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ARCHAEOLOGICAL EVALUATION ON LAND AT FEN ROAD, RUSKINGTON, LINCOLNSHIRE (RFR04)

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ARCHAEOLOGICAL
PROJECT
SERVICES

EVENT L15778 (TT) } INTERVENTION L19885
L15784 (GS) } EXCAVATION L19886

PRN 63561 late neolithic/early bronze age findspot.
63558 Middle Iron Age
63559 (2-(3 Roman
63560 (6-(7 Saxon
61193 Medieval.

62822 cropmarks.

ARCHAEOLOGICAL EVALUATION ON LAND AT FEN ROAD, RUSKINGTON, LINCOLNSHIRE (RFR04)

Work Undertaken For
Chanceoption Homes

February 2005

Report Compiled by
Victoria Mellor BSc (Hons)

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1. SUMMARY

An archaeological evaluation was undertaken to determine the archaeological implications of proposed development on land in the east of the village, between Priory Road and Fen Road, Ruskington, Lincolnshire.

Ruskington is situated in an area of known archaeological remains which span the prehistoric to post-medieval periods. A Palaeolithic handaxe and Bronze Age inhumations have been found within a few hundred metres of the site, and a Neolithic flint axe was retrieved from the site itself. Cropmarks recorded immediately to the east of the site are undated but have been interpreted as defining a Roman or prehistoric enclosure and trackway. Previous archaeological investigations immediately to the north revealed two ditches which may define a droveway, in addition to Iron Age pits and ditches and a possible ring gully. Undated post-holes in a curvilinear arrangement may represent a Late Iron Age or early Roman round house. 1st to 2nd century, and 3rd to 4th century Roman ditches were also identified in addition to a late Roman grave. An Anglo-Saxon cemetery was located at the western edge of the village, approximately 1.2km from the site, and a sherd of Early Saxon pottery was retrieved during works at Chestnut Street Primary School, immediately west of the proposed development site.

Geophysical survey of the current area of investigation identified a number of anomalies, which may represent archaeological features. These included two possible enclosure ditches and a number of possible pits, in addition to possible flood deposits from The Beck in the north, and probable agricultural features which were particularly evident in the southern portion of the site.

Trial trenching confirmed that many of the anomalies noted in the geophysical survey of the site were archaeological features. The results of the trial trenching reflected the known chronological diversity of archaeological remains the area, with finds of prehistoric, Roman, Saxon and later dates being retrieved.

A small number of worked flints were retrieved during the investigation, indicating prehistoric activity in the area.

Whilst only a small number of Roman artefacts were retrieved from the site, the types of pottery sherds retrieved were indicative of higher status occupation.

A Middle Iron Age enclosure and sub-enclosure were identified, from which domestic pottery, animal bone and burnt stone were retrieved. This indicated settlement of the site in the Middle Iron Age, and undated pits and a post hole within the sub-enclosure may be contemporary. If contemporary, the post hole might represent the remains of a small roundhouse within the enclosure.

Middle Saxon deposits on the site comprised an east-west aligned ditch, which may have functioned as a defence against flooding from The Beck. Saxon deposits to the north of this ditch were confined to flood deposits containing dumped domestic refuse. To the south of this ditch, several pits of this date were identified which were likely to be rubbish pits. The remains of a Saxon post-built structure were identified in Trench 1, whilst an undated post-built structure in Trench 10 was potentially also Saxon. Saxon pottery from the site dates from between the mid 5th and 7th centuries, and is likely to have been used for domestic purposes. A large assemblage of Saxon animal bone together with other finds including a latchlifter and a loomweight

also indicate domestic and craft activity and occupation of the site in this period.

Medieval remains were confined to ridge and furrow across the southern part of the site, and possibly an associated headland. Post medieval and later remains comprised a small number of land drains at the north of the site and further indications of agricultural land use.

2. INTRODUCTION

2.1 Definition of an Evaluation

An archaeological evaluation is defined as, *'a limited programme of non-intrusive and/or intrusive fieldwork which determines the presence or absence of archaeological features, structures, deposits, artefacts or ecofacts within a specified area or site. If such archaeological remains are present Field Evaluation defines their character and extent and relative quality; and it enables an assessment of their worth in a local, regional, national or international context as appropriate'* (IFA 1999).

2.2 Planning Background

A planning application (N/52/0633/04) for residential development on land at Fen Road, Ruskington, Lincolnshire was submitted to North Kesteven District Council. The North Kesteven Planning Archaeologist advised that an archaeological evaluation by trial trenching should be undertaken to assess the importance of any archaeological remains buried on the site.

Archaeological Project Services was commissioned by Chanceoption Homes to undertake the archaeological evaluation. The evaluation was carried out between the 27th August and 23rd September 2004 in accordance with a specification prepared by Archaeological Project Services (Appendix 1) and approved by the North Kesteven Planning Archaeologist.

2.3 Topography and Geology

Ruskington is located 5km north of Sleaford in the administrative district of North Kesteven, Lincolnshire (Figure 1). The site forms a roughly rectangular area of approximately 3 hectares located in the eastern part of the village, south of Fen Road, at National Grid Reference TF 08789 50851 (Figure 2).

The site lies on the south bank of the partially canalised stream, The Beck, on land at approximately 10mOD, sloping gently down toward the watercourse (Figure 3). Soils at the site are Ruskington Association gleyic brown calcareous earths developed on glaciofluvial sand and gravel (Hodge *et al.* 1984, 304).

2.4 Archaeological and Historical Setting

Ruskington village is located in an area of archaeological remains dating from the prehistoric through to the post-medieval period. A Palaeolithic handaxe (NK 52.4) was discovered *c.* 400m southwest of the present investigation area. A flint axe (NK 52.14) dated to the Neolithic period was found approximately 50m southwest of the development site and a second Neolithic flint axe was found within the proposed development area itself (NK 52.40). Worked flints (NK 52.12) have been recovered 550m to the southeast. Two inhumation burials (NK 52.56), accompanied by beaker pottery dated to the Bronze Age, were recorded during building work 200m west of the development site.

Cropmarks have been recorded immediately

to the east of the proposed development site and apparently define an enclosure alongside a trackway, likely to be of Roman or prehistoric date (Figure 3).

A geophysical survey to the north of the development area, undertaken in December 1999, identified a possible trackway, curvilinear features and pits. Trial trenching took place on the basis of the survey results and revealed several Iron Age pits and ditches, with the ditches including parts of a possible ring gully. 1st-2nd century Roman ditches were revealed throughout the southern half of the site, and two of the ditches, also visible in the geophysical survey, were interpreted as a possible droveway. Later Roman ditches of a 3rd-4th century date were also identified. A late Roman grave was exposed near the southern edge of the site. Undated postholes in a curvilinear arrangement found in the southwestern part of the site may represent a late Iron Age or Early Roman round house type structure (Rayner *et al* 2000). Two pieces of briquetage container (ceramic debris from salt making) were also retrieved from a feature of probable Iron Age date during this earlier evaluation. Briquetage has not been recovered in the area before, the nearest know Iron Age salterns being located some 12km to the southeast on the fen edge in Little Hale and Helpringham. Late Iron Age and early Roman deposits were also identified during further investigations undertaken during development of the land subject to the February 2000 evaluation (Hall 2004) (Figure 3).

Passing through the western edge of the village in an approximately north-south direction is the important Roman Road, Mareham Lane (NK 52.21, referred to as King Street). Aerial photographs have located field systems and enclosures of probable Roman date in the vicinity of Mareham Lane (NK 52.11, 24, 29 and 34). Roman coins have been recovered from various locations in the vicinity of the proposed development area (NK 52.6, 7, 8 and 9), and a sherd of Roman pottery was found immediately to the west (NK 52.54).

An Anglo-Saxon cemetery containing at least 180 burials (NK 52.1) was located at the western edge of the village, approximately 1.2km west of the proposed development site. Iron spearheads, also of Anglo-Saxon date, have been found at several places to the east and southeast of the cemetery (NK 52.25 and 26). A single sherd of Early Saxon pottery was retrieved immediately to the west of the investigation area (NK 52.54). Middle to late Saxon settlement features and part of a Bronze Age Beaker cemetery were identified during archaeological investigations at 29 Station Road (Palmer-Brown 1995). An archaeological evaluation at Station Road identified a gully containing Roman pottery and a middle to late Saxon ditch (JSAC, 2000).

Ruskington is first mentioned in the Domesday Survey of 1086. Referred to as *Riscintone* and *Reschintone* the name is derived from the Old English *riscen* meaning 'rushy' with the suffix indicating a homestead or village (Ekwall 1974, 397). At the time of the Domesday Survey, Ruskington was held principally by Geoffrey Alselin and contained 60 acres of meadow, 240 acres of wood for pannage, a church, a priest and 3 mills (Foster and Longley 1976). No standing remains of 11th century date are recorded at the present church, suggesting that the Domesday Book is referring to an earlier precursor.

The Medieval period is represented by All Saints' church which contains a Norman tower arch and an Early English chancel and chancel arch (Pevsner and Harris 1989, 617). Medieval pottery (NK 52.54) has been recorded immediately to the west of the

development site.

Geophysical survey of the proposed development area in June 2004 identified a number of anomalies arranged in linear trends which may represent archaeological features (Appendix 3). Features identified during this survey included two possible enclosure ditches and a number of possible pits (Figure 3). Results for the northern area of the survey indicated possible flood deposits from The Beck, and probable agricultural features were particularly evident in the southern portion of the site (Figure 3 & Appendix 3).

3. AIMS

The aim of the archaeological evaluation was to gather sufficient information for the North Kesteven Planning Archaeologist to formulate appropriate policies for the management of the archaeological resources, if present, on the site. The objectives of the investigation were to establish the type, chronology, density, spatial arrangement and extent of any archaeological remains present.

4. METHODS

A geophysical survey of the site was undertaken by GSB Prospection during June 2004 (Appendix 3) prior to the commencement of trial trenching. The results of the survey were used to position the twenty evaluation trenches over potential archaeological features, the distribution of trenches also providing sample coverage of the total area of the proposed development (Figure 3).

The locations of these trenches were surveyed and plotted with reference to the site boundary and the geophysical survey grid using a Geodolite Total Station. The trenches were then excavated by machine, each trench being 20m long and 1.6m wide, with Trench 19 comprising two such trenches which were combined.

Once excavation had been completed, the sides and bases of the trenches were cleaned and the sides rendered vertical. Selected deposits were then excavated by hand to determine their nature and to retrieve artefactual material.

Each deposit exposed during the evaluation was allocated a unique reference number (context number) with an individual written description. All contexts and their descriptions appear as Appendix 2. A photographic record was compiled using both colour slides and black and white print formats. Sections were drawn at a scale of 1:10 and plans at 1:20. Recording of deposits encountered was undertaken according to standard Archaeological Project Services practice. Both trenches and spoil heaps were scanned with a metal detector to aid finds retrieval. Environmental sampling was undertaken at the discretion of the site supervisor in accordance with Centre for Archaeology Guidelines 'Environmental Archaeology' (English Heritage 2002).

Following the activation of a contingency requirement by the North Kesteven Planning Archaeologist, Trenches 1, 3 and 10 were extended (Figure 3). This was again done by machine and the above cleaning, excavation and recording methodology was then repeated.

Following excavation, all records were checked and ordered to ensure that they constituted a complete Level II archive and a stratigraphic matrix of all identified deposits was produced. Artefacts recovered from excavated deposits were examined and a period date assigned where possible (Appendices 4-8). Phasing

was based on artefact dating and the nature of the deposits and recognisable relationships between them.

5. RESULTS

Trench 1

The earliest deposit encountered in Trench 1 was a light brownish-yellow calcareous sandy gravel (102), over 0.40m thick. This was naturally-formed, and similar deposits also formed the earliest deposit encountered in each of the other 18 trenches.

A 70mm deep and 0.40m wide north-south aligned linear feature [119] was identified in this trench, within which six post holes ([121], [123], [125], [127], [129] & [131]) were identified (Figure 6, Figure 7 Sections 3-8, Plates 5 & 6). These ranged in diameter from 0.20m to 0.40m, in depth from 0.12m to 0.20m, and were variously circular, sub-circular or oval. The post trench and each of these post holes contained fills of mid greyish-brown sandy silt, and the trench was apparently truncated at the north by animal burrowing or root action [133]. Part of the rim of a Saxon pot was retrieved from the fill (124) of one of these post holes [123], indicating a Saxon date for the post trench.

On the extension of Trench 1, feature [119] did not continue to the north, but may continue as [170] to the south (Figure 6, Figure 7 Section 113). However, it is not clear whether this feature originally continued to the north and was subsequently truncated.

Nine additional possible and probable post holes ([135], [137], [139], [141], [143], [145], [156], [158] & [160]) were identified in Trench 1 (Figure 6). Most of these were undated although Saxon pottery was retrieved from the fill of post hole [158].

Close to the southwestern end of the trench was a 0.35m deep and 2.90m wide feature [103], which had steepish sides and a flattish base, although it was not fully exposed in plan (Figure 6, Figure 7 Sections 1 & 94). Several sherds of Saxon pottery ware retrieved from the fill of this feature (104).

A second feature [117] was identified within the excavated slot through feature [103], although the relationship between the two features could not be determined (Figure 6, Figure 7 Sections 1 & 94). Feature [117] was 0.70m wide and over 0.25m deep with steepish sides and a flattish base, and may be part of an east-west aligned linear feature although its full extent was not exposed.

A probable continuation of either feature [117] or [103] was identified in the extension of the trench to the south (deposit (168)), from the surface of which Saxon pottery was retrieved (Figure 6). A pair of iron shears also retrieved from the surface of this feature were of late post-medieval date and were probably derived from overburden rather than deposit (168) itself.

Towards the centre of the evaluation trench was a 60mm thick layer of mid greyish-brown fine sandy silt (153)=(115) (possibly the same as layer (162)=(113) with occasional gravel and which contained Saxon pottery and animal bone. Half of this deposit was removed by hand in order to identify any underlying features, and two post holes [154] & [151] and a probable pit [149] were identified in this way (Figure 6, Figure 7 Section 30).

Removal of half of Saxon layer (162)=(113) (possibly the same as layer

(153)=(155)), revealed two possible features [163] & [165] (Figure 6, Figure 7 Sections 93 & 89). These two possible features were somewhat amorphous, contained no finds, and may be natural in origin.

The southern extension of Trench 1 revealed Saxon pit [171] which was probably circular, 2.20m in diameter and 0.52m deep with concave irregular profile. This contained a deposit of mid greyish-brown medium to fine sandy silt (172) with occasional gravel and frequent animal bone (Figure 6, Figure 7 Sections 111 & 112, Plate 4). A number of juvenile cattle bones retrieved from this fill may derive from one individual.

A small number of additional probable features were identified following cleaning of the extensions to this trench. These were not excavated (Figure 6, Plate 3), after consultation with the North Kesteven Planning Archaeologist.

Layer (101), comprising mid slightly reddish-brown slightly sandy silt with occasional gravel was intermittent throughout the trench and was 0.10m-0.30m thick. Overlying this was a 0.30m-0.40m thick topsoil of dark greyish-brown slightly fine sandy silt with occasional gravel (100).

Trench 2

Two linear features and a possible post hole were identified in Trench 2, each of which was cut into natural calcareous sand and gravel (203). Linear feature [207], a probable medieval furrow, was 1.30m wide and 0.34m deep with a concave profile, and undated linear [209] was 0.40m wide and 0.20m deep with steepish sides and flattish base (Figure 8, Figure 9 Section 10). Each of these features was somewhat irregular in plan. A sub-oval possible post hole [205] was 0.60m by 0.40m in diameter and 0.50m deep (Figure 8). A single sherd of Roman pottery was retrieved from the fill of this possible post hole although this seems likely to be residual.

All of these features were sealed by a 0.25m thick layer of mid greyish-brown silty sand and gravel (202), which was in turn sealed by a 0.45m thick topsoil of mid to dark brownish-black silty, sandy and gravelly loam (201).

Trench 3

Several features were identified in this trench, and, with the exception of probable furrow [314], all were cut directly into natural calcareous sand and gravel (302)=(313).

Undated pit or linear terminus [330] was over 0.40m by 1.20m in diameter and 0.33m deep with a concave to flattish base and a fill of mid brown sand and gravel with occasional charcoal (331) (Figure 10, Figure 11 Section 68).

An undated pit, post hole or gully terminus [310] was 0.56m by over 0.35m in diameter and 0.39m deep with steep to vertical sides and a flat base. Adjacent to this feature was a doubtful feature [312] (Figure 10, Figure 11 Section 45). The single post hole identified in this trench [316] was sub-circular, 0.30m-0.33m in diameter and 0.14m deep with steep to vertical sides and a flattish irregular base (Figure 10, Figure 11 Section 44), which was again undated.

A forked curvilinear ditch of Middle Iron Age date was identified towards the centre of the trench [323], [324], [325] & [326] (Figure 10, Plate 9), which is likely to be the same feature identified in the geophysical survey (Figure 4). Although

several context numbers were allocated, the fills of the various ditch elements were indistinguishable and apparently contemporary (Figure 11 Sections 46-48 & 52). Part of the ditch ([326] & [325]) was north-south aligned, 1.80m wide, 0.40m deep and over 6.50m long with steepish sides and a flattish base. At the northern end of the exposed portion of this ditch was a branch which curved to the west and then to the southwest ([324] & [323]) (Figure 10). This portion of the ditch was over 3.60m long, 0.50m deep and 1.07m wide with a 'V'-shaped profile and concave base. The ditch was filled with mid brown sand and gravel with some clay and occasional charcoal flecks. Middle Iron Age Scored Ware was retrieved from the fill of this ditch in addition to animal bone and burnt stones.

An irregular pit or linear terminus [322] extended beyond the edge of the trench to the northeast (Figure 10, Figure 11 Sections 49 & 50, Plate 10). This feature was over 1.30m long by 1.20m wide and 0.53m deep with irregular sides and base, the sides being steeper to the west. A single fill of mid greyish-brown sand and gravel (320) contained occasional charcoal. This fill was rich in finds, and 29 sherds of Mid Iron Age pottery were retrieved from it, in addition to animal bone and 120 burnt stones. Comparison of this feature and the results of the geophysical survey indicates that this may be a ditch terminus, forming an enclosure, approximately 9m by 5m in extent, along with the forked ditch also identified in this trench (Figure 10, Figure 4).

To the west of this feature was a shallow irregularly-shaped north-south aligned feature [332], likely to be a medieval plough furrow. Two further probable furrows, [314] and [333], were identified in this trench. Feature [314] was cut into deposit (311), the fill of feature [310] (Figure 10). A number of fragments of lava quern were retrieved from the fill of one of these probable furrows. Given the spacing of these three probable furrows, it is possible that a fourth furrow truncated the north-west aligned ditch [326], although no such feature was visible (Figures 4 & 10).

Trench 4

Amorphous feature [416] was the only feature in this trench (Figure 12) from which dating evidence was retrieved. This comprised several sherds of Middle Iron Age pottery (Appendix 4).

Each of the remaining features in this trench was undated. Three post holes [404], [408] & [410] and a possible post hole [406] were cut into natural calcareous sand and gravel (403) close to the northern edge of the trench (Figure 12 Sections 32-35). These sub-rounded features ranged in depth from 60mm to 0.20m, and from 0.33m to 0.45m in diameter.

A possible feature [412] extended beyond the limit of excavation to the west (Figure 12 Section 40). To the southeast of this feature was an irregularly-shaped pit or linear terminus [414], which was over 1.40m in diameter and 0.35m deep with a concave base. An irregular pit [420] was 0.55m by 1.00m in diameter and 0.30m deep with a concave base (Figure 12 Section 36).

Two irregularly-shaped features extended beyond the limit of excavation to the south [418] & [422], and a further irregular possible feature [424] extended beyond the limit of excavation to the north (Figure 12 Sections 37 & 41).

Trench 5

Undated feature [505] was cut into natural

calcareous sand and gravel (503) and extended beyond the eastern edge of Trench 5. This possibly curvilinear feature was over 1.00m long, 0.40m wide and 0.12m deep with steepish sides with an uneven base (Figure 8, Figure 9 Section 14, Plate 14).

A 1.95m wide 'D'-shaped feature [507] extended beyond the limit of excavation to the north and south and was 0.22m deep with gently sloping sides and a concave base (Figure 8, Figure 9 Section 15). This contained a single fill of dark brown silty sand with frequent gravel and moderately frequent charcoal flecks (506) from which Saxon pottery and animal bone were retrieved.

A north-south aligned linear feature [515] was identified at the western edge of Trench 5 (Figure 8, Figure 9 Section 9). This feature was 0.30m deep and over 0.90m wide with a flattish base, and may be agricultural in origin.

A possibly northwest-southeast aligned linear feature [509] was 3.00m wide and 0.32m deep with uneven sides and base (Figure 8, Figure 9 Section 42). Possible Iron Age pottery was retrieved from its fill (508). A similar feature [514]=[512] was identified *c.*5.30m to the west of this (Figure 8, Figure 9 Section 43). This was 2.70m wide and 0.28m deep and also had uneven sides and base. Animal bone was retrieved from the fill of this feature, in addition to single sherds of Saxon and Roman pottery. Comparison of these two features with the results of the geophysical survey of the site indicates that these may be plough furrows (Figure 4). An intermittent layer (502) of dark brown silty sand with frequent gravel overlay the natural sand and gravel in Trench 5 and may represent the remains of heavily truncated features.

Trench 6

A north-south aligned ditch [609] was 2.00m wide and 0.60m deep (Figure 8). This feature had a shallow 'V'-shaped profile and sides which were slightly stepped to the west (Figure 9 Section 23). This was filled by a mid to dark greyish-brown silty sand with frequent gravel (608). Animal bone and fired clay were retrieved from the fill of this ditch, in addition to 35 sherds of Middle Iron Age pottery and burnt stones. This ditch is apparently a continuation of the ditch identified in the geophysical survey and Trenches 3 & 11 (Figure 4).

No further dated features were identified in this trench, although two post holes were cut into natural calcareous sand and gravel (603). Post hole [613] was sub-circular, 0.30m in diameter and 0.20m deep, whilst post hole [615] was sub-oval, 0.60m by 0.45m in diameter and 0.25m deep (Figure 8, Figure 9 Sections 24 & 25).

Three possible post holes were identified in this trench [605], [607] & [617], although these may be natural in origin (Figure 8, Figure 9 Sections 21, 22 & 26).

An amorphous possible feature [620] extended outside the trench to the south (Figure 8, Figure 9 Section 108).

A layer of mid to dark greyish-brown silty sand with frequent gravel (602) occurred intermittently across the trench, overlying the natural sand and gravel. This may represent the remains of truncated features, likely to include the furrows identified elsewhere on the site.

Trench 7

Natural calcareous sand and gravel (707) in this trench included occasional limestone concretions. Cut into this layer

was a possible north-south aligned linear feature [703], which may be the remnants of a plough furrow (Figure 13, Figure 14 Section 16). This feature was 1.45m wide and 0.12m deep with a flattish base. An irregularly-shaped possible pit [705] was located close to the northwestern edge of the trench (Figure 13, Figure 14 Section 20).

An intermittent layer of dark brown sandy silt with frequent gravel (701) was up to 0.15m thick and sealed the natural sand and gravel.

Trench 8

Features in Trench 8 were restricted to a probable tree throw [807] and a possible gully [809] (Figure 13). This possible gully, which was cut into natural calcareous sand and gravel (805), was roughly northeast-southwest aligned and curvilinear. It was over 3.50m long, 0.40m wide and 0.20m deep with a concave profile (Figure 14 Section 53).

Sealing both of these possible features was a 0.15m thick layer of mid yellowish-brown slightly silty sand (801) which contained moderately frequent gravel, occasional animal bone, limestone and ironstone (Figure 14 Section 31). This deposit was comparatively finds-rich, with finds including 20 sherds of Saxon pottery and a large quantity of animal bone, although some of the finds within this deposit may be intrusive.

Trench 9

Cut into natural calcareous sand and gravel (902) in this trench was a single probable post hole [912] (Figure 13, Figure 14 Section 92).

At the eastern edge of the trench was a north-south aligned linear feature [910] which was 1.60m wide and 0.32m deep (Figure 13, Figure 14 Section 62). Though undated, the alignment of this feature indicates that it may be a plough furrow.

To the west of this feature was a second north-south aligned linear feature [914] which was 1.00m wide and 80mm deep which may also be a plough furrow (Figure 13, Figure 14 Section 91).

A third possible plough furrow [904] was 2.90m wide, and at its western edge was indistinguishable from feature [906] (Figure 13, Figure 14 Section 67, Plate 8). Feature [906] was only partially exposed in the evaluation trench, but may correspond to an anomaly recorded in geophysical survey of the site (Figure 4), suggesting that it may be the edge of a substantial pit. Feature [906] was over 3.60m by over 0.90m in extent and 0.29m deep. The eastern portion of the base of [904] sloped down to the south, and it may be that this sloped area is also part of feature [906], truncated by possible furrow [904] (Figure 13). Pottery, bone and iron were retrieved from the fill of feature [906], and it is likely that at least some of the finds retrieved from the fill of [904] also originated from feature [906]. The Saxon pottery retrieved from these two features, included the only decorated Saxon vessel from the site, which was stamped and is likely to date to the 6th century (Appendix 5).

Trench 10

Up to twelve post holes were identified in Trench 10, cut into natural calcareous sand and gravel (1002), and up to fourteen additional post holes were identified in the extensions of this trench to the west and east (Figure 15), although some of the possible post holes may have been natural in origin.

A north-south aligned post trench [1037] was identified in the westerly extension to Trench 10, within which 3 post holes ([1039], [1041] & [1043]) were identified (Figure 15, Figure 16 Section 10, Plate 11). This post trench was 0.59m wide, 6.00m long and 90mm deep with a concave profile and concave to flattish base. The post trench apparently terminated at its southern end, and, at the northern end was discontinuous and was indistinguishable from linear [1028] (Figure 15, Plate 12). It is possible that east-west aligned linear [1028] was a continuation of post trench [1037]. Linear [1028] was 1.10m wide, over 2.00m long and 0.25m deep with a concave profile and a step at the south (Figure 15, Figure 16 Section 85). A second east-west linear [1049] was over 2.70m long, 1.25m wide and 20mm deep with a flattish irregular base (Figure 15, Figure 16 Section 16, Plate 12). A post hole [1045] lay within the course of this feature, although it is not clear whether these features were either related or contemporary. It is possible that both east-west aligned linear features [1028] and [1049] are agricultural in origin, and may reflect east-west aligned ploughing identified in geophysical survey of the site (Figure 4). A third east-west aligned linear feature [1047] was over 1.00m long, 0.32m wide and 0.11m deep, terminating at the east (Figure 15, Figure 16 Section 124), and may also be either agricultural or structural.

A small number of Saxon sherds was retrieved from a possible post hole [1034] and agricultural or structural linear [1028]. Additionally a single sherd of 2nd century or later Roman pottery was retrieved from the fill of probable post hole [1034], and an indeterminate glass fragment was retrieved from the fill of post hole [1043], within post trench [1037]. Given that the only dated and stratified material from this trench is Saxon or earlier, it is possible that the structure is also of this date, although some of the Saxon material is abraded and thus possibly redeposited. However, very few of the features and possible features are dated, and the nature of several of these is unclear. This means that the structure or structures within Trench 10 must be treated as undated.

Topsoil (1001) sealed the fills of each of the features in Trench 10, and comprised a 0.30m thick mid to dark sandy silt with frequent gravel.

Trench 11

North-south aligned undated linear feature [1106] was cut into natural calcareous sand and gravel (1102). This feature over 3.06m long, 1.42m wide and 80mm deep (Figure 17, Figure 18 Section 72) with a flattish base. This was cut by east-west aligned ditch [1104] (Figure 18 Section 69), which was 2.20m wide, over 1.10m long and 0.50m deep (Figure 17, Figure 18 Sections 70 & 71, Plate 13). This ditch had a concave profile and Saxon pottery was retrieved from its fill (1103), which also contained flecks of charcoal and oyster shell. At the southeastern end of the trench, an additional ditch [1108] was partially exposed which was aligned north-south (Figure 17, Figure 18 Sections 97 & 98, Plate 13). This was over 2.00m wide, over 2.30m long and 0.80m deep, with a concave slightly stepped profile. Middle Iron Age pottery was retrieved from the fill (1107) of this ditch, which also contained flecks of charcoal. The east-west aligned Saxon ditch [1104] appears to be a continuation of the ditch recorded in Trenches 12 & 14, whilst the Middle Iron Age ditch [1108] is apparently a continuation of the ditch in Trenches 6 & 3. Each of these ditches was identified in the geophysical survey of the site (Figure 4).

Trench 12

Natural calcareous sand and gravel in this trench (1208) was similar to that identified in other trenches, although it was overlain at the south of the trench by a 0.40m thick layer of mid yellowish-reddish brown slightly silty sand with moderately frequent gravel (1207).

An east-west aligned ditch [1210] was 3.30m wide and 0.55m deep with slightly stepped steep sides and a flattish, irregular base (Figure 17, Figure 18 Sections 119 & 120, Plate 17). In addition to a small quantity of residual Roman and possible Iron Age pottery, 5 sherds of Saxon pottery were retrieved from the various fills of this ditch. Additional finds comprised fired clay, glass and a late Neolithic to Early Bronze Age barbed and tanged arrowhead. Environmental assessment of one of the fills of this ditch (1213) indicated that it was sufficiently wet to sustain some freshwater species, mainly those preferring muddy conditions or tolerant of occasional dry episodes (Appendix 9).

The upper fill of this ditch was sealed by a 0.40m thick buried soil or flood-deposited layer of mid yellowish-brown gravelly silty sand (1205). This layer is apparently Medieval, 3 sherds of 13th to 15th century pottery being retrieved from it, in additon to part of a Medieval pegtile.

Trench 13

Feature [1306] was not clearly defined in plan but was 1.50m wide and 0.47m deep with a concave profile (Figure 17, Figure 18 Section 58). Eight sherds of Saxon pottery were retrieved from the fill of this feature. Adjacent to its eastern edge was feature [1308], the extent of which was also not seen in plan but was 0.80m wide and 0.35m deep with a concave profile and steep sides (Figure 18 Section 58, Plate 7). A single fragment of Roman brick or tile was retrieved from this feature.

Features [1306] and [1308] seemed to be cut by feature [1310], which was a 2.25m wide and 0.17m deep northnorthwest-southsoutheast aligned linear feature with a flattish base (Figure 17, Figure 18 Section 58). Based on the form of this feature and comparison with the results of the geophysical survey of the site it appears to be a plough furrow. Two further furrows [1304] & [1313] were identified in Trench 13 (Figure 17, Figure 18 Section 57), and Saxon pottery was retrieved from each.

Close to the western edge of this trench was a 30mm thick spread of mid yellowish-brown sandy silt with frequent gravel and animal bone (1301) (Figure 17, Plate 7). This deposit, from which Saxon pottery was retrieved, is likely to be the remains of a shallow feature which has been almost entirely truncated.

Trench 14

Several features were identified cut into the calcareous natural sand and gravel in Trench 14. Close to the southern end of the trench, and extending beyond the limit of excavation to the east, was a possibly oval feature [1405]. This was 1.25m by over 0.40m in extent and 0.27m deep and had sides which were slightly stepped at the south and a concave to flattish base (Figure 19 Section 55). The primary fill of this feature was a 0.17m thick dark greyish- reddish-brown sandy silt with frequent gravel (1406). The secondary fill of this feature comprised a dark black sandy clayey silt (1407) with occasional gravel, charcoal and fragments of fired clay, one of which was a Saxon loomweight.

An undated east-west aligned linear feature [1408] was over 1.60m long, 0.70m wide and 0.21m deep with steep to vertical sides and a flat base (Figure 19 Section 56). At the northern edge of this feature was a sub-oval to sub-rectangular feature with rounded corners [1419], which was also undated (Figure 19 Sections 100-103, Plate 16). This was 0.80m long, 0.60m wide and 0.15m deep with steep sides and a concave to flat base. The fill of this pit comprised *c.*40% fire-cracked pebbles in a matrix of mid to dark greyish-brown, light grey, mid grey and occasionally reddish and yellowish mottled sandy clay and silt with occasional charcoal flecks (1420).

A feature likely to be an east-west aligned ditch [1417] was located towards the centre of Trench 14. This feature was 2.20m wide and 0.44m deep with a stepped side at the south and a flattish base (Figure 19 Section 104, Plate 15). This may be a continuation of the ditch identified in Trenches 11, 12 and also in the geophysical survey (Figure 4). Fired clay, burnt flint, a single sherd of Samian pottery and animal bone was retrieved from the secondary fill of this ditch (1413). Saxon pottery was retrieved from the tertiary fill (1412), in addition to fired clay, burnt stone and charcoal.

To the north of this ditch was an additional gully [1418] which was northeast-southwest aligned, 0.45m deep and 0.40m wide with steep sides and a concave base (Figure 19 Section 104). Saxon pottery and burnt stone were retrieved from the primary fill (1415) of this gully. The secondary fill of gully [1418] also formed a 0.22m thick layer (1411)=(1416) of dark slightly greenish-brown clayey sand and silt, with frequent gravel and occasional charcoal. This layer extended beyond the limit of excavation to the north, and burnt stone and animal bone were retrieved from it.

Overlying both this layer and the upper fill of ditch [1417] was a 0.20m thick layer of dark grey gravelly clayey sand and silt (1410)=(1414) (Figure 19 Section 104, Plate 15). This layer also extended beyond the limit of excavation to the north. A large assemblage of animal bone was retrieved from this deposit, in addition to Saxon pottery and burnt stone. Metal detecting of the base of the trench identified two iron objects within this deposit, one of these being a Saxon latchlifter [an item similar to a door key] (Plate 21), and the other a possible pot hook. Environmental assessment of this deposit (Appendix 9) indicated a predominance of marsh species within this layer which, possibly indicating that this deposit is derived from either flood debris or material obtained from the nearby fen or marsh.

Sealing all of these features and layers was a 0.28m thick mid reddish- greyish brown sandy silt with frequent gravel (1403), in turn sealed by a 0.22m thick dark reddish-greyish-brown fine sandy clayey silt with frequent gravel (1402). No dating evidence was retrieved from either of these two layers.

The latest deposit in Trench 14 was a topsoil of dark grey fine sandy silt with frequent gravel (1401).

Trench 15

An east-west aligned ditch [1513] was cut into natural sand and gravel in this trench, and was 0.27m deep and 0.70m wide with sloping sides and a concave base (Figure 20).

The fill of this ditch was of similar character to several deposits which sealed the natural calcareous sand and gravel in

this trench. These comprised variously mid greyish, reddish and brownish clay, silt and sand. Although these layers were largely undated, Saxon pottery was retrieved from one of them (1501), and animal bone was retrieved from several of these layers. These deposits were apparently water-lain, which may be the cause of the light colour of the natural sand and gravel in this trench indicating leaching.

Environmental assessment of the primary fill (1512) of ditch [1513], indicated wet conditions, similar to those seen in the assemblage from the Saxon enclosure ditch in Trenches 11 & 12, and an undated linear in Trench 17 (Appendix 9).

An east-west aligned land drain [1509], containing a red ceramic pipe, was cut into some of the water-lain deposits in this trench, and was located at the edge of ditch [1513], with which it shared the same alignment (Figure 21 Section 118).

Trench 16

With the exception of a southwest-northeast aligned field drain, no cut features were identified in Trench 16. However, a 0.30m thick layer of mid greyish-brown sandy silt with occasional gravel (1603) overlay natural sand and gravel (Figure 20, Figure 21 Section 105). This water-lain deposit contained environmental evidence that it was derived from fen, marsh or flood material, and three sherds of Saxon pottery and over forty fragments of cattle, sheep and pig bones.

Part of a bone pin or needle was also retrieved from this trench although it was unstratified.

Trench 17

Similar silty deposits to those identified in Trenches 15 & 16 overlay natural sand and gravel in Trench 17. In addition to this, two linear features and two possible linear features, also filled with silty material, were identified (Figure 20). Two possible linear features at the east of the trench [1710] & [1708]=[1712] may be naturally-formed depressions rather than cut features (Figure 20, Figure 21 Sections 122, 123 & 126, Plate 18). Southwest-northeast aligned linear [1714] was over 0.90m wide, 0.35m deep and over 5.20m long (Figure 20, Figure 21 Section 125, Plate 19). Environmental assessment of the fill of this feature indicated wet conditions, similar to those identified in the Saxon enclosure ditch in Trenches 11 & 12, and the undated linear in Trench 15. Animal bone was also retrieved from this deposit (1713).

Cut into this feature was a north-south aligned linear feature [1706] with steep sides and concave base which was 0.68m wide, 0.55m deep and over 1.60m long (Figure 20, Figure 21 Section 121).

A 0.30m thick layer of mid yellowish-brown sandy silt with occasional charcoal, bone and gravel (1701) was identified which extended throughout Trench 17, from which horse bone and part of the skeleton of a dog were retrieved.

Although animal bone was retrieved from several deposits, no dating evidence was retrieved from deposits or features in this trench.

Trench 18

A sequence of water-lain deposits were also identified in the northernmost 13m of Trench 18, corresponding with a drop, towards the north, in the level of the

uppermost surface of the underlying natural sand and gravel (Figure 22). Two possible east-west aligned gullies [1816] & [1809] were identified in this trench, in addition to a more substantial ditch or channel [1812] close to the centre of the trench (Figure 22). A land drain [1810], was cut into the edge of linear [1812], and this contained a red ceramic pipe.

Trench 19

Two undated linear features were identified at the southern edge of Trench 19 (Figure 22). Linear [1909] was east-west aligned, over 1.60m long, 0.30m deep and 1m wide with steep sides and a flat base. Crossing this feature was a second linear, [1911], which was north-south aligned, over 3.30m long, 0.80m wide and 0.11m deep with steepish sides and a flattish base, although the relationship between these two features could not be established. Although undated, it is possible that linear [1911] may be a continuation of the Middle Iron Age enclosure ditch identified in Trenches 3, 6 & 11 (Figure 4).

The only other features identified in this trench were an east-west aligned field drain [1907], and a single possible post hole [1905] (Figure 22).

6. DISCUSSION

Natural deposits and Topography

A layer of calcareous sand and gravel was the earliest deposit encountered in each of the nineteen trenches, representing the underlying glaciofluvial sand and gravel. The upper surface of these gravels was highest in the southwest corner of the site, at approximately 9.94m OD, and lowest in the northeast, at approximately 8.81m OD (Figure 5a). This reflects the course of the partly canalised stream The Beck, the site being located on a gentle slope down towards the watercourse. The present-day ground level falls from around 10.40m OD at the southwest to approximately 9.58m OD at the northeast (Figure 5b).

Undated deposits

Undated deposits and features were encountered across the site, including flood deposits in Trenches 15, 17 & 18 at the north of the site and various amorphous features and possible features across the site (Figure 4). The similarity of the flood deposits at the north of the site to the dated Saxon flood deposits in this area indicates that these may be contemporary. Undated post holes and a post trench in Trench 10 are likely to reflect the presence of a structure. As the post trench identified in Trench 1 was Saxon, this might hint that the post trench in Trench 10 is of a similar date. Although this remains unproven, the presence of a small quantity of Saxon and earlier sherds in this trench could support this dating.

Prehistoric deposits

A small number of worked flints were retrieved from the site, although, with the possible exception of a single flake from Middle Iron Age enclosure ditch [324], these were all either unstratified or redeposited in later contexts. No features were identified which were earlier than the Middle Iron Age.

An unstratified sherd of prehistoric pottery from Trench 8 may be of Bronze Age date.

Mid-Iron Age deposits

A significant assemblage of mid-Iron Age pottery was retrieved from the site, the vast majority of which was from only four contexts (305), (320), (417) & (608)

(Appendix 4).

Deposit (305) was the fill of part of the forked curvilinear enclosure ditch [323]=[324] (Figure 10) which probably formed a sub-enclosure off the north-south aligned ditch enclosure ditch [325]=[326]. The north-south aligned ditch apparently extended beyond Trench 3 and into Trenches 6 & 11 (Figure 4). The extent of this ditch to the north of Trench 11 is unknown, although it is possible that it may continue as feature [1911] in Trench 19, although this feature was undated (Figures 4 & 22). The geophysical survey of the site identified an anomaly interpreted as being of probable natural origin or possibly a continuation of the north-south linear feature (Appendix 3). The extent of the ditch to the south of Trench 3 is also unknown.

What was possibly a ditch terminus [322] was also identified in Trench 3 (Figure 10), from the fill of which (320) mid-Iron Age pottery was retrieved. Comparison of this feature, the forked ditch in this trench and the results of the geophysical survey indicate that this feature may be a ditch terminus, and part of the same sub-enclosure already identified as [323]=[324], this perhaps being sub-rectangular with an entrance at the west (Figure 4).

The north-south aligned portion of the main enclosure ditch appeared to continue into Trench 6 [609] (Figure 4). A substantial quantity of mid-Iron Age pottery was retrieved from the fill of this portion of the ditch (608). Thus, three of the four contexts from which the majority of prehistoric pottery was retrieved appear to be various elements of the same enclosure system. Further sherds were retrieved from various other parts of the enclosure ditch in Trenches 3 and 11. Although the ditch in Trench 11 appears to be a continuation of the ditch in Trenches 3 & 6 (Figure 4), significantly less pottery was retrieved from its fill than was the case in the other trenches. This reflects the overall distribution of the prehistoric pottery from the site, which is concentrated in Trenches 3, 4 & 6, with 3 or less sherds in each of the other trenches (Figure 5c). Although the distribution of pottery across the site may be somewhat biased by the extension of Trench 3, and the larger size of Trench 4 this is apparently a real trend.

Deposit (417), from which Mid Iron Age pottery was retrieved, was the fill of an amorphous feature [416] (Figure 12). Although the form of this feature was unclear, it was located close to the contemporary features in Trenches 3 & 6 (Figure 4).

The few remaining sherds of prehistoric pottery from the site were either redeposited in later contexts or unstratified.

The distribution of mid-Iron Age pottery and features across the site indicate a focus of activity around Trench 3, extending to Trenches 4 & 6, and to a lesser extent to Trench 11 (Figures 4 & 5). The average size of sherds is large, indicating little disturbance of the material.

Several of the pottery sherds are either burnt or sooted on the interior demonstrating use as cooking pots, and the assemblage is indicative of a rural settlement.

Fifteen fragments of burnt stone were retrieved from the fills of the forked enclosure in Trench 3 (305), (308) & (309), with a further one hundred and twenty being retrieved from (320), the fill of pit or linear terminus [322].

Iron Age deposits produced less than 4% of the animal bone assemblage from the site, and this relatively small quantity was considered too small for reliable inferences on husbandry (Appendix 7). However, although the Iron Age bone was more poorly preserved than the later material, sixty-four fragments of animal bone were retrieved from mid-Iron Age contexts in Trench 3.

Inside the possible sub-enclosure in Trench 3 were a post hole [316], a pit or linear terminus [330] and a pit, post hole or linear terminus [310] (Figure 10). None of these features were dated, although it is possible that some of these features could represent a contemporary structure within the sub-enclosure. Given the concentration of Middle Iron Age pottery in this trench, and the interpretation of the assemblage as indicative of rural settlement, it is tempting to suggest that such a structure might be a round house, although these features may not be closely contemporary.

The environmental evidence from the fills of ditches [323] and [609] indicates damp, but not particularly wet, conditions within the ditch (Appendix 9). However, little indication of either domestic or industrial activity was identified in any of the environmental samples from the site. Given the paucity of environmental evidence, the findings of the environmental assessment are that it is unlikely that the site was close to areas of settlement in either the Iron Age or Saxon periods, although this conclusion seems to contradict much of the other evidence from the site. No explanation for this disparity is immediately apparent.

The dearth of pottery dating to the later Iron Age is informative, suggesting a lack of domestic activity on the site in this period. However, late Iron Age features were identified during previous investigations to the north of The Beck (Figure 3) which may indicate that the area saw small scale rural settlement, shifting location slightly over time.

2nd to 3rd Century Roman deposits

Only seven sherds of Roman pottery were retrieved from the site, all of which date from the mid 2nd to 3rd century, with no later Roman wares. This group includes two examples of imported ware, an amphora containing olive oil from Baetica in Southern Spain, and a dish fragment in Central Gaulish Samian. Although Roman pottery is rare on the site, the type of sherds which were retrieved are indicative of higher status occupation.

Just two of the Roman pottery sherds were retrieved from possible Roman contexts, the remainder being either unstratified or redeposited. A sherd of possible Roman pottery was retrieved from the fill of doubtful post hole [205] in Trench 2. A sherd of Roman pottery of the 2nd century or later was also retrieved from probable post hole [1020], although in each case this pottery may be residual.

A fragment of Roman brick or tile was the only find retrieved from the fill of feature [1308], although the form of this feature was unclear, and it is possible that this find was redeposited in a later feature.

A single unstratified fragment of window glass which may be Roman was retrieved from Trench 6.

The distribution of late Iron Age material in the vicinity of the site is somewhat similar to the distribution of Roman material. In each case very little material was retrieved from the proposed development site, whilst several features were identified in previous investigations to the north (Figure 3), perhaps suggesting

a shift in settlement in this period. It seems that an additional shift occurs in the early Saxon period, with a dearth of material of this date from either the present investigation area or the previous investigation area to the north (Figure 3). However, some of the Saxon pottery fabric types retrieved from the site occur throughout the early Anglo-Saxon period and could therefore be earlier.

6th to 7th Century Anglo-Saxon deposits

A total of 146 pottery sherds were identified as being of Anglo-Saxon date, representing 128 vessels. The Saxon pottery dates between the mid 5th and 7th centuries, and the lack of distinctive 5th to 6th century traits suggests that occupation is mainly of 6th to 7th century date.

In some cases calcareous inclusions have been leached from the inner surface of vessels, indicating that they were used to contain acidic liquid. There are indications that some of the vessels were used to boil water and have an internal 'kettle fur' deposit, in others the contents had an organic content which burnt dry and left a black carbonaceous deposit on the inner surface, and some have external sooting. These traces indicate that most of the Ruskington Anglo-Saxon pottery was used for domestic purposes including boiling water and cooking. Most of the Anglo-Saxon pottery from the site is of local manufacture, although a few vessels may have been traded in from outside the area.

Perhaps the most striking of the Saxon features identified on the site is the east-west aligned ditch evident in the results of the geophysical survey of the site, and subsequently identified in Trenches 11, 12 & 14 (Figure 4). Prior to trial trenching, and based on the results of the geophysical survey (Appendix 3) this ditch appeared likely to be continuous with the north-south aligned ditch at the east of the site (Figure 3). However, trenching revealed that the north-south aligned portion was of mid-Iron Age date, and apparently unrelated to the east-west aligned Saxon ditch. Slightly more prehistoric pottery was retrieved from the trenches within which the Saxon ditch was located than was retrieved from the surrounding trenches (Figure 5c). This would seem to be the result of slightly improved preservation of the early pot due to its deeper burial in these trenches, in addition to the presence of the mid-Iron Age ditch in Trench 11. There was no evidence that the Saxon ditch might represent the re-cutting of an earlier boundary, although there appears to be some degree of continuity in the alignments of boundaries around the site.

The location of the east-west ditch corresponds with a drop, towards the north, in the upper level of both natural sand and gravel and the present day ground surface (Figure 5e). Whilst layers of Saxon date were identified to the north of this ditch, in Trenches 15 & 16, no Saxon features were identified in this area (with the exception of a small gully [1418] immediately to the north of the ditch in Trench 14) (Figure 4). Saxon layers (1603), to the north of the ditch, and (1410), also to the north of, and partially sealing, the ditch were the subjects of environmental assessment. This indicated that some, or all, of the matrix of these deposits was derived from either flood debris or material obtained from the nearby fen or marsh. The Saxon material retrieved from these deposits, which mainly comprises pottery and animal bone, appears to be dumped domestic refuse. Similar water-lain layers, which are possibly contemporary, were encountered in Trenches 17 and 18, although these were undated. No comparable water-lain deposits were identified in any of Trenches

1-12 or Trench 19. It seems then that the area of lower ground at the north of the site, on the northern side of the east-west ditch, and closer to the present-day course of The Beck, was an area of marsh or flooding in this period (Figure 5e). However, more extensive flooding of the rest of the site and subsequent truncation and removal of any flood deposits by ploughing cannot be ruled out. The thickness of overburden increases at the north of the site (Figure 5e), apparently due to the presence of flood deposits in this area, in combination with a gradual process of levelling due to subsequent ploughing, and the slope down to The Beck.

The evidence of marsh or flood conditions at the north of the site may indicate that part of the function of the east-west ditch was to act as a defensive barrier against flooding in exceptional conditions. The upcast from this substantial ditch would have created an effective barrier against such flooding. Alternatively, different ground conditions in the northern and southern areas of the site may have been a deciding factor in determining the positioning of this boundary, and flooding of the remainder of the site may not have been a concern.

Comparison of the upper level of the surviving dated Saxon flood deposits in Trench 16 and the level of the base of the ditch in Trench 12 indicates that the ditch may also have been wet (Figure 5e). This is confirmed by the environmental evidence from the fill of the ditch in Trenches 11 & 12, which suggests that the ditch was sufficiently wet to sustain some freshwater species, mainly those preferring muddy conditions or tolerant of occasional dry episodes. In Trench 14, as has already been discussed, a Saxon deposit containing flood or marsh material (1410) sealed the ditch.

Dated Saxon features are more common in the western part of the site (Figure 4), and the distribution of Saxon pottery indicates a focus of activity in the south and west (Figure 5d). The only trenches from which no Saxon pottery was retrieved were Trench 4, in the southeast of the site, and Trenches 17, 18 & 19, located in the north and east. The distribution of Saxon pottery across the site seems to correspond closely to the contours of the site, with generally more material on higher ground (Figures 5a, 5b & 5d). Although the distribution of Saxon pottery may to some extent be biased by the extension of Trench 1, this trend appears to be genuine. The largest concentration of middle Saxon pottery was in Trench 1, where several features of this date were identified (Figures 4 & 6).

A north-south aligned probable post trench [119] was identified in this trench, within which six post holes were identified (Figure 6, Plates 5 & 6). A sherd of the rim of a jar retrieved from the fill of one of the post holes [123] within the trench dates this feature to the Saxon period. Nine additional possible and probable post holes were identified in Trench 1, most of which were undated, although an additional fragment of a Saxon jar rim was retrieved from one of these [158] (Figure 6).

In Trench 1, Saxon pottery was retrieved from both feature [103] and deposit (168) (Figure 6). The southern extension of Trench 1 revealed pit [171]. Saxon pottery was retrieved from this feature, in addition to a large quantity of animal bone.

In Trench 8, a layer of either buried soil, a midden, or the remains of truncated features (801) was the only Saxon deposit.

A Saxon feature [507], in Trench 5, may be a pit (Figure 8), and is likely to be the cause of an anomaly detected in the geophysical survey of the site (Figure 4,

Appendix 3).

In Trench 9, a possible medieval plough furrow [904] truncated Saxon pit [906] (Figure 13, Plate 8). Although pit [906] was only partially exposed in the evaluation trench, it too may correspond to an anomaly recorded in geophysical survey of the site (Figure 4). The Saxon pottery retrieved from these two features, included the only decorated Saxon vessel from the site, which was stamped and is likely to date to the 6th century (Appendix 5).

At least one post-built structure is represented in Trench 10, although very few artefacts were retrieved from it, and its form was unclear. The only dated and stratified material from this trench is Saxon or earlier and it is possible that the structure is also Saxon, although these finds may be redeposited. Very few of the components of this structure are dated, and the structure or structures within Trench 10 must be treated as undated.

Saxon pottery was retrieved from the fill of feature [1306], which may be a pit (Figure 18 Section 58, Plate 7).

A spread which contained animal bone in Trench 13 (1301) (Figure 17) also contained Saxon pottery and burnt stone. This deposit is likely to be the remains of a feature which has been almost entirely truncated.

In Trench 14 was a possibly oval feature [1405] (Figure 19), from which several fragments of fired clay were retrieved including a Saxon loom weight.

Probable flood deposits partly sealed the Saxon enclosure ditch in Trench 14, and a variety of finds were retrieved from these layers (1410) and (1411). These finds included Saxon pottery, animal bone, a possible iron pot hook and an iron latchlifter (Plate 21). These finds, together with other Saxon finds from the site such as the loomweight, also from this trench, indicate domestic activity. The animal bone assemblage from the site as a whole was unusually large, suggesting fairly intensive Middle Saxon activity with a considerable amount of domestic occupation debris.

Saxon features and deposits identified during the evaluation complement previous finds of this period in the vicinity of the site. A single sherd of Early Saxon pottery was retrieved during an archaeological watching brief at the primary school immediately to the west of the site, whilst Middle to Late Saxon settlement features were identified during archaeological investigations at 29 Station Road.

Medieval deposits

Geophysical survey of the site revealed a number of north-south aligned linear features which were interpreted as representing ploughing (Figure 3). Many of these features were also identified in the evaluation trenches and appear to be the remains of medieval ridge and furrow (Figure 4). These furrows have truncated several earlier features, particularly towards the centre of the site. The ridge and furrow, in both the geophysical survey and evaluation trenches, was apparently confined to the southern side of the east-west Saxon enclosure ditch which was identified in trenches 11, 12 & 14 (Figure 4). This may reflect either the continuity of this boundary into the medieval period or the unsuitability of the lower land adjacent to The Beck for agriculture, perhaps being wet at this time. If the ridge and furrow did not extend further north than this ditch, the increased thickness of overburden in Trenches 12 & 14 might indicate that this

area was a headland, an area used for turning the plough. An increased number of medieval pottery sherds retrieved from a buried soil layer in Trench 12 might support the interpretation of this area as a headland. However, ridge and furrow may be present but not be archaeologically visible in this area due to the increasing thickness of overburden to the north of the site (Figure 5e).

Fourteen or fifteen sherds of medieval pottery were retrieved during the investigation, which were of 13th to 16th century date. Only four of these sherds were stratified, one being retrieved from the fill of a probable furrow (513), and three being retrieved from a buried soil layer (1205).

The small quantity of Medieval material from the site reflects the agricultural use of the site in this period, evidenced by the ridge and furrow.

Post-Medieval and recent deposits

Unstratified post medieval and recent pottery was retrieved from trenches across the site, although the only post-medieval features identified were a small number of ceramic land drains in the area of low ground at the north of the site.

East-west aligned anomalies identified in the geophysical survey may reflect post-medieval agriculture, although these features were not clearly identified in trenching. The medieval ridge and furrow identified on the site does not appear to survive as earthworks, indicating that these have been removed by later ploughing.

7. STATEMENT OF POTENTIAL

A range of deposits and feature types were identified across the site, including flood deposits, agricultural features, structural elements, refuse pits and enclosure ditches. A lengthy sequence of activity on the site was identified, spanning the prehistoric to post medieval periods, with marked intensification of activity at the site in the Middle Iron Age and Middle Saxon periods.

At the north of the site some archaeological deposits and features were sealed by a thick protective overburden, which was up to 0.80m thick in Trench 14. However, the majority of features on the site were heavily truncated by medieval and later ploughing. In Trench 9, for example, Saxon features were sealed by only *c.*0.30m of topsoil, and in Trench 13, an almost entirely truncated Saxon feature was identified as a deposit (1301). The evident effects of agricultural activity indicate that further agricultural activity or groundworks would have similarly destructive effects on the surviving archaeological deposits and features on the site.

The Middle Iron Age pottery from the site is in good condition. Publication and selective drawing of the prehistoric and Roman pottery from this site has been recommended. In combination with the pottery from previous archaeological investigations immediately to the north of the site, this would provide a useful typology of pottery in the area from the Early to Middle Iron Age through to the 3rd century AD. Parallels with the pottery forms identified at Marked Deeping could establish links with ceramic traditions of South Lincolnshire, providing information about trade and settlement.

The Middle Iron Age animal bone from the site is less well preserved than the bone retrieved from later deposits. The relatively small assemblage of this date is of more limited potential than the more

extensive and better-preserved collection of Middle Saxon animal bone. A large assemblage of animal bone was retrieved during the evaluation, which appears to reflect fairly intensive Middle Saxon activity, with a considerable amount of domestic occupation debris. Further excavations at the site would be likely to produce a large and useful bone assemblage that could be compared to contemporary sites at Holdingham, Quarrington and Fishtoft, Boston. Large bone assemblages of this date are relatively uncommon, and the bone preservation is good. The assemblage has potential for understanding husbandry and economics of the site in the Middle Saxon period. Environmental sampling has been recommended to aid the retrieval of fish and bird bones, which, at present appear to be under-represented in the collection.

The preservation of the Middle Saxon pottery from the site was variable, with small abraded sherds from ploughsoil and large unabraded sherds from deeper features where better protected. The Middle Saxon pottery is unusual in that much of it has not undergone obvious alteration after burial. This would allow analysis of the fabrics to be carried out with a good chance of a successful outcome. Most of the Saxon pottery is local and it would be possible to subdivide local wares. Sampling and analysis of local clay and sand might pinpoint production sites and demonstrate which share the same resources. However this would be a large project involving other sites in the area. As with the earlier pottery, several drawings have been recommended, in addition to stamp recording, which might identify sites with similar stamps.

The small collection of Medieval pottery from the site is of limited significance and potential.

The assemblages retrieved from the environmental samples from the site were unusually small. The results of the analysis of these samples were somewhat at odds with the results of several of the other specialist reports on the site. Whilst the animal bone, Middle Iron Age pottery and Middle Saxon pottery assemblages indicate domestic activity at the site, the results of the environmental assessment indicate low density scattered refuse, not closely associated with either domestic or industrial activity. The reasons for this discrepancy are unclear, although further environmental sampling at the site might provide some explanation for this. Despite the small assemblages retrieved from the samples, some useful information on environmental conditions at the site was obtained, including information on whether various features and deposits were damp, some deposits being formed in flood, marsh or fen conditions.

A range of other finds were retrieved during the investigation including worked flints, building materials, glass and metal objects. The preservation of iron objects at the site is apparently good, as evidenced by the Saxon latchlifter retrieved from Trench 14 (Plate 21).

The geophysical survey of the site indicated probable archaeological features on the site, several of which were targeted in the evaluation trenches. In many cases the findings within the trenches confirmed the archaeological nature of the geophysical anomalies, for example in the identification of Saxon pit-type features in Trenches 5 and 9 (Figure 4). This indicates that some of the other geophysical anomalies interpreted as being of archaeological origin are likely to be additional pit-type features. Archaeological features were also identified in trenches which were targeted on geophysical anomalies interpreted as

being natural in origin, for example in Trenches 14 & 19 (Figure 4). Thus, anomalies which were initially interpreted as being natural in origin might also prove to be archaeological.

8. CONCLUSIONS

Archaeological investigations were undertaken at Fen Road, Ruskington, because the site lay in an area of known archaeological remains spanning the prehistoric to post-medieval periods. Archaeological remains in the vicinity of the site include a Palaeolithic handaxe, a Neolithic flint axe and Bronze Age inhumations. Previous archaeological investigations immediately to the north of the proposed development site identified Iron Age pits, ditches and a possible ring gully in addition to a possible late Iron Age or early Roman round house, Roman ditches and a Roman grave. Anglo-Saxon remains were also known in the vicinity of the site.

Geophysical survey of the site revealed a number of anomalies which were thought likely to reflect buried archaeological remains, and trial trenching targeted some of these anomalies.

The results of trial trenching reflected the chronological diversity of the area, with finds of prehistoric, Roman, Saxon and later dates being retrieved. For most periods, finds were restricted to a small number dating to each period of activity at the site, which probably reflects the use of the site as farmland in several of these periods. However, domestic activity at the site apparently intensified in both the Middle Iron Age and Middle Saxon periods.

A small number of worked flints were retrieved during the investigation, in addition to a sherd of possible Bronze Age pottery, indicate prehistoric activity in the area.

A Middle Iron Age enclosure and sub-enclosure were identified, from which domestic pottery, animal bone and burnt stone were retrieved. This indicated settlement of the site in the Middle Iron Age, and undated pits and a post hole within the sub-enclosure may be contemporary. If contemporary, the post hole might represent the remains of a small roundhouse within the enclosure.

Whilst only a small number of Roman artefacts were retrieved from the site, the types of pottery sherds retrieved were indicative of higher status occupation.

Middle Saxon deposits on the site comprised an east-west aligned ditch, which may have functioned as a defence against flooding from The Beck. Saxon deposits to the north of this ditch were confined to flood deposits containing dumped domestic refuse. To the south of this ditch, several pits of this date were identified which were likely to be rubbish pits. The remains of a Saxon post-built structure were identified in Trench 1, whilst an undated post-built structure in Trench 10 was potentially also Saxon. Saxon pottery from the site dates from between the mid 5th and 7th centuries, and is likely to have been used for domestic purposes. A large assemblage of Saxon animal bone together with other finds including a latchlifter and a loomweight also indicate domestic and craft activity and occupation of the site in this period.

Medieval remains were confined to ridge and furrow across the southern part of the site, and possibly an associated headland. Post medieval and later remains comprised a small number of land drains at the north of the site and further indications of

agricultural land use.

There are clear similarities between the alignment of the Saxon and mid-Iron Age ditches, some of the undated cropmarks to the east, some of the Roman ditches identified during investigations to the north of the site, Medieval ridge and furrow and the existing field boundaries. However, although these features of very different dates seem to share a similar alignment, the lack of evidence for activity on the site in intermediate periods suggests that boundaries are unlikely to have been continuously maintained. The positioning of these boundaries may have been largely determined by the topography of the site. The Iron Age material from the site is predominantly of mid-Iron Age date, and Roman material is restricted to the 2nd and 3rd centuries, lacking both earlier and later Roman material. Earlier Saxon, and later Saxon to earlier Medieval finds are also apparently absent, potentially leaving gaps in the record of around 200 and 500 years respectively. Additionally, the assemblages of Roman and Medieval pottery were extremely small, and the mid-Iron Age and middle Saxon periods represent the only substantial assemblages retrieved from the site.

9. ACKNOWLEDGEMENTS

Archaeological Project Services would like to acknowledge the assistance of Chanceoption Homes who commissioned the fieldwork and post-excavation analysis. Dale Trimble coordinated the work and along with Tom Lane edited this report. Jo Hambley, the North Kesteven Planning Archaeologist, kindly permitted access to the parish files maintained by Heritage Lincolnshire.

10. PERSONNEL

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Site staff: Matt Bentley, Aaron Clements, Bob Garlant, Barry Martin, Chris Moulis, Mary Nugent, Neil Parker, Jim Robertson, Karen Rosser, Aleck Russel, Fiona Walker, Pete Watkin
Work experience volunteers: Cerys Reid-Smith, Alice Owen
Metal detecting: Jim (volunteer), Victoria Mellor
School site tour: Neil Parker
CAD Illustration: Victoria Mellor
Mapmaker illustration: Mark Dymond
Finds processing: Denise Buckley
Surveying: Victoria Mellor, Dale Trimble, Pete Watkin
Photographic Reproduction: Sue Unsworth
Post-excavation Analyst: Victoria Mellor

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12. ABBREVIATIONS

APS Archaeological Project Services

DoE Department of the Environment

IFA Institute of Field Archaeologists

NKDC North Kesteven District Council

OD Ordnance Datum
(Height above sea level)

OS Ordnance Survey

SMR Sites and Monuments Record

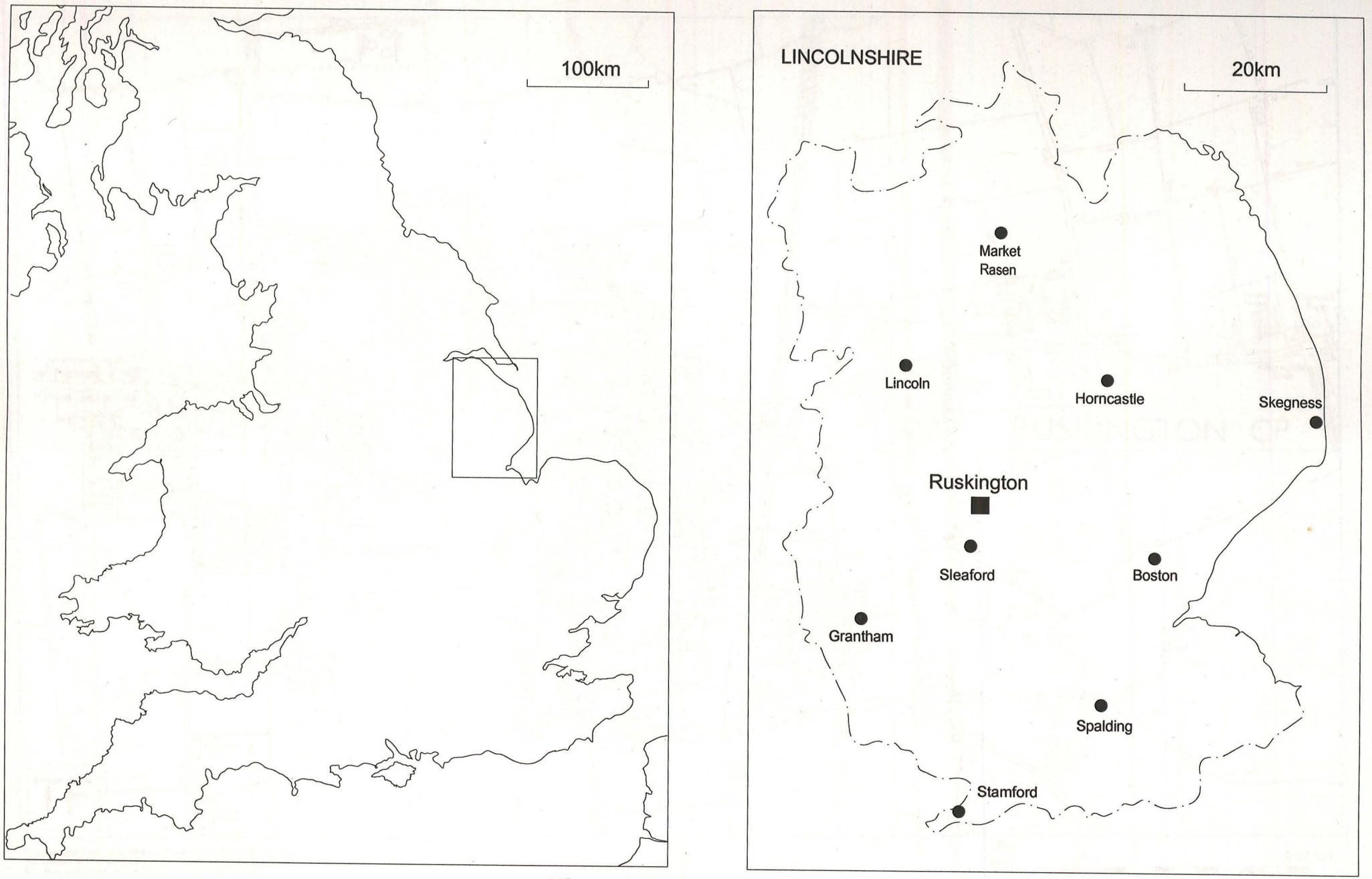

Figure 1 General Location Map

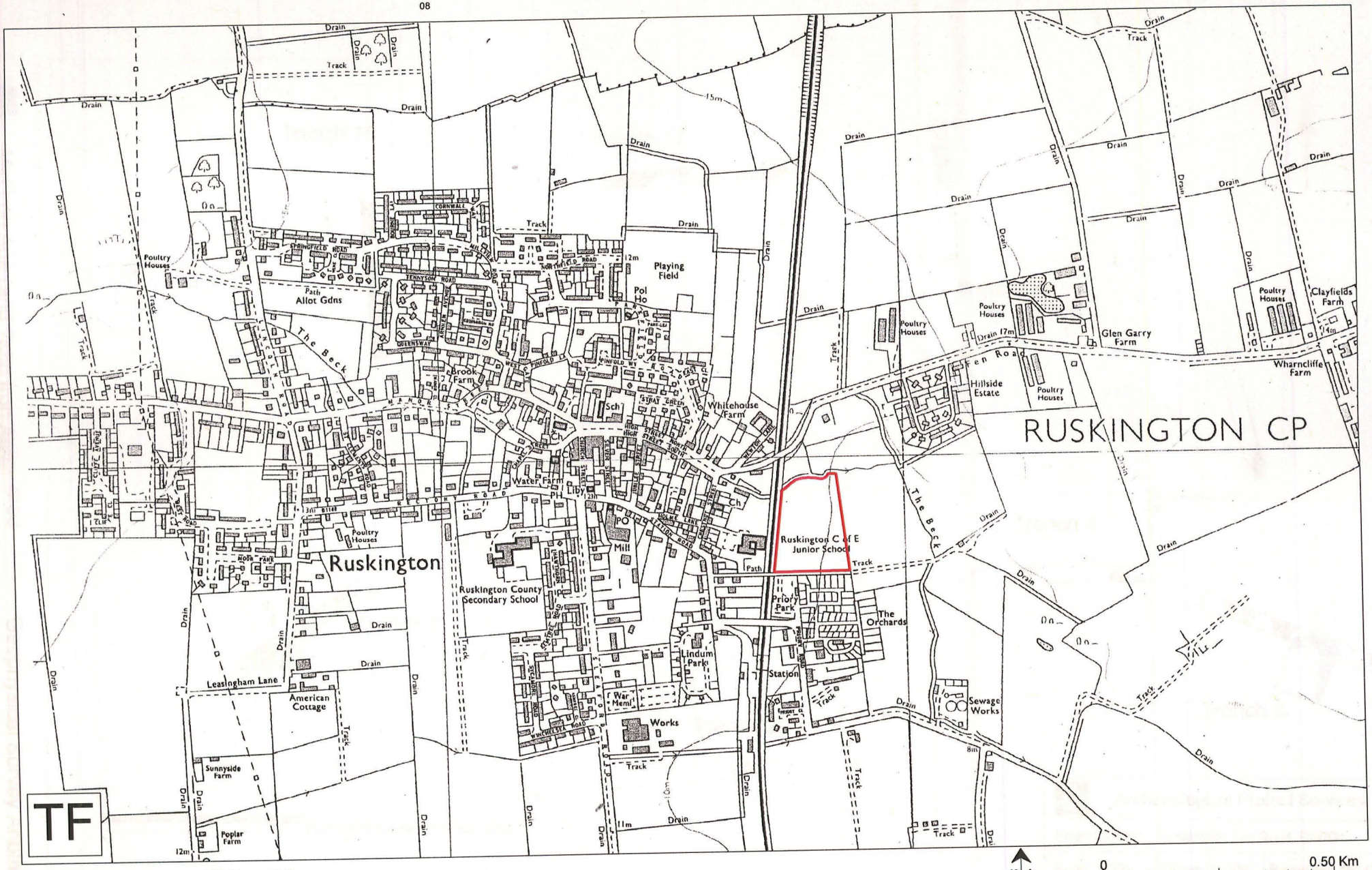

Figure 2 Site location plan

Figure 4 Phased Trench Plan

- Neolithic findspot
- Iron Age/Roman
- Late Iron Age
- Roman
- Saxon
- Medieval
- Post-medieval
- Modern
- Undated
- Extent of Geophysical Survey, 2000 Evaluation
- Geophysical Survey Anomalies, 2000 Evaluation
- Geophysical Survey Anomaly, trend, current investigation
- Geophysical Survey Anomaly, Ploughing, current investigation
- Geophysical Survey Anomaly, ?Archaeology, current investigation
- Geophysical Survey Anomaly, ?Natural, current investigation
- Geophysical Survey Anomaly, Ferrous, current investigation
- Extent of geophysical survey, current investigation

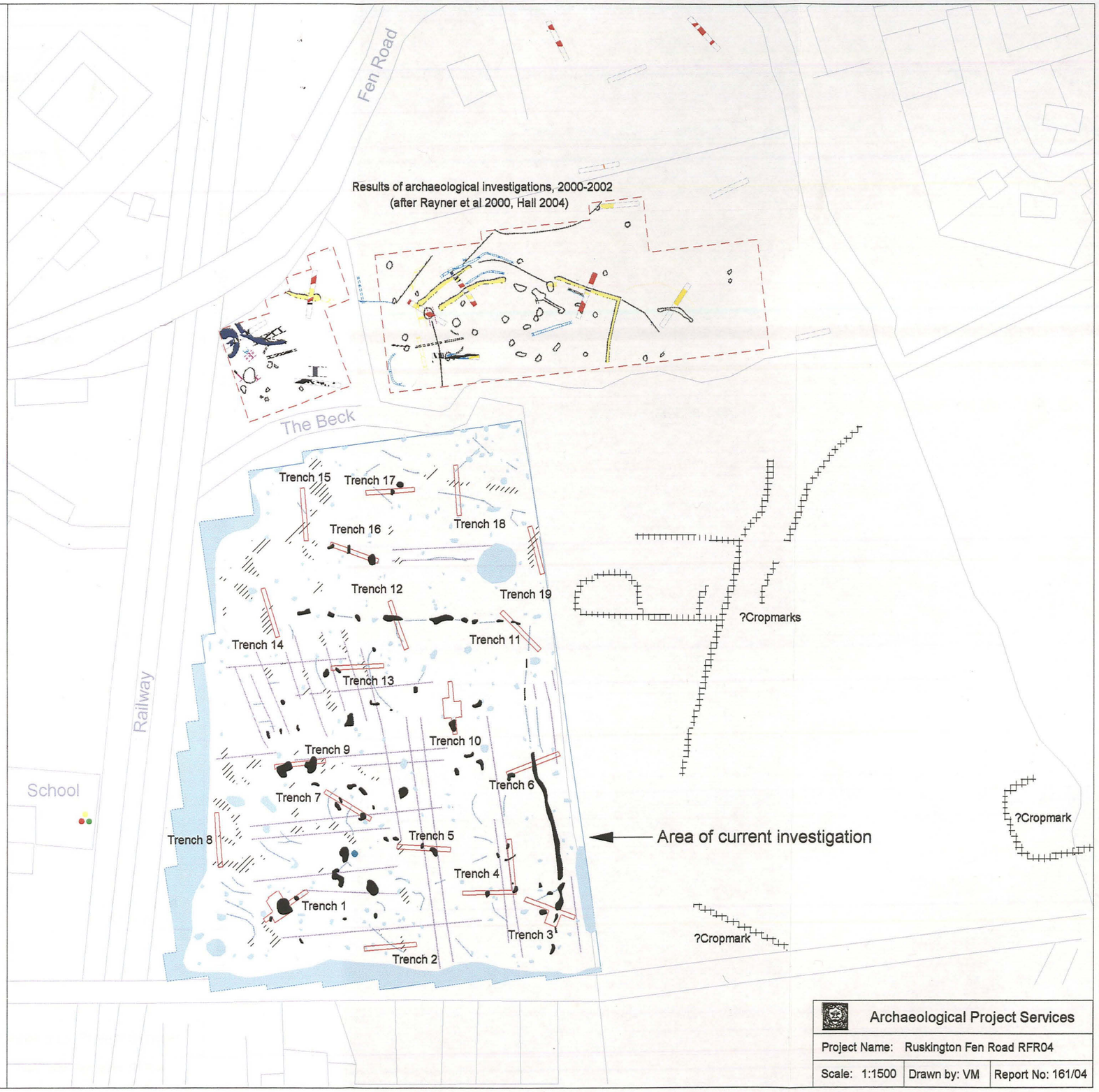

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Figure 3 Trench location plan showing results of geophysical survey and archaeological remains recorded adjacent to the site

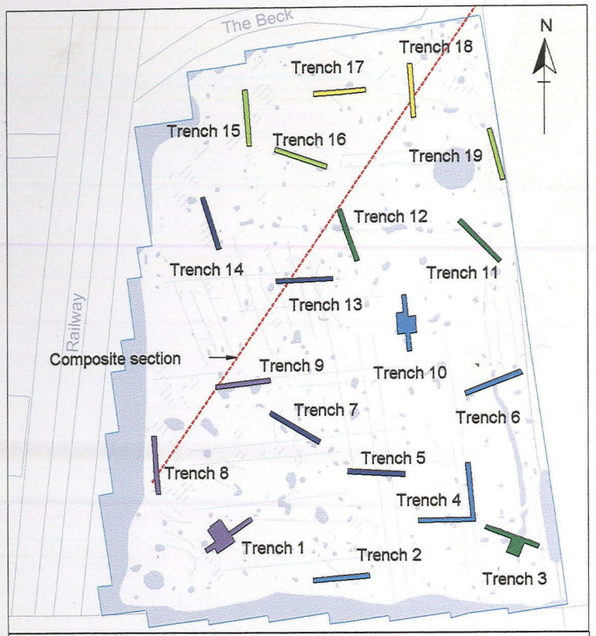
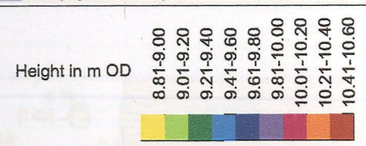


Figure 5a Top of natural sand and gravel in trenches

Geophysical survey results Scale 1:2000



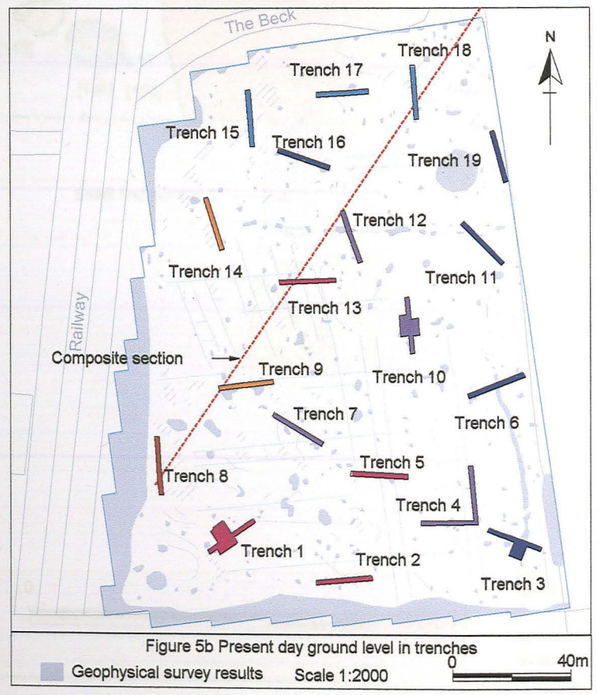


Figure 5b Present day ground level in trenches

Geophysical survey results Scale 1:2000

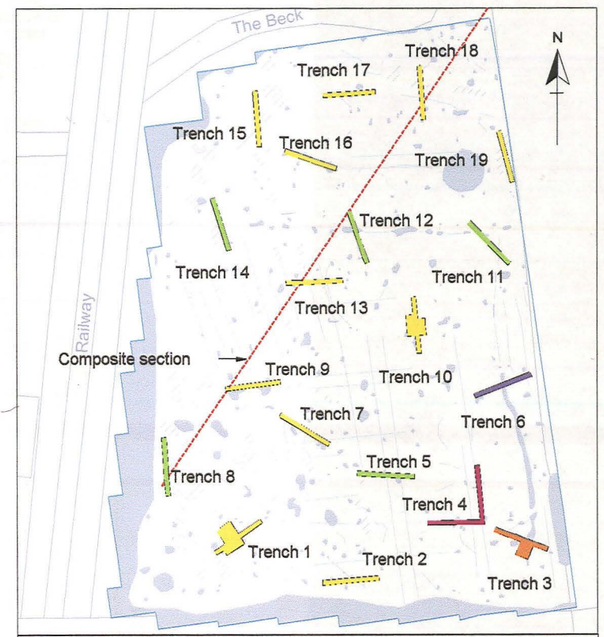


Figure 5c Distribution of Prehistoric pottery by number of sherds

Geophysical survey results Scale 1:2000

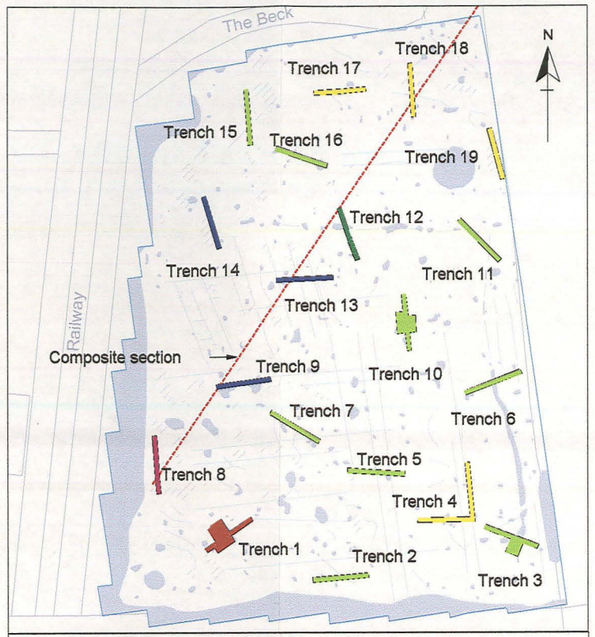


Figure 5d Distribution of Anglo-Saxon pottery by number of sherds

Geophysical survey results Scale 1:2000

Figure 5e Composite section across site showing present day ground surface, upper level of natural calcareous sand and gravel and principal Saxon features

(Vertical scale exaggerated x5)

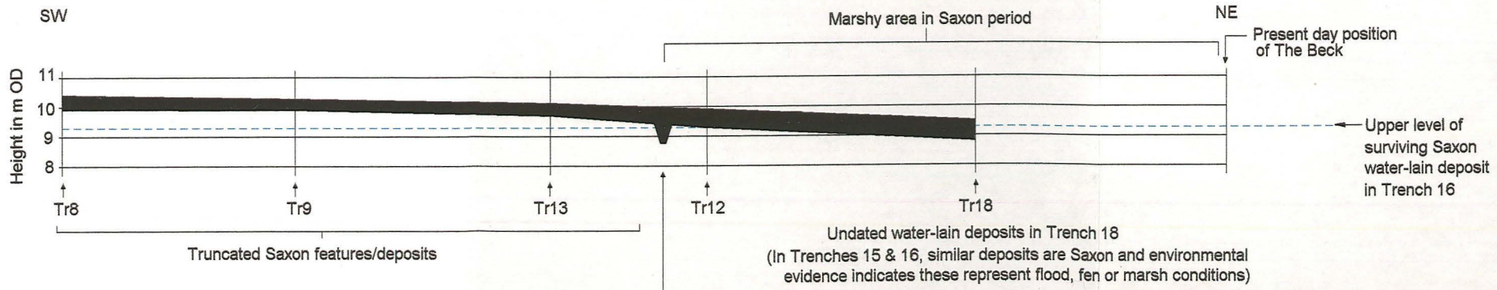


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Figure 5 Topography of site, composite profile of site and distribution of Saxon and prehistoric pottery

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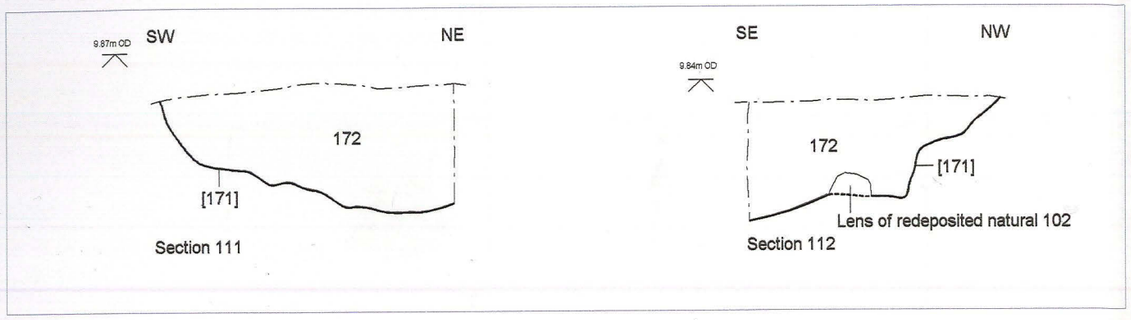
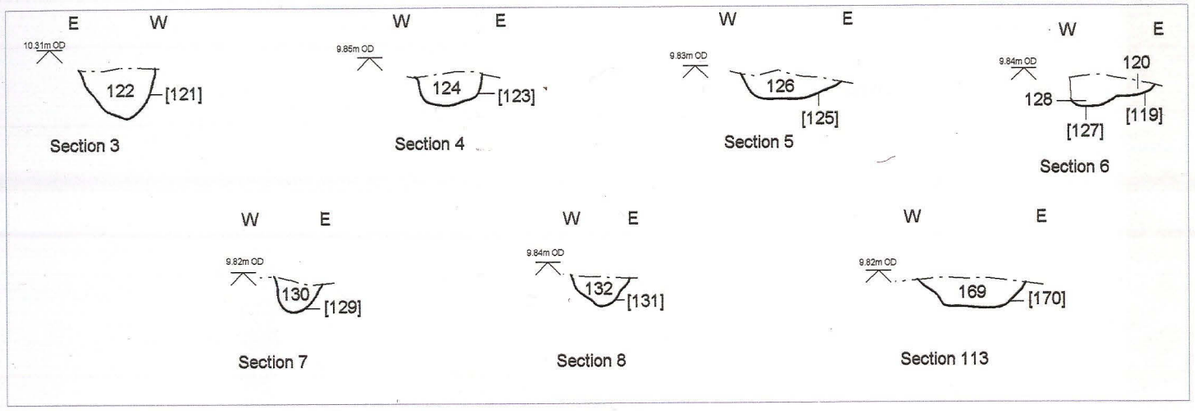
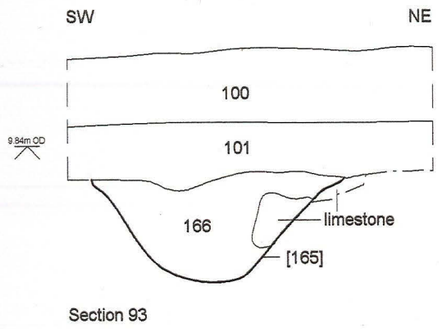
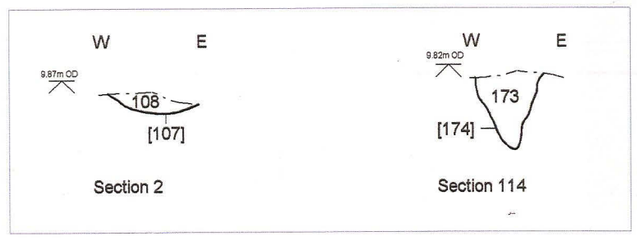
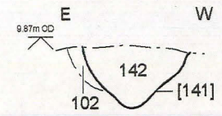
Figure 6 Trench 1 Plan

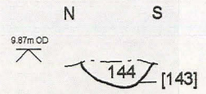


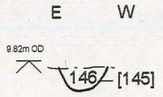


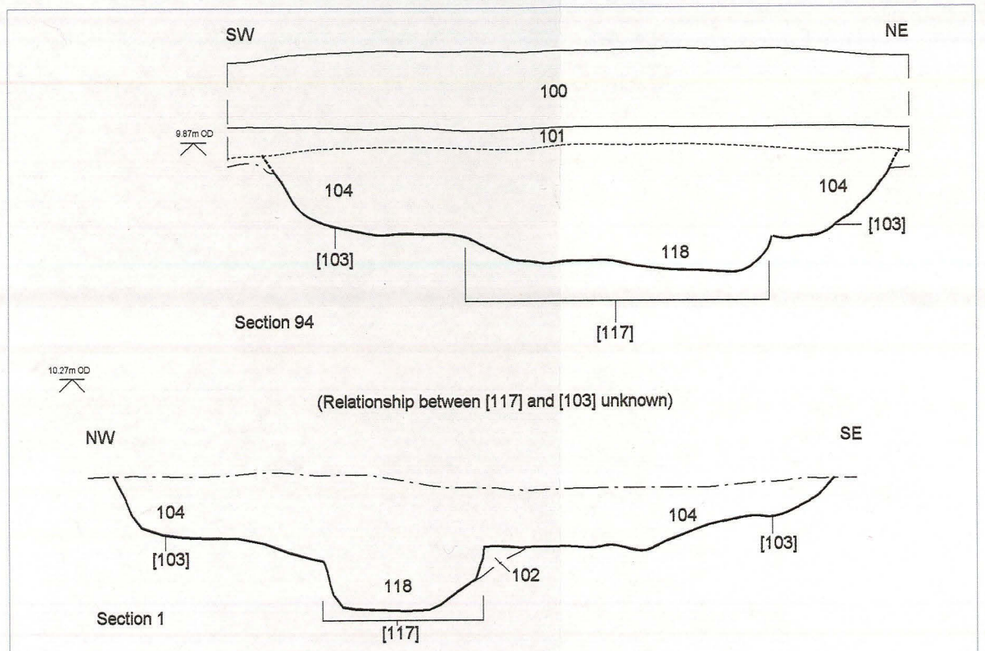


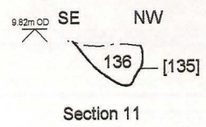


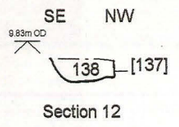


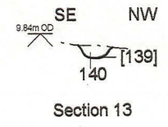


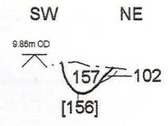


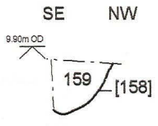


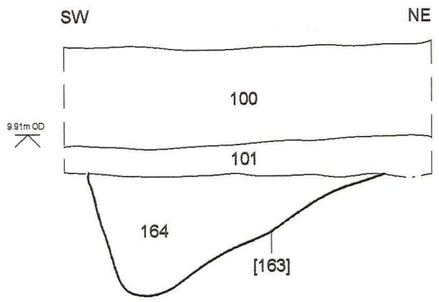


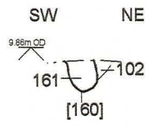


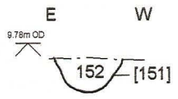


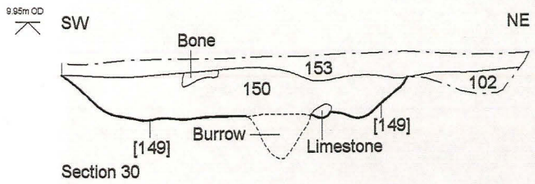












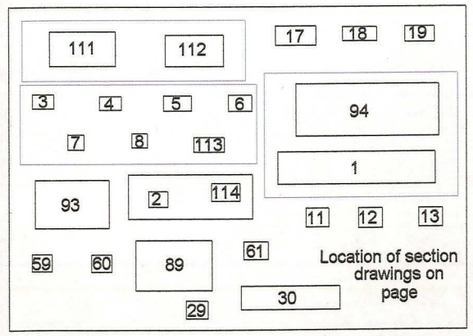


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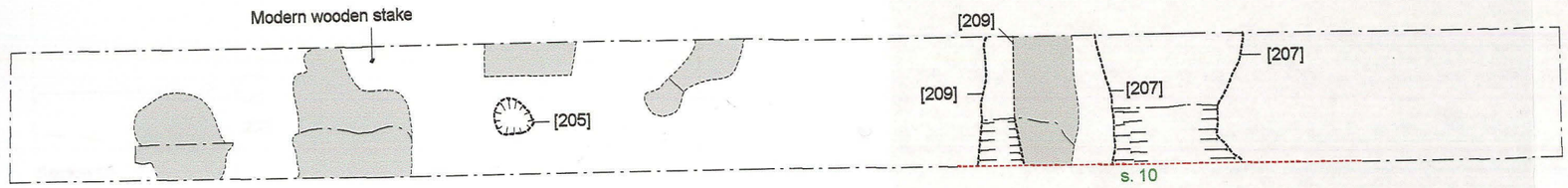
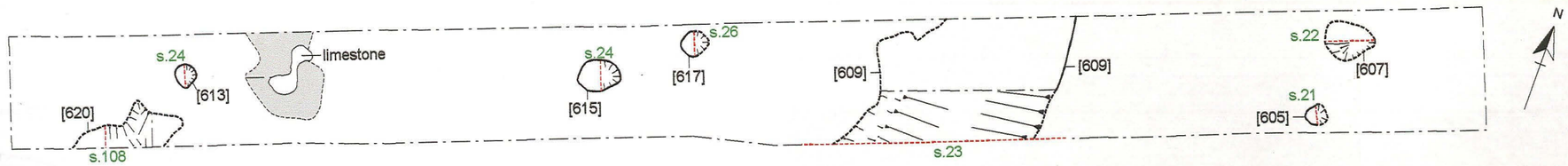
Figure 7 Trench 1 Sections



Trench 2

Trench 5



Trench 6

0 4m

Probable overburden, burrow or root disturbance

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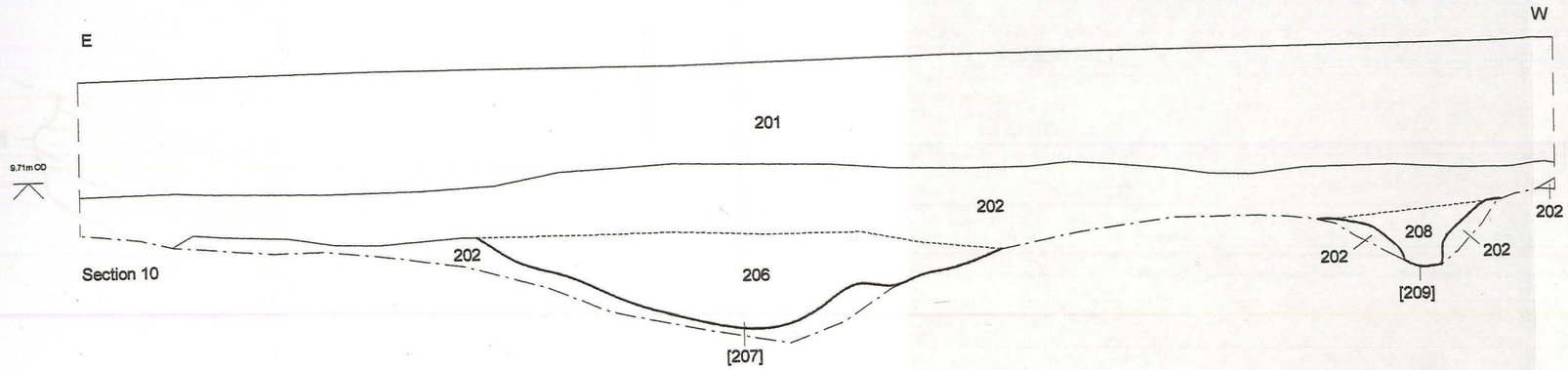
Figure 8 Trenches 2, 5 & 6 Plans



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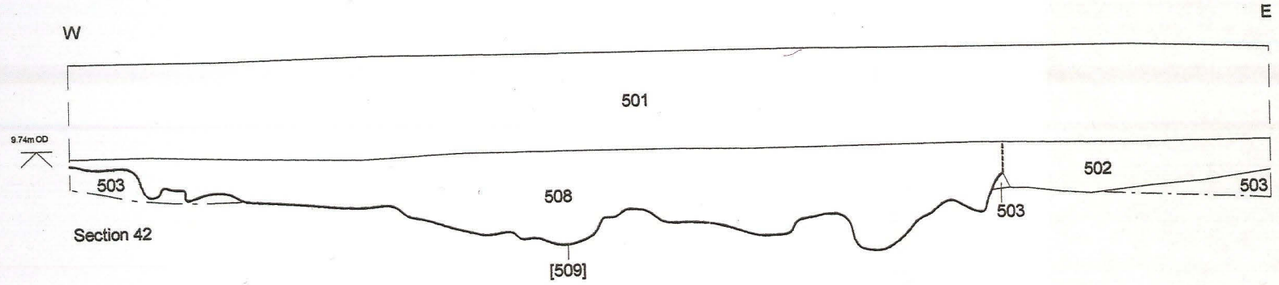
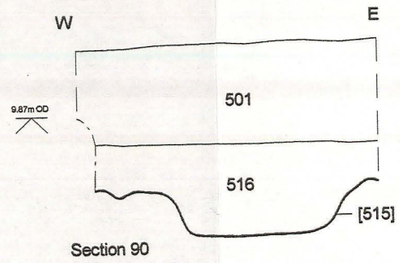
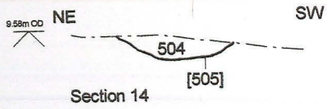
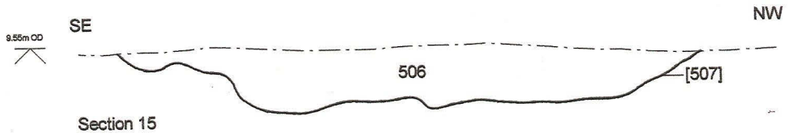
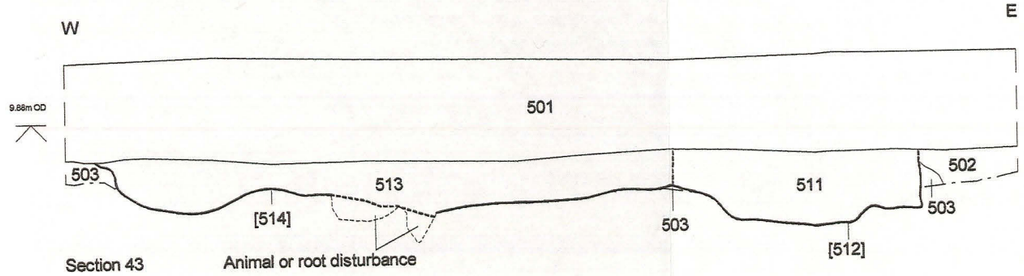


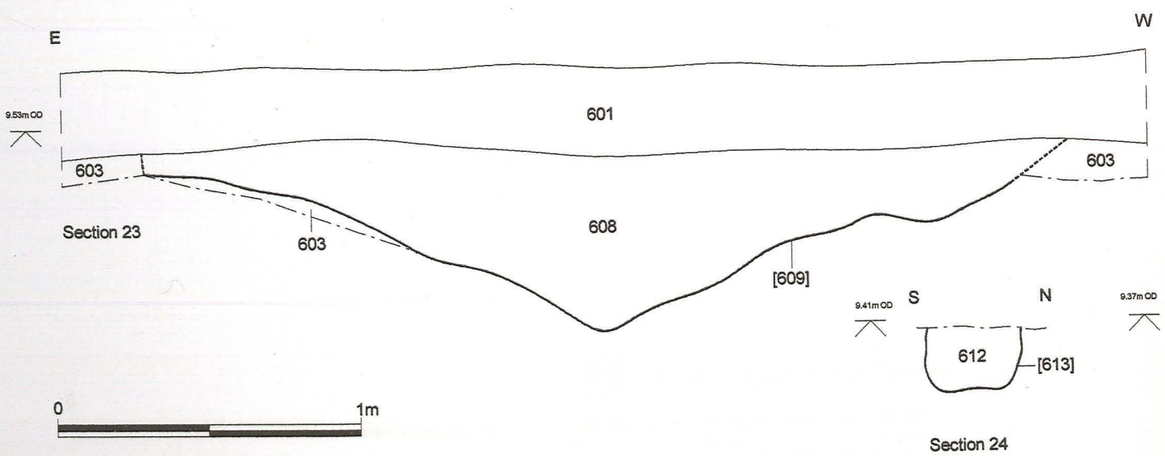


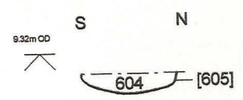


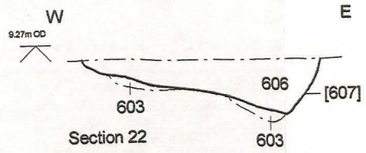


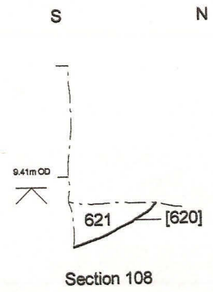


Trench 5

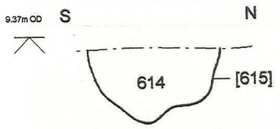


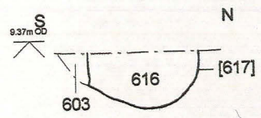






Trench 6





Archaeological Project Services		
Project Name: Ruskington Fen Road RFR04		
Scale: 1:20	Drawn by: VM	Report No: 161/04

Figure 9 Trenches 2, 5 & 6 Sections

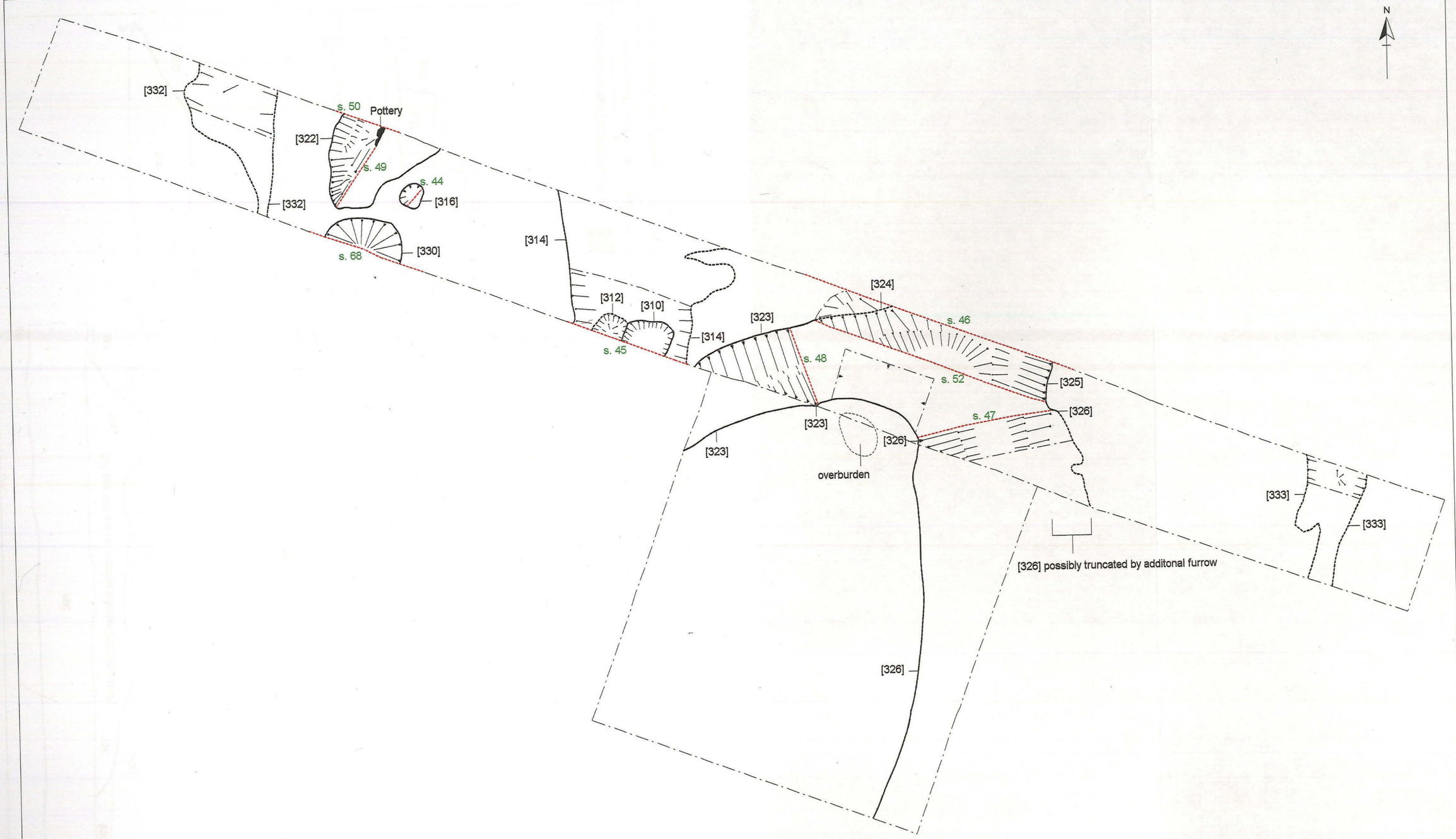


Figure 10 Trench 3 Plan

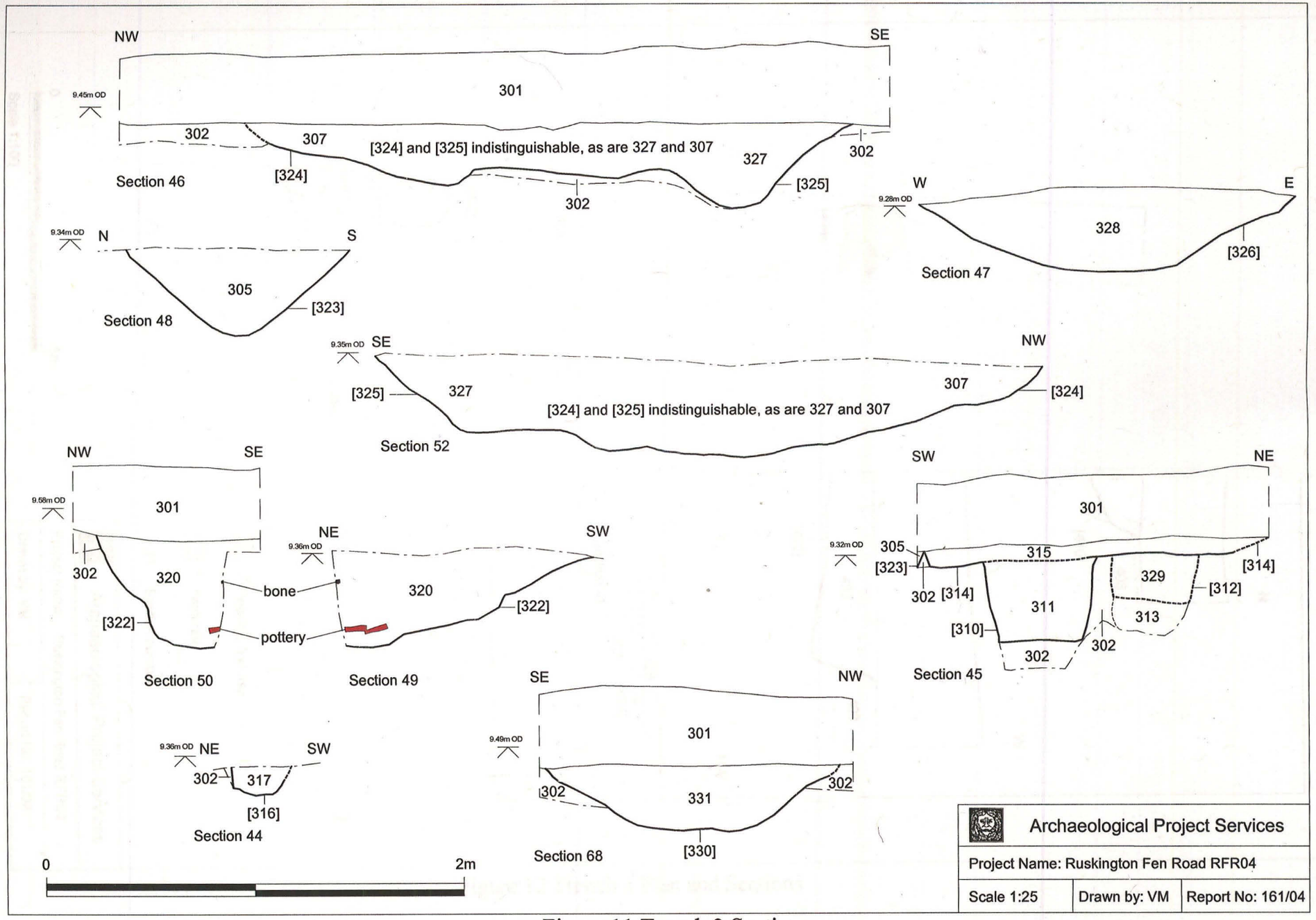
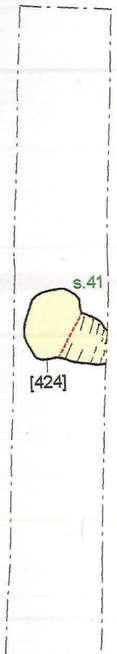
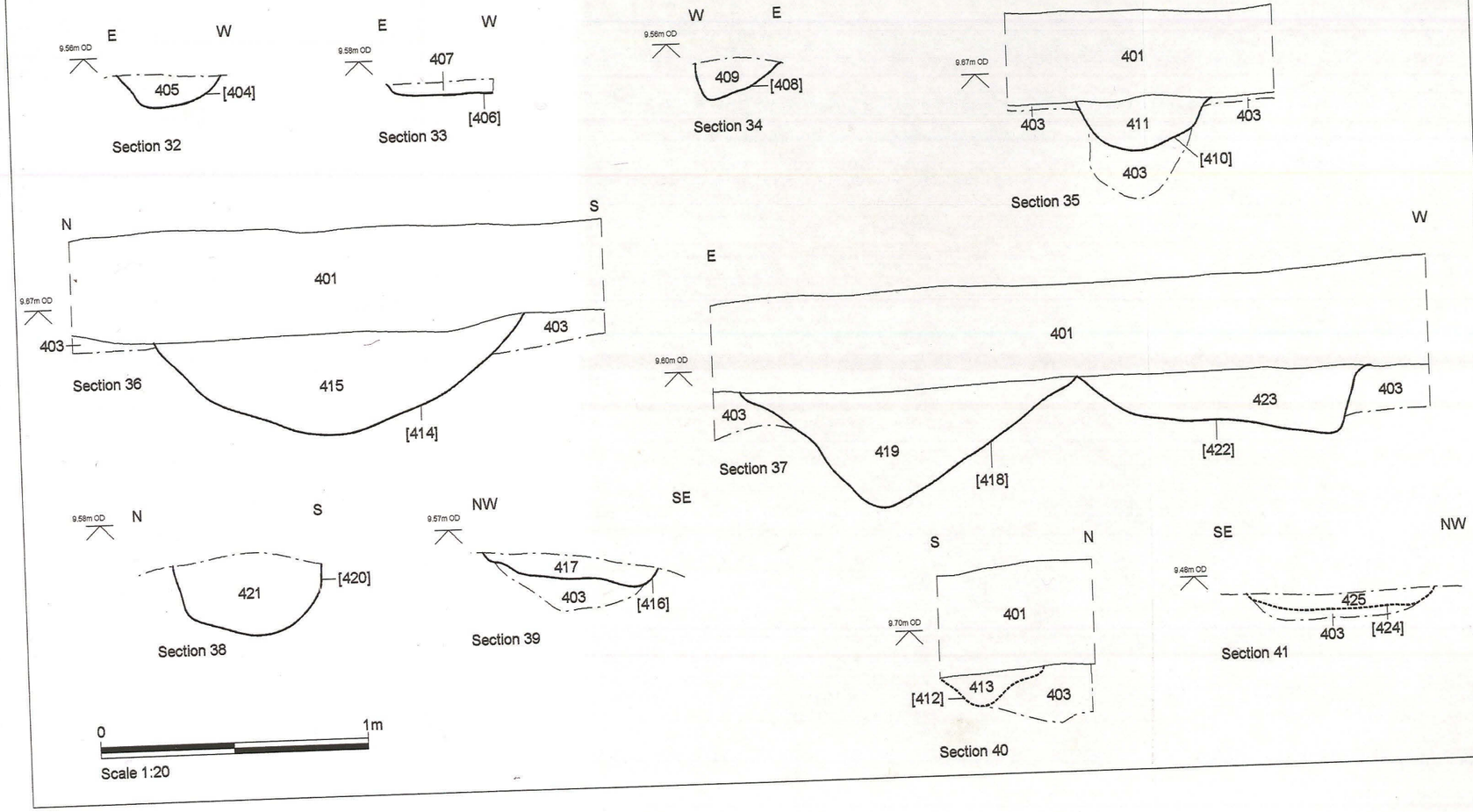
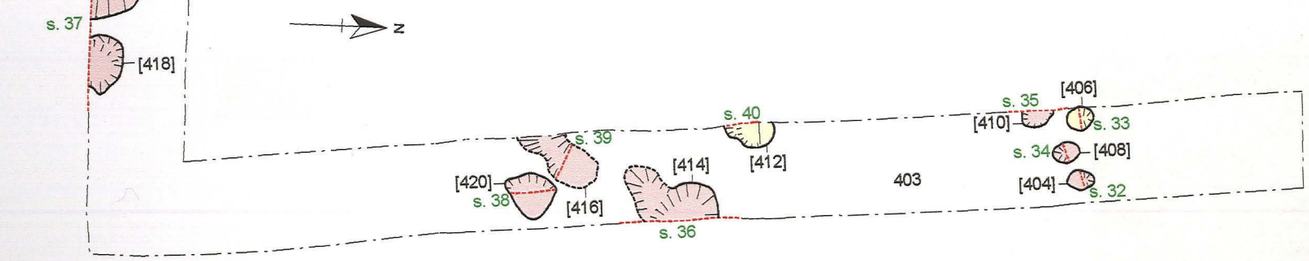


Figure 11 Trench 3 Sections







Possible features

Features

s.11 Section number

Archaeological Project Services

Project Name: Ruskington Fen Road RFR04

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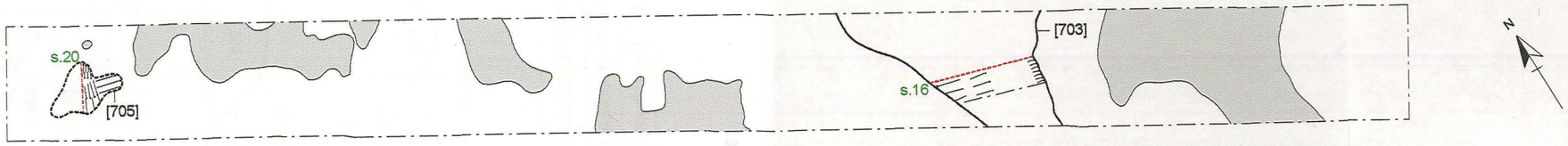
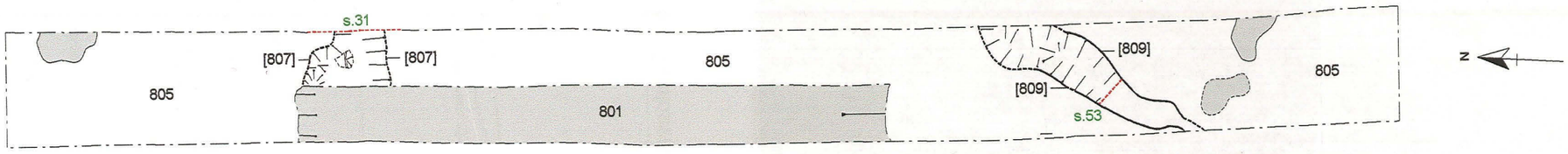
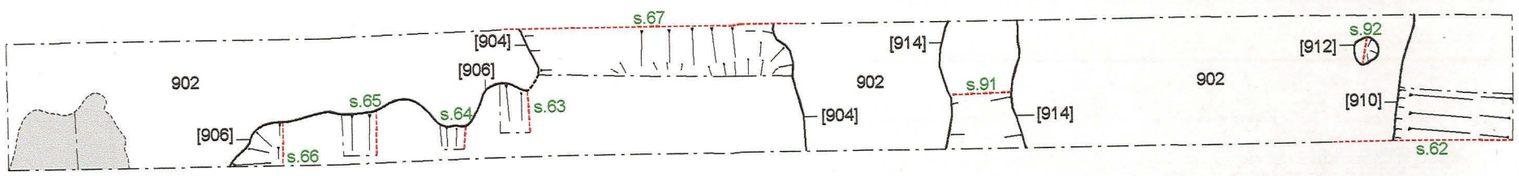
Figure 12 Trench 4 Plan and Sections



Trench 7



Trench 8



Extent of [904] and [906] unclear as [904] appears to truncate [906]

Trench 9

0 4m

Probable overburden, burrow or root disturbance

s.11 Section number

Archaeological Project Services		
Project Name: Ruskington Fen Road RFR04		
Scale: 1:75	Drawn by: VM	Report No: 161/04

Figure 13 Trenches 7, 8 & 9 Plans

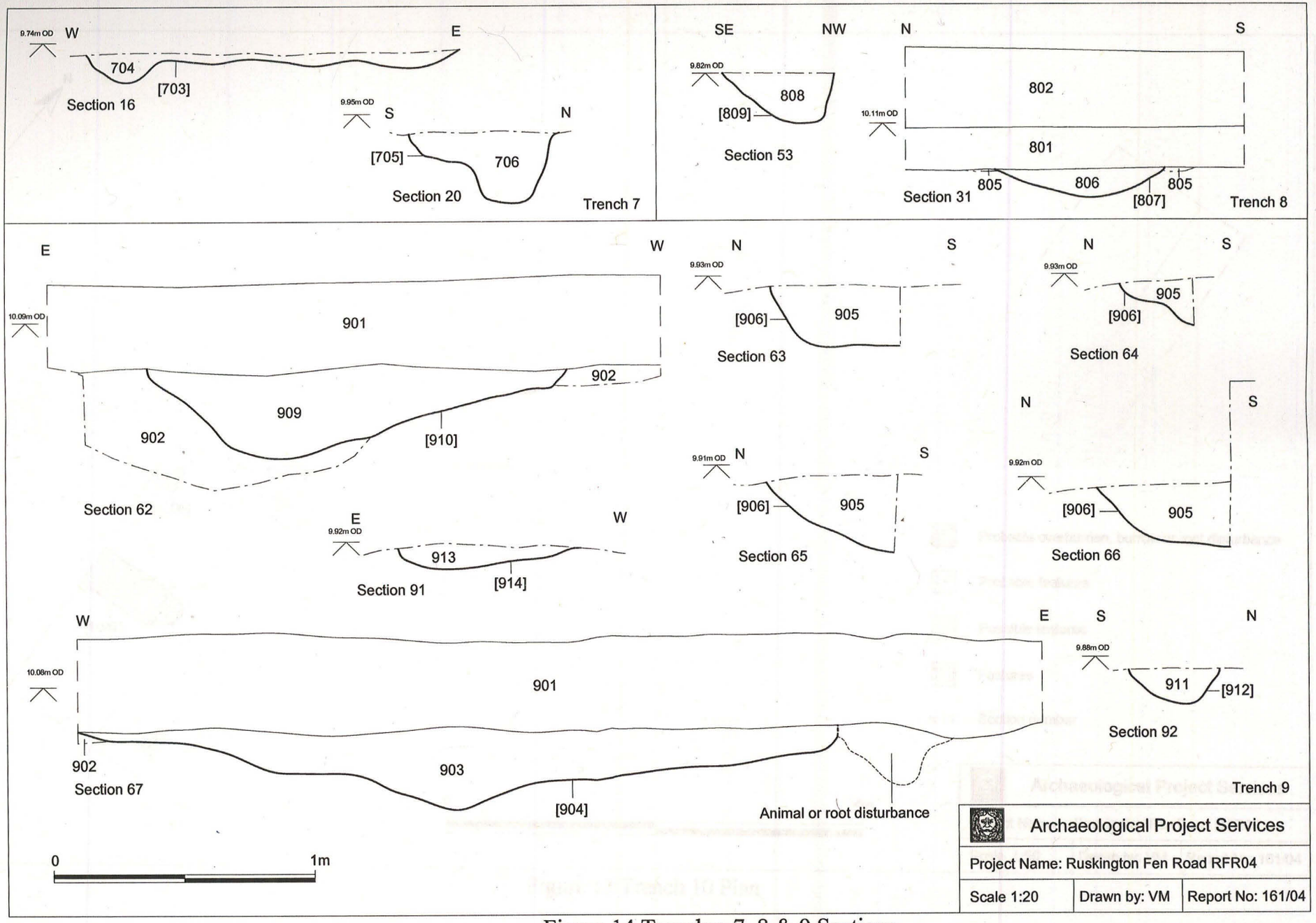


Figure 14 Trenches 7, 8 & 9 Sections

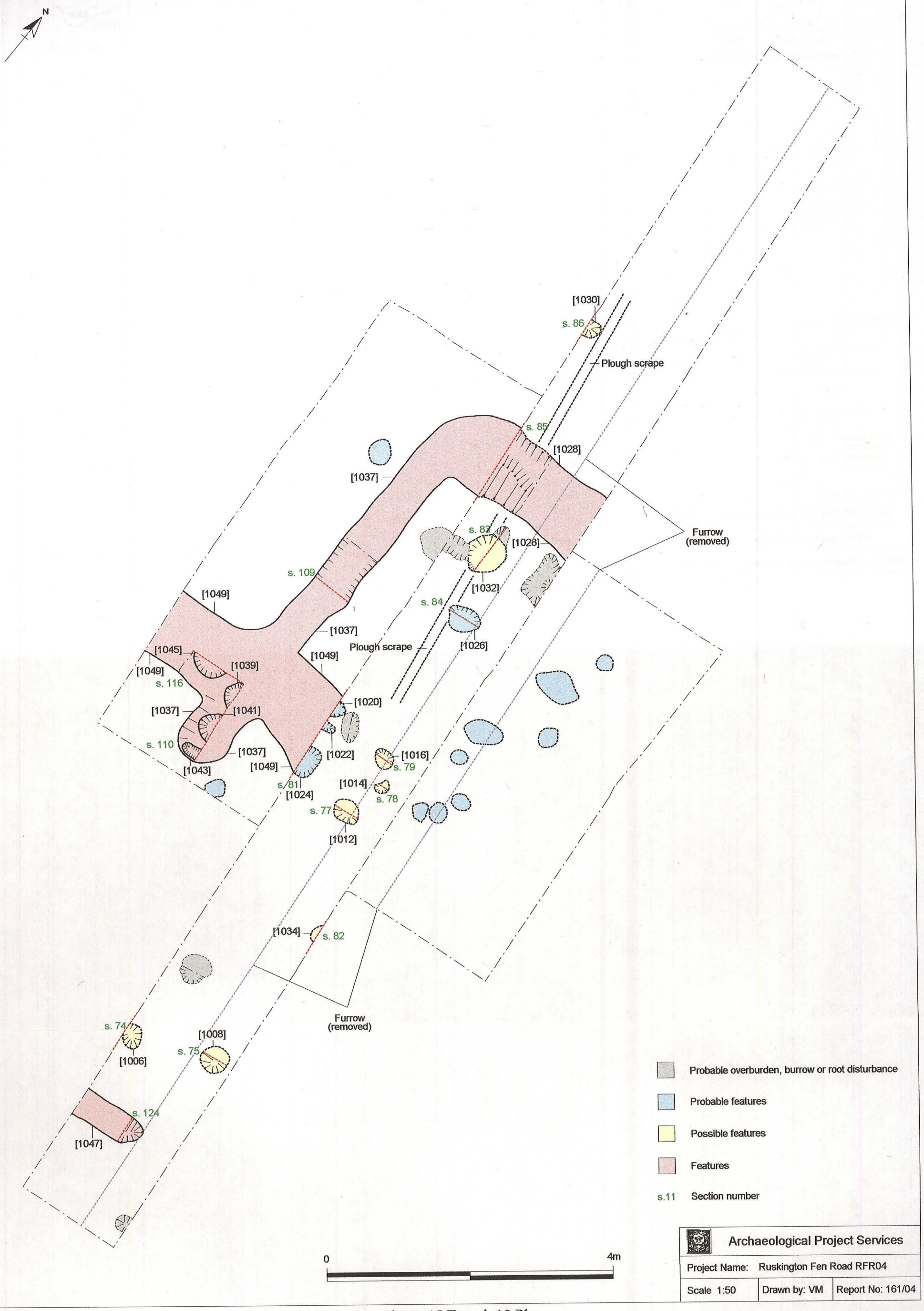


Figure 15 Trench 10 Plan

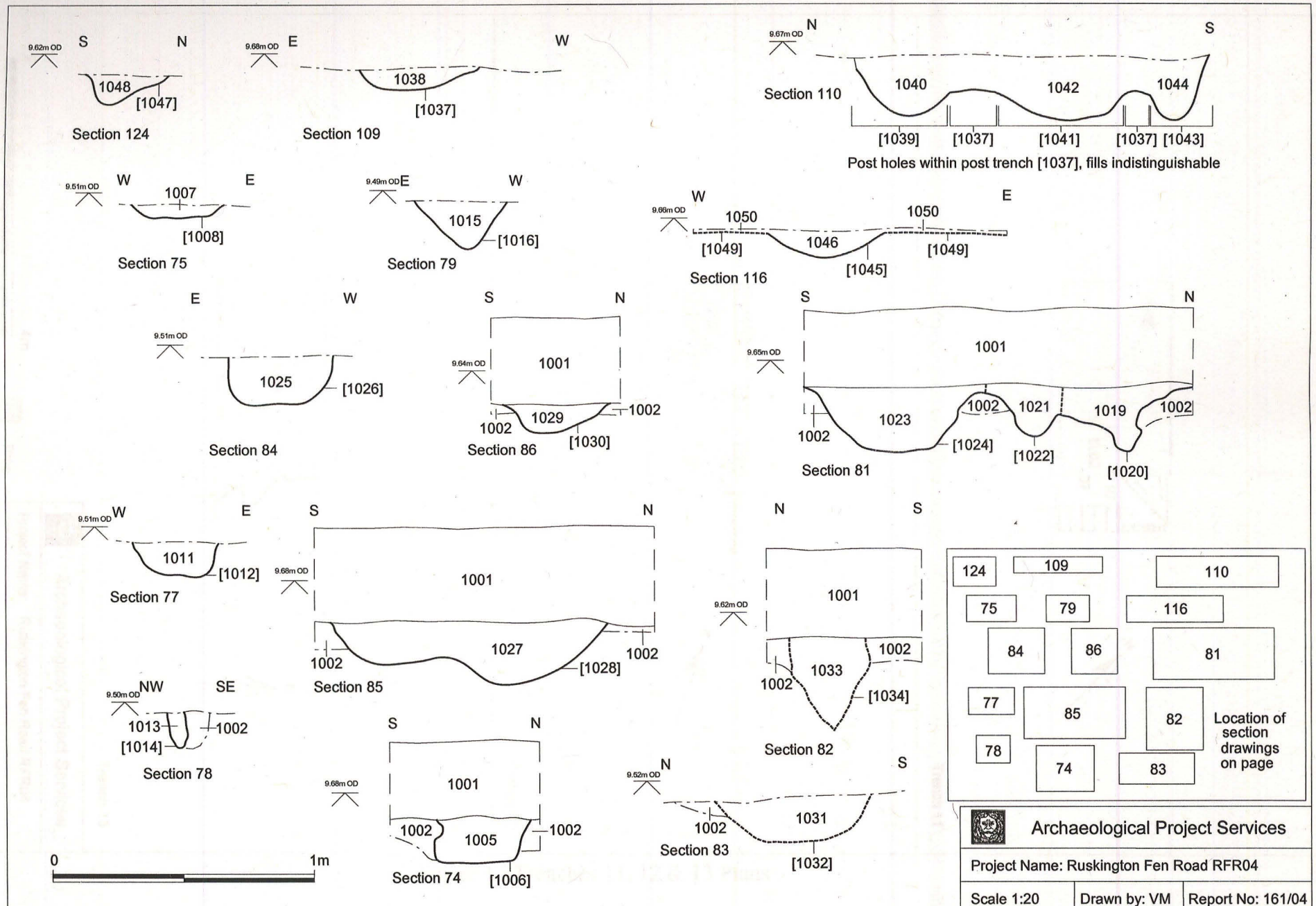
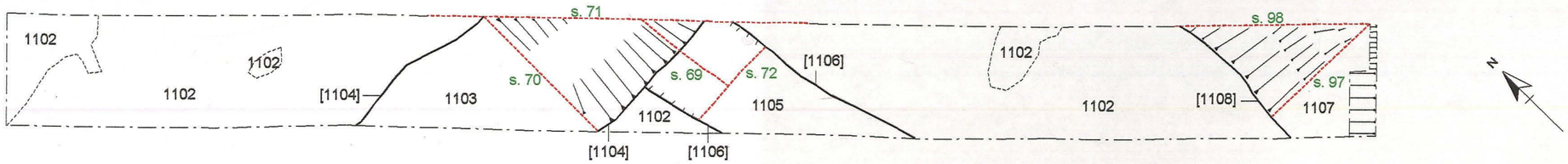
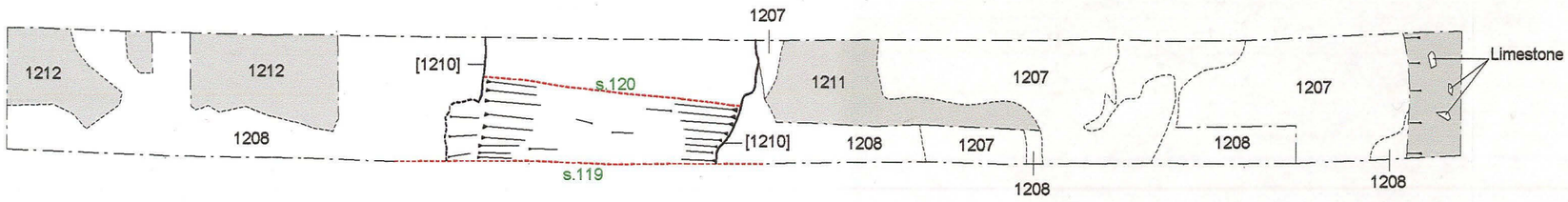


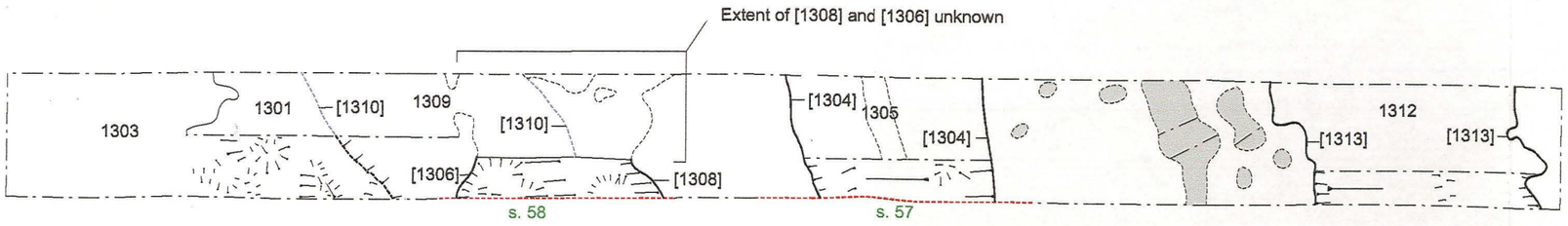
Figure 16 Trench 10 Sections



Trench 11



Trench 12



Trench 13

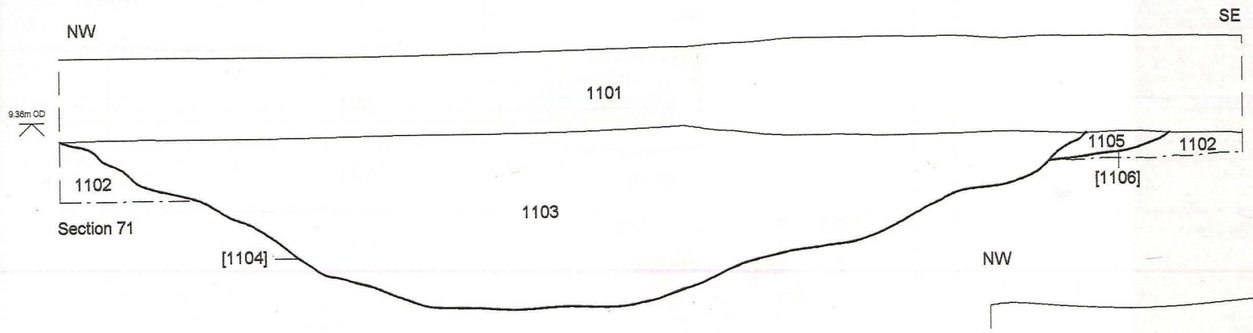
0 4m

Probable overburden, burrow or root disturbance

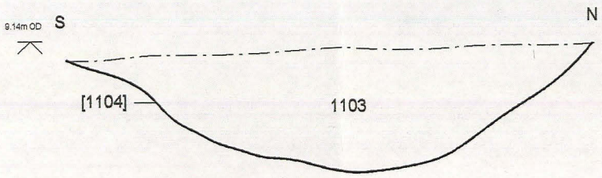
s.11 Section number

Archaeological Project Services		
Project Name: Ruskington Fen Road RFR04		
Scale: 1:75	Drawn by: VM	Report No: 161/04

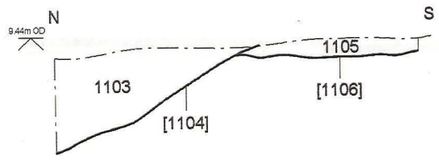
Figure 17 Trenches 11, 12 & 13 Plans



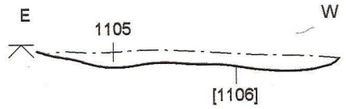
Section 71



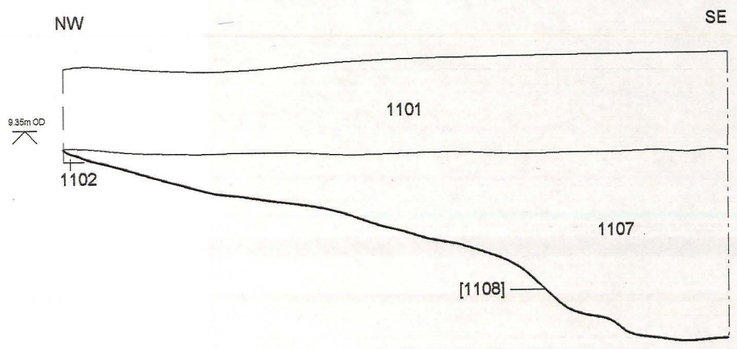
Section 70



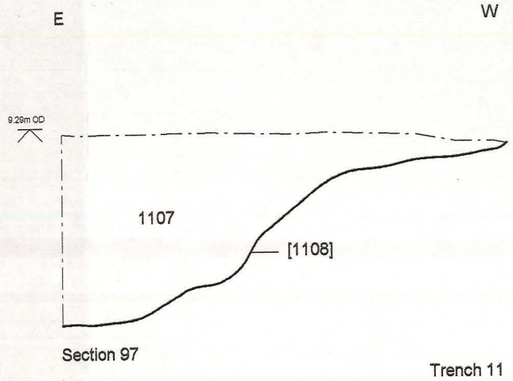
Section 69



Section 72

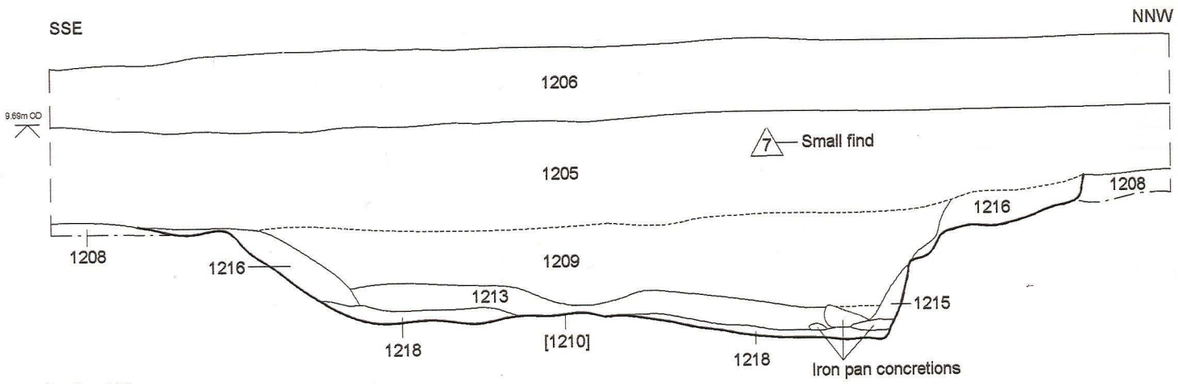


Section 98

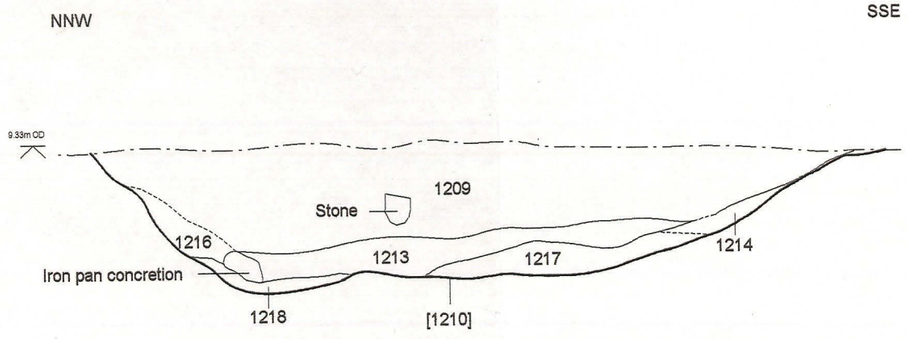


Section 97

Trench 11

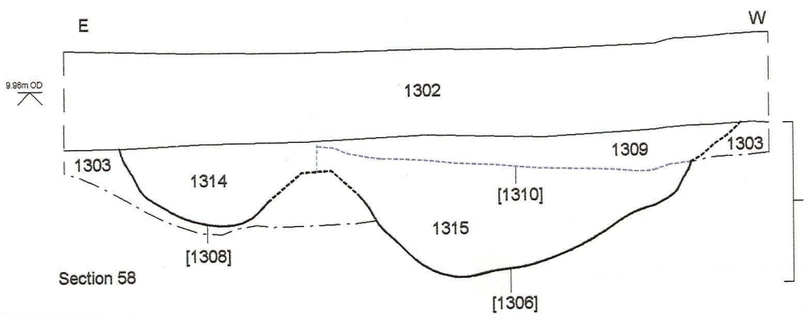


Section 119

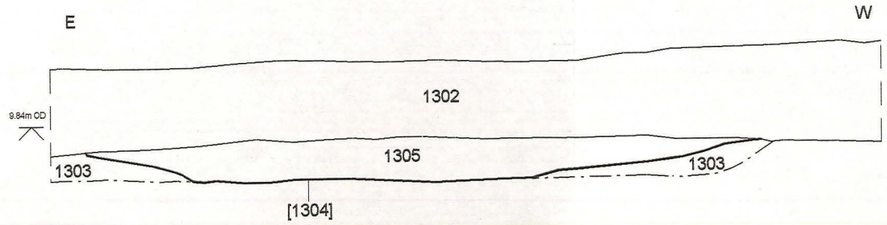


Section 120

Trench 12



Section 58



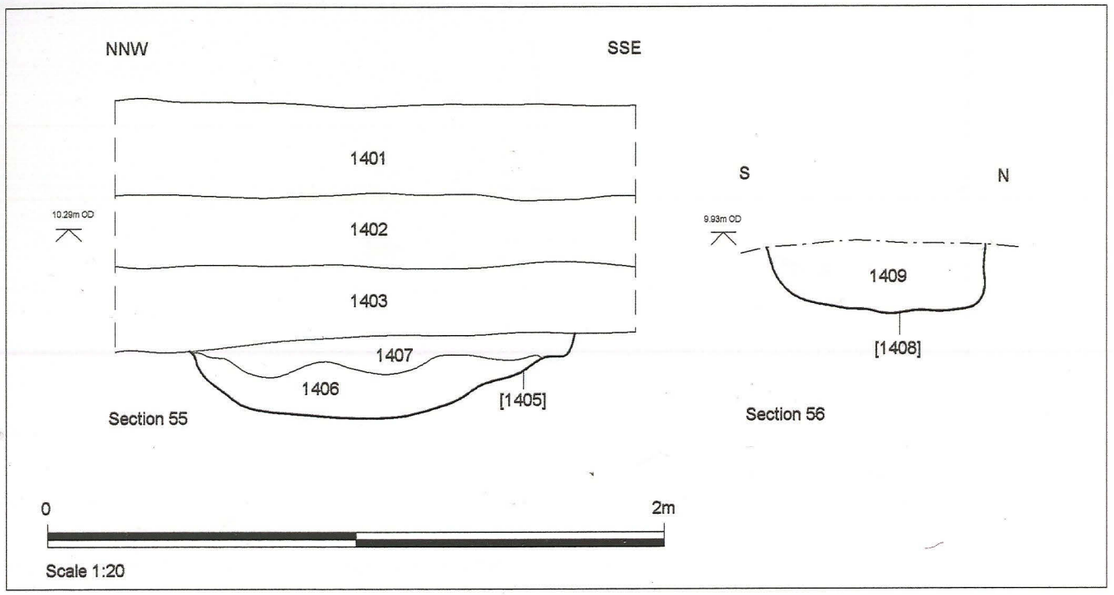
Section 57

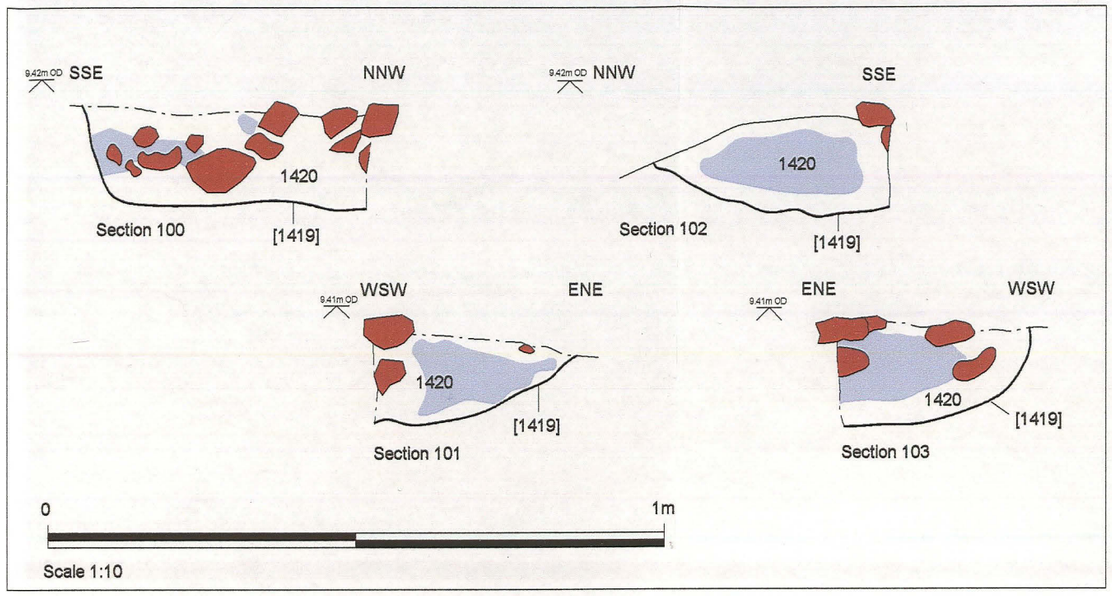
Trench 13

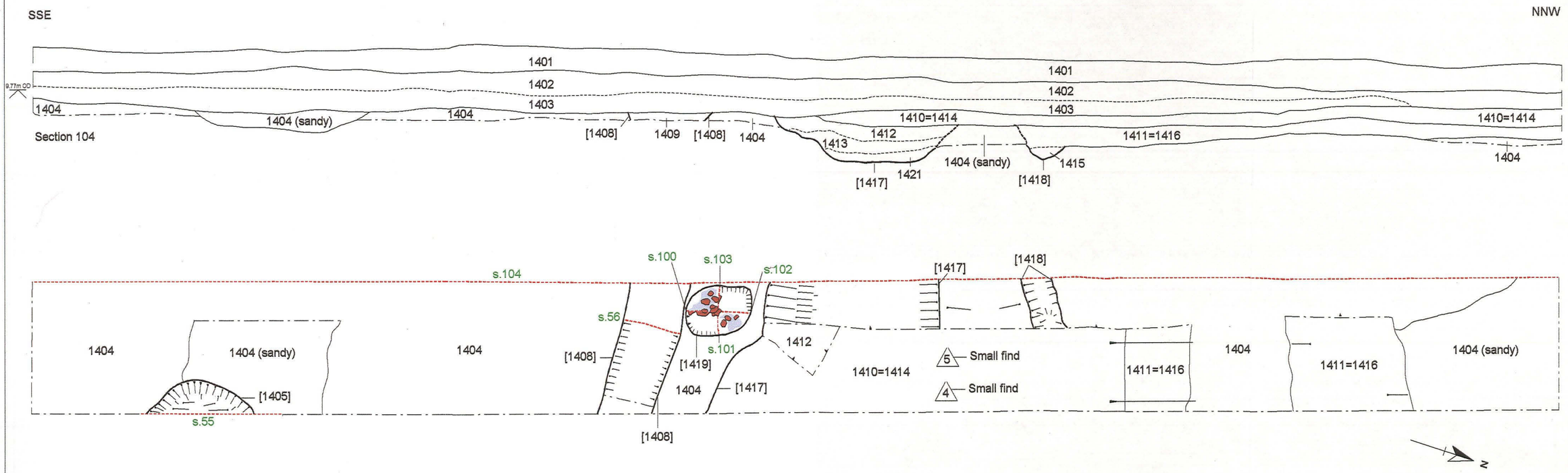
0 2m

Archaeological Project Services		
Project Name: Ruskington Fen Road RFR04		
Scale: 1:25	Drawn by: VM	Report No: 161/04

Figure 18 Trenches 11, 12 & 13 Sections





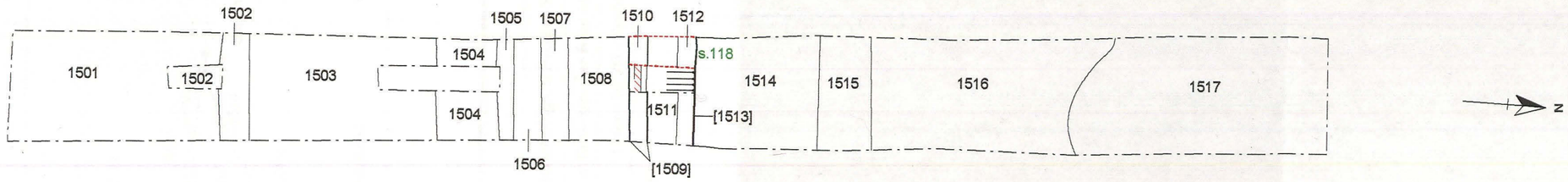


Archaeological Project Services

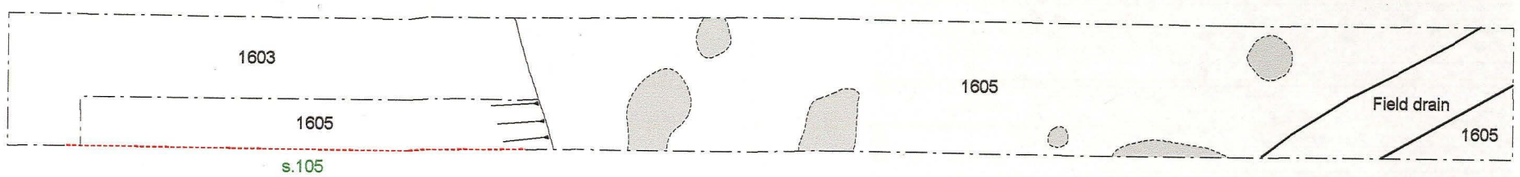
Project Name: Ruskington Fen Road RFR04

Drawn by: VM | Report No: 161/04

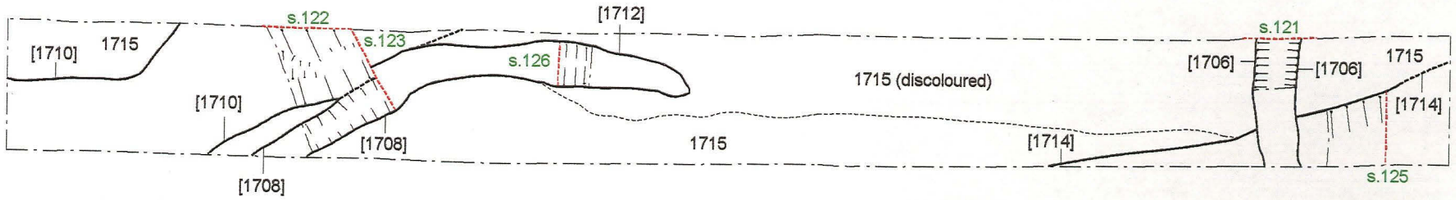
Figure 19 Trench 14 Plan and Sections



Trench 15



Trench 16



Trench 17

0 4m

Probable overburden, burrow or root disturbance

s.11 Section number

Archaeological Project Services		
Project Name: Ruskington Fen Road RFR04		
Scale: 1:75	Drawn by: VM	Report No: 161/04

Figure 20 Trenches 15, 16 & 17 Plans

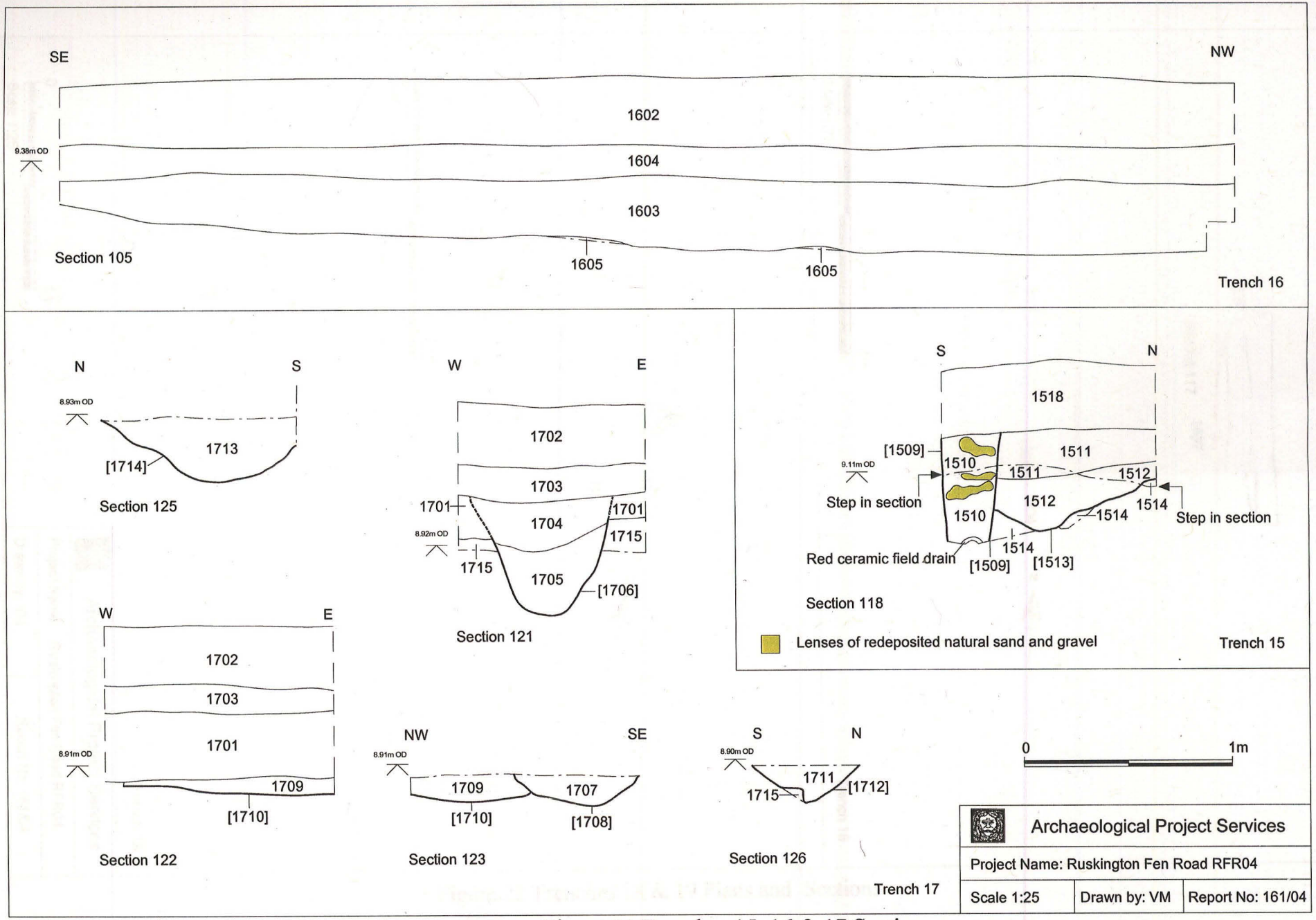
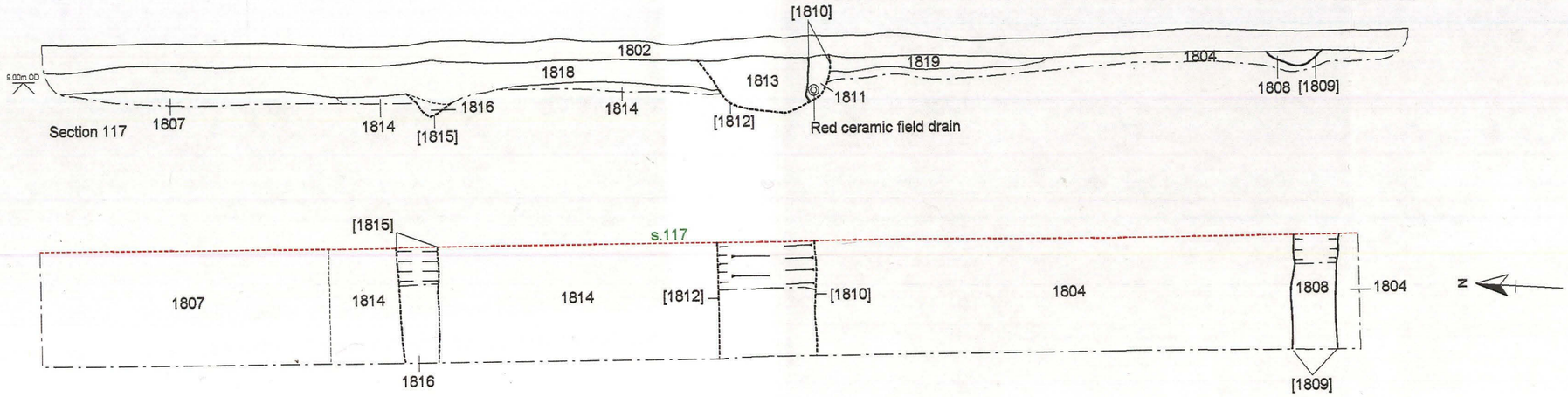


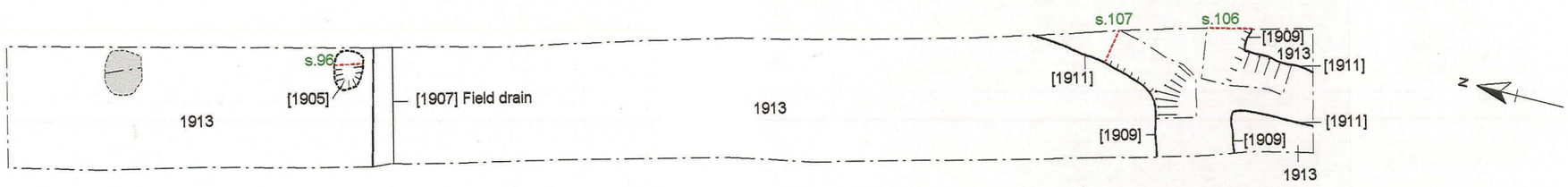
Figure 21 Trenches 15, 16 & 17 Sections



0 4m

Scale 1:75

Trench 18

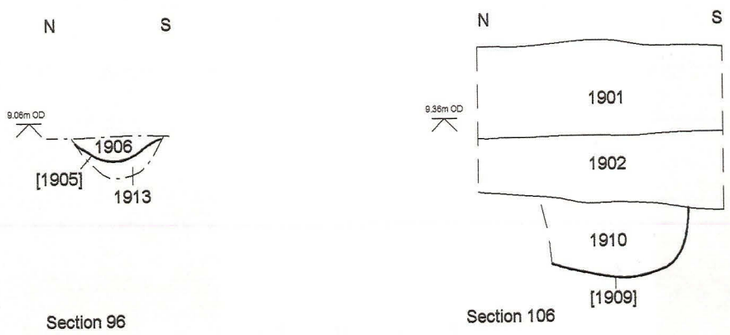


0 4m

Scale 1:75

Probable overburden, burrow or root disturbance

s.11 Section number



0 1m

Scale 1:25

Trench 19

Archaeological Project Services

Project Name: Ruskington Fen Road RFR04

Drawn by: VM | Report No: 161/04

Figure 22 Trenches 18 & 19 Plans and Sections

Plate 1 General view of the site from footbridge at southwest corner of site, looking north and east

Plate 2 General view of the site and The Beck (following cleaning) from northeast corner of site, looking south and west

Plate 3 Trench 1, Southern extension following cleaning, looking southwest

Plate 4 Trench1, Saxon pit [171], Sections 111 & 112, looking west

Plate 5 Trench 1, Post hole [121] within Saxon post trench [119], looking south

Plate 6 Trench 1, Saxon post trench [119] (centre and left), undated gully [107] in background and burrowing or root disturbance [133] at the right, looking southwest

Plate 7 Trench 13 Possibly Saxon features [1306] & [1308], truncated by furrow [1310] with truncated Saxon feature (1301) in background, looking southwest, Section 58

Plate 8 Trench 9 Saxon feature [906] truncated by furrow [904], looking southwest

Plate 9 Trench 3 Mid-Iron Age enclosure ditch [323], [324], [325] & [326], looking southwest

Plate 10 Trench 3 Mid-Iron Age possible ditch terminus [322], looking east, Section 49

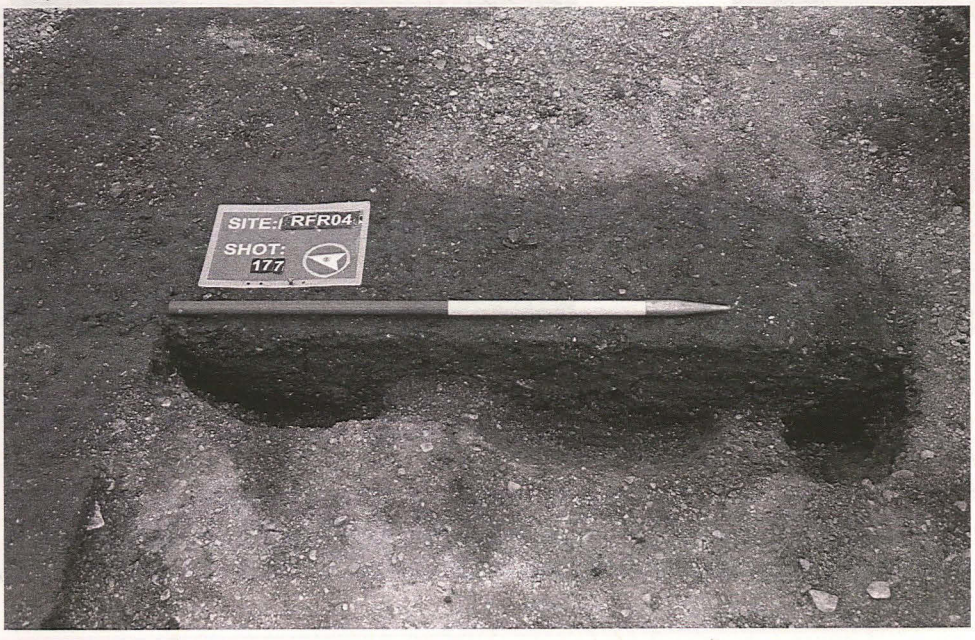


Plate 11 Trench 10, Post trench [1037], post holes [1039], [1041] & [1043], Section 110, looking east

Plate 12 Trench 10 following excavation, looking northeast

Plate 13 Trench 11 following excavation, looking northwest

Plate 14 Trench 5 following cleaning, before excavation, showing furrows, Saxon feature [507] and undated feature [505], looking west

Plate 15 Trench 14 Section 104, Saxon ditch [1417] and Saxon gully [1418], Saxon layers (1410)=(1414) and (1411)=(1416), with undated fire pit [1419] partially visible at left, looking west

Plate 16 Trench 14 Undated fire pit [1419], with undated linear [1408] partially visible in background, looking south, Section 103

Plate 17 Trench 12 Saxon ditch [1210], looking west, Section 119

Plate 18 Trench 17 Representative section through undated water-lain deposit (1701) including possible linear feature [1710], Section 122, looking north

Plate 19 Trench 17 Ditch or natural channel [1714], Section 125, looking east

Plate 20 Ruskington Chestnut Street C of E Primary School visit to the site, Trench 1, looking south

Plate 21 Saxon latchlifter from deposit (1410) in Trench 14.
Total length approximately 110mm

Appendix 1

SPECIFICATION FOR ARCHAEOLOGICAL EVALUATION

1 SUMMARY

1.1 *This document comprises a specification for the archaeological field evaluation of land off Fen Road, Ruskington, Lincolnshire.*

1.2 *The area is archaeologically sensitive, lying in an area of considerable archaeological interest and potential from the prehistoric period onwards. Evaluation of land immediately to the north of the proposed development identified archaeological deposits of Iron Age and Roman date.*

1.3 *A full planning application for construction of 102 dwellings has been submitted to North Kesteven District Council. The North Kesteven Heritage Officer has requested that an archaeological evaluation of the site is undertaken to assess the impact of the development on any buried remains which may survive on the site. A geophysical survey has been undertaken on the site and this document forms a specification of works for a programme of 2% trial trenching*

1.4 *On completion of the fieldwork a report will be prepared detailing the findings of the investigation. The report will consist of a text describing the nature of the archaeological deposits located and will be supported by illustrations and photographs.*

2 INTRODUCTION

2.1 This document comprises a specification for the archaeological field evaluation of land off Fen Road, Ruskington, Lincolnshire. The site is located at National Grid Reference TF 08789 50851.

2.1.1 The document contains the following parts:

2.1.2 Overview

2.1.3 The archaeological and natural setting

2.1.4 Stages of work and methodologies to be used

2.1.5 List of specialists

2.1.6 Programme of works and staffing structure of the project

3 SITE LOCATION

3.1 Ruskington is located 5km north of Sleaford in the administrative district of North Kesteven, Lincolnshire. The site forms a roughly rectangular area of approximately 3 hectares located in the eastern part of the village, south of Fen Road, at National grid Reference TF 08789 50851.

4 PLANNING BACKGROUND

4.1 A full planning application (Application No. N/52/0633/04) for construction of 102 dwellings has been submitted to North Kesteven District Council. The North Kesteven Heritage Officer has requested that an archaeological evaluation of the site is undertaken to assess the impact of the development on any buried remains which may survive on the site. A geophysical survey has been undertaken on the site and this document forms a specification of works for a programme of 2% trial trenching.

5 SOILS AND TOPOGRAPHY

5.1 The site lies on the south bank of the partially canalised stream, The Beck, on land at approximately 10m, sloping gently down toward the watercourse. Soils at the site are Ruskington Association gleyic

brown calcareous earths developed on glaciofluvial sand and gravel (Hodge *et al.* 1984, 304).

6 ARCHAEOLOGICAL OVERVIEW

6.1 Archaeological sites discovered in Ruskington include complete Early Bronze Age Beaker burials and a rich Anglo-Saxon cemetery located to the west of the village which contained at least 180 burials, mainly inhumation but some cremation. The Roman road known as Mareham Lane which linked Bourne with Lincoln passes approximately 400m to the east of the proposed development. A Neolithic polished axe was found in the southern half of the development area as a stray find.

6.2 An arrangement of linear cropmarks have been plotted from aerial photographs of land immediately adjacent to the proposed development and are thought to represent possible prehistoric or Roman enclosures and a trackway.

6.3 Archaeological evaluation of land immediately to the north of the site undertaken in February 2000 identified several pits and ditches of Iron Age date, including a possible ring gully, likely to represent a circular building. Roman deposits identified on this site include ditches of 1st to 2nd century date, two of these possibly defining a droveway. In addition, near the southern edge of the site, a north-south grave of later Roman date contained an inhumation, a fragmented pottery vessel and coffin nails (Rayner, Trimble and Taylor 2000). A number of these linear ditches identified during the evaluation appear to share similar alignments to those plotted as crop marks in the field to the southeast.

6.4 Areas of settlement identified during the 2000 evaluation appear to be concentrated on gravels close to the northern boundary of the area of development. It is highly likely that similar remains will extend into the area of proposed evaluation.

6.5 Two pieces of briquetage container (ceramic debris from salt making) were also retrieved from a feature of probably Iron Age date during the evaluation. Briquetage has not been recovered in the area before, the nearest know Iron Age salterns lies some 12km to the southeast on the fen edge in Little Hale and Helpringham. Although salt production at the site seems unlikely, given the inland location of the site, transportation of salt in such containers is so far unattested. Perhaps the adjacent beck was tidal during the Iron Age, or these pieces of briquetage represent movement of produced salt inland from the fen edge.

6.6 Late Iron Age and early Roman deposits were also identified during a watching brief undertaken during development of the land subject to the February 2000 evaluation. A late Iron ditch was identified immediately north of the northeast corner of the proposed development, reflecting the results of the earlier evaluation, which also identified Iron Age remains in this area (Hall 2004).

6.7 Geophysical survey of the proposed development area in June 2004 identified a number of anomalies arranged in linear trends which may represent archaeological features. However, these may also be related to medieval or recent agricultural processes.

7 AIMS AND OBJECTIVES

7.1 The aim of the work will be to gather sufficient information for the archaeological curator to be able to formulate a policy for the management of the archaeological resources present on the site.

7.2 The objectives of the work will be to:

7.2.1 Establish the type of archaeological activity that may be present within the site.

7.2.2 Determine the likely extent of archaeological activity present within the site.

7.2.3 Determine the date and function of the archaeological features present on the site.

7.2.4 Determine the state of preservation of the archaeological features present on the site.

7.2.5 Determine the spatial arrangement of the archaeological features present within the site.

7.2.6 Determine the extent to which the surrounding archaeological features extend into the application area.

7.2.7 Establish the way in which the archaeological features identified fit into the pattern of occupation and land-use in the surrounding landscape.

8 TRIAL TRENCHING

8.1 Reasoning for this technique

8.1.1 Trial trenching enables the *in situ* determination of the sequence, date, nature, depth, environmental potential and density of archaeological features present on the site.

8.1.2 The trial trenching will consist of the excavation of twenty 20m long trenches, approximating to 2% of the development area. Provision has been made for an extra 1% sample of the proposed development. This may be used to extend trenches where necessary for the investigation of significant features, or to further investigate areas of the site thought to contain significant archaeological remains.

8.1.3 The curator has provided a trench plan showing the locations of the trenches, most of which are positioned to target anomalies identified during the geophysical survey. Trenches may be widened and stepped-in should archaeological deposits extend below 1.2m depth. Augering may be used to determine the depth of the sequence of deposits present.

8.2 General Considerations

8.2.1 All work will be undertaken following statutory Health and Safety requirements in operation at the time of the investigation.

8.2.2 The work will be undertaken according to the relevant codes of practice issued by the Institute of Field Archaeologists (IFA). *Archaeological Project Services* is an IFA Registered Archaeological Organisation (No. 21).

8.2.3 Any and all artefacts found during the investigation and thought to be 'treasure', as defined by the Treasure Act 1996, will be removed from site to a secure store and promptly reported to the appropriate coroner's office.

8.2.4 Excavation of the archaeological features exposed will only be undertaken as far as is required to determine their date, sequence, density and nature. Not all archaeological features exposed will necessarily be excavated. However, the investigation will, as far as is reasonably practicable, determine the level of the natural deposits to ensure that the depth of the archaeological sequence present on the site is established.

8.2.5 Open trenches will be marked by hazard tape attached to road irons or similar poles. Subject to the consent of the archaeological curator, and following the appropriate recording, the trenches, particularly those of excessive depth, will be backfilled as soon as possible to minimise any health and safety risks.

8.3 Methodology

8.3.1 Removal of the topsoil and any other overburden will be undertaken by mechanical excavator using a toothless ditching bucket. To ensure that the correct amount of material is removed and that no archaeological deposits are damaged, this work will be supervised by Archaeological Project Services. On completion of the removal of the overburden, the nature of the underlying deposits will be assessed by hand excavation before any further mechanical excavation that may be required. Thereafter, the trenches will be cleaned by hand to enable the identification and analysis of the archaeological features exposed.

8.3.2 Investigation of the features will be undertaken only as far as required to determine their date, form and function. The work will consist of half- or quarter-sectioning of features as required and, where appropriate, the removal of layers. Should features be located which may be

worthy of preservation *in situ*, excavation will be limited to the absolute minimum, (*ie* the minimum disturbance) necessary to interpret the form, function and date of the features.

8.3.3 The archaeological features encountered will be recorded on Archaeological Project Services pro-forma context record sheets. The system used is the single context method by which individual archaeological units of stratigraphy are assigned a unique record number and are individually described and drawn.

8.3.4 Plans of features will be drawn at a scale of 1:20 and sections at a scale of 1:10. Should individual features merit it, they will be drawn at a larger scale.

8.3.5 Throughout the duration of the trial trenching a photographic record consisting of black and white prints (reproduced as contact sheets) and colour slides will be compiled. The photographic record will consist of:

- the site before the commencement of field operations.
- the site during work to show specific stages of work, and the layout of the archaeology within individual trenches.
- individual features and, where appropriate, their sections.
- groups of features where their relationship is important.
- the site on completion of field work

8.3.6 Should human remains be encountered, they will be left *in situ* with excavation being limited to the identification and recording of such remains. If removal of the remains is necessary the appropriate Home Office licences will be obtained and the local environmental health department informed. If relevant, the coroner and the police will be notified.

8.3.7 Finds collected during the fieldwork will be bagged and labelled according to the individual deposit from which they were recovered ready for later washing and analysis.

8.3.8 The spoil generated during the investigation will be mounded along the edges of the trial trenches with the top soil being kept separate from the other material excavated for subsequent backfilling.

8.3.9 The precise location of the trenches within the site and the location of site recording grid will be established by an EDM survey.

9 ENVIRONMENTAL ASSESSMENT

9.1 If appropriate, during the investigation specialist advice will be obtained from an environmental archaeologist. The specialist will visit the site and will prepare a report detailing the nature of the environmental material present on the site and its potential for additional analysis should further stages of archaeological work be required. The results of the specialist's assessment will be incorporated into the final report.

10 POST-EXCAVATION AND REPORT

10.1 Stage 1

10.1.1 On completion of site operations, the records and schedules produced during the trial trenching will be checked and ordered to ensure that they form a uniform sequence constituting a level II archive. A stratigraphic matrix of the archaeological deposits and features present on the site will be prepared. All photographic material will be catalogued: the colour slides will be labelled and mounted on appropriate hangers and the black and white contact prints will be labelled, in both cases the labelling will refer to schedules identifying the subject/s photographed.

10.1.2 All finds recovered during the trial trenching will be washed, marked, bagged and labelled according to the individual deposit from which they were recovered. Any finds requiring specialist treatment and conservation will be sent to the Conservation Laboratory at the City and County Museum, Lincoln.

10.2 Stage 2

10.2.1 Detailed examination of the stratigraphic matrix to enable the determination of the various phases of activity on the site.

10.2.2 Finds will be sent to specialists for identification and dating.

10.3 Stage 3

10.3.1 On completion of stage 2, a report detailing the findings of the investigation will be prepared. This will consist of:

- A non-technical summary of the results of the investigation.
- A description of the archaeological setting of the site.
- Description of the topography and geology of the investigation area.
- Description of the methodologies used during the investigation and discussion of their effectiveness in the light of the results
- A text describing the findings of the investigation.
- Plans of the trenches showing the archaeological features exposed. If a sequence of archaeological deposits is encountered, separate plans for each phase will be produced.
- Sections of the trenches and archaeological features.
- Interpretation of the archaeological features exposed and their context within the surrounding landscape.
- Specialist reports on the finds from the site.
- Appropriate photographs of the site and specific archaeological features or groups of features.
- A consideration of the significance of the remains found, in local, regional, national and international terms, using recognised evaluation criteria.

11 ARCHIVE

11.1 The documentation, finds, photographs and other records and materials generated during the investigation will be sorted and ordered into the format acceptable to the City and County Museum, Lincoln. This sorting will be undertaken according to the document titled *Conditions for the Acceptance of Project Archives* for long term storage and curation.

12 REPORT DEPOSITION

12.1 Copies of the investigation report will be sent to: the client, Chanceoption Homes; the North Kesteven District Council Heritage Officer; North Kesteven District Council Planning Department; and the Lincolnshire County Sites and Monuments Record.

13 PUBLICATION

13.1 A report of the findings of the investigation will be submitted for inclusion in the journal *Lincolnshire History and Archaeology*. Notes or articles describing the results of the investigation will also be

submitted for publication in the appropriate national journals: *Medieval Archaeology* and *Journal of the Medieval Settlement Research Group* for medieval and later remains, and *Britannia* for discoveries of Roman date.

14 CURATORIAL MONITORING

14.1 Curatorial responsibility for the project lies with the NKDC Heritage Officer. As much written notice as possible, ideally at least seven days, will be given to the archaeological curator prior to the commencement of the project to enable them to make appropriate monitoring arrangements.

15 VARIATIONS TO THE PROPOSED SCHEME OF WORKS

15.1 Variations to the scheme of works will only be made following written confirmation from the archaeological curator.

15.2 Should the archaeological curator require any additional investigation beyond the scope of the brief for works, or this specification, then the cost and duration of those supplementary examinations will be negotiated between the client and the contractor.

16 SPECIALISTS TO BE USED DURING THE PROJECT

16.1 The following organisations/persons will, in principle and if necessary, be used as subcontractors to provide the relevant specialist work and reports in respect of any objects or material recovered during the investigation that require their expert knowledge and input. Engagement of any particular specialist subcontractor is also dependent on their availability and ability to meet programming requirements.

Task	Body to be undertaking the work
Conservation	Conservation Laboratory, City and County Museum, Lincoln.
Pottery Analysis	Prehistoric: Dr D Knight, Trent and Peak Archaeological Trust
	Roman: B Precious, independent specialist
Anglo-Saxon:	J Young, independent specialist
Medieval and later:	G Taylor, APS in consultation with H Healey, independent archaeologist; or
Other Artefacts	J Cowgill, independent specialist; or G Taylor, APS
Human Remains Analysis	R Gowland, independent specialist
Animal Remains Analysis	Environmental Archaeology Consultancy; or P Cope-Faulkner, APS
Environmental Analysis	Environmental Archaeology Consultancy
Radiocarbon dating	Beta Analytic Inc., Florida, USA
Dendrochronology dating	University of Sheffield Dendrochronology Laboratory

17 PROGRAMME OF WORKS AND STAFFING LEVELS

17.1 Fieldwork is expected to be undertaken by 4 staff and supervisor and to take seven days.

17.2 Post-excavation analysis and report production will be undertaken by a project officer or supervisor,

with assistance from the finds supervisor and CAD illustrator. Specialist time for reporting on artefactual and environmental remains are allowed for in the budget.

17.3 Contingency

17.3.1 A contingency for an additional 1% sample of the proposed area of development is allowed for in the budget.

17.3.2 The activation of any contingency requirement will be by the archaeological curator (NKDC Heritage Officer), not Archaeological Project Services.

18 INSURANCES

18.1 Archaeological Project Services, as part of the Heritage Trust of Lincolnshire, maintains Employers Liability insurance to £10,000,000. Additionally, the company maintains Public and Products Liability insurances, each with indemnity of £5,000,000. Copies of insurance documentation can be supplied on request.

19 COPYRIGHT

19.1 Archaeological Project Services shall retain full copyright of any commissioned reports under the *Copyright, Designs and Patents Act* 1988 with all rights reserved; excepting that it hereby provides an exclusive licence to the client for the use of such documents by the client in all matters directly relating to the project as described in the Project Specification.

19.2 Licence will also be given to the archaeological curators to use the documentary archive for educational, public and research purposes.

19.3 In the case of non-satisfactory settlement of account then copyright will remain fully and exclusively with Archaeological Project Services. In these circumstances it will be an infringement under the *Copyright, Designs and Patents Act* 1988 for the client to pass any report, partial report, or copy of same, to any third party. Reports submitted in good faith by Archaeological Project Services to any Planning Authority or archaeological curator will be removed from said Planning Authority and/or archaeological curator. The Planning Authority and/or archaeological curator will be notified by Archaeological Project Services that the use of any such information previously supplied constitutes an infringement under the *Copyright, Designs and Patents Act* 1988 and may result in legal action.

19.4 The author of any report or specialist contribution to a report shall retain intellectual copyright of their work and may make use of their work for educational or research purposes or for further publication.

20 BIBLIOGRAPHY

Hall, R.V., 2004 *Archaeological Investigations on Land at Fen Road, Ruskington, Lincolnshire (RFRA01)* Unpublished Archaeological Project Services Report No. **89/04**

Hodge, CAH, Burton, RGO, Corbett, WM, Evans, R, and Seale, RS, 1984 *Soils and their use in Eastern England*, Soil Survey of England and Wales **13**

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Appendix 2

CONTEXT DESCRIPTIONS

No.	Description	Interpretation
001	Unstratified finds from site	

TRENCH 1

No.	Description	Interpretation
100	Dark greyish-brown fine slightly sandy silt with occasional small stones, around 0.30m but up to 0.40m thick	Topsoil
101	Mid slightly reddish-brown slightly sandy silt with occasional small stones, around 0.10m but up to 0.30m thick	Buried soil, possibly indicating location of ploughed-out features
102	Light slightly brownish-yellow sandy gravel, over 0.40m thick	Natural calcareous sand and gravel
103	Feature, over 1.60m by 2.90m and 0.35m deep with steepish and slightly concave sides and flattish base	Pit or ditch
104	Mid slightly reddish-brown sandy silt with very occasional small stones, 0.35m thick	Fill of pit or ditch [103]
105	Unstratified finds from either (118) or (104)	
106	Patches of overburden recorded prior to excavation	
107	Northwest-southeast aligned linear feature with concave base over 1.75m long, 0.35m wide and 80mm deep	Linear feature, possibly same as [174] possible post trench
108	Mid slightly reddish- and greyish-brown sandy silt, 80mm thick	Fill of linear [107]
109	Void	
110	Void (same as (162)	
111	Void	
112	Void	
113	Denotes surface finds from layer (162)	
114	Mid greyish-brown fine to medium sandy silt with occasional small stones	Overburden and other deposits, same as (167) unstratified
115	Number allocated to surface finds, same as layer (153)	
116	Number allocated to surface finds, same as layer (162)	
117	Feature, possibly east-west aligned linear, 0.70m wide, over 0.90m long and over 0.25m deep with steepish sides and a flattish base	Pit or linear feature
118	Mid slightly reddish-brown sandy silt with occasional small stones, over 0.25m thick	Fill of pit or linear [117]
119	North-south aligned linear feature, over 1.50m long, 0.40m wide and over 70mm deep	Post trench, possibly same as [170]
120	Mid greyish-brown sandy silt, over 70mm thick	Fill of post trench [119]
121	Sub-circular feature with steep sides and concave base, 0.30m in diameter and 0.21m deep	Post hole within post trench [119]
122	Mid greyish-brown sandy silt, 0.21m thick	Fill of post hole [121]

No.	Description	Interpretation
123	Oval feature, 0.28m by 0.20m in diameter and 0.16m deep with steep sides and concave base	Post hole within post trench [119]
124	Mid greyish-brown sandy silt, 0.16m thick	Fill of post hole [123]
125	Sub-circular feature, 0.40m in diameter and 0.12m deep with concave sides and flattish base	Post hole within post trench [119]
126	Mid greyish-brown sandy silt, 0.12m thick	Fill of post hole [125]
127	Sub-circular feature, 0.23m in diameter and 0.13m deep with concave base	Post hole within post trench [119]
128	Mid greyish-brown sandy silt, 0.13m thick	Fill of post hole [127]
129	Sub-circular feature, 0.20m in diameter and 0.14m deep with steep sides and concave base	Post hole within post trench [119]
130	Mid greyish-brown sandy silt, 0.14m thick	Fill of post hole [129]
131	Sub-circular feature, 0.23m in diameter and 0.12m deep with steepish sides and concave base	Post hole within post trench [119]
132	Mid greyish-brown sandy silt, 0.12m thick	Fill of post hole [131]
133	Irregular amorphous feature, 0.80m by over 0.40m and 0.20m deep	Area of burrowing or root action truncating post trench [119] at northern end
134	Mid reddish-brown sandy silt, 0.20m thick	Fill of amorphous feature [133]
135	Sub-circular feature, 0.27m in diameter and 0.17m deep with steep sides and narrow concave base	Probable post hole
136	Mid greyish-brown sandy silt with occasional small gravel, 0.17m thick	Fill of probable post hole [135]
137	Sub-circular feature, 0.26m in diameter and 90mm deep with concave base	Probable post hole
138	Mid greyish-brown sandy silt with occasional small gravel, 90mm thick	Fill of probable post hole [137]
139	Sub-circular feature, 0.14m wide and 50mm deep with concave profile	Possible post hole
140	Mid greyish-brown medium to fine sandy silt with occasional small gravel, 50mm thick	Fill of possible post hole [139]
141	Sub-circular feature, 0.49m in diameter and 0.25m deep with steepish sides and narrow concave base	Probable post hole
142	Mid greyish-brown sandy silt with occasional small gravel, 0.25m thick	Fill of probable post hole [141]
143	Sub-circular feature, 0.29m in diameter and 0.11m deep with concave base	Possible post hole
144	Mid greyish-brown sandy silt with occasional small gravel, 0.11m thick	Fill of possible post hole [143]
145	Sub-circular feature, 0.20m in diameter and 90mm deep with steepish sides and concave base	Possible post hole
146	Mid greyish-brown sandy silt with occasional small gravel, 90mm thick	Fill of possible post hole [145]
147	Void	
148	Void	
149	Feature of uncertain shape, 1.40m by over 0.40m and 0.20m deep with regular angled sides and flat base	Feature, probable pit
150	Mid greyish-brown fine sandy silt with occasional small stones, 0.20m thick	Fill of probable pit [149]

No.	Description	Interpretation
151	Sub-circular feature, 0.28m in diameter and 0.14m deep with steepish sides and concave base	Post hole
152	Mid to light yellowish-brown silty sand with occasional small gravel, 0.14m thick	Fill of post hole [151]
153	Mid greyish brown fine sandy silt with occasional small gravel, up to 60mm thick	Layer, possibly ploughed-out features or buried soil possibly same as (162)
154	Sub-circular feature, over 0.25m in diameter and over 0.20m deep with concave profile	Post hole
155	Mid yellowish-brown silty sand with occasional small gravel, 0.20m thick	Fill of post hole [154]
156	Sub-oval feature, 0.21m in diameter and 0.12m deep with steepish sides and concave base	Possible post hole
157	Mid greyish-brown medium to fine sandy silt with occasional gravel, 0.12m thick	Fill of possible post hole [156]
158	Feature, possibly sub-circular, 0.45m by over 0.20m and 0.22m deep with steepish sides and concave base	Probable post hole
159	Mid greyish-brown medium to fine sandy silt with occasional gravel, 0.22m thick	Fill of probable post hole [158]
160	Sub-circular feature, 0.11m in diameter and 0.11m deep with steep sides and concave base	Possible post hole
161	Mid greyish-brown medium to fine sandy silt with occasional small gravel, 0.11m thick	Fill of possible post hole [160]
162	Mid greyish-brown medium to fine sandy silt with occasional small gravel, 0.15m thick	Layer, possibly ploughed-out features or buried soil, possibly same as (153)
163	Feature, possibly circular, 1.33m by over 0.70m and 0.55m deep with steep side at southwest and shallower angle to northeast and concave base	Possible feature
164	Mid reddish-brown silty sand with occasional small stones, 0.55m thick	Fill of possible feature [163]
165	Feature, possibly linear, 1.10m by over 0.70m and 0.55m deep with steepish sides and concave base	Possible feature
166	Mid greyish- yellowish- brown sandy gravel, 0.55m thick	Fill of possible feature [165]
167	Unstratified finds from Trench 1	
168	Surface finds from probable feature, possibly a continuation of either feature [103] or feature [117]	
169	Dark brown sandy silt with frequent small gravel, 0.12m thick	Fill of trench [170]
170	Linear feature with concave profile and flattish base, over 1.85m long, 0.45m wide and 0.12m deep	Trench, possibly same as post trench [119]
171	Feature, probably circular, 2.20m in diameter and 0.52m deep with concave irregular profile	Pit
172	Mid greyish-brown medium to fine sandy silt with occasional gravel and frequent animal bone, 0.52m thick	Fill of pit [171]
173	Mid grey sandy silt with frequent small gravel, 0.31m thick	Fill of possible post trench [174]
174	Linear feature, over 1.42m long, 0.26m wide and 0.31m deep with steeps sides and concave base	Possible post trench, possibly same as [107]
175	Void	
176	Void	

TRENCH 2

No.	Description	Interpretation
200	Unstratified finds from Trench 2	
201	Mid to dark brownish-black silty, sandy and gravelly loam, 0.45m thick	Topsoil
202	Mid greyish-brown silty sand and gravel, 0.25m thick	Buried soil, possibly indicating location of ploughed-out features
203	Mid to light whitish-brown sand and gravel, over 0.45m thick	Natural calcareous sand and gravel
204	Mid to dark greyish-brown silty sand and gravel, 0.50m thick	Fill of possible post hole or pit [205]
205	Sub-oval feature with steep sides and concave base, 0.60m by 0.40m in diameter and 0.50m deep	Possible post hole or pit
206	Mid brown silty sand and gravel, 0.34m thick	Fill of possible plough furrow [207]
207	Linear feature, 1.30m wide and 0.34m deep with concave profile	Possible plough furrow
208	Mid brown silty sand and gravel, 0.20m thick	Fill of linear [209]
209	Linear feature, 0.40m wide and 0.20m deep with steepish sides and flattish base	Linear feature

TRENCH 3

No.	Description	Interpretation
300	Unstratified finds from Trench 3	
301	Dark blackish-brown silty sand with frequent gravel and some clay, 0.35m thick	Topsoil
302	Light white to light yellow with some yellowish-brown mottling sand and gravel. In places this is sandier or gravel comprises pea gravel or smaller, over 0.40m thick	Natural calcareous sand and gravel
303	Void	
304	Void	
305	Mid brown sand and gravel with some clay and occasional charcoal flecks, 0.42m thick	Fill of enclosure ditch [323]
306	Void – same as (307), fill of ditch [324]	
307	Mid brown sand and gravel with frequent clay and occasional charcoal flecks, 0.44m thick	Fill of enclosure ditch [324]
308	Denotes finds from either (307) or (327)	
309	Denotes finds from either (328) or (327)	
310	Feature, 0.56m by over 0.35m in diameter and 0.39m deep with steep to vertical sides and flat base	Pit, post hole or gully
311	Mid greyish-brown sand and gravel with frequent clay and occasional charcoal, 0.39m thick	Fill of pit, post hole or gully [310]
312	Feature, 0.46 by over 0.26m in diameter and 0.22m deep with steep sides and flattish base	Doubtful post hole, gully or pit
313	Mid to light yellowish- and greyish-brown mottled slightly gravelly sand, 0.22m thick	Same as natural (302)
314	Irregular, possibly north-south aligned linear, feature, over 1.50m long, 1.60m wide and 0.12m deep with flattish irregular base	Probable furrow

No.	Description	Interpretation
315	Mid brown sand and gravel, 0.12m thick	Fill of probable furrow [314]
316	Sub-circular feature, 0.30m by 0.33m in diameter and 0.14m deep with steep sides to west and vertical sides to north and flattish irregular base	Post hole
317	Mid greyish-brown sand and gravel with occasional charcoal, 0.14m thick	Fill of post hole [316]
318	Void	
319	Void	
320	Mid greyish-brown sand and gravel with occasional charcoal, 0.53m thick	Fill of pit or linear terminus [322]
321	Mid brown sand and gravel, 0.20m thick	Fill of probable furrow [332]
322	Irregular feature, over 1.30m by 1.20m and 0.53m deep with irregular sides and base	Pit or linear terminus
323	Curvilinear feature, 0.50m deep and 1.15m wide with smooth and regular sides on an angle close to 45° and a concave base	Enclosure ditch
324	Curvilinear feature, 0.45m deep and 1.20m wide with slightly stepped, smooth and regular sides and a concave base	Enclosure ditch
325	Linear feature, 0.50m deep and 0.90m wide with smooth and regular sides on an angle close to 45° and a concave base	Enclosure ditch
326	Curvilinear feature, 0.40m deep and 1.80m wide with steepish and regular sides and a flattish base	Enclosure ditch
327	Mid brown sand and gravel with some clay and occasional charcoal, 0.45m thick	Fill of enclosure ditch [325]
328	Mid brown sand and gravel with occasional charcoal with some clay, 0.40m thick	Fill of enclosure ditch [326]
329	Mid grey with brown and yellow mottles silty sand and pea gravel, 0.22m thick	Fill of doubtful post hole, gully or pit [312]
330	Feature, over 0.40m by 1.20m and 0.33m deep with smooth and regular sides and concave to flattish base	Pit or linear terminus
331	Mid brown sand and gravel with occasional charcoal, 0.33m thick	Fill of pit or linear terminus [330]
332	Irregular, possibly north-south aligned linear, feature, 0.90m wide and 0.20m deep, with a flattish irregular base	Probable furrow
333	Irregular, possibly north-south aligned linear, feature, 1.00m wide and 0.15m deep with a flattish irregular base	Probable furrow
334	Mid greyish-brown very slightly clayey and silty sand and gravel, 0.15m thick	Fill of probable furrow [333]

TRENCH 4

No.	Description	Interpretation
400	Unstratified finds from Trench 4	
401	Mid greyish-brown gravelly sandy silt loam, 0.38m thick	Topsoil
402	Void	
403	Mid yellowish-brown sand and gravel	Natural calcareous sand and gravel
404	Sub-rounded feature, 0.45m in diameter and 100mm deep with a concave profile	Post hole
405	Mid greyish-brown sandy silt with occasional gravel, 100mm thick	Fill of post hole [404]

No.	Description	Interpretation
406	Sub-rounded feature, over 0.40m wide and 60mm deep with a flattish base	Possible post hole
407	Mid brownish-grey gravelly sandy silt, 60mm thick	Fill of possible post hole [406]
408	Sub-rounded feature, 0.33m in diameter and 0.15m deep with a concave base	Post hole
409	Mid greyish-brown very sandy silt with frequent gravel, 0.15m thick	Fill of post hole [408]
410	Sub-rounded feature, 0.55m in diameter and 0.20m deep with concave base	Post hole or gully terminus
411	Mid to light greyish-brown sandy silt with occasional charcoal flecks, 0.20m thick	Fill of post hole or gully terminus [410]
412	Rounded to irregular feature, 0.40m in diameter and 0.12m deep with concave base	Possible post hole or pit
413	Mid to dark greyish brown sandy silt, 0.12m thick	Fill of possible post hole or pit [413]
414	Irregular feature, 1.4m diameter and 0.35m deep with a concave base	Pit or linear terminus
415	Mid yellowish-brown sandy silt with occasional gravel, 0.35m thick	Fill of pit or linear terminus [414]
416	Irregular to linear feature, 1.20m by 0.65m and 100mm deep with a flattish base	Irregularly-shaped probable pit
417	Mid greyish-brown slightly sandy silt with occasional flecks of reddish ceramic and charcoal flecks and whitish flecks, possibly of bone, 100mm thick	Fill of probable pit [416]
418	Irregular to rounded feature, 1.25m wide by over 0.35m and 0.45m deep with a concave base	Irregularly-shaped pit or linear terminus
419	Mid reddish-brown slightly sandy silt with occasional gravel, 0.45m thick	Fill of pit or linear terminus [418]
420	Irregularly-shaped to rounded feature, 0.55m by 1.00m, and 0.30m deep with a concave base	Pit
421	Mid greyish-brown sandy silt with occasional charcoal flecks and moderately frequent gravel, 0.30m thick	Fill of pit [420]
422	Irregular to curvilinear feature, 2.00m long, over 0.90m wide and 0.25m deep with flattish sloping base	Irregularly-shaped pit or linear
423	Mid reddish-brown sandy silt, 0.25m thick	Fill of pit or linear [422]
424	Irregularly-shaped feature, 0.70m by 1.40m and 50mm deep with flattish base	Possible pit
425	Light to mid yellowish-brown gravelly sandy silt with frequent gravel, 50mm thick	Fill of possible pit [424]

TRENCH 5

No.	Description	Interpretation
500	Unstratified finds from Trench 5	
501	Dark greyish-brown silty sand with frequent gravel, 0.30m thick	Topsoil
502	Dark brown silty sand with frequent gravel up to 0.18m thick, intermittent throughout trench	Intermittent layer, either buried soil or truncated features
503	Light yellowish-white to mid reddish-yellow sand and gravel	Natural calcareous sand and gravel
504	Dark slightly reddish-brown silty sand with frequent gravel, 0.12m thick	Fill of possible linear [505]

No.	Description	Interpretation
505	Feature, possibly curvilinear, over 1.00m long, 0.40m wide and 0.12m deep with steepish sides and uneven base	Possible linear
506	Dark brown silty sand with frequent gravel and moderately frequent charcoal flecks, 0.22m thick	Fill of pit or linear terminus [507]
507	Possibly 'D'-shaped feature, over 1.95m by 1.95m and 0.22m deep with gently sloping sides and concave base	Pit or linear terminus
508	Mid yellowish-brown sandy silt with moderate to frequent gravel, 0.32m thick	Fill of possible furrow [509]
509	Possibly linear feature, 3m wide and 0.32m deep with slightly concave uneven sides and base	Feature, probably linear, possible furrow
510	Void – area of animal burrowing or root action	
511	Mid reddish-brown sand and silt with yellowish mottles and moderate to frequent gravel, 0.28m thick	Fill of possible furrow [512], possibly same as (513)
512	Possibly linear feature, 0.68m wide and 0.28m deep with steep sides and concave, uneven base	Feature, probably linear, possible furrow, possibly same as [514]
513	Mid reddish-brown sand and silt with yellowish mottles and moderate to frequent gravel, 0.18m thick	Fill of possible furrow [514], possibly same as (511)
514	Possibly linear feature, 1.70m wide and 0.18m deep with uneven base	Feature, probably linear, possible furrow, possibly same as [512]
515	Possibly linear feature, over 0.90m wide and 0.30m deep with flattish base	Feature, probably linear, possible furrow
516	Dark slightly reddish-brown silty sand with frequent gravel, 0.30m thick	Fill pf possible furrow [515]

TRENCH 6

No.	Description	Interpretation
600	Unstratified finds from Trench 6	
601	Mid to dark brown fine silty sand with frequent gravel, 0.30m thick	Topsoil
602	Mid to dark greyish brown silty sand with frequent gravel, up to 0.20m thick, intermittent across trench	Intermittent layer, either buried soil or truncated features
603	Light yellowish whitish-brown sand and gravel, over 0.60m thick	Natural calcareous sand and gravel
604	Mid to dark greyish brown silty sand with frequent gravel, 70mm thick	Fill of possible post hole [605]
605	Sub-circular feature, 0.30m by 0.28m and 70mm deep with concave base	Possible post hole
606	Mid to dark greyish brown silty sand with frequent gravel, 0.18m thick	Fill of possible post hole [607]
607	Irregular to sub-oval feature, 0.65 by 0.55m and 0.18m deep with concave base, stepped to west	Possible post hole
608	Mid to dark greyish brown silty sand with frequent gravel, 0.60m thick	Fill of enclosure ditch [609]
609	Linear feature, 2.00 wide and 0.60m deep, sides slightly stepped to west with shallow 'V'-shaped base and profile	Enclosure ditch
610	Void - same as (608)	
611	Void	
612	Mid to dark greyish brown silty sand with frequent gravel, 0.20m thick	Fill of post hole [613]
613	Sub-circular feature, 0.30m in diameter and 0.20m deep with steep sides and flattish base	Post hole

No.	Description	Interpretation
614	Mid to dark greyish brown silty sand with frequent gravel, 0.25m thick	Fill of post hole [615]
615	Sub-oval feature, 0.60m by 0.45m and 0.25m deep with steep sides and concave base	Post hole
616	Mid to dark greyish brown silty sand with frequent gravel, 0.18m thick	Fill of possible post hole [617]
617	Sub-circular feature, 0.35 by 0.40m and 0.18m deep with steep sides and a concave base	Possible post hole
618	Void	
619	Void	
620	Irregularly-shaped feature, 1.26m by over 0.40m in extent and 0.28m deep with irregular sides and base	Possible feature
621	Mid to dark greyish brown gravelly silty sand, 0.28m thick	Fill of possible feature [620]

TRENCH 7

No.	Description	Interpretation
700	Unstratified finds from Trench 7	
701	Dark greyish-brown sandy silt with frequent gravel, 0.30m thick	Topsoil
702	Dark brown sandy silt with frequent gravel, up to 0.15m thick, intermittent throughout trench	Intermittent layer, either buried soil or truncated features
703	Feature, probably linear, 1.45m wide and 0.12m deep with a flattish base, slightly deeper at the west	Possible furrow
704	Mid greyish-brown sand and silt with light sandy mottling and frequent gravel, 0.12m thick	Fill of possible furrow [703]
705	Irregular feature, 0.55m by 1.00m and 0.28m deep with concave, irregular profile, stepped at the south	Possible pit
706	Dark greyish-brown sandy silt with frequent gravel, 0.28m thick	Fill of possible pit [705]
707	Light whitish yellow and brown mottled sand and gravel with occasional limestone concretions, 0.30m thick	Natural calcareous sand and gravel

TRENCH 8

No.	Description	Interpretation
800	Unstratified finds from Trench 8	
801	Mid yellowish-brown slightly silty sand with moderately frequent gravel, occasional animal bone, limestone and ironstone, 0.15m thick	Buried soil/midden layer
802	Dark greyish-brown slightly silty sand with frequent charcoal and occasional coal flecks, 0.30m thick	Topsoil
803	Same as (801)	
804	Same as (801)	
805	Light brownish-yellow sandy gravel, over 0.19m thick	Natural calcareous sand and gravel
806	Mid yellowish-brown slightly silty sand with occasional gravel and animal bone, 0.18m thick	Fill of probable tree throw [807]

No.	Description	Interpretation
807	Irregular to rounded feature, 1.20m by over 0.80m and 0.18m deep with concave base	Probable tree throw
808	Mid yellowish-brown slightly silty sand with frequent gravel, 0.20m thick	Fill of burrow or gully [809]
809	Curvilinear feature, over 3.50m long, 0.40m wide and 0.20m deep with concave profile	Burrow or gully

TRENCH 9

No.	Description	Interpretation
900	Unstratified finds from Trench 9	
901	Dark greyish-brown sand silt with frequent gravel, 0.30m thick	Topsoil
902	Light yellowish-brown and brownish yellow sand and gravel, over 0.45m thick	Natural calcareous sand and gravel
903	Mid reddish-brown sandy silt with yellowish brown mottles and moderately frequent gravel, 0.39m thick	Fill of feature [904], possible furrow or pit
904	Feature, 2.90m by over 1.55m and 0.39m deep with gently sloping concave irregular base	Feature, possibly a furrow a truncating pit
905	Mid reddish-brown sandy silt with moderately frequent gravel, 0.29m thick	Fill of feature [906], ditch or pit
906	Irregular feature over 3.60m by over 0.90m and 0.29m deep with steepish sides	Ditch or pit
907	Void – animal burrow or root action	
908	Void – animal burrow or root action	
909	Mid brown sandy silt with moderately frequent gravel, 0.32m thick	Fill of possible furrow [910]
910	Possibly linear feature, over 1.55m long, 1.60m wide and 0.32m deep	Possible furrow
911	Mid greyish-brown sandy silt with moderately frequent gravel, 0.12m thick	Fill of probable post hole [912]
912	Sub-circular feature, 0.34m by 0.30m and 0.12m deep with concave profile	Probable post hole
913	Mid greyish-brown sandy silt with moderately frequent gravel, 80mm thick	Fill of possible furrow [914]
914	Irregular north-south aligned linear feature, over 1.60m long, 1.00m wide and 80mm deep with flattish to concave base	Possible furrow

TRENCH 10

No.	Description	Interpretation
1000	Unstratified finds from Trench 10	
1001	Mid to dark sandy silt with frequent gravel 0.30m thick	Topsoil
1002	Mid to light whitish-brown sand and gravel, over 0.25m thick	Natural calcareous sand and gravel
1003	Void – area of animal burrowing or root action	
1004	Void – area of animal burrowing or root action	
1005	Mid to dark yellowish-brown silty sand with frequent gravel, 0.18m thick	Fill of possible post hole [1006]

No.	Description	Interpretation
1006	Sub circular feature, 0.36m by 0.28m and 0.18m deep with steep sides and flattish base	Possible post hole
1007	Mid to dark yellowish-brown silty sand, 50mm thick	Fill of possible post hole [1108]
1008	Circular feature, 0.35 by 0.40m in diameter and 50mm deep with concave profile and flattish base	Possible post hole
1009	Void – area of animal burrowing or root action	
1010	Void – area of animal burrowing or root action	
1011	Mid to light brownish-grey sandy silt with moderately frequent gravel, 0.13m thick	Fill of possible post hole [1012]
1012	Sub circular feature, 0.39m by 0.31m and 0.13m deep with steep sides and flattish base	Possible post hole
1013	Mid to dark greyish-brown sandy silt with moderately frequent gravel, 0.14m thick	Fill of possible post hole [1014]
1014	Sub circular to irregular feature, 0.16m by 0.23m and 0.14m deep with steep sides and concave to 'V'-shaped base	Possible post hole
1015	Mid to light reddish- yellowish-brown sandy silt, with moderately frequent gravel, 0.18m thick	Fill of possible post hole [1016]
1016	Sub circular feature, 0.25m by 0.30m and 0.18m deep with steepish sides and rounded base	Possible post hole
1017	Void – area of animal burrowing or root action	
1018	Void – area of animal burrowing or root action	
1019	Mid to dark greyish-brown sandy silt with moderately frequent gravel, 0.25m thick	Fill of probable post hole [1020]
1020	Possibly sub-circular feature, 0.25m by over 0.16m in diameter and 0.25m deep with concave profile	Probable post hole
1021	Mid to dark greyish-brown sandy silt with moderately frequent gravel, 0.20m thick	Fill of probable post hole [1022]
1022	Possibly sub-oval feature, over 0.18m by 0.15m in diameter and 0.20m deep with flattish base	Probable post hole
1023	Mid to dark greyish-brown sandy silt with moderately frequent gravel, 0.26m thick	Fill of probable post hole [1024]
1024	Possibly squarish feature with rounded corners, over 0.20m by 0.60m and 0.26m deep with concave sides and flattish base	Probable post hole
1025	Mid to dark greyish brown sandy silt with moderately frequent gravel, 0.18m thick	Fill of probable post hole [1026]
1026	Sub-oval feature, 0.40m by 0.35m in diameter and 0.18m deep with concave steepish sides and flattish base	Probable post hole
1027	Mid to dark greyish-brown sandy silt with moderately frequent gravel, 0.25m thick	Fill of linear feature [1028]
1028	East-west aligned linear feature, 1.10m wide, over 2.00m long and 0.25m deep with concave profile, stepped at south	Linear feature, either a structural element or agricultural
1029	Mid to dark greyish-brown sandy silt with moderately frequent gravel, 0.12m thick	Fill of possible post hole [1030]
1030	Possibly sub-circular feature, 0.40m by over 0.20m and 0.12m deep with concave profile	Possible post hole
1031	Mid to dark brown sandy silt with moderately frequent gravel, 0.18m thick	Fill of possible post hole [1032]
1032	Possibly sub-rounded feature, 0.60m by 0.55m in diameter and 0.18m deep with concave sides and flattish base	Possible post hole
1033	Mid to dark greyish-brown sandy silt with moderately frequent gravel, 0.35m thick	Fill of possible post hole [1034]

No.	Description	Interpretation
1034	Possibly circular feature, 0.30m by over 0.30m in diameter and 0.35m deep with steep sides and 'V'-shaped base	Possible post hole
1035	Void – area of animal burrowing or root action	
1036	Void – area of animal burrowing or root action	
1037	North-south aligned linear feature, 0.59m wide, 6.00m long and 90mm deep with concave profile and concave to flattish base	Post trench
1038	Dark greyish-brown sandy silt with moderately frequent gravel, 90mm thick	Fill of post trench [1037]
1039	Possibly circular feature, 0.40m by over 0.16m in diameter and 0.23m deep with concave base	Post hole within post trench [1037]
1040	Mid greyish-brown sandy silt with moderately frequent gravel, 0.23m thick	Fill of post hole [1039]
1041	Possibly circular feature, 0.45m by over 0.23m in diameter and 0.23m deep with concave base	Post hole within post trench [1037]
1042	Mid greyish-brown sandy silt with moderately frequent gravel, 0.23m thick	Fill of post hole [1041]
1043	Possibly oval feature, 0.20m by over 0.25m and 0.25m deep with steep sides and concave base	Post hole within post trench [1037]
1044	Mid greyish-brown sandy silt with moderately frequent gravel, 0.25m thick	Fill of post hole [1043]
1045	Possibly circular feature, over 0.20m by 0.50m in diameter and 90mm deep with concave base	Post hole
1046	Mid greyish-brown sandy silt with moderately frequent gravel, 90mm thick	Fill of post hole [1045]
1047	East-west aligned linear feature, over 1.00m long, 0.32m wide and 0.11m deep with shallow 'V'-shaped profile and terminating at the east	Gully, either a structural element or agricultural
1048	Mid yellowish-brown silty sand with occasional gravel, 0.11m thick	Fill of gully [1047]
1049	East-west aligned linear feature, over 2.70m long, 1.25m wide and 20mm deep with flattish irregular base	Linear feature, either a structural element or agricultural
1050	Mid to dark greyish-brown sandy silt with moderately frequent gravel, 20mm thick	Fill of linear feature [1049]

TRENCH 11

No.	Description	Interpretation
1100	Unstratified finds from Trench 11	
1101	Dark yellowish-brown silty sand with moderately frequent gravel, 0.35m thick	Topsoil
1102	Light brownish-yellow silty sandy gravel, over 0.80m thick	Natural calcareous sand and gravel
1103	Mid reddish-brown sandy silt with occasional gravel, oyster shell, snail shell and charcoal flecks, 0.50m thick	Fill of ditch [1104]
1104	East-west aligned linear feature, 2.20m wide, over 2.10m long and 0.50m deep with concave profile and base	Enclosure ditch
1105	Mid yellowish-brown slightly silty sand with frequent gravel, 80mm thick	Fill of ditch [1106]
1106	North-south aligned linear feature, over 3.06m long, 1.42m wide and 80mm deep with flattish base	Ditch
1107	Mid yellowish-brown sandy silt with frequent gravel, occasional charcoal flecks and occasional snail shell, 80mm thick	Fill of ditch [1108]

No.	Description	Interpretation
1108	North-south aligned linear feature, over 2.00m wide, over 2.30m long and 0.80m deep with a concave slightly stepped profile	Enclosure ditch

TRENCH 12

No.	Description	Interpretation
1200	Unstratified finds from Trench 12	
1201	Denotes finds made during machining, same as (1205)	
1202	Denotes finds made during machining, same as (1205)	
1203	Denotes finds made during machining, same as (1205)	
1204	Denotes finds made during machining, same as (1205)	
1205	Mid yellowish-brown gravelly silty sand, 0.40m thick	Buried soil layer
1206	Dark blackish-brown sandy silt with moderately frequent gravel and pea gravel, 0.33m thick	Topsoil
1207	Mid yellowish-reddish brown slightly silty sand with moderately frequent gravel, over 0.40m thick	Natural sand
1208	Light to mid whitish-yellow to yellowish-brown slightly sandy and silty gravel, over 0.11m thick	Natural gravel
1209	Mid to dark greyish-brown silty sand with moderately frequent gravel and occasional oyster shell, 0.46m thick	Fill of ditch [1210]
1210	East-west aligned linear feature, over 1.60m long, 3.30m wide and 0.55m deep with slightly stepped steep sides and a flattish irregular base	Enclosure ditch
1211	Mid greyish-brown sand with occasional gravel and charcoal flecks, 0.13m thick	Layer, possibly same as (1205)
1212	Mid brown silty sand with moderately frequent gravel, 80mm thick	Buried soil layer, same as (1205)
1213	Dark greyish-brown slightly clayey sandy and gravelly silt with occasional ironpan, charcoal and snail shells, 0.12m thick	Fill of ditch [1210]
1214	Mid yellowish-brown sand with moderately frequent gravel, 100mm thick	Fill of ditch [1210]
1215	Mid yellowish-brown sand with moderately frequent gravel, 100mm thick	Fill of ditch [1210]
1216	Mid brown slightly silty sand and gravel, 0.13m thick	Fill of ditch [1210]
1217	Mid brownish-grey sand and gravel with occasional bands of yellowish brown sandy gravel and occasional oyster shell, 0.22m thick	Fill of ditch [1210]
1218	Mid to dark grey slightly silty sand and gravel, 40mm thick	Fill of ditch [1210]

TRENCH 13

No.	Description	Interpretation
1300	Unstratified finds from Trench 13	
1301	Mid yellowish-brown sandy silt with frequent gravel and animal bone, 30mm thick	Layer, probably remnants of a severely truncated feature
1302	Mid to dark brownish-grey sandy silt with moderately frequent gravel, 0.40m thick	Topsoil

No.	Description	Interpretation
1303	Light yellowish-white sand and gravel, over 0.60m thick	Natural calcareous sand and gravel
1304	North-south aligned linear feature, 2.80m wide and 0.20m deep with flat base	Furrow
1305	Mid to dark reddish-brown slightly sandy silt with occasional charcoal flecks and gravel, 0.20m thick	Fill of furrow [1304]
1306	Feature of unknown form, 1.50m wide and 0.47m deep with concave profile	Feature of unknown form
1307	Denotes finds from either (1309), (1314) & (1315)	
1308	Feature of unknown form, 0.80m wide and 0.35m deep with concave profile and steep sides	Feature of unknown form
1309	Mid yellowish-brown gravelly sand and silt, 0.17m thick	Fill of furrow [1310]
1310	Northnorthwest-southsoutheast aligned linear feature, 2.25m wide and 0.17m deep with a flattish base	Furrow
1311	Same as (1309)	
1312	Mid yellowish-brown gravelly sand and silt, 0.18m thick	Fill of furrow [1313]
1313	Northnorthwest-southsoutheast aligned linear feature, 2.60m wide and 0.18m deep with a flattish base	Furrow
1314	Mid to dark brown silt and sand with frequent gravel, 0.34m thick	Fill of feature [1308]
1315	Mid to dark brown silt and sand with frequent gravel, 0.47m thick	Fill of feature [1306]

TRENCH 14

No.	Description	Interpretation
1400	Unstratified finds from Trench 14	
1401	Dark grey fine sandy silt with frequent gravel, 0.30m thick	Topsoil
1402	Dark reddish- greyish-brown fine sandy clayey silt with frequent gravel, 0.22m thick	Layer, probable buried soil
1403	Mid reddish- greyish-brown sandy silt with frequent gravel, 0.28m thick	Layer, probable buried soil
1404	Dark reddish-yellow to light reddish-yellow sand and gravel with sand lenses, over 0.60m thick	Natural calcareous sand and gravel
1405	Feature, exposed portion oval, 1.25m by over 0.40m and 0.27m deep with concave profile, slightly stepped at south and concave to flattish base	Feature possibly a pit
1406	Dark greyish- reddish-brown sandy silt with frequent gravel, 0.17m thick	Primary fill of ?pit [1405]
1407	Dark black sandy clayey silt with occasional gravel, charcoal and fired clay, 0.10m thick	Secondary fill of ?pit [1405] including burnt material
1408	East-west aligned linear feature, over 1.60m long, 0.70m wide and 0.21m deep with steep to vertical sides and flat base	Ditch
1409	Dark greyish-brown sandy silt with frequent gravel, 0.21m thick	Fill of ditch [1408]
1410 = 1414	Dark grey gravelly clayey sand and silt with occasional charcoal, up to 0.20m thick across northern 10m of trench	Layer, possible buried soil with occupation evidence

No.	Description	Interpretation
1411 = 1416	Dark slightly greenish-brown clayey sand and silt with frequent gravel, occasional charcoal and bone, 0.22m thick across northern 7m of trench	Layer, possible buried soil with occupation evidence. At south also forms a secondary fill of gully [1418]
1412	Dark blackish-brown clayey silt and sand with frequent gravel and occasional charcoal, 0.18m thick	Tertiary fill of ditch [1417]
1413	Dark blackish-brown clayey silt and sand with frequent gravel, 0.24m thick	Secondary fill of ditch [1417]
1415	Mid brownish-grey clayey and silty sandy and gravel with occasional charcoal flecks, 0.14m thick	Primary fill of gully [1418]
1417	Probably linear (east-west aligned) feature, 2.20m wide and 0.44m deep with stepped sides to south and flattish base	Ditch
1418	Probably linear (northeast-southwest aligned) feature, 0.45m deep and 0.40m wide with steep sides and concave base	Gully
1419	Sub-oval to sub-rectangular feature with rounded corners, 0.80m by 0.60m and 0.15m deep with steep sides and concave to flat base	Fire pit
1420	Mid to dark greyish-brown, light grey, mid grey and occasionally reddish and yellowish mottled sandy, clay and silt matrix with *c.*40% fire-cracked pebbles and occasional charcoal flecks, 0.15m thick	Fill of fire pit [1419]
1421	Dark grey sandy and silty clay with occasional gravel, 0.12m thick	Primary fill of ditch [1417]

TRENCH 15

No.	Description	Interpretation
1500	Unstratified finds from Trench 15	
1501	Mid, slightly pinkish, brownish-grey with reddish mottles sandy silt and clay with frequent gravel and occasional charcoal	Water-lain layer
1502	Light grey, mid grey and reddish mottled silty sand and iron pan with frequent gravel	Upper surface of natural calcareous sand and gravel, transformed by water-lain deposits
1503	Mid grey with brown mottles slightly sandy silty clay with frequent gravel	Water-lain layer
1504	Mid brownish-grey silty sand and gravel with occasional charcoal	Upper surface of natural calcareous sand and gravel, transformed by water-lain deposits
1505	Light yellowish-brown sand and gravel	Natural calcareous sand and gravel, same as (1514) & (1517)
1506	Light to mid grey silty sand and gravel with occasional charcoal flecks	Upper surface of natural calcareous sand and gravel, transformed by water-lain deposits
1507	Light to mid grey slightly silty sand and gravel	Upper surface of natural calcareous sand and gravel, transformed by water-lain deposits
1508	Light yellow and light grey mottled sand and gravel	Upper surface of natural calcareous sand and gravel, transformed by water-lain deposits
1509	East-west aligned linear feature, over 1.60m long, 0.27m wide and over 0.53m deep with vertical sides	Land drain
1510	Mid greyish brown sandy loam with a red ceramic field drain, frequent gravel and lenses of redeposited natural calcareous sand and gravel, over 0.53m thick	Fill of land drain [1509]

No.	Description	Interpretation
1511	Mid grey and reddish-brown mottled sandy and clayey silt with frequent gravel, up to 0.25m thick	Secondary fill of ditch or channel [1513], also forming a layer extending outside the limit of excavation to the north
1512	Mid grey silty and clayey sand with occasional charcoal flecks, 0.27m thick	Primary fill of ditch or channel [1513], also forming a layer extending outside the limit of excavation to the north
1513	East-west aligned linear feature, 0.27m deep and 0.70m wide with sloping sides and concave base	Ditch or channel
1514	Light yellow sand and gravel	Natural calcareous sand and gravel, same as (1505) & (1517)
1515	Light to mid grey slightly silty sand and gravel with occasional charcoal flecks	Upper surface of natural calcareous sand and gravel, transformed by water-lain deposits
1516	Light grey and yellow sand and gravel	Upper surface of natural calcareous sand and gravel, transformed by water-lain deposits
1517	Light yellow with light grey mottles sand and gravel	Natural calcareous sand and gravel, same as (1505) & (1514)
1518	Dark brown sandy loam, 0.35m thick	Topsoil

TRENCH 16

No.	Description	Interpretation
1600	Unstratified finds from Trench 16	
1601	Void – same as (1604)	
1602	Mid to dark greyish-brown silt and sand with occasional gravel and pea gravel, 0.30m thick	Topsoil
1603	Mid greyish brown sandy silt with occasional small stones and gravel, 0.30m thick	Water-lain layer
1604	Mid greyish-brown silt and sand with frequent flecks of limestone, 0.20m thick	Possible buried topsoil or subsoil or transformed water-lain deposit
1605	Light brownish-grey, light to mid brownish yellow and mid greyish-brown sand and gravel with moderately frequent limestone fragments	Natural calcareous sand and gravel

TRENCH 17

No.	Description	Interpretation
1700	Unstratified finds from Trench 17	
1701	Mid yellowish-brown sandy silt with occasional charcoal flecks, bone and gravel, 0.30m thick	Water-lain layer
1702	Dark yellowish-brown slightly sandy silt with moderately frequent gravel and occasional flecks of ceramic building material	Topsoil
1703	Mid yellowish-brown sandy silt with moderately frequent gravel and occasional oyster shell	Possible buried topsoil or subsoil or water-lain deposit
1704	Mid brown silt with some reddish mottling, 0.25m thick	Secondary fill of ditch or channel [1706]
1705	Mid greyish-brown gravelly silt, 0.35m thick	Primary fill of ditch or channel [1706]

No.	Description	Interpretation
1706	North-south aligned linear feature with steep sides and concave base, 0.68m wide, 0.55m deep and over 1.60m long	Ditch or channel
1707	Light yellowish-brown sand and gravel, 0.15m thick	Fill of ditch, channel or natural depression [1708]
1708	Northeast-southwest aligned curvilinear feature with concave profile, over 2.00m long, 0.60m wide and 0.15m deep	Ditch, channel or natural depression, same as [1712]
1709	Light reddish-brown sand and gravel with occasional lenses of light brownish-red sand and charcoal flecks	Fill of possible ditch, channel or natural depression [1710]
1710	Northeast-southwest aligned linear feature with shallow concave profile, over 2.90m long, 1.35m wide and 0.12m deep	Ditch, channel or natural depression
1711	Light yellowish-brown sand and gravel with occasional charcoal, 0.17m thick	Fill of ditch, channel or natural depression [1712]
1712	East-west aligned curvilinear feature with a shallow 'V'-shaped profile, over 3.00m long, 0.52m wide and 0.17m deep	Ditch, channel or natural depression, same as [1708]
1713	Mid greyish-brown sandy silt with occasional reddish mottles and possible charcoal flecks, 0.35m thick	Fill of ditch or channel [1714]
1714	Southwest-northeast aligned linear feature with concave profile, 0.35m deep, over 0.90m wide and over 5.20m long	Ditch or channel
1715	Light yellowish-brown and mid yellowish-brown sand and gravel with occasional clay lenses, over 0.30m thick	Natural calcareous sand and gravel

TRENCH 18

No.	Description	Interpretation
1800	Unstratified finds from Trench 18	
1801	Void	
1802	Mid grey sandy silt with frequent gravel, 0.30m thick	Topsoil
1803	Void	
1804	Light yellowish-brown sand and gravel, over 0.30m thick	Natural calcareous sand and gravel, same as (1807)
1805	Void	
1806	Void	
1807	Light brown with reddish-yellow mottles gravelly sand with frequent iron pan, over 0.20m thick	Natural calcareous sand and gravel, same as (1804)
1808	Mid brown sandy silt with frequent gravel, 0.20m thick	Fill of ditch, channel or natural depression [1809]
1809	East-west aligned linear feature, 0.76m wide and 0.20m deep with a shallow concave profile	Ditch, channel or natural depression
1810	East-west aligned linear feature, 0.60m deep and 0.30 m wide with vertical sides	Land drain
1811	Mid greyish-brown sandy silt with a red ceramic field drain, moderately frequent gravel and occasional charcoal, 0.60m thick	Fill of land drain [1810]
1812	East-west aligned linear feature with steepish sides and flattish to concave base, over 1.50m wide and 0.70m deep	Ditch or channel
1813	Mid greyish-brown silty sand with moderately frequent gravel, 0.70m thick	Fill of ditch or channel [1812]
1814	Mid to light grey sandy silt with moderately frequent iron pan, over 100mm thick	Water-lain layer
1815	East-west aligned linear feature with concave profile, 0.60m wide and 0.30m deep	Ditch, channel or natural depression

No.	Description	Interpretation
1816	Mid brownish-grey clayey sandy silt with occasional gravel, 0.30m thick	Fill of ditch, channel or natural depression
1817	Void – same as (1818)	
1818	Mid brownish-grey with reddish-yellow mottling sandy silt, 0.60m thick	Water-lain deposit
1819	Light brown sandy silt with frequent gravel, 0.20m thick	Water-lain deposit

TRENCH 19

No.	Description	Interpretation
1900	Unstratified finds from Trench 19	
1901	Dark greyish-brown sandy silt with occasional gravel, 0.32m thick	Topsoil
1902	Mid grey silty sand with frequent gravel, 0.25m thick	Possible subsoil or water-lain deposit
1903	Void	
1904	Void	
1905	Possibly sub-circular feature with a concave profile 0.35m by over 0.50m in diameter and 100mm deep	Post hole
1906	Dark greyish-brown sandy silt with occasional gravel, 100mm thick	Fill of post hole [1905]
1907	East-west aligned linear feature, 0.22m wide, over 1.60m long and over 0.30m deep with vertical sides	Land drain
1908	Dark greyish-brown sandy silt with a ceramic land drain and occasional gravel, over 0.30m thick	Fill of land drain [1907]
1909	East-west aligned linear feature over 1.60m long, 0.30m deep and 1m wide with steep sides and flat base	Ditch
1910	Mid slightly greyish-brown slightly silty sand with frequent gravel, 0.30m thick	Fill of ditch [1909]
1911	North-south aligned linear feature, over 3.30m long, 0.80m wide and 0.11m deep with steepish sides and flattish base	Linear
1912	Mid greyish-brown slightly silty sand with frequent gravel, 0.11m thick	Fill of linear [1911]
1913	Light to mid yellowish-brown sand and gravel, over 0.30m thick	Natural calcareous sand and gravel

Appendix 3

GEOPHYSICAL SURVEY

By GSB Prospection Ltd

SURVEY RESULTS

2004 / 46 Ruskington Fen Road, Lincolnshire

1. Survey Area

1.1 Approximately 2.5ha of detailed gradiometer survey was carried out using a Bartington *Grad 601-2* instrument. The location of the survey is shown in Figure 1 at a scale of 1:2000.

1.2 The survey grid was set out by ***GSB Prospection*** and tied in to existing field boundaries using tapes. Stakes have been placed in the boundaries at either end of the baseline. A copy of the tie-in information has been lodged with the client.

2. Display

2.1 Figures 2 and 3 show the data as a summary greyscale and interpretation, respectively, both at a scale of 1:1000.

2.2 The results are displayed as X-Y traces and dot density plots with accompanying interpretations, all at 1:500 (Figures 4-9). For ease of display at this scale the data have been divided into two areas but will be discussed as a whole within the text. The display formats and the interpretation categories used are discussed in the *Technical Information* section at the end of the text.

2.3 Letters within the text refer to anomalies highlighted in the interpretation diagrams.

3. General Considerations - Complicating factors

3.1 At the time of survey the ground cover consisted of long pasture, the soil was also very hard which caused difficulties when setting out the grid. This however did not hinder the results of the survey.

3.2 To the west of the survey area runs a railway line, which produced ferrous disturbance within the data, as did a footpath to the south.

4. Results of Detailed Survey

4.1 The broken linear anomaly (A), running east – west, appears to be on the same alignment as a cropmark in the adjacent field, probably indicating a continuation of the feature; the anomaly is interpreted as a former field division of an unknown date. The interpretation of a field division is also aided by the termination of the north-south ploughing trends at this anomaly.

4.2 In the east of the data, response (B) is likely to be natural in origin. However this anomaly is also on the same alignment as the sinuous archaeological response (C) (see 4.3), and could easily be a

continuation of that feature.

4.3 The curvilinear response at (C), in the eastern half of the area, is of archaeological potential and could be interpreted as forming an enclosure, along with (A). However, it is also likely that it could be the remainder of a former field boundary.

4.4 A number of pit-type responses, especially at (D), have been located within the data and are likely to be archaeological in nature. However, given the natural variation indicated elsewhere in the data, this interpretation is cautious; the significance of the potential pits can only be confirmed by excavation.

4.5 In the north eastern section of the data, probable natural responses (E) could be a result of past flooding from the beck, immediately to the north. This response is roughly on the same alignment as the cropmarks in the field to the east and, as an alternative, could possibly be associated with these. However, this is tentative and the first interpretation is favoured. Natural responses at (F) are again, as with (E), likely to be associated with the beck.

4.6 Ploughing trends within the data run north – south and east – west and are mostly confined by responses (A) and (C), which aids to the interpretation of a former field boundary. Responses at (F) could also be archaeological and as such, an interpretation of these responses must remain cautious.

4.7 A number of trends are evident within the data, and whilst they could be archaeological in nature, no clear form can be made from them and again, any interpretation must be taken with care.

4.8 Ferrous response (G) was caused by the presence of a telegraph pole. A railway is situated to the west of the survey area, and to the south a path of man-made ground. Both modern features have caused a ferrous response which will have masked any archaeological remains within these areas. Other ferrous responses are likely to be caused by modern debris within the topsoil and on the surface.

5. Conclusions

5.1 A number of potential archaeological responses have been noted within the data. These linear features can be interpreted as field boundaries or possibly the remains of an enclosure, with pit-type features located throughout the area. All interpretations must remain cautious and some of the anomalies would benefit from further investigation. Although there are some strong and well defined pit type anomalies there are no clear patterns to suggest a core of settlement activity.

5.2 Clear ploughing trends are evident in the data, running both north - south and east - west. Ploughing may have destroyed any other archaeological remains, or certainly added to the unclear interpretation of the remaining features.

5.3 Natural responses within the data are likely to be associated with the beck, whether they are due to flooding, dredging or perhaps a former course of the waterway.

Project Co-ordinator: E Wood
Project Assistants: J Adcock and J Anderson

Date of Survey: 17th-18th June 04
Date of Report: 24th June 04

References:

SSEW 1983. *Soils of England and Wales. Sheet 4, Eastern England.* Soil Survey of England and Wales.

SITE SUMMARY SHEET

2004 / 46 Ruskington Fen Road, Lincolnshire

NGR: TF 088 508

Location, topography and geology

Ruskington lies approximately 6km to the north of Sleaford, Lincolnshire. The survey area is bound by a railway to the west and a beck to the north. The topography is of a flat terrain. Soils of the area belong to the Ruskington association (512c), formed from a parent of sand and gravels (SSEW 1983).

Archaeology

Crop marks in the field to the east of the survey area show linear and curvilinear features, which could represent old field systems and enclosures. A site was excavated within Ruskington prior to building work in which an Iron Age enclosure was identified, (SMR Nos. 60498/60499), (www.lincolnshire.gov.uk). Within Ruskington, Bronze Age cremation urns have been discovered along with the remains of bone (www.lincsheritage.org).

Aims of Survey

The aim of the magnetic survey was to locate any detectable archaeological remains within the application area. This work forms part of a wider evaluation being undertaken by **Archaeological Project Services (APS)**.

Summary of Results *

The results show a potential enclosure of an unknown date within which a number of pit-type responses of an archaeological nature have been identified. This 'enclosure' could be part of an old field system, due to its alignment with the cropmarks in the adjacent field to the east. Evidence of ploughing within the data suggests that archaeological features, if present may have been damaged.

Natural responses in the north west of the data are likely to be associated with the beck and could be a result of flooding or an earlier channel. Other such responses in the southern half of the data also have the potential of being archaeological, but with the presence of the ploughing the interpretation remains cautious.

Ferrous responses along the west and southern edges of the grid are caused by the presence of a railway line and a modern path, which have masked any remains of archaeological potential.

*** It is essential that this summary is read in conjunction with the detailed results of the survey.**

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Figure 2	Summary Greyscale	1:1000
Figure 3	Summary Interpretation	1:1000
Figure 4	Area A: XY Trace Plot	1:500
Figure 5	Area A: Dot Density Plot	1:500
Figure 6	Area A: Interpretation	1:500
Figure 7	Area B: XY Trace Plot	1:500
Figure 8	Area B: Dot Density Plot	1:500
Figure 9	Area B: Interpretation	1:500

TECHNICAL INFORMATION

The following is a description of the equipment and display formats used in **GSB Prospection Ltd (GSB)** reports. It should be emphasised that whilst all of the display options are regularly used, the diagrams produced in the final reports are the most suitable to illustrate the data from each site. The choice of diagrams results from the experience and knowledge of the staff of **GSB.**

All survey reports are prepared and submitted on the basis that whilst they are based on a thorough survey of the site, no responsibility is accepted for any errors or omissions.

Instrumentation

(a) Fluxgate Gradiometer - Geoscan FM36 / FM256 and Bartington *Grad*601-2

Both the Geoscan and Bartington instruments comprise of two fluxgate magnetometers mounted vertically apart at a distance of 500mm and 1000mm, respectively. The gradiometers are carried by hand, with the bottom sensor approximately 100-300mm from the ground surface. At each survey station, the difference in the magnetic field between the two fluxgates is conventionally measured in nanoTesla (nT), or gamma. The fluxgate gradiometer suppresses any diurnal or regional effects. Generally features up to one metre deep may be detected by this method. Readings are logged at 0.25 intervals along traverses 1.0m apart, unless stated otherwise in the report. Having two gradiometer units mounted laterally with a separation of 1.0m, the Bartington instrument can collect two lines of data per traverse. The *Grad*601-2 has marginally greater sensitivity afforded by the increased fluxgate separation, unfortunately this also increases the instrument's susceptibility to external sources of interference.

(b) Resistance Meter - Geoscan RM15

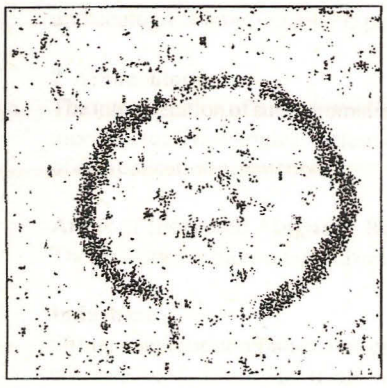
This measures the electrical resistance of the earth, using a system of four electrodes (two current and two potential.) Depending on the arrangement of these electrodes an exact measurement of a specific volume of earth may be acquired. This resistance value may then be used to calculate the earth resistivity. The "Twin Probe" arrangement involves the paring of electrodes (one current and one potential) with one pair remaining in a fixed position, whilst the other measures the resistance variations across a fixed grid. The resistance is measured in Ohms and the calculated resistivity is in Ohm-metres. The resistance method as used for area survey has a depth resolution of approximately 0.75m, although the nature of the overburden and underlying geology will cause variations in this generality. The technique can be adapted to sample greater depths of earth and can therefore be used to produce vertical "pseudo sections". In area survey readings are logged at 1.0m x 1.0m intervals, unless stated otherwise in the report.

(c) Magnetic Susceptibility

Variations in the magnetic susceptibility of subsoils and topsoils occur naturally, but greater enhanced susceptibility can also be a product of increased human/anthropogenic activity. This phenomenon of susceptibility enhancement can therefore be used to provide information about the "level of archaeological activity" associated with a site. It can also be used in a predictive manner to ascertain the suitability of a site for a magnetic survey. Sampling intervals vary widely but are often at the 10m or 20m level. The instrument employed for measuring this phenomenon is either a field coil or a laboratory based susceptibility bridge. The field coil measures the susceptibility of a volume of soil. The laboratory procedure determines the susceptibility of a specific mass of soil. For the latter 50g soil samples are collected in the field. These are then air-dried, ground down and sieved to exclude the coarse earth (>2mm) fraction. Readings are made using an AC-coil and susceptibility bridge, with results being expressed either as SI/kg x 10^{-8} or m^3/kg.

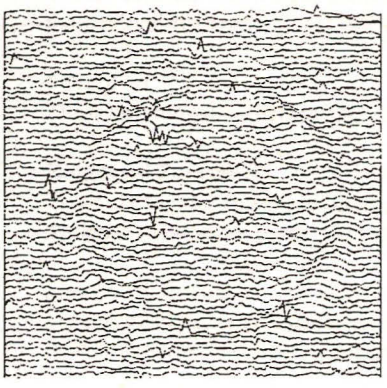
Display Options

The following is a description of the display options used. Unless specifically mentioned in the text, it may be assumed that no filtering or smoothing has been used to enhance the data. For any particular report a limited number of display modes may be used.



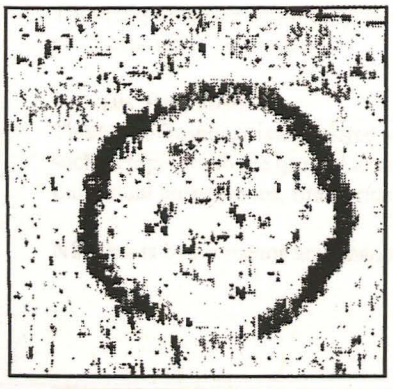
(a) Dot Density

In this display minimum and maximum cut-off levels are chosen. Any value that is below the minimum will appear white, whilst any value above the maximum will be black. Values that lie between these two cut-off levels are depicted with a specified number of dots depending on their relative position between the two levels. Assessing a lower than normal reading involves the use of an inverse plot that reverses the minimum and maximum values, resulting in the lower values being presented by more dots. In either representation, each reading is allocated a unique area dependent on its position on the survey grid, within which numbers of dots are randomly placed. The main limitation of this display method is that multiple plots have to be produced in order to view the whole range of the data. It is also difficult to gauge the true strength of any anomaly without looking at the raw data values. However, this display is favoured for producing plans of sites, where positioning of the anomalies and features is important.



(b) XY Plot

This involves a line representation of the data. Each successive row of data is equally incremented in the Y axis, to produce a stacked profile effect. This display may incorporate a hidden-line removal algorithm, which blocks out lines behind the major peaks and can aid interpretation. The advantages of this type of display are that it allows the full range of the data to be viewed and shows the shape of the individual anomalies. The display may also be changed by altering the horizontal viewing angle and the angle above the plane. The output may be either colour or black and white.



(c) Greyscale

This format divides a given range of readings into a set number of classes. These classes have a predefined arrangement of dots or shade of grey, the intensity increasing with value. This gives an appearance of a toned or grey-scale. Similar plots can be produced in colour, either using a wide range of colours or by selecting two or three colours to represent positive and negative values. While colour plots can look impressive and can be used to highlight certain anomalies, greyscales tend to be more informative.

Terms commonly used in the graphical interpretation of gradiometer data

Ditch / Pit
This category is used only when other evidence is available that supports a clear archaeological interpretation e.g. cropmarks or excavation.

Archaeology
This term is used when the form, nature and pattern of the response is clearly or very probably archaeological but where no supporting evidence exists. These anomalies, whilst considered anthropogenic, could be of any age. If a more precise archaeological interpretation is possible then it will be indicated in the accompanying text.

? Archaeology
The interpretation of such anomalies is often tentative, with the anomalies exhibiting either weak signal strength or forming incomplete archaeological patterns. They may be the result of variable soil depth, plough damage or even aliasing as a result of data collection orientation.

Areas of Increased Magnetic Response
These responses show no visual indications on the ground surface and are considered to have some archaeological potential.

Industrial
Strong magnetic anomalies, that due to their shape and form or the context in which they are found, suggest the presence of kilns, ovens, corn dryers, metal-working areas or hearths. It should be noted that in many instances modern ferrous material can produce similar magnetic anomalies.

Natural
These responses form clear patterns in geographical zones where natural variations are known to produce significant magnetic distortions e.g. palaeochannels or magnetic gravels.

? Natural
These are anomalies that are likely to be natural in origin i.e geological or pedological.

Ridge and Furrow
These are regular and broad linear anomalies that are presumed to be the result of ancient cultivation. In some cases the response may be the result of modern activity.

Ploughing Trend
These are isolated or grouped linear responses. They are normally narrow and are presumed modern when aligned to current field boundaries or following present ploughing.

Trend
This is usually an ill-defined, weak, isolated or obscured linear anomaly of unknown cause or date.

Areas of Magnetic Disturbance
These responses are commonly found in places where modern ferrous or fired materials are present e.g. brick rubble. They are presumed to be modern.

Ferrous Response
This type of response is associated with ferrous material and may result from small items in the topsoil, larger buried objects such as pipes or above ground features such as fencelines or pylons. Ferrous responses are usually regarded as modern. Individual burnt stones, fired bricks or igneous rocks can produce responses similar to ferrous material.

NB This is by no means an exhaustive list and other categories may be used as necesssary.

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PROJECT: 2004/46 Ruskington Fen Road

TITLE: Location Diagram

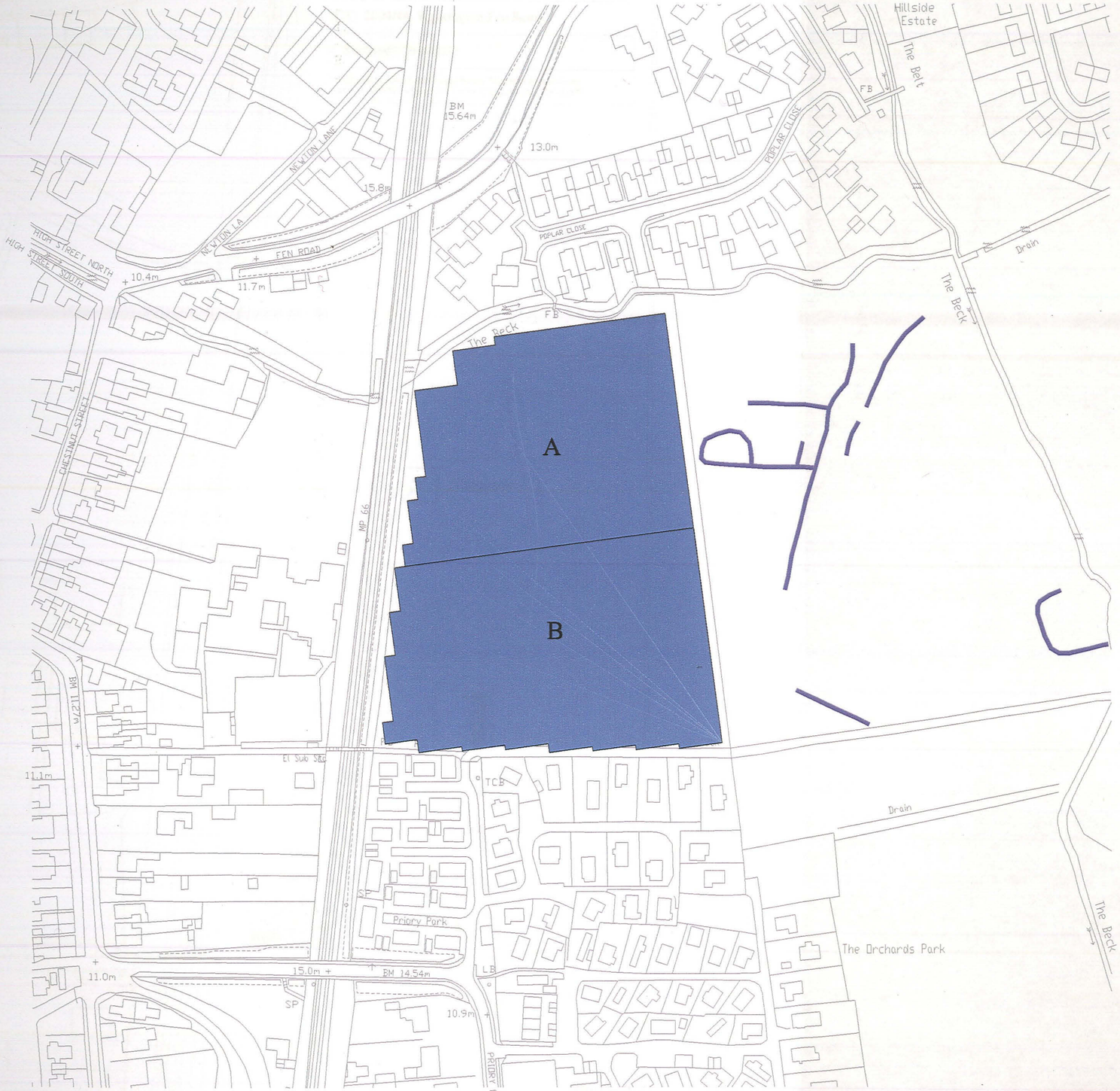
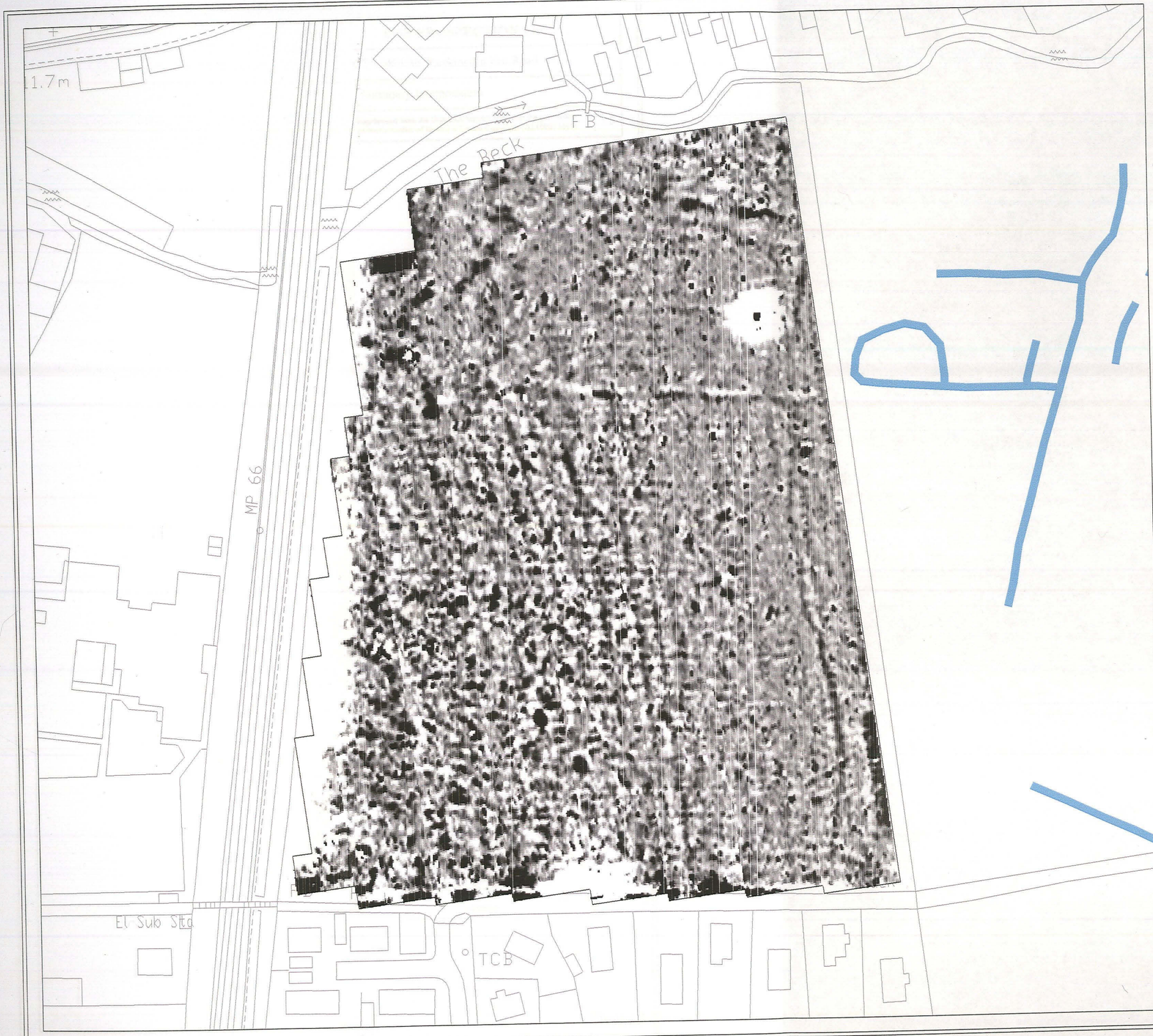


Figure 1

GSB PROSPECTION Ltd.

PROJECT: 2004/46 Ruskington Fen Road

TITLE: Summary Greyscale



?Cropmark

2
nT
-1

0 metres 40

Figure 2

GSB PROSPECTION Ltd.

PROJECT: 2004/46 Ruskington Fen Road

TITLE: Summary Interpretation

?Archaeology

Trend

?Natural

Ploughing

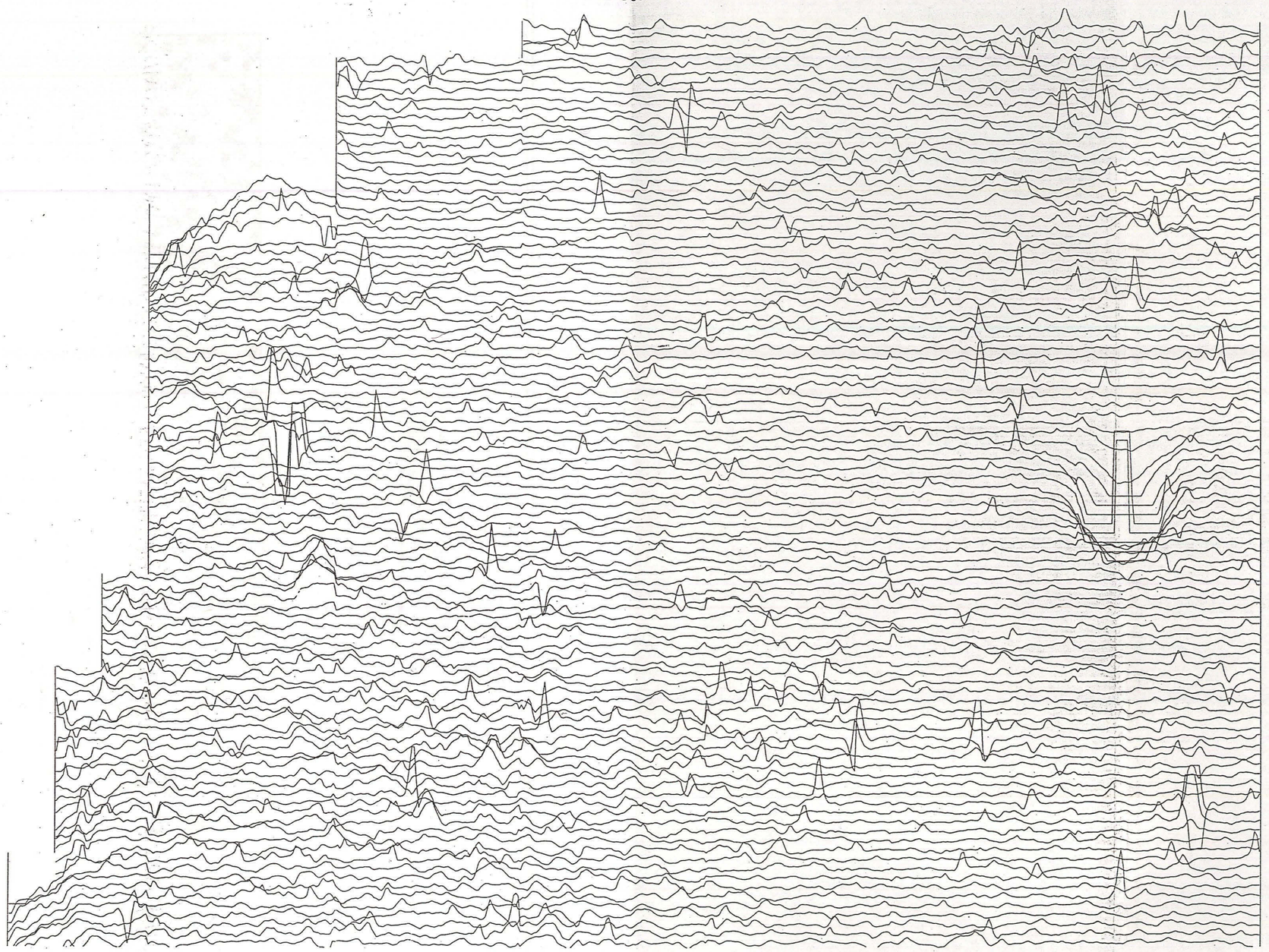
Ferrous

?Cropmark

0 metres 40

Figure 3

RUSKINGTON FEN ROAD
Area 1A



15 nT

0 m 20

GSB Prospection Ltd. 2004/46

Figure 4

RUSKINGTON FEN ROAD
Area 1A

GSB Prospection Ltd. 2004/46

Figure 5

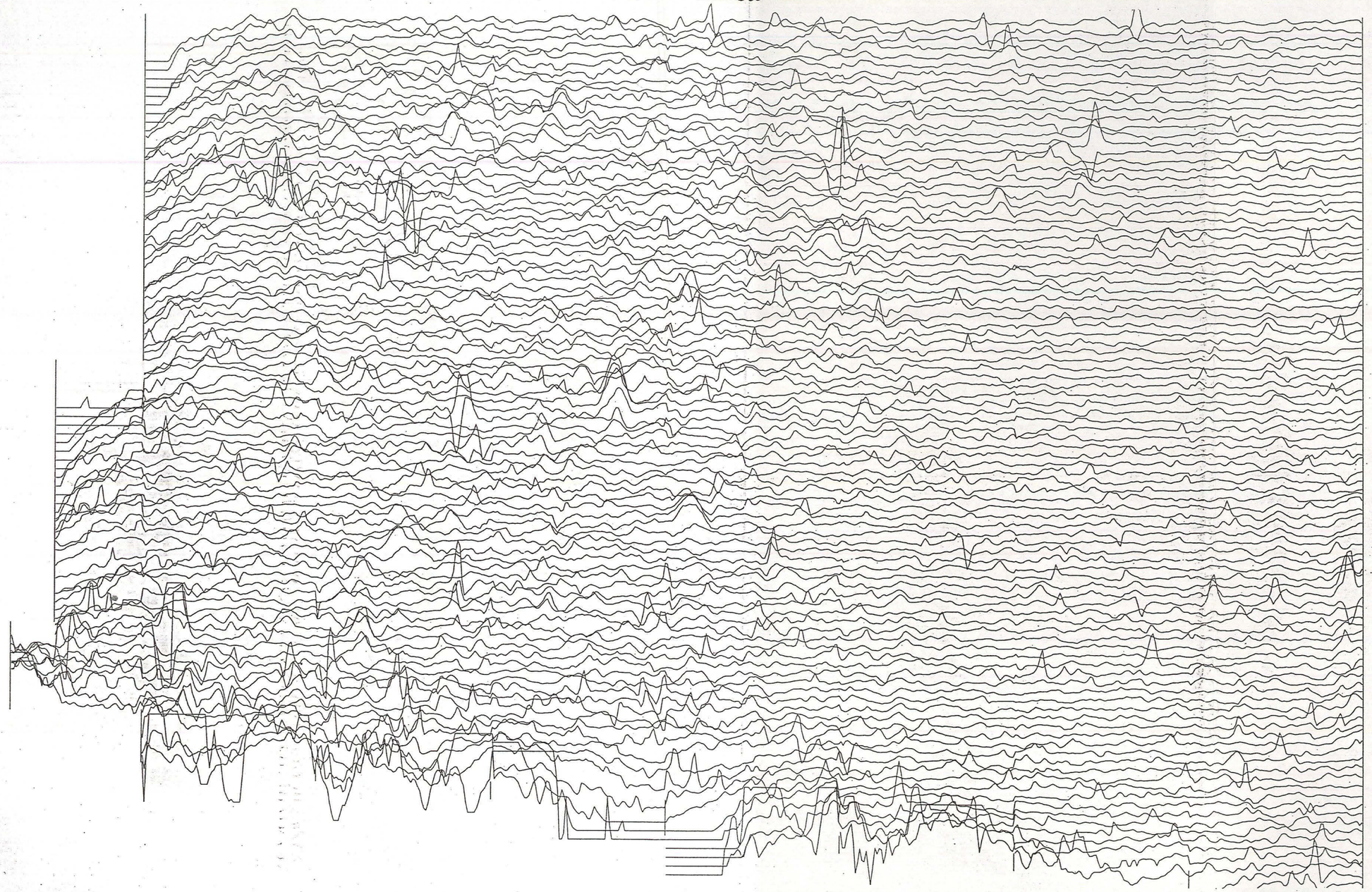
RUSKINGTON FEN ROAD
Area 1A

GSB Prospection Ltd. 2004/46

Figure 6

RUSKINGTON FEN ROAD

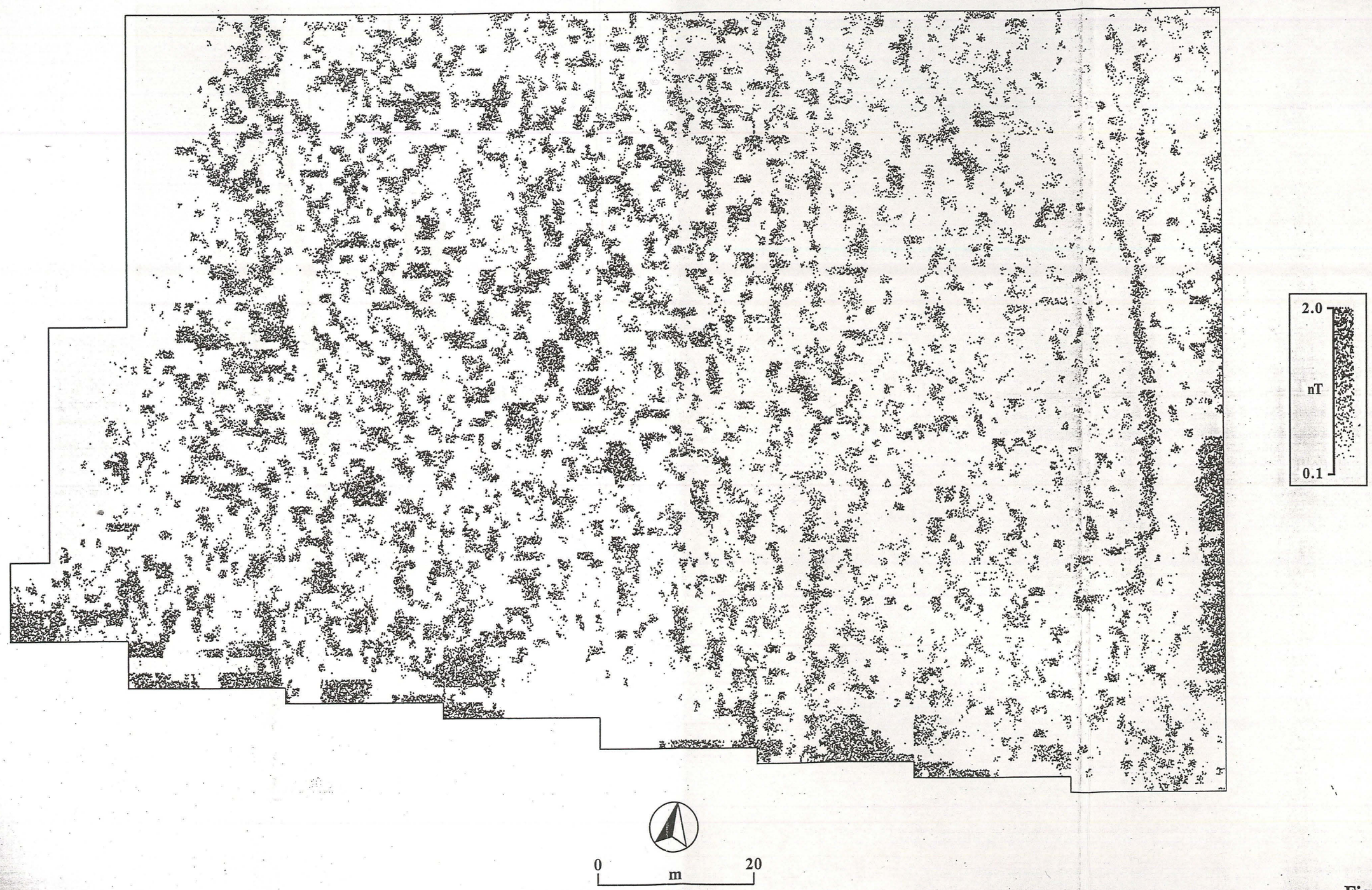
Area 1B



GSB Prospection Ltd. 2004/46

Figure 7

RUSKINGTON FEN ROAD
Area 1B



GSB Prospection Ltd. 2004/46

Figure 8

RUSKINGTON FEN ROAD
Area 1B

GSB Prospection Ltd. 2004/46

Figure 9

Appendix 4

THE MID-IRON AGE AND ROMAN POTTERY

By B J Precious

The Mid-Iron Age and Roman Pottery

The pottery has been recorded according to the Study Group for Roman Pottery (SGRP) guidelines, using codes currently in use by the City of Lincoln Archaeology Unit (CLAU), with sherd count and weight as measures. (See also the site archive: rfr04.xls).

The site produced a small assemblage of pottery, 149 sherds weighing 2210 grams, from 22 contexts and 12 trenches. RFR04 is the third intervention in this area. All three sites produced pottery of similar date (Mid- to Late Iron Age BC to the 3rd century AD), but this excavation, RFR04, has resulted in a significant assemblage of Middle Iron Age wares.

Dating (see Table 1, below)

Table 1, below, shows that few of the contexts produced more than three sherds, **305**, **320**, **417**, and **608**. Stratigraphic information suggests that all of these contexts are interrelated. Trench 3, where the bulk of the mid-Iron Age pottery came from, mainly consists of an enclosure ditch that probably extends into Trenches 6 and 11. Trench 4 is adjacent to Trench 3. All of these trenches produced pottery of mid-Iron Age date denoted by the mainly vertical, and random scoring on many of the body sherds. Most of this pottery consists of body sherds (Drawing 4, for example), but there are five rims of vessels (Drawings 2-3, 5 and 6), that can be paralleled within the first two phases of Mid-Iron Age activity at Market Deeping (MAD91 – Knight, forthcoming). Two vessels are in finer shell and may be Mid- to late Iron Age in date (contexts **300** and **1107**).

Table 1: The date-range of the Roman pottery by context and sherd count.

Context	Trench	Sherds	Grams	Sherd/weight	Date range
162	1	1	73	73	EM2/POSTRO
204	2	1	11	11	RO?
300	3	1	16	16	IA POSS MLIA
305	3	20	159	7.95	MIA
307	3	2	31	15.5	MIA
308	3	3	4	1.3	MIA?
309	3	2	1	0.5	MIA?
320	3	26	867	33.35	MIA
417	4	42	360	8.57	MIA
508	5	1	3	3	IA?
511	5	1	3	3	2C+
608	6	35	602	17.2	MIA
800	8	1	17	17	PREH
801	8	3	12	4	MIA?/POSTRO
1019	10	1	6	6	2C+
1107	11	2	13	6.5	IA POSS MLIA
1200	12	1	19	19	3C
1209	12	1	3	3	L2-3C
1213	12	1	1	1	IA POSS MLIA
1300	13	1	1	1	3C
1400	14	2	5	2.5	MIA?
1413	14	1	3	3	2C
		149	2210	14.83	TOTAL

The assemblage from Trench 8, which consists mainly of Anglo-Saxon pottery, produced a few sherds with unusual fabrics; native tempered pottery with large angular rocks (context **800**), and shell-tempered pottery with conglomerate inclusions together with a rim sherd in a dense fabric with sparse shell (both from context **801**). The rim sherd, which is crude and inturned, may be Early to Mid-Iron Age in date, whilst that from context **800**, may be earlier, possibly Bronze Age.

Roman pottery is scarce, consisting of seven sherds weighing 118 grams, from Trenches 1, 2, 5, 10, 12, 13 and 14, and a possible scrap of fired clay or Roman tile from Trench 5. Most are body sherds and single examples from the context(s), but date from the mid 2nd to the 3rd century with no later Roman wares.

Condition

The Iron Age pottery is in good condition, but tends to fragment easily, and several are either burnt or sooted on the interior demonstrating use as cooking pots. The fragmentation tends distort the sherd/weight ratio for this pottery, which, if the small fragments are excluded, amounts to 32 grams per sherd. This is a high ratio and, although including several large vessels, indicates little disturbance of the material. The Roman pottery is in fair condition, but the some of the fine wares are abraded, and the average sherd weight of 16 grams is average. There are no obvious sherd links.

Statement of Potential (Tables 2 and 3, below)

The pottery from this site has a much earlier bias than that from the previous interventions in this area, with a significant assemblage of Mid Iron Age pottery. Most are cooking pots with simple rims (Drawings 2,3 and 5), some with scored decoration, and one with a notched rim (Drawing 6). There are also at least two, large jar or bowl forms and a storage jar (Drawing 4, for example). Most are in shell-tempered fabrics that have varying amount of punctate brachiapods, which do not appear in the shell-tempered wares found in either Lincoln or in North Lincolnshire. The shell-inclusions range from scare to moderate or abundant, and fine to medium or coarse in size. Altogether, a group that is indicative of a rural settlement.

Table 2: Mid-Iron Age and Roman fabrics by sherd count and weight

Fabric	Code	Sherds	%	Grams	%
Prehistoric, coarse-tempered	COAR	1	0.67%	8	0.36%
Dressel 20 amphora	DR20	1	0.67%	73	3.30%
Fired clay	FCLAY	1	0.67%	3	0.14%
Grey ware	GREY	2	1.34%	9	0.41%
Native-tempered	NAT	1	0.67%	17	0.77%
Nene Valley colour-coated	NVCC	2	1.34%	20	0.90%
Nene Valley grey ware	NVGW	1	0.67%	3	0.14%
Oxidised ware	OX	1	0.67%	11	0.50%
Central Gaulish samian	SAMCG	1	0.67%	3	0.14%
Iron Age, shell-tempered, abundant, fine	SHAF	1	0.67%	2	0.09%
Iron Age, shell-tempered, common, coarse	SHCC	11	7.38%	423	19.14%
Iron Age, shell-tempered, common, fine	SHCF	6	4.03%	37	1.67%
Iron Age, shell-tempered, common, medium	SHCM	23	15.44%	480	21.72%
Iron Age, shell-tempered, moderate, coarse	SHMC	85	57.05%	976	44.16%
Iron Age, shell-tempered, moderate, fine	SHMF	1	0.67%	10	0.45%
Iron Age, shell-tempered, moderate, medium	SHMM	3	2.01%	8	0.36%
Iron Age, shell-tempered, sparse, coarse	SHSC	2	1.34%	11	0.50%
Iron Age, shell-tempered, sparse, fine	SHSF	5	3.36%	87	3.94%
Iron Age, shell-tempered, sparse, medium	SHSM	1	0.67%	29	1.31%
	TOTAL	149	100.00%	2210	100.00%

There is no evidence for continuous occupation at this site as the earliest Roman pottery dates from the 2nd, probably mid-2nd century. This group includes two locally produced grey ware vessels and two examples of imported ware, an amphora containing olive oil from Baetica in Southern Spain, and a dish fragment in Central Gaulish samian. The latter, a fine table ware is burnt suggesting destruction rather than use. These imported wares, although rare, are indicative of higher status occupation.

Further examples of fine wares consist of a folded beaker with scale decoration and a dish imitating samian form Dr36. Both are colour-coated and were manufactured at kilns in the Nene Valley, along with a jar or beaker in a finer grey ware (NVGW). These are 3rd century in date, but there is no later Roman pottery.

Table 2 – Mid-Iron Age and Roman forms by sherd count and weight

Form	code	sherds	%	grams	%
Undiagnostic		1	0.67%	3	0.14%
Amphorae	A	1	0.67%	73	3.30%
Folded beaker with scale decoration	BKFOSC	1	0.67%	1	0.05%
Jar or beaker	JBK	1	0.67%	3	0.14%
Bowl as samian Dr. 36	B36	1	0.67%	19	0.86%
Native tradition bowl	BNAT	1	0.67%	3	0.14%
Dish	D	1	0.67%	3	0.14%
Native tradition cooking pot	CPN	68	45.64%	437	19.77%
Jar	J	4	2.68%	36	1.63%
Large jar or bowl	JBL	69	46.31%	1603	72.53%
Storage jar	JS	1	0.67%	29	1.31%
	TOTAL	149	100.00%	2210	100.00%

Further Work

There is little pottery published from this area and the Middle Iron Age pottery from this site alone warrants publication. However, this is now the third intervention in this area, and (RFR04) together with the two previous excavations (RFR00 and RFRA01), constitutes a substantial group of significant ceramics ranging in date from the Prehistoric period to the early to middle Iron Age, the Conquest period and continuous occupation into the 3rd century AD. These assemblages should be combined and published as a single paper.

The forms can be paralleled with those from Market Deeping, and further research into the forms from the earlier sites should be undertaken to establish links with the ceramic traditions of South Lincolnshire, giving valuable information about settlement and trade in this area.

As part of this undertaking, the fabrics of all three sites should be further analysed, and thin sectioned in order to determine the source of the shell and coarse-tempered pottery. Apart from the good quality and range of the shell-tempered wares there is an unusual one form RFRA01. It is pale and poorly mixed with a soapy texture with silt-sized quartz and rare to moderate amounts of larger quartz (<0.5mm) with a dark red, matt colour-coat that only survives on the interior. The colour-coat is most unusual and reminiscent of terra rubra, a late Iron Age to early Roman fabric that has been noted at Old Sleaford (Elsdon, 1997).

Six vessels from RFR04 should be illustrated to demonstrate the range of Middle Iron Age pottery from the site. This is in addition to the 14 selected from the previous site RFRA01, and a 9 from RFR00 thus forming a good typology of these wares from this area.

Storage and Curation

Most of the pottery is in stable condition, and should be retained for further study. Some of the Middle Iron Age pottery is friable and should be stabilised and stored in acid-free tissue paper.

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CONTEXT	FABRIC	FORM	DEC	VESSNO	DWGNO	ALTER	COMMENTS	JOIN	SHS	WT	TRENCH
162	DR20	A					BS; EM2C FAB		1	73	1
162	ZDATE						EM2/POSTRO				1
162	ZZZ						DR20 ONLY W SAXON POT				1
204	OX	J					BASE; WM; POOR MIX CLAY		1	11	2
204	ZDATE						RO?				2
204	ZZZ						OX J ONLY; POSS MPOT				2
300	SHCF	J				SOOT	BASE;RQ;RAR PB;HARD;ILLSOR F-M		1	16	3
300	ZDATE						IA POSS MLIA				3
300	ZZZ						NEAT BASE;SEE ALSO 1107				3
305	SHCC	CPN	SCRH	1	2	SOOTIN	RIM LWR WALL BSS J;ILL F-C;H PB;NO Q;SMALL VESS INTURN PLAIN RIM; CFD28 MAD91;NO SCR;PH1		3	95	3
305	SHCM	CPN		1?	3		RIM BS;BLK;ILL F-M RAC;R PB;SOFTER;NO Q;CF D66 NO SCR MAD91;PH 2		2	13	3
305	SHMC		SCR	1?			BSS;ILL F-VC;SOFTER;NO PB Q; OCC SPINE		3	27	3
305	SHMC						SCRAPS		7	6	3
305	SHMC						SCRAP;SOFT NO PB Q;RDBN;ILL F-C <6>		1	1	3
305	SHMC						FLAKE;HARD,NO PB Q; BLK ILL F-C<6>		1	6	3
305	SHMM		SCR	1?		BURNT	BSS;HARD;ILL F-C;NO PB Q;BLK;THIN SMALL VESS		3	8	3
305	SHSC		SCR				BS SOFTER; R Q;		1	8	3
305	ZDATE						MIA				3
307	SHAF						FRAG;R Q;HARD; NO OBV PB;ILL F-M		1	2	3
307	SHSM	JS	SCRV		D?		BS VTHICK;SOFTER DENSE;R Q;LGE VESS		1	29	3
307	ZDATE						MIA				3
308	SHCM			1?			FRAGS; R Q;HARD		2	1	3
308	SHCM						FRAG;HARD DENSE R Q;M PB;ILLSORT M-C		1	3	3
308	ZDATE						MIA?				3
308	ZZZ						SCRAPS				3
309	SHMC						SCRAPS;DENSE HARD ;NO PB Q		2	1	3

CONTEXT	FABRIC	FORM	DEC	VESSNO	DWGNO	ALTER	COMMENTS	JOIN	SHS	WT	TRENCH
309	ZDATE						MIA?				3
309	ZZZ						SCRAPS				3
320	SHCC	JBL	SCRV	1	4		BSS;RDBN;SOFTER; S PB RQ ILL F-C		3	297	3
320	SHCC	SCRV		1?			BSS RDBN, ILL S-C;SOFTER; RA PB RQ		3	37	3
320	SHCC						BS PART OF DWG 4 <5>		1	9	3
320	SHCC						SCRAPS <5>		2	1	3
320	SHCC		SCRV				BS DKGRY;NO PB; S-M RQ; HARD; ILL		1	14	3
320	SHCF						BS; LTBN; SOFTER; M PB;RA RQ; SPINE;ILL F-M		1	6	3
320	SHCM	JBL	SCRV	1			BSS;SCRV FAINT;RDBN SOFTER;R PB NO Q;SPINE;M SORT		5	399	3
320	SHCM	NOTCH			6		RIM CF MAD 91 PH2;HARD ILL;NO PB;S R Q;DKBN		1	7	3
320	SHCM						FRAGS; ILL M-CBN DKGRY CORE		6	19	3
320	SHCM					ABR	BASE?;LTBN;SOFTER; ILL; NO PB ; RA R Q		1	25	3
320	SHSF	CPN		1	5		RIM LWR;CF MAD 87;SMALL;WIPED;ILL;NO PB;RA R Q;SPINE;DKBN BLK CORE		5	87	3
320	ZDATE						MIA				3
417	SHCM			1			FRAGS; ILL M-C;R Q;GRY CORE ;HARD		5	13	4
417	SHMC	JBL		1		FRIABLE	BASE BSS FRAGS;LTBN;SOFTER;ILL;S RQ;THICK NO PB DKGRY CORE		14	280	4
417	SHMC	JBL		1			FRAGS FROM SAME VESS		22	57	4
417	SHMF		SCRV				BS;RDBN BLK INT;RA C SHEL;M RQ;NOPB;HARD;ILL F-M		1	10	4
417	ZDATE						MIA				4
417	ZZZ						<1>; SCRAPS;R PB				4
508	FCLAY					BURNT	FRAG;GRY;HIGH FIRED;CALC;SPINES?		1	3	5
508	ZDATE						IA?				5
508	ZZZ						QUARTZ;BROKEN FRAG;RTIL?				5
511	GREY	J					BS		1	3	5
511	ZDATE						2C+				5
511	ZZZ						GREY ONLY				5
608	SHMC	JBL	SCRH	1			BSS;THICKER;HARD;DKBN;ILL;SPINE;NO PB;S R Q		24	561	6
608	SHMC			1		FRIABLE	FRAGS SAME VESS		11	41	6

CONTEXT	FABRIC	FORM	DEC	VESSNO	DWGNO	ALTER	COMMENTS	JOIN	SHS	WT	TRENCH
608	ZDATE						MIA				6
608	ZZZ						SCR MAINLY VERTICAL				6
800	NAT			D?			BASE;RQ;HARD;DENSE;ROCKS		1	17	8
800	ZDATE						PREH				8
800	ZZZ						NO SHEL; BA OR EMIA				8
801	COAR					BURNT	BS;A Q ROCKS;HARD DENSE;PREH? BA?;UNUS FAB		1	8	8
801	SHCF						FRAG;F-M SHEL;CONGLOMERATES		1	1	8
801	SHSC	BNAT			1	BURNT	RIM;INT LIP;MIN SHEL SOME Q;OOL FE?		1	3	8
801	ZDATE						EMIA?/POSTRO				8
801	ZZZ						JURASSIC LIMEST;AGV;+BA?;UNUS FAB;W SAXON				8
1019	GREY	J					BS; LGE QUARTZ ROCK		1	6	10
1019	ZDATE						2C+				10
1019	ZZZ						GREY ONLY				10
1107	SHCF	J		1?		SOOT	BASE BS;RQ;RAR PB;HARD;ILLSOR F-M		2	13	11
1107	ZDATE						IA POSS MLIA				11
1107	ZZZ						NEAT BASE;SEE ALSO 300				11
1200	NVCC	B36				ABR	RIM		1	19	12
1200	ZDATE						3C				12
1200	ZZZ						B36 NVCC ONLY				12
1209	NVGW	JBK					BS		1	3	12
1209	ZDATE						L2-3C				12
1209	ZZZ						NVGW ONLY				12
1213	SHCF	J				SOOT	FRAG;RQ;RAR PB;HARD;ILLSOR F-M		1	1	12
1213	ZDATE						IA POSS MLIA				12
1213	ZZZ						NEAT BASE;SEE ALSO 300; 1107				12
1300	NVCC	BKFOSC				ABR	BS		1	1	13
1300	ZDATE						3C				13
1300	ZZZ						NVCC BKFOSC ONLY				13
1400	SHCC						FRAG;HARD M PB SPINE LESS Q		1	4	14

CONTEXT	FABRIC	FORM	DEC	VESSNO	DWGNO	ALTER	COMMENTS	JOIN	SHS	WT	TRENCH
1400	SHMC						FRAG;SOFTER;M PB LESS Q;RDBN		1	1	14
1400	ZDATE						MIA?				14
1413	SAMCG	D				BURNT	BS		1	3	14
1413	ZDATE						2C				14
1413	ZZZ						SAMCG ONLY				14

Appendix 5

AN ASSESSMENT OF ANGLO-SAXON POTTERY FROM FEN ROAD, RUSKINGTON, LINCOLNSHIRE (RFR04)

by Alan Vince and Kate Steane

Archaeological excavations by APS Ltd at Fen Road, Ruskington (NGR TF 08789 50851) revealed evidence of occupation of Iron Age, Roman and Anglo-Saxon date. In a few cases features produced contemporary assemblages of Anglo-Saxon or Iron Age date but in areas where occupation of both periods was present it has proved to be difficult to reliably separate each and every sherd. Nevertheless, a number of sherds of Anglo-Saxon date have been positively identified, having the same fabrics as other Anglo-Saxon vessels in the locality or having forms or surface treatment or decoration which do not occur on Iron Age pottery in central Lincolnshire. In total, 146 sherds were identified as being of Anglo-Saxon date, representing 128 vessels and weighing in total 2.273 Kg.

The Anglo-Saxon pottery certainly dates between the mid 5th and the 7th centuries. The lack of distinctive 5th/6th-century traits suggests that the occupation is mainly of 6th to 7th-century date.

Description

Fabric

The Anglo-Saxon pottery was all examined at x20 magnification using a binocular microscope. All of the sherds could be assigned to fabric groups which are known from other sites in this part of Lincolnshire (Table 1).

Table 1

Cname	Sum of Nosh	Sum of NoV	Sum of Weight
CHARN	11	8	72
CLSST	106	95	1818
ECHAFF	1	1	2
ESAXIMP?	2	1	29
ESGS	1	1	8
FE	2	2	9
LIM	11	9	252
LIM+RQ	1	1	5
RQ	8	7	37
RQ+CHAFF+LIM	1	1	1
SSTMG	2	2	40
Grand Total	148	128	2273

Charnwood ware (CHARN)

This fabric contains angular fragments of a biotite-rich acid igneous rock. Similar inclusion suites occur in boulder clays in the upper Vale of York and probably in parts of the North Yorkshire Moors but in the east midlands clays or sands containing such inclusions tend to have a much wider range of inclusions present, most of which are derived from more local sources and the most likely source is the Mountsorrel granodiorite, which outcrops in northeast Leicestershire and is found in boulder clay and fluvioglacial deposits to the south and east of that outcrop (Williams and Vince 1997).

Central Lincolnshire Sandstone-tempered (CLSST)

This fabric is characterised by the presence of a fine-grained sandstone, mostly with some iron-rich cement together with a variable quantity of limestone and other inclusions. Such sandstones outcrop in the middle and upper Jurassic and in decalcified sands and clays would tend to dominate the inclusion suite. The other inclusions are oolitic and shelly limestones, rounded quartz grains, angular igneous rock fragments, Millstone Grit sandstone and other sandstones. These indicate that the parent gravel is of fluvio-glacial origin, not simply derived from the local underlying bedrock. The Ruskington sherds could be subdivided into fabric groups depending on the relative proportions of sandstone, limestone and rounded quartz and these subdivisions might well indicate that different clay or temper sources

were being exploited. However, all contain mainly rocks and minerals of middle/upper Jurassic origin and are therefore likely to have been made within, say, 10 miles of Ruskington.

Chaff-tempered ware (ECHAF)

This fabric contains few large inclusions (i.e. over 0.1mm across) except for the voids where organic temper has burnt out.

Possible import (ESAXIMP?)

Two sherds from a single wheelthrown whiteware jar with a rounded quartz sand were recovered. The vessel was not recognised as a common Romano-British type and it is therefore identified here as a possible import.

Early Anglo-Saxon Greensand-tempered (ESGS)

This fabric contains water-polished rounded quartz grains of the type which occur in the lower Cretaceous rocks which outcrop along the western edge of the Lincolnshire wolds (but which also occur in the Red Chalk, which outcrops at the base of the chalk in the southern tip of the Yorkshire Wolds). Where such grains form the majority of the quartz sand present is it assumed that the fabric is of Lincolnshire Wolds origin rather than fluvioglacial-derived sand being carried southwards from Yorkshire. Boulder clays containing abundant grains of this quartz occur to the south of the Lincolnshire Wolds, and outcrop as islands surrounded by peat fen in the fens (for example, at Stickney).

Ironstone-tempered (FE)

A few sherds contain large angular ironstone inclusions, together with mudstone or shale pellets and have a fine-textured, silt-free groundmass. These characteristics suggest the use of a clay from the Middle Jurassic exposures on the scarp slope of the Jurassic ridge, but similar rocks might be present on the dip slope, much closer to Ruskington.

Oolitic Limestone-tempered (LIM)

This fabric is characterised by abundant ooliths, and occasional fragments of oolitic limestone, with a variable quantity of rounded quartz sand. The inclusions suggest that the clay was tempered with a weathered oolitic limestone with either no cement or one that was softer than the ooliths. This is not the case for any local exposures but is true of the Ketton rock which outcrops in the Stamford area.

Oolitic Limestone and rounded quartz sand tempered (LIM+RQ)

A single sherd contained approximately equal quantities of ooliths (as in LIM) and rounded quartz grains.

Trent valley sand-tempered (RQ)

This fabric contains a rounded quartz sand, mean size 0.5mm, with some rounded calcareous inclusions up to 1.5mm across. Similar quartz sand occurs in the Witham terraces at Lincoln but is widespread in the Trent valley.

Rounded quartz, chaff and oolitic limestone tempered (RQ+CHAFF+LIM)

A single sherd contained a mixture of rounded quartz, the voids from organic tempering and ooliths. It is likely to be related to (or the same as) LIM+RQ.

Millstone Grit sandstone-tempered ware (SSTMG)

This fabric contains angular fragments of Millstone Grit sandstone and its component quartz sand grains, recognisable at x20 magnification through the overgrowth of the quartz sand grains and by the presence of an off-white kaolinitic cement .

Form

Table 2

Form	TRENCH	Sum of Nosh	Sum of NoV	Sum of Weight
JAR	1	37	29	1074
	2	2	2	17
	3	3	3	35
	5	4	4	73
	6	1	1	2
	7	1	1	4
	8	26	21	196
	9	19	16	199
	10	5	5	18
	11	3	3	18
	12	7	7	34
	13	20	17	170
	14	18	17	150
	15	1	1	3
	16	3	3	20
JAR Total		150	130	2013
LARGE JAR	1	1	1	167
	2	1	1	33
	9	1	1	54
	12	1	1	13
	13	1	1	30
LARGE JAR Total		5	5	297

Most of the sherds come from globular jars with a short vertical neck and rounded rim (Table 2). They vary somewhat in size, although few rim diameters could be measured. Several base sherds were present indicating that bases were rounded but with a carination at the base/body join.

Only one decorated vessel was represented, a single sherd from a stamped jar. The vessel is probably a large globular jar in which there is no sharp neck angle. The sherd comes from the neck/shoulder of the jar and includes a single vertical burnished line, indicating that the stamps were separated into vertical panels

Several of the vessels were roughly burnished, either just on the exterior or on both interior and exterior. Examination of more complete material suggests that where they were burnished, this treatment often extended over the rim to at least the inside of the shoulder. In most cases, however, it is not possible to say where the sherd was positioned on the parent vessel.

A few vessels have thick walls and very low curvature and these must come from much larger vessels, whose form cannot be determined, except to say that they too were probably roughly globular in shape (Table 2, Large Jar).

Function

Table 3

Use	TRENCH	Sum of Nosh	Sum of NoV	Sum of Weight
LEACHED INT; WHITE DEP INT	1	3	1	151
LEACHED INT; WHITE DEP INT Total		3	1	151
SOME INT LEACHING	2	1	1	13
"	13	3	1	34
SOOTED EXT	1	5	2	197
SOOTED EXT; SOME INT LEACHING	13	1	1	9
SOOTED EXT; WHITE DEP INT	9	2	1	29
SOOTED INT	1	7	7	260
"	3	1	1	8
"	5	3	3	68
"	7	1	1	4
"	8	6	5	41
"	9	2	2	15
"	13	2	2	41
"	14	5	5	72
"	16	3	3	20
SOOTED INT/EXT	1	2	2	36
"	13	1	1	7
"	14	1	1	17
SOOTED INT/LEACHED INT	8	1	1	44
WHITE DEP INT	1	2	2	43
Grand Total		155	135	2310

A few of the sherds, as noted above, have very little curvature and a thick wall and are probably from large vessels used for storage.

Most of the sherds present have fabrics which contain calcareous inclusions. Where the vessel was used to contain acidic liquid these inclusions have leached from the inner surface (Table 3, leached int).

In some cases the vessels were used to boil water and have a light brown "kettle fur" deposit on the interior (Table 3, white dep int).

In others, the contents had an organic content and when burnt dry have lead to a black carbonaceous deposit on the inner surface (Table 3, sooted int). It is remarkable that there are more sherds with these deposits than with external sooting.

In both cases, there may also be sooting on the exterior of the vessel, and this sooting may be present on the upper part of the vessel, where there are no internal deposits (Table 3, Sooted ext).

From these traces (Table 3), it is possible to say that most of the Ruskington Anglo-Saxon pottery was used mainly for domestic purposes – boiling water and cooking.

Condition

Table 4

Condition	TRENCH	Sum of Nosh	Sum of NoV	Sum of Weight
ABRA	1	1	1	3
"	2	1	1	33
"	3	1	1	24
"	5	1	1	5
"	6	1	1	2
"	8	3	3	18
"	10	1	1	7
"	12	6	6	43
"	13	6	5	20
"	14	7	7	37
"	15	1	1	3
SOME LEACHING INT/EXT	2	1	1	4

Two measures of the sherd condition were recorded. The first is the sherd weight, which will obviously vary with the size and wall thickness of the parent vessel, and the second is abrasion (Table 4). There is a wide range in the collection, from small, abraded sherds, which are presumably from ploughsoil and exposed to mechanical and chemical weathering, to large, unabraded sherds, which have probably been buried in a feature deep enough to protect them from weathering, either by the plough, frost, or the action of groundwater.

Assessment

Date

Recent work on Anglo-Saxon pottery recovered from a settlement at Brough, in the Trent valley, suggest that this site was occupied in the 5th century but that a similar range of fabrics occur in the parts of the site occupied at that time and in the slightly later, late 5th to 6th-century, settlement. These wares include several found at Ruskington: CHARN, CLSST, FE, RQ and SSTMG. At the other end of the period, various wares of early Anglo-Saxon character have been found associated with Maxey-type wares of mid Saxon date. These include: CHARN, ESGS, LIM and SSTMG. Thus, at least two of the fabrics found at Ruskington occur throughout the Early Anglo-Saxon period and are thus impossible to date closely.

The single stamped sherd is likely to be of 6th-century date, although one would really need to see the overall decorative scheme to be sure. The globular form of the jars, with a simple rounded rim, is more characteristic of the 5th to 6th centuries than later, when everted rims and pronounced shoulders on bag-shaped jars are more common.

Taking all of these clues together, it is likely that the early Anglo-Saxon Ruskington pottery dates to the 6th/7th centuries.

Location of settlement

In some cases, a trench produced only a few sherds of early Anglo-Saxon pottery, from unstratified or post-Saxon deposits such as the fills of medieval plough furrows (Table 2). The size of these sherds varies from trench to trench and in most cases they were less than 10gm mean weight. Four trenches, however, produced larger sherds: Trenches 1, 2, 3 and 8. Thus, in evaluating the significance of the spread of Anglo-Saxon pottery finds the relative size of the sherds ought to be considered. In general, however, these finds seem to indicate a similar scatter across the trenches.

Table 5

TRENCH	Sum of Nosh	Sum of NoV	Sum of Weight
1	4	4	164
2	2	2	46
3	2	2	32
5	2	2	18
6	1	1	2
7	1	1	4
8	5	5	101
9	2	2	7
10	1	1	4
12	2	2	13
13	15	13	96
14	7	7	42
15	1	1	3
16	3	3	20

Stratified material, however, is more restricted in its distribution (Table 3). It also tends to be better preserved, with mean sherd weights of over 10gm in five trenches (1, 5, 9, 13 and 14). The sherds from features in Trenches 8, 10 and 12 also include a higher proportion of abraded sherds and it is therefore possible that the pottery from features in these trenches is actually residual and that the features are of post-Anglo-Saxon date.

Table 6

TRENCH	Sum of Nosh	Sum of NoV	Sum of Weight
1	34	26	1077
5	2	2	55
8	21	16	95
9	18	15	246
10	4	4	14
11	1	1	5
12	5	5	33
13	4	4	94
14	9	9	102
Grand Total	98	82	1721

Regional importance

The Sleaford area is emerging as an importance focus of early Anglo-Saxon activity, at a time when there is little evidence at all for occupation in or around Lincoln. This site is one of a number which indicate a high density of settlement and, presumably, agricultural exploitation of the light soils on the dip slope of the Jurassic ridge, situated between upland grazing land to the west and the fen edge to the east. In itself, the site is probably of no great significance, but in comparison to several previously-discovered sites it does have one unusual feature: much of the pottery has not undergone obvious alteration after burial and this would allow analysis of the fabrics to be carried out with a good chance of a successful outcome.

Potential for characterisation studies

Most of the Anglo-Saxon pottery from the site is of local manufacture, as determined by binocular microscope study. It would be possible to subdivide the local wares into different fabric groups and, with luck and a programme of sampling and analysis of local clay and sand sources, it might be possible to pinpoint the production sites for this local pottery and to demonstrate which sites were sharing the same resources. This is, however, a large project in which this Ruskington material could play an important part. However, there are a few vessels in the collection for which a local source is less likely and by taking a small number of samples for thin section and chemical analysis it would be possible to determine whether or not they were unusual local products or, as suspected, made outside of the area and traded in. These wares include CHARN, RQ, and SSTMG.

Potential for typological studies

Several of the sherds are of sufficient size to reconstruct the size and shape of the parent vessel. However, all but one are undecorated vessels and the total number of vessels represented is quite low, so that even further detailed study will not establish the full range of vessel forms used at the site. However, there are a number of rim sherds present, several of which are sufficiently large to reveal the orientation and general profile of the vessels from which they came.

Recommendations

Retention

All of the pottery should be retained for future study.

Fabric analysis

Samples of CHARN, FE, LIM, RQ and SSTMG should be thin sectioned and chemical analyses of their compositions obtained. This would enable the visual identifications to be tested and the fabrics compared with those from other sites in Lincolnshire and the neighbouring counties. A minimum of seven samples is recommended.

Context	TRENCH	REFNO	Action	Cname	Form	Part	Description	Nosh	NoV	Weight	Use	Condition
104	1			CLSST	JAR	BS	BURNISHING EXT	1	1	135		
104	1			CLSST	JAR	BS		1	1	3		
104	1			CLSST	JAR	BS		1	1	40	SOOTED INT	
112	1			CLSST	JAR	BS		1	1	10	SOOTED INT	
114 A+B	1			CLSST	JAR	BS		1	1	20		
114 A+B	1			CLSST	JAR	BS		1	1	85	SOOTED INT	
115	1		DR13	CLSST	JAR	R		1	1	38	SOOTED INT	
115	1			LIM	JAR	BS		1	1	21	SOOTED INT/EXT	
124	1		DR14	CLSST	JAR	R		1	1	15	SOOTED INT/EXT	
150	1			CLSST	JAR	BS		1	1	3		
150	1			CLSST	JAR	BS		2	1	36		
153	1		DR5	CLSST	JAR	R	INT SCRAPING	1	1	51		
153	1			CLSST	JAR	BS		2	1	13	SOOTED EXT	
159	1		DR6	CLSST	JAR	R	EXT BURNISHING	1	1	14		
162	1		DR4	CLSST	JAR	R	EXT BURNISHING	1	1	27		
162	1			CLSST	JAR	BS		1	1	29		
162	1			CLSST	JAR	BS		3	1	151	LEACHED INT; WHITE DEP INT	
162	1			CLSST	JAR	BS		2	2	20	SOOTED INT	
167	1			CLSST	JAR	BS		2	1	37		
167	1		DR2	CLSST	JAR	R; BS		2	1	25		
167	1		DR1	CLSST	LARGE JAR	R		1	1	167		
167	1		DR3	CLSST	JAR	B	ROUNDED BASE	1	1	67	SOOTED INT	
167	1			CLSST	JAR	BS		1	1	28	WHITE DEP INT	
168	1			CLSST	JAR	BS		1	1	15	WHITE DEP INT	
168	1			LIM	JAR	BS		3	1	184	SOOTED EXT	
172	1	21		CHARN	JAR	BS		1	1	1		
172	1			CLSST	JAR	BS		1	1	3		ABRA
172	1	21		CLSST	JAR	BS		1	1	1		
172	1	21		ECHAFF	JAR	BS		1	1	2		
200	2			CHARN	JAR	BS		1	1	13	SOME INT LEACHING	

Context	TRENCH	REFNO	Action	Cname	Form	Part	Description	Nosh	NoV	Weight	Use	Condition
200	2			CLSST	LARGE JAR	BS		1	1	33		ABRA
300	3			CLSST	JAR	B	VERY OBTUSE ANGLED BASE	1	1	8	SOOTED INT	
321	3			CLSST	JAR	BS		1	1	24		ABRA
500	5			CLSST	JAR	BS		1	1	13	SOOTED INT	
506	5			CLSST	JAR	BS	BURNISHED EXT	1	1	12	SOOTED INT	
506	5			CLSST	JAR	BS		1	1	43	SOOTED INT	
513	5			CLSST	JAR	BS		1	1	5		ABRA
600	6			CLSST	JAR	BS		1	1	2		ABRA
700	7			CLSST	JAR	BS		1	1	4	SOOTED INT	
800	8			CHARN	JAR	BS		1	1	3		
800	8			CLSST	JAR	BS		1	1	12		
800	8			CLSST	JAR	BS		1	1	5	SOOTED INT	
800	8			CLSST	JAR	BS	SCRAPED EXT	1	1	44	SOOTED INT/LEACHED INT	
800	8		DR12	SSTMG	JAR	R	SCRAPED INT	1	1	37		
801	8			CHARN	JAR	BS		3	1	8		
801	8	4		CHARN	JAR	BS		1	1	1		
801	8			CHARN	JAR	BS		3	2	11	SOOTED INT	
801	8			CLSST	JAR	BS		1	1	1		
801	8			CLSST	JAR	R		1	1	5		
801	8			CLSST	JAR	BS		1	1	10	SOOTED INT	
801	8			ESGS	JAR	BS		1	1	8		ABRA
801	8			LIM	JAR	BS		2	2	10		ABRA
801	8			RQ	JAR	BS		2	2	13		
801	8			RQ+CHAFF+LIM	JAR	BS		1	1	1		
804	8			CLSST	JAR	BS		3	1	8		
804	8			CLSST	JAR	BS	SCRAPED EXT	1	1	15	SOOTED INT	
806	8			CLSST	JAR	R		1	1	4		
900	9			CLSST	JAR	BS	EXT SCRAPING	1	1	3		
900	9			CLSST	JAR	BS		1	1	4		
903	9		DR8	CLSST	JAR	BS	INT BURNISHING; EXT STAMPED FOUR DOT DEC	1	1	12		

Context	TRENCH	REFNO	Action	Cname	Form	Part	Description	Nosh	NoV	Weight	Use	Condition
903	9			CLSST	LARGE JAR	BS		1	1	54		
903	9			CLSST	JAR	BS		6	6	99		
903	9	12		CLSST	JAR	R		1	1	3		
903	9			CLSST	JAR	BS		1	1	3	SOOTED INT	
903	9		DR9	ESAXIMP?	JAR	BS		2	1	29		
903	9			LIM	JAR	BS		1	1	12	SOOTED INT	
903	9			RQ	JAR	BS		1	1	3		
905	9			CLSST	JAR	BS		2	1	29	SOOTED EXT; WHITE DEP INT	
905	9			RQ	JAR	BS		2	1	2		
1027	10			CLSST	JAR	BS		3	3	7		
1027	10			CLSST	JAR	BS	BURNISHED EXT	1	1	4		
1033	10			FE	JAR	BS		1	1	7		ABRA
1103	11			LIM+RQ	JAR	BS		1	1	5		
1200	12			CLSST	JAR	BS		1	1	8		ABRA
1201	12			RQ	JAR	BS		1	1	5		ABRA
1209	12			CLSST	LARGE JAR	BS		1	1	13		ABRA
1209	12			CLSST	JAR	BS		1	1	3		
1209	12			FE	JAR	BS		1	1	2		ABRA
1209	12			RQ	JAR	R		1	1	7		ABRA
1213	12			CLSST	JAR	BS		1	1	8		ABRA
1300	13		DR10	CLSST	JAR	R	BURNISHED EXT	1	1	5		
1300	13			CLSST	JAR	BS		1	1	4		
1301	13			CHARN	JAR	B	ROUNDED BASE	1	1	35	SOOTED INT	
1301	13			CLSST	JAR	BS		1	1	23		
1301	13			CLSST	LARGE JAR	BS		1	1	30		
1301	13			CLSST	JAR	BS		1	1	6	SOOTED INT	
1305	13			CLSST	JAR	BS		3	3	9		ABRA
1312	13			CLSST	JAR	BS		1	1	1		ABRA
1312	13			SSTMG	JAR	BS		1	1	3		

Context	TRENCH	REFNO	Action	Cname	Form	Part	Description	Nosh	NoV	Weight	Use	Condition
1315	13			CLSST	JAR	BS	SCRAPED EXT	1	1	14		
1315	13			CLSST	JAR	BS		2	2	10		
1315	13			CLSST	JAR	BS		3	1	34	SOME INT LEACHING	
1315	13			CLSST	JAR	BS		1	1	9	SOOTED EXT; SOME INT LEACHING	
1315	13		DR11	CLSST	JAR	R		1	1	7	SOOTED INT/EXT	
1412	14		DR7	CLSST	JAR	R		1	1	37	SOOTED INT	
1412	14			CLSST	JAR	BS		1	1	10	SOOTED INT	
1412	14			LIM	JAR	BS		1	1	14	SOOTED INT	
1414	14			CLSST	JAR	BS	EXT BURNISHING; EXT SCRAPING	1	1	11		
1414	14			CLSST	JAR	BS		1	1	17	SOOTED INT/EXT	
1414	14			LIM	JAR	BS		1	1	1		
1414	14			RQ	JAR	BS		1	1	7		
1415	14			CLSST	JAR	BS		1	1	2	SOOTED INT	ABRA
1501	15			CLSST	JAR	BS		1	1	3		ABRA
1603	16			CLSST	JAR	BS		3	3	20	SOOTED INT	

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Appendix 6

THE MEDIEVAL AND LATER POTTERY

By Jane Young

context	cname	full name	sub fabric	form type	sherds	vessels	weight	decoration	part	description	date
0300	LLSW	Late Lincoln Glazed ware		large jug	1	1	62		handle	multi grooved strap;pierced;very abraded;? ID or is this POTTG	late 14th to 15th
0300	BERTH	Brown glazed earthenware		?	1	1	4		applied part		late 18th to 20th
0400	BERTH	Brown glazed earthenware		large jar/bowl	1	1	92		BS		18th to 19th
0400	BL	Black-glazed wares	MP type	jug/jar	1	1	10		BS		17th to 18th
0500	BL	Black-glazed wares		?	1	1	7		base	vitrified	17th to 18th
0500	BERTH	Brown glazed earthenware		hollow	1	1	2		BS	ext green glaze	18th to 19th
0500	GRIMT	Grimston-type ware		jug	1	1	113		handle	grooved rod handle;abraded;reduced glaze ?;reduced with oxid surfs abun fine quartz comm fine black fe occ ca	13th to 14th
0502	TOY	Toynton Medieval Ware		jar	1	1	25		BS	slightly abraded	late 13th to 15th
0513	SLST	South Lincolnshire Shell Tempered ware		?	1	1	4		BS		13th to 15th
0600	BL	Black-glazed wares		ointment jar ?	1	1	9		base		18th to 19th
0600	POTTG	Potterhanworth Glazed ware		jug	1	1	104		handle	rod handle;abraded;2 deep ypper thumbings;cu glaze;?ID or LSW3 lighter firing	late 13th to 14th
0600	NOTS	Nottingham stoneware		jar ?	1	1	8	machine decoration	BS		18th to 19th
0700	TPW	Transfer printed ware		flat	1	1	7		BS		19th to 20th
0700	TB	Toynton/Bolingbroke wares		?	1	1	2		BS	abraded	mid 15th to 16th

context	cname	full name	sub fabric	form type	sherds	vessels	weight	decoration	part	description	date
0700	PORC	Porcelain		jar ?	1	1	20		rim		19th to 20th
0700	TPW	Transfer printed ware		cup	1	1	5		rim	pearlware ?	19th
0700	WHITE	Modern whiteware		hollow	1	1	2		BS		19th to 20th
0700	BOU	Bourne D ware		jug/jar	1	1	12		BS	leached & abraded	mid 15th to 16th
0800	WHITE	Modern whiteware		hollow	1	1	6		rim		19th to 20th
0800	BL	Black-glazed wares		small jar ?	1	1	2		rim		18th to 19th
0802	NCBW	19th-century Buff ware		hollow	1	1	2		BS		late 18th to 20th
0900	CIST	Cistercian-type ware		cup ?	1	1	2		BS		mid 15th to 16th
1000	CREA	Creamware		?	1	1	2		BS	flake	late 18th to 19th
1100	MISC	Unidentified types	OX/R/OX;fine sandy;hard	small jar	1	1	25		rim	soot on rim edge & over one break;abundant fine quartz mod fe clay pellets;hollow everted rim sim to some ST rims;salt surfacing ?	10th to 14th or Roman
1200	MEDX	Non Local Medieval Fabrics	OX/R/OX;fine sandy;hard	jar ?	1	1	16		BS	very abraded;thick internal deposit;abundant fine quartz sparse ca mod fe;ext amber glaze	13th to 14th
1200	NCBW	19th-century Buff ware		bowl ?	1	1	4		BS	white int glaze	19th to 20th
1200	TPW	Transfer printed ware		flat	1	1	4		base		19th to 20th
1202	NOTGL	Nottingham glazed ware Light Bodied		jug	1	1	63		UHJ		13th

context	cname	full name	sub fabric	form type	sherds	vessels	weight	decoration	part	description	date
1203	SLST	South Lincolnshire Shell Tempered ware		bowl ?	1	1	33		base	slightly abraded	13th to 15th
1211	MEDX	Non Local Medieval Fabrics	light reduced with oxid edges;med sandy;hard	jug/jar	2	1	17		BS	comm med subround to round quartz occ larger;mod fe	13th to 14th
1300	TOY	Toynton Medieval Ware		jug ?	1	1	34		base	very abraded;? ID or TB;basal wire marks ?	late 13th to 15th
1300	ENGS	Unspecified English Stoneware		jar ?	1	1	2		BS	white	19th to 20th
1300	BL	Black-glazed wares		?	1	1	7		BS		18th to 19th
1300	BL	Black-glazed wares		large bowl	1	1	29		rim		18th to 19th
1300	ENGS	Unspecified English Stoneware		bottle	1	1	27		base		19th to 20th
1300	WHITE	Modern whiteware		jar ?	2	1	14		BS	fluted	late 19th to 20th
1300	TPW	Transfer printed ware		?	1	1	2		BS	chipped	19th to 20th
1700	ENGS	Unspecified English Stoneware		jar ?	1	1	14		BS		19th to 20th
1800	TPW	Transfer printed ware		plate	1	1	13		rim		19th to 20th

Appendix 7

THE ANIMAL BONE
By James Rackham

Ruskington – RFR04

Introduction

During evaluation excavations by Archaeological Project Services at Ruskington a relatively large assemblage of animal bones was recovered by hand excavation, comprising 1888 bone fragments weighing 31.744 kilogrammes. The assemblage derives largely from middle Saxon deposits, with a small assemblage of middle Iron Age and medieval material and a somewhat larger group of undated or unstratified bone (Table 1). The bone has been assessed in the following manner. The bone from each context was scanned and a record of the following information made. The weight of bone and number of fragments, the general condition of the bone on a scale of 1-5 (see Key with the catalogue); the number of bones for which two or more measurements could be recorded; whether cattle, sheep or pig were present; the number of mandibles or maxillae of cattle, sheep or pig with sufficient teeth for an age estimate at death; a record of the bone elements identified to each species during the scanning (but no quantification); a record of other taxa and bone elements present; and occasional comments – for instance presence of neonates, calves, lambs or skeletons in the context. The catalogue is attached as an Appendix to this report. Ovicaprid remains were recorded as sheep throughout except where horn cores were present and references to sheep below should be taken as either sheep or goat. No bones identifiable as goat were present.

Table 1. **Number and weight of hand collected bone fragments summarised by preliminary phasing.**

Preliminary phasing	Fragment nos	Weight in g
Middle Iron Age	68	353
Iron Age	1	78
Roman?	1	2
Mid Saxon	998	13549
Mid Saxon?	222	3231
Saxon or later	7	56
Saxon/medieval?	67	2197
Undated/Saxon?	13	96
Medieval	4	83
Medieval?	38	1164
Undated	144	3972
Unstratified	325	6963
Totals	1888	31744

Of the 1888 fragments that have been recovered nearly 65% are from deposits assignable to middle Saxon deposits. The Iron Age contexts have produced less than 4% of the assemblage and are less well preserved (Table 2) than the bone from later deposits at the site. Bone from probable medieval contexts comprise less than 3% of the assemblage but a fairly large proportion, 25%, is either undated or unstratified. The data on the preservation condition of the bone in each context suggests that the bulk of this latter bone is likely to be Saxon or later since all the Iron Age material has been classified as condition 3 – ie surface etched, eroded and very brittle, in contrast to the Saxon material which is in good condition (Table 2).

Table 2. **Number of contexts allocated to the different preservation conditions, by preliminary phasing.**

Preliminary date	cond.- 3	cond.- 4
Middle Iron Age	6	
Iron Age	1	
Roman?		1
Mid Saxon	5	34
Mid Saxon?		5
Saxon or later		1
Saxon/medieval?		2
Undated/Saxon?		1
Medieval	1	2
Medieval?	2	4
Undated	6	16
Unstratified	4	22

An initial idea of the importance of each species can be obtained by assessing the frequency of contexts in which each is found (Table 3). Cattle occur in a much greater number of middle Saxon contexts than the other species. Sheep follow, then pig, horse and goose. The number of Iron Age contexts is too small to draw any reliable inferences. The undated and unstratified contexts show broadly similar proportions to the Saxon contexts.

Table 3. **Number of contexts in which each species was identified.**

date	Cattle	Sheep/goat	Pig	Horse	dog	chicken	goose
Middle Iron Age	4	3		1	1		
Iron Age	1						
Middle Saxon	34	18 (1sk)	13	6			1
Middle Saxon?	5	4	3	1		1	
Saxon or later	1						
Undated/Saxon?	1						
Saxon/Medieval?	2	2		1			
Medieval	2						
Medieval?	2	1		2			
Undated	15	6	1	5	1sk		
Unstratified	20	11	6	2	1		1

Sk –partial skeleton

The measurable and ageable bones in the assemblage are largely limited to the Saxon contexts (Table 4), although a number of undated and unstratified contexts have produced a few. Only cattle and sheep/goat jaws occur with sufficient frequency to make any inferences of the cull structure, and therefore husbandry, of the animals.

Table 4. **Number of measurable bones and tooth rows in the assemblage.**

date	Measureable bones	No. cattle tooth rows	No. sheep tooth rows	No. Pig tooth rows
Middle Iron Age			2	
Middle Saxon	43	13	10	3
Middle Saxon ?	13	3	3	2
Saxon or later		1		
Saxon/medieval?	5	2	2	
Medieval		1		
Medieval?	3	2		
Undated	11	2	1	
Unstratified	24	9	3	

Material from samples

Animal bone was recovered from eleven samples. These included cattle and sheep/goat bones and totalled 57 bone fragments. Cattle dominated in these samples. The sample from middle Saxon context 172 includes a number of juvenile cattle bones which might derive from one individual. There is an absence of small bones in these collections and it may be that the smallest sample residues (those less than 5 or 2mm) were not sorted for bones, which could explain the absence of fish bones.

Bone small finds

A single unstratified bone find was collected from trench 16. This is the distal (pointed) end of a bone pin or needle. The bone object is likely to have been manufactured from the shaft of a cattle sized long bone.

Discussion

This is an unusually large assemblage of animal bone to be recovered from an evaluation and suggests that the site has fairly intensive middle Saxon activity with a considerable amount of domestic occupation debris. This period is clearly the most important on the site and an excavation programme is likely to produce a large and extremely useful bone assemblage that can be compared with contemporary sites at Holdingham, Quarrington and the recently excavated site at Fishtoft, Boston. The preservation of the bone in the Saxon contexts is good, and the number of measurable and ageable bones that could be recovered from such an excavation indicates that the site has considerable potential for understanding the husbandry and economics of the site in the middle Saxon period. Large bone assemblages of this date are relatively uncommon and this therefore constitutes an important site. The absence of fish bones from the samples collected during the evaluation is unusual since freshwater fish and eels are generally fairly common on sites of this period, and bird bones also appear to be poorly represented. Both these groups are generally recovered from soil samples and any excavation should ensure a full programme of soil sampling for the recovery of this element of the fauna as well as the charred plant and industrial waste also typically recovered.

2nd February 2005

THE ENVIRONMENTAL ARCHAEOLOGY CONSULTANCY

Key to codes used in the cataloguing of animal bones and marine shells

SPECIES:

SPECIES CODE			SPECIES CODE	
MAN	human		DOVE	Dove species
EQU	Horse		FER	Feral dove
EQSZ	Horse size		PART	Partridge
BOS	Cattle		SWAN?	Swan?
BOSL	Cattle-large		WOOD	Woodcock
CSZ	cattle size		CURL	Curlew
SUS	Pig		WADE	wader
OVCA	sheep or goat		CROK	Crow or rook
OVI	Sheep		CORV	Crow or rook
CRA	Goat		JACK	Jackdaw
SSZ	sheep size		OWL	Owl indet.
FEL	Cat		BUZZ	Buzzard
CAN	Dog		GULL	Gull sp.
AUR	Aurochs			
AUR?	Aurochs?		TURD	Turdidae
CER	red deer		BIRD	Identifiable but not id'd
DAM	Fallow deer		PASS	Passerine
CLS	roe deer		LBIRD	Large bird
LEP	Hare		UNIB	Bird indet
ORC	Rabbit			
LAG	Lagomorph		FROG	Frog
CARN	Carnivore		FRTO	Frog or toad
FOX	Fox			
POLE	Polecat/ferret			
WEA	weasel		GAD	Gadid, cod family
BADG	Badger		LING	Ling
SEAL	seal		HADD	Haddock
SQU?	Squirrel?		RAY	ray
BEAV	Beaver		FISH	Fish
ROD	Rodent		UNIF	Fish indet
RAT	Rat			
AGR	Field vole		OYS	oyster
ARV	Water vole		COK	Cockle
MUS	House mouse		MUSS	Common Mussel
SORA	Common shrew		WHELK	Common whelk
MOLE	Mole		HEL	Helix aspersa
SMA	Small mammal		HELIX	Helix sp.
UNI	Unknown		HELN	Helix nemoralis
			SNAIL	snail
CHIK	Chicken			
CHKZ	Chicken size		FOSS	Fossil bone
GOOS	Goose, dom			
GOOS?	Goose, dom.?			
GSSZ	Goose size			
GSSP	Goose species			
GOSZ	Goose, poss. Wild			
DUCK	Duck, domestic sp.			
DUCK?	Duck?			
DKSP	Duck species			
DSP	Duck species indet			
MALL	Duck, dom.			
TURK	Turkey			

BONE ELEMENT:

BONE CODE		BONE CODE	
SKEL	skeleton	SCP	scapula
SKL	skull	HUM	humerus
ANT	antler	RAD	radius
ANT?	antler?	ULN	ulna
ATT	antler tine	RUL	radius and ulna
HC	horn core	C/T	carpus/tarsus
TEMP	temporal	C23	carpus 2+3
FRNT	frontal	CAR	carpus
PET	petrous	CPA	accessory carpal
PAR	parietal	CPI	intermediate carpal
OCIP	occipital	CPR	radial carpal
ZYG	zygomatic	CPU	ulnal carpal
NAS	nasal	MTC	metacarpus
PMX	premaxilla	MC1-5	metacarpus 1-5
MAN	mandible	MTP	metapodial
MNT	mandibular tooth	MPL	lateral metapodial
DLI	deciduous lower incisor	INN	innominate
DLPM1-4	deciduous lower premolar 1-4	ILM	ilium
LI	lower incisor (and 1-3)	PUB	pubis
LC	lower canine	ISH	ischium
LPM1-LPM4	lower premolar 1-4	FEM	femur
LM1-LM3	lower molar 1 - molar 3	PAT	patella
MAX	maxilla	TIB	tibia
DUI	deciduous upper incisor	FIB	fibula
UI	upper incisor (1-3)	LML	lateral malleolus
UC	upper canine	AST	astragalus
DUPM	deciduous upper premolar	CAL	calcaneum
DUPM1-4	deciduous upper premolar 1-4	CQ	centroquartal
UPM1-UPM4	upper premolar 1-4	TAR3	tarsus 3
UM1-UM3	upper molar 1 - molar 3	T4	tarsus 4
MXT	maxillary tooth	TAR	tarsus
TTH	indeterminate tooth	MTT	metatarsus
INC	incisor	MT1-5	metatarsus 1-5
HYD	hyoid	MTL	lateral metatarsus
ATL	atlas	SES	sesamoid
AXI	axis	PH1	1st phalanx
CEV	cervical vertebra (and 3-7)	PH2	2nd phalanx
TRV	thoracic vertebra (and 1-13)	PH3	3rd phalanx
LMV	lumbar vertebra	PHL	lateral phalanx
SAC	sacrum	LBF	long bone
CDV	caudal vertebra	UNI	unidentified
VER	vertebra		
STN	sternum	CLV	clavicle
CC	costal cartilage	COR	coracoid
RIB1	first rib (2 etc)	CMP	carpo-metacarpus
RIB	rib	CMC	carpo-metacarpus
		WPH1-3	wing phalanges 1-3
URO	urostyle	WPH	wing phalanx
		LSA	lumbosacrale
DENT	dentary		
CLEI	cleithrum		
RAY	fin ray		
SHELL	shell		
UV	upper valve		
VAL	valve		

PRESERVATION: **records the condition of the bone in the following manner**

1- **enamel only surviving**
2- **bone very severely pitted and thinned, tending to break up; teeth with surface erosion and loss of cementum and dentine**
3- **surface pitting and erosion of bone, some loss of cementum and dentine on teeth**
4- **surface of bone intact, loss of organic component, material chalky, calcined or burnt**
5- **bone in good condition, probably with some organic component**

Archive Assessment Catalogue of hand collected animal bone from Ruskington – RFR04

site-code	cont.	weight	frag nos	condition	measurability	cattle	bos tooth row	bos bones	sheep	ov tooth row	ov bones	pig	sus tooth row	sus bones	others	bird	fish	comments	date
RFR04	104	489	24	4	7	Y	0	TIB,SKL,RIB,FEM	Y	3	MTT,MTC,TIB, RAD,MAN,ULN, HUM, INN,RIB		0					POSS PART SKELY SHEEP	sax
RFR04	104	613	75	4	9	Y	0	MAX,SKL,SCP	Y	1	ATL,CEV,HUM, TRV,LMV,ULN, RAD,TIB,PH1,CAL ,AST,INN,TIB,SCP		0					PARTIAL SKELY SHEEP	sax
RFR04	104	143	2	4	0	Y	1	MAN,SCP		0			0						sax
RFR04	104	111	5	4	0				Y		CAL	Y	1	MAN					sax
RFR04	105	1298	12	4	3	Y	1	LM,MTC,HUM,TIB, RAD	Y	0	RAD		0		EQU-TIB,INN,LI				und
RFR04	112	786	26	4	1	Y	2	MAN,RAD,MTT, SKL,HUM		0			0			GOOS-HUM			u/s
RFR04	117	946	18	4	1	Y	0	RAD,HUM,MAN, RIB,TRV,FEM	Y	1	MAX,INN		0						und
RFR04	117	324	5	4	1	Y	0	RAD,INN,FEM, CAL	Y	0	AXI		0						und
RFR04	122	20	2	4	0		0			0		Y	0	UC					sax
RFR04	124	13	1	4	0		0			0			0						sax
RFR04	150	559	11	4	1	Y	1	MAN,SKL,SCP, RIB,HUM		0			0		EQU-MAN,PH1				sax
RFR04	153	111	7	4	0	Y	1	MAX,MAN		0		Y	0	HUM					sax
RFR04	162	689	45	4	4	Y	1	HC,RIB,PH1,AST, MAN,SKL	Y	2	MAX,MAN,	Y	0	FEM					sax
RFR04	162	137	4	4	0	Y	0	TIB		0			0						sax
RFR04	162	981	25	4	1	Y	1	MAX,HUM,TIB,INN ,MTT,MTC,RAD		0			0		EQU-MTC				sax
RFR04	167	445	7	4	4	Y	0	HUM,CAL	Y	1	MAN,TIB		0						u/s
RFR04	167	304	11	4	1	Y	0	MTT,TIB,ULN, HUM,SKL	Y	0	INN	Y	0	UC					u/s
RFR04	169	6	3	4	0		0		Y	0	MAN,PMX		0						sax
RFR04	172	767	19	4	2	Y	1	MAN,SCP,MTC, PH1,PH2,PMX, SKL,HUM,CAL,TI B	Y	0	INN,TIB		0						sax

RFR04	172	241	1	4	1	Y	0	MTT		0			0					EXPANDED CONDYLE	sax
RFR04	172	842	29	4	1	Y	2	MAX,FEM,SKL, SCP,RAD,PH2, PH1,CAL,MAN	Y	0	MTC,MTT,SCP	Y	0	LI					sax
RFR04	172	688	27	4	2	Y	0	HC,SCP,INN,RIB, MAN		0			0						sax
RFR04	200	18	1	4	0	Y	0	RIB		0			0						u/s

site-code	cont.	weight	frag nos	condition	measurability	cattle	bos tooth row	bos bones	sheep	ov tooth row	ov bones	pig	sus tooth row	sus bones	others	bird	fish	comments	date
RFR04	204	2	1	4											CSZ-RIB				Rom?
RFR04	305	159	18	3	0	Y	0	ULN,UPM2	Y	1	MAN,UM		0		EQU-FEM;CAN-MAN				mia
RFR04	307	47	4	3	0	Y	0	TIB		0			0						mia
RFR04	308	9	3	3	0		0		Y	0	SKL		0						mia
RFR04	309	28	20	3	0	Y	0	RIB		0			0					POOR PRES	mia
RFR04	320	56	19	3	0		0		Y	1	LM3,MTT,AST		0						mia
RFR04	400	41	9	3	0		0		Y	1	MTC,MAX,CEV, TRV		0						u/s
RFR04	400	28	3	4	1				Y		MTC,ULN	Y		MAN					u/s
RFR04	500	27	2	4	1	Y	0	TIB	Y	0	TIB		0						u/s
RFR04	506	210	17	4	0	Y	0	HUM,FEM,SKL, MTT	Y	0	HUM		0						sax
RFR04	508	64	1	4	0	Y	1	MAN		0			0						med
RFR04	511	17	1	4	0	Y	0	LM		0			0						med
RFR04	513	2	2	3	0		0			0			0						med
RFR04	600	33	1	4	0	Y	0	RAD		0			0						u/s
RFR04	608	54	4	3	0	Y	0	FEM		0			0						mia
RFR04	616	2	1	4	0		0			0			0						und
RFR04	700	26	4	4	0	Y	0	TTH		0			0						u/s
RFR04	707	314	17	4	1	Y	1	UM,MTC,INN,SCP		0			0						u/s
RFR04	800	1339	55	4	7	Y	1	HUM,TIB,MTT,CQ, FEM,INN,MTC, MAND,LMV,SCP	Y	0	TIB,MTT,RAD		0		EQU-ATL,MTC				u/s
RFR04	800	225	16	4	0	Y	1	UM,CAL,RIB,MTC, LPM4,	Y	0	TIB		0						u/s
RFR04	801	44	1	4	0	Y	0	CQ		0			0						sax
RFR04	801	653	46	4	1	Y	0	MAN,CAL,INN,MTT,SKL,SCP,TTH	Y	0	MAN,RAD		0		EQU-TIB	GOOS-PH1			sax
RFR04	802	2	1	4	0		0			0			0						u/s
RFR04	806	260	15	4	2	Y	1	MTT,CAL,HUM, LM3	Y	0	AST		0						sax?
RFR04	808	1	2	4	0		0			0			0						und
RFR04	900	33	7	4	0	Y	0	SCP		0		Y	0	FEM					u/s

RFR04	900	123	6	4	1	Y	0	HC,SCP,RIB		0			0						u/s
RFR04	903	676	114	4	4	Y	0	RAD,MTT,TRV, PH3,TIB,PH1	Y	1	HC,TIB,INN,MAN, RIB	Y	1	MAX,SKL,LM V,	EQU-TTH	CHIK-HUM			sax?
RFR04	903	1805	70	4	5	Y	1	MAN,AST,INN,RIB ,HUM,MTC,CEV, TIB,ULN,FEM,PH1 ,SCP,SKL,CAL	Y	1	TIB,HUM,RAD, UM3,MAN,HC	Y	1	FEM,SKL,MA X,INN,TRV	EQU-LC				sax?

site-code	cont.	weigh t	frag nos	con ditio n	mea sura bilit y	cattle	bos toot h row	bos bones	shee p	ov toot h row	ov bones	pig	sus toot h row	sus bones	others	bird	fish	comments	date
RFR04	903	169	18	4	1	Y	1	UM3,SKL,MAN, FEM	Y	1	MTT,HUM,MAN		0						sax?
RFR04	903	321	5	4	1	Y	0	SKL,TIB,HUM		0		Y	0	LMV					sax?
RFR04	905	91	1	4	1	Y	0	HC		0			0						sax
RFR04	999	389	8	3	1	Y	0	RAD,TRV		0			0					TR15-US	u/s
RFR04	1000	82	2	3	0	Y	0	TIB,FEM		0			0						u/s
RFR04	1017	3	2	4	0		0			0		Y	0	LI					u/s
RFR04	1025	48	3	3	0	Y	0	SKL,LMV		0			0						und
RFR04	1027	97	20	3	0	Y	0	MTT,INN,MAN,RIB	Y	0	UPM		0						sax
RFR04	1029	22	1	3	0	Y	0	FEM		0			0						und
RFR04	1038	29	8	3	0	Y	0	MAN		0			0						und
RFR04	1103	116	14	3	1				Y	0	TIB,INN,TRV	Y	0	MAN					sax
RFR04	1107	78	1	3	0	Y	0	MTT		0			0						ia
RFR04	1200	10	2	4	0		0			0			0						u/s
RFR04	1202	22	1	3	0		0			0			0						med?
RFR04	1204	239	1	4	0		0			0			0		EQU-TIB				med?
RFR04	1207	5	1	4	0		0			0			0						und
RFR04	1209	354	38	3	0	Y	1	LM2,HUM,LM3, MTT		0			0		EQU-MAN				sax
RFR04	1211	62	0	3	0		0		Y	0	TTH		0		EQU-SCP				med?
RFR04	1213	10	3	4	0	Y	0	UPM		0			0						sax
RFR04	1300	190	9	4	0	Y	0	CEV,RIB		0			0		EQU-TRV,LM				u/s
RFR04	1301	1062	64	4	2	Y	1	MAN,MTC,SKL, RIB,INN		0			0		EQU-MAX,LMV, UM,MAN				sax
RFR04	1301	591	66	4	1	Y	0	TRV,HUM,AST, SKL,PH1,RIB,FEM		0			0						sax
RFR04	1301	713	117	4	1	Y	1	LM,SKL,RIB,FEM, SCP,MTT	Y	1	MAN,RAD		0		EQU-MAN,LMV,				sax

															SAC					
RFR04	1301	140	42	4	0	Y	0	MAN,RIB		0			0		EQU-LM					sax
RFR04	1307	664	21	4	1	Y	0	MTC,HUM,LMV, TRV,MAN,FEM	Y	1	MAN		0		EQU-FEM					sax/med ?
RFR04	1307	1533	46	4	4	Y	2	MAN,MTC,CAL, ULN,INN,HUM, SKL,MTT,RIB,SCP ,AXI,CEV	Y	1	MAN,HUM,		0							sax/med ?
RFR04	1311	67	18	4	0	Y	1	DUP3,RIB		0			0							med?
RFR04	1311	771	17	4	3	Y	1	MAN,SCP,RAD,AS T,TIB,HUM,MAX		0			0							med?
RFR04	1312	3	1	4																Med?

site-code	cont.	weight	frag nos	condition	measurability	cattle	bos tooth row	bos bones	sheep	ov tooth row	ov bones	pig	sus tooth row	sus bones	others	bird	fish	comments	date
RFR04	1400	768	40	4	2	Y	1	MAN,ULN,HUM, CAL,TIB,RIB,AXI, ATL,SCP,MTT	Y	0	MTT	Y	0	HUM,LI					u/s
RFR04	1410	149	11	4	1	Y	0	TIB,LI,MTC		0		Y	0	LC					sax
RFR04	1410	74	6	3	0	Y	0	LMV	Y	0	FEM	Y	0	LI					sax
RFR04	1411	149	15	4	0	Y	0	UM,CAL,RAD,SKL	Y	1	LM3		0						sax
RFR04	1412	602	31	4	1	Y	0	RAD,INN,TIB,SKL, MTC,MTT	Y	0	MTC,MAN,INN	Y	1	MAN,SCP	EQU-PH2,UM				sax
RFR04	1413	60	12	3	0	Y	0	RAD,ULN		0			0					CALF	sax
RFR04	1414	191	21	4	0	Y	1	MAN,PH2,SCP		0			0					LOTS MOD BREAKS	sax
RFR04	1414	721	94	4	3	Y	0	HC,PH1,MAN,LMV ,INN,HUM,SKL,CQ	Y	0	RAD,LMV,RIB	Y	0	MTT,PH1					sax
RFR04	1415	142	30	4	0	Y	0	TRV,FEM,MTT	Y	1	UM,TRV	Y	0	MAX,SKL					sax
RFR04	1416	399	28	4	2	Y	0	PH1,SKL,MAN, HUM,PH2,MTC, HYD,SCP	Y	0	MTT,TIB	Y	0	INN					sax
RFR04	1420	4	1	4	0		0			0			0						und
RFR04	1500	55	21	4	0	Y	0	SCP	Y	0	CAL		0		CAN-MAN				u/s
RFR04	1500	445	10	4	1	Y	1	MAN,TIB,SCP	Y	0	TIB		0						u/s
RFR04	1502	10	5	4	0	Y	0	LI		0			0						und
RFR04	1503	96	13	4	0	Y	0	LM3,MTP,PH1		0			0						und/sax ?
RFR04	1504	140	15	4	0	Y	1	MAX,TTH,SCP, FEM,INN	Y	0	TIB		0						und
RFR04	1507	64	4	4	0	Y	0	SKL,INN		0			0						und
RFR04	1508	60	15	4	0	Y	0	LMV	Y	0	HC,SCP,MTC		0						und
RFR04	1512	144	15	4	1	Y	0	LM,PH2,MAN		0			0		EQU-TIB				und
RFR04	1515	33	2	4	0	Y	0	SAC		0			0						und
RFR04	1516	41	2	4	0	Y	0	INN		0			0		EQU-SKL				und
RFR04	1600	1062	61	3?	2	Y	2	MAN,SKL,MTC, UM3,FEM,INN, TRV,TIB	Y	1	MAN,FEM	Y	0	MTC					u/s
RFR04	1601	56	7	4	0	Y	1	SCP,UM		0			0						sax or later
RFR04	1603	85	9	4	0	Y	0	SKL		0			0						sax
RFR04	1603	486	32	4	0	Y	1	TIB,UM,MAN,MTC,	Y	1	MAN,HUM,	Y	1	MAN					sax

								MTT											
RFR04	1700	4	1	4	0		0			0			0						u/s
RFR04	1701	711	25	4	5	Y	0	SKL,MTT,ULN		0			0		EQU-HUM;CAN-SKEL			PART SKEL DOG-HUM,FEM,TIB,ULN	und
RFR04	1704	40	3	4	0	Y	0	MAN		0			0		EQU-MPL				und
site-code	cont.	weight	frag nos	condition	measurability	cattle	bos tooth row	bos bones	sheep	ov tooth row	ov bones	pig	sus tooth row	sus bones	others	bird	fish	comments	date
RFR04	1711	11	1	3	0		0			0			0						und
RFR04	1713	24	3	3	0		0		Y	0	MTT	Y	0	LMV					und
RFR04	1800	212	3	4	1	Y	0	TIB,SKL		0			0						u/s
RFR04	1912	15	2	3	0		0			0			0						und

sitecod	context	weight	frag	con	mea	cattle	bos tooth	bos bones	sh	ov	ov bones	pig	su	sus bones	others	bird	comme	phasing
RFR04	104	111	5	4	1		0			0	CAL	Y	1	MAN				sax
RFR04	204	2	1	4	0		0			0			0		CSZ-RIB			Rom?
RFR04	400	28	3	4	1		0		Y	0	MTC,ULN	Y	0	MAN				u/s
RFR04	1312	3	1	4	0		0			0			0					med?
RFR04	1411	149	15	4	0	Y	0	UM,CAL,RAD,SKL	Y	1	LM3		0					sax
RFR04	1410	74	6	3	0	Y	0	LMV	Y	0	FEM	Y	0	LI				sax
RFR04	1500	445	10	4	1	Y	1	MAN,TIB,SCP	Y	0	TIB		0					u/s
RFR04	1503	96	13	4	0	Y	0	LM3,MTP,PH1		0			0					und/sax?
RFR04	1508	60	15	4	0	Y	0	LMV	Y	0	HC, SCP,MTC		0					und

Appendix 8

THE OTHER FINDS

By Rachael Hall, Jane Cowgill, Gary Taylor and Peter Watkin

A quantity of other artefacts, metals, brick/tile, glass, stone and burnt materials and industrial residue, comprising 450 items weighing a total of 17066g, was retrieved.

Provenance

The material was recovered from the following deposits:

(001) unstratified finds from site
(118) fill of pit or linear [117]
(162) layer of buried soil or ploughed-out features
(167) unstratified finds from Trench 1
(168) surface finds from feature, possibly a continuation of either Saxon feature [103] or feature [117]
(172) fill of Saxon pit [171]
(200) unstratified finds from Trench 2
(204) fill of possible post hole or pit [205]
(300) unstratified finds from Trench 3
(305) fill of Middle Iron Age enclosure ditch [323]
(307) fill of Middle Iron Age enclosure ditch [324]
(308) finds from either (307) or (327), fill of Middle Iron Age enclosure ditch [324] or [325]
(309) finds from either (328) or (327), fill of Middle Iron Age enclosure ditch [326] or [325]
(315) fill of probable medieval plough furrow [314]
(320) fill of Middle Iron Age pit or ditch terminus [322]
(400) unstratified finds from Trench 4
(500) unstratified finds from Trench 5
(600) unstratified finds from Trench 6
(608) fill of Middle Iron Age enclosure ditch [609]
(700) unstratified finds from Trench 7
(800) unstratified finds from Trench 8
(801) buried soil layer/Saxon midden or ploughed-out features
(900) unstratified finds from Trench 9
(903) fill of feature [904], a medieval furrow which truncates Saxon pit [906]
(905) fill of Saxon pit [906]
(913) fill of possible medieval furrow [914]
(1000) unstratified finds from Trench 10
(1027) fill of linear feature [1028], possibly Saxon, either structural or agricultural
(1044) fill of post hole [1043], part of post trench [1037]
(1100) unstratified finds from Trench 11
(1107) fill of Middle Iron Age enclosure ditch [1108]
(1200) unstratified finds from Trench 12
(1201) machining finds from buried soil layer (1205)
(1209) a fill of Saxon ditch [1210]
(1212) buried soil layer, same as (1205)
(1213) a fill of Saxon ditch [1210]
(1300) unstratified finds from Trench 13
(1301) layer, probably remains of severely truncated Saxon feature
(1305) fill of medieval furrow [1304]
(1314) fill of feature [1308], Roman or later
(1400) unstratified finds from Trench 14
(1407) secondary fill of pit [1405]
(1410)=(1414) Saxon layer, partly comprising flood/fen or marsh material
(1412) tertiary fill of Saxon ditch [1417]
(1413) secondary fill of Saxon ditch [1417]
(1415) primary fill of gully [1418]
(1416)=(1411) Saxon layer, partly comprising flood/fen or marsh material
(1420) fill of undated fire pit [1419]
(1500) unstratified finds from Trench 15
(1515) flood deposit directly overlying natural sand and gravel
(1600) unstratified finds from Trench 16
(1603) Saxon flood deposit containing dumped material
(1700) unstratified finds from Trench 17
(1800) unstratified finds from Trench 18
(1900) unstratified finds from Trench 19

Range
The range of material is detailed in the tables.

Table 1: Metals

Gary Taylor with contributions from Jane Cowgill

Context	Material	Description	No.	Wt (g)	Context Date
001	Iron	Nails, late post-medieval	7	34	19th-20th century
	Iron	Fittings, late post-medieval	3	34	
	Copper alloy	Ring, late post-medieval	1	23	
	Copper alloy	Washer, 19th-20th century	1	7	
	Copper alloy	Ruler, 19th-20th century	1	4	
	Copper alloy	Mount, 19th-20th century	1	3	
	White metal	Sheet, toy? late post-medieval	2	12	
162	Iron	C-shaped sheet	1	45	
167	Iron	Hinge, late post-medieval	1	117	Late post-medieval
	Iron	Pin	1	1	
168	Iron	Shears	1	56	Late post-medieval
300	Iron	Nail and nut & bolt	1	30	19th-20th century
500	Iron	Nails	2	141	19th-20th century
	Iron	Machinery part, embossed letter R, 19th-20th century	1	17	
600	Iron	Cast sheet, post-medieval	1	43	Post-medieval
	Iron	Nails	2	10	
700	Iron	Nails	2	13	19th-20th century
	Iron	Cast drainpipe, 19th-20th century	1	8	
800	Iron	Nail	1	4	
801	Iron	Nails	2	11	
900	Iron	Strap hinge	1	49	Late post-medieval
903	Iron	?blade fragment	2(link)	2	
905	Iron	Nail	1	3	
	Iron	C-shaped rod, broken ring/chain link/hook	1	10	
913	Iron	Sheet	1	5	
1000	Iron	Nail	1	22	
1100	Iron	Cast sheet, late post-medieval	1	176	19th-20th century
	Iron	Washer? 19th-20th century	1	32	
1200	Iron	Nails	5	47	19th-20th century
	Iron	Horseshoe, late post-medieval	1	115	
	Iron	Nut and bolt, 19th-20th century	1	66	
	Iron	Rectangular strap	1	12	
1300	Iron	Nails	5	60	
1400	Iron	Nails	5	40	
1410	Iron	L-shaped flattened rod, possible 'pot hook', Saxon?	1	39	Saxon
	Iron	Latchlifter, Saxon	1	28	
1500	Iron	Nail	1	22	
1515	Iron	Blade	1	17	
1600	Iron	Horseshoe, late post-medieval	1	205	Late post-

Context	Material	Description	No.	Wt (g)	Context Date
	Iron	Shoe/clog iron, late post-medieval	1	36	medieval
	Iron	Hook, post-medieval	1	10	
	Iron	Rectangular rod	1	88	
	Iron	Rectangular sheet	1	13	
1700	Iron	Bolt, late post-medieval	1	69	Late post-medieval
	Iron	Nail	1	3	
1800	Iron	Nails	4	24	
1900	Iron	Nail	1	5	19th-20th century
	Lead alloy	Washer, 19th-20th century	1	22	

An iron hook was retrieved from (1410). This may be part of an implement known as a 'pot hook' (from similarity to later tools that had this function) and a closely comparable example was found with other Saxon material at Ipswich (West 1998, fig 78, no 1). This hook was associated with an iron latchlifter of classic T-shaped form, the ends of the cross bar both bent back to parallel with the main shaft. When found in burials such utensils are usually associated with females (Drinkall 1998, 284).

A pair of scissors or shears was recovered from (168). These are of iron and the two arms appear to be linked by a rivet. They are likely to be late post-medieval in date, perhaps 18th or 19th century.

Table 2: Glass

Rachael Hall

Context	Description	No.	Wt (g)	Context Date
600	Small sherd of dark green cylindrical beer/wine bottle, 20th century	1	2	20th century
	Pale green window glass, with grozing along two edges, poss Roman	1	2	
	Small sherd colourless jar shoulder, 20th century	1	5	
	Small sherd of colourless bottle glass, post-medieval	1	1	
700	Small sherd of colourless cylindrical bottle with partial remains of embossed labelling, 20th century	1	8	20th century
	Small sherd of colourless bottle neck, post-medieval	1	2	
	Small sherd of blue bottle(?), post-medieval	1	1	
800	Sherd of dark green cylindrical beer/wine bottle, 20th century	1	6	20th century
	Small sherd of colourless glass, probable bottle, post-medieval	1	2	
	Small sherds of colourless glass, indeterminate, undated	1	1	
801	Black, waste droplet/slag	1	1	
900	Pale green, internal screw bottle neck with string rim	1	14	19th century
1000	Dark green, part of push-up of bottle, heavy iridescence, post-medieval	1	18	19th-20th century
	Small sherd of green glass, post-medieval	1	1	
	Sherds of colourless bottle glass, 19-20th century	1	14	
1044	Small sherd pale blue glass, indeterminate	1	1	
1200	Pale green, lid/stand, remains of embossing '..HM JOHN..'	1	84	20th century
1213	Small sherd of colourless glass, indeterminate	1	>1	

1300	Colourless window glass, 20th century	1	2	20th century
	Colourless bottle, 20th century	1	1	
1900	Colourless bottle neck, 19-20th century	1	10	19th-20th century
	Colourless window glass, 19-20th century	2	2	
	Colourless window glass with tracing of grozing, 19-20th century	1	1	

Table 3: Ceramic Building Materials

Gary Taylor

Context	Description	No.	Wt (g)	Context Date
118	Handmade brick	3	59	
172	Fired clay/brick	1	1	
200	Machine-made brick, 20th century	1	38	20th century
	Handmade brick, post-medieval	5	55	
400	Tile, oxidized throughout, late post-medieval	1	25	Late post-medieval
	Handmade brick, post-medieval	2	52	
500	Handmade brick, shaped, post-medieval	1	63	Post-medieval
	Pantile? post-medieval	1	47	
	Brick/tile, Roman	1	27	
	Tile, oxidized throughout, post-medieval	1	12	
	Tile, reduced core, post-medieval	1	23	
608	Fired clay	6	25	
700	Machine-made tile, very worn/polished on upper surface, paver, late post-medieval	1	103	Late post-medieval
	Brick/tile, post-medieval	1	20	
	Fired clay	1	15	
800	Brick/tile	2	17	
900	Tile, oxidized throughout, post-medieval	1	53	Post-medieval
	Tile	1	7	
903	Fired clay	1	5	
1000	Tile, oxidized throughout, post-medieval	1	46	Post-medieval
	Field drain, post-medieval	1	14	
	Brick/tile	2	5	
1200	Tile, oxidized throughout, post-medieval	3	143	Post-medieval
	Handmade brick, mortar adhering, post-medieval	1	17	
	Nibtile, overfired and distorted, medieval?	1	70	
1201	Pegtile, reduced core, 18mm thick, 12mm dia peghole, very worn around peghole on underside	1	94	Medieval
1209	Fired clay	1	10	
1213	Fired clay	1	1	
1300	Tile, oxidized throughout, post-medieval	1	38	Post-medieval
	Tile, reduced core, post-medieval	1	36	
	Field drain, post-medieval	1	80	
	Handmade brick, post-medieval	3	77	
	Brick/tile	2	12	
1301	Brick/tile	5	10	
1314	Brick/tile, 32mm thick	1	124	Roman
1400	Handmade brick, post-medieval	1	15	Post-medieval
	Fired clay	2	34	
1407	Fired clay	8	42	Saxon
	Fired clay loom weight, Saxon	1	41	

Context	Description	No.	Wt (g)	Context Date
1412	Fired clay	2	3	
1413	Fired clay	1	2	
1500	Brick/tile, late post-medieval	1	66	Late post-medieval
	Brick, post-medieval	1	15	
1600	Tile, oxidized throughout	3	87	Post-medieval
1900	Tile/field drain	1	50	Post-medieval

Part of a loomweight, of annular or bun-shaped form, was recovered from (1407). Such items, used to keep threads taut in weaving, are typically Saxon in date, with annular types of the Early and Middle Saxon periods and bun-shaped forms essentially Late Saxon (Hamerow 1993, 66).

Table 4: Lithics (flint)

Peter Watkin

Context	Description	No.	Wt (g)	Possible Date
307	30mm long by 20mm wide, light brown with a slight cream patina. Clear bulb of percussion and bulbar scar, no visible retouch; waste flake	1	2	Prehistoric
600	40mm long by 20mm wide, dark grey with slight cream patina. Parallel retouch along one edge from proximal to distal end; edge scraper, neolithic	1	8	Neolithic
	11mm long by 10mm wide, mid to dark grey with a slight cream patina. No visible retouch, prehistoric	1	1	
700	30mm wide by 30mm long by 12mm deep, light grey with white reformed cortex. Core used for the production of small blades or microliths, three faces show signs of flake removal.	1	10	Due to reformation of cortex a possible early date can be attributed to this. Late upper Palaeolithic to early Neolithic.
801	30mm long by 20mm wide, light grey flint with slight cream patina. Clear bulb of percussion, no visible retouch; possible waste flake	1	1	Prehistoric
900	35mm long by 25mm wide by 15mm deep, dark grey. Core used for the production of small blade type flakes, only two faces remain as all others have been broken way in antiquity	1	10	Prehistoric
1209	32mm long by 20mm wide, yellowish brown. Slight retouch along one edge but not extending along full-length; waste flake, prehistoric	1	4	Prehistoric; late Neolithic-Early Bronze Age
	20mm long by 15mm wide, light grey flint, no visible signs of retouch, prehistoric	1	1	
	25mm long by 18mm wide, light brown. Barbed and tanged arrowhead. Cross section at point is median ridged with a random flaking pattern on both faces, although the blade edges show a parallel flaking. Only one barb remains and this is of a dropped wing type. The second barb may have been lost during production or in antiquity. Due to size and type this is of a possible late Neolithic to Early Bronze Age date.	1	1	

1212	20mm long by 15mm wide, light grey with cream patina. Clear bulb of percussion, no visible retouch. Waste flake, prehistoric	1	1	Prehistoric, early Neolithic
	12mm long by 0.05 mm wide, light grey with cream patina. Microlith with clear dorsal ridge and bulb of percussion, retouch to all edges from proximal end to distal end, early neolithic	1	<1	

Other fragments of flint were returned for investigation from the following context (305), (315), (400), (903), (1200) and (1212). These had none of the attributes required to show human production. Given that the underlying geology of this area is of gravel it is possible that these were produced by natural conditions.

Due to the lack of large tools or flakes this assemblage seems to have been produced from the natural flints held within the underlying gravels. The material indicates prehistoric activity, probably of Neolithic date, in the area.

Table 6: Stone

Gary Taylor

Context	Description	No.	Wt (g)	Context Date
167	Burnt stone	1	56	
172	Burnt stone	1	3	
204	Burnt stone	5	752	
305	Burnt stone	11	837	
308	Burnt stone	3	299	
309	Burnt stone	1	85	
315	Lava quern	30	437	Roman-medieval
320	Burnt stone	120	1074	
600	Burnt stone	1	128	
608	Burnt stone, crazed	4	27	
700	Burnt ironstone	*c.* 20	1192	
801	Burnt stone	2	3062	
	Burnt limestone, possibly shaped – has form of approximately ¼ of a large disk-shape, 120mm thick, radius *c.*170-180mm, outer wall leans in so that top radius is 30-40mm less than base	1	4086	
1027	Burnt stone	2	200	
1301	Burnt stone	2	5	
1305	Ironstone, natural	1	4	
1412	Burnt stone	3	308	
1413	Burnt flint	1	13	
1414	Burnt stone	1	98	
1415	Burnt stone	1	74	
1416	Burnt stone	1	79	
1420	Burnt stone	5	24	
1600	Burnt stone	2	283	
1603	Burnt stone	1	2	
1700	Slate	1	1	Post-medieval

A quantity of burnt ironstone was collected from (700). This could be ore that was being roasted for subsequent extraction of the iron by smelting.

Deposit (315) yielded a quantity of fragmented lava quern. This lava was imported from the Rhineland and

adjacent areas from the Roman to medieval periods.

Table 7: Other Artefacts

Gary Taylor

Context	Material	Description	No.	Wt (g)	Context Date
300	Cinder	Cinder	1	6	
308	Charcoal	Charcoal	3	1	
500	Cinder	Cinder	1	2	
600	Slag	Iron slag, smithing?	1	24	
	Cinder	Cinder	1	2	
700	Cinder	Cinders	2	4	
800	Cinder	Cinders	7	15	
900	Cinder	Cinders	3	4	
1107	Cinder	Cinder	1	9	
1200	Cinder	Cinders	2	9	
1300	Unidentified	Bright blue object, possibly solidified paint or painted mortar	1	1	
	Cinder	Cinders	10	17	
1400	Cinder	Cinders	2	4	
1412	Charcoal	Charcoal	1	1	
1600	Cinder	Cinder	1	2	
1900	Cinder	Cinder	1	4	

Condition

All the material is in good condition and presents no long-term storage problems. Archive storage of the collection is by material class. Most of the burnt stone can be discarded, though the heat-affected ironstone should be retained.

Documentation

There have been previous archaeological investigations at Ruskington that are the subjects of reports. Details of archaeological sites and discoveries in the area are maintained in the files of the North Kesteven Planning Archaeologist and the Lincolnshire County Council Sites and Monuments Record.

Potential

Much of the assemblage of mixed artefacts is of late post-medieval date and consequently of limited local potential and significance. However, certain of the items, particularly those of Saxon date, are of high local significance. These include a pot hook, latchlifter and loomweight and signify general domestic and craft activity of Saxon date occurring at the site. Additionally, the flintwork is of moderate-high local potential and importance and indicates prehistoric activity in the area.

If the burnt ironstone from deposit (700) is associated with metalworking this would be of high local potential and importance. However, the interpretation is uncertain and, therefore, the potential of the material indeterminate.

There is a small amount of Roman material but the quantities involved suggest that these artefacts are scatter or derived from Roman occupation elsewhere, not at the present investigation site. Consequently, these artefacts are of limited local potentrial but do indicate Roman settlement somewhere nearby.

References

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Hamerow, H., 1993 *Excavations at Mucking Volume 2: the Anglo-Saxon Settlement*, English Heritage

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West, S., 1998 *A Corpus of Anglo-Saxon Material from Suffolk*, East Anglian Archaeology **84**

Appendix 9

AN ASSESSMENT OF THE CHARRED PLANT MACROFOSSILS AND MOLLUSC SHELLS FROM FEN ROAD, RUSKINGTON, LINCOLNSHIRE (RFR04)

by Val Fryer

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October 2004

Introduction

Excavations at Fen Road, Ruskington were undertaken by Archaeological Project Services in September 2004. The work revealed features of Iron Age and Saxon date including pits, post-holes and ditches, with some of the latter belonging to either enclosures or possibly field systems. Samples for the extraction of the plant macrofossil assemblages were taken from across the excavated area, and twenty one were submitted for assessment.

Methods

The samples were processed by manual water flotation/washover, collecting the flots in a 500 micron mesh sieve. The dried flots were scanned under a binocular microscope at magnifications up to x 16, and the plant macrofossils and other remains noted are listed on Table 1. Nomenclature within the tables follows Stace (1997) for the plant remains and Kerney and Cameron (1979) and Macan (1969) for the molluscs. All plant macrofossils were charred. Modern contaminants, including fibrous/woody roots and seeds, were present throughout.

The non-floating residues were collected in a 1mm mesh sieve and dried prior to sorting. Fragments of bone, pot and burnt or fired clay were retained for further specialist analysis.

Results of assessment

Plant macrofossils

With the exception of charcoal fragments, which were common or abundant throughout, plant remains were exceedingly rare, occurring as single specimens in only nine samples. Most finds were of cereal grains (including wheat (*Triticum* sp.)), although a single fragment of hazel (*Corylus avellana*) nutshell was noted in sample 1. Preservation was very poor, with all grains being either puffed and distorted, or fragmented.

Molluscs

Mollusc shells, including rare burnt specimens, were recorded from all but two samples. Some retain delicate surface structures and pigmentation, and are almost certainly modern in origin, but others are abraded or have very pitted surfaces, and these may well be contemporary with the contexts from which they were taken. All four of Evans (1972) ecological groups of terrestrial taxa are represented, with the open country and marsh/freshwater slum species being most common. Freshwater obligate taxa were noted in seven samples.

Other materials

Fragments of black porous 'cokey' material and black tarry material were present or common in most samples. Although some are probable residues of the combustion of organic materials at very high temperatures, other pieces have the appearance of industrial coke and, along with the coal, may be intrusive within the contexts. Heavily abraded small bone fragments were recorded from all but eight assemblages.

Discussion

The assemblages recovered from the Fen Road samples are, somewhat unusually, all very small and this, along with the extreme rarity of plant macrofossils, almost certainly indicates that the material recorded (including the charcoal) is derived from a low density of scattered refuse. Given this paucity of material, it

would appear very unlikely that any of the features recorded were ever closely associated with either domestic or industrial activities.

Although the mollusc assemblages are difficult to interpret with any accuracy (due to the unknown degree of modern contamination), they would appear to indicate that certain of the features were either damp (Iron Age enclosure ditches – samples 3 and 6) or sufficiently wet to sustain some freshwater obligate taxa, mostly those preferring muddy conditions or tolerant of occasional dry episodes (Saxon ditches [1104] and [1210], and undated linears [1513] and [1714]). The predominance of marsh species within Saxon layers [1410] and [1603] may indicate that some or all of the matrix of these deposits is derived from either flood debris or material obtained from the nearby fen or marsh.

Conclusions and recommendations for further work

In summary, the plant remains recorded are probably derived from scattered and/or wind-blown refuse, and as so few are present, it would appear unlikely that the site was close to areas of settlement in either the Iron Age or Saxon periods. The mollusc assemblages may indicate that certain features were either damp or seasonally water filled.

As most of the samples do not contain quantifiably viable assemblages (i.e.100+ specimens) of either plant remains or mollusc shells, no further analysis is recommended.

References

Evans, J., 1972 — *Land Snails in Archaeology*. London

Kerney, M.P. and Cameron, R.A.D., 1979 — *A Field Guide to the Land Snails of Britain and North West Europe.* Collins.

Macan, T.T., 1969 — A key to the British Fresh- and Brackish-Water Gastropods. *Freshwater Biological Association* Scientific Publication No. **13**

Stace, C., 1997 — *New Flora of the British Isles*. Second edition. Cambridge University Press

Key to Tables

x = 1 – 10 specimens xx = 10 – 100 specimens xxx = 100+ specimens
Feat. = feature E.ditch = enclosure ditch ph = post-hole
b = burnt

Sample No.	**1**	**3**	**5**	**6**
Context No.	**417**	**608**	**320**	**305**
Feature No.	**416**		**322**	**323**
Feature date	**IA**	**IA**	**IA**	**IA**
Feature type	**Feat.**	**E.ditch**	**Pit/ditch terminus**	**E.ditch**
Cereals				
Triticum sp. (grains)	x		xcf	
Cereal indet. (grains)	x		xcf	
Tree/shrub macrofossils				
Corylus avellana L.	x			
Other plant macrofossils				
Charcoal <2mm	xx	x	xx	x
Charcoal >2mm	x		x	x
Charred root/stem		x		
Molluscs				
Open country species				
Pupilla muscorum				x
Vallonia sp.	xx	xx	xx	xx
V. costata		x		
V. excentrica	x	x	x	x
V. pulchella		x		x
V. pygmaea		xcf		
Catholic species'				
Cochlicopa sp.	x	x	x	x
Nesovitrea hammonis		x		
Trichia hispida group	xx	xx	xx	xx
Marsh/freshwater slum species				
Carychium sp.		x		x
Lymnaea sp.		xx	x	x
Succinea sp.	x			
Vertigo sp.	x	x		
V. angustior				x
V. antivertigo		x	x	
Other materials				
Black porous 'cokey' material	xx	x	xx	xxx
Black tarry material	xx	x	xx	x
Bone	x	x	x	
Burnt/fired clay	x			
Ferrous globules	x			
Small coal frags.	xx	x	xx	xx
Small mammal/amphibian bone	x	x	x	
Vitrified material	x	x		
Sample volume (litres)	**20**	**40**	**8**	**8**
Volume of flot (litres)	**0.1**	**<0.1**	**<0.1**	**<0.1**
% flot sorted	**100%**	**100%**	**100%**	**100%**

Sample No.	4	7	8	11	12	13	15	17	18	20	21
Context No	801	1103	1107	1410	903	104	122	1213	1025	1603	172
Feature No.		1104	1108		904	103	121	1210	1026		171
Feature date	Saxon	Saxon	IA	Saxon	Saxon	Saxon	Saxon	Saxon	Undated	Saxon	Saxon
Feature type	Layer	E.ditch	E.ditch	Layer	Pit	Ditch / Pit	ph	Ditch	ph	Layer	Pit
Cereals											
Triticum sp. (grain)											x
Cereal indet. (grains)	x					x					x
Other plant macrofossils											
Charcoal <2mm	xx	x	xx	x	xx	xx	x	xx	x	xxx	xx
Charcoal >2mm										xx	x
Charred root/stem				x	x	x			x	x	
Indet.seed			x	x							
Molluscs											
Woodland/shade loving species											
Aegopinella sp.		x	x					x			
Oxychilus sp.								x			
Trichia striolata									x		
Zonitidae indet.		x									
Open country species											
Pupilla muscorum			x					x		x	
Vallonia sp.		x	xx	xx	x	x	x	x		xx	x
V. costata			x								
V. excentrica									x		
V. pulchella		x	x	x						x	
Vertigo pygmaea								xcf			
Catholic species											
Cochlicopa sp.		x	x	x				x	xx	x	

Sample No.	**4**	**7**	**8**	**11**	**12**	**13**	**15**	**17**	**18**	**20**	**21**
Trichia hispida group		xx	xx	xx		x		x	xx	xxx	x
Marsh/freshwater slum species											
Carychium sp.		xx		x				x		x	
Lymnaea sp.		x	x	xx				x		xx	
Vertigo sp.						xb				x	x
Vertigo angustior				x				x			
Succinea sp.				x						x	
Freshwater species											
Anisus leucostoma		x						xx		x	
Bathyomphalus contortus				x							
Pisidium sp.								x		x	
Valvata cristata		xx						xx			
Other materials											
Black porous 'cokey' material	x		x	x	x	xx	xx		x	x	xx
Black tarry material	x	x	x	x		x		x	xx		xx
Bone	x	x	x		x	x				xx	
Burnt/fired clay						x					x
Small coal frags.	xx	x	x		x	x	xx		x	x	x
Small mammal/amphibian bone	x	x		x	x					x	x
Tufaceous concretions	xcf										
Vitrified material									x		
Sample volume (litres)	**10**	**10**	**10**	**8**	**8**	**16**	**8**	**16**	**8**	**8**	**10**
Volume of flot (litres)	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**
% flot sorted	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Sample No.	9	10	14	16	19	22
Context No	1420	1407	118	1512	1042	1713
Feature No.	1419	1405	117	1513	1041	1714
Feature date	Undated	Undated	Undated	Undated	Undated	Undated
Feature type	Pit	Pit?	Linear or Pit	Linear	ph	Linear
Cereals						
Triticum sp. (grain)	x				x	
Cereal indet. (grains)	x		x	x		
Other plant macrofossils						
Charcoal <2mm	xx	xxx	x	xxx	x	x
Charcoal >2mm		x				
Charred root/stem		x	x			
Mineralised root channels						xx
Molluscs						
Woodland/shade loving species						
Aegopinella sp.						x
Clausilia sp.		x				
Open country species						
Vallonia sp.		xx		xxx		xxx
V. costata	x	x		x	x	x
V. pulchella	x			xx	x	xx
Vertigo pygmaea				x		
Catholic species						
Cepaea sp.						x
Cochlicopa sp.	x xb	x		xx		x
Limacid plates						x
Trichia hispida group	xxx	xx		xxx	x	xxx
Marsh/freshwater slum species						
Carychium sp.	x			xx		xx
Lymnaea sp.	x			x		x
Vertigo sp.				x		x
Vertigo antivertigo				x		x
Succinea sp.				xx		xx
Freshwater species						
Anisus leucostoma		x		x		x
Aplexa hypnorum				x		x
Bathyomphalus contortus				x		x
Pisidium sp.						x
Planorbis planorbis						x
Other materials						
Black porous 'cokey' material	x		x		x	
Black tarry material	xx			x		x
Bone	x		x	xx		x
Burnt/fired clay	x			x		
Mineralised concretions	x					xxx
Small coal frags.	x		x	x	x	x
Small mammal/amphibian bone			x			x
Vitrified material				x		
Sample volume (litres)	20	8	10	8	8	8
Volume of flot (litres)	<0.1	<0.1	<0.1	<0.1	<0.1	0.2
% flot sorted	100%	100%	100%	100%	100%	50%

Appendix 10

GLOSSARY

Alluvium	Deposits laid down by water. Marine alluvium is deposited by the sea, and fresh water alluvium is laid down by rivers and in lakes.
Anglo-Saxon	Pertaining to the period when Britain was occupied by peoples from northern Germany, Denmark and adjacent areas. The period dates from approximately AD 450-1066.
Bronze Age	A period characterised by the introduction of bronze into the country for tools, between 2250 and 800 BC.
Context	An archaeological context represents a distinct archaeological event or process. For example, the action of digging a pit creates a context (the cut) as does the process of its subsequent backfill (the fill). Each context encountered during an archaeological investigation is allocated a unique number by the archaeologist and a record sheet detailing the description and interpretation of the context (the context sheet) is created and placed in the site archive. Context numbers are identified within the report text by brackets, e.g. [004].
Cropmark	A mark that is produced by the effect of underlying archaeological or geological features influencing the growth of a particular crop.
Cut	A cut refers to the physical action of digging a posthole, pit, ditch, foundation trench, etc. Once the fills of these features are removed during an archaeological investigation the original 'cut' is therefore exposed and subsequently recorded.
Domesday Survey	A survey of property ownership in England compiled on the instruction of William I for taxation purposes in 1086 AD.
Fill	Once a feature has been dug it begins to silt up (either slowly or rapidly) or it can be back-filled manually. The soil(s) that become contained by the 'cut' are referred to as its fill(s).
Geophysical Survey	Essentially non-invasive methods of examining below the ground surface by measuring deviations in the physical properties and characteristics of the earth. Techniques include magnetometry and resistivity survey.
Headland	Strip of uncultivated land left between areas of ridge and furrow which was used for turning the plough. These strips provided access and often became lanes or roads.
Iron Age	A period characterised by the introduction of Iron into the country for tools, between 800 BC and AD 50.
Layer	A layer is a term used to describe an accumulation of soil or other material that is not contained within a cut.
Medieval	The Middle Ages, dating from approximately AD 1066-1500.
Mesolithic	The 'Middle Stone Age' period, part of the prehistoric era, dating from approximately 11000 - 4500 BC.
Manuring Scatter	A distribution of artefacts, usually pottery, created by the spreading of manure and domestic refuse from settlements onto arable fields. Such scatters can

	provide an indication of the extent and period of arable agriculture in the landscape.
Natural	Undisturbed deposit(s) of soil or rock which have accumulated without the influence of human activity
Neolithic	The 'New Stone Age' period, part of the prehistoric era, dating from approximately 4500 - 2250 BC.
Old English	The language used by the Saxon (q.v.) occupants of Britain.
Palaeolithic	The 'Old Stone Age' period, part of the prehistoric era, dating from approximately 500000 - 11000 BC in Britain.
Post hole	The hole cut to take a timber post, usually in an upright position. The hole may have been dug larger than the post and contain soil or stones to support the post. Alternatively, the posthole may have been formed through the process of driving the post into the ground.
Post-medieval	The period following the Middle Ages, dating from approximately AD 1500-1800.
Prehistoric	The period of human history prior to the introduction of writing. In Britain the prehistoric period lasts from the first evidence of human occupation about 500,000 BC, until the Roman invasion in the middle of the 1st century AD.
Ridge and Furrow	The remains of arable cultivation consisting of raised rounded strips separated by furrows. It is characteristic of open field agriculture.
Romano-British	Pertaining to the period dating from AD 43-410 when the Romans occupied Britain.
Saxon	Pertaining to the period dating from AD 410-1066 when England was largely settled by tribes from northern Germany
Till	A deposit formed after the retreat of a glacier. Also known as boulder clay, this material is generally unsorted and can comprise of rock flour to boulders to rocks of quite substantial size.
Toft	The site of a house or former house.
Transformed	Soil deposits that have been changed. The agencies of such changes include natural processes, such as fluctuating water tables, worm or root action, and human activities such as gardening or agriculture. This transformation process serves to homogenise soil, erasing evidence of layering or features.

Appendix 11

THE ARCHIVE

The archive consists of:

19	Daily record sheets
373	Context records
29	Context register sheets
10	Photographic record sheets
2	Plan record sheets
5	Section record sheets
1	Levels sheets
2	Environmental sample register sheets
21	Environmental sample sheets
120	Sheets of scale drawings
1	Stratigraphic matrix
1	Printed survey data
2	Boxes of finds

All primary records and finds are currently kept at:

Archaeological Project Services
The Old School
Cameron Street
Heckington
Sleaford
Lincolnshire
NG34 9RW

The ultimate destination of the project archive is:

Lincolnshire City and County Museum
12 Friars Lane
Lincoln
LN2 1HQ

The archive will be deposited in accordance with the document titled *Conditions for the Acceptance of Project Archives*, produced by the Lincolnshire City and County Museum.

Lincolnshire City and County Council Museum Accession Number: 2004.191

Archaeological Project Services Site Code: RFR 04

The discussion and comments provided in this report are based on the archaeology revealed during the site investigations. Other archaeological finds and features may exist on the development site but away from the areas exposed during the course of this fieldwork. *Archaeological Project Services* cannot confirm that those areas unexposed are free from archaeology nor that any archaeology present there is of a similar character to that revealed during the current investigation.