

DEVELOPMENT ARCHAEOLOGY SERVICES Ltd

REPORT ON THE RESULTS OF A SECOND PHASE ARCHAEOLOGICAL INVESTIGATION [Strip Map Excavate & Record] ON LAND AT BONHAM'S FIELD YAPTON

[Site Centred at National Grid Reference: SU 9756 0345]

DAS Site Code: BON/20

**PREPARED FOR
Seaward Properties Ltd.**



By

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[with contributions from
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PLANNING REF: Y/1/17/OUT

[RESERVED MATTERS REF: Y/63/19/RES]

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Summary:

This report details the results of an archaeological investigation at the development site on and between the 1st of October to 23rd October 2020. Field work was supervised by Christopher Pine and Neville Hall of Development Archaeology Services Ltd [DAS].

The investigation constituted a 'second phase' investigation to enhance the results of the preliminary site investigation undertaken by Archaeology South East.

The second phase investigation involved the excavation and recording of total area of approximately 2,500m² [Areas A, A1, B and C] centred on key linear features recorded in the 2018, ASE site investigation.

Phase 2 results indicate that the hypothesised extension of significant evidence for pre-historic activity seen within the first phase investigation within Trench 2 [ASE 2018] does not extend into the development site area. Phase 2 results from Areas A and A1 indicate only light evidence for pre-historic [LBA/EIA] is present within this site area. Heavier concentrations of pre-historic activity / occupation to the north west, though external to the development site, should not be discounted.

The dating, characteristics, and arrangement of features within Area B suggest the area was an area of medieval [HM] refuse discard rather than a confirmed area of medieval occupation or settlement.

The presence of animal burials within this area suggests the area, in the post medieval period, continued to be used as discard/dump area.

Within Area C a broadly similar pattern relating to form of recorded features and finds type and date range was noted as that recorded in Area B. However, an increase in concentration of medieval domestic / refuse finds when compared to Area B suggests Area C may be considered as a 'primary' discard area.

The predominant presence of High Medieval wares recovered from Area C would suggest a moderately significant occupation focus is present proximal to, though outside, the investigation / development site area.

1.0 Introduction

- 1.1 Development Archaeology Services Limited [DAS] was commissioned by Seaward Properties Ltd. to undertake a post-determination archaeological field investigation as a final element of works associated with a proposed new residential development [Application ref: **Y/1/17/OUT**] with associated access on land at Bonham's Field Yapton, centred at National Grid Reference SU 8094 0308. [For site location refer to Figure 1 and Figure 2, and for detail of proposed development [footprint] see Figure 3].
- 1.2 This report documents the results of the archaeological second phase 'Strip, Map, Record', investigation which was undertaken in accordance with a previously submitted and approved for Written Scheme of Investigation second phase investigation prepared by DAS. This document was submitted to and approved by Mr. James Kenny, Archaeological Officer of Chichester District Council, [in his capacity as archaeological advisor on planning issues to Arun District Council, the Local Planning Authority [LPA]], prior to the commencement of the on-site works. This approach complies with the principles established in *NPPF: Planning for the Historic Environment: Historic Environment Planning Practice Guide* [Department of Culture, Media and Sport, 2010] and *Standard and guidance for archaeological evaluations* [CHIfA, 2014].
- 1.3 Copies of this report will be deposited with the clients, Mr James Kenny, the West Sussex Historic Environment Record [HER] and with the Littlehampton Museum, along with an ordered project archive for long term storage and curation.
- 1.4 This report details methodology and results of a second phase investigation at the site. A preliminary site evaluation [trial trench investigation] evaluation phase was carried out at the proposed development site on and between the 11th to 15th June 2018 by Archaeology South East [ASE].
- 1.5 This first phase evaluation survey phase involved the mechanical excavation under archaeological supervision of A total of 21 trenches were excavated, 11 of which revealed archaeological finds and features.
- 1.6 During the first phase 'evaluation' a total of 21 trenches were excavated, 11 of which revealed archaeological finds and features. The main focus of activity appeared to be on the western edge of the site whilst the remaining trenches with archaeology present were spread across the site.
- 1.7 Recorded features comprised mainly of ditches and gullies as well as a number of postholes, a pit and a potential quarry pit. The earliest dating came from a potential

quarry pit within Trench 12 which produced a fragment of Neolithic pottery and a fragment of flint.

- 1.8 **Trenches** 2, 8, 14 and 21 provided evidence of Late Bronze Age/Early Iron activity in the form of gullies and postholes. Further south within **Trench 5** a series of probable ditches were found considered to have the potential to be medieval. **Trench 10** also provided evidence of a medieval pit and shallow ditch.
- 1.9 Much later activity was visible in the south-eastern corner within Trench 21 which had deposits which could be the remains of a previous post-medieval surface, potentially relating the listed buildings seen to the east
- 1.10 Environmental samples taken from two features which appear to date to the Late Bronze Age/Early Iron Age produced evidence of crops such as wheat and six-row barley, whilst free-threshing wheats, hulled barley, pulses and possibly oat and flax were found to date during the medieval period.
- 1.11 Following consideration of the results of the first phase 2018 evaluation survey / investigation results [ASE 2018] between DAS Ltd and the Chichester District Archaeology Officer, James Kenny, it was considered that further investigation at the site was warranted.
- 1.12 The second phase investigation was to be centred on and around Phase 1 evaluation Trenches 2,5 and 10 and to include localised areas around might allow recording and recovery of evidence of the extent character of the site and in addition provide dating evidence for exploitation / occupation episodes within the development site area.
- 1.12 It was considered a suitable mitigation would be the implementation of a program of site stripping mapping and excavation on areas / locations where archaeological features had been recorded at the evaluation phase.
- 1.9 In accordance with and considering the advice given by J. Kenny, a Written Scheme of Investigation [WSI] [DAS 2020] was submitted and approved.
- 1.10 This report documents the results of the archaeological investigation [2nd Phase], which was guided by the approved WSI prepared by DAS.
- 1.11 Copies of this report will be deposited with the clients, Mr. James Kenny of Chichester District Council, the Chichester District Historic Environment Record (HER), and the

Chichester District Museum, along with an ordered project archive for long term storage and curation.

2. Site Location and Description

- 2.1 The investigation site at Bonhams Field is situated on land off the northern frontage of the B2233 road [Main Road] and on the western outskirts of the village of Yapton. The assessment site currently comprises an enclosed field with modern residential development to the east. The village of Yapton is situated within the modern civil parish of the same name, administrative district of Arun, county of West Sussex. [See Figure 1 and 2].
- 2.2 The site is centred at approximately Central National Grid Reference: SU 9756 0345.
- 2.3 The assessment site is situated on deep, stoneless silty soils of the Hamble 2 Series, which have developed on aeolian silty drift deposits of brickearth. These in turn overlie Oldhaven, Blackheath, Woolwich, Reading and Thanet gravel beds of the Palaeocene [Soil Survey, 1983; BGS, 1996].

3. Planning Background

- 3.1 It is understood that outline planning permission has been granted by Arun District Council [ADC] for the erection of 56 dwellings and associated access, parking and services [Planning application ref: Y/1/17/OUT [though see also Y/63/19/RES]. [See Figure 3 for proposed site / development layout].
- 3.2 An initial Desk Based Assessment was compiled and submitted to accompany and inform the application by Development Archaeology Service Ltd. [DAS 2106] that concluded that the site, based on review of extant data, had low to moderate potential for archaeological remains to be present within the site area. A condition (No. 5) was attached to the permission requiring that:

No development shall take place until the applicant has secured the implementation of a programme of archaeological work in accordance with a written scheme of investigation which has been submitted by the applicant and approved by the local planning authority
Reason: The site is of archaeological significance in accordance with Arun District Local Plan Policy GEN7.

- 3.3 Accordingly, a Written Scheme of Investigation [WSI] for archaeological evaluation was prepared detailing requirements for a 'Phase 1 'evaluation' investigation at the site [ASE 2018] and approved prior to the commencement of fieldwork.
- 3.4 Following consideration of the results of the first phase 2018 evaluation survey / investigation results [ASE 2018] between DAS Ltd and the Chichester District Archaeology Officer, James Kenny, it was considered that further investigation at the site was warranted. The second phase investigation was to be centred on and around Phase 1 evaluation Trenches 2,5 and 10 and to include localised areas around might allow recording and recovery of evidence of the extent character of the site and in addition provide dating evidence for exploitation / occupation episodes within the development site area.
- 3.5 A Written Scheme of Investigation for an archaeological investigation [Strip map excavate and record] of designated survey areas A,B and C [see DAS 2020] was subsequently submitted to and approved by Mr. James Kenny on behalf of the Local Planning Authority [ADC] prior to the commencement of the on-site ' second phase' archaeological investigation.
- 3.6 This staged methodology to accurately assess heritage assets within the development area complies with process as detailed in Policy HER DM5 [sections 1.7.1, 16.7.2, 16.7.3 and 16.7.4, and also Policy HER DM6 [paragraphs a, b and c] of the submission draft Arun District Council Local Plan [2011-2031].

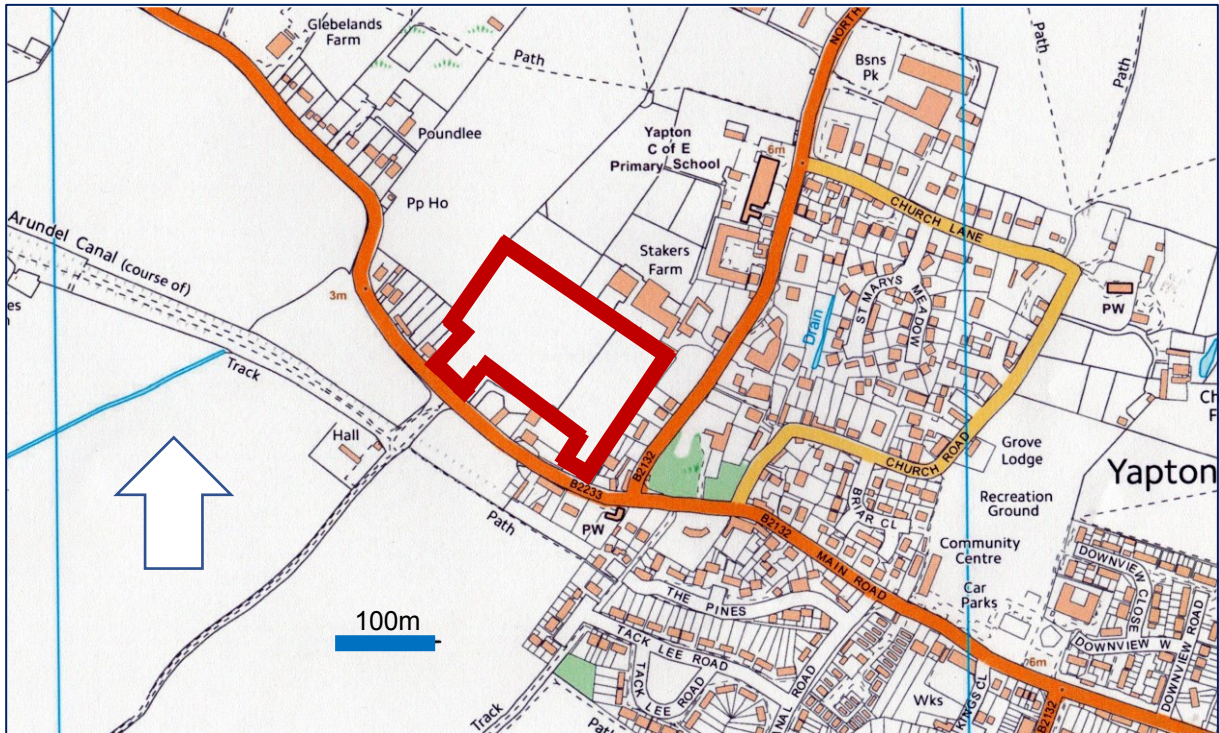


Figure 1: General site location at a scale of 1:5000. The area of the proposed development site is shown in red. [O.S. copyright licence number 100048723]

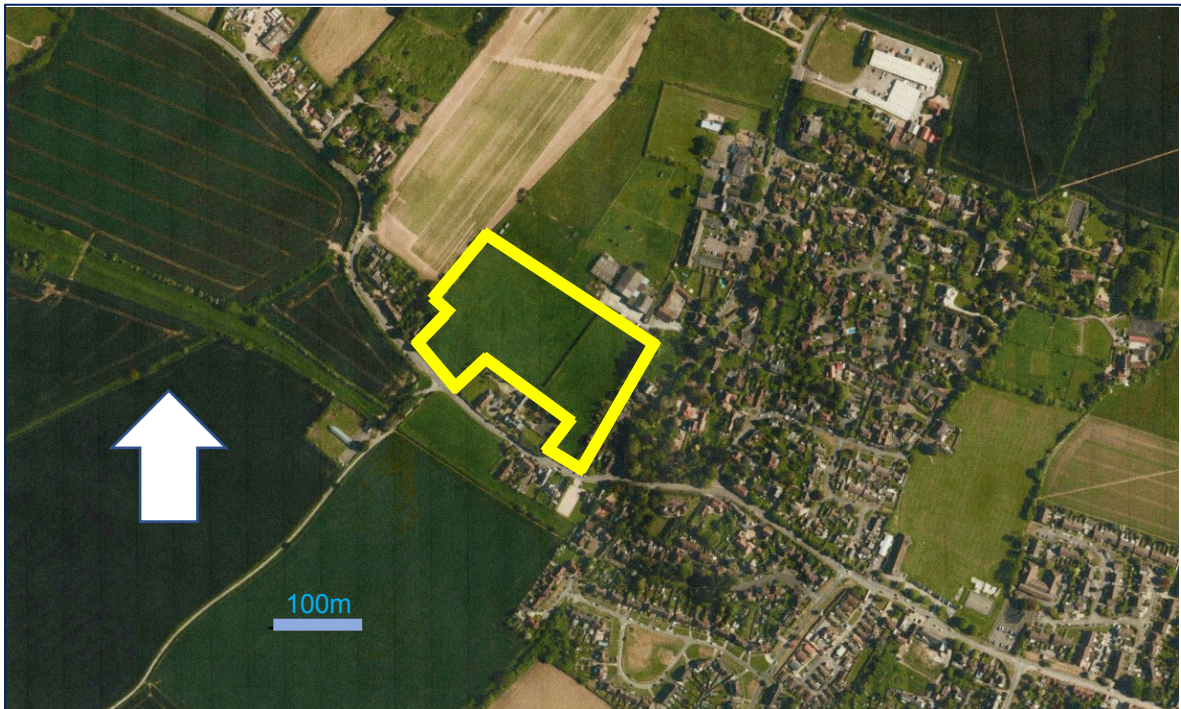


Figure 2: Site location at an original scale of 1:5000. The assessment site is shown outlined in yellow.

Figure 3

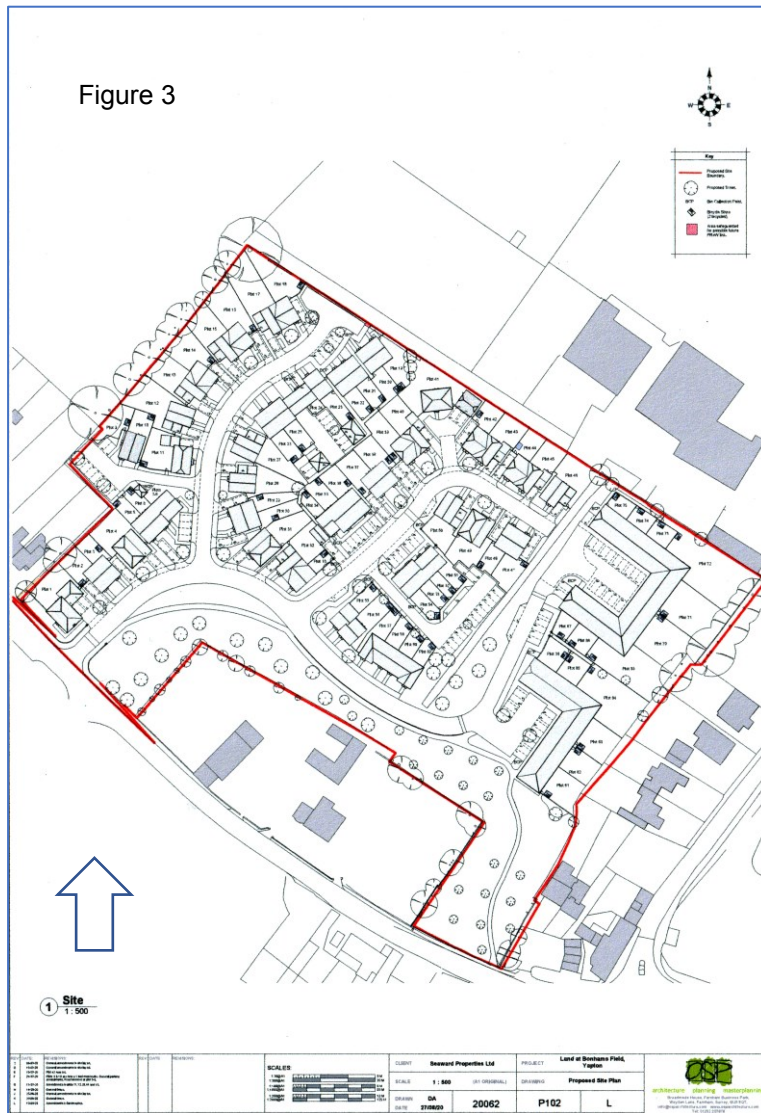


Figure 3: Proposed development layout.

Figure 3a

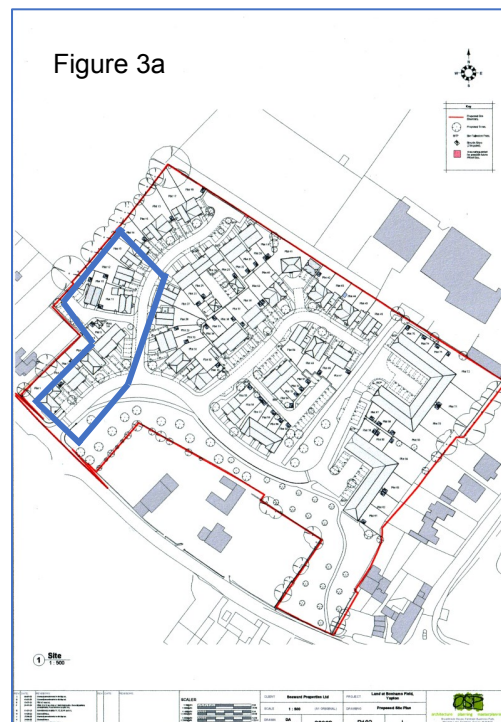


Figure 3a Phase 2 investigation area. 

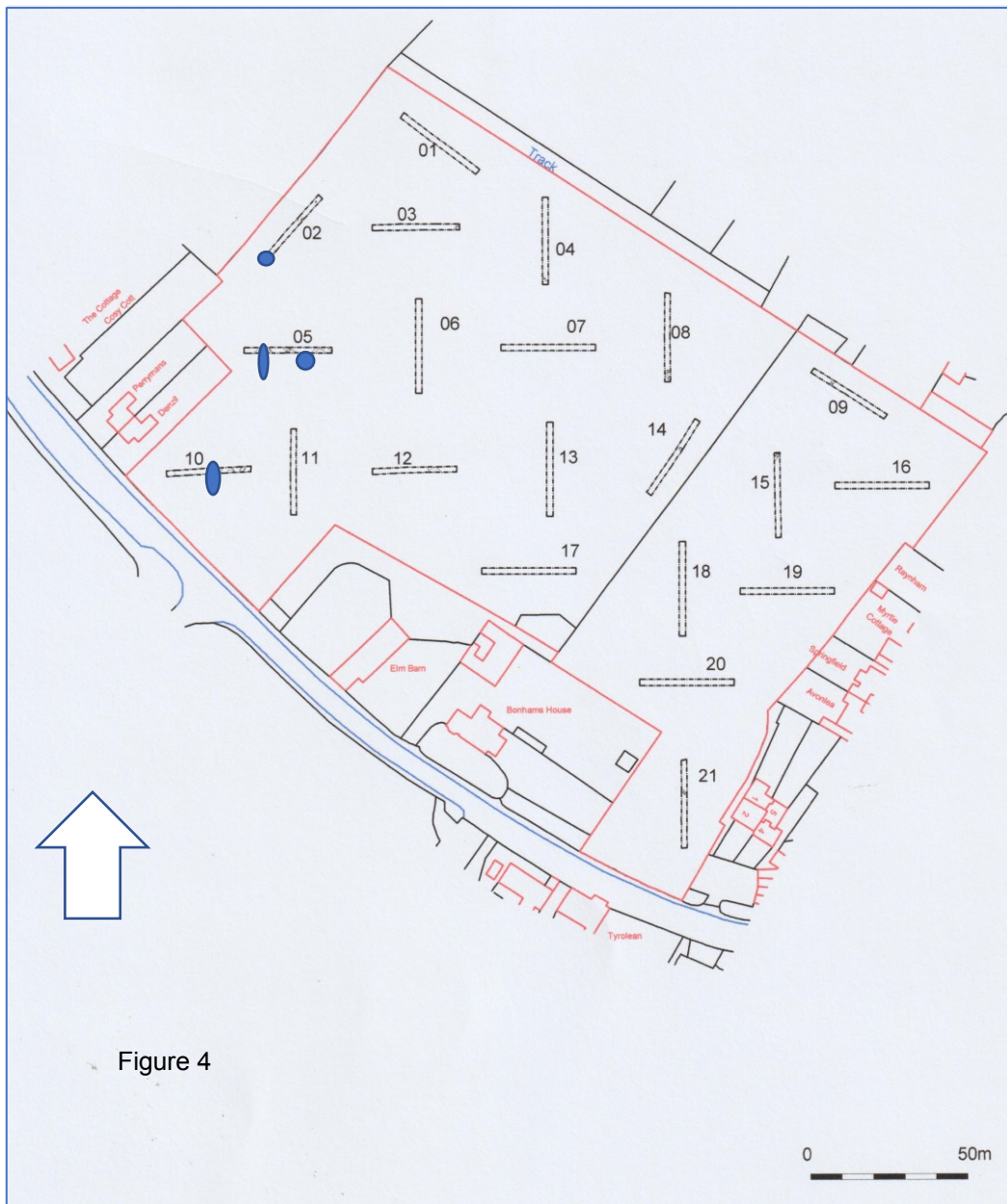


Figure 4

Figure 4: Location of evaluation / investigation trenches across full site area [ASE investigation Phase 1]. Shows approximate location of features investigated at Stage 2 investigation ●

Refer to Figure 6 for detail.

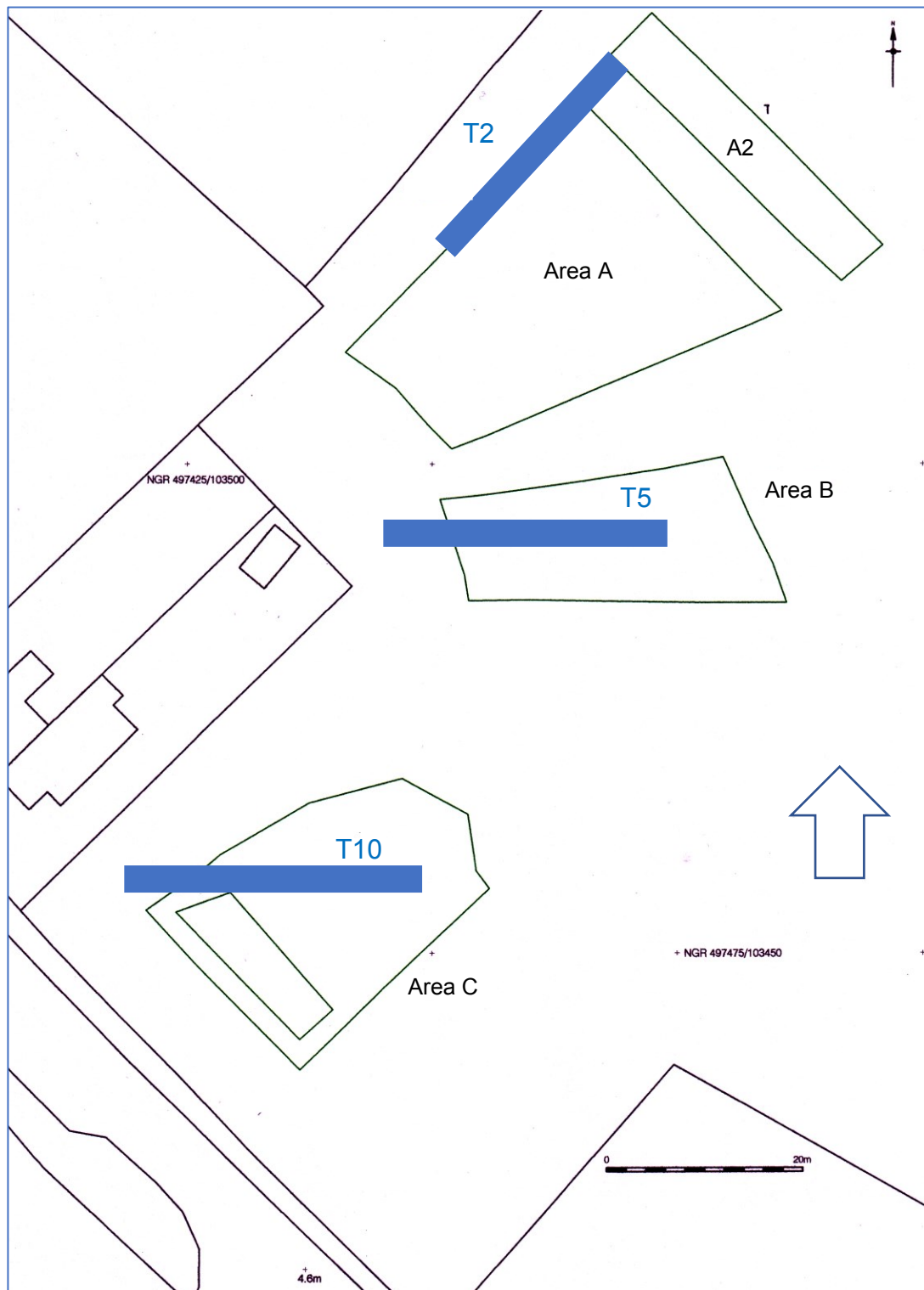


Figure 5: Location of Stage 1 investigation Trenches 2,5 and 10 relative to Stage 2 investigation areas, A, A2, B and C.

Shows location of Stage 1 evaluation Trenches T2, T5, and T10.

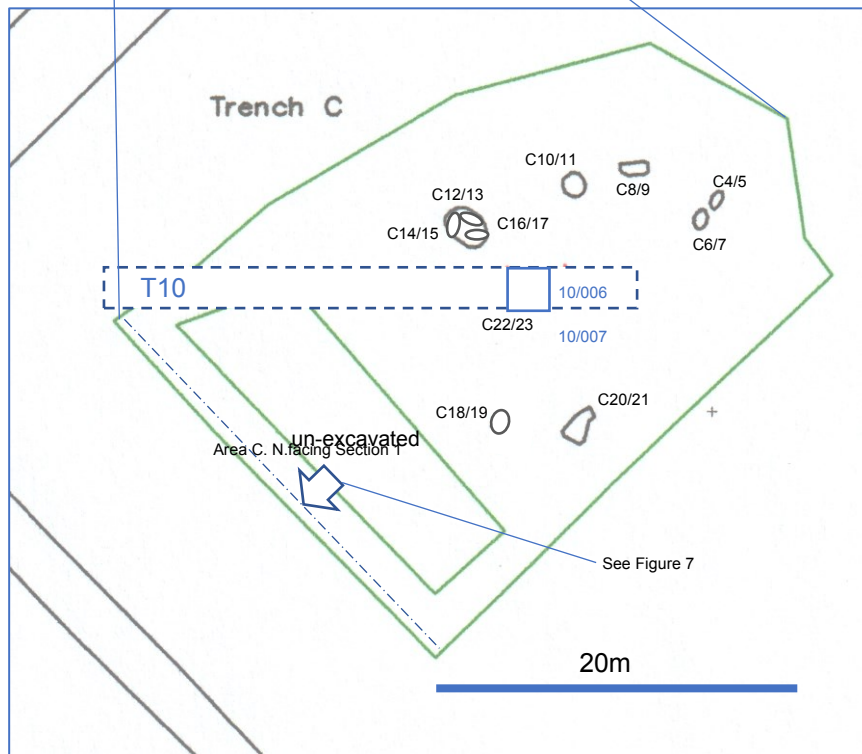
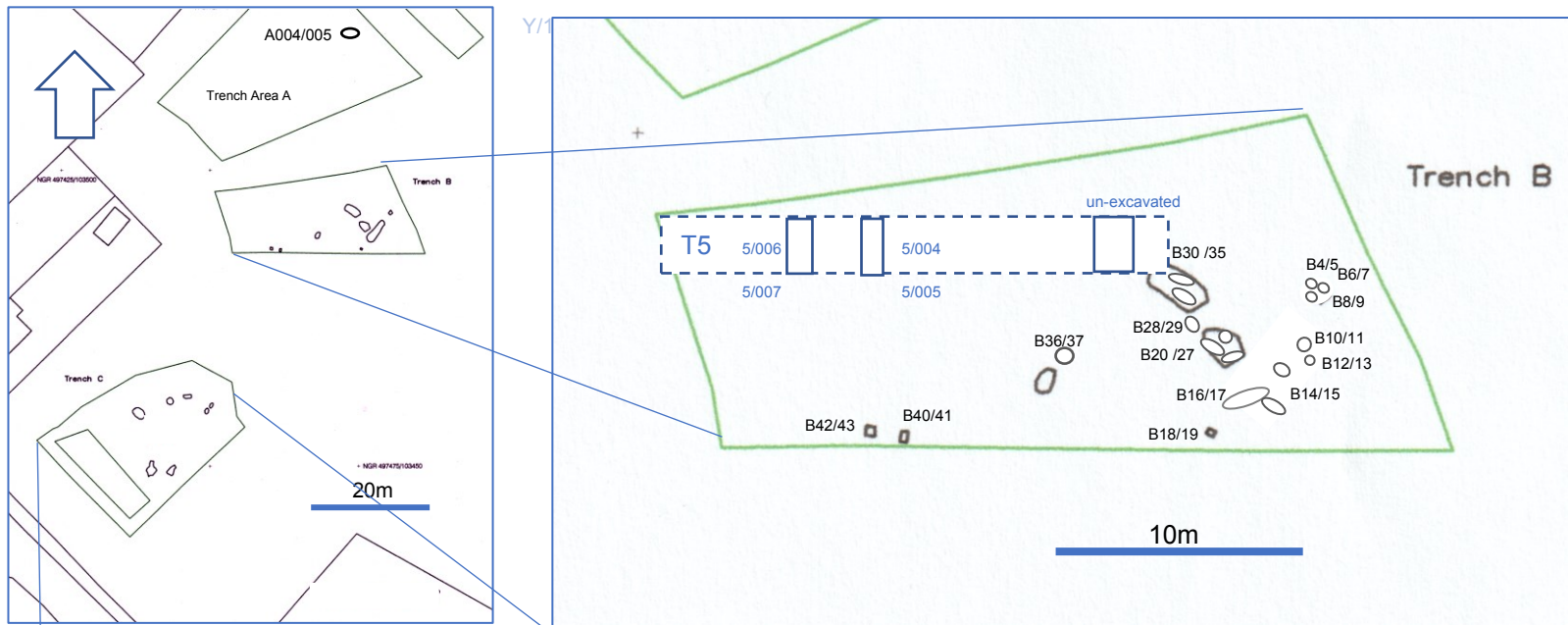


Figure 6: Location of second phase features [with context ref. within Second Stage Investigation Areas A, B and C].

- Location of ASE first phase trenches
- Location of ASE first phase features [contexts]



Plate 1: Area A viewed from the north east looking west

Plate 2: Area A viewed from the south east looking north

4.00 Methodology [second phase investigation]

4.1 Aims and objectives of Stage 2 investigation.

4.1.1 The general aims of the archaeological investigation were;

4.1.2 To augment the understanding of the archaeological potential within the proposed development area specifically with Phase I investigation areas centred on and proximal to Phase 1 investigation Trenches 2,5 and 10.

4.1.3 To provide detailed information regarding the date, nature, extent, integrity and degree of preservation of any identified heritage assets with Phase 1 survey areas centred on and proximal to Trenches 2,5 and 10.

4.1.4 General: To interpret the archaeology of the site within its local, regional and national archaeological context.

4.1.5 Refer to Figures 3a [for second phase investigation area] and Figures 4 & 6 for location of Phase 1 survey results in relation to second phase strip map and record areas.

4.1.6 Within Trench 2 [ASE 2018] a total of six postholes, one pit and one gully feature were recorded. Dating of recorded features suggests Late Bronze Age / Early Iron Age activity [poss. occupation] within this sub site area.

4.1.7 The second phase excavation of site **Area A and A2** [See Figures 5 and 6] were located / positioned to further investigate results of first phase Trench 2 results.

4.1.8 Within Trench 5 first phase results recorded five suggested ditch lines [only 2 excavated]. Dating evidence from the fill of ditch [5/004-5/005] suggested a medieval date for this feature group.

4.1.9 The second phase excavation of site **Area B** [See Figures 5 and 6] were located / positioned to further investigate results of first phase Trench 5 results, specifically to confirm form date and function of recorded medieval features.

4.1.10 Within Trench 10 first phase results recorded two variable form pits both containing medieval [HN] pot.

4.1.11 The second phase excavation of site **Area C** [See Figures 5 and 6] were located / positioned to further investigate results of first phase Trench 5 results, specifically to confirm form date and function of recorded medieval features.

4.2 Methodology [Field work phase]

- 4.2.1 The second Stage investigation was undertaken on and between 1st of October to 23rd October 2020. All elements of the project were supervised by C.A. Pine of DAS Ltd
- 4.2.2 In advance of machining / excavation of survey areas A, B & C the locations of Stage 1 investigation trenches [Area A - Trench 2, Area B - Trench 5 Area C - Trench10] were surveyed in and trench locations marked / pegged out to accurately locate / define Stage 2 investigation areas.
- 4.2.3 Areas to be subjected to controlled stripping were initially pegged out [using surveyor's markers] with and surveyed in using a Leica 900 Smartrover RTK GPS (real-time kinetic global positioning system) connected to the Smartnet network, obtaining real-time corrections to achieve centimetric accuracy. The data was subsequently downloaded in Leica Geo-Office and manipulated using Survey Control Centre software to produce a detailed survey points using AutoCad for presentation and illustration.
- 4.2.3 For location of each second phase sub site area A, A2, B and C within the gross site area refer to Figure 5.
- 4.2.4 The initial excavation was undertaken using a c. 15 ton 360° tracked mechanical excavator fitted with a c.2.00-metre-wide toothless ditching bucket. In accordance with the submitted and approved WSI for this Stage 2 investigation excavation was in less than 10cm spits, to remove top-soils and sub-soils to expose archaeological levels. Stripping of topsoil to reveal archaeological horizon was undertaken with minimum tracking of plant to ensure lowest impact to archaeological horizons. Plant used to remove topsoil / stripped material did not track across stripped areas until these areas were 'signed off' as archaeologically clear either due to absence of archaeology or the area has been adequately recorded
- 4.2.5 At each survey areas the accurate siting of Phase 2 investigation areas was confirmed of by recognition of Stage 1 evaluation phase trench scarring.
- 4.2.7 At each survey / investigation location the following areas were investigated:

Area A: Total survey area of 1000m² [including **Area A2**]

Area B: Total survey area of 750m²

Area C: Total survey area of 800m²

- 4.2.8 After the initial site area stripping all archaeological features, structures and deposits exposed within the stripped areas were cleaned, planned and recorded in accordance with the approved WSI for

second stage investigation. Locations of recorded features within each sub site area are shown at Figure 6.

- 4.2.9 A proportion of archaeological features, were hand excavated by cutting sections or were fully excavated. Each archaeological feature was excavated sufficient to obtain a representative picture of the feature's date, form and function. A list of contexts forms the second phase investigation is presented at Appendix 1.
- 4.2.10 Selected features [within Areas A, B and C] were sampled for subsequent off-site processing and assessment / analysis. Sampling strategies followed procedures detailed in the approved WSI for the project. On site sampling was undertaken following procedures / guidance as detailed in the formally agreed WSI for the second phase investigation. Sample process register [relating to each Area / Context] is presented at Appendix 2. Assessment and analysis of all categories of environmental remains are presented at Appendix 3.
- 4.2.11 A photographic record was made using digital camera [10mp resolution] to illustrate in both detail and general context of the principle features that were exposed. In addition, working shots to illustrate the nature of the archaeological investigation are shown within this report.
- 4.2.12 The Archaeological Officer [J. Kenny] made a site visit to view all open excavation areas [Areas A, B and C] on both the 7th and 16th of October. On completion of the Stage 2 survey, and under instruction from J. Kenny [CDC archaeology officer and advisor to Arun District Council] all site areas were back filled and levelled.
- 4.3 **Environmental sampling:** A sampling strategy [to gather a statistically viable sample] was undertaken to sample all intrusive features excavated considered to be relatively undisturbed. The samples taken were predominantly of 40 litres with 100% samples taken from smaller features. A list of sampled contexts is reproduced **Appendix 2**.
- 4.3.1 Field and post field work sampling and processing / assessment / strategies followed English Heritage guide lines Environmental Archaeology [English Heritage 2002: Environmental Archaeology; a guide to the theory and practice of methods, from sampling and recovery to post excavation].
- 4.3.2 Methodology: Post excavation phase: Samples were processed outside using a 'Siraf' style flotation tank (Williams 1973), with meshes of 500 microns for retention of the residue and the 'flot' collected in a 300-micron mesh sieve.
- 4.3.3 Residues were subject to additional bucket flotation in order to obtain maximum possible retrieval of environmental evidence. Faunal, plant and pot sample finds and residues [where appropriate]

were submitted for specialist assessment. Results of specialist assessment reports are presented at Appendix 3 & Appendix 4.

5.0 Results: Area A

- 5.1.1 **Results Area A:** The stage 2 investigation of Area A produced results from only a single feature, a shallow pit / spread [A4/5] of burnt flint containing fragments of Late Bronze Age to Early Iron Age pot fragments. [See Plate A1 and Figure A1, see also Appendix 2 and 4].
- 5.1.2 The excavation of the north western edge of phase 2 excavation did not result in the exposure of the small cluster of features [2/004 through to 2/016] recorded during the first phase evaluation. However, the date of phase 1 features, where determined, accorded with the date of late Bronze Age to Early Iron Age recorded during second phase investigation.
- 5.1.3 Although Area A and the extended Area A1 excavation exposed no additional features Area A did contain localised [c. 4m radius] spreads of very sparse and non-patterned spreads of granular burnt flint.

5.2 Results Area B

- 5.2.1 Concentration of excavated features appears biased toward the east of the excavated area. Contexts B4 through to B15 may be summarised as shallow circular to sub circular shallow pits. None of this “sub grouping” contained firm dating evidence. Where present inclusions include sparse burnt flint and charcoal fragments. No date form or function may be accurately described for these features.
- 5.2.2 Datable features within Area B are limited to contexts B20/21, B26/27 and B32/33. A date range, based on sparse numbers of sherds, suggests an Early Medieval to Late Medieval date range. However as noted by Barber [Appendix 4] at least one feature [B20/21] may contain intrusive pot fragments.
- 5.2.3 The date range of c. 1225-1350, for one feature [possible ditch line 5/005] recorded at the evaluation Stage 1 shows agreement with second phase dating evidence. At Stage 2 investigation no extension of this ‘ditch line’ was evident. This feature is therefore interpreted as a shallow pit, again in form and date equivalent to contexts B20/21 and B32/33 recorded at second stage investigation.
- 5.2.4 Based on a summary of dating evidence for each investigation phases the features recorded within Area B suggest evidence for High Medieval [c.1200/25-1350/75] within this site area.

- 5.2.5 The main feature /feature grouping with Area B is considered to be pits / pit groupings B16/17 and B24 through to B28. With the majority of bone material recovered from B 16/17 this feature 'group' indicates a sub site area used for animal burial with a horse and probably 2 dog burials being evidenced. There are also, within B34, sparse remnants, in the form of metatarsal and first phalanges of a cattle hind foot.
- 5.2.6 Associated with, though possible intrusive, is the medieval pottery recovered from four of the features containing animal bone [pits B20, B26, and B32].
- 5.2.7 As noted by Foster [Appendix 3] confirmation of dating for these animal remains is problematic. The shallow nature of the burials and post depositional disturbance, coupled with bone colouration, suggest a relative recent date for burial, possibly post-medieval/modern.
- 5.2.8 The unexcavated feature [possible ditch line] recorded at stage 1 investigation phase [not assigned a context] at the eastern end of Trench 5 [See Figure 7 ASE 2018] lies adjacent and probably associated with second phase contexts B30/B35. No clear evidence of a linear, at this site location, was observed during the second phase investigation.

5.3 Results Area C.

- 5.3.1 All features excavated within this area are predominantly ovoid irregular shallow pits. All features produced dating evidence. Stage 2 investigation produced predominantly High Medieval pottery [from all features] though as noted by Barber [Appendix 4] second phase investigation produced an increase in 1st-to mid-15th century material. This suggests a continuation of activity / refuse disposal in this area.
- 5.3.2 During the second investigation phase first phase contexts 10/007 were excavated [C22/23 at Stage 2] to an additional 8cms only to bottom this feature. Pottery finds from [C22/C23] consisted of High Medieval cooking pot sherds suggesting a primary refuse disposal mainly between c.1200 and 1325. This domestic refuse / discard evidence accords with form, date and function of material recovered during the initial investigation phase from an equivalent context.
- 5.3.3 A single dog calcaneus was the only bone recovered – from a 40-litre bulk sample (Sample C8) of Context C19 (fill of shallow pit/spread C18).
- 5.3.4 The only environmental remains likely to be contemporary with deposition and of *any* intrinsic interest were six charred grains/grain fragments (including two tentatively identified as? wheat (cf. *Triticum*) and one of? barley (cf. *Hordeum*)) from Context C15 (fill of pit C14). Similar "domestic waste" food indicators were recorded during the initial excavation phase within this area [[Contexts 10/006 10/007].

- 5.3.5 Charcoal fragments form C11 (fill of C10), C13 (fill of C12), C15 and C17 (fill of C16) – presumably derive from fuel waste, again commensurate with domestic refuse disposal.
- 5.3.6 As shown at Figures 7 & 7[2] the south west border of the site along the southern boundary of investigation Area C shows evidence of infilling of a localised depression seen as a lobe of re-deposited material [Units 2,3] extending into Area C.
- 5.3.7 Sparse glass and brick fragments [Modern / early mid C20th] present within Unit 2 and overlying layers suggest prior to infilling this site area may have presented as a localised depression accessible from the line of the current B2233.
- 5.3.8 As finds within Area C are interpreted as probable domestic refuse / discard it is hypothesised that probable refuse material may have been imported into the site from the south west boundary line.

6.0 Discussion and Conclusions Areas A, B & C.

- 6.1 The hypothesised extension of significant evidence for pre-historic activity seen within the first phase investigation within Trench 2 [ASE 2018] does not extend into the development site area.
- 6.2 Phase 2 results from Areas A and A1 indicate only light evidence for pre-historic [LBA/EIA] is present within this site area. Heavier concentrations to the north west though external to the development site should not be discounted.
- 6..3 The majority of features within Area B produced minimal or no dating evidence. There was no evidence found for the presence of significant medieval boundary features.
- 6..4 Dating of features, where possible, within Area B suggest the area was an area of medieval [HM] refuse discard rather than a confirmed area of medieval occupation or settlement.
- 6.5 The presence of animal burials within this area suggests the area, in the post medieval period, continued to be used as discard/dump area.
- 6.7 Within Area C a broadly similar pattern relating to form of recorded features and finds type and date range was noted as that recorded in Area B. However, an increase in concentration of medieval domestic / refuse finds when compared to Area B suggests Area C may be considered as a 'primary' discard area.

- 6.8 The predominant presence of High Medieval wares recovered from Area C would suggest a moderately significant occupation focus is present proximal to though outside the investigation / development site area.

AREA A

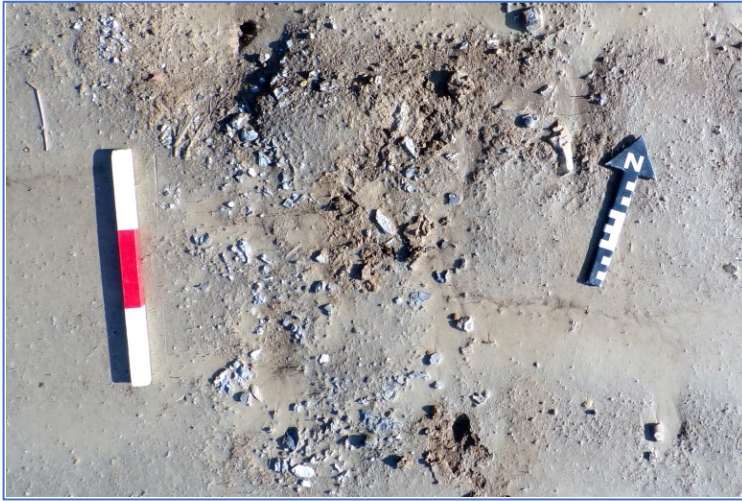


Plate A1: Burnt flint scatter prior to excavation of contexts [A/004 - A/005]

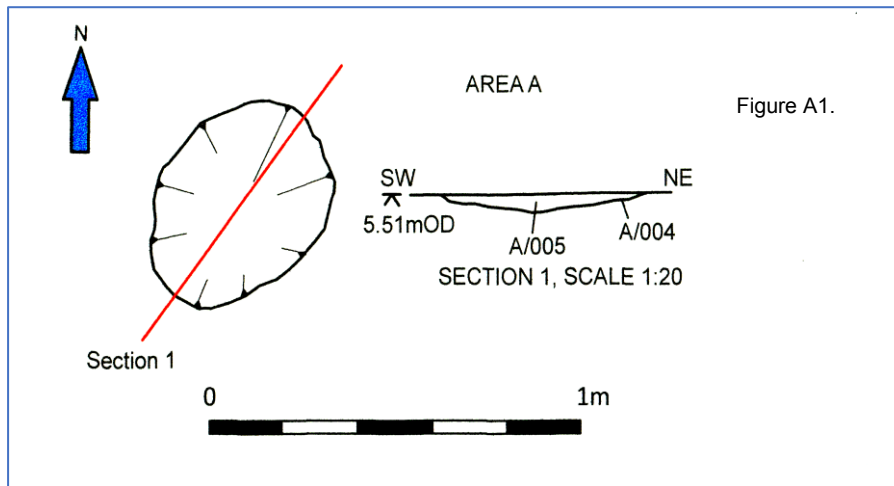


Figure A1.

Figure A1: Isolated shallow pit / scrape containing Late BA early IA pot fragments with burnt flint.

[Refer to Table Appendices 2 and 4 for detail].

AREA A2



Plate A2/1: Area A2 viewed from the south east looking north west. Shows location of representative Section A1. 

See Plate A2/2 for detail.



Plate A2/2. Section A 1 [north east facing section].

0.00: [top of section + 5.89m. OD.

0.00-0.42: [topsoil]

0.42. Moderately sharp horizontal contact

0.42-0.50/55 Mid brown to reddish brown silt to clay silt. Matrix moderately well rooted and supports sparse sub angular flint costs. [sub-soil / plough soil].

0.50/55. Sharp gently undulating contact

0.50/55-0.81. Mid reddish-brown clay silt. Dense firm and compact [upper brickearth silt].

Base of section +5.08m. OD.



AREA B

Plate B1: Area B viewed from the north looking south



Plate B2: Area B viewed from the south west looking to the north east.



Plate B3: Area B Section 1. West facing section [representative]

0.00: [top of section + 5.93m. OD].

0.00-0.34/40: [topsoil]

0.34/40-Moderately sharp undulating contact.

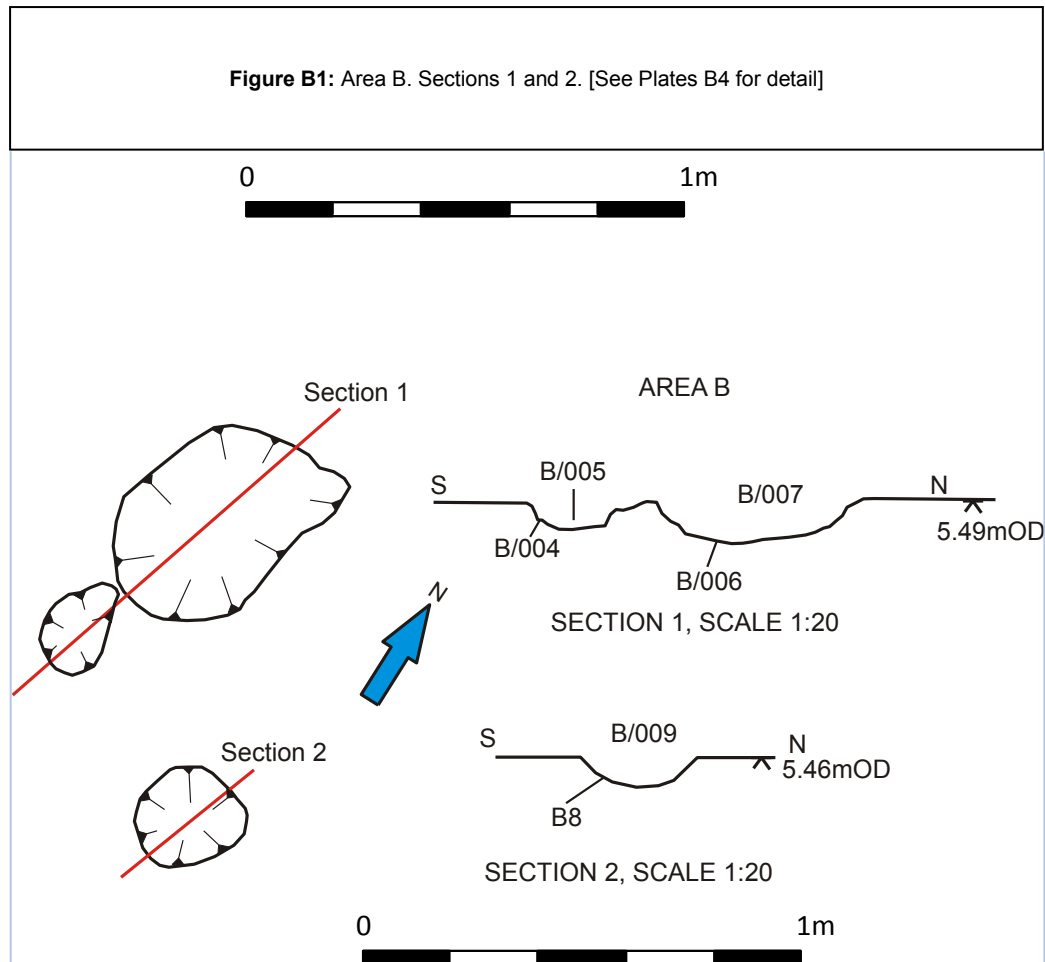
0.34/40- 0.55/0.60. Mid brown to reddish brown silt to clay silt. Matrix moderately well rooted and supports sparse sub angular flint costs. [sub-soil / plough soil].

0.55/0.60 Moderately sharp sub-horizontal contact

0.55/0.60-0.75 Mid reddish-brown clay silt. Dense firm and compact [upper brickearth silt].

Base of section + +5.18m OD.

AREA B



See **Figure 6** for locations within Area B.

Shallow pit grouping [no dating evidence / no significant environmental data]

AREA B

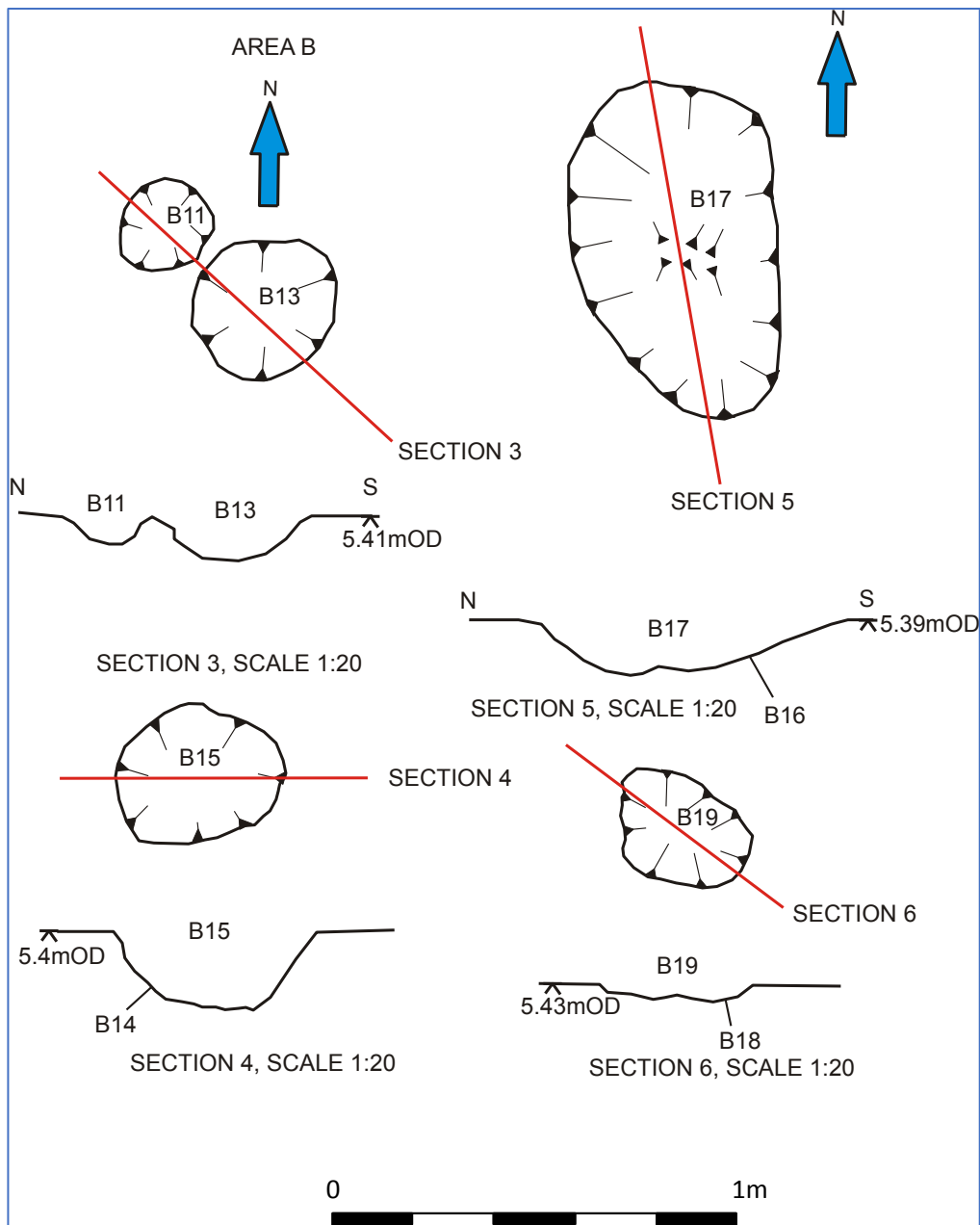


Figure B2: Area B. Sections 3,4,5 & 6. [See Plates B5, B6, B7 & B8 for detail]

See **Figure 6** for locations within Area B.

See Appendices 2,3 & 4 for detail.

AREA B

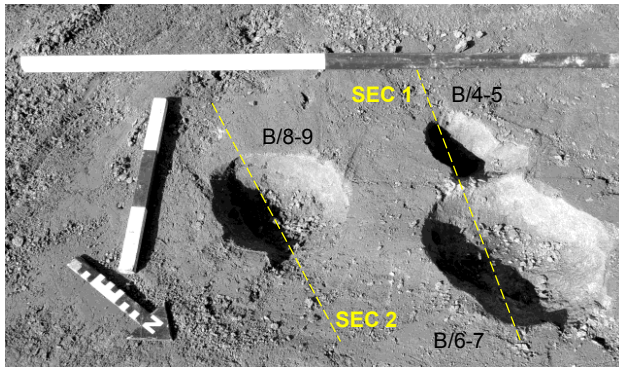


Plate B4: Area B pit grouping.

B/4-B/5.

B/6-B/7

B/8-B9

See Figure B2 Sections 1 and 2.

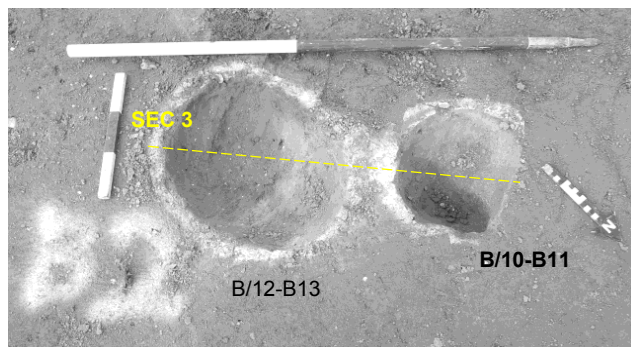


Plate B5: Area B pit grouping.

B/10-B/11

B/12-B/13

See Figure B2 for detail

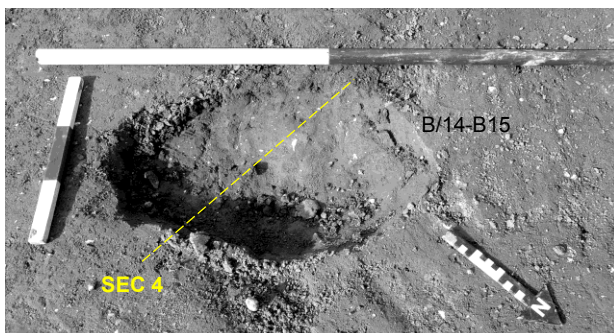


Plate B6:

B/14-B15

See Figure B2 for detail

See **Figure 6** for locations within Area B.

See Appendices 2,3 & 4 for detail.

AREA B

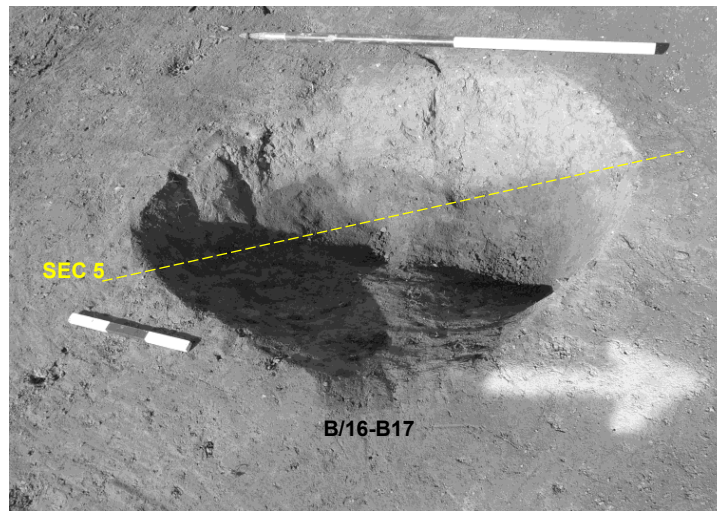


Plate B7: B16-B17

See Figure 2B / Section 5 for detail.

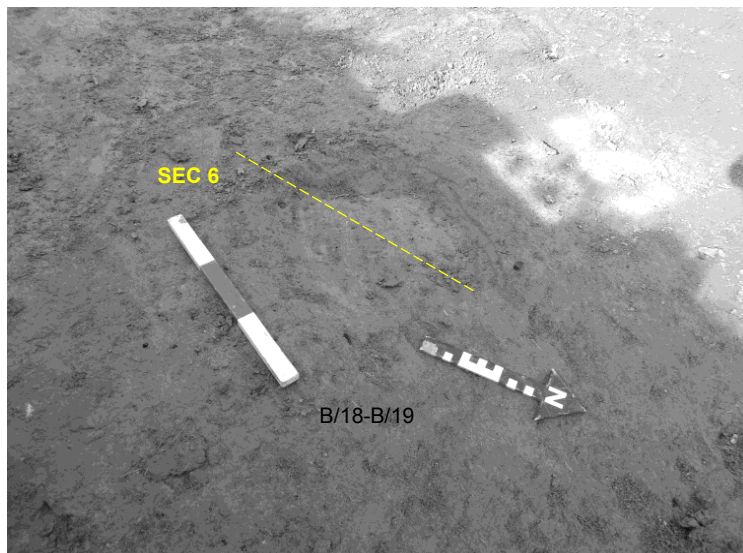


Plate B8: B18-B19

See Figure B2 / Section 6 for detail.

See **Figure 6** for locations within Area B.

See Appendices 2,3 & 4 for detail.

AREA B

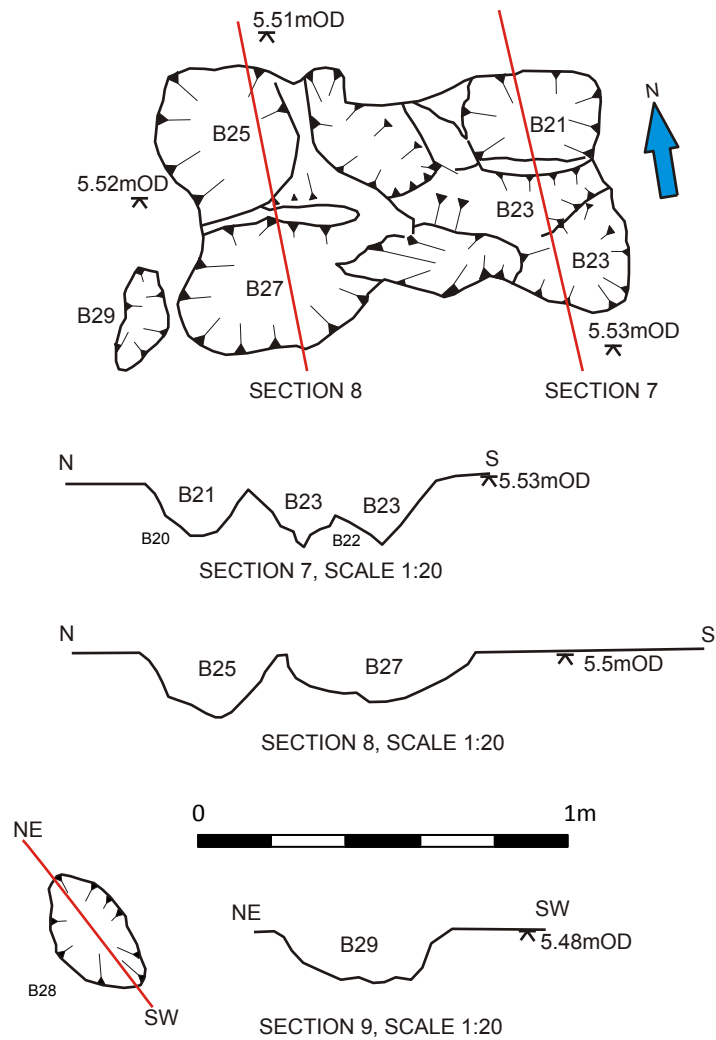


Figure B3: See **Figure 6** for locations within Area B
& see Plate B9 for detail.
See Appendices 2,3 & 4 for description.

AREA B

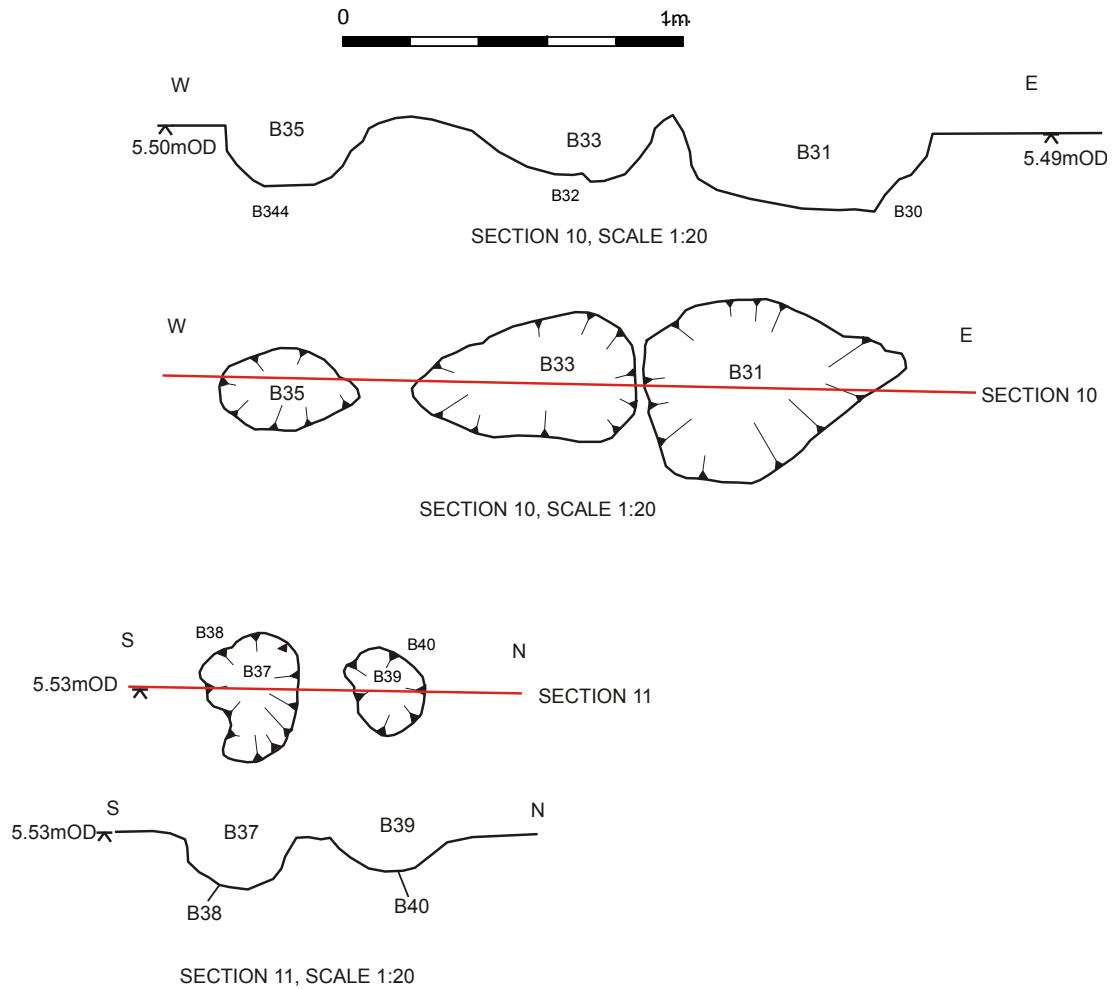


Figure B4: See Figure 6 for locations within Area B.

See Plates B10 & B11 for detail

See Appendices 2,3 & 4 for description.

AREA B

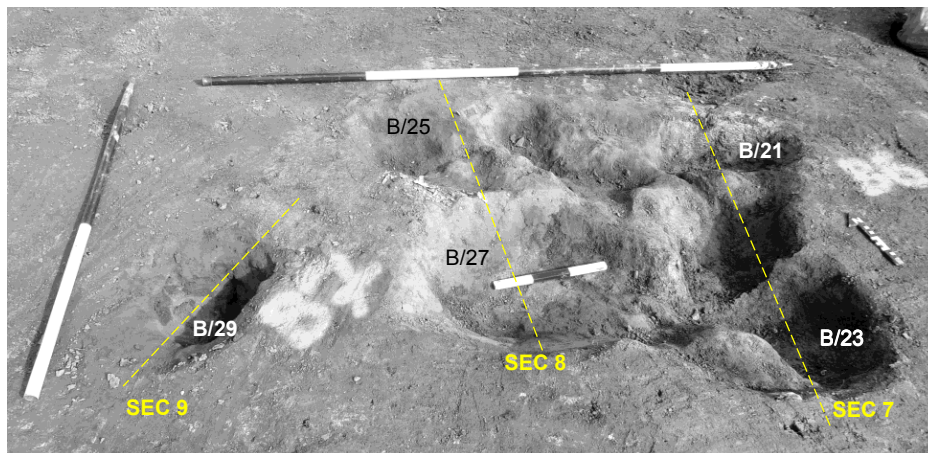


Plate B9:

B20-B21 / B22-B23 / B24-B25 / B26-B27 / B28-29.

See Figure B3 for detail

See **Figure 6** for locations within Area B.

See Appendices 2,3 & 4 for description

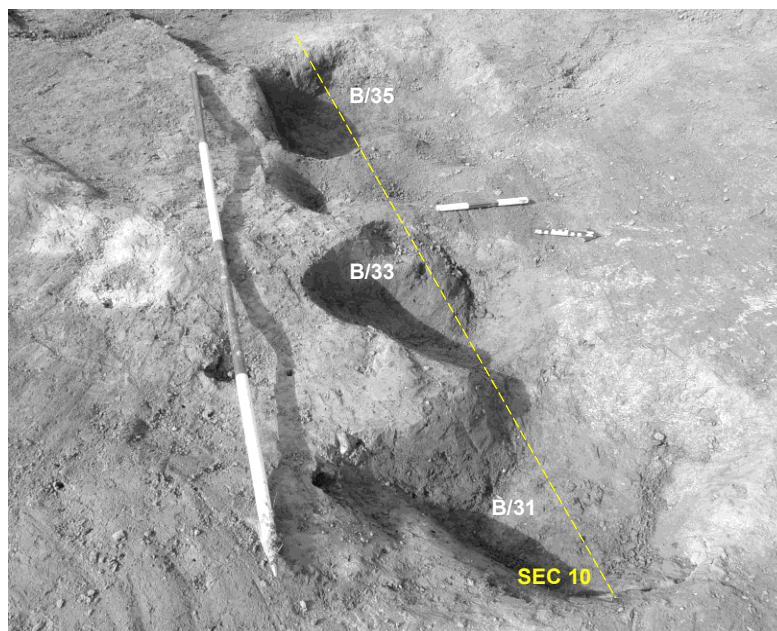


Plate B 10:

B30-B31 / B32-B33 / B34-B35

See Figure B4 for detail.

See **Figure 6** for locations within Area B.

See Appendices 2,3 & 4 for description

AREA B

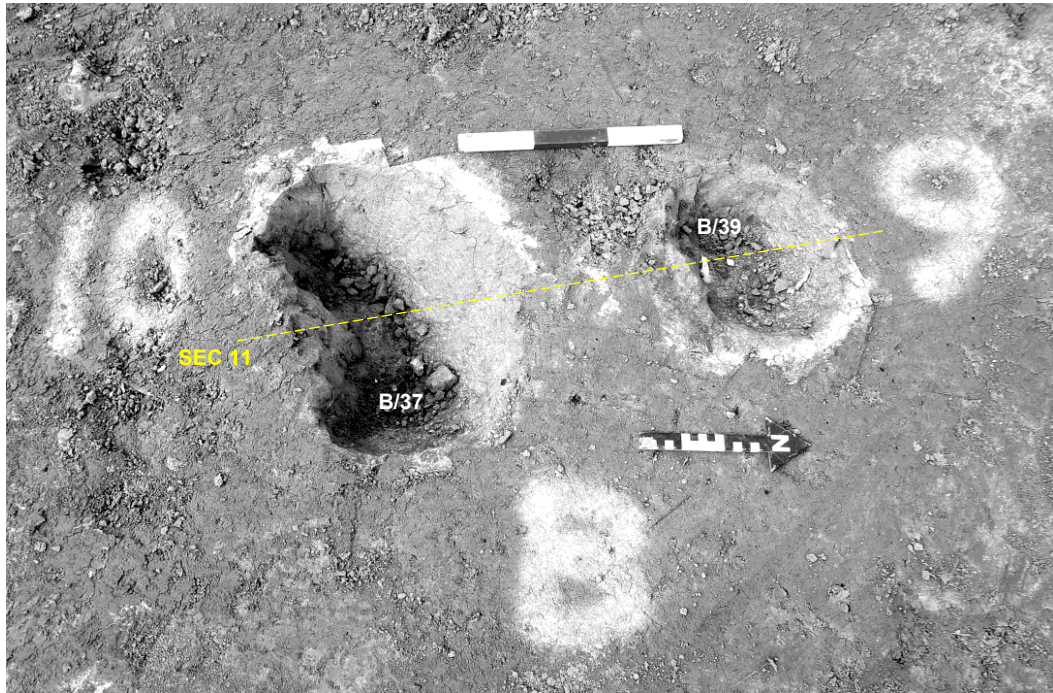


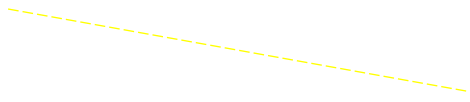
Plate B11:

B36-B37 / B38-B39.

See Figure B4 for detail.

See **Figure 6** for locations within Area B.

See Appendices 2,3 & 4 for description



AREA C

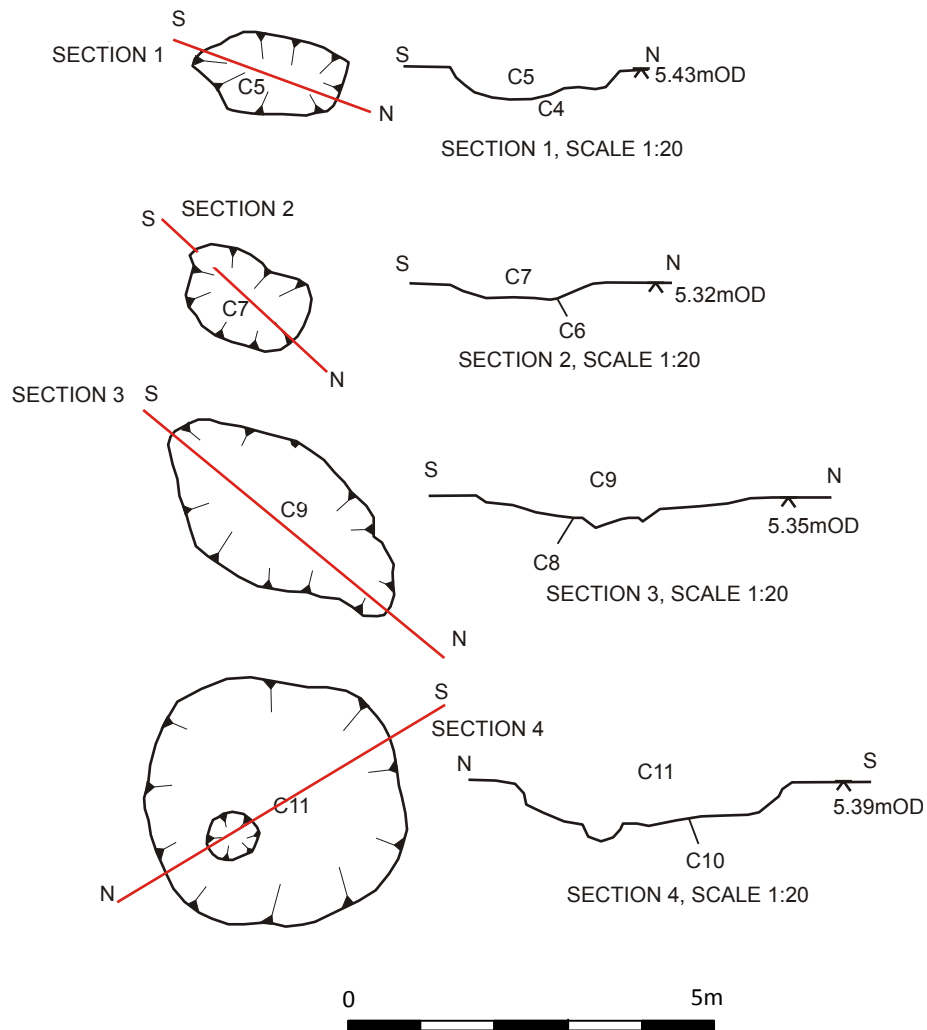


Figure C2: See **Figure 6** for locations within Area C.

See Plates C1 for detail [C10 / C11 only]

See Appendices 2,3 & 4 for description

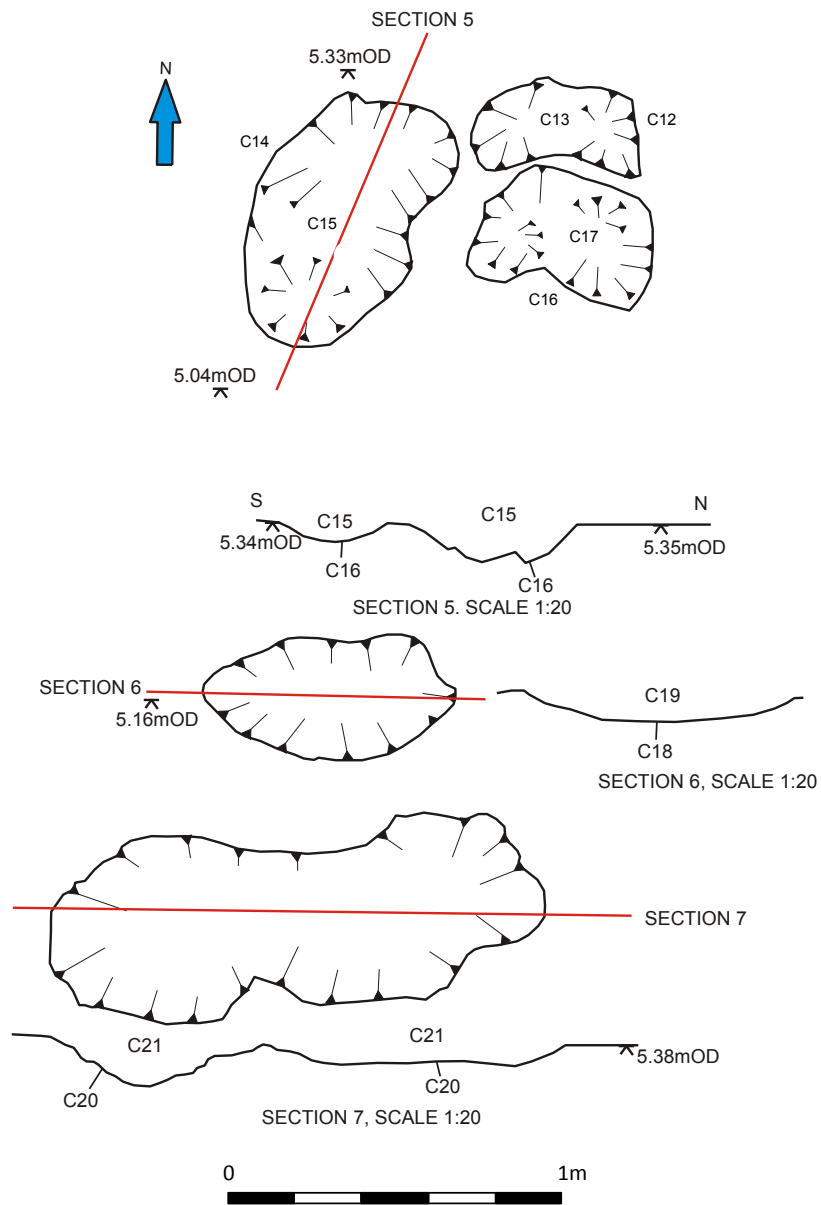


Figure C3.

See **Figure 6** for locations within Area C.

See Plates C2 for detail [

See Appendices 2,3 & 4 for description



Plate C1: C10 / C11

See Figure C2 for detail.

See **Figure 6** for locations within Area C.

See Appendices 2,3 & 4 for description

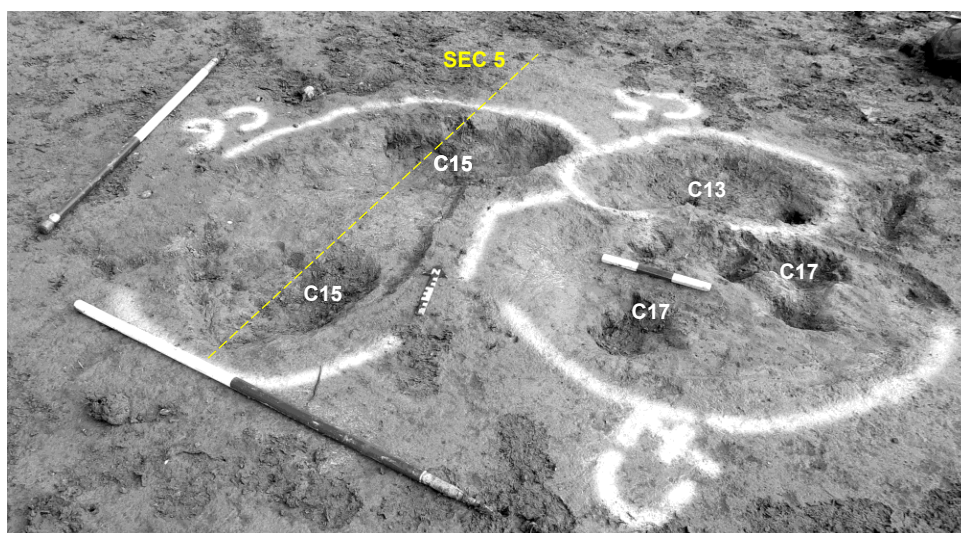


Plate C2:

C12-C13 / C14-C15 / C16-C17

See Figure C3 for detail.

See **Figure 6** for locations within Area C.

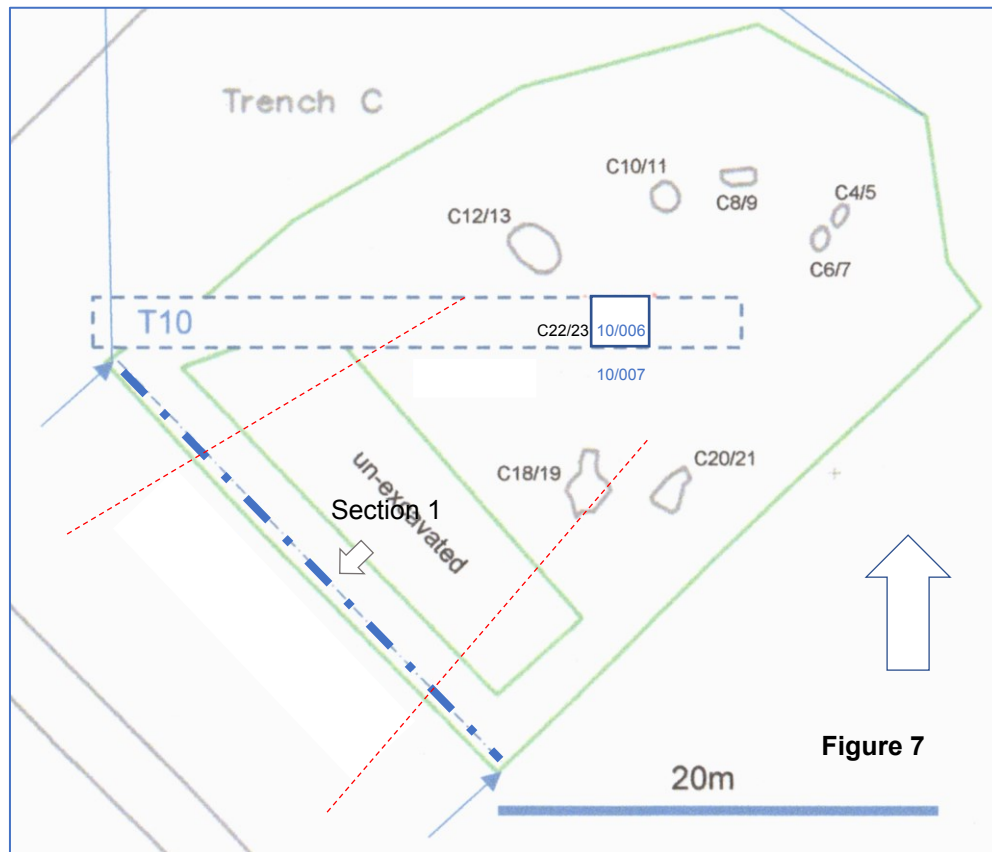


Figure 7: Location of North Facing **Section 1** within Area C.

Plate 7A: **Section 1** viewed from the south east looking north west

Plate 7B: Detail of recorded central section [See Figure 7[2] for description / detail.

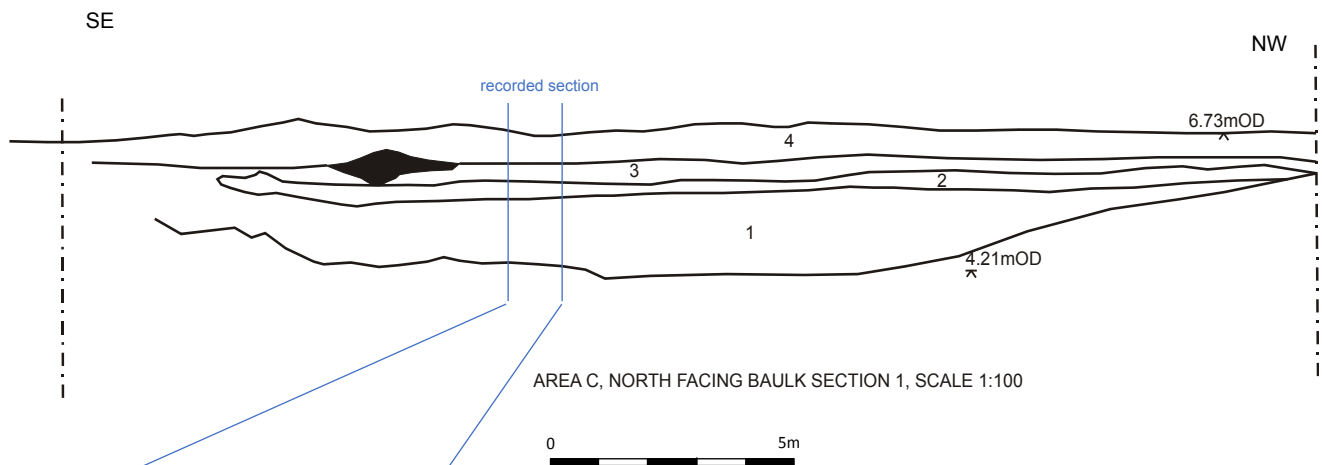


Figure 7 [2] Section description.



Area C North facing Section 1.

Top of section at + 6.75m O D.m [o.00]

0.00-0.38. **[UNIT 4 / upper]** mid to light brown silt / granular silt. Matrix is loose and friable and supports occ. modern [C20th] brick fragments [imported topsoil] and modern rooting.

0.38 moderately sharp irregular uneven contact

0.38-0.63. **[UNIT 4 lower]** [in patches / sub lenses] mid light brown to yellowish brown silt to clay silt [as discrete lenses]. Silt fraction very dense firm and compact. [appears as discrete lenses] = imported material/spread.

0.63- -----Sharp horizontal contact-----

0.63-1.19. **[UNIT 3]** Light yellowish-brown clay silt. Matrix is dense firm and compact with block structure. At west end of section discrete 'sub-unit' patch of modern [C20th] ash clinker debris.

1.19 _____Sharp horizontal contact_____

1.19-1.52. **[Unit 2]** light grey/brown clay silt to silty clay. Matrix is very dense firm and compact. No discernible structure. Matrix supports occ. glass [modern C20th] fragments and granular pockets of fine well sorted gravels. [modern imported / landscaping level]

1.52 _____Sharp horizontal contact_____

1.52-2.30 Light reddish-brown clay silt [Brickearth silt] -Natural. Contact at 5.21m OD.

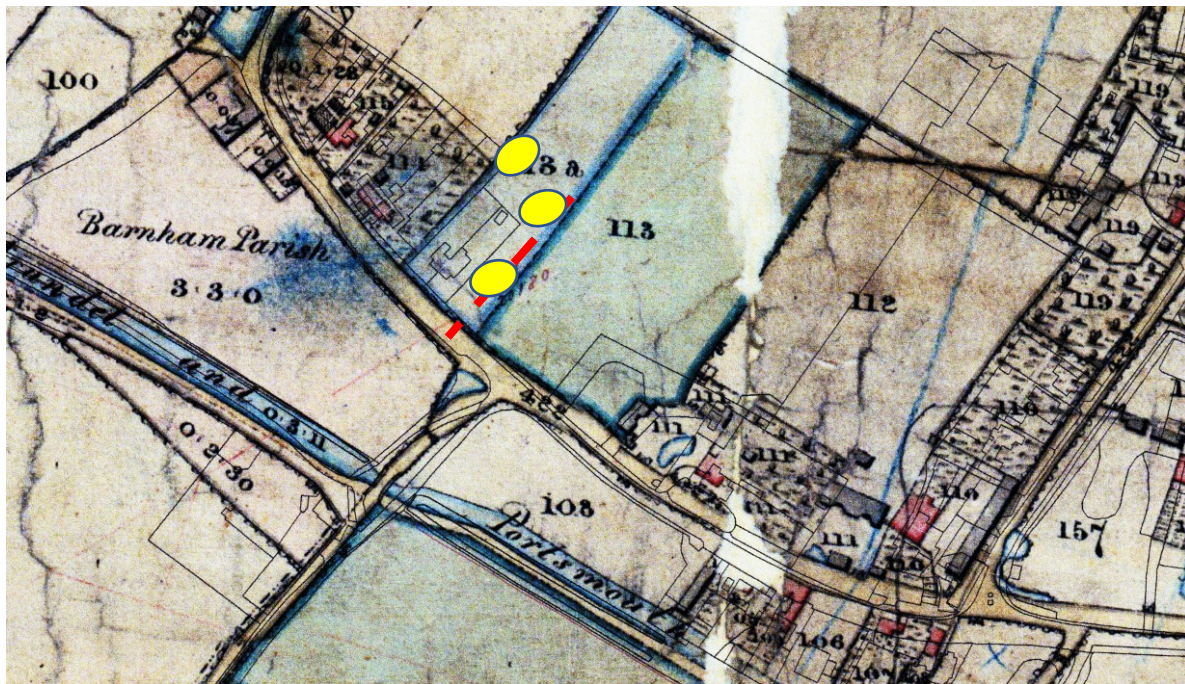


Figure 7 [3]

- - - - - projection [hypothesised] of recorded baulk section
- Approximate location of second phase investigation areas

7. Publication and dissemination proposals [archive deposition]

- 7.1 This document will be submitted to ADC's Archaeological advisor / officer [J. Kenny]. Following appropriate review and approval the appropriate archive deposition and OASIS deposition forms and associated deposition procedures will be completed
- 7.2 Following appropriate review, it is suggested that a note, summary report, may be submitted for incorporation, publication in an agreed journal
- 7.3 DAS will liaise with ASE to ensure all categories of finds and the appropriate archive records [written / photographic etc] are combined into a single coherent grouping prior to deposition at /with the appropriate designated recipient museum.

- 8. Acknowledgements:** DAS would like to thank James Kenny for his assistance at all project stages. Thanks, are also extended to Seaward Properties Ltd for commissioning all phase of work.

9.0 Bibliography

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Appendix 1: List of contexts from excavation [Phase 2]

Table 1: Area A: Context / Bulk sample / Description / Interpretation

Table 2: Area B: Context / Bulk sample / Description / Interpretation

Table 3: Area C: Context / Bulk sample / Description / Interpretation

TABLE 1: Area A: Context / Bulk sample / Description / Interpretation

CONTEXTS	Section No.	Context Description	Interpretation/comment
A1 [topsoil] A2 [sub soil] A3 BE silt.	See representative Section Sec A1 [Plate A2/2]	See Plate A2/2 and Plate A2/2	Representative Section baulk
Cut [A4] Fill [A5]	Sec 1	[A4] Cut 35cm X 20cm depth 4cms. [5] Light greyish brown silt. Matrix loosely compacted with no discernible bedding structure, supports sparse burnt flint frags and abraded pot fragments.	shallow ovoid pit / scrape

TABLE 2: Area B: Context / Bulk sample / Description / Interpretation

CONTEXTS	Section No.	Context Description	Interpretation/comment
B1 [topsoil] B2 [sub soil] B3 BE silt.	See representative Section Sec1	See Plate B3 : Area B Section 1. West facing section [representative]	Representative Section baulk
Cut [B4] Fill [B5]	Sec 1	[4] Cut 12cm diameter Depth 6cms. [5] Mid brown to reddish brown silt. Matrix is moderately firm and compact with no discernible bedding structure, supports sparse sub rounded flint clasts.	Small ovoid pit [associated with [B6/B7]
Cut [B6] Fill [B7]	Sec 1	[6] Cut 44cms wide at top with shallow sides falling to sub rounded base. Depth 10cms. [7] Mid brown mottled silt to granular silt.	Ovoid shallow pit [associated with [B4/B5]
Cut [B8] Fill [B9]	Sec 2	[8] Circular pit approx. 22cms diameter near vertical sides with rounded base. Depth 10cms. [9] Mid brown silt to granular silt. Matrix is moderately compact	Small shallow pit [possible association with pits 004/006.
Cut [B10] Fill [B11]	Sec 3	[B10] Small circular pit approx. 20cms diameter with near vertical sides and rounded base. Depth 10cms. [B11] Brown silt to granular silt. Matrix is moderately firm and compact and supports v. sparse charcoal [as flecks] and cbm/ferrous frags.	Shallow pit [possible association with B12/B13]
Cut [B12] Fill [B13]	Sec 3	[B12] Circular pit approx. 40 cms diameter with shallow profile to flat base. Depth 15cms.	

		[13] Light brown to mottled greyish brown silt. Matrix is moderately firm and compact and supports sub angular to occasionally angular flint clast with a single well-rounded 4cm diameter flint clasts.	Shallow pit [possible association with B10/B11]
Cut [14] Fill [15]	Sec 4	[14] Shallow pit approx. 40cms diameter with acute 45° profile with sub-rounded base. Depth 20cms. [15] mid brown to mottled mid grey silt. Matrix is moderately firm and compact, though with loose friable pockets of silt, and supports sub angular to occasionally angular flint clasts to maximum 1.5cms diameter.	Deep pit.
Cut [16] Fill [17]	Sec 5	[16] Cut 75cms wide at top with shallow profile to flat / ridged base. Depth 12cms. [17] Grey brown mottled grey silt to granular silt. No discernible bedding structures. Matrix supports sparse burnt flint granules sparse charcoal / plant fragments and abundant [2.7kg] animal bone.	Large pit [animal burial pit] Possible 2 cut phases?
Cut [18] Fill [19]	Sec 6	[18] Cut 40cms wide at top shallow profile with flat base. Depth 8cms. [19] Fill greyish brown silt. No discernible bedding structure Matrix supports sub angular burnt flint fragments and sparse organic material.	Shallow pit / scrape
Cut [20] Fill [21]	Sec 7	[20] Cut 20cms wide acute profile with angled [cut?] base. Depth 20cms. [21] Fill reddish brown mottled silt to granular silt. No discernible bedding structure Matrix supports sparse pot fragments, bone fragments and occ. burnt flint fragments.	Part of associated pit grouping. [B20 through to B27]
Cut [22] Fill [23]	Sec 7	[22] Cut / irregular in plan, 70cm wide X 80cm in length at top with asymmetrical acute [c90°] dip profile to cone base. Depth variable to 50cms. [23] Fill reddish brown silt. No discernible bedding structure Matrix supports occ. flint spalls [poss. debitage]	Part of associated pit cuts/grouping with B20 through to B27
Cut [24] Fill [25]	Sec 8	[24] Cut sub circular, 40cm diameter with steep c. 45° sides. Depth c. 18cms. [25] Fill reddish brown silt. No discernible bedding structure Matrix supports bone fragments [animal]	Part of associated pit cuts/grouping with B20 through to B27
Cut [26] Fill [27]	Sec 8	[26] Cut ovoid in plan 45cm X 30cms with gently sloping sides to flat base. [27] Fill reddish brown silt. No discernible bedding structure Matrix supports burnt flint fragments and bone fragments [animal]	Part of associated pit cuts/grouping with B20 through to B27
Cut [28] Fill [29]	Sec 9	[28] Cut 40cms at top with shallow irregular side profile to irregular flat base. Depth 17cms. [29] Fill reddish brown silt. No discernible bedding structure Matrix supports burnt flint fragments, poss. worked flint, plant and bone fragments [animal]	Small shallow ovoid pit [possible associated with adjacent pit grouping]

Cut [30] Fill [31]	Sec 10	[30] Ovoid cut 80cms X 50cm at top with c.45° sides to rounded to flat base. Depth 23cms. Fill [31] Fill reddish brown silt. No discernible bedding structure Matrix supports sparse burnt flint fragments sparse charcoal and bone fragments [animal]	Sub ovoid pit [association with pit grouping 32 to 35]
Cut [32] Fill [33]	Sec 10	[32] Ovoid cut 65cms X 33cms at top with variable slope to sides. Depth 20cms. [33] Fill brown silt clay silt with matrix supporting sparse burnt flint, cbm and bone [animal]	Sub ovoid pit [association with pit grouping 30 to 35]
Cut [34] Fill [35]	Sec 10	[34] Ovoid cut 40cms at top with c. 50° slope to rounded base. Depth 16cms. [35] Fill reddish brown silt. No discernible bedding structure Matrix supports sparse burnt flint fragments and bone fragments [animal]	Sub ovoid pit [association with pit grouping 30 to 33]
Cut [36] Fill [37]	Sec 11	[36] irregular ovoid small pit 20 X 30 with steep sides to rounded base. Depth 12cms [37] Mid reddish-brown silt. [negative]	Isolated pit [no inclusions]
Cut [38] Fill [39]	Sec 11	[38] Rounded small pit c. 20cm diameter. Depth 13cms [39] Mid reddish-brown silt. [negative]	Isolated pit [no inclusions]
Cut [40] Fill [41]	[no section record / photo record]	[40] Rounded pit c. 28cms diameter. Depth 14cms. [41] Mid reddish-brown silt [negative]	Isolated pit [no inclusions]
Cut [42] Fill [43]	No section record / photo record].	[42] Rounded pit c. 30cms diameter. Depth 17 cms [43] Mid reddish-brown silt [negative].	Isolated pit [no inclusions]

TABLE 3: Area C: Context / Bulk sample / Description / Interpretation

CONTEXTS	Section No.	Context Description	Interpretation/comment
C1 [topsoil] C2 [sub soil] C3 BE silt.	See Section Sec1Areac C Figure 7.	See Figure 7.	???
Cut [C4] Fill [C5]	Sec 1	[4] Ovoid shallow pit 40cm X 20cm Depth 8cms. [5] Mid brown silt. Matrix is moderately firm and compact with no discernible bedding structure. Contains single pot fragment	Small ovoid pit / shallow 'scrape'.
Cut [C6] Fill [C7]	Sec 2		

		[6] Sub rounded shallow pit 22cm wide X 39cm with shallow sides falling to flat base. Depth 5cms. [7] Mid brown mottled silt, supports flint fragments [poss. core] and X2 pot fragments.	Small ovoid pit / shallow 'scrape'
Cut [C8] Fill [C9]	Sec 3	[8] Ovoid pit approx. 40 cms wide X 80cm in length. Depth 5cms. [9] Mid brown silt to granular silt. Matrix is loosely compacted and contains flint debitage and some pot & oyster [Ostrea edulis] valves [X2]	Shallow pit / scrape
Cut [C10] Fill [C11]	Sec 4	[10] Circular pit approx. 70cms diameter with shallow sloping sides with small c. 8cm diameter 'sub pit' [poss. post hole scar] at northern end. Depth 21cms. [11] Brown silt. Matrix is moderately firm and compact and supports sparse burnt flint / sparse charcoal and pot [moderately abundant]	Shallow circular pit Poss. shallow post hole forming at base.
Cut [C12] Fill [C13]	No section recorded [see plate C2]	[12] Ovoid irregular pit approx. 45 cms X 24cm with shallow profile to flat base. Depth 12cms. [13] Light to mid brown to mottled greyish brown silt. Matrix is moderately firm and compact and supports burnt flint / flint debitage / spalls, pot and cbm fragments.	Shallow irregular pit probably associated with C14-C17
Cut [C14] Fill [C15]	Sec 5	[14] Shallow sub ovoid pit [2 linked pits] approx. 70cms X 45cm with very shallow profile with sub-rounded base. Depth 12cms. [15] mid brown to mottled mid grey silt. Matrix is moderately firm and compact, and supports burnt flint [granular] fragments some pot and cbm.	Shallow ovoid pit [X 2 conjoined pits] associated with C12-C17.
Cut [C16] Fill [C17]	No section recorded [see plate C2]	[16] Irregular ovoid pit 55cms wide 70 long with irregular profile to ridged base. Depth 35 cms. [17] Brown mottled grey silt to granular silt. Matrix supports burnt flint and frequent pot and cbm fragments.	Irregular ovoid pit / scrape associated with C12-C15
Cut [C18] Fill [C19]	Sec 6	[18] Ovoid shallow pit 85cms long X 40cms wide. Very gently angled sides to curved shallow base 5cms deep. [19] Mid brown silt fill supporting burnt flint [poss. blade] moderately frequent pot / cbm and single bone fragment [includes coal/bitumen fragments]	Shallow pit / scrape
Cut [C20] Fill [C21]	Sec 7	[20] Ovoid shallow pit 1.40m long X 60cms wide. Shallow depth variable between c. 5cms to 15cms. [21] Grey / brown silt fill with matrix supporting flint spalls [X3] pot frags. and oyster [Ostrea edulis X 3 valves].	
Cut [C22] Fill [C23]	Base of ASE [stage 1] feature [ASE context 10/007]	Bae of 10/007 [Phase 1 investigation] Initially interpreted as possible quarry pit. Re-interpretation as deep refuse pit.	

Appendix 2: Sample process register [Areas A, B and C.]

Bon/20: AREA A: Sample process register / summary:

A1: Topsoil

A2: Sub-soil

A3 B/E silt [natural].

Bulk / Sample No.	VOLUME litres [approx.]	CONTEXT A1: Topsoil A2: Sub- soil A3 B/E silt [natural]	Description [summary]	Burnt flint [weight no. of pieces / description]	Pot	Plant remains [flot detail]	Bone/shell	other	comment
		CUT/FILL							
A1	40	C4/C5	Shallow< 2cms spread/pit	23 frags 295gms	X1: 22gms				Shallow< 2cms spread/pit

Bon/20: AREA B: Sample process register / summary:

B1: Topsoil

B2: Sub-soil

B3 B/E silt [natural.

Bulk / Sample No.	VOLUME litres [approx.]	CONTEXT B1: Topsoil B2: Sub-soil B3 B/E silt [natural.	Description [summary]	Burnt flint [weight no. of pieces / description]	Pot	Plant remains [flot]	Bone [Animal]	other	comment
		CUT/FILL							
B1-A B1-B B1-C	10 10 10	B4/B5 B6/B7 B8/B9	Grouping of small, poss. associated pits	neg	neg	neg	neg	neg	Group poss. associated shallow pits.
B2-A	20	B10/B11	One of two small, poss. associated pits	1 frag. 1gm		Flot [inc. charcoal]		Ferrous frags. X2. 16gms	One of two small, poss. associated pits
B2-B		B12/B13	One of two small, poss. associated pits	neg	neg	neg	neg	neg	One of two small, poss. associated pits
B3	30	B14/B15	Shallow pit	neg	neg	neg	neg	neg	Shallow pit
B4	60	B16/B17		Burnt flint. 2 gms		Flot submission to **	Abundant animal bone. [2.7kilo] [molluscs]	Ferrous 8gms [nail]	Large ovoid pit
B5	15	B18/B19		Burnt flint X 4frags.		Flot submission to **			Shallow pit
B6-A	30	B20/B21		B/F 6 frags 31gms	X4 10gms		X 4 frags 67gms		Pit [part of grouping]
B6-B	20	B22/B23		X 2 flint spalls. 2gms					Pit [part of grouping]
B6-C	30	B24/B25					10+ frags.180gms		Pit [part of grouping]
B6-D	30	B26/B27		B/f 1X6gms	1X 8gms		10+ frags. 191gms		Pit [part of grouping]
B7	20	B28/B29		B/f X 5 frags 28gms. [1X worked flint [poss. blade]		Flot submission to **	X2 frags. 165gms		Small pit [poss associated with B6-A, B, C, D.
B8-A	20	B30/B31		B/f X 3 frgs 10gms		Flot [charcoal frag.] submission to **	X 3 frags. 3gms		Pit [part of grouping]
B8-B	20	B32/B33		B/f x 9frags 163gms	Cbm x3 frag. 27gms		X16 frags [inc tooth] 93gms.		Pit [part of grouping]
B8-C	20	B34/B35		B/f 2X 23gms			X13 frags. 233gms		Pit [part of grouping]
B9	15	B36/B37	neg	neg	neg	neg	neg	neg	Small pit
B10	15	B38/B39	neg	neg	neg	neg	neg	neg	Small pit
B11	15	B40/B41	neg	neg	neg	neg	neg	neg	Small pit
B12	15	B42/B43	neg	neg	neg	neg	neg	neg	Small pit

Bon/20: AREA C: Sample process register / summary:

C1: Topsoil

C2: Sub-soil

C3: B/E silt [natural].

Bulk / Sample No.	VOLUME [approx.]	CONTEXT C1: Topsoil C2: Sub-soil C3 B/E silt [natural.	Description [summary]	Burnt flint [weight no. of pieces / description]	Pot/CBM	Plant remains [flot for submission]]	Bone / shell	other	comment
		CUT/FILL							
C1	40	C4/C5	Pit		X1: 22gms				
C2	40	C6/C7	Pit	Flint poss.? core] X3 frags. 58gms	X2: 25gms				
C3	40	C8/C9	Pit	Flint x3 frags 160 gms [debitage]	X4: 135gms		Oyster [Ostrea edulis] X 2 valves: 98gms		
C4	40	C10/C11	Pit	B/flint & flint debitage: X18 frags. 82gms.	X11: 103gms	Flot. submission to **		Charcoal X2 [<1gm] Clay [burnt [daub?]] 21 frags. 148gms	
C5	20	C12/C13	Pit [associated with 6 and 7]	B/flint frags & debitage/spalls] X15. 73gms	X6. 41gms CBM X3. 120gms	Flot. submission to **			
C6	20	C14/C15	Pit [associated with 5 and 7]	B/Flint: > 100. [granular frags].237gms	X7. 73gms	Flot [charcoal frag] submission to **		charcoal frags	
C7	20	C16/C17	Pit [associated with 5 and 6]	Burnt flint / flint fragments [poss. blade frags]. 43gms	X21. 285gms. CBM: 10X528gm	Flot. submission to **	Sandstone block [Bognor rock] tertiary [approx. 1kg]		
C8	40	C18/C19	Shallow pit / spread	Burnt flint / flint fragments [poss. blade frags] X3 47gms	X5. 111gms X1 frag. 101gms CBM X1 320gms		Bone X1. 7gms.	Bitumen / coal? X4 frags. 22gms	
C9	40	C20/C21	Shallow pit / spread	Flint debitage / frags. X3. 3gms	X4. 43gms		Oyster [Ostrea edulis] X 3 valves: 72 gms		
C10	40	C22/C23	Base of ASE feature		X10 164gms				

Appendix 3:

Assessment of biological remains from bulk sediment samples recovered from archaeological works undertaken at Bonhams Field, Main Road, Yapton, West Sussex (site code: BON/20)

by
Alison Foster and John Carrott

Summary

Remains recovered from bulk sediment samples processed following a second phase of archaeological investigations at Bonhams Field, Main Road, Yapton, West Sussex, were submitted for an assessment of their bioarchaeological potential. Four areas (designated A, A2, B and C) were investigated but no archaeology was revealed in Area A2 and no material from samples in Area A were submitted. All of the submitted material was from two groups of three possibly associated pits in Area B and a single deep pit feature with possibly associated peripheral shallow irregular plan pits in Area C; dating evidence was limited but, provisionally, the activity was thought to be of medieval date in Area B and medieval/post-medieval in Area C.

Biological remains recovered in the sample flots were few and predominantly clearly, or almost certainly, intrusive or contaminants (modern rootlet and occasional other plant remains, including elder and sycamore fruits, and a woodlouse). Charred plant material from several of the samples, mostly indeterminate rectilinear charcoal fragments, and perhaps a small mollusc assemblage (at least in part) from the fill of a large ovoid pit in Area B were more likely contemporary with deposition but too small and too poorly preserved to be of any interpretative value – other than to note that the former probably reflects a 'background' level of fuel waste. There were a few larger charcoal fragments from pit fills in Area C which could be tentatively identified as ?heather (from one pit) and alder/birch/hazel (from two pits), with one of the latter also yielding six charred grains/grain fragments (poorly preserved but provisionally including two of ?wheat and one of ?barley). Although the grains/grain fragments and one fragment of ?heather roundwood charcoal (which represented just 7 or 8 years of wood growth) could be submitted for radiocarbon dating (via AMS) this cannot be recommended for dating of the deposits as a whole – given the tiny quantities of material recovered there is a strong possibility that individual small remains may have been displaced from their original point of deposition by subsequent human activity and/or bioturbation.

Several pits from the associated group in Area B yielded a small assemblage of vertebrate remains comprising the part-skeletons of a horse and at least two dogs. The horse bones mostly represent the axial skeleton with a single calcaneus and a few other fragments of limb bone. Additional bone included elements from a cattle hind foot, found in the same pit as some of the dog bones. Although medieval pottery was recovered from three pits in Area B (and also a shallow pit/spread in Area C), the shallow nature of the burials and the subsequent disturbance of the deposits, together with the preservation and light colour of the bone, suggest a relatively recent date for the part-skeletons, probably post-medieval/modern. It is possible that this part of the field was set aside for the burial of animals closely connected to the household, in contrast to pits commonly dug for the convenient disposal of fallen stock from the farm.

The extant material is of no further interpretative value beyond that reported in this assessment and may be discarded.

KEYWORDS: BONHAMS FIELD; MAIN ROAD; YAPTON; WEST SUSSEX; ASSESSMENT; MEDIEVAL; POST-MEDIEVAL; PLANT REMAINS; CHARRED PLANT REMAINS; CHARCOAL (TRACE); CHARRED GRAIN/GRAIN FRAGMENTS (TRACE); INVERTEBRATE REMAINS (TRACE); LAND SNAILS (TRACE); VERTEBRATE REMAINS

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Assessment of biological remains from bulk sediment samples recovered from archaeological works undertaken at Bonhams Field, Main Road, Yapton, West Sussex (site code: BON/20)

Introduction

A second phase of archaeological investigations prior to a housing development was undertaken by Development Archaeology Services at Bonhams Field, Main Road, Yapton, West Sussex (centred around NGR SU 97555 03460) between the 1st and the 23rd of October 2020. The works consisted of a monitored topsoil strip, map and record exercise in four site areas – designated Areas A, A2, B and C – with archaeological features and deposits encountered and provisionally interpreted as follows:

Area A – a single shallow spread or shallow pit containing frequent burnt flint fragments and three sherds of prehistoric (late BA early Iron Age) pottery.

Area A2 – no features/deposits encountered.

Area B – north central area containing pits (two groupings of three possibly associated pits). Probably medieval in date with moderate, and locally high, concentrations of animal bone.

Area C – a single deep with possibly associated peripheral shallow irregular plan pits. Possibly the central area of medieval/post-medieval activity (perhaps occupation or primary refuse disposal area [*Pine C.A. pers com.*]).

Small quantities of remains recovered as the flots from nine bulk sediment samples ('GBA'/'BS' *sensu* Dobney *et al.* 1992) and, for three of these samples, a little separately bagged charcoal or shell, together with a small assemblage of vertebrate remains (also from bulk sediment samples), were submitted to Palaeoecology Research Services Limited, Kingston upon Hull (PRS), for an assessment of their bioarchaeological potential. All of the submitted material was recovered from deposits in Areas B and C.

Methods

The samples were processed by DAS following their standard methodology. Samples were processed outside using a 'Siraf' style flotation tank (Williams 1973), with meshes of 500 microns for retention of the residue and the 'flot' collected in a 300-micron mesh sieve. Residues were subject to additional bucket flotation in order to obtain maximum possible retrieval of environmental evidence.

Only the 'flot' fractions from nine samples with, for two of the samples, a little separately bagged charcoal (fragments over 10 mm) and from one a little separately bagged shell, together with a single bone fragment from an additional sample in Area C were submitted for assessment.

Plant macrofossil remains were compared with modern reference material (where possible) and with published works (e.g. Cappers *et al.* 2006 and, for cereal identifications, Jacomet 2006), and identified to the lowest taxon possible or necessary to achieve the aims of the project. Nomenclature for plant taxa follows Stace (1997), with cereal identifications following Jacomet (2006) where nomenclature follows van Zeist (1984); no species level cereal identifications were made, however.

Charcoal identifications were attempted for larger fragments, all of which were over 4 mm in at least one dimension. Pieces were broken to give clean cross-sectional surfaces and the anatomical structures were examined using a low-power binocular microscope (x7 to x45) and higher magnification where necessary (x100 and x150). Identifications were made by comparison with modern reference material where possible, and with reference to published works (principally Hather 2000 and Schoch *et al.* 2004).

Mollusc remains were examined and individuals identified as closely as possible, with reference to published works (chief sources: Cameron 2003; Cameron and Redfern 1976; Evans 1972; Kerney 1999; Kerney and Cameron 1979). Nomenclature follows Kerney (1999). Minimum numbers of individuals present were estimated by numbers of shell apices. Other invertebrate remains present were clearly modern intrusions or contaminants and were recorded in brief.

For the vertebrate remains, subjective records were made of the state of preservation, colour of the bone fragments, and the appearance of broken surfaces ('angularity'). The bones were also examined for evidence of dog gnawing, burning, butchery and fresh breaks which was noted where applicable. Where fragments of the same bone could be confidently refitted the pieces were recorded as a single element. Where possible, fragments were identified to species or species group using modern comparative reference material and published works (e.g. Schmid 1972). Remains that could not be identified to species were grouped into categories: large mammal (assumed to be cattle, horse or large deer (cervid)), medium-sized mammal 1 (assumed to be sheep/goat (caprine), pig or small deer), medium-sized mammal 2 (from a cat or hare-sized mammal) and completely unidentifiable. Metrical data follows von den Dreisch (1976).

During recording, consideration was given to the identification of suitable remains (if present) for possible submission for radiocarbon dating by standard radiometric technique or accelerator mass spectrometry (AMS).

Results

The results of the examination of the sample flots and the small quantities of associated but separately bagged charcoal and shell are presented in Table 1, together with archaeological information, provided by the excavator. All of this material was from samples in Areas B and C but none of the remains recovered were of any significant interpretative value. The only remains likely to be contemporary with deposition and of *any* intrinsic interest were six charred grains/grain fragments (including two tentatively identified as ?wheat (cf. *Triticum*) and one of ?barley (cf. *Hordeum*)) from Context C15 (fill of pit C14) and occasional

land snail shells (heavily fragmented) from Context B17 (fill of large ovoid pit B16) which included one *Discus rotundatus* (Müller) and one ?*Trichia hispida* (L.); both assemblages were far too small and too poorly preserved for interpretation, however. There were also four indeterminate bone fragments from pit B16 which probably derived from the part-skeleton of a horse recovered from this feature (see below). Trace levels of charcoal in six pit fills – Contexts B29 (fill of B28), B31 (fill of B30), C11 (fill of C10), C13 (fill of C12), C15 and C17 (fill of C16) – presumably derive from fuel waste but provided little additional information. Occasional larger fragments could be tentatively identified as? heather (cf. *Calluna*) from Context C11 and? alder/birch/hazel (cf. *Alnus/Betula/Corylus*) from Contexts C15 and C17 but no definitive species level identifications were possible owing to the fragility of the fragments. Almost all of the charcoal was rectilinear fragments, the exceptions being the two? heather fragments from Context C11 which were of roundwood and one of which could be determined to represent 7 or 8 years of wood growth. Other plant and invertebrate remains were few and all were clearly, or almost certainly, modern intrusions or contaminants.

The excavations also produced a small assemblage of vertebrate remains amounting to 344 fragments representing 64 bones. With the exception of a single bone from Area C (Context C19; fill of pit C18), all of the material was recovered from the group of pits in Area B. The bone from Area B was of a consistent condition and colour and appeared generally well-preserved, although the more fragile elements, including a horse skull, were much fragmented and refitted where possible.

A summary of the vertebrate remains identified, by Area, is given below and detailed records, by context/fill, are shown in Table 2, with metrical data presented in Table 3.

Area B

The majority of the material from Area B are horse bones, most of which were recovered from the large ovoid pit (B16) which may be the base of a once-larger feature. Additional fragments were found in three associated pits (B24, B26 and B28). Elements present comprised: most of the skull (excluding the mandibles and the maxillary teeth), at least four cervical vertebrae (excluding the atlas and axis), one each of the thoracic and lumbar vertebrae, numerous rib fragments, a single calcaneus, and small fragments of femur and ulna. The size of the bones and consistent preservation strongly suggest that these derived from the same individual and were the partial remains of a once-complete skeleton, subsequently disturbed and dispersed. Examination of the intact external occipital process showed the morphology to be compatible with that of horses rather than donkeys (Hanot and Bocheron 2018) – the relatively large size of the bones also makes it unlikely that this was a donkey. An estimated size for the horse was not possible as none of the elements normally used for withers height calculation were present; although the calcaneus is smaller than that from a 16hh (approximately 162cm at the withers) modern reference horse skeleton. Fusion of the calcaneal tuberosity and the physes of the vertebral bodies was complete, indicating an animal of at least five years old (Schmid 1972). Teeth might have provided additional ageing information but none were recovered; however, the tooth sockets in a small piece of pre-maxilla included the alveolus for a relatively large canine. These develop in stallions and geldings and have usually erupted by the time the animal is five (Richardson 1997). Although mares do occasionally develop canine teeth, they are almost always small

or remain unerupted. No trauma was apparent on the temporal region of the skull to suggest euthanasia by captive bolt, pole axe or bullet to the brain. There were no butchery marks on the bones to indicate disarticulation of the carcass or cuts to show the animal had been skinned, although the elements that normally display this evidence were largely absent.

A number of dog bones were recovered from two associated pits (B32 and B34) to the west of the horse skeleton, together with a mandible fragment and a lumbar vertebra from pits B24 and B26, respectively. Very few of the bones could be measured but the size of the surviving elements (including two right pelves) suggested a larger dog in pit B34 and a slightly smaller individual in pit B32. Also found in pit B34 were the metatarsal and first phalanges of a cattle hind foot. The second and third phalanges were not present and, as there was no butchery evidence for their removal, it seems most likely that later disturbance of the feature was responsible for their dispersal and loss.

The remainder of the bone from Area B included a few fragments of a cattle proximal tibia shaft from the ovoid pit (B16). Differential preservation of these fragments suggest that they were older than the horse skeleton and may, along with an isolated sheep/goat molar, represent material redeposited at the time of the horse burial.

Area C

A single dog calcaneus was the only bone recovered – from a 40-litre bulk sample (Sample C8) of Context C19 (fill of shallow pit/spread C18).

Discussion and statement of potential

Biological remains recovered in the sample flots were few and predominantly clearly, or almost certainly, intrusive or contaminants (modern rootlet and occasional other plant remains, including elder and sycamore fruits, and a woodlouse). Charred plant material from several of the samples, mostly indeterminate rectilinear charcoal fragments, and *perhaps* the small mollusc assemblage (at least in part) from the fill of large ovoid pit B16 were more likely contemporary with deposition but too small and too poorly preserved to be of any interpretative value – other than to note that the former probably reflects a ‘background’ level of fuel waste. There were a few larger charcoal fragments which could be tentatively identified as ?heather (from pit C10) and alder/birch/hazel (from pits C14 and C16) and one of the former was a piece of roundwood representing 7 or 8 years of wood growth which *could* be submitted for radiocarbon dating (via AMS); however, see *caveat* below. From pit C14 there were also six charred grains/grain fragments (poorly preserved but provisionally including two of ?wheat and one of ?barley – not identifiable more closely); again, too few for any interpretation but potentially could provide radiocarbon dating candidate material. Overall, the charred plant remains cannot be recommended for radiocarbon dating of the deposits themselves, however. Other than the single piece of charcoal noted above, all of the fragments were of an indeterminate number of years of wood growth and, consequently, the associated ‘old wood’ problems could

result in a radiocarbon date significantly earlier (by an unknown amount but potentially several hundreds of years in the case of long-lived species such as oak) than the charring event being returned. The ?heather roundwood fragment (pit C10) and the charred grains/grain fragments (pit C14) would provide more suitable material for AMS dating, but the quantities of charred material recovered from the samples were so small that there would be considerable doubt regarding the extension of any dates returned to the deposits as a whole – given the strong possibility of displacement of individual small remains from their original point of deposition by subsequent human activity and/or bioturbation (by, for example, root growth or earthworm and other animal burrowing).

Several pits from an associated group in Area B yielded a small assemblage of vertebrate remains comprising the part-skeletons of a horse and at least two dogs. The horse bones mostly represent the axial skeleton with a single calcaneus and a few other fragments of limb bone. Additional bone included elements from a cattle hind foot, found in the same pit as some of the dog bones. Dating was problematic: medieval pottery was recovered from four of the features (pits B20, B26 and B32 and shallow pit/spread C18), together with an undated ferrous nail (from pit B16) but these may have been redeposited as the pits were backfilled. The shallow nature of the burials and the subsequent disturbance of the deposits, together with the preservation and light colour of the bone, suggest a relatively recent date for the part-skeletons, probably post-medieval/modern.

Horse burials on farmland are not unusual. At the end of their working lives, horses retained some value and during the post-medieval period towns and cities had knacker's yards within easy reach for processing the carcasses of urban working animals. However, before motorised transport the costs of bringing dead horses long distances by horse-drawn cart often negated their value. From the 18th century, local foxhunts might take the carcass as a favour (Wilson and Edwards 1993) but if this was not an option horses were frequently buried on farmland. The practicalities of dealing with such a heavy carcass meant that a horse discovered dead in a field would often be dragged or rolled into a pit dug directly adjacent. This process could be complicated by factors such as too-small pits and rigor mortis, but a large animal could be made to fit by cutting off the limbs and packing them by the sides, which appeared to be the case with the horses discovered at Walberton, West Sussex (Excavations at Walberton: The Horse Skeletons 2019). Here, the limbs and in one case the head of these horses were chopped off to facilitate burial in small pits. If the killing was planned, an alternative method was to dig the pit in advance and lead the horse into it prior to euthanasia: the dead horse would then collapse into the pit without the inconvenience of moving the carcass. This seems to have been the practice at the farm animal burial ground at Dooagh Beach, County Mayo (Rathbone *et al.* 2016), where the pits were large and the pony skeletons unbutchered. The scattered and partial nature of the horse skeleton in Bonhams Field makes interpretation difficult: the disturbed deposit and missing limb bones mean there is no evidence for butchery to disarticulate the carcass. However, the intact temporal area of the skull indicates the animal was not euthanised by the usual method of trauma to the brain and it may be surmised that it was discovered dead, probably close to the burial pit.

The dog bones appear to be the partial skeletons of two dogs originally buried in two smaller pits adjacent to the horse burial. The graves have been disturbed and most of the bones dispersed and lost. The pit (B34)

containing the bones of the larger dog also produced articulated elements from a cattle lower hind leg. The bones are of a similar degree of preservation to those of the dog and may have been intentionally deposited in the pit at the time of the burial. It is tempting to view them as a form of 'grave offering' for the dog but they could equally be merely casual disposal.

It is possible that this part of the field was set aside for the burial of animals closely connected to the household, in contrast to pits commonly dug for the convenient disposal of fallen stock from the farm. The post-medieval period saw a marked increase in the discrete burial and memorial of favourite animals including dogs, racehorses and hunters (Tourigny 2020).

Recommendations

No further study of the biological remains reported here is warranted.

Retention and disposal

The extant material is of no further interpretative value beyond that given in this assessment and may be discarded.

Archive

All of the material reported herein is currently stored by Palaeoecology Research Services (Unit 4, National Industrial Estate, Bontoft Avenue, Kingston upon Hull), pending return to the archaeological contractor (or permission to discard), along with paper and electronic records pertaining to the work described here.

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Table 1. Bonhams Field, Main Road, Yapton, West Sussex: Information for flots, charcoal and shell recovered from bulk sediment samples. Key: 'A' = Area; 'CN' = context number; 'BSN' = bulk sample number; 'Sub' = subdivision of material.

Area	CN	Context description	BSN	Sub	Processed sample volume /L (approx.)	Approx. Volume /ml	Condition	Weight (if dry) /g	Notes and identifications
B	B11	Fill of small pit B10	B2-A	flot	20	2	wet	-	Mostly stones (to 8 mm; 5x pieces of eroded limestone/chalk); a little modern rootlet; 1x piece coal (to 13 mm); 1x small concretion of ?ash with mineral (iron) impregnation (to 7 mm).
B	B17	Fill of large ovoid pit B16	B4	flot	60	2	moist	-	Mostly shell fragments (to 12 mm) including 4x <i>Helicidae</i> sp. (based on apices) 1x of which was ? <i>Trichia hispida</i> (L.) and also 1x <i>Discus rotundatus</i> (Müller) – all of these snail shells were crushed – the largest individual shell fragment was probably either <i>Helix</i> sp. or <i>Cepaea/Arianta</i> sp.. There were also 4x indeterminate bone fragments (to 16 mm; rather thin 'flakes') and a little modern rootlet.
				shell		5	wet	-	Numerous shell fragments (probably 100+; to 26 mm) but probably representing just single individuals of each of <i>Helix</i> sp. and <i>Cepaea/Arianta</i> sp.).
B	B19	Fill of shallow pit B18	B5	flot	15	1	wet	-	All modern rootlet.
B	B29	Fill of small pit B28	B7	flot	20	2	wet	-	Almost all modern rootlet, with a trace of indeterminate rectilinear charcoal (to 2 mm; extremely fragile disintegrates/smears with the slightest of pressure).
B	B31	Fill of pit B30	B8-A	flot	20	1	moist	-	Mostly modern rootlet, with 1x piece of ?'straw'/plant stem (to 12 mm), 1x elder (<i>Sambucus nigra</i> L.) fruit (probably also modern but these robust fruits can survive in unfavourable preservational conditions for long periods), a little undisaggregated (or more likely re-integrated post-processing as present as small 'flakes') sediment 'crumb' (to 2 mm), 1x tiny piece of rectilinear charcoal (to 1 mm) and 1x larger piece of rectilinear charcoal (to 7 mm; very soft and crumbly but probably of a diffuse-porous species – not identifiable more closely).
C	C11	Fill of pit C10	C4	flot	40	1	dry	1.1	Mostly stones (to 7 mm), 'crumbs' of undisaggregated (?indurated) sediment (to 3 mm) and modern rootlet in approximately equal parts (by volume), with a trace of

Area	CN	Context description	BSN	Sub	Processed sample volume /L (approx.)	Approx. Volume /ml	Condition	Weight (if dry) /g	Notes and identifications
									indeterminate rectilinear charcoal (to 3 mm), 1x modern woodlouse (<i>Oniscus asellus</i> L.) and 1x modern leaf fragment (to 3 mm; indeterminate).
				charcoal (>1 cm)		3	moist	-	Two charcoal fragments. Larger fragment (to 21 mm; diameter to 10 mm) of diffuse-porous, perhaps? heather (cf. <i>Calluna</i>), roundwood of 7 or 8 years of wood growth. Smaller fragment (to 17 mm) of diffuse-porous, also perhaps ?heather, partial-roundwood with 5 years of growth rings visible but both the central 'core' of the fragment and the waney edge lacking.
C	C13	Fill of pit C12	C5	flot	20	2	moist to wet	-	Almost all modern rootlet, with 5x small pieces of rectilinear charcoal (to 5 mm but all bar one <4 mm). Largest charcoal fragment very soft and crumbly – crumbled when identification was attempted and remained wholly indeterminate.
C	C15	Fill of pit C14	C6	flot	20	20	moist	-	Mostly charcoal (to 13 mm), including 1x charred ?thorn/prickle base fragment (to 10 mm), with frequent modern rootlet, a few small stones (to 5 mm; including flint) and flakes of ?paint (to 3 mm), and 6x charred grains/grain fragments (poorly preserved – 2x ?wheat (cf. <i>Triticum</i>) and 1x ?barley (cf. <i>Hordeum</i>), others indeterminate). All of the charcoal was rectilinear and very soft and crumbly – of 6x larger fragments examined more closely 4x crumbled and remained wholly indeterminate and 2x were only partially, and tentatively, identifiable as ?diffuse-porous.
				charcoal (>1 cm)		1	just moist	-	One rectilinear and quite heavily sediment encrusted charcoal fragment (to 11 mm) of a diffuse-porous species, probably alder (<i>Alnus</i>), birch (<i>Betula</i>) or hazel (<i>Corylus</i>).
C	C17	Fill of pit C16	C7	flot	20	5	moist	-	Mostly modern rootlet, with 1x piece of modern ?rhizome, 1x modern sycamore (<i>Acer pseudoplatanus</i> L.) winged fruit, 1x 'crumb' of undisaggregated (?indurated) sediment (to 2 mm), and 3x rectilinear charcoal fragments (to 10 mm) – smallest to 3 mm and indeterminate, 2x larger fragments similar in size and both diffuse-porous with one perhaps alder, birch or hazel.

Table 2. Bonhams Field, Main Road, Yapton, West Sussex: Vertebrate remains. Key: a ‘*’ for ‘refitted bones’ indicates that these fragments form part of an individual bone accounted for elsewhere in the table.

Bulk/ sample no	Cut/fill	Description	Processed sample volume (L)/bone weight (g)	Species		Bone	Notes	Totals fragment s/refitted bones
B4	B16/B17	Large ovoid pit	60/2700	<i>Equus</i>	horse	Skull	Fragmented skull of male horse. Most areas represented including: occipital; parietale; temporalis; frontale; zygomaticus; maxilla; pre-maxilla; nasale. 112 pieces plus abundant tiny fragments not counted. No teeth present but alveoli for right side upper 1 st , 2 nd and 3 rd incisors and canine	112/1
						Cervical vertebrae	Three almost complete vertebrae, together with fragments of at least one more. Physes fused	6/4
						Lumbar vertebra	Small piece	2/1
						Ribs	1 st rib plus at least three more – refits possible	12/9
						Femur	Fragment of distal articulation (right side)	1/1
						Calcaneus	Complete, right side	1/1
				<i>Bos f. domestic</i>	cattle	Tibia	Part of proximal shaft with foramen, right side	4/1
						Tooth	Root and part of crown of mandibular molar	1/1
				Caprine	sheep/goat	Tooth	1 st or 2 nd upper molar	1/1
				Unidentified		indeterminate	Small fragments with fresh breaks, almost certainly part of horse skull, ribs or vertebrae recorded above	90/*
B6-A	B20/B21	Pit (part of grouping)	30/67	Large mammal		long bone	Small shaft fragment	1/1
				Unidentified		indeterminate	Small fragments	3/3
B6-C	B24/B25	Pit (part of grouping)	30/180	<i>Equus</i>	horse	Skull	Small fragments of skull recorded from B4 including parts of maxilla	8/*
						Cervical vertebrae	Small fragments	6/1
						Ribs	Some refits possible	8/6
				<i>Canis f. domestic</i>	dog	Mandible	Small fragment of left side, broken at symphysis. 1 st , 2 nd and 3 rd incisors present	1/1

Bulk/ sample no	Cut/fill	Description	Processed sample volume (L)/bone weight (g)	Species		Bone	Notes	Totals fragment s/refitted bones
				Unidentifie d		indeterminat e	Small fragments with fresh breaks, almost certainly part of horse skull, ribs or vertebrae recorded above	39/*
B6-D	B26/B27	Pit (part of grouping)	30/191	<i>Equus</i>	horse	Cervical vertebrae	Two fragments which refit with vertebra from B6-C	2/*
						Thoracic vertebra	Refitted	2/1
						Ulna	Left side, in two pieces	2/1
						Ribs	Two fragments	2/1
				<i>Canis f. domestic</i>	dog	Lumbar vertebra	Physes fused	1/1
B7	B28/B29	Small pit (poss ass w B6: A, B, C and D)	20/165	<i>Equus</i>	horse	Sacrum	In three pieces	3/1
B8-A	B30/B31	Pit (part of grouping)	20/3	Unidentifie d		indeterminat e	Tiny fragments	4/4
B8-B	B32/B33	Pit (part of grouping)	20/93	<i>Canis f. domestic</i>	dog	Radius	Left side, proximal and distal ends	2/1
						Pelvis	Right side, acetabulum	1/1
						Lumbar vertebra	Physes fused	1/1
						MC3	Left	1/1
						Mtp	Distal end	1/1
						Tooth	M1, upper	1/1
						Rib	Small piece	1/1
				Large mammal		Pelvis	Fragment of ilium	1/1
						Ribs	Fragments, probably horse ribs	6/5
B8-C	B34/B35	Pit (part of grouping)	20/233	<i>Bos f. domestic</i>	cattle	ABG	Associated bone group comprising articulated left distal metatarsal (fused) and both 1 st phalanges, together with fragments of proximal metatarsal, probably the same bone	6/3
				<i>Canis f. domestic</i>	dog	Pelvis	Right side, acetabulum, in five pieces	5/1
						Ulna	Right side	1/1
						Tibia	Distal articulation, right side	1/1

Bulk/ sample no	Cut/fill	Description	Processed sample volume (L)/bone weight (g)	Species		Bone	Notes	Totals fragment s/refitted bones
				Medium- sized mammal 2		Rib	Small fragment, probably dog	1/1
				Unidentifie d		indeterminat e	Small fragments	2/2
C8	C18/C19	Shallow pit/spread	40/7	<i>Canis</i> f. domestic	dog	Calcaneus	Complete, right side	1/1
Totals								344/64

Table 3. Bonhams Field, Main Road, Yapton, West Sussex: Metrical data (following von den Dreisch 1976) for domestic mammals, by element. All measurements in mm. Key: ‘*’ = refitted element.**

Radius

Bulk/sample no	Cut/fill	Species	Side	Bp
B8-B	B32/B33	Dog	left	18.38

Ulna

Bulk/sample no	Cut/fill	Species	Side	LO	SDO	DPA
B8-C	B34/B35	Dog	right	33.07	21.09	25.48

Calcaneus

Bulk/sample no	Cut/fill	Species	Side	GL	GB
B4	B16/B17	Horse	right	123.00	60.00
C8	C18/C19	Dog	right	46.83	19.15

Metatarsal

Bulk/sample no	Cut/fill	Species	Side	Bd	DD
B8-C	B34/B35	Cattle	left	59.14	30.00**

Phalanx

Bulk/sample no	Cut/fill	Species	Side	GLpe	Bp	SD	Bd
B8-C	B34/B35	Cattle	left	70.00	31.97	27.65	29.65

Appendix 4: Pottery / finds assessment

[Luke Barber]

DAS Site Code: BON/20

Yapton Bonhams Field YAP 18 (ASE 180307)

Spot Dates

Evaluation [ASE]

5/005 – c. 1225-1350

10/002 – c. 1225-1350

10/005 – c. 1225-1350

10/007 – c. 1200-1275

10/008 – c. 1200-1275

15/001 – mixed: x1 late C13th – 14th & x1 e/m C19th

21/001 – c. 1800-1925

21/007 – c. 1750-1925

Stage 2 works [DAS]

A4/5 – LBA-EIA

B20/21 – c. 1300-1450 (x1 ?intru)

B26/27 – c. 1050-1200 (x1 ambiguous sherd – poss earlier)

B32/33 – c. 1275-1400

C4/5 – c. 1300-1450

C6/7 – Mixed: x1 c. 1400-1525, x1 ?intru c. 1700-1800

C8/9 – c. 1275-1400 (x1 intru c. 1700-1800)

C10/11 – c. 1225-1325

C12/13 – c. 1225-1325

C14/15 – c. 1225-1325 (x1 resid C12th)

C16/17 – c. 1325-1450

C18/19 – c. 1350-1450

C20/21 – c. 1325-1425

C22/23 – c. 1325-1425 (high residual C13th)

The Prehistoric and Roman Pottery by Anna Doherty (summarised by Luke Barber)

The excavations [both Phase 1 and 2] produced a small assemblage of prehistoric and Roman pottery, totalling 96 sherds, weighing 2275g. The majority of this was recovered during the evaluation stage (93/2261g) and was reported on in the Stage 1 evaluation report by Anna Doherty [ASE 2018] but is summarised here for completeness.

The earliest sherd came from context [12/005]. Both the fabric, with sparse but very ill-sorted flint temper of 0.2-5mm, and the presence of impressed decoration suggest it to be of the Middle Neolithic Peterborough Ware tradition, dating to c.3500-2700BC. The sherd is highly abraded and quite probably residual.

The vast majority of the assemblage, 78 hand-collected sherds, weighing 2207g, was recovered from evaluation context, [2/009]. In addition, a further 62 fragmentary sherds, weighing 296g, were recovered from the environmental sample taken from this context (though not included in the overall quantification due to their small size).

A large proportion of this group comprised body sherds from one thick-walled vessel in a relatively coarse flint-tempered fabric, with most inclusions ranging from 0.2-4mm and very rare examples up to 8mm. Both thick-walled vessel profiles and coarse flint tempering *can be* associated with the Middle Bronze Age Deverel-Rimbury tradition; however, in this case, the presence of common fine quartz sand in the fabric and the use of combing on the vessel exterior are perhaps more suggestive of a particularly large vessel of earlier Iron Age date. The remainder of the sherds in this context are all flint-tempered wares in a range of coarseness consistent with Late Bronze Age/Early Iron Age post-Deverel- Rimbury (PDR) assemblages; these could date anywhere from c.1150-400BC. However, several fragmentary sherds from a fairly thin-walled plain profile jar in an abundantly tempered and well-sorted flint-tempered fabric, as well as an open profile neckless jar with a recurving profile and flattened rim top, are both also perhaps indicative of Early Iron Age dating, suggesting that this context is likely to fall within the latter part of the PDR tradition.

The remainder of the prehistoric assemblage from the evaluation was recovered from contexts [2/005], [2/009], [3/002], [8/006], [12/002], [12/005], [21/005], and as clearly residual material in context [10/005]. It is entirely made up by undiagnostic flint tempered bodysherds. This makes close dating problematic since flint tempering was very long-lived on the coastal plain, occurring in most prehistoric periods from the Early Neolithic to the Late Iron Age. Taken as a whole, the coarseness and sorting of inclusions in the fabrics, together with part of a flint-gritted base from context [8/006], are generally consistent with the Late Bronze Age/Early Iron Age PDR tradition. The paltry two sherds (9g) of ill-sorted flint tempered wares from the Stage 2 excavations (context [A4/5]) come from a single reduced vessel that probably is of this general Late Bronze Age/Early Iron Age date.

The only Roman pottery consists of a worn 5g scrap of Arun Valley sandy greyware residual in context [C12/13]. The pieces are likely to derive from sporadic bouts of manuring cultivated land with domestic waste during the 1st to 2nd centuries AD.

The prehistoric and Roman pottery assemblages are small and consist of either the isolated group or isolated, often residual, single sherds. There is a notable lack of diagnostic feature sherds and the assemblage is not considered to hold significant potential for further detailed analysis at this stage beyond that undertaken for the current evaluation/assessment reports. No further work is proposed, however, the assemblage ought to be retained for the museum.

The Post-Roman Pottery by Luke Barber

The archaeological work recovered 127 sherds of post-Roman pottery, weighing 2023g, from 21 individually numbered contexts. Of these, 41 (1067g) were recovered from the initial Stage 1 evaluation (eight different contexts). The material has been fully listed in Table 1 as part of the visible archive. Medieval fabrics have been allocated a site-specific code with brief descriptive title while post-medieval ones are listed by common name only.

Table 1: Pottery assemblage [both evaluation [Phase 1] and Phase 2 investigation.

(EM – Early Medieval c. 1050-1200/25; HM - High Medieval c. 1200/25-1350/75; LM – Late Medieval c. 1350/75-1525/50; EPM – Early Post-medieval c. 1525/50-1750; LPM - Late Post-Medieval c. 1750-1900+).

Context	Fabric	Period	No	Weight	Comments (including estimated number of different vessels represented)
5/005	M2 Fine quartz tempered ware with rare white flint	HM	1	12g	Undiagnostic of form x1 (worn)
5/005	M4 Fine/medium quartz tempered ware	HM	2	10g	? Cooking pot x2 (reduced)
10/002	M1 Fine/medium quartz with sparse flint grits to 0.5mm	HM	1	12g	Cooking pot x1 (oxidise)
10/002	M4 Fine/medium quartz tempered ware	HM	1	28g	Cooking pot x1 (oxidised)
10/005	M2 Fine quartz tempered ware with rare white flint	HM	1	6g	Jug x1 (oxidised, green glazed spots externally)
10/005	M3 Fine/medium quartz with rare flint grits to 0.5mm	HM	2	14g	Cooking pots x2 (oxidised)
10/005	M4 Fine/medium quartz tempered ware	HM	2	10g	Cooking pots x2 (oxidised, x1 with applied thumbled strip)
10/007	M4 Fine/medium quartz tempered ware	HM	13	404g	Cooking pot x2 (oxidised, externally sooted). X1 everted concave-topped rim, x1 everted, slightly beaded rim. Very fresh

10/007	M5 Moderate white flint w/o 1.5mm. Chichester flinty ware	HM	1	114g	Cooking pot x1 (oxidised). Everted rim with upright bead
10/008	M2 Fine quartz tempered ware with rare white flint	HM	1	30g	Jug x1 (oxidised tripod vessel, clear spot of glaze externally)
10/008	M4 Fine/medium quartz tempered ware	HM	7	178g	Cooking pot x3 (oxidised, externally sooted). Fresh. Conjoins with [10/007]
10/008	M4 Fine/medium quartz tempered ware	HM	3	110g	Bowl x1 (oxidised). Full profile, rectangular club with internal bead
10/008	M5 Moderate white flint to 1.5mm. Chichester flinty ware	HM	1	32g	Cooking pot x1 (oxidised, externally sooted)
10/008 <2>	M5 Moderate white flint to 1.5mm. Chichester flinty ware	HM	1	1g	Cooking pot x1 (oxidised, externally sooted)
15/001	LM1 Well fired medium quartz tempered with moderate red iron oxides	LM	1	10g	Undiagnostic of form x1 (oxidised)
15/001	Pearlware (transfer-printed)	LPM	1	2g	Plate x1 (willow pattern)
21/001	Unglazed red earthenware	LPM	1	2g	Flower pot x1
21/007	Glazed red earthenware (late)	LPM	1	92g	Undiagnostic of form x1 (large vessel with clear internal glaze)
B20/21	M6a Fine quartz (rare larger grains)	HM/LM	2	3g	? x1 (oxidised, worn)
B20/21	M6b Fine quartz (pale/buff) West Sussex Ware type	HM/LM	1	5g	Jug x1 (oxidised, thumbled base, green glaze. Worn)
B20/21	Glazed red earthenware (sandy/early)	EPM	1	2g	? x1 (oxidised, black glaze internally. Worn).
B26/27	M8a Common chalk (voids to 1mm, moderate fine quartz, rare flint)	EM	1	7g	? x1 (oxidised, externally sooted)
B32/33	M6b Fine quartz (pale/buff) West Sussex Ware type	HM/LM	1	3g	Jug x1 (oxidised, external white slip and green glaze)
C4/5	M6b Fine quartz (pale/buff) West Sussex Ware type	HM/LM	1	20g	Jug x1 (oxidised, green glaze externally)
C6/7	M7a Late Medieval fine sandy 'Painted Ware'	LM	1	18g	Jar x1 (oxidised, green glazed spots internally, flaring rim)
C6/7	Glazed red earthenware (late)	LPM	1	6g	? x1 (clear glaze internally. Worn)
C8/9	M6a Fine quartz (rare larger grains)	HM/LM	1	10g	Jug x1 (oxidised, green glaze externally. Worn)
C8/9	Glazed red earthenware (late)	LPM	1	2g	? x1 (clear glaze internally)
C10/11	M4 Fine/medium quartz tempered ware	HM	10	88g	Cooking pots x2 (oxidised and reduced, triangular clubbed rim. Fresh)
C10/11	M6a Fine quartz (rare larger grains)	HM/LM	1	2g	Cooking pot x1 (reduced, externally sooted)
C12/13	M4 Fine/medium quartz tempered ware	HM	2	4g	? x2 (reduced)
C12/13	M6a Fine quartz (rare larger grains)	HM/LM	2	22g	Jugs x2 (oxidised, x1 applied scales/pellets and external green glaze, x1 incised lines and green external glaze)
C12/13	M6c Very fine uniform sandy West Sussex Ware	HM/LM	1	8g	Jug x1 (reduced, dark green glazed exterior)

C14/15	M8b Common chalk (voids)	EM	1	3g	? x1 (oxidised, worn)
C14/15	M4 Fine/medium quartz tempered ware	HM	5	66g	Cooking pots x4 (oxidised and reduced, externally sooted. Fresh)
C14/15	M4b Buff common fine quartz with occasional flint and iron oxides	HM	1	2g	Jug x1 (oxidised, green glaze externally)
C16/17	M4 Fine/medium quartz tempered ware	HM	3	8g	? x2 (oxidised/reduced. Worn)
C16/17	M4b Buff common fine quartz with occasional flint and iron oxides	HM	1	1g	Jug x1 (oxidised, green glazed externally)
C16/17	M6a Fine quartz (rare larger grains)	HM/LM	15	136g	Jug x1 (oxidised, white slip and green glazed externally. Worn, sooted plain base)
C16/17	M6b Fine quartz (pale/buff) West Sussex Ware type	HM/LM	8	137g	Jug x1 (oxidised, green glazed externally, incised horizontal lines – same vessel in C4/5); x1 (green glazed lower interior)
C18/19	M9a Binsted-type well-fired fine quartz with rare flint	LM	4	35g	? x1 (oxidised, fresh)
C18/19	M6b Fine quartz (pale/buff) West Sussex Ware type	HM/LM	7	165g	Bowl x1 (oxidised, large vessel with applied horizontal thumbed strip and green glaze internal base); jug x1 (oxidised, external green glaze); x2 (oxidised, fresh)
C20/21	M4 Fine/medium quartz tempered ware	HM	3	27g	? Bowl x1 (oxidised, green glazed internal base); x1 (oxidised)
C20/21	M9a Binsted-type well-fired fine quartz with rare flint	LM	2	30g	Cooking pot x1 (oxidised, stubby flaring rim)
C22/23	M5 Moderate white flint to 1.5mm. Chichester flinty ware	HM	1	50g	Cooking pot x1 (oxidised/reduced, simple everted rim)
C22/23	M2 Fine quartz tempered ware with rare white flint	HM	1	18g	Cooking pot x1 (oxidised, externally sooted)
C22/23	M4 Fine/medium quartz tempered ware	HM	1	15g	Cooking pot x1 (oxidised, externally sooted)
C22/23	M4b Buff common fine quartz with occasional flint and iron oxides	HM	1	8g	Bowl x1 (oxidised, expanded rim. Worn)
C22/23	M9a Binsted-type well-fired fine quartz with rare flint	LM	5	57g	Cooking pot x1 (same vessel as in C20/21)

The earliest post-Roman pottery from the site consists of the two somewhat worn chalk tempered examples from contexts [B26/27] and [C14/15]. The latter sherd is clearly residual and of the later 11th- to 12th- centuries, but the former is more ambiguous and is an isolated sherd.

The assemblage is dominated by High Medieval wares of the 13th to mid-14th centuries. Although some sherds show signs of having been reworked (e.g. those in context [5/005]) many are both notably fresh and large. This is particularly the case with the pieces in contexts [10/007] and [10/008] where very fresh sherds to 140mm across are present. The most distinctive of the fabrics is the flinty fabric M5 which is certainly a Chichester product, probably deriving from the 13th- century Orchard Street or Southgate kilns (Down and Rule 1971; Down 1978). These flinty Chichester wares are never common

but appear to be in contemporaneous use with fine to medium quartz tempered wares of local but uncertain source. The association between the two tempering types demonstrates the longevity of the flint tempered wares but some could be residual as in context [C22/23]. The material obviously relates to some primary refuse disposal probably mainly between c. 1200 and 1325.

The Stage 2 works produced more of this High Medieval pottery but also significantly more 14th- to mid-15th- century material demonstrating a continuation in activity/refuse disposal. There are a number of fine sandy wares, including examples of West Sussex War type jugs, that could easily extend well into the 15th century though most sherds are fairly worn. Of more note are the few sherds of Late Medieval M7a fine sandy Painted ware type and 9a Binsted coarseware, both certainly of the 15th century (Barton 1979). These later sherds are less abraded, though this may be in part due to their better firing.

Later pottery is very scarce and may relate to occasional periods of arable cultivation and the associated manuring of the land during the 17th to 19th centuries.

Following the initial evaluation which produced a few signs that the site may contain useful fresh groups of medieval pottery the Stage 2 excavations have been disappointing in providing only somewhat scattered generally worn pieces and a distinct lack of feature sherds. As such the overall post-Roman pottery assemblage remains small and lacks feature sherds and good secure groups of a useful size. The presence of Binsted material is interesting but there are just too few sherds and issues with residuality to warrant further detailed study at this stage. Elements of the current pottery assessment can be included within the final site narrative as needed but no separate report is needed for publication. No pieces are proposed for illustration and no further work is proposed. However, it is felt prudent that the assemblage is retained for long-term curation in a museum.

The Ceramic Building Material by Isa Benedetti-Whitton and Luke Barber

The initial evaluation produced just 13 pieces of ceramic building material, weighing 1267g. This assemblage was hand-collected from four contexts across three trenches: [9/005, 17/001, 21/006 and 21/007] and is fully reported on in the initial evaluation report by Isa Benedetti-Whitton. The bulk of this came from TR 21, and an early-mid post-medieval date is suggested for this assemblage.

The Stage 2 excavation works recovered a further 13 pieces of ceramic building material and these have been fully listed in Table 2 as part of the visible archive.

Table 2: Ceramic building material [CBM]

Context	Form	Fabric	Date	No/weight	Dimensions	Comments
B32/33	Burnt clay	Silty	?	1/3g	n/a	Amorphous
B32/33	Peg tile	Pale 'marl'-rich, common iron oxides	C14th-16th	1/18g	13mm thick	Well formed, medium fired. Worn
C8/9	Peg tile	Common 'marl' streaks, moderate iron oxides	C14th-16th	1/65g	12mm thick	Well formed, medium fired. Stacking mark
C9/9	Peg tile	Fine matrix, sparse calcareous pellets and 'marl' streaks	C15th-17th	1/51g	12mm thick	Well formed, medium fired
C12/13	Peg tile	Common fine/coarse quartz with 'marl' streaks	C13th-14th	2/24g	12mm thick	Well formed, medium fired
C12/13	Floor tile	Common fine to coarse quartz	C13th-15th	1/95g	28mm thick	Oxidised. Stabbed base. Very worn
C16/17	Burnt clay	Silty	?	3/7g	n/a	Amorphous
C16/17	Peg tile	Fine matrix, sparse calcareous pellets and 'marl' streaks	C13th-14th	1/21g	12mm thick	Well-formed and fired
C16/17	Peg tile	Moderate/common fine quartz, occasional 'marl'	C14th-16th	1/14g	12mm thick	Well formed. Worn
C18/19	? Ridge tile	Moderate/common fine quartz, occasional 'marl'	C14th-16th	1/311g	11mm thick	Quite well formed, medium fired.

Many of the peg tile fragments correspond with the material from the evaluation, however, it is felt the majority probably belong to the later medieval to very early post-medieval periods rather than later – something the associated pottery tends to agree with. There is a scatter of earlier High Medieval tile, most notably in context [C12/13] where the fabrics are typically more sandy. The presence of a worn piece of floor tile in this deposit suggests the ceramic refuse may originate from a household of some standing though where this was is uncertain. Overall, the assemblage is quite worn and appears to represent a background manuring scatter alongside the bulk of the domestic pottery.

The ceramic building material assemblage is small, often appears as isolated pieces in deposits with some residuality/intrusiveness issues and generally lacks diagnostic pieces. The assemblage does not have the potential to further our knowledge of tile fabric and form chronologies and has no potential to

shed further light on the current excavated site beyond the points noted in this assessment. As such no further work is proposed and no separate report is needed for publication. The assemblage is recommended for discard.

The Geological Material by Luke Barber

The evaluation recovered just two pieces of stone from the site – both were recovered during the initial evaluation. One consists of a 6g flint pebble that could easily be naturally occurring in the area (context [21/006]). The other piece was recovered from context [2/009]. This consists of a 1692g fragment from the upper stone of a rotary quern in Hythe Beds sandstone, probably originating at the Lodsworth quarries. The stone measures 60mm thick towards its outer edge, tapering to just 28mm thick towards its centre. An approximate diameter of c. 400mm is likely. This is the most common stone type used for querns in Sussex, being most common in the Roman period, but being used both earlier and later periods.

The stone is of well-known types for the area and is not considered to hold any potential for further analysis in isolation. The assemblage need not be retained for long-term curation in a museum.

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