

An Archaeological Evaluation and Excavation on Land at Rectory Lane, Appleby Magna, Leicestershire (SK 308 102)
Planning Application No.97/0126/PT

Summary

Archaeological excavation on land at Rectory Lane, Appleby Magna, Leicestershire (SK 308 102) was undertaken by University of Leicester Archaeological Services in advance of development by JWA Architects and Loangain Ltd.. Excavations indicated the presence of a small Romano-British farmstead of 4th century date, with strong evidence for agricultural activities, such as corn processing, being carried out on site, within insubstantial structures, possibly representing the ancillary buildings of a main farm house.

1 Introduction

1.1 Loangain Ltd, in conjunction with JWA Architects, propose to build a new motel and facilities on land near J11 of the M42, Rectory Lane, Appleby Magna, Leicestershire, (SK 308 102).

1.2 In accordance with the Department of the Environment Planning Policy Guideline No. 16 (PPG 16 Archaeology and Planning), an archaeological desk based assessment was undertaken by the University of Leicester Archaeological Services (ULAS Report No. 99/23), which concluded that the archaeological potential of the area was unknown, since little archaeological survey work had been carried out in the parish.

As the site lies beyond the historic core of the village of Appleby Magna and formed part of the open field system at this time, it was suggested that any archaeological remains present would be likely to predate the medieval period and be well preserved close to the surface, as the site has existed as undisturbed pasture land in subsequent times.

1.3 As part of an archaeological condition of planning permission a scheme of archaeological survey work was undertaken, prior to the development of the area.

1.4 Initially, geophysical survey of the development area was undertaken by ULAS, on behalf of JWA Architects Ltd. The results of the survey proved inconclusive as to the presence/absence of archaeological deposits. Details and results of the geophysical survey are contained in ULAS Report No. 99/142.

1.5 Results of the subsequent archaeological evaluation, in the form of trial trenching, however, indicated the presence of Romano-British deposits within the development area, including possibly structural remains. In view of the evaluation results in relation to the 'footprint' of the development, two areas, each measuring 30m by 30m, were opened up for archaeological excavation, located to target the archaeological deposits observed within trenches 4 and 8 of the evaluation.

1.6 The archaeological evaluation and excavation of the development area were commissioned from (ULAS) and were directed by Sophie Clarke.

2 Location

The site lies approximately 28km west of Leicester in Appleby Magna parish in the district of north west Leicestershire (SK 308 102). It consists of an area of c.2.7 ha, within which it is proposed to construct an hotel and ancillary facilities. The site is located outside the village of Appleby Magna, on fairly flat land, at a height of c.98m OD.

3 Geology

The Ordnance Survey Geological Survey of Great Britain Sheet 155 indicates that the underlying geology consists of sandstone with bands of Mercia Mudstone.

4 Archaeological and Historical Background

4.1 *Archaeological background*

No known archaeological sites were listed in the SMR for the development area itself.

The SMR lists four sites of medieval origin, existing within the centre of the village of Appleby Magna.

30NWS SAM17061 (SK 316 098) Moat House, Appleby Magna. Medieval manorial complex, moat and fishponds earthworks, dovecote and 15th century manor house buildings.

30NWT (SK 315 098) Church of St. Michael, Appleby Magna. Dated to 14th century.

30NWZ (SK 316 097) Medieval village of Appleby Magna.

30NWJ (SK 314 098) Medieval/ post-medieval village earthworks.

4.2 *Historical Background*

Appleby is entered under Derbyshire in the Domesday Book. Land was owned there by Countess Godeva and Henry de Ferieres. Walker's Hall was built to replace the Moat House as the residence of the Lord of the Manor, in the centre of the village.

The manor of Appleby Magna was purchased by Sir Wolstan Dixie in 1604 and given to the trustees of Market Bosworth School, of which he was the founder.

No Enclosure or Tithe maps include the proposed development area. Ordnance Survey maps show that the area has changed very little between 1882 and the present day. Parts of the field were lost during the widening of the A453 and A444 trunk roads.

5 Aims and Methods

5.1 *The Evaluation*

In accordance with ULAS (1999) *Design Specification for Archaeological Work*, fourteen trial trenches, measuring 30m by 1.6m, were excavated, located within areas where the

development would be most destructive to the archaeology. These trenches represented a 2% sample of the development area.

A JCB 3CX, fitted with a 1.6m wide ditching bucket, was used to remove topsoil and subsoil, where present, until archaeological remains or the natural geological substratum was reached. This was carried out under archaeological supervision. All machined layers were recorded and the spoil was examined for finds.

Trenches were examined by hand cleaning. The levels above Ordnance Datum (OD) of all machined layers were recorded along the lengths of the trenches. All deposits of potentially archaeological significance were investigated and recorded. The work followed the Institute of Field Archaeologists' (IFA) *Standard and Guidance for Archaeological Evaluation*.

The locations of the trenches were recorded using a Topcon GTS-212 Electronic Distance Measurer linked to a Psion hand held data logger.

The aims of the archaeological evaluation were:

- 1) To establish the nature, character and extent of any archaeological deposits within the area to be affected by the proposed development.
- 2) To establish a date range for any archaeological deposits located.
- 3) To define the state of preservation of any such deposits, including the potential for environmental data.
- 4) To assess the local, regional and national importance of any deposits.

5.2 The Excavation

The results of the evaluation indicated two possible focal points for the archaeological activity observed within the evaluation trenches. Area 1, measuring 30m long by 30m wide, was positioned to locate the extent of the archaeological deposits observed within Trenches 4 and 12 of the evaluation. Area 2, also measuring 30m long by 30m wide, was positioned to locate the extent of features observed within Trenches 8 and 10.

Each area was excavated using two JCB 3CX mechanical diggers; each equipped with a 1.6m wide toothless ditching bucket. The topsoil and subsoil, where present, were removed in spits, under constant archaeological supervision until either archaeological features, or the natural geological substratum were revealed.

Each excavation area was subject to partial hand cleaning, in order to clearly define the archaeological remains present. All excavated archaeological deposits were recorded using the standard ULAS conventions. The work followed the Institute of Field Archaeologists' (IFA) *Standard and Guidance for Archaeological Excavation* and ULAS (1999) *Design Specification for Archaeological Excavation and Archaeological Attendance during Groundworks*.

Each area was located using a Topcon GTS Electronic Distance Measurer linked to a hand held data logger. The data were processed using Intsurv2 Survey software. Final digital drawings were produced using TurboCAD.

The aims of the excavation, as set out in the *Design Specification for Archaeological Excavation and Archaeological Attendance During Groundworks, Rectory Lane, Appleby Magna, Leicestershire (SK 308 102) (ULAS 1999)* were:

- 1) To ascertain the function, date and chronology of the archaeological deposits present.
- 2) To locate and record any structural elements associated with these deposits.
- 3) To recover environmental data likely to provide information on the economy and local environment of the settlement.

6 Results of the Evaluation

Fourteen trial trenches were excavated within the development area. Each trench was 1.6m wide. The natural substratum in all trenches was Mercia Mudstone.

Throughout the report archaeological features have been referred to using numbers:

[-] has been used for cut numbers, (-) has been used for context numbers

6.1 Trench 1

Trench 1 Details

Context Numbers: 1, 2

Length: 33m

Width: 1.6m

Average Depth: 0.35m

Surface level (m OD): 99.89

Base of Trench (m OD): 99. 54

Trench 1 was located in the north of the development area, aligned east/west, on the line of the proposed access road for the site. The natural subsoil was reached at a depth of c.35m and consisted of red sandy clay.

Three furrows, consisting of mid- orange brown, sandy clay, found to contain post- medieval pottery, were recorded in Trench 1. These furrows measured approximately 3m wide and were regularly spaced, aligned north-west/south-east.

At the western end of the trench, a linear feature was observed to cut through the geological substratum, aligned north-east/south-west and running underneath the baulk at either end. A section was excavated through the linear feature, showing Cut [2] to be a narrow gully, 0.95m wide and 0.32m deep, with a flattish base. Its fill (context (1)) consisted of compact, pale, orange brown sandy clay, containing medium sized pebbles. No dating evidence was found. Fill (1) was identical to context (15), the fill of a linear feature [16], observed on the same alignment as [2] in Trench 11. A section excavated through (15) showed the gully [16] to have a similar profile to gully [2] and it is probable that both profiles pertain to the same feature, a linear gully running across the area.

6.2 Trench 2

Trench 2 Details

Context Numbers: None

Length: 30m

Width: 1.6m

Average Depth: 0.32m

Surface level (m OD): 99.97

Base of Trench (m OD): 99.65

Trench 2 was situated to the south west of Trench 1, aligned north-north-west/south-south-east, along the line of the proposed access road.

One plough furrow, consisting of a mid orange brown, sandy clay, found to contain post-medieval pottery, was recorded in Trench 2. The furrow was approximately 7m wide and it was aligned north-west/south-east.

No deposits of archaeological significance were observed in this trench.

6.3 Trench 3

Trench 3 Details

Context Numbers: None

Length: 30m

Width: 1.6m

Average Depth: 0.35m

Surface level (m OD): 100.30

Base of Trench (m OD): 99.95

Trench 3 was located to the south of Trench 2, along the line of the proposed access road, on a south-west/north-east alignment.

At approximately 15.3m from the south-west end of the trench, was a linear area of disturbed ground, measuring 0.7m in width. This contained fragments of brick and sherds of post-medieval pottery and was found to correspond with the line of an earlier field boundary, which appears on the O.S. map of 1882.

6.4 Trench 4

Trench 4 Details

Context Numbers: (3) (4) (9) (10) (11)

Length: 30m

Width: 1.6m

Average Depth: 0.32m

Surface level (m OD): 100.90

Base of Trench (m OD): 100.58

Trench 4 was aligned north-north-west/south-south-east and located within the area proposed for the footprint of the main hotel building.

Four plough furrows were observed to cross the trench at regular intervals, on a north-west/south-east alignment.

At the southern end of the trench, a number of intercutting archaeological features was observed. These features remained unexcavated, partly due to restrictions on time but it was also felt that certain chronological relationships could be better understood in the context of a larger excavated area. Despite this, hand cleaning of the area provided dating evidence for each of the features noted in the trench.

Context (3) was recorded as an area of mid reddish brown sandy clay, containing common medium sized pebbles and producing sherds of Roman pottery. Context (3) had an unknown relationship with Context (10), an irregularly shaped deposit comprising small and medium sized pebbles, pressed into greyish brown, sandy clay. Surface cleaning of Context (10) also produced sherds of Roman pottery.

Context (4) consisted of dark greyish brown, silty clay containing occasional medium sized pebbles and flecks of charcoal. This feature protruded from the north-eastern baulk of the trench and appeared to form part of a linear feature, butt-ending near, or having some unknown relationship with Context (11), the dark reddish brown silty clay fill of a linear feature running beneath the opposite baulk. Surface cleaning of this area produced dating evidence from each feature.

Context (9) appeared as the fill of a post-hole type feature, a subcircular patch of mid greyish brown, silty clay. No finds were produced with which to date this feature.

6.5 Trench 5

Trench 5 Details

Context Numbers: None

Length: 33m

Width: 1.6m

Average Depth: 0.35m

Surface level (m OD): 101.00

Base of Trench (m OD): 100.65

Trench 5 was aligned east/west and positioned to target part of the footprint of the hotel building.

No deposits of archaeological significance were observed in this trench.

6.6 Trench 6

Trench 6 Details

Context Numbers: None
Length: 30m
Width: 1.6m
Average Depth: 0.35m
Surface level (m OD): 100.10
Base of Trench (m OD): 99.75

Trench 6 was located to the south of Trench 2, aligned north-north-west/south-south-east and positioned to target the footprint of the main hotel building.

A plough furrow measuring approximately 7m in width and found to contain sherds of modern pottery was recorded on a north-west/south-east alignment.

No deposits of archaeological significance were observed in this trench.

6.7 Trench 7

Trench 7 Details

Context Numbers: None
Length: 31m
Width: 1.6m
Average Depth: 0.35m
Surface level (m OD): 100.75
Base of Trench (m OD): 100.40

Trench 7 was located to target the area of the proposed car park and was aligned east/west. No deposits of archaeological significance were observed in this trench.

6.8 Trench 8

Trench 8 Details

Context Numbers: (5)- (8), (19)- (23)
Length: 30.5m
Width: 1.6m
Average Depth: 0.35m
Surface level (m OD): 100.50
Base of Trench (m OD): 100.15

Trench 8 was aligned north-west/south-east and was positioned along the exit road for the proposed development.

A plough furrow was observed to run along the length of the north-eastern edge of the trench.

(22) was a number assigned to an irregularly shaped area of dark, greyish brown, silty clay. This deposit was partly obscured by the plough furrow. Following the removal of the plough furrow, by hand, it seemed that (22) comprised a linear strip of what appeared to be intercutting post-hole type features.

(5) was a discrete, sub-circular feature, aligned very closely to (22). Excavation of this feature showed [55] to be a shallow, circular, post hole type feature with a rounded bottom. The dark, greyish brown, silty, clay fill (5) contained flecks of charcoal and one sherd of Roman pottery.

(6), (7), (28) and (21) were numbers assigned to find spots within a large, irregularly shaped spread of dark, greyish brown, silty clay. Where the cut for the land drain, contained within the plough furrow, had truncated this deposit, the natural Mercia Mudstone could be seen. No differences between fill types could be distinguished within this spread. The truncation of this archaeological deposit, by the land drain and by the plough furrow, made it difficult to ascertain its true nature and it was left unexcavated until it could be better understood through the excavation of the surrounding area.

(8) was a number assigned to a spot find, consisting of 5 sherds of mortaria, found within the north-eastern baulk section. The JCB was used to excavate a slot perpendicular to the main trench body, in order to locate any archaeological deposit to be associated with find spot (8). Although no such deposit was located, the extra slot revealed the mid greyish brown, sandy, clay fill of what appeared to be the butt-end of a narrow, linear feature (19). No finds were obtained with which to date this feature.

6.9 Trench 9

Trench 9 Details

Context Numbers: None

Length: 30.5m

Width: 1.6m

Average Depth: 0.35m

Surface level (m OD): 99.85

Base of Trench (m OD): 99.50

Trench 9 was located to target the proposed balancing pond, and was aligned east/west. One plough furrow was observed; this measured 5m wide and was aligned north-west/south-east. No deposits of archaeological significance were recorded in this trench.

6.10 Trench 10

Trench 10 Details

Context Numbers: (12) (13) (14)

Length: 14m

Width: 1.6m

Average Depth: 0.35m

Surface level (m OD): 100.30

Base of Trench (m OD): 99.95

Trench 10 was aligned north-west/south-east and was positioned to locate any continuation of the archaeological deposits observed within Trench 8.

(12) (13) and (14) were numbers assigned to find spots within what may turn out to be one large spread of dark, greyish brown, silty clay. This feature was left unexcavated, as it was thought that it could be better understood within the context of a larger excavated area.

6.11 Trench 11

Trench 11 Details

Context Numbers: (15) [16]

Length: 10m

Width: 1.6m

Average Depth: 0.31m

Surface level (m OD): 100.70

Base of Trench (m OD): 100.39

Trench 11 was aligned north-west/south-east and positioned to locate a continuation of linear feature [2] that was observed in Trench 1.

At the north-western end of the trench a linear band of pale, orange brown, sandy clay (15) was observed to cut through the natural geology on a north-east/south-west alignment. Context (15) was identical in nature to Context (1), seen in Trench 1. Excavation of (15) showed the profile of [159] to be very similar to the profile of [2]. As these features displayed very similar characteristics in both cut and fill and as they are exactly aligned, it is probable that both features represent a single, linear gully type feature, running north-east/south-west across the development area.

No dating evidence was produced from context (15).

6.12 Trench 12

Trench 12 Details

Context Numbers: (17) (18)

Length: 10.9m

Width: 1.6m

Average Depth: 0.35m

Surface level (m OD): 100.60

Base of Trench (m OD): 100.25

Trench 12 was aligned north-west/south-east and was positioned to locate any continuation of the archaeological deposits seen in Trench 4.

A plough furrow, containing a post-medieval land drain, also aligned north-west/south-east truncated the length of the south-western side of the trench.

Towards the north-west end of the trench there was a patch of dark, greyish brown, silty clay (17), which yielded sherds of Roman pottery during machining. The overlying furrow material was removed by hand, but the deposit appeared either to have been truncated by the furrow, or to butt-end. This feature was not excavated at this time, and appeared to be either a large circular pit, or the rounded butt-end of a ditch.

6.13 Trench 13

Trench 13 Details

Context Numbers: None
Length: 15m
Width: 1.6m
Average Depth: 0.35m
Surface level (m OD): 101.15
Base of Trench (m OD): 100.80

Trench 13 was aligned north-west/south-east and was positioned to locate any continuation of archaeological deposits seen in Trench 12.

Much of the base of the trench lay obscured by furrow material, from a plough furrow running along the same alignment as the trench, although the undisturbed Mercia Mudstone was visible along the south-western edge of the trench.

No archaeological deposits were located in this trench at the time of evaluation.

6.14 Trench 14

Trench 14 Details

Context Numbers: None
Length: 15m
Width: 1.6m
Average Depth: 0.35m
Surface level (m OD): 100.40
Base of Trench (m OD): 100.05

Trench 14 was aligned north-west/south-east and was positioned to locate any continuation to the north-east, of archaeological deposits seen in Trench 4.

Much of the base of the trench remained obscured by furrow material. Natural Mercia Mudstone was observed towards the north-western end of the trench. No archaeological deposits were located in this trench.

7 Discussion

Fourteen trial trenches were excavated within the development area, and of these Trenches 1, 4, 8, 10, 11 and 12 produced evidence of archaeological activity. Medieval ridge and furrow ploughing activity was revealed across the site, aligned roughly north-west/south-east.

Context numbers were given to features prior to excavation, in order to locate pottery finds. The gully (1)[2] that was recorded within trench 1 appears to be aligned roughly north-east/south-west and it is likely that gully (15)[159], located within trench 11, is a continuation of the same feature. Excavation of each context indicated a similar fill of compact, orange brown, sandy clay and showed the gully to be V-shaped, approximately 1.0m wide at the top and 0.32m deep. A slot was dug through each gully segment recorded, but no finds were recovered.

No other features were excavated during the evaluation as it was thought that they would be better understood within the context of a larger area of excavation. All features are discussed later in the text as part of the main excavation discussion.

8 Results of the Excavation

8.1 Based on the findings of the archaeological evaluation, it was decided that two larger areas were to be subject to topsoil stripping in an attempt to locate the extent of the archaeological deposits recorded within evaluation trenches 4, 8, 10 and 12.

Area 1 measured 30 metres square and was positioned in the southern part of the development area, to locate the extent of archaeological deposits recorded within trenches 8 and 10.

Area 2 also measured 30m square and was positioned in the western part of the development area, to locate the extent of archaeological deposits recorded within trenches 4 and 12.

Upon the stripping of the topsoil and the subsoil layers, a clear pattern of plough furrows emerged across each area, with each furrow measuring 2-3m wide and running on a north-west/south-east alignment. The heavy ploughing activity that took place across the site will have resulted in the heavy truncation of the underlying archaeological deposits and therefore accounts for the shallow depth of some of the features encountered.

Area 1

Group 1

A cluster of archaeological deposits was located in the southern part of area 1, possibly representing two relatively contemporary, but discreet episodes of activity. The earliest episode of activity was represented by linear gully [59]. The gully had a flattish base and was aligned north/south, truncated on its southern path by the edge of excavation. To the north, the gully was truncated by a plough furrow, running perpendicular to the gully, and it did not appear on the other side. The fill of the gully, (23), consisted of mid greyish brown, silty clay, containing pebbles and occasional charcoal flecks. Two sections were excavated through the gully producing, in total, 32 sherds of Roman pottery.

At right angles to gully [59] was a second butt-ending gully, [38]. This gully had an uncertain relationship with [59]. Its fill, (37) had been highly truncated and consisted of mid greyish brown, sandy clay that produced no dating evidence.

Cut into the top of the gully was [6], a large, sub-rectangular feature with a flattish base. The feature measured approximately 4m long by 3m wide, and had been truncated across its width by a clay pipe land drain. The feature was overlain by a plough furrow, which had to be removed by hand, and this may account for its shallow depth, which was no more than 0.1m. Its fill, (7), consisted of dark greyish brown, silty clay, containing pebbles and charcoal flecks, producing a total of 39 sherds of late 4th century Roman pottery. Also found within (7), by metal detector, was a bronze coin (Small find no. 2). The coin depicted the Emperor Magnentius, dating to 350-353 AD.

Around the southern and eastern edges of [6], and respecting the shape of the cut, were five shallow post-holes, each measuring approximately 0.25m in diameter. All postholes had a

similar fill of mid greyish brown, silty clay, and of these, [61] and [63] were observed to cut into the top of gully (23) [59]. No finds were obtained from the post-holes.

Although corresponding post-holes were looked for around the northern and western edges of [6], they were not found. It is possible that they had once been there, but that the plough furrow observed to truncate feature (7)[6] had removed any evidence of further associated features. The extent of the truncation of these deposits, by the plough furrow, can be appreciated when we consider the shallow depth of the features remaining- the depths of the five post-holes recorded varied between 0.05m and 0.18m.

To the west of, and possibly associated with Cut [6], was a short alignment of possible post-holes, running north-west/south-east. The south-western edge of the alignment had been clearly truncated by the trench for the modern land drain and this truncation by the land drain and by the plough furrow had resulted in the shallow depth of these post-holes. [45] was sub-circular in plan, with a diameter of approximately 0.35m. (44) consisted of mid greyish brown sandy clay, with occasional charcoal flecks and produced two sherds of Roman pottery.

Cuts [47], [54] and [49] were intercutting post-holes, on the same alignment as [45], although their relationships were unclear. Each fill was of a similar type, consisting of mid greyish brown sandy, silty clay. (22)[54] produced three sherds of Roman pottery.

The final post-hole in the alignment was [55], a shallow, sub-circular feature, measuring approximately 0.40m in diameter. The fill, (5), was of a similar type to the other associated post-holes and produced one sherd of Roman pottery.

It is uncertain whether these post-holes can be associated with the activity represented by the other features within Group 1, or whether they formed part of a second, separate structure, that had been truncated away by the plough furrow.

Group 2

A second grouping of features was located in the centre of Area 1, to the north of Group 1.

[14] was a shallow, sub rectangular feature, with a flattish base, measuring approximately 3.2m wide by 3.7m long. Its fill (12) consisted of dark greyish brown, silty clay, containing large pebbles, heat-cracked stones and charcoal flecks.

Excavation of the feature produced 127 sherds of Roman pottery, dated to the late 4th century. Also found within the fill was a burnt fragment of the upperstone from a rotary quern, used for grinding corn, an iron hobnail and two pins, made from copper alloy.

Once [14] had been emptied of its fill, a sequence of 13 stakeholes was located, lining the southern edge of the feature. Each stakehole measured 0.05m square, in plan, and each fill consisted of mid yellowish brown, sandy clay.

To the west of [14] were two intercutting post-holes, [51] and [53], with an unknown relationship. Each post-hole appeared to be sub-circular in plan, with a diameter of 0.5m. Each fill consisted of dark greyish brown, sandy, silty clay. Context (50) produced three sherds and (52) produced two sherds of Roman pottery.

Group 3

Group 3 was located towards the northern perimeter of Area 1.

[39] was a highly truncated, sub-rectangular/linear pit-type feature. Its fill, (31), actually consisted of two separate layers. The uppermost layer was found to consist of a shallow spread of dark brown, sandy clay, containing frequent pebbles and stones, of all sizes, and occasional flecks of charcoal. Beneath this shallow layer was a compact spread of large and medium sized cobbles, that had been pressed into the natural. This feature appeared to exist as a cut in the ground, rather than as a layer or a surface, but had a maximum depth of 0.2m. In the centre of the feature was a shallow but noticeable, sub-circular shaped depression. (31) was excavated from the feature in its entirety and 139 sherds of Roman pottery were recovered, dateable to 350+ AD. Also recovered from the fill were four fragments of quern, two with evidence of post breakage burning, and a bronze coin depicting Emperor Constantine I, dated to 307-337 AD.

To the west of [39] were two parallel, linear gullies [41] and [43]. The gullies displayed similar characteristics in their fills and in their cut shapes. The western extent of the gullies were limited by the edge of excavation, whilst to the east both appeared to butt-end below [39]. Each gully produced sherds of Roman pottery. Although, stratigraphically, the gullies pre-date [39], it is not certain whether the deposits represent two separate phases of activity or whether they are contemporary.

To the north-west of [39] was a very shallow post-hole type feature (56), consisting of mid brown, sandy clay with flecks of charcoal. No pottery was recovered from this feature. Although further post-holes were looked for, none were found and it may be that the plough furrows closely aligned on either side of [39] had destroyed all evidence of further associated deposits.

Other Features

To the south-west of area 1 was a small collection of irregularly shaped post-hole type features. (32), (33) and (34) had evidently suffered plough damage, as the scarring could be seen in the ground and this could account for the irregularities in their plan shapes. It is equally possible that the three contexts could represent one single, truncated pit-type feature. Each fill consisted of mid greyish brown, silty clay and one sherd of Roman pottery was recovered from (33).

Area 2

The Ditches

Segments of three apparently parallel ditches were recorded within area 2, aligned roughly east / west.

The most northerly of the ditches was represented by [76], measuring approximately 2.5m wide at the surface. Two slots were excavated through the ditch and examination of each

section face showed the ditch to have a different profile in each instance. The first section showed the ditch to be approximately 0.5m deep, with 45° sides and a flat base. The second section through the ditch showed its profile to have more steeply sloping sides and a rounded base.

The ditch fill was made up of three different contexts, representing, the gradual silting up of [76]. The primary fill of the ditch, (75) consisted of reddish brown, sandy clay containing occasional pebbles and charcoal. A single sherd of Roman pottery was recovered from this layer. The overlying (74) consisted of mid yellowish brown sandy clay. The uppermost fill of the ditch, (24) consisted of dark greyish brown, sandy, silty clay, containing pebbles and charcoal. Thirty-three sherds of pottery were recovered from (24), dated to the late 3rd-4th century.

Approximately 15m to the south of [76] was a second ditch on the same alignment. This feature [86] measured approximately 2m wide at the surface and was 0.5m deep, with a flat base. The primary fill, (85) consisted of mid yellowish brown, sandy clay, containing pebbles and charcoal flecks and produced 16 sherds of Roman pottery, dating to the late third-fourth century. The uppermost fill of the ditch, (29) consisted of dark greyish brown, sandy, silty clay, containing pebbles and charcoal and 29 sherds of Roman pottery, dated to the late 3rd-4th century.

Approximately 10m to the south of [86], a small segment of a third ditch, [131], was recorded. A small section was excavated through the ditch, which showed it to measure approximately 2.5m wide at the surface and approximately 0.7m deep, with a V-shaped profile. The primary fill of [131] was (151), which consisted of reddish brown, sandy clay. Context (130) consisted of mid yellowish brown, sandy clay, containing pebbles and charcoal and producing 12 sherds of third-fourth century pottery. The uppermost fill of the ditch, (129) consisted of dark greyish brown, sandy, silty clay and contained 19 sherds of 4th century pottery.

Group 4

Group 4 is the collective name given to the archaeological deposits recorded to lie in between ditches [131] and [86].

[128] was a shallow, possibly sub-rectangular sunken feature, similar to [14] located in area 1, although as this feature, truncated by the edge of excavation, was not fully revealed, it is difficult to define. Measuring approximately 3m wide, the fill of [128], (17) consisted of dark greyish brown, silty clay, 0.2m deep, containing fragments of burnt stone and occasional flecks of charcoal. Excavation of the fill recovered 109 sherds of third-fourth century pottery, five fragments of tegula roof tile and a fragment from the upperstone of a rotary quern. Also recovered from (17) were two highly corroded iron objects, one of which was identifiable as a possible knife blade.

There was no evidence of features that could be associated with [128], although the fact that this feature had been truncated by a plough furrow to the north and was limited by the edge of excavation to the south, meant that there was little opportunity to record any such features.

To the east of [128] was a spread of dark greyish brown, silty clay. Context numbers (27), (28) and (144) were assigned to different areas of this layer, but it is possible that they are

part of the same deposit. The layer was removed by hand, producing 23 sherds of fourth century pottery and revealing several features cut into the natural below.

[153] and [156] appeared to be two butt-ending gullies, crossing each other at right angles, although the exact nature of their relationship was not clear. [153] was aligned roughly east/west, butt-ending to the west. [156], aligned north/south, crossed [153] just before the butt-end, itself butt-ending to the north. Both gullies were highly truncated and produced no pottery.

[150] was a third gully aligned roughly south-west/north-east. This feature was also highly truncated, being no more than 0.20m wide and 0.08m deep. One sherd of Roman pottery was produced from its fill.

Appearing to respect the line of this gully was part of a possible surface (145). This consisted of a layer of closely packed cobbles, measuring approximately 100mm by 80mm (average size). The cobbles were contained within a shallow, oval depression, measuring 2m long by 1m wide. Although it is possible that this feature may have been part of a hearth, there was no abundance of charcoal and no evidence of *in situ* burning that one might expect with a hearth-type feature. Eighteen sherds of fourth century Roman pottery were removed from the cobble layer.

To the south of (145) there was a narrow, linear gully, aligned north-west/south-east. Although gully [148] was very shallow and truncated to the north-west by a plough furrow; to the south-east by the edge of excavation- its fill, (147), produced eight sherds of fourth century pottery.

The Corn Drying Oven

A hearth- type feature, identified as a probable corn drying oven, was located in the western part of Area 2. This consisted of a linear pit, [80], measuring approximately 1.8m in length and 0.16m deep, cut into the natural boulder clay. The pit was aligned roughly north/south, the northern end measuring 0.6m in width, being wider and more rounded than the tapered southern end. The southern end of [80] measured 0.30m wide and proved to be the deepest part of the feature, with a shallow but noticeable 'bowl' at the end. [80] was lined with a burnt layer of silty clay, (79), rich in charcoal, with evidence of having been burnt *in situ*, in the form of red, scorched natural clay around the feature.(79) was thicker and the signs of scorching were more apparent in the vicinity of the northern, bulb-end of the corn dryer. A sample of (79) was taken for environmental analysis, which showed a high density of carbonised cereal grains, representing glume wheats, *Triticum* sp. and hulled barley. Above (79) was (30), a layer of dark, orange brown, silty clay, containing occasional flecks of charcoal and a single fragment of animal bone. It is likely that this layer represents the infilling of the corn dryer, following its disuse. No finds were obtained from either context with which to date the corn dryer.

Group 5

To the west of the corn dryer was a group of heavily truncated features, located on a ridge between two plough furrows.

The earliest of these features appeared to be [109], a narrow, linear gully, aligned roughly east/west. The gully measured approximately 90mm deep and 0.30m wide. Its fill, (108), consisted of mid greyish brown silty clay and produced two sherds of late 3rd/4th century pottery. The gully was truncated at either end by a plough furrow and the modern disturbance associated with a former field boundary.

Possibly cutting [109] was a second gully, [99], aligned roughly north/south, to form a right angle. [99] measured 0.6m wide and 0.26m deep with a V-shaped profile, running for 6m before being truncated by a plough furrow. The earliest fill of [99], (110), produced two sherds of Roman pottery whilst the latest fill, (4) produced 21 sherds of 4th century pottery.

Cutting into gully [99] from the west, were two butt-ending gullies. [82] was aligned roughly east/west, measuring 5m in length and butt-ending at both ends with the western end cutting through (4). [78] was aligned roughly south-west/north-east, measuring approximately 6m in length, also butt-ending at both ends with the north-eastern end cutting through (4). (77) produced a single sherd of Roman pottery. At the junction of gullies [99] and [78], within (110) was the upper portion of a cow cranium, incorporating both horns.

[112] was a shallow, linear pit-type feature, appearing to cut into the top fill of gully [99], and measuring approximately 1.8m long by 0.6m wide. Its fill, (111) consisted of mid greyish brown silty clay and produced two sherds of Roman pottery.

Five metres to the west of gully [99], was a second, parallel gully. [105] also aligned north/south, measuring 3m in length, butt-ending at the southern end and truncated by a plough furrow to the north. [105] had been highly truncated, measuring 0.6m wide and 0.17m deep, with a rounded base. A single sherd of Roman pottery was produced from Context (104), along with fragments of animal bone.

Between gullies [99] and [105] was a cluster of small pits and post-holes that did not appear to form any obvious structural associations. The pottery obtained from the features in this area suggests a fourth century date for the activity they represent. Small quantities of iron slag were produced from a number of the features in this area and although it was not clear whether they represented the smelting or the smithying stages of iron working, it does suggest that small-scale metal-working activity was taking place in the vicinity.

9 Discussion

9.1 Despite the effects of truncation, by the medieval and post-medieval ploughing systems, over much of the site and despite the limitations of the small areas available for archaeological survey, the excavations have revealed an interesting range of deposits providing evidence of activity during the later Roman period.

The Evidence for Agricultural Activity

9.2 The Corn Drying Oven

Of the corn drying ovens recorded in Britain, most have been located next to villa settlements and stone built aisled buildings of the 3rd and 4th centuries. Different forms have been identified, but the following components have been put forward as the main criteria for their identification: a stoking area, a fire place, flues and a drying floor (Morris, 1979).

Spelt wheat is thought to have been the most common crop grown in Roman Britain, produced for the purposes of bread making (Monckton, 1995,35). The different stages of crop processing for bread making can sometimes be identified by the appropriate residues left as waste. Following initial threshing, to remove the grains from their stalks, the resulting 'spikelets' were subject to further stages of parching and pounding in order to free the grains from their husks, or 'glumes'. The result was then fine sieved to remove the purified grain, leaving chaff and weed seeds as waste by-products. The presence of quern stones can perhaps be an indication of the milling of the grains for the production of flour.

The corn drying oven found at Appleby Magna was of a very simple form representing, perhaps, the remains of the stoking bowl. Any evidence of a superstructure, including the drying platform that would have held the grain had been truncated away by subsequent ploughing. Environmental analysis of (79), the burnt lining of the corn drier, showed a high density of carbonised plant material within the fill, with a large proportion of wheat grain. It was thought that the sample represented wheat 'spikelets', the name given to the husked grains after initial threshing.

Corn drying ovens previously found in Leicestershire include the Roman villa sites at Norfolk Street, Leicester (Lucas, 1980, 83) and at Great Casterton (Morris, 1979). Another corn drying oven was discovered at the Romano-British site recently excavated at Crown Hills, Leicester (Chapman, forthcoming). This example was of a similar form to the Appleby Magna corn dryer, consisting of an elongated pit measuring 1.27m long, with a bulb end measuring 0.81m wide and a narrower 'flue' measuring 0.47m wide.

9.3 *The Sunken Features*

Two large sunken features of comparable size were located in the southern part of the development area, within Area 1.

[7] and [14] displayed similar characteristics in the nature of their fill and of their form. Both features were roughly sub-rectangular in plan, measuring approximately 3m wide by 4m long. Both features showed some structural evidence, although plough truncation may have destroyed evidence of further structural deposits that could have been associated with these features.

[7] appeared to be encircled by a ring of five shallow post-holes. Each post-hole appeared to have roughly the same diameter. Although no finds were obtained with which to date any of the post-holes, it seems likely that they were roughly contemporary with [7] as they follow the line of the cut so closely. Corresponding post-holes from the northern side of the feature are missing and it is likely that the plough furrow that was observed to have truncated through the feature, has destroyed all evidence of these shallower deposits.

[14] displayed a sequence of 13 square shaped stakeholes around its southern edge, to form a rough line of stakes around approximately half of the feature. Again, the proximity of the

feature to large plough furrows on either side suggests that more deposits that could have been associated with this group, may have been destroyed by the medieval ploughing and the later ploughing undertaken to level the ridge and furrow in the field.

A third sunken feature, [128] was located in the southern part of Area 2. [128] was of a size comparable to [7] and [14], although the full extent of the feature was not seen as it was truncated, to the south by the baulk edge of excavation and to the north by a plough furrow. The plough furrow was removed by hand, revealing the edge of [128]. However, the depth of the plough furrow meant that any evidence of structural remains, recorded in conjunction with similar features [7] and [14], that may have been associated with [128], would have been destroyed.

Environmental analysis of (17) showed a predominance of chaff items in the sample, representing the glumes, or the husks from parched grains of spelt wheat. Chaff items were predominant in all of the context samples subject to environmental analysis and this is a good indication of crop processing works in the vicinity.

Although the sunken feature building, or 'Grubenhau' is a form of building more commonly associated with the Saxon period, there have been several examples recorded from Romano-British sites around the country, including the Isle of Thanet, in Kent (Bennet & Williams, 1997), Crickley Hill in Gloucestershire (Jarret, pers.comm) and the Lower Terrace site at Tintagel Island (Harry, 1994).

At Crickley Hill, the site of a re-occupied Iron Age hill fort, several sunken feature buildings were located that were thought to date to 400AD (Jarret, pers.comm). Some of these examples had evidence of foundation wall stones and were thought to represent cob-walled structures. Stakeholes found in association with structures found on the terrace at Tintagel, dated to 395AD were thought to represent uprights used to support turf walls (Harry, 1997).

The results of the environmental analysis, which provides evidence of the waste products of crop processing, and the presence of the identified corn drying oven suggest that all stages of crop processing were being carried out on site.

Based on the results of the excavation, it is possible that the sunken features may represent low-status structures which served as the 'workshops' where stages of crop processing were undertaken, following the parching of the grain in the corn drying ovens.

The chaff items recovered from (17) suggests that this sunken feature may have been the location where the parched grain was pounded, in order to remove the grains from their glumes. The presence of quern fragments both in (17) and (12) suggest that the refined grain was being milled on site and that these 'workshops' may have been the focal points for more than one type of activity, with the various stages of corn processing being undertaken in one location.

The parching of grain in corn dryers has also been suggested as a method of preserving the corn for storage purposes, so that it could be used throughout the year (Morris, 1979.25). As the archaeological deposits on site indicate agricultural activity on a small scale, perhaps serving the domestic requirements of a single farmstead, this piecemeal method of activity seems more likely and it is possible to imagine small quantities of corn being refined and milled according to the needs of the household. It is not unlikely that the processing of the

grain was undertaken within the ancillary farm buildings represented perhaps by [7] [14] and [128].

9.4 *The Threshing Floors*

The initial threshing stage of corn processing is difficult to identify using environmental analysis of soil samples, as the waste product of threshing is straw, which would have been removed for re-use elsewhere on site. Straw was an important ingredient used in the construction of cob-walled buildings, which was a common method used in the construction of low status, timber-frame, agricultural buildings of the Roman period (Morris, 1979). However, as other stages of crop processing have been identified on site, it is likely that the initial threshing of the corn took place nearby and it is possible that the two cobbled surfaces recorded, (31) and (145), could represent threshing floors. Both contexts appeared to consist of medium and large sized rounded cobbles contained within shallow depressions in the ground. It is possible that the large quantities of broken pottery recovered from each context were deposited on the floors in order to consolidated the surfaces that each may represent. A narrow gully [150] that was aligned against cobbled surface (145) may be a beam slot, representing a timber-frame structure which may have provided shelter to the surface. All other structural evidence pertaining to this feature may have been eradicated by the plough furrow that appears to have truncated the northern extent of the surface.

Other Activity

9.5 *The Ditches*

The three parallel ditches recorded within area 2 pose some problems in their interpretation. As the ditches were on the same alignment as the medieval ridge and furrows apparent across the development area they could represent a separate phase of medieval ploughing. However, sections excavated through each ditch showed each one to have a good ditch-shaped profile and the quantities of Roman pottery with the lack of any later pottery finds suggest that these features were indeed Roman ditches, rather than medieval plough furrows.

It is difficult to understand what function these ditches may have served. [76] and [86] were only 15m apart making it very difficult to envisage them as enclosure ditches, as no returns were located that would have formed the enclosure.

Another possible explanation for the ditches and their proximity could be that they represent part of a cattle droveway, with the ditches acting to direct the cattle in a particular direction, from one field to another. Such a droveway has been identified, using geophysical survey, from a multi-period site at Warren Farm, Lockington (Butler & Ripper, 1998) but no similar Roman examples are known from Leicestershire.

9.6 *The Structural Evidence*

It has been suggested above that the sunken features located at Appleby Magna may represent basic structural forms, possible ancillary buildings of a low status farming settlement. The activity recorded on site has indicated the likelihood of the nearby presence of a central farm building or villa.

Excavations in Leicestershire and nation-wide have shown that the archaeological evidence of low status Romano-British farmstead buildings can be minimal, with use of timber frames and cob walling, as opposed to the stone built structures of wealthier settlements, which leave less ephemeral remains for the archaeological record.

Excavations at Bonners Lane, Leicester (Finn, 1994) located the remains of a 3rd /4th century timber framed building, existing as an imprint of gullies, or beam slots, representing external walls, with correspondingly shallower slots for internal, partition walls. Although the building was heavily truncated by later deposits, the form of the building was easily recognisable.

It is possible that the gullies of Group 5, within Area 2, could represent the beam slots of a rectangular shaped, timber framed building, although the truncation, to the north and to the south of the group, by plough furrows, makes it very difficult to substantiate this theory. However, the fact that neither gully [99] or [105] appeared to continue to run on the other side of the 3m wide plough furrow, suggesting turning or termination of each feature, suggests that these features might be structural rather than drainage features or field systems.

In addition to the parallel gullies [99] and [105], the right angle formed by gullies [99] and [109] is also reminiscent of structural forms, although once again, the later truncation of these features by plough furrow makes it very hard to be more conclusive. Neither gully was observed to continue to run on the southern side of the plough furrow.

If the gullies of Group 5 do represent a structure, then it is unlikely that the other features of the group, the pits and post-holes contained by the gullies, are contemporary with the building. Due to the undiagnostic quality of much of the pottery found within the features of Group 5, with a date range of 3rd/4th century given for all contexts, it is not possible to suggest a time sequence for the activity in this area, although stratigraphically, the latest phase of activity is represented by Context (10), the pebble surface and Context (122), the occupation layer above it.

10 Conclusion

The archaeological excavations undertaken at Appleby Magna have provided us with a rare opportunity to record the activities of a working, low status rural farmstead of the later Romano-British period. Excavations of rural settlements of this type have been rarely undertaken in Leicestershire and evidence nationally tends to be scarce due to the insubstantial nature of such occupation sites.

The archaeological remains located had been subject to significant truncation by the medieval ridge and furrow ploughing system and much of the archaeological evidence will have been lost as a result. As areas 1 and 2 represent only a small portion of the total development area, it is likely that the activity seen in these areas continues over the rest of the site.

There have been no previous archaeological excavations in Appleby Magna and although the village is mentioned in the Domesday Survey of 1086, the earliest archaeological evidence of settlement previously known in the village is the Church of St. Michael, dating to the early 14th century.

The Romano-British occupation site recorded through archaeological excavation has provided evidence for the early occupation of the area of Appleby Magna. The evidence for agricultural activity suggests that all the stages necessary to produce bread flour from the unrefined crop were being carried out on site, but that the production was on a small scale, perhaps furnishing the requirements of a single farmstead.

There was evidence to suggest that the small scale agricultural practices may have been carried out within small, insubstantial buildings, possibly consisting of timber structures that may have supported cob or turf walls. A sequence of shallow gullies, in close proximity to the corn drying oven, may represent the beam slots of the main farmstead building, although the plough truncation of this area makes it difficult to prove this conclusively.

The small assemblage of animal bone recovered from the site indicated that cattle sheep and pig were being kept and consumed by the inhabitants of the site. It was unclear whether the presence of dog and cat bones indicated domesticated or scavenging animals. The pottery sources, reflect local trading patterns with production centres such as Nene Valley, Oxfordshire, Derbyshire and Mancetter. The majority of the pottery found at Appleby Magna may have come from the kilns at Ravenstone, located approximately 9km to the north-east (Keegan, S., 1995).

The finds assemblage suggested that all the activity recorded on site took place around the 4th century, and certain more diagnostic sherds of pottery have been dated to the latter half of the century. The spatial distribution of the archaeological deposits would also suggest that the evidence represents the activities of a single working farmstead over a short timespan. There is no evidence of the continuity of the site beyond the 4th century and it is possible that after this time, the farmstead fell into disuse and became part of the open field systems of Appleby Magna.

11. Acknowledgements

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12 Archive

The archive is to be held with the Leicestershire Museums, Arts and Records Service, under the accession number X.A64.1999.

site indices

158 context sheets

19 A2 permagraph sheet pencil drawings of plans and sections

3 colour films/ 4 monochrome films

small finds

animal bone

pottery finds

tile and quern

survey data

13 Publication

A version of the Summary (above) will be published in *Transactions of the Leicestershire Archaeological and Historical Society* in due course.

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