



**MALTINGS ACADEMY,  
SPINKS LANE,  
WITHAM.  
ESSEX**

**Summary of Results and Assessment of Potential for Analysis  
and Publication**

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## **MALTINGS ACADEMY, SPINKS LANE, WITHAM ESSEX**

### **Summary of Results and Assessment of Potential for Analysis and Publication**

#### **Summary**

Wessex Archaeology was commissioned by SKM Enviros, to undertake a programme of archaeological work in advance of redevelopment at the Maltings Academy, Spinks Lane, Witham, Essex, centred on National Grid Reference 581592 214314 (hereafter the Site). Planning permission (09/01013/FUL) has been granted by Braintree District Council for a replacement three storey building with new access, parking and associated works, including landscaping and provision of a multi-use games area subject to a condition ensuring appropriate archaeological mitigation is completed.

The Site, which is currently a school playing field, lies to the east of a Middle to Late Iron Age settlement uncovered during excavations of the NEACC Complex and the Witham Lodge earthwork enclosure. Although Neolithic flint work and a large feature of possible Late Bronze Age date confirm prehistoric activity on the Site, no evidence of Iron Age activity was identified during the excavation or the evaluation.

The majority of the evidence identified by the excavation comprised pits, gullies and ditches and was of medieval or later date, spanning the 11<sup>th</sup> to 15<sup>th</sup> centuries. In total five phases of occupation and activity were recorded during the excavations; the earliest (Phase 1) relating to a large feature of possible Late Bronze Age date. Three phases of medieval activity (Phases 2-4) were recorded, the first comprising the construction of two approximately east-west aligned gullies, both of which displayed signs of recutting and/or maintenance, dated to the 11<sup>th</sup> to early 13<sup>th</sup> century. Phase 3 (13<sup>th</sup>–15<sup>th</sup> century) comprised the excavation and use of a large number of small intercutting pits, all within a relatively limited area of alluvium between the river gravels and a tufaceous water lain deposit. The final phase of medieval activity was represented by four approximately north-south aligned ditches, possibly representing some form of enclosure, which partially truncated the earlier gullies and some of the pits. Later activity (Phase 5) comprised post-medieval or modern ditches, gullies and pits.

A watching brief carried out within the Site on groundworks related to drainage and landscaping identified a small number of features of natural origin only. In addition to the excavation of archaeological features and deposits, the fieldwork also examined and recorded the complex drift geology present within the Site.

This document assesses the potential of the archaeological resource to contribute to our understanding of the area and contains a proposal for further analysis and publication in the form of an article in a suitable regional journal, possibly combining print and web formats. This reflects the local significance of the findings from the project.

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The fieldwork was directed by Vaughan Birbeck assisted by Andy Sole, Daniel Joyce and Mariusz Wisniewski of Wessex Archaeology and Trevor Ennis and Phillipa Sparrow of Essex Archaeology Unit.

This report was compiled by Vaughan Birbeck and Chloe Hunnisett, with specialists reporting by Lorraine Mepham (finds) and Jessica Grimm (animal bone). The environmental samples were processed by Nicola Mulhall. The bulk samples were assessed by Dr Chris J. Stevens and the molluscs were assessed by Sarah F. Wyles. Soils and sediments (including sampling for micro-fossils) were assessed by David Norcott. The report illustrations were produced by Kenneth Lymer and the project was managed on behalf of Wessex Archaeology by Sue Farr.

## **MALTINGS ACADEMY, SPINKS LANE, WITHAM, ESSEX**

### **Summary of Results and Assessment of Potential for Analysis and Publication**

#### **1 INTRODUCTION**

##### **1.1 Project Background**

1.1.1 Wessex Archaeology was commissioned by SKM Enviros (the Client) to undertake an archaeological excavation on the Maltings Academy, Spinks Lane, Witham, Essex (hereafter 'the Site'), centred on National Grid Reference 581592 214314 (**Figure 1**).

1.1.2 Planning permission (09/01013/FUL) has been granted by Braintree District Council for the redevelopment of the Site, to provide a replacement three storey building with new access, parking for 104 cars and associated works, including landscaping and provision of a multi-use games area.

1.1.3 An archaeological field evaluation comprising the excavation of 10 trenches by Wessex Archaeology (WA 2009a) identified archaeological remains relating to two phases of medieval occupation of the Site. The Historic Environment Officer (HEO) of Essex County Council (ECC) advised that an archaeological excavation on four areas (**Figure 1**) together with a watching brief should be undertaken prior to and during construction on the Site.

1.1.4 A Written Scheme of Investigation (WSI) (WA 2009b) was approved by the HEO prior to fieldwork commencing. The WSI proposed the excavation of four areas (Area 1-4) where medieval activity was indicated. The four areas totalled c. 0.12ha in size. An archaeological watching brief was also proposed to monitor groundworks including the excavation of the ponds (swales) near the school and adjacent to the river and landscaping work.

1.1.5 Wessex Archaeology undertook the area excavations between 14<sup>th</sup> December 2009 and 20<sup>th</sup> January 2010. Following the main excavation, the archaeological watching brief was carried out between July 2010 and July 2011. This report documents the results of the archaeological excavation and watching brief, incorporating relevant information from the evaluation, and presents an assessment of the results together with proposals for further analysis and publication.

##### **1.2 Location, topography and geology**

1.2.1 The Site is bounded to the north by residential properties, to the west by Spinks Lane and to the east by the River Brain and its flood plain. To the south of the Site are a number of buildings fronting onto Bridge Street.

1.2.2 The Site is currently a school, with the existing school buildings to the south of the Site and areas of playing fields to the north and east.

- 1.2.3 The underlying geology is London Clay, but overlying this nearby are mapped Glacial Sand and Gravel, Boulder Clay, 3<sup>rd</sup> Terrace gravels, Chalk Head and Holocene Alluvium (Geological Survey Sheet 241).
- 1.2.4 The local geology is quite complex, with a number of different drift deposits of Pleistocene date being mapped in the immediate vicinity.

## **2 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND**

### **2.1 Introduction**

- 2.1.1 The Essex Historic Environment Record (EHER) was consulted and information provided within a 500m radius of the Site. The entries in the EHER cover a range of archaeological periods, with particular emphasis on the post-medieval and modern. Of the 79 records, over 30 refer to Listed Buildings within the vicinity of the Site and a number refer to isolated find spots. Although no finds or features are recorded on the Site itself, Iron Age and Romano-British settlement activity is recorded immediately to the west.

### **2.2 Background**

#### *Prehistoric*

- 2.2.1 A collection of over 30 Palaeolithic hand axes were identified in two deposits at Ivy Chimneys, some 750m to the south-west of the Site, in the 1970s. There is also evidence of Mesolithic and early Neolithic activity at Chipping Hill to the north-east of the Site, but no evidence for occupation, although Later Neolithic evidence at Chipping Hill suggests occupation at that time.
- 2.2.2 Excavation of the NEACC complex, Spinks Lane, immediately to the west of the Site (**Figure 1**), identified archaeological features including boundary ditches, a gully, pits and stake holes indicative of settlement activity during the Middle to Late Iron Age (Pocock, 2005).
- 2.2.3 The settlement is thought to relate to the Witham Lodge earthwork enclosure, an irregular enclosure with an internal bank and two or three ditches first excavated in the early 1970s. A hut circle and postholes forming a possible structure were excavated and on the fringe of the settlement, a single inhumation burial was also identified.
- 2.2.4 The Chipping Hill area of Witham appears to have been occupied throughout much of the prehistoric period. The focus of settlement appears to have shifted towards the end of this period to the Maltings Lane and Witham Lodge Earthwork area (Medlycott, 1998). Excavations in 1970-2 and 1979-80 at Ivy Chimneys, approximately in the centre of the Witham Lodge Earthwork revealed evidence for an Early or Middle Iron Age enclosure, containing at least six round-houses and a number of four-post structures (Turner, 1982). There was also a possible precursor to the Roman temple, (see below), located outside the enclosure ditch. Examination of a sewer trench close to the London-Colchester road at Witham Lodge in 1970 revealed a pair of parallel ditches, that have been interpreted as representing a large enclosure (approximately 56 ha.) which enclosed the previous enclosure (Rodwell, 1993).



*Romano-British*

- 2.2.5 Isolated Romano British finds have been found in Witham and stray finds recorded at Chipping Hill Camp to the north of the Site. The primary focus of settlement was at Ivy Chimneys (Turner, 1982) and Maltings Lane (Wade, 1997).
- 2.2.6 In the 1<sup>st</sup> century AD a settlement at Ivy Chimneys was replaced by a *temenos* (temple complex), delimited by a ditch. Within the *temenos* was a man-made pond, two timber-built structures interpreted as temples and a pottery kiln. Votive objects were recovered, including a chalk figurine and over thirty Palaeolithic hand-axes. In the late 4<sup>th</sup> and early 5<sup>th</sup> century AD a small stone building, a small sunken hexagonal, tile-lined pond and a larger timber-revetted pond were constructed. The former two structures have been interpreted as a Christian chapel and baptismal font (Turner, 1982).
- 2.2.7 At Maltings Lane, approximately 800m to the south of the Site, evidence was identified for domestic occupation during the Romano-British period, including rubbish pits and ditches, as well as considerable quantities of building material residual in Saxon contexts. The finds suggest a 2<sup>nd</sup> to 3<sup>rd</sup> century date with a lesser degree of activity into the 4<sup>th</sup> century. Both Ivy Chimneys and Maltings Lane lie alongside the London to Colchester road on the south-west bank of the River Brain. Coupled with the freshwater spring that the temple complex was built around, the area was ideally sited to become a posting station (albeit a minor one) on one of the principle routes through Roman Britain. To serve this complex, settlement spread southwards towards Maltings Lane, where occupation peaked during the 2<sup>nd</sup> and 3<sup>rd</sup> centuries, before declining in the 4<sup>th</sup> century

*Saxon*

- 2.2.8 Saxon features dating to the 5<sup>th</sup> to 7<sup>th</sup> centuries including two possible Sunken Featured Buildings, a possible well, ditches, postholes and rubbish pits, as well as a possible cemetery area indicated by a single cremation, were excavated at the Wood End Farm, Maltings Lane (Wade, 1997) some 800m to the south of the Site.
- 2.2.9 At Ivy Chimneys the walls of the stone chapel were almost completely robbed, floor tiles removed and the font back-filled with rubble. There is some evidence for other activity including the digging of a large pit which contained the remnants of a burnt daub wall which may be Saxon in date (Turner, 1982). The early Saxon evidence from Chipping Hill is less substantial, consisting of a single pottery sherd.

*Medieval*

- 2.2.10 Approximately 700m to the west of the Site lies the earthwork remains representing the moated site of Blunts Hall, a Scheduled Monument (No. 381250). The monument comprises a sub-rectangular homestead moat, with an inner rampart, suggesting that the original manorial buildings were strongly defended. Archaeological excavations at the site in 1958 examined the inner rampart and also recorded a hearth and possible clamp kiln on the interior, but no other features. Pottery recovered suggested an occupation date of c. 1050-1200. Documentary evidence suggests that the earthwork was built by William de Tregoz, whose family held the manor in 1135, or by Geoffery de Mandeville who was granted the honour of the manor and Williams knights fees in 1141. The site appears to have been unoccupied after c. 1200 (EHER).

2.2.11 Early medieval Witham was located, like its Saxon predecessor, at Chipping Hill, where the parish church and market were located. In 1147 King Stephen gave the manor of Witham to the Knights Templar. The layout of the present town, along the London-Colchester road, appears to have developed in the early 13<sup>th</sup> century, when the market charter for the 'new town' was granted in 1212. Following the dissolution of the Knights Templar in 1312 the manor of Witham passed into the hands of the Knights Hospitallers (Medlycott, 1998). The Site itself therefore lay in the hinterland of the planned medieval town, yet quite close to a manorial centre at Blunts Hall.

## **2.3 Archaeological Field Evaluation**

2.3.1 A total of ten evaluation trenches were excavated by Wessex Archaeology in October 2009 which identified at least two distinct phases of medieval archaeology.

2.3.2 The earliest phase consisted of three parallel north-east to south-west aligned ditches dated by pottery evidence to the 11<sup>th</sup>-12<sup>th</sup> centuries. A later, more intensive phase of activity dating to the 13<sup>th</sup>-15<sup>th</sup> centuries was evidenced by a curving north-south ditch which may form part of an enclosure, within which, ten pits were recorded suggesting domestic occupation. The archaeology was largely confined to an area to the north of the Site with the only features recorded to the south being a late post-medieval trackway and evidence for 20<sup>th</sup> century gravel quarrying.

## **3 AIMS AND METHODS**

### **3.1 Aims and Objectives**

3.1.1 The objective of the excavation was to expose, plan and examine the archaeological resource within a framework of defined aims (see below), to seek a better understanding of that resource, to analyse the findings and to disseminate the results of the work.

3.1.2 The aims of the archaeological excavation were:

- To define (within the constraints of the excavation area) the nature, extent, character and chronology of the medieval and later occupation on the Site.
- To preserve *by record* archaeological remains within the Site that are subject to disturbance and damage by the development.
- To excavate and record features/deposits associated with the medieval occupation of the Site at an appropriate level to assist and inform the chronology and phasing.
- To disseminate and publish the results of the works.
- To ensure the long term conservation of the Site archive generated by the works.

## 3.2 Methodology

### **Excavation**

- 3.2.1 Four areas were excavated totalling c. 0.12ha in size (**Figure 1**) and partially positioned over trenches from the earlier evaluation undertaken on the Site (WA 2009b).
- 3.2.2 Area 1 comprised a machine excavated trench, c. 23m by 3m connecting evaluation Trenches 1 and 3. Area 2, measuring c. 21m by 28m was partially positioned over evaluation Trench 6, and located immediately to the south of Area 1. Area 3, measuring c. 53m by 3.5m, formed a further trench to the south of Area 2, positioned partially over Trenches 7 and 9. Area 4, positioned between evaluation Trenches 4 and 5, and immediately east of Trenches 8 and 10 measured c. 59m by 4m.
- 3.2.3 The areas were stripped of topsoil using a 360° tracked excavator with a toothless grading bucket under constant archaeological supervision. Machine excavation ceased at the identification of significant archaeological deposits or where natural geology was encountered.
- 3.2.4 All archaeological deposits were recorded using Wessex Archaeology's *pro forma* record sheets. Trenches and excavation areas were located using a Leica Real Time Differential GPS survey system. All archaeological features and deposits were planned at a scale of 1:20 with sections drawn at 1:10. All principal strata and features were related to the Ordnance Survey datum.
- 3.2.5 A full photographic record was made both of individual features and general context of the investigations, utilising colour transparencies, black and white negatives (on 35mm film) and digital images.
- 3.2.6 Following completion of the excavation, the archive and all artefacts were taken to the offices of Wessex Archaeology in Salisbury where they were processed and assessed for this report.

### **Watching brief**

- 3.2.7 The watching brief was maintained during groundworks within the Site including excavation of a series of surface water drainage tanks and pipe trenches and installation of foul water drainage (**Figure 1**).
- 3.2.8 All groundworks undertaken below the present ground surface were monitored continuously by an appropriately qualified member of Wessex Archaeology. Archaeological remains encountered were investigated and recorded using Wessex Archaeology's recording system. Excavated material was visually examined for archaeological material to enhance artefact recovery. A digital photographic record of the watching brief was compiled.

## 3.3 Scope and structure of report

- 3.3.1 The purpose of this report is to provide an interim summary of the results of the excavation and watching brief (see Sections 4-6), to assess their potential to address the aims specified in the WSI (Sections 7-10), and to recommend a costed programme of further work required to achieve those aims, including

analysis, public dissemination through publication and the curation of the archive (see Section 11).

## **4 SUMMARY OF RESULTS**

### **4.1 Introduction**

4.1.1 The following sections provide a summary of the information held in the Site archive. Details of individual excavated contexts and features, and details of artefactual and environmental assessments are retained in the archive and a detailed tabulated version of these can be found in **Appendix 1**.

4.1.2 Five phases of occupation and activity were recorded during the excavations, and in addition residual possible Neolithic or Bronze Age flint work indicating earlier activity on the Site was retrieved.

4.1.3 The earliest phase of activity (Phase 1) comprised a large oval feature of possible Late Bronze Age date. Three phases of medieval activity (Phases 2-4) were recognised, the earliest comprising the construction of two approximately east-west aligned gullies in the 11<sup>th</sup> to 12<sup>th</sup> century, both of which displayed signs of recutting and/or maintenance. Phase 3 comprised the excavation and use of a large number of small pits, all within a relatively limited area of alluvium between river gravels and a tufaceous water lain deposit; many of these pits intercut both with the earlier ditches and one another, suggesting an extended period of use. The final phase of medieval activity (Phase 4) was represented by two approximately north-south aligned ditches, possibly some form of enclosure, which partially truncated the earlier gullies and some of the pits. Later activity (Phase 5) comprised post-medieval or modern ditches, gullies and pits.

4.1.4 The excavations also examined and recorded the complex drift geology present on the Site.

### **4.2 The Natural Soil Sequence**

4.2.1 River terrace gravels (mixed clay and gravel) were overlain by mottled silty clay alluvium in the north of Site, possibly representing a former course of a small tributary of the River Brain that still flows, albeit in a culverted form, along the northern boundary of the development area (**Figure 2**). This was filled by a substantial tufaceous silty clay deposit indicative of slow water movement along the edge of the gravel terrace, presumably representing the partial silting up of a meander in the channel.

4.2.2 The tufaceous deposit, partially overlain by a deposit of brown silty clay, may represent overbank flooding along the southern bank of the channel, having been deposited at the edge of the terrace. The tufaceous deposit was cut by a large oval feature, within the silted-up channel. This feature was cut by an east-west ditch, which was in turn cut by pits and later ditches. The whole sequence was overlain by a possible buried topsoil which was sealed below probable landscaping/levelling deposits, presumably representing the construction of the school playing fields. The tufaceous material at the northern end of the Site is potentially early Holocene/Mesolithic in date (c. 10,000-8,500 BC) or Bronze Age (2400-700 BC). These two periods represent the times when the climate was most favorable for such formation.

- 4.2.3 There was a clear concentration of significant archaeological features in the northern end of the Site focused along the edge of the gravel terrace; these features were revealed cutting the tufaceous material or the alluvium and were conspicuous by their absence on the higher ground of the gravel terrace to the south. This suggests the terrace may have been truncated at some point prior to the post-medieval period as only post-medieval or modern features were observed cutting the gravel.

### **4.3 Late Bronze Age**

#### *Phase 1*

- 4.3.1 The earliest feature (Phase 1) identified on the Site comprised a large, oval feature (3502, **Figure 3**), cut into the upper surface of the tufaceous alluvial deposit in the north of the main excavation area (Area 2). This large, slightly irregular feature was over 17.5m long, continuing beyond the western limit of excavation, approximately 10m wide and 0.80m deep (an auger transect along the length of this feature confirmed the continuity of depth and fills) with moderately steep, concave sides and an irregular, concave base. The feature terminated within the main excavation area and although originally interpreted as a natural pond within the fills of an earlier palaeochannel, (represented by the tufaceous and alluvial deposits), the absence of freshwater snails recovered from the fills of this feature appear to suggest a different function, potentially relating to the Witham Lodge Earthwork to the west.
- 4.3.2 An assemblage of animal bone, primarily cattle, but with some pig, and a single sherd of Late Bronze Age flint tempered pottery was recovered from the basal fill of this feature and several substantial lenses of charcoal, comprised mainly of oak wood, possibly indicating an industrial origin, were noted in the upper fills, all apparently entering the feature from its northern side; this suggests that while this may represent a naturally formed feature of uncertain function, at least some human activity was partly responsible for its infilling. Soil macromorphology analysis and the mollusc sample, however, suggest that the fills of this feature were derived from dumped material and that it was never water-filled.
- 4.3.3 Prehistoric activity, probably Later Bronze Age, is also represented by a small assemblage of worked flint, primarily waste flakes that were recovered from later features, where they were clearly residual.

### **4.4 Medieval Archaeology**

#### *Phase 2*

- 4.4.1 Stratigraphically the earliest medieval features (Phase 2) comprised two approximately east-west aligned gullies (3503 and 3504), both of which displayed some signs of recutting and/or maintenance. Gully 3503, which cut the upper fills of feature 3502, was traced for approximately 20m from evaluation Trench 6 in the west to where it was truncated by the later north-south ditch 3501. Although not continuous, it is assumed to be the same feature recorded in evaluation Trench 4 (410) and Trench 5 (510). It was on average 0.90m wide and between 0.15m and 0.20m deep with steep, concave sides and a concave base and was filled with a single pale greyish brown silty clay deposit which was cut by several later pits.

- 4.4.2 A similar sized gully on a very similar alignment was recorded in evaluation Trenches 4 and 5 and in the northern end of Area 4 and may represent a continuation of this feature. Gully 3504 lay approximately 3m to the south of gully 3503 and was also aligned approximately east-west. It measured on average, between 0.80m and 0.90m wide and between 0.15 and 0.45m deep with moderately steep, concave sides and a concave base and was traced for c. 50m from Area 1 to evaluation Trench 5. This feature was cut by numerous pits and later ditches 3500 and 3501. Pottery recovered from the fills of the phase 2 gullies suggests that they were filled between the 11<sup>th</sup> and early 13<sup>th</sup> centuries.
- 4.4.3 Where stratigraphic relationships were present, these gullies were cut by later pits and ditches. Both gullies were filled with a single pale greyish brown silty clay fill that appeared to be the result of gradual silting.
- Phase 3*
- 4.4.4 Following the silting up of gullies 3503 and 3504, a large number of pits were excavated in the brown alluvium that lay on the southern bank of the possible palaeochannel (Phase 3).
- 4.4.5 Up to 33 pits were recorded across the Site and were generally sub-circular in plan, with steep, concave sides and concave bases. Although they rarely exceeded 0.50m in depth, a few of the pits were considerably larger, for example pit 3097 was a large sub-rectangular feature, 3.2m long, 1.50m wide and 0.67m deep with vertical sides and a flat base (**Figure 3**). A possible posthole (3044) recorded in the base of this feature may indicate the original presence of some form of post and plank or post and wattle lining. The basal fill (3098) comprised a blue grey very silty clay, which could possibly be a cess deposit, indicating the pits original function as a latrine, although the absence of mineralised environmental remains recovered from this feature appear to suggest a different function, probably the disposal of domestic waste.
- 4.4.6 Other notable finds recovered from the pits include a possible briquetage trough (Plate 2) in pit 3049, one of two intercutting pits in the western side of Area 2.
- 4.4.7 The basal fills of the pits tended to be well-sorted silty or sandy clays, probably derived from the surrounding natural alluvial deposits, indicating that the pits were probably left to silt up naturally following their final use. Small quantities of domestic waste, such as animal bone, marine shells and pottery sherds, usually within the upper fills indicate their use for rubbish disposal and suggest the presence of a nearby settlement.
- 4.4.8 Four pits were recorded cutting into the tufaceous deposit in the north of the Site. Three of these were recorded within Trench 1 of the earlier evaluation and the other (2008) at the southernmost end of Area 1, contained a discrete dump of charcoal primarily derived from oak wood which suggests an industrial origin (Plate 1). These pits were, on average, deeper than those recorded cutting into the brown alluvium.
- 4.4.9 The only feature excavated that may represent an element of a building, possibly a posthole, was pit 3010 in the west of Area 2. This comprised a narrow elongated feature, 0.50m wide, 1.00m long and 0.20m deep with steep

sides and a concave base. However, no other possible structural features were recognised.

- 4.4.10 Where stratigraphic relationships were present, the pits were cut by the later approximately north-south aligned ditches (Phase 4). The pits, which tended to be less than 2m in diameter and between 0.20m and 0.80m deep, generally had steeply sloping, concave sides and concave bases.
- 4.4.11 The pits were clustered along the southern sides of gullies 3503 and 3504 although none penetrated the underlying terrace gravels, possibly suggesting that their function was primarily for the extraction of clay and their small, irregular forms could indicate that this was quarried on an *ad hoc* basis. The majority of these pits appear to have silted up naturally or were utilised in the disposal of domestic waste.
- 4.4.12 Datable finds from the pits suggest a fairly wide date range for their disuse ranging from the 11<sup>th</sup> to the 15<sup>th</sup> centuries; there are some 11<sup>th</sup>-early 13<sup>th</sup> century, the majority are of 13<sup>th</sup> or 14<sup>th</sup> century, and the final pits seem to be of 14<sup>th</sup> or 15<sup>th</sup> century date, indicating that pit digging was still taking place after the construction and initial silting of the Phase 4 ditches in the 13<sup>th</sup> or 14<sup>th</sup> centuries.

#### *Phase 4*

- 4.4.13 The third and final phase of medieval activity (Phase 4) was represented by three approximately north-south aligned ditches (106, 3500 and 3501), two east-west ditches (3505 and 3506) and a third ditch (104) recorded during the evaluation, possibly representing some form of enclosure or superimposed enclosures, which partially truncated the earlier gullies and some of the pits.
- 4.4.14 Ditch 3500 was aligned approximately north-south and was traced for c. 14.50m from its southern terminal in the south-east of the excavation area to the eastern limit of the excavation, beyond which it continued. It was 1.50m wide on average and between 0.40m and 0.75m deep with steep sides and a fairly flat base. The deepest parts of the ditch were in the north of the area, where it was cut into the tufaceous deposits and shallower in the south, where it terminated just to the north of the terrace gravels, which rise from below the alluvial deposits. The earliest fills appear to be the result of natural silting, while the upper fills seem to be derived from the dumping of domestic or agricultural waste.
- 4.4.15 Approximately 3m to the west of ditch 3500 was a curvilinear ditch, 3501, which was traced for c. 31m between the northern and western limits of excavation, beyond which it continued. This ditch varied widely in size, from 2.10m wide and 0.70m deep in the north of the area, where it cut into tufaceous and alluvial deposits, to 0.50m wide and 0.30m deep in the south-west of the area, where it was cut into the terrace gravels.
- 4.4.16 Ditches 3500 and 3501 both cut earlier gullies and pits, but were generally not cut by medieval features, suggesting that the construction and use of one of these ditches represents the final phase of medieval activity on the Site. No stratigraphic relationship was seen between ditches 3500 and 3501 and their stratigraphic relationships with other features indicate that the two features could have been in use simultaneously, although it seems unlikely given their

position within the Site. Both features contained pottery that suggests that they were filled in the 13<sup>th</sup> or 14<sup>th</sup> centuries.

- 4.4.17 In the southern end of ditch 3501 a headless, but otherwise complete articulated cattle skeleton was recorded in the base of the ditch. This appears to have been inserted into the partially silted ditch and covered quickly with redeposited natural clay.

#### **4.5 Post-medieval and modern features and deposits**

##### *Phase 5*

- 4.5.1 Several post-medieval and/or modern features were identified and excavated. These included two ditches, a large quarry feature filled with early 20<sup>th</sup> century domestic debris and two possible wheel ruts that may represent a former trackway formerly recorded in evaluation Trench 9. Two further modern linear features were identified in Areas 3 and 4. A modern sewer trench was also noted in Area 1, cutting a post-medieval ditch (2002).
- 4.5.2 Two identical parallel gullies were recorded in Trench 9 (906 and 908) which were interpreted as wheel ruts from a post-medieval trackway. The centre of the each gully was 1.7m apart and each contained sherds of pottery dating to the post-medieval period
- 4.5.3 Trenches 8 and 11 in the earlier evaluation revealed evidence of modern gravel extraction quarries which had subsequently been utilised as domestic rubbish pits. Quarry pit (1111) was only partially revealed but contained modern bottle glass. Quarry pit (805) measured nearly 20m wide and had been backfilled with domestic rubbish post 1911. As well as a variety of 20<sup>th</sup> century glass bottles and earthenware pottery, an industrial whiteware commemorative cup was recovered, produced by the 'Witham Co-operative Society' celebrating the coronation of George V and Queen Mary on 22<sup>nd</sup> June 1911.

#### **4.6 Watching brief results**

- 4.6.1 The watching brief area traversed the length of the Site, and consequently, the stratigraphic sequence revealed during groundworks was somewhat varied. However the findings broadly upheld those from the main excavation.
- 4.6.2 Natural River terrace gravels (mixed clay and gravel) were generally overlain by mottled silty clay alluvium. This was in turn overlain by topsoil in places, however topsoil had been removed and redeposited across much of the Site. There were frequent areas of disturbance within the areas monitored, and modern backfill deposits directly overlay natural river gravels within the north-east corner and areas in the south of the Site, indicating areas where the natural soil sequence had been truncated. Smaller areas of localised modern disturbance were common.
- 4.6.3 The tufaceous deposit identified within the north-eastern corner of the excavation (**Figure 2**) was also identified during excavation of the second surface-water tank. Isolated patches of a similar deposit occurred throughout the Site.



- 4.6.4 A small number of features were identified during the course of the watching brief which were of natural origin, and are thought to represent small ancient water courses or palaeochannels.
- 4.6.5 Natural feature 6008 was a small irregular feature cut into the natural gravels (although overlying deposits had been truncated in this area), with undercutting sides, indistinct edges and a series of naturally derived tufaceous, water-lain deposits. The fill contained a partial cattle skull and additional small fragments of bone, but no material of anthropogenic origin. The deposits were consistent with a very low energy water lain environment, and contained large numbers of molluscs. The feature is thought to be a natural hollow, water hole or other standing-water feature, and the cattle skull is likely to have been introduced into the feature through natural processes.
- 4.6.6 Linear feature 6014 was aligned approximately east to west and was between 0.15 and 0.34m deep. The feature was uneven and meandering and the sides were extremely indistinct and undercutting in places. The feature is thought to represent a small ancient water course or brook, filled with an archaeologically sterile water borne gravel-rich deposit.
- 4.6.7 A small linear feature 6006 was observed in section and was possibly a ditch, however the sterile fills and absence of archaeological finds suggest that this feature is likely to be a small water course similar to 6014.
- 4.6.8 All three of the above natural features were located within the north-east corner of the watching brief area (**Figure 2**). It is likely that the features represent ancient minor tributaries of the more substantial water course to the north, thought to be responsible for the deposition of the tufaceous deposits identified within the Site. Feature 6008 could be indicative of waterlogged or boggy conditions within the Site at some stage.
- 4.6.9 A single possible linear feature 6016 was identified during excavation of drainage trenches in the north-west corner of the Site. The ditch was 1.8m wide and 0.75m deep. Watching brief conditions did not allow for the feature to be excavated due to health and safety concerns. Based on the alignment of the ditch is it probable that this is an extension of ditch 106, however no finds were recovered from the feature to confirm this.
- 4.6.10 The shallow linear features (510 and 508) were identified within excavation Areas 2 and 4, aligned south-west to north-east. These features were not identified during the watching brief. This could be due to the ditches terminating or turning in the area to the west of the watching brief area. Alternatively the shallow features, which were between 0.15 and 0.2m deep within Area 4, had been truncated or removed by localised modern disturbance within the area of the watching brief.
- 4.6.11 No other finds or features of archaeological origin were identified during the watching brief.

## 5 FINDS

### 5.1 Introduction

5.1.1 This section considers the finds recovered from both stages of fieldwork on the Site, from evaluation and from excavation. The assemblage is relatively small, and in a restricted range of material types; the date range is from prehistoric to post-medieval, but with a firm emphasis on the medieval period.

5.1.2 All finds have been quantified by material type within each context; totals by material type are given in **Table 1**. Following quantification, all finds have been at least visually scanned, in order to determine their nature, potential date range and condition. Based on this information, an assessment has been made of their potential to inform an understanding of the Site. Spot dates have been recorded for pottery; all data are held in the project database (MS Access).

### 5.2 Pottery

5.2.1 Pottery provides virtually the only dating evidence for the Site. The assemblage is mainly of medieval date, with small amounts of prehistoric, Romano-British and post-medieval material. The whole assemblage has been quantified by ware type within each context, and totals are given in **Table 2**.

#### *Prehistoric*

5.2.2 Two small flint-tempered sherds have been identified as of late prehistoric date, probably Late Bronze Age, on fabric grounds; both represent undiagnostic body sherds. Both sherds are abraded, and are likely to be residual in the contexts in which they were found (ditch 305, part of feature 3501 and feature 3502), although feature 3502 does constitute stratigraphically the earliest feature on the Site.

#### *Romano-British*

5.2.3 Seven sherds are of Romano-British coarse greyware, although none are diagnostic. Again, all sherds are likely to be residual (pits 113, 3070 and 3146, ditch 2002 and 3506).

#### *Medieval*

5.2.4 The majority of the assemblage (361 sherds) is of medieval date. Several ware types are represented, spanning the medieval period. The earliest are shelly, shelly/sandy and sandy/shelly wares (Fabrics 12A, 12B and 12C respectively in the Essex type series: see Cotter 2000), with a date range of 11<sup>th</sup> to 12<sup>th</sup> century. Diagnostic sherds are limited to a few jar rims, all with relatively simple, undeveloped profiles. Early medieval sandy wares (fabric 13) are well represented, again largely in jar forms but also including one dish/bowl (or possibly skillet); these wares have a date range from 11<sup>th</sup> to early 13<sup>th</sup> century; there are a few more developed rim profiles here suggesting a date within the latter part of the overall date range. There are no early medieval feature groups of any size, although a few features have been assigned to this date range on the basis of a handful of sherds.

5.2.5 Medieval sandy greywares (Fabric 20) and orange sandy wares (Fabric 21) have broad date ranges from late 12<sup>th</sup> to 14<sup>th</sup> or perhaps 15<sup>th</sup> centuries; jar forms are predominant, all with developed rims, together with one globular jug

profile. Hedingham-type fineware (Fabric 22), a sub-type of the orange sandy wares, is represented by a few sherds, probably all from glazed jugs; one sherd has elaborate slipped and applied decoration.

- 5.2.6 Probably falling latest within the sequence are sherds of Colchester ware (Fabric 21A), a hard, fine, orange sandy ware. Many of the sherds here are slip-decorated under a patchy clear glaze, and most sherds appear to derive from jugs; a substantial part of the base of one vessel came from evaluation pit 113, and other groups came from pits 606 and 3002. The decorative style of these vessels places them in the 14<sup>th</sup> or 15<sup>th</sup> century (Cotter 2000, fig. 75, nos. 29-30).

*Post-medieval*

- 5.2.7 Nine sherds are post-medieval; these comprise seven coarse redwares, and two modern refined whitewares (cart track 906, quarry pit 805, pits 3070 and 3146 and ditches 2002 and 3506).

### 5.3 Ceramic Building Material (CBM)

- 5.3.1 One piece of CBM may be Romano-British (residual within medieval pit 113); most of the remainder comprises fragments of medieval and post-medieval roof tile, and post-medieval brick.

- 5.3.2 Of note, however, are four fragments from at least two, and possibly three unusual objects, all from pit 606, in the west of Area 2. These fragments, two of which join, appear to derive from cylindrical forms, with a sturdy flange at the base, and curving slightly outwards at the top. The height ranges from 115 to 140mm. One end of the largest section is cut vertically, and has a semi-circular cut-out in the wall. The pit is of late medieval date (14<sup>th</sup>/15<sup>th</sup> century), and the objects are presumed to be of similar date. They may be roof furniture of some sort, perhaps from chimney coping (J. Cotter pers. comm.).

### 5.4 Fired Clay

- 5.4.1 The majority of the fired clay consists of small, featureless and abraded fragments, all with an admixture of chalk, and probably representing structural material from 'cob' walling.

- 5.4.2 The exception is a group of severely under fired fragments from pit 3049 (dated by pottery to the 13<sup>th</sup>/14<sup>th</sup> century). When found, these formed a rectangular vessel, probably a briquetage trough for salt-working (Plate 2); the vessel fragmented badly on recovery. Salt-working is well documented along the Essex coast from the prehistoric period onwards, and medieval salt-working sites are known at Tolleshunt D'Arcy and South Woodham Ferrers.

### 5.5 Worked and Burnt Flint

- 5.5.1 The worked flint consists almost entirely of waste flakes, made using locally accessible gravel flint. A few pieces are patinated, and some have suffered edge damage. There are two scrapers (evaluation pit 113, pit 3150), which are not chronologically distinctive. In the absence of other, more diagnostic tool types, this small assemblage can only be broadly dated as Neolithic or Bronze Age.

- 5.5.2 Burnt, unworked flint was more prolific, although most of it came from a single feature (3502), in which a single Late Bronze Age pottery sherd provided the only dating evidence. Burnt flint is intrinsically undatable, although frequently associated with prehistoric activity.

## 5.6 Animal Bone

### *Introduction*

- 5.6.1 A total of 151 bones were hand-recovered at the Site; on the basis of associated finds these are assumed to be medieval in date. All bones derive from mammals, birds, fish and amphibians.

- 5.6.2 Conjoining fragments that were demonstrably from the same bone were counted as one bone in order to minimise distortion, and therefore totals may differ from the raw fragment counts in **Table 3**. No fragments were recorded as 'medium mammal' or 'large mammal'; these were instead consigned to the unidentified category.

- 5.6.3 The extent of mechanical or chemical attrition to the bone surface was recorded, and the numbers of gnawed bone were also noted. Marks from chopping, sawing, knife cuts and fractures made when the bone was fresh were recorded as butchery marks.

### *Condition and preservation*

- 5.6.4 Almost all animal bone fragments were in fair condition. The broken and disarticulated nature of the assemblage together with the evidence for butchery marks (**Table 3**) indicates that the animal bone represents food waste. The gnawed bone shows that dogs had access to the bones prior to deposition. Apart from the articulated partial cattle skeleton (3079, from ditch 3501), one other instance of articulating bone in the same ditch (also part of the cattle skeleton?) was found.

### *Animal husbandry*

- 5.6.5 The identified bones in this small assemblage derive from horse (n=6), cattle (58), sheep/goat (22), pig (18), dog (3), deer (fragmented antler beam), cat (1), chicken (2) and frog/toad (2). Evaluation feature 109 contained a sheep/goat tibia of quite modern date. Ditch 5006 (a section through gully 3504 in area 4) contained three mandibles representing adult and sub adult sheep/goat.

- 5.6.6 The two nearly complete halves of a horse's pelvis from ditch 3062 (a section through ditch 3506) are probably from a mare. They show extensive canid gnawing marks. The complete metatarsus accompanying it belonged to a horse with a height at the withers of 1.33m (May 1985); a rather small animal.

- 5.6.7 Pit 3122 contained a sheep/goat tibia of a sub adult animal with a well healed mid-shaft fracture. As there was only minimal displacement and bowing, it is likely that the animal received some form of veterinary care

### *Cattle skeleton*

- 5.6.8 Ditch 3501 contained the nearly complete skeleton (3079) of a small, mature cattle (height at the withers 1.05m, von den Driesch and Boessneck 1974).

The head, cervical vertebrae (although these might be in ditch fill 3078), right metatarsus, most carpals/tarsals and most phalanges are missing. A rib fracture, not fully healed, was noted. The disposal of partial animal skeletons in cut features is not unusual during the medieval period.

## **5.7 Marine Shell**

5.7.1 Most of the marine shell consists of oyster; both right and left valves are represented, i.e. both preparation and consumption waste. Mussel shells are also represented in smaller quantities.

## **5.8 Other Finds**

5.8.1 Other finds comprise clay pipe (stems only), glass (modern bottle) and iron (one nail; two strip fragments, undatable).

# **6 PALAEOENVIRONMENTAL EVIDENCE**

## **6.1 Introduction**

6.1.1 Seven bulk samples were taken in total from the excavations; two from a single feature, pit 113 (115, 116) uncovered in the initial evaluation within Trench 1, a single sample from pit 2008 (2013) within Area 1, and four further samples from features within Area 2. The latter comprised two samples from ditches 3501 and 3500, one from pit 3097 and the final one from a possible prehistoric feature 3502. With the exception of the latter, all the samples are probably medieval in date.

6.1.2 A single monolith <5> was taken through potentially water lain sediments within the feature 3502 (3103, 3104 and 3015) in Area 2 (**Table 4**).

6.1.3 A snail column was taken during the watching brief from probable natural feature 6008.

## **6.2 Charred Plant Remains**

6.2.1 The bulk samples were processed by standard flotation methods; the flot retained on a 0.5mm mesh, residues fractionated into 5.6mm, 2mm and 1mm fractions and dried. The coarse fractions (>5.6mm) were sorted, weighed and discarded. Flots were scanned under a x10–x40 stereo-binocular microscope and the presence of charred remains quantified (**Table 5**) to record the preservation and nature of the charred plant and wood charcoal remains. Preliminary identifications of dominant or important taxa are noted below, following the nomenclature of Stace (1997).

6.2.2 While some of the flots were quite large, in many cases this was due to high number of mollusc shells, and only two contained quite high numbers of charred remains. Roots were generally low, although some of the samples contained degraded seeds of elder that may have been worked into the deposits. Preservation ranged from generally good to more frequently very

poor, even within single samples, and it is possible that some of the material was reworked from slightly earlier, but still medieval deposits.

- 6.2.3 A few of the samples contained reasonable charred grain deposits, mainly those from pit 113 and pit 2008. Grains included those of free-threshing wheat (*Triticum aestivum*), hulled barley (*Hordeum vulgare*) and rye (*Secale cereale*), but there was relatively little chaff in the samples, comprising occasional rachis fragments of free-threshing wheat. The main cereal recovered was free-threshing wheat, although that from ditch 3501 had a more even spread of barley and rye as well. Oat (*Avena sp.*) grains were also quite common in the sample, but the wild grains cannot be distinguished from cultivated grains without the chaff. However, a few spikelets of oat in which the floret base was still attached were recovered from pit 2008, and it would appear that most were cultivated. Several grains of oats from this same pit also showed clear signs of germination, although none of the barley grains appeared to show such signs.
- 6.2.4 As stated cereal rachises and chaff in general was fairly poorly represented although the sample from pit 2008 (2013) contained quite a number of fragments of culm nodes and straw, in particular those from basal culm nodes or rootlets.
- 6.2.5 The only other possible crops were those of legumes, with possible fragments of pea (*Pisidium sativum*) and bean (*Vicia faba*) from a few of the samples. Seeds of wild species, most probably arable weeds, were only present in limited numbers in a few of the samples. Mainly they were of vetch/wild pea (*Vicia/Lathyrus sp.*), but also cleavers (*Galium aparine*), black bindweed (*Fallopia convolvulus*), dock (*Rumex sp.*), fat-hen (*Chenopodium album*), sheep's sorrel (*Rumex acetosella*), nipplewort (*Lapsana communis*), and stinking mayweed (*Anthemis cotula*) were recorded in particular from the sample within pit 2008. Additionally both ditch deposits contained fruit stones of hawthorn (*Crataegus monogyna*).
- 6.2.6 The range of crops is similar to those seen at Blatches, near Little Dunmow, of 12<sup>th</sup>-13<sup>th</sup> century date just over 10 miles to the north. Rye at this aforementioned site was slightly less well represented than seen here although free-threshing wheat was dominant, with some evidence for both pea and bean (Carruthers 2007). It might be noted that cultivated oats dominated Saxon assemblages from Springfield Lyons, Chelmsford (Murphy 1987) and testifies to the longevity of this crop in this part of England.
- 6.2.7 The site at Blatches also produced a similar range of weed seeds (Carruthers 2007) although characteristic species of lighter sandier soils were less prevalent in the assemblage studied here, although sheep's sorrel is generally commoner on such soils.

### 6.3 Wood Charcoal

- 6.3.1 Wood charcoal was noted from the flots of the bulk samples and is recorded in **Table 5**. Some large fragments of charcoal were recovered from pit 2008, including ring-porous fragments of probable oak round wood, probably of 5-8cm diameter and a thorn of hawthorn/sloe (*Crataegus/Prunus spinosa*) type. Few of the other sample contained much in the way of wood charcoal, other than 3502, which contained several fragments of charcoal, probably mainly

again of oak. It should be noted that this charcoal came from the bottom of the feature and did not appear to be water-rolled which would have been likely if the feature was a pond.

#### 6.4 Land, fresh water and marine molluscs

- 6.4.1 A sub-sample of 1 litre (1000g) was taken for molluscs from the bulk sample from a possible prehistoric feature 3502 (3014) to assist in determining the nature of this feature. The sample was processed by standard methods (Evans 1972) for land snails. The flot (0.5mm) were rapidly assessed by scanning under a x 10 – x 40 stereo-binocular microscope to provide some information about shell preservation and species representation. The numbers of shells and the presence of taxonomic groups were quantified (**Table 6**). Nomenclature is according to Kerney (1999).
- 6.4.2 The mollusc quantities and species range within the bulk samples were also noted, although the potential information from these in determining the detailed local landscape is more limited than when columns of specific mollusc samples are taken due to there generally being only single samples from individual features and the less precise sample location.
- 6.4.3 The moderate assemblage was dominated by land snail species, in particular the open country species *Vallonia* spp., the intermediate species *Trichia hispida* and the shade-loving species *Discus rotundatus* and *Carychium tridentatum*. The presence of the obligatory *xerophile*, *Truncatellina cylindrica* is noteworthy. There were also a few fresh-water species.
- 6.4.4 The bulk sample from this feature produced a similar species range with the addition of shells of the intermediate species *Pomatias elegans*, the shade-loving species *Clausiliidae*, *Vitrea* spp. and *Helicigona lapicida* and the marsh loving species *Succinea/Oxyloma* spp.
- 6.4.5 These assemblages are indicative of a mixed local environment, with probable areas of open short grassland, longer grassland, possible scrub/woodland and marshy patches in the vicinity. The fresh-water component may be a result of flooding from the river and is unlikely to be a result of an aquatic environment within the feature and is unlikely to support the initial interpretation of the feature as a pond. Shells of terrestrial, freshwater and marine molluscs were also noted in a number of the other samples, and broad quantities of each category are recorded in **Table 6**, with a more detailed description of the species present below.
- 6.4.6 A number of shells were seen within Pit 113 (116, 115) including many of shaded environments in particular *Discus rotundatus* with some *Aegopinella* spp., *Vitrea* spp., *Oxychilus cellarius* and *Carychium* and fewer numbers of *Clausiliidae*. Open country species were represented by shells of *Helicella itala*, *Vallonia* spp., *Pupilla muscorum*, *Vertigo* spp. and introduced *Helicellids*. Intermediate species were also well represented by specimens of *Trichia hispida*, *Cochlicopa* sp., and fewer *Cepaeal/Arianta* spp and *Limicidae*. The lower deposit (115) from pit 113 contained a broadly similar assemblage to the upper deposit, but with several shells of a *sinestral* *Vertigo* and a single shell of *Helix pomatia*. Both samples also contained occasional shells of freshwater species, mainly *Planorbids* and *Lymnaea* spp.

- 6.4.7 Pit 113 also provided some evidence for marine species with two shells of the edible periwinkle (*Littorina littorea*) and a fragment of mussel (*Mytilus edulis*) in deposit (115) and fragments of mussel in deposit (116).
- 6.4.8 The sample from pit 2008 (2013) produced a mixed assemblage mainly of shade-loving and intermediate species. These included the shade-loving species *Discus rotundatus*, *Acanthinula aculeata*, *Carychium spp.*, *Aegopinella spp.*, *Oxychilus cellarius*, *Vitrea spp.* and *Clausiliidae* and the intermediate species *Cepaeal/Arianta spp.*, *Trichia hispida*, *Cochlicopa spp.*, *Euconulus fulvus*, *Punctum pygmaeum* and *Pomatias elegans*. The smaller open country element was represented by shells of *Vallonia spp.*, *Pupilla muscorum*, *Vertigo spp.* and *Helicella itala*. There were also a few shells of *Succinea/Oxyloma spp.* There was a larger freshwater element than that observed in 3502 and pit 113. This comprised shells of *Planorbids*; *Pisidium spp.*, *Lymnaea spp.* and *Bithynia spp.* Several ostracods testa were also noted.
- 6.4.9 The sample from pit 3097 had a similar assemblage to that seen above including *Trichia hispida*, *Discus rotundatus*, *Cochlicopa spp.*, *Aegopinella spp.*, *Oxychilus cellarius*, *Vitrea spp.*, *Cepaeal/Arianta spp.*, *Pomatias elegans* and *Carychium spp.*, with a few more shells of open country species, such as *Pupilla muscorum*, *Vallonia spp.*, *Vertigo spp.* and *Helicella itala*. The sample also contained a single *Pisidium* valve.
- 6.4.10 Ditch 3501 contained the largest number of freshwater species, mainly represented by shells of *Planorbids*, but also of *Lymnaea spp.*, *Valvata spp.* and *Pisidium spp.* The terrestrial shells included a similar range to that seen in the pits, although with generally fewer open country species, and included *Oxychilus cellarius*, *Aegopinella spp.*, *Discus rotundatus*, *Vitrea spp.*, *Carychium spp.*, *Cochlicopa spp.*, *Clausiliidae*, *Trichia hispida*, *Pomatias elegans*, *Acanthinula aculeata*, *Cepaeal/Arianta spp.*, *Pupilla muscorum*, *Helicella itala*, *Vallonia spp.*, *Vertigo spp.* and a *sinestral Vertigo*. There was also a single specimen of *Acicula fusca*, a species particularly indicative of old undisturbed deciduous woodland.
- 6.4.11 The other sample from ditch 3500 had more open country species than seen within the previous sample, including shells of *Vallonia spp.*, *Vertigo spp.*, *Helicella itala*, *Pupilla muscorum*, and of the intermediate species *Cochlicopa spp.* and *Cepaeal/Arianta spp.* and of the shade-loving species *Discus rotundatus* and *Carychium spp.* No fresh water species were observed in this feature.
- 6.4.12 These assemblages are again indicative of a generally mixed local environment, with probable areas of open short grassland, longer grassland, and some kind of woodland and possible more marshy patches in the vicinity. There is a significant quantity of niche environments in the locality available for exploitation by the shade-loving species. The fresh-water component may be a result of flooding from the river and is unlikely to reflect specific aquatic environments within the features.
- Watching brief*
- 6.4.13 A sequence of four small samples were taken from the possibly natural feature 6008, which contained a cattle skull at its base. These samples were processed for the recovery and assessment of molluscs.



- 6.4.14 Samples of 1500g were processed by standard methods (Evans 1972) for land snails. The flots (0.5mm) were rapidly assessed by scanning under a x 10 – x 40 stereo-binocular microscope to provide some information about shell preservation and species representation. The numbers of shells and the presence of taxonomic groups were quantified (**Table 7**). Nomenclature is according to Kerney (1999).
- 6.4.15 The samples produced good shell numbers and the mollusc assemblages were dominated by the land species. The composition of the assemblages is broadly the consistent throughout the feature, with a few fluctuations in some species.
- 6.4.16 The small numbers of freshwater snails within these assemblages include species which can be indicative of moving water, such as *Bithynia* spp., together with species more prevalent in localised flood deposits or areas of seasonal desiccation, such as *Lymnaea truncatula*. There may be an under representation of the marsh loving species, as the *Vertigo* spp., *Vallonia* spp., *Cochlicopa* spp. and *Carychium* spp. may include species within these groups which can thrive in marshy conditions.
- 6.4.17 The mollusc assemblages from this feature may possibly indicate an open landscape with some limited localised areas of longer grass and marsh subject to occasional flooding. It is unlikely that this feature was permanently wet.
- 6.4.18 The basal sample, sample 10, also produced a single grain of oats (*Avena* sp.).

## **6.5 Sediments**

- 6.5.1 One monolith sample was taken from feature 3502, interpreted as a possible pond. The monolith was cleaned prior to recording and standard descriptions used, (following Hodgson 1997) including Munsell colour, texture, structure and nature of boundaries, as given below in **Table 4**.
- 6.5.2 Of particular focus was whether or not feature 3502 may have been a pond.
- 6.5.3 The sediments do not support the interpretation of the feature as a pond. They are unlaminated and poorly or un-sorted, which argues strongly against a water lain origin and is more suggestive of a dumped fill. There are also no organic or silting deposits which one would expect in such a feature.
- 6.5.4 Whilst the marly lower deposits sampled are very likely of alluvial or lacustrine origin, these pre-date the feature, possible very significantly. Given the location of the Site in a river floodplain the deposits could be Holocene in date, but Pleistocene lacustrine deposits are also mapped in the wider area (BGS sheet 241).

## **6.6 Small animal and fish bones**

- 6.6.1 During the processing of bulk soil samples for the recovery of charred plant remains and charcoals, a few small animal bones, including small mammal, anuran (toad/frog), and a single fish vertebrae were recorded (**Table 5**) in the flots.

## **7 STATEMENT OF POTENTIAL**

### **7.1 Archaeological Deposits**

- 7.1.1 The archaeological fieldwork undertaken at the Site has broadly achieved the aims and objectives as listed in section 3 of this report. The fieldwork has generated a range of data spanning the prehistoric through to the post-medieval period and the results of the fieldwork indicate that the features and deposits excavated and recorded continue beyond the bounds of the Site.
- 7.1.2 The large, possible prehistoric feature is dated on the basis of a single, abraded sherd of Late Bronze Age flint tempered pottery that could be residual in this context. The nature and function of this feature is uncertain, although its alignment and orientation could indicate that it relates to the Witham Lodge Earthwork that lies immediately to the west of the Site, possibly forming an entrance structure, however, this appears rather wider than the enclosure ditches recorded during earlier excavations (Rodwell 1993).
- 7.1.3 Prehistoric and Romano-British activity on the Site is represented by a small assemblage of residual finds and is probably associated with occupation within the Witham Lodge earthwork, immediately to the west of the Site.
- 7.1.4 The early medieval features and deposits encountered on the Site appear to be of a broadly similar date to the occupation of the nearby moated site of Blunts Hall, some 700m to the west and, on the basis of this similar dating, may be associated with the monument. They also appear to be heavily influenced by the underlying drift geology, with the majority of the pits being excavated into the brown silty alluvial deposits and the earliest gullies (3503 and 3504) coinciding with the interface between the brown silty alluvium and the tufaceous alluvium to the north. Finds of possible roof furniture and cob wall remains suggest the presence of a building of some status in the area, however, only one possible posthole that may have related to a building was recognised during either the evaluation or the area excavations.
- 7.1.5 The briquetage trough recovered from the fill of a pit could indicate a salt making function, however, as the Site is several miles from the nearest salt-water/brackish water source, this seem unlikely, unless the small water course that originates near Blunts Hall, some 700m to the west was brackish, which, from the mollusc shells recovered from environmental samples appears unlikely. Environmental remains and finds recovered from the medieval features and deposits appear to show that the deposits were formed by the accumulation of domestic and agricultural waste.
- 7.1.6 This assessment has highlighted the importance of the medieval occupation at Witham. Although the settlement formed along Newland Street to the south-west is relatively well understood, evidence for agricultural and/or domestic occupation beyond the boundaries of the 'new town' is sparse. Moreover, evidence of occupation within the floodplain is less well documented. The Maltings Academy Site therefore provides an opportunity to further our understanding of the nature of activities undertaken within the hinterland of the medieval town.
- 7.1.7 Further post-excavation analysis will therefore concentrate on the medieval remains. More detailed, site-specific objectives will include:
-

- the confirmation of the phasing of activity across the Site
- descriptions of the evidence for the prehistoric and medieval activity
- determination of the date, extent, nature and duration of the medieval activity
- establishment of the character, status and economy of the medieval use of the Site and its relationship with the new town in the south-east and Blunts Hall to the north-west.

## 7.2 Finds

7.2.1 This is a small assemblage in which only pottery and animal bone are represented in any quantity. The focus is on the medieval period; quantities of finds from the prehistoric and Romano-British periods (worked flint, pottery, CBM) are too small to enable further comment on the nature of activity on the Site at these periods beyond what has been attempted here. Post-medieval finds are even more scarcely represented (pottery, clay pipes, glass).

7.2.2 The pottery has already served to provide a chronological framework for the Site; further analysis may enable some refinement of the medieval chronology, through a closer examination of fabrics and their potential sources, and the development of jar rim profile. The ceramic framework for the region is well established (Cunningham 1985; Drury 1993; Cotter 2000), although work on some of the individual industries is still ongoing (e.g. Heddingham: H. Walker in prep.). Pottery supply to the Site from Colchester in the later medieval period has been established, but earlier sources of supply are less certain.

7.2.3 Beyond the pottery, animal bone and other material types offer little potential for further analysis, although the presence of a briquetage (salt-working) trough is noteworthy, and can be linked to widespread evidence of medieval salt-working along the Essex coast.

## 7.3 Environmental

### *Charred plant remains*

7.3.1 The charred plant remains have the potential to look at the range of crops utilised on the Site during the early medieval period, as well as the potential to examine cultivation, storage and cultivation practices. Given the low number of samples with suitable remains present, such potential is however limited with only those from pit 2008 and ditch 3501 providing a suitable assemblage for analysis.

### *Wood charcoal*

7.3.2 Only two features (pit 2008 and feature 3502) produced even reasonable quantities of wood charcoal. The assemblages were relatively small and appeared on preliminary scanning to comprise mainly of oak wood. The wood charcoal has a limited potential to examine the collection of wood for fuel, and possibly some aspects of local woodland composition and management, however, given the small size of the assemblages and that the features are not associated with any specific activity such potential is limited.

### *Land Snails and fresh/brackish water molluscs*

7.3.3 Although the assessment of the mollusc assemblages from the excavation has indicated the presence of a mixed environment with a significant shady

element and the occurrence of a limited aquatic component, more detailed analysis of these assemblages is unlikely to provide a very detailed picture of the local landscape, particularly as the samples were mainly single spot samples from the individual features. The occurrence of the relatively rare species *Truncatellina cylindrica* and *Acicula fusca* is noteworthy.

- 7.3.4 Further analysis of the mollusc assemblages identified during the watching brief in feature 6008 has the potential to define the environment of the local landscape with more certainty and to assist in determining how wet this area of the Site was. This will only worthwhile if this feature becomes dated and can be related to the archaeological remains.

#### *Sediments*

- 7.3.5 The sediments are of no further potential and are recommended for discard.

#### *Pollen*

- 7.3.6 There is no potential for pollen work from the monolith sample. The upper contexts sampled are mixed archaeological fills, and the lower are undated (and effectively undatable) calcareous drift geology.

#### *Small animal and fish bones*

- 7.3.7 There is no further potential for these remains.

## **8 METHOD STATEMENT**

### **8.1 Stratigraphic Report**

- 8.1.1 The known archaeological background in the immediate vicinity of the Site will be re-examined. This will include reviewing published reports and available 'grey literature' and will contribute towards the discussion of the Site and how it fits within the wider historic landscape.
- 8.1.2 An Access database and AutoCAD drawings have been constructed to facilitate rapid cross-examination and updating of the archive during the post-excavation analysis.
- 8.1.3 Once the initial post-excavation analysis is completed, revisions will be made as required. Advised by a post-excavation manager, the detailed outline of the publication text will be written and specialists will make their contributions. Illustrations will be prepared to accompany the report.

### **8.2 Finds**

- 8.2.1 From the finds retrieved, only pottery warrants any further analysis. Method statements for that proposed analysis are given below. Brief comments are also suggested for the briquetage trough, and the possible ceramic chimney coping. For other finds, information gathered as part of this assessment stage may be utilised in any proposed publication, but is unlikely to be presented in a formal publication report.

#### *Pottery*

- 8.2.2 The medieval pottery will be subjected to fabric and form analysis, following the standard Wessex Archaeology recording system for pottery (Morris 1994), and using nationally recommended nomenclature for vessel forms (MPRG

1998). Correlations will be made with the Essex type series, which will necessitate a short consultation with a local specialist. The range of ware types and vessel forms represented will be briefly discussed within the known ceramic framework for Essex (e.g. Cunningham 1985; Cotter 2000), with their implications for the Site chronology, and for an understanding of sources of supply and Site status. A very limited selection of vessels will be made for illustration (maximum six vessels).

#### *Ceramic Building Material*

- 8.2.3 Parallels will be sought for the possible chimney coping fragments, and these items will be briefly discussed within their local context in Essex. The most complete example will be illustrated.

#### *Fired Clay*

- 8.2.4 The briquetage trough will be briefly discussed within the context of salt-working on the Essex coast, however, further research is necessary to locate any appropriate parallels from other sites in the area. Reconstruction of the trough for illustration is likely to prove impracticable, but a photograph showing the vessel *in situ* may be presented for publication.

### **8.3 Environmental**

#### *Charred plant remains*

- 8.3.1 It is proposed to analyse the richest sample from pit 2008 and an additional sample from ditch 3501 in order to characterise the range of crops on the Site during the medieval period.
- 8.3.2 All identifiable charred plant macrofossils will be extracted from the 2 and 1mm residues together with the flot. Identification will be undertaken using stereo incident light microscopy at magnifications of up to x40 using a Leica MS5 microscope, following the nomenclature of Stace (1997) and with reference to modern reference collections where appropriate, quantified and the results tabulated.

#### *Wood charcoal*

- 8.3.3 No further work is recommended.

#### *Land snails and fresh/brackish water molluscs*

- 8.3.4 It is suggested that this mollusc sequence from feature 6008 is analysed in full, if it both becomes dated and can be related to the archaeological remains, to provide information on the local landscape.
- 8.3.5 Analysis of selected samples involves the extraction of apical and diagnostic fragments from both flot and residue. The recovered shells are identified and quantified using stereo incident light microscopy at magnifications of up to x40 using a Leica MS5 microscope, following the nomenclature of Kerney (1999) and with reference to modern reference collections where appropriate. The results are tabulated and species diversity indices calculated (Shannon index, Broullion index, Delta 2 index and Delta 4 index). Mollusc histograms are produced where applicable.

- 8.3.6 The assessment results should be written up but no further analysis work is recommended for the remainder of the samples.

*Sediments*

- 8.3.7 The sediments are recommended for discard.

*Pollen*

- 8.3.8 No pollen work is proposed.

*Small animal and fish bones*

- 8.3.9 No further work is recommended.

## **9 PROPOSALS FOR PUBLICATION, ANALYSIS AND ARCHIVE**

### **9.1 Publication proposal**

- 9.1.1 In view of the excavation's potential to throw light on the nature of medieval activity in the area, it is proposed that a short note (maximum 5000 words, with supporting illustrations), summarising the results presented in this assessment report, and incorporating relevant information from the evaluation report, is submitted for publication in a suitable journal (Essex Proceedings/Med Arch) and made available online (OASIS).
- 9.1.2 The report will comprise a brief introduction detailing the circumstances of the project and its aims and objectives; a description of the archaeological remains recorded, summaries of the finds data contained in this report, the results of further limited environmental analysis as detailed above; and a discussion of the results, placing the Site within its wider regional context.
- 9.1.3 A copy of this assessment report will be deposited with the NMR at Swindon and the Essex County Sites and Monuments Record. In addition, the online form for the Online Access to Index of Archaeological Investigations (OASIS) Project will be completed by Wessex Archaeology.
- 9.1.4 In order to achieve the project aims the following list identifies the task, personnel and/or time required. Proposed personnel and their qualifications are listed in section 11.2. Further details may be supplied on request. Wessex Archaeology reserves the right to vary the staff should circumstances necessitate this.

<b>Task</b>	<b>Personnel</b>	<b>Days</b>
<b>Pre-analysis tasks</b>		
Extraction of charred plants (2 samples)	Environmental Officer	1
Snails: extraction of four samples	Environmental Officer	2
Check phasing	Senior Project Officer	1
<b>Analysis tasks</b>		
Charred plant remains, analysis and reporting	Senior Project Officer	2.5
Snails, analysis and report writing	Environmental Officer	4
Medieval pottery	Senior Project Manager Ext ( H Walker)	4 1

CBM	Senior Project Manager	0.5
Briquetage	Senior Project Manager	0.5
<b>Report preparation</b>		
Prepare drawings	Senior Project Officer	2
Introductory sections	Senior Project Officer	1.5
Archaeological/historical background	Senior Project Officer	1.0
Site description	Senior Project Officer	0.5
Site phasing	Senior Project Officer	3
Discussion and synthesis, acknowledgements and bibliography	Senior Project Officer	7
Editing	Project Manager	1.5
Revisions/integration	Project Officer	2
<b>Illustrations</b>		
Site	Illustrator	1
Finds	Illustrator	2
<b>Publication</b>		
Review Report	Project Manager	2
Publication cost	Ext	
<b>Archive</b>		
Archive preparation	Project Officer	1
Microfilm preparation and checking	Project Assistant	0.5
Microfilm paper records	Ext	
Archive deposition	Project Assistant	1
Box storage grant	-	

## 9.2 Personnel

9.2.1 The following Wessex Archaeology staff and nominated specialists are currently proposed to undertake the post-excavation analysis, report production and archive deposition:

Regional Director	Nick Truckle BA, MIFA
Project Manager	Sue Farr BA, MIFA
Reports Manager	Julie Gardiner BA, PhD, FSA, MIFA
Project Officer	Sian Reynolds
Illustrator	Liz James
Specialist	Chris Stevens
Pottery specialist	Lorraine Mephram
Records Assistant	Helen Macintyre/Stuart Wilkinson
External Specialist	H Walker

## 9.3 Programme

9.3.1 The post-excavation programme is achievable within six months of an agreed start date, to be followed by submission of the draft publication report to a suitable journal (Essex Proceedings/Med Arch) and the availability of this report online (OASIS).

- 9.3.2 It is recommended that the project archive resulting from the excavation be deposited with Braintree Museum. The Museum has agreed in principle to accept the project archive on completion of the project, under the accession code **BRNTM: 2010.200.1**. Deposition of the finds with the Museum will only be carried out with the full agreement of the landowner.

#### **9.4 Preparation of archive**

- 9.4.1 The complete site archive, which will include paper records, photographic records, graphics, artefacts and ecofacts, will be prepared following standard conditions for the acceptance of excavated archaeological material by Braintree Museum, and in general following nationally recommended guidelines (Walker 1990; SMA 1995; Richards and Robinson 2000; Brown 2007).

- 9.4.2 All archive elements will be marked with site and accession code, and a full index will be prepared. The archive comprises the following:

- Up to 12 cardboard boxes of artefacts and 1 large airtight plastic box of ecofacts, ordered by material type
- 2 files/document cases of paper records & A3/A4 graphics
- 1 file photographs
- 2 A1 graphics

#### **9.5 Conservation**

- 9.5.1 No immediate conservation requirements were noted in the field. Finds which have been identified as of unstable condition and therefore potentially in need of further conservation treatment comprise the three metal objects. Further conservation treatment is not proposed for these objects, which are not of intrinsic interest.

#### **9.6 Discard Policy**

- 9.6.1 Wessex Archaeology follows the guidelines set out in *Selection, Retention and Dispersal* (Society of Museum Archaeologists 1993), which allows for the discard of selected artefact and ecofact categories which are not considered to warrant any future analysis. Any further discard could target the ceramic building material, and the undiagnostic fired clay. This discard policy will be discussed with the recipient museum.

- 9.6.2 The discard of environmental remains and samples follows the guidelines laid out in Wessex Archaeology's 'Archive and Dispersal Policy for Environmental Remains and Samples'. The archive policy conforms to nationally recommended guidelines (SMA 1993; 1995; English Heritage 2002) and is available upon request.

#### **9.7 Copyright**

- 9.7.1 The full copyright of the written/illustrative archive relating to the Site will be retained by Wessex Archaeology Ltd under the Copyright, Designs and Patents Act 1988 with all rights reserved. The recipient museum, however, will be granted an exclusive licence for the use of the archive for educational purposes, including academic research, providing that such use shall be non-



profit making, and conforms with the Copyright and Related Rights regulations 2003.

## 9.8 Security Copy

9.8.1 In line with current best practice, on completion of the project a security copy of the paper records will be prepared, in the form of microfilm. The master jackets and one diazo copy of the microfilm will be submitted to the National Archaeological Record (English Heritage), a second diazo copy will be deposited with the paper records, and a third diazo copy will be retained by Wessex Archaeology.

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## APPENDIX 1: FINDS TABLES

**Table 1: Finds totals by material type**

Material	EVALUATION		EXCAVATION		TOTAL	
	No.	Wt. (g)	No.	Wt. (g)	No.	Wt. (g)
Pottery	70	1458	309	4300	379	5758
<i>Prehistoric</i>	1	1	1	4	2	5
<i>Romano-British</i>	4	63	3	16	7	79
<i>Medieval</i>	56	1181	305	4280	361	5461
<i>Post-medieval</i>	9	213	-	-	9	213
Ceramic Building Mat.	29	1604	7	1391	36	2995
Fired Clay	12	108	96	1382	108	1490
Clay Pipe	2	1	-	-	2	1
Worked Flint	11	91	18	256	29	347
Burnt Flint	16	371	1512	5485	1528	5856
Glass	2	1	-	-	2	1
Iron	2	-	2	-	4	-
Animal Bone	68	847	469	10084	537	10931
Shell	22	252	116	1380	138	1632

**Table 2: Pottery totals by ware type**

Date Range	Ware type	No. sherds	Weight (g)
PREHISTORIC	Flint-tempered ware	2	5
ROMANO-BRITISH	RB greyware	7	79
MEDIEVAL	Early medieval shelly ware (Fab 12A)	5	46
	Early medieval shelly/sandy ware (Fab 12B)	13	224
	Early medieval sandy/shelly ware (Fab 12C)	28	342
	Early medieval sandy ware (Fab 13)	113	1502
	Sandy orange ware (Fab 21)	2	23
	Colchester-type ware (Fab 21A)	52	1247
	Hedingham type ware (Fab 22)	3	31
POST-MEDIEVAL	Redware (Fab 40)	7	68
	Refined whiteware	2	145
	<b>TOTAL</b>	<b>379</b>	<b>5758</b>

**Table 3: Animal bone condition and potential (n)**

Context	Unid.	Loose teeth	Gnawed	Measureable	Ageable	Butchered	Total no. frags.
all	38	1	5	13	33	5	113

**APPENDIX 2: ENVIRONMENTAL TABLES**
**Table 4: Sediment descriptions and sub-samples taken**

<b>Feature:</b>	3012	<b>Mono:</b>	5	<b>Comments:</b> Monolith through a possible pond feature and calcareous drift geology beneath	
<b>Level (top):</b>	**m aOD	<b>Drg:</b>	3012		
<b>Depth (m)</b>	<b>Pollen samples</b>	<b>Other samples</b>	<b>Context</b>	<b>Sediment description</b>	<b>Interpretation</b>
0-0.10	-	-		void	
0.10-0.26	-	-	3104	2.5Y 5/1 grey chalky gritty silt loam, very common chalk from 1-10mm, occasional small burnt stone / flint. Sparse small charcoal frags. Clear boundary.	Fill, probable dump
0.26 -0.38	-	-	3015	10YR 4/2 dark greyish brown gritty silt loam, rare charcoal flecks and small chalk and gravel fragments. Sharp boundary.	Fill, probable dump
0.38-0.49	-	-	3129	2.5Y 7/2 light grey, degraded and mixed chalk or marl ( <u>not</u> tufa). Sharp boundary.	Mixed chalk / marl
0.49-0.59	-	-	3167	2.5Y 6/3 light yellowish brown clay loam, quite to very calcareous, slightly less so than above (10% HCl test). Appears to be slightly decalcified chalk or marl.	Degraded chalk / marl

**Table 5: Assessment of the charred plant remains and charcoal**

Samples			Flot								
Feature Context	Sam-ple	Vol. Ltrs	Flot (ml)	% roots	Grain	Chaff	Other Seeds etc.	Notes	Charcoal >4/ 2mm	Other	Analy-sis
<b>72780</b>											
Trench 1 Medieval											
Pit 113 116	1	30	125	50	A*	-	C	Grains of free-threshing wheat, barley and rye. <i>Avena</i> sp. <i>Vicia/Lathyrus</i> type	1/1ml	moll-t (A**) moll-f (C) moll-m (C) fish-(C) sab- (C)	-
Pit 113 115	2	30	125	20	A	-	-	Coal frg x1, Grains of free-threshing wheat, barley and rye.	3/3 ml	moll-t (A**) moll-f (C) moll-m (C) fish-(C) sab- (C)	-
<b>72781</b>											
Area 1 Medieval											
Pit 2008 2013	1	10	180	3	A**	A	A	Mainly f-t wheat+ barley, rye & oats incl. cult spikelet. 1x f-t rachis frg. of legumes ?Pea, several frgs of straw + basal culm nodes. <i>Vicia/Lathyrus</i> , <i>Galium</i> sp. <i>Fallopia</i> , <i>Rumex</i> , <i>Chenopodium</i> , <i>Anthemis</i> , <i>Brassica</i> , <i>R. acetosella</i> , <i>Lapsana</i> , <i>Silene</i>	10/3 ml	moll-t (A**) moll-f (A)	P
Area 2 Medieval											
Pond? 3012 3014	2	16	450	3	A	-	C	7x f-t wheat, 1x <i>Avena</i> a few poorly preserved grains	55/100 ml	moll-t (A**) moll-f (A*)	-
Pit 3097 3098	4	10	20	40	B	C	C	<i>Vicia faba</i> frg, f-t wheat x3 & rachis fragment x1.	1/1 ml	Moll-t (A) Moll-f (C)	-
Ditch 3032 3033	6	9	35	10	A	-	C	Barley, free-threshing wheat, rye, <i>Avena</i> sp., <i>Crataegus monogyna</i> stone x1, <i>Rumex</i> .	-/-	moll-t (A**) moll-f (A*) sab-(C)	P
Ditch 3081 3082	7	9	15	3	B	-	C	f-t wheat x6, <i>Crataegus monogyna</i> , <i>Vicia</i> sp.	-/-	moll-t (A*)	-

Key: A\*\*\* = exceptional, A\*\* = 100+, A\* = 30-99, A = >10, B = 9-5, C = <5  
 sab = small animal bones, Moll-t = terrestrial molluscs, Moll-f = freshwater molluscs; Moll-m = marine molluscs. Analysis: P = plant remains

**Table 6: Mollusc assessment from Feature 3502**

<b>Site Phase</b>	<b>Medieval</b>
<b>Feature type</b>	<b>Pond?</b>
<b>Feature no.</b>	<b>3012</b>
<b>Context no.</b>	<b>3014</b>
<b>Sample no.</b>	<b>2 M</b>
<b>Depth (m)</b>	<b>Spot</b>
<b>Volume (L)</b>	<b>1</b>
<b>Open country species</b>	
<i>Pupilla muscorum</i>	C
<i>Vertigo</i> spp.	C
<i>Helicella itala</i>	C
<i>Vallonia</i> spp.	A
<i>Truncatellina cylindrica</i>	C
<b>Intermediate species</b>	
<i>Trichia hispida</i>	A
<i>Cochlicopa</i> spp.	B
<i>Cepaea/Arianta</i> spp	C
<i>Punctum pygmaeum</i>	C
<b>Shade-loving species</b>	
<i>Carychium</i> spp.	A
<i>Discus rotundatus</i>	A
<i>Oxychilus cellarius</i>	C
<i>Aegopinella</i> spp.	C
<i>Acanthinula aculeata</i>	C
<b>Fresh and Brackish water species</b>	
<i>Lymnaea</i> spp.	C
<i>Pisidium</i> spp.	C
<b>Burrowing species</b>	
<i>Cecilioides acicula</i>	A
<b>Approx totals</b>	<b>80</b>

**Table 7: Mollusc Assessment from Feature 108**

Feature no.	6008	6008	6008	6008
Context no.	6009	6009	6010	6011
Sample no.	10	11	12	13
Depth (m)	0.55- 0.65	0.45- 0.55	0.25- 0.35	0.05- 0.15
Weight (g)	1500	1500	1500	1500
Open country species				
<i>Pupilla muscorum</i>	C	B	B	B
<i>Vertigo</i> spp. (Inc <i>Vertigo antivertigo</i> )	A	A	A	B
Sinistral <i>Vertigo</i> spp.	B	A	C	C
<i>Helicella itala</i>	C	C	C	C
<i>Vallonia</i> spp.	A	A	A	A
Catholic species				
<i>Trichia hispida</i>	A	A	A	A
<i>Pomatias elegans</i>	C	C	+	-
<i>Cochlicopa</i> spp.	B	B	C	C
<i>Cepaeal Arianta</i> spp	C	C	C	C
<i>Punctum pygmaeum</i>	C	C	C	-
<i>Nesovitrea hammonis</i>	C	C	C	-
Limax	-	-	C	-
Shade-loving species				
<i>Carychium</i> spp.	A	A	A	C
<i>Discus rotundatus</i>	B	B	B	A
<i>Oxychilus cellarius</i>	C	C	C	C
<i>Aegopinella</i> spp.	C	C	C	C
Clausiliidae	C	C	C	C
<i>Vitrea</i> spp.	C	C	C	C
Marsh Loving Species				
<i>Succinea/Oxyloma</i> spp.	B	C	C	C
Fresh and Brackish water species				
<i>Bithynia</i> spp.	C	C	C	-
<i>Bithynia operculum</i>	-	C	C	-
<i>Lymnaea truncatula</i>	C	C	C	-
<i>Lymnaea</i> spp.	C	C	C	C
Planorbids	C	-	C	-
<i>Pisidium</i> spp.	C	B	C	-
<b>Approx totals</b>	<b>100+</b>	<b>100+</b>	<b>100+</b>	<b>75</b>



**APPENDIX 3: OASIS RECORD FORM**
**Maltings Academy, Spinks Lane, Witham, Essex - Wessex Archaeology**
**OASIS ID - wessexar1-109662**

<b>Versions</b>				
<b>View</b>	<b>Version</b>	<b>Completed by</b>	<b>Email</b>	<b>Date</b>
View 1	1	S Farr	s.farr@wessexarch.co.uk	9 September 2011
<b>Completed sections in current version</b>				
<b>Details</b>	<b>Location</b>	<b>Creators</b>	<b>Archive</b>	<b>Publications</b>
Yes	Yes	Yes	Yes	1/1
<b>Validated sections in current version</b>				
<b>Details</b>	<b>Location</b>	<b>Creators</b>	<b>Archive</b>	<b>Publications</b>
No	No	No	No	0/1
<b>File submission and form progress</b>				
Grey literature report submitted?	No	Grey literature report filename/s		
Images submitted?	No	Image filename/s		
Boundary file submitted?	No	Boundary filename		
HER signed off?		NMR signed off?		