for Archaeological Evaluation (2020);
- Management of Research Projects in the Historic Environment (MoRPHE)

This strategy is subject to the approval of the Planning Archaeologist at the South Yorkshire Archaeology Service (SYAS).

2.0 Location and Description (Figs. 1, 2 and 4)

Brierley is a small town in the metropolitan borough of Barnsley in South Yorkshire. It lies primarily on the south side of the A628 c.3km northeast of Cudworth, extending south along Church Street towards the neighbouring town of Grimethorpe.

Hall Gardens is a cul-de-sac on the east side of Church Street in the centre of Brierley. Formerly the site of Brierley Hall, the modern residential estate is less than 10years old at the time of writing. The Site lies at the northern end of Hall Gardens, an unused plot (grazing) of c.2.021 acres that lies between Hall Gardens and Spa Well Grove, defined to the north by Wager Lane. The Site is roughly rectangular with a small projection at the northern corner.

The approximate central NGR of the site is SE 41103 11240.

3.0 Geology and Topography

The bedrock geology of Brierley is Brierley Rock – Sandstone. It is a sedimentary bedrock formed in a swamp/estuary/delta setting in the Carboniferous period c. 310-315million years ago when this area was coastal. Borehole data from the area records 0.25m of modern topsoil, overlying a light brown sandy silty clay with weathered sandstone and pockets of sand, and a light grey laminated siltstone and sandstone exceeding c.1.5m below existing ground level. There are no overlying deposits recorded.

(<http://mapapps.bgs.ac.uk/geologyofbritain/home.html>).

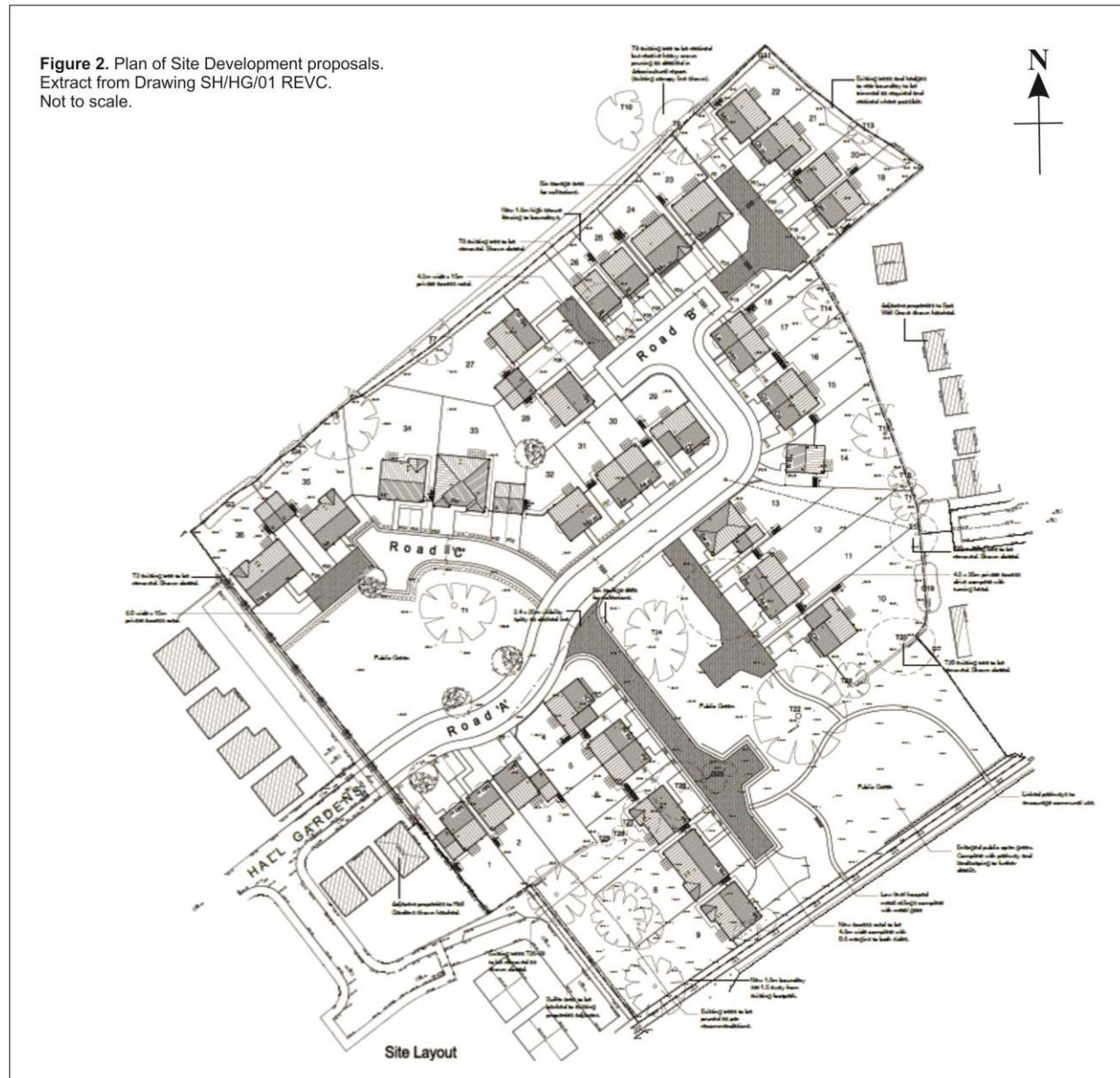
Brierley lies on a promontory in this rugged landscape south of the Hemp Dyke. The Site lies at almost the highest point in the village with the 105m contour line marked around the western Ste boundary. A benchmark at St. Peter's Church c.120m south of the Site is recorded at 107.42mAOD (c.050m above EGL). On Site the ground slopes downwards from west to east.

4.0 Planning Background

A planning application for residential development of 36 no. dwellings and associated works including associated garages and parking (Figure 2) on land at Hall Gardens, Brierley, has been submitted to Barnsley Metropolitan Borough Council for consideration, application ref: 2019/1530.

A geophysical survey of the Site has been submitted with the application, and the SYAS Planning Archaeologist has advised further pre-determination investigation (targeted evaluation) is required to inform the planning decision and assist in the design of any archaeological mitigation that may be required in association with the proposals.

This document presents the results of the evaluation including the post-excavation reporting and archiving procedures. It is subject to the approval of the SYAS Planning Archaeologist as advisor to the LPA.



5.0 Archaeological and Historical Background

There are few confirmed Prehistoric monuments around Brierley – the topography of the landscape would push people to the west on the flatter ground for ease of travel although this position on the top of the hill might have been valued for its views across land in all directions. There is an enclosed Iron Age camp on a similar hilltop c.2.5kmsoutheast of the Site at South Kirkby (SAM 1018818), and cropmarks thought to be a prehistoric enclosure adjacent to the Hemsworth bypass c.850m northeast of the Site. A scatter of worked flint has been recovered from fields on the north side of the village, and cropmarks (curvilinear enclosures and a possible ditch) in the fields to the north of the Site may be prehistoric in origin (Sheppy *et al*, 2010). There are also very few Roman dated monuments in the vicinity of the Site, although some of the cropmarks to the north may be evidence of Romano-British activity here. Lidar tiles (at 2m, 1m and 0.50m scales) were studied to determine if the cropmarks extended into the Site however those available did not extend across to Brierley (<https://environment.data.gov.uk/DefraDataDownload/?Mode=survey>).

Settlement in Brierley was almost certainly established in the post-Roman period. The place name is thought to derive from the Old English *brer* and *leah* meaning *woodland clearing where the briars grow* (Mills, 1998). The settlement is named twice in the Domesday Book – the manor of Ilbert de Lacy (with South Hiendley) held by Alric, who has land for 2 ploughs, 3 villans and 6 bordars with land for 2 ploughs, meadow and woodland pasture the whole worth 20s. A further 6 carucates of land in Brierley and South Hindley are disputed in the Domesday clamores (Williams *et al*, 2003).

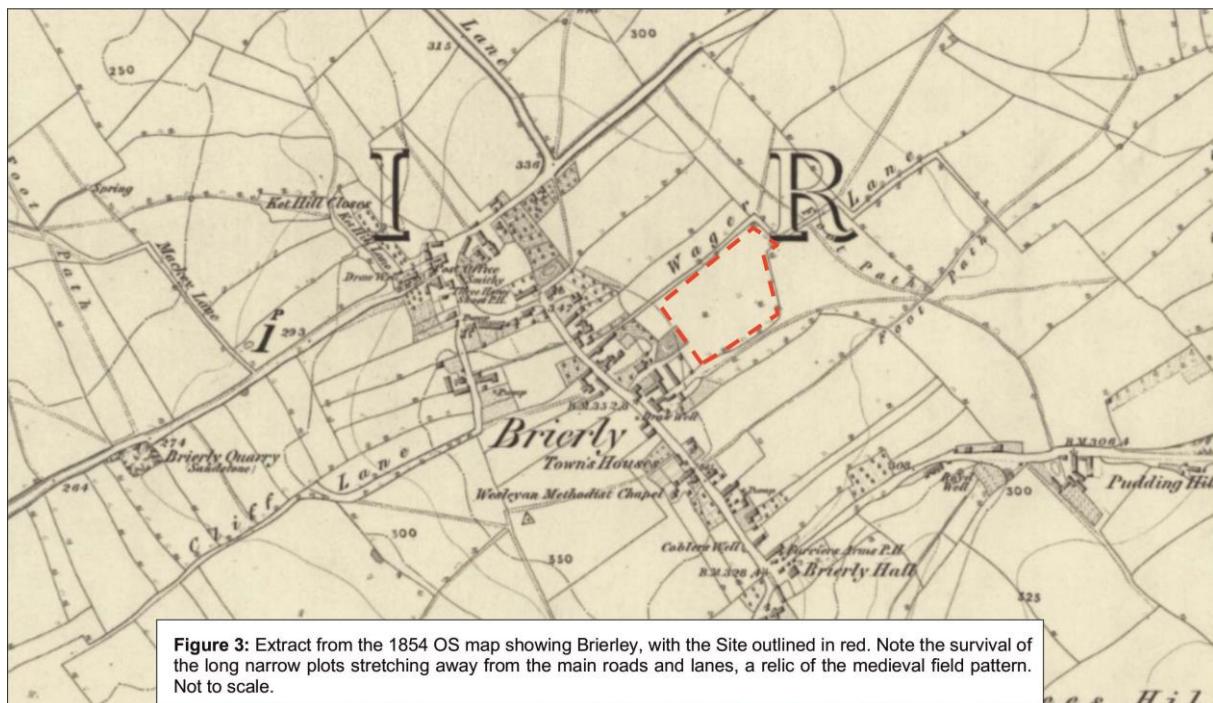
The medieval settlement was typical in layout, with dwellings along the amin roads and enclosed crofts to the rear, behind which were the open strip fields for agriculture. The Site lies behind the plots on the roadside, making it more likely to have been part of the crofts to the rear of the dwellings along Church Street; Wager Lane is likely to be a historic track giving access between two of the crofts to the fields beyond. Tofts were narrow strips of land usually of a comparable width and directly connected with the dwelling on the roadside; the long narrow fields stretching away from the main road and from Wagner and Cliff Lanes can be seen on historic OS mapping, although many of these have been amalgamated in the 20th century to larger fields some of the boundaries are preserved today. Archaeological evaluations at Common Lane c.250m south of the Site confirmed the presence of structural remains from the medieval period (McCluskey, 2006). The medieval manor was at Hallsteads, a Scheduled moated manor site (SAM 1012457) which survives as earthworks c.2.2km south of the Site on the east side of Grimethorpe (which was probably an outlying farm in the pre-Conquest period). There was a hunting park established in association with the manor, created in the early 15th century. Brierley (Brearley) Park covered c.425acres of land mentioned by Leland in the mid 16th century.

Brierley Manor House is a Grade II Listed structure (LB 1191201) lying on the east side of Church Street immediately west of the Site. The earliest elements of the structure are 18th century, but Pevsner (and the SYSMR) records late medieval elements of the structure suggesting the east wing may be earlier (15th century), possibly representing a relocation from the Hallsteads site to the south to a more central location in the village at the same time as the creation of the hunting park. The hall as used as local council offices in the middle of the 20th century, with a large southern wing extension added to facilitate this, later demolished. In the last decade Brierley Hall has been converted into three private dwellings, and a new estate of 29 new dwellings built in the gardens of the original property, now called Hall Gardens.

The Site occupies the enclosed land to the rear of Brierley Hall, with historic mapping showing the plots to the north and south were historically long, narrow strips extending back from the road side dwellings. The Site boundaries are defined by the mid 19th century, and possibly indicate an amalgamation of the medieval toft and croft plots in this area as part of the construction of the medieval manor house or the Georgian manor house. This area has

remained undeveloped therefore there is a high potential for buried remains relating to medieval or earlier activity to survive within the redline Site.

A geophysical survey of the Site was completed in 2020 (Bunn, 2020). The results (Figure 4) identified a northeast-southwest aligned linear anomaly that is comparable with the long narrow plots further north and south along Church Street seen on historic mapping, suggesting this is a medieval toft division. Perpendicular striations are thought to represent agricultural impacts. There are a scatter of discrete features that may be pits or similar, with a small concentration towards the centre of the Site, and negative responses close to the southern corner of the Site may identify the location of a building (probably barn) shown on historic mapping. Modern ferrous disturbance was also noted.



6.0 Methodology

The scheme of archaeological evaluation required 8 trenches, 30m by 2m to be excavated over the proposed development footprint targeting magnetic anomalies revealed during the geophysical survey to investigate their character, date and survival (Trenches 2,3,4,5,6 and 8). Trenches 1 and 7 targeted magnetically void areas to validate the survey results. This information would then be used to mitigate any further archaeological works.

The archaeological evaluation was undertaken with reference to the South Yorkshire Historic Environment Research Framework (Pettitt *et al*, 2021).

The Barnsley Museum and Archive Centre (Experience Barnsley) as the receiving archive for this area has been contacted with the Project Initiation Form regarding this project.

An online record of the project data will be initiated with the Archaeological Data Service (OASIS database) prior to the start of fieldwork. This online record shall be updated and completed as the project progresses and will include an uploaded digital copy of the final report of the results of the trenching.



Plate 1. Site location looking northeast.

The trenches were opened by mechanical excavator equipped with a toothless ditching bucket and hand excavated between the 20th July and 23rd July 2021.

A full written drawn and photographic record of each significant stratigraphic horizon and archaeological feature was made, including any colluvial or other natural deposits identified on the site. A description of each horizon will be made on standard PCAS context recording forms. All sections were drawn at scale 1:20. Archaeological features were also plotted on plans of each trench drawn at scale 1:200.

7.0 Results (Figs. 4 & 5)

Summary

Eight trenches were excavated over the proposed development footprint which revealed four small ditches, one each in Trenches 2,3,4 and 8 and 3 possible pits or tree bowls, two in Trench 6 and one in Trench 5.

No dating evidence was retrieved from the features excavated; but they may pertain to a field system related to medieval toft division.

Trench 1

Located in the northeast corner of the development area, Trench 1 was deemed negative, the earliest material encountered was light yellow brown, firm sandy substrate, containing angular sand stone fragments which was consistent across the site.

This was subsequently covered by a light-mid orange brown sandy subsoil, 0.2m thick and sealed by mid brown sandy topsoil to a depth of 0.3m.

Trench 2

Also situated in the northeast corner of the site, Trench 2 revealed a shallow ditch [204] aligned northeast to southwest, cut into the natural substrate and partially through the overlying subsoil. This ditch exhibited broad, 1.2m wide shallow sloping sides descending to a concave base 0.5m deep, and may be a continuation of the same linear revealed in Trench 8. Two deposits were contained within, comprised of a 0.1m thick basal deposit of dirty redeposited natural (205) and covered by a main bulk deposit of orange brown silty sand (206).

All the above were ultimately sealed by a 0.3m thick deposit of topsoil.



Plate 2. Ditch [204] looking northeast.



Plate 3. Trench 2 showing Ditch [204] towards northwest end of Trench, looking southeast.

Trench 3

Trench 3 targeted an anomaly that appears to be identified as an agricultural feature or furrow. Excavation revealed a shallow, 0.58m wide ditch [304] with a flat base cut partially through the subsoil again and into the natural substrate to a depth of 0.35m. A single deposit of mid orange brown sand (305) was recorded, and subsequently covered by 0.3m of topsoil.



Plate 4. Possible ditch or furrow [304] looking southwest.

Trench 4

This trench located at the southern end of the site targeted a northwest to southeast aligned linear anomaly. Cut into the natural substrate was Ditch [404], approximately 1.45m wide with moderately steep sides descending to a narrow concave base 0.6m in depth.

Two fills were recorded, the earliest being a dirty re-deposited natural (405) of fine sand with light grey brown clay lenses, 0.15m thick. The upper fill comprised orange-yellow brown silty sand (406) 0.5m thick, and sealed by topsoil. An environmental sample taken from the upper fill proved to contain low to moderate densities of desiccated and mineral-replaced plant remains, with no charred material and no cereal remains: the plants identified were typical of a wet grassland and transitional scrub environment (Appendix 2).



Plate 5. Ditch [404] looking northwest.

Trench 5

Situated in the southwest end of the site, Trench 5 investigated a possible pit anomaly at its eastern extent as well as straddling several 'agricultural' features.

A possible sub-rectangular pit or tree bowl [504] was revealed, approximately 1.45m wide and 0.7m deep, exhibiting steep sides descending to an irregular sloping base, containing a single deposit of mid brown fine sand (505).

Another feature observed but not recorded was a single, modern posthole containing brick fragments, situated towards the eastern half of the trench.



Plate 6. Pit [504] looking west.

Trench 6

Trench 6 was located towards the middle of the site and targeted several pit like anomalies as well as a northwest to southeast linear or 'agricultural' feature.

Two irregular pits or more likely tree bowls were recorded, cut through the subsoil and directly under the overlying topsoil.

'Pit' [604] was 0.7m in diameter with shallow sloping sides descending to an irregular concave base, 0.35m deep. A single, poorly sorted fill of mid brown fine sand (605) with lumps of grey brown silty sand were observed with a horizon of charcoal towards the base which was subsequently sampled for any environmental evidence. The environmental sample proved to contain low to moderate densities of desiccated and mineral-replaced plant remains, with no charred material other than the charcoal and no cereal remains: the plants identified were typical of a wet grassland and transitional scrub environment (Appendix 2).



Plate 7. Trench 6 looking northeast.



Plate 8. Pit/tree bowl [604] looking northwest.



Plate 9. Pit/tree bowl [606] looking southeast.

The second 'Pit' [606] revealed an even more irregular profile with steep sides descending to a depth of 0.55m on its northeast edge and rising up and shallowing out to the southwest. A single deposit was recorded and appears identical to that of (605) but with slightly less charcoal towards the base.

Trench 7

This was the second negative trench, excavated along with Trench 1 as a control to a depth of 0.45m.

Trench 8

Trench 8 targeted the second positive linear aligned southwest to northeast.

Ditch [804] exhibited a 2.1m wide shallow profile with a concave base 0.4m in depth and containing a mid brown deposit of fine sand (805). This feature was partially cut through the overlying subsoil and subsequently sealed by 0.35m of topsoil.



Plate 10. Trench 8 looking northwest showing gradient and Ditch [804] towards the northern end.



Plate 11. Ditch [804] looking northeast.

8.0 Discussion and Conclusion

The lack of any dating evidence across the evaluation makes interpretation of the site difficult. The right angled enclosure investigated by Trenches 4 and 8 may well be part of the medieval croft and toft plot division, comparable with those seen along Church Street on historic mapping. An ephemeral extension of this ditch was revealed by the geophysical survey heading towards Trench 2. Excavation of which proved this to be the case, the enclosure now forming an elongated 'T' junction, with the scattering of small pits may well be indicative of tree bowls. Environmental sampling of feature fills identified no evidence of agriculture on the site, although the quantity of charcoal retrieved from the fill of pit [604] suggests human activity in the vicinity (Appendix 2).

Although not conclusive in regards to dating the site, the evaluation has revealed that possible medieval features relating to toft division do survive within the landscape and the results of which can be used for further mitigation of the site.

9.0 Project Archive

A mid-project review has been undertaken, in line with the requirements for the South Yorkshire Museums Service. The project archive is currently in the keeping of PCAS: if it is assessed as suitable for deposition, it will be deposited with the Barnsley Museum and Archive, following preparation in accordance with the museum's deposition guidance policy; an archive accession number will be assigned at this point.

10.0 Acknowledgements

PCAS Archaeology Ltd would like to thank Saul Homes for this commission.

11.0 Effectiveness of Methodology

Intrusive evaluation was an appropriate method for gathering information about the site's archaeological potential, indicating that archaeology has survived on site within the footprint of the proposed development area. The body of data produced by this evaluation will be able to inform the planning and development process.

12.0 References

OS Explorer Map, 2015, Sheet 278: Sheffield and Barnsley, Ordnance Survey, Southampton. (OS mapping © Crown copyright. All rights reserved. PCAS licence no. 100049278).

Harrison, C & Thomson, J, 2011, 24 Church Street, Brierley, Barnsley, South Yorkshire Archaeological Evaluation and Historic Building Recording, Wessex Archaeology grey Literature

McCluskey, B, 2006, Church Street, Brierley: Archaeological Evaluation, Archaeological Services WYAS grey literature report

Mills, 1998, English Place Names, Oxford University Press

Sheppy, J & Mora-Ouomano, A, 2010, An Archaeological Desk-Based Assessment of Brierley Hall, Brierley, Barnsley, Archaeological Research Services Ltd grey literature

Williams et al, 1992, Domesday Book: The Complete Translation. Penguin Books

Websites:

<https://environment.data.gov.uk/DefraDataDownload/?Mode=survey>
<https://www.ordnancesurvey.co.uk/benchmarks/>

<http://www.heritagegateway.org.uk>

<http://list.historicengland.org.uk/mapsearch.aspx>

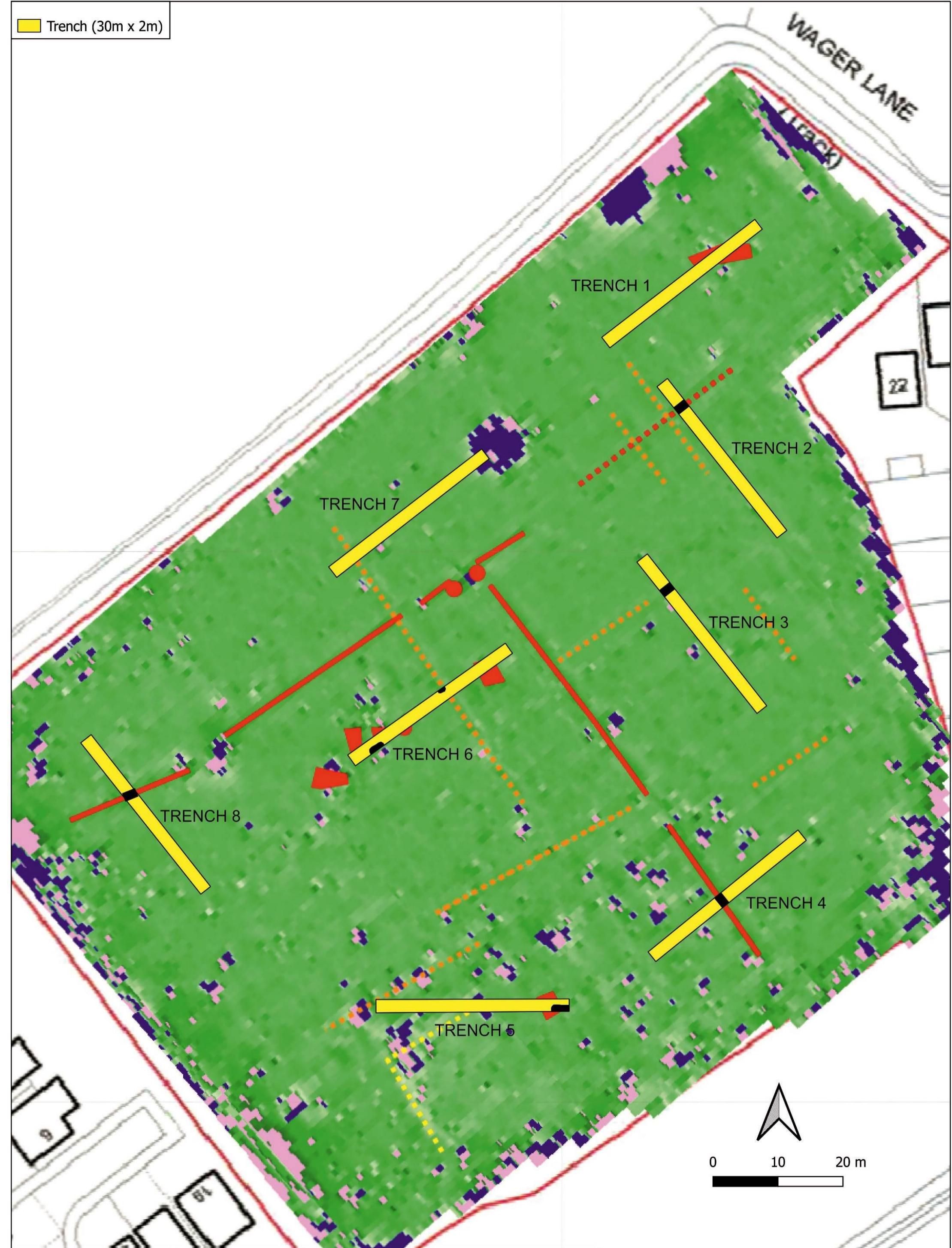
<http://mapapps.bgs.ac.uk/geologyofbritain/home.html>

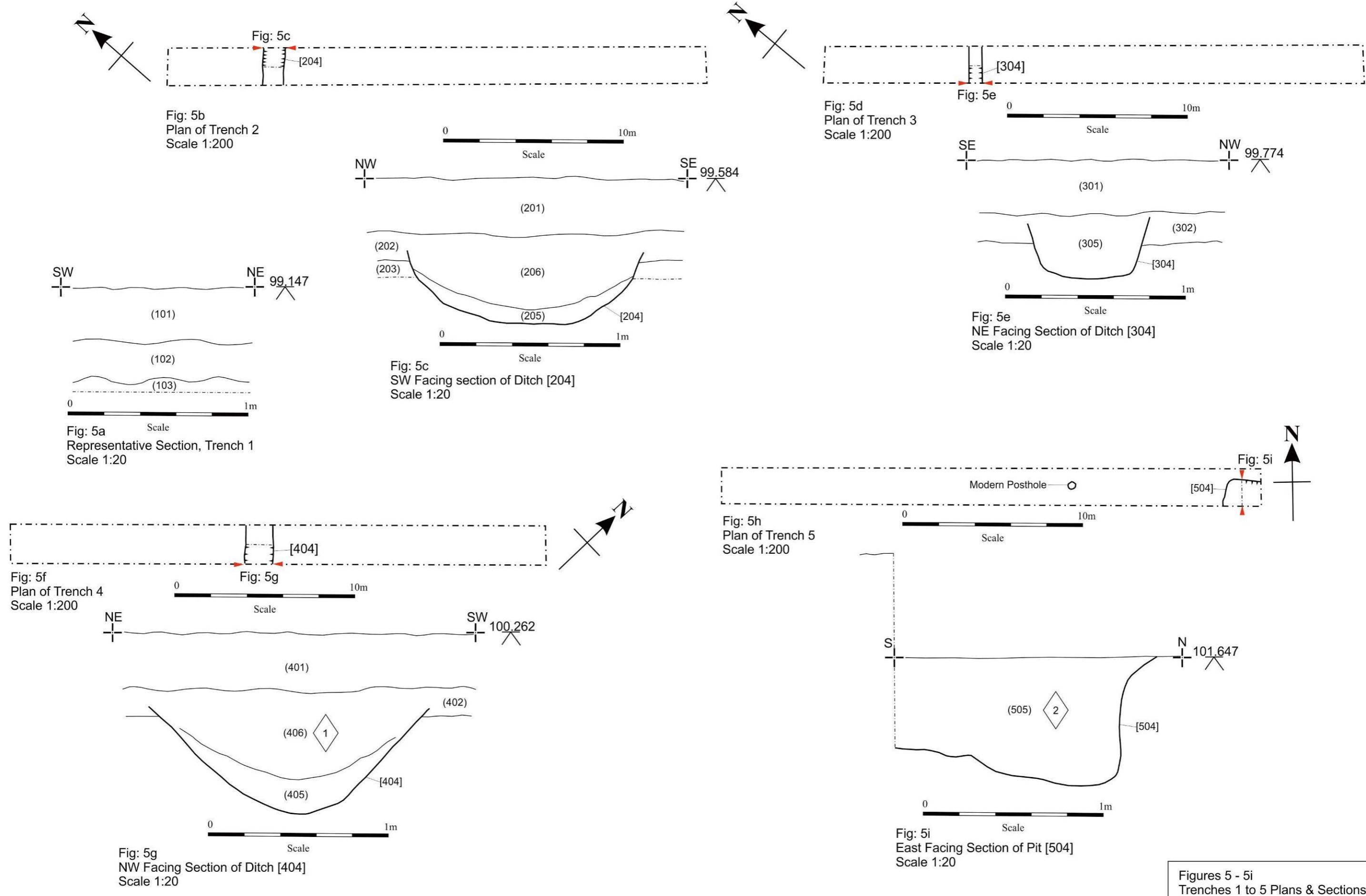
Land off of Hall Gardens, Brierley, Barnsley, Archaeological Evaluation.

<https://www.old-maps.co.uk/>

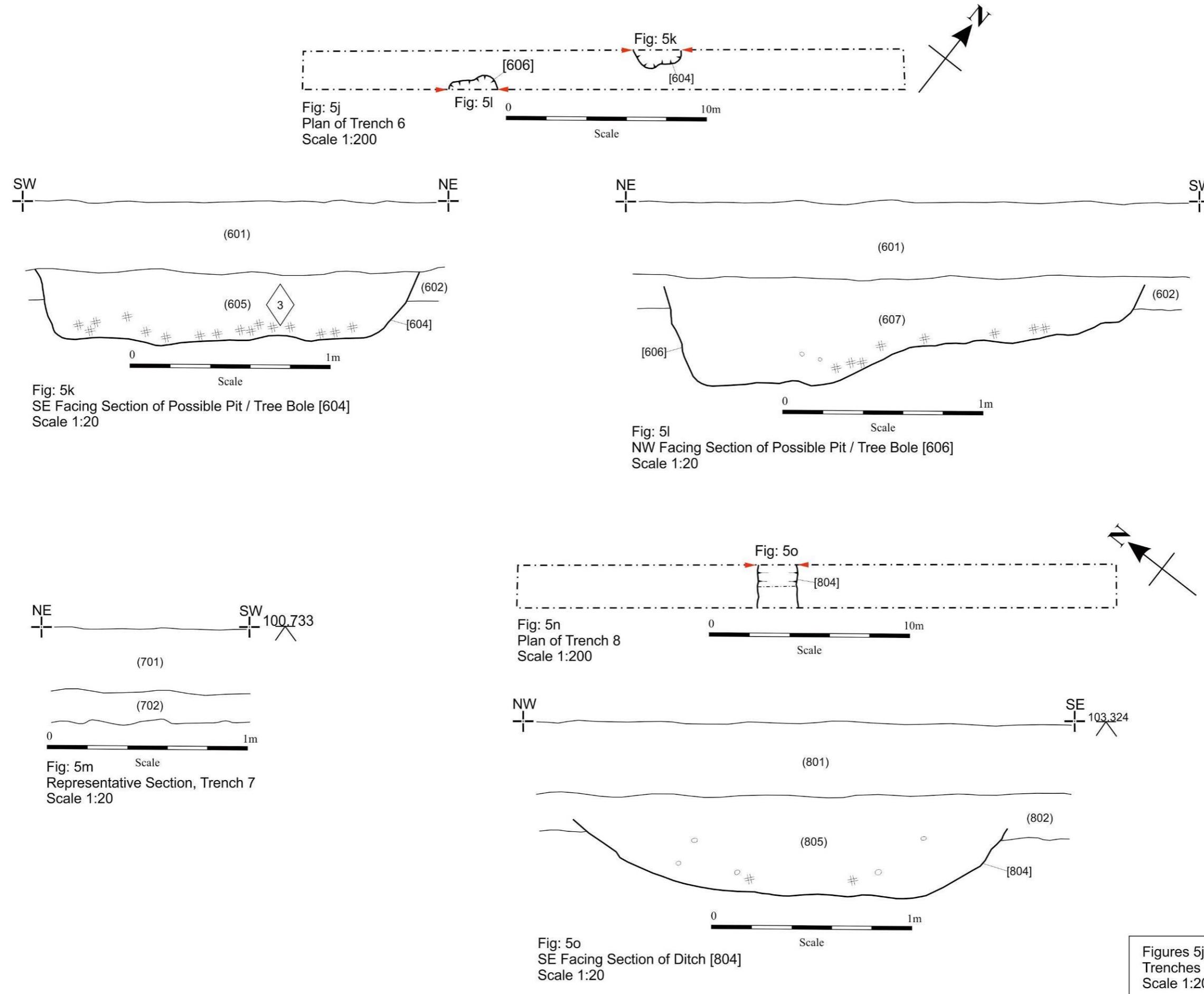
<https://wwwapplications.barnsley.gov.uk/PlanningExplorerMVC/Home/ApplicationDetails?planningApplicationNumber=2019%2F1530#summary>

 Trench (30m x 2m)





Figures 5 - 5i
Trenches 1 to 5 Plans & Sections.
Scale 1:200 & 1:20



Appendix 1. Context Summary

TRENCH 1			
CTX	TYPE	DESCRIPTION	DIMENSIONS
101	Layer	Topsoil: Mid brown fine sand.	0.3m thick
102	Layer	Subsoil: Light-mid orange brown firm silty sand.	0.2m thick
103	Layer	Natural Substrate: Light yellow brown firm fine sand with angular sandstone fragments.	

TRENCH 2			
CTX	TYPE	DESCRIPTION	DIMENSIONS
201	Layer	Topsoil.	0.3m thick
202	Layer	Subsoil.	0.15m thick
203	Layer	Natural Substrate.	
204	Cut	Ditch, aligned NE-SW. Shallow sides, concave base.	1.2m wide 0.5m deep
205	Fill	Basal fill. Dirty re-deposited natural mid yellow brown sand.	0.1m thick
206	Fill	Upper fill. Mid orange brown fine silty sand.	0.4m thick

TRENCH 3			
CTX	TYPE	DESCRIPTION	DIMENSIONS
301	Layer	Topsoil.	0.3m thick
302	Layer	Subsoil.	0.15m thick
303	Layer	Natural Substrate.	
304	Cut	Ditch/Furrow, aligned NE-SW. Moderately steep sides descending to a flat base.	0.58m wide 0.35m deep
305	Fill	Mid orange brown fine silty sand.	0.35m thick

TRENCH 4			
CTX	TYPE	DESCRIPTION	DIMENSIONS
401	Layer	Topsoil.	0.3m thick
402	Layer	Subsoil.	0.15m thick
403	Layer	Natural Substrate.	
404	Cut	Ditch, aligned NW-SE. Moderately steep sides descending to a narrow concave base.	1.45m wide 0.6m thick
405	Fill	Basal fill. Dirty light yellow brown fine sand with light grey brown clay sand lenses.	0.15m thick
406	Fill	Upper fill. Mid orange yellow brown silty, fine sand.	0.5m thick

TRENCH 5			
CTX	TYPE	DESCRIPTION	DIMENSIONS
501	Layer	Topsoil.	0.3m thick
502	Layer	Subsoil.	0.2m thick
503	Layer	Natural Substrate.	
504	Cut	Possible Pit/tree bowl. Steep sides descending to an irregular base.	1.45m wide 0.7m deep
505	Fill	Single fill. Mid brown fine sand.	0.7m thick

TRENCH 6			
CTX	TYPE	DESCRIPTION	DIMENSIONS
601	Layer	Topsoil.	0.35m thick
602	Layer	Subsoil.	0.2m thick

TRENCH 6			
CTX	TYPE	DESCRIPTION	DIMENSIONS
603	Layer	Natural Substrate.	
604	Cut	Possible Pit/tree bowl. Shallow sides descending to an irregular concave base.	0.7m wide 0.35m deep
605	Fill	Mixed mid brown fine sand with lumps of dark grey brown soil and charcoal towards base.	0.35m thick
606	Cut	Possible Pit/Tree bowl. Steep sides descending from the NE to an irregular base, rising up to the SW.	0.65m wide 0.55m deep
607	Fill	Mixed mid brown fine sand with lumps of dark grey brown soil and charcoal towards base.	0.55m thick

TRENCH 7			
CTX	TYPE	DESCRIPTION	DIMENSIONS
701	Layer	Topsoil.	0.3m thick
702	Layer		0.15m thick
703	Layer		

TRENCH 8			
CTX	TYPE	DESCRIPTION	DIMENSIONS
801	Layer	Topsoil.	0.35m thick
802	Layer	Subsoil.	0.2m thick
803	Layer	Natural Substrate.	
804	Cut	Ditch aligned NE-SW. Shallow sloping sides descending to a concave base.	2.1m wide 0.4m deep
805	Fill	Mid brown fine sand and charcoal flecks.	0.4m thick

Appendix 2: Evaluation of archaeobotanical remains

by Charles Simpson BSc (Hons) MA MRSB

Introduction

A program of archaeological evaluation trenching was carried out by PCAS Archaeology on land off Hall Gardens, Brierley, Barnsley, South Yorkshire prior to the development of the site.

The site lies within the garden of Brierley Hall, a Grade II manor house that dates from the 18th century but may have replaced an earlier late medieval structure. The site also lies within the historic core of the village, in an area likely to have been divided in tofts in the medieval period. A geophysical survey of the site in 2020 revealed both linear and discrete anomalies.

Excavations identified several cut features inside the evaluation trenches, and it is from three of these features the samples were taken.

Three bulk samples was submitted for processing and evaluation of their archaeobotanical content.

Methodology

Samples were processed, following the procedures of Kenward *et al.* (1980), for the recovery of biological remains.

The samples were processed by manual water flotation/washover, collecting the flots in a 250 micron mesh sieve. The non-floating residues were collected in a 1mm mesh sieve and dried.

The processed flots were examined for plant macrofossils and other biological remains. The residues were sorted and re-sampled (due to large volumes) where necessary. Where present, these subsamples were also examined for larger plant macrofossils and archaeological finds which were noted down and bagged.

The dried flots were scanned under a binocular microscope using x10, x20 and x35 magnifications and the archaeobotanical remains noted were identified where possible and tabulated in Table 1 below, using the nomenclature of Stace (1997). Morphological criteria were used for the identification of plant species, based on modern reference material and seed identification manuals (e.g. Berggren 1981; Carruthers and Smith 2020; Cappers *et al.* 2006; Martin & Barkley 2000).

The abundance (x = scarce <10; xx = moderate 10-50; xxx = frequent 50-250; xxxx = super abundant >250) of each archaeobotanical type was estimated and presented in Table 1.

Roots and other plant parts, snail shells, small animal bones along with insect & arthropod remains etc. were also noted, but were not removed from the flots. Any obvious modern contaminants were also noted along with any seeds that were not charred, mineral-replaced or waterlogged. The results are again presented in Table 1.

Results

The composition of the assemblage was within the normal environmental parameters of the site and consisted of low densities of desiccated and mineral replaced macrofossils.

Seeds/fruits of common herb species (weed and scrub plants) were present in the sample. They included *Artemisia* sp. (mugworts), *Brassica* sp. (cabbage family), *Carex* sp. including *C. hirta* (hairy sedge), *Circium* sp. (thistles), *Rubus fruticosus* (blackberry), *Sambucus nigra* (elder) and *Sonchus oleraceus* (smooth sow-thistle).

No cereal evidence was recovered from any of the samples.

Other Results

Items removed from the residues of all samples are summarised in the table below.

Context & <sample> No.	Charcoal
605 <3>	x

Discussion

The assemblage of plant remains from all samples are composed predominantly of low to moderate densities of desiccated and mineral replaced macrofossils.

The taxa recovered all point to a wet grassland and transitional scrub environment.

There was no evidence of cereal remains or any vegetal weed species.

Overall, low seed counts and ubiquitous nature of the taxa recovered, precluded further interpretation. Although the quantity of charcoal recovered from context (605) would suggest activity, there were no significant archaeobotanical (seed) remains to comment upon, in support of this.

Charcoal and Wood Fragments - statement of potential

The sample from context (605) contained significant quantities of charcoal and this material could be used, via standard radiometric processes, to generate radiocarbon dating evidence if desired.

Recommendations

The results from this site were average in nature. Future excavations at this site should certainly be accompanied by a programme of sampling and assessment of suitable deposits to establish whether more substantial levels of preservation have occurred at lower levels and elsewhere in the area.

No further analysis of the macro-botanical remains recovered, or the sample residues is warranted.

Conservation

The dried flots, and plant material from the residues, have no particular conservation requirements.

Retention and disposal

All samples from the deposits considered here have been returned to PCAS Archaeology for their retention / disposal.

Archive

A paper and electronic copy of this report has been supplied to PCAS Archaeology and a copy of the paper and electronic records pertaining to the work have been kept by Charles Simpson.

References

- Berggren, G. (1981). *Atlas of Seeds and Small Fruits of Northwest-European Plant Species with Morphological Descriptions (Sweden, Norway, Denmark, East Fennoscandia and Iceland)*. Part 2. Cyperaceae. Stockholm: Swedish Museum of Natural History.
- Cappers, R.T.J., Bekker, R.M. and Jans, J.E.A. (2006). *Digital Seed Atlas of the Netherlands*. Groningen Archaeological Studies 4. Eelde: Barkhuis Publishing.
- Carruthers, W.J. and Smith, D.N. (2020). *Mineralised Plant And Invertebrate Remains: A guide to the identification of calcium phosphate replaced remains*. Historic England.
- Kenward, H. K., Hall, A. R. and Jones, A. K. G. (1980). A tested set of techniques for the extraction of plant and animal macrofossils from waterlogged archaeological deposits. *Science and Archaeology* 22, 3-15.
- Martin, A.C. & Barkley W.D. (2000). *Seed Identification Manual*. New Jersey: The Blackburn Press.
- Stace, C. (1997). *New Flora of the British Isles*. Cambridge, Cambridge University Press.

Appendix 2.1: Sample Analysis (Table 1)

	Context No.	>	406	605	605
	Spot Date	>			
	Environmental Sample No.	>	<1>	<2>	<3>
	Volume Processed (litres)	>	20	20	20
Latin Name	Common Name				
<i>Artemisia sp</i>	mugworts	x			
<i>Brassica sp.</i>	cabbage family	xx	xx	xx	
<i>Carex sp.</i>	sedges		x		
<i>Carex hirta</i>	hairy sedge			xx	
<i>Circium sp.</i>	thistles			xx	
<i>Rubus fruticosus</i>	blackberry			x	
<i>Sambucus nigra</i>	elder			x	
<i>Sonchus oleraceus</i>	smooth sow-thistle	x			
rootlets		xxx	xxx	xx	
testa fragments		xx	xx	xx	
insect rem.s.		xxx	xx	xxx	

Appendix 3: OASIS Summary