ARCHAEOLOGICAL SERVICES WYAS

Redland's Quarry, Methley
West Yorkshire

Archaeological Excavation

September 2008

Report No. 1845

CLIENT

Redland Aggregates Ltd

Redland's Quarry, Methley
West Yorkshire

Archaeological Excavation

Summary

An archaeological excavation was undertaken at Redlands Quarry site in 1993 in advance of the extension of the quarry. The site is located in an area rich with evidence for later prehistoric and Romano-British activity. The investigations revealed evidence for human activity between the second and fourth centuries AD. The earliest phase of activity comprised two parallel ditches that represented part of a field system or enclosure, which were likely associated with a north-west to south-east ditch identified through geophysical survey. An apparently open ended enclosure was superimposed over one of the earlier ditches in the Romano-British period. It was probably initially used for agricultural activity, however an assemblage of iron objects and slag from the enclosure ditch and internal the pits and post-holes suggest it later was used for iron working activity.

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Report Information

Client:	Redland Aggregates Ltd
Report Type:	Archaeological Excavation
Location:	Redlands Quarry, Methley
County:	West Yorkshire
Grid Reference:	SE 4180 2695
Period(s) of activity represented:	Romano-British and post-medieval
Report Number:	1845
Site Code:	RQM93
Date of fieldwork:	October - November 1993
Date of report:	September 2008
Project Management:	Andy Boucher BSc and Ian Roberts BSc FSA MIFA
Fieldwork supervisor:	Jamie Wright BSc
Report:	Andrea Burgess BSc and Alexandra Grassam MSc based upon an initial draft by Jamie Wright BSc
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1 Introduction

Archaeological Services WYAS (ASWYAS) was commissioned by Redland Aggregates Limited to undertake an archaeological investigation in the area of the proposed quarry extension at Methley, West Yorkshire (Fig. 1). The excavation was carried out between the 4th of October and the 5th of November 1993.

Site Location and Topography

Redlands Quarry was located approximately 2.5km to the east of Methley and 3km north-west of Castleford, centred at NGR SE 4180 2695 (Fig. 1). The excavation area lay on a slight north-south ridge, at a height of approximately 17m AOD. Approximately 200m to the north of the area of investigation the ridge shelved down to the flood plain of the River Aire and the River Calder lies approximately 600m to the south. The confluence of the two rivers lies 800m to the south-east of the site (Fig. 1).

Soils, Geology and Land-use

The drift geology of the study area is the second river terrace gravels and the underlying solid geology is the Middle Coal Measures (BGS 2001). The main soils in the area are classified as being of the Wick 1 association, described as deep well drained coarse loam and sands. Locally, there are pockets of soil of Conwy association, a deep stoneless fine silty and clay variably affected by groundwater (Soil Survey of England and Wales 1980).

At the time of excavation, the land was used for arable farming.

2 Archaeological and Historical Background

The Redlands Quarry site is located near the confluence of the Rivers Aire and Calder, an area rich with archaeological remains dating to the later prehistoric and Romano-British periods. Aerial photography and extensive geophysical surveying has identified a substantial network of field systems and trackways in the vicinity of the site (e.g. Yarwood and Marriott 1990; 1991; Deegan 1999; see Fig. 2). A number of ring ditches, which possibly represent the remains of early prehistoric barrows, have also been identified and worked flint dating from the Mesolithic, Neolithic and Bronze Age has been recovered during fieldwalking in the area (MAP 1996).

Archaeological excavations undertaken at the Boat Lane site, 100m to the north-east, recorded the remains of numerous ditches, enclosures, sub-circular structures and pits dating the late Iron Age (MAP 1996). Excavations at Willow Grove Farm, approximately 750m to the west of the site, in 1988 revealed the remains of a rectilinear field or enclosure system and a curvilinear enclosure, dated to the Iron Age. A series of shallow scoops containing remains associated with metal working were also identified (Yarwood and Marriott 1988).

The area probably formed part of the hinterland to the fort and civilian settlement established in Castleford *c.* AD 80, just beyond the confluence of the Aire and the Calder, approximately

3km to the south-east of the site (Keith and Roberts 2001). Excavations here between 1975 and 1985 identified two military forts, with a smaller structure replacing the earlier one in the 2nd century AD. Although the fort was abandoned in the middle of the 2nd century, the neighbouring civilian settlement continued to be occupied into the 4th century (Abramson, Berg and Fossick 1999).

The previous phase of quarry extension (Phase 1, Part 1) was preceded by a programme of evaluation and excavation by the West Yorkshire Archaeology Service. A series of crop marks, revealed through aerial photography, was further investigated by geophysical survey (Yarwood and Marriott 1990; 1991; see Fig. 2) and excavations around Willow Grove Farm (Yarwood and Marriott 1988; Abramson 1990) and off Boat Lane (Wright 1994) confirmed the existence of later prehistoric and Roman features on the gravel terrace.

The area of the proposed quarry extension (Phase 1, Part 2) comprised *c.*4.6ha of land, within which cropmarks indicated two short lengths of linear ditch. More detailed information was obtained by gradiometer survey in August 1990 (Figs 3 and 4;, Yarwood and Marriott 1991). The geophysical survey identified a series of linear features believed to relate to both pre-Iron Age and Iron Age/Romano-British landscapes. A series of linear features forming probable field boundaries and enclosures were identified in the south-western part of the survey area. These features were not recommended for further investigation. In the north-eastern part of the survey area, a linear feature, an open-ended enclosure and a possible penannular ring ditch were identified, and were selected for further investigation by open area excavation.

3 Aims and Objectives

The aims of the archaeological excavation were to investigate and record the nature, date and extent of the complex of archaeological features at the site (Appendices 1 and 2; Yarwood and Marriott 1991; WYAS 1991).

4 Methodology

The site archive contains all the information gathered during the investigations, and its contents are listed in Appendix 3. Inventories of contexts, artefacts and samples are listed in Appendix 4. The archive is currently held in ASWYAS stores but will be deposited with the Leeds Museum in due course.

The detailed excavation comprised three large trenches covering a total area of *c.*1205m^2 (Fig. 5). The location of the trenches was based upon the results of the geophysical survey (Figs 3 and 4; Appendix 1; Yarwood and Marriott 1991). Trench 1 was intended to investigate a probable open-ended enclosure and any internal features; Trench 2 was intended to investigate a possible penannular ring ditch; and Trench 3 was positioned to investigate the possible terminal of the southern boundary ditch of the open-ended enclosure.

In accordance with the project design (Appendix 2; WYAS 1991) the trenches were stripped of topsoil and subsoil by a mechanical excavator fitted with a toothless ditching bucket, under direct archaeological supervision. Stripping was halted at the first appearance of archaeological deposits. The stripped areas were then cleaned manually, and a pre-excavation plan of the identified features was produced at a scale of 1:20. Discrete features were half-sectioned and segments of ditches were excavated, with sections recorded by hand at a scale of 1:10. West Yorkshire Archaeology Service's pro forma context sheets were completed for all cuts and fills, and features were photographically recorded. Finds were recorded either by context or by small find numbers as appropriate.

Following the cleaning of Trench 3 a linear feature was identified but contrary to the geophysical survey evidence no terminal was present. On the instruction of the West Yorkshire Sites and Monuments Record the trench was extended to the east to ensure that the butt-end had not been missed.

Where appropriate, soil samples were taken for the retrieval of environmental remains. The environmental samples were subjected to a system of flotation through a Siraf-style flotation tank by West Yorkshire Archaeology Service staff. The flot was collected in a 500µm sieve and examined using a binocular microscope. None of the environmental samples contained remains suitable for detailed analysis.

5 Results

Summary

Trench 1 comprised an area of 825m², and revealed a series of features that closely reflect the results of the geophysical survey (Figs 5 to 7). Two phases of Romano-British activity were identified and the artefactual evidence indicates that these features were all mid to late Roman in date. Two features of post-medieval date were also identified, while several features could not be allocated to a phase.

Trench 2 covered an area of 231m², and was positioned to investigate a geophysical anomaly interpreted as a ring-ditch (Fig. 4). No evidence of the ring-ditch was found, but five potential features were identified; linear feature 163, pit 166 and three further discrete features (157, 168 and 170). No stratigraphic relationships could be obtained and these features are unphased (Fig 5 and 12).

Trench 3 was located to investigate the possible terminal of an east-west enclosure ditch defined by the geophysical survey. The trench was broadly L-shaped, with an area of *c.*148m². Four features were revealed; two irregular linear features, 234 and 278, pit 230, and field drain 229 (Figs 5 and 13). These features also remain unphased.

Phase 1

The first phase of activity comprised two parallel ditches in Trench 1, 3m apart, which had not been identified by the geophysical survey (Figs 6 and 7).

Ditch M186 was aligned north-east/south-west across the trench (a length of *c.*30m was exposed), and was 1.5m to 2.5m in width. In the northern area of the trench ditch M186 was cut by curvilinear ditch M143. Four metres south-west of this intersection it was demonstrated that ditch M186 had also been cut by complex M279.

Two segments, each of 1.75m length, were excavated through ditch M186. The average depth of the ditch was 0.45m, although the profile varied somewhat between the segments, and it had been substantially truncated by complex M279 (Fig. 8, S.30 and S.70). The fills of ditch M186 produced only two finds; one sherd of Roman greyware from 183 (the secondary fill of segment 175) and a flint scraper from 243 (the primary fill of segment 241).

Ditch M221 was located *c.*3m to the south-west of, and parallel to, ditch M186. This ditch had been truncated along much of its length by Phase 2 ditch M143, and ditch M221 could not be clearly defined apart from a 2m length at the northern end where the alignment of the later ditch changed. Two segments were excavated, 181 and 271.

At the point of Segment 181 ditch M221 had survived to be 0.55m deep with gently sloping sides, a rounded base and a single fill (Fig. 8, S.42). The extent of the truncation to the northern side of the ditch meant that the original width could not be established from the section, however an estimate of *c.*1.7m was obtained. Ditch segment 271 was unaffected by the later ditch cut, and a width of 1.6m was recorded. The depth was 0.55m, once again with gently sloping sides, a rounded base and a single fill (Fig. 8, S.77). Although it was not established with certainty that ditch segments 181 and 271 are part of the same continuous ditch cut, the similarity in the profiles of 181 and 271 strongly indicate that this is the case. Segment 181 contained a sherd of Roman pottery dated to the second to fourth centuries.

Parallel ditches M221 and M186 have been interpreted as contemporary features and placed together in Phase 1. There is no evidence to refute this phasing and it is clear that both ditches are post-dated by the Phase 2 enclosure. However it should be noted that it remains possible that the ditches were not coexistent and that Phase 1 may therefore comprise two sub-phases.

Phase 2

Phase 2 features were identified in Trench 1 only and comprised ditch M143, and feature groups M279, M282, and M283 (Figs 6 and 7). Feature groups M279, M282 and M283 were located within the enclosure formed by ditch M143 and all contained pottery dating from the late third to fourth centuries AD, along with a number of iron artefacts and evidence for ironworking.

Ditch M143

Ditch M143 had been identified by the geophysical survey as forming the north-west and north-east sides of an apparently open-ended enclosure appended to a north-west to south-east aligned field boundary (Figs 3 to 6). It cut both of the Phase 1 ditches (M221 and M186).

Two segments of ditch M143 were excavated; 159 and 201. Segment 159 was 1.8m wide and 0.75m deep, with four fills (Fig. 9, S.20). It is of note that the uppermost fill (156) was composed of the same soil matrix as the fill below (176), differentiated only by the inclusion of large stones and a prolific amount of pottery and slag within it. The relationship between ditch M143 and Phase 1 ditch M221 was not clear in Segment 201 due to the indistinct interface between the upper fills of the two ditches, however it was established that ditch M143 was *c.*1m deep, *c.*2.1m wide and contained three fills (Fig. 8, S.42).

The uppermost fill of ditch M143 (110=158=202) yielded a comparatively large quantity of finds, comprising 110 sherds of Roman pottery, mostly dating to the third to mid-fourth centuries, 221 pieces of slag, two pieces of oxidised daub, a flint scraper and two flint flakes. A number of iron objects were also retrieved from the upper fill, including a bundle of iron bars and nails, a tang, a knife blade and a possible iron needle. The primary fill (204) of segment 201 contained three pottery bodysherds of a Roman date and one piece of flint waste and the tertiary fill (176) of segment 159 contained a single sherd of Roman pot dated to the mid to late Antonine period (*c.* AD 140-200).

Complex M279

Complex M279 comprised a group of intercutting features enclosed by ditch M143 (Figs 6 and 7) and cutting ditch M186.

The earliest episode of activity in this complex was pit/hollow 247. Pit/hollow 247 was a shallow feature, with a very uneven base and it varied in depth between 0.36m to 0.67m. It was approximately 3.6m wide and it contained a single fill, from which a piece of slag, a flint flake, large water worn cobbles, which are possibly pot boilers, and two sherds of Roman pottery were recovered (Fig. 8, S.70).

An irregular sub-rounded feature (161/248) of *c.*5m diameter cut pit/hollow 247 and segment 241 of ditch M186 (Fig. 8, S.70). Excavation revealed 161/248 to be a shallow scoop or hollow, which was a maximum of 0.1m in depth. The fill (162) included a small discrete area of burnt material with charcoal inclusions (lens 270). Context 162 contained 25 sherds of Roman pottery dated to the second to mid-fourth centuries, seven pieces of iron nail, an iron rove, an iron strip, a quernstone fragment, and an intrusive post-medieval potsherd and a fragment of clay pipe. Lens 270 contained three sherds of Roman pottery, four iron nails, and some slag fragments.

The final episode in this sequence of activity comprised four discrete features (250, 255, 267 and 269) which cut the fill of pit/hollow 161/248. Gully 255 was orientated north-east to

south-west, and was 3.75m long, 1.1m wide at the surface and 0.7m wide at its base, with a depth of 0.3m (Fig. 9, S.75). It produced three third to fourth-century Roman pottery sherds, an iron hobnail, two iron nails, and a microlith. The north of the gully was poorly defined in plan, however its south-west end was defined by two intercutting post-holes (267 and 269). The stratigraphic relationship between the two post-holes and the gully could not be established (Fig. 9, S.76). A further post-hole (250) was located *c.*2m to the south-east of the gully, and contained a distinctive clay fill.

These features may represent episodic industrial activity. Ironworking is suggested by the presence of charcoal, iron and slag in several of the fills. Large quantities of slag and iron were also found in the fills of contemporaneous ditch M143, located only 0.4m north of this putative working area.

Group M282

Group M282 comprised post-holes 147, 149, 184, 208, 210, and 223, and a possible beamslot 146. This fairly densely clustered group of features lay against the western edge of the unphased ditch M132 (see below) and it is perhaps significant as to their contemporaneity that none of these features was intercutting. Beamslot 146 measured 1.88m in length and 0.5m wide with a depth of 0.05m. It was orientated east-west and a post-pad was recorded at its east end (Fig. 9, S.45). Post-hole 184 lay 0.05m beyond the west end of 146, and measured 0.35m in diameter and 0.25m deep (Fig. 9, S.28). The five other post-holes in this group (147, 149, 208, 210 and 223) measured 0.42m to 0.5m in diameter, and between 0.1m and 0.35m in depth (Fig. 9, S. 25, S.26, S.43, S.46and S.49). These were located close to beamslot 146 but did not form any clearly identifiable pattern. Two post-holes (147 and 149) contained packing stones.

Five of the seven post-holes produced artefacts. A single Roman potsherd was recovered from each of 146, 147, 149 and 223; as a group these indicated a third to fourth century date. Post-hole 184 contained three Roman sherds of the same date and post-hole 149 also contained an iron hobnail.

Group M283

Group M283 comprised six pits (121, 133, 134, 139, 144 and 145), two post-holes (122 and 136), and a potential beamslot (123/138). These features lay in the southern part of the site, and formed a broadly spaced north-east to south-west linear grouping, located between ditch M186 and trackway M132. The pits varied both in shape and size. The largest was sub-circular pit 144, which measured 2.5m by 2.2m, and 0.5m deep (Fig. 10, S.21); and the smallest was 133, a sub-rectangular feature which measured 1.43m by 0.47m, and 0.22m deep (Fig. 10, S.58). The pits were all well defined, and each contained a single fill, except for 121 which contained two fills. The fills of 134 and 144 were distinctive in that they contained patches of clay.

The possible beamslot 123/138 was located adjacent to the east side of pit F139, but the relationship between these features could not be determined. The feature was orientated east-west and measured 1.9m in length, 0.4m in width and was 0.04m deep (Fig. 10, S.37). Adjacent to this feature were post-holes 136 and 122, located to the east of the slot. Post-hole 136 was small (0.29m by 0.15m) and contained stone packing, this feature was not excavated. Post-hole 122 was larger, with a diameter of 0.31m and a depth of 0.21m, and the fill contained charcoal inclusions.

Four of the features in this group contained artefacts, which suggests a late Roman date for these features. The possible beamslot 123/138 contained a single fill from which eight Roman potsherds dated to the second to fourth centuries and a fragment of an iron joiners dog were recovered. The upper fill of pit 121 contained 55 pottery sherds, dating to the late third to fourth centuries, and a piece of an iron T-clamp and rove. Pit 139 contained two pottery sherds dated to the early to mid-fourth century, a late third century Roman coin, a flint flake, and a piece of slag. Pit 144 contained sooted daub chip and a flint flake.

Phase 3

Pit 135, in Trench 1, dated to the post-medieval period. It was located in the south of Trench 1, between ditches M221 and M186 (Figs 4 or 5). This feature was sub-rectangular in plan, orientated east to west, and measured 2.66m in length and 0.86m in width. The charcoal-rich fill contained post-medieval glass, pottery and clay pipe fragments. Excavation ceased at a depth of 0.5m.

Unphased Features

Trench 1: Ditch M132, Group M280, Group M281 and isolated features

Ditch M132 ran from north-east to south-west across the southern corner of Trench 1 (Figs 6 and 7). It was a broad, shallow feature with a flat base and a slight ridge in the centre. It measured approximately 2.5m wide and was between 0.12m and 0.2m deep (Fig. 11, S.15). At the southern end, M132 appeared in plan to comprise two separate parallel linear features spaced approximately 1m apart.

A single sherd of Roman pottery was found in segment 172 (173) while segment F273 contained nine Roman potsherds. Four sherds of pottery dated to the second to fourth centuries were also recovered from the surface of ditch M132 (109), along with an iron nail.

Group M280 comprised post-holes 124, 126, 189, 193, 196, 197, 199, 205, 224, 226 and 264. They were located immediately west of enclosure ditch M143. The post-holes varied in diameter between 0.3m and 0.9m, and were between 0.05m and 0.24m in depth (Fig. 11, S.31-34, S.36, S.38 and S.39). Four of the post-holes contained packing stones (196, 197,

126 and 124). They did not appear to represent a structure. The base of post-hole 196 showed signs of burning, and the fill of 189 contained charcoal inclusions. The post-holes did not appear to represent a structure, although it is noteworthy that three post-holes were paired with an adjacent post-hole; these pairs being 193 with 224, 264 with 189, and 126 and 226. No pottery or flint was found in any of these features, but post-hole 264 contained a fragment of quernstone.

A second group of unphased post-holes (M281) was located in the south-west corner of Trench 1 (151, 153, 155 and 261). The post-holes were 0.3m to 0.55m in diameter and 0.2m to 0.26m deep (Fig. 11, S.69 and S.73). Three contained packing stones (151, 153 and 155) and post-hole 151 cut the north-west side of post-hole 261. A single Roman potsherd was recovered from post-holes 151 and 261.

The post-holes groups M280 and M281 are similar morphologically to M282, which has been assigned to Phase 2.

Pit 142 and two intersecting linear features 129 and 131 were also unphased. Sub-rectangular pit 142 was located at the eastern edge of excavation, adjacent to trackway M132. It was 1.5m in length, 0.8m wide and was only 0.1m deep, with an irregular profile (Fig. 11, S.57). The linear features (129 and 131) were located in the south corner of the trench. These features were not investigated.

Trench 2

Trench 2 contained a linear feature (163), a pit (166) and three irregular features (157, 168 and 170), none of which could be dated (Fig. 12). The circular anomaly identified during the geophysical survey (Fig. 4) was not observed within the trench.

Linear feature 163 was aligned north-west to south-east and 10m of it was exposed in the trench. It was irregular in plan and it varied in width between 0.7m and 1.10m. Feature 163 was interpreted as a furrow or ploughscar and, in agreement with the SMR, was not excavated. Linear feature 163 ran parallel to the linear anomaly identified in this area during the geophysical survey (see Figs 2 and 3).

Pit 166 was sub-circular in plan, and measured 1.75m long, 0.90m wide, and 0.25m deep. The edges of the cut were well defined on the eastern and northern edges only (Fig. 12, S.44). No finds were recovered.

Feature 157 was located in the northern area of Trench 2. It was an oblong feature with a rounded east end, orientated north-west to south-east, and measuring 1.65m by 0.90m. Feature 168 was oval and measured 2.25m by 1.16m, and was also orientated north-west to south-east. Feature 170 was an irregular oval shaped feature, lying on the same orientation as 157 and 168 and measuring 1.18m by 0.75m. The fills of features 157, 168 and 170 were

believed to be of modern origin, possibly resulting from ploughing, and so were not excavated.

Trench 3

Trench 3 contained three features (230, 234 and 278; Fig. 13). By agreement with the SMR, only the intersection between features 234 and 278 was excavated. Feature 234 was orientated north-west to south-east and measured between 2.7m and 0.5m wide. Three fills were recorded but the maximum recorded depth of this feature was only 0.18m. The upper fill of 234 contained a flint core.

Feature 278 ran from east to west to the centre of the trench where it met feature 234. Like feature 234 it was irregular in plan, with a width of between 1.5m and 3m. The depth of this feature was only 0.11m.

The relationship between 234 and 278 could not be determined as the fills could not be differentiated (Fig. 13, S.63). The irregular outline in plan of 278 suggests that it is not a furrow, and it appears to be morphologically very similar to 234, with similar upper fills and very shallow profiles. Feature 234 runs on a similar alignment to the linear geophysical anomaly identified during the geophysical survey (see Figs 2 and 3) and it may, therefore, represent the south-west and south-east sides of the enclosure revealed in Trench 1.

Pit 230 was only partially visible, extending under the northern trench section, with an east/west diameter of 1.5m. Although unexcavated, this feature was provisionally interpreted as a pit within the enclosure.

6 Artefact Record

Introduction

The assemblages of pottery, metal work, slag, coins, stone and flint have all been analysed and the reports are reproduced below. The metalwork was reported on in 1997, while the pottery, worked stone and slag reports date to 1998. The coins and flint were examined in 2008.

The excavations also produced small quantities of daub, clay pipe, medieval pottery and glass. These finds were not considered to be of significance and have not been analysed.

Roman Pottery by Dr J. Evans, with a contribution by B. Dickinson

The assemblage consists of 265 Romano-British pottery sherds (weighing 3.533 kg), comprising 231 sherds from 23 stratified contexts and 34 sherds from unstratified contexts (see Appendix 5). The average sherd weight from the group is 13.2g and the average percentage of rim is 11.4%. Some 10.2% of the sherds are sooted and 27.2% are burnt, however, much of the material is eroded and an accurate assessment of surface condition cannot be made. The assemblage also includes one medieval sherd and seven post-medieval

sherds (mainly from unstratified contexts), plus one fragment of tile and three fragments of daub.

A small amount of the ceramic assemblage provides evidence for the use of pottery on the site during the first or early second century. The early Roman assemblage comprises principally the sherd of Ver region mortarium, although the oxidised sherds, the cream ware flagon base and the grog tempered hand-made sherd probably also relate to this. The two sherds of Black-burnished ware (BB1) suggest very little pottery use here from the Hadrianic period (AD 120-140) until the end of the third century. The vast bulk of the collection would seem most likely to date to the early fourth century with Dales ware, South Yorkshire grey ware, and East Yorkshire calcite gritted ware all probably of this date and the calcite gritted ware certainly suggesting occupation continuing to *c.* AD 330-50. As with most of the rural Romano-British sites in West Yorkshire there is no clear evidence of occupation in the second half of the fourth century (Evans unpublished).

Table 1 shows the functional analysis of the assemblage; which is typical of a northern rural site (Evans 1993) with a high proportion of jars and low tableware levels. The level of fine wares on the site is also low, 3.0% by count, 2.8% by weight, as might be expected on a rural site.

Table 1. Functional analysis of pottery (by minimum numbers of rims)

Jars	**Bowls**	**Dishes**	**Mortaria**	**Constricted neck jars**	
69.5%	17.4%	0%	8.7%	4.3%	n=23
84.8%	11.6%	0%	class present	3.4%	

The most common fabric in the assemblage is South Yorkshire grey ware, followed by Dales ware, which reflects the fourth-century date of most of the material. The high proportions of these two fabrics is inkeeping with that recorded on other similar sites (e.g. Swillington Brick Works). Unusually, however, unlike Swillington Brick Works, East Yorkshire calcite gritted ware is also common in the Redlands Quarry assemblage. This fabric seems to become more common on sites in the north-east during the first half of the fourth century (Evans 1985), and although its presence in the Redlands Quarry assemblage may be an erratic feature of this site, it may also indicate that it was receiving pottery later into the first half of the fourth century compared to Swillington Brick Works. The fabric R03 (sandy grey ware with a dark grey core, orange-brown margins and black surfaces with common moderate sand temper) appears to be important by sherd count, but it probably represented by only one or two well fragmented vessels.

The Oxfordshire colour-coated ware dish is an unusual feature on such a site, although there is a thin scattering of such vessels in the north.

Metalwork by Dr H.E.M Cool

A total of 36 pieces of iron were recovered during the excavations at Redlands Quarry site. The objects were recovered from nine stratified contexts, and only one object (a nail) was unstratified. All of the ironwork could be Romano-British in date but the objects cannot be closely dated within this period.

The apparently complete or virtually complete nails with standard flat heads, found as isolated finds, range in length from 80mm to 38mm with an average length of *c.*45mm. They are thus of the ideal length for use with timber cladding and similar purposes (Manning 1985a: 291). The possible beamslot 123/138 (group M283) produced part of a joiners dog which would have been used to join two pieces of timber (Manning 1985b: 131) and the object from nearby pit 121 is a T-shaped clamp with an anchor-shaped head. This could be a structural fitting, though it has been suggested that they might have been used in wagon building (Manning 1985b: 132). The rove from hollow 161 (group M279) may have come from another clamp or from a holdfast.

An interesting group of iron bars and nails was found in the upper fill of ditch M143 (Plate 5). When found they were corroded together as if they had been tied into a bundle with their long axes parallel. If the detached nails from the same context are included, at least 11 nails appear to have been associated in this find (Plate 6). Four of these appear complete and can be measured. They range in length from 65mm to 100mm (mean *c.*85mm), and the shank fragments that can now be recognised also appear to have come from long nails. The nails in the bundle are thus larger than the nails found on these sites as isolated finds and may have been specially selected. The bundle could have been part of a blacksmith's store of iron waiting to be forged into useful items. The bars would have been ideal for this and even the nails are substantial enough to make welding together a worthwhile chore.

How it entered the archaeological record is of some interest. When complete, the bundle would have measured at least 260mm long with a cross section centrally of at least 55mm by 70mm. It consisted of a substantial body of iron; not something to be discarded lightly or, one might think, easily overlooked and casually lost. The possibility that it may have been deliberately deposited/abandoned should be considered. A growing body of evidence suggests that what has been thought of in Romano-British contexts as utilitarian rubbish disposal or hoarding to safeguard items, may perhaps have had a ritual purpose at its core (see for example Poulton and Scott 1993; Clarke and Jones 1996). Certainly in the context of the West Yorkshire rural Romano-British sites where metalwork in general is very sparse, the abandonment of so much iron in the bundle is most unusual and appears almost profligate.

Other non-structural items were recovered from this site. Two individual hobnails from shoes were found (in post-hole 149, group M282, and in gully 255, group M279). Two items possibly associated with leatherworking were found in ditch M143 (segment 159). One may be part of a substantial needle of the type used to sew both coarse cloth and leather (Plate 7; Manning 1985b, 36). The other is part of a knife, conservation work revealed small patches

of mineralised organic remains on the tang which appear to be wood, the position of the remains and the direction of the grain are consistent with this being a handle (O'Connor 1997).

Slag by Dr J.G. McDonnell, P.I. Maclean and Dr. P.D Budd

A total of 6.3 kg of slag was recovered from the Redlands Quarry site. The slags were visually examined, but no analysis was undertaken, hence classification is based solely on morphology. In general, slags and residues are divided into two broad groups; diagnostic and non-diagnostic slags. The diagnostic slags can be attributed to a particular industrial process and comprise the ironworking slags (i.e. smelting or smithing slags) or the non-ferrous residues (e.g. crucibles).

Table 2. Diagnostic slags identified in the assemblage

Iron Smithing Slags	Description	Total
Smithing Slag (SSL)	Randomly shaped pieces of fayalitic slag generated by the smithing process	4.815kg
Hammerscale (HS)	It occurs in two forms, flake and spheroidal. The former is believed to derived from scaling (oxidation) of the surface of the iron being worked, and would be removed from the metal during hammering and deliberately knocked from the surface prior to insertion in the fire. Spheroidal scale is formed during fire welding. Slag is trapped between the two pieces of iron being welded and is ejected during hammering of the weld which form droplets that freeze in flight.	detected in residue in bags - not weighed

The non-diagnostic residues cannot be directly ascribed to a process, but may be identified with a process by association with diagnostic residues, e.g. clay furnace lining with smelting slag.

Table 3. Non-diagnostic slags and residues identified in the assemblage

Slag	Description	Total
Furnace/Hearth Lining (FL/HL)	The clay lining of an industrial hearth, furnace or kiln which has been subjected to high temperature oxidising conditions. It is characterised by a vitrified surface inner face. In some cases the tuyère mouth may be preserved. Furnace Lining is considered non-diagnostic, since it cannot be ascribed to a process on grounds other than archaeological association, i.e. there is as yet no diagnostic feature which will distinguish vitrified lining from a smithing hearth from that from an iron smelting furnace.	1215g
Fuel Ash Slag (FAS)	A very high silica slag (usually >90% silica) formed under high temperature oxidising conditions by the reaction of siliceous material and fuel ash. It is a non-diagnostic slag which can be formed in any hearth or fire at sufficiently high temperatures.	49g
Other Material	Coal objects	153g
	Iron objects	69g

The smithing slag is distributed throughout contexts 106 (Pit 139 group M283), 110 and 158 (Ditch M143) and 162 (working hollow 161, group M279), with by far the greatest concentration in 158. Context 158 also showing evidence of plate hammerscale, believed to be indicative of ironworking (metal hammering). The presence of hammerscale is significant as it indicates that the full assemblage of smithing debris was dumped rather than a preferential selection of larger lumps, e.g. from a slag heap for use as hardcore.

Quantities of furnace/hearth lining occur in 158, 162 and 256 (gully 255, group M279), again with the majority from 158. A possible tuyère fragment has also been identified from 158, possessing a reconstructed diameter of approximately 40mm.

Small amounts of fuel ash slag (FAS) are recorded in 158 (Ditch M143) and 277 (cleaning layer from Trench 2). There is no accepted interpretation of FAS, save that it does not normally derive from ironworking, but may be occasionally associated with copper-alloy working (although in this case no substantiating evidence of this latter possibility has been found). The recovery of other small deposits of FAS at a number of Iron Age sites (e.g. Beckford, see McDonnell 1986) has been linked with aspects of high temperature burning. These may have been oxidising fires associated with non-metallurgical (e.g. organic) processes and could form accidentally with the burning of thatch or straw.

The iron objects from 162 and 246 (pit 247 group M279) are amorphous and in the case of 162 highly fragmented. Further study by X-radiography would probably not yield any further information.

A sample from the coal fragments recovered from 162 was selected for analysis, employing standard coal petrological methods involving the examination of polished blocks using a reflected light microscope and oil immersion objectives. The sample was seen to consist of fissured fusinite and vitrinite material, suggesting that it is a coal which has undergone oxidation or thermal alteration (Stach 1975). A detailed petrological study, to examine a range of samples and carry out reflectance measurements for the determination of coal rank, could provide further information on the type of coal present in this deposit, and the process by which it has been transformed.

Occasional fragments of coal associated with metalworking debris have been found on late Romano-British iron smithing sites (e.g. Ribchester, Lancashire and Southwark, Courage Brewery), however recovered quantities have always been limited, with charcoal being the predominant fuel source. Dearne and Branigan (1995) discuss the use of coal in ironworking and give fewer than ten sites on which coal was confirmed as present in smithing slags. In this case no charcoal was detected in the metal working debris supplied for analysis and coal totalled 152.5g from a single context (162).

With respect to spatial distribution across the site, the majority of metalworking debris considered (SSL, FL/HL) has been recovered from Phase 2 ditch M143. This context also produced several iron objects including a piece of iron tang, knife blade, possible needle and two nails, along with 103 sherds of Roman pottery. Small amounts of slag (fifteen pieces totalling just over 100g) are scattered to the south of the ditch in Group M279. Only one small piece of fuel ash slag has been identified from Trench 2 (277), representing one of the few finds from this area.

The recovery of 36 pieces of iron, including a series of nails and iron bars from the ditch M143 have been interpreted as a possible blacksmith's store of iron for subsequent forging. The smithing slag lumps and notably the plate hammerscale found within the ditch would lend support to this evidence for smithing activities.

The presence of smithing slag constitutes the archaeological evidence for smithing. The quantity is small and therefore indicates local small-scale smithing. There is no evidence for iron smelting or other metalworking activity.

The recovered quantity of coal appears to have been subject to thermal alteration (heating) and may indicate its use in the smithing process, but this cannot be firmly concluded.

Table 4. Composition of the slag assemblage by context

Context	Feature	Group	SSL	FL/HL	FAS	Other	Comments
106	Pit 139	M283	5.5g				
110	Ditch 143	M143	42g				
158	Ditch 159	M143	4745.4g	901.4g	43g		Hammerscale
158	Ditch 159	M143		164.5g			Tuyère?
158	Ditch 159	M143				152.5g	Coal
162	Pit/hollow 161	M279				59.6g	Fe frags
162	Pit/hollow 161	M279	21.8g	147.5g			
246	Hollow 247	M279				9.5g	Fe obj
256	Gully 255	M279		1.5g			
277	Trench 2 cleaning layer	u/s			6.0g		
Total			**4814.7g**	**1214.9g**	**49.0g**	**221.6g**	

Coins by C. Barclay

Two coins were recovered from the site, only one from a stratified context. These items were conserved prior to being examined. A full description of the coins is presented in Appendix 6.

A complete, copper alloy coin was recovered from an unstratified deposit (cleaning layer 113), close to the intersection of ditches M186 and M143 (Plate 9). It was minted between AD117 and AD 138, during the rule of Hadrian. It is extremely worn, however, which suggests that it is a third century loss.

The second coin was found in fill 106 of pit F139 (feature group M283; Plate 10). It is incomplete and is also made of copper alloy, but the remains of silver plating were also identified. This coin has been identified as a silver-plated Antoninianus of Tetricus I, dating to AD 270-273. The obverse shows a radiate bust facing right with the lettering [IMP C T]ETRICV[S PF AVG]. The coin is only slightly worn, which probably indicates that it is a near-contemporary loss.

Stone by D. Heslop

The assemblage consists of two pieces of worked stone; one fragment of beehive quern, and one fragment of rotary quern. The querns are both heavily worn.

Both were recovered from stratified contexts in Trench 1; the fill of working hollow 161 in group M279, and the fill of post-hole 264 in group M280. The former is part of a large, flat rotary quern of Romano-British type; with a diameter of *c.*540mm and thickness 38mm, suggesting that the quern was heavily worn if not worn out. The quern fragment used as post-packing in post-hole 264 is a fragment of a beehive upper stone of a collared type, with the collar having been knocked off (Plate 11), a feature noted on other collared querns in the region. The diameter is 300mm and the height is 134mm. In the extant quarter there is one handle, which was probably redundant, the grinding face having worn through to the conical socket. The manufacture is of high quality and the stone is a coarse-grained Millstone grit type; a very good sandstone for querning.

Flint by M. Lightfoot

Of the 20 worked flints recovered during the excavation, six are Mesolithic, nine are likely to date to the Neolithic or Bronze Age, with the remainder being undiagnostic. All of the stratified flints were recovered from contexts also yielding Romano-British pottery, so are presumably residual. The remaining unstratified flints were recovered from the subsoil and from general cleaning layer (113).

Although much of the flint was from poor quality riverine pebbles, possibly from the nearby River Aire, and showed varying degrees of weathering, some were from good quality primary sources, especially a core (112) and a flint blade (113), which showed no signs of weathering and were probably deposited on or near to the site (Plates 12 and 13). All the remaining flints showed varying degrees of weathering, indicating that they were exposed to the surface for sometime prior to deposition.

Discussion

Human activity in the earlier prehistoric period was concentrated along river valleys and estuaries and flints attributed to the Mesolithic period, particularly easily transported microliths, commonly appear in naturally occurring alluvial deposits, often in association with naturally derived river-rolled flint pebbles. During the later Neolithic and Early Bronze Age, activity expanded onto the fertile soils of the surrounding river terraces, and after episodes of woodland clearance, permanent and semi-permanent settlements were established. Flints from this period may indicate such activity on or close to the site, though any archaeological features from this period may have been completely destroyed by later activity.

Table 5: Summary of the flint assemblage by context

Context	Feature	Group	Description	Comments/date
106	Pit 139	M283	Grey, no cortex burin	Mesolithic(?)
110	Ditch 143	M143	light grey broken flake	Neolithic/Bronze Age
			Small recorticated	Utilised flake?
			Small brown chip, light brown cortex along one edge	Debitage
112	Subsoil	-	Dark grey , no cortex remaining,	Core of Neolithic or Early Bronze Age date
			Banded light and dark grey , brownish cortex covering c. 30% dorsal surface	Secondary decortication flake, utilised
113	Cleaning Layer		Grey	Neolithic/Bronze Age broken blade
			dirty grey microburin	Mesolithic ?
			Grey	Bronze Age side scraper
			Bluish-grey flake 25% brown cortex covering dorsal surface	Utilised flake
			Dark grey blade cf. 112 core	Neolithic/Bronze Age flint blade
			Dark grey end scraper	Mesolithic
114	Pit 144	M283	Light grey recorticated microlith	Mesolithic
164	Ditch 163	-	Brown, side scraper	Neolithic/Bronze Age
204	Ditch 201	M143	Greenish brown, broken backed bladelet?	Mesolithic(?)
211	Trench 3 Cleaning Layer	-	Greenish brown side-scraper	Neo/BA – cleaning layer
228	Ditch 234	-	Dark grey, small core	Non-diagnostic
243	Ditch 241	M186	Yellowish grey	Neolithic/Bronze Age side scraper
256	Gully 255	M279	White recorticated	Mesolithic microlith
277	Trench 2 Cleaning Layer		Dark grey, discoidal	Bronze Age unifacial thumbnail-scraper

7 Discussion

The excavation identified Romano-British activity concentrated in the area of Trench 1. In comparison, few features and artefacts were recovered from Trenches 2 and 3.

The first phase of activity is represented by a double-ditched feature in Trench 1. Pottery evidence from the primary fill of the western ditch indicates that the ditches were in use sometime between the second and fourth centuries. Stratigraphically, it is clear that they had fallen out of use and become infilled by the advent of the third to fourth century industrial activity at the site, thus probably dating them to the second to third century phase at the latest. The function of the double-ditched feature is not clear. It may be the remains of a trackway, although the space between the two ditches was rather narrow, measuring between 1.9m and 3.25m. An alternative is that a bank was constructed between the two ditches, although no evidence for one was visible in the excavated sections. It is also possible that the ditches were not contemporary and may perhaps represent the slightly changing position of a boundary.

Enclosure ditch M143 was first identified by the geophysical survey which showed it to be appended to a *c.*100m long north-west to south-east orientated ditch (Fig. 2, Yarwood and Marriott 1991). The continued use of existing field alignments from Phase 1 into Phase 2 is demonstrated by the superimposition of this enclosure directly over the earlier double-ditched feature. Although this area was clearly used for metal working at some point, the absence of evidence for industrial activity in the lower fills of the enclosure ditch indicate that it was originally created for another purpose. Enclosures attached to field boundaries are common feature in the Iron Age and Romano British period and are often interpreted as being associated with livestock or agrarian activity, particularly when there is an absence of finds (e.g. Burgess 2001; O'Neill 2001) and it is possible that enclosure ditch M143 was originally associated with agricultural activity.

Industrial Activity

The evidence for iron smithing within this enclosure is clear; the pits and hollows contained smithing slag and iron objects, and the upper fills of the enclosure ditch adjacent to this working area contained large quantities of similar material, along with hammerscale. The ironworking pits and hollows were located in the corner of the enclosure, with similar activity apparently occurring near the pits and post-holes to the south. The post-holes may be indicative of some small structural element to the ironworking. A shallow linear feature (M132) adjacent to the pits and post-holes may belong in this phase of activity on the evidence of the early fourth-century pottery found in the fill.

A number of iron tools were found in these features. Of particular interest is the bundle of iron bars and nails - a blacksmith's store - which was recovered from the enclosure ditch adjacent to the industrial complex. The same ditch contained a knife and a needle which are thought to be leatherworking tools. The pits to the south of the working complex contained a

number of structural fittings; a joiners dog and a T-clamp and rove, and another rove was recovered from the complex itself.

The bundle of iron objects is unlikely to represent a casual loss. Groups or hoards of iron objects are recorded on Romano-British sites throughout the north of England, such as the one excavated at Ferrybridge which included two T-clamps, two hold fasts, three annular iron rings, an L-shaped staple and a circular cutting disc (Duncan 2005, 157). The practice of depositing hoards of iron objects appears in northern England in the mid first century AD, probably in response to the advancing Roman army, and continues through to the mid-2nd century (Manning 1972). The pottery from the enclosure ditch clearly dates this to the later Romano-British period however, and as all of the contexts containing iron objects also produced slag, it is more likely that the tools and fittings may have been in use, produced, repaired or were intended to be reworked at the site. An alternative explanation is that the deposition of iron objects represents some form of ritual or votive offering (e.g. Fulford 2001), perhaps associated with the ironworking activity.

The pottery evidence indicates that all of the identified ironworking activity took place in the third to fourth centuries, with no evidence for use of the site from the second half of the fourth century onwards. The duration of this activity is not clear but it is possible that this type of small-scale working was fairly temporary and was set up at a time of particular need. The absence of hearths may suggest that the centre of the ironworking area was outside of the area of investigation. The geophysical survey identified two strong magnetic anomalies located to the north of the enclosure ditch outside of the area of excavation measuring approximately 2.5m diameter, which maybe the remains of furnaces (Yarwood and Marriott 1991).

Small-scale industrial activity, such as that identified at Redlands Quarry, is of particular importance because of the paucity of ironworking sites of this date in West Yorkshire. Shallow scoops containing remains associated with metal working were identified during the excavations to the east of Willow Grove Farm (Yarwood and Marriott 1988), approximately 750m to the south-west of the Redlands Quarry site, and evidence for iron smithing has been identified at Field Lane, South Elmsall (McNaught 1998), although both are probably earlier in date compared to Redlands Quarry. There is also evidence that metal working was undertaken along side other industrial activities at Swillington Brickworks and at Apple Tree Close, Pontefract, a D-shaped enclosure established adjacent to an earlier rectangular enclosure was used for a range of activities, including iron smithing and crop processing (O'Neill 2001, 278). Evidence for small-scale smithing in the form of hammer scale was found at Menagerie Wood, near Worksop (Garton *et. al.* 1988). The location of iron mines of this period are unknown but the ore occurs naturally in the Millstone Grit and Coal Measures of the county (Faull 1981, 149).

The Site in the Landscape

The orientation of enclosure ditch M143 and in particular the adjacent north-west to south-east ditch corresponds well to the regime of enclosure recorded at Boat Lane, approximately 100m to the north-east of the site (MAP 1996; see Fig. 2). The excavations here recorded evidence for occupation in the later Iron Age, including the remains of at least one roundhouse, several multi-phased enclosures and pits. Little diagnostic evidence was recovered from the site, although archaeomagnetic dating of a fired pit produced a date range of 100 cal. BC to cal. AD 50, and it appears that occupation in the area ceased in the early Roman period (MAP 1996).

The dating evidence suggests, therefore, that the enclosure at Redlands Quarry and the remains at the Boat Lane site are not contemporary, with the former being established after the latter had gone out of use. The layout and orientation of the Redlands Quarry site does indicate, however, the north-west south-east linear feature either continued in use or a prominent marker in the landscape after the Boat Lane site was abandoned.

8 Conclusions

The excavations at the Redlands Quarry site have revealed evidence for an enclosure that was probably appended to a ditched field boundary which continued to north-west, towards an area used for Late Iron Age occupation (MAP 1996). The enclosure was probably initially used for agricultural activity, although by the late third or early fourth century, it formed the focus of small-scale iron working activity. The evidence for iron smithing is of considerable significance given the paucity of evidence for Romano-British industrial activity in West Yorkshire, and it possibly represents a temporary site where repairs were made to existing items and some reworking took place.

Appendix 1: Evaluation Report (Yarwood and Marriott 1991)

Appendix 2: Archaeological Specification (WYAS 1991)

Appendix 3: Inventory of primary archive

File/Box No	Description	Quantity
File no.1	Context register sheets	4
	Context cards (101-175)	75
File no. 2	Context register sheets	4
	Context cards (176-250)	75
File no. 3	Context register sheets	2
	Context cards (250-283)	33
File no. 4	Draft report by JW (incomplete 4/1/94)	1
	Pre-ex notes	3
	Risk assessment	1
	Context description database printout	26
	Stratigraphic database printout	7
	Matrices by JW	8
	Levels	1
	Plans	4
	Environmental sample register	1
	Sample record sheets	22
	Small finds register	6
	Finds log	10
	Discard list (hand-written)	3
	Finds notes	6
	Monochrome prints	2
	Monochrome contacts	8 films
	Colour transparencies	4 films
	Drawing register	9
	Drawings (sheet nos. 33-55)	23
	Reprographs of plans	23
File no. 5	Site diary	1
File no. 6	Levels book	1
	Plans and sections (sheet nos. 1-29, 56-59)	34

Appendix 4: Concordance of contexts

Context	Trench	Group	Description	Artefacts and environmental samples
101	1	M283	Fill of 121	Pot (55); Iron (1)
102	1	M283	Fill of 133	
103	1	M283	Fill of 134	
104	1	-	Fill of 135	
105	1	M283	Fill of 122	
106	1	M283	Fill of 139	SF 103 Pot (2); Slag (1); SF 106 Coin (1); Flint (1)
107	1	M283	Fill of 123	Pot (8)
108	1	M283	Fill of 136	
109	1	M132	Overall fill of 132	SF 37, 38, 43, 44 and 45 Pot (5); SF 81 Iron (1)
110	1	M143	Overall fill of 143	SF 36, 39, 79 and 80 Pot (5); Slag (4); SF 86 and 87 Flint (3); Glass (1)
111	1	-	Topsoil	
112	1	-	Subsoil	SF 83 Pot (1); SF 73 and 82 Flint (2)
113	1	-	Cleaning layer	SF 3, 5, 9, 10 to 14, 16 to, 20, 25, 26, 29, 32 Pot (33); SF 7 Iron (1); SF 40 Coin (1); SF 1, 21, 22, 24, 27, 28, 30, 31, 33, 35, 67, 69, 78 and 88 (18); SF 8 Tile (1)
114	1	M283	Fill of 144	Flint (1); Daub (1)
115	1	M283	Fill of 145	
116	1	M282	Fill of 146	SF 42 Pot (1)
117	1	M282	Fill of 147	Pot (1)
118	1-3	-	Natural	
119	1	M282	Fill of 149	Pot (1); Iron (1)
120	1-3	-	Natural	
121	1	M283	Pit	
122	1	M283	Post-hole	
123	1	M283	Beamslot	
124	1	M280	Post-hole	
125	1	M280	Fill of 124	
126	1	M280	Post-hole	
127	1	M280	Fill of 126	
128	1	-	Fill of 129	
129	1	-	?Linear	
130	1	-	Fill of 131	
131	1	-	?Linear	
132	1	M132	Ditch group no	
133	1	M283	Pit	

Context	Trench	Group	Description	Artefacts and environmental samples
134	1	M283	Pit	
135	1	-	Pit	
136	1	M283	Post-hole	
137	1	M283	Fill of 138	SF 89 Iron (1)
138	1	M283	Same as 123	
139	1	M283	Pit	
140	1	M280	Fill of 196	
141	1	-	Fill of 142	
142	1	-	Pit	
143	1	M143	Ditch group no	
144	1	M283	Pit	
145	1	M283	Pit	
146	1	M282	Beamslot	
147	1	M282	Post-hole	
148	1-3	-	Natural	
149	1	M282	Post-hole	
150	1	M281	Fill of 151	Pot (1)
151	1	M281	Post-hole	
152	1	M281	Fill of 153	
153	1	M281	Post-hole	
154	1	M281	Fill of 155	
155	1	M281	Post-hole	
156	2	-	Fill of 157	
157	2		Pit/irregular feature	
158	1	M143	Fill of 159	Pot (1); Iron (4); Slag (270); Daub (2)
159	1	M143	Ditch	
160	1	M143	Fill of 159 (lens)	
161	1	M279	Pit/hollow	
162	1	M279	Fill of 161	SF 53, 54, 57, 59, 60, 63 to 65 and 70 Pot (25); Iron (9); Slag (3); Worked stone (1); SF 48 Flint (2); Clay Pipe (1)
163	2	-	Ditch	
164	2	-	Fill of 163	SF 49 and 50 Flint (2)
165	2	-	Topsoil	
166	2	-	Pit	
167	2	-	Fill of 166	
168	2	-	Pit	
169	2	-	Fill of 168	

Context	Trench	Group	Description	Artefacts and environmental samples
170	2	-	Pit	
171	2	-	Fill of 170	
172	1	M132	Ditch	
173	1	M132	Fill of 172	Pot (1)
174	2	-	Subsoil	
175	1	M186	Ditch	
176	1	M143	Fill of 159	Pot (1)
177	1	M143	Fill of 159	
180	1	M143	Fill of 159	
181	1	M221	Ditch	
182	1	M221	Fill of 181	Pot (1)
183	1	M186	Fill of 175	Pot (1)
184	1	M282	Post-hole	
185	1	M282	Fill of 184	Pot (3)
186	1	M186	Ditch group no	
187	1	M283	Fill of 188	
188	1	M283	Postpipe of 122	
189	1	M280	Post-hole	
190	1	M280	Fill of 189	
191	1	M279	Hollow, same as 247	
192	1	M279	Fill of 191, same as 246	Flint (1)
193	1	M280	Post-hole	
194	1	M280	Fill of 193	
195	1	M186	Overall fill of 186	
196	1	M280	Post-hole	
197	1	M280	Post-hole	
198	1	M280	Fill of 197	
199	1	M280	Post-hole	
200	1	M280	Fill of 199	
201	1	M143	Ditch	
202	1	M143	Fill of 201	Pot (2)
203	1-3	-	Natural	
204	1	M143	Fill of 201	Pot (3); Flint (1)
205	1	M280	Post-hole	
206	1	M280	Fill of 205	
207	1	M282	Fill of 208	
208	1	M282	Post-hole	
209	1	M282	Fill of 210	

Context	Trench	Group	Description	Artefacts and environmental samples
210	1	M282	Post-hole	
211	3	-	Cleaning layer	Pot SF 75 and 77 (2); SF 76 and 84 Flint (2)
212	1	M143	Ditch, same as 218	
213	1	M143	Fill of 212, same as 233	Flint (1)
214	1	-	Group no same as M280	
215	1	M143	Fill of 201	
216	1	M132	Ditch	
217	1	M132	Fill of 216	
218	1	M143	Ditch	
219	-	-	Natural	
220	-	-	Natural	
221	1	M221	Ditch group no	
222	1	M282	Fill of 223	Pot (1)
223	1	M282	Post-hole	
224	1	M280	Post-hole	
225	1	M280	Fill of 224	
226	1	M280	Post-hole	
227	1	M280	Fill of 226	
228	3	-	Fill of 234	SF 85 Flint (1)
229	3	-	Field drain	
230	3	-	Pit	
231	3	-	Fill of 230	
232	3	-	Fill of 278	
233	1	M143	Fill of 218	
234	3	-	Ditch	
235	-	-	Natural	
236	-	-	Natural	
237	3	-	Subsoil	
238	3	-	Natural	
239	-	-	Natural	
240	1	M283	Fill of 121	
241	1	M186	Ditch	
242	1	M186	Fill of 241	Pot (2)
243	1	M186	Fill of 241	Flint (1)
244	3	-	Fill of 234	
245	3	-	Fill of 234	
246	1	M279	Fill of 247	Slag (1)
247	1	M279	Hollow	

Context	Trench	Group	Description	Artefacts and environmental samples
248	1	M279	Same as 161	
249	1	M279	Fill of 248	Pot (1)
250	1	M279	Post-hole	
251	1	M279	Fill of 250	
252	1	M186	Fill of 175	
253	-	-	Natural	
254	-	-	Natural	
255	1	M279	Gully	
256	1	M279	Fill of 255	Pot (2); Iron (3); Flint (1)
257	1	M279	Fill of 258, same as 246	
258	1	M279	Hollow, same as 247	
259	1	M279	Fill of 260, same as 246	
260	1	M279	Hollow, same as 247	
261	1	M281	Post-hole	
262	1	M281	Fill of 261	Pot (1)
263	1	M221	Overall fill of 221	
264	1	M280	Post-hole	
265	1	M280	Fill of 264	SF 72 Worked stone (1)
266	1	M279	Fill of 267	
267	1	M279	Post-hole	
268	1	M279	Fill of 269	
269	1	M279	Post-hole	
270	1	M281	Fill of 261	Pot (3); Iron (4)
271	1	M221	Ditch	
272	1	M221	Fill of 221	
273	1	M132	Ditch	
274	1	M132	Fill of 273	Pot SF 1, 105 to 107 (8)
275	-	-	Natural	
276	-	-	Natural	
277	2	-	Cleaning layer	Slag (2); SF 46 Flint (1)
278	3	-	Ditch	
279	1	M279	Working complex group no	
280	1	M280	Post-hole group no	
281	1	M281	Post-hole group no	
282	1	M282	Post-hole group no	
283	1	M283	Pit group no	

Appendix 5: Pottery Catalogue

Roman fabric descriptions

Black-Burnished wares

B01 BB1 - See Williams (1977), most is probably from Dorset.

Fine-wares

F01 Oxfordshire colour-coated ware - See Young (1977)

Mortaria

M10 Verulamium region mortaria - A white mortarium fabric with abundant sub-angular translucent sand temper c0.3mm, very occasional red-brown ironstone c0.2mm.

Gritted wares

G10 Dales ware - See Loughlin (1977).

G20 East Yorkshire calcite gritted ware; a hand-made generally black fabric; abundant calcite tempering c0.5-5mm and some brown-black ironstone inclusions up to 5mm.

Oxidised wares

O01 Methley - 'Moorhouse diam.' 26/81 86. An oxidised fabric, sometimes with a blue-grey core, and orange margins and surfaces, with some-common sand temper c0.2-0.3mm and some-common red-brown ironstone inclusions c0.3-1mm, and occasional/some rounded white non-calcareous inclusions c0.1-0.4mm.

O20 Oxid RQM 158 An oxidised fabric which is a pale buff-orange colour and of 'soapy' texture, with common rounded orange grog inclusions c0.3-2mm and some rounded white grog c0.3-2mm.

O21 Oxid RQM 204 A buff-yellow oxidised fabric with common moderate sand temper c0.3mm and some rounded brown grog c1mm and occasional red-brown ironstone c1-2mm.

Iron Age tradition hand-made wares

P01 A hand-made Iron Age tradition fabric with a grey core and orange-brown margins and surfaces with common sand temper c0.3mm and occasional brown and grey sub-rounded ?quartzite c3-4mm.

Grey-wares

R01 South Yorkshire grey-ware - See Buckland *et al* (1980).

R02 Grey Possibly a BB2 related fabric with a grey core and dark grey margins and surfaces with abundant fine sand temper c0.2mm. wt 11g

R03 Grey A sandy grey ware jar bodysherd with applied handle stub. The fabric has a dark grey core, orange-brown margins and black surfaces with common moderate sand temper c0.3mm. wt 11g

R07 Grey RQM 150 A 'clean' grey ware with orange margins and grey surfaces with a little fine sand c0.1mm.

R11 Crambeck grey ware - See Evans (1989).

Catalogue

The pottery catalogue provides a description of the pottery by context. Those marked with * are illustrated (see Fig. 14).

No. Context Description

1. 101 A bodysherd and three bead rimmed bowl rimsherds in eroded Oxfordshire colour-coated ware (Fabric F01), c.f. Young 1977, type C45, AD 270-400+. diam. 23cms, RE 11%, wt 32g.

2. 101 A sandy grey ware jar bodysherd with applied handle stub (Fabric R03). wt 11g.

3. 101 Around ten sandy grey ware bodysherds, exterior burnished (Fabric R03). wt 23g.

4. 101 Thirteen sandy grey ware jar chips in Fabric R03. wt 6g

5. 101 Three bodysherds in a sandy grey ware with horizontal burnished line decoration on exterior (Fabric R03). wt 7g.

6. 101 A jar bodysherd in sandy grey ware with eroded surfaces and a horizontal groove on the exterior (Fabric R03). wt 40g.

7. 101 Around 22 sandy grey ware bodysherds, exterior undecorated (Fabric R03). wt 57g.

8. 101 A sandy grey ware bodysherd, exterior decorated with vertical burnished line (Fabric R03). wt 5g

9. 106 A calcite gritted ware bodysherd, exterior sooted (Fabric G20). wt 2g

10.* 106 SF103 A calcite gritted ware S-bend or proto Huntcliff type jar rim fragment (Fabric G20), rim sooted, early-mid 4th century. diam.c16cms, RE 5%, wt 5g.

11. 107 Six Dalesware bodysherds (Fabric G10), exterior burnt brown. 3rd-4th century. wt 27g

12.* 107 A Dalesware Dales type rim (Fabric G10), exterior burnt brown. 3rd-4th century. diam.c19cms, RE 8%, wt 14g.

13.* 107 A sandy grey ware beaded and flanged bowl rim with eroded surfaces, probably a South Yorkshire product (Fabric R01). Later 3rd-4th century. diam. 19cms, RE 11%, wt 23g.

14. 109 SF43 A flange rimmed wide-mouthed jar rimsherd, internally beaded, in South Yorkshire grey ware, surfaces eroded (Fabric R01). Cf Buckland and Dolby 1980, class Hc-d, 2nd-4th century. diam.c35cms, RE 5%, wt 25g.

15. 109 SF38 A sandy grey ware jar/wide-mouthed jar bodysherd, surfaces undecorated, possibly South Yorkshire (Fabric R01). wt 17g.

16. 109 SF45 A sandy grey ware bodysherd, very heavily burnt orange, possibly South Yorkshire (Fabric R01). wt 7g.

17. 109 SF37 A sandy grey ware bodysherd, horizontal burnished line of exterior, possibly South Yorkshire (Fabric R01). wt 13g

18. 109 SF44 An abraded sandy grey ware bodysherd, burnt orange on one side, possibly South Yorkshire (Fabric R01). wt 2g.

19.* 110 An everted rimmed jar rim (Fabric R03). diam. 17cms, RE 7%, wt 13g.

20. 110 SF36 A sandy grey ware bodysherd, exterior burnished (Fabric R03). wt 1g.

21. 110 SF39 A sandy grey ware bodysherd with very eroded surfaces, possibly South Yorkshire (Fabric R01). wt 9g.

22. 110 SF80 An oxidised jar bodysherd, surfaces eroded (Fabric O01). wt 27g.

23. 110 SF79 An abraded fragment of a hammerhead mortarium rim in Mancetter-Hartshill fabric (Fabric M12). Not illustrable. diam.?, wt 8g.

24. 112 SF83 A white gritty ware medieval bodysherd. wt 9g.

25. 113 A sandy grey ware jar simple base with very eroded surfaces, exterior burnt brown, possibly South Yorkshire ware (Fabric R01). diam. 9cms, BE 12%, wt 33g.

26. 113 A sandy grey ware bodysherd, abraded, probably South Yorkshire (Fabric R01). wt 33g.

27. 113 A ?constricted-necked jar rimsherd with burnished, undercut rim (Fabric R01). Cf Buckland and Dolby 1980, class Gb, 2nd-4th century. Not illustrable. diam. 14cms, RE 10%, wt 7g.

28. 113 SF16 Two very eroded jar/wide-mouthed jar lower wall sherds in a sandy grey ware with orange margins, possibly South Yorkshire (Fabric R01). wt 86g.

29. 113 SF17 A BB1 bodysherd (Fabric B01). Hadrianic or later. wt 1g.

30. 113 A Dalesware bodysherd, 3rd-4th century (Fabric G10). wt 2g.

31. 113 A modern/post-medieval glazed chip. wt 1g.

32. 113 Two sandy grey ware dish/bowl base sherds, interior and exterior burnished, probably South Yorkshire (Fabric R01). wt 52g.

33. 113 Two joining, undecorated, South Yorkshire grey ware jar bodysherds (Fabric R01). wt 29g.

34. 113 Three abraded jar/wide-mouthed jar sandy grey ware bodysherds, possibly South Yorkshire (Fabric R01). wt 33g.

35.* 113 A horizontal, everted rimmed wide-mouthed jar rimsherd, slightly undercut, rim burnished, surfaces eroded (Fabric R01?). diam. 36cms, RE 6%, wt 28g.

36. 113 SF13 An eroded sandy grey ware jar bodysherd, exterior burnished and sooted (Fabric R01?). wt 11g.

37. 113 SF32 A jar/wide-mouthed jar simple base, exterior undecorated, possibly South Yorkshire (Fabric R01). diam. 13cms, BE 11%, wt 55g.

38. 113 A grey ware jar bodysherd, exterior burnished, possibly South Yorkshire (Fabric R01). wt 17g.

39. 113 A grey ware dish/bowl bodysherd with eroded surface. Possibly a BB2 related fabric (Fabric R02). wt 11g.

40. 113 SF9 An abraded sandy grey ware bodysherd, possibly South Yorkshire (Fabric R01). wt 4g.

41. 113 SF3 An abraded grey sandy jar bodysherd, possibly South Yorkshire (Fabric R01). wt 5g.

42. 113 SF12 A sandy grey ware jar bodysherd with horizontal grooves on the exterior, surfaces very eroded (Fabric R01?). wt 17g.

43. 113 SF5 A Dalesware bodysherd, exterior sooted (Fabric G10). 3rd-4th century. wt 4g.

44. 113 SF10 A calcite gritted ware bodysherd, exterior burnt brown (Fabric G20). wt 13g.

45. 113 SF20 A calcite gritted ware bodysherd, exterior sooted (Fabric G20). wt 21g.

46. 113 SF19 An oxidised bodysherd (Fabric O01). wt 2g.

47. 113 SF25 A hand-made reduced bodysherd with a black fabric (Fabric P21). wt 3g.

48.* 113 SF11 A large everted rimmed jar rimsherd and shoulder, burnished with a horizontal groove below this zone (Fabric R01). Cf Buckland and Dolby 1980, class F, 2nd-4th century. diam. 22cms, RE 5%, wt 22g.

49. 113 SF8 An oxidised chip, possibly tile, in an orange fabric with some fine sand *c.* 0.1mm and some black rounded ironstone *c.*0.5-1mm. wt 3g.

50. 113 SF18 A post-medieval glazed sherd. wt 24g.

51. 113 SF29 A medieval/post-medieval glazed sherd. wt 1g.

52. 113 SF14 A post-medieval glazed sherd. wt 4g.

53. 113 SF26 A post-medieval bodysherd. wt 8g.

54. 114 A ?daub chip, sooted. wt 1g.

55. 116 SF42 A sandy grey ware jar/wide-mouthed jar bodysherd, exterior undecorated, South Yorkshire (Fabric R01). wt 22g.

56. 117 A Crambeck grey ware dish/bowl simple base with eroded surfaces (Fabric R11). 4th century. diam. 19cms, BE 10%, wt 27g.

57. 119 A sandy grey ware bodysherd with eroded surfaces, South Yorkshire (Fabric R01). wt 2g.

58. 150 A grey ware bodysherd with orange margins and eroded surfaces (Fabric R07). wt 6g.

59. 158 Twelve hand-made calcite gritted ware bodysherds, exterior burnt brown. The shoulder sherd amongst them must be an S-bend or proto-Huntcliffe type jar (Fabric G20). Early-mid 4th century. wt 111g.

60. 158 Six hand-made calcite gritted bodysherds (Fabric G20). 4th century. wt 27g.

61. 158 22 hand-made Dalesware bodysherds, exterior burnt brown (Fabric G10). 3rd-4th century. wt 215g.

62. 158 Five hand-made Dalesware bodysherds (Fabric G10). 3rd-4th century. wt 35g.

63. 158 Four sherds from a Dalesware jar simple base (Fabric G10). diam. 12cms, BE 58%, wt 62g.

64.* 158 A Dalesware Dales type jar rim, exterior sooted, 3rd-4th century (Fabric G10). diam. 17cms, RE 8%, wt 12g.

65.* 158 Four joining and three other Dales type rims in Dalesware (Fabric G10), exterior burnt brown, 3rd-4th century. Three sherds sooted. diam. 24cms, RE 55%, wt 184g.

66. 158 A BB1 ?bowl bodysherd (Fabric B01), interior burnished. wt 5g.

67. 158 Three eroded sandy South Yorkshire grey ware bodysherds (Fabric R01). wt 37g.

68.* 158 An eroded sandy South Yorkshire grey ware wide-mouthed jar rim, rim burnished (Fabric R01). Cf Buckland and Dolby 1980, class Hc-d, 2nd-4th century. diam.c30cms, RE 8%, wt 58g.

69. 158 An eroded oxidised bodysherd (Fabric O20). wt 3g.

70. 158 A very eroded oxidised ?base sherd (Fabric O20). wt 3g.

71. 158 Six Dalesware bodysherds, exterior burnt brown (Fabric G10). 3rd-4th century. wt 73g.

72. 158 Five Dalesware bodysherds, exterior burnt brown, exterior sooted (Fabric G10). 3rd-4th century. wt 66g.

73. 158 Three calcite gritted ware bodysherds, exterior burnt brown (Fabric G20). wt 61g.

74. 158 Two calcite gritted ware bodysherds, exterior sooted (Fabric G20). wt 23g.

75. 158 Three calcite gritted ware bodysherds (Fabric G20). wt 30g.

76.* 158 Two pairs of two joining proto-Huntcliff calcite gritted ware jar rimsherds (Fabric G20), two have sooted shoulders, cAD 330-50. diam. 18cms, RE 69%, wt 250g.

77. 158 One oxidised ?daub chip. wt 2g.

78. 158 Two calcite gritted ware bodysherds, exterior burnt and oxidised (Fabric G20). wt 6g.

79. 158 Three calcite gritted ware bodysherds (Fabric G20). wt 8g.

80. 158 A calcite gritted ware jar base, not from the proto-Huntcliffe type vessel above, exterior burnt brown (Fabric G20). diam. 7cms, BE 10%, wt 17g.

81. 158 An oxidised brown daub fragment. wt 7g,

82. 158 An ?oxidised bodysherd, burnt, with a grey core and oxidised margins (Fabric O20).

83. 158 An oxidised rim fragment, possibly from a bowl, burnished, maybe Crambeck red ware (Fabric F10). diam.c15cms, RE 4%, wt 2g.

84. 158 Four South Yorkshire grey ware wide-mouthed jar bodysherds, surfaces eroded (Fabric R01). wt 192g.

85. 158 A South Yorkshire grey ware wide-mouthed jar bodysherd with horizontal grooves on the exterior (Fabric R01). wt 12g.

86. 158 A South Yorkshire grey ware wide-mouthed jar bodysherd, exterior burnished (Fabric R01). wet 14g.

87. 158 A South Yorkshire grey ware jar simple base, exterior burnished (Fabric R01). diam. 11cms, BE 8%, wt 32g.

88.* 158 A South Yorkshire grey ware wide-mouthed jar rimsherd, rim and upper exterior burnished with horizontal grooves on the shoulder (Fabric R01). Cf Buckland and Dolby 1980, Class Hc-d, 2nd-4th century. diam. 29cms, RE 14%, wt 135g.

98. 162 A calcite gritted ware bodysherd, exterior sooted (Fabric G20). wt 21g.

99. 162 A calcite gritted ware bodysherd, very eroded (Fabric G20). wt 2g.

100. 162 A Dr31R CGS bodysherd, mid- to late-Antonine. wt 21g.

101. 162 Two joining fragments, burnt grey, from a hammerhead Mancetter-Hartshill mortarium rim, cAD 220-350 (Fabric M12). Not illustrable. diam.?, wt 7g

102. 162 A circular cut incomplete spindle whorl from a jar or wide-mouthed jar wall in South Yorkshire grey ware, undecorated (Fabric R01). A hole has started to be drilled through the disc from the interior, but this has been abandoned, possibly because the sherd is well-fired and very hard. diam. 5cms, wt 22g.

103. 162 Three South Yorkshire jar bodysherds, exterior burnished (Fabric R01). wt 42g.

104. 162 A South Yorkshire grey ware jar bodysherd, exterior decorated with burnished horizontal lines (Fabric R01). wt 8g.

105. 162 A South Yorkshire jar grey ware bodysherd, undecorated (Fabric R01). wt 5g.

106. 162 Two South Yorkshire grey ware jar bodysherds, surfaces eroded, one has a handle stub and is from the same vessel as the jar below (Fabric R01). wt 34g.

107.* 162 An everted rimmed jar rim in South Yorkshire grey ware (Fabric R01). Cf Buckland and Dolby 1980, class F, 2nd-4th century. diam. 15cms, RE 17%, wt 37g.

108. 162 A jar bodysherd in a gritty grey ware (Fabric G02). wt 16g.

109. 162 SF60 A calcite gritted ware bodysherd, exterior burnt brown (Fabric G20). wt 7g.

110.* 162 SF57 A triangular rimmed wide-mouthed jar in South Yorkshire grey ware, rim burnished (Fabric R01). Cf Buckland and Dolby 1980, class Hc-d, 2nd-4th century. diam.c35cms, RE 4%, wt 27g.

111. 162 SF70 Two joining simple base sherds, the base showing string-marks, possibly from a wide-mouthed jar, South Yorkshire (Fabric R01). diam. 10cms, BE 68%, wt 141g.

112. 162 SF54 A sandy grey ware bodysherd with eroded surfacesm possibly South Yorkshire (Fabric R01). wt 25g.

113. 162 SF53 A sandy grey ware bodysherd with eroded surfaces, possibly South Yorkshire (Fabric R01). wt 12g.

114. 162 SF65 A dish/bowl simple base sherd in sandy grey ware, possibly South Yorkshire, interior and exterior burnished (Fabric R01). diam. *c.* 20cms, BE 4%, wt 20g.

115. 162 SF59 An eroded sandy grey ware bodysherd, possibly South Yorkshire (Fabric R01). wt 2g.

116. 162 SF63 An eroded sandy grey ware bodysherd, possibly South Yorkshire (Fabric R01). wt 7g.

117. 162 SF64 A sandy grey ware bodysherd with very eroded surfaces, possibly South Yorkshire (Fabric R01). wt 9g.

118. 173 A sandy grey ware bodysherd, very heavily eroded, South Yorkshire (Fabric R01). wt 7g.

119. 176 An eroded CGS footring base of Dr 38 or 44, mid- to late- Antonine. diam. 8cms, BE 23%, wt 14g

120. 182 A flange rimmed wide-mouthed jar in South Yorkshire grey ware, internally beaded, surfaces very eroded (Fabric R01). Cf Buckland and Dolby 1980, class Hc-d, 2nd-4th century. Not illustrable. diam.?, wt 34g.

121. 183 A sandy grey ware jar lower wall bodysherd, exterior burnished, possibly South Yorkshire (Fabric R01). diam. 8cms, BE 8%, wt 29g.

122. 185 A Dalesware bodysherd, exterior sooted (Fabric G10). wt 7g.

123. 185 A calcite gritted ware bodysherd (Fabric G20). wt 2g.

124.* 185 A ?South Yorkshire grey ware wide-mouthed jar with everted, rising, bead ended rim, rim burnished (Fabric R01?). Cf Buckland and Dolby 1980, no 228, this parallel being attributed to a Lincolnshire source. The fabric of the present example seems to fall within the South Yorkshire range and a Holme-on-Spalding Moor origin is not likely, though possible. diam. 29cms, RE 12%, wt 72g.

125. 202 A much eroded white ware falgon beaded base, exterior originally brown slipped (Fabric F02?), probably Nene Valley ware. diam. 10cms, BE 15%, wt 28g.

126.* 202 A slightly eroded grooved rim bowl rimsherd with a low chamfered base (Fabric O01). diam. 22cms, RE 8%, wt 52g, diam. 14cms, BE 10%.

127. 204 Three buff-yellow oxidised bodysherds, eroded, exterior sooted (Fabric O21). wt 4g.

128. 211 SF75 A bodysherd of a sandy white mortarium with translucent sub-angular quartz trituration grits *c.* 1-2mm. Probably Ver region ware and *c.* AD 70-120 (Fabric M10). wt 15g.

129. 211 SF77 A post-medieval black glazed sherd. wt 2g.

130. 222 A Dalesware bodysherd, exterior sooted (Fabric G10). 3rd-4th century. wt 2g.

131. 242 An unabraded sandy grey ware jar bodysherd, possibly South Yorkshrie, undecorated, exterior sooted (Fabric R01). wt 1g.

132. 242 An unabraded sandy grey ware jar bodysherd, possibly with a handle scar, (Fabric R03). wt 7g.

133. 249 A medieval/post-medieval bodysherd. wt 7g.

134. 256 A calcite gritted ware bodysherd, sooted, exterior burnt brown (Fabric G20). wt 7g.

135.* 256 A sandy grey ware lid-seated jar rim in South Yorkshire ware, rim and shoulder sooted (Fabric R01). Cf Buckland and Dolby 1980, class Eb, 3rd-4th century. diam. 13cms, RE 24%, wt 49g.

136. 256 A grey sandy bodysherd, eroded (Fabric R03). wt 1g.

137. 262 A sandy jar grey ware bodysherd, exterior burnished, possibly South Yorkshire (Fabric R01). wt 2g.

138. 270 A much abraded bodysherd of a South Yorkshire mortarium with a reduced core and orange-brown margins and surfaces with black slag trituration grits *c.* 2-4mm (Fabric M15). wt 7g.

139. 270 A calcite gritted ware bodysherd, exterior burnt brown (Fabric G20). wt 6g.

140. 270 A wheel-made gritted ware bodysherd, not Holme-on-Spalding Moor ware (Fabric G02). wt 13g.

141. 274 SF106 Two calcite gritted ware bodysherds, one has sooted exterior (Fabric G20). wt 11g.

142. 274 A very abraded grey ware bodysherd, probably South Yorkshire (Fabric R01). wt 3g.

143. 274 SF107 A grey ware jar bodysherd, exterior burnished, possibly South Yorkshire (Fabric R01). wt 8g.

144. 274 Two joining simple base sherds and a bodysherd from a cream ware flagon (Fabric W01). diam. 7cms, BE 25%, wt 63g.

145. 274 SF1 An oxidised eroded hand-made bodysherd with a grey core and orange-brown margins and surfaces (Fabric P01). wt 13g.

146. 274 SF105 A sandy grey ware bodysherd, finer sand temper than usual, very eroded surfaces, possibly South Yorkshire (Fabric R01). wt 9g.

Appendix 6: Coin Catalogue

Context:	113 (Trench 1 Cleaning Layer)
SF no.:	40
Ruler:	HADRIAN
Denom:	AS
Date:	117-138
Obv.)	Radiate bust right; inscription illegible
Rev.)	Illegible
Wear:	Extremely worn/Extremely worn
Die axis:	?
Diam:	25.5mm
Wt.:	7.8g
Comments:	Extremely worn coin. Probably C3rd loss.

Context:	106 (Pit F139)
SF no.:	41
Ruler:	TETRICUS I
Denom:	ANTONINIANUS
Date:	270-73
Obv.)	[IMP C T]ETRIC[VS P F AVG] Radiate bust right
Rev.)	Stg. Female figure (Laetitia?)
Wear:	Slightly worn/corroded
Die axis:	11
Diam:	23mm max.
Wt.:	1.5g
Comments:	Slightly worn coin. Probably near-contemporary loss.

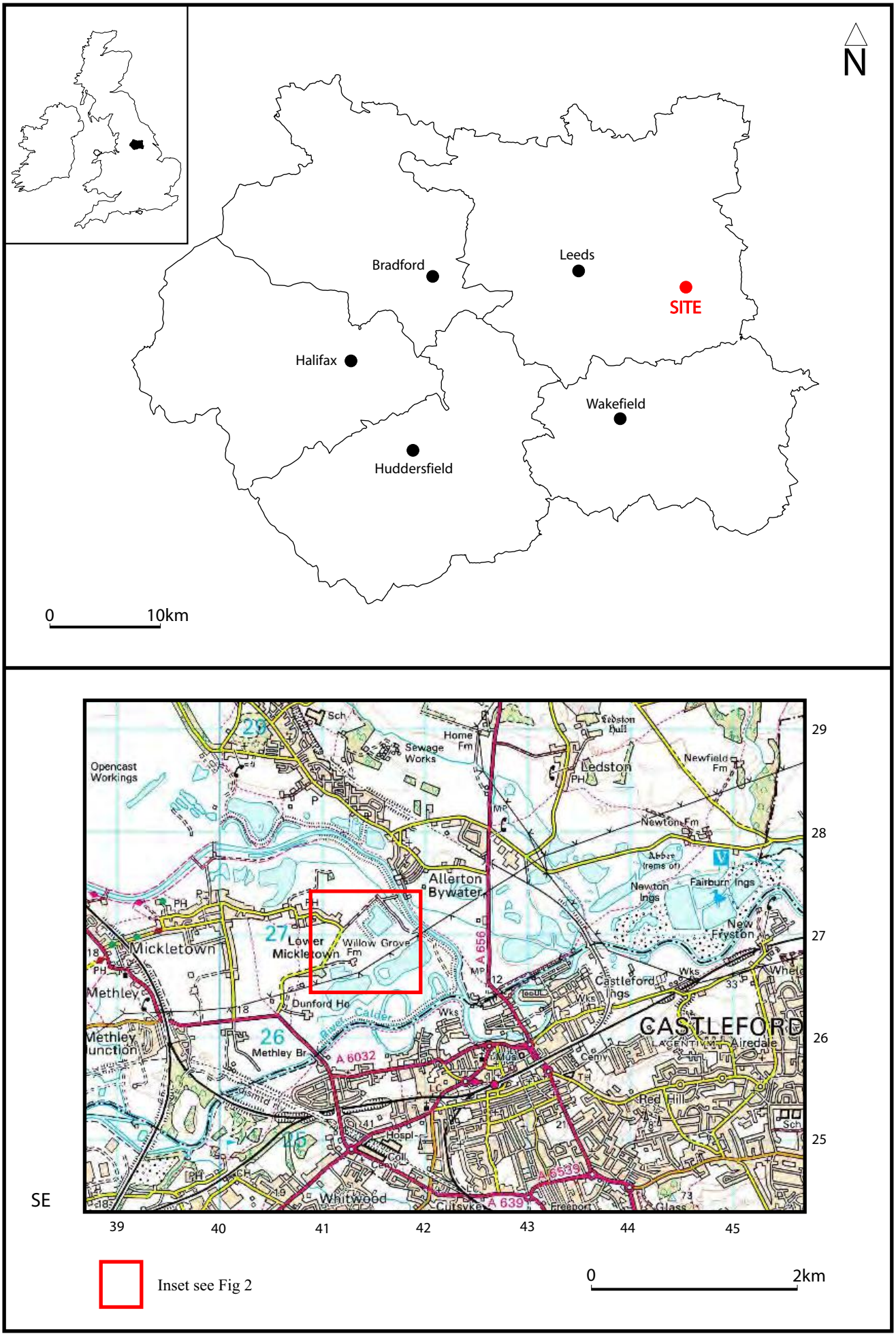


Figure 1. Site location

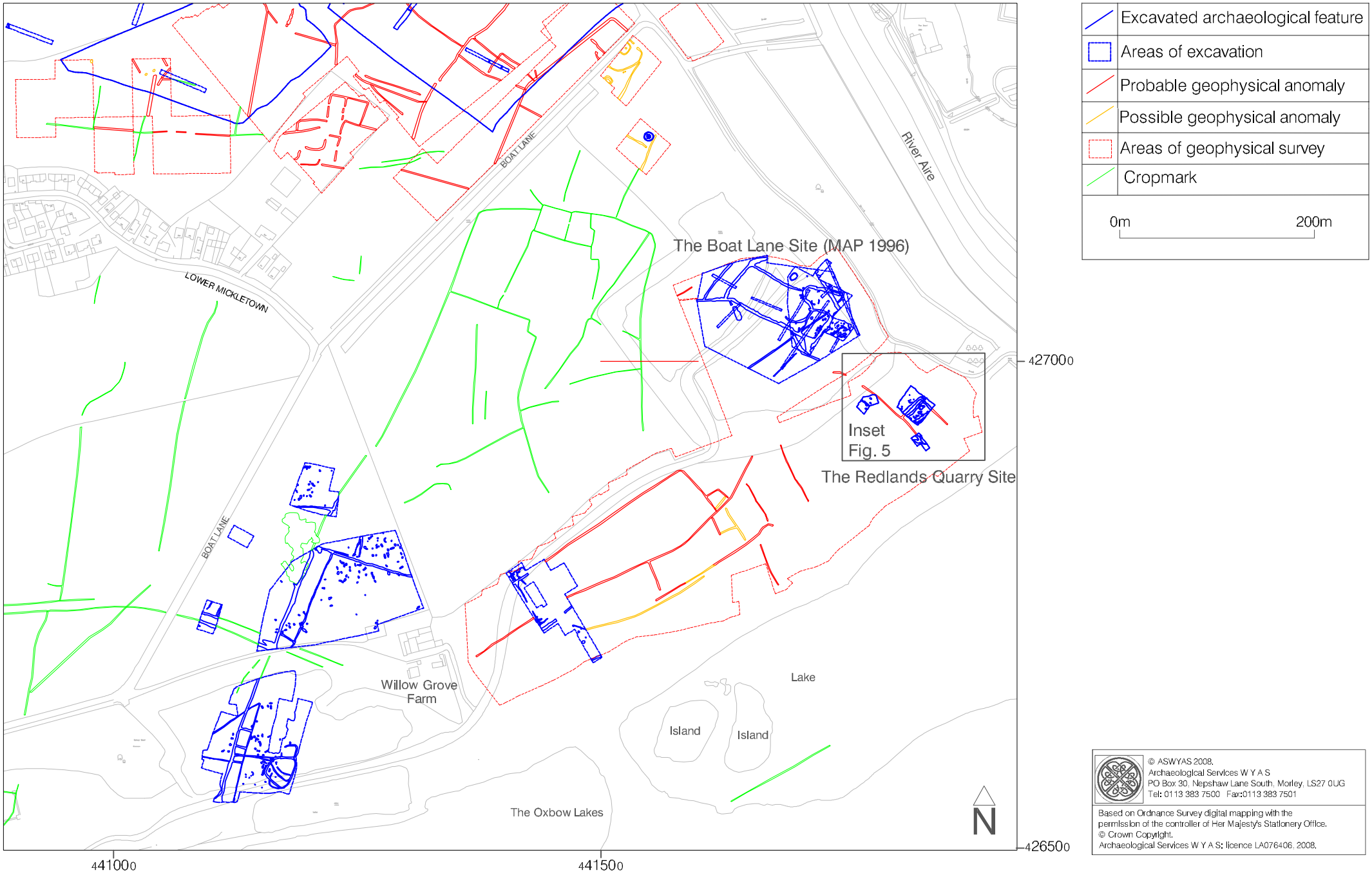


Fig. 2. Detailed site location plan (1:5000 scale)

Fig. 3. Results from the gradiometer survey undertaken in 1990 by Yarwood and Marriot (1:2000 scale). Yarwood and Marriot's interpretation of a sub-circular enclosure in the western part of Fig. 4 inset area is not reflected in this representation of the geophysical data

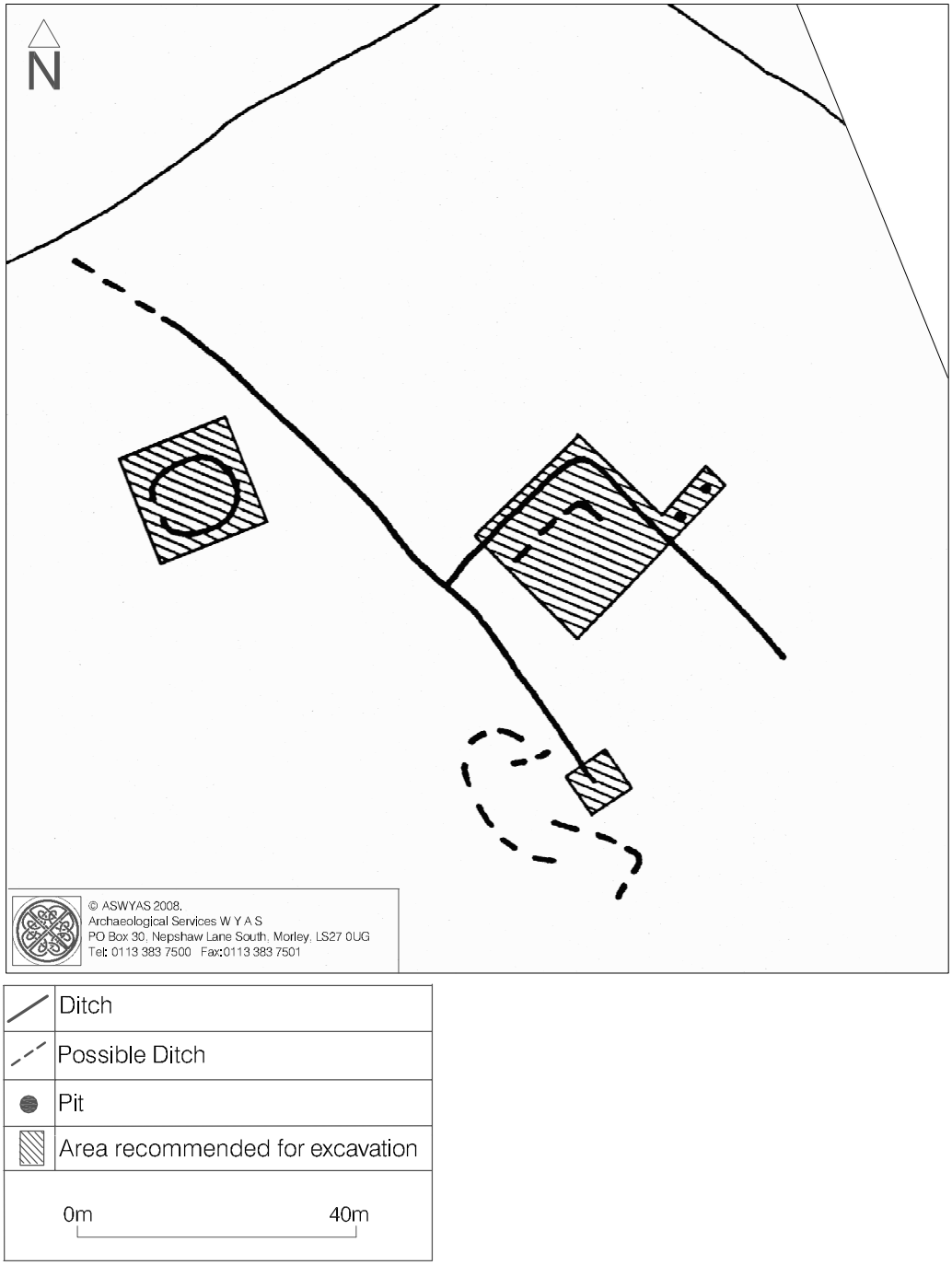


Fig. 4. Interpretation of the results from the gradiometer survey undertaken in 1990 by Yarwood and Marriot (1:1000 scale)

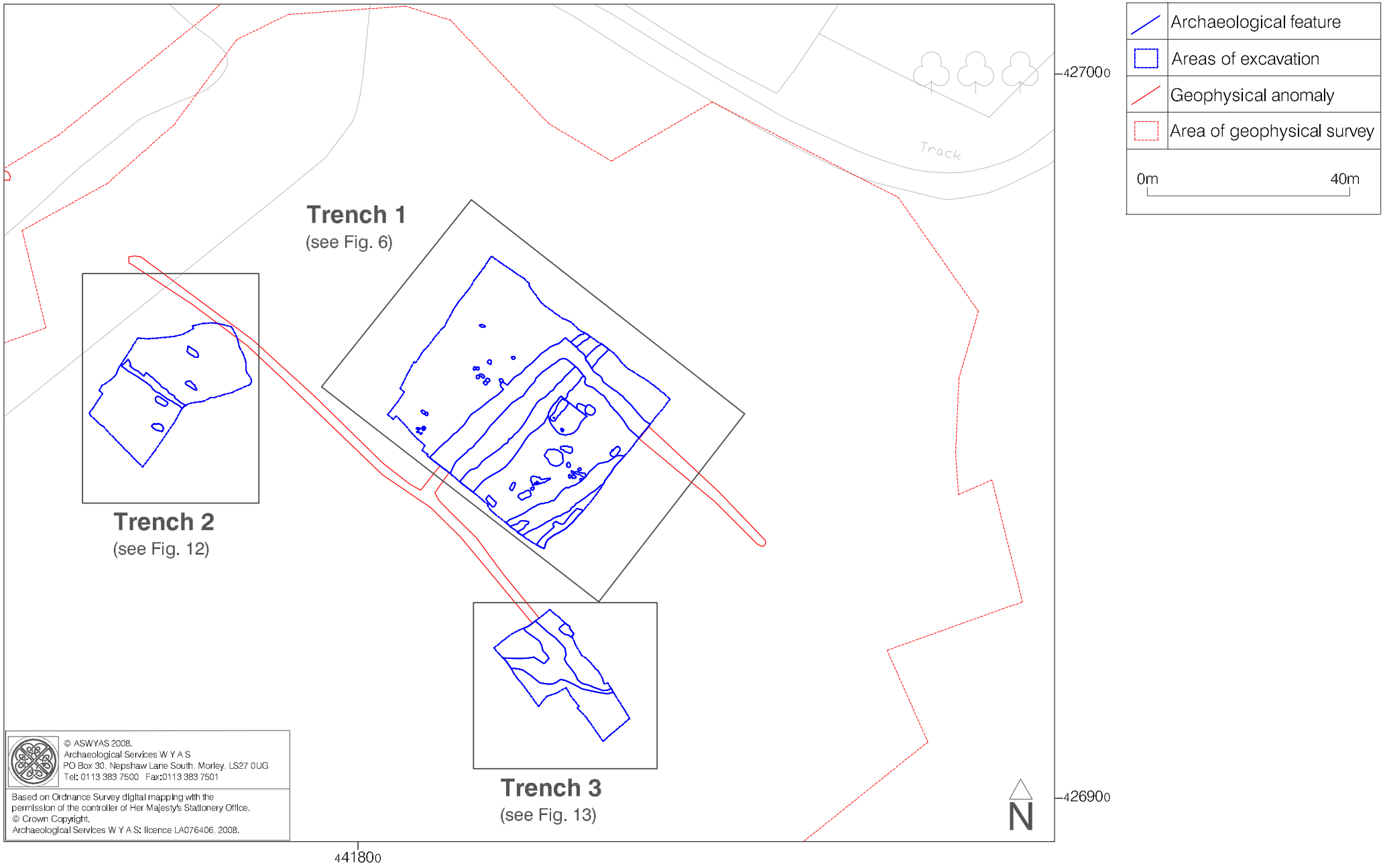


Fig. 5. Trench location plan (1:1000 scale)

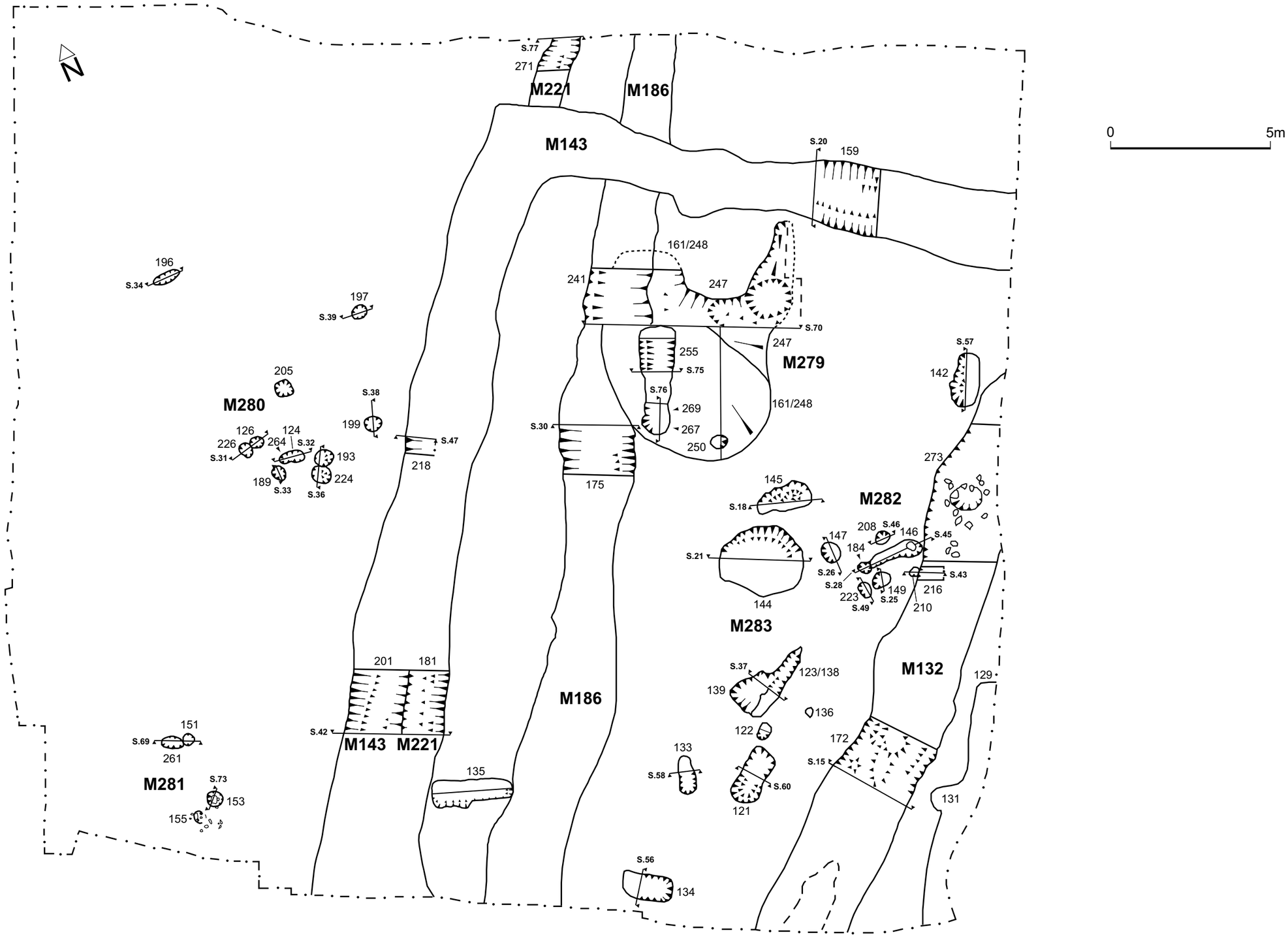


Fig. 6. Plan of Trench 1 (scale 1:125 @ A3)

Fig. 7. Trench 1 Phase Plan (scale 1:125 @ A4)

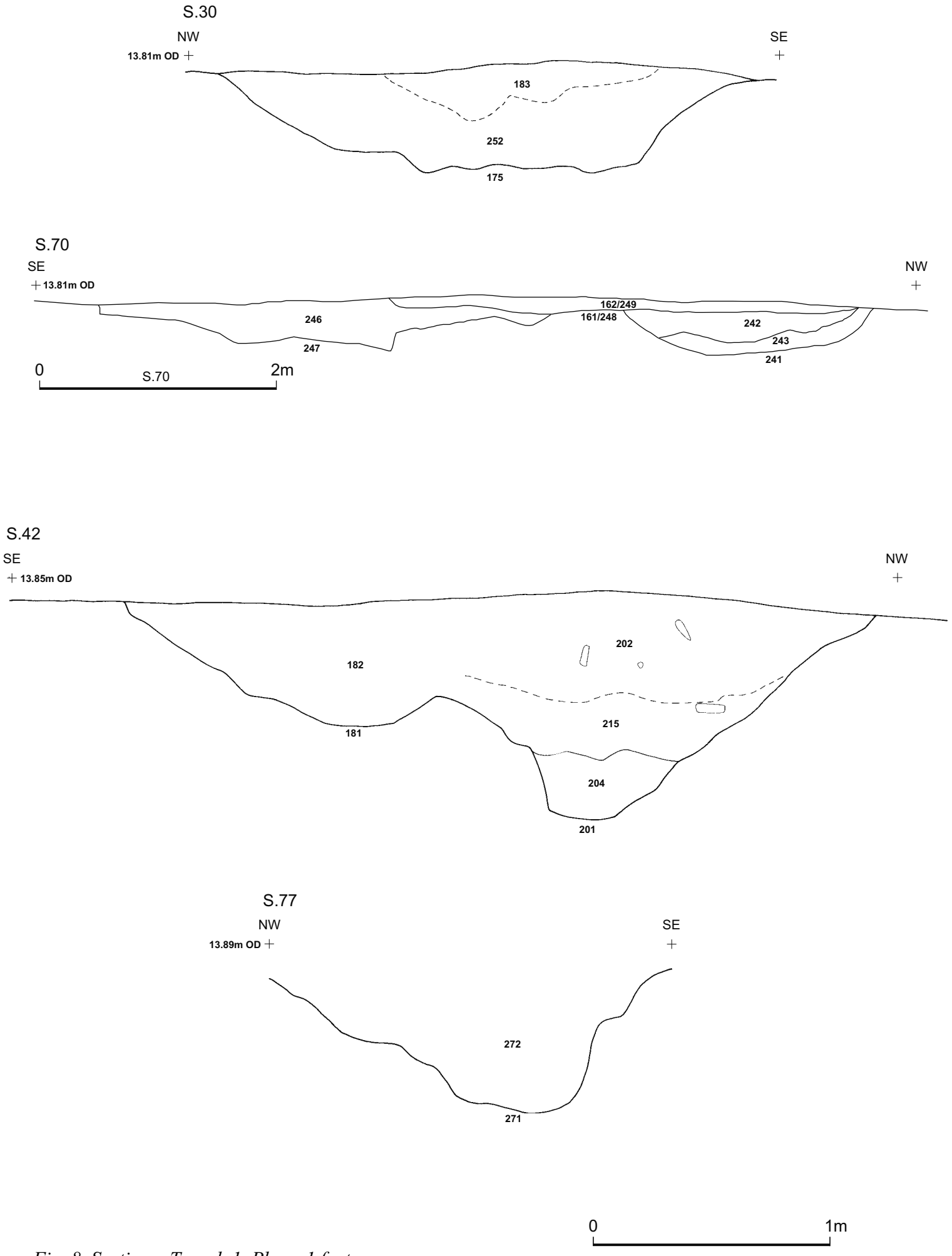


Fig. 8. Sections: Trench 1, Phase 1 features

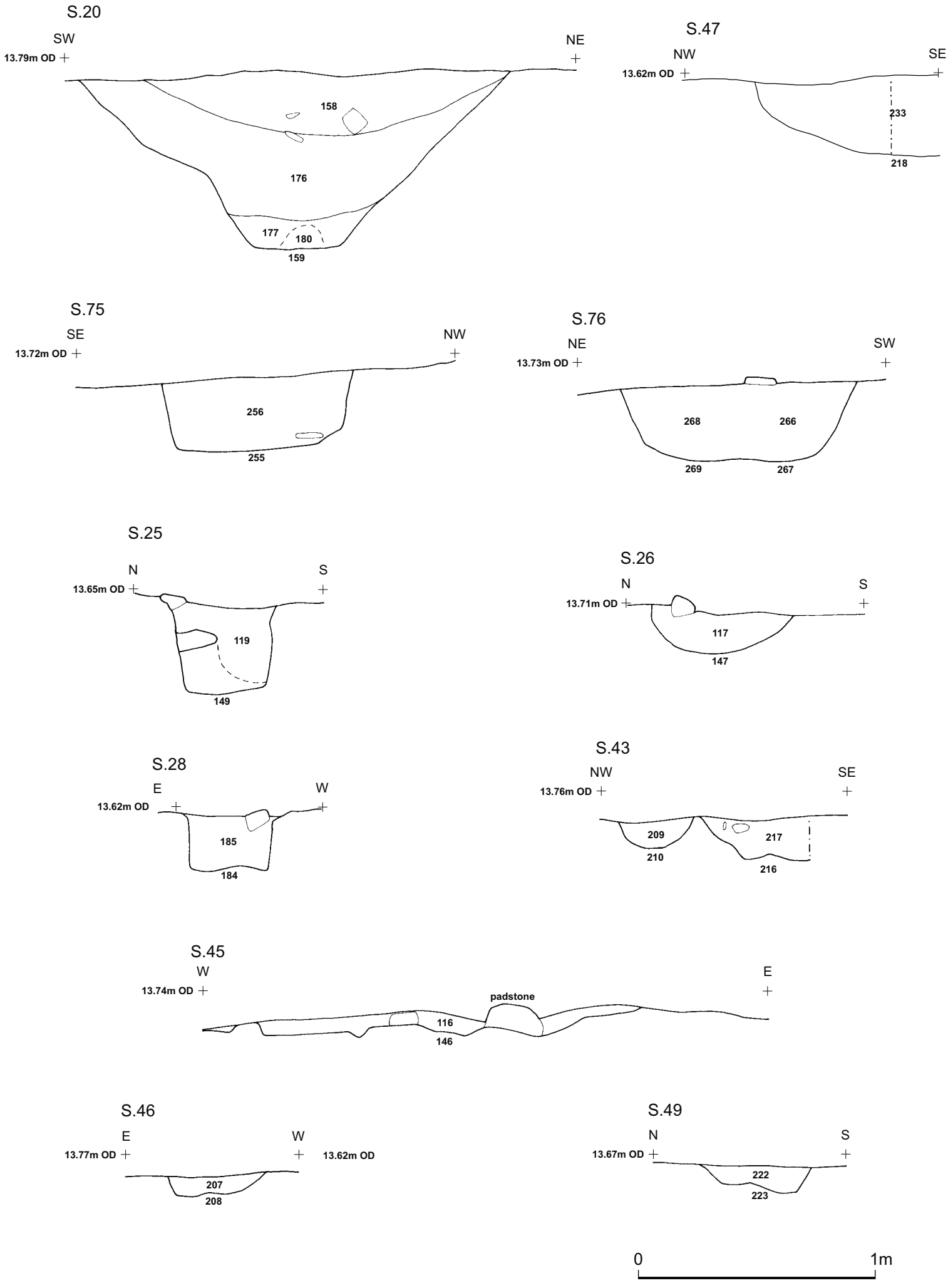


Fig. 9. Sections: Trench 1, Phase 2 features M143, M279 amd M282

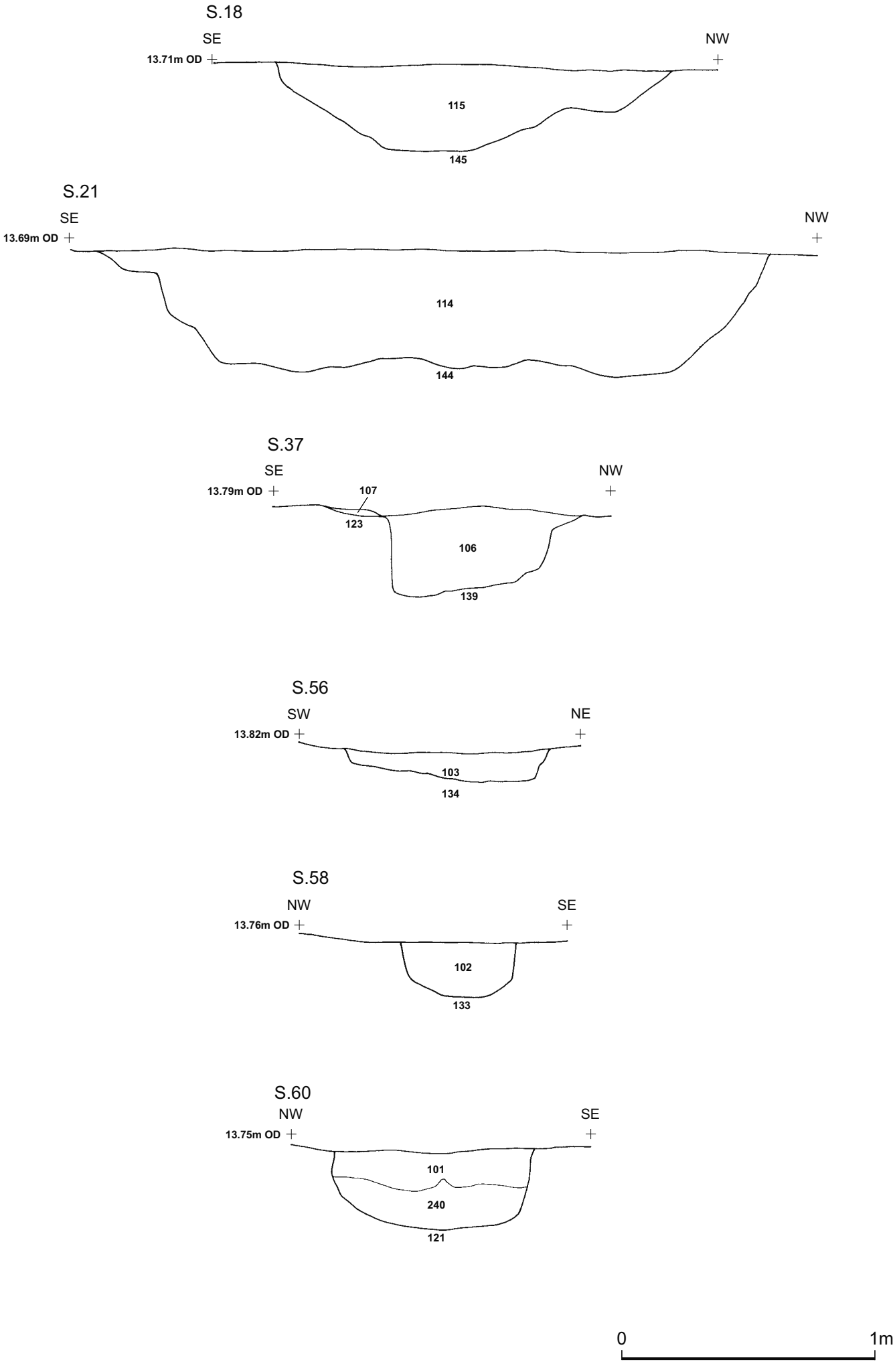


Fig. 10. Sections: Trench 1, Phase 2 features M283

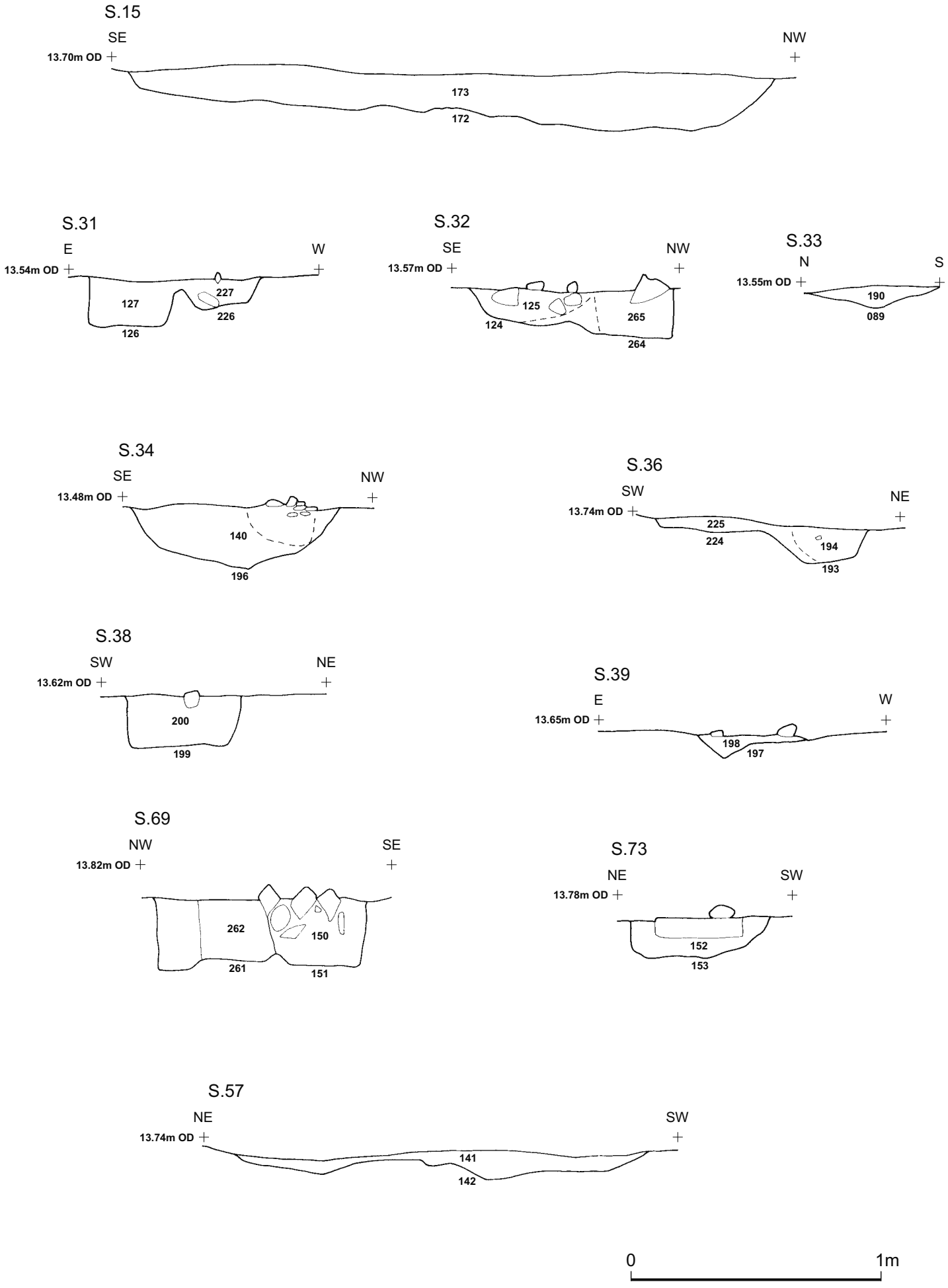


Fig. 11. Sections: Trench 1: Unphased features M132, M280, M281 and Pit 142

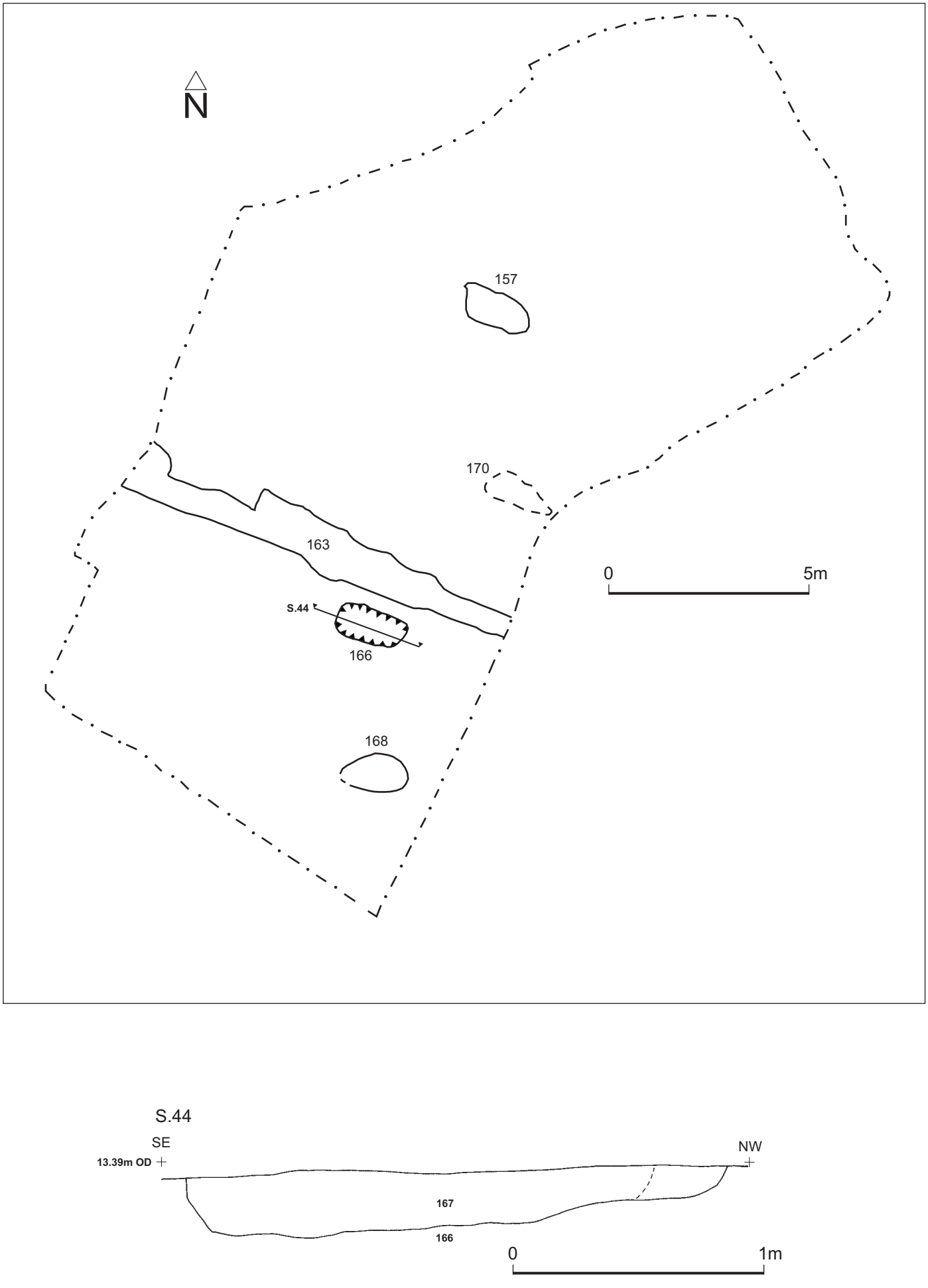
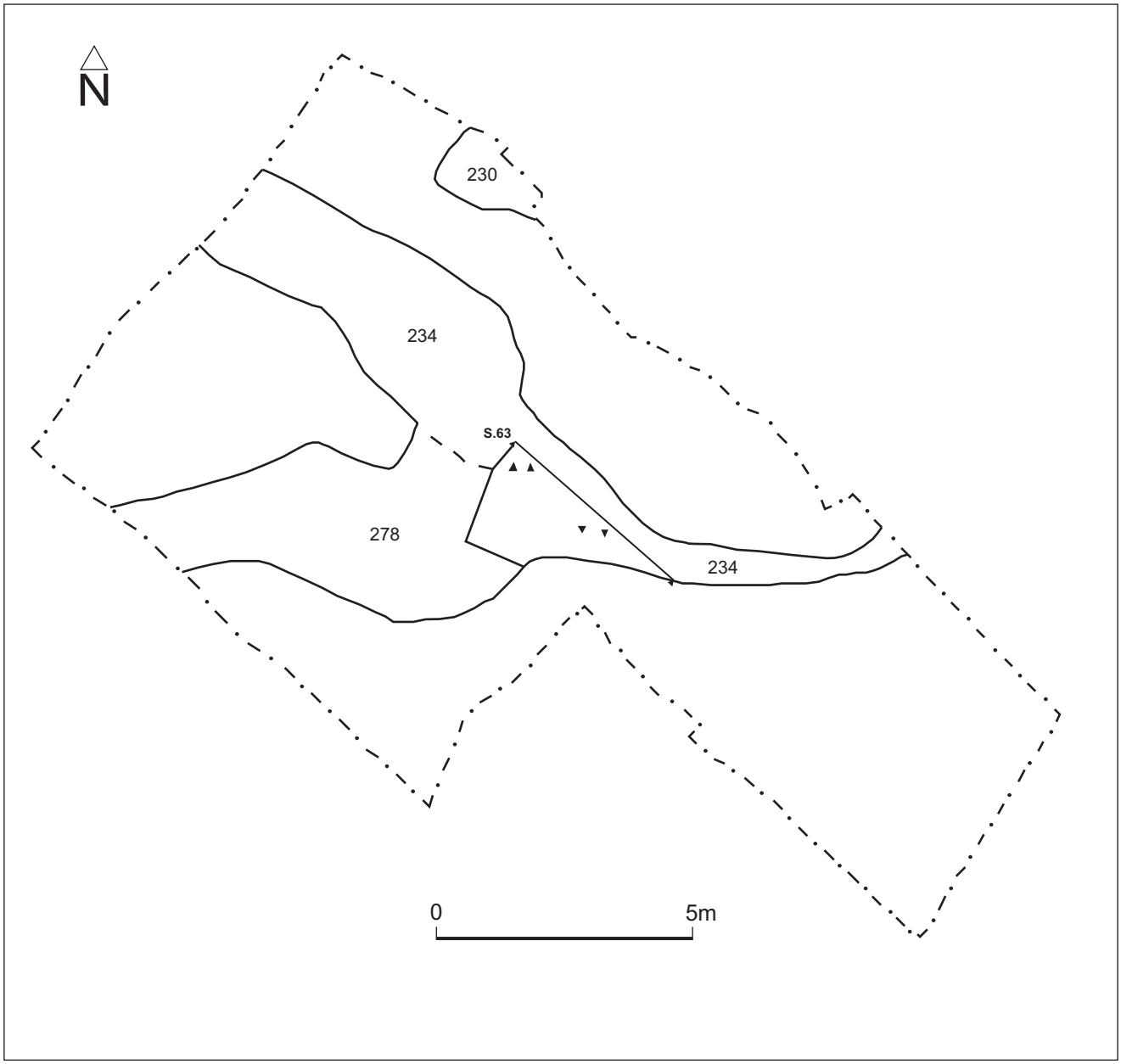


Fig. 12. Plan and section of Trench 2



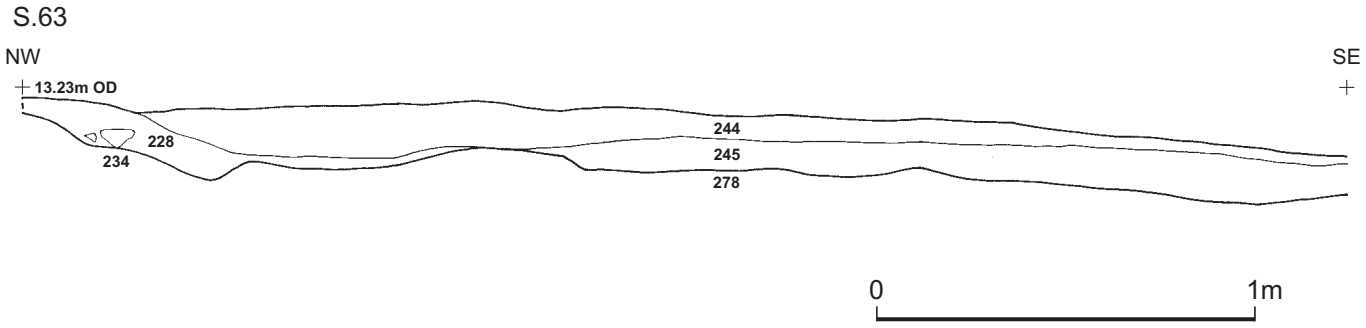


Fig. 13. Plan and section of Trench 3

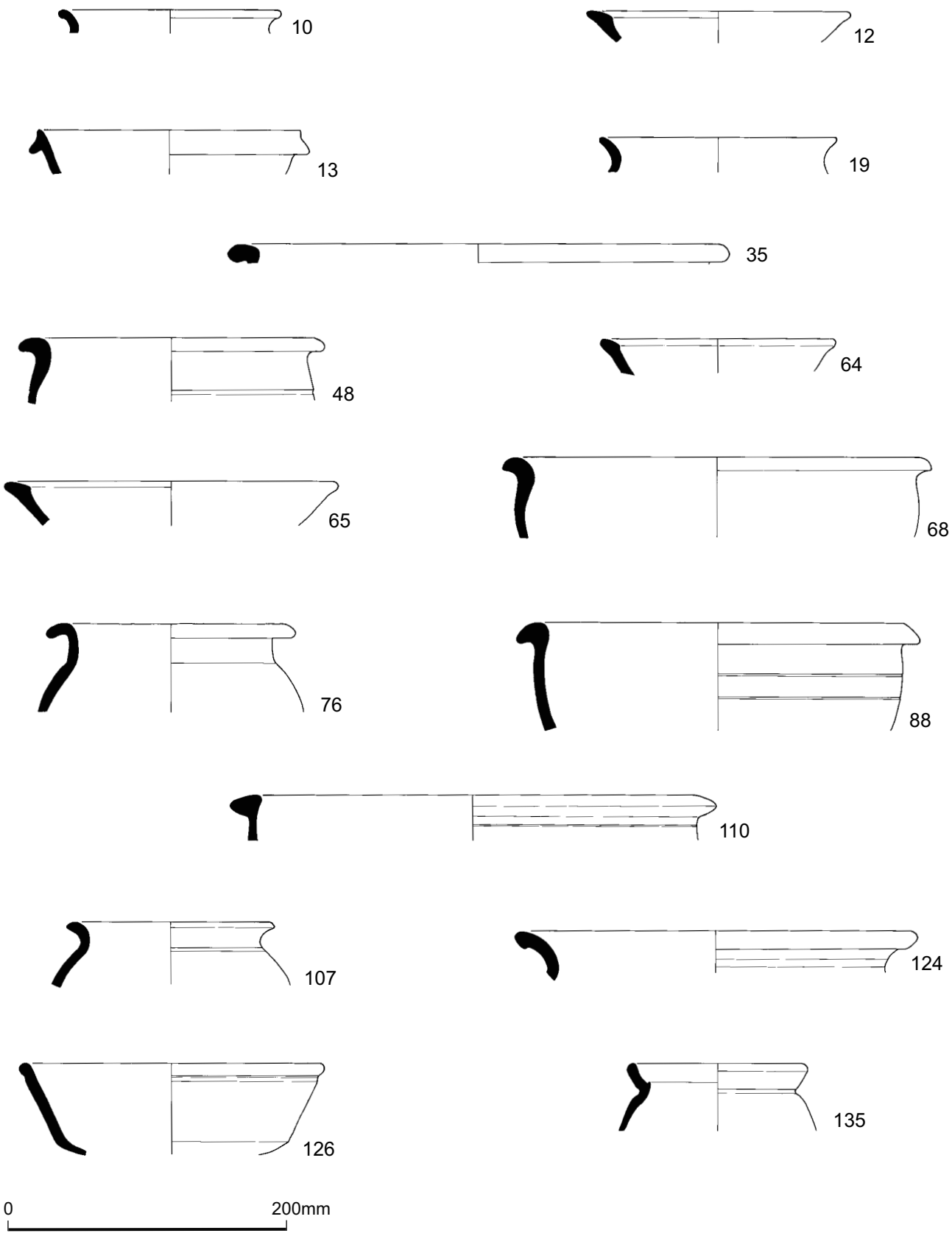


Fig. 14. Pottery Illustrations

Plate 1. Trench 1 facing west

Plate 2. Ditch M143 Segment 159 facing south-west

Plate 3. Feature Group M282 facing west

Plate 4. Pit 145, with Pit 144 in the background, facing north-west

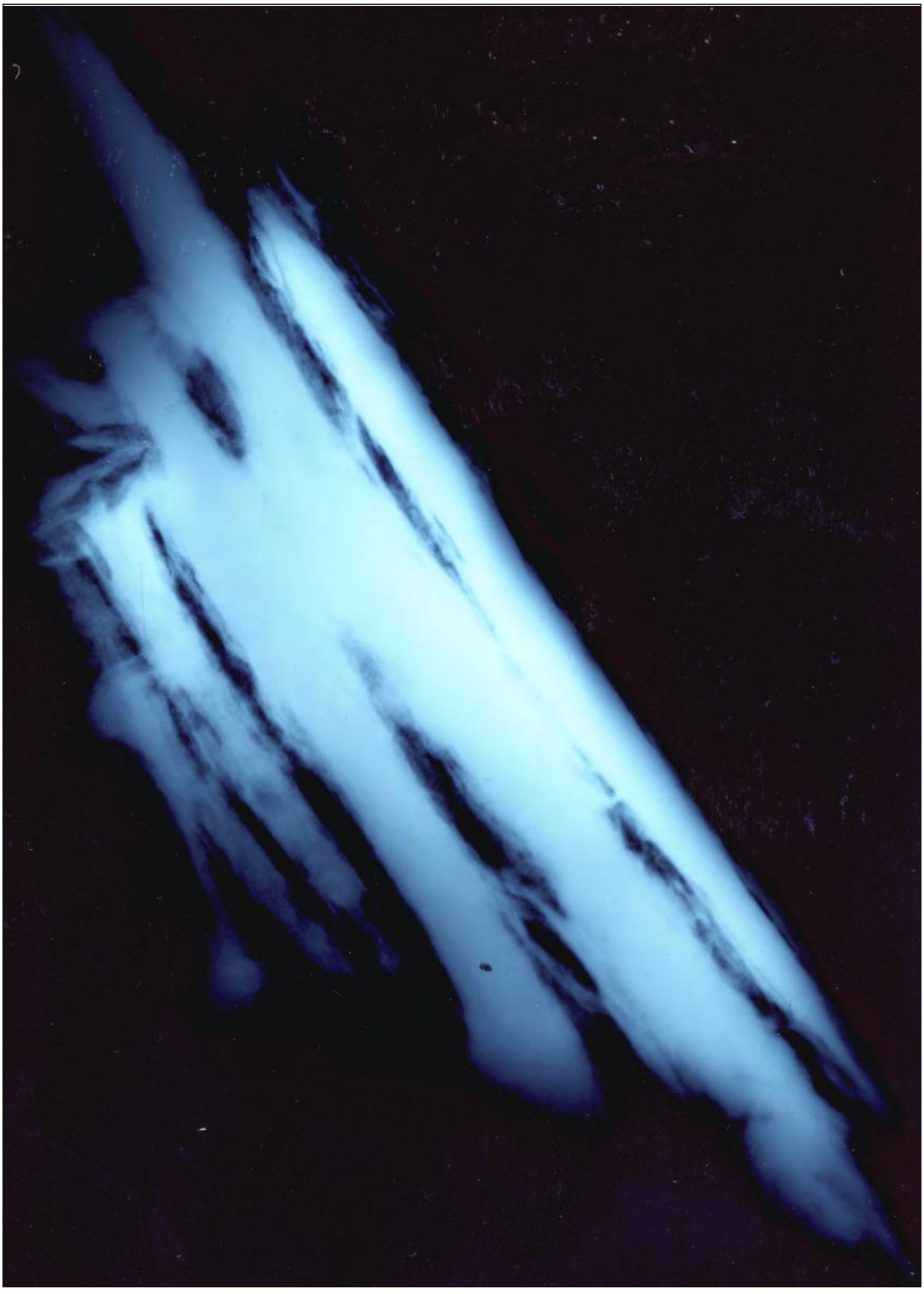


Plate 5. X-ray of possible blacksmith's store of iron objects from enclosure ditch M143 (SF 81)

1 = fill 110, enclosure ditch M143; 2= cleaning layer 113; 3= fill 256, gully 255 (M279); 4= fill 270, post-hole 261 (M281)

Plate 6. X-rays of iron objects

Plate 7. Possible iron needle from fill 158 of enclosure ditch M143

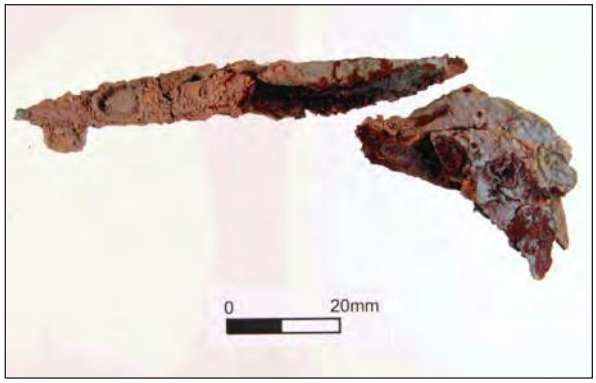


Plate 8. Possible iron awl from fill 158 of enclosure ditch M143

Plate 9. Coin minted between AD 117 to AD 138 from cleaning layer 113 (SF 40)

Plate 10. Coin minted between AD 270 to AD 273 from fill 106 of pit 139 in group M283 (SF 41)

Plate 11 . Fragment of quern stone from fill 264 of post-hole 265, group M280 (SF 72)

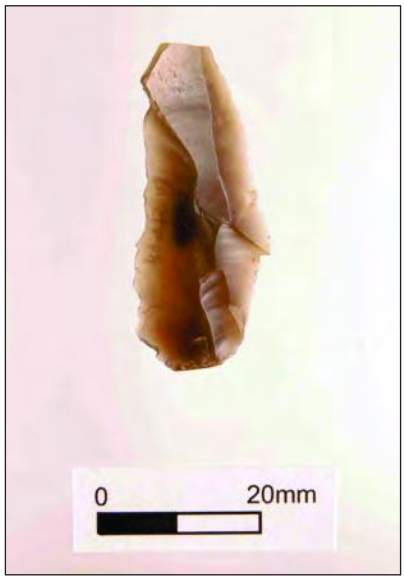


Plate 12 . Flint blade from cleaning layer 113

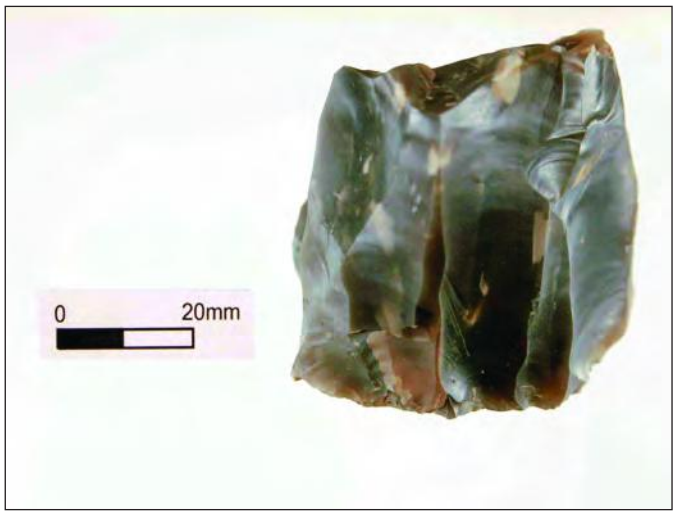


Plate 13. Flint core from subsoil (SF 73)

Bibliography

Abramson, P., 1990, 'Methley Quarry. Phase 1, Part 1. Rescue Excavation 1988 Interim Report.' WYAS R114

Abramson, P., Berg., D and Fossick, F., 1999, *Roman Castleford: The structural and environmental evidence,* Vol II, West Yorkshire Archaeology Archaeology 5

BGS, 2001, Solid Geology Map UK South Sheet 1:625 000 4th Edition

Buckland, P. C., Magilton, J. R. and Dolby, M. J., 1980, 'The Roman Pottery Industries of South Yorkshire: A Review' *Britannia* Vol. 11, 145-164

Burgess, A. 2001, 'The earlier prehistoric periods' in I. Roberts, A. Burgess and D. Berg (eds.) *A New Link to the Past*, Yorkshire Archaeology 7: 254-269

Clarke, S. and Jones, R., 1996 'The Newstead pits' in van Driel Murray, C., (ed.) *Military Equipment in Context. Proceedings of the Ninth Roman Military Equipment Research Seminar 1994. Journal of Roman Military Equipment 5*: 109-114

Dearne, M.J. and Branigan, K., 1995 'The use of coal in Roman Britain' in *Antiquaries Journal* 75: 71-105

Deegan, A., 1999, 'Air Photo Mapping of the Aire-Calder Confluence West Yorkshire: SE 370 245 to SE 425 285' unpubl.

Duncan, H. B., 2005, 'The small finds', in I. Roberts (ed.) *Ferrybridge Henge: The Ritual Landscape*, Yorkshire Archaeology 10, 152-164

Evans, J., 1985, 'Aspects of later Roman pottery assemblages in northern England.' Unpublished University of Bradford PhD thesis

Evans, J., 1989, 'Crambeck; the development of a major northern pottery industry' in P. R. Wilson (ed.) *Crambeck Roman Pottery Industry*, The Roman Antiquities Section, Yorkshire Archaeological Society, Leeds, 43-90

Evans, J., 1993, 'Pottery function and finewares in the Roman north.' *Journal of Roman Pottery Studies* 6: 95-118

Evans, J. unpublished Pottery from the Rural Romano-British Sites of West Yorkshire

Faull, M.L., 1981, 'The Roman period' in Faull, M.L. and Moorhouse, S.A., (eds) *West Yorkshire: An Archaeological Survey to a.d 1500. Volume 1*: 141-170 Wakefield: West Yorkshire Metropolitan County Council

Fulford, M., 2001, 'Links with the past: pervasive 'ritual' behaviour in Roman Britain', *Britannia* Vol. 22, 199-218

Garton, D., Hunt, C.O., Jenkinson, R.D.S. and Leary, R.S., 1988, 'Excavations at a Romano-British Cropmark Enclosure near Menagerie Wood, Worksop, Nottinghamshire', *Trans. Thoroton Soc. Nottinghamshire* 92, 22-33

Keith, K., and Roberts, I., 2001, 'Methley Quarry Extension, Methley, West Yorkshire. Archaeological Desk-based assessment and Mitigation Strategy' ASWYAS Report No. 834

Loughlin, N., 1977, 'Dales ware: a contribution to the study of Roman coarse pottery', in D.P.S Peacock (ed.) *Pottery and early commerce; characterisation and trade in Roman and later ceramics*, Academic Press, 85-146

Manning, W. H., 1972, 'Ironwork hoards in Iron Age and Roman Britain', *Britannia* Vol. 3, 224-50

Manning, W.H., 1985a, *Catalogue of the Romano-British Iron Tools, Fittings and Weapons in the British Museum.* London: British Museum

Manning, W.H., 1985b, 'The iron objects' in Pitts, L.F. and St Joseph, J.K., *Inchtuthil the Roman Legionary Fortress Excavations 1952-65. Brittania Monograph Series 6*: 289-299. London

MAP, 1996, 'Excavation of an Iron Age site at Methley, West Yorkshire' MAP Archaeological Consultancy Ltd

McDonnell, J.G., 1986, 'Report on slag recovered from excavations at Beckford, Worcestershire.' *English Heritage Ancient Monuments Laboratory Report*, New series 64/86

McNaught, R., 1998, 'Land to the north of Field Lane (Area C), South Elmsall. West Yorkshire.' Assessment Report. WYAS R665

O'Connor, S., 1997, Metalwork conservation record and notes.

O'Neill, R., 2001, 'The Roman Period', in I. Roberts, A. Burgess and D. Berg (eds.) *A New Link to the Past*, Yorkshire Archaeology 7: 269-280

Poulton, R. and Scott, E., 1993, 'The hoarding, deposition and use of pewter in Roman Britain' in Scott, E., (ed.) Theoretical Roman Archaeology: First Conference Proceedings: 115-132. Aldershot.

Soil Survey of England and Wales, 1980, Soils of Northern England Sheet 1

Stach, E., 1975, Stach's Textbook of Coal Petrology, trans. D.G. Murchison, G.H. Taylor and F. Zierke, 2nd edition. Gebruder Borntraeger: Berlin

Williams, D.F., 1977, 'The Romano-British Black Burnished industry; an essay on characterisation by heavy mineral analysis', in D.P.S Peacock (ed.) *Pottery and early commerce; characterisation and trade in Roman and later ceramics*, Academic Press, 163-220

Wright, J., 1994, 'Boat Lane, Methley, West Yorkshire. Archaeological Evaluation.' WYAS

WYAS, 1991, 'Redlands Quarry Methley: Phase 1.2. Archaeological Specification.' WYAS R43.

Yarwood, R.E. and Marriott, J., 1988, 'Willow Grove, Methley', in 'CBA 4 Register', *CBA Forum 1988*, *The Annual Newsletter for CBA Group 4*, Counc. Br. Archaeol., 27

Yarwood, R. and Marriott, J., 1990, 'Methley Quarry. Phase 1, Part 1. Archaeological Evaluation.' WYAS

Yarwood, R. and Marriott, J., 1991, 'Methley Quarry. Phase 1, Part 2. Archaeological Evaluation.' WYAS R28

Young, C. J., 1977, *The Roman pottery industry of the Oxford region*, British archaeological reports 43, Oxford