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West Street
Gargrave
North Yorkshire

Assessment Report

MAP Archaeological Consultancy Ltd

February 1998

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1. Introduction

The site measuring approximately 0.84 hectares. is situated on the western edge of residential development in the village of Gargrave, North Yorkshire (SD 9322 5438 : Fig. 1). It is presently an open area of grass land and is bounded to the east by a sports field, with residential properties to the south including Old Hall (a 17th-18th century farmhouse) and a large flood bank for the Leeds-Liverpool canal to the north (Pls. 1 & 2).

The topography of the site is dominated by two pronounced earthworks, the canal bank in the north and a sub-circular platform in the central to southern area of the site. Surface levels on the site show a gradual slope from north to south of 0.97m (c. 103.58 - 102.61m AOD) and a much less defined slope from west to east of 0.29m (103.74 - 103.45m AOD).

The geology of the site is largely Conway Association soils, a deep, fine, silt/clay made up from river alluvium. The deeper solid geology of the site is Carboniferous limestone. The natural water table lies at approximately 1.5m beneath the present land surface.

Outline planning permission for housing was granted for the site in the mid 1970's. Development work in 1976 illustrated the archaeological potential and a programme of evaluatory work was carried out from 1977-81 under Craven Museum. In 1987 the outline planning permission was renewed with a Watching Brief condition. In 1992 a further renewal retained the Watching Brief condition.

In early April the site was sold to Burley Developments for residential housing development. with only a Watching Brief condition. Such a condition was felt to be less than satisfactory and a more acceptable programme of works was considered.

Following a series of meetings between English Heritage, the Heritage Dept. of North Yorkshire County Council, MAP Archaeological Consultancy Ltd and Burley Developments a decision was made to undertake the work programme with specific objectives (section 5.1).

The work was joint funded by Burley Developments Ltd and English Heritage in an attempt to find a meaningful compromise between use of the site for housing, and the preservation of an important archaeological monument by record.

2. Historical Background

Prehistory

Current information on the prehistoric activity in Gargrave is relatively poor, a small number of flint tools were located at the West Street site by William's (Williams 1983), and Iron Age activity was located beneath the Roman villa complex at Kirk Sink, located approximately 1km to the south of Gargrave (Gill 1988).

Roman

Excavations from 1968 to 1975 showed that the Kirk Sink site was occupied from the second to the fourth century AD. During the fourth century, the Roman activity on the site became much more prestigious, judging from the elaborate baths complex and the increased size of the buildings.

The villa was largely built from a red gritstone, the nearest source being Flasby. Several pieces of this distinctive stone were located within the fill of the moat on the West Street site.

Saxon and Viking

The field names around the village of Gargrave originate from Old English and there is an example of Anglian sculpture in the village church. The sculpture dates from the seventh to the eleventh century but little Saxon evidence has been gathered from actual excavation (Gill 1988).

A piece of carved bone, recovered from the previous excavation by Williams, has a possible Viking provenance.

Post Conquest

The Domesday Book records that before the conquest Gargrave had been owned by two Saxon nobles, Torfin and Gamel. It is probable that this is the same Gamel who is listed elsewhere as the under lord of Bradford. Torfin ruled the lands North of the Aire while Gamel held the lands to the south. Domesday records that Torfin and Gamel were replaced by Norman overlords after 1066. The land to the south of the river passed to William de Perci (sometimes spelled Percy), and the lands to the north passed into the Honour of Skipton. There were two manors in Gargrave. The manor incorporating the West Street site was recorded as *Horbury Garth*, which translates roughly as stronghold in the mud (Gill 1988). The other manor, *Garris,* was located south of the river Aire near to Gargrave church.

Later Medieval

The seigniorial ownership of the site carried on throughout most of the later medieval period. The manor of Gargrave was listed in Kirkby's inquisitions as being 18 carucates in extent. 10.5 of these belonged to the fee of the castle of Skipton, to which the West Street site belonged, with the remainder assigned to the Percy fee.

The fee associated with West Street then passed to a number of different families, among them John de Longvilers, Geoffrey de Nevile and finally Christopher Danby who passed the lands into the hands of the Cliffords in the 17th century (Williams 1983).

Post Medieval

The later history is known largely from cartographic sources. The late 18th century estate map of the Wilson family of Eshton Hall shows the site after the digging of the Leeds-Liverpool canal in 1774.

3. Previous Archaeological Work

The extant earthworks on the site and their imminent destruction in the late 1970's prompted a series of excavations, each lasting for two weeks, during the summers of 1977 to 1982 (Fig. 2). The site was excavated by David Williams, then of Skipton Museum, with the aid of a small team of volunteers. No machines were used, all trenches being excavated by hand, thus

the progress was limited by lack of manpower, experience and time. Only small scale funding was available which resulted in limited environmental work and specialist appraisal.

Excavation consisted of a series of trenches, the results of which produced nine phases of activity from the early 13th through to the 18th century. Excavations on the platform located a number of buildings of differing constructional type and a ditch which appeared to encircle the platform suggested that the site was moated.

Archaeological deposits were not confined to the platform, excavation in the west of the site (in the area disturbed by the initial development work by Windle & Sons) located a "large medieval structure" (Williams 1983).

This work led to a report which informed any subsequent developer of the archaeological importance of the site. In January 1997, MAP undertook re-excavation of a series of eleven engineers test pits. The work was to establish the extent of the remaining archaeology. Areas of archaeological interest were identified and prioritised. A further trench, totally excavated by MAP was placed in the entrance to the site so that a full sampling strategy could be implemented (Fig. 2).

During April and May 1997, further archaeological excavation was undertaken by MAP Archaeological Consultancy Ltd at West Street site and forms the subject of this report.

4. The Stratigraphic Sequence

4.1. The data

The archive data detailing the excavated sequence of deposits is composed of 4 basic sources:-

1. The context record sheets (Appendix 2).

The context register describes and records the individual features making up the stratigraphic sequence. A total of 159 context numbers were allocated, broken down into:-

- Trench 1 = 35
- Trench 2 = 53
- Trench 3 = 71

2. Site drawings (Appendix 3).

3. Photographic record (Appendix 4).

Colour slide, monochrome and colour print.

4. Environmental Samples Register (Appendix 5).

4.2 Quantity and quality of the archive data.

Context Register

There are 159 completed and checked context sheets. These are broken down into 3 trenches and all are of a high standard, providing valuable information regarding the nature, date and stratigraphic sequence of the site.

Site Drawings
The drawn record consists of 67 drawings. Of these, 21 are sections, drawn at a scale of 1:10 and the remainder are plans, drawn at a scale of 1:20. There are also a number of contexts sheets with scale drawings on the reverse. These would be used in post excavation analysis only.

Photographic Record
The photographic record was made up of monochrome, colour print and colour slide copies. These totalled 439 shots. All have been catalogued and labelled. All contexts were photographed in duplicate, to prevent loss of data through over/under exposure etc.

Environmental Register
A total of sixteen environmental samples being taken. 15 of these were bulk samples taken for environmental assessment and the remaining sample was discarded due to contamination. Two samples were processed in order to establish the possible potential of the remaining samples. The results from this environmental evidence is located in Section 6.3.

In addition to this a quantity of slag from Trench 1 was retained and sent for analysis at the Ancient Monuments Laboratory (section 6.5).

5. The archaeological sequence

5.1. Aims and objectives

Three trenches were opened with the aid of a back acting JCB mechanical excavator using a 2m wide toothless ditching bucket. The trenches were 20m² (Trench 3), 10m² (Trench 2) and 5m² (Trench 1) respectively (Fig. 3).

Trench 1 - street frontage
The 1997 investigation suggested structural activity fronting on to West Street of unknown date and on a different alignment to structures housed on the platform and those currently standing on West Street. This area of the site formed the only access to the development and prior excavation showed that deposits were very close to the surface and would therefore be totally destroyed by the construction of the access road.

Excavation in this area was to provide evidence on settlement patterns away from the platform and was concentrated in a 5m x 5m trench which would involve the re-excavation of MAP's Trench 12 with extension areas to the north and south.

Trenches 2 & 3 - the moat and ancillary ditches
Previous excavations by Williams located a large cut feature interpreted as a moat. Recent work called into question the general acceptance that this feature was a moat. Second in importance to the question of the development of street frontage and settlement patterns in Gargrave was the role of the 'moat' and a number of possible further ditches located in the 1997 evaluation. Trench 2 was opened with the objective of determining the relationship of a number of ditches located both in the 1978-81 and 1997 excavations. As the 1997 evaluation work cast some doubt as to whether a moated site was present the excavations in Trench 2 were designed to examine in closer detail the presence, alignment, date, and function of a number of ditches located to the south and east of the platform.

Trenches 2 & 3 - character of early settlement
The platform has been excavated in the past but the construction of three houses would cause damage to unexcavated areas of the platform during the excavation of the strip foundations.

The earliest recorded date for occupation on the platform was in the early 13th century, but it was clear that potentially large areas of the platform had not been fully excavated.

Excavation into a previously backfilled trench placed over a section of the platform where previous records suggest that excavation was not taken down to natural was undertaken, thus establishing if pre-13th century deposits existed and thus defining their nature.

Trenches 2 - interior and exterior platform activity
Previous excavations recorded the development of activity away from the interior of the platform into sections of infilled moat. The actual alignment/presence of the moat to the north of the platform is as yet to be resolved. Re-excavation in this specific area allowed the confirmation of the presence/absence of the moat, to evaluate distribution and nature of activity in this area of the site and to integrate the new excavation results with the previous work.

Trench 3 - environmental potential of moat deposits
Previous excavations at the site failed to address the importance of environmental deposits surviving within the fills of the moat. A sampling programme was therefore instigated.

5.2. Method of Excavation
Each trench was cleaned by hand and then photographed, planned and excavated using standard archaeological techniques. Photographs were taken in 35mm colour slide, colour and monochrome print. All plans were drawn at a scale of 1:20 and all sections at 1:10. Excavations below the Health and Safety threshold were carried out using a JCB mechanical excavator with an extending arm.

An environmental specialist was employed as a member of the excavation team. This allowed the on site assessment of all contexts for the possibility of positive environmental sampling. Bulk samples were taken where appropriate in order to establish the presence of micro and macro fossils.

In addition to the archaeological work, a sub surface metal detector survey of the site was done in strict accordance with the English Heritage Guidelines outlined in Geophysical Survey In Archaeological Field Evaluation (David 1995). Permission was sought from the developers and English Heritage before this work was undertaken. The metal detector survey was carried out by Mr Kevin Jackson, a resident of Gargrave. The whole of the site was scanned and the finds recovered by Mr Jackson, in association with a member of the archaeological team. The position of the finds were noted. A large number of metal objects were also recovered from the spoil heaps created during the initial mechanical clearance of the trenches. These were retained and the approximate position noted as each spoil heap came from a discrete area of the site. In addition to this, the area under excavation was scanned for non ferrous and ferrous finds and the location of each object marked to facilitate their recovery during excavation.

Finally, all spoil removed from discrete contexts was kept separate and scanned for metal work. This allowed the entire metal content to be located from an individual context.

5.3 Excavation Results

The trenches are discussed in ascending numerical order, with each trench broadly broken down into phases. Finally the whole site is discussed in section 5.3.4.

5.3.1 Trench 1

Trench 1 contained 35 discrete contexts and can be divided into four activity phases.

Phase 1

Cutting the natural clays (context 1036) were three linear features (1032, 1034 and 1021), interpreted as the result of agricultural activity (Fig. 5). Cut 1021 was 1m wide and 0.3m deep, filled by 1020 and dated to the 12th/13th century by the location of gritty ware pottery within the feature (section 6.1). This context also contained 363g of iron slag, which was considered to be the result of small scale smithing, and not associated with the area of burnt material located during trial trenching (section 6.5).

The second linear (cut 1032, fill 1031) was 1.75m wide and 0.51m deep and the third linear (cut 1034, fill 1033) 0.95m wide and 0.27m deep. No pottery was found, but animal bone was located in contexts 1031 and 1033 (section 6.4).

The fills of these linears were examined by the on site environmentalist and considered unsuitable for sampling.

Phase 2

Sealing the agricultural horizon, were a series of deposits previously interpreted as a burnt building (MAP 1997). Excavation found these deposits to be a circular kiln, containing ash resulting from the burning of lime (Fig. 5).

The lime kiln consisted of layers of burning and lime (cut 1033, structure 1030, fills 1019, 1022 and 1023 : Fig. 5 & Pl. 3).

All dating evidence came from sealed deposits with little or no intrusive activity. The only dating evidence recovered from the kiln fill itself, came from context 1019. Gritty ware pottery showed the upper fill to be 12th/13th century or later in date (section 6.1). A small amount of well preserved bone was also retained (section 6.4).

Environmental samples were taken to allow more accurate conclusions to be drawn as to the nature of the structure. The result of this environmental sampling showed only traces of stinging nettle and a number of unidentified invertebrate remains (section 6.3).

Lime is burnt to produce a medium for the creation of mortar, but it is also burnt for spreading on agricultural land to improve the quality of acid soils.

Phase 3

Phase 3 was represented by a maze of modern service trenches (cuts 1007, 1010, 1012, 1014, 1016 & 1018). A representative sample of the pottery and bone was retained in order to identify the date and nature of the contexts (fill 1006). A large amount was identified as modern (20th century), but residual medieval pottery was also recovered (section 6.1). A single square, iron buckle was recovered from context 1006. However, due to the modern nature of the deposit, a firm date for the buckle was not possible. It had been noted on site that the soil matrix from context 1020 was very similar to that from context 1006 and that the service trench was probably, at least partly, backfilled with context 1020. The presence of

0.764kg of slag confirmed this opinion (section 6.5). Thus, many of the finds recovered from context 1006, including the plated buckle, could have originated in context 1020.

All material recovered from this level was in good condition.

Phase 4
Contexts 1001 to 1003 were removed by machine as overburden and represented modern topsoil and levelling deposits.

5.3.2. Trench 2
Trench 2 was positioned in order to assess the nature and extent of Williams previous excavation as well as to investigate the formation process of the mound and the moat. A total of fifty-three contexts were recorded.

A machine section was cut through the moat itself and extended to create a continuous section through both mound and moat. Trench 2 served the dual purpose of evaluating the depth of the mound deposits and locating the extent of Williams trenches. No evidence for previous excavation was found, therefore the trench was taken down to natural subsoil in order to allow a clearer view of the depositional and anthropogenic processes involved in the creation of the monument.

Phase 1
Phase 1 was represented by the deposits used to create a mound or mote (contexts 2036, 2037, 2038). Surrounding this mound was a deep ditch, cut 2050, which measured 8m wide and was 1.7m deep (Fig. 7). The cut was gentle in the southern part, but broke to a 45 degree angle after around 4m. The contexts forming the mound had also slipped into the moat to form part of the fill.

It seems likely that the mound was built at the same time as the moat was dug. The material taken from the moat being heaped up to create the mound (Pl. 4).

The primary event in this sequence is the lowest level of the mound, context 2038 which was visible for 3.5m in the section and being 0.2m deep and made up of clay silt, similar to the natural subsoil.

The primary fill of the moat (context 2047) was caused by weathering of the newly exposed natural, coupled with the mixing of primary silts and was 0.2m deep.

This was sealed by a further period of natural infilling (context 2041). A small amount of well preserved bone was present in this layer but no firm dating evidence was located. This layer was also visible in the section cut through the mound and therefore the eroded material came from the mound surface. The section on top of the mound and the section in the ditch were both sampled to allow an environmental comparison to be established. The layer measured 0.4m deep and extended across the entirety of the 2m section opened up.

Contexts 2038 and 2041 were sealed by context 2037 and illustrated a period of stability within the moat. The material spread from the top of the mound right through the moat (Fig. 7). Context 2037 was 1m and being 0.3m deep and contained a large amount of metalwork (three iron nails, an iron horseshoe, a possible iron hook and two iron fragments). These appear to show dumping rather than any concerted industrial activity. East Pennine gritty ware dated the context to the 13th century (section 6.1). Environmental samples were taken

from the higher part of the mound and from the moat to allow a comparison to be drawn and to establish if this was in fact, one continuous layer (section 6.3).

This in turn was sealed by a layer of coarse sand and sorted cobbles and pebbles, context 2036. Context 2036 was 0.5m deep and covered the whole of the section opened (Fig. 7). The layer was present both in the moat and on the mound itself. This suggested that the moat had been cleared out at some stage, and the spoil deposited on the mound bank.

Context 2036 contained a discrete deposit (context 2039 - Fig. 7).

The higher parts of the mound had been partially removed in modern times. However, it was still evident that context 2035 sealed context 2036. A lack of dating evidence allowed no secure date to be placed on this activity. The layer was 0.15m deep and was evident in 2.5m of the section.

In the upper part of the moat, context 2036 was sealed by context 2043. Context 3036 was 0.2m deep and 0.3m wide (Fig. 7). Context 2043 was a small layer, 0.3m deep and 0.15m wide and was another context made up of re deposited natural, for which the origin is unclear.

The uppermost fill of the moat, context 2040, represents the fill of a re-cut (cut 2042). The cut was 1.1m deep and 2m was visible in the section (Fig. 7).

The fill of this cut, context 2040, was a clay silt, similar to natural, it was rich in metalwork, containing a copper coin (small find 8), a fragment of iron blade (small find 11), a smaller number of iron and lead fragments (section 6.7) and gritty ware pottery of 12th/13th century date.

Phase 2

Constructed into the uppermost fill of the moat (context 2040) were a pair of linear cobble structures (2010, 2011 : Fig. 6 :Pl. 5). They did not have any clear association with any nearby context. The first linear (2011) was 2m x 0.35m x 0.05m and the second (2010) was 3.5m x 0.25m by 0.15m deep. No clear relationships could be drawn and no datable evidence was recovered. The two met immediately beneath the larger wall (2003/4 : see below). In the final stages of the excavation it was established that wall 2010 continued to the north east of wall 2003 to form a sub circular structure. Context 2010 was partially sealed beneath context 2009 and lay above context 2049.

Structure 2010 was made from four courses of cobbles, intermixed with limestone blocks and fragments and is very similar to the one described by Williams as 'a dovecote'. He arrived at this conclusion due to the drum-like build of the structure and the fact that it was similar to one excavated at Newstead, West Yorkshire, which was also interpreted as a dovecote. Williams mentions in his report that the upper courses are fire cracked and reddened but gives no explanation for this. Williams dated the structure to pre 1400. Structure 2010 contained no dating evidence but it was sealed by context (2009), dated to the 15th century, providing a *terminus ante quem*.

In the south-west of the trench, there was a distinct layer (2049) bounded by the edge of excavation and wall 2003; although not fully excavated, it was at least 0.2m deep and produced three iron nails, an iron ring fragment, an iron bar, a copper alloy disc and a copper alloy stud, but no pottery was found.

Phase 3

Within the southern section of Trench 2 there was a pit visible (cut 2030 : Pl. 6). The pit had been cut into the mound created during the building of the moat. The lining of pit 2030 (context 2031) contained a large amount of burnt material, and the lowest levels contained burnt natural and burnt subsoil, indicating a fire in situ. This was reinforced by the large amount of charcoal present. Animal bone, in good condition was recovered from fills 2028 and 2027, although no datable artefacts were found.

A sample was taken from the lowest level, context 2031, a burnt ash layer, for environmental analysis. The analysis showed traces of brick and mortar as well as residue from the burning of straw. The pits primary use seems to have been as a place in which to burn refuse, but the mollusc evidence suggests that the pit was then left open for some time, *?bidentatum* and *discus rotundatus* indicating damp conditions, perhaps under rubbish. (section 6.3).

Pit 2030 was cut through contexts 2020 and 2018. Deposit 2020 was a layer of mixed stone, sand and gravel, between 0.2m to 0.4m deep, and probably represents a part of the mound build.

Phase 4

Phase 4 was represented by a large wall, contexts 2003/2004 (Fig. 6 : Pl. 7), which stood above the upper moat fill, context 2040. From this layer, immediately beneath the upper walls, a single sherd of unglazed, red pottery was recovered, providing a terminus post quem for the structure. Analysis of this sherd showed the earliest date for the wall construction to be of 15th century date, throwing confusion on the Williams hypothesis that the wall was of 14th century date.

Wall 2003/4 contained no datable artefacts within the matrix and was dismantled in order to investigate its method of construction. It was faced both sides with a rubble core. The outer facing was of a higher quality on the inner face, leading to the conclusion that it had served as a boundary wall, whose aesthetic aspect was important. It may also have served a defensive purpose judging from the size and good quality of the build. In the area where the wall had been built on top of the moat there had been partial subsidence but the wall had still retained its structural integrity despite having its back broken. The wall also has a buttress attached (2008), presumably to support the higher levels after the lower courses had sank into the moat. No datable evidence was recovered from this context, but some animal bone was collected.

The wall shared the north to south alignment of the existing wall line of Old Hall Farm and continued into the southern baulk of the trench. The wall was detected in a sondage circa 5m south of Trench 2 at which point the overlying soil contained modern pottery. No dating evidence was found within the matrix of the wall itself, or beneath it, in this sondage.

The wall turned a right angle in Trench 2 and then ran west, being observed during the top stripping; a second right angle was detected turning the wall back towards the existing boundary of Old Hall Farm. This would suggest that wall 2003/4 was a boundary associated with Old Hall Farm and would have doubled the enclosed area.

At the instigation of the present owner, the window in the cellar of the cottage contained within Old Hall Farm, was analysed and photographed. It proved to be of probable medieval date judging from the style and is presently at 1.5m below ground surface, giving an interesting insight into the medieval ground level.

A number of older local people from the village still refer to Old Hall Farm as the Garrison House, suggesting that during the Civil War, Colonel Lambert billeted Roundhead troops there. He did own property in the area and was himself based at Carlton, only a few miles away. Thus, it is entirely plausible that the Old Hall may have been used as a garrison and it may be that the wall forms the outer perimeter of this. However, no archaeological evidence of activity from this period was located on the site, except for a single unstratified musket ball and a shoe buckle which dates to the approximate period (section 6.7). A much higher degree of concentration of military paraphernalia would be expected if the site had, in fact, been a garrison.

Within Williams report, the line of the wall (2003/4) is identified, but it is phased as later fourteenth/early fifteenth century, but no indication was given as to the dating methodology used. He suggested that the west wall of the building (C5), was built in stone and may have incorporated a boundary wall. It is the only stone wall of this building. He has therefore extrapolated that since building C5 appears to be fourteenth century and utilises the boundary wall then the boundary wall must pre date this structure. However, in Trench 2, the wall was found to overlay the uppermost fill of the moat. Williams states that the moat was continuing to silt up during this phase, making his dating of the wall confusing. The moat cannot be continuing to fill and yet at the same time have the wall overlying it.

Phase 5
The whole of Trench 2 was sealed by modern plough soil (contexts 2001 and 2002). Plough scars in the archaeology demonstrated that the site had been ploughed at some stage but also had been under pasture for a protracted period. This topsoil horizon contained modern pottery as well as medieval pottery.

5.3.3. Trench 3
Trench 3 was positioned in order to assess the nature and extent of Williams previous excavation as well as to investigate the formation process of the mound and moat, and to establish the nature of the ditch located in the previous trial trenching. Trench 3 contained 71 contexts in total.

Phase 1
The first archaeological activity in this trench was the moat, cut 3030, which continued into Trench 2 (Fig. 8 : Pls. 8 & 9). The recording of the lowest levels was difficult due to the observation of Health and Safety requirements. Thus, the overall depth of the moat is approximately 2.6m and over 6.5m wide at the point where excavated. Cut 3030 was steep sided, circa 45 degree and had a V-shaped profile (Fig. 9).

The basal fill of the moat (3068) was made up of gravel and cobbles in a sandy, clay matrix. No finds were recovered *in situ* but a small amount of metalwork was recovered from the fill, after it was mechanically removed. This consisted of an iron nail, a copper alloy sheet and a lead fragment. The fill is probably the result of natural erosion and gradual infilling after the digging of the moat. The excavated section filled with water as soon as the fill was removed, demonstrating that the lower level of the moat is below the water table, adding weight to the argument that the moat was not dry.

Immediately above this basal fill was a deposit of silt with a slight clay content, context 3032. This context covered the northern edge of the moat and measured 0.6m deep at its maximum. It appeared to be the result of the erosion of the sides of the moat due to natural weathering processes. Gritty ware pottery dated this context to the 12th century (section 6.1).

Above context 3032 was a dumped deposit, context 3038, which was made up of a more clay rich material being 1m deep and 2.3m in width. The context contained large rounded cobbles and animal bone.

A layer of charcoal rich silty clay, context 3031, sealed contexts 3032 and 3038. Context 3031 was 0.12m deep and 1.5m wide. The large amount of charcoal indicated burning but there was no evidence of this occurring in situ. The largest assemblage recovered from any single context came from this area, with twelve sherds of gritty ware and three sherds of Tees Valley ware giving a 13th/14th century date. A single iron nail was also recovered as well as animal bone.

Deposit 3033 also sealed context 3038. Deposit 3033 was a fine gravely silt, measuring around 0.5m deep and extending down the upper half of the south-east edge of the moat. The deposit was probably the result of natural silting and sorting of the sides of the moat. Gritty ware dated this context to the 12th/13th century.

Phase 2

Sealing contexts 3031 and 3033 was a layer of silty clay (3024) containing angular and sub rounded cobbles. This was interpreted as being redeposited natural. It is possible that the deposit is the fill of a re cut, but it seemed more likely that it represented a phase in the filling of the moat. It is also possible that this fill was the result of action connected with the cutting of the nearby canal. The deposit (3024) was 0.9m thick and over 4m wide (Fig. 9). An iron horseshoe and an associated corrosion lump were the only finds recovered from this context.

When the moat (overall context 3003) was cleaned in plan, a number of red gritstone fragments were located. These may be reused from the Kirk Sink villa site, since the closest other source is at Flasby. Metal finds from the upper fill were frequent. These included eleven iron nails, two iron tools, a copper alloy clasp, a lead weight, a copper alloy buckle and copper alloy and iron object. A small number of fragments were also recovered. Pottery evidence was mostly 12th to 13th century but three sherds of Humberware pushed the date forward to the 15th century. (Appendix 3.2)

Phase 3

To the south of the moat section a series of ditches were located and excavated (Fig. 9). These features cut through deposit 3048 which was a very dark clay/silt and possibly a previous agricultural horizon.

Context 3041 was a shallow U shaped ditch with gentle sides, filled with clayey silts and sands (contexts 3040 and 3039). This ditch terminated 1m from the southern section. The upper fill,a silty clay with frequent rounded pebble inclusions (3008), was part of a linear feature (cut 3037) running north-west to south-east and measuring 7m long and 0.6m wide.

Cutting this linear was a second linear (cut 3036) aligned east-west. This was 3m long and between 0.2m and 0.45m wide and 0.25m deep with concave base and steep sides. The fill (context 3009) was a silt clay, with concentrations of large rounded cobbles at either end of the linear.

Cutting through this and also through the upper fill of the moat was a linear feature (context 3007) running north-west to south-east, measuring 0.22m deep, it was between 1m and 0.4m wide and 6m long. The cut was straight sided with a concave base. The fill (context

3037) was a silty clay with occasional cobbles. The context appeared to be a heavily truncated ditch of indeterminate function.

This in turn, was cut by a further linear feature (cut 3064). Cut 3064 was shallow and concave, measuring 9m long by 0.5m wide and was less than 0.3m deep, with the western end narrowing to less than 0.4m. The fill (context 3006) contained frequent large, rounded river cobbles. The pottery assemblage from this context suggested a 13th century date, but since it cuts the upper fill of the moat (context 3003), which contains 15th century sherds it would seem that these 13th century sherds are residual.

Immediately above this linear, at less than a meter from the southern section was a single deposit containing the skeleton of a mature sheep, context 3005. The deposit was around 1m in diameter and less than 0.4m deep.

A further ditch, although with no clear association, was located in the extreme south-east of the trench. Ditch 3047 was 2m wide and 0.75m deep with steep, V shaped sides and a sharp base. It terminated at approximately 1m from the section. It was aligned on a ditch exposed in a trench previously opened by MAP earlier in the year. The fill (3046) was a dark silt clay, which had been heavily truncated by a later re-cut (3045). This was concave with steep sloping sides, with a fill (3044) of darker clay silt. A second terminus (context 3044) was aligned on this at around 1.5m distance and was very similar in nature and size to 3036, along with the fill (3050) was also very similar to that of the other terminus. The two termini formed an interval through the ditch although they are no longer orientated on any existing land boundaries. There was a small post hole (cut 3051; fill 3052) set into the top of this ditch. The post hole was cut by the ditch indicating that it was in existence before the ditch was cut (Fig. 8).

Both contexts 3045 and 3047 were cut by a linear (3043) running north-east to south-west. Cut 3043 was 1.3m wide and 0.35m deep. It ran for 2m at least before disappearing under the section. The fill (3042) was a clay silt with traces of charcoal. The pottery from this context contained a single sherd of gritty ware from the 12th/13th century and a single sherd of 19th century earthenware, but these could have been intrusive due to the unstable nature of the section in this area.

Phase 4

A series of post holes (contexts 3025, 3028 and 3070) were located to the south-east of the moat, the latter cutting into the top of the moat fill. Pothole (3070) had a diameter of 0.44m and was 0.25m deep, it contained small rounded pebbles (fill 3069).

Posthole 3025 was 0.3m in diameter and was 0.23m deep. It contained a single large stone (fill 3020). It was located to the west of ditch 3006 (Fig. 8).

Posthole 3028 was larger with a diameter of 0.61m and was 0.21m deep. The fills (3029 and 3015) contained angular blocks. It was located immediately to the east of linear 3007.

Phase 5

The entirety of Trench 2 was sealed by context 3002 which was approximately 0.2m deep. This was probably a previous plough soil. This in turn was sealed by modern topsoil (3001).

Phase 6

Cut through the topsoil at various points, the trenches previously opened by Williams were visible. These were recorded in order to establish whether Williams had bottomed the

archaeological deposits he investigated. The evidence from the sections suggested that Williams did in fact reach the limit of archaeology. The layers within the sections opened by Williams were numbered (3053 to 3067, excluding 3064).

5.3.4. Conclusions

A small amount of residual Roman dating material, both from the Williams excavation and from MAP's excavations, indicate Roman activity on the site. The red gritstone in the upper moat fill, may have come from the villa, but as other Roman evidence was scant it is likely that this material was brought in later.

The excavations recovered pottery which suggested that the first phase of medieval occupation at the site occurred from the 12th century. The pottery assemblage was very small and indicated little prestige activity and only small scale general activity on the site.

The moat excavated in Trenches 2 and 3, was deep, wide and was probably leated. The moat is comparable inwidth to examples from Newstead and Rest Park (Patourel 1973), but its pronounced V-shaped profile is unusual. The moat was cleaned at least once, as shown by the re-deposited material which came originally from the bottom of the moat and was than thrown onto the moat side.

Trench 1 contained a medieval agricultural horizon, characterised by parallel linear ditches or furrows, indicating cultivation of thewest of the site during the medieval period.

The window in the basement of the nearby farmhouse would suggest a shift of focus away from the moated site in the 14th century. The linears to the south of the moat in Trench 3 may form part of the complex associated with the movement of settlement, the focus of which was probably around Old Hall Farm with its proven medieval origins.

After the shift of emphasis the moat continued to silt up naturally and a number of smaller buildings were erected on the site, including the dove cot? located by Williams and the similar structure from the 1997 excavation. These may be fowl houses or dove cots as Williams suggests or more likely are cool houses or more probably ovens, for the Williams one was fire cracked and contained ash deposits.

It seems likely that at this stage, a series of drainage or stock ditches, were dug. These may be associated with the post holes, but the lack of dating evidence makes any dating of these post holes difficult. Ditch 3006 has a 13th century or later date. This linear is cutting most of the other ditches, making it a later feature. The ditches in this area are therefore probably pre-13th century.

The large wall visible in Trench 2 was the next phase of activity, and must have occurred during or after the 15th century, since a sherd of 15th century pottery was located beneath it. This again seems to be associated with the later Manor House, and probably represents the extent of the enclosed area belonging to the manor house.

The next activity was a small amount ditch digging during the 17th and 18th century. This may be associated with the horticulture or garden features.

Modern activity seems to be confined to small scale agriculture and pasture.

6. Specialist reports

6.1 Pottery Catalogue and Report

Number	Type	Date
1004	1 rim gritty ware 4 (3 rims, 1 base) white earthern ware	12th-20th century
1006	3 gritty ware (1 rim) 1 red coarse ware rim 2 yellow glaze 1 white earthenware	12th-19th century
1019	4 gritty ware	12th/13th century
1020	12 gritty ware inc. (2 rims + 8 sherds from same vessel) 1 ?Tees valley ware A 'Bifid' rim 2 East Pennines gritty ware	12th/13th century
T2 unstrat	1 unidentified 2 red coarse ware 2 black ware	17-18th century
2006	1 unidentified 1 glazed red slipware 2 black ware	17th-18th century
2009	1 bunghole pitcher sherd. ?Tees Valley ware	15th century
No	**Type**	**Date**
2014	1 gritty ware 2 black ware 1 Nottingham type stoneware 1 pearl ware	12th/18th century
2015	1 (?source) 3 yellow ware	Late 17th century Late 17th C
2021	1 calcite gritted ware	1st-4th century
2037	3 East Pennine gritty ware	13th century
2040	3 gritty ware (1 base)	12th/13th century
2045	3 black ware	17th/18th century
2051	1 (?black ware / Staffordshire type slip ware)	17th-18th century
T3 unstratified	1 gritty ware 1 unidentified 1 Cistercian ware cup sherd 5 black ware	12th-20th century

	2 white glazed earthenware	
3003	16 gritty ware (inc 4 rim + 2 base) 1 York glazed ware 7 Tees Valley ware A (inc 4 rims) 3 Humber ware	12th-15th century
3006	4 Tees Valley ware A	12th century
3024	2 gritty ware	12th/13th century
3031	12 gritty ware 3 Tees Valley jug sherds	12th/13th C
3032	4 gritty ware (inc 1 rim)	12th century
3033	4 gritty ware	12th/13th century
3042	1 gritty ware rim 1 slipped white earthen ware	12th-19th century

Comment

The pottery assemblage consisted of 130 sherds, of which 1 was Romano-British, 93 were medieval, 24 were post medieval and 12 which were 19th century or modern. The sherds were examined by hand lens and then divided into identifiable types based on their fabric and any decorative treatment. For the earliest 'types' from the site, these groups are broad, but it is possible to be more specific with some of the post medieval sherds. The small size of the assemblage makes quantitative analysis difficult.

Romano-British

A single Romano-British sherd was recovered (context 2021), in a reduced, calcite gritted fabric with calcite and chalk inclusions. With no specific clues from the form of the sherd it is not possible to give a more specific date.

Medieval

Pottery from the 1977-81 excavations at the site has been previously examined by S. Moorhouse, who identified 17 medieval pottery types. The assemblage from the 1997 excavation divided into 5 types, of which the gritty ware tradition is the most numerically important. Gritty ware was produced from the late 11th century until the mid 13th century. A number of the less gritty sherds belong in the East Pennine tradition and would be slightly later, 13th to 14th century. There is a substantial component of Tees Valley ware within the assemblage, including both cooking pots and jugs; this fabric was first published after the 1983 site report (Evans DH and Heslop DH. 1985. Two Medieval Sites in Yarm. YAJ 57. 68-9.) A single York Glazed ware jug sherd is represented. Late medieval Humber ware accounts for 3 sherds. 4 sherds of medieval pottery were not assigned to a specific source.

Post medieval

Pottery of this date is represented by Cistercian ware, black ware, yellow ware, red glazed slip ware, red coarse ware and Nottingham type stone ware. These range from the 16th to the 18th centuries.

Modern

The modern pottery consists of factory made white bodied earthen wares.

Discussion
The Romano-British calcite gritted sherd, meaningless by itself, supports the concept of a Roman presence on the site, implied by the location of metalwork and coins from the Roman period.

The medieval pottery is derived from a number of sources, none of them strictly local; the Tees Valley, York area, the West Riding and in the later medieval period, the Humber basin. This bears out the conclusions of the 1983 report, which set Gargrave at the fringes of a number of pottery supplying traditions. Only a small number of glazed jugs are present, cooking pots and jars accounting for the bulk of the forms. This suggests that food preparation and storage were probably being carried out adjacent to the area excavated, rather than food presentation. The date of the medieval assemblage shows a marked dropping away in activity from the 14th century on, and the single 16th century Cistercian sherd confirms this decline.

The post medieval pottery shows a background of activity at this time. As many of the sherds are abraded horticultural activity could be represented.

Recommendations
Since the publication of William's report medieval ceramic studies have advanced, with the recognition of new industries. The substantial assemblage from the 1997-1981 excavations should be considered afresh alongside the assemblage from the 1997 excavations

6.2 Conservation Assessment

Introduction
The following report details the conservation assessment of the material recovered during excavations at Gargrave, near Skipton, North Yorkshire. The material is discussed in two sections. The first deals with those items from stratified contexts, recovered both by excavation and by the use of a metal detector. The second section is concerned with those items recovered solely by metal detector from unstratified contexts.

The assessment was carried out by X-radiography of both iron and copper objects as well as visual examination of all the material under low power binocular microscope. The work was undertaken without recourse to a finds specialist.

6.2.1 Stratified material
The following material totals were recovered:

Iron	44
Copper Alloy	8
Lead Alloy	8

Material Assessment

Iron
In general the iron work is well preserved, usually covered with a thin crust of soil and corrosion products. The X rays show that in a majority of cases, there is quite a lot of remaining metal, although several exhibit severe corrosion with little sound core remaining.

Much of the ironwork consists of nails and bar fragments, but a number of items require further investigation to assist in interpretation as well as identifying possible surface plating. A number of items require investigation to establish whether they are tools or nail shanks (from context 3003) and a possible hook (from context 2037) needs further clarification. A possible arrow head (from context 2017) also needs detailed investigation, and there may be the remains of mineralised wood in the socket. A knife blade fragment from context 2040 needs to be confirmed. Two objects exhibiting possible plating (fitting Fe 8 from context 3003 and a large square buckle from context 1006).

Overall, the material tends to suggest general dump debris rather than indicating any specific activity occurring on the site.

Copper Alloy

Overall, the copper alloy objects are very well preserved, many with good stable patinas. The one stratified Roman coin (SF 8, context 2040) has a very worn patinated surface with the relief just visible. The relief is partially visible on the radiograph, but the coin has already been identified as datable to Constantius II so no further work is necessary.

One item, a possible clasp (SF 4, context 3003) appears to have traces of mineralised leather between the two plates. Another object with possible mineralised remains is a tiny disc or stud (from context 2049) which has a very poor powdery surface, but the radiograph reveals decoration.

Another interesting unidentified object appears to be a thin copper alloy sheet with iron attached (SF 5, context 3003). Initial investigation revealed the possibility of the sheet being decorated with traces of solder; further study may be necessary.

Lead Alloy

All of the lead items are covered in a stable, off white (?carbonate) crust and require no further investigation. Most are either waste or sheet fragments and one (SF 2, context 3003) may be a weight, possibly used in fishing.

A catalogue is listed at the back of this report.

6.2.2 Unstratified material

This material was recovered by metal detector, mainly from the spoil heaps of the three trenches and the surrounding vicinity.

Material totals:

Iron	245
Copper Alloy	28
Lead Alloy	41
Silver	1

Material Assessment

Iron

The condition of the iron work is similar to that recovered from stratified deposits, generally covered in a thin crust of soil and corrosion products. The majority of the items are nails, horseshoes, sheet and bar fragments. A knife with possible plating along it's back was

recovered from an area west of trench 2 (xray number 4245) and another large, plated, square buckle, was found in the spoil heap from trench 3 (xray number 4247). Other interesting items include a knife with a possible non-ferrous fitting again from trench 3 spoil (xray 4249) and a tiny buckle with plate attached (xray 4250, trench 3 spoil). There may be remains of mineralised leather associated with the buckle plate.

Copper Alloy

Again, the copper alloy is well preserved, with good stable surfaces. Much of the material would appear to be modern although items of note include some small medieval buckles recovered from the area close to trench 2, and a Roman coin and fibula brooch from trench 3. The coin has a very worn surface with feint relief visible. This coin has been dated to Valens 364-378 AD, so no further work is required. The fibula brooch may have traces of blue enamel within the decoration, but more detailed examination would be necessary to confirm this. The blue deposit may be just copper corrosion.

Another small coin recovered near to trench 2 is very worn and no relief is visible on the xray. Although dated to the 4th century, further examination may reveal more relief. A possible clasp with inscription or monogram was recovered from an area close to trench 2 and possibly warrants more detailed examination.

Lead Alloy

Much of the material is either sheet fragments or shot and all appear to have stable carbonate or oxide crusts. One interesting item is a cloth seal dated to the 16-17th centuries, recovered near to trench 2.

Silver

A cut penny of Henry III was found near trench 2 and is in very good condition. There is some tarnishing of the surface, but otherwise the coin appears stable.

Storage Requirements

All the material has been packed with 'Jiffy' foam inserts in each bag to provide physical protection and stored under desiccated conditions using silica gel. This method is acceptable for long term storage, but does require regular monitoring and maintenance.

Further Work

A number of items have been identified as requiring further work, either to assist in the interpretation of the objects or to reveal and identify surface plating. Those items from stratified contexts are listed below in the catalogue. The investigation would entail the partial or complete removal of the overlying corrosion by use of standard mechanical methods, or by the use of non-invasive X radiography.

Table of Metalwork Assessed

Context	Find No	Metal	Interpret.	X ray	Comments	Investigate
William	Fe 12	Fe	Nail	4243		
Modern	Fe 1	Fe	Nail	4243		
Disturb.	Fe 2	Fe	Nail	4243		
"	Fe 3	Fe	Bar frag.	4243		
'	Fe 11	Fe	Nail	4243		
1006	-	Fe	Buckle	4243	Plated, needs investigation	Y
1006	-	Fe	Nail	4243		

2017	-	Fe	?Arrow head	4243	Investigate to assist ID	Y
2037	14	Fe	Nail	4244		
2037	15	Fe	?Nail	4244		
2037	16	Fe	Nail	4244		
2037	-	Fe	Horseshoe	4243		
2037	17	Fe	?Bar frag	4244	X section to assist ID	Y
2037	-	Fe	Frag	4243		
2037	-	Fe	Hook	4243	Investigate to assist ID	Y
2038	18	Pb	Bar frag	-	Stable off white crust	
2040	7	Pb	Frag	-	Sable off white crust	
2040	13	Fe	Nail	4244		
2040	11	Fe	Blade frag	4244	Investigate X section to confirm	Y
2040	10	Cu A	Sheet	4244	Dull cuprite surface	
2040	9	Pb	Fragment	-	Stable off white crust	
2040	8	Cu A	Coin	4244	Worn patinated surface; feint relief. ID as Constantius II	
2045	19	Pb	Shot	_-	Stable off white crust	
2049	-	Cu A	Disc	4244	Powdery corrosion. Shows decoration	Y
2049	-	Fe	?Ring frag	4244	Investigate to assist ID	Y
2049	-	Fe	Nail	4244		
2049	-	Fe	Nail	4244		
2049	-	Fe	Bar	4244	Features visible on radiograph	Y
2049	12	Cu A	Stud	4244	Stable dull green surface. ?mpo around pin	Y
2049	-	Fe	Nail	4244		
2049	-	Fe	Fragment	4244	?slag	
3003	Fe 4	Fe	Nail	4243		
3003	4	Cu A	?Clasp	4244	Good surface, a few blisters; iron bar in situ. ?mpo between plates.	Y
3003	1	Cu A	Buckle	4244	Patina, breaking down in areas; Fe rivet in situ. ?decorated	Y
3003	3	Pb	Fragment	-	Stable off white crust	
3003	2	Pb	?weight	-	Stable off white crust	
3003	5	Cu A /Fe	Object	4244	Cu A plate with Fe attached? Possible solder deposits	Y
3003	Fe 10	Fe	Nail	4243		
3003	Fe 18	Fe	Nail	4243		
3003	Fe 17	Fe	Nail	4243		
3003	Fe 16	Fe	Nail	4243		
3003	Fe 15	Fe	Nail	4243		
3003	Fe 9	Fe	?Tool	4243	Needs investigating to	Y

					assist ID	
3003	Fe 20	Fe	Nail	4243		
3003	Fe 19	Fe	?Tool	4243	Needs X section to assist ID	Y
3003	Fe 5	Fe	Sheet	4243		
3003	Fe 14	Fe	Nail	4243		
3003	Fe 13	Fe	Nail	4243		
3003	Fe 8	Fe	?Fitting	4243	Plating visible on Xray. Needs investigation	Y
3003	Fe 7	Fe	Nail	4243		
3003	Fe 21	Fe	Nail	4243		
3020	Fe 6	Fe	Nail	4243		
3024	-	Fe	Horseshoe	4244		
3024	-	Fe	Corrosion lump	4244		
3031	-	Fe	Nail	4244		
3068	-	Fe	Nail	4244		
3068	-	Pb	Sheet	-	Stable dull grey surface	
3068	-	Fe	Nail	4244		
3068	-	Pb	Fragment	-	Stable dull grey surface	

6.3 Assessment of medieval plant and invertebrate remains

J Carrott, A Hall and F Large

Summary

The bioarchaeological potential of some samples of sediment from medieval deposits from excavations in West Street, Gargrave, has been assessed. Two of the samples yielded small numbers of charred cereals, but plant remains were otherwise limited to a small amount of charcoal. One sample yielded a small assemblage of molluscs of limited interpretative value. It is not recommended that any further analysis of the material is undertaken.

Keywords: WEST STREET; GARGRAVE; NORTH YORKSHIRE; MEDIEVAL; MOATED SITE; PLANT REMAINS; CHARCOAL; CHARRED CEREALS ; MOLLUSCS

Introduction

Fifteen samples of sediment were collected during excavation of a medieval moat and associated features at a site in West Street, Gargrave, N. Yorkshire (NGR SD 94 54) by MAP Archaeological Consultancy Ltd. in May 1997. They were submitted to the Environmental Archaeology Unit (EAU), University of York, for assessment of their bioarchaeological potential.

Methods

All the sediment samples were inspected in the laboratory and notes made concerning their likely potential to yield useful assemblages of biological remains. On this basis, eight were selected for analysis using 'test' subsamples (Kenward *et al.* 1986) of between 1.4 and 3 kg. Washovers were taken from all the samples and these and the dried residues examined for their content of plant and animal remains.

In two cases, 'squashes' (Dainton 1992) were performed to check for the presence of microfossils of various kinds.

Results

The results of the assessment of the sediment samples are presented in Table 1.

Recommendations for further work

Given the very limited amount of preserved material and the limitations on dating of the contexts which *were* productive, the results obtained through this assessment do not, in the authors' opinion justify any further analysis of the material already examined or of any other samples from these excavations. However, the present report should be lodged with the site archive as a record of the work on plant and invertebrate remains undertaken.

Retention and disposal

All paper and electronic archives pertaining to the work reported here, together with processed and unprocessed samples and fossils obtained from the former, are currently stored at the EAU. It is not recommended that any unprocessed material be retained on bioarchaeological grounds.

Acknowledgements

We are grateful to English Heritage for making available funds for technical assistance to undertake this assessment.

References

Dainton, M. (1992). A quick, semiquantitative method for recording nematode gut parasite eggs from archaeological deposits. *Circaea, the Journal of the Association for Environmental Archaeology* **9**, 5863.

Kenward, H. K., Engleman, C., Robertson, A., and Large, F. (1986). Rapid scanning of urban archaeological deposits for insect remains. *Circaea* **3**, 16372.

Table 1. Results of assessment of sediment samples from West Street, Gargrave. Samples are listed in context order. NFACno further action recommended.

Context and archaeological information	Sample	Wt. (kg)	Nature of sediment	Evidence of plant remains	Evidence of invertebrate remains	Other material	Comments
1030 (charred fill from around kiln, Tr. 1; no dating)	3	1.4	dark greyish-brown, ?slightly humic, sandy silty clay; very small residue of sand with a little gravel (to 10 mm), traces of brick/tile (to 5 mm)	a single stinging nettle achene and traces of charcoal (< 2 mm max. dimension)	traces of land snails; many unidentified invertebrate eggs	a trace of organic detritus noted from a >squash=	NFA
2031 (charred residues from side of pit; no dating)	17	3	angular stones (to 100 mm+) in a charcoal-rich, dark reddish-brown to black ?ash matrix; large residue of sand and gravel (to 45 mm) with some bone and mortar, and traces of brick/tile, coal and land snail shell fragments	the washover was large (about 200 cm^3) and consisted mainly of soft, somewhat >spiky= fragments of charcoal, perhaps including some herbaceous material (e.g. from straw); some may be from coniferous wood; a few charred grains, including barley spikelets and hexaploid wheat grains(all rather blistered and poorly preserved)	a moderately large assemblage of land snails , mainly *Carychium ?bidentatum* and *Discus rotundatus*; together they indicate damp, shaded conditions, perhaps under rubbish, or damp grassland with some cover (e.g. woodland), but not interpretatively very useful		the cereals could perhaps be investigated further to make a proper record; there is probably little more useful analysis to be made of the snails; but N.B. only about 0.25 kg of matrix remains and dating is currently not available

Context and archaeological information	Sample	Wt. (kg)	Nature of sediment	Evidence of plant remains	Evidence of invertebrate remains	Other material	Comments
2036 (sand and gravel at edge of moat; dating: medieval)	10		light-mid yellowish-grey-brown unconsolidated sand and gravel				not selected for analysis
2037 (deposit in mound passing laterally into fills of moat; dating: C13th)	4 (upper part of mound sequence)		dark grey, crumbly (working plastic and sticky when wet), moderately stony sandy silty clay				not selected for analysis
	5 (middle part of mound sequence)		dark grey, crumbly (working plastic and sticky when wet), moderately stony sandy silty clay				not selected for analysis
	7 (deposit from top of moat, perhaps old land surface)		dark grey-brown, crumbly (working plastic and sticky when wet), very stony sandy silty clay				not selected for analysis
	12 (continuation of 2037 into moat fills)	3	dark brownish-grey, crumbly to slightly plastic (sticky when wetted), very stony silty clay sand; moderately large residue of sand and gravel (including stones to 50 mm)	traces of charcoal to 2 mm and ?root bark fragments	a little invertebrate cuticle	one large mammal tooth fragment	NFA

Context and archaeological information	Sample	Wt. (kg)	Nature of sediment	Evidence of plant remains	Evidence of invertebrate remains	Other material	Comments
2038 (lower part of mound sequence; no dating)	6	3	mid-dark greyish-brown, crumbly to brittle (working plastic and slightly sticky when wet) very stony silty clay sand; small residue of sand and gravel (including stones to 70 mm); some evidence of scorching of stone fragments	traces of charcoal to 2 mm and some ?modern root/rootlet fragments	a few ?earthworm egg capsules	one large mammal tooth	NFA
2039 (rectangular organic deposit; dating: medieval)	8	2	black to yellowish-brown to grey-brown crumbly, moderately stony sandy silt, rich in charcoal and ?ash; large residue of sand and gravel (to 30 mm)	moderate amounts of charred cereal grains in the washover of about 30 cm^3 (mainly ?bread wheat, but also some oats; grains mostly rather distorted); also a little charcoal to 5 mm	traces of land snails	some organic detritus was noted from the squash, along with a few fungal hyphae, and many diatoms and phytoliths	the cereals might repay closer examination but the material lacks chaff, is not very well preserved, and is from a context for which dating is currently too broad; further examination of the diatoms might yield information on water quality at the time of deposition but this seems unlikely to be of great interpretative value
	13						

Context and archaeological information	Sample	Wt. (kg)	Nature of sediment	Evidence of plant remains	Evidence of invertebrate remains	Other material	Comments
2040 (moat fill; dating: C12-13th)			dark grey-brown, more or less plastic and sticky, very stony sandy silty clay				not selected for analysis
	14	3	dark brownish-grey, crumbly (working plastic and slightly sticky when wet), very stony silty clay sand; small residue of sand with a little gravel to 25 mm; some scorching evident on stones	traces of charcoal to 5 mm with one charred half-grain of a cereal and traces of elderberry (*Sambucus nigra*) seed fragments; perhaps some other (extremely poorly preserved) seeds	a few ?earthworm egg capsules	trace of burnt bone to 5 mm	NFA
	15		dark grey-brown, crumbly (working plastic and sticky when wet) sandy silty clay with traces of stones 2-6 mm				not selected for analysis
2041 (moat fill; dating: medieval)	11	3	rounded stones (cobbles, to 100 mm) in a matrix of dark grey-brown plastic sandy clay; large residue of gravel (including stones to 70 mm) and a little sand	traces of charcoal to 5 mm	traces of invertebrate cuticle		NFA

Context and archaeological information	Sample	Wt. (kg)	Nature of sediment	Evidence of plant remains	Evidence of invertebrate remains	Other material	Comments
2047 (lowest moat fill; dating: medieval)	16		mid yellowish-grey-brown, crumbly, unconsolidated, very stony slightly clay sand				not selected for analysis
2049 (deposit from within circular stone structure; dating medieval) ars context 2051]	18	3	dark grey-brown, brittle to crumbly (working plastic and sticky when wet), moderately stony silty sandy clay; small residue of sand with a little gravel (to 40 mm)	traces of charcoal to 2 mm and of elder seed fragments	traces of land snails and ?earthworm egg capsules		

6.4. Assessment of vertebrate remains

K Dobney

Summary

Three large plastic bags of animal bones from deposits revealed by excavations at West Street, Gargrave, were submitted for an assessment of their potential for further analysis.

A small and variably preserved assemblage of animal bones, representing the medieval, post-medieval and modern periods, was present. No further work on the remains is recommended.

Keywords: WEST STREET; GARGRAVE; NORTH YORKSHIRE; ASSESSMENT; MEDIEVAL; POST-MEDIEVAL; VERTEBRATE REMAINS.

Introduction

Excavations were undertaken at West Street, Gargrave during May 1997 by MAP Archaeological Consultancy Ltd. Deposits from three trenches produced a very small assemblage of vertebrate remains, amounting to approximately 20 litres of bone. The pottery assemblage indicates that the material can be dated to the medieval, post-medieval and early modern periods. Of the 30 bone bearing contexts, deposits from 13 were either only dated to broad periods (i.e medieval or post-medieval), or produced no dating information at all. Deposits from the remaining 17 well-dated contexts produced material of 12th/13th (a total of five contexts), 13th/14th (two contexts), 15th (three contexts), 17th/18th (four contexts), 19th (two contexts) and 20th (one context) century date.

This report assesses the potential of the extant vertebrate assemblage.

Methods

Material from all well dated bone-bearing contexts was recorded.

Notes were made for each context regarding the state of preservation, colour, and the appearance of broken surfaces ('angularity'), whilst quantities and identifications of bone were noted where appropriate.

Results

The range of identified species recovered from the excavation is shown in Tables 1-5. The small size of the assemblage precludes detailed analysis of species quantification.

Overall, preservation, colour and angularity were recorded as 'variable' and dog gnawing was noted on many of the large mammal remains. This may suggest a significant component of reworked or redeposited material present in the assemblage.

Statement of potential

The small size of the recovered bone assemblage and the limited number of bones which can be used to obtain age-at-death and biometrical information preclude any further detailed recording and interpretation of the extant assemblage.

Recommendations

No further work on the recovered material is recommended.

Retention and disposal

The bones from well dated deposits should be retained.

Archive

All vertebrate remains are currently stored in the Environmental Archaeology Unit, University of York, along with paper and electronic records pertaining to the work described here.

Acknowledgements

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Table 1. Vertebrate remains from 12th/13th century deposits, West Street, Gargrave. (Key: Frags-number of fragments, Meas-measurable, Mand-mandibles with teeth, Iso-isolated teeth).

Species		Frags	Meas	Mand	Iso
Canis f. domestic	dog	1		1	-
Equus f. domestic	horse	2	1	-	-
Capreolus capreolus (L.)	roe deer	1	1	-	-
Sus f. domestic	pig	*	*	*	*
Bos f. domestic	cow	12	2	-	-
Caprovid	sheep/goat	3	-	-	-

*Complete juvenile pig skeleton

Table 2. Vertebrate remains from 13th/14th century deposits, West Street, Gargrave. (Key: Frags-number of fragments, Meas-measurable, Mand-mandibles with teeth, Iso-isolated teeth).

Species		Frags	Meas	Mand	Iso
Bos f. domestic	cow	2	1	-	-
Caprovid	sheep/goat	1	-	-	-

Table 3. Vertebrate remains from 15th century deposits, West Street, Gargrave. (Key: Frags-number of fragments, Meas-measurable, Mand-mandibles with teeth, Iso-isolated teeth).

Species		Frags	Meas	Mand	Iso
Canis f. domestic	dog	2	1	-	-
Bos f. domestic	cow	6	-	-	4
Caprovid	sheep/goat	1	-	-	-

Table 4. Vertebrate remains from 17th/18th century deposits, West Street, Gargrave. (Key: Frags-number of fragments, Meas-measurable, Mand-mandibles with teeth, Iso-isolated teeth).

Species		Frags	Meas	Mand	Iso
Felis f. domestic	cat	1	-	-	-
Canis f. domestic	dog	6	1	-	1
Equus f. domestic	horse	4	-	-	-
Sus f. domestic	pig	1	-	-	-
Bos f. domestic	cow	3	1	-	-
Caprovid	sheep/goat	2	-	-	-

Table 5. Vertebrate remains from 19th century deposits, West Street, Gargrave. (Key: Frags-number of fragments, Meas-measurable, Mand-mandibles with teeth, Iso-isolated teeth).

Species		Frags	Meas	Mand	Iso
Bos f. domestic	cow	16	1	-	-

6.5. The Examination of Metalworking Debris

D Starley , Ancient Monuments Laboratory. Report 78/97

Introduction

Excavation of a medieval moated site at Gargrave near Skipton, North Yorkshire (SD 9322 5438) were undertaken by MAP Archaeological Consultancy Ltd between April and May 1997. 1.4 kg of debris was recovered from a single trench measuring 5m². No debris was examined or reported from two further trenches of 20m² and 10m².

Context descriptions

Slag was found in three contexts, provisional interpretation and dating for which was provided by Paul Gething (pers comm.):

1006, the fill of a modern service trench, possibly containing disturbed material from deposit 1020 immediately below it.

1020, a linear deposit, interpreted as a field boundary, running to the west of a feature provisionally suggested to be a lime kiln. The context is probably medieval with no evidence of intrusive material and preservation was good.

1030, a second linear deposit running parallel to 1020. Interpreted as either a second ditch in the field system or possibly as the beginning of a ridge and furrow farming system. This feature was also of medieval date, containing no intrusive dating evidence, with good preservation. The deposit runs directly underneath the "lime kiln".

Objectives of examination

1. To identify the process(es) from which the debris derives
2. To suggest any alternative interpretation for the "lime kiln"

Examination and interpretation of the material

When received, the debris was heavily caked in mud, making identification difficult. The assemblage was washed, with care taken to examine the detached mud for hammerscale using a magnet. The material was visually examined, classified using the standard categories used by the Ancient Monuments Laboratory and the weights of each category noted (see Table 1).

Table 1 Metallurgical debris from Gargrave

Context	Interpretation	Weight(g)	Comments
1006	smithing hearth bottom	239	90x60x40mm
	undiagnostic ironworking slag	500	
	vitrified hearth lining	25	
	flake and spheroidal hammerscale	-	not quantified
1020	smithing hearth bottoms	363	256g 90x70x30mm & 107g 60x60x30mm
	undiagnostic ironworking slag	75	
	flake and spheroidal hammerscale	-	not quantified
1031	smithing hearth bottom	180	85x65x35mm
	flake hammerscale	-	not quantified

For such a small assemblage it was fortunate that an unusually large proportion of the material was diagnostic of a specific process. The four **smithing hearth bottoms**, provide clear evidence of blacksmithing, *i.e.* the hot forging of iron. These slag lumps are recognisable by their characteristic plano-convex form, having a rough underside and a smoother, vitrified upper surface often hollowed as a result of downwards pressure from the air blast through the tuyere. Compositionally, hearth bottoms have a largely fayalitic (iron silicate) composition and result from high temperature reactions between the iron, iron scale and silica from either the sand used as flux or from the hearth lining. Statistics for the smithing hearth bottoms are given in Table 2. Compared to other medieval assemblages examined at the Ancient Monuments Laboratory, hearth bottoms from Gargrave are unusually small and of remarkably consistent in size.

Table 2 Smithing heath bottom dimensions (n=4)

	range	mean	std dev
weight (g)	107-256	196	67
length (mm)	60-90	81	14
width (mm)	60-70	64	5
depth (mm)	30-40	34	5

Further evidence for the smithing of iron was provided by very small quantities of **hammerscale** which was found by testing the soil removed from the uncleaned slag with a magnet. These micro slags can be divided into two types (Starley 1995). The first, **flake hammerscale,** consists of fish scale like fragments of the oxide/silicate skin of the iron dislodged during hot working. **Spheroidal hammerscale** results from the solidifiction of small droplets of liquid slag expelled during working, particularly when two components are welded together or when blooms of iron are first consolidated.

The debris classified as **undiagnostic ironworking slag** is also of fayalatic composition and can be formed during iron smelting or iron smithing. However, in the absence of any clear evidence for the former it is probable that the undiagnostic slag also derives from iron smithing. The only other catagory of material identified comprised two fragments of **vitrified hearth lining**. This forms as a result of a high temperature reaction of slag and/or alkali fuel ashes with the clay lining of a hearth.

Again in the absence of evidence of other processes it would seem most probable that this also derives from iron smithing.

Conclusions

The assessment of slag from Gargrave provided evidence for the smithing of iron in the form of both smithing hearth bottoms and hammerscale. The quantities of metallurgical debris were very small, totalling no more than 1.4kg of which more than half came from a modern feature, service trench (1006). However, the similarity of the material from this feature to that from the underlying medieval field boundary (1020) provides some support to the excavators hypothesis that the slag originates from the earlier context. Assessing the scale of the ironworking activities at Gargrave is problematic. Such a small quantity could have been produced by a single smith working for only a couple of days, alternatively it could be argued that the assemblage represents only a sample of a larger, more widely distributed presence at the site.

In the absence of supporting evidence such as a structure or part worked objects, determining the exact nature of the medieval ironworking at Gargrave is difficult and unreliable. Had larger quantities of hammerscale been found, the relative quantities of the two types, flake and spheroidal might have provided an indication of the type of work being carried out. However, the quantities found at Gargrave were inadequate to do this meaningfully. The consistently small size of the hearth bottoms found suggests small scale activity in a clay lined hearth to be the most likely. There is no reason to link the slags to the large feature provisionally identified as a lime kiln.

Further work

It is not thought that further visual examination or physico-chemical analysis of the slag would provide additional, useful information.

Storage of slag

All slag should be saved. Most metal working slag being predominantly fayalitic, is not prone to deterioration and requires no special storage treatment.

References

Starley D. 1995. *Hammerscale.* Archaeological Datasheet No 10, Historical Metallurgy Society, London.

6.7 Ferrous and non ferrous metalwork

The metalwork located during the metal detector survey was analysed using visual examination of all the material under low power monocular eyepiece, by Kevin Jackson, Craven Museum. The dateable artefacts were then compared with examples from comparative collections and as well as illustrations and photographs of similar objects. Below is a table of results

Area	Metal	Description
E of Trench 3	Cu alloy	Buckle 1250-1500ad
E of Trench 3	Cu alloy	Coin 364-378 ad- Valens type AE3
E of Trench 3	Alloy	Coin - Association Of Irish Mine Co. token c. C18ad
E of Trench 3	Cu alloy	Clog fastener c. C18-C19ad
E of Trench 3	Alloy	George III half penny, 1760-1820ad
E of Trench 3	Pewter	Button c. C18-C19ad
E of Trench 3	Cu alloy	Frag of fibular-with blue enamel c. C2ad (mid)
E of Trench 3	Fe	Purse bar / frame swivel c. Late C15-C16ad
E of Trench 3	Pewter	Buckle 1720-1790ad
Spoil W of Trench 2	Cu alloy	Coin, Roman, AE3 c. C4ad, from size.

Trench 3 Spoil	Ag	Henry III half short cross penny, 1217-1242ad
Trench 3 Spoil	Pb	Cloth seal, medieval
Trench 3 Spoil	Pewter	Buckle c. Later C17ad
Trench 3 Spoil	Cu alloy	Buckle c. C13-C14ad
Trench 3 Spoil	Pb	Powder measure, post medieval
Trench 3 Spoil	Cu alloy	Buckle 1350-1400ad

Conclusions

The datable metalwork from West Street, Gargrave provides corroborating evidence for the phasing of the site through pottery and physical relationships. Unfortunately a high proportion of the material recovered came from the metal detecting of spoil and also providing information on material culture at the site it calls into question whether further work would provide any additional information. A comparison of material recovered from the 1997 excavations to that from the William's excavations shows a very similar assemblage.

A Roman presence was detected, largely confined to the eastern part of the site. There was a single second century brooch, but evidence from the fourth century was more compelling. A late fourth or early fifth century Germanic buckle confirmed this.

There is a general hiatus on the site after the Roman period until the thirteenth century, with a silver coin and a buckle demonstrating activity in this period.

Buckles were also located from the fourteenth and fifteenth century.

Post medieval activity is demonstrated by the presence of the powder measure. The trading token of the Association of Irish Mining Companies was probably lost during the construction of the canal.

It is suggested that any further work is covered by a short summary report and catalogue.

7. Potential and acedemic objectives

Although the West Street site has now been developed, it still retains its regional importance as one of only two medieval moated sites in the District of Craven (the second is also located in Gargrave). The excavations undertaken by Williams were in direct response to the potential destruction of the site by development, the 1997 excavations were to an identical response, although over a much smaller area and a more limited timescale. No work had been undertaken at the site since 1981 and little work has been undertaken in Gargrave in recent years to further our understanding of the site, the village and its history.

The construction of residential housing has rendered the site no longer available for further archaeological investigation but the two excavation archives and the results of both excavations remain as testimony to the importance of this site and its role in understanding the history of Gargarve. The excavation results from both phases of the excavations need to be amalgamated, for example the issues raised in the Williams work and those addressed by the finds from the 1997 excavations - i.e. the dating of the archaeological sequence, development of settlement patterns at the site, the function of pottery, contribution of domestic versus commercial butchery to the faunal remains, the existence of iron smelting on the site and the presence of water logged remains in the moat.

Specific objectives within the 1997 excavations addressed a number of the issues raised by Williams.

Dating of the archaeological sequence

The 1997 investigations called into question a number of Williams interpretations and phases. A re-working of the Williams report would enable a tighter and more accurate report of the archaeology on the site to be produced.

This would include both archaeological and historical sources and would be achieved by reassessment of the William's archive, especially the photographs and site drawings, historical and cartographic sources (Public Records Office, North Yorkshire County Archives, Yorkshire Archaeological Society).

Maps of the area would be utilised to allow the comparison of the archaeological data with the existing cartographic evidence.

Williams archives	(15 days)	1500.00
Historical sources	(7 days)	700.00
Local history	(1 day)	100.00
	Total	£2300.00

The finds assemblage from the site has also provided dating evidence and where as care is required in that much of the 1997 material (excluding pottery) came from metal detected contexts it is still necessary to incorporate a short summary of findings and a catalogue within any new article on the archaeology of the site (sections 6.2 & 6.6).

Conservation work	EH funded
Summary report and catalogue	£300.00

The function of the pottery

The 1997 excavations produced an assemblage similar in content to that from the earlier excavations. However, the advances in pottery study and the need to further the study of regional research objectives as identified in Medieval Ceramic Studies in England (Mellor 1994) merits further work. This would concentrate on how in particular non-local wares can inform on the movement of pottery between regions and the need to characterise local pottery wares and their resources in the lower Dales region. This work would involve a re-assessment of the pottery assemblage from the William's excavations and integration with the 1997 pottery assemblage.

Examination of Williams archive	(2 days)	£200.00
Collation with 1997 assemblage	(2 days)	£200.00
	Total	£400.00

The re-assessment needs also to consider the Roman pottery found in the 1977-81 excavations. This material merits only a short paragraph in the report and considering the additional Roman

matieral recovered in 1997, available information on Roman activity at the site needs to be set into context.

Examination and report pottery	(1 day)	£100.00

Faunal assemblage

Although questions may still exist as to the balance of domestic versus commercial butchery, the 1997 results have been unable to shed further information nor provide the assemblages to take this element of research further.

The existence of iron smelting on the site

The 1997 excavations located a kiln and further domestic features (possibly ovens). Analysis of the metal working debris was informative but has not answered all the questions posed by the earlier excavations. Unfortunately due to the development of the site no further work on this subject is envisaged.

The presence of water logged remains in the moat

An environmental sampling strategy in 1997 provided the interesting information that the moat was leated. But the samples taken did not provide the data to forward further research.

The small scale investigations undertaken in 1997 called into question certain elements of the published results of the 1977-1981 excavations at the West Street site. The 1997 excavations addressed specific questions raised by the re-assessment of the site. A number of factors became apparent through the excavation and assessment which could be resolved by taking the project through to the next stage of analysis and publication. One of the medieval moated sites of Gargrave now only survives as isolated islands of in situ archaeology under a housing development, but the archives and information derived from the excavations merit a final report which sets the record straight.

10. Bibliography

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MAP (1997) West Street, Gargrave, North Yorkshire. Archaeological Evaluation. Unpublished.

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Williams, D. (1983) Excavations at Gargrave (1977-1981). Craven District Council.

APPENDIX 1

The Williams Archive

Photographs

There are 534 photographs in total.

1977	1-66
1978	67-134
1979	135-223
1980	224-346
1881	347-534

All photographs were black and white and marked on the reverse with a unique number.
These are accompanied by a hand written catalogue.
The majority have scales, but some are location shots etc.
Some are of a poor quality, e.g. they have a photographic bag in shot.
Some are not of Gargrave at all.

Context Register

There are 187 context sheets. They are pre-printed Craven Museum sheets. All are filled out by David Williams and all are in pencil, thus some have faded and are illegible.

No munselling was done and some of the terminology is confused . The grid system is unclear.

Only one sheet type was used, thus no separate sheets were used for structures or timber etc.

Site Notebooks

There are 4 site note books in total.

1977-78	Site 1	1 book
1978	Sites 2 and 3	1 book
1981	Site 2	1 book
1981?	Site?	1 book

These books contain site drawings, texts and matrices. They are written in pencil. Some parts are dirty, some parts are illegible or faded.

Other Notebooks

There are 3 small finds notebooks. Each context has a separate page so it is difficult to synthesise information and create a complete list of small finds, bulk, finds etc.

There are 2 finds notebooks again laid out by context and also difficult to synthesise information.

Site Drawings

There are 45 plans of which all are undated, unsigned and without site codes. Almost all have a scale of some sort.

There are also 31 sections again without dates or site codes. Most have scale indicated.
Included within these are

- 1 location plan
- 2 maps, 1 from 1838
- 1 large scale location map
- 2 plans on poor quality tracing paper
- 1 contour plan
- 1 coloured in resistivity plan
- 3 moat sections without ID or scale

The drawings need careful collation and investigation in order to identify exactly what they represent and how they tie in to the context register.