HESLINGTON EAST

POST-EXCAVATION ASSESSMENT REPORT ON AN ARCHAEOLOGICAL INVESTIGATION (VOLUME 1)

OSA REPORT No: OSA10EV19

July 2012



OSA

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Report Summary.

REPORT NO: OSA10EV19, Volume 1

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PERIODS REPRESENTED: Mesolithic, Neolithic, Bronze Age, Iron Age, Romano-

British, Anglo-Saxon, medieval, post-medieval

List of Figures.

Figure 1. Site location (NGR SE 64267 51062) with OSA excavation areas shown in red	e
Figure 2. Areas of investigation	(
Figure 3. Field 8. Locations of earliest features	23
Figure 4. Field 8. Location of major Iron Age features	24
Figure 5. Field 8. Location of main features dated to the 2nd century AD	25
Figure 6. Field 8. Location of main features dated to the 3rd century AD	26
Figure 7. Field 8. Locations of major features dated to the late 3rd to early 4th century AD	27
Figure 8. Field 8. Locations of major features dated to the late 4th century AD	28
Figure 9. Field 8. Locations of medieval features	29
Figure 10. Field 9. Locations of Bronze Age and other prehistoric features in Trench 2	33
Figure 11. Field 9. Locations of major ditches in Trench 2.	36
Figure 12. Field 9. Features recorded in Trench 3, 4 and 8.	40
Figure 13. Trench 9. Section through earliest deposits	41
Figure 14. Trench 9. Plan of latest features.	42
List of Plates.	
Plate 1. Aerial view of site, looking northwest	48
Plate 2. Trench 6, Bronze Age waterhole	48
Plate 3. Field 8, Iron Age roundhouse and enclosure	49
Plate 4. Field 8. Detail of Iron Age roundhouse	49
Plate 5. Trench 6 and 3, second possible roundhouse	50
Plate 6. Trench 6, small Roman wattle lined channel	51
Plate 7. Detail of wattle lined channel	52
Plate 8. Trench 1. Earliest unlined waterhole	52
Plate 9. Trench 1. Working hollow (1068)	53
Plate 10. Trench 1. Wattle lining of well	53
Plate 11. Trench 1. Masonry around top of well and upper part of wattle lining	52
Plate 12. Trench 6. Small wattle lined well	54
Plate 13. Trench 6, detail of complex timber and cobble waterhole revetment	55
Plate 14. Trench 6. Crop drier 6254 pre-excavation	55
Plate 15. Trench 6. Crop drier 6254 partially excavated	56
Plate 16. Trench 10. Surviving tile lining of crop drier 10171	56

Plate 17.	Trench 2.	Bronze Age waterhole with cobble capping	.57
Plate 18.	Trench 2.	Log cylinder 2295	. 58
Plate 19.	Trench 2.	Detail of hollowed log cylinder 2090	. 59
Plate 20.	Trench 2.	Log cylinder 2090, in-situ	. 59
Plate 21.	Trench 2.	Bronze Age waterholes, pre-excavation	. 60
Plate 22.	Trench 2.	Colluvial layer 2049 over organic Bronze Age deposits	. 60
Plate 23.	Trench 2.	Ditch 2012 etc in foreground	.61
Plate 24.	Trench 2.	Roman ditches towards southwest corner of the trench	.61
Plate 25.	Trench 2.	Roman timber structure	. 62
Plate 26.	Trench 2.	Detail of base of timber post after lifting	. 62
Plate 27.	Trench 2.	Pre-excavation view of clay fill of ditch 2044	. 63
Plate 28.	Trench 2.	Mesolithic hearth 2085	. 64
Plate 29.	Trench 4.	Unlined Iron Age well	. 64
Plate 30.	Trench 9.	Stepped section	. 65
Plate 31.	Trench 9.	Sondage into natural roots	. 65
Plate 32.	Trench 9.	Possible trackway	. 66

1.0 Abstract.

Between the spring of 2010 and the summer of 2011 On-Site Archaeology Ltd undertook a programme of archaeological investigation in advance of the construction of a new spine road and associated groundworks as part of the Heslington East extension to the University of York. The investigations followed a series of evaluations and were carried out in accordance with methodologies agreed between the Principal Archaeologist for City of York Council, John Oxley, and the University of York Archaeological Consultant, Dr Patrick Ottaway. The majority of the archaeological investigation comprised detailed excavation of the line of the new spine road within two fields (Fields 8 and 9) on the south facing slope of Kimberlow Hill. In addition excavation extended to the south of the spine road in Field 8 in advance of future development, and within a separate area to the southeast of Field 9, known as field B6.

The main excavation area revealed the presence of a complex archaeological site ranging in date from the Middle Bronze Age to the late 4th century AD. A minimum of seven main phases of occupation were recognised. In addition to the main phases limited artefactual evidence suggests some form of activity stretching back as far as the Mesolithic and also into the Anglian period. By the medieval period the site appears to have been utilised exclusively as agricultural land, which had continued until the early 21st century.

Unusual geological conditions had led to the presence of a series of natural springs, located approximately along the 20m contour line, on the south facing slope of Kimberlow Hill. These springs had been managed to some extent from at least the early Bronze Age to the late Roman period.

Much of the archaeology recorded within Field 8 comprised ditched enclosures and wells of Romano-British date. These were clearly situated towards the periphery of much more extensive settlement remains, which were investigated by the University of York Department of Archaeology Field School.

The archaeological results of the investigation are clearly of sufficient significance to require publication. This will be done alongside the results of the investigations carried out by the Department of Archaeology and by York Archaeological Trust on other areas of the Heslington East site. This assessment has been prepared to assist in the preparation of an Updated Project Design for undertaking the post-excavation analyses and publication.

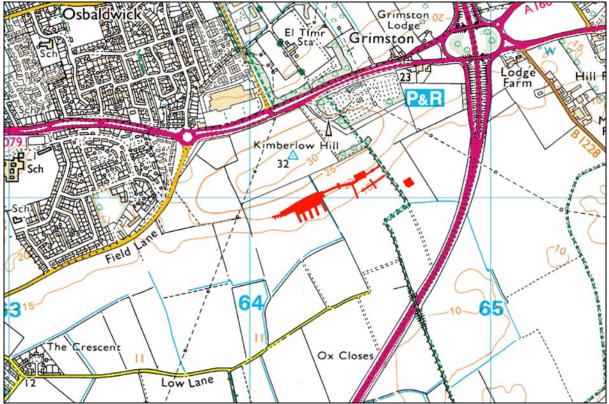


Figure 1. Site location (NGR SE 64267 51062) with OSA excavation areas shown in red

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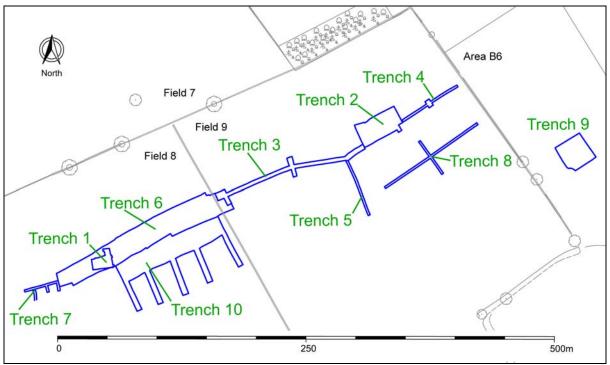


Figure 2. Areas of investigation

2.0 Site Location, Geology, Topography and Land Use.

The Heslington East site lies c. 3km to the east of the centre of the City of York and on the east side of the village of Heslington. The bulk of the site is bounded by Field Lane and Hull Road (A1079) to the north, the A64 trunk road to the southeast, and Low Lane to the south. At the time of the excavation the site was divided up into 18 fields, which had until the early 21st century been largely under arable cultivation.

The highest point in the site is at c. 32m OD, on Kimberlow Hill, in the northeastern corner. The land falls away steeply from here towards the Vale of York basin to the south, with the lowest point in the site being at c. 11m OD. It falls more gradually from Kimberlow Hill to the southwest and west. From Kimberlow Hill there are good views across the Vale of York to the south, southwest and southeast; the tower of York Minster can also be seen to the west-northwest.

The whole of the northern part of the main Heslington East site is situated on the glacial moraine, which exists as a ridge or ridges of elevated ground running roughly east-west across the Vale of York and cut by the river Ouse at York. The moraine is composed of gravels, sands and boulder clay deposited at the end of the last glaciation. In certain areas colluvium (hillwash) covers the glacial deposits. The southern part of the site lies on glacial sands as well as silts and clays. The solid geology is Bunter and Keuper sandstones. (The above information is derived from the Archaeological Remains Management Plan, PJO Archaeology 2007).

The part of the Heslington East site covered in this assessment is restricted to parts of three fields. Two of these, Fields 8 and 9, lie on the south facing slope of Kimberlow Hill, within Archaeological Area A3. The third area, defined as area B6, lies to the southeast, on low lying ground at the base of the hillslope. The areas of archaeological investigation included in this assessment are shown in red on Figure 1 and a general aerial view of the site, showing the location of the spine road is shown on Plate 1.

3.0 Archaeological Background.

Detailed descriptions of the archaeological potential of the site have been included in the Archaeological Remains Management Plan (PJO Archaeology 2007). The following section provides a brief summary of the main archaeological periods and character of remains that were anticipated within Area A3 at the commencement of the fieldwork.

Whilst previous investigations across the Heslington East site as a whole had revealed remains of prehistoric date, ranging from the late Neolithic to the Iron Age, those within Area A3 had only encountered a number of ditches and gullies of possible Iron Age date.

Very little Roman material was found during the fieldwalking stage of evaluation. This lack of Roman material was surprising in view of the substantial evidence for Roman activity and occupation that was subsequently recovered during the evaluation trenching. The trenching revealed evidence for ditched enclosures, dated to the early to mid 2nd century, but possibly of Iron Age origin. Two areas of unusually intense activity were investigated in Trenches 33-39 (Field 8) and 56 (Field 9).

In Trench 36 there were the foundations for the northern end of a building that included the hypocaust, including fifteen *pilae* in three rows, and furnace base, for a heated room. This was probably the *caldarium* of a small bath house. Adjacent to the building was a small pit containing five deliberately placed miniature pottery vessels. A cobbled road (Trench 38) led to the building from the northeast. Found in Trench 56 were the remains of a small stone structure, roughly square in plan, of unknown function. A few small pits apparently containing domestic waste were also recorded.

Unusual finds included a hoard of four bronze coins in Trench 33 (Field 8), probably datable to the reign of Hadrian (AD 117-138). Animal burials were found in Trenches 34 (horse) and 35 (cow), possibly with ritual associations. The horse was very fragile and left *in situ*. The cow made up part of an assemblage of 183 fragments of bone from Roman deposits. The bones were scattered in 27 stratified deposits in eleven trenches mostly in Fields 8-9.

Features identified as springheads were identified in Trenches 33 and 60 (Fields 8 and 9 respectively) and contained deposits with good organic preservation.

In the late Roman period (late $3rd - 4^{th}$ century) the bath house was demolished. A few late Roman features were found including two large ditches on a northwest to southeast alignment in Trenches 35 and 36 (Field 8) and part of a mammal burial in Trench 39 (Field 8).

Further investigation, carried out by the Department of Archaeology Field School attempted to determine the extent of the two areas identified as springheads (found within the original evaluation Trenches 33 and 60).

4.0 Methodology.

Standard *On-Site Archaeology* techniques were followed throughout the excavation. These involved the completion of a context sheet for each deposit, structure or cut encountered, along with plans and/or sections drawn to scale. Heights above Ordnance Datum (AOD) were calculated by taking levels from a Temporary Benchmark (TBM), which was then tied in with an existing Ordnance Survey benchmark. A photographic record of the deposits and features was also maintained.

All work was carried out in accordance with instructions issued by Dr Patrick Ottaway (PJO Archaeology) acting as consultant on behalf of The University of York and in consultation with John Oxley, the Principal Archaeologist for the City of York Council. Regular site meetings were held throughout the investigation.

5.0 Summary of Findings by Area.

5.1 Field 8

5.1.1 General

Archaeological investigations within this field were predominantly placed along the line of the new spine road. Initially excavation took the form of a single evaluation trench, Trench 1, which was positioned to investigate an area of waterlogged deposits suggested by previous evaluation work carried out by the Department of Archaeology Field School. Trench 1 was originally a 12m x 12m square. This was extended to become a rectangle 20m x 12m, with, at the northeast edge, a further extension of approximately 5m x 6m. The entire trench was subsequently incorporated into Trench 6.

Trench 6 comprised the excavation of the full width of the new spine road through Field 8, for a length of approximately 170m from the eastern field boundary. Originally this was 20m wide, but was extended by an additional 5m on its southernmost side, to clear an area for use as a construction corridor. The western end of Trench 3, within Field 9, contained archaeological features that clearly form a continuation of features excavated in Trench 6, so these are also described in this section.

To the west of Trench 6 the investigation narrowed to initially comprise a 2m wide evaluation trench, Trench 7. Three extensions were made to the south side of the initial evaluation trench to confirm the continuation of the line of a single linear feature. One of these extensions was positioned to evaluate the location of a proposed drainage swale.

A further investigation area was located to the south of, and conjoined with, the spine road excavation (Trench 6), to enable full archaeological recording in advance of future development. This area was recorded as Trench 10. Trench 10 comprised a 20m wide extension to the south of Trench 6, from the eastern field boundary for a distance of 115m. Originally it had been intended to excavate the entire field, to the south of the new spine road. However, during the course of mechanical stripping it became clear that the level of truncation caused by medieval and later ploughing increased to the south, and the density of archaeological features decreased. The southernmost part of the field was therefore evaluated by the excavation of five trenches, each 4m wide and 35m long, extending from the southern edge of the 20m wide excavation area. As no archaeological features were encountered within these evaluation trenches no further investigation was carried out in the southern part of Field 8.

All of the trenches excavated within Field 8 (and the western end of Field 9) were physically linked, with archaeological features extending across several trenches. Therefore the archaeological results from the various trenches in this field will be described together. The description is presented in approximately chronological order, based upon the provisional phasing of the site. A number of features excavated did not contain any readily datable

artefacts and could not be dated on stratigraphic grounds by their relationships with dated features.

Natural glacial deposits were encountered throughout the linked excavation areas within Field 8. These generally comprised firm reddish brown to yellow clays and sandy clays, with varying quantities of gravel, pebble and cobble inclusions. Sondages excavated into this material revealed interleaved lenses of deposits typical of the glacial moraine across the Vale of York. Natural deposits were recorded at a maximum height of 22.91m AOD along the northern edge of the road corridor. The ground sloped consistently down to the south, by just over 2m within the width of the road corridor itself. To the south of the road it sloped further, down to a height of approximately 17m AOD at the southern ends of the evaluation trenches extending down the slope as part of Trench 10. Within the road corridor, concentrated along the 21m AOD contour were a series of poorly defined areas where the firm glacial clays were replaced by soft pale grey, yellow and orange sands, which consistently included natural groundwater springs. An OSL date obtained from sampling these sand deposits within Trench 1, suggested that was deposited 36,000 years BP (although there is a suggestion that the sample had been compromised). (See OSL report in Volume 2).

5.1.2 Earliest features

One of the earliest features excavated within Field 8 comprised a substantial oval pit [6298], (Plate 2) within Trench 6 (which had originally been exposed and sample excavated in YAT evaluation Trench 33 [33060/33062]). This had a maximum diameter of 7m. The sides were gradually sloping down to a concave base at a maximum depth of 0.80m, although the original profile of the feature was much altered by collapse of the soft surrounding sand caused by the constant inflow of groundwater. The primary fill (6297) comprised a mixture of soft yellow sand derived from the surrounding natural, together with a proportion of organic matter. Assessment of a sample from this fill revealed a superabundance of water scavenger beetles indicative of aquatic deposition. This primary fill included invertebrate remains in an excellent state of preservation and it appears that it had suffered little in the way of drying out since deposition. A second fill (6241), of dark brown organic silty sand also appeared, during excavation, to contain a similar degree of preservation, but sample assessment suggests that it has been subject to periodic drying out. The identified invertebrates again suggest an aquatic deposition environment. The invertebrate remains, and the still flowing natural spring indicate that this feature was an open waterhole.

The final fill recorded within feature [6298] differed distinctly from the first two. This comprised a fine, pale grey sand (6202), similar to the surrounding sandy natural. This deposit clearly indicated a significant change in the depositional environment of the feature. The first two fills are likely to have formed whilst the hole was open with accessible standing water, whilst this final fill marks the sealing of the feature and its disuse. Artefacts were rare from the first two fills, being limited to occasional fragments of flint, one of which is suggested on typological grounds to date from the Early Bronze Age, whilst the others could have been Late Neolithic or Early Bronze Age. By contrast the final fill produced an assemblage of 16 fragments of flint, more than double that produced by any other single

deposit in the entire excavation. The earliest date that could be assigned to majority of this material was Late Neolithic to Early Bronze Age. A single small sherd of handmade pottery was also recovered from fill (6202). Together these provide two different dates by which the waterhole had been sealed by (6202). The single sherd of pottery suggesting this took place by the Iron Age, whilst the flint would seem to indicate an earlier date. As none of the flint recovered from the earlier fills of the feature are likely to date to later than the Early Bronze Age this at least appears to support the earlier date for this feature to have been in use. This Early Bronze Age date is also supported by the dating recovered from waterhole features excavated in Field 9 (see below).

Field 8 contained a number of other, stratigraphically early, but otherwise undated, pit features. Two of these [6583] and [6639] were located towards the western end of Trench 6, close to the northern edge of excavation. This area contained a complex sequence of intercutting features, including wattle-lined and timber/cobble revetted wells dating to later Romano-British phases of activity (see below). Pits [6583] and [6639] were two of the earliest features within this sequence and had been substantially truncated by the later cuts. Neither contained any datable finds so it is unclear if they belong within this prehistoric phase of activity, or they represent the earliest part of the Romano-British sequence.

Two more pits were recorded towards the eastern end of Trench 6, close to its southern edge, which on stratigraphic grounds should be considered as belonging to this prehistoric phase of activity. Pits [6498] and [6739] were both cut by the western side of a square enclosure ditch, which has been assigned an Iron Age date (see below). Once again neither contained any datable artefacts so it is not possible to determine how much earlier than the enclosure they are. The locations of these earliest features are shown on Figure 3. Field 8 also contained a number of undated, stratigraphically isolated features that may be related to this earliest period of occupation.

5.1.3 Iron Age features

The next major recognisable group of features were located at the east end of Trench 6, extending into the west end of Trench 3 and south into the eastern part of Trench 10, and clearly represent settlement evidence. This settlement predominantly comprises a square ditched enclosure, with the remains of a roundhouse, and other associated structures within. (See Figure 4).

The square enclosure is formed by a ditch cut [6084, 3023, 10012 etc]. The profiles recorded along this ditch vary due to differing degrees of truncation. The southernmost side had been substantially truncated by ploughing, so that it was only 0.50m wide and a maximum of 0.20m deep [10017], with a single recorded fill. By contrast at the northeast corner (excavated within Trench 3 as [3023]) the ditch was 1.20m wide and 0.50m deep, with a sequence of three fills. Parts of the western side (eg [10064]) were even deeper, a maximum of 0.60m, with a total of five fills, and there were suggestions in some of the sections along this side of recutting, which may account for the greater depth.

The enclosure formed by this ditch was square, with its axes aligned approximately north-northwest to south-southeast (parallel to and cut by the modern boundary between Fields 8 and 9) and east-northeast to west-southwest. The enclosure was approximately 35m across. The eastern side of the enclosure included a 3m wide entrance, approximately 15m from the northeast corner.

Assemblages of pottery were recovered from several of the sections excavated through the infill of this enclosure ditch. The majority of the pottery comprised handmade fabrics dated to the pre-Roman Iron Age, although some sherds of Romano-British date, mainly from the 1st to early 3rd century, were also present. The enclosure lay within an area where intensive Romano-British activity had subsequently taken place and these sherds my represent intrusion and contamination within the ditch that was not recognised during excavation. Alternatively they may suggest that the ditch was at least partially still open into the Romano-British period, or that the enclosure is actually Romano-British and contains a substantial assemblage of residual pre-Roman pottery. This last suggestion seems to be most unlikely given the nature of the features recorded within the enclosure and quantities of pottery recovered.

The most coherent feature within the enclosure comprised a roundhouse ring gully [6709, 10006, 10027] (see Plates 3 and 4). This was located approximately in the centre of the enclosure. The ring gully comprised a penannular feature, the cut of which was a maximum of 0.80m wide and between 0.15m and 0.25m deep. A maximum internal diameter of 7.75m was recorded, and a 3.6m wide entrance was present to the southeast. No features were recorded within the ring gully, although this is unsurprising given the evidence for truncation of this area by subsequent ploughing and the presence of later ditches cutting through the feature. At its southernmost point the ring gully had been cut into by a small oval pit [10040], with a maximum diameter of 0.32m. Although no easily datable finds were present a small assemblage of burnt bone was recovered. Immediately to the southeast of the ring gully entrance lay a single posthole [10008/10010]. Although undated the position of this posthole suggests that it is related to the ring gully, potentially forming part of the roundhouse entrance.

Several other, possibly contemporary, features were recorded within the square enclosure.

Immediately to the northeast of roundhouse ring gully [6709 etc] were two similar gullies [6661/3/5] and [6469/6659]. These had been truncated by the recent ditches defining the Field 8/9 boundary and continued beyond the southern limit of excavation, so the full extent and form of the feature represented by these gullies is unclear. The easternmost section of gully [6661 etc] was between 0.56m and 1.09m wide, and a maximum of 0.16m deep (see Plate 5). None of the fills of this stretch of gully contained any finds. The westernmost section of the gully [6469/6659] was of similar width, but survived to a greater depth, a maximum of 0.25m. Several sherds of handmade pottery were recovered from the fill (6458) suggestive of an Iron Age date. Despite the incomplete nature of the feature formed by these gullies, it is possible that they represented a second roundhouse. If this were indeed the case then it would have an internal diameter of approximately 7m, and a northern entrance 1.25m wide.

Other features recorded within the square enclosure were limited to either undated pits, or contained artefacts of clearly later date and are therefore not associated with this phase of activity.

Beyond the limits of the square enclosure other features were excavated within Field 8 that only contained handmade pottery and were therefore potentially of contemporary, Iron Age date. One such feature [6685] was located within the complex of wells excavated at the western end of Trench 6, close to its northern edge of excavation. As with pits [6583] and [6639] described above, this was stratigraphically early within this sequence of features, but contained a single scrap of probably Iron Age pottery. Pit [6685] lay approximately 135m to the west-of the square enclosure.

Other pits containing similar handmade pottery were located less than 5m outside the western ditch of the enclosure [6721], and 45m and 75m to the southwest of the enclosure, [10112] and [10280], both within Trench 10.

Within the area that was occupied by the 2004 evaluation Trench 33 another stratigraphically early pit [6594], containing handmade pottery of probably Iron Age date, was excavated. (This pit had previously been identified during the evaluation as a possible ditch [33026/33051], although its location at the edge of the trench had made this interpretation uncertain). Pit [6594] was sub-oval, with a maximum diameter of 2.70m, irregular sides, which had clearly suffered from collapse due to the inflow of groundwater, and a flattish base at a maximum depth of 0.70m. The primary fill (6593) was predominantly derived from the eroded sand natural. The only artefact recovered from this fill was a near complete saddle quern. The primary fill was sealed by a further similar sandy fill (6592), from which no finds were retrieved and a final fill (6591) of mid grey silty sand, which contained a small assemblage of handmade pottery, suggested to be of Iron Age date.

If the dating of these pit features is correct then it suggests that whilst the square enclosure was a focus of settlement in Fields 8 and 9 during the Iron Age other activities, probably including the managed extraction of water, were being carried out across the site at the same time. However, given the spacing of the occasional features, and the potentially broad date range into which they fall, this activity is clearly not intensive.

5.1.4 Romano-British features

The majority of the features excavated within Field 8 clearly lie within the Romano-British period. Ceramic dating of the assemblage recovered from the Field 8 trenches suggests a period of occupation from the 2nd century to the later 4th century AD. Features predominantly include ditches, dividing and sub-dividing this area of the site, together with localised clusters of waterholes and wells and single complex features, such as crop driers, and possible working hollows. The following section attempts to summarise the archaeological findings from the Romano-British period, by dividing the features into simple chronological phases, based upon the ceramic spot dating. Clearly within these broad phases the site has developed on a micro-topographical scale, as is shown by detailed analysis of stratigraphic relationships between features included in the same ceramic phase.

The earliest of the clearly Romano-British dated ditches, are likely to have been filled in during the 2nd century AD at the earliest, suggesting a period of disuse of this area of the site following the backfilling of the square enclosure ditches. (See Figure 5). Relatively few ditches excavated in Trenches 6 and 10 could be confidently dated on ceramic grounds to the 2nd century. These included an L-shaped ditch [6365 etc] and a related north-northwest to south-southeast ditch [6346 etc], located approximately 35m from the modern Field 8/9 field boundary. Stratigraphically these two ditches were also the earliest in this area of the site so the comparatively early date would seem to be reasonable. Further ditches and occasional pits were recorded that only contained pottery dated to the 2nd century, but as they cut other features from which 3rd or 4th century material was recovered they are excluded from this earliest phase of Romano-British activity.

A second group of possibly 2nd century features was recorded close to the northern limit of Trench 6, approximately 90m from the Field 8/9 boundary. Two of these features [6224] and [6336] were irregular pits, interpreted as possibly being caused by the removal of tree stumps, whilst the third was a posthole [6349]. Given the relative lack of features excavated in Field 8 which only contained 2nd century pottery this apparent concentration would seem to be significant. Several other postholes and two possibly structural slots [6160] and [6206] were also excavated in this area of Trench 6 but did not contain any datable artefacts. These undated features may be contemporary, which would seem to suggest the presence of a relatively slight structure, dated to the 2nd century. A single, stratigraphically early pit [1026] excavated in Trench 1, also only contained 2nd century pottery. This may represent the first water extraction pit of the sequence of pits and wells recorded in Trench 1 (see below)

Features containing pottery dated to the early to mid 3rd century at the latest were also present (Figure 6). One group of such features comprised a series of ditch termini [6076, 6097 and 6167], which extended a short distance into Trench 6 from the northwest. These ditch termini are all located close to the possible 2nd century structure, possibly suggesting some form of continuity of activity along this northern edge of this stretch of Trench 6. A truncated pit [6261] located immediately to the east of [6167] also contained pottery of the same date range and is likely to be related. These features were all limited to the northernmost 5m of Trench 6, spaced across an area 30m wide.

Approximately 12m to the east of the group of ditch termini and pit was another ditch [6372 etc] which contained 3rd century pottery. This was recorded for a total length of just over 20m, from the northern edge of excavation. Stratigraphically it was the earliest feature within this part of the site, being cut by two later linears at right angles. 15m to the northeast of [6372] was another stratigraphically early ditch terminus [6200], containing 3rd century pottery, although this had been substantially truncated and it only survived for a length of 1.30m.

Three further areas of Trench 6 contained ditches containing 3rd century pottery.

Towards the eastern end of the trench [6491] and [6493] were located immediately inside the Iron Age square enclosure, cutting its western ditch. Given the apparent gap between the backfilling of the enclosure ditch and the filling of these ditches, and the fact that they only

occur along part of this side of the enclosure, it seems unlikely that they represent a deliberate attempt to redefine the enclosure. It is more likely that the apparent relationship is more coincidental, and reflects the dominant orientations of almost all of the ditches excavated.

Within the area originally occupied by and immediately adjacent to evaluation Trench 33 (excavated in 2004), two more features only containing 3rd century pottery were excavated. These included the western terminus of an approximately east west aligned ditch [6507], which was recorded for a total length of approximately 5m. It was 0.85m wide and a maximum of 0.43m deep. An assemblage of pottery, the latest types of which were dated to the 3rd century was recovered from the final fill of this ditch (6508). The eastern end of the ditch had been truncated by a pair of successive large oval pits. The earlier of these [6574] did not contain any datable artefacts. The final fill (6567) of the later of the two pits [6571], also contained a range of pottery, the latest of which was dated to the later 2nd to early 3rd century. The stratigraphic position of this pit, post-dating ditch [6507], clearly pushes it towards the latter part of this date range.

The final area within Field 8 where features containing 3rd century pottery were excavated lay towards the western end of Trench 6, within a complex sequence of archaeology. Three separate lengths of ditch containing pottery dated to the 3rd century at the latest were recorded in this area of the site, two of which were stratigraphically related. The earlier of these was [6522/6558], which entered the trench from the north (although in a truncated state due to the presence of a plough furrow), to the west of the complex of intercut features, before turning to the east. Two of the fills of this ditch (6524), (6525), contained pottery dated to the mid 2nd to mid 3rd centuries. This ditch was heavily truncated by a number of other features so tracing its continuation to the east is somewhat uncertain. One of the features cutting [6522/6558] was another ditch [6544] containing pottery dated to the 3rd century. Although this had also suffered from a degree of truncation it appeared to run north to south for a total distance of approximately 18m from the northern edge of the trench. At its northern end this ditch was as much as 1.40m wide and over 0.50m deep, whilst to the south it was much reduced, down to less than 0.25m wide and 0.10m deep in places. This is likely to at least partially be due to the increased degree of plough truncation exhibited in the southernmost parts of the excavated areas in Field 8.

The third ditch recorded within this western end of the areas excavated in Field 8 was located predominantly within evaluation Trench 7 [7005/7008]. This ditch lay at right angles to ditch [6544] and terminated approximately 2m from its western side. It is included in this 3rd century phase of activity due to the presence of two sherds of amphorae dated to the 1st to 3rd century. However, it should be noted that it lies parallel to ditch [7010], which appears to date to a later phase of occupation, and its termination is adjacent to the corner of late 3rd to early 4th century ditch [6575] to which it may also be related.

One further feature [6391] within this area of Trench 6 also contained pottery dating it to the 3rd century. This was a narrow, steep to vertically sided, north-northwest to south-southeast aligned linear cut, approximately 4m in length (although the northern end had been truncated by later features). It was 0.65m wide and up to 0.25m deep, with a gently sloping base from

the southern end, down towards the north. The sides had been lined with wattling (6682, 6683, 6790, 6791) (Plates 6 and 7). The lining and slope suggest that this feature had been constructed to channel water (or another liquid?) into a larger feature, such as a pit or tank. However, subsequent pits and wells have completely removed any evidence for this presumed feature.

The next phase of activity recognised in Field 8 from the ceramic assemblage, dates to the late 3rd to early 4th century. Features containing pottery of this date predominantly comprised ditches and pits (see Figure 7).

Two of the main east-northeast to west-southwest ditches containing late 3rd to early 4th century pottery [10021 etc] and [10061 etc] were parallel, approximately 5m apart, and appeared to form the southeastern boundary to the main area of Romano-British activity on the site. The western end of the northern ditch [10021/6575/1083] turned through approximately 90°, cutting through the western complex area of archaeological features, and extending to the north beyond the limits of the excavated area. These parallel ditches may have formed a trackway, or alternatively flanked a central bank.

Several other ditches were located to the north of this ditch, two of which [6010 etc] and [6257 etc] joined it at right angles. These two ditches were placed 40m apart, with the easternmost one approximately 40m from the Field 8/9 boundary. To the west of these another parallel ditch was recorded [6454], although this was very shallow and did not continue far enough to the south to join the west-southwest to east-northeast ditch. This may have been due to the greater degree of truncation evidenced further to the south down the hill slope. Taken together these ditches appear to form a coherent series of rectangular enclosures, set along the northern side the double ditch southern boundary.

Within the eastern part of Trench 6 several further lengths of ditch, aligned either east-northeast to west-southwest, or at right angles to this, appear to form sub-divisions within this basic layout of rectangular enclosures. One of these ditches [6035 etc] broadly mirrored the northernmost ditch of the Iron Age square enclosure. Unlike the square enclosure ditch this did not continue into the western part of Field 9, but turned slightly to the south before being completely truncated by the current Field 8/9 boundary ditch. This turn, together with the complete absence of contemporary ditches within the western part of Field 9, suggests that the current field boundary lies along the line of a Romano-British boundary ditch forming part of this late 3rd to early 4th century field system.

Ditch [6035] appeared to be cut by another ditch, which differed from the majority excavated as it diverged from the general alignments recorded. This ditch [6033 etc], entered Trench 6 from the north, following the normal north-northwest to south-southeast alignment, but just to the south of ditch [6035] it turned to the southeast, cutting through the Iron Age square enclosure ditch and the roundhouse, at which point it terminated (see Plate 4). There appeared to be several recuts of this ditch, especially towards its southeast end. This set of ditches has been cautiously included within this phase of activity on the basis that it cuts through [6035]. However, its dating and unusual alignment, causes some doubt to be cast upon this. The pottery collected from the numerous sections excavated through this ditch

generally suggested an earlier date, in the 2nd century AD, for its backfilling. In addition a single sherd of medieval pottery was recovered from the top fill of one of the sections. This medieval pottery is assumed to be intrusive, probably caused by the medieval ploughing mixing the top fill of the ditch. If this is the case then all of the remaining pottery would seem to suggest that the ditch may be earlier than the late 3rd to early 4th century ditch through which it was believed to cut. Either all of the 2nd century pottery is residual, with no contemporary late 3rd to early 4th century sherds, or the feature actually dates to this earlier phase and the originally recorded stratigraphic relationship is mistaken.

In addition to the ditched system of enclosures that have been dated to the late 3rd to early 4th century several discrete features could also be dated to this phase of occupation. A concentration of such features lay within the westernmost rectangular enclosure, located to the west of ditch [6454]. The westernmost of these features was situated within the previously described complex area of intercutting waterlogged features. [6340/6681] was a substantial sub-oval pit. The edges of this had clearly suffered from collapse of the surrounding natural sands, caused by the constant inflow of groundwater. Attempts had been made to consolidate the edges of the cut with vertical stakes driven into the sand, and probable horizontal wattling between these, although subsequent features had disturbed the structure to the extent that it is difficult to reconstruct its original form with any certainty. This pit was almost certainly constructed to facilitate the extraction of water from the natural spring.

Approximately 15m to 25m to the east, still within this westernmost rectangular enclosure were further substantial cut features, containing pottery dated to the late 3rd to early 4th centuries, some of which were also likely to be related to water extraction. (This area was originally identified as containing preserved organic deposits through a Department of Archaeology evaluation trench, and was then opened up as OSA evaluation Trench 1). Feature [1121] was a substantial sub-oval pit, up to 5m in diameter, with steeply sloping sides and a flat base at a depth of 0.75m (Plate 8). The primary fill (1120) and one of the later fills (1115) both contained pottery dated to the late 3rd to early 4th century. A sample assessed from part of the backfill sequence was dominated by water beetles indicative of stagnant water.

7m to the west of [1121] was another large pit [6479], containing pottery dated to the late 3rd to early 4th century. This was sub-rectangular, up to 4m across, moderately sloping sides and a flat base at a depth of 0.50m. Once again the organic primary fill was suggestive of deposition within water, although this was less obviously linked to a groundwater spring. Pit [6479] severely truncated an earlier pit [6564], the remnant of which also contained late 3rd to early 4th century pottery.

Between the large pits [1121] and [6479] was another large, but shallower, feature [1068], containing pottery dated to the late 3rd to early 4th century. This was an irregular oval, with a maximum diameter of 5m. The primary fill (1069) comprised a layer of grey to yellow sand (similar to the natural in the vicinity) containing frequent pebbles and cobbles (see Plate 9). This may have formed a firm floor surface. However, the irregular character of the feature

would seem to suggest that it was not part of a building, and although occasional postholes were recorded in the area of this feature they do not form a coherent pattern suggestive of walls. This feature may therefore represent a less substantial structure, such as a partially covered or screened working area. Its proximity to the contemporary pits, which were potentially excavated to provide access to a water source, suggests that the activity being undertaken required substantial quantities of water.

Additional pits containing late 3rd to early 4th century pottery were excavated further to the east. One such group was located approximately along the line of the possible trackway forming the southern boundary of the field system, close to its junction with dividing ditch [6257]. Two of the pits [10221] and [10273] cut the northernmost ditch, whist the third [10183] was placed between the two ditches and did not have a direct stratigraphic relationship with either. These pits did not obviously coincide with natural springs so presumably performed a different function to the majority so far described.

Within the eastern part of Field 8 discrete features containing pottery dated to the late 3rd to early 4th century were limited to a single isolated posthole [10022] located alongside the trackway, and a single isolated pit [6296] located in the northeastern part of Trench 6.

5.1.5 Late Romano-British and early medieval features

The final phase of Romano-British activity, identified from the ceramic assemblage, was dated to the later 4th century (Figure 8). Features assigned this date again included ditches, pits, wells and possibly two crop driers.

The southern ditch of the possible trackway, described above [10061 etc] was recut [10049 etc], and the fill contained pottery dating to the late 4th century. This recut was not present within the eastern part of Field 8. It is possible that the recut terminated within the limits of the trench. However, the recut was notably shallower towards its eastern end and this may have resulted in it being entirely truncated within this part of the field by subsequent ploughing. Further to the west a similar shallow ditch was recorded apparently continuing the line of this trackway ditch (as [6598] in Trench 6 and [7010] in Trench 7). Unfortunately none of the sections excavated in this westward portion of the ditch contained any closely datable artefacts so it could not be confirmed if it represented the original ditch cut, the late 4th century recut, or a different earlier or later phase altogether.

To the north of the southern boundary ditch additional ditches [6172] and [6289] were laid out at right angles. These two ditches both terminated to the north of the late 3rd early 4th century ditch [10021 etc] suggesting that, although there was no sign of a recut like its southern counterpart, it still exerted a degree of influence over the configuration of new boundaries. Within the western part of Trench 6 (running through Trench 1, and YAT evaluation trench 33) another late 4th century ditch was established [6136 etc]. This ditch entered Trench 6 from the northern edge of excavation, ran for a distance of approximately 18m, before turning through 90° towards the west-southwest. It cut the two, probably prehistoric waterhole features originally recorded in YAT Trench 33, and several of the features excavated in Trench 1, including the late 3rd to early 4th century pit [1121] and

working hollow [1068]. At its western end this ditch joined the complex sequence of intercut features, where it was clearly truncated by some of the latest features in this sequence. To the west of this sequence of features a possible continuation of ditch [6136] was recorded. However, this continuation [6558] only contained earlier pottery (of 3rd century date) and was truncated by other ditches, [6544] and [6575] which also contained pottery either dated to the 3rd century or to the late 3rd to early 4th century. However, as ditch [6136] did not continue to the west or the south of the sequence of intercut features it either terminated at the point at which it was subsequently truncated, or returned to the north, beyond the limits of Trench 6.

In addition to the ditches dated to the late 4th century several other features containing pottery of this date were recorded.

A small shallow pit [10247] containing late 4th century pottery cut into the northern side of part of the late 3rd to early 4th century trackway ditch approximately 10m to the southeast of the corner of enclosure ditch [6136]. Further east, immediately south of late 4th century ditch [6172], was a larger, shallow cut [10301/10302], which also contained late 4th century pottery. This cut was a rough oval, up to 5.50m in diameter and between 0.30m and 0.40m deep. In addition to cutting through the northern ditch of the late 3rd to early 4th century trackway ditch [10021], it also cut several smaller pits, which were generally undated or only contained very occasional sherds of earlier Romano-British pottery. Although these did not include any active springs and were not particularly rich in organic material they may have originally functioned as water extraction pits as they lay close to the contour at which the majority of similar features were found in Field 8.

Several other features are likely to belong to this latest Romano-British phase of activity, upon stratigraphic grounds. Within Trench 1, late 4th century ditch [6136] was cut by the construction pit for a substantial, lined well [1043]. (It also cut the earlier, late 3rd to early 4th century waterhole [1121]). The construction cut for this well was a sub-oval pit, up to 2.45m in diameter and approximately 1m deep. Throughout the excavation of this feature groundwater was constantly entering at a rapid rate. The interior face of the well was lined with carefully constructed wattle, forming a cylindrical shaft approximately 0.90m in diameter (Plate 10). Packed around the wattle were deposits containing frequent cobbles, timber posts, planks and clay. It is possible that the posts, planks and cobbles formed an earlier form of lining that had been replaced by the wattle, although they may also have been parts of a single episode of construction. The large quantities of material being used as backfill around the wattle lining were probably needed due to the very loose character of the surrounding natural sand through which the groundwater easily percolated. At the top of the well a ring of re-used squared masonry blocks had been constructed, which appeared to have originally formed a low wall around the well (Plate 11). Datable finds from the well were scarce, being limited to occasion scraps of Romano-British pottery dated to the late 3rd to early 4th century, which, given the stratigraphic relationship with late 4th century ditch, is clearly residual.

To the south of the well, within Trench 1, another stratigraphically late pit [1133] was excavated. This cut through both the waterhole [1121] and ditch [1083] which were dated to the late 3rd to early 4th century, and may therefore relate to this phase of activity.

Further to the west, within the complex area of organic deposits and features, were other cuts that clearly related to the extraction of water. Natural spring water constantly flowed into these excavated features. One of these features [6588] was a shallow well, and included a wattle lining (Plate 12). This was fairly small, the construction cut being up to 1.65m in diameter, with the wattle lining forming a circular shaft less than 1m in diameter. None of the fill contained any datable artefacts. Adjacent to this, and cutting several of the earlier ditches and possible earlier waterholes in this area, was a larger irregular oval cut [6237]. Rather than including a wattle lining the loose sand natural into which this had been cut had been consolidated with driven stakes and posts, with substantial quantities of horizontal timbers between them (Plate 13). Large cobbles had also been occasionally employed in this consolidation, including a substantial fragment of beehive quern base. Once again closely datable artefacts were absent from this feature. Ascertaining the precise stratigraphic relationships and sequence within this area of the site was extremely difficult, partially due to the constant inflow of water, but also due to the fact that many of the features appeared to be sealed by a single overlying deposit, making them indistinguishable in plan. However, the relatively complete character of these two wells indicates that they are late within the overall sequence, and despite the lack of contemporary pottery, have therefore been considered as part of the late 4th century phase of occupation.

Two more complex features have also been included within this late 4th century phase despite an apparent lack of contemporary pottery. These are both interpreted as crop driers. The westernmost of these [6254] was clearly constructed above the backfill of ditch [6172], which contained pottery dated to the late 4th century. Structure [6254] comprised an approximately T-shaped feature, with the longest arm of the T 3.80m long and aligned east-northeast to west-southwest. At its west end the top of the T extended at right angles, being a total length of 3.5m. The western end of this feature included a single course of poor stonework bonded with clay (Plate 14). This appears to have formed the base for a drying floor, with the flue extending to the east to the firebox and probable stokehole for the feature at the eastern end. The location of the firebox could be identified by the presence of in-situ burning at this location (Plate 15). Dating material within this feature was again scarce. It was limited to a single sherd of Romano-British pottery dated to the 3rd century, which is clearly residual as the feature post-dates the late 4th century ditch, and a single sherd of medieval pottery dated to the 11th to 13th century. As the form is suggestive of a Romano-British feature, and the majority of the archaeology excavated in Field 8 is dated to this period, the single medieval sherd recovered from this feature has been assumed to be intrusive, probably as a result of damage by ploughing. Crop drier [6254] has therefore been included in the late 4th century phase of Field 8. However, the possibility should not be entirely discounted that the crop drier is actually a medieval feature.

The second crop drier [10171] was located approximately 20m to the southeast of [6254]. This was approximately rectangular, a total of 4.80m in length, and was again aligned east-

northeast to west-southwest. The eastern part was up to 1.30m wide, whilst the western was expanded slightly to a maximum width of just over 2m. Parts of the outside of the cut had been lined with clay and tile (Plate 16), some of which had clearly been burnt in-situ, and the fills contained quantities of ash. The original form of this feature was harder to determine than [6254] due to a greater level of truncation by ploughing and land drains. Ascertaining a date for this was also problematical due to the lack of datable pottery, as neither Romano-British nor later material was present. Several fragments of Romano-British brick and flue tile had been used in the lining of structure [10171], which, (whilst it is possible that such material could be re-used into the medieval period) are taken to provide a broad date for its construction. Stratigraphically feature [10171] appears to truncate the southern end of a late 3rd to early 4th century ditch [6109], although the relationship had been compromised by the presence of a plough furrow and land drain.

The excavations within Field 8 also recovered a number of sherds of pottery provisionally dated as Anglian on the basis of surface decoration or the fabrics present. The assignation of an Anglian date of handmade pottery on fabric alone is extremely difficult and some of the material is from features which are almost certainly Iron Age in date (such as the roundhouse gully). However, some of these possible Anglian sherds were recovered from comparatively late deposits, overlying features securely dated to the late 4th century at the earliest. The most securely identified sherd, which included decoration, was recovered from a layer capping all the earlier features in Trench 1. This would hint at some form of Anglian activity taking place within Field 8. The Anglian identification of the remaining pottery requires confirmation before conclusions can be made regarding the possible extent and significance of this period.

5.1.6 Late medieval, post-medieval and modern features

The final phase of activity represented in Field 8 dates to the medieval to early modern periods. Occasional sherds of pottery, ranging in date from the late 11th to the 19th century were recovered. Features recorded for this long period are all consistent with the sites known agricultural land-use, being limited to plough furrows (especially within the southern portion of the Field 8 investigations, see Figure 9), land drains (often cutting through the areas of well preserved organic archaeology) and the Field 8/9 boundary ditch. Possibly the most significant factor relating to this phase of agricultural land-use is the degree to which it may be responsible for truncating earlier periods of archaeology. The clearest evidence for this is provided by the Iron Age square enclosure ditch, with the southern side being approximately 0.30m shallower than the northern, suggesting the loss of this depth of deposits as a result of greater depths of plough damage. It is therefore worth noting that whilst the double ditched trackway, originating in the late 3rd to early 4th century AD appears to mark the southern extent of Romano-British occupation in Field 8, the increased truncation within the southern part of the field may have removed any evidence for shallower features. One very shallow linear feature which was interpreted as a plough furrow was recorded entering the northern edge of excavation towards the west end of Trench 6. This had truncated an earlier Romano-British ditch and may in fact be a severely truncated ditch rather than a furrow, as no similar parallel furrows were located along this northern edge.

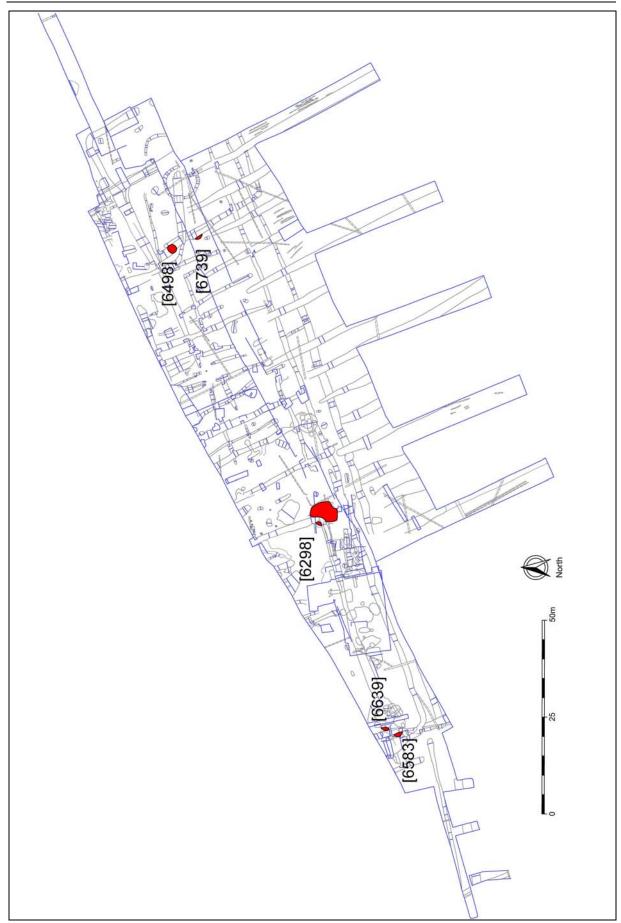


Figure 3. Field 8. Locations of earliest features

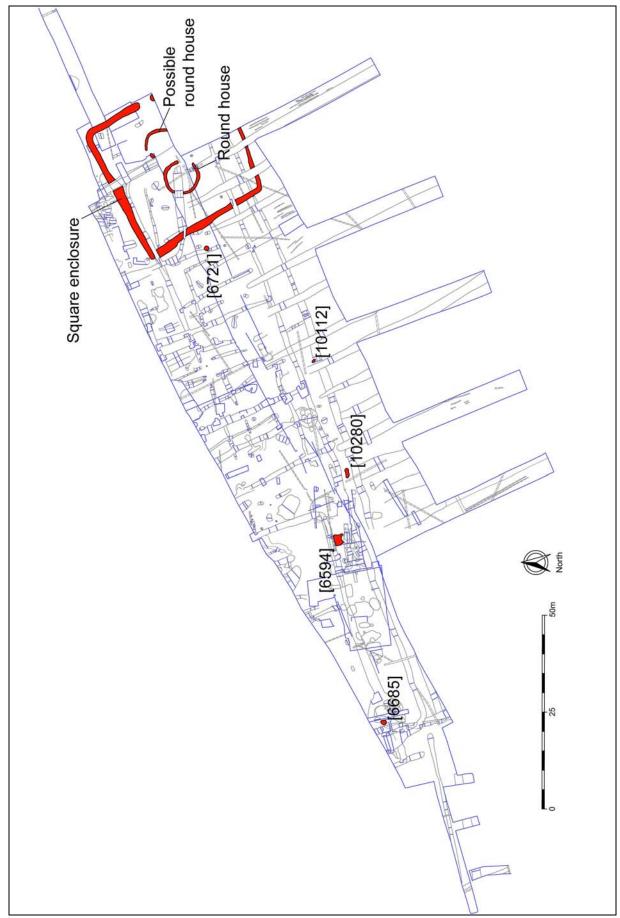


Figure 4. Field 8. Location of major Iron Age features



Figure 5. Field 8. Location of main features dated to the 2nd century AD

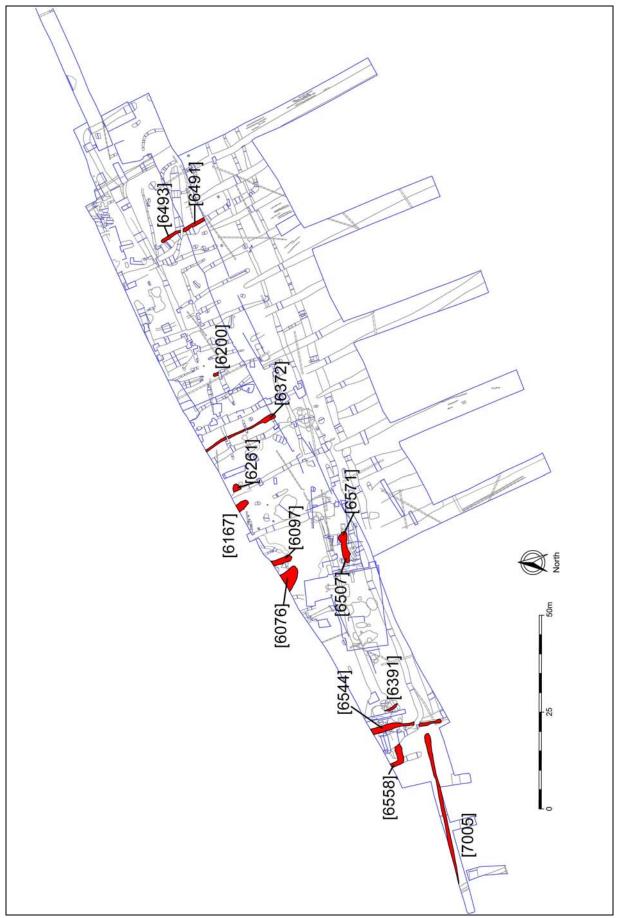


Figure 6. Field 8. Location of main features dated to the early to mid 3rd century AD

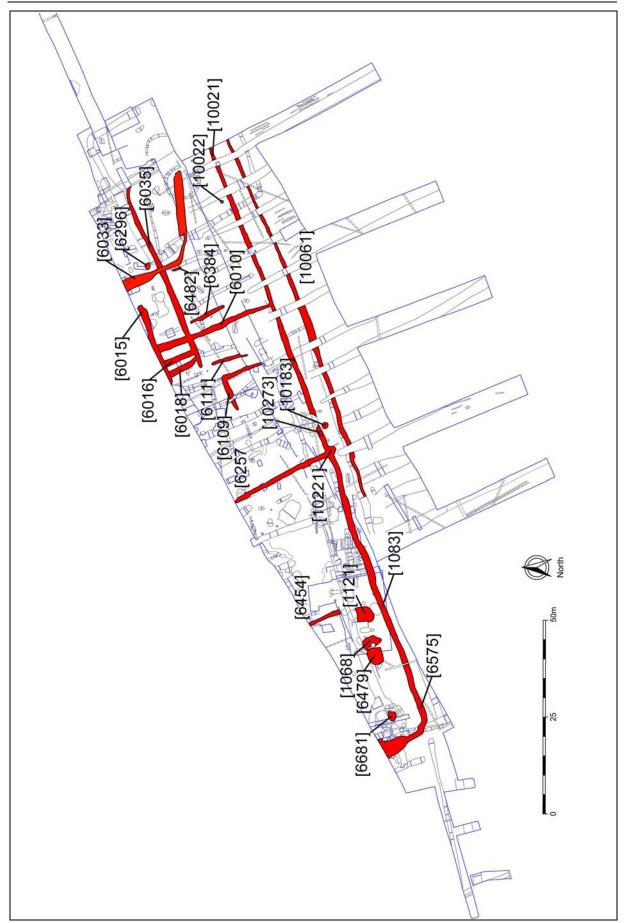


Figure 7. Field 8. Locations of major features dated to the late 3rd to early 4th century AD

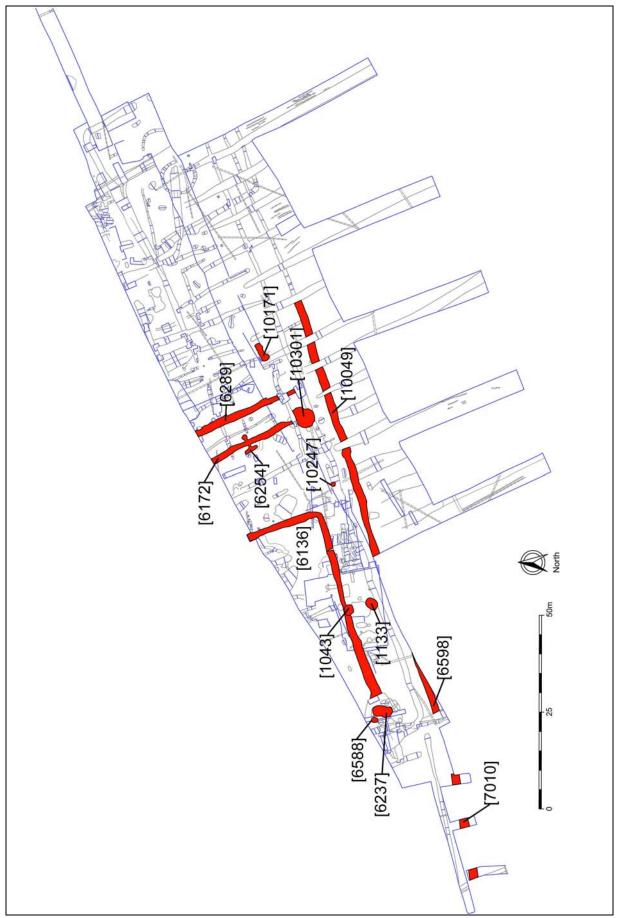


Figure 8. Field 8. Locations of major features dated to the late 4th century AD



Figure 9. Field 8. Locations of medieval features

5.2 Field 9

5.2.1 General

Archaeological investigations within this field were again predominantly placed along the line of the new spine road. In the case of Trench 2 this was expanded to encompass an area 45m x 25m, due to the presence of a complex sequence of waterlogged archaeological deposits. This trench had originally been part of the Department of Archaeology Field School, and DoA trenches extend immediately to the west and north.

To the east of Trench 2 investigations were undertaken within Trench 4. This trench was initially excavated as a 2m wide evaluation trench, placed along the centre line of the spine road. Along the majority of its length no archaeological features were present. In one small area, approximately 30m from the eastern boundary of the field, and 30m from the eastern edge of Trench 2, a group of archaeological features were recognised. The trench was therefore expanded at this location to allow full excavation of the features within the construction width of the spine road.

To the west of Trench 2 investigations were again carried out within an initial evaluation trench, Trench 3, placed along the centre of the spine road. Trench 3 was initially 4m wide, and was again expanded to the full width of the spine road where archaeological features were revealed. This involved one extension 20m wide, approximately 75m to the west of Trench 2. At the west end of Trench 3 the archaeological features investigated are clearly very closely related to those excavated in Field 8 and are therefore described within that part of the report (See Trench 6).

Approximately 20m to the west of Trench 2, extending to the south of Trench 3, lay a further evaluation trench, Trench 5. This trench was located within the centre of a proposed southern spur road. It was 2m wide and 60m long. As no archaeological features were recorded, it was not necessary to undertake any extensions to this trench.

One further trench, Trench 8, was excavated in Field 9. This was located to the south of Trench 2, and the east of Trench 5, within the footprint of a proposed new car park. Trench 8 comprised two conjoined evaluation trenches, each 2m wide, at right angles to one another, forming a cross. The two elements of the cross were approximately 110m and 40m in length.

5.2.2 Trench 2

Natural glacial deposits were revealed across the entire area of this trench. These varied from firm sandy and gravelly reddish brown clays to soft pale yellow sands. Examination of the sands suggested that they had been deposited within a peri-glacial environment, and there appeared to be a positive relationship between the locations of these sand deposits and the locations of natural springs, which were subject to water extraction exploitation from the Bronze Age onwards across the site. The sand deposit within this trench did not contain any cultural material, and is therefore considered as "natural". An OSL sample was taken from this deposit (2292), which produced a date of 12,000 years before present. The natural

deposits within Trench 2 sloped down from north to south, as did the whole of the topography within Field 9. The natural was recorded at a maximum height of 21.10m AOD at the north edge of the trench (where it continued into areas excavated by the DoA), and sloped down to 19.96m AOD in the southwest corner and 19.24m AOD in the southeast.

Stratigraphically the earliest clearly archaeological features excavated within Trench 2 comprised a sequence of intercutting pits, that had been dug into the natural sands and underlying boulder clay in the vicinity of natural springs. The pits covered a total area of approximately 13m x 13m (see Figure 10. Some of the pits were irregular in shape and may not have been deliberately cut, but had been caused by, or severely affected by tree rooting (for example [2326]).

The majority of the pits were sub-circular or oval in shape. Due to the constant inflow of ground water from the natural springs the edges of the cuts were very difficult to define and often eroded immediately after the fills had been removed. They ranged in size from around 0.50m diameter, up to a maximum of over 4m in diameter, although the largest examples were unusual and may in fact have been several adjacent pits that had eroded into one. The majority of these features were between 1m and 3m in diameter. Typically these pits were between 0.30m and 0.50m deep, although occasional shallower and deeper examples were present. None of the pits were in excess of 0.75m deep. The fills were characterised by high organic content, clearly aided by the permanently wet conditions provided by the springs, together with frequent bands of rounded cobbles and pebbles (Plate 17). Finds were rare, being limited to occasional fragments of bone, some of which has been identified as human, and occasional flints, some of which could be typologically assigned a Late Neolithic to Early Bronze Age date.

Two of the pits [2082] and [2302], however, also contained wooden objects, in the form of hollowed out log cylinders. One of these (within fill (2295) had been severely damaged by later cuts and only survived in a fragmentary form (Plate 18). The second (2090) was recovered in a much better state of preservation (Plates 19 and 20). This appears to have been deliberately set into the base of one of the pits, and surrounded by cobbles, presumably acting as packing. The cylinders had been formed by hollowing out alder logs. Very little evidence for working marks survived due to erosion to the surfaces caused by immersion in water. Samples from the two log cylinders have been submitted for C14 dating with (2090) being dated to 1880-1960 BC, and (2295) dating to 1520-1680 BC, placing both within the Early Bronze Age.

Initial definition of the individual pits proved very difficult due to the similarity of all of their fills. In plan they were sealed by a series of organic rich layers (2255), (2261), (2291), (2293) including amorphous concentrations of cobbles (Plate 21). None of these deposits contained any fragments of pottery. However, two worked flints, of Neolithic or Early Bronze Age date, were recovered from (2291). A single human skull fragment was retrieved from (2293), and animal bone was present in (2255) and (2293). The exact stratigraphic relationships and therefore nature of these deposits and the pits is uncertain. It is possible that the layers actually form the upper fills of several different pits, which were cut individually after

previous pits had been fully filled. This possibility seems unlikely as, although excavation conditions were difficult, separate cuts were recognisable in many of the areas of the site in similar waterlogged environments. Alternatively the sequence of cuts may have all been completely backfilled prior to the laying down of these capping layers, and they therefore represent a different type of deposition activity.

However, the similarity between the character of the pit fills and the capping layers would suggest that they are closely related activities. A third alternative, that the deposition of the layers and the digging and filling of the pits are penecontemporaneous, should be considered. Palaeoenvironmental assessment of several of the samples recovered from the sequence of pits suggests detritus-rich, stagnant water, with elements associated with animal dung. Given the poorly consolidated character of the natural sands and clays into which the pits were cut it is likely that the edges of features were frequently changing with the inflow of clean groundwater. Several of the pits were probably open at the same time, with fills constantly accumulating whilst at the same time the edges of the same features were expanding due to erosion. The inclusion of concentrations of cobbles is likely to have been as a result of specific dumping of such material within the predominantly wet environment. This suggests that a degree of human management of the open, water filled pits was taking place. This is further confirmed by the presence in at least two pits of hollowed log cylinders, which would have protected the edge of the pits from refilling. The log cylinders may also have been used as an attempt to separate slightly cleaner areas of water from the remainder, suggesting differential users, possibly marking the division between human extraction and livestock access.

As a group these features and layers are interpreted as having been dug to assist in the access to the natural springs. Whilst the hollowed out log cylinders appear to indicate that attempts were made to extract clean water, and so could almost be described as wells, many of these features are much more likely to have been less formal. The apparently shifting character of the edges and nature of the fills is more suggestive of livestock watering holes, with animals being brought to the waters edge to drink. To date the most direct dating for the sequence of wells and water holes is provided by the two hollowed out logs, which, whilst both indicate an Early Bronze Age date, are spaced up to three hundred years apart. The exploitation of this water source, therefore, appears to have been a long-term enterprise. However, it is unclear if this was continuous, seasonal or more sporadic.

The latest organic fills/capping layers were clearly cut by two distinct features. These comprised a large oval pit [2270], located towards the western edge of the area of earlier pits, and a north-northwest to south-southeast aligned ditch [2078 etc], cutting through the eastern edge of the pitted area.

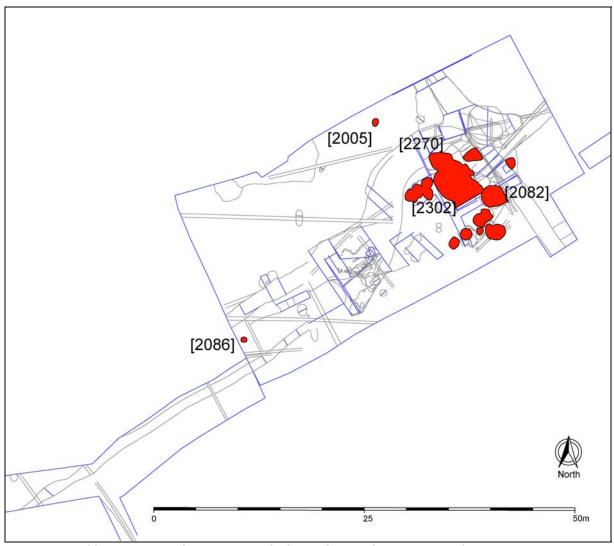


Figure 10. Field 9. Locations of Bronze Age and other prehistoric features in Trench 2.

The pit was similar to many of those belonging to the earlier phase, being a maximum of 3.6m in diameter and 0.50m deep. The edges were also very difficult to define and suffered very badly from erosion by the inflow of groundwater. Although this feature did not contain any substantial quantities of cobbles its organic fill was similar to those of the earlier pits. It was treated separately from the other pits as it was clearly visible cutting into the latest of the fill/capping layers (2293), and also contained a small quantity of handmade pottery, which was notable by its absence from the earlier features. However, it may have performed a similar function, providing livestock access to water.

The eastern side of the complex of pits was cut by a north-northwest to south-southeast aligned ditch [2058/2078/2239] (shown on Figure 11). This ditch was recorded for a total length of 25m across the full width of Trench 2, and there is also a suggestion that it was encountered, in a much truncated form, almost 40m further to the south in Trench 8 (see below). In the northernmost excavated section [2058] the ditch had been substantially truncated by a later ditch. Two fills were present, a primary fill (5057), representing initial erosion of the ditch sides and (2056), formed by gradual silting up in the open ditch. Handmade pottery of late Iron Age or early Romano-British date was recovered from the

primary fill. Further to the south other sections [2078/2239], revealed either the same, or similar sequences of fills, although no additional datable pottery was recovered.

Ditch [2078/2239], and the earlier sequence of waterholes, through which it was cut, were sealed by an extensive, homogenous layer (2049/2070), that marked a significant change in the sequence of deposition in this area of the site. This layer was typically a light grey to yellow clay and silt sand (Plate 22). It covered an area approximately 16m x 9m, being truncated by later features to the north and northwest, and was up to 0.25m thick. Despite the extensive nature of this deposit and the fact that a substantial proportion of it was hand excavated, very few datable finds were recovered. These were limited to a small assemblage of pottery dated to the 2nd to early 3rd century AD, and a small number of worked flints, ranging in date from the Early Neolithic to the Early Bronze Age. Preliminary geoarchaeological examination of this deposit suggests that it is colluvial in origin, formed by the gradual movement of soil disturbed higher up the hill slope, which has settled within a slight depression formed by the presence of the earlier waterholes.

The northern and western edges of the colluvial deposits were truncated by a complex sequence of ditches. These ditches were recut, and/or cleaned on several occasions and it was clear that the profile of each excavated section of ditch was influenced by the deposits into which it was cut, with much erosion of the edges taking place where groundwater was freely flowing. There was therefore a degree of difficulty in correlating the sequence of the ditch recuts within each of the adjacent excavated sections, even though these were only a few metres apart. Whilst it is reasonable to join the latest recuts in each of the excavated sections to form a single feature some of the earlier ditches were very severely truncated with the possibility that either both sides, only one side, or neither side have survived truncation by later cuts within any single excavated section. The suggested sequence is therefore presented with this proviso in mind.

Two main basic alignments of these recut ditches were identified (see Figure 11). To the northeast of the waterhole area these ditches [2012/2055/2173] entered Trench 2 from the north, cutting into the top of earlier ditch [2078 etc]. The ditches then curved gradually round to the east, terminating approximately 3.50m from the eastern edge of excavation (Plate 23). The fills of the various sections contained pottery predominantly dating from the late 3rd to early 4th century.

In addition to ditch [2012 etc] a substantial sub-circular pit [2219] had also been dug into the northeastern part of the earlier sequence of waterholes and colluvial layer. This pit also truncated the earlier ditch [2078 etc], but was cut by ditch [2173]. The fills of the large pit contained substantial deposits of collapsed natural sand, especially along the northern edge, together with a large timber beam. It is possible that this pit had been excavated as a water extraction pit and the timber is all that remains of an attempt to revet the soft natural sand edge. Pottery recovered from one of the fills (2217) of this feature was dated to the late 1st to early 2nd century AD.

To the west of ditch [2012] and pit [2219] the second main group of recut ditches were recorded [2041/2110/2140]. These ditches terminated at the northern edge of the area of

springs, close to the western edge of ditch [2078] and the outside curve of later ditch [2012]. From these northeastern termini the ditches then curved round the edge of the area of natural springs to the south west, before turning, and continuing to the western edge of excavation (to continue into an area excavated by the Dept of Archaeology). The latest fills of the final recutting of this alignment of ditches [2041] contained pottery of late 2nd to mid 3rd century date (eg (2038) and (2040)). In several instances the latest apparent recutting of the ditches only contained pottery of late 1st to early 2nd century. The final recuts may therefore only be localised rather than continuous along the entire recorded lengths of the ditches (see Plate 24).

Within the southwestern part of Trench 2, ditch [2140] expanded to a maximum width of just over 5m (see Figure 11 for location). In addition to the complex sequence of fills and recuts recorded elsewhere, this part of the ditch included a series of worked timbers forming a structure (Plate 25). The timber structure initially comprised two major squared uprights (2227) and (2236), 0.30m across and between 0.70m and 0.80m long. They were set onto the base of the cut, approximately 1m from the southern edge, and 2.5m apart. These two uprights were both cut from the same oak tree, and have provided a dendrochronological date for felling of between 53 and 89 AD. Pottery recovered from the fills of the ditch in which this structure had been built was dated to the late 1st to early 2nd century AD. Between the two uprights and the southern edge of the ditch several roundwood timber branches and trunks had been horizontally lain (eg (2211), (2212), (2213), (2214)). Unlike the uprights these were not of oak, but alder, yew and hazel. Little working, with the exception of hewing side branches, had taken place. The bases of the two major oak timbers had not been sharpened in any way and they were not placed within cuts, nor was there any evidence for packing around them (Plate 26). It therefore seems reasonable to assume that they were held in place by additional, above ground timbers providing the structure's rigidity, that have subsequently been removed. The horizontal timbers to the south of the uprights have clearly been lain against the sides of them. It is possible that they formed parts of a single original structure, but they could also represent a later phase of alteration or repair.

One final ditch was recorded within Trench 2 [2044/2317/2320]. Unlike the large ditches discussed above, this ditch did not appear to make any attempt to skirt round the earlier area of springs and associated organic deposits. Stratigraphically it was clearly one of the latest features within the eastern part of the trench (with the exception of obviously recent land drains), cutting through the colluvial layer and underlying deposits. Ditch [2044] entered the trench at its eastern edge and appeared to followed a fairly straight course to the southwest. It was just over 1m wide and a maximum of 0.30m deep and contained a distinctive upper fill of light grey brown sandy clay (2042) which was unusual when compared to the majority of ditches excavated (see Plate 27 for a pre-excavation view of this ditch fill). Although its course was not confirmed as continuous throughout Trench 2 a similar ditch, again with the distinctive upper clay fill, was recorded on the same alignment in the southwest corner of the trench [2317]. Given the alignment and the similarity of fill sequence it is considered likely that this originally formed a single feature. Unfortunately no datable finds were recorded. Further to the southwest this ditch was also recorded in Trench 3 [3017], from which a single sherd of handmade pottery, potentially of Iron Age or Anglian date, was recovered. The relatively late stratigraphic position of this ditch, together with its apparent disregard for the

orientations of earlier features, may suggest that it belongs to the later of these suggested dates.

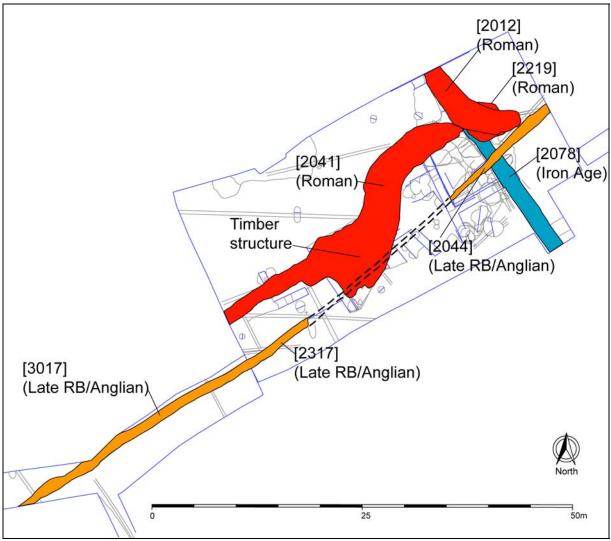


Figure 11. Field 9. Locations of major ditches in Trench 2.

Despite the intensive activity that is present within those parts of Trench 2 that included the springs and recut ditches, there are also areas of this trench with very little in the way of archaeological features. The northeast and southeast corners do not contain any archaeological features beyond the ditches described above. Likewise, much of the northwest and north central areas of the trench are devoid of archaeology, although occasional cuts are present. Two of particular interest are small sub-circular pits [2005], [2086], which contained large quantities of cobbles within their fills (Plate 28), some of which were clearly burnt. Neither of these features contained any pottery. A single burnt flint tool, potentially of Mesolithic date, was recovered from fill (2085). This feature would therefore be the earliest excavated within either Fields 8 or 9 during the archaeological investigation. The evidence for burning suggests that it may have been a small temporary hearth. (The locations of these possible hearths are shown of Figure 10). It possibly hints that the natural springs, which were clearly intensively utilised and adapted from the Early Bronze Age, were the focus for much earlier activity, possibly in the form of seasonal camps.

The apparent dearth of Iron Age or Romano-British features within the northwest part of this trench is especially noteworthy given that features of these dates were found immediately to the north, within the DoA excavations. These features included evidence for buildings. It appears therefore that the southern extent of the settlement activity was to some extent limited by the presence of the "wet" area defined by the earlier prehistoric to Romano-British springs.

5.2.3 Trench 3

Natural glacial deposits were revealed throughout this trench, either immediately below the modern topsoil, or beneath a discontinuous, thin layer of former ploughsoil. The natural was recorded at a maximum height of 21.97m AOD at the west end of the trench, and gradually sloped down to the east to 20.37m AOD at the east.

The majority of the archaeological features recorded in this trench were located towards its western end and continued beyond the field boundary into Field 8. The features excavated in that area of Trench 3 are therefore described within the Field 8 section of this report (along with Trenches 6 and 10).

Occasional plough furrows and land-drains were found throughout Trench 3. Within the majority of Trench 3, away from the western end, features are limited to two ditches and a gully.

At the east end of the trench, (and continuing into Trench 2) was a southwest to northeast aligned ditch [3017] (see Figure 11). The single fill (3016) only contained a single sherd of handmade, probably Iron Age, but possibly Anglo-Saxon, pottery. Sections excavated through the continuation of this ditch into Trench 2 were also undated.

A short distance to the west of ditch [3017] lay a shallow gully [3009]. This comprised a shallow east west element, approximately 11m long, which then turned through 90° to the south to continue beyond the limits of excavation (see Figure 12 for location). A small fragment of hand-made pottery, of Iron Age or possibly Anglo-Saxon date, was recovered from the upper part of this ditch.

The final ditch recorded in Trench 3 lay 75m to the west of Trench 2 and 90m from the western boundary of Field 9 (see Figure 12). This ditch [3015] had originally been revealed within the 4m wide evaluation trench. The trench was extended at this location to record the full length of the ditch within the spine road construction corridor, so that a total length of 20m was exposed. Ditch [3015] was aligned approximately north to south. It was a maximum of 2.3m wide at the north end and 1.60m wide at the south. This difference was almost certainly due to an increased degree of truncation down the slope, a phenomenon that was recorded elsewhere along the hillside in both Fields 8 and 9. One of the fills of this ditch (3025) contained an assemblage of hand-made pottery, probably dating to the Iron Age. (A continuation of this ditch to the south was recorded in YAT evaluation Trench 63, and it was initially recognised through geophysical survey (Patrick Ottaway *pers. comm.*).

5.2.4 Trench 4

Natural glacial boulder clay was revealed throughout this trench, at a height of 19.60m AOD at the northeast end ad 19.76m AOD to the southwest. Throughout the majority of Trench 4 the only features recorded comprised agricultural land-drains.

One limited area, close to the centre of the trench, contained a sequence of six intercutting, associated, archaeological features (see Figure 12 for the location of this group of features). Three of these features were deep, steep sided pits [4006], [4025] and [4032], the former two of which contained evidence for clay, cobble and wooden stake linings (Plate 29). Immediately to the west of the three deeper features were three shallow pits [4033], [4041] and [4042]. The exact stratigraphic sequence and chronological relationships between the six features were difficult to determine due to the similarities between the uppermost fills and the presence of a large number of recent land-drains that had cut through this area of the trench; presumably these had been inserted as a result of the very wet ground conditions in this area. The majority of the pottery recovered from this group of pits comprised handmade sherds of probable pre-Roman Iron Age date, although sherds from two of the upper fills of [4006] have been tentatively identified as possibly Anglo-Saxon. An early fill of deep pit [4032] contained a single sherd of Romano-British pottery dated to 100 AD or later. Only one of the three shallow pits [4033] contained any pottery, which comprised a single sherd dated to the 3rd century AD.

All of these features (but especially the three deeper lined ones), appear to relate to the exploitation of a natural spring, hence the degree of timber preservation present and the continued wet character of this area of the field. If the majority pre-Roman Iron Age date is taken for the hand-made pottery then the deeper features appear to represent an Iron Age to early Romano-British phase of water extraction, in an area away from the main focus of contemporary settlement. This appears to be located to the north and northwest within the Department of Archaeology excavations in this field. The three shallow pits may represent a much later re-use of the same spring, possibly relating to the later Romano-British phases of activity excavated in Trench 2 to the west.

5.2.5 Trench 5

Natural glacial deposits were revealed in the northern part of this trench at a height of 20.19m AOD, approximately 0.30m below the modern ground surface. With the exception of recent agricultural land-drains the only feature recorded in this trench was a substantial furrow, aligned approximately north-south, cutting into the boulder clay within the northern part of the trench, and forming the base of a layer of ploughsoil. The topography in this area of the field sloped down substantially to the south, and within the southern part of the trench an additional layer was recorded. This comprised a yellow brown sand, including lenses of clay and gravel (5002). Based upon comparisons with similar deposits encountered in Trenches 2 and 9 this deposit is likely to be colluvial in origin. Towards the southern end of the trench the natural glacial deposits were recorded at a depth of 0.80m below the modern ground level, the difference between this part of the trench and that to the north being accounted for by the

thickness of the colluvial sand. Unlike in Trenches 2 and 9 removal of this deposit did not reveal evidence for earlier organic deposits.

5.2.6 Trench 8

This trench comprised two 2m wide evaluation trenches set at right angles to each other, forming a cross. The natural glacial deposit was revealed throughout this trench, although the depth at which it was encountered varied. At the northern edge of the area the natural was revealed at 17.66m AOD, at a depth of 0.40m below the modern ground level. The ground sloped down to the south, with the natural at 15.09m AOD, again 0.40m below the surface. To the west the natural was recorded at 16.39m AOD, 0.40m below the surface, and to the east at 15.06m AOD, at a depth of 1.20m.

Few archaeological features were excavated in this trench. Within the western wing several parallel plough furrows were present, and agricultural land drains were present throughout. A small number of probable archaeological features were present. (See Figure 12).

In the northern part of the trench a shallow ditch [8002/8010] was recorded for a total length of 8m. None of the excavated fills contained any datable artefacts. This ditch is parallel with the furrows recorded to the west, so it may be related to this phase of activity. However, it should also be noted that several of the Iron Age and Romano-British ditches recorded in Fields 8 and 9 follow the same orientation, so this feature may belong to an earlier period of land division.

Within the western part of the trench, the easternmost of the shallow linear features recorded as plough furrows [8016] appears to broadly correspond to the anticipated alignment of an Iron Age ditch recorded in Trench 2 to the north [2078]. Again this feature is undated, but it is possible that it represents a continuation of the ditch, in a truncated form, rather than being one of the later group of furrows.

The final feature recorded in this trench was a small shallow, sub-oval pit [8012]. This had a maximum diameter of 1.20m and was 0.30m deep. The single fill (8013) did not contain any artefacts. The lack of recent inclusions suggest that this pit relates to one of the archaeological phases excavated elsewhere in Field 9.

Datable artefacts were scarce from this trench, being limited to a single fragment of hand-made pottery from the subsoil (8001).

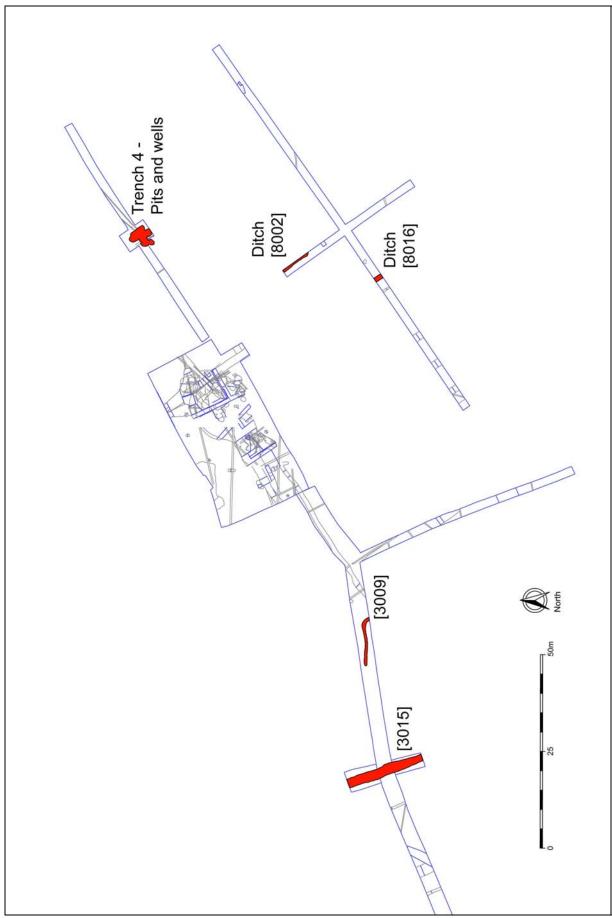


Figure 12. Field 9. Features recorded in Trench 3, 4 and 8.

5.3 Area B6

Excavation within this area comprised a single trench, measuring 30m x 30m (Trench 9), from which topsoil and modern overburden was removed. A smaller area within this was then excavated to a greater depth to provide access to a series of earlier deposits.

The earliest deposits recorded were a series of interleaved wetland silts, sands, gravels and clays (9076 etc) that are shown on Figure 13 and Plate 30. A total thickness of just over 1m of these deposits were excavated, by hand and selectively by machine trenching. At an average level of approximately 10.00m AOD the wetland deposits included substantial numbers of preserved roots (Plate 31). These were examined *in-situ* by Steve Allen, the Heslington East project specialist advisor on waterlogged wood. A sample were then lifted and recorded further in the laboratory, which confirmed that they were all unworked, natural roots. Species identified included alder and willow.

The top of the sequence of wetland deposits was recorded at a height of approximately 10.20m AOD and was sealed by a 0.50m thick layer of mid orange to yellow sand and clay sand (9075) (visible at the top of the sequence shown on Plate 30). When this layer had originally been observed in the initial phases of evaluation on the site it was believed to comprise an undisturbed glacial natural deposit (YAT report 2004/23). However, during a subsequent phase of investigation (YAT report 2010/27) it was shown to overlay wetland deposits, which included moderate quantities of willow roots. A sample of those roots returned a C14 date of Cal BC 2910-2880 (Middle Neolithic). Rather than being glacial natural, therefore sand and sandy clay deposit (9075) is interpreted as a colluvial layer, deposited at some time after the Middle Neolithic. The surface of (9075) lay at between 11.35m AOD at the northern edge of the trench, and sloped very gently downwards to 10.72m AOD to the south.

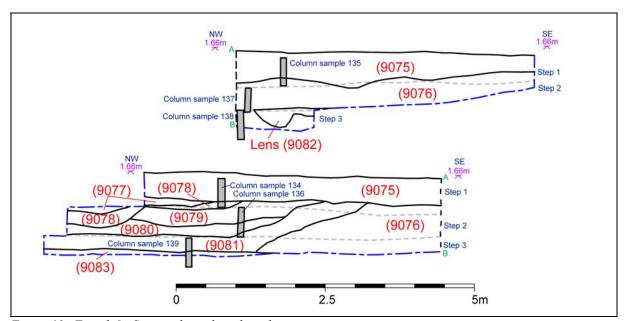


Figure 13. Trench 9. Section through earliest deposits

Colluvial deposit (9075) was cut by several archaeological features. Many of these were irregular pits, possibly resulting from the removal of tree stumps, and were undated. Within the eastern half the trench were two parallel, shallow, discontinuous, linear features ([9020/9021] and [9004/9006/9014/9024]). These were typically just over 1m wide, less than 0.10m deep and were placed approximately 4.30m apart. The majority of the fills did not contain any artefacts although a small quantity of abraded Romano-British brick was recovered from (9019), together with a fragment of glass. Within the northwestern part of the trench the area between the parallel linear features appeared to have been disturbed or trampled (9023). The parallel linears are therefore interpreted as the outer ditches of a trackway (see Figure 14 and Plate 32).

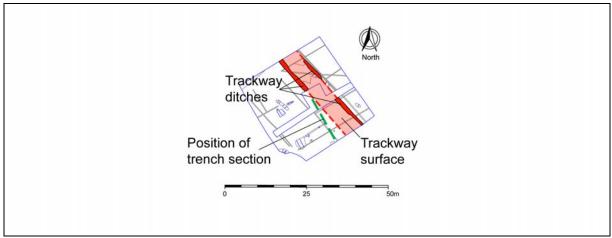


Figure 14. Trench 9. Plan of latest features.

In addition to the trackway and probable tree pits this trench contained a large number of agricultural field-drains.

The colluvial deposit (9075) and later cut features, were all sealed by a shallow topsoil (9001), between 0.20m and 0.40m thick. The northern edge of the trench corresponded to the southern limit of the part of Area B6 that had previously been excavated and landfilled.

6.0 Chronological Summary of the Site.

The excavations for the new northern spine road and associated areas encountered datable features from the Mesolithic to the post-Roman periods.

Both Fields 8 and 9 contained natural springs, which appear to have been located on the south facing slope of Kimberlow Hill. The loose sand deposits, with which the springs are associated, were laid down between 36,000 and 12,000 year before present. The springs have clearly exerted a significant influence upon the nature of past activities carried out within these areas of the site. The continued existence of the springs to the present day has also created unusual circumstances for the preservation of archaeological and palaeoenvironmental materials.

The earliest recorded activity comprised occasional flints dated to the Mesolithic period. Whilst a substantial proportion of these were recovered from much later features and deposits, Trench 2 does appear to include at least one feature dated to this period. A second similar feature, which lacked any finds, may be broadly contemporary. If the interpretation of these features as hearths is correct then it would appear to suggest that the springs in Field 9 provided a focus for activity, probably as a seasonal camping site, from at least the Mesolithic period.

The Neolithic period is also represented by a small quantity of diagnostic worked flint. However, no excavated features could confidently be assigned a date within this period. Within Area B6, to the southeast of the main northern spine road investigations, an area of sealed wetland was located. A Neolithic date was obtained from a C14 sample taken from natural roots within this wetland.

During the Early Bronze Age the intensity of activity on the site clearly increased dramatically. This period saw the start of the management and alteration of the natural springs. Whist this was most clearly represented in Field 9 (specifically within the concentration of waterholes in Trench 2), isolated waterholes within Field 8 are also likely to date to the Bronze Age. The level of water management is illustrated by the use of hollowed out log cylinders, which were presumably used to delay the collapse of the natural sand edges of the waterholes, but may also have allowed a degree of separation of "clean" areas of water. Palaeoenvironmental evidence suggests that the waterholes may have been used at least in part to water livestock. However, despite this suggestion of a level of organisation and control of the landscape taking place during the Bronze Age there were no other clearly contemporary features present. Pottery dated to the Bronze Age was not present along any part of the northern spine road excavation.

The earliest clear evidence for settlement on the site dates to the Iron Age, comprising the square enclosure, containing at least one, and possibly two, roundhouses. Preliminary assessment of the handmade pottery assemblage did not suggest the presence of any early Iron Age material. Given the fact that the C14 dates provided by the two hollowed out log cylinders in Trench 2 are from the Early Bronze Age and there appears to be a lack of Bronze

Age or Early Iron Age pottery on the site it appears that the site was not significantly occupied during this period. The late Iron Age evidence therefore may indicate a resettlement of an otherwise unoccupied area. The Iron Age settlement within these two fields appears to represent a single farmstead, with associated ditched field boundaries. Whilst the area of springs within Trench 2 had probably become unusable, with the deposition of the layer of colluvium, scattered wells in Trench 4 and Trench 6 suggest that the natural water sources were still being accessed during this period.

The Romano-British period clearly dominates the archaeological record within Field 8, and to a lesser extent, in Field 9. The large number of Romano-British ditches found in Field 8 almost all follow similar alignments, being either north-northwest to south-southeast, or east-northeast to west-southwest. These alignments broadly correspond to those of the earlier, Iron Age, square enclosure so it is tempting to suggest that a degree of landscape continuity is present. However, these same alignments have been maintained to the present day, and are also evident from the medieval and post-medieval periods, in the orientation of frequent plough furrows. These alignments may therefore reflect more the general topographic configuration upon which the site is located, than long-term continuity of land division.

Within Field 8 there is little evidence for new activity taking place in the late 1st and early 2nd century. The major phases represented date to the 3rd and 4th centuries. Many features within Field 8 are predominantly concerned with the division of the landscape and appear to include the southern boundary for most of the Romano-British activity carried out on the south side of Kimberlow Hill.

A large number of the other features excavated in Field 8 clearly relate to the access to, and management of, the natural water sources. These features vary from relatively simple pits, to complex structures with linings of wattle or cobbles and posts. One of the wells included a ring of masonry around the top forming a low wall. The masonry blocks incorporated in this structure were almost certainly reused from a substantial, possibly monumental feature.

In addition to the boundary ditches and water access features, the excavations within Field 8 also revealed evidence for limited industrial activities. This included processing features, interpreted as crop driers, and probable working areas, apparently closely linked to one or more of the wells. These are the type of feature that would be located towards the periphery of the contemporary settlement and the excavations undertaken to the north of Trench 6 clearly provide a setting for this settlement.

Romano-British activity in Field 9 was concentrated around the earlier area of springs. The series of recut ditches date from as early as the late 1st century AD. These ditches appear to be linked into a wider system of land division, extending beyond the limits of the northern spine road excavation areas. However, they appear to function as more than simply field boundaries in this area of the site as they incorporate the still flowing springs. One of the ditches within the southwestern part of Trench 2 had been expanded to form what was almost a small pond. It was within this area that a complex timber structure had been built in the second half of the 1st century AD. This may have functioned as some form of platform, either to access for the withdrawal of water for use elsewhere, or to undertake some activity within

the water itself. The large pit excavated to the northeast of the springs may also be related to a similar activity. Ditches were being redefined around the spring area into the 3rd century.

The site also contains limited evidence of activity of post-Roman date. This was in the form of a small quantity of handmade pottery tentatively dated to the Anglian period. The significance of this pottery and what it may represent is difficult to determine until it can be confirmed that it is definitely of Anglian date.

All of the excavations revealed evidence from the medieval period. However, this was generally limited to plough furrows, and occasional field boundaries. These would be entirely consistent with the expected use of the site throughout the medieval period as agricultural land.

7.0 Assessment and Recommendations.

The archaeological work reported here recorded a total of 1812 contexts. The stratigraphic and structural characteristics of each one were recorded on *pro forma* context sheets. Plans and sections of contexts were drawn and photographs taken.

In some cases individual contexts have been provisionally organised into groups and phases (based on feature type and pottery determination). The grouping and phasing scheme remains provisional and is intended to be refined during the course of the stratigraphic analysis and integration of full finds reports.

The archive has been checked and cross-referenced and indices have been compiled for each individual component. A full security-copy of the archive has been made. A list of all contexts and all drawings are included as appendices to this report. A selection of photographs is reproduced as plates at the back of this report to illustrate the nature of the archaeology. The primary site archive is kept at *On-Site Archaeology* office, 25A Milton St, York.

The following table details the contents of the site archive:

Context Type	Total
Cut	592
Deposit	1079
Masonry	5
Timber	135
Skeleton (animal)	1
Total contexts	1812
Drawing type	
Sections and profiles	410
Plans	249
Total drawings	659

Table showing breakdown of field archive for the site

The stratigraphic and structural information from the investigation consists mainly of cut features such as postholes, pits, ditches and gullies and of occasional structural features such as crop driers. The majority of the features were cut straight into the natural glacial deposits in Trenches 2, 6 and 10 along the line of the northern spine road. The unusually high degree of organic preservation, resulting from the presence of the natural springs, has lead to a substantial number of worked, and a smaller number of natural, timbers being present

The stratigraphic and structural sequence has been summarised above by area but it has also been provisionally organised into phases. The chronology of the site is represented by several periods of occupation providing the opportunity to trace the development of this landscape from the Mesolithic to the medieval period.

Clearly one of the major issues regarding the understanding of the archaeological results of the investigations carried out along the northern spine road relates to the fact that it represents only a selected part of the overall archaeology of the Heslington East site. It will be necessary to review these results alongside those of the excavations carried out by the Department of Archaeology over several separate seasons. A review of the earlier phases of evaluation comprising field-walking, geophysical survey and trial trenching, carried out within the areas covered by this investigation, should also be undertaken.

The joint review of the *On-Site Archaeology* and Department of Archaeology results will be fed into the production of an updated project design to progress the project towards final publication. This should take into account the results of fieldwork and assessment carried out on other parts of the wider Heslington East site, beyond the limits of the fields investigated as part of this project.

8.0 Bibliography.

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9.0 The Plates.



Plate 1. Aerial view of site, looking northwest



Plate 2. Trench 6, Bronze Age waterhole



Plate 3. Field 8, Iron Age roundhouse and enclosure (south to top)



Plate 4. Field 8. Detail of Iron Age roundhouse



Plate 5. Trench 6 and 3, second possible roundhouse



Plate 6. Trench 6, small Roman wattle lined channel



Plate 7. Detail of wattle lined channel



Plate 8. Trench 1. Earliest unlined waterhole



Plate 9. Trench 1. Working hollow (1068)



Plate 10. Trench 1. Wattle lining of well



Plate 11. Trench 1. Masonry around top of well and upper part of wattle lining



Plate 12. Trench 6. Small wattle lined well



Plate 13. Trench 6, detail of complex timber and cobble waterhole revetment



Plate 14. Trench 6. Crop drier 6254 pre-excavation



Plate 15. Trench 6. Crop drier 6254 partially excavated



Plate 16. Trench 10. Surviving tile lining of crop drier 10171



Plate 17. Trench 2. Bronze Age waterhole with cobble capping



Plate 18. Trench 2. Log cylinder 2295



Plate 19. Trench 2. Detail of hollowed log cylinder 2090



Plate 20. Trench 2. Log cylinder 2090, in-situ



Plate 21. Trench 2. Bronze Age waterholes, pre-excavation



Plate 22. Trench 2. Colluvial layer 2049 over organic Bronze Age deposits



Plate 23. Trench 2. Ditch 2012 etc in foreground



Plate 24. Trench 2. Roman ditches towards southwest corner of the trench



Plate 25. Trench 2. Roman timber structure



Plate 26. Trench 2. Detail of base of timber post after lifting



Plate 27. Trench 2. Pre-excavation view of clay fill of ditch 2044



Plate 28. Trench 2. Mesolithic hearth 2085



Plate 29. Trench 4. Unlined Iron Age well



Plate 30. Trench 9. Stepped section



Plate 31. Trench 9. Sondage into natural roots



Plate 32. Trench 9. Possible trackway