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Prepared by:	Gary Evans (Supervisor)
Checked by:	Tim Allen (Senior Project Manager)
Edited by:	Chris Hayden (Senior Project Manager Post-excavation)
Approved for Issue by:	David Score (Head of Fieldwork)
Signature:	Dawitheone

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OA South Janus House Osney Mead Oxford OX2 OES

t. +44 (0)1865 263 800

OA East 15 Trafalgar Way Bar Hill Cambridge CB23 8SG

t. +44 (0)1223 850 500

e. info@oxfordarch.co.uk w. oxfordarchaeology.com Oxford Archaeology is a registered Charity: No. 285627

OA North Mill 3 Moor Lane Mills Moor Lane Lancaster LA1 1QD t. +44 (0)1524 880 250

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SAFETY SCHEMES IN PROCUREMENT



Land at Boulton Moor, east of Chellaston Lane, Derby (Phases 3 & 4)

Archaeological Excavation Report

Written by Gary Evans and Tim Allen

With contributions from Martyn Allen, Edward Biddulph, Sharon Cook, Julia Meen, Rebecca Nicholson, Sarah Percival, Cynthia Poole and Ruth Shaffrey, and illustrations by Lucy Gane and Conan Parsons

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Summary

Oxford Archaeology (OA) was commissioned by CgMs Consulting to undertake a programme of open area excavations in advance of the development of an area of land between Chellaston Road and the A6, at Boulton Moor, Derby. The Strip, Map and Sample excavations took place from March-May 2018 in two areas (Areas A and B).

A system of ditches was uncovered in the western half of Area A, surrounding a penannular ditched enclosure with an entrance on its eastern side. There was no sign of an internal structure within the enclosure. The ditch system was of two phases, the main boundary in the first phase running on a NNW alignment, and in the later phase on a NNE alignment. Pottery dating to the middle and later Iron Age was recovered from the fills of the penannular ditched enclosure and the surrounding ditches, together with a small assemblage of animal bones, principally cattle. Charred plant remains and charcoal, were sparse. The Iron Age activity may well represent a small pastoral settlement managed by a single family or individual, though the limits of the Iron Age activity were not definitely established either to the north or south.

In Area B, Roman pottery principally of later 2nd-3rd century date, were found within the fills of an enclosure ditch that enclosed an area measuring 62m by at least 50m. Within the enclosure a scatter of shallow pits, a hearth and short lengths of ditch or gully were found. The finds from the internal pits suggest domestic occupation. No animal bones were found, but several of the pits and other internal features contained assemblages of charred plant remains, some indicating crop processing. A number of ditches which lay outside the enclosure suggest that a further system of fields or paddocks was laid out to the east of the main enclosure in the later Roman period.

The Roman enclosure in Area B cut smaller ditches running east-west, and other ditches further east on a similar alignment produced sherds of Iron Age pottery, perhaps indicating a further area of Iron Age activity beyond the limits of the site. A radiocarbon date of 175-40 cal BC was obtained on charred residue adhering to a vessel from one of these ditches.

Only part of the Roman enclosure lay within the site, so it is difficult to establish its overall character with confidence. The pottery suggests settlement, although no structures were found. The other finds consisted predominantly of fragments of quernstones. In contrast to the Iron Age features, the Roman features produced no animal bones, while charred plant remains were much more abundant. This may indicate a change from pastoral to arable farming, despite the relatively low-lying location of the site.

A number of north-south aligned plough furrows containing pottery dating to the 18th and 19th centuries followed the prevailing orientation of the modern



fields. They appear to have been post-medieval sub-divisions of the field related to agricultural activity.

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The project was managed for Oxford Archaeology by Tim Allen, who also paid for the radiocarbon dating. The fieldwork was directed by Gary Evans, who was supported by Dan Sykes, David Pinches, Dan Pound, Emma Powell, Kate Webster and Emma Winter.

Survey and digitizing were carried out by Ben Brown, Conan Parsons, Caroline Souday and Kate Webster.

Thanks are also owed to the OA staff who washed, marked and packaged the finds under the supervision of Geraldine Crann and management of Leigh Allen, processed the environmental remains under the supervision of Sharon Cook and management of Rebecca Nicholson, and prepared the archive under the management of Nicola Scott.

1 INTRODUCTION

1.1 Project details

1.1.1 Oxford Archaeology (OA) was commissioned by CgMs Consulting, on behalf of Persimmon Homes/Charles Church Ltd, to undertake a programme of open area strip, map and sample excavations on land between Chellaston Road and the A6, at Boulton Moor, Derby (grid reference 440025 331550).

1.1.2 The work, which took place from 19th March to 11th May 2018, was undertaken as a condition of planning permission (planning ref. 9/2015/1104 South Derbyshire District Council).

1.1.3 The excavations were the second stage of archaeological works on the site and followed on from an archaeological trial trench evaluation of the site undertaken by OA in 2017 (OA 2018a).

1.1.1 The evaluation established that there were two areas of the site containing significant archaeological remains and, as agreed in the planning condition, it was therefore followed by a further phase of archaeological mitigation. Although the Local Planning Authority had not set a brief for the further work, discussions with the Derbyshire Planning Archaeologist Stephen Baker and Mike Dawson of CgMs established the scope of work required. A Written Scheme of Investigations (WSI) was duly prepared by OA outlining how OA would implement those requirements. The latest version (OA 2018b) was agreed with by Stephen Baker prior to commencement of the work.

1.1.2 This document outlines how OA implemented the specified requirements for excavation and describes and discusses the results.

1.2 Location, topography and geology

1.2.1 The site lies east of the already developed housing estate of Boulton Moor, south of Alvaston and north-east of Chellaston, Derby (Fig. 1). It is a roughly rectangular area measuring *c*. 14.5 hectares between Chellaston Lane on the west and the Derby Spur running north from the A6, and is bordered by open fields to the north and south. The site is divided into two fields by a north-south aligned hedge/dyke, the larger field being to the east.

1.2.2 The land is relatively flat and lies at an elevation of around 41m above Ordnance Datum (aOD).

1.2.3 The British Geological Survey indicates that the underlying geology of the area is Branscombe Mudstone Formation, overlain by sand and gravel of the Allenton Terrace Deposit.

1.3 Archaeological and historical background

1.3.1 The Derbyshire Historic Environment Record (HER) indicates that the area around the southern edge of Derby is rich in prehistoric archaeology, with two scheduled sites close to the site, including the Swarkestone Lows barrow cemetery, which lies around 2.5km southwest of Boulton Moor. However, no earlier prehistoric archaeology has been found in the excavations around the present site.



1.3.2 Trial trenching of Phases 1, 2 and 4 west of Chellaston Lane located archaeological remains of Iron Age date, including two pit alignments, one running ENE dated to the early Iron Age (OA 2017b), the other running north-west to south-east dated to the middle Iron Age (Hunt 2014a; 2014b). The projected line of the ENE pit alignment appears to lie just south of Phases 3 and 4 east of Chellaston Lane; the other pit alignment does not appear to cross east of the lane. Iron Age ditches, gullies and pits were also found in Phases 1, 2 and 4, some dated by pottery to the middle Iron Age.

1.3.3 A third pit alignment, this time a double line of pits of similar size and spacing on an ENE-WSW alignment, has been found at Swarkestone only 2.5km to the south-west of Boulton Moor, with a possible shorter alignment at right angles running NNW (Harvey 2012; Clay 2015; OA 2017c). This was again associated with Iron Age pottery.

1.3.4 Second- or third-century Roman pottery was recovered from a pond in Phase 2 at Boulton Moor (Hunt 2014b), and a Roman enclosure and trackway was excavated at Swarkestone (Clay 2015).

1.4 Results of the archaeological evaluation by trenching, Phases 3 and 4

1.4.1 Towards the southern edge of the site (Fig. 2), the 2017 trial trench evaluation (TR. 48 and 47) found a substantial ditch running on a NNW-SSE alignment that contained Iron Age pottery, a triangular brick or loom weight fragment, and other fired clay. Diverging from this ditch in a north-easterly direction was a pair of smaller ditches or gullies curving to the east.

1.4.2 The NNW-SSE ditch was traced northwards and appeared to represent a linear boundary. Several other boundaries to the west, and one to the east, were also found on broadly the same alignment. One of these contained a sherd of Romano-British pottery towards the top, raising the possibility that these formed a field system, possibly of Romano-British or later date. The Iron Age pottery, which included sizeable sherds, suggests, however, some focus of later prehistoric activity close to the southern edge of the site.

1.4.3 Also towards the southern edge of the site (Fig. 2, Trenches 75 and 76), but east of the features containing Iron Age pottery, the trenches exposed two pits and a gully or slot of later Romano-British date, which produced Derbyshire ware pottery and a Mancetter-Hartshill mortarium of 4th-century type.

Several linear features on a north-south alignment were also found. Most were broad and shallow, and although none produced any finds, they were interpreted as medieval or later plough furrows. One north-south ditch was also found, which produced 19th/20th-century pottery. This feature was interpreted as a former field boundary.

2 **PROJECT AIMS**

2.1 General

2.1.1 All work was planned taking into consideration the National Research Context (English Heritage 1991 and 1997), the East Midlands Research Framework (Cooper ed. 2006) and strategy (Knight *et al.* 2012), along with targeted national research aims.

2.1.2 The project's main objectives as set out in the WSI were to:

• To identify the presence/absence of any archaeological deposits.

• To establish the character, extent and date range of any archaeological deposits to be affected by the proposed ground works.

• To produce an archive and report of any results.

2.2 Specific aims and objectives

- To look for evidence of earlier prehistoric activity in the landscape surrounding the prehistoric burial mounds and other monuments.
- To establish whether further Iron Age pit alignments exist (i.e. whether a system of land division was present in this area).
- To establish whether Roman activity, and particularly Roman settlement, was present.

2.3 Methodology

2.3.1 A broad summary of the methods employed is described below as well as any significant variation or clarification to the agreed methodology.

2.3.2 All archaeological work and the preparation of this report was conducted in accordance with the agreed mitigation strategy (OA 2018b) and in accordance with local and national planning policies (National Planning Policy Framework: Communities and Local Government 2011). As well as in accordance with the Code of Conduct of the Chartered Institute for Archaeologists, of which OA is a Registered Organisation.

2.3.3 Fieldwork techniques followed current best practice and accepted professional standards were carried out in accordance with the requirements of Derby County Museums.

2.3.4 Two areas of the site were machine stripped and the archaeology mapped, sampled and recorded. Both areas lay close to the southern edge of the development area and both were to the east of the north-south aligned hedge/dyke (Fig. 2).

2.3.5 Area A was the more westerly of the two and covered an area of 4871m². Area B was to the east and was initially 6138m² but was later extended to 6221m².

2.3.6 These areas were targeted upon significant archaeology that had been identified during OA's 2017 evaluation. Area A was focused upon an NNW-SSE aligned ditch containing Iron Age pottery and adjacent curving gullies, and Area B was centred upon a series of late Roman pits and a slot or gully (OA 2018a).



2.3.7 The Derbyshire Planning Archaeologist Stephen Baker asked that areas be opened around these features for Strip, Map and Sample excavation to clarify the extent and character of the Iron Age and Roman activity.

2.3.8 Machine excavation started adjacent to the known features and continued outwards from them until no new associated archaeological features were exposed in a peripheral zone 10m wide.

2.3.9 The areas were stripped one at a time, and as each area was completed it was mapped and photographed to provide a provisional plan of proposed hand-dug interventions for approval by Planning Archaeologist Stephen Baker of Derbyshire County Council and Mike Dawson of CgMs. Once agreed, OA excavated the agreed sample interventions.

2.3.10 As the project progressed the strategy was changed, with the agreement of Stephen Baker and Mike Dawson, to take into account new archaeological discoveries.

2.3.11 Because of the discovery of parts of a penannular ditched enclosure containing Iron Age archaeological remains at the western edge of Area A, the stripped area in Area A was extended westwards to establish that feature's extent and to uncover any other features or deposits associated with it. The discovery of a small section of curved ditch at the northern edge of Area A led to the stripped area being further extended northwards again to uncover the feature's full extent.

2.3.12 In Area B, after the discovery of a Roman enclosure ditch, the stripped area was extended westwards following the line of the northern enclosure ditch to locate its northwest corner, and two trenches were excavated by machine across the projected line of the western enclosure ditch further south to confirm its extent.

2.3.13 In addition to the interventions dug by hand, three slots were also dug by machine through the Roman enclosure ditch in Area B to recover more finds.

2.3.14 In Area A, parts of the N-S plough furrows were also removed by machine to reveal earlier features beneath.

2.4 Site specific methodology

2.4.1 Topsoil and overburden were removed under continuous archaeological supervision using a mechanical excavator fitted with a toothless bucket. The machining was carried out carefully in level spits.

2.4.2 The site was excavated down to the top of archaeological deposits or natural undisturbed ground, whichever was reached first. As a result, post-medieval furrows were initially left in place, though as machining proceeded and their orientation and spacing became clear, selective removal of furrows was carried out where these obscured important archaeological intersections or areas (for example the interior of a penannular enclosure in Area A. Some furrows were only partially removed, their bases appearing to be irregular and potentially masking earlier archaeological features (see Fig. 4 and Section 3.5 below).

2.4.3 All excavation by machine and hand was undertaken with a view to avoiding damage to archaeological deposits or features that might appear to be worthy of preservation *in situ*.

2.4.4 During stripping, the subsoil was monitored by metal detector to recover finds. Further metal detecting was carried out once stripping had been completed, and any signals of



probable archaeological origin were marked with flags for subsequent investigation as appropriate.

2.4.5 Parts of the stripped areas (e.g. within the penannular ditch) were cleaned by hand once machine excavation had finished to ensure that all archaeological features had been fully exposed.

2.4.6 The two excavation areas were open for 5-6 weeks, and during this time the area was inspected several times for any features that might not have been visible immediately after the machine strip, but had subsequently weathered out. No additional features were, however, found by this means.

2.4.7 All archaeological features or deposits located were recorded by GPS and transferred to a CAD plan tied in to the Ordnance Survey Grid.

2.4.8 Archaeological deposits were sample-excavated by hand to establish the stratigraphic and chronological sequence. Sediments from all of the investigated features were carefully sorted to recover economic and artefactual evidence, and environmental samples were taken from deposits with visible or suspected environmental evidence.

2.4.9 A minimum of 10% of linear features, half of all discrete archaeological features, and 25% of all structures were excavated, unless otherwise agreed by the CgMs consultant and the Planning Archaeologist for Derbyshire County Council.

2.4.10 Where discrete features were large, a quadrant was initially excavated by hand, and further excavation be carried out by hand or by machine as required, the appropriate method being agreed between the CgMs consultant and the Planning Archaeologist for Derbyshire County Council.

2.4.11 All archaeological deposits and features were recorded by means of Oxford Archaeology pro-forma recording sheets.

2.4.12 All observations were recorded against a unique Event Site Code (CHE18). A continuous unique numbering system was used.

2.4.13 Excavated archaeological interventions and areas of complex stratigraphy were handdrawn at a scale of 1:20. At least two Drawing Points (DPs) were set in as a baseline and measurements taken off this by tape and offset. The hand drawn plans were referenced to the digitally captured pre-site plan by measuring in the DPs with a GPS. These hand-drawn elements were then scanned in, geo-referenced using the DPs as reference points and digitised following OA's digitising protocols.

2.4.14 Sections of any excavated archaeological features were drawn at an appropriate scale and were tied into the Ordnance Survey National Grid using a GPS.

2.4.15 A full photographic record was maintained. The photographic record included photographs of all archaeological features and deposits as encountered and shots to illustrate work in progress.

2.4.16 All artefacts recovered from hand-excavated contexts were retained unless they were of recent origin. In these cases, sufficient quantities of the material were retained to validate the date and establish the function of the deposit from which the finds were recovered.



2.4.17 Recovery was normally by hand, except where bulk samples were taken for other purposes or for special recovery of small items. Where possible all upcast/spoil was scanned by hand and any finds retrieved.

2.4.18 All finds, and samples were treated in an appropriate manner and to standards agreed in advance in the WSI.

2.4.19 Artefacts collected during the excavation were identified by context. The artefacts were exposed, lifted, cleaned, stabilised, marked, bagged and boxed in appropriate materials and conditions to ensure that no deterioration occurred.

2.4.20 Bulk environmental samples of up to 40 litres were taken from well-dated, sealed archaeological features from deposits with visible evidence of environmental potential.

2.4.21 All bulk environmental samples taken were processed and scanned to assess the environmental potential of the deposits.

2.4.22 The resulting residues and sieved fractions were recorded and retained with the project archive.

2.4.23 All artefact/ecofact processing/storage was carried out in accordance with UKIC (United Kingdom Institute for Conservation) - Archaeology Section Guidelines for the Preparation and Storage of Excavation Archives for Long-term Storage (1990), as well as the Standards and Guidelines for the collection, documentation, conservation and research of archaeological materials (Institute for Archaeologists 2001),

2.4.24 Any survey data recorded in the field were downloaded using Leica GeoOffice, LisCAD or other appropriate downloading software, and saved as an AutoCAD Map DWG file or an ESRI Shapefile. These files were regularly updated and backed up with originals being stored on an OA server in Oxford.

2.4.25 All drawings were composed of closed polygons, polylines or points in accordance with the requirements of GIS construction and OA Geomatics protocols. Once created, additional GIS/CAD work was carried out at the local OA central office. Support for all GIS/CAD work was available from OA's Oxford Office during normal office hours.

2.4.26 All plan scans were numbered according to their plan site number. Digital plans were given a standard new plan number taken out from the site plan index.

2.4.27 All digital data were backed up incrementally on CD or DVD. Each Friday the entire data directory was backed up and returned to Oxford, where it was copied onto the OA projects server. Each CAD drawing contained an information layout, which included all the relevant details appertaining to that drawing. Information (metadata) on all other digital files were created and stored as appropriate. At the end of the survey all raw measurements were made available as hard copy for archiving purposes.



3 RESULTS

3.1 Introduction and presentation of results

3.1.1 This section summarises the results of the archaeological investigation integrated with selected specialist material.

3.1.2 The site was divided into two parts (Area A and Area B) and this sub-division is used to describe the discovered deposits and features which are described stratigraphically and by feature type. These are illustrated by photographs, plans and sections. Where possible, related features and remains are linked.

3.1.3 The full details of all archaeological features and deposits with their dimensions and depths can be found in Appendix A.

3.1.4 Finds are reported upon, with dating where possible, in Appendix B, and environmental remains are reported upon in Appendix C.

3.1.5 Fully cross-referenced site records are available in the project archive.

3.2 General soils and ground conditions

3.2.1 The soil sequence was relatively similar across the site: the natural drift geology (4808/7502) was overlain by subsoil (4801/7501), which in turn was overlain by topsoil (4800/7500) which was up to 0.3m thick.

3.3 General distribution of archaeological deposits and features

3.3.1 After the removal of the topsoil and subsoil to the top of the natural, archaeological features were identified and planned.

3.3.2 Many of the archaeological features were plough furrows on a north-south alignment. These number 20 in total and were seen across both of the excavated areas. Nine furrows were seen in Area A and 11 in Area B. These features were post-medieval and were filled with subsoil. In places plough furrows truncated earlier archaeological features.

3.3.3 The earlier features across both areas comprised a series of Iron Age and Roman ditches, enclosures pits, postholes, a penannular ditched enclosure and the base of a possible hearth.

3.3.4 All the recorded archaeological features lay directly beneath the subsoil and were cut into the natural geology or into earlier archaeological features.

3.4 Area A (Western Area) – Fig. 3

Penannular ditched enclosure and associated features

3.4.1 At the western edge of Area, A, a silted up penannular ditch (4827) was uncovered. This was up to 1m wide and up to 0.42m deep and formed a circular enclosure 12m in diameter with a 2.6m wide entrance on its eastern side (Figure 5, sections 4834, 4852-5; Plates 1-5). At some points along its length the ditch had steep sides and a concave base, giving it a V-shaped profile; in others the base was flat.



3.4.2 Eight interventions were excavated through the ditch (Fig. 3), and all contained similar grey brown sandy silt fills. On the south-west of the enclosure slot 5005 contained two fills, 5006 overlain by 5007, neither of which contained finds. The lower fill, 5006, was tentatively interpreted as the remains of an earthen bank which had slumped into the ditch from the outer side of the enclosure (Fig. 5, section 4852; Plate 4).

3.4.3 On either side of the entrance there was evidence of a probable recut of the ditch. This was 0.5m wide and 0.2m deep, and was numbered 5083 and 5085 on the north, and 5087 on the south (Fig. 5, sections 4834 and 4854; Plate 3).

3.4.4 Four interventions - 4946 on the south, 5025 on the north-west, 5018 on the northeast and the terminal 4956 - all contained fragments of Iron Age pottery (fills 4947, 4957, 5019 and 5026). The fill of recut 5083, numbered 5084, also contained Iron Age pottery, and pottery was also recovered from the surface of the unexcavated segments during cleaning (Fig. 8 Vessel 2). Single fragments of smithing slag were also recovered from the fills of cuts 5018 and 5084. Environmental sample <17> was taken from deposit 5084, and hazel charcoal submitted for radiocarbon dating, providing a date of 365-200 cal BC (SUERC-87581; 2204 ± 24 cal BB).

3.4.5 The interior of the enclosure was 10-10.5m across. A band running north-south across the middle had been truncated by a broad furrow, which was removed by machine during stripping. The only internal feature surviving was a posthole (4837) on the north-west. This was half-sectioned and was at least 0.5m deep but did not produce any finds.

3.4.6 Some 2.5m east of the northern terminus of 4827 was a line of postholes running just north of west-east: 4868, 4850, and 4842. Posthole 4868 lay 3.6m east of the gully terminus, and the other two postholes were spaced at the same interval from one another. None of the fills of these features produced any finds, but charcoal was present in both 4850 and 4842, and an environmental sample <13> was taken from 4843.

3.4.7 Posthole 4868 was cut by the north end of a 3m length of gully (4870), which ran across the entranceway on a NNE alignment. This had a V-shaped profile and was 0.25m deep. The excavated portion did not contain any finds.

3.4.8 The line of this gully was continued 8.5m further north by a series of short lengths of gully and pits or large postholes (Fig. 3: 4845, 4874, 4898 and 4856). These were up to 0.36m deep and 1.40m wide. Several of the fills from these features (4846-7 and 4856) contained Iron Age pottery. These cuts were joined by two short lengths of gully, the more southerly (4848) narrower than the northern one (4913, 4854 and 4872). Five fragments of a small sherd of Roman pottery weighing 3g were recovered from 4914, the fill of 4913, but are probably intrusive from ploughing. Two undated postholes (4876 and 4896) lay just to the west and were excavated.

3.4.9 Some 8m to the south-west of the penannular enclosure a 5m long section of a shallow north-south aligned ditch (4989) was excavated. This ditch, which was undated, continued southwards beyond the limits of the excavation.

Iron Age Field Boundaries

3.4.10 Close to the northern edge of Area A, a 17m long section of a ditch (4988) was excavated (Fig. 3). This feature was aligned south-west to north-east, and was up to 0.66m



wide and up to 0.3m deep. Much of an Iron Age jar was recovered from fill 5020 at the northeastern terminus (see Appendix B.1), and a very large sherd was also recovered from fill 5012 in the centre.

3.4.11 Just south of the eastern end of this ditch another ditch (4722) was uncovered, running on a similar alignment. The western end of this ditch was truncated by a medieval furrow, and no relationship with ditch 4988 was established. Unlike ditch 4988, ditch 4722, of which a 7m length was exposed, bowed out or curved to the south as it ran north-east (Fig. 3). Ditch 4722 was up to 0.7m wide and 0.34m deep. One of its fills (5038) contained Iron Age pottery (Plates 6 and 7). At the eastern end, a widening of the ditch suggests that one phase of ditch terminated just short of large boundary ditch (4895) which ran on a NNW-SSE alignment. Another phase of ditch continued to a junction with the boundary ditch, and was cut by 5045 on its western side. As there were two phases of 4985 north of this, it is not certain that ditch 4722 was not at some stage contemporary with the boundary ditch.

3.4.12 Ditch 4985 was the earlier of two boundary ditches that crossed in the centre of Area A. It was aligned NNW-SSE, and crossed the full length of the site (a length of 81m), continuing beyond the limits of the excavations to the south and north. The ditch had slight kinks and changes in width along its length, reflecting either its original excavation in short sections by a group of individuals, or perhaps modifications and partial recutting at various points along its length, but overall was straight. The clearest kink was close to the north end of the site, where a smaller ditch (4722) ran off westwards from it, and there was a distinct bulge just south of this on the west side, perhaps indicating that a terminus had existed here at some stage. Ditch 4985 was up to 0.67m deep and up to 1.8m wide. Its base, which was concave, sloped down from south to north, being 41.18m aOD in 4983, 40.60m aOD in 4959 and 40.39m aOD in 5061 (Fig. 5, sections 4863, 4841; Fig.6, section 4807; Plates 8 and 9).

3.4.13 Five fills of ditch 4985 (4892, 4960, 4978, 5063 and 5076) contained Iron Age pottery (see Fig. 8. Vessel 5), and fill 4941 in cut 4938 contained a little smithing slag. At the northern edge of the site evidence of a later recut (5064), 0.2m deep and 0.67m wide, was observed; neither of the two fills of the recut (5065 and 5066) contained any finds.

3.4.14 This ditch had been uncovered and sampled in Trench 48 during OA's evaluation in 2017, when it was numbered 4802. The upper fill of 4802 (fill 4805) produced four sherds of Iron Age pottery (Oxford Archaeology 2018a).

3.4.15 Ditch 4985 was cut by at its southern end by an east-west aligned ditch 4986 (Fig. 6, section 4807), and mid-way along its length it was also cut by ditch (4987) running NNE-SSW.

3.4.16 Ditch 4987 was uncovered for a length of 61m, and terminated at the NNE end within the site. To the SSW it continued beyond the limit of the excavation (Fig. 3; Plates 10-12). This ditch group consisted of two lengths of different widths, the northern part offset 1m east of the southern part. At the southern end, only a single ditch (4952) was visible, with no evidence of a recut. This section of the ditch was up to 1.2m wide and up to 0.62m deep. Fill 4955 in slot 4952 produced Iron Age pottery.

3.4.17 In slot 4965, where the ditch widened slightly, evidence of a recut (4967) of the ditch was observed (Fig. 5, section 4845). The recut was 1.22m wide and 0.63m deep - very similar in size to cut 4952 further south - and had two fills: 4968, which contained Iron Age pottery, and overlying fill 4969 which was sterile. The earlier cut was on the eastern side and may

represent a terminus. The recut continued, and may have ended 6m further NNE as cut 4860, or have turned 90° south-eastwards for another 3.5m before ending.

3.4.18 To the north of this slot, the ditch was recut, the original ditch being the more westerly and the recut lying on the east (Fig. 5, section 4857). The more westerly ditch, comprising cuts 4902, 4967, 5058, 5073 and 5029, was up to 0.22m deep and up to 0.7m wide. Fills 5060 and 5074 from this ditch contained Iron Age pottery. The eastern ditch consisted of slots 4904, 4833, 4860, 4996 and 5079, and diverged from the earlier ditch cut towards the NNE end (Fig. 3). This ditch was up to 0.5m wide and 0.45m deep. Fills 4834 and 5076 from slots 4833 and 5073 contained Iron Age pottery (see Fig. 8 Vessels 6a and 6b).

3.4.19 At the north-east end the western ditch turned 90° west, ending after 8m at a squared terminus. The fills of the cuts into this ditch (5039 and 5043) did not contain any dating material. The recut ditch (5092) continued for a further 7m north-eastwards before ending c. 12m from the northern edge of the site.

3.4.20 Ditch 4987 drained from south to north, the base being at 41.12m aOD in slot 4930 to 40.67 m aOD in 4904.

3.4.21 Ditch 4987 had been uncovered and sampled, as ditch 4902/4904, in Trench 49 during OA's evaluation in 2017. The upper fill of 4902 (fill 4903) produced a single sherd of Later Iron Age pottery (OA 2018a).

3.4.22 Mid-way along its length, ditch 4987 was cut by two intercutting pits 486 and 4866. Pit 4864 cut pit 4866. Pit 4864 contained no finds but the upper fill (4867) of pit 4866 contained a little Iron Age pottery.

3.4.23 At the southern edge of Area A, ditch 4987 was cut by an east-west ditch 4986 (Fig. 3). This ditch appears to have formed part of a further system of enclosures consisting of ditch 4986 and an eastern continuation 4711, with a 2.5m wide entrance between them, and ditch 4721 running southwards from ditch 4986. Ditch 4711 was up to 0.6m wide and 0.2m deep, except at the terminal, where it widened to 0.9m and was slightly deeper. This widening was interpreted as a possible posthole, and was numbered 4934, but may instead have been a sump. The more westerly ditch (4986) was slightly wider and deepened from 0.23m to nearly 0.6m towards the east end. Together, ditches 4986 and 4711 were traced for 48m, and continued beyond the limits of excavation to the east and west.

3.4.24 Partway along, ditch 4986 cut across the terminus (4886) of N-S aligned ditch 4721 (Plates 13 and 14). Ditch 4721 was 1m wide and 0.4m deep and the terminal contained a sizeable group of Iron Age pottery sherds and some animal bone. This ditch continued southwards beyond the limit of excavation.

3.4.25 No finds were recovered from 4711, and the only finds from 4986 were two small fragments of post-medieval ceramic building material from cut 4815 at its intersection with a later furrow. These are judged to be intrusive from the furrow, whose fill was very similar to that of the ditch. The date of the east-west ditch is therefore uncertain, but as it was aligned to cross the termini of both 4986 and 4985, it is believed to have also been Iron Age.

Undated Features

3.4.26 Three large circular pits (4970, 5070 and 4917) were found in the excavation area, none of which produced any finds. Pit 4970 lay just south of the line of postholes east of



penannular enclosure 4827. It was 1.75m in diameter, and had steeply sloping sides, but was not bottomed due to the high water table. There were five fills, primary natural silting being followed by further clayey silts, one of the middle fills containing a large lump of charcoal. Pit 5070 lay around 30m further east, and was isolated beyond the ditched boundaries described above. It was circular and 1.68m across, with one steep and one vertical side and a concave

base, and was 0.82m deep (Fig. 5 section 4864; Plate 15). A third large pit (4917), which was nearly 2m in diameter, lay at the southern end of the site, and cut into east-west ditch 4986. Like pit 4970, this had steeply sloping sides, and was dug to a depth of nearly 0.50m, but was not bottomed due to the high water table. The two fills that were excavated did not contain any finds.

3.4.27 A series of undated pits and post holes (4889, 4891 and 4895) were excavated to the south-east of the southern end of ditch 4987, and a tree-throw hole, pit or short section of ditch and a posthole (4920, 4922, 4924 and 4926) were uncovered to the south of the western end of ditch 4988. None of these features produced any finds or environmental remains.

3.4.28 Two similarly undated features (4858 and 5068) were excavated near the northeastern corner of the site (Fig. 3). Both were sub-circular, small and shallow, and contained a little charcoal. They probably represent burnt three-throw holes.

Post medieval plough furrows

3.4.29 A number of north-south aligned plough furrows containing pottery dating to the 18th and 19th centuries were also discovered crossing Area A (4709, 4710, 4712, 4713, 4714, 4719, 5010, 5091 and 5099). These shallow features were evenly spaced and followed the prevailing orientation of the modern fields. They appear to have been post-medieval sub-divisions of the field related to agricultural activity

3.5 Area B (Eastern Area) – Fig. 4

Roman Enclosure

3.5.1 The south-west part of Area B contained part of a rectangular ditched enclosure (7670; Fig. 4). Parts of the northern and eastern sides of the enclosure lay within the excavation area, and the location of the north-western corner and the line of the northern part of the western side were established by trenching at a late stage, demonstrating that the enclosure measured 62m from east to west, and was at least 55m from north to south. The southern end of the enclosure lies beyond the limits of excavation.

3.5.2 The enclosure ditch was investigated by cross-sections 7561, 7567, 7574, 7583 7685, 7589, 7681, 7683, 7744,7760, 7761 and 7764. The enclosure ditch proved to be up to 1.94m wide and 0.6m deep, and had steep sides and a concave base, with an almost V-shaped profile in places (Fig. 7, sections 7507, 7508, 7516 and 7547; Plates 17-23).

3.5.3 Many of the fills in enclosure ditch 7670 (fills 7563, 7564,7590, 7618, 7682, 7683, 7684 and 7686) contained pottery, and these can be dated to the second half of the 2^{nd} century AD.

3.5.4 Along the northern arm of the enclosure there was evidence of a recut, numbered as cuts 7525, 7576, 7581 and 7764 (Fig. 7, sections 7507, 7508; Plates 17-18). The respective single fills of 7525 and 7576 (7524 and 7577) contained pottery, as did fills 7618, 7619, 7621 and 7622 from ditch slot 7764. The assemblages can be dated to 180-260AD. Fill 7621 was



v.3

also sampled for environmental remains (<52>) but contained very little. No entrance into the enclosure was seen on the northern or eastern side of the enclosure, so this presumably lay either on the west, south, or towards the southern end of the east side. It is also possible that an entrance existed at one time on the north, but was later cut through when the enclosure ditch was recut.

3.5.5 Towards the north-eastern corner, the northern arm of the enclosure ditch cut a narrow ditch (7613) which ran ENE from the enclosure for 6m before ending beneath a furrow. No finds were recovered from it.

3.5.6 Towards the southern limit of the excavation the eastern arm of enclosure ditch 7670 cut the south-west ends of two short parallel lengths of ditch running north-eastwards. The larger of these (7742/7749) was up to 0.60m wide and 0.40m deep and 8m long, and its rounded north-eastern end was uncovered to the east of plough furrow 7747. The fill of 7742 (7743) produced a little middle to late Roman pottery.

3.5.7 Also on the eastern side, enclosure ditch 7670 was cut by 7759, a narrow ditch up to 0.8m wide and 0.38m deep. This ditch ran SSW north of the enclosure, but turned to run north-south alongside ditch 7670 for some 12m, and then ran into the top of the enclosure ditch on the south, where the ditch edges then faded out. This suggests that the enclosure ditch still had a hollow along its top at this time, into which ditch 7759 drained. Where ditch 7759 met the north-east corner of the enclosure, it had two phases, the later phase (numbered 7562) ending at a terminal adjacent to the enclosure ditch (Fig. 7, section 7517). Neither phase of ditch produced any finds, but the fact that both phases either respected, or were aligned with, the enclosure, suggests that these ditches were Roman. At the north end ditch 7759/7562 was obscured by a furrow, beyond which it did not reappear. The furrow was not removed, so the northern end of the ditch was not found.

Features within the Roman enclosure

Ditches around the periphery of the interior

3.5.8 In the north-eastern part of the enclosure two narrow ditches or gullies were found, one (7765) running parallel to the northern arm of the enclosure, the other (7757) parallel to the eastern arm, but turning at right angles at the north end to form an L-shape (Fig. 4).

3.5.9 Ditch 7757 was up to 0.8m wide and 0.30m deep with a concave base, and the arms of the L were 9m and 3m long (Fig. 7, section 7529; Plate 24). The fills of this feature (7515, 7637 and 7639) contained pottery dating to the late 2nd or early 3rd century AD.

3.5.10 Ditch 7765 lay 4m north of 7757, and was of similar dimensions and profile, but did not contain any finds. This ditch lay 6m due south of ditch 7613, and was of much the same length, though slighter in dimensions and profile. Ditch 7765 was cut by plough furrow 7750.

3.5.11 A short length of an east-west aligned ditch (7625 and 7646) was also exposed close to the excavation area's western limit. This was 5m long, up to 0.62m wide and 0.30m deep. At its western limit this shallow ditch, the fills of which produced no finds, was cut by an undated pit (7648), and both the ditch and the pit were obscured by a furrow at the very edge of the area. This was not removed, so it remains unclear whether the east-west ditch terminated beneath the furrow, or continued westwards beyond it.

Southern Pit complex and hearth



3.5.12 Right up against the southern limits of the area a series of shallow intercutting pits and hollows was uncovered (Fig. 4: 7628, 7629, 7630, 7632, 7633, 7653, 7668, 7671 and 7672).

3.5.13 At the northern edge of these a shallow hearth (7627) was excavated. This was a roughly circular pit *c*. 0.68m in diameter cut 0.3m deep into the natural clay, whose flat base was covered with rough fire-cracked stones, and whose sides had been burnt red (Fig. 4; Plates 25 and 26). The sole fill of 7627 (7660) produced much charcoal, and a few sherds of middle to late Roman pottery. The hearth or oven was encroached upon by several later pits, and does not appear in the section cut through this complex of pits (Fig. 7 section 7536).

3.5.14 To the south of 7627 only two features (pits 7629 and 7679) were more than 0.24m deep, the rest being no more than 0.19m deep, whilst several were only 80mm deep. All of the pits that were excavated produced quantities of pottery and ceramic building material, most dating to the middle Roman period (late 2nd or early 3rd century AD). Pit 7671 could be more closely dated to the first half of the 3rd century AD, and pit 7672 and hollow 7652 to the later 3rd or 4th century. Pits 7629, 7671 and 7672 contained dark fills that were sampled for charred plant remains (samples 56, 57 and 58 respectively), and the last two samples proved to contain rich assemblages of cereal remains and chaff. Fill 7534 in pit 7671 also contained a fragment of rotary quern. Hollow 7652 was larger than the other pits, and may have resulted from the activity of livestock (trampling etc) rather than being man-made.

3.5.15 There were a number of outliers to the main cluster of pits. To the east was a group of three (7553, 7557 and 7559), of which 7557 contained Roman pottery and 7553 charcoal and a stone rubber (Fig. 7, section 7514).

3.5.16 To the west and north-west was a more scattered collection of pits, four of which (7605, 7607, 7609 and 7611) had been found in evaluation, and another (7679) just to the east. All of these had similar grey-brown or darker grey fills, but none produced any finds, though 7607 was cut by a gully (7603) containing Roman pottery.

Other Pits

3.5.17 To the north-east of ditch 7757, a shallow oval pit (7643) was uncovered (Fig. 4). This pit was ovoid, 1.12m long and 0.20m deep and contained two fills. The lower (7644) was almost black in colour and contained abundant charred plant remains including cereal grains, chaff and charcoal (<53>), while the upper fill (7645) contained a sherd of Roman pottery. There was no sign of *in situ* burning on the base or sides of the pit, so this was presumably a deposit dumped before the pit was backfilled.

3.5.18 Several other pits were scattered across the northern part of the interior. Two (7544 and 7579) were of similar size to pit 7643. The fill of pit 7544 contained much charcoal, but no other finds. The single fill of pit 7579 contained only occasional charcoal flecks, but did include a sherd of Roman pottery. Pit 7544 lay less than 5m south of the pair of oval or sub-rectangular pits (7503 and 7506) excavated in the evaluation, both of which contained Roman pottery and fragments of quern and other dressed stone (OA 2018a). Like pit 7643, pit 7506 also contained a rich charred plant assemblage including cereal grains, chaff and charcoal.

3.5.19 North of pit 7579, and cut by the enclosure ditch, was a smaller pit (7587). Unlike the others, whose fills were either grey-brown, grey or black, this was filled with a yellow sandy silt and pebbles, and there were no finds.



3.5.20 A scatter of small pits and tree-throw holes were uncovered south of pit 7544 in the centre of the enclosure (Fig. 4: 7545, 7547, 7550, 7594 and 7641; Fig. 7, 7512-3; Plates 27-28). The first three formed a tight cluster, although they did not intercut. This group of features was of diverse forms, but were all shallow, ranging from only 70mm to 0.34m in depth. Only 7552 and 7580 (the fills of 7550 and 7579) produced any dating material, consisting of pottery

Features outside the Roman Enclosure

sherds all dating to the middle Roman period.

3.5.21 Just over 5m east of the end of ditch 7758, a short (3m) east-west length of gully (7711) was exposed (Fig. 4). The single fill (7712) contained a group of small sherds of Iron Age pottery.

3.5.22 At the south-eastern corner of the site, an east-west aligned ditch (7756) was sampled. This ditch was up to 1.12m wide and 0.4m deep. Its fills (7678 and 7714) contained no finds. Towards its western end, ditch 7756 turned north-west and its western end was truncated by a later furrow (7750).

3.5.23 Some 5m further north-west, a short length of gully or elongated pit 7806 was found in evaluation Trench 78. This feature, which was orientated WSW, contained much of a squat vessel of middle-late Iron Age date (Fig. 8, vessel 1). Charred food residue on the interior of the vessel was submitted for radiocarbon dating, and gave a date of 175-40 cal BC (see Appendix C Radiocarbon report).

3.5.24 Cut 7677 of ditch group 7756 was cut by 7673, a southern terminus of ditch group 7753. This ditch, which was up to 1.58m wide and 0.30m deep, was orientated NW-SE and continued northwards beyond the limits of the site. None of the fills of this ditch contained finds.

3.5.25 Ditch group 7753 was also planned continuing south-eastwards beyond 7756, but this length of the ditch was not further investigated. The hand-drawn plan of the investigation between 7673 and 7677 suggested that the east-west ditch 7756 may have cut the continuation of 7753, but this is not certain. If it did, then presumably

3.5.26 Mid-way along its length, ditch 7753 cut through an earlier pit 7719 (Fig. 6, section 7542), but this too was undated.

3.5.27 Some 12.5m north of the point at which ditch 7759 was obscured by a furrow, a ditch aligned ENE emerged from beneath the same furrow, and continued for 18m before being truncated by a second furrow (7728). This ditch was investigated by three hand-dug slots (7722, 7724 and 7726), and was up to 0.70m wide and from 80mm to 0.18m deep, with only a single fill. A single sherd of Roman pottery was recovered from 7723, the fill of slot 7722. Ditch 7753, which also contained Roman pottery, lay only 1.5m east of 7726, and ditch 7726 may either have ended just short of it or have run into it. In either case the two ditches were probably associated.

Post medieval plough furrows

3.5.28 A number of north-south aligned plough furrows spaced at 10-12m intervals were uncovered (Fig. 4: 7598, 7692, 7697, 7699, 7734, 7750, 7751, 7752, 7753, 7754, 7760, 7766 and 7767). A few were initially investigated by hand to confirm their character and date; the remainder were not excavated, other than to look for the continuations of earlier ditches



masked by the furrows. Most contained fragments of pottery or ceramic building material dating to the 18th and 19th centuries. These shallow features crossed Area B and followed the prevailing orientation of the modern fields.



4 **DISCUSSION**

4.1 Reliability of field investigation

4.1.1 Despite partial flooding in several parts of the site and a variable geology, furrows, ditched enclosures, pits and ditches were recognized in both areas.

4.1.2 All identified features were mapped and were excavated and recorded in accordance with the requirements of the WSI.

4.1.3 A reasonably coherent narrative of the site can be proposed, demonstrating that the field investigation was reliable, and met the aims and objectives set out in the WSI.

4.2 Interpretation

4.2.1 Based on stratigraphic relationships, artefactual and radiocarbon dating, the archaeological features observed at Boulton Moor have been divided into three identifiable periods as follows:

- Middle and Later Iron Age (400-50 BC)
- Roman period (2nd-4th centuries AD)
- Post-medieval (AD 1600-1900).

4.2.2 Where the dating evidence was lacking or uncertain, features have been assigned to a period after consideration of their orientation, stratigraphic relationships, forms and proximity to datable features.

Iron Age

4.2.3 The excavated Iron Age settlement in Area A consisted of a single penannular ditched enclosure surrounded by a series of linear ditches, with a major boundary on the east of two phases, and a pair of smaller ditches running roughly east-west, one to the north and (later) one to the south of the penannular gully, eventually enclosing it on three sides. There was no evidence of a continuous boundary on the western side, unless it was marked by a small ditch or gully 4503 excavated in evaluation Trench 45, which produced a sherd of later Iron Age pottery (OA 2018). In addition, the ditches, even those of the main boundary, were not particularly substantial. The site was not, therefore, a truly enclosed settlement, which appears to have been the most commonly identified settlement type in the East Midlands (Speed 2010). Examples of penannular enclosures outside larger enclosures are known (for instance at Egleton, Rutland: Brown 2016), but excavation of the adjacent larger enclosure at Boulton Moor (in Area B) gives no indication of an Iron Age origin, suggesting instead that it was dug in the Roman period.

4.2.4 Iron Age pottery was also recovered from a couple of ditches east of the Area B enclosure, and may have been associated with a larger but undated ditch running NNW, roughly parallel to the main boundary in Area A. Another ditch containing a sherd of Iron Age pottery was found to the west during the evaluation (OA 2018). It is, therefore, possible that the wider landscape was divided into broad swathes by linear boundaries (ibid., fig. 15; see also Fig. 2) within which there may have been several foci of activity beyond the evaluated area to the east or south. The Area B excavation, however, proved that there were substantial gaps between any such foci.



4.2.5 Similar Iron Age settlement layouts in the Midlands are few. Roundhouses adjacent to a linear boundary are known from excavations along the A46 in Nottinghamshire, at High Thorpe and Cropwell Wolds (Cooke and Mudd 2014), but both indicate a density of occupation greater than that at Boulton Moor. Perhaps the best parallel is that at Area A, Aston Hall Hospital, Aston on Trent, Derbyshire, where an irregular system of ditches covering a similar area and described as livestock enclosures were uncovered (Flintoff and Stein 2016).

4.2.6 Returning to Area A, as the first phase of the main boundary continued both north and south of the excavated area, and the second phase also did so to the south, while the east-west ditch also continued west of the main boundary, it is clear that the excavation had not reached the limits of Iron Age activity. As a result, the following discussion must be considered provisional until the adjacent area to the south has been investigated.

4.2.7 The penannular gully was within the normal range of such enclosures in the East Midlands. Examples range from less than 10m in diameter, as at Cropwell Wolds or Rutland Water (Cooke and Mudd 2014; Cooper 2000, 47, structures 2 and 3) to more than 13m in diameter, as at Hallam Fields, Birstall (Speed 2010). Most of the larger penannular enclosures are not interpreted as representing the wall of the building, although at Wanlip, Leicestershire, a convincing ring-groove was 13.5m in diameter (Beamish 1998). The absence of post-pipes or packing in the penannular ditch at Boulton Moor, together with its sloping profile, also argues against interpreting this as the wall-line of a building. If the penannular enclosure did surround a house, it is more likely to have been a drip gully. No concentrations of finds or of very charcoal-rich fills at the terminals, such as are often found in roundhouse gullies, were evident. This may in part have been the result of truncation by later ploughing.

4.2.8 There was, however, only one posthole inside the penannular enclosure, and this lay away from the entrance, which might suggest that this enclosure did not surround a house at all. The depth of this posthole was considerable, so if there had been a post-built house, then despite the truncation of part of the interior, other postholes might have been expected to survive. Houses need not, however, have been post-built; buildings of slighter construction leaving few traces are now well-known from the middle Iron Age. At Shenstone, Staffordshire, for example, where the penannular gully survived up to 0.6m deep, only part of an internal ring-groove survived, and this only 0.06m deep (Simmonds in Powell *et al.* 2008, 223-4). Stake-walled construction, as for example at Moel-y-Gaer, Flintshire (Guilbert 1981) leaves no trace unless conditions of preservation are excellent. Evidence of this sort would most likely have been ploughed out, although the absence of door postholes is less easy to explain.

4.2.9 Alternative functions for the enclosure are not obvious. Even if truncated, and so originally somewhat deeper and wider, the penannular gullies are not particularly substantial, so use as an animal pen does not seem very convincing (unless the animals concerned were small and docile) nor does use as boundaries to a storage area intended to keep out livestock. A little smithing slag was found in the enclosure ditch, suggesting that smithing may have taken place within, or adjacent to, the enclosure occasionally.

4.2.10 Outside the penannular enclosure, some degree of organization of the surrounding space was evident. The short length of ditch or gully outside the entrance restricted access from the east, and the line of postholes running east from its northern end suggests a barrier running between this gully and the main boundary ditch further east. This could have been a post and rail fence, but the absence of an accompanying ditch perhaps suggests that this was

a temporary or intermittent barrier, perhaps closed by lengths of hurdle to create pens, or to aid stock sorting at certain times of year.

4.2.11 The depths of the ditches forming the several phases of the system surrounding the penannular enclosure varied, some surviving as only shallow features. Even allowing for truncation by ploughing, only the upcast from the main boundaries could have provided sufficient material to create above-ground banks of any significance. This perhaps indicates that the boundaries were dug more for drainage than to act as substantial barriers for livestock. The substantial gaps evident in all phases support this view, and make clear that they could not have provided an effective defensive function. They might also have assisted the sorting of livestock at certain times of year, using temporary barriers such as hurdles to close the gaps. Drainage for arable fields is alternatively possible, although the protection of crops from livestock and wild animals also requires continuous and substantial boundaries to be effective.

4.2.12 It is possible that more substantial barriers existed above ground in the form of hedges, although the limited environmental evidence does not provide much evidence for their presence.

4.2.13 Only three fairly deep pits were found, the majority being shallow. This presumably reflects the high water-table (two of the three were not bottomed for this reason), and it is clear that below-ground storage would not have been practicable on this site. There were no four-post structures within the excavated area, and this, combined with the virtual absence of grain from the charred plant remains, and the absence of any querns, may indicate that the site had a pastoral function. The limited charred plant remains also suggest that the site was too damp for cereal cultivation.

4.2.14 Unfortunately the local soil conditions were not conducive to good bone preservation, so the assemblage was too small to indicate more than the presence of cattle, sheep and horse. Information on the local environment from charcoal and charred plant remains was also very scarce.

4.2.15 The Iron Age pottery included several groups of large numbers of sherds from single vessels, two from ditch termini, one from 5020 towards the north end of the site, the other from 4886 at the south end, and the third from pit 4845 north-east of the penannular enclosure, but at the end of a complex of intercutting gullies and pits. Although none of the vessels was complete, it is possible that they were not simply discarded as rubbish, but were deliberately deposited in these locations. 'Structured deposition' is a common occurrence on Iron Age sites across Britain, although elsewhere such deposition is often marked by a variety of materials, not simply pottery. Within the wider region structured deposition was claimed at Wanlip, Leicestershire, and at Elms Farm, Humberstone, Leicestershire, where a concentration of pottery in ditch terminals was noted, deposits of whole and near-complete pots were also discussed in terms of structured deposition (Charles *et al.* 2000, 159-60).

4.2.16 In the eastern part of Area B two short gullies containing Iron Age pottery were found. A number of longer ditches were also exposed, including a major boundary on a NNW-SSE alignment, but none of these contained any finds. The orientation of the major boundary ditch is similar to that of the first phase of Iron Age boundary ditch in Area A, so it is possible that this system was also of Iron Age date. If so, it may indicate a broader pattern of land division



on this alignment, as was tentatively suggested in the evaluation report (OA 2018; see also this report Fig. 2).

4.2.17 The occupation within Area A provided a single radiocarbon date of 365-200 cal BC, whereas the vessel from the east side of Area B gave a date of 175-40 cal BC. While both belong to the later part of the Iron Age, this may indicate a shift in focus of Iron Age activity within this landscape over time.

4.2.18 Occasional sherds of Roman pottery were found in the tops of other long ditches on this alignment, perhaps suggesting that this system of land division persisted into the Roman period.

The Roman Period

4.2.19 Roman activity was virtually confined to Area B, although a sherd of pottery was found in a short gully or elongated pit in Area A.

4.2.20 In Area B, the Roman material was almost entirely contained within a large enclosure in the south-western part of the area or in the enclosure ditch fills. The size of the enclosure - 62m by 55m or more - is of middling size for single-ditched enclosures in the Central West part of Roman Britain (Smith *et al.* 2016, fig. 8.9). Enclosed farmsteads surrounded by a single ditch are the most common form of Roman rural settlement within this region (ibid., 292 and Table 8.2).

4.2.21 Internal features in Area B consisted of a number of short lengths of shallow ditch running roughly parallel to the main enclosure ditches, and of a number of shallow pits, of which there was a marked concentration at the southern edge of the excavated area. The shallowness of the internal pits is probably due, at least in part, to the high water table, which was also a factor in the depth of the Iron Age pits. This appears to suggest that there was no significant improvement in drainage between the late Iron Age and the 2nd century AD in the local area.

4.2.22 The gap between the internal ditches and the enclosure was 4.5-6m, which might suggest that the area between them had been occupied by an internal bank, but several pits and a gully lay within this zone on the north, as well as another pit on the east, indicating either that there was no internal bank, or that this did not continue as a barrier throughout the use of the enclosure. The excavated evidence does not rule out an external bank.

4.2.23 Two phases of the enclosure ditch were seen on the north, the first dating to the later 2nd century, the second to the very late 2nd or first half of the 3rd century AD. This is also the date range covered by the pottery from the internal pits and ditches, except for one or two probably later 3rd century groups. A ditch cutting the top of the enclosure ditch on the east may also belong with this limited later phase of use. The date span corresponds to the phases when rural farmsteads were most common in the Central West part of Roman Britain (Smith *et al.* 2016, fig. 8.6).

4.2.24 No buildings were found within the excavated area, but as only part of the interior of the enclosure was seen, this does not preclude domestic occupation. Many of the excavated Roman farmsteads in the Central West region had only a single building inside them, and some were without any clear evidence of buildings (Smith *et al.* 2016, 291-297).



4.2.25 The pottery and quernstones derive from local or regional production centres (Mancetter/Hartshill and Derbyshire Millstone Grit), indicating that, while the settlement was integrated into the regional economy, it was of low status. There was a very limited range of finds of the Roman period, and none to indicate higher status activity.

4.2.26 Prominent among the finds were fragments of mortaria and quern stones, evidence of the processing of food or other materials, whilst the charred plant remains suggest small-scale crop processing, possibly for local consumption. The absence of animal bone may be a reflection of the acid quality of the soils, though some animal bones did survive in Area A. It is also possible that bones were disposed of in a different manner in the Roman period, either onto surface middens that would further break down bones, or in particular parts of the site, which may occur in the unexcavated parts of the enclosure. On the face of it, however, this farmstead does appear to have been focussed primarily on arable agriculture.

Post-medieval-modern

4.2.27 A number of north-south aligned plough furrows containing pottery dating to the 18th and 19th centuries were discovered in both areas. These followed the prevailing orientation of the modern fields, and appear to have been post-medieval sub-divisions of the field related to agricultural activity.

4.3 Excavation objectives and results

4.3.1 At each stage of the project, aims were established as part of the framework of investigation. After the completion of each stage the aims were re-examined, and the results checked to see whether the general and site-specific objectives had been achieved.

4.3.2 The general aims set out in section 2.2.1 have been met. The excavations were successful in determining the general natural and character of the remains present, and dating has been established for most of the excavated features. Post-excavation assessment and reporting has allowed the compilation of an outline narrative of the site's development (this document), and the finds, paper and digital archive is ready for deposition.

4.3.3 The specific aims were as follows:

4.3.4 To look for evidence of earlier prehistoric activity in the landscape surrounding the prehistoric burial mounds and other monuments.

4.3.5 The only evidence of earlier prehistoric activity comprised a single flint blade which was found unstratified in the topsoil in Area B. The lack of finds or features of earlier prehistoric date in the areas examined suggests a very limited presence prior to the Iron Age.

4.3.6 To establish whether further Iron Age pit alignments exist, i.e. whether a system of land division was present in this area.

4.3.7 No continuation of the pit alignments found west of Chellaston Lane was found, nor any further Iron Age pit alignments. A system of ditches of Iron Age date was, however, revealed in Area A, as well as traces of a possible further system on the eastern side of Area B. A wider system of land division based on ditches on a NNW-SSE alignment has been posited, but dating to confirm this was lacking, and this remains tentative.

4.3.8 To establish whether Roman activity, and particularly Roman settlement, was present.



4.3.9 A substantial Roman enclosure was uncovered in Area B, enclosing ditches and a complex of shallow pits and a possible hearth. Although no Roman buildings were identified within the excavated part of the enclosure, the quantity and condition of the pottery indicates settlement activity, and the charred plant remains and quernstones confirm crop processing on site. A little Roman pottery was also recovered from Area A.

4.4 Significance

4.4.1 While Iron Age pottery and pit alignments have previously been recovered from the development area further west (Clay 2015; Harvey 2012; Hunt 2014a, 2014b; OA 2017b, 2017c), the excavation of Area A has provided the first evidence for a focus of settlement comprising a penannular enclosure, pits and a surrounding system of ditches. The range and quality of finds recovered suggest a low-status pastoral settlement, possibly set within a landscape divided by a combination of pit alignments and long ditches. Radiocarbon dating of the penannular enclosure (365-200 cal BC) has confirmed that the Area A settlement was in use during the middle Iron Age, although it is also possible that the occupation began a little earlier than the quoted range. The vessel found on the east side of Area B, residue from which was radiocarbon dated to 175-40 cal BC, belongs to the later part of the middle Iron Age, and demonstrates the continuation of activity on the site over most of the later Iron Age.

4.4.2 All of this activity is later than the pit alignment recovered in Phase 5 west of Chellaston Lane, which was dated to 760-420 cal BC (Gorniak and Allen 2017, Appendix C.3), although the pit alignment from Phase 1 apparently included most of an East Midlands Scored Ware vessel (Cooper in Hunt 2014, Appendix II). Such vessels are generally dated to the early-middle Iron Age, and so the pit alignment may have been contemporary with the occupation in Area A. A wide variety of elements of Iron Age activity has now been found during the excavations spanning much of the Iron Age, and the site is therefore locally significant.

4.4.3 Despite the presence of ditches, this was not an enclosed settlement, making it relatively unusual for the East Midlands, and thus increasing its significance within the region.

4.4.4 As for the Iron Age period, scattered evidence of Roman activity had previously been identified to the west, but only a small enclosure (30m x 21m) had previously been identified within the Boulton Moor development area (Harvey 2012). The Area B enclosure represents a much larger occupation focus.

4.4.5 The Roman occupation was largely of the same date as other Roman features identified within the development area, that is, later 2nd and early 3rd centuries AD, but also included some evidence of the late Roman period, extending the duration of Roman activity within the area. The nearest enclosure of Roman date known, though much smaller than that in Area B, is that at Chellaston Fields, Swarkestone, some 3.2km to the south-west (Clay 2015). The Roman site is therefore locally significant.

4.4.6 In the wider region, farmsteads enclosed by a single ditch are the commonest form of rural settlement known, and the period of use of this site also falls into that most commonly seen within the region (Smith *et al.* 2016). Regionally, therefore, the site as currently understood is not of particular significance.



4.5 Publication and Dissemination

4.5.1 The remains uncovered during this phase of the project are of sufficient significance to warrant summary publication on their own account, though publication within the context of further work in the surrounding landscape would be better.

4.5.2 There is currently no agreed proposal for further development south of the current sites, where the Iron Age and Roman activity found in the excavations may continue, so a summary report has been prepared and submitted to the Derbyshire Archaeological Journal (forthcoming 2020) to ensure that attention is drawn to the existence of this report, arrangements for the archiving of which are described below.

4.6 Archive

4.6.1 The complete project archive includes paper context records and indices, permatrace drawings, digital plans and photographs.

4.6.2 These were prepared following the guidelines set out in *Guidelines for the preparation of excavation archive for long-term storage* (Walker 1990).

4.6.3 The digital data are temporarily stored on the server at OA South, which is backed up daily. For long term storage of the digital data CDs/DVDs will be used, and will include the reports, plans, scanned images and digital photographs. Each disk will be fully indexed and accompanied by the relevant metadata as provenance.

4.6.4 The project archive and finds are currently held at Oxford Archaeology (south) in Osney Mead, Oxford, under the Site code CHE 18. The archive will be deposited with Derby Museum and Art Gallery, under Accession number DBYMU 2017-66.

4.6.5 Copies of the report will be uploaded on to OASIS, and further copies made available through the OA library. Digital data will be curated on the ADS.

4.6.6 One bound hard copy of the report, and a Pdf on disk will be deposited with the Derbyshire HER.



APPENDIX A CONTEXT INVENTORY

Area A						
Context No.	Туре	Width (m)	Depth (m)	Description	Finds	Date
4709	Cut	-	-	N-S linear cut. Plough furrow. Not excavated	Pottery	-
4710	Cut	-	-	N-S linear Plough furrow. Not excavated	Pottery	18 th -19 th C
4711	Group	-	-	E-W aligned ditch consisting of: [4823], [4944], [4936]	-	-
4712	Cut	-	-	N-S aligned plough furrow. Not excavated		
4713	Cut	-	-	N-S aligned plough furrow. Not excavated		
4714	Cut	-	-	N-S aligned plough furrow. Not excavated		
4715	Fill of [4713]	-	-	Brown silty clay with pebbles. plough furrow. Not excavated		
4716	Fill of [4714]	-	-	Brown silty clay with pebbles. plough furrow. Not excavated		
4717	Fill of [4712]	-	-	Brown silty clay with pebbles. plough furrow. Not excavated		
4718	Fill of [4719]	-	-	Brown silty clay with pebbles. plough furrow. Not excavated		
4719	Cut	-	-	N-S aligned plough furrow. Not excavated		
4720	Natural		30mm	Uneven base. filled with light grey sandy silty clay		
4721	Group			N- S aligned ditch consisting [4825] and [4886]		
4722	Group			NE-SW aligned ditch consisting of [5037] [5048]		
4800	Layer	-	0.24	Topsoil. Dark brown clayey silt		
4801	Layer	-	0.15	Subsoil. Light brown orangey clayey silt sand	IA Pottery	

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4808	Natural	-	-	Natural drift geology		
4809	Cut	1.65	0.12	Linear N-S ditch, flat	-	-
				base, 20°-30° sides.		
				plough furrow. Not		
				excavated		
4810	Fill of	1.65	0.12	Friable yellowish-	-	-
	[4809]			brown silty sand.		
				Occasional gravel		
				inclusions. plough		
				furrow.		
4811	Cut	0.80	0.10	NE-SW linear ditch.	-	-
				Irregular base and		
				shallow sides.		
4812	Fill of	0.80	0.10	Loose orangey-grey	-	-
	[4811]			silty sand, frequent		
				small stone inclusions.		
4813	Cut	0.60	0.10	Terminus of N-S	-	_
				aligned ditch. Rounded		
				N end. Irregular base		
				shallow sloping sides		
4814	Fill of	0.60	0.10	Loose orangey-grey	-	-
	[4813]			silty sand. Frequent		
				small stones.		
4815	Cut	0.28	0.23	WNW-ESE Curvilinear	-	
				ditch. Moderate		
				concave base,		
				moderate concave		
				sides. Changes to NW-		
				SE alignment.		
				Truncated by [4817].		
4816	Fill of	0.28	0.23	Friable dark greyish-	CBM	Post-
	[4815]			brown silty sand.		medieval
	[]			Moderate poorly		
				sorted flint inclusions.		
4817	Cut	0.70	0.13	N-S linear furrow.	_	_
				Shallow straight sides,		
				wide concave base.		
4818	Fill of	0.70	0.13	Friable brownish-grey	_	_
	[4817]			silty sand. Moderate		
	[.~~,]			flint inclusions.		
4819	Fill of	0.67	0.65	Friable greyish-brown	_	_
	[4820]	0.07		silty clay. Moderate		
				flint pebble inclusions		
4820	Cut	0.67	0.65	NE-SW linear drainage/	_	_
1020		0.07	0.05	boundary ditch.		
		I		Soundary utten.		



Lana at boan	ton Moor, east of t	enenaston Eane,	Benoy (i hases	5 4 17		V.3
4821	Fill of [4822]	1.20	0.59	Compact dark greyish- brown silty clay. Medium pebble inclusions.	-	-
4822	Cut	1.20	0.59	E-W aligned boundary ditch. Concave base and 45° slope on S side.	-	-
4823	Cut	0.90	0.24	NW-SE linear ditch. Irregular concave base, shallow sides.	-	-
4824	Fill of [4823]	0.90	0.24	Loose greyish-brown silty sand. Infrequent small stones inclusions.	-	-
4825	Cut	1.0	0.40	Ditch, flat base, 40°- 45° sides	Bone	-
4826	Fill of [4825]	1	0.40	Friable brown sandy silt. Frequent gravel inclusions.	Pottery, Bone	Iron Age
4827	Group	<13.0		Group/ structure number for Penannular ring ditch.	Pottery, bone	Iron Age
4828	Fill of 4827	-	-	Brown silt. Occasional pebble inclusions.	Pottery	-
4829	Cut	0.90	0.10	N-S Linear ditch. Flattish base, 15°-20° sides.	-	-
4830	Fill of [4829]	0.90	0.10	Friable yellowish- brown sandy silt. Regular rounded gravel inclusions.	-	-
4831	Cut	1.72	0.2	Curvilinear ditch. Flat base with minor undulations, shallow sides. Probable plough furrow	-	-
4832	Fill of [4831]	1.72	0.2	Moderately loose brownish grey sandy silt. Occasional small stone inclusions. Probable plough furrow	-	-
4833	Cut	0.50	0.38	NNE-SSW Linear ditch.	-	Iron Age
4834	Fill of [4833]	0.44	0.20	Friable dark greyish- brown silty gravel. Frequent flint and	Iron Age Pottery, bone.	Iron Age

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				infrequent sandstone inclusions.		
4835	Cut	0.64	0.27	N-S linear ditch. Possible field	-	18 th -19 th C
4836	Fill of [4835]	0.64	0.27	boundary. Loose light brownish- grey silty sand. Moderate flint	18 th -19 th C Pottery	18 th -19 th C
				inclusions and rare charcoal inclusions.	,	
4837	Cut	0.70	0.48	Posthole. Sub-circular, vertical sides, base not reached.	-	-
4838	Fill of [4837]	0.70	0.48	Soft/friable yellowish- brown sandy silt. Some pebble inclusions.	-	-
4839	Cut	0.96	0.50	Curvilinear enclosure/ structure. Narrow flat base, steep 85° sides.	-	_
4840	Basal fill of [4839].	0.96	0.45	Friable/firm brownish- grey sandy clay. Occasional rounded gravel inclusions.	-	-
4841	Upper fill of [4839].	0.96	0.05	Firm, reddish-grey sandy clay. Frequent rounded gravel inclusions.	-	-
4842	Cut	0.60	0.18- 0.30	Posthole. Irregular oval shape, concave base, steep sides.	-	-
4843	Fill of [4842]	0.6	0.18- 0.30	Firm brownish grey clayey silt. Frequent stone inclusions.	<13>	_
4844	Fill of [4833]	0.50	0.11	Friable greyish-brown silty sand. Moderate, poorly sorted, flint inclusions.	Iron Age Pottery	Iron Age
4845	Cut	1.40	0.36	Sub-circular pit. Flat base, moderate/steep sides.	-	Iron Age
4846	Upper fill of [4845].	1.40	0.28	Soft/Friable yellowish- grey sandy silt. Irregular pebble &manganese inclusions.	Iron Age pottery Fired clay	Iron Age



4847	Basal fill of	1.12	0.08	Soft/friable yellowish-	Iron Age	Iron Age
-0-7	[4845].	1.12	0.00	brown sandy silt.	pottery	II OII Age
	[+0+5].			Frequent pebble	pottery	
				inclusions.		
4848	Cut	1.15	0.10	E-W linear drip gully.		
4848	Cui	1.15	0.10	101	-	-
				Moderate slope, flat		
				base.		
4849	Fill of	1.15	0.10	Soft/friable brownish-	-	-
	[4848]			yellow sandy silt. Some		
				rounded pebble		
				inclusions.		
4850	Cut	0.75	0.40	Small pit, irregular	-	-
				oval. Flat base with		
				minor undulations,		
				steep sides.		
4851	Basal fill of	0.50	0.20	Firm brownish-grey	-	-
	[4850].			clayey sand. Occasional		
				charcoal flecks, small		
				stone inclusions.		
4852	Middle fill	0.40	0.10	Firm reddish-grey	-	-
	of [4850].			sandy silt. Charcoal		
				, flecks, occasional small		
				stones inclusions.		
4853	Upper fill	0.50	0.10	Firm dark brownish-	-	_
1000	of [4850].	0.00	0.10	grey clayey silt.		
	01 [100 0]1			Occasional small stone		
				and charcoal flecks.		
4854	Cut	0.90	0.11	Linear feature. Flat	_	
4034	Cut	0.50	0.11	base, shallow concave		_
				sides.		
4855	Fill of	0.90	0.11			
4655		0.90	0.11	Firm greyish-brown	-	-
	[4854]			sandy clay. Occasional		
1050		4.65	0.10	gravel inclusions.		
4856	Cut	1.65	0.19	Pit. Rounded, concave	-	Iron Age
				base, very shallow		
				concave sides.		
4857	Fill of	1.65	0.19	Firm dark greyish-	Iron Age	Iron Age
	[4856]			brown sandy clay.	pottery	
				Occasional poorly		
				sorted, rounded gravel		
				inclusions.		
4858	Cut	0.72	0.14	Pit/ root ball. Sub-	-	-
				circular, irregular base,		
				20°-45° sides.		
4859	Fill of	0.70	0.14	Friable greyish	-	-
	[4858]			orangey-brown sandy		

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				silt. Irregular charcoal		
4860	Cut	0.46	0.19	inclusions. NE-SW aligned ditch. Moderate sides, narrow concave base.	-	Iron Age
4861	Fill of [4860]	0.46	0.19-	Loose greyish-brown sandy silt. Moderate / flint inclusions	-	Iron Age
4862	Cut	0.44	0.15	NE-SW aligned ditch. Moderate concave sides/ base.	-	-
4863	Fill of [4862]	0.44	0.15	Loose greyish-brown sandy silt. Moderate flint inclusions.	_	_
4864	Cut	0.76	0.65	Pit. Circular, irregular. Steep concaved sides, wide concave base.	-	-
4865	Basal fill of [4864].	1.21	0.16	Moderately compact dark brownish-grey sandy silt. Moderate flint inclusions.	-	-
4866	Cut	0.54	0.64	Pit. Circular, irregular. NW side steep, NE side concave. Truncates [4860], [4864].	Iron Age pottery, bone	Iron Age
4867	Fill of [4866]	0.54	0.43	Loose greyish-brown sandy silt. Frequent flint inclusions.	Iron Age pottery, bone	Iron Age
4868	Cut	0.80	0.26	Pit. Irregular, part of sequence of intercutting pits.	_	-
4869	Fill of [4868]	0.80	0.26	Firm brownish-grey clayey silt. Occasional small stone inclusions.	Iron Age pottery	Iron Age
4870	Cut	0.40	0.25	Pit. Irregular part of sequence of intercutting pits. Concave base, steep sides.	-	-
4871	Fill of [4870]	0.40	0.25	Firm greyish-brown clayey silt. Occasional small stone inclusions.	-	-
4872	Cut	0.26	0.20	E-W linear, possible gully. Moderately sloped sides curve into concave base.	-	-



4873	Fill of [4872]	0.26	0.20	Soft/friable brownish- yellow sandy silt. Some pebble inclusions.	-	-
4874	Cut	0.30	0.12	Pit. Oval, moderately sloped sides, flat base.	-	-
4875	Fill of [4874]	0.30	0.12	Soft/friable light grey sandy silt. Some pebble inclusions.	-	-
4876	Cut	0.50	0.10	Pit. Sub-circular, steep sides, flat base.	-	-
4877	Fill of [4876]	0.60	0.10	Soft/friable brownish- grey sandy silt. Some pebble inclusions.	-	-
4878	Cut	0.44	0.13	NE-SW aligned possible boundary ditch, flat base.	-	Iron Age
4879	Fill of [4878]	0.44	0.13	Loose dark brownish- grey silty sand. Moderate flint inclusions.	-	Iron Age
4880	Cut	1.21	0.21	Circular, irregular tree throw.	-	-
4881	Fill of [4880]	1.21	0.21	Loose reddish-brown, light yellowish-grey silty sand. Moderate flint inclusions.	-	-
4882	Cut	1	0.47	E-W aligned ditch. Flat base, 30°-50° sides.	-	-
4883	Basal fill of [4882].]	1	0.10	Friable mid-dark brown silty sand. Moderate grit/gravel inclusions.	-	-
4884	Middle fill of [4882].	1	0.20	Friable greyish-brown sandy silt. Moderate gravel/ pebble inclusions.	-	-
4885	Upper fill of [4882].	1	0.20	Friable dark greyish- brown sandy silt. Irregular gravel/pebble inclusions.	-	-
4886	Cut	1.2	0.4	N-S aligned ditch terminus. Flat base, 70°-45° sides.		Iron Age
4887	Fill of [4886]	1.2	0.40	Friable greyish-brown sandy silt. Irregular gravel/ pebble inclusions.	Fired clay, Iron Age pottery	Iron Age



4888	Fill of [4889]	0.80	0.30	Greyish-brown sandy silty. Frequent pebbles, occasional well rounded pebbles.	-	-
4889	Cut	0.80	0.30	Pit. Circular, concave base, near vertical sides.	-	-
4890	Fill of [4891]	2.0	0.42	Friable brownish-grey coarse silty sandy gravel. Frequent pebbles.	-	-
4891	Cut	2.0	0.42	Pit. Elongated oval. Flat base, vertical sides.	-	-
4892	Middle fill of [4893].	1.24	0.37	Loose blueish-grey silty sand. Moderate flint inclusions. Manganese.	Iron Age Pottery, bone	Iron Age
4893	Cut	1.75	0.67	N-S aligned boundary ditch. Moderately sloped sides, narrow concave base.	-	Iron Age
4894	Fill of [4895]	0.60	0.11	Brown gravel-rich sandy silt. Moderate pebble inclusions.	-	-
4895	Cut	0.60	0.11	Posthole. Elongated oval, flat base steep sides.	-	-
4896	Cut	0.50	0.10	Pit. Oval, moderately slopes sides, flat base.	-	-
4897	Fill of [4896]	0.50	0.10	Soft/friable light brownish grey sandy silt. Occasional pebbles.	-	-
4898	Cut	1.10	0.36	Pit. Circular, narrow rounded base, moderately sloped sides.	-	-
4899	Fill of [4898]	1.10	0.36	Firm dark brownish- grey clayey silt. Occasional poorly sorted 10mm gravel inclusions.	-	-
4913	Cut	0.55	0.14	Linear, possible drip gully. Narrow rounded base, steep concave sides.	-	-



4914	Fill of [4913]	0.55	0.14	Soft/ friable brownish- yellow sandy silt. Occasional poorly sorted, gravel inclusions.	Pottery	Roman
4915	Cut	0.65	0.23	E-W aligned ditch. Moderate concave sides, narrow concave base.	-	-
4916	Fill of [4915]	0.65	0.23	Loose brownish-grey silty sand. Infrequent flint and rare sandstone inclusions.	-	-
4917	Cut	0.72	0.47	Pit. Ovular, irregular, moderate concave sides.	-	
4918	Fill of [4917]	0.72	0.24	Loose dark brownish- grey silty gravel. Frequent moderately sorted flint inclusions.	-	
4919	Group	-	-	Possible drip gully consisting of: [4913], (4914), [4848], (4849), [4872], (4873).	-	-
4920	Cut	1	0.16	Irregular curvilinear ditch terminus. Concave base with undulation, irregular sides (root channels).	-	-
4921	Fill of [4920]	1	0.16	Firm brownish-grey clayey silt. Frequent small stone inclusions.	-	-
4922	Cut	0.80	0.10	Tree throw.	-	-
4923	Fill of [4922]	0.80	0.10	Form dark brownish- grey clayey silt. Occasional stone inclusions.	-	-
4924	Cut	0.80	0.18	Curvilinear ditch. Flat base with minor undulation.	-	-
4925	Fill of [4924]	0.80	0.18	Firm brownish-grey clayey silt. Occasional small stone inclusions.	-	-
4926	Cut	0.48	0.20	Small pit/ posthole. Circular, Concave base, steep sides.	-	-

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4927	Fill of	0.48	0.20	Firm brownish-grey	_	
4527	[4926]	0.48	0.20	clayey silt. Occasional		
	[4520]			small stone inclusions.		
4928	Cut	0.50	80mm	Ditch terminus. Flat	_	
4920	Cut	0.50	8011111		-	-
				base. Shallow sloped		
4020		0.50	0.00	sides.		
4929	Fill of	0.50	0.80	Soft brown sandy silt.	-	-
	[4928]			Frequent poorly sorted		
				pebble inclusions.		
4930	Cut	0.47	0.24	NNE-SSW linear. W	-	-
				edge concave towards		
				base. Moderately		
				concaved base.		
4931	Fill of	0.47	0.24	Loose orangey-brown	-	-
	[4930]			silty sand. Moderate		
				flint inclusions.		
4932	Cut	0.42	0.24	E-W aligned ditch.	-	
				Moderately concaved		
				sides/ base.		
4933	Fill of	0.42	0.24	Loose greyish-brown	-	
	[4932]			silty sand. Moderate		
				flint inclusions.		
4934	Cut	0.80	0.20	Posthole. Sub-circular,	-	-
				rounded base,		
				gradually sloped sides.		
4935	Fill of	0.80	0.20	Soft brown sandy silt.	-	_
	[4934]			, Rare pebble inclusions.		
4936	Cut	0.50	0.12	NE-SW enclosure ditch	-	_
				terminus. Flat base.		
4937	Fill of	0.50	0.12	Soft yellowish-brown	_	_
1337	[4936]	0.00	0.12	sandy silt. Irregular		
	[1550]			pebble inclusions.		
4938	Cut	2.43	0.52	N-S boundary ditch.	_	Iron Age
4550	Cut	2.45	0.52	Concave base, 45°		II OII Age
				concaves sides.		
4939	Basal fill of	2.43	50mm	Loose/ friable	_	Iron Age
200	[4938].]	2.40	John	yellowish-brown silty		II OII Age
	[+550].]			sand. Frequent 10-		
				30mm rounded gravel		
				inclusions.		
40.40		1 7 2	0.17		Danz	
4940	Middle fill	1.72	0.17	Friable reddish-brown	Bone	Iron Age
	of [4938]			sandy silt. Rare 10-		
				40mm rounded gravel		
				inclusions.		



4941	Upper fill of [4938].	2.30	0.30	Friable dark brownish- grey sandy silt. Occasional 10-30mm rounded gravel inclusions.	Iron Age pottery, slag	Iron Age
4942	Cut	1.50	0.17	NNE-SSW linear, possible furrow. Flat base, shallow concave sides.	-	Post- Medieval
4943	Fill of [4942]	1.50	0.17	Friable reddish-brown sandy silt. Occasional 10-30mm rounded gravel inclusions.	-	Post- Medieval
4944	Cut	0.56	0.12	E-W aligned enclosure ditch. Flat base, moderate sides	-	-
4945	Fill of [4944]	0.56	0.12	Soft yellowish-brown sandy silt. Some pebble inclusions.	-	-
4946	Cut	0.70	0.30	Curvilinear ditch segment of penannular ditch (4827). Flat base 45°-60° sides.		Iron Age
4947	Fill of [4946]	0.70	0.30	Friable greyish-brown sandy silt. Moderate gravel/pebble inclusions.	Pottery	Iron Age
4948	Cut	0.90	0.38	Cut of penannular ditch (4827). Concave base, steep sides.	-	-
4949	Fill of [4948]	0.90	0.38	Firm brownish-grey clayey silt. Frequent small-medium stone inclusions.	-	-
4950	Cut	0.95	0.30	Southern terminus of penannular ditch (4827). Flat base, 45°- 60° sides.	-	-
4951	Fill of [4950]	0.95	0.30	Friable greyish-brown sandy silt. Moderate gravel/pebble inclusions.	-	-
4952	Cut	1.25	0.42	NE-SW aligned ditch. Moderate concaved sides/ base.	-	Iron Age



4953

4954

4955

4956

4957

4958

Land at Boulton Moor, east of Chellaston Lane, Derby (Phases 3 & 4)

Basal fill of [4952].

Middle fill

of [4952].

Upper fill of [4952].

Cut

Fill of

[4956]

Fill of

0.56	0.10	Loose brownish-orange silty gravel. Moderate flint inclusions.	-	Iron Age
0.69	0.18	Loose orangey-brown silty gravel. Moderate flint inclusions.	-	Iron Age
1.0	0.27	Loose dark greyish- brown silty sand. Moderate flint inclusions.	Iron Age pottery.	Iron Age
0.76	0.34	Penannular ditch (4827) terminus. Flat base, steep concave sides.	-	-
0.76	0.34	Firm dark brownish- grey clayey silt. Frequent small/medium stone inclusions.	-	-
0.72	0.25	Loose orangey-brown silty sand. Moderate flint inclusions.	-	-
1.70	0.50	N-S aligned boundary ditch. 45° sloped sides, curved base.	-	-
1.70	0.32	Soft yellowish-brown sandy silt. Frequent pebble inclusions.	Bone	-
1.26	0.18	Soft yellowish-grey sandy silt. Frequent pebbles inclusions.	-	-
0.62	0.30	E-W aligned boundary/ enclosure ditch terminus. Vertical/	-	Iron Age

[4917] 4959 Cut 4960 Upper fill of [4959]. 4961 Basal fill of [4959].] 4962 Cut (terminus. Vertical/ steep sides, sloped base. 4963 Upper fill 0.04 Soft light brown sandy 0.62 _ of [4962] silt. Some pebble inclusions. 4964 Basal fill of 0.62 0.26 Soft greyish-brown Iron Age [4962] sandy silt. Frequent pottery. pebbles & cobbles, rare charcoal fleck inclusions.

Cut

0.30

0.46

4965

ENE-WSW boundary

ditch. Broad rounded

-

Iron Age

Iron Age

_



				base, 45° concave		
				sides.		
4966	Fill of	0.30	0.46	Friable reddish-brown	-	-
	[4965]			silty sand. Occasional		
				10-30mm rounded		
				gravel inclusions.		
4967	Cut	1.22	0.63	ENE-WSW possible re-	-	Iron Age
				cut of field boundary		_
				ditch [4965] narrow		
				rounded base, 45°		
				concave sides.		
4968	Basal fill of	1.10	0.43	Friable reddish-brown	Iron Age	Iron Age
	[4967].			silty sand. Occasional	pottery,	0
				, 10-30mm rounded	bone	
				gravel inclusions.		
4969	Upper fill	1.10	0.20	Friable dark reddish-	-	Iron Age
	of [4967].		0.20	brown sandy silt.		
	01[1007]1			Occasional 10-30mm		
				rounded gravel		
				inclusions.		
4970	Cut	1.74	0.51+	Pit. Circular, steep	_	-
1370	Cut	1.7 1	0.01	sides. Not bottomed.		
4971	Basal fill of	0.30	0.10	Firm brownish-grey	_	_
1371	[4970].	0.00	0110	clayey silt. Frequent		
	[13,0].			small/ medium stone		
				inclusions.		
4972	Upper fill	0.20	0.10	Firm greyish-brown	_	_
1372	of [4970].	0.20	0110	clayey silt. Occasional		
				small/ medium stone		
				inclusions.		
4973	Cut	2.0	0.64	Possible recut of pit	_	_
1375	Cat	2.0		[4970]. Steep sides.		
				Base unexcavated.		
4974	Basal fill of	1.60	0.12	Firm reddish-brown	_	_
1371	[4973].]	1.00	0.12	sandy silt. Occasional		
	[13,0]]			small stones, Charcoal		
				inclusions.		
4975	Middle fill	1.40	0.32	Firm dark greyish-	-	_
1373	of [4973].	1.10	0.52	brown clayey silt.		
				Occasional small		
				stones inclusions.		
4976	Upper fill	1.20	0.10	Firm brownish-grey		_
1370	of [4973].	1.20	0.10	clayey silt. Occasional		
				small stone inclusions.		



		1			1	
4977	Basal fill of [4893].	1.14	0.15	Loose orangey-brown silty gravel. Moderate flint inclusions.	-	Iron Age
	C11					
4978	Upper fill	1.04	0.20	Loose greyish-brown	Iron Age	Iron Age
	of [4893].			silty sand. Infrequent	Pottery,	
				flint inclusions.	bone	
				Manganese.		
4979	Cut	1.37	0.09	NNE-SSW aligned	-	Early
				furrow. Shallow		, Modern/
				concave sides, wide		Late
				concave base.		Medieval
4980	Fill of	1.37	0.09	Loose brownish-grey		Early
4580		1.57	0.05	silty sand. Moderate		Modern/
	[4979]					-
				flint inclusions.		Late
						Medieval
4981	Cut	0.66	0.30	E-W aligned boundary	-	-
				ditch. Flat base, steep		
				sides.		
4982	Cut	-	0.10	NE-SW aligned furrow.	-	-
				Flat base, shallow		
				sides. Plough furrow.		
4983	Fill of	0.66	0.30	Soft greyish-brown	_	-
	[4981]	0.00	0.00	sandy silt. Frequent		
	[1901]			pebble inclusions.		
				Cobble packing		
				towards base.		
1001			0.10			
4984	Fill of	-	0.10	Soft yellowish-brown	-	-
	[4982]			sandy silt. Occasional		
				pebble. Plough furrow.		
4985	Group	-	-	NW-SE aligned ditch	-	-
				consisting of: [4893],		
				[4822], [4959], [4942],		
				[5061], [5045], [5053].		
4986	Group	-	-	E-W aligned ditch	-	-
				consisting of: [4915],		
				[4886], [4815], [4820],		
				[4928].		
4987	Group	_	-	NE-SW aligned ditch	_	_
1007	Group			cut consisting of:		
				-		
				[4958], [4889], [4952],		
				[4865], [4864], [4862],		
				[4860], [5058], [5056].		
4988	Group	-	-	NE-SW aligned ditch		
				consisting of: [4962],		
				[4981], [5011] [5020]		



					1	1
4989	Group	-	-	N-S aligned ditch	-	-
				consisting of: [4813],		
				[4811].		
4990	Fill of	0.53	0.37	Loose brownish-grey	-	-
	[4866]			sandy silt. Moderate		
				flint inclusions.		
4991	Middle fill	0.76	0.37	Loose greyish-brown	-	-
	of [4864].			gravelly silt. Frequent		
				flint inclusions.		
4992	Upper fill	0.66	0.25	Loose greyish-brown	-	-
	of [4864].			sandy silt. Moderate		
	[]-			sub-rounded flint		
				inclusions.		
4993	Cut	0.82	0.40	Pit. Rounded, broad	_	_
4555	Cut	0.02	0.40	concave base, 45°		
				sloped sides.		
4004	Decel fill of	0.50	0.00			
4994	Basal fill of	0.52	0.06	Friable greyish-brown	-	-
40.05	[4993]	0.00	0.004	sandy silt.		
4995	Upper fill	0.82	0.034	Friable brownish-grey	-	-`
	of [4993].			sandy silt. Occasional		
				lenses of brownish-		
				yellow friable sandy		
				silt.		
4996	Cut	1.22	0.45	NE-SW boundary ditch.	-	-
				Broad flat base, 75°		
				sides.		
4997	Basal fill of	1.22	0.04	Friable greyish-brown	-	Iron Age
	[4996].]			sandy silt. Occasional		
				10-40mm rounded		
				gravel inclusions.		
4998	Upper fill	1.22	0.41	Firm/friable mid/dark	Pottery,	Iron Age
	of [4996].			greyish-brown sandy	bone	
	01[1550].			silt. Occasional	bone	
				rounded stone		
				inclusions.		
5005	Cut	1.00	0.42	Penannular ditch, part	Pottery,	
5005	Cut	1.00	0.42			-
				of group (4827).	bone	
				Flat/concave base, 35°-		
5000		1	0.15	45° sides.		
5006	Basal fill of	1	0.15	Friable orangey-brown	-	-
	[5005].			silty sand. Occasional		
				20mm gravel		
				inclusions.		
5007	Upper fill	1	0.34	Friable orangey-brown	Pottery,	-
	of [5005].]			sandy silt. Regular	bone	



				40mm gravel		
				inclusions.		
5008	Fill of	0.6	0.60	Friable brown sandy	-	-
	[4822]			clayey silt. Occasional		
F000		1.60	0.16	pebble inclusions.		a oth a oth
5009	Fill of	1.60	0.16	Brown sandy silt.	Pottery	18 th -19 th
	[5010]			Occasional pebble		С
F010	Cut	1.00	0.16	inclusions.	Dattami	18 th -19 th
5010	Cut	1.60	0.16	N-S aligned plough furrow	Pottery	1819 C
E011	Cut	0.50	0.20		_	Middle
5011	Cut	0.50	0.20	E-W aligned boundary	-	or later
				ditch. Gradually sloped sides, curved base.		
5012	Fill of	0.50	0.20	Soft greyish-brown	nottony	Iron Age Middle
3012	[5011]	0.30	0.20	sandy silt. Occasional	pottery	or later
	[3011]			pebble & cobble		
				inclusions.		Iron Age
5013	Group	0.80	0.08	N-S ditch terminus		_
5015	Group	0.00	0.00	group consisting of:		
				[4811], [4813].		
5014	Cut	1.00	0.20	Penannular ditch slot,	_	_
		1.00	0.20	part of group (4827).		
				Concave base, 45°		
				sides.		
5015	Fill of	1.00	0.20	Friable orangey-brown	-	-
	[5014]			sandy silt. Regular		
				30mm gravel		
				inclusions.		
5016	Fill of	0.50	0.10	Soft dark grey mottled	-	-
	[5017]			with orangey-brown		
				sandy silt. Occasional		
				flecks of red burnt clay		
				and charcoal. Rare		
				rounded pebble		
5047		0.50	0.10	inclusions.		
5017	Cut	0.50	0.10	Posthole. Circular,	-	-
				concave base,		
				gradually sloped S-E		
E010	Cut	0.00	0.35	sides, W side 45° slope.		Iron Age
5018	Cut	0.90	0.35	Penannular ditch slot, part of group (4827).		Iron Age
				Flat base, 70°-80°		
				sides.		
5019	Fill of	0.90	0.36	Friable brownish-grey	Pottery,	Iron Age
2012	[5018]	0.50	0.50	sandy silt.	slag	II OII Age
					<14>	



5020	Cut	0.38	0.24	NE-SW aligned	-	Iron Age
				boundary ditch. Flat base, steep sides.		
5021	Upper fill	0.80	0.06	Soft greyish-yellow	-	Iron Age
5021	of [5020].	0.00	0.00	sandy silt. Occasional		II OII Age
	01 [3020].			pebble inclusions.		
5022	Basal fill of	0.38	0.24	Soft brownish-grey	Iron Age	Iron Age
	[5020].			sandy silt. Occasional	pottery	
				pebble inclusions.	. ,	
5023	Cut	-	-	N-S aligned plough	-	-
				furrow. Shallow, not		
				fully excavated.		
5024	Fill of	-	-	Soft yellowish brown	-	-
	[5023]			sandy silt. Frequent		
				pebbles. Plough		
	_			furrow.		
5025	Cut	0.70	0.36	Penannular ditch slot,	Pottery	Iron Age
				part of group (4827).		
				Flat base, 40°-50°		
5026	Fill of	_	0.36	sides. Friable greyish-brown	Pottery	_
5020	[5025]	-	0.30	sandy silt. Occasional	FULLETY	-
	[3023]			20mm gravel		
				inclusions.		
5027	Natural	-	-	Natural geology	-	-
5028	Cut	-	-	Modern feature.	Pottery	Modern
5029	Cut	0.70	0.22	NE-SW linear, possible	-	-
				drip gully. Rounded		
				base, moderately		
				concave sides.		
5030	Fill of	0.70	0.22	Friable greyish-brown	-	-
	[5029]			sandy silt. Very rare 10-		
				30mm rounded gravel		
F031	Cut	0.60	0.40	inclusions.		
5031	Cut	0.60	0.48	NE-SW linear, possible	-	-
				field boundary. Narrow rounded sides.		
5032	Fill of	0.60	0.48	Friable mid/dark		_
5052	[5031]	0.00	0.40	greyish-brown sandy		
	[3031]			silt. Very rare 10-		
				30mm rounded gravel		
				inclusions.		
5033	Cut	1.52	0.16		-	-
				Flat base, shallow		
				concave sides.		
5033	Cut	1.52	0.16	inclusions. Possible plough furrow. Flat base, shallow	-	-



5034	Fill of [5033]	1.52	0.16	Friable greyish-brown sandy silt. Very rare 10- 30mm rounded gravel inclusions.	-	-
5035	Cut	0.80	0.50	Pit. Rounded, vertical sides not fully excavated.	-	Modern
5036	Fill of [5035]	0.80	0.50	Loose/ friable very dark brownish-grey and mid brownish-grey sandy silt. Rare 30-70mm gravel inclusions.	-	Modern
5037	Cut	0.64	0.18	SW-NE aligned ditch. Flat base, 45° sides.	-	Iron Age
5038	Fill of [5037]	0.64	0.18	Soft yellowish-brown sandy silt. Occasional pebble inclusions.	lron Age pottery	Iron Age
5039	Cut	0.85	0.22	WNW-ESE boundary ditch. Broad rounded base, shallow concave sides.	-	-
5040	Fill of [5039]	0.85	0.22	Friable light/mid greyish-brown sandy silt. Very rare 10- 30mm gravel inclusions.	-	-
5041	Cut	0.50	0.30	NE-SW aligned linear. Rounded base, shallow concave sides.	-	-
5042	Fill of [5041]	0.50	0.30	Friable greyish-brown sandy silt. Very rare 10- 30mm rounded gravel inclusions.	-	-
5043	Cut	1.00	0.57	E-W aligned boundary ditch. V shaped profile, concave base, steep 45° sides.	-	-
5044	Fill of [5043]	1.00	0.57	Friable greyish-brown sandy silt. Occasional pebble inclusions.	-	-
5045	Cut	2.0	0.60	N-S aligned ditch. Flat base, 45° sides.	-	-
5046	Fill of [5045]	2.0	0.60	Soft brown sandy silt, some clay. Frequent pebble inclusions.	_	-



5047	Fill of [5045]	0.60	0.10	Soft yellowish-brown sandy silt. Occasional	-	-
				pebble inclusions.		
5048	Cut	1.230	0.34	E-W aligned ditch terminus. Steep sides,	-	-
				base not fully exposed.		
5049	Upper fill	1.23	0.10	Soft greyish-brown	-	-
	of [5048].			sandy silt. Occasional		
5050		0.00		pebble inclusions.		
5050	Basal fill of	0.90	0.24	Soft yellowish-grey	-	-
	[5048].			sandy silt. Frequent pebble inclusions.		
5051	Cut	0.60	0.14	Pit. Sub-circular, flat	-	-
				base, gently sloped sides.		
5052	Fill of	0.60	0.14	Soft brown sandy silt.	-	-
	[5051]			Occasional pebble		
				inclusions.		
5053	Cut	0.86	0.43	N-S aligned boundary	-	-
				ditch. Moderate		
				concave sides.		
5054	Basal fill of	0.69	0.17	Loose brownish-grey	-	-
	[5053].			silty gravel. Frequent		
	C.11	0.00	0.26	flint inclusions.		
5055	Upper fill	0.86	0.26	Loose light brownish-	-	-
	of [5053].			grey sandy silt. Moderate flint		
				inclusions.		
5056	Cut	0.52	0.34	NE-SW aligned ditch.	_	Iron Age
3030	Cut	0.52	0.01	Concaved sides and		110117180
				base.		
5057	Fill of	0.52	0.34	Loose greyish-brown/	Iron Age	Iron Age
	[5056]			dark brownish-orange	pottery,	
				gravelly silt. Moderate	bone	
				flint inclusions.		
5058	Cut	0.67	0.48	NE-SW aligned ditch.	-	Iron Age
				Narrow concave base,		
				steep sides.		
5059	Fill of	0.31	0.11	Basal fill of [5059].	-	Iron Age
	[5058]			Loose light brownish-		
				orange sandy gravel.		
				Frequent flint inclusions.		
5060	Upper fill	0.67	0.45	Loose dark brownish-	Iron Ago	Iron Ago
5000	of [5058].	0.07	0.40	grey sandy silt.	Iron Age Pottery,	Iron Age
					bone	
		I	1	1	Solic	



				Moderate flint		
				inclusions.		
5061	Cut	1,18	0.55	NE-SW aligned	-	Iron Age
				boundary ditch. Broad		
				flat base, steep		
			concave sides.			
5062	Basal fill of	1.18	0.36	Firm/ friable light	-	Iron Age
	[5061].			greyish-brown sandy		
				silt. Rare rounded		
				gravel inclusions.		
5063	Upper fill	1.18	0.19	Form brownish-grey	Iron Age	Iron Age
	of [5061].			clayey silt. Rare	pottery	
				rounded 10-30mm	<16>	
				gravel inclusions.		
5064	Cut	1.14	0.62	NE-SW aligned	-	-
				boundary ditch.		
				Narrow, concave base,		
				steep concave sides.		
5065	Basal fill of	1.14	0.10	Firm/ friable light/ mid	-	-
	[5064].			greyish-brown sandy		
				silt. Rare 10-30mm		
				gravel inclusions.		
5066	Upper fill	1.14	0.52	Friable brownish-grey	-	-
	of [5064].			sandy silt. Rare 10-		
				30mm rounded gravel		
				inclusions.		
5067	Fill of	0.90	0.12	Friable dark grey	-	-
	[5068]			mottled with light grey		
				& orangey-brown.		
				Charcoal & frequent		
				pebbles.		
5068	Cut	0.90	0.12	Posthole. Oval, W edge	-	-
				vertical E edge sloping,		
				concave base.		
5069	Fill of	1.80	0.82	Friable grey mottled	Bone,	-
	[5070]			with brown, sandy silt.	CBM	
				Charcoal flecks and		
				occasional pebble		
				inclusions.		
5070	Cut	1.80	-0.82	Pit. Oval, vertical sides,	-	-
				concave base.		
5071	Natural	-	-	Geological feature	-	-
5072	Cut	L_	_	Modern sub-oval	_	_
507Z	Cut					



Cut

5073

Land at Boulton Moor, east of Chellaston Lane, Derby (Phases 3 & 4)

1.60

0.55

N-S aligned boundary	-	-
ditch. Broad, rounded		
base, steep 75° sides.		
Loose yellowish-red	-	1
silty sand. Frequent 10-		
30mm rounded gravel.		

				base, steep 75° sides.		
5074	Basal fill of	0.60	0.05	Loose yellowish-red	-	-
	[5073].]			silty sand. Frequent 10-		
				30mm rounded gravel.		
5075	Middle fill	0.70	0.36	Friable greyish-brown	-	-
	of [5073].			sandy silt. Rare 10-		
	[]-			30mm rounded gravel		
				inclusions.		
5076	Upper fill	0.70	0.16	Friable dark brownish	Pottery.	Iron Age
5070	of [5073].	0.70	0.10	grey sandy silt. Rare	TOLLETY.	II OII Age
	0[5075].			10-30mm rounded		
				gravel inclusions.		
5077	Cut	0.15	0.40	NE-SW aligned	-	-
				boundary ditch. Steep		
l				concave sides, base not		
				excavated.		
5078	Fill of	0.15	0.40	Loose mid/light	-	-
	[5077]			mottled reddish-		
				yellowish-brown silty		
				sand. Occasional 10-		
				30mm rounded gravel		
				inclusions.		
5079	Cut	1.30	0.52			
5079	Cut	1.50	0.52	NE-SW aligned	-	-
				boundary ditch. Broad		
				rounded base, steep		
				concave sides.		
5080	Basal fill of	1.30	0.05	Loose mid/light	-	-
	[5079].]			brownish-red silty		
				sand. Occasional 10-		
				25mm rounded		
				gravels.		
5081	Middle fill	1.30	0.18	Friable greyish-brown	-	-
	of [5079].]			sandy silt.		
5082	Upper fill	1.30	0.29	Friable dark greyish-	_	-
	of [5079].			brown sandy silt. Rare		
	[- 0, 0],			10-30mm rounded		
				gravel inclusions.		
5083	Cut	0.50	0.20	Curvilinear ditch.	Pottery	-
2002	Cut	0.50	0.20	Possible re-cut of	<17>	
					<1/>	
				penannular ditch		
				terminus (4956).		
				Concave base, 35°-45°		
				sides.		



5084	Fill of [5083]	0.50	0.20	Friable greyish-brown sandy silt. Occasional gravel/ sandstone inclusions.	Pottery, slag <17>	365-200 cal BC
5085	Cut	0.50	0.25	Linear. Possible re-cut of penannular ditch cut 5018. 40°-50° sides.	-	-
5086	Fill of [5085]	0.50	0.24	Friable mid/dark greyish-brown sandy silt. Occasional rounded gravel inclusions.	-	-
5087	Cut	0.50	0.22	Curvilinear. Re-cut of penannular ditch terminus 4950. Concave base, 30°-55° sides.	-	-
5088	Fill of [5087]	0.50	0.22	Friable mid/ dark greyish-brown sandy silt. Occasional gravel inclusions.	-	-
5089	Natural	-	-	Geological feature	-	-
5090	Cut	-	-	Modern feature	-	-
5091	Cut	-	-	N-S aligned plough furrow. Not excecated.	-	-
5092	Cut	0.60	0.30	NW-SE aligned boundary ditch. Narrow concave base, shallow concave sides.	-	_
5093	Fill of [5092]	0.60	0.30	Friable brownish-grey sandy silt. Rare 10- 30mm gravel inclusions.	-	-
5094	Cut	1.35	0.08	NE-SW aligned plough furrow. Broad flat base, shallow concave sides.	-	-
5095	Fill of [5094]	1.35	0.08	Friable/ loose greyish- brown sandy silt. Rare 10-30mm gravel inclusions.	-	-
5096	Fill of [4709]	-	-	Brown silt. Frequent pebble inclusions. Plough furrow. Not excavated.	Pottery	-



5097	Fill of	-	-	Brown silt. Moderate	-	-
	[4710]			pebble inclusions.		
				Plough furrow. Not		
				excavated.		
5098	Fill of	-	-	Brown silt. Occasional	Modern	18 th -19 th
	[5099]			pebble inclusions.	pottery	С
				Plough furrow. Not		
				excavated.		
5099	Cut	-	-	N-S aligned plough	Pottery	18 th -19 th
				furrow. Not excavated.		С

Area B						
Context No.	Туре	Width (m)	Depth (m)	Description	Finds	Date
7500	Layer	-	0.30	Topsoil. Dark grey clayey silt.		
7501	Layer	-	0.20	Subsoil. Brown clay silt	Stafford Blue roof tile	C19-20 th
7502	Layer	-	-	Natural drift geology. Yellow to reddish brown silty sandy with patches of gravel		
7515	Fill of [7516]	0.30	0.10	Friable greyish-brown. Occasional pebbles.	-	-
7516	Cut	0.30	0.10	N-S aligned ditch Concaved sides, Concave base		
7517	Cut	-	-	N-S aligned plough furrow. Flat base, shallow sides.	-	-
7518	Fill of [7517]	-	-	Friable brownish-grey silty sand. Frequent small stone inclusions. Plough furrow	Pottery	-
7519	Cut	0.77	0.30	NE-SE aligned ditch. Narrow concave base, convex top, straight sides.	-	Roman (?)
7520	Fill of [7519]	0.77	0.30	Friable greyish-brown silty gravel. Frequent flint inclusions.	-	Roman (?)
7521	Cut	1.53	0.26	N-S aligned ditch. Concaved sides, wide flat base.	-	Roman, 2-3 rd C

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7522	Fill of [7512]	1.53	0.26	Friable dark brownish- grey silty sandy gravel. Frequent flint inclusions.	Roman pottery, CBM	Roman, 2-3 rd C
7523	Deposit	1.96	0.09	Loose light brownish- grey gravelly silt. Frequent flint inclusions.	-	-
7524	Fill of [7525]	1.46	0.32	Loose dark brownish- grey sandy silt, Infrequent flint inclusions.	Roman pottery, CBM	Roman
7525	Cut	1.46	0.48	E-W aligned Roman rectilinear enclosure ditch. Concaved side, concaved base.		Roman
7526	Fill of [7670]			Grey brown silt. Not excavated.	Pottery	Roman
7527	Fill of [7653]	0.65	0.10	Friable mixed natural clay & mid/dark grey clay silt. Occasional pebble inclusions.	Pottery	Roman
7528	Deposit			Same as (7652).	Pottery	Roman
7529	Deposit			Same as (7652).	Pottery, tegula	Roman
7530	Fill of [7629]	1.21	0.24	Soft dark greyish-brown silty clay. Rare charcoal & moderate small stone inclusions.	Roman pottery <56>	Roman
7531	Fill of [7721]	1.32	0.09	Firm dark greyish brown silty clay. Some rounded stone inclusions.	Pottery	Roman
7532	-	-	-	Same as (7531)	Pottery	Roman
7533	Fill of [7632]	2	80mm	Friable greyish-brown sandy silt.	Pottery	Roman
7534	Fill of [7671]	2.10	0.12	Firm dark greyish-brown silty clay. Moderate charcoal flecks, regular rounded stone inclusions.	Pottery, stone SF.3	Roman
7535	Fill of [7672]	1.30	0.16	Firm dark greyish-brown silty clay. Charcoal flecks, rounded stone inclusions.	Pottery	Roman
7536	-	-	-	Same as (7535)	Pottery, CBM	Roman

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7537	-	-	-	Same as (7531)	Pottery	Roman
7538	-	-	-	Same as (7535)	Pottery	Roman
7539	-	-	-	Same as (7531)	Pottery	Roman
7540	Fill of	1.04	0.18	Moderately compact	-	-
	[7525]			greyish-orange gravelly		
				silt. Frequent small flint		
				inclusions.		
7541	Cut	0.74	0.43	E-W aligned enclosure	-	-
				ditch. Moderate		
				concaved sides,		
				moderate concave base.		
7542	Fill of	0.74	0.43	Moderately compact	-	-
	[7541]			orangey-brown gravelly		
				silt. Moderate flint		
				inclusions.		
7543	Fill of	1.36	0.16	Grey silt. Frequent	-	-
	[7544]			charcoal and occasional		
				pebble inclusions.		
7544	Cut	1.36	0.16	Pit. Oval, gradually	-	-
				sloped sides.		
7545	Cut	1.0	0.26	Tree throw	-	-
7546	Fill of	1	0.26	Firm brownish-grey	-	-
	[7545]			sandy silt. Frequent		
				small stones.		
7547	Cut	1.46	0.30	Tree throw	-	-
7548	Fill of	1.47	0.14	Firm brownish grey	-	-
	[7547]			sandy silt. Frequent		
				small stone & occasional		
				charcoal inclusions.		
7549	Fill of	1	0.18	Firm greyish-brown	-	-
	[7547]			sandy silt. Frequent		
				small stone inclusions.		
7550	Cut	2	0.36	Pit. Oval, concave base	Pottery,	Roman
				with minor undulations.	stone,	
					metal	
7551	Basal fill of	2	0.22	Firm brownish-grey	-	Roman
	[7550].			sandy silt. Occasional		
				small stones.		
7552	Upper fill of	1.20	0.16	Firm dark brownish-grey	Roman	Roman
	[7550].			sandy silt. Frequent	pottery,	
				charcoal and occasional	worked	
				small stone inclusions.	stone,	
					metal	
7553	Cut	1.10	0.18	Pit. Sub-circular, flat	-	-
				base, gradually sloped		
				base, Bradadily stoped		

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7554	Upper fill of [7553].	1.10	0.10	Soft dark brown silty clay. Rare pebble inclusions & very small fragments of fired clay.	Burnt stone	-
7555	Middle fill of [7553].	1.06	0.06	Soft dark grey loam. Occasional charcoal flecks and pebble inclusions.	-	-
7556	Basal fill of [7553].	0.70	0.02	Soft mottled brownish- red & dark grey silty clay. Rare degraded cobble inclusions. Occasional charcoal flecks.	_	_
7557	Cut	0.40	0.10	Pit. Oval, flat base, shallow sides.	-	Roman
7558	Fill of [7557]	0.40	0.10	Soft grey silty clay with yellowish flecks. Rare pebble inclusions.	Roman pottery	Roman
7559	Cut	0.22	0.06	Posthole. Sub-circular, flat base, gently sloped sides.	-	-
7560	Fill of [7559]	0.22	0.06	Firm light grey silty clay. Rare pebble inclusions.	-	-
7561	Cut	1.69	0.55	Rectilinear enclosure ditch. Steep concave sides, concave base.	Pottery	Roman, 2-3 rd C
7562	Cut	1.0	0.40	NE-SE aligned curvilinear ditch terminus. Concave base, 54° sides.	-	-
7563	Basal fill of [7561].	1.24	0.25	Loose greyish-brown gravelly silt. Frequent flint inclusions.	Roman pottery	Roman, 2-3 rd C
7564	Middle fill of [7561].	1.56	0.27	Loose brownish-grey sandy silt. Infrequent flint inclusions.	Roman pottery	Roman, 2-3 rd C
7565	Upper fill of [7561].	1.04	0.11	Loose brownish-grey gravelly silt. Frequent flint inclusions.	-	Roman, 2-3 rd C
7566	Fill of [7562]	0.94	0.40	Friable orangey-brown sandy silt. Occasional rounded gravel inclusions.	-	-

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7567	Cut	0.24	0.20	E-W aligned enclosure ditch. Not fully	-	-
				excavated.		
7568	Fill of	0.27	0.20	Soft brown sandy silt.	_	_
7508	[7567]	0.27	0.20	Occasional pebble		
	[/30/]			inclusions.		
7569	Natural	_	_	Soft yellowish-brown	_	_
7505	Naturai			sandy silt.		
7571	Natural	_	0.01-	Natural manganese/	_	_
/3/1	Natarai		0.01	decaying stone		
7572	Natural	_	-	Reddish sand/ gravel	_	_
7573	Natural	_	_	Reddish sand/ gravel	_	_
7574	Cut	0.60	0.60	Rectilinear enclosure		Roman
7374	Cut	0.00	0.00	ditch. Concave base,		Noman
				steep sides.		
7575	Fill of	0.60	0.60	Firm reddish-brown	Roman	Roman
1313	[7574]	0.00	0.00	sandy silt. Occasional	pottery	Noman
	[/3/4]			small stones.	pottery	
7576	Cut	1.40	0.34	Re-cut of rectilinear		Roman
/5/0	Cut	1.40	0.54	Roman enclosure ditch.		Noman
				Concave base, 45° sides.		
7577	Fill of	1.40	0.34	Firm greyish-brown	Roman	Roman
1311	[7576]	1.40	0.54	sandy silt. Occasional	pottery	Noman
	[/3/0]			small stones.	pollery	
7578	Modern	0.24	0.05		_	Modern
7579		0.24	0.03	Modern posthole. Pit. Sub-circular, shallow	-	
1519	Cut	0.70	0.07	sloped sides, flat base.	-	Roman
7580	Fill of	0.70	0.07	Loose brown sandy silty	Roman	Roman
	[7570]			gravel. Rare charcoal	pottery	
				flecks. Frequent pebble		
				inclusions.		
7581	Cut	2.18	0.40	E-W aligned enclosure	-	Roman
				ditch. Flat base, steep		
				sides. Re-cut of [7585].		
7582	Upper fill of	1.48	0.11	Soft brown sandy silt.	Roman	Roman
	[7581].			Occasional stones.	pottery	
7583	Middle fill	1.48	0.08	Soft brown sandy silt.	-	Roman
	of [7581].			Frequent pebbles &		
				small gravels.		
7584	Basal fill of	1.52	0.24	Soft yellowish-brown	-	Roman
	[7581].			sandy silt. Occasional		
				pebble inclusions		
7585	Cut	0.44	0.34	E-W aligned ditch.	-	-
				Moderate/steep sides,		
				base not seen.		



7500			0.04			
7586	Fill of	0.44	0.34	Soft yellowish-brown	-	-
	[7585]			sandy silt. Occasional		
				pebble inclusions. Rare		
				charcoal flecks.		
7587	Cut	0.80	0.14	Pit. Sub-circular/ oval,	-	-
				Gradually sloped sides.		
7588	Fill of	0.80	0.14	Soft light brownish-	-	_
/ 500	[7587]	0.00	0.11	yellow sandy silt.		
	[/38/]					
7500		1.20	0.04	Frequent pebbles.		
7589	Cut	1.30	0.34	N-S aligned enclosure	-	Roman
				ditch. Broad, rounded		
				base, steep concave		
				sides.		
7590	Basal fill of	0.52	0.12	Firm brownish-grey	Pottery	Roman
	[7589].			loam. Very rare 30-		
				50mm gravel inclusions.		
7591	Upper fill of	1.30	0.17	Friable greyish-brown	_	Roman
7551	[7589].	1.50	0.17	sandy silt. Very rare 10-		Noman
	[7569].					
				30mm rounded gravel		
				inclusions.		
7592	Cut	0.64	0.18	NE-SE aligned linear,	-	-
				possible drainage gully.		
				Broad, rounded base,		
				shallow concave sides.		
7593	Fill of	0.64	0.18	Friable dark/ mid	-	-
	[7592]			yellowish-brown sandy		
	[, 332]			silt. Very rare 15-20mm		
				rounded gravel		
				inclusions.		
7504		1.0	0.24			
7594	Cut	1.0	0.34	Pit. Irregular oval,	-	-
				concave base, shallow		
				sides.		
7595	Fill of	1.0	0.34	Firm brownish-grey	-	-
	[7594]			sandy silt. Occasional		
				small stones.		
7596	Natural	-	-	Natural geology	-	-
7597	Modern	-	_	Modern feature	Pottery	Modern
7598	Cut	0.43	0.12	N-S aligned gully. Wide		-
0.00		0.40	0.12	0 0 /		
				concaved base, shallow		
				straight sides.		
7599	Fill of	0.43	0.12	Loose brownish-grey	-	-
	[7598]			sandy silt. Infrequent		
				flint inclusions.		
7613	Cut	0.61	0.24	E-W aligned ditch.	-	-
				Shallow concave sides,		
				wide concave base.		
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7614	Fill of [7613]	0.61	0.24	Loose greyish-brown sandy silt. Infrequent flint inclusions.	-	-
7615	Cut	1.19	0.32	Pit. Oval, Flat base, steep W side moderate concave S side.		Roman
7616	Fill of [7515]	1.19	0.32	Loose orangey-brown sandy silt. Infrequent flint inclusions.	Roman pottery	Roman
7617	Cut	1.94	0.73	E-W aligned rectilinear enclosure ditch. Wide concave base, steep concave sides.		Roman
7618	Initial fill of [7617].	0.75	0.32	Loose orangey-brown sandy silt. Moderate flint inclusions.	Roman pottery	Roman
7619	Second fill of [7617].	0.69	0.10	Moderately compact reddish-brown gravelly silt. Moderate flint inclusions.	Roman pottery	Roman
7620	Third fill of [7617].	0.60	0.17	Loose light greyish- brown sandy silt. Frequent poorly sorted flint inclusions.	-	Roman
7621	Fourth fill of [7617]	1.57	0.47	Moderately compact light greyish brown sandy silt. Moderate flint inclusions.	Roman pottery <52>	Roman
7622	Fifth (Upper) fill of [7617].	1.08	0.17	Friable dark brownish- grey sandy silt. Infrequent flint inclusions.	Roman pottery	Roman
7623	Cut	0.80	0.38	NE-SW aligned curvilinear ditch. Concave base, 30°-45° sides.	-	-
7624	Fill of [7623]	1.48	0.38	Friable orangey-brown sandy silt. Regular angled stone gravel inclusions.	-	-
7625	Cut	0.62	0.31	E-W aligned ditch terminus. Sloping base, moderate /steep sides.	-	-
7626	Fill of [7625]	0.62	0.31	Soft brownish-yellow silty sand. Occasional pebbles.	-	-

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7627	Cut	0.68	0.30	Hearth/ fire pit. Irregular/ circular, flat heat affected laid stone base.	Pottery <54>	Roman
7628	Cut	0.70	0.30	Pit. Irregular/ oval, irregular base, shallow sides.		Roman
7629	Cut	1.21	0.24	Pit. Circular, moderate sides, concave/ flat base.	-	Roman
7630	Cut	0.48	0.06	Posthole. Circular, shallow sides, flat base.	-	-
7631	Fill of [7630]	0.48	0.06	Firm greyish-brown silty clay. Some large/ small stone inclusions.	Pottery	Roman
7632	Cut	2	80mm	Shallow ovoid scoop. Flat base, 10°-20° sides.	Pottery	-
7633	Cut	1.40	80mm	Shallow ovoid scoop. Flat base, 5°-15° sides.		Roman
7634	Fill of [7633]	1.40	80mm	Friable greyish-brown sandy silt.	Roman pottery	Roman
7635	Natural	-	0.10	Natural geology	-	-
7636	Natural	-	-	Light brown sand	-	-
7637	Fill of [7638]	0.40	0.10	Grey sandy silt. Rare pebble inclusions.	Pottery	Roman
7638	Cut	0.40	0.10	N-S aligned gully terminus. Concave base, rounded S edge.	Pottery	-
7639	Upper fill of [7640].	0.80	0.22	Fine grey sandy silt. Occasional pebble inclusions.	Pottery	Roman
7640	Cut	0.80	0.30	Linear, possible gully. Flat base, vertical sides.	-	-
7641	Cut	0.85	0.18	Pit. Circular, shallow concave base, shallow concave sides.	-	-
7642	Fill of [7641]	0.85	0.16	Loose greyish-brown silty sand. Rare 10- 40mm gravel inclusions.	-	-
7643	Cut	1.12	0.20	Pit. Ovoid, broad concave base, 45° concave sides.	-	-
7644	Basal fill of [7644].	1.0	0.09	Friable very dark brownish-grey sandy silt. Frequent charcoal deposits.	<53>	-



7645	Upper fill of	1.12	0.11	Loose/ friable greyish-	Pottery	Roman
	[7644].			brown sandy silt. Rare	,	
				10-40mm gravel		
				inclusions.		
7646	Cut	0.55	0.16	E-W aligned ditch/ gully.	-	-
				Gradually sloped sides.		
7647	Fill of	0.55	0.16	Soft/ friable yellowish-	-	-
	[7646]			brown sandy silt with		
				brown patches.		
				Frequent pebble		
				inclusions.		
7648	Cut	0.90	0.18	Pit. N-S aligned long pit,	-	-
				45° sides.		
7649	Fill of	0.90	0.18	Soft/ friable brown	-	-
	[7648]			sandy silt. Occasional		
				pebble inclusions.		
7650	Cut	-	0.08	N-S aligned furrow. Flat	-	-
				base, gradually sloped		
7654			0.00	sides. Plough furrow.		
7651	Fill of	-	0.08	Soft/ friable greyish-	-	-
	[7650]			yellowish-brown sandy		
				silt. Occasional pebble		
7652	Denesit	1.98	0.19	Plough furrow.	Roman	Domon
7052	Deposit	1.90	0.19	Loose brownish-grey sandy silt. Infrequent	pottery,	Roman, AD240+
				flint inclusions filling	Tegula	ADZ40+
				depression.	regula	
7653	Cut	0.65	0.10	Irregular ovoid	_	_
/000	Cut	0.05	0.10	depression. Flat base,		
				irregular 10°-15° sides.		
				Possible pig wallow.		
7654	Cut	0.40	0.16	ENE-WSW aligned	-	-
		_		terminus of drip gully.		
				Narrow concave base,		
				narrow 75° sides.		
7655	Fill of	0.40	0.16	Loose greyish-brown	-	-
	[7654]			silty sand. Rare 10-		
				30mm gravel inclusions.		
7656	Cut	0.40	0.15	ENE-WSW aligned drip	-	-
				gully. Broad concave		
				base, shallow concave		
				sides.		
7657	Fill of	0.40	0.15	Loose greyish-brown	-	-
	[7656]			sandy silt. Frequent 10-		
				20mm rounded gravel		
				inclusions.		

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7658	Cut	0.55	0.08	NNW-SSE aligned drip gully. Broad flat base, shallow 45° sides.	-	-
7659	Fill of [7658]	0.55	0.08	Loose greyish brown silty sand. Rare 10- 20mm gravel inclusions.	-	-
7660	Fill of [7627]	0.68	0.30	Firm fark reddish-grey clayey silt. Frequent charcoal and occasional stone inclusions.	Roman pottery <54>	Roman
7661	Fill of [7628]	0.52	70mm	Firm light brownish- orange silty clay. Occasional stone inclusions.	Pottery	-
7662	Cut	1.12	0.35	Pit. Irregular shape, irregular undulating base, steep sides.	-	-
7663	Fill of [7662]	1.12	0.35	Firm light brownish-grey clayey silt.		-
7664	Cut	0.84	0.22	Pit. Small concave base, shallow sides.		Roman
7665	Fill of [7664]	0.84	0.22	Firm dark brownish-grey clayey silt. Frequent charcoal inclusions.	Pottery <55>	Roman
7666	Cut	0.56	0.10	Pit. Irregular, concave shallow sides.		Roman
7667	Fill of [7666}	0.56	0.10	Firm greyish-orange clayey silt. Occasional small stone inclusions.	Roman pot	Roman
7668	Cut	2.24	0.12	Pit. Irregular, concave base, shallow sides.		Roman
7669	Fill of [7668]	2.24	0.12	Firm brownish-grey clayey silt. Occasional small stone inclusions.	Roman pottery	Roman
7670	Group	-	-	Boundary/ enclosure ditch consisting of: [7574], [7576], [7567], [7581], [7617], [7589], [7681], [7683], [7685], [7744]. [7760] [7761]	Pottery	-
7671	Cut	2.10	0.12	Pit/Natural depression. Irregular, shallow sides, undulating base.	-	-



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7672	Cut	1.30	0.16	Pit/natural depression. Shallow sides, concave base.	-	Roman
7673	Cut	2	0.58	N-S aligned boundary ditch. Terminus in S end. Flat base, steep sides.	-	-
7674	Upper fill of [7673].	2	0.18	Firm reddish-brown silty clay. Occasional pebble inclusions.	-	-
7675	Middle fill of [7673].	1.7	0.40	Soft/ friable brown loam. Occasional pebble inclusions.	-	-
7676	Basal fill of [7673].	0.30	0.04	Soft light yellowish- brown silty clay. Rare pebble inclusions.	-	-
7677	Cut	0.60	0.10	E-W aligned gully. Flat base, gently sloped sides.	-	-
7678	Fill of [7677]	0.60	0.10	Firm yellowish-brown silty clay. Frequent pebble inclusions.	-	-
7679	Cut	0.59	0.32	Pit. Circular/ irregular, steep straight sides, wide flat base.	-	-
7680	Fill of [7679]	0.59	0.32	Loose dark orangey- brown sandy silt. Infrequent flint and Rare charcoal inclusions.	-	-
7681	Cut	1.70	0.56	Machine slot through enclosure ditch. Concave base.	Pottery	Roman
7682	Fill of [7683]	0.60	0.60	Brownish grey fine sandy silt. Rare rounded/ pebble inclusions.	Pottery, CBM	Roman
7683	Cut	0.60	0.60	Machine slot through enclosure ditch. Concave base.	-	Roman
7684	Fill of [7683]	0.60	0.60	Brown fine sandy silt. Occasional pebbles.	Pottery	Roman
7685	Cut	0.60	0.60	Machine slot through enclosure ditch. Concave base.		Roman
7686	Fill of [7685]	0.60	0.60	Brown fine sandy silt. Occasional pebbles.	Pottery	Roman

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7687	Natural	0.54	0.20	Natural feature	-	-
7688	Fill of	-	-	Light brown gritty silt.	_	_
/000	[7689]			pebble inclusions.		
7689	Natural	_	_	Natural feature	_	_
7690	Fill of	0.30	0.10	Brown silty gravel.	Pottery	_
7050	[7750]	0.50	0.10	Frequent pebbles.	TOLLETY	
7691	Modern	_	_	Posthole. Brownish grey	Modern	Modern
7051	Wodern			silt fill with occasional	pottery	WOUCH
				pebble inclusions.	pottery	
7692	Cut	_	_	N-S aligned plough		_
1052	Cut			furrow. Brown silt fill		
				with moderate pebble		
				inclusions.		
7693	Natural	_	_	Natural feature	_	_
7694	Modern			N-S aligned plough		
7054	Modern	_		furrow. Brown silt fill		
				with frequent pebbles.		
7695	Cut	_	_	Modern feature	Pottery	Modern
7696	Natural		_	Natural feature	- TOLLETY	
7697	Modern	_	_	N-S aligned plough	Pottery	Modern
1051	Wodern			furrow.	TOLLETY	WOUCH
7698	Natural	_	_	Natural feature	_	_
7699	Modern	_	_	N-S aligned plough	_	_
1055	Wodern			furrow		
7707	Natural	_	_	Natural feature	_	_
7708	Natural	-	-	Natural feature	-	-
7709	Natural	-	-	Natural feature	-	-
7710	Natural	-	-	Natural feature	-	-
7711	Cut	0.33	0.13	ENE-WSW aligned gully.	Iron Age	Iron
				Irregular flat wide base,	Pottery	Age?
				shallow sloping W edge,	,	Ũ
				moderate concave E		
				edge.		
7712	Fill of	0.33	0.13	Moderately compact	Iron Age	Iron
	[7711]			reddish-brown sandy	pottery	Age?
				silt. Infrequent rounded		
				flint inclusions.		
7713	Cut	1.12	0.40	WNW-ESE aligned	-	-
				boundary ditch. Broad		
				base, steep 75° sides.		
7714	Fill of	1.10	0.40	Friable greyish-brown	-	-
	[7713]			sandy silt. Rare 10-		
				30mm gravel inclusions.		
7715	Natural	-	-	Natural interface	-	-
				between grey clay and		
				orange gravelly sand.		

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7716	Basal fill of [7640].	0.80	0.30	Yellowish-grey gravelly silt.	-	-
7717	Cut	1.40	0.20	N-S aligned boundary ditch. Flat base, step of E edge, gently sloped W edge.	-	-
7718	Fill of [7717]	1.40	0.20	Firm yellowish brown loam. Occasional pebble inclusions.	-	-
7719	Cut	0.56	0.20	Pit. Sub-circular, curved base, gently sloped sides.	-	-
7720	Fill of [7719]	0.56	0.20	Firm brown loam. Occasional pebble inclusions.	_	-
7721	Cut	1.32	0.09	Pit. Sub-circular, shallow sides, flat base.	-	Roman
7722	Cut	0.70	0.18	E-W aligned drip gully. Broad concave base, shallow concave sides.	-	-
7723	Fill of [7722]	0.70	0.18	Friable greyish-brown sandy silt. Frequent gravel inclusions.	Pottery	-
7724	Cut	0.65	0.17	ENE-WSW aligned gully. Moderate concave sides/ base	-	-
7725	Fill of [7724]	0.65	0.17	Loose greyish-brown sandy silt. Moderate flint inclusions.	-	-
7726	Cut	0.80	0.16	E-W aligned gully. Flat base, gently sloped sides.		-
7727	Fill of [7726]	0.80	0.16	Firm/ friable yellowish brown loam. Occasional pebble inclusions.	-	-
7728	Cut	1.76	0.14	N-S aligned furrow. Flat base, gently sloped sides.	-	-
7729	Fill of [7728]	1.76	0.14	Firm/ friable greyish- brown loam. Frequent pebble inclusions.	-	-
7730	Fill of [7754]	-	-	Brown fine sandy silt. Moderate pebble. Plough furrow. Not excavated.	Pottery	Roman



				·			
7731	Fill of	-	-	Brown sandy silt.	Pottery	-	
	[7752]			Frequent pebbles.			
				Plough furrow. Not			
				excavated.			
7732	Fill of	-	-	Brown silt. Frequent	Pottery	19 th C	
	[7734]			pebbles. Plough furrow.			
				Not excavated.			
7733	Fill of	-	-	Brown silt. Occasional	Pottery	18 th -19 th	
	[7760]			pebbles.		С	
7734	Cut	-	-	N-S aligned plough		-	
				furrow. Not excavated.			
7735	Fill of	-	-	Brown fine sandy silt.	Pottery	ery -	
	[7699]			Occasional pebbles.	-		
7736	Natural	-	-	Natural feature			
7737	Natural	-	-	Natural feature	-	-	
7738	Natural	-	_	Natural feature	_	_	
7739	Natural	-	_	Natural feature	_	_	
7740	Natural	_	-	Natural feature	-	_	
7741	Natural	_	-	Natural feature	-	_	
7742	Cut	0.60	0.43	Linear ditch. Concave	_	_	
,,,,,,	Cut	0.00	0.15	base, moderately			
				concave sides.			
7743	Fill of	0.60	0.43	Loose greyish-brown	Pottery	Roman	
// 13	[7742]	0.00	0.15	sandy silt. Infrequent	rottery	Roman	
	[// 12]			flint inclusions.			
7744	Cut	0.70	0.38	Linear enclosure ditch.	_	Roman	
,,,,,	Cut	0.70	0.50	Moderately concaved		Norman	
				sides, concave base.			
7745	Fill of	0.70	0.38	Loose greyish-brown	Pottery	Roman	
//+5	[7744]	0.70	0.50	sandy silt. Infrequent	TOLLETY	Norman	
	[//++]			flint inclusions.			
7746	Fill of	0.70	0.10	Grey sandy silt with			
//40	[7628]	0.70	0.10	rounded pebbles and			
	[7028]			charcoal inclusions.			
7747	Fill of	0.50	0.06	Grey sandy silt	_	_	
//4/	[7628]	0.50	0.00	Grey sandy site			
7748	Fill of		_	Brown fine candy silt	_		
//40		-	-	Brown fine sandy silt.	-	-	
	[7749]			Frequent pebble			
7740	Cu+	0.00		inclusions.			
7749	Cut	0.66	-	E-W aligned ditch	-	-	
				terminus. Not			
7750			0.10	excavated.			
7750	Cut	-	0.10	N-S aligned. Concave	Pottery	-	
				base. Plough furrow.	<u> </u>		
7751	Cut	-	-	N-S aligned Plough	-	-	
				furrow. Not excavated.			

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7752	Cut	-	-	N-S aligned Plough furrow. Not excavated.	-	-
7753	Group	-	-	NW-SE aligned ditch consisting of: [7521], [7717], [7673].	Pottery	-
7754	Cut	-	-	N-S aligned Plough furrow. Not excavated.	-	-
7755	Group	-	-	E-W aligned ditch/ gully consisting of: [7724], [7722], [7726].	-	-
7756	Group	-	-	E-W aligned ditch consisting of: [7677], [7713].	-	-
7757	Group	-	-	L shaped ditch/ gully consisting of: [7639], [7515], [7638].	Pottery	-
7758	Group	-	-	NE-SW aligned ditch consisting of: [7742], [7749].	-	-
7759	Group	-	-	N-S aligned ditch consisting of: [7592] and [7563]	-	-
7760	Cut	-	-	N-S aligned Plough furrow. Not excavated.	-	-
7761	Cut	-	-	N-S aligned section of enclosure ditch. not excavated		
7762	Cut	-	-	N-S aligned section of enclosure ditch. not excavated		
7763	Fill of [7761]	-	-	Brown fine sandy silt. Occasional pebbles. not excavated		
7764	Fill of [7762]	-	-	Brown fine sandy silt. Occasional pebbles. not excavated		
7765	Group			E-W aligned ditch comprised of [7656] and [7654]		



APPENDIX B FINDS REPORTS

B.1 Prehistoric pottery

By Sarah Percival

Introduction

B.1.1 A small assemblage of 368 prehistoric sherds weighing 9.015g was collected from archaeological evaluation and excavation at Boulton Moor (Table B4). A total of 32 sherds weighing 528g were recovered from six features, all ditches, and from subsoil across seven trenches during the evaluation (Oxford Archaeology 2018a). A further 336 sherds (8,487g) were recovered from 28 features during the excavation, again mostly from ditches. The biggest assemblage containing the largest and best-preserved sherds came from a boundary ditch, the remaining pottery coming from gullies, pits, a penannular ditch and from subsoil. The assemblage is all of mid to later Iron Age date and includes rim sherds from seven vessels. A single sherd of sandy greyware, found during evaluation, may be Roman. The sherds are moderately to well preserved, with only around 10% showing moderate to severe post-depositional abrasion.

Methodology

B.1.2 The assemblage was analysed in accordance with the guidelines for analysis and publication laid down by the Prehistoric Ceramics Research Group (PCRG 2010). The total assemblage was studied and a full catalogue prepared. The sherds were examined using a binocular microscope (x10 magnification) and were divided into fabric groups defined on the basis of inclusion types. Fabric codes were prefixed by a letter code representing the main inclusion type: F representing flint, G representing grog and Q representing quartz. Vessel form was recorded: R representing rim sherds, B representing base sherds, D representing decorated sherds and U representing undecorated body sherds. The sherds were counted and weighed to the nearest whole gram. Vessel count was calculated by counting vessel rims. Decoration, condition, food residues and sooting were also noted. The catalogue was recorded using Microsoft Excel 2010.

Fabric

- B.1.3 The assemblage is overwhelmingly sandy with fabrics containing quartz forming 98% of the total assemblage by weight. A range of quartzitic inclusions are present but most are medium to coarse (>0.25mm 3.00mm) sub-rounded to angular pieces, poorly mixed (Table B1). Very fine quartz or quartz sand in many fabrics appears as glittering inclusions in the body and surfaces of the sherds, which are generally hard fired and reduced.
- B.1.4 A small number of sherds (14 sherds, 332g) have dark angular igneous inclusions alongside moderate quartz sand. Two sherds, (2g) contain possible shell.
- B.1.5 The range of fabrics present and the composition of the assemblage match those found within the contemporary assemblage from Gamston, Nottinghamshire some

21km to the east of Boulton Moor (Allen *et al.* 1992, 41) which is also dominated by sandy quartz tempered fabrics, believed to represent local production alongside non-local igneous and shell tempered sherds.

Description	Quantity	% quantity	Weight	% weight	Count
			(g)		of NV
Sand, quartz abundant, fine to coarse	98	26.6%	5371	59.6%	1
Sand, quartz abundant, moderate	82	22.3%	648	7.2%	2
Sand, quartz rare, medium	66	17.9%	1200	13.3%	1
Sand, quartz abundant, fine voids	28	7.6%	129	1.4%	
Sand, quartz moderate medium	16	4.3%	155	1.7%	
Sand, quartz rare medium	11	3.0%	268	3.0%	1
Sand, quartz common coarse red oxide	10	2.7%	34	0.4%	
Sand, quartz rare coarse	10	2.7%	65	0.7%	
Igneous moderate medium, quartz common medium	7	1.9%	168	1.9%	
Sand, quartz abundant, fine	7	1.9%	188	2.1%	
Sand, quartz common coarse	5	1.4%	78	0.9%	
Sand, quartz moderate very coarse	5	1.4%	15	0.2%	
Sand, igneous moderate medium voids	4	1.1%	70	0.8%	
Sand, igneous moderate medium	3	0.8%	94	1.0%	1
Sand, quartz sparse fine red oxide	3	0.8%	81	0.9%	
Sand, quartz abundant, fine to coarse	2	0.5%	108	1.2%	
Sand, quartz abundant, fine to coarse	2	0.5%	79	0.9%	
Sand, quartz abundant, fine to coarse	2	0.5%	71	0.8%	
Sand, quartz abundant, fine to coarse	2	0.5%	12	0.1%	
Sand	1	0.3%	3	0.0%	
Sand, quartz common coarse to very coarse	1	0.3%	10	0.1%	
Sand, quartz moderate coarse	1	0.3%	126	1.4%	1
Sand, rounded quartz moderate medium	1	0.3%	40	0.4%	
Sandy greyware?	1	0.3%	2	0.0%	
Total	368	100.0%	9015	100.0%	7

Table B1: Quantity and weight of Iron Age pottery by fabric

B.1.6 The igneous tempered fabrics from Gamston contain granodiorite, which analysis has confirmed derived from sources in a limited location around Mountsorrel near Charnwood Forest, Leicestershire (Knight *et al.* 2003 and 2014). Mountsorrel granodiorite has been found in pottery from a number of Iron Age sites in the East Midlands, with a distribution concentrating on the Soar, Trent and Wreake valleys (Knight *et al.* 2003, 117). Results of an extensive petrographic and microprobe analysis of East Midland fabrics undertaken by Knight *et al.* indicate that pottery containing Mountsorrel granodiorite was probably being manufactured around Charnwood using clay from easily accessible alluvial sources local to that region. These vessels were then transported to consumer sites, perhaps along the river networks including along the Trent (Knight *et al.* 2014, 72). The location of Boulton Moor adjacent to the Derwent above its junction with the Trent means that igneous-tempered pot could have arrived

there using river transport. Charnwood granodiorite has been identified at several sites in Derbyshire including Swarkestone Lowes and Willington Quarry further down the Trent (Elliot and Knight 1999, 131; Woodward and Tinsley 1990, 85).

- B.1.7 Shell-tempered sherds, found in very small numbers at Boulton Moor, are also present at Gamston, perhaps representing imported pottery from Lincolnshire (Allen *et al.* 1992, 42).
- B.1.8 A single sherd of sandy greyware, recovered during evaluation, may be Roman.

Form

- B.1.9 A limited range of forms are present (Table B2; Fig. 8). The vessels are probably all jars and are mostly ovoid with short upright or everted necks (Knight 1992, fig. 22, 50), two with fingertip impressed decoration along the rim top. Three vessels have high, rounded shoulders, concave necks and everted rims similar to examples found at Gamston (Knight 1992, fig. 18, 30), including one example with fingertip impressions along the rim top (Knight 1992, fig. 20, 39). A neckless ovoid jar or bowl with direct rounded rim is again found at Gamston (Knight 1992, fig. 20, 39). One jar, found during evaluation in Trench 78 (within Area B), with sinuous profile and stubby, everted rim (Fig. 8 No. 1), belongs to the later Iron Age. Charred residue on the interior of this vessel gave a radiocarbon date of 175-40 cal BC (see Appendix C Radiocarbon report).
- B.1.10 A little over 3% of the body sherds and one of the seven vessels identified feature rough vertical wiping or scoring to the exterior surfaces.
- B.1.11 The form and decoration of these vessels compares well with the scored and plain component of Knight's 'Earlier La Tène' phase in his regional type series for the East Midlands (Knight 2002, fig.12.3) dated by him to around the 5th to 3rd centuries BC.

Form	Vessel count
Sinuous jar everted rim	1
Jar with high round shoulder, concave neck and everted rim	3
Ovoid medium upright rim jar	1
Ovoid jar with short upright neck	1
Ovoid jar or bowl with slightly everted rim and no neck?	1
Total	7

Table B2: Quantity and weight of Iron Age pottery by form

B.1.12 Captions for illustrated vessels (Fig. 8):

Vessel 1. Complete profile of globular jar with smoothed exterior and simple, everted rim. Fabric QmicaQUrM. Black ext & core, red oxidised int. Context 7807. Radiocarbon date of 175-40 cal BC obtained from charred residue on the interior.

Vessel 2. Flattened everted rim with fingertip decoration from a jar with a concave neck, high round shoulder and diagonal scoring on the body. Fabric QQuMC. Oxidised surfaces, reduced core. Context 4827.

Vessel 5. Flattened upright rim with fingertip/nail decoration from ovoid jar with short, upright neck and vertical scoring on the body. Fabric QQuAF/M. Oxidised surfaces, reduced core. Context 4892

Vessel 6a. Flattened upright rim with fingertip decoration from a medium ovoid jar with vertical wiping on the body. Fabric QlgMM. Oxidised surfaces, reduced core. Context 5076.

Vessel 6b. Stepped base of smaller vessel with smoothed exterior. Fabric QQuAF. Oxidised interior, reduced ext and core. Context 5076.

Distribution

- B.1.13 The largest single feature assemblage came from boundary ditch group 4988 towards the northern end of the site, which produced over 60% of the total assemblage by weight (Table B3). The average sherd weight of 54g for this group is high. The high sherd count and large average sherd size results from the deposition within this feature of a single vessel, a semi-complete jar with high-rounded shoulders, perhaps best interpreted as a storage jar, recovered from context 5022. No other rims came from this feature, which contained only three further body sherds from smaller vessels, weighing 117g.
- B.1.14 A further large assemblage came from the terminus of north-south ditch group 4721 at the south end of the site, which contained 67 sherds weighing 399g including four sherds (41g) from an ovoid jar with direct rim and no neck plus 58 sherds (320g) in the same fabric, which may be from the same vessel, and five body sherds from a second vessel. The presence of the rim and body sherds might suggest that, as with boundary ditch 4988, a substantial proportion of a vessel had been deliberately deposited in the ditch at its terminus.
- B.1.15 Penannular ditch 4827 produced 13 sherds (307g) including a rim from an ovoid jar with high, rounded shoulder and body sherds from perhaps four other vessels. The sherds were distributed in small numbers through five interventions through the ditch.
- B.1.16 Three pits produced pottery, of which one, 4846 contained 66 sherds (1200g) all from a single vessel: a round-shouldered jar with rough wiped surfaces. The remaining pits, 4866 and 4968, contained only very small assemblages with no diagnostic sherds.

Group	Feature type	Quantity	% quantity	Weight	% weight	Vessel
						count
4988	Boundary ditch	99	26.9%	5464	60.6%	1
	Ditch	2	0.5%	79	0.9%	
	Ditch terminus EW boundary	1	0.3%	38	0.4%	
4721	NS Ditch	1	0.3%	5	0.1%	
	Ditch terminus	67	18.2%	399	4.4%	1
4985	Boundary ditch	15	4.10%	189	2.10%	
4827	Penannular ditch	13	3.5%	307	3.4%	1
4987?	Penannular ditch	13	3.5%	39	0.4%	
	Pit	2	0.5%	45	0.5%	

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	1		1	I		I
4987	Boundary ditch	1	0.3%	40	0.4%	
	Ditch	24	6.5%	314	3.5%	
Not	Boundary ditch	4	1.1%	133	1.5%	1
grouped	Ditch	21	5.7%	408	4.5%	1
	NS Ditch	13	3.5%	174	1.9%	1
	Gully	14	3.8%	83	0.9%	
	Pit	68	18.5%	1264	14.0%	1
	Subsoil	10	2.7%	34	0.4%	
Total		368	100.0%	9015	100.0%	7

Table B3: Quantity and weight of Iron Age pottery by feature

Discussion

- B.1.17 Dating of the assemblage probably centres on the mid to later Iron Age. The close parallels between this assemblage and the much larger assemblage found at Gamston suggest a similar date range. Both assemblages are dominated by ovoid jar forms with upright or everted rims and high-shouldered jars in sandy quartz rich fabrics. Dating of the Gamston assemblage is wide with the majority of the assemblage suggested as being late 1st millennium into the 1st century AD (Knight 1992, 16). No forms with angular shoulders and fingertip impressed decoration on the body were found at Boulton Moor, suggesting that the assemblage does not include an earlier Iron Age component, nor are any wheel turned or other late Iron Age 'Belgic' forms found.
- B.1.18 A small number of sherds (13 sherds, 313g) from pit 4866 and ditch 7806 have sooty residue on the surfaces which may provide an opportunity for radiocarbon dating. Charred residue on the sinuous jar recovered during the evaluation from context 7807, whose form is the latest in style from this assemblage, was dated to 175-40 cal BC at 95% confidence. Further dating of the material from pit 4866 might also be of use in helping to refine ceramic chronology for the region.
- B.1.19 Quartz inclusions in the bulk of the fabrics suggest that most of the vessels were made locally; quartz forms the main component of most pottery from Iron Age sites from the region. At Gamston quartz-tempered wares formed 83.2% of the total assemblage by count and 86.5% by weight (Knight 1992, 41) and quartz fabrics also predominate at Red Hill, Ratcliffe-on Soar (Elsdon 1982, 20) and Swarkeston Lowes (Allen *et al.* 1999, 128). The possible granitic inclusions in some sherds from Boulton Moor indicate potential exchange links similar to those found on many sites along the Trent valley.

Phase	Trench	Group	Feature	Quantity	% quantity	Weight	% weight	Vessel count
Evaluation	48	4985	4802	4	1.1%	48	0.5%	
	49	4987	4902	1	0.3%	78	0.9%	
	14	Ungrouped	1401	1	0.3%	2	0.0%	
	35		3503	5	1.4%	45	0.5%	
	45		4503	1	0.3%	52	0.6%	
	78		7806	12	3.3%	298	3.3%	1
	80		8001	8	2.2%	5	0.1%	

Table B4. Pottery by context, feature and phase



v.3

Excavation	4721	4825	1	0.3%	5	0.1%	
		4886	67	18.2%	399	4.4%	1
	4827	4827	1	0.3%	126	1.4%	1
		4946	3	0.8%	88	1.0%	
		5018	3	0.8%	19	0.2%	
		5025	1	0.3%	10	0.1%	
		5083	5	1.4%	64	0.7%	
	4985	4893	1	0.3%	43	0.5%	
		4938	6	1.6%	28	0.3%	
		5061	4	1.1%	70	0.8%	
	4987	4833	20	5.4%	177	2.0%	
		4952	1	0.3%	21	0.2%	
		4996	1	0.3%	40	0.4%	
		5056	1	0.3%	28	0.3%	
		5058	1	0.3%	10	0.1%	
	4987?	4866	2	0.5%	45	0.5%	
	4988	4962	1	0.3%	38	0.4%	
		5011	1	0.3%	93	1.0%	
		5020	98	26.6%	5371	59.6%	1
		5037	2	0.5%	79	0.9%	
	Not grouped	4801	2	0.5%	29	0.3%	
		4846	66	17.9%	1200	13.3%	1
		4868	2	0.5%	64	0.7%	
		4893	13	3.5%	174	1.9%	1
		5018	13	3.5%	39	0.4%	
		5058	2	0.5%	11	0.1%	
		5073	4	1.1%	133	1.5%	1
		7711	12	3.3%	71	0.8%	
		7722	2	0.5%	12	0.1%	
Total			368	100.0%	9015	100.0%	7

Retention and discard

B.1.20 Although a relatively small assemblage, the Iron Age pottery is nevertheless significant for the county and the region, and should be retained. It has further potential for research through petrographic or residue analysis and radiocarbon dating, and as material for comparison with assemblages from other sites.

B.2 Roman pottery

By Edward Biddulph

Introduction

B.2.1 Some 640 sherds of pottery, weighing 12,945g, were dated to the Roman period. All the material, excluding pottery recovered by sieving from environmental samples, was fully recorded to recommended standards (PCRG *et al.* 2016) and analysed in order to provide ceramic dates for each context group. Pottery retrieved by sieving from environmental samples was fully recorded and dated only where no other pottery from the context existed.



B.2.2 Each context-group was sorted into wares, which were assigned codes taken from Oxford Archaeology's guidelines for recording Roman pottery (Booth 2016). Forms were identified by rim and similarly assigned standard OA form codes. These are defined as a two-letter code, such as CK for 'cooking pot' type jar, sometimes followed by a three-digit rim code, for example JB 110, a plain-rimmed curving-sided dish. Each vessel or other coherent collection of sherds were quantified by sherd count and weight and, where possible, number of vessels (MV) based on rim and estimated vessel equivalent (EVE), which measures the surviving portion (expressed as a fraction of a whole) of the circumference of a rim. Thus, a complete rim is recorded as 1 EVE or 100%, while half a rim is recorded as 0.5 EVE or 50%. Forms were matched where possible with local or regional parallels (eg Gillam 1957; Dool 1985; Hartley 2002; Leary 2003). Ware codes (Table B5) pertaining to regionally significant fabrics have been cross-referenced with the National Roman Fabric Reference Collection (NRFRC; Tomber and Dore 1998).

Fabric	Description	Sherds	Weight (g)	MV	EVE
B10	Unsourced black-burnished ware	2	41	2	0.16
B11	Dorset black-burnished ware (DOR BB 1)	4	30	3	0.19
B30	Imitation/other black-burnished wares	24	224	3	0.28
С	Indeterminate shelly fabric	2	17	2	0.13
C10	Shell-tempered ware	35	228	2	0.16
F52	Nene Valley colour-coated ware (LNV CC)	13	98	1	0.16
M20	Unsourced white ware mortarium	1	78	1	0.13
M23	Mancetter-Hartshill white ware mortaria (MAH WH)	30	1331	10	1
0	Indeterminate oxidised fabric	1	2		
010	Fine oxidised wares	10	86	1	0.06
020	Sandy oxidised wares	12	123		
050	Miscellaneous oxidised ware	3	53		
O80	Coarse tempered oxidised wares	12	140		
R	Indeterminate reduced fabrics	5	3		
R10	Fine reduced wares	2	7		
R20	Sandy reduced wares	43	767	5	0.67
R211	Derbyshire coarse ware (DER CO)	335	6527	59	7.05
R30	Medium sandy reduced ware	87	2823	7	0.79
R40	Miscellaneous reduced ware	2	15		
R50	Dark-surfaced wares	4	121	1	0.11
S	Indeterminate samian fabrics	2	47		
S30	Central Gaulish samian ware (LEZ SA 2)	4	76		
S40	East Gaulish samian ware	2	57		
W13	Mancetter-Hartshill white ware (MAH WH)	4	22		
W20	Sandy white wares	1	29		
TOTAL		640	12945	97	10.89

Table B5: Quantification of Roman-period fabrics (NRFRC codes in brackets)

Assemblage composition and pottery supply



No context-groups were dated by pottery specifically to the early Roman period, with B.2.3 the earliest groups (contexts 7524, 7527, 7539, 7652 and 7682) belonging to the second half of the 2nd century AD (Table B6). However, a single example of a Mancetter-Hartshill mortarium in a sandy fabric and with sandy trituration grits, the production of which began before c. AD 140 (Tomber and Dore 1998, 189), was recorded, although it was residual in a mid-Roman context (7534). Also, rouletted body sherds in medium sandy reduced ware (R30) that resemble a jar assigned to the late 1st or early 2nd century at Derby Racecourse (Dool 1985, fig. 76, no. 1) were recorded, though again as a residual occurrence.

Fabric	С	CD	CJ	СМ	EH	КА	Total EVE	% EVE
B11							*	
C10							*	
M23						0.15	0.15	9%
010							*	
020							*	
050							*	
080							*	
R20				0.1	0.25		0.35	20%
R211	0.25	0.25	0.64				1.14	67%
R30	0.07						0.07	4%
S30							*	
Total EVE	0.32	0.25	0.64	0.1	0.25	0.15	1.71	-
% EVE	19%	15%	37%	6%	15%	9%	-	-

Table B6: Pottery from context-groups dated c. AD 150-180/200. Quantification by EVE. Forms: C indeterminate jars, CD medium-mouthed jars, CJ lid-seated/cup-mouthed jars, CM wide-mouthed jars, EH 'jar-beakers', KA bead-and-flanged mortaria. * Fabric present but not represented by rim

B.2.4 As is evident from Table B6, Derbyshire coarse ware (R211) dominated supply during the later 2nd century. Forms in the fabric largely comprised cup-mouthed jars (CJ) – bell-shaped concave rims with or without a groove or bead-rim around the top were recorded – but everted-rimmed necked jars (CD) were also present. A wide-mouthed jar (CM) and jar-shaped beaker (EH), the latter probably deriving from a blackburnished ware prototype (Gillam 172), were also present. Mortaria with wide, hooked flanges and beads level with the flange arrived from the Mancetter-Hartshill kilns (M23). Black-burnished ware (B11) and a Drag. 31 dish in Central Gaulish samian ware (S30) were also identified.

Fabric	С	CD	CJ	СК	D	EC	KA	КС	Total EVE	% EVE
B11				0.14					0.14	5%
B30				0.23					0.23	8%
C10					0.1				0.1	3%

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550					1	0.46	1		0.46	F 0/
F52						0.16			0.16	5%
M20								0.13	0.13	4%
M23							0.1	0.2	0.3	10%
R10									*	
R20									*	
R211	0.22	0.22	1.33						1.77	60%
R30	0.03				0.1				0.13	4%
R50									*	
S									*	
S30									*	
S40									*	
W20									*	
Total EVE	0.25	0.22	1.33	0.37	0.2	0.16	0.1	0.33	2.96	-
% EVE	8%	7%	45%	13%	7%	5%	3%	11%	-	-

Table B7: Pottery from context 7534, dated *c*. AD 200-240. Quantification by EVE. Forms: C indeterminate jars, CD medium-mouthed jars, CJ lid-seated/cup-mouthed jars, CK 'cooking-pot' jars, D indeterminate jar or bowl, EC bag-shaped beaker, KA bead-and-flanged mortaria, KC hammerheaded mortaria. * Fabric present but not represented by rim

B.2.5 A date within the first half of the 3rd century AD was given to context 7534, a fill of pit 7671 (Table B7). The group was dated on the basis of hammerheaded mortaria (KC; cf. Hartley 2002, fig. 188, no. M93) in fabric M23 in association with East Gaulish samian ware (S40) and a plain-rimmed, bag-shaped, beaker (EC) in Nene Valley colour-coated ware (F52; Perrin 1999, 90). Derbyshire ware (R211) again dominated the group. Jar type CJ is better represented compared with the later 2nd century, and included rims with a definite internal ledge or bead, as well as those with smoother concave profiles. Jar type CD was also available in the fabric. Cooking-pot-type jars (CK) arrived from Dorset (fabric B11).

Fabric	С	CD	CJ	СМ	JB	К	КА	КС	Total EVE	% EVE
B10					0.13				0.13	8%
B30									*	
С	0.13								0.13	8%
F52									*	
M23						0.07	0.26	0.1	0.45	27%
R20					0.06				0.06	4%
R211	0.03	0.13	0.59						0.75	45%
R30				0.14					0.14	8%
S									*	
Total EVE	0.16	0.13	0.59	0.14	0.19	0.07	0.26	0.1	1.66	-
% EVE	10%	8%	36%	8%	11%	4%	16%	6%	-	-

Table B8: Pottery from context-groups dated *c.* AD 150-260. Quantification by EVE. Forms: C indeterminate jars, CD medium-mouthed jars, CJ lid-seated/cup-mouthed jars, CM wide-



mouthed jars, JB curving-sided dish, K indeterminate mortaria, KA bead-and-flanged mortaria, KC hammerheaded mortaria. * Fabric present but not represented by rim

B.2.6 Three context-groups (7530, 7531 and 7577) were dated more broadly to the second half of the 2nd century or first half of the 3rd century AD (Table B8). In general, the groups are similar to the better-dated assemblages, but lack diagnostic pieces that would date them more closely. Material not present in the other groups included dishes (JB) with a plain rim (fabric R20) and a plain rim delineated by a groove (fabric B10). Fabric R211, again dominant, includes a lid-seated jar with an internal bead.

Fabric	BB	CD	CJ	СК	СМ	HB	HC	IA	JB	Total EVE	% EVE
B30								0.05		0.05	4%
C10							0.06			0.06	5%
M23										*	
010	0.06									0.06	5%
R20				0.05					0.21	0.26	20%
R211		0.31	0.29		0.09					0.69	54%
R30						0.16				0.16	13%
R40										*	
S40										*	
Total EVE	0.06	0.31	0.29	0.05	0.09	0.16	0.06	0.05	0.21	1.28	-
% EVE	5%	24%	23%	4%	7%	13%	5%	4%	16%	-	-

Table B9: Pottery from context 7535, dated *c*. AD 250-350. Quantification by EVE. Forms: BB larger flagons, CD medium-mouthed jars, CJ lid-seated/cup-mouthed jars, CK 'cooking-pot' jars, CM wide-mouthed jars, HB straight-sided bowls, HC curving-sided bowls, IA straight-sided bowl or dish, JB curving-sided dish. * Fabric present but not represented by rim

- B.2.7 A single group, context 7535, a fill of pit or depression 7672, was dated to the late Roman period (Table B9). This was on the basis of the presence of bead-and-flanged dishes and bowls (HB/IA) in fabrics B30 and R30. A wide-mouthed jar adds to the forms available in fabric R211. Fabric M23 is notably represented only by body sherds, but given the relatively small size of the group, it would be unwise to draw any firm conclusions from this near-absence about the supply of the fabric to the site.
- B.2.8 Another 25% of pottery by EVE was recovered from groups dated to the mid to late Roman period (*c.* AD 150-350). This material included type CD and CJ jars in fabric R211, a type CK jar in fabric B11, a storage jar (CN) in fabric R30, and an everted rim jar in fabric R50.

Discussion

B.2.9 Overall, the assemblage points to pottery deposition in the mid and late Roman periods, with a strong emphasis on the period c AD 150-250. There is the suggestion of early Roman supply, but no context-groups could be dated to this period specifically. Derbyshire coarse ware, which was manufactured at a variety of sites (PKRB nd),

including Derby Racecourse (Dool 1985) in Derby itself and Holbrook, Milford and Hazelwood (Leary 2003) to the north of the city, dominated supply from the mid-2nd century.

- B.2.10 Intriguingly, the assemblage included four vessels in Derbyshire coarse ware with production damage. Three vessels, two of type CD from context 7535 and one of type CJ from context 7611 (the latter spot-dated to the mid-2nd to mid-4th century), had uneven rims, suggestive of 'seconds'. The rim of another vessel (type CJ) from context 7684, also dated to the mid-2nd to mid-4th century, was pressed flat against the shoulder and had become warped. This piece is more convincing as a waster. Together, the evidence hints at production of Derbyshire coarse ware to the south of the city in the vicinity of the site. This would be significant, as production here is so far unattested. However, the occasional presence in Roman Britain of samian vessels with warped rims reminds us that flawed pottery was usable and could travel, and it is not impossible that the wasters or second came from one of the known kiln sites.
- B.2.11 The Mancetter-Hartshill workshops join the makers of Derbyshire coarse ware as important suppliers of pottery to the site, largely during the mid-Roman period. Supply was very limited before *c*. AD 140, as indicated by the paucity of mortaria with sandy grits.
- B.2.12 The mortaria adds to other pottery black-burnished ware from Dorset, colour-coated ware from the Nene Valley and samian ware from Central and East Gaul that shows that the settlement was located within regional trade networks. Much of the pottery is of a utilitarian, and therefore low-status, character (cf. Evans 2001), but the presence of samian ware dishes (Drag. 31) and a decorated bowl (Drag. 30) suggest some familiarity with continental-style dining.
- B.2.13 Evidence of use was limited to two vessels, body sherds in fabric R20 with a carbonised deposit on the exterior surface, and a CJ-type jar in fabric R211 with a burnt deposit on the interior surface of the rim. Both vessels had been used for cooking. Reuse of pottery is suggested by two possible examples of trimming. The break around the complete base of a jar in fabric R211 (SF 3) was relatively smooth, as if it had been trimmed after breakage, and the top of the shoulder of another jar in R211 also appears to have been trimmed, presumably after the rim had broken.
- B.2.14 The condition of the pottery was reasonably good. The mean sherd weight (sherd weight/count) is 20.3g, pointing to fairly large fragments. The range of mean sherd weights per context is 0.6g to 88g. The distribution of values is skewed towards the lower values, though the highest proportion of groups fall within the 10-20g range. The overall mean EVE value or 'completeness' (EVE/vessel count; Orton and Hughes 2013, 215) is 0.11 EVE or 11%, with values from context-groups ranging from 0.03 to 0.25 EVE. Values are concentrated in the central part of the range, around *c*. 0.1-12 EVE. Context-groups were on the whole small, having a mean size of 14 sherds. The largest groups were recovered from pits or natural depressions 7671 and 7672, although the pottery from these groups was of average mean sherd weight. Pottery was also collected from other pits and enclosure ditches.
- B.2.15 The values suggest that the pattern of deposition was relatively uniform across the site, the pottery having undergone a similar sequence of breakage and redeposition

after initial discard throughout the period of occupation. It is worth noting that the samian is generally very worn, suggesting a gap between initial discard and final deposition. Pits or natural depressions appear to have been particularly attractive to pottery deposition.

Phasing of the main enclosure

- B.2.16 There are two phases associated with the main enclosure: a primary phase of original cutting and use, and a second phase of recutting and use. The pottery is consistent with this phasing. Collectively, the pottery from contexts attributed to the primary phase is broadly dated to the second half of the 2nd century, a date supported by the presence of Central Gaulish samian ware (S30), a jar-shaped beaker (EH) in reduced fabric R20, and vessels in Derbyshire coarse ware (R211).
- B.2.17 Context-groups belonging to the later phase have no samian, but instead contain Derbyshire coarse ware and mortaria dated on typological grounds to *c*. AD 180-260 from Mancetter-Hartshill (M23). As stated above, mortaria from this source were available from *c*. AD 140, if not earlier, but these groups suggest that such vessels did not arrive in quantity until the late 2nd century. Collectively, the pottery from the later phase spans the late 2nd to mid-3rd century or later. While there is overlap in the date ranges of the earlier and later groups (indeed, one context-group from the later phase is dated to the second half of the 2nd century), there is no contradiction between the stratigraphic and ceramic evidence.

Recommendations regarding the conservation, discard and retention of material

B.2.18 The pottery reported on here has the potential to inform future research through reanalysis and thus it is recommended that all the pottery is retained. This follows the advice set out in the 'Standard for Pottery Studies in Archaeology' (PCRG *et al.* 2016).

B.3 Ceramic building material and fired clay

By Cynthia Poole

Introduction and Methodology

- B.3.1 A small quantity of ceramic building material (CBM) amounting to 18 fragments weighing 1074g was recovered from Roman features and deposits together with eight fragments (66g) of fired clay from Iron Age and Roman pit and ditch fills. The ceramic building material is all Roman in date apart from a Staffordshire Blue engineering quality roof tile of 19th-20th century date from the subsoil. The fired clay cannot be dated intrinsically and relies on associated dateable artefacts for its phasing. All the material was fragmentary with no complete tiles recovered. Both the tile and fired clay had relatively low mean fragment weights of 60g and 8g respectively.
- B.3.2 The assemblage has been fully recorded on an Excel spreadsheet in accordance with guidelines set out by the Archaeological Ceramic Building Materials Group (ACBMG 2007). The record includes quantification, and details of fabric type, form, surface

finish, forms of flanges, cutaways and vents, markings and evidence of use/reuse (mortar, burning etc). The terminology for Roman tile follows Brodribb (1987); coding for markings, tegula flanges, etc. follows that established by OA for the recording of CBM, and tegula cutaway types are linked to those classified by Warry (2006). Fabrics were characterised on the basis of macroscopic characteristics together with the aid of x20 hand lens.

Fabrics

- B.3.3 The following fabrics were recorded:
 - Fabric C: orange fired clay containing frequent medium-coarse quartz sand
 - Fabric D: brownish orange, low-moderate density medium and coarse quartz sand, dark red/black iron oxide and occasional sandstone grit 1-2mm
 - Fabric E: orange with cream streaks, smooth laminated clay containing sparse siltstone and argillaceous pellets up to 5mm

Tile forms

- B.3.4 The Roman tile consisted of tegula and flat plain tile fragments, which almost certainly represent the central sections of the tegulae, based on the similarity of fabric and finish. The tegulae had a thickness of 14 to 26mm and the plain tile 22-28mm. Surfaces were generally smooth and even, and fairly regularly finished with some knife trimming of edges.
- B.3.5 Three flanges occurred: two rectangular in profile of type A4 (ctx 7529) and one rounded type F (ctx 7652). The flanges measured between 17mm and 27mm wide with clear evidence of a taper from the upper to lower end of the tile. Flange heights measured 45 and 55mm. A further scrap of flange was probably rectangular in profile (ctx 7730). One upper cutaway and one lower cutaway were present. The lower cutaway was of type D16, very neatly cut measuring 46mm long and 30mm wide at the base. This is dated by Warry (2006) to AD 240-380.
- B.3.6 Several fragments of tegula and flat tile from context 7562 had been burnt on the base surface. The tile need not indicate buildings anywhere in the vicinity of the site, and is more likely to have been obtained from elsewhere for reuse in hearth or oven structures.

Fired clay

B.3.7 The fired clay was all made in a brownish red, coarse sandy clay containing ironstone grits up to 5mm and, in one piece, a large ferruginous mudstone pellet measuring 21mm. All was of indeterminate form, though the largest fragment (ctx 4887) may be a fragment of oven structure. It had an undulating outer surface smoothed with finger depressions and a fairly even bonding surface at the back forming a wedge shape in cross-section up to 30mm thick. It may represent an individual lump pressed into the wall structure and smoothed out and thinned across a previously constructed section of the oven.

Retention and Discard



- B.3.8 The tegulae with flanges and cut-aways from contexts 7529 and 7652 have potential for further research into production centres and distribution through thin-section analysis, and for comparison with tegulae from other sites, and so should be retained.
- B.3.9 The remainder of the CBM and fired clay may be discarded.

B.4 The worked stone

Ruth Shaffrey

- B.4.1 A total of eleven fragments of worked stone, representing eight items, were recovered from the archaeological investigations, all from Area B.
- B.4.2 A quarter fragment of a Millstone Grit lower rotary quern of typical Roman form was found on the surface at Boulton Moor. Two additional fragments of Millstone Grit querns were recovered, one from topsoil 7500 and the other from pit fill 7534. The fragment from 7534 was certainly from a rotary quern, that from 7500 was too small to identify the type. Five further fragments of Millstone Grit representing two items were recovered from the fills (7504 and 7507) of pits 7503 and 7506, and might also be from querns, but are too small to be certainly identified. There is some variation in the rock type, suggesting that five querns are represented.
- B.4.3 A fragment of large rubber was found in pit 7553 (7554). This is a large cobble that is well smoothed on one face and along one edge creating a slight facet. It could be residual from Iron Age activity nearby or might well be contemporary with the Roman activity. Saddle querns and rubbers remained in use, possibly with a different function, following the introduction of the rotary quern.
- B.4.4 The querns and rubber are indicative of general domestic activity and the preparation of food. The use of Millstone Grit is typical, with major production of these querns known to have occurred in Derbyshire during the Roman period, probably alongside smaller scale manufacturing.
- B.4.5 Two further pieces of stone found during the evaluation phase are of less certain identification. One piece of sandstone has pock marks on one face and grooves on the edge at right angles to it (7507). It is roughly oblong shaped and is probably building stone but could possibly be a reworked fragment of millstone. The same context produced a large block of sandstone with one flat face and two flat edges. This was presumably used as building stone but does not retain any tool marks suggesting it was dressed.

Catalogue of worked stone

- B.4.6 Rotary quern. Millstone Grit. Coarse grained gritty slightly feldspathic sandstone, but not fresh surface. Small circumference fragment with part of curved edge and flat pecked and worn face. Measurements are indeterminate. Weighs 45g. Ctx 7534. Fill of pit 7671
- B.4.7 Quern. Millstone Grit. Medium coarse grained poorly sorted sandstone containing lots of grit. Fragment with flat pecked grinding surface and rounded pecked outer face. Top and centre do not survive. This could be from a rotary quern, but it looks more

likely to be from a saddle quern. Measures >95mm long x >110mm wide x 85mm thick. Weighs 1228g. SF5. Ctx 7500.

- B.4.8 Rubber. Fine grained micaceous red sandstone. Fragment of large cobble, burnt with one flat worn face, used for rubbing. One edge adjacent to the main rubbing face has also been worn through use creating a slightly faceted edge. Measures >90mm long x 120mm wide x 52mm thick. Weighs 784g. Ctx 7554. Fill of pit 7553.
- B.4.9 Lower rotary quern. Millstone Grit. Typical coarse gritty feldspathic gritstone. Fragment with roughly worked flat base, straight vertical pecked edges and sloped straight pecked grinding surface with some rotational wear. Eye is missing. Measures >450mm diameter x 65mm thick. SF 1. Unstratified.
- B.4.10 Possible quern or millstone fragment. Millstone Grit. Two adjoining pieces. One possible tooled face, but no edges or centre. Weighs 1884g + 1689g. Weighs 3573g. Ctx 7504. Pit fill.
- B.4.11 Possible quern or millstone fragment. Millstone Grit, slightly finer grained. Three adjoining fragments of flat stone. Both faces possibly worked and worn but no obvious pecking nor edges or centre. Weighs 1618g. Ctx 7507. Pit fill.
- B.4.12 Possible building slab or millstone fragment. Sandstone. Approximately oblong piece with deep spaced pecking on one face and grooves on what might be the edge, fine grained sandstone, *c.* 3000g. Weighs 3000g. Ctx 7507. Pit fill.
- B.4.13 Structural slab. Sandstone. Medium to coarse grained well sorted micaceous sandstone with occasional small rounded quartz clast. Large block/slab with one flat worn face and two flat edges. Presumably used structurally, although no evidence of tool marks survives. Ctx 7507. Pit fill.

Recommendations for retention and discard

B.4.14 Quern fragments from the following contexts (as itemised in the dataset) should be retained because they have not been subjected to detailed petrographic analysis and there is the potential in future for their provenance to be more closely determined: 7504, 7507 (two fragments), 7500 (SF3), 0 (SF1) and 7554.

B.4.15 The remainder of the stone may be discarded.

B.5 Struck flint

Tom Lawrence

B.5.1 Three pieces of struck flint were recovered from the excavations, two from subsoil (7501) and a small chip from context 7530 (the last recovered from a sieved sample).

B.5.2 One of the pieces from 7501 was an end-and side scraper made on a side trimming flake, struck with a hard hammer and with a linear platform. This tool, which was 39.9mm in length and 22.4mm in breadth, was made on a chocolate flint with elongated inclusions, and had a weathered cortex. The piece showed only light damage.

B.5.3 The other piece from 7501 was a cortical flake with a very diffuse point of percussion, and was probably plough-struck.

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B.5.4 No further information can be obtained from the chip from context 7530.

Discussion

B.5.5 The very small number of struck flints recovered is consistent with the results from the evaluation, which only produced a single struck piece of chert. These presumably represent chance losses by people occasionally crossing the site.

Retention and Discard

B.5.6 The end-and-side scraper should be retained, as should the chert flake from evaluation. The plough-struck flake and chip can be discarded.

B.6 Metal finds

lan R Scott

Introduction

B.6.1 The metal finds, all of which came from the fills of furrows in Area B, comprise eight small pieces of iron, comprising three hobnails and five hobnail stem fragments, and three pieces of lead. The latter comprise two small pieces of melted lead waste and a length of lead rod formed into point at one end and bent. The latter may be a lead pencil.

Catalogue

B.6.2 Context 7552 Lead waste. Two small fragments of melted lead waste. Sf 4

Hobnails. Three hobnails and five hobnail stem fragments. Sample <51>

B.6.3 Context 7730 Lead pencil? Lead rod pointed at one end, now bent. L extend: c 60mm

Discussion

- B.6.4 Although residual in a post-medieval furrow, the hobnails add to our understanding of the Roman occupation in Area B. Hobnails are not unusual on rural Roman settlements, but confirm the presence of Roman footwear on the site. The lead waste from the same context could be of Roman or later date.
- B.6.5 Lead pencils are usually of medieval or post-medieval date, and so may have been lost on site during cultivation long after the end of occupation.

Retention and Discard

B.6.6 None of the metal finds is worthy of retention. All may be discarded.

B.7 Iron Slag

Tim Allen

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B.7.1 Three fragments of slag were recovered from Area A, one weighing 13g from context 4941 in linear boundary 4985, the others from contexts 5084 and 5019 in the penannular enclosure ditch 4827.

B.7.2 All the fragments were smithing slag, and those from 4941 and 5084 both had some clay fused to the slag, suggesting that they were fragments from smithing hearths.

Retention and Discard

B.7.3 The slag may be discarded.

B.8 Post-medieval pottery and clay pipe

John Cotter

B.8.1 A small assemblage of 29 sherds of post-medieval pottery weighing 445g, and a fragment of clay tobacco pipe stem, were recovered from furrows crossing the excavation areas, or as intrusive finds from earlier features intersecting with furrows.

Context	Feature	Туре	Description	Sherd	Weight (g)
No				Count	
4816	4815	Ditch	Handle (MORAN?) C16-18 th	1	7
4816	4815	Ditch	Glazed sherd (MORAN?) C17-18th	1	4
4836	4835	Furrow	Glazed sherd (BLACK) 1600-1750?	1	12
4836	4835	Furrow	Glazed dish (SLRE) 1650-1800	1	9
5009	5010	Furrow	Rim (int glaze) and body sherd (MORAN) C17-18 th	2	90
5091	4804	Furrow	Glazed sherd (STRSB or BLACK) 1700- 1800	1	11
5093	5092	Ditch	(MORAN) sherds, one jug C15-16 th and one C17-18 th	2	13
5096	4709	Furrow		1	25
5097	4710	Furrow	Bowl sherd (BLACK) 1600-1800?	1	62
5098	5099	Furrow	Rimsherd (BLACK) 1600-1800?	1	25
7522	7521	Furrow	Rimsherds (2) (MORAN) C17-18 th + 2 bodysherds (BLACK)	4	38
7691		Posthole	Base sherd (REFW) 1805-1900	1	9
7695		Pit/scoop	Glazed sherd (MORAN) C18-19 th	1	3
7697		Furrow	Rimsherd (TPW) 1840-1900 and sherd (MORAN) C15-16 th	2	12
7699		Furrow	Footring base (REFW) 1805-?1850	1	45
7731	7752	Furrow	Rimsherd (STSL) 1700-1800	1	17
7732	7734	Furrow	Glazed sherd (MORAN) C17-18 th ?	1	14
7733		Furrow	Glazed sherd (BLACK) 1600-1800? + scrap of tile. Also clay pipe stem frag,	2	12
			late 18 th or 19 th century.	1	2
7734		Furrow	Glazed and unglazed sherd (MORAN) C17-18th?	2	15
7735	7699	Furrow	Glazed base (MORAN) C17-18 th ?	1	18
7791	7701?	Subsoil	Rimsherd (PEAR PNTD) 1780-1840	1	4

Table B.6.1 Summary of post-medieval pottery by context (for full description see archive).



APPENDIX C ENVIRONMENTAL REPORTS

C.1 Animal bones

By Martyn Allen

- C.1.1 The excavations from Chellaston produced 29 specimens of animal bone from 15 contexts (Table C.1.1.). The remains were entirely recovered from Area A, predominantly from ditch fills but also from three pit fills. All of the contexts have been dated to the Iron Age. The assemblage was very poorly preserved and many of the specimens had lost the surface of the cortical bone. This is undoubtedly due to the slightly acidic soil conditions which has likely resulted in the loss of more bone material. Many small bone fragments were present and where these were obviously from the same element, they were counted together as single specimens.
- C.1.2 A total of 17 cattle specimens were identified, 10 of which were tooth specimens (dentine survives in acidic soils better than bone). One lower third molar was missing its posterior cusp, which is a fairly infrequent genetic anomaly. Other elements included parts of a mandible, metapodial fragments, pelvis, radius and scapula. No evidence of juveniles was observed in the assemblage. One metacarpal specimen exhibited butchery evidence: the bone had been deliberately broken causing oblique fracture through the shaft and a hole had been bored through the proximal surface (possibly to push the bone marrow from the internal cavity). One horse upper molar was recovered from ditch fill 4887, and a sheep tibia was recovered from ditch fill 4998. The remaining specimens were nearly all from long-bone fragments that could not be identified to species, though most were probably cattle. A single rib fragment most likely from a sheep-sized animal was also recovered.
- C.1.3 The very poor level of preservation and small sample size means that little can be said about the pastoral economy of the site, other than that cattle, horse and sheep were present and were probably locally managed. This is unfortunately typical of this area of the country, where very few suitable faunal assemblages have been recovered from Iron Age or Roman rural settlements.

Context	Feature	Taxon	Element	No.	Comments
	type			frags	
4826	ditch	cattle	mandible	1	five/six fairly large fragments, poorly preserved
4826	ditch	cattle	scapula	1	
4834	ditch	cattle	lower molar	1	
4834	ditch	medium mammal	rib	3	several fragments, all poorly preserved
4867	pit	large mammal	long-bone shaft	1	12 fragments (all modern breaks)
4887	ditch	cattle	lower molar	1	
4887	ditch	horse	molar	1	poorly preserved
4892	pit	cattle	lower 3rd molar	1	missing third cusp

Table C.1.1 Animal bones by context, taxon and element



				1	
4960	ditch	large mammal	long-bone shaft	1	poorly preserved
4968	ditch	cattle	metacarpal	1	oblique fracture through shaft, hole in proximal end – very poorly preserved
4978	ditch	cattle	pelvis	1	very poorly preserved
4978	ditch	large mammal	long-bone shaft	1	very poorly preserved
4998	ditch	cattle	metapodial	4	four shaft fragments
4998	ditch	sheep/goat	tibia	1	poor surface preservation
4998?	ditch	cattle	molar	1	poor preservation (context not secure)
5007	ditch	cattle	upper molar	1	
5007	ditch	large mammal	long-bone shaft	1	possible cattle radius fragment
5019	ditch	cattle	tooth	1	fragment from sieved sample 14
5038	ditch	cattle	upper molar	1	
5060	ditch	cattle	metacarpal	1	small shaft fragment
5060	ditch	cattle	upper molar	1	
5060	ditch	cattle	upper premolar	1	
5069	pit	cattle	radius	1	medial side of proximal end – poorly preserved

Retention and Discard

C.1.4 The animal bones should be retained, as they have potential to provide radiocarbon dates for the Iron Age settlement, and may possibly also retain isotopic information.

C.2 Charred plant remains

By Sharon Cook

Introduction

C.2.1 Thirteen bulk soil samples were taken during the excavations. Five samples were taken from Area A and eight from Area B. The samples were taken primarily for the retrieval of charred plant remains (CPR) and artefacts.

Method

C.2.2 The bulk samples were processed in their entirety using a modified Siraf-type water flotation machine to 250µm (flot) and 500µm mesh (residue). The residue fractions were sorted by eye and all bone and artefacts removed while the flot material was sorted using a low power (x10) binocular microscope to extract cereal grains and chaff, smaller seeds and other quantifiable remains. Identifications were carried out using standard morphological criteria for the cereals (Jacomet 2006) and with reference to the Digital Seed Atlas of the Netherlands (Cappers *et al.* 2006) for identification of wild

plant remains, as well as comparison with modern reference material. Classification and nomenclature of plant material follows Stace (2010).

C.2.3 Quantification of remains is as follows: cereal grains and the seeds of wild plants were only quantified for items of which more than half was present, this means that all cereal and seed counts may be used to reach an MNI (Minimum number of individual seeds). For legumes, chaff and nutshell fragments the count is for all observed fragments, this means these figures are not suitable for calculating MNI.

The assemblages

C.2.4 Table C1 lists the charred taxa identified from each sample.

Area A (Western Area)

- C.2.5 Samples 13 17 originate from Area A of the site, an area containing predominantly Iron Age features. The samples from this area have produced generally small flots with little charred material. Anthracite and small fragments of indeterminate clinkered material are present within all of these flots, together with small quantities of fine modern roots and occasional modern seeds and insects. The charcoal fragments are generally small, and most are heavily encrusted with mineral precipitate, giving them a shiny appearance. The few cereal grains are in poor condition with a clinkered appearance and heavy external encrustation, and seeds of non-cultivated plants are also few and in poor condition. Seeds include oat/brome (*Avena/Bromus* sp.), likely to be either a crop contaminant or to be growing around the periphery of fields and a small number of seeds indicative of damp ground including rushes (*Juncus* sp.), marsh violet (*Viola palustris*), and sedge (Cyperaceae).
- C.2.6 These provide some tentative evidence that drainage was an issue on this site during the Iron Age, as has been suggested elsewhere (van der Veen 1992).

Penannular ditched enclosure and associated features

- C.2.7 Ditch fill 5019 (sample 14) from Iron Age penannular enclosure ditch 4827 contains only small quantities of fragmented and small-sized charred material in poor condition. It is likely that the material was deposited gradually as a combination of lighter windblown material and through other processes such as silting.
- C.2.8 The fill of the recut (5083, sample 17) at the enclosure entrance contains a similar assemblage of charred plant remains. The two samples from this ditch contain the largest assemblages from sampled features within Area A but as with the other material in the area of the site, all seeds, grain and charcoal are externally encrusted and have a shiny metallic appearance.
- C.2.9 Undated posthole 4842 (sample 13) to the east of the entranceway of the enclosure, produced only small quantities of charcoal <2mm in size.
- C.2.10 The small quantities of crop related material within this area indicates that any areas of crop processing and/or consumption are likely to be at a distance from the area of the penannular ditch.

Iron Age field boundaries



C.2.11 Ditch fill 5022 (sample 15) from boundary ditch 4988 near the northern edge of Area A contains only a small amount of charred material, again heavily mineral affected. This is also the case for sample 16 from ditch fill 5063 (boundary ditch 4985 in the centre of Area A). A sample was taken from the lower fill of this ditch during the earlier evaluation of the site (sample 9 – 4082), which contained a single indeterminate cereal grain and a possibly modern seed, as well as small and heavily mineralised charcoal fragments in poor condition. Field boundary ditches are normally poor in charred remains, and the heavily mineralised condition of the material is consistent with the limited evidence from the uncultivated seeds (see above) in suggesting that the area was generally wet.

Area B (Eastern Area)

C.2.12 Samples 51 – 58 come from Area B, containing features that are predominantly Roman in date. The samples from this area have generally produced much larger flots with a greater range of charred material. As with Area A, anthracite and small fragments of indeterminate clinkered material are present within all of these flots together with small quantities of fine modern roots and occasional modern seeds and insects. Some of the charcoal is large enough to be potentially identifiable, but the majority of fragments are again heavily encrusted and often have a metallic shiny appearance as a result of mineral precipitate. The cereal grain is in mixed condition, the majority having a clinkered appearance and heavy external encrustation, although occasional grains have survived well. The seeds of non-cultivated plants are few and are generally in poor condition; they include likely crop contaminants such as oat/brome, vetches, cleavers, docks and mayweed as well as rushes and sedges.

Roman enclosure

C.2.13 The secondary fill of ditch re-cut 7764 (sample 52) in the northern part of the enclosure contained little charred material, mainly from uncultivated plants. The few identified seeds are of species similar to those observed within the Iron Age features although in slightly greater numbers. A single barley grain (*Hordeum* sp.) may indicate the addition of barley as a crop during this period (see also below).

Southern pit complex and hearth

C.2.14 Three pit fills were sampled from the pit complex to the South of Area B: pits 7629 (sample 56), 7671 (sample 57) and 7672 (sample 58). Whilst sample 56 contains little charred material (although the only example of a possibly cultivated legume came from this sample), samples 57 and 58 are richer. Pits 7671 and 7672 were shallow intercutting features whose relationship could not be clearly established. Samples 57 and 58 contain very similar charred assemblages with cereal grain as well as fairly abundant glume bases (*Triticum spelta/dicoccum*), spikelet forks and rachis fragments, including those of barley (*Hordeum* sp.). Although identification was impeded by the poor condition of the remains, the cereal grains which could be further identified include wheat (*Triticum* sp.), barley (*Hordeum* sp.) and two grains from pit 7672 which may be rye (*Secale cereale*). The seeds of wild plants are a combination of common crop contaminants and plants of waste ground and peripheral areas which prefer damp ground.

- C.2.15 The larger amount of material (for this site) is likely to be the result of a dump of waste material, possibly the waste from the processing of a small quantity of harvested crop, which may be an indication of the piecemeal cleaning and processing of grain for domestic purposes and burning of the waste as fuel. Pit 7671 contained the richer assemblage and it is possible that they were both filled with material of the same origin.
- C.2.16 Sample 55 from the fill of pit 7664 comprises mostly charcoal with heavy external encrustation and little other charred material. As this was a large flot, only part of it was scanned, but generally it seems likely that this deposit is a dump from a hearth or other small fire.
- C.2.17 Sample 54, from hearth 7627 to the north of the pit complex also comprises mostly charcoal with heavy external encrustation. The few seeds present are likely to be accidental inclusions.

Pit 7643 in the north-east corner of the interior

- C.2.18 The lower fill of pit 7643 (sample 53) contained abundant cereal grain, though most of this is clinkered and highly fragmented and therefore unidentifiable. There is also chaff, both glume base fragments (*Triticum* sp.) and rachis internode fragments; although highly fragmented these are likely to be barley (*Hordeum* sp.). Large numbers of detached embryos are present, probably from more than one type of cereal, together with coleoptile/radicula fragments. The majority of the embryos do not appear to be sprouting and at least some of the coleoptiles/radicula have been detached from the embryo as a result of pre-sprouting fragmentation rather than as a result of length. However, some of the unidentified grains appear to have collapsed, while others have become extremely fragile, which is likely to be a result of sprouting.
- C.2.19 The majority of the unidentified grain is likely from its general size and overall shape to be wheat or barley with grains of oat or brome (*Avena/Bromus*) also common. No definite identification of barley has been made, but small quantities of wheat, oat and rye are present. The large quantity of oat/brome type seeds makes it tempting to consider oats as a crop in this area. The poor condition and similarity between grains of cultivated oats, wild oats and brome means, however that it is more prudent to conclude that these are crop contaminants.
- C.2.20 Of the non-cultivated plant seeds, the most commonly represented are grass seeds and rushes (*Juncus* sp.). The grass seeds are likely to be either crop contaminants or plants growing at field edges while the rushes are likely to have grown in more peripheral areas, although it is possible that the presence of rush seeds is the result of the use of rushes as roofing or flooring material in a nearby structure. As with the samples from Area A, damp loving plants and common crop contaminants form the majority of the assemblage which suggests the cultivation of heavier soils.
- C.2.21 It would seem likely judging the condition and make up of this assemblage that sample 53 represents the destruction of spoiled grain, with some crop/clearance waste. While grain could have spoiled in storage after transportation from elsewhere, the presence of weed seeds and other waste makes it more likely that the crops were grown locally.

Pits and postholes



- C.2.22 The upper fill of Pit 7550 (sample 51) contained the only charred assemblage comparable in quantity and diversity with that present in sample 53. The cereal grain, while still in poor condition, is less fragmented and slightly better preserved than is the case in other samples and as a result a larger percentage is identifiable to genus if not to species. Wheat, barley and oats are all present as well as oat/brome together with a significant quantity of cereal chaff with in excess of 1000 glume base fragments present as well as a smaller but not inconsiderable quantity of rachis internode fragments which are unfortunately too broken up to identify further.
- C.2.23 The much smaller quantity of embryos and coleoptiles as well as the less fragmented nature of the grain argues for a slightly different origin for this material to that in sample 53. There is far less evidence of possible crop spoiling and together with the considerably larger quantity of chaff and wild plant seeds it would seem a reasonable hypothesis that this is the result of crop processing such as coarse sieving and dehusking with the grains present being those that either became broken during the process or accidentally spilled into the waste. As with the other pit samples on this site the deposit is likely to be a deliberate dump of waste.
- C.2.24 Vivianite staining was observed on many fragments of the charred material in this sample which is an indicator of prolonged waterlogged conditions.

Discussion

- C.2.25 The scant and poorly preserved charred material from Area A perhaps indicates that this area was unsuitable for cereal cultivation during the Iron Age, probably being used as pasture/grazing although it is worth noting that the majority of samples from this area originate in ditch rather than pits while the richer samples from Area B come from pit fills with the nearby ditches being almost devoid of material.
- C.2.26 The samples from Area B contain a greater quantity of charred material including grain and chaff from glume wheat (probably predominantly spelt as the most commonly cultivated cereal in the region in the later Iron Age and Roman periods (Monkton 2006)), barley and probably rye. This pattern is fairly typical for Roman sites locally; the main crops cultivated were wheat (spelt with occasional emmer and bread wheat (T. aetivum type)), and hulled barley (H. vulgare) including six-row. Rye has been found as an occasional crop and wild or cultivated oats possibly as a weed of crop (*ibid*.). The charred seeds from uncultivated plants are again fairly typical and include plants which are commonly found in arable fields including oat/brome, vetches, grasses and various other plants such as cleavers (Galium aparine) and mayweed (Tripleurospermum sp.) which are regularly found within assemblages of this type and date. Stinking mayweed (Anthemis cotula), identified in sample 51 and only identified in the east Midlands region from the Roman period onwards, is considered to be an indicator of agricultural intensification in the Roman period with the cultivation of heavy clay soils (ibid.). The rushes and sedges are probably also indicative of the cultivation of these heavier, damp soils.
- C.2.27 The abundance of cereal chaff particularly in sample 51 is again reminiscent of other Roman sites in the region and are also probably indicative of agricultural intensification. At Carsington in Derbyshire a deposit largely consisting of spelt chaff



C.2.28 The possible presence of rye (*Secale cereale*) grains in small numbers is interesting as this crop is largely associated with the Anglo-Saxon period and is not commonly found on earlier sites, although it has been occasionally recorded from Roman sites in the east Midlands such as Dunston's Clump in Nottinghamshire (Monkton 2006). Other Roman examples from sites further north include finds from York (Williams 1979), Verulamium (Helbaek 1952), Scotch Corner and Walton-le-Dale (Hall and Huntley 2007). It is believed that rye was introduced to Germany during the Roman period (Mills 2006). However, the general consensus is that, when present for this period in Britain, rye represents small groupings of crop contaminants as opposed to being a crop in its own right (Campbell 2016, Senser and Hawkes 1980). The brittle floret of the rye grain makes them particularly prone to casual dispersal, which may also affect their likelihood of appearing within an assemblage.

Conclusions

- C.2.29 The samples taken during both the evaluation and excavation stages provide little evidence for Iron Age farming practices, although small scale cereal cultivation is possible.
- C.2.30 Samples dating from the Roman period included greater quantities of charred remains but probably indicate fairly small-scale arable farming for local consumption. In keeping with other sites in the region there is evidence suggesting the cultivation of heavy clay soils in the Roman period. Again consistent with the regional picture, the primary cereal seems to have been wheat, probably spelt, with barley and possibly rye as secondary crops. A single charred legume from sample 56 may indicate the consumption of peas or beans, but generally pulses are unlikely to become charred, and any food preparation would have taken place in settlement areas, so the cultivation and use of this foodstuff is likely to be under-represented.
- C.2.31 In both the Iron Age and Roman periods cultivated soils are likely to have been damp, as they are at the site today, since many seeds within the assemblages are from plants with a preference for these conditions. Waterlogged conditions locally are also indicated by vivianite staining in sample 51 and by mineral encrustation which affected the material in samples from across both areas.

Recommendations for Retention and Discard

C.2.32 The charred plant flots (including the charcoal) should be retained, both due to the potential for radiocarbon dating of the Iron Age material, and for further identifications of the Roman charcoal remains. Should the settlements prove to extend further south, these remains will also provide useful comparison with any further material recovered from these settlements.



Sample No		13	14	15	16	17	51	52	53	54	55	56	57	58
Context No		4843	5019	5022	5063	5084	7552	7621	7644	7660	7665	7530	7534	7535
Feature		4842	5018	5020	5061	5083	7550	7617	7643	7627	7664	7629	7671	7672
Group			4827	4988	4985			7762						
Area		А	А	А	А	А	В	В	В	В	В	В	В	В
Description		Fill of posthole	Fill of Penannula	Upper fill of Pit	Upper fill of Ditch	Fill of ditch re-cut	Upper fill of Pit	Middle fill of Ditch	Basal fill of Pit	Fill of Hearth	Single fill of Pit	Single fill of Pit	Single fill of Pit	Single fill of Pit
Phase		a/n	Ρ	LBA/EIA	LBA/EIA	Ρ	Roman	Roman	Roman	Roman	Roman	Roman	Roman	Roman
Volume (L)		25	40	10	40	40	40	35	38	8	35	38	34	28
Flot Volume (ml)		2	10	2	10	18	75	5	50	5	200	20	65	50
Flot scanned		100%	100%	100%	100%	100%	100%	100%	100%	100%	50%	100%	100%	100%
Charcoal														
	>4mm		+			+	+			+	+++	+	+++	+++
	2-4mm		++			+++	+++		+++	+++	++++	++	++++	++++
Cereal grain														
Triticum sp.	wheat						30#		24#			2#	9#	
cf Triticum sp.	cf. wheat						7#		8#				7#	3#
Hordeum sp.	barley						5#	1#						
cf Hordeum sp.	cf. barley						9#						3#	1#
Avena sp.	oat						12#		3#					
Avena/Bromus	oat/brome					1#	55#		87#				4#	1#
Secale cereale	rye								4#					
cf Secale cereale	cf. rye								3#					2#
Cerealia	indet cereal		3#	1#		2#	277#	1#	299#				74#	25#

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			<u>.</u> .					· ·	•			•
Chaff												
Triticum dicoccum/spelta	emmer/spelt glume base	3#		2#	>1000 #		309#		6	# 1	12#	27#
Triticum dicoccum/spelta	emmer/spelt spikelet forks				13#		2#			1	.0#	
Cerealia	Indet rachis				386#		106#	2#		1	.7#	7#
Hordeum sp.	barley rachis									1	.5#	2#
Cerealia	detached embryo				24		181				1	
Cerealia	Coleoptiles/radicu la				3		68#					
Avena sp.	oat awns				***							
Nuts/Legumes/etc												
Legume >4mm	pea/bean								1	.#		
Wild Species												
Fumaria officinalis	common fumitory				2							
Fabaceae	pea family				3#							
Vicia/Lathyrus sp. >2 mm	vetch/vetchling/ta re, etc (157)				5#		2#					1#
<i>Vicia/Lathyrus</i> sp. <2 mm	vetch/vetchling/ta re, etc (157)		1#		29#		1#		1	#		2#
Viola palustris	marsh violet	1		1								
Polygonaceae	knotweed family						1#					
Persicaria sp.	knotweed				2	1	2					
<i>cf Persicaria</i> sp.	cf knotweed						5#					
Rumex sp.	docks				27#	7#	2#				6#	1#
Rumex acetosella	sheep's sorrel				4#		2					
Stellaria media	common chickweed			1		6					9#	1
Amaranthaceae	goosefoot family						4#					
Chenopodium sp.	goosefoots				7		9					
Atriplex sp.	oraches						4					
Montia fontana	blinks				2		6				2#	1

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Galium aparine	cleavers (Large seeded)			1#						
Galium aparine	cleavers (Small seeded)			1						
Veronica hederifolia	ivy-leaved speedwell		1	1#	8	6?	5	1	2	
Asteraceae	daisy family			26#		6#				
Anthemis cotula	Stinking mayweed			33#						
Anthemis cf cotula				6#						
Leucanthemum/Tripleurosper mum	Oxeye daisy/mayweed			14#		13#			5#	
Tripleurospermum sp.	mayweed		1#							
Juncus sp.	rushes		1	2		18				
Cyperaceae	sedge family	1							3#	
Isolepsis setaceae	bristle club rush			3					2	
Carex sp.	sedges (2 sided)			2#						
Carex sp.	sedges (3 sided)			3#						
Poaceae	grass seeds (various)			22#		32#		1#	2#	3#
Other										
Indet.	seed/fruit	1#		33#	1#	18#			9#	5#
Raphanus raphanistrum	Wild radish seed 3 + capsules 10#			1 + 5#			1#			

Table C1: Summary of charred plant remains



C.3 Charcoal from Area A

Julia Meen

- C.3.1 A scan of the charred flots from Iron Age features found that only one of the samples, sample 17, contained charcoal of sufficient size or quantity to permit further work. Sample 17 was taken from a fill of ditch [5083], part of an Iron Age penannular enclosure. Charcoal was generally of small size and only fourteen pieces potentially suitable for species identification could be extracted. Each piece was fractured on the transverse, radial and tangential planes and the exposed sections were examined up to x400 magnification using a Brunel Metallurgical SP-400BD microscope. Species identification was carried out on the basis of diagnostic anatomical characteristics and following the keys in Hather (2016) and Schweingruber (1990). Species nomenclature follows Stace (2010).
- C.3.2 Identifications of wood taxa present in sample 17 are shown in Table C.3.1. Due to the small size of the charcoal fragments, identification was often difficult and many of the identifications are provisional, and several pieces could not be identified beyond being diffuse porous or could otherwise be classed only as indeterminate. The charcoal was a mixture of oak with diffuse porous taxa, probably including hazel (Corylus avellana) and Maloideae type (a group of anatomically similar taxa which includes apple, hawthorn, rowan and wild service). With such a small sample size, interpretation must be very limited, but the results do show that the deposit is mixed and does not purely derive from mature oak.

	Sample No.	17
	Context No.	5084
	Cut No.	5083
	Date	Iron Age
Quercus sp.	oak	2
cf Quercus sp.	cf oak	1
cf Corylus avellana L.	cf hazel	4
cf Maloideae	cf hawthorn/rowan/apple type	1
diffuse porous		2
indeterminate		4 (r)
TOTAL		14
r = roundwood		

Table C.3.1: Wood	l charcoal iden	tifications	for sample 17
	chui cour iuch	lijiculions	joi sumpic 17

C.4 Radiocarbon dating potential

By Tim Allen and Rebecca Nicholson

C.4.1 The potential for radiocarbon dating to refine the chronology of the Iron Age activity on the site, and refine ceramic chronology for the region, was considered for the following categories of material: residues on potsherds, animal bones and charred plant remains (including charcoal).



- C.4.2 Residues on pottery were found on sherds in pit 4886 and ditch 7806. Pit 4886 contained only three sherds in total, and no recognisable forms, so the potential for refining the ceramic chronology of the region is low. This feature is cut into other Iron Age features, and with such a small assemblage, we cannot be sure that the pottery is not redeposited from an earlier phase of activity. The group of sherds in ditch 7806 are all from a single vessel (Fig. 8 Vessel 1), and radiocarbon dating would establish the period of use of this vessel, which is described as `possibly Late Iron Age' in the pottery report. As this vessel comes from the east side of Area B, ie remote from the main Iron Age settlement area, however, and would not assist in refining the chronology of the main settlement.
- C.4.3 Only 29 animal bone fragments were found in Area A, and almost all of the contexts from which they came contained only fragments from a single bone, so do not represent clearly contemporary material in the contexts within which tey were found. These bones were also in a poor state of preservation, so whether they would provide adequate collagen for dating is uncertain. If they do, dating is likely to provide date ranges within the period of Iron Age use of Area A, but could not be used to refine the internal chronology of this area.
- C.4.4 Flotation of the charred plant remains and charcoal generally produced small flots, and the material was generally in poor condition and was heavily mineralised. A few cereal grains and a little roundwood were present in the sample from the penannular enclosure ditch, avoiding the problems of dating oak heartwood.
- C.4.5 The available categories of material do not, therefore, offer the potential to provide an internal phasing for the development of the Iron Age activity on Area A. Given the broad dating offered by the ceramic assemblage, radiocarbon dating of material from Area A might provide some absolute dating to which to tie the Iron Age activity, and which could be compared with other Iron Age sites in the region.
- C.4.6 Dating of Vessel 1 might resolve the question of its phasing within the Iron Age, and whether it, and the ditch in which it was found, are later than the activity on Area A.

C.5 Radiocarbon Dating report

Rebecca Nicholson

Introduction

C.5.1 In the light of the assessment of dating potential above, two samples, one of charcoal from the penannular enclosure ditch in Area A, and one a charred food crust from below the rim of a ceramic vessel in Area B, were submitted to the Scottish Universities Environmental Research Centre (SUERC) for radiocarbon dating by Accelerator Mass Spectrometry (AMS), using the methods described in Dunbar *et al* (2016). The laboratory maintains a continuous programs of internal quality control in addition to participation in international inter-comparisons (Scott *et al* 2010). These tests indicate no laboratory offset and demonstrate the validity of the precision quoted.

Results



- C.5.2 The original selection of material from sample 17 (5084) included the shortest-lived wood that could be identified in the sample flot, which was an unidentified charred twig with both bark and pith present. Unfortunately, however, this sample failed to produce a date due to insufficient carbon, so a replacement sample comprising several fragments of hazel (*Corylus*) charcoal was submitted. The sample of charred food crust came from below the rim of vessel 1, recovered from context 7807.
- C.5.3 The resulting date of 2204 ± 24 BP (SUERC 87581, GU52360) and 2083 ± 24 (SUERC 87318, GU52036) are conventional radiocarbon ages (Stuiver and Polach 1977), quoted in accordance with the international standard known as the Trondheim convention (Stuiver and Kra 1986). The measured δ^{13} C values used in the calculation of the results are within the typical range for seeds and wood from terrestrial plants (Bowman 1990, 23). The calibrated dates given in the table below have been calculated using the datasets published by Reimer *et al* (2013) and the computer program OxCal v4.3.2 (Bronk Ramsey 1995; 1998; 2001; 2009; 2017) and is quoted in the form recommended by Mook (1986), with the end points rounded outward to five years as the error is <25 years. The date range has been calculated according to the maximum intercept method (Stuiver and Reimer 1986).

Lab. Number	Sample	Context	Feature Type and location	Material	δ ¹³ C (‰)	Radiocarbon Age (BP)	Calibrated date (at 95.4%)
SUERC- 87318 (GU52063)	Vessel 1	7807	Beneath rim of vessel	Carbonised food crust	-26.8	2083 ± 24	175 – 40 cal. BC
GU52064	17	5084	Fill of pennanular ditch [5083]	charcoal : indet. twig, 2 rings, pith/bark		failed	
SUERC- 87581 (GU52360)	17	5084	Fill of penannular ditch [5083]	Charcoal: <i>Corylus</i> sp.	-26.5	2204 ± 24	365-200 cal. BC



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APPENDIX E SITE SUMMARY DETAILS

Site name:	Land at Boulton Moor east of Chellaston Lane, Derby (Phases 3 & 4)
Site code:	CHE18
Grid Reference	440025 331550
Туре:	Excavation
Date and duration:	19 th March to 11 th May 2018 (8 weeks)
Area of Site	14.5ha of which 1.1ha was excavated

Summary of Results: In Area A a small penannular ditched enclosure and surrounding ditched field system of later Iron Age date were found. Charcoal from the enclosure was dated to 365-200 cal BC. The ditch system was of several phases. A line of three postholes may indicate a fence, but only one posthole was found inside the enclosure, so whether this contained a house is unclear. Only three, scattered deep pits came from Area A, probably due to the high water table. A few animal bones indicate that cattle, sheep and horse were present; charred remains were few, and this was probably not an arable site.

Ditches containing Iron Age pottery, one vessel dated to 175-40 cal BC, occurred on the east side of Area B, and may indicate a further Iron Age focus of activity beyond the eastern limits of the site.

A rectangular enclosure measuring 62m by at least 55m (enclosing an area of 3100m2) was found in Area B, and Roman pottery dating to the later 2nd and the late 2nd to mid 3rd century AD came from the two phases of enclosure ditch. The ditch cut several gullies on the north and east.

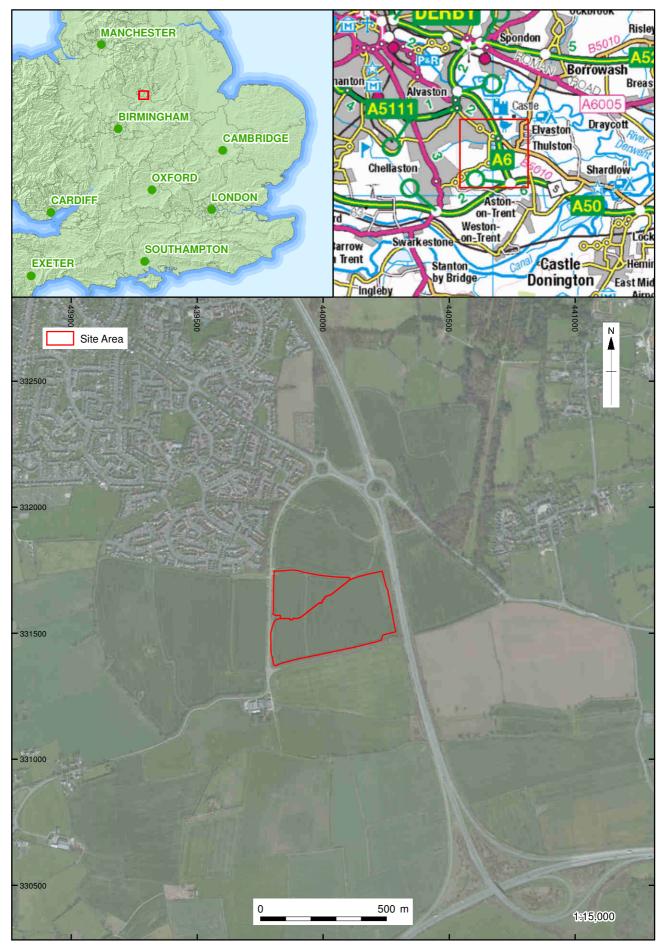
Only the north-east part of the enclosure interior lay within the excavation area. A complex of intercutting shallow pits was found on the south, with a hearth or oven adjacent. The latest pits were dated to the later 3rd century AD. Scattered pits were found on the north and east, together with lengths of gully parallel to the enclosure ditch, one of which formed an L-shape. Further pits lay west of the main complex.

Large sherds of Roman pottery confirm use on site, and indicate domestic occupation. Other than pottery, the main category of find was fragments of querns. Charred plant remains (and charcoal) were richer than those from the Iron Age, and also suggest cereal processing on site. There were no animal bones from the Roman occupation.



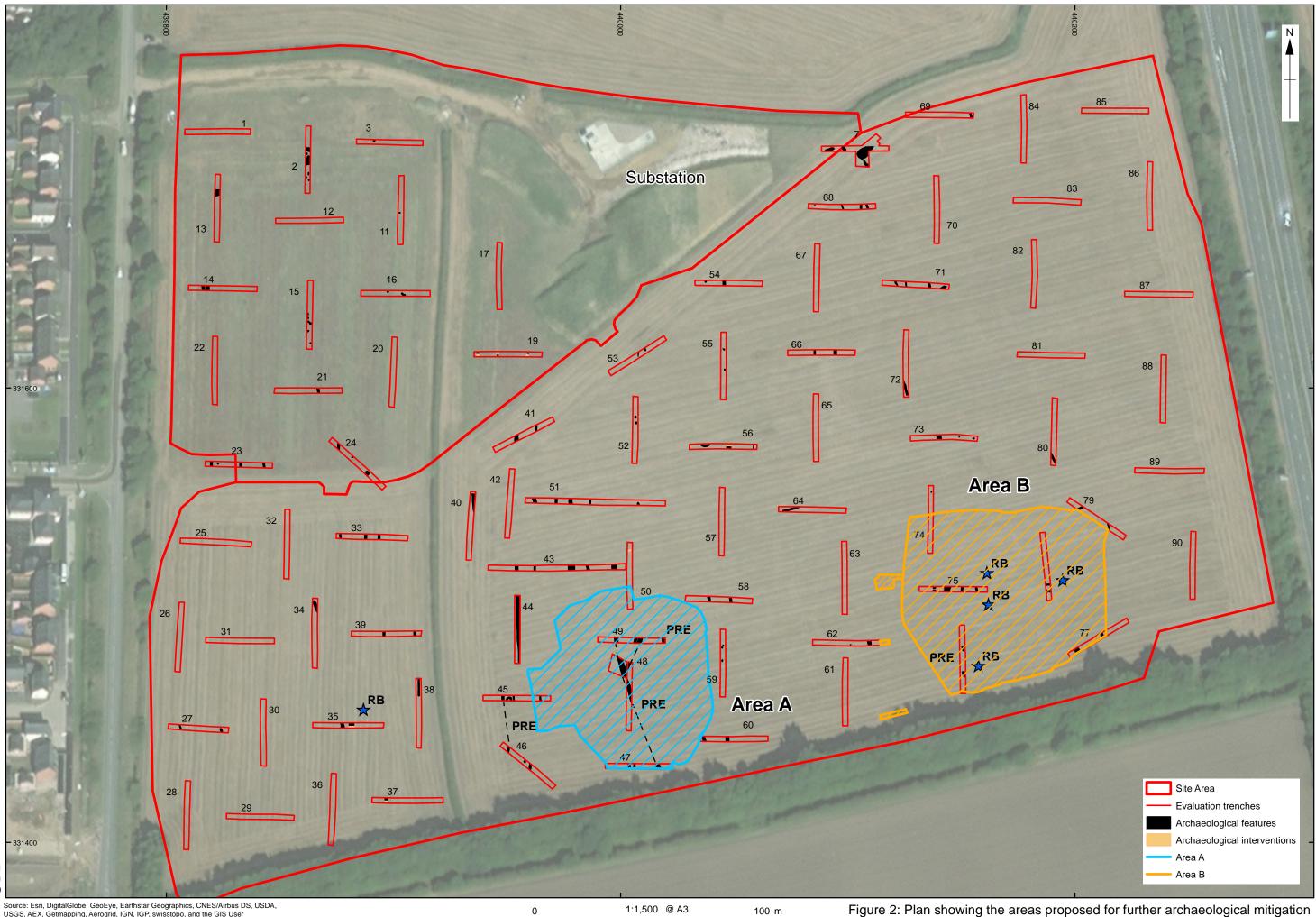
A series of north-south aligned plough furrows crossed both excavation areas, following the orientation of the modern fields, and 18th-19th century finds were recovered from them.

Location of archive: The archive is currently held at OA, Janus House, Osney Mead, Oxford, OX2 OES. Following a mid-project review, the archive, including the prehistoric and Roman pottery, the quernstones, the tegulae with cutaways, the animal bone and the charred plant remains will be deposited with Derby Museum and Art Gallery in due course, under accession number DBYMU: 2017-66.

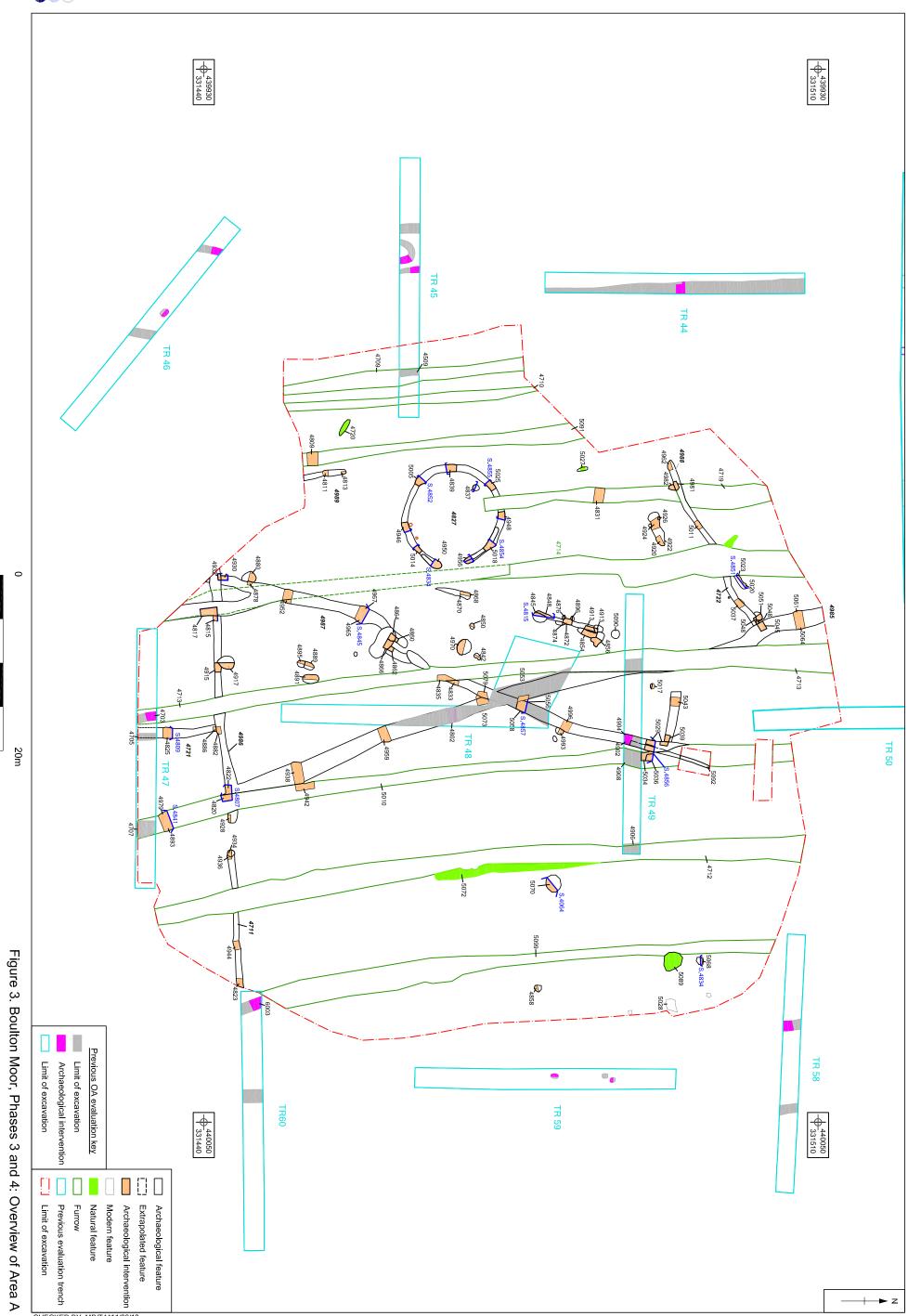


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Figure 1: Site location

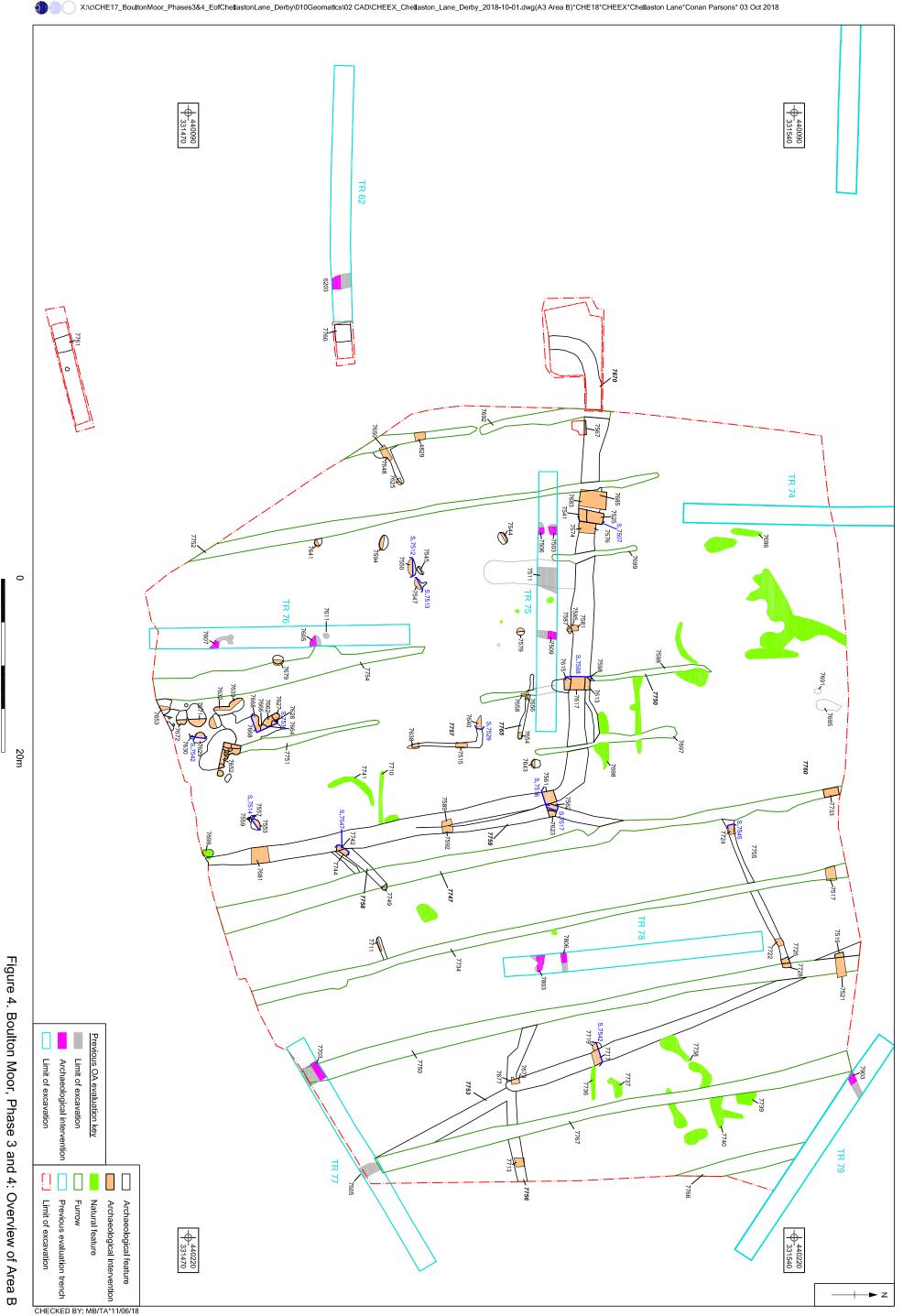


Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User

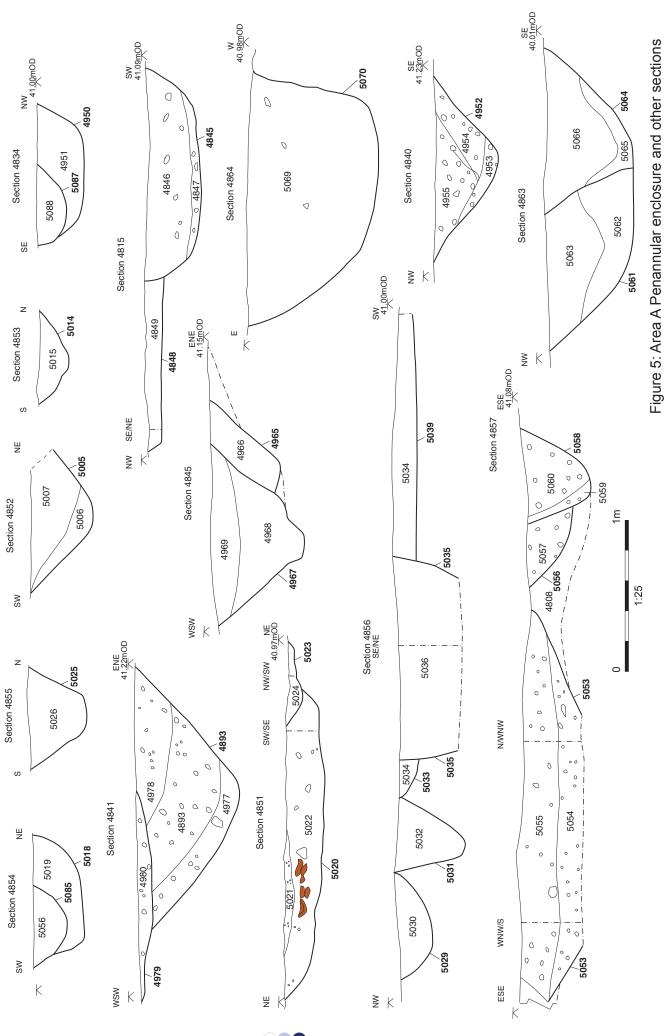


CHECKED BY: MB/TA*11/06/18

Scale at A3 1:400



Scale at A3 1:400



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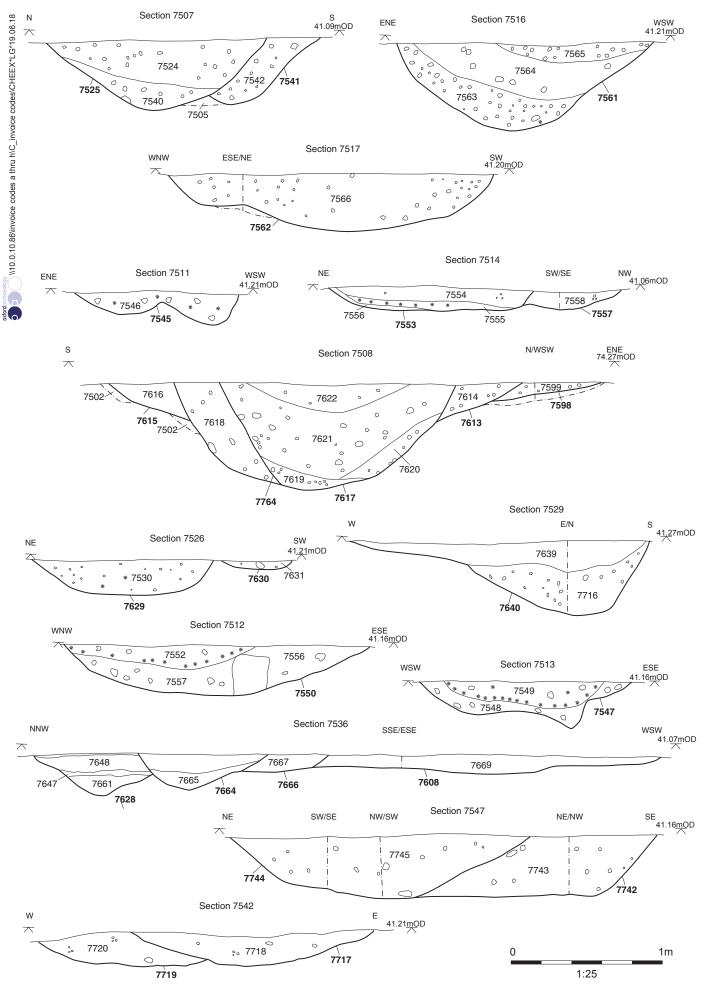


Figure 6: Area A further sections

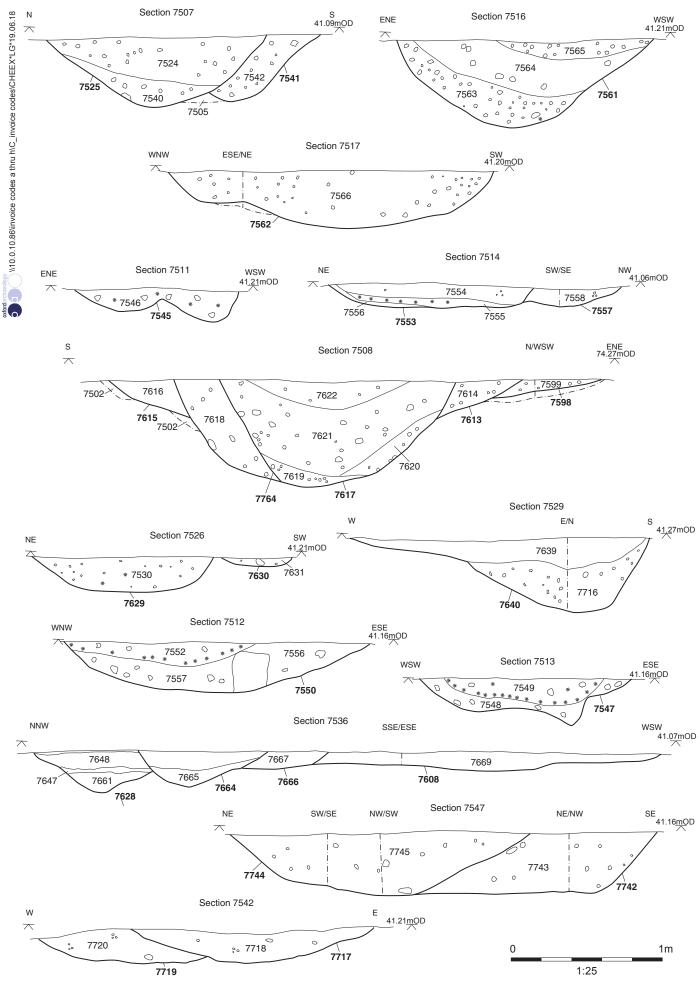


Figure 7: Area B sections

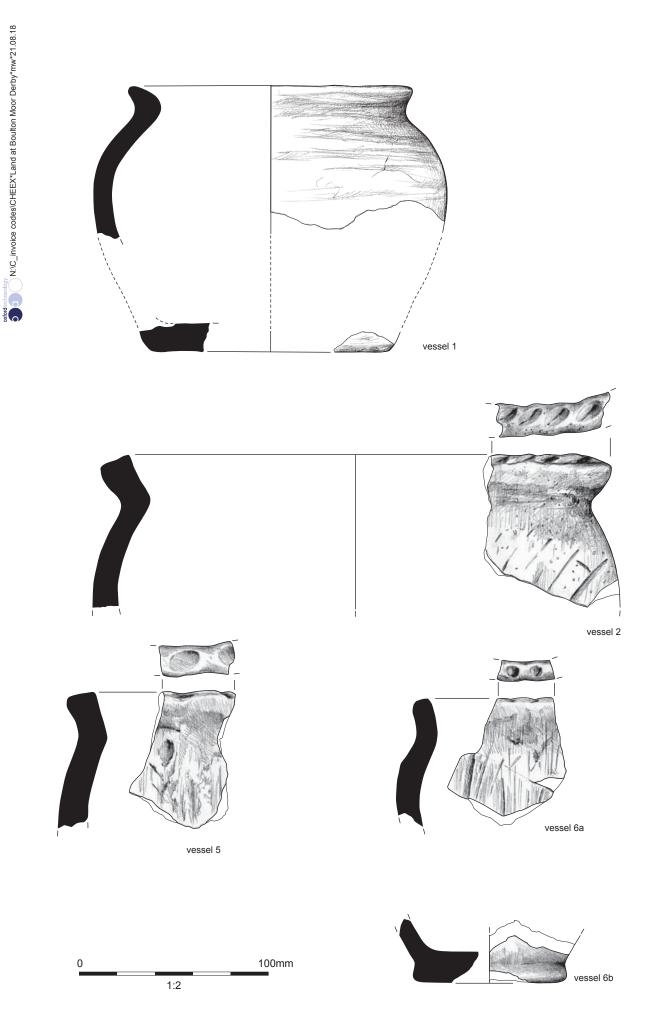


Figure 8: Iron Age pottery



Plate 1: Pre-excavated penannular ditch 4827 from



Plate 2: Penannular ditch 4827 section 4855. Looking west



Plate 3: Penannular ditch 4827 section 4854 showing recut. Looking NW



Plate 4: Penannular ditch 4827 section 4852



Plate 5: Penannular ditch 4827 after excavation Looking west through entrance...



Plate 6: Ditch 4988 section 4851 Looking south





Plate 7: Ditch 4988 section 4851 Looking south showing pottery



Plate 8: Ditch 4985 section 4865. Looking NNW



Plate 9: Ditch 4985 section 4841 Looking NNW



Plate 10: Ditch 4987 section 4857 Looking SW



Plate 11: Ditch 4987 (Interventions 5058 and 5056) Looking SW



Plate 12: Ditch 4987 section 4845 Looking NNE



Plate 13: Ditch 4721 section 4809 Looking N



Plate 14: Junction of Ditches 4986 and 4985 Section 4807 Looking NE



Plate 15: Pit 5070 section 4064 Looking north



Plate 16: Pit 4845 section 4815 Looking SE



Plate 17: Roman Enclosure ditch 7670 section 7507 Looking NW



Plate 18: Roman Enclosure ditch 7670 section 7508 Looking NW



Plate 19: Roman Enclosure ditch 7670 Looking NW



Plate 20: Roman Enclosure Ditch 7670 section 7516 and ditch 7562 Looking S



Plate 21: North-west corner of Roman enclosure ditch 7670 Looking N



Plate 22: Southern limit of Roman enclosure ditch 7670 Looking E



Plate 23: Junction of Roman enclosure ditch 7670 and 7758 section 7547 looking N



Plate 24: Western terminus of 7757 section 7529 Looking N



Plate 25: Hearth 7627/7628 showing laid stone base and in situ burning. Looking E



Plate 26: Detail of Hearth 7627 and rake-out pit 7628. Looking W



Plate 27: Pits 7629 and 7630 section 7526 Looking NE



Plate 28: Pit 7550 section 5712 Looking N









Head Office/Registered Office/ OA South

Janus House Osney Mead Oxford OX20ES

t: +44(0)1865263800 f: +44(0)1865793496 e: info@oxfordarchaeology.com w:http://oxfordarchaeology.com

OA North

Mill 3 MoorLane LancasterLA11QD

t: +44(0)1524 541000 f: +44(0)1524 848606 e: oanorth@oxfordarchaeology.com w:http://oxfordarchaeology.com

OAEast

15 Trafalgar Way Bar Hill Cambridgeshire CB238SQ

t:+44(0)1223 850500 e:oaeast@oxfordarchaeology.com w:http://oxfordarchaeology.com



Director: Gill Hey, BA PhD FSA MCIfA Oxford Archaeology Ltd is a Private Limited Company, N⁰: 1618597 and a Registered Charity, N⁰: 285627