NYS 8186

NYE 380

NYCC HER	
SNY	8186
ENY	380
CNY	838
Parish	4009
Rec'd	

Crossgates Phase III
Crab Lane
Seamer
North Yorkshire

Archaeological Excavations
2001

August 2001

Crossgates Phase III
Crab Lane
Seamer
North Yorkshire

Archaeological Excavations

Contents **Page**

Figure List **Page**

Plate List **Page**

Crossgates Phase III
Crab Lane
Seamer
North Yorkshire

Archaeological Excavations

Summary

The 2001 phase of excavation at Crab Lane was designed to provide a record of all the internal features of the two eastern compartments of the enclosure system, as well as illustrating the way in which the enclosure system developed.

The earliest feature-related activity as yet recognised consisted of two Bronze Age graves.

The 1999 and 2000 evaluations had already established that the enclosure system originated in a field system of Late Bronze Age or Early Iron Age date The 2000 and 2001 seasons disentangled the development of the rectangular enclosure system, but the exact phasing of this development, and the phasing of internal features, will depend on the final assessment of the pottery, along with radio carbon and perhaps thermoluminescence dating techniques

The latest excavations showed that a square barrow was incorporated into the northern boundary of the enclosure, along with much recutting of the boundaries and the insertion of two entrances into the eastern boundary of the enclosure

Within the two eastern enclosure compartments, four ring gullies (Structures 1-4), a large number of pits and postholes, a pottery kiln and an 'oven' were identified. Structures 2 and 3 were associated, or had relationships, with other gullies and pits, but generally there was little vertical stratigraphy

1. Introduction

This Interim Report has been prepared by MAP Archaeological Consultancy Ltd, on behalf of Persimmon Homes (Yorkshire) Ltd., for the archaeological excavation in advance of

housing development on a site west of Crab Lane, Crossgates, Seamer, North Yorkshire (NGR TA 0265 8350 : Fig. 1).

The site has been designated for housing development within the Scarborough Borough Local Plan - April 1999.

This Excavation was the sixth part of a staged approach A Fieldwalking programme, Geophysical Survey and two Evaluation Excavations have already been completed (Trenches 1-7, 9-10 and 11-30)

All work has been funded by Persimmon Homes (Yorkshire) Ltd.

2. Site Description

The Crab Lane site lies c.1 km to the east of the village of Seamer on the northem edge of the Vale of Pickering (NGR TA 0265 8350 : Fig. 1)

The site at present forms part of an arable field, and has long been used for cultivation. Crab Lane forms the site's eastem boundary, with another public road, Long Lane, bounding it to the south. The proposed development covers an area of c. 3.7 ha. The level of the ground falls gently southwards in a series of undulations from c. 39.5m AOD in the north to c. 35.5m AOD in the south

3. Geology

The underlying geology of the development area consists of fluvio-glacial sands and gravels deposited during the late Devensian/Flandrian (Mackney *et al* 1983) Approximately 6 7 metres of sands and gravels overlie Corallian limestone bedrock

Soils are of the Wick 1 Association (No. 541r), defined as coarse loamy, non-calcareous typical brown earths (Jarvis *et al* 1984).

4. Historical and Archaeological Background

4.1 Historical Background

The manor of Seamer was held by *Carle* before the Norman conquest, after which it passed to William de Percy. The Percy family held it until 1536-7 (VCH 1914).

The name Seamer, first instanced as *Semaer* at the Domesday Survey (1086) is derived from the Old English words for 'sea' or 'lake' plus 'pool' (Smith 1928) Crossgates was a name attached to a public house at the time of the First Edition Ordnance Survey map (1854)

The site lay within Low Field, one of Seamer's medieval Open Fields

4.2 Aerial Photography

No aerial photographs showing cropmarks exist for the site. Aerial photography on the sandier soils on the southern side of the Vale of Pickering has identified ribbon or ladder settlement and Iron Age/Romano-British field systems. Airborne multi-spectral techniques have identified a pattern of enclosures on the northern side of the Vale including features in the vicinity of the site (D. Powlesland, pers. comm.). Aerial photographs taken in September 1999 show the full extent of the limestone building after the removal of Crab Lane

4.3 Fieldwalking

A fieldwalking programme was carried out in the autumn of 1997 (MAP 1998i) This recovered large amounts of modern and post-medieval material. Earlier ceramic finds consisted of medieval pottery, no Roman or prehistoric sherds were recovered

Forty-two pieces of struck flint were recovered, made up by twenty-eight waste fragments (twenty-one flakes, six chunks and one core), and fourteen tools (three blades, three bladelets, seven scrapers and a single barbed and tanged arrowhead). The flint assemblage was distributed across the whole of the survey area, and was of Late Neolithic/Bronze Age date. The collection of flint did not appear to correspond with the features revealed on the ground during the 1999 and 2000 evaluations.

4.4 Geophysical Survey

A. L. Pacitto carried out a magnetometry survey in November 1997 which revealed a large number of linear anomahes (MAP 1998ii).

The most striking anomalies were the westward continuation of a Square Enclosure known from previous survey and fieidwork to exist on the east side of Crab Lane, and a Rectangular Enclosure, 120m x 80m in size, with three intemal compartments.

Rectilinear anomalies were plotted in the area to the west of the Square Enclosure, and also south of the Rectangular Enclosure. Parallel linear anomalies north of the Rectangular Enclosure were believed to represent ridge and furrow.

A major anomaly ran on a sinuous course south-westwards across the survey area. This was interpreted as a former stream-bed or palaeo-channel.

4.5 Evaluation Excavation

A total of nine areas (Trenches 1-7 and 9-10 - Fig. 2) were excavated in the summer of 1999 to evaluate the geophysical anomalies, and also to examine areas not included in the Geophysical Survey (MAP 1999).

Trench 1 was situated in the north-eastem comer of the site, a location not covered by the Geophysical Survey. A north-south linear feature was recorded, this apparently being the continuation of an anomaly known from the geophysics. A pit-like feature was also present There was no associated dating evidence.

Trench 2 was situated in the central/northem part of the site, across the area of parallel linear anomahes. Excavation examined a series of seven relatively broad and shallow parallel linear features, which were interpreted as furrows from a Ridge and Furrow field system. A disruption in their alignment along the central part of the trench may have represented a headland within the field system.

Trench 3 was positioned on the eastern margin of the site to evaluate the interior of the Square Enclosure and specifically to ascertain whether or not a substantial cobble foundation visible on the eastern side of Crab Lane continued into Crossgates III. A substantial rectangular limestone building of First/Second century date was located, which was abandoned at the end of the Second century.

Trench 4 evaluated the north-eastern compartment of the rectangular enclosure. A series of intercutting Late Iron Age and Roman pits and gullies were recorded. The ditch forming the northern boundary of the enclosure was sectioned, and an area of cobbling, along with a parallel less substantial ditch, were seen as forming a trackway around the north of the enclosure.

Trench 5 was an L-shaped trench designed to evaluate the south-eastern compartment of the rectangular enclosure. A cobbled entranceway was located, the boundary ditch having been remodelled at least twice. As with Trench 5 a less substantial ditch ran parallel with the main enclosure boundary. A similar ditch on an east-west alignment, cut into the main enclosure ditch at its south-east corner. A burnt feature of linear form, along with a clay-lined pit, were interpreted as relating to malting; this gave a Late Iron Age archaeomagnetic date.

Trench 6 was situated on the eastern margin of the site, a position outside the geophysical survey area. No archaeological features or finds were present

Trench 7 was positioned to evaluate the linear anomalies south of the compartmented enclosure A boundary ditch at the western end of the trench appeared to form the limit of a series of postholes and intercutting gullies. The boundary ditch and an east-west aligned ditch were dated to by associated pottery to the Early Iron Age, the date of the pits and gullies remains unclear but they apparently predated ridge and furrow remains, while respecting the ditches

No work took place in the proposed location of Trench 8 as it lay outside the development area.

Trench 9 was designed to evaluate the boundary ditches, and interior of the western compartment of the Rectangular Enclosure The boundary ditch was substantial and V-shaped in profile Early Iron Age pottery was recovered from the basal fill of one of the boundary ditch segments, implying that the ditches here had been established at that date Evaluation showed that the southern boundary ditch, and the ditch dividing the western compartment from the south-eastern compartment, were contemporary.

Trench 10 evaluated the north-west corner of the site, which lay outside the Geophysical Survey area. No archaeological features or finds were present

A further nine areas (Trenches 11-30 - Figs. 3 and 4) were excavated in the spring and early summer of 2000 to further evaluate the geophysical anomalies, and also to examine areas not included in the Geophysical Survey (MAP 1999).

Trench 11 excavation and cleaning of this trench showed that no archaeological features were present The geophysical anomaly at this location was of geological origin

Trench 12 excavation and cleaning revealed no archaeological features other than ridge and furrow; the geophysical anomaly here was of geological origin.

Trench 13 weathering of the surface of the natural in this trench revealed a possible feature which on excavation proved to be a pit containing the skeleton of an adult horse, an iron nail, an abraded sherd of medieval pottery and a piece of stove clinker, suggested a post-medieval date for the burial

Trench 14 examined an area of the north-eastern compartment's interior Part of a sub-circular gully was identified, along with a mass of pits and postholes, which were densest in the western area of the trench. A line of shallow postholes apparently representing a fence-line was identified in the north-eastern part of the trench. Associated finds spanned the Late Iron Age/Roman period. A first century coin came from a pit, and another was found during the metal detecting of the topsoil The ditch forming the southern boundary of this compartment was sectioned, and showed signs of having been recut A strip c. 3m wide,

running parallel to the enclosure ditch, showed no ancient archaeological features making it possible that a bank formerly existed here.

In Trench 15 vague natural trends of geological origin were the only features present.

Trench 16 was situated at the intersection of two secondary ditches with the junction of the ditches forming the boundaries of the north-east and south-east compartments of the enclosure system. The ditches forming the south-east compartment of the enclosure system were shown to be earlier than the north-east compartment The two secondary ditches were later additions to the enclosure boundary ditches, perhaps to aid in the management of livestock

In Trenches 17/20/21/22 excavation established that the north-south ditch which joins the south-westem comer of the enclosure system was earlier in date than the compartmented enclosure system, this supported the results of the 1999 evaluation which recovered early Iron Age pottery from it. The rectilinear system of small gullies originally identified by the first stage evaluation was defined, and shown to be later than the enclosure boundary ditch.

In Trench 18 the southem boundary ditch of the main enclosure system was shown to be later than the less substantial north-south ditch forming the westem boundary of the south-east compartment.

Trench 19 examined an area of the interior of the south-eastem compartment of the enclosure system A ring-gully with an intemal diameter of 9m was revealed, the 4m wide entrance lying at the eastem side, i.e. away from the prevailing wind. The ring gully presumably provided drainage around a circular stmcture whose presence was represented by three postholes, other postholes may be present, but these were difficult to define within the hillwash into which they were cut. Excavated sections of the ring-gully contained moderate amounts of Late Iron Age pottery, with occasional flint and animal bone An area of pitched stone withm the 'ring', incorporated a saddle quem and the lower part of a rotary quem, suggesting a working area where grain was prepared The ring-gully lay c. 1.5m north of the mam enclosure ditch, a short distance which does not allow for the former presence of a bank.

At least one shallower ditch was dug into the main enclosure ditch after it had become largely silted up, this picture reflected the results from the 1999 evaluation of Trench 5. The original enclosure ditch was a massive feature at least 4m wide and 2m deep. Associated finds included pottery of Late Iron Age / Roman character, along with a small amount of Roman sherds

Trenches 23-30 were excavated on the route of the western access road

Trench 23 examined a strong linear anomaly known from the geophysical survey, which proved to be a pebble-surfaced trackway of recent origin, cut into a deep hillwash deposit. After scanning by a metal detector, the hillwash was removed, but there were no archaeological features below it. The metal detector located a bronze pin of Anglian type with a faceted head with ring-and-dot decoration.

Trench 24 examined the intersection of two parallel east-west linear anomalies with two other linears which joined from the south-east and north-east. These are interpreted as a 'hollow-way' running parallel to a boundary ditch. Dating evidence was confined to a Roman sherd from the upper fill of the hollow-way. The other two linear anomalies proved to be service trenches of recent date.

Trench 27 excavation revealed two shallow curvilinear gullies of unknown date and purpose, they may be related to the recent horticultural activity at the site.

Trenches 25, 26, 28, 29 and 30 contained no archaeological deposits.

4.6 Previous Research

As previously stated the site is situated within a landscape of archaeological remains which he both within and beyond the previous phases of housing development at Crossgates, overlapping the Crossgates I and II sites.

No spot finds have been identified as originating from the development area.

Spot finds from within a kilometre of the site consist of prehistoric worked flint and stone axes, and a possible Iron Age chariot burial from a ballast pit at Seamer station (c. 800m east of the site - Mortimer 1905). Although Rutter and Duke thought this discovery as "dubious", Stead saw it as a reasonable to connect it with Iron Age activity in the area (Stead 1965).

In 1857 Anglian graves with associated pottery and jewellery were recovered from Seamer Quarry, c. 400m north of the site, during the working of the limestone quarry (Elgee and Elgee 1933). These discoveries point to a significant Anglian settlement in the vicinity, not necessarily at the Burton Riggs gravel quarry.

From 1947-56 excavations and recording work was carried out on a Late Iron Age, Roman and Anglian site at the former Burton Rigg sand and gravel quarry c 600m south-east of the site (Rutter and Dukes 1958) The principal discovery was a rectangular ditched enclosure which is believed to have been abandoned at the end of the 1st century, and reoccupied in the 4th In its earliest phase, the site echoes the square enclosure overlapping Crossgates II and III

At Crossgates I a geophysical survey conducted in 1988 (GSB 1988) located a series of linear and curvilinear anomalies, along with a number of enclosures. A series of sample excavations and Watching Briefs were conducted on these anomalies from 1989-92, recording a pair of square-ditch barrows associated with a trackway, ring-gully and posthole structures, V-profiled enclosure ditches and other features of Iron Age through to medieval date (summarised in MAP 1998i).

At Crossgates II, Geophysical Survey in 1996 (GSB 1996) located a series of rectilinear enclosures which were evaluated in the following year (MAP 1998i). A Romano-British enclosure was located at the extreme north-west of the excavated area, along with a series of field systems across the site.

Fuller excavations at Crossgates II were carried out in the spring of 1999 (MAP 1999). The interior of the enclosure was examined revealing postholes and pits More significantly, the entrance of the enclosure had been widened in the Ist or 2nd century and a stone entrance

structure inserted into the earlier ditch terminals. This event was part of a process that saw a cobble surface being laid over the enclosure's interior and a substantial cobble and clay foundation constructed at the extreme western margin of the site.

5. Aims and Objectives

The evaluation of the site illustrated the potential of the archaeological deposits in terms of their date, form, and degree of preservation. The evaluation also showed the most significant areas to be the two eastern compartments of the Rectangular Enclosure.

The significance of the settlement activity lies in its date, which includes the Early Iron Age, and also covers the period of the Late Iron Age, Roman conquest, and Roman occupation proper.

Excavations west of Crab Lane were carried out in order to preserve archaeological remains by record so that the proposed housing development could take place without archaeological hindrance The discovery of the Roman stone building, with peripheral settlement activity and the accompanying entrance structure, was regarded as being of sufficient regional, and even national, importance to require additional consideration At the time of writing, this area is to form Public Open Space within the development, particularly the interior and ditches of the Square Enclosure lying west of and under Crab Lane.

Evaluation of the separate housing development area west of Crab Lane concentrated on the compartmented Rectangular Enclosure, and examined a number of linear geophysical anomalies. The conclusion was that the two eastern compartments of the Rectangular Enclosure represent the most archaeologically significant areas west of Crab Lane, because of the settlement activity illustrated there. The settlement remains were particularly important because of their suspected early Iron Age origin, and because they straddled the period of the Late Iron Age, through the Roman conquest, to the Second century, and have the potential to give valuable information on this significant period. The excavation of the site should therefore allow the assessment of the impact of Romanisation on a rural settlement. Aspects of this period - evidence for the use or disruption of native transport and settlement patterns by the Romans - have been identified as Research Questions requiring particular study in

North Yorkshire The Square Enclosure was shown to have activity straddling the Late Iron Age to Roman periods, and the excavation sought to understand how this aspect of the two enclosures is complementary.

In the light of the results of the Evaluation, further archaeological excavation took place to record the most significant areas of the site - the two eastern compartments of the enclosure.

As stated previously, the part of the Square Enclosure which lies west of Crab Lane will form Public Open Space; this in effect means that there was little scope for setting aside additional large areas for open space within the development of CG III. The north-eastern and south-eastern compartments of the Rectangular Enclosure covered an area of c 90m x 60m This formed a significant proportion of the development (c. 12.5% of the total), and the proposed layout showed a large block of houses and associated services at this location These two factors argued against the feasibility of preserving the entirety of this part of the site *in situ*. Persimmon indicated in 1999 that it might be possible to devote the proportion of the site allocated for Public Open Space to the archaeologically sensitive areas, although the total available was not sufficient to cover the whole of the two eastern compartments of the Rectangular Enclosure.

The 2000 evaluation sought to establish which of the two significant enclosure compartments should be allocated to Public Open Space. However, Scarborough Borough Council indicated that this open space should be positioned more centrally to the development, and it was assigned to a location north-west of the rectangular enclosure, away from the area of known settlement activity

Given that it was established that it was not feasible to preserve the most archaeologically sensitive part of the site *in situ*, it is proposed that the topsoil should be stripped from the area of the two eastern compartments of the Rectangular Enclosure, and the area hand-cleaned to identify the archaeological features so that they could be planned. Those areas at risk from damage or destruction by housing, roads and/or services were identified and consultation took place between all interested parties (Persimmon Homes, MAP and the Heritage Unit) to clarify which features required excavation. The results of the excavation

and evaluation phases are to be brought together and published. This course of action was intended to advance the understanding of two highly significant periods - the Early Iron Age, and the Late Iron Age to Roman crossover - while facilitating the development of a site that had been accepted into the local area plan for housing development

The presence of flint artefacts recovered by fieldwalking was not backed up by the discovery of features of Neolithic/Bronze Age date during the evaluation, and due consideration was given to the recovery of any information relating to these periods within the excavated area.

The extent of the Early Iron Age activity was unknown, and an objective of the Excavafion was to ascertain the extent and nature of this activity in an area east of the Rectangular Enclosure, as well as to gain further information on the origins of the Rectangular Enclosure, which were believed to he in this period. There is an emerging pattem of Early Iron Age settlement on the margins of the Vale of Pickering, with Palisaded Enclosures at Staple Howe (Knapton parish - Brewster 1963) and Devils Hill (West Heslerton - Stephens 1986), and an 'open settlement' at Cooks Quarry (West Heslerton - Powlesland *et al* 1986). Another 'open settlement' has recently been excavated at Newbridge Quarry, Pickering, and a settlement of uncertain type was excavated in the 1920s at Castle Hill, Scarborough (Challis and Harding 1975) Evidence from the Rectangular Enclosure at Seamer will form a valuable addition to the body of inforination on the Early Iron Age in the region

Additional objectives of the excavation were to examine suspected entrance areas, and to gain further infomiation on the development of the enclosure system by the excavation of those ditch intersections not previously examined

The quantification of the full extent of Late Iron Age to early Roman settlement, and 'industrial' activity (*viz* the 'oven' feature) was another principle objective.

The study of rural sites and their associated artefact assemblages is self-evidently crucial for the understanding of life in the Iron Age and Roman periods The great majority of the people of Iron Age and Roman Britain lived on such sites and their consumption pattems (for which pottery provides important evidence) must have had a large impact on regional

economies. It follows that rural sites are highly significant for our understanding of the Iron Age and Romanisation; Seamer has been proved to straddle this period, and so could fomi a regional type-site to show how this process effected rural sites. Many of the excavations conducted on Roman sites in Britain have been in favour of high status sites such as villas, and so there is a strong case for the examination of lower status settlements. This would help mitigate previous under-examination of this category of site. Evidence suggests that in northem Britain lower status sites tend to yield very small groups of artefacts. This low level of occurrence may be socially and economically significant, but may in the case of Seamer reflect a military influence at the site. Small quanfities of finds are recovered from the interiors of military sites, which tended to be kept clean. A lack of finds need not be indicative of a military site but is also seen on the indigenous rectilinear setflements of northem England. Military sites and influence is of supreme importance seen from a countrywide, and even Empire wide, perspective These hypotheses can only be tested by further information from excavations

The understanding of the context of the site will be further enhanced by a consideration of other research and fieidwork in the site's vicinity, along with any recent discoveries from aerial photography by English Heritage or other bodies (e.g. D Powlesland/Landscape Research Trust)

The results of previous geophysical surveys in the vicinity of the site will also be used to set the site in context. The results of the Crab Lane geophysical survey are to be compared to the excavated results.

Roman activity within the Rectangular Enclosure, and the Square Enclosure to the north-east, had a clear cut-off date in the late Second Century, and the reasons for this remain unclear There are indications that the region underwent a major shift in settlement pattem in the early Third century, and the recovery of evidence to illustrate how this process may have affected Seamer was a major objective of the excavafion.

The Excavation comprised.

- An area 90m x 60m in size to include the entirety of the two eastern compartments of the Rectangular Enclosure
- An additional rectangular excavation area, 20m x 10m in size, configuous with the north-eastern part of the main area to examine a location threatened by housing, which lay within a 'field' enclosure, and was also in the general vicinity of Early Iron Age activity within the Square Enclosure

6. Methodology

6.1 Excavation

The stripping of excavation areas was undertaken by a 360 degree excavator, using a toothless bucket, under close archaeological supervision. Machining ceased at the top of archaeological deposits or the natural, whichever was encountered first.

The excavation areas were hand-cleaned, photographed and planned. Thereafter excavation was undertaken on the following lines:

Ditches/gulhes/slots - sections through these features were placed to provide information on phasing, function and dating Where the phasing was apparent in plan, sections concentrated on recovering dating evidence and information on the profiles Excavation concentrated on those areas where ditches intersected, excavating deposits at the junctions of or interruptions to linear features over a sufficient length to determine the relationships between components.

Other cut features such as postholes, storage pits and a kiln were excavated in full to determine and record their form.

Within the costings for the outlined programme of work provision was made for carbon-14 and archaeomagnetic dating, and the analysis of human skeletal material, animal bone, metalwork and environmental bulk samples. A specific sampling strategy for the recovery of palaeoenvironmental material was discussed and implemented under the guidance of the Palaeoecology Research Services (EAU - York)

All work was carried out in line with the Institute of Field Archaeologists Code of Conduct (IFA 1998)

All artefacts were retained for specialist analysis.

6.2 On Site Recording

All archaeological deposits were recorded according to the normal principles of stratigraphic excavation on MAP's *pro forma* sheets which are compatible with the MoLAS recording system (Appendix 1 1, 1 2, 1 3) The MoLAS recording manual was used on site where necessary.

6.3 Plans and Sections

The full extent of all archaeological deposits were recorded in plan at an appropriate scale on drawing film. All plans were related to the Ordnance Survey grid. Sections of features and individual layers were drawn at a scale of 1 10 and included an OD height The actual areas of ground disturbance and archaeological features were accurately located on a site plan which was fixed in relation to nearby permanent structures and roads.

6.4 Photographic Record

The photographic record was made up of monochrome prints, colour prints and colour slides, included a record of all archaeological features encountered, as well as a selection of general site and working shots

6.5 Finds

The finds were processed in accordance with English Heritage Guidelines (EH 1995) All finds were cleaned, identified, assessed, dated (if possible), marked (if appropriate) and properly packed and stored in accordance with the requirements of national guidelines Finds of significance were recorded as small finds and treated accordingly. Samples of ceramic building materials and masonry were collected and retained for dating purposes and architectural comment.

6.6 Metal Detecting

Metal detecting was carried out over the surface of the excavated areas, and on the spoil heaps by accredited detectorists under archaeological supervision. The only significant find was a coin from the backfill of Trench 14, but the detectorists encountered problems with 'hot rocks' which tended to mask the responses given by artefacts proper

7. Excavation Results

The excavation identified a series of features ranging in date from two Late Neolithic or Early Bronze Age graves, to settlement activity of the later Iron Age and Roman periods, along with the associated enclosure boundaries (Fig. 5).

7.1 Grave 41096

This was an oval cut aligned east-west, 1.25m long, 0.85m wide and 0.30m deep, and situated towards the south-west of the site (Fig. 6 - Pl. 1) A group of cremated bone (context 41102) was found at the base of the pit, and this was associated with a flint knife (SF 36). In the south-west and north-west parts of the grave, lay small deposits of burnt material (context 41101), the remainder of the grave being filled by a heavily mixed brown silt (context 41095) The top of the grave revealed itself as two massive flat sandstone blocks

7.2 Grave 41160

This grave was situated c 10m of grave 41096, within the area later enclosed by the ring gully of Structure 4 (Fig. 7). The steep-sided grave cut (context 41096 - Pl 2) was sub-circular, and had a diameter of 1.90m and a depth of 1.20m. A distinctive feature of the grave fill was that it contained a large number of sub-angular stones, which increased in size and frequency from 30 cm in diameter at the top to 50 cm towards the base. On the floor of the grave a group of nine stones (context 41195), up to 20 cm in length, were deliberately arranged around the inhumation burial. The skeleton (context 41194) was in a crouched position lying on its left side. Judging by the fact that the molars were not erupted, these were the remains of a juvenile who was 9-13 years of age at death. Two flint flakes were found with the burial, SF 46 lying under the skeleton, the other (SF 47) being covered by one of the 'headstones'. These flint flakes indicate a Bronze Age date for the grave.

Two curvilinear gullies (contexts 41400 and 41417) formed an interrupted arc around the eastern side of the grave at a distance of c. 2m from it. Although not stratigraphically connected to it, these two gullies appear to have demarcated the grave

7.3 Square Barrow

Situated at the north-west margin of the north-eastern enclosure (Fig. 8), segments (contexts 40055 and 40067) were excavated to illustrate the Square Barrow's relationship with the enclosure boundary It was clearly established that the barrow was earlier, the northern part being cut away by the enclosure ditch. The barrow was 12m square externally, the ditch being approximately 1.5m wide and 0.5m deep. A large vertically-sided and flat-based oval pit (context 40057) was situated slightly to the north-east of the barrow's centre, and was 2 4m long, 1 8m wide and 0.8m deep. A pennanular copper-alloy bracelet (SF 35) was found at the base of the mixed fill (context 40056). Although no burial was found within the pit (?perhaps destroyed by the acidic soil condifions), the position of the pit within the barrow, its form and the presence of the bracelet indicate that this was almost certainly a grave

7.4 Enclosure System

The first element of the enclosure system was represented by a relatively narrow and shallow ditch (40202), recorded on the eastern boundary of the north-east enclosure When this early ditch was partly silted up, a deposit of cobbles (contexts 40182 and 40199) was laid into it to create a 3ni wide entrance (Pl. 3). The re-modelled ditch (excavated as segments 40169, 40205 and 40223 - Pl. 4) was a massive feature over 4m wide and c. 2m deep. Three features were dug immediately within the enclosure, directly in line with the entrance. These consisted of two pits or postholes (contexts 40212 and 40216) which lay either side of another pit (context 40214) which contamed articulated fragments of apparently articulated human bone The position of these features strongly suggested that they were deliberately positioned at the entranceway, the implication being that they represented a 'votive' deposit at this significant location

A similar entrance was created into the southern compartment, where an early ditch (contexts 41524 and 41528) was covered over to form a cobbled causeway (context 41526) and massive ditch terminals (contexts 41510 and 41557 - Pl 5) dug on both sides.

The creation of the entrance to the north-eastern compartment apparently coincided with the reinstatement of its boundaries, with a recut ditch being clearly traced leading from the east-west aligned dividing ditch swinging northwards into the pre-existing north-south enclosure boundary, terminating at the entrance (context 40192 - Pl. 6).

The original geophysical survey showed a ditch running parallel to the northern and eastern boundaries of the enclosure, and this ditch had been examined in 1999 in Trench 4 at the north of the site This external ditch was traced southwards to the point where it intersected with an earlier east-west aligned ditch (context 41548), swinging westwards to cut through the upper part of the main enclosure ditch and continue along the line of the southern boundary of the south-east enclosure compartment. This means that although the external ditch respected the line of the main enclosure boundaries, it cut through the main boundary ditch when the latter had largely silted up and become redundant.

Two components of this ditch system link into the features excavated to the east of Crab Lane in 1999 (CG 99) East-west ditch 4158 is the continuation of Ditch 25, part of the rectilinear 'brick work' field system lying to the east Ditch 21, also on an east-west alignment, cut into a segment of the external ditch (context 40320), clearly showing it to be later.

7.5 Structure 1

Situated within the north-east enclosure compartment, the eastern half of the ring gully representing this structure, along with associated post holes, was excavated in 2000, the 2001 excavation enabling the complete plan to be built up (Fig. 10). The ring gully (context 40084) formed an ovate feature with its longest axis aligned south-west to north-east. A large number of postholes and pits lay within the gully, presumably representing an internal building

A large mass of intercutting pit and postholes lay within a c. 7m wide zone immediately east of the ring gully, the density dropping off markedly to the south and east, but continuing to the north. A pit cutting into the ring gully yielded a coin of Vespasian (AD 79), another coin (?Hadrian, AD 117-38) coming from metal-detecting of the topsoil from this area The

position of the Vespasian com implies that Structure 1 was Iron Age, or at the latest mid-First century, in date.

7.6 Structure 2

This structure was located c. 10m south of Structure 1, within the south-eastern enclosure compartment (Pl 7). This was a sub-circular ring gully (context 41023 - Fig. 11) 0.45m wide and 0 25ni deep with an external diameter of c 10m The entrance was represented by a c. 5m wide gap in the gully on the north-east side. The fill of the ring gully contained calcite-gritted sherds along with recognisably Roman pottery. Assuming that the pottery was deposited within the gully during its working life, rather than representing rubbish dumped into it after it had become disused, a First or Second century date is indicated for this feature

Around Twenty-two postholes or pits were recognised within the ring gully, but the exact plan of any building remains unclear.

Structure 2 cut into a curvilinear gully (context 41179 - Fig. 12) on its south-eastern side, and another curvilinear gully (context 41025 - Fig. 12), present c 6ni south, also cut 41179 Gully 41179 contained a significant number of Roman Greyware sherds, which is further proof of a Roman date for Structure 2. In turn, gully 41179 cut into three pits (contexts 41245, 41357 and 41377), pit 41245 cutting into two postholes (contexts 41259 and 41261), providing a sequence of vertical stratigraphy for this area

A group of pits lay several metres south of Gully 41205, and these were perhaps associated with it Notable among this group was pit 41248, whose fill (context 41249) contained a large quantity of limpet and whelk shells, along with animal bone and calcite-gritted pottery

7.7 Structure 3

At c 14m in diameter, Structure 3 was the largest of the four structures, lying six metres south-west of Structure 2 (Pl. 8). Much of the eastern part of the ring gully was removed by a north-south aligned post-medieval ditch (context 41005). The ring gully showed traces of remodelling with the original circular gully (represented by gully segments 41090, 41092, 41098, 41205, 41215, 41233, 41413 and 41415 - Fig. 13) replaced on the northern side by a

concentric ditch of slightly smaller diameter (contexts 41107 and 41105). Approximately forty postholes within the ring gully represent indications of the associated building(s).

7.8 Structure 4

Structure 4 lay at the extreme south of the south-eastern enclosure compartment (Pl 9), and was represented by a ring gully with an external diameter of c. 10m (excavated as segments 19020, 19022, 19024, 19040, 19046, 41481, 41489, 41493 and 41497 - Fig 14) The gully had an entrance gap 4m wide on the eastern side, and was c. 1m wide and up to 0 8m deep. The northern part of the ring gully contained a discrete dump of burnt reddish clay (contexts 19018 and 41490) Along with calcite-gritted pottery of Late Iron Age / Roman character, the ring gully contained definitively Roman sherds.

There were few indications of a structure lying within the ring gully, but three postholes were recognised (contexts 19032, 19035 and 19037) grouped around an area of stone surfacing (context 19028 - Pl 10) situated directly opposite the entrance. The surfacing incorporated the base of a rotary quern (CL 00: SF 6) and a saddle quern (CL 00: SF 7), suggesting that this was a working area where gram was processed. Another rotary quern base (CL 00· SF 8) was located c. 4ni to the south-east. Other internal features were represented by three pits (contexts 41500, 41503 and 41508) and a patch of burnt clay (context 41502)

Two pits (contexts 41430 and 41512) were possibly associated with Structure 4. Pit 41430 was a relatively small clay-lined pit situated c. 8m east of the ring gully's entrance, 0 70m in diameter and 0.20m deep The fact that it was clay-lined could also link it to the paired kiln and long clay-lined pit to the north (contexts 5027 and 5054, described below). Pit 41512 was located around 4ni to the south-east of Structure 4, and was shown to be earlier than a recut of the southern enclosure boundary ditch (context 41518). The pit's fill (context 41511) contained significant amounts of calcite-gritted pottery and bone.

7.9 **Ki**ln 41180

A kiln was identified immediately north-west of Structure 2, consisting of a sub-oval cut (context 41587) on an east to west alignment, 1.20m long, 0.80m wide and 0.70m deep (Figs. 15 & 16 - Pl 11). Much of the gravel into which the pit was cut was scorched red by heat.

The actual stmcture was represented by areas of bumt clay (context 41224) on the kıln's south, west and north edges, and a vertical 'pedestal' stone consıstıng of a flat sandstone block held vertıcally, and parallel to the pit's axıs, by a pad of clay. The absence of lınıng at the east end of the kiln ındıcated that the stoke hole had been at thıs end.

An archaeomagnetıc date was obtained from samplıng the pedestal stone and undisturbed parts of the kıln's lınıng, giving a date of two possıble dates for the last fırıng event, namely 20 B.C - 40 A.D. or 160 B.C. - 70 B.C. The later of the two dates was ınterpreted as the most likely as this corresponded to the closest approach of the Master Curve for the period 1000 B.C to 600 A D (Geoquest 2001 - App. 00). Thıs ıs the earlıest date obtained for a pottery kıln ın Great Brıtaın (Swann pers. Comm.), makıng thıs a hıghly sıgnıficant feature ın the Britısh Iron Age.

The kıln was filled by a series of mixed deposıts (contexts 41181, 41221, 41252, 41264, 41268, 41252, 41297 and 41383) contaınıng much charcoal and fragments of the fired clay superstructure and lınıng. Context 41268 contained a fragment of a fired clay kıln plate, consıstıng of a flat plate of clay pierced by a number of holes; the presence of thıs dıstınctıve artefact is conclusıve proof of pottery manufacture, and the tentatıve ıdentıfıcatıon of pottery wasters and possıble vessels used ın the actual fırıng process are further proof of the kıln's functıon.

Four clay-lıned oval pits (contexts 41183, 41185, 41187 and 41217 - Pl. 12) were grouped around the kıln, and as they occupied the same stratıgraphic posıtıon, would appear to have been contemporary The pits were around 1.20m long, c. 1m wide and 0.5m deep. Each pıt was lıned wıth an even deposit of olıve green clay (contexts 41483, 41484, 41485 and 41486 respectıvely) up to 0 20nı thick. Clearly, the clay lınıngs would have made the pıts water-tıght, and of the many processes connected wıth pottery manufacture that they could have performed, the lıkelihood ıs that they were used to 'cure' clay ın preparatıon for throwıng.

A small number of postholes near the kiln (contexts 41234, 41470, 41156 and 41162) may be indications of a windbreak, or even an open-sided building, around the kiln and clay-lined pits.

After its final firing the kiln was backfilled and covered over by a deposit of scorched limestone pebbles (context 41181), after which a 0.10m deep deposit built up, or was dumped over this location (Fig. 17). Subsequently an area of large, flat limestone blocks (context 41058) was laid down to form a surface c. 2.70m long east to west and c. 1 70m wide north to south. A curvilinear gully (context 41059) running east to west c. 4m to the south may have been associated with the surface, as may two roughly linear cobble settings (contexts 41066 and 41067) lying to the north. This gully cut the ring gully of Stmcture 2, and cobbles 41067 partly overlay the fill (context 41563) of the east-west dividing ditch, illustrating that this was a late phase of activity.

7.10 **Kiln 5054**

Excavated in 1999, it is useful to compare this feature (context 5054 - Fig 18) with kiln 41180 Kiln 5054 was a 2.8m long, narrow cut with a bumt red clay lining (context 5009) There was a circular pit (context 5016), probably a stoke-hole, at its south-eastem end. The kiln was archaeoniagnetically dated to 40 B.C. to 40 A.D (or less likely 100 B C. - 60 B.C.).

This bumt feature fonned a pair with an oval pit of dished profile (context 5027), 2.9m in length and 0 8m wide, which was lined with unfired yellowish green clay (context 5031).

Both of these features were longer and narrower than Kiln 41180; additionally kiln 5054 lacked a central 'pedestal stone'. It therefore seems unlikely that this kiln was for the manufacture of pottery. No slag or hammer scale was present to indicate metal-working, and therefore processing of an organic commodity would seem to have been involved. The original interpretation that this pair of features was associated with malting still stands, the clay-lined pit probably being used to steep and germinate grain, the kiln itself roasting the grain to the required point to create malt for use in brewing.

7.11 Additional Industrial Activity

An indication of further industrial activity was represented by slag deposits (contexts 40048 and 40232) which filled an F-shaped gully (context 40049 -Fig. 19) situated in the south-west corner of the north-east enclosure compartment. The gully was c. 7ni long east-west, and at least 4m long north-south, being truncated by the east-west recut (context 14060) at its southern end. The F-shaped gully cut into another linear feature (context 40039), and this in turn cut into the south-eastern arc of Structure 2's ring gully, illustrating a long sequence of activity for this part of the site.

7.12 L-shaped Cut 40086 and C-shaped Cut 40096

These two features were situated in the extreme north-east corner of the north-east enclosure compartment (Fig 20) The C-shaped gully (context 40096) was the earliest of the two, and had a diameter of c 4m, the gully itself being steep-sided and flat-based, 0 50m wide and 0 25ni deep L-shaped gully 40086 cut through the central part of cut 40096, and had a total length of c. 13m, the gully having a U-shaped profile, with a maximum width of 0.8m and a depth of 0 5m.

The C-shaped gully may have been part of a minor structure such as a stack-base. The L-shaped gully respected the main enclosure ditches to the north and south, and was apparently intended to close off the corner of the enclosure. Two pits (contexts 40088 and 40095), and a possible posthole (context 40070) lay within the enclosed area.

8. Discussion

The 2001 excavations totally excavated the internal features of the two eastern compartments of the rectangular enclosure system west of Crab Lane, and demonstrated the way in which the system of boundaries developed.

The earliest activity on site was evidenced by the flint assemblage which contained material of Mesolithic, Neolithic and Bronze Age date. The only features as yet assignable to any of these periods are the two Bronze Age graves, which demonstrated both cremation and inhumation funerary traditions.

The enclosure system itself had its origins in a Late Bronze Age / Early Iron Age field system, the compartmented rectangular enclosure being established over it. The enclosure also incorporated an isolated square barrow; such barrows usually being dated to the Early Iron Age

The precise phasing and dating of the elements of the enclosure compartments will depend on a detailed analysis of the pottery allied with radio carbon and possibly thermoluminescent dating methods. Provisionally, it seems that the rectangular enclosure was laid out complete with its internal divisions at the same time, but modifications to this system culminated in the re-instatement of the north, east and southern boundaries of the north-eastern compartment. The two eastern enclosure compartments were served by their own entrances, the excavation showing that these were actually cut into an earlier, partly infilled version of the eastern enclosure boundary There were no indications of earlier entrances, but these could well have been removed by the massive later recuts to the boundary ditches.

Earlier evaluation had shown that settlement activity was confined to the two eastern compartments, the suggestion being that the western compartment was used for keeping livestock Preliminary examination of the pottery assemblage, and the two archaeomagnetic dates, shows that this settlement was flourishing in the First century B.C. and the early First century A.D., extending into the Roman period, but ceasing before the end of the Second century A.D. The latest ditch recuts also contained early Roman material, presumably originating from domestic rubbish dumped from inside the enclosure However it could be that this dumping represents the deliberate infilling of the enclosure boundaries, for a later Roman ditch was seen to cut into the infilled enclosure ditch.

After a long break, the next evidence for human activity consisted of the remains of medieval ridge and furrow crossing the site on a north-south alignment, and parts of this formed the basis of field boundaries shown on the 1930 Ordnance Survey map (Fig 21).

9. Bibliography

Brewster, T C M. 1957 Excavations at Newham's Pit, Staxton, 1947- 48. *Yorks Arch J 154, 193-224*

Brown, J 1999 Romano-British Villa Complex at Chapel House Farm, Dalton on Tees, North Yorkshire. *Yorks Arch Soc Roman Antiquities Section Bulletin No 16*

Challis, A J. and Harding, D.W 1975 Later Prehistory from the Trent to the Tyne BAR 20 (i & n).

Corder, P. and Kirk, J.L. 1932 A Roman Villa at Langton, near Malton, East Yorkshire (YAS, Oxford)

EH 1989 Monuments Protection Programme, Single Monument Class Description, Minor Villas (Romano-British)

EH 1991 English Heritage Management of Archaeological Projects, 2nd ed.

EH 1995 English Heritage. A Strategy for the Care and Investigation of Finds

EH 1997 English Heritage Archaeology Division Research Agenda. (Draft).

ERARC 1989 Crossgates Farm, Seamer : Archaeological Sampling Excavations. (Unpublished).

IFA 1998 Institute of Field Archaeologist Year Book and Directory of Members

GSB 1988 Report on Geophysical Survey · Crossgates Farm, Seamer Survey No. 1988/9. (Unpubhshed).

GSB 1996 Report on Geophysical Survey : Crossgates Farm, Seanier. Survey No 1996/64 (Unpublished)

Hayes, R H 1988 Levisham Moor - Archaeological Investigations 1957-78. North York Moors National Park, Scarborough Archaeological and Historical Society joint publication.

Leach, P 1989 Archaeological Excavations at Crossgates, Seamer (North Yorkshire), July 1989. An Interim Report. (Unpublished.)

McHugh, M 1989 Soil Report: Crossgates Farm, Seamer, NorthYorkshire. Ancient Monuments Laboratory Report 106/89 (Unpublished).

Mackney, D. 1983 — Soils of England and Wales. Sheet 1: Northern England. Soil Survey of England and Wales.

MAP 1996 — Excavations at All Saints Church, Burythorpe. (Unpublished.)

MAP 1998i — Crossgates Farm, Seamer, North Yorkshire. Proposed Residential Development Archaeological Evaluation (Unpublished).

MAP 1998n — Crab Lane, Seamer, North Yorkshire. Geophysical Survey. (Unpublished).

Mortimer, J.R. 1905 — Forty Years Researches in British and Saxon Burial Mounds of East Yorkshire.

Neal, D S. 1996 — Excavations on the Roman Villa at Beadlam, Yorkshire. *YAS Yorkshire Archaeological Report No 2*

Powlesland, D. (ed.) 1998 — The West Heslerton Assessment *Internet Archaeology No 5*

Pye, G 1976 — Excavations at Crossgates near Scarborough in 1957-65 *Transactions of the Scarborough Archaeological and Historical Society (T.S A H.S.), 19*

Pye, G. 1983 — Further Excavations at Crossgates near Scarborough. *T.S.A.H.S 25*

Ramm, H 1978 — The Parisi. (London.)

RCHME 1997 — Ancient Landscapes of the Yorkshire Wolds

Riley, D. 1976 — Air Reconnaisance of West and South Yorkshire in 1975. *YAJ 48, 13-8.*

Rutter, J and Duke, G — 1958 Excavations at Crossgates near Scarborough 1947-56. *T.S A H.S. 1.*

Spratt, D 1982 — Prehistoric and Roman Archaeology of North-east Yorkshire *British Archaeological Reports British Series No 104.*

Stead, I.M. 1965 — The La Tene Cultures of Eastem Yorkshire. (York).

Stead, I.M. 1980 — Rudston Roman Villa. (YAS, Leeds).

Wilson, P.R (ed) — North-east Yorkshire Studies· Archaeological Papers by Raymond H Hayes. (YAS, Leeds)