Gravel End, Coveney, Cambridgeshire

Archaeological Evaluation Report

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Prepared by:	Paddy Lambert (Field Project Supervisor)
Checked by:	Tom Phillips (Senior Project Manager)
Edited by:	Aileen Connor (Senior Project Manager)
Approved for Issue by:	Paul Spoerry (Regional Manager)
Signature:	

OA South
Janus House
Osney Mead
Oxford
OX2 0ES

t. +44 (0)1865 263 800

OA East
15 Trafalgar Way
Bar Hill
Cambridge
CB23 8SG

t. +44 (0)1223 850 500

OA North
Mill 3
Moor Lane Mills
Moor Lane
Lancaster
LA1 1QD
t. +44 (0)1524 880 250

e. info@oxfordarch.co.uk
w. oxfordarchaeology.com
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Gravel End, Coveney, Cambridgeshire

Archaeological Evaluation Report

Written by Paddy Lambert BA (Hons) and Tom Phillips BA ACIfA

With contributions from Carole Fletcher BA ACIfA, Rachel Fosberry ACIfA and Denis Sami PhD and illustrations by Gillian Greer MA and Dave Brown BA

Contents

List of Figures

List of Plates

Summary

Between the 9th and 13th October 2017 Oxford Archaeology East (OA East) carried out a trial trench evaluation at Gravel End, Coveney, Cambridgeshire. Three trenches totalling 55m of linear trenching were excavated by machine. The evaluation revealed the remains of a medieval midden, present in the south-east of Trench 1 and the entirety of Trench 3, an area covering at least 20m x 10m. The midden material had been deposited in a series of pits, originally constructed either as quarries or for the deliberate disposal of rubbish. Evidence for the pitting was best represented in Trench 1. The midden was formed by at least three distinct layers in both trenches and measured up to 0.7m thick in the south-west of Trench 3. A total of ten Test Pits were hand excavated through the layers of midden material in Trenches 1 and 3, to characterise and date the sequence.

An assemblage of medieval and post-medieval pottery weighing over 7kg was recovered from the midden deposits. The pottery assemblage is moderately abraded, with some larger, relatively unabraded, sherds and contains both kitchen and table wares. Although some later fabrics are present, the midden represents, in part, a transitional assemblage from the high medieval to the later medieval period. Medieval fabrics (*c.* AD 1150-1500) comprise approximately 85% of the total assemblage by weight, indicating that the midden deposits are mainly medieval in origin. The presence of transitional medieval-late medieval Ely ware sherds, suggests that there is a distinct phase of 14th century deposition within the midden. Other artefacts and ecofacts attest to both the domestic nature of the assemblage and the status of the building it may have come from. Medieval glazed roof tile was recovered from the top of the midden in Trench 3, while single medieval or late medieval roof tile fragments were recovered from other layers in Trench 3, where it was found alongside post-medieval roof tile. A small metalwork assemblage included a small iron knife and a barrel lock mechanism.

Plant remains such as cereal grains, legumes and seeds of both dry and wetland plants were recovered and the level of preservation was good. The assemblage mainly represents burnt food remains, which would be expected within midden deposits, with a moderate assemblage of cereal grains and a significant amount of legumes (peas and beans), which were an important component of the medieval diet.

A total of 6.3kg of animal bone was recovered from the midden layers. While not a huge amount, the volume recovered, coupled with signs of carcass processing and food waste evidence from the midden deposits, is substantial enough to indicate nearby settlement. A small shell assemblage is an indicator of diet and trade with the wider area (most likely via the River Great Ouse), with edible oyster shells from estuarine, shallow coastal waters and mussels from intertidal zones. The shell, along with a small number of fish bones and a single piece of egg shell attest to further culinary refuse.

Acknowledgements

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The project was managed for Oxford Archaeology by Tom Phillips. The fieldwork was directed by Paddy Lambert, who was supported by Alexanne Dawson. Survey and digitising was carried out by Dave Brown. Thanks is also extended to the teams of OA staff that cleaned and packaged the finds under the management of Natasha Dodwell and processed the environmental remains under the guidance of Rachel Fosberry. Katherine Hamilton prepared the archive.

1 INTRODUCTION

1.1 Scope of work

1.1.1 Oxford Archaeology (OA) was commissioned by John Fyfe & Son (Ely) Limited to undertake a trial trench evaluation at Gravel End, Coveney, Cambridgeshire (TL 4907 8247; Fig. 1), on land proposed for residential development of two detached dwellings, with associated driveways and gardens.

1.1.2 The work was undertaken as a condition of Planning Permission (planning ref. 17/00549/OUT). A Brief for Archaeological Evaluation was issued by Gemma Stewart of Cambridgeshire County Council Historic Environment Team (CHET, dated 4th August 2017) detailing the Local Authority's requirements for work necessary to discharge the planning condition. A written scheme of investigation was produced by OA, which outlines how OA implemented the specified requirements.

1.2 Location, topography and geology

1.2.1 The site lies to the northern edge of the village of Coveney, in East Cambridgeshire, around 5km north-west of Ely and 3km north-east of Witcham.

1.2.2 The development site (of 0.17ha), which sits at around 5.5m OD, is currently grassed, bounded to the west by Gravel End, to the south by Gravel End Lane and to the north by houses.

1.2.3 The site has a bedrock geology of Ampthill Clay formation, with no superficial deposits recorded (http://www.bgs.ac.uk/discoveringGeology/geologyOfBritain/viewer.html).

1.3 Archaeological and historical background

1.3.1 A summary of the archaeological and historical background of the site and within a 1km radius, in chronological order of period, is listed below (Phillips 2017). This information is based on data provided by the Cambridgeshire Historic Environment Record (CHER), supplemented by the Victoria County History (http://www.british-history.ac.uk/vch/cambs/vol4/pp136-140 accessed *10/11/2017*).

Prehistoric

1.3.2 A Neolithic greenstone axe was found 150m south of the proposed development site (01720). Most other evidence for prehistoric activity has been found in the west of the parish around the eastern fringes of Wardy Hill. This is also the location of the Wardy Hill Iron Age ringwork, which was subject to excavation between 1991-1992 (CHER 09497).

1.3.3 A possible causeway was found when timber was ploughed up in Hall Fen near Grunty Fen Drain (MCB16028), 700m to the north-east. The area is the shortest crossing point between the higher ground of Coveney and Downham Hythe to the north, and therefore a suitable location for a causeway.

Medieval, Post-medieval and Modern

1.3.4 Coveney is first mentioned in c. AD 1060 but does not appear in the Domesday Book or the *Inquistio Eliensis*. The manor of Coveney was held originally by the prior and convent of Ely, but unlike other manors held by the monastery, it was occupied by a long-standing tenure by the Lisle family and their successors, the Lords Scrope of Bolton Castle in Yorkshire. It is believed that the later 11th century saw a temporary abandonment of the convent of Coveney, due to it not worth being occupied. It was later restored during the Anarchy period in the mid-12th century, as a grant to Bishop Niel (1133-69), who granted it to Ralph his steward. Ralph is believed to be an ancestor of the Lisle family, who subsequently became the convent's tenants in Coveney for over 200 years until 1379, when it was bequeathed to the Scrope family. Henry Scrope made settlements of the manor between 1438 and 1446, meaning that it was partially divided.

1.3.5 The medieval church of Saint Peter-ad-Vincular, located c. 300m south of the site (CHER10339; DCB1340) is the earliest extant structure in the village, and has its origins in the 13th century. It is thought that Coveney Mansion (MCB22038; DCB794), dating to late 16th century (and associated with a listed stable (DCB1131)) and located close to the church, is the successor of the medieval manor house. Throughout its history, the lordship of the manor of Coveney was owned by intermittently resident laymen.

1.3.6 A possible moated site is located 300m to the south-east (01061). Three sides of a square have been mapped although the HER record states that moats are rare in the fens and that the feature could be pedological (soil formation).

1.3.7 There are late 14th century records of a medieval hermitage at Downham Hythe (09942), 500m to the north. No trace of it survives and the importance of the settlement declined following drainage in the 17th century.

1.3.8 Cartographic evidence from the 19th century suggests a wind mill or wind pump was located 900m to the east, close to Grunty Fen Drain (07128).

1.3.9 The other heritage assets of post-medieval date in Coveney relate to 19th century buildings – most of which are still standing. These are primarily located along the frontage of Main Street. These include a Methodist church established 1847 (MCB17172), Fen House (MCB22036), Sallycroft House (MCB22037), Hill House (MCB22039), the Cross Keys public house (MCB22041), The Bell public house (MCB22042) a former Baptist Chapel (MCB22043) and school (MCB22045), and a now demolished blacksmiths workshop (MCB22044).

1.3.10 Recent works undertaken by OA East, located at Manor Farm approximately 871m to the south west of the site, found evidence for drainage ditches dating to the 19th century (Lord 2017).

Undated

1.3.11 Aerial photography has identified a small penannular cropmark 600m to the south-east, measuring 15m in diameter (09503).

2 EVALUATION AIMS AND METHODOLOGY

2.1 Aims

2.1.1 The project aims and objectives were as follows:

i. establish the presence or absence of archaeological remains on the site, characterise where they are found (location, depth and extent), and establish the quality of preservation of any archaeology and environmental remains
ii. provide sufficient coverage to establish the character, condition, date and purpose of any archaeological deposits
iii. provide sufficient coverage to evaluate the likely impact of past land uses, and the possible presence of masking deposits
iv. provide – in the event that archaeological remains are found – sufficient information to construct an archaeological mitigation strategy, dealing with preservation, the recording of archaeological deposits, working practices, timetables, and orders of cost.

2.2 Methodology

2.2.1 A total of three trenches were machine excavated using a 1.8m wide toothless bucket (Fig.2). These comprised two trenches measuring 20m long (Trenches 1 and 2) and one trench measuring 15m long (Trench 3), providing a coverage totalling 5% of the development area. The machine excavation was supervised at all times by the author.

2.2.2 Trench 1 was re-machined at its north-western end to a depth of 1.3m to establish the natural horizon. Baulk sections were drawn of both sides of the trench.

2.2.3 Spoil was stored alongside the trench. Where possible, the topsoil and archaeological deposits were kept separate during the excavation, to allow for sequential backfilling of the trenches.

2.2.4 Site survey was carried out using a survey-grade differential GPS (Leica GS08) fitted with "smartnet" technology with an accuracy of 5mm horizontal and 10mm vertical.

2.2.5 The discovery of an unusual and widespread series of midden layers sitting in former quarry pits in Trenches 1 and 3 required a specific strategy to de devised in agreement with the CCC Archaeologist. As a result, a series of 1m x 1m hang dug test pits (TPs) was excavated adjacent to the edges of Trenches 1 and 3. Each Test Pit was ascribed a unique identification number from 1-10.

2.2.6 All archaeological deposits and spoil were scanned with a metal detector. All metal detected and hand-collected finds were retained for inspection.

2.2.7 Artefact characterisation of the topsoil and subsoil was not undertaken due to the presence of the midden deposits close to the ground surface in Trenches 1 and 3.

2.2.8 At least one deposit from every individual TP in Trenches 1 and 3 was environmentally sampled to establish the presence and preservation of plant remains (fourteen samples in total). This provided adequate coverage of all layers/deposits present within each TP.

2.2.9 All finds recovered from equivalent layers or deposits were bagged and labelled with the context number and TP number.

2.2.10 A register was kept of the trenches, features, and photographs. All features, layers and deposits have been issued with unique context numbers.

2.2.11 Sections of features were drawn at 1:20. All sections are tied in to Ordnance Datum and the site plan is tied into the Ordnance Survey National Grid.

2.2.12 All site drawings include the following information: site code, scale, section number, orientation, date and initials of the archaeologist who prepared the drawing.

3 RESULTS

3.1 Introduction and presentation of results

3.1.1 The evaluation revealed the remains of a medieval midden sitting either in former quarry pits or possibly pits constructed deliberately for rubbish disposal. The midden was present in the south-east of Trench 1 and the entirety of Trench 3, an area covering at least 20m x 10m. It was formed by at least three distinct layers in both trenches and measured up to 0.7m thick in the south-west of Trench 3. Trench 2 contained the edge of a possible quarry pit in the south-western end but was otherwise devoid of features.

3.1.2 The results of the evaluation are presented below and include a stratigraphic description of the trenches that contained archaeological remains. The full details of all trenches with dimensions and depths of all deposits can be found in Appendix A. Finds data and spot dates are tabulated in Appendix B.

3.2 General soils and ground conditions

3.2.1 The soil sequence differed within each trench. In Trenches 1 and 3 the natural geology had been affected by the cutting of quarry pits, which had subsequently been either rapidly backfilled or used for the dumping of midden material. In Trench 2 the natural geology was sealed by subsoil and topsoil.

3.2.2 Ground conditions throughout the evaluation were generally good, and the trenches remained dry throughout. The midden layers were relatively easy to identify against the underlying natural geology of greyish brown Ampthill Clay.

3.3 General distribution of archaeological deposits

3.3.1 The remains of a medieval midden were identified in the south-east of Trench 1 and the entirety of Trench 3 (Fig. 2). The midden deposits appeared to have been deposited in a series of pits, originally constructed either as quarries or for the deliberate disposal of rubbish, possibly a combination of both. This was most evident in Trench 1 where a large quarry pit at the north-western end (**58**) had been rapidly backfilled (Fig. 3, section 5 and 6). Later cuts were visible to the south-east (**61**, **62**, **63**), and it is believed the midden material was dumped in the hollows left by the quarrying. This also explains why the midden appeared to be sitting directly on top of the natural clay, because the midden was sitting within cut features rather than on the ground surface. Trench 2 was almost entirely devoid of archaeological features, apart from the edge of a possible quarry pit in the south-western end.

3.4 Trench 1

3.4.1 Trench 1 measured 20m in length and was located in the west of the site, aligned north-west to south-east (Plates 7 and 8), parallel with Gravel End. Natural geology was encountered at the south-east end of the trench at 3.33m OD within TP1. The trench contained a series of quarry pits, which were evident in the north-west of the trench (**58**, **61**, **62**, **63**; Fig. 3, section 5 and 6) with a build-up of medieval midden material extending across the entire south-east end of the trench and sitting within further quarry pits. There was also one post-medieval ditch present (**31**), which truncated the midden.

Quarry pits

3.4.2 Quarry pit **58** was the earliest feature. It extended north-west from approximately the centre of the trench to beyond the north-western end of the trench, measuring at least 10m long and 0.7m deep (Fig. 3, sections 5 and 6). Within the centre of the trench the edge of the pit was truncated by later quarry pits (**61** and **63**). Quarry pit **58** contained two fills. The primary fill (54) was a dark grey silty clay measuring 0.22m thick. It was very compacted and devoid of any artefacts or ecofacts, the only inclusions being small – medium sized stones. It was sealed by fill (53), a yellowish brown silty clay measuring up to 0.44m thick, comprising re-deposited natural clay. The fills of quarry pit **58** suggest it was rapidly backfilled, firstly with topsoil represented by (54), and subsequently with un-utilised natural material (53).

3.4.3 Quarry pits **61** and **62** were both recorded in a machine excavated section (Fig. 3, section 5). Quarry pit **61** measured 2.8m wide and 0.4m deep with gently sloping sides and a concave base. Primary fill (56) comprised a dark grey silty clay and was devoid of finds. It was sealed by a layer of re-deposited natural clay (55). Pit **62** was only visible in the south-eastern end of section 5, where it truncated pit **61**. Its single fill (57) comprised a dark grey silty clay, which contained no finds.

3.4.4 Quarry pit **63** was recorded in a machine excavated section (Fig. 3, section 6) and through hand excavation (TP4; Fig. 3, section 2). It measured at least 4m wide and up to 0.4m deep with gently sloping sides and a concave base. It contained six fills in TP4; primary fill (10) was a mid grey silty clay, which contained no finds and probably represents initial backfill of the quarry. The remaining five fills formed part of the sequence of midden layers and therefore have been described below.

The midden

3.4.5 A total of four Test Pits were hand excavated through the layers of midden material along the north-eastern baulk of the trench, at 1m increments from south-east to north-west (Fig. 2 and Fig. 3, section 1 and 2). TP1 (Plates 2 and 5), TP2 (Plates 3 and 5) and TP3 (Plate 4) measured 1x1m, and TP4 (Plate 1) measured 1.7x1m. The midden deposits or layers were interpreted as sitting within further quarry pits, similar to those recorded to the north-west, but this time utilized for the disposal of domestic debris. The midden is described below as a series of layers with the exception of TP4, where the deposits had already been assigned as fills of a known quarry pit (63). The location of each test pit can be found in Fig. 2.

3.4.6 Fill (12) within quarry pit **63** was present in TP4 (Fig. 3, section 2). It comprised mid yellowish grey redeposited silty clay, measuring 0.08m thick. It was the earliest deposit within the sequence to contain finds. Artefacts included 41 sherds (756g) of pottery, most of which was medieval (c. AD 1350-1500) along with two sherds of post-medieval pottery, rim sherds from a Post-medieval Redware and Post-medieval Black-Glazed ware bowls (Appendix B.1.16). Fill (12) also contained three fragments of glass, one of which was conclusively 19th century (Appendix B.4). The fragments of glass and sherds of post-medieval pottery are at odds with the position of fill (12) in the sequence, which means that it is part of the midden but with some intrusive material within it,

or alternatively there is an additional feature present, which was not identified during hand-excavation.

3.4.7 The earliest layer or deposit within TP1, TP2 and TP3 was layer (40). It comprised a dark grey silty clay and measured up to 0.38m thick, with occasional small stone inclusions throughout. Finds from the layer all came from TP2 and TP3 and included 24 sherds of medieval pottery (591g), with the most coming from TP3 (22 sherds, 562g). The pottery covered a relatively wide date range between AD 1400 – 1650, although a date for the formation of the layer in the 15th century is most likely (Appendix B.1.17). A copper-alloy barrel lock (SF3) was also recovered from layer (40) in TP2 (Appendix B.3), as well as an iron nail. Animal bone totalled 399g, mostly from TP2; as well as sheep/goat and horse there were two fish bones, five amphibian bones and a single mouse bone recovered. Both oyster (134g) and mussel shell (10g) were recovered from TP2 (Appendix C.3). Environmental samples 6 and 13 were unproductive, producing only occasional specimens of cereals and legumes (Appendix C.1).

3.4.8 Fill (7) within pit **63** in TP4 (Fig. 3, section 2 and 6) may have equated to layer (40). It consisted of a similar dark grey silty clay measuring 0.16m thick. It contained no pottery but did contain a small knife (SF1), a polishing stone (SF2; Appendix B.3) and occasional cereals and legumes from environmental sample 2.

3.4.9 The earliest deposit was sealed by a layer of mid grey silty clay (11=39=42), which was present in TP1, TP2 and TP4. It measured up to 0.12m thick with rare small stone inclusions. Layer 11 also contained inclusions of white and grey ashy flecks. The only find from the layer was a small fragment of pottery (2g), which was not closely datable. Environmental sample 7 produced only sparse remains in the form of a single grain and legume preserved.

3.4.10 The latest layer within the midden in TP1 and TP2 (28=30) comprised a mid-grey silty clay, measuring up to 0.26m thick and containing occasional small stone inclusions. Medieval pottery was recovered from both Test Pits (a total of 32 sherds, 693g), dating between AD 1300 – 1400. The assemblage includes a number of non-local sherds from Essex, Lincolnshire, Norfolk and Buckinghamshire, alongside pottery with more local origins, consisting of Medieval Ely ware (Appendix B.1.18). A fragment of a whetstone (SF9; Appendix B.3) came from TP2, along with oyster (77g) and mussel shell (3g). Animal bone, predominantly cattle, was recovered from both TP1 and TP2 (485g). Environmental sample 4 from layer (28) produced only a single pea.

3.4.11 In TP4 layer (9) may have equated to 28 and 30 although this was not certain (Fig. 3, section 2). It comprised a dark grey silty clay measuring 0.1m thick, containing rare small stone inclusions. Pottery recovered from the layer (27 sherds, 821g) includes eight sherds of Late Medieval Ely ware (AD 1350-1500), which was absent from contexts 28 and 30, suggesting a slightly later date for context (9). Animal bone was also recovered (113g) along with two fragmentary mussel shells (2g).

3.4.12 It was sealed by layer (8), a dark greyish brown silty clay measuring 0.5m wide and 0.16m deep, with frequent mussel shell inclusions, representing a minimum of 97 mussels (318g) and a single winkle shell (2g) (Appendix C.3). It was also the most productive context on the site in terms of plant remains, producing the largest

assemblage of charred grain, predominantly comprised of oats along with barley and wheat, in addition to frequent peas and beans, crop weed seeds of rye grass and frequent seeds of wood-rush (Appendix C.1). Layer (8) also contained a small assemblage of medieval pottery (8 sherds, 69g), dating between AD 1300 – 1400.

3.4.13 In TP3 the basal layer (40) was sealed by a layer not visible in the other Test Pits (34). It comprised a mid-brown clayey silt measuring 0.40m thick, with frequent CBM flecks throughout.

3.4.14 Ditch **31** was orientated north to south and truncated the midden deposits in the south of Trench 1. It measured 0.7m wide and 0.18m deep with gently sloping sides and a flat base (Fig.3, section 1 and 3). Its single fill (32) comprised a dark brown silty clay, which yielded a small assemblage of post-medieval pottery (3 sherds, 119g) with an overall date of c. AD 1670 – 1800 (Appendix B.1.20).

3.5 Trench 2

3.5.1 Trench 2 measured 20m in length (Plate 17) and was located towards the north of the plot, aligned north-east to south-west. Natural geology at the south-west end of the trench was at 3.24m OD, sloping downhill to 2.31m OD at the north-east end. The only feature encountered was a shallow pit (**60**), which extended beyond the baulk in the south-west corner of the trench. It measured 1.01m wide and 0.14m deep with steep sides and a flat base. Its single fill was a dark grey silty clay, which was heavily compacted. It had a similar composition to the primary fill (54) of quarry pit **58** in Trench 1. The feature was thought to be a quarry pit, although only the shallow edge was exposed. No finds were recovered from pit **60**.

3.6 Trench 3

3.6.1 Trench 3 (Plates 14-16) measured 15m in length and was situated in the south-eastern corner of the site, aligned north-east to south-west. Natural geology at the north-east end of the trench was at 3.15m OD, while at the south-west end the deepest point it was encountered was at 3.23m OD within TP5. The trench contained the continuation of the large spread of midden material, and a modern brick-lined feature. It was difficult to identify potential quarry or refuse pits in Trench 3 but this is likely due to the position of the trench. The sequence of layers again seemed to be sitting directly on clean natural geology, as if the midden was within a cut feature. In addition, the presence of duckweed seeds in an untransformed state in most of the samples from Trench 3 suggests standing water in a hollow, or more likely a quarry pit.

3.6.2 A total of six Test Pits (TP 5-10; Plates 10-13) were hand excavated along the south-eastern baulk through the layers of midden material, each measuring 1m x 1m and spaced 1m apart from south-west to north-east (Fig. 2 and Fig. 3, section 4). The natural geology was encountered at a maximum of 1.2m below modern ground level in TP5 at the south-western end of the trench.

3.6.3 The earliest layer (14=45=48=51=52) was present in every Test Pit. It comprised a dark grey silty clay, measuring up to 0.2m thick. Finds from the layer all came from TP9 and TP10 and included 24 sherds of pottery (310g), with the most coming from TP10 (13 sherds, 185g). Based on the pottery the context dated to *c*. AD 1200 – 1400, apart from

a single sherd from a Staffordshire Slipware bowl (AD 1660-1730) that was recovered from context (52), although it seems likely that this sherd is intrusive (Appendix B.1.21). There was a small discrete dump of stones within layer 45, Test Pit 5 (Plate 10). None of the stones were worked although they may represent a dump of building rubble. A small amount of animal bone was also recovered (30g), comprising sheep/goat. Plant remains consist of only duckweed seeds in TP8 and TP10 and occasional charred grains, legumes and weed seeds in TP9.

3.6.4 The earliest deposit was sealed by a layer of mid grey silty clay, which was again present in every Test Pit (26=36=47=50). It measured up to 0.22m thick in the north-eastern end with inclusions of frequent medium and small stones and rare charcoal flecks in places. Finds were recovered from TP7, TP8 and TP9 and included medieval pottery dating to between AD 1200 – 1350 (14 sherds, 95g), mostly from TP8 and TP9 (Appendix B.1.22). Context (26) in TP9 yielded two fragments of brick (94g) along with a lead artefact (SF10). Animal bone was recovered from TP7 and TP8 (75g) and included a single sheep/goat bone as well as a fish bone and two amphibian bones. Environmental sample 10 from layer (47) produced occasional cereals and legumes.

3.6.5 In TP 5 and TP6 there was a discrete layer (18 and 46), which sealed (36) in TP5 and (47) in TP6. It comprised a mid-yellowish grey re-deposited silty clay, measuring 2.2m wide in plan and up to 0.22m thick with occasional chalk, charcoal and small stone inclusions. The only finds came from TP5 and included medieval pottery (6 sherds, 49g), which dates the context overall to between AD 1200 – 1450, although it contained the only sherds of Developed St Neots recovered from the midden. Dating from the mid-11th to the mid-13th century, these sherds represent some of the earliest pottery recovered (Appendix B.1.23). Animal bone was also recovered (325g) including a cattle mandible and three fish vertebrae. Environmental sample 5 from layer (18) produced occasional cereal grains, legumes and weed seeds.

3.6.6 In TP7 layer (49) sealed layer (47) and was only present in this location. It comprised a dark greyish brown silty clay, measuring 0.08m thick. The only finds were two sherds of medieval pottery (15g) dating between AD 1150 – 1300 (Appendix B.1.24). Environmental sample 9 produced two fish vertebrae, a single amphibian bone and occasional cereals and legumes (barley, wheat, peas, beans and crop weeds).

3.6.7 The final hand-excavated layer within the midden sequence (20=22=24) was present in TP6, TP7 and TP8. It consisted of a light grey clayey silt measuring up to 0.18m thick, with a moderate amount of ash within it, along with occasional charcoal flecks and chalk inclusions. This was also the most finds-rich layer, particularly in terms of ceramics. Medieval pottery totalled 170 sherds weighing 2524g, with an overall late medieval date range spanning AD 1300 – 1450. The pottery included sherds from Late Medieval Ely ware jars and jugs and was recovered from all three Test Pits with most coming from context (22), TP7 (96 sherds, 1350g), followed by context (24), TP8 (53 sherds, 1002g) and context (20), TP6 (21 sherds, 172g). Several fragments of CBM were recovered (240g), comprising single medieval or late medieval roof tile fragments from context (22) in TP7 and context (24) in TP8, where it was found alongside post-medieval roof tile. Animal bone totalled 645g, which was mainly in TP6 and consisted of cattle, horse, sheep/goat, and a single fish bone. A small amount of oyster (17g) and mussel shells (23g) were collected, while plant remains from layer (20) in TP6 consisted

of a charred grape seed, several legumes and well-preserved charred seeds of henbane and spike rush

3.6.8 TP's 5, 6, 7 and 8 were overlaid by a thick mid-grey silty clay layer (2), measuring up to 0.36m thick, with frequent small stone inclusions. The deposit was initially thought to be the subsoil but is likely to be the upper part of the midden. It contained a mixed assemblage of pottery dating between AD 1550 – 1880 (49 sherds, 843g). The assemblage produced a number of Medieval Ely ware vessels, including sherds from two curfews (a ceramic fire guard). A later date is indicated by a single sherd of Bourn D ware (1450-1630) and five sherds from two Post-medieval Redware vessels (1550-1800), as well as a small intrusive sherd of Staffordshire White Salt-Glazed ware (1g) dating to the 18th century (Appendix B.1.26). A small amount of CBM in the form of fragments of green glazed medieval roof tile (Appendix B.2) was also recovered (152g), along with animal bone (84g), mussel shell fragments (8g), oyster shell fragments (24g) and a single iron nail. Environmental sample 12 produced occasional cereal grains, legumes and weed seeds and also has a component of charred sedge seeds.

3.6.9 A rectangular brick-lined feature (**4**) was located in the north-east of the trench, aligned north-north-east to south-south-west. Constructed from modern brick, it measured 1.4m long by 0.67 wide, and contained a single homogenous disuse fill (5), that comprised a mid-reddish brown silty clay, measuring 0.16m deep. Pottery dating to the late 18th – mid 19th century was recovered from the fill (11 sherds, 314g), along with CBM of a similar date (208g). Although of an unknown function, the feature is likely to be associated with the cottages that existed on the site, located approximately 10 – 15m to the south-west of Trench 3 (see discussion in 4.3).

3.7 Finds summary

3.7.1 The majority of finds were recovered from the midden deposits in Trenches 1 and 3 and are tabulated below (Table 1). This included an assemblage of medieval and post-medieval pottery (434 sherds, 7.333kg), which can be considered large for the sample size investigated (Appendix B.1). The pottery assemblage is moderately abraded, with some larger, relatively unabraded, sherds. It contains both kitchen and table wares, and fragments from at least two curfews, indicating the management of domestic hearths, and relates to at least one dwelling of moderate or higher status. Although some later fabrics are present, the midden represents, in part, a transitional assemblage from the high medieval to the later medieval period. Medieval fabrics (*c.* AD 1150-1500) comprise approximately 85% of the total assemblage by weight, indicating that the midden deposits are mainly medieval in origin. The presence of transitional medieval-late medieval Ely ware sherds, suggests that there is a distinct phase of 14th century deposition within the midden.

3.7.2 Ceramic Building Material (23 sherds weighing 726g), was recovered from a modern brick structure (**4**), subsoil and test pits across the midden in Trench 3 (Appendix B.2). The bulk of the assemblage by weight is roof tile, from medieval to modern, and some late medieval to early post-medieval brick is also present. A total of 10 items of metalwork were recovered from the midden layers in Trenches 1 and 3 (Appendix B.3). The metalwork assemblage is formed by four hand forged iron nails (SF5-8), a knife (SF 1), a tool (SF4) and a copper-alloy barrel lock (SF3). Two worked stone items were

found within the midden layers in Trench 1, a basalt polishing stone (SF2) and a whetstone (SF9). Finally, a small assemblage of glass was recovered from Test Pit 4 in Trench 1 (Appendix B.4). A total of three fragments came from context 12, a redeposited layer within the midden, only one of which could be securely identified. This shard is a fragment from the rim-lip and neck of a small bottle and is most likely to be 19th century.

3.8 Environmental summary

3.8.1 Fourteen bulk samples were taken, mainly from layers of medieval midden material. Preservation of plant remains such as cereal grains, legumes and seeds of both dry and wetland plants is by carbonisation and the level of preservation is good. The assemblage mainly represents burnt food remains with a moderate assemblage of cereal grains and a significant amount of legumes with the relatively rare finding of a charred grape seed. Charcoal volumes are low. Legumes comprising peas (*Pisum sativum*) and beans (*Fabaceae*) are frequent and are particularly well preserved with the outer testa (seed coat) frequently retained. These legumes were an important component of the medieval diet and would have been dried for use all-year round. All four of the main cereal types are represented with oats (*Avena* sp.), barley (*Hordeum vulgare*), wheat (*Triticum aestivum/turgidum*) and rye (*Secale cereale*) present in varying quantities but not exceeding 50 grains per sample. A single charred grape/raisin (*Vitis vinifera*) seed was recovered. Many of the flots contain rootlets which may have caused movement of material between contexts. Charred seeds of wetland plants are also present, while seeds of duckweed (*Lemna* spp.) are present in an untransformed state in most of the samples from Trench 3, probably preserved by the anoxic environment of the clay matrix.

3.8.2 The finds recovered from the samples indicate that there is a significant culinary refuse component of the midden material which includes the remains of shell fish, fish bones and egg shell.

3.8.3 The animal bone represents faunal remains weighing 6.3kg in total. There were 62 fragments recorded, 30 from hand collection and 32 from environmental samples. The species represented include cattle (*Bos taurus*), sheep/goat (*Ovis/Capra*), horse (*Equus cabullus*), pig (*Sus scrofa*), vole (*Microtus agrestis*), mouse (*Mus musculus*), fish, amphibian and large mammal. Of the large mammals cattle and sheep/goat are the most numerous species, fish and amphibian were the most common species from the environmental samples. The presence of cattle aged 40-50 months is an indication that cattle were likely favoured for meat, as this is the age where cattle reach optimum weight for slaughter. The presence of fish and amphibian remains from the environmental samples provides additional insight into dietary preferences and environment conditions. Fish remains mainly consist of vertebrae. The volume of bone recovered from the site, and the signs of carcass processing and food waste evidence from middens is substantial enough to indicate nearby settlement.

3.8.4 A total of 639g of shells was collected by hand during the evaluation. The shells recovered are all edible mollusca, examples of oyster *Ostrea edulis*, from estuarine,

shallow coastal waters, mussel *Mytilus edulis* from intertidal zones, and a single common Periwinkle or winkle *Littorina littorea* from context 8 (Trench 1, TP4). The assemblage is a mix of complete valves, partial shells of various sizes, including young individuals, and fragments of shell. The shells recovered probably represent the remains of a small number of meals and indicate the use of food sources from beyond the immediate area and surrounding hinterland, most likely arriving by river transportation.

Test Pit	Context	Pottery (count)	Pottery (g)	CBM (g)	Metalwork	Worked stone	Faunal (count)	Faunal (g)	Mussel Shells (g)	Oyster shell (g)	Enviro
Trench 1											
1	28	16	274				3	52			Single pea
1, 2, 3	40	24	591		SF3: CuA barrel lock		19	399	10	134	Occasional cereals and legumes
2	30	21	433			SF9: Whetstone	5	433	3	77	
2	42	1	2								single wheat and pea
4	7				SF1: Fe Knife	SF2: Polishing stone	1	1			Occasional cereals and legumes
4	8	8	69				1	1	318		Oats, barley, wheat, peas, beans, crop weeds and wetland plants
4	9	27	821				2	113	2		
4	12	41	756							21	
	32	3	119								
Trench 3											
5	18	6	49				4	325			Occasional wheat, rye, peas
6	20	21	172				13	588	23	3	peas, beans, grape/raisin, wheat, rye, crop weeds and wetland plants
6, 7	47	5	8				4	1			Occasional cereals and legumes
7	22	96	1350	182	SF4: Fe tool SF5-8: Fe nails		4	193			
7	49	2	15								barley, wheat, peas, beans, crop weeds
8	24	53	1002	57			2	57		14	
8	50	5	46								
8	51						5	3			wetland seeds only
9	26	4	41	94							
9	52	11	125	33			3	27			Occasional wheat, peas, beans, crop weeds and wetland plants
10	14	13	185								duckweed only
	2	49	843	152			3	84	8	24	Occasional wheat, peas, beans, crop weeds and wetland plants
	5	11	314	208			1	4			

Table 1: Finds and enviro summary, ordered by Trench, then by Test Pit, then by context number

4 DISCUSSION

4.1 Reliability of field investigation

4.1.1 The midden deposits, distinguished by their mid – dark grey colours, were easily identifiable against the bluish grey natural clay geology. The deposits present within the larger machined quarry pits (Trench 3) were likewise easy to distinguish from the natural geology.

4.1.2 Weather conditions were generally favourable, with dry and overcast conditions throughout the investigation. The results are considered to have a good level of reliability.

4.2 Evaluation objectives and results

4.2.1 The evaluation has identified the presence of archaeological features within the development area with features present in all trenches, although Trench 2 was almost entirely blank of archaeological features.

4.2.2 Dating evidence has been collected from the majority of features, with additional hand-excavation carried out through the medieval midden deposits in Trenches 1 and 3.

4.3 Interpretation

The medieval midden

4.3.1 The evaluation revealed an area of medieval midden, present in the south-east of Trench 1 and the entirety of Trench 3. The build-up of midden material appeared to be sitting within a sequence of former quarry pits or pits constructed for the deliberate disposal of rubbish. The clay extracted from the pits may have been used for improving the quality of the soil or in a village location, for use as a building material. A series of quarry pits were evident in the north-west of Trench 1 (pits **58**, **61**, **62**, **63**). By examining the level of the natural in TP1 – 3 (Fig. 3, section 1) it is clear that this pitting continued but assigning individual cuts within the Test Pits was not possible. It was also difficult to determine whether they were all quarry pits or a combination of quarries and refuse pits. In Trench 3 the situation was less clear, possibly because of the position of the trench. However, the trench profile (Fig. 3, section 4) does suggest the natural geology dropping in both directions from the centre of the trench (in TP7) and this may be evidence of pit cuts. In addition, the contrast between the midden deposits sealing 'clean' natural geology in both trenches does suggest the midden was sitting within cut features. It is also interesting to note that the environmental samples from Trench 3 all contained seeds of duckweed, an aquatic plant that grows on the surface of water. This suggests the deposits may at some point have been sitting within a body of water, in other words a pond, which fits with a partially infilled quarry.

4.3.2 The dating evidence within the sequence of midden layers suggests they may have formed over a considerable period of time, between the 12th and 15th centuries. Medieval fabrics (*c.* AD 1150-1500) comprise approximately 85% of the total

assemblage by weight, while the presence of transitional medieval-late medieval Ely ware sherds, suggests that there is a distinct phase of 14th century deposition within the midden. No evidence of the midden was found in Trench 2, suggesting that the midden covered an area of at least 20m east to west and 10m north to south (Fig. 2). It is possible that the midden continues all the way to the site boundary in the south-east corner of the site, which is certainly possible when considering that the midden was at its thickest in the centre and south-west of Trench 3 (for example, 0.7m thick in TP6). The midden became increasingly thicker from the north-east (TP10) to the south-west (thickest in TP6 and TP7).

4.3.3 The midden was formed by at least three distinct layers in both trenches, with varying amounts of finds in each. It is unlikely that all the same layers are represented in each trench, in fact the ceramic evidence suggests the two trenches cut through different parts of the midden with an earlier date for the sequence in Trench 3 than that in Trench 1. Equally there is some evidence for mixing of contexts, with some of the earliest sherds present in the stratigraphically latest layers (e.g. two sherds of Thetford-type ware, AD 840 – 1150, present in context 28, TP2 in Trench 1) and some of the latest sherds found in the earliest layers (e.g. a single sherd of Staffordshire-type slipware bowl, AD 1660 – 1730, recovered from context 52 in TP9, Trench 3). The earliest layer in Trench 3 (14=45=48=51=52) contained pottery dating between AD 1200 – 1350 (28 sherds, 153g), with pottery from the layer sealing it (26=36=47=50) dating to between AD 1200 – 1350 (14 sherds, 95g). The next layer in the sequence (20=22=24) contained a large assemblage of pottery (171 sherds weighing 2527g), with a slightly later date range, spanning AD 1300 – 1450. Layer (2), which is most likely part of the midden sequence, contained a mixed assemblage of mostly medieval pottery (particularly Ely wares dating to the 14th century), along with several later sherds, which could be intrusive.

4.3.4 In contrast, the earliest layer in Trench 1 (40) contained pottery of a similar date to the latest deposit in Trench 3; it covered a relatively wide date range between AD 1400 – 1650, with a date for the formation of the layer in the 15th century most likely (29 sherds, 600g). Pottery from the latest datable layers dated between AD 1300 – 1400 in TP1 and TP2 (layer 28=30) (37 sherds, 707g) and AD 1350 – 1500 in TP4 (layer 9) (27 sherds, 821g).

4.3.5 Beyond the ceramic evidence, the other artefacts and ecofacts attest to both the domestic nature of the assemblage and the status of the building it may have come from. Medieval glazed roof tile was recovered from the layer 2 in Trench 3, while single medieval or late medieval roof tile fragments were recovered from other layers in Trench 3 – context (22) in TP7 and context (24) in TP8, where it was found alongside post-medieval roof tile. The metalwork included a small iron knife (SF1) from layer (7) in TP4 and a barrel lock mechanism (SF3) from the basal layer (40) in Trench 1. Despite being only a single item, the lock mechanism suggests it came from a property where items were valuable enough to lock away. Within the pottery assemblage sherds from two curfews were identified (a ceramic fire guard used to cover the fire at night and to prevent fires), both from layer 2 in Trench 3. The presence of curfews indicates the management of domestic hearths.

4.3.6 The environmental evidence also supports the idea of domestic debris, most of it representing burnt food remains. The well preserved remains included a moderate assemblage of cereal grains, frequent legumes in Trench 3 and seeds of both dry and wetland plants. The legumes consisted of peas and beans, both of which were an important component of the medieval diet. Animal bone totaled 6.3kg; while not a huge amount, the volume recovered, coupled with signs of carcass processing and food waste evidence from the midden deposits, is substantial enough to indicate nearby settlement (Appendix C.2). The shell assemblage is an indicator of diet and trade with the wider area (most likely via the River Great Ouse), with edible oyster shells from estuarine, shallow coastal waters and mussels from intertidal zones, but the quantities recovered are relatively small.

4.3.7 While it is common on larger medieval sites to find midden material disposed of in pits of varying sizes, such a large and well preserved concentration of medieval domestic debris, at the edge of a village, is unusual. Often pits excavated for other purposes were then utilized for the disposal of rubbish once they had gone out of use. For example, excavations at West Fen Road, Ely, 4km to the east (Mortimer *et al*, 2005), saw the widespread use of pits and ditches for the disposal of domestic rubbish. At Gravel End, preservation of the midden suggests it has not been truncated by later ploughing, probably because of its location in a corner of a plot of land, not easily accessible for ploughing. Also, the Fenland Survey (Hall 1996, p.52) suggests that the fen edge is located close to the southern boundary of the site. In reality the fen edge must have been further to the south, but probably not far. It is possible therefore that the site was a small parcel of dry land close to the edge of the fen, and perhaps would not have been suitable for intensive ploughing, due to its small size.

4.3.8 The presence of the midden points towards the presence of a dwelling of moderate or high status, which has to have been located very close to the site. The location of the manor house is not known although the Victoria County History states that Coveney Mansion, a timber framed thatched building dating to the 16th century and later, could be the successor to the manor house (Atkinson *et. al*. 2002). Coveney Mansion is located north of the church (MCB22038; DCB794, Fig. 1), approximately 200m south of the current site. Although this may seem a long way for the source of the midden material, the edge of village location, away from dwellings and on a downward slope towards the fen, is ideal for the disposal of rubbish.

Other features

4.3.9 Ditch **31** in Trench 1 was post-medieval in date, and presumably relates to former plot boundaries on the site. Several smaller plots are marked on the First Edition Ordnance Survey map of 1887 (https://www.old-maps.co.uk/#/Map/548500/282500/12/100087 accessed 07/11/17). Also marked are approximately 4 cottages, fronting on to Gravel End, to the south-west of Trench 1. It may be that brick-lined pit **4** in Trench 3 is associated with these cottages.

4.3.10 Pit **60** in Trench 2 most likely part of another quarry pit, extending towards Trench 1.

4.4 Significance

4.4.1 While the act of middening in the medieval period is not un-common, the discovery of relatively *in-situ* medieval midden deposits within a semi-rural location on the edge of a village, with no other associated activity on the site, is unusual. The source of the midden is either a nearby dwelling or because of its siting in a convenient location within an area of former quarrying on the edge of Coveney.

Appendix A CONTEXT INVENTORY

Context	Trench	Category	Feature Type	Function	Breadth (m)	Depth (m)	Colour	Fine comp.	Coarse component	Compaction	Shape in Plan	Side	Break of Slope	Base
1				Topsoil		0.5	Dark blackish brown	silty clay	frequent small stones	firm				
2	3	layer		Sub soil disuse layer	2	0.36	Mid grey	Silty clay	frequent small stones and cbm	firm				
3		VOID												
4	3	cut	Modern Brick Structure	Structural	0.67	0.12					Rectangu -lar	steep	steep	flat
5	3	Fill of **4**	Modern Brick Structure	Disuse	0.67	0.12	Mid Reddish Brown	Silty Clay		Firm				
6		VOID												
7	1	layer	Middening ?	Disuse/Silting ?	1.7	0.16	Dark Grey	Silty Clay	Common small stones throughout	Firm				
8	1	layer	Midden	Mussel shell waste deposit	0.5	0.15	Dark greyish brown	Silty Clay	Frequent mussel shells	Firm				
9	1	layer	Midden	Disuse	1.12	0.1	Dark Grey	Silty Clay	Rare small stones	Firm				
10	1	Fill of **58**	hollow	Disuse	1.7	0.1	Light Mid Grey	Silty Clay	Rare small stones	Firm				
11	1	layer	Midden	Organic Waste	1	0.1	Dark Brownish Grey	Silty Clay	Small flecks fo white/ off white material	Firm				
12	1	layer	Midden	Re-deposit	0.42	0.08	Mid Yellowish Grey	Silty Clay	Occasional small stones	Firm				

Context	Trench	Category	Feature Type	Function	Breadth (m)	Depth (m)	Colour	Fine comp.	Coarse component	Compaction	Shape in Plan	Side	Break of Slope	Base
13		VOID												
14	3	layer	Midden	Disuse	3.66	0.36	Dark Grey	Silty Clay	Occasional small stones	Firm				
15		VOID												
16		VOID												
17		VOID												
18	3	layer	Midden	Disuse	2.2	0.22	Mid Yellowish Grey	Silty Clay	Occasional small stones + chalk + charcoal	Firm				
19		VOID												
20	3	layer	Ash Midden	Disuse	0.7	0.08	Light Grey Ash	Ash	Occasional chalk and charcoal	Soft				
21		VOID												
22	3	layer	Midden	Disuse		0.18	Dark grey	Silty Clay	Occassional chalk + small stones + charcoal flecks	Firm				
23		VOID												
24	3	layer	Midden	Disuse	1	0.14	Dark Grey	Silty Clay	Occasional chalk + small stones + charcoal	Firm				
25		VOID												
26	3	layer	Midden	Disuse	1	0.22	Dark Grey	Silty Clay	Rare flecks of chalk and some charcoal	Firm				
27		VOID												

Context	Trench	Category	Feature Type	Function	Breadth (m)	Depth (m)	Colour	Fine comp.	Coarse component	Compaction	Shape in Plan	Side	Break of Slope	Base
28	1	layer	Midden	Disuse		0.26	Mid Grey	Silty Clay	Occasional small-medium stones	Firm				
29		VOID												
30		VOID												
31	1	cut	ditch	Unknown	0.7	0.16					linear	Gentle	Gradual	Concave
32	1	Fill of **31**	ditch	Unknown	0.7	0.16	Mid Brown	Silty Clay	Occasional CBM	Firm				
33		VOID												
34		VOID												
35		VOID												
36	3	layer	Midden	Disuse	1	0.1	Mid Grey	Silty Clay	Very Frequent small-medium stones and chalk	Firm				
37	1	layer	Midden	Disuse	1.6	0.16	Dark Grey	Silty Clay	Frequent small stones	Firm				
38	1	layer	Midden	Slumping	0.5	0.24	Dark Brown	Silty Clay	CBM common throughout	Firm				
39	1	layer	Midden	Re-deposit	1	0.08	Mottled Dark Yellowish Grey	Silty Clay	Occasional small stones	Firm				
40	1	layer	Midden	Disuse		0.16	Dark Grey	Silty Clay	Occasional small stones	Firm				
41	1	layer	Sub soil mix	Disuse	4.16	0.21	Mid Brown	Silty Clay	Frequent CBM flecks and frequent small stones	Firm				

Context	Trench	Category	Feature Type	Function	Breadth (m)	Depth (m)	Colour	Fine comp.	Coarse component	Compaction	Shape in Plan	Side	Break of Slope	Base
42	1	layer	Midden	Disuse		0.12	Mid Grey	Silty Clay	Rare small stones - common small unknown white inclusions	Firm				
45	3	layer	Midden	Disuse	1	0.2	Dark Grey	Silty Clay	Rare small stones and charcoal and large stones	Firm				
46	3	layer	Midden Re-deposited Natural	Disuse	0.38	0.22	Mid Yellowish Grey	Silty Clay	Occasional small stones, chalk and charcoal	Firm				
47	3	layer	Midden	Disuse	1	0.14	Mid Grey	Silty Clay	Yellow sand patches and flecks of charcoal and occasional small stones	Firm				
48	3	layer	Midden	Disuse	1	0.16	Dark Grey	Silty Clay	Red Silty patches and occasional small stones	Firm				
49	3	layer	Midden	Disuse	1	0.08	Dark Grey Brown	Silty Clay	Occasional small stones and charcoal	Firm				
50	3	layer	Midden	Disuse	1	0.3	Mid Grey	Silty Clay	Yellow sand patches and flecks of	Firm				

Context	Trench	Category	Feature Type	Function	Breadth (m)	Depth (m)	Colour	Fine comp.	Coarse component	Compaction	Shape in Plan	Side	Break of Slope	Base
									charcoal and occasional small stones					
51	3	layer	Midden	Disuse	1	0.15	Dark Grey	Silty Clay	Rare small stones and flecks of charcoal	Firm				
52	3	layer	Midden	Disuse	1	0.26	Dark Grey	Silty Clay	Occasional small stones	Firm				
53	1	Fill of **58**	quarry	Re-deposited	7.2	0.44	Mottled Light Grey	Silty Clay	Rooting Common	Firm				
54	1	Fill of **58**	quarry	Disuse	7.4	0.22	Dark Grey	Silty Clay	small-medium flint	Firm				
55	1	Fill of **61**	hollow	Re-deposited	2.8	0.22	Light Brownish Grey	Silty Clay	frequent small stones	firm				
56	1	Fill of **61**	hollow	Disuse	3.46	0.22	Dark Grey	Silty Clay	frequent small stones	Firm				
57	1	Fill of **62**	quarry	Re-deposited grey disuse mix	0.54	0.24	Mottled Dark Grey	Silty Clay	Rooting prominent and small stones frequent	Firm				
58	1	cut	pit	quarry		0.7					unknown	gently sloping	Impercept-ible	concave
59	2	Fill of **60**	pit		1.01	0.14	Dark Grey	Silty Clay	small-medium flint	Firm				
60	2	cut	pit	quarry	1.01	0.14					unknown	steep	sharp	flat
61	1	cut	pit	quarry	2.8	0.4					unknown	gently sloping	Impercept-ible	concave

Context	Trench	Category	Feature Type	Function	Breadth (m)	Depth (m)	Colour	Fine comp.	Coarse component	Compaction	Shape in Plan	Side	Break of Slope	Base
62	1	cut	pit	quarry	0.55	0.2					unknown	gently sloping	Imperceptible	concave
63	1	cut	pit	quarry	4	0.4					unknown	gently sloping	Imperceptible	concave

APPENDIX B FINDS REPORTS

B.1 Pottery

By Carole Fletcher

Introduction

B.1.1 Archaeological works produced a moderate to large pottery assemblage of 403 sherds, weighing 7.184kg, recovered from features and test pits across three trenches. A further 31 sherds (0.149kg) of pottery were recovered from samples; of these a single sherd from sample 12 and two sherds from sample 9, which produced the only pottery recovered from context 49, have been incorporated into the report (see methodology). The condition of the overall assemblage is moderately abraded, with some larger, relatively unabraded, sherds. The assemblage as recovered does not represent a primary assemblage, as some of the material has been reworked within the midden, however, the levels of abrasion on the larger sherds suggest that, for some areas of the midden, reworking was less frequent, or non-existent.

B.1.2 The assemblage contains both kitchen and table wares, and fragments from at least two curfews, indicating the management of domestic hearths, and relates to at least one dwelling of moderate or higher status.

Methodology

B.1.3 The Prehistoric Ceramics Research Group (PCRG), Study Group for Roman Pottery (SGRP), and The Medieval Pottery Research Group (MPRG), 2016 *A Standard for Pottery Studies in Archaeology* and the MPRG *A guide to the classification of medieval ceramic forms* (MPRG 1998) act as standards.

B.1.4 Recording was carried out using OA East's in-house system, based on that previously used at the Museum of London. Fabric classification has been carried out for all sherds, and previously described medieval and post-medieval types, named using Cambridgeshire fabric types where possible (Spoerry 2016). The Museum of London Archaeology medieval and post-medieval pottery codes (http://www.mola.org.uk/medieval-and-post-medieval-pottery-codes) are used for 18th century and later pottery.

B.1.5 Where samples were taken from which pottery was recovered, the pottery has not been examined when the contexts, or their equivalent have already produced pottery. All other sherds have been counted, classified and weighed on a context-by-context basis. The minimum number of vessels (MNV) is a guide only, as rapidity of recording did not allow for establishment of any cross-fits between contexts (none were immediately obvious). The assemblage is summarised in the catalogue at the end of this report and recorded in an Access Database. The pottery and archive are curated by Oxford Archaeology East until formal deposition or dispersal.

Assemblage

B.1.6 The test pits within the trenches were 1 x 1m, spaced 1m apart. Where possible, the contexts recorded in each test pit have been equated with those in adjacent test pits. Therefore, in some instances, the discussion of the fabrics present will reference several contexts. In total, 18 contexts produced 7.200kg of pottery. The fabrics present in the assemblage and the fabric codes used in the catalogue are given in Table 2.

B.1.7 Due to the large amount of pottery recovered, from what is a sample of the midden, the assemblage is briefly discussed by period, provenance and form, to help build a picture of the make-up of the midden. This indicates that, although some later fabrics are present, the midden represents, in part, a transitional assemblage from the high medieval to the later medieval period.

Fabrics Present in the Assemblage

Full Name	Fabric Code	MNV	No. of Sherds	Weight (kg)	% of assemblage by weight
Bourne D ware	BOND	4	7	0.233	3.2
Bourne-type Medieval wares	BOUB	6	13	0.141	2.0
Brill/Boarstall ware	BRIL	3	5	0.080	1.1
Developed St Neots-type ware	DNEOT	1	2	0.007	0.1
Developed Stamford ware	DEST	1	1	0.001	<0.1
East Anglian Redwares	EAR	5	5	0.040	0.6
East Anglian Redwares/Late Medieval East Anglian Redwares	EAR/LEAR	2	6	0.092	1.3
Grimston Glazed ware	GRIM	5	6	0.054	0.8
Hedingham Fineware	HEDI	2	2	0.013	0.2
Huntingdon Late Medieval Calcareous ware	HUNCAL	1	1	0.023	0.3
Late Medieval Ely ware	LMEL	9	50	0.644	9.0
London Stoneware	LONS	1	1	0.092	1.3
Medieval Ely ware	MEL	52	121	1.937	26.9
Medieval Ely ware+	MEL+	17	32	0.581	8.1
Medieval Essex-type micaceous grey sandy wares	MEMS	1	1	0.018	0.3
Medieval Sandy Greyware	MSGW	4	8	0.101	1.1
Medieval Sandy ware	MSW	7	23	0.314	4.4
Pearlware	PEARL	1	5	0.063	0.9
Post-medieval Black-Glazed Redwares	PMBL	1	1	0.054	0.8
Post-medieval Redwares	PMR	8	12	0.483	6.7
Raeren Stoneware	RAER	1	1	0.006	0.1
Shelly ware	SHW	1	2	0.022	0.3
South-east Fenland Medieval Calcareous Buff ware	SEFEN	17	61	1.621	22.5
Staffordshire-type Slipware	STSL	1	1	0.013	0.2
Staffordshire-type White Salt-Glazed Stoneware	SWSG	1	1	0.001	<0.1
Thetford-type wares (Huntingdon-type)	HUNTHET	1	2	0.165	2.3
Unglazed Reduced Sandy wares (of Blackborough End-type)	UGBB	5	19	0.152	2.1
Unprovenanced glazed wares	UPG	8	11	0.185	2.6
Unprovenanced wares	UPROV	3	6	0.064	0.9
		169	**406**	**7.200**	**100.0**

Table 2: Fabric present and fabric codes

Pottery by Period

B.1.8 Two sherds from an abraded, Thetford-type ware (?Huntingdon Thetford-type ware) handled jar, from context 28, Test Pit 2, is the earliest pottery (840-1150) recovered from the evaluation. Two sherds of Developed St Neots (1050-1250) were also recovered, from context 8. The presence of Developed St Neots and Thetford-type ware suggest early medieval activity in the vicinity of the area evaluated.

B.1.9 Medieval fabrics (*c.*1150-1500) comprise approximately 85% of the total assemblage by weight, indicating that the midden deposits are mainly medieval in origin. The presence of transitional medieval-late medieval Ely ware sherds, suggests that there is a distinct phase of 14th century deposition within the midden. Definitively late medieval fabrics comprise approximately 9% of the assemblage.

B.1.10 Transitional late medieval/post-medieval fabrics, form approximately 3% of the total assemblage by weight, represented mainly by Bourn D ware (1450-1630). Six Bourn D sherds were recovered from context 40, Test Pit 3.

B.1.11 Post-medieval pottery forms 7% of the assemblage by weight, and was recovered from ditch 31, layer 12 in Test Pit 4, and subsoil 2.

B.1.12 17th century and later pottery was recovered from ditch 31, in Trench 1 and contexts 2 and 5 in Trench 3. However, a single sherd from a Staffordshire-type slipware bowl was recovered from context 52 in Test Pit 9, Trench 3, from what otherwise appear to be a medieval context.

Provenance

B.1.13 There is a range of fabrics of local and non-local origin present in the assemblage, from a relatively moderate range of sources, mostly from the surrounding counties, including Buckinghamshire, Lincolnshire and Norfolk, some represented only by small numbers of sherds. Imported wares are represented by a single sherd from a Raeren stoneware jug, and the bulk of the assemblage originates in the Cambridgeshire region, mostly Medieval Ely wares. Other fabrics present from the Cambridgeshire region include a sherd tentatively identified as Huntingdon Thetford ware, a single sherd from a Huntingdon Late Medieval Calcareous ware vessel, and South Fenland Medieval Calcareous Buff ware.

Form

B.1.14 The vessels present in the assemblage are primarily domestic in nature. Where a vessel form can be ascribed, jugs are the most common form by weight and MNV, followed by bowls and then jars. Sherds from two curfews were identified, both from subsoil context 2 in Trench 3. The presence of curfews indicates the management of domestic hearths, and further supports the identification of this assemblage as domestic.

Trench assemblage: Trench 1

B.1.15 Pottery was recovered from ditch **31**, and each of the four test pits (1-4). The bulk of the pottery was recovered from Test Pit 4, from contexts 9 and 12 (68 sherds weighing 1.586kg). The excavator suggests that, although context 9 may equate to contexts 28 and 30, context 12 may be part of another feature, rather than part of the midden.

B.1.16 Context 12 produced 41 sherds, weighing 0.756kg. The pottery is mixed, being mainly medieval, with jar, bowl and jug sherds present, and including a sherd from a medieval Ely ware jug that copies the decoration style of a Grimston jug. A number of late medieval Ely ware sherds were also present. Two post-medieval sherds were also recovered, rim sherds from a Post-medieval Redware and Post-medieval Black-Glazed ware bowls. These sherds may be intrusive, as much of the post-medieval pottery recovered in both Trenches 1 and 3, is more abraded than the medieval pottery it was recovered with.

B.1.17 Context 40 is stratigraphically the earliest context within the midden. Pottery was recovered from Test Pits 2 and 3, with the bulk of the pottery being recovered from Test Pit 3, 22 sherds weighing 0.562kg, including medieval and Bourn D ware (c1450-1630); only two relatively small sherds of Medieval Ely ware were recovered from context 40 in Text Pit 4. This layer was sealed by contexts 11=39=42, none of which produced pottery, except for a small fragment recovered from sample <7>, which was too small to be sure of identification.

B.1.18 Contexts 28=30 produced pottery from Test Pits 1 and 2 (32 sherds, weighing 0.693kg), with context 30 in Test Pit 2 producing the larger assemblage (21 sherds, 0.433kg). The pottery from context 30 included a number of non-local sherds, including from Essex, one of the two sherds of Hedingham Fineware recovered from the evaluation. Also present are Bourne-type Medieval wares from Lincolnshire, Unglazed Reduced Sandy wares (of Blackborough End-type) from Norfolk, and Brill/Boarstall ware from Buckinghamshire. The bulk of the pottery has more local origins, consisting of Medieval Ely ware, including 14th century sherds and South Fenland Medieval Calcareous Buff ware. Overall the layer could be dated to *c*.1300-1400.

B.1.19 It is uncertain if layer 9 in Test Pit 4 is equivalent to contexts 28 and 30, and the pottery it produced (27 sherds, 0.821kg), includes eight sherds of Late Medieval Ely ware (1350-1500), which was absent from contexts 28 and 30, suggesting a late medieval date for context 9. Sealing context 9 was context 8, which produced a relatively large number of mussel *Mytilus edulis* shells, and only eight sherds of pottery; the context dates to *c*.1300-1400.

B.1.20 Ditch **31** is described as truncating the midden deposits in the south of Trench 1 and is thus deemed to post-date the midden. The ditch, excavated in Test Pit 3, produced three sherds of pottery (0.119kg), the near-complete base from a London Stoneware drinking jug, a fragment from the base of a Raeren Stoneware jug (1480-1610) and a sherd from a Post-medieval Redware jar. Overall the date for the pottery and this feature is *c*.1670-1800. The presence of late 17th-18th century pottery in this feature, and its truncation of the midden, may explain the presence of similarly dated pottery within the midden, and that this represents the last phase of activity.

Trench assemblage: Trench 3

B.1.21 This trench included the modern feature **4** and further midden material, through which six test pits (5-10) were excavated. Of the earliest layers, only two contexts, 14=52 at the base of Test Pits 9 and 10, produced pottery, including South Fenland Medieval Calcareous Buff ware and Medieval Ely ware jug and jar sherds. The context may be 13th – 14th century, however, a single sherd from a Staffordshire Slipware bowl (1660-1730) was recovered from context 52, although it seems likely that this sherd is intrusive, from later disturbance of the midden.

B.1.22 Layer 14=52, is sealed in Test Pit 9 by context 26, and in Test Pit 8 by the equivalent context 50. Both contexts produced medieval assemblages, including fragments from glazed Grimston ware and Medieval Ely ware jugs, South Fenland Medieval Calcareous Buff ware and a Medieval Essex-type micaceous grey sandy ware jar, pottery that dates from the 13th to the mid-14th century.

B.1.23 In Test Pit 5, context 18, described as a discrete layer, produced both medieval pottery and the only sherds of Developed St Neots recovered from the midden. Dating from the mid-11th to the mid-13th century, these sherds represent some of the earliest pottery recovered.

B.1.24 Context 49 was only identified in Test Pit 7, and produced only two relatively small sherds of medieval South Fenland Medieval Calcareous Buff ware, and Unglazed Reduced Sandy wares (of Blackborough End-type).

B.1.25 The excavator describes contexts 20, 22 and 24 as the last hand-excavated layer within the midden sequence (section 3.6.7) across Test Pits 6, 7 and 8. Contexts 22 and 24 produced the largest assemblages from individual contexts. All produced pottery of similar dates, and contexts 22 and 24 both produced sherds from Late Medieval Ely ware jars and jugs. These indicate a late medieval date for the layer, although the ceramic building material (CBM) produced fragments of later date. Again, these may represent later intrusions or reworking of the medieval midden.

B.1.26 Context 2 overlay Test Pits 5 – 8 and produced a mixed assemblage (49 sherds, weighing 0.843kg). Medieval fabrics are common, and the context produced a number of Medieval Ely ware vessels, including sherds from two curfews, a ceramic fire guard used to cover the fire at night, to prevent fires and to keep the coals or embers, allowing the following morning's fire to be built up from the embers. A later date for this context is indicated by a single sherd of Bourn D ware (1450-1630) and five sherds from two Post-medieval Redware vessels (1550-1800). The context also produced some of the latest pottery recovered from the evaluation, although these are likely to be intrusive; the small sherd of Staffordshire White Salt-Glazed ware (0.01kg) dates to the 18th century.

B.1.27 The final context to produce pottery in this trench is feature **4**, which produced both 18th-19th century CBM, and pottery, in the form of an undecorated Pearlware jar (1770-1840). It is suggested that this brick feature relates to cottages that existed on the site, and is possible that these cottages may be the origin of the later pottery within the midden.

Discussion

B.1.28 Domestic in origin, the medieval sherds from the excavation are moderately abraded with some unabraded material, and although not representing primary deposition, many of the sherds do not appear to have been overly reworked. The pottery was recovered alongside CBM, incorporating medieval glazed roof tile, and various small finds, including, among other things, a barrel lock or padlock, and a much-used micaceous sandstone whetstone or hone. Also recovered was animal bone, oyster and mussel shells. The bulk of the assemblage may represent both kitchen and table waste from a medieval household of some status. Possibly, this was the medieval manor house that was the precursor of the late 16th century Coveney Manor with continued use by the new manor, or the possible moated site 300m to the south-east of the current site. Regardless of its origins and later disturbance, the midden produced an interesting assemblage of pottery and other artefacts.

Retention, dispersal or display

B.1.29 Should further work be undertaken, the pottery should be incorporated into any later catalogue.

Pottery Catalogue

Trench	Test Pit	Context	Fabric	Form	MNV	No. of Sherds	Weight (kg)	Pottery Date	Context Spot dating
1	4	8	MEL+		0	3	0.033	1300-1400	1300-1400
			MSGW		0	2	0.013	1150-1500	
			MSW		0	2	0.015	1150-1500	
			UGBB		0	1	0.008	1150-1300	
		9	BRIL	Jug	1	3	0.059	1200-1500	1350-1500 (1350-1450)
			GRIM	Jug	1	2	0.012	1200-1500	
			LMEL	Bowl	1	3	0.078	1350-1500	
			LMEL	Jar	0	4	0.041	1350-1500	
			LMEL	Jug	1	1	0.008	1350-1500	
			MEL	Bowl	0	1	0.008	1150-1350	
			MEL+	Jar	1	1	0.045	1300-1400	
			SEFEN	Bowl	1	7	0.513	1150-1450	
			UPG	Jug	1	1	0.005	1200-1500	
			UPROV		1	4	0.052	1200-1500	
		12	EAR		1	1	0.021	1200-1400	1580-1700 last phase of activity, otherwise 1350-1500
			EAR	Jug	1	1	0.005	1200-1400	
			LMEL	Jug	1	2	0.015	1350-1500	
			MEL		0	1	0.055	1150-1350	
			MEL	Bowl	3	8	0.182	1150-1350	
			MEL	Jug	0	1	0.022	1150-1350	

Trench	Test Pit	Context	Fabric	Form	MNV	No. of Sherds	Weight (kg)	Pottery Date	Context Spot dating
			MEL (GRIM copy)	Jug	1	1	0.021	1200-1350	
			MEL+	Bowl	1	1	0.019	1300-1400	
			MEL+	Jar	2	6	0.087	1300-1400	
			MEL+	Jug	2	5	0.082	1300-1400	
			MSW	Jar	1	7	0.110	1150-1500	
			PMBL	Bowl	1	1	0.054	1580-1700	
			PMR	Bowl	1	1	0.025	1550-1800	
			UPG	Bowl	1	3	0.023	1200-1500	
			UPG	Jug	1	2	0.044	1200-1500	
	1	28	BOUB	Jar	1	1	0.004	1150–1400	1300-1400
			MEL		1	1	0.011	1150-1350	
			MEL	Bowl	1	2	0.045	1150-1350	
			MEL	Jar	1	1	0.013	1150-1350	
			MEL	Jug	2	3	0.010	1150-1350	
			MEL+	Jar	1	1	0.012	1300-1400	
	2	28	THET/HUNTHET	Handled jar	1	2	0.165	840-1150	840-1150 (however 1300-1400/1450 for layer)
		30	BOUB	Jug	1	1	0.027	1150–1400	1300-1400/1450
			BRIL	Jug	1	1	0.012	1200-1500	
			EAR		1	1	0.003	1200-1400	
			EAR	Jug	1	1	0.004	1200-1400	
			HEDI	Jug	1	1	0.010	1150-1350	
			MEL	Bowl	1	1	0.043	1150-1350	
			MEL	Jar	2	2	0.026	1150-1350	
			MEL	Jug	2	6	0.157	1150-1350	
			MEL+	Bowl	1	1	0.020	1300-1400	
			MEL+	Jug	1	1	0.003	1300-1400	
			SEFEN	Bowl	1	3	0.079	1150-1450	
			SEFEN	Jug	1	1	0.029	1150-1450	
			UGBB	Jar	1	1	0.020	1150-1300	
	3	32	LONS	Drinking jug	1	1	0.092	1670-1926	Late 17th-18th century
			PMR	Jar	1	1	0.021	1550-1800	
			RAER	Drinking jug	1	1	0.006	1480-1610	
		40	MEL		1	1	0.015	1150-1350	1430-1500
			MEL	Jug	1	1	0.014	1150-1350	
			BOND	Jug	3	5	0.159	1430-1650	
			BOND	Jug - pitcher	1	1	0.071	1430-1650	
			EAR/LEAR	Bowl	1	2	0.045	1200-1400/1350-1500	

Trench	Test Pit	Context	Fabric	Form	MNV	No. of Sherds	Weight (kg)	Pottery Date	Context Spot dating
			EAR/LEAR	Jug	1	4	0.047	1200-1400/1350-1500	
			GRIM	Jug	2	2	0.017	1200-1500	
			HUNCAL	Jar	1	1	0.023	1300-1450	
			MEL		1	1	0.014	1150-1350	
			MEL	Bowl	1	1	0.029	1150-1350	
			MEL	Jug	4	5	0.157	1150-1350	
3		2	BOND		0	1	0.003	1430-1650	*c.*1550-1650 with possible 18th century intrusion or disturbance
			BOUB	Jar	1	6	0.067	1150–1400	
			EAR	Jug	1	1	0.007	1200-1400	
			MEL		5	8	0.091	1150-1350	
			MEL	Bowl	3	5	0.075	1150-1350	
			MEL	Jug	3	5	0.066	1150-1350	
			MEL	Curfew	2	3	0.058	1150-1350	
			MEL (GRIM copy)	Jug	1	1	0.030	1200-1350	
			MSW		1	4	0.049	1150-1500	
			PMR	Bowl	2	5	0.193	1550-1800	
			SEFEN		1	1	0.028	1150-1450	
			SEFEN	Bowl	1	1	0.038	1150-1450	
			SEFEN	Jar	1	1	0.018	1150-1450	
			SWSG		1	1	0.001	1720-1780	
			UGBB	Jar	1	5	0.036	1150-1300	
			UPG	Jug	1	1	0.083	1200-1500	
		5	MSGW	Jar	1	1	0.007	1150-1500	Late 18th -mid 19th century (1770-1800)
			PEARL	Jar	1	5	0.063	1770-1840	
			PMR	Bowl	2	3	0.198	1550-1800	
			PMR	Jar	2	2	0.046	1550-1800	
	10	14	HEDI	Jug	1	1	0.003	1150-1350	1150-1350
			MEL	Jar	0	6	0.021	1150-1350	
			MEL	Jug	0	1	0.006	1150-1350	
			MSGW	Jar	2	2	0.032	1150-1500	
			SEFEN		0	2	0.024	1150-1450	
			SEFEN	Jug	1	1	0.099	1150-1450	
	5	18	BRIL	Jug	1	1	0.009	1200-1500	1200-1450
			DNEOT		1	2	0.007	1050-1250	
			MSGW	Jar	1	1	0.023	1150-1500	
			MSW		1	1	0.004	1150-1500	

Trench	Test Pit	Context	Fabric	Form	MNV	No. of Sherds	Weight (kg)	Pottery Date	Context Spot dating
			SEFEN		1	1	0.006	1150-1450	
	6	20	BOUB		1	1	0.016	1150–1400	1300-1400/1450
			BOUB	Jar	1	3	0.015	1150–1400	
			DEST	Jug	1	1	0.001	1150-1300	
			MEL	Jug	1	1	0.016	1150-1350	
			MEL+		0	1	0.005	1300-1400	
			MSW		1	5	0.037	1150-1500	
			SEFEN		1	5	0.047	1150-1450	
			SEFEN	Jar	1	2	0.026	1150-1450	
			UPG	Jug	1	1	0.004	1200-1500	
			UPROV		1	1	0.005	1200-1500	
	7	22	BOUB		1	1	0.012	1150–1400	1350-1400/1450
			LMEL		0	15	0.187	1350-1500	
			LMEL	Jar	1	5	0.029	1350-1500	
			LMEL	Jug	2	16	0.223	1350-1500	
			MEL		2	5	0.115	1150-1350	
			MEL	Bowl	2	2	0.049	1150-1350	
			MEL	Jar	2	25	0.325	1150-1350	
			MEL	Jug	2	3	0.046	1150-1350	
			MEL+	Jug	1	1	0.076	1300-1400	
			SEFEN		1	8	0.096	1150-1450	
			SEFEN	Jar	1	5	0.105	1150-1450	
			SHW	Jar	1	2	0.022	1150-1500	
			UGBB	Jar	1	5	0.036	1150-1300	
			UPG	Bowl	1	1	0.011	1200-1500	
			UPG	Jug	1	1	0.011	1200-1500	
			UPROV		1	1	0.007	1200-1500	
	8	24	GRIM	Jug	1	1	0.006	1200-1500	1350-1400/1450
			LMEL		1	2	0.007	1350-1500	
			LMEL	Jar	2	2	0.056	1350-1500	
			MEL		0	6	0.057	1150-1350	
			MEL	Jar	2	6	0.090	1150-1350	
			MEL+	Bowl	3	3	0.041	1300-1400	
			MEL+	Jar	1	1	0.049	1300-1400	
			MEL+	Jug	2	6	0.101	1300-1400	
			MSGW	Jar	0	2	0.026	1150-1500	
			MSW		0	1	0.029	1150-1500	
			MSW	Bowl	1	1	0.031	1150-1500	
			MSW	Jar	1	1	0.027	1150-1500	

Trench	Test Pit	Context	Fabric	Form	MNV	No. of Sherds	Weight (kg)	Pottery Date	Context Spot dating
			SEFEN	Bowl	1	1	0.074	1150-1450	
			SEFEN	Jug	1	16	0.377	1150-1450	
			UGBB	Jar	1	4	0.031	1150-1300	
	9	26	GRIM	Jug	1	1	0.019	1200-1500	1200-1350
			MEL		1	1	0.006	1150-1350	
			MSW		1	1	0.012	1150-1500	
			UPG	Jug	1	1	0.004	1200-1500	
	7	49	SEFEN		0	1	0.005	1150-1450	1150-1300
			UGBB		1	1	0.010	1150-1300	
	8	50	MEL		2	2	0.012	1150-1350	1200-1350
			MEL	Jug	1	1	0.006	1150-1350	
			MEMS	Jar	1	1	0.018	1200-1400	
			SEFEN	Jar	1	1	0.010	1150-1450	
	9	52	MEL		1	3	0.046	1150-1350	1660-1730 if STSL not intrusive otherwise 1300-1400/1450
			MEL+	Jar	1	1	0.008	1300-1400	
			SEFEN		1	1	0.011	1150-1450	
			SEFEN	Jar	1	3	0.036	1150-1450	
			STSL	Bowl	1	1	0.013	1660-1730	
			UGBB	Jar	0	2	0.011	1150-1300	
Total					**169**	**406**	**7.200**		

Table 3: Pottery Catalogue

B.2 Ceramic Building Material

By Carole Fletcher

Introduction

B.2.1 A fragmentary assemblage of ceramic building material (CBM), 23 sherds weighing 726g, was recovered from a modern brick structure (**4**), subsoil and test pits across the midden in Trench 3 (Table 4). The bulk of the assemblage by weight is roof tile, from medieval to modern, and some late medieval to early post-medieval brick is also present.

B.2.2 The assemblage was quantified by test pit and context, counted and weighed, with form recorded where this was identifiable. Only complete dimensions were recorded, which was most commonly thickness. Fabrics are briefly described. Dating, except for the 19th century or later roof tile, is tentative, and Woodforde (1976), McComish (2015), Drury (1993) and Ryan (1992) form the basis for identification.

Assemblage

B.2.3 The small assemblage of CBM is moderately abraded, except for the 19th century or later roofing tile which is mostly unabraded. The CBM was all recovered from Trench 3, and most of the 19th century or later roofing tile was recovered from the modern brick structure **4**, although no bricks were recovered or sampled. The bulk of the remaining CBM was recovered from the midden.

B.2.4 Medieval glazed roof tile was recovered from the layer 2 in Trench 3, while a single 19th century or later roofing tile fragment was recovered from Test Pit 7, context 22, alongside post-medieval roof tile and a fragment of brick. A medieval or late medieval roof tile fragment was recovered from Test Pit 8, alongside post-medieval roof tile in a Burwell brick-type (Suffolk White) fabric. From Test Pit 9, a shallow brick with distinct sunken margin was recovered from context 26, however it is unclear if the brick is medieval and no complete dimensions survive; context 52 from the same test pit produced undatable brick fragments.

B.2.5 The assemblage is somewhat mixed, with roof tile of various periods and some fragments of brick, some may be from bricks made of estuary clays, as they have purplish hints to the fabric. Estuarine clay bricks from salt-rich estuarine clays, ‘early brick’ as described by Drury, in relation to Norfolk (Drury 1993 163), and those described by Ryan (Ryan 1992 94), are medieval in date.

Discussion

B.2.6 A fragmentary and mixed assemblage of CBM was recovered from the site, with glazed medieval roof tile from subsoil 2, a possible medieval ‘early brick’ from Test Pit 9 and a scattering of late-medieval or post-medieval CBM fragments.

B.2.7 The glazed medieval roof tile is likely to have come from a substantial moderate-to-high status medieval building, although the low levels of CBM suggest that this building may be some distance from the midden. The presence within the midden of the remains of a medieval barrel lock or barrel padlock, used on chests or doors with hasps

(Margeson 1993 143) and used to deter theft, indicates that its original owner had something of value to protect, although they could also be used to secure human and animal limbs (Goodall 1993 155).

B.2.8 The midden, although now perhaps somewhat disturbed, appears to relate to a building or buildings of some status.

Retention, dispersal or display

B.2.9 Should further work be undertaken, the CBM should be examined by an appropriate specialist in relation to any CBM recovered and incorporated into any later catalogue.

Trench	Test Pit or other	Context	CBM Description and Form	No. of fragments	Weight (kg)	Date
3	Subsoil	2	Fragments of roof tile, partially externally green glazed. Slightly curved, upper and partially sooted lower surfaces and a short length of edge survive. Buff external surface with reddish-yellow margin and lower surface, mid-dark grey core. Hard fired, quartz-tempered fabric with rare calcareous inclusions, 16-17mm thick	3	0.152	Medieval
	Building 4	5	Fragments of slightly curved pan tile with a rounded, almost hooked edge. Dull red to yellowish-red with occasional yellowish swirl, hard fired quartz-tempered with occasional grog, relatively smooth upper surface and sanded base. 13-14mm thick (around ½ inch thick)	11	0.208	Late 18th-19th century
	7	22	Fragment of pan tile with a rounded, almost hooked edge. Dull red to yellowish-red throughout, hard fired quartz-tempered with occasional grog, relatively smooth upper surface and sanded base. 12mm thick	1	0.025	Late 18th-19th century
			Fragment of roof tile: Hard fired, buff to pale brown upper surface to dull reddish yellow lower surface, poorly mixed with swirls of yellow and occasionally pink lenses. Relatively coarse, quartz-tempered with some grog, the fabric contains fine and medium, buttery-coloured round specks. The fabric has a slight purple tinge, possibly indicating an estuarine origin. Appears to have been made in a sanded mould, upper and lower surfaces and a short length of edge survive. 15-17mm thick	1	0.070	?Late medieval
			Partial handmade brick: yellow-pink surfaces, relatively smooth upper with lightly sanded base. Fabric is relatively poorly mixed with some swirls of pink and yellow clay, but mainly slightly mottled. Common voids of irregular sizes, grog inclusions are relatively large lumps up to 15 mm, the grog itself contains fine, buttery coloured round specks within the matrix and has a vaguely purplish hint. Moderate quartz and, under the microscope, impressions of vegetable matter. 46mm thick	1	0.087	Medieval or early post-medieval
	8	24	Fragment of roof tile: dull red upper surface, lower surface and margins, mid-dark grey core. Hard fired, quartz-tempered fabric with occasional calcareous inclusions. Small areas of surfaces survive, base may be lightly sanded. 14mm thick	1	0.034	Medieval
			Roof tile: yellow-buff, Burwell brick-type fabric (Suffolk White), sparsely quartz-tempered, occasional calcareous inclusion. Drag marks on upper surface, rough, possibly lightly sanded lower surface. 12mm thick.	1	0.023	Post-medieval
	9	26	Fragment of ?brick: poorly mixed, dull pink-red and cream-yellow swirled fabric, voids and grog, hard fired, possible surface survives, but no measurable dimensions.	1	0.015	Not closely datable
			Fragment of brick: dull pink-red and cream-yellow swirled fabric, voids and grog, darker grey to dull red-purplish core. Part upper surface and side of brick survive, but no measurable dimensions. Upper surface has sunken margin and side may show evidence of vegetation impressions.	1	0.079	Uncertain. Could be a 14th-15th century brick.

Trench	Test Pit or other	Context	CBM Description and Form	No. of fragments	Weight (kg)	Date
			Possibly fabric described by Drury and used in 'later bricks' (Drury 1993 164-5) but could be earlier.			
		52	Two fragments of ?brick: poorly mixed, dull pink-red and cream-yellow swirled fabric, voids and grog, hard fired, possibly part of the surface survives but no measurable dimensions.	2	0.033	Not closely datable
Total				**23**	**0.726**	

Table 4: CBM Catalogue

B.3 Metalwork and Worked Stone

By Denis Sami

Introduction

B.3.1 A total of 10 artefacts were recovered from the layers associated with middening from the evaluation. The metalwork assemblage is formed by four hand forged iron nails (SF5-8), a knife (SF 1), a tool (SF4) and a copper-alloy barrel lock (SF3). Finally, a basalt polishing stone (SF2) and a whetstone (SF9) form the non-metal assemblage.

B.3.2 Iron hand forged nails – especially if poorly preserved – can generally only be date through association with the ceramic or other artefacts collection from the same context. The nails from Gravel End were found in a midden layer (22) dating – accordingly to the ceramic – to the late medieval or post medieval periods.

B.3.3 From a midden layer (7) comes a knife (SF1) which is similar to early Anglo-Saxon examples found in burials (Evison type 2; Evison 1989). However, similar forms continued into the medieval period and this example is probably medieval.

B.3.4 Leatherworking activity in the area is suggested by tool SF4. Similar objects have been documented in Thetford (Andrew 1995: 93, no 7-9) and SF4 can be dated to the medieval or post medieval periods.

B.3.5 Connected to agricultural work or other activities implying sharpening and polishing are SF 2 and 9. SF2 is a hard, compact, dark basalt with a very fine grit, while SF9 is a pinkish-buff stone with a coarser grit.

B.3.6 Despite being very fragmented SF3 can be identified a barrel lock dating to the late medieval or post medieval periods.

B.3.7 Metal finds are in general poor preservation, they are incomplete, fragmented and show signs of corrosion and encrustation.

Method statement

B.3.8 Finds were catalogued by small find number (SF), context and preservation. They were subsequently measured by length (L), width (W) and thickness (T). When possible, the Portable Antiquities Scheme (PSA) data base, Crummy (1988), Andrew (1995), Atkin and Evans (2002) and Manning (1989) were used as references for identification and description.

Statement of potential

B.3.9 Finds were mostly recovered from midden layers and have a limited potential in informing us about the site history.

Retention, dispersal and display

B.3.10 Nails SF5-8 can be discarded. The remaining finds should be considerate for drawing is publication is planned.

Catalogue

SF 1, (7), TR1, TP4, incomplete knife. Truncated tapering tang with rectangular cross-section (L: 24 mm W: 9 mm; T: 6 mm) stepping into a straight back and curved cutting edge (Evison type 2). L: 106 mm; 18 mm; T: 7 mm

SF 2, (7), TR1, TP4, complete polishing stone. Sub-cylindrical, irregular dark grey basalt stone presenting signs of heavy wear on all sides and particularly on the wider face.

SF 3, (40), TR1, incomplete barrel lock mechanism. The lock was made in a copper alloy cylindrical case. Part of the iron mechanism, as well as the bit of an iron key are encrusted inside one of the tube faces. (Similar to PAS: LEIC-9F0248). L: c. 84 mm; W: 39 mm

SF 4, (22), TR3, TP7, incomplete leatherworking tool. A long tapering at the two ends tool with possible lozengiforme cross-section (Andrews 1995: 93, no7-9). L: 111 mm; W: 7 mm

SF 5, (22), TR3, TP7 incomplete hand forged nail. Truncated tapering stem with square cross-section and flat sub-circular head. L: 36 mm; W (stem): 6 mm

SF 6, (22), TR3, TP7, incomplete hand forged nail. Truncated tapering stem with square cross-section and sub-circular flat head. L: 26 mm; W (stem): 4 mm

SF 7, (22), TR3, TP7, incomplete hand forged nail. Tapering stem with rectangular cross-section stem and possibly flat triangular head partially preserved (Manning type 2). L: 53 mm; W (stem): 6.6 mm; T (stem): 3 mm

SF 8, (22), TR3, TP7, incomplete hand forged nail. Long slightly bent stem with square cross-section and nearly completely missing head. L: 72 mm; W (stem): 4 mm

SF 9, (30), Tr1, TP2, incomplete. A truncated whetstone of sub-pyramidal shape. There is heavy wear on all faces and a shallow groove just below one of the angles. L: 101 mm; 49 mm

SF 10, (26), Tr3, TP9, incomplete. A deformed short T shape junction made of lead. The top surface presents sign of wear and the two extremes are folded inward. L: 57 mm; W: 19 mm; T: 15 mm.

B.4 Glass

By Carole Fletcher

Introduction and Methodology

B.4.1 A small assemblage of glass was recovered from Trench 1, Test Pit 4 (Table 5). The glass was scanned and recorded by form, colour, count and weight, and dated where possible; minimum number of vessels (MNI) was not established due to the small size of the assemblage.

Assemblage

B.4.2 The glass from Trench 1, Test Pit 4, context 12, a redeposited layer within the midden, is from several vessels, only one of which could be securely identified. This shard is a fragment from the rim-lip and neck of a small bottle, and is most likely to be 19th century. Several contexts from the evaluation produced 19th century material, so it seems likely that the material became incorporated into the midden through later disturbance.

Discussion

B.4.3 The presence of 19th century vessel glass suggests some level of disturbance, possibly rubbish deposition on, or within, the midden in the 19th century.

Retention, dispersal or display

B.4.4 Should further work be undertaken, the glass should be incorporated into any later catalogue.

Glass Catalogue

Trench	Test Pit	Context	Form and Colour	No. of Shards	Weight (kg)	Glass Date
1	4	12	Vessel glass: part of the cylindrical neck, and lip from a small bottle, of slightly blue-green cast glass. 3.9mm thick, diameter 23mm, internal bore 13mm	1	0.003	19th century
			Vessel glass: sub-rectangular shard of clear glass with a slight greenish cast. Very slight curve to glass, matt on external surface. Possibly from the base of a vessel. 2.5-3.6mm thick.	1	0.003	Not closely datable
			Vessel glass: irregular curved body sherd of slightly blue-green cast, from a vessel uncertain form. The fragment has a moulded uneven surface and may be from a stemware drinking vessel or decorative bottle. The glass has light fine pearlized iridescence on the external surface. 1.9-2.2mm thick	1	0.001	Not closely datable

Table 5: Glass catalogue

APPENDIX C ENVIRONMENTAL REPORTS

C.1 Environmental Samples

By Rachel Fosberry

Introduction

C.1.1 Fourteen bulk samples were taken from features within the evaluated area at Gravel End to assess the quality of preservation of plant remains and their potential to provide useful data as part of further archaeological investigations. Samples were taken from features encountered within Trenches 1 and 3 from layers of medieval midden material.

Methodology

C.1.2 Due to the heavy clay matrix, a sub-sample of one bucket was selected for an initial assessment. The samples were soaked in a solution of sodium carbonate for 24hrs prior to processing to break down the heavy clay matrix. The sub-samples were processed by tank flotation using modified Siraff-type equipment for the recovery of preserved plant remains, dating evidence and any other artefactual evidence that might be present. The floating component (flot) of the samples was collected in a 0.3mm nylon mesh and the residue was washed through 10mm, 5mm, 2mm and a 0.5mm sieve. The resultant flots retained a large amount of silty clay and were subjected to a secondary flotation through suspension in clean water and wash-over.

C.1.3 The dried flots were scanned using a binocular microscope at magnifications up to x 60 and an abbreviated list of the recorded remains are presented in Table 6. Identification of plant remains is with reference to the Digital Seed Atlas of the Netherlands (Cappers *et al*. 2006) and the authors' own reference collection. Nomenclature is according to Zohary and Hopf (2000) for cereals and Stace (1997) for other plants. Plant remains have been identified to species where possible. The identification of cereals has been based on the characteristic morphology of the grains and chaff as described by Jacomet (2006).

Quantification

C.1.4 For the purpose of this initial assessment, items such as seeds and cereal grains have been scanned and recorded qualitatively according to the following categories:

= 1-5, ## = 6-25, ### = 26-100, #### = 100+ specimens

C.1.5 Items that cannot be easily quantified such as charcoal and molluscs have been scored for abundance

+ = rare, ++ = moderate, +++ = abundant

Key to tables:

U=untransformed

Results

C.1.6 Many of the flots contain rootlets which may have caused movement of material between contexts. Preservation of plant remains such as cereal grains, legumes and seeds of both dry and wetland plants is by carbonisation and the level of preservation is good. Charcoal volumes are low. Peas (*Pisum sativum)* and beans (Fabaceae) are frequent and are particularly well preserved with the outer testa (seed coat) frequently retained. All four of the main cereal types are represented with oats (*Avena* sp.), barley (*Hordeum vulgare*), wheat (*Triticum aestivum/turgidum*) and rye (*Secale cereale*) present in varying quantities but not exceeding 50 grains per sample. A single charred grape/raisin (*Vitis vinifera*) seed was recovered. Charred seeds represent weeds that would have been growing amongst crops such as stinking mayweed (*Anthemis cotula*), rye/grass (*Lolium* sp.) and cleavers (*Galium* sp.) as well as plants that grow generally in disturbed soils such as docks (*Rumex* sp.), henbane (*Hyoscyamus niger*), chickweeds (*Stellaria* spp.) and clovers (*Trifolium* sp.). Charred seeds of wetland plants are also present and include sedges (*Carex* spp.), spike-rush (*Eleocharis palustris*), Great Fen sedge (*Cladium mariscus*), black bull-rush (*Schoenus nigricans*) and wood-rushes (*Luzula* sp.)

Trench 1

C.1.7 The earliest deposit sampled is midden layer 40 encountered in TP 2 and TP 3 and in both cases the samples are fairly unproductive in that they contain only occasional specimens of cereal grains and legumes. Layer (7), which possibly equates to layer (40), contains only occasional oats and legumes. Silty clay layer 42, also in TP 2 is similarly sparse in content with only a single grain and legume preserved and layer 28 in TP 1 contains a single pea. Subsequent midden layer 8 in TP 4 is the most productive sample from the site and produced the largest assemblage of charred grain which is predominantly comprised of oats along with barley and wheat in addition to frequent peas and beans, crop weed seeds of rye grass and frequent seeds of wood-rush.

Trench 3

C.1.8 Seeds of duckweed (*Lemna* spp.) are present in an untransformed state in most of the samples from Trench 3, probably preserved by the anoxic environment of the clay matrix. The earliest layers (14, 51 and 52) within Trench 1 contain only duckweed seeds in TP 8 and 10 and occasional charred grains, legumes and weed seeds are present in TP 9. Deposits 47 and 49 in TP 7 and a discrete layer (18) in TP 5 also contain charred grains (slightly more frequent) and legumes and weed seeds. Midden layer 20 in TP 6 produced the charred grape seed and contains several legumes and well-preserved charred seeds of henbane and spike rush. Rye grains are present in TP 5 and TP 6. Layer 2, the latest midden deposit, also contains occasional cereal grains, legumes and weed seeds and also has a component of charred sedge seeds.

Area/trench	Test Pit	Context No.	Sample No.	Related	Volume	Flot Volume	Cereals	Chaff	Legumes	Weed Seeds	Duckweed seeds	Snails from flot	Charcoal <2mm	Charcoal > 2mm	Flot comments
1	1	28	4	1	8	15	0	0	#	0	0	0	++	0	Single pea
1	2	40	6	N/A	8	10	0	0	#	0	0	+	+	0	occasional legumes
1	2	42	7	6	8	20	#	0	#	0	0	++	+	0	single wheat and pea
1	3	40	13	6	8	5	#	0	#	0	0	+	+	+	Occasional cereals and legumes
1	4	7	2	1	8	5	#	0	#	0	0	+	+	+	Occasional cereals and legumes
1	4	8	1	2	9	40	###	0	##	##	0	++	+++	+	Oats, barley, wheat, peas, beans, crop weeds and wetland plants
3	5	18	5	N/A	8	15	##	0	#	##	###u	+	+++	+	Occasional wheat, rye, peas
3	6	20	8	N/A	8	25	#	0	##	##	###u	++	++	+	peas, beans, grape/raisin, wheat, rye, crop weeds and wetland plants
3	7	47	10	9	8	15	#	0	#	0	#u	0	++	+	Occasional cereals and legumes
3	7	49	9	10	9	15	##	0	##	##	##u	++	++	+	barley, wheat, peas, beans, crop weeds
3	8	51	11	N/A	8	1	0	0	0	0	##u	+	+	+	wetland seeds only
3	9	52	14	N/A	6	25	#	0	#	##	##u	0	+	++	Occasional wheat, peas, beans, crop weeds and wetland plants
3	10	14	3	N/A	6	5	0	0	0	0	##u	+	+	+	duckweed only
3		2	12	N/A	8	15	#	0	#	##	0	+	+	+	Occasional wheat, peas, beans, crop weeds and wetland plants

Table 6: Environmental samples from Gravel End, Coveney

Discussion

C.1.9 The recovery of charred grain, legumes, weed seeds and occasional charcoal indicates that there is the potential for the preservation of plant remains at this site. Preservation is mainly of burnt food remains with a moderate assemblage of cereal grains and a significant amount of legumes with the relatively rare finding of a charred grape seed. Cereal grains are frequently recovered from archaeological sites as they are easily burnt during cooking or represent the burning of discarded/spilt grain. Legumes such as peas and beans were an important component of the medieval diet and would have been dried for use all-year round. The recovery of charred legumes is less common than cereal grains as they are less likely to be exposed to direct heat unless they have also been deliberately thrown into a fire. Cereal chaff, including straw, has not been preserved and it is possible that the assemblages represent stored, fully processed crops that have just a few weed seed contaminants. The finds recovered from these deposits indicate that there is a significant culinary refuse component of the midden material which includes the remains of shell fish, fish bones and egg shell.

C.1.10 The assemblages show little variation in content with the only significantly different assemblage originating from one of the later deposits found in TP 4. Most of the

samples contain rootlets which may have caused movement of material between contexts. Molluscs are rare but include the burrowing snail (*Ceciliodes acicula*) which may also have contributed to bioturbation. Legumes are rather large to have moved between contexts but their relative abundance in layers of different dates suggests that there may have been some post-depositional mixing of material.

C.1.11 Duckweed is an aquatic plant that grows on the surface of water. The recovery of duckweed seeds in most of the samples from Trench 3 suggests the presence of standing water and may indicate that this is an area where water accumulated.

C.1.12 Sub-samples of approximately 10L were assessed and a similar volume of each sample has been retained. Further processing is likely to produce similar assemblages and may not be beneficial at this stage. If further excavation is planned for this area, it is recommended that environmental sampling is carried out in accordance with Historic England guidelines (2011).

C.2 Animal Bone

By Hayley Foster

Introduction

C.2.1 The animal bone from Coveney represents faunal remains weighing 6.3kg in total. There were 62 fragments recorded, 30 from hand collection and 32 from environmental samples. Bone was collected from two of the trenches excavated. The species represented include cattle (*Bos taurus*), sheep/goat (*Ovis/Capra*), horse (*Equus cabullus*), pig (*Sus scrofa*), vole (*Microtus agrestis*), mouse (*Mus musculus*), fish, amphibian and large mammal. Most of the remains are from middens.

C.2.2 The method used to quantify this assemblage was based on that used for Knowth by McCormick and Murray (2007) which is modified from Albarella and Davis (1996). Identification of the faunal remains was carried out at Oxford Archaeology East. References to Hillson (1992), Schmid (1972), von den Driesch (1976) were used where necessary. Fish and amphibian remains were not identified to species for evaluation.

Results

C.2.3 Of the large mammals cattle and sheep/goat are the most numerous species, fish and amphibian were the most common species from the environmental samples. There are 2 fragments categorised as large mammal, yet likely belong to horse or cattle. The condition of the bone is good, and fragmentation is moderate. There is no indication of burning or gnawing however there is a case of butchery present on a cattle radius. A chop mark appears on the posterior distal, likely an attempt to remove the front foot.

C.2.4 Dental wear aging for the cattle mandible from context 18 (TP 5 TR 3) indicates an animal of 40-50 months of age at death and a third mandibular molar indicating an animal also 40-50 months. There are no cattle long bones with unfused epiphyses. A sheep/goat third molar aged to mature (over 28 months but not yet adult) and an unfused distal tibia indicates an animal less than 15-24 month of age at death.

C.2.5 The presence of fish and amphibian remains from the environmental samples provides additional insight into dietary preferences and environment conditions. Fish remains mainly consist of vertebrae, some of which belong to the gadidae family.

C.2.6 The presence of cattle aged 40-50 months is an indication that cattle were likely favoured for meat, as this is the age where cattle reach optimum weight for slaughter. The volume of bone recovered from the site, and the signs of carcass processing and food waste evidence from middens is substantial enough to indicate that there were signs of settlement activity discovered, in the two trenches.

Cattle	Sheep/Goat	Horse	Pig	Vole	Mouse	Fish	Amphibian	Large Mammal	Total
11	11	6	1	3	1	14	13	2	62

Table 7: Total number of identifiable fragments (NISP) by species

Recommendations for further work

C.2.7 The assemblage is small in size therefore no meaningful interpretations can be made unless further remains are recovered from the site.

C.3 Mollusca

By Carole Fletcher

Introduction

C.3.1 A total of 639g of shells was collected by hand during the evaluation. The shells recovered are all edible mollusca, examples of oyster *Ostrea edulis*, from estuarine, shallow coastal waters, mussel *Mytilus edulis* from intertidal zones, and a single common Periwinkle or winkle *Littorina littorea* from context 8 (Trench 1, TP4).

C.3.2 The shell is moderately well preserved and does not appear to have been deliberately broken or crushed, however, it has undergone some post-depositional damage.

Methodology

C.3.3 The shells were weighed and recorded by species, with complete or near-complete right and left valves noted, where identification can be made, using Winder (2011) as a guide for oysters and http://jeb.biologists.org/content/218/22/3623 fig 2A as a guide to the right and left valves of mussels. For the larger assemblage of shell recovered from context 8, the number of incomplete, but recognisable, left or right valves are noted in brackets (see Table 8). Further shells have been recovered from environmental samples: sample <1> from context 8 (Trench 1, TP4) was taken specifically to recover shell, however, the small fragments recovered from other samples was not examined.

Assemblage

C.3.4 The bulk of the shell was recovered from layers, much of it incorporated into the midden as general rubbish deposition. Both oyster *Ostrea edulis* and mussel *Mytilus edulis* shells were recovered. Test Pits 2, 3, 6 and 8 did not produce large numbers of shells and the quantities recovered are hardly enough for a single meal, thus it seems likely that the shell was well distributed throughout the midden. The oyster shell recovered varies from relatively large, thick, old shells to fragile fragments of small shells. The mussel shells are of moderate size, but with smaller 'younger' individuals present. By comparison, Test Pit 4 produced 320g of mussel *Mytilus edulis* shells, all but 2g recovered from the sample taken from context 8. Among the 171 complete, partial or recognisable valves, was a single winkle. Winkles occupy the same habitat as the mussel, and it may have been collected in error, yet consumed alongside the mussels. The shells recovered from context 8 contained fewer young examples than the midden assemblage.

C.3.5 The midden assemblage is too small a sample to draw any but the broadest conclusions, in that shellfish were reaching the site from the coastal regions, indicating trade with the wider area, most likely via the River Great Ouse. Few oyster shells show definitive evidence of shucking, in the form of small or sometimes large 'V' or 'U' shaped hole on the outer edge. This damage is likely to have been caused by a knife during the opening or 'shucking' of the oyster, prior to its consumption.

C.3.6 The mussel shell from context 8 more clearly represents consumption of shellfish, since approximately 20 shells might be enough for a small meal of mussel meat alone. The context produced a minimum of 97 mussels, suggesting the shell may represent approximately a single meal for five, or five single meals. Unlike oysters, where the shell is physically opened if eaten raw, and the meat eaten from a single shell, mussels open during cooking and the valves remain attached at the hinge, becoming separated later, possibly post-deposition.

Discussion

C.3.7 The assemblage is a mix of complete valves, partial shells of various sizes, including young individuals, and fragments of shell. The shells recovered probably represent the remains of a small number of meals, the oyster being eaten from the left valve. Having both left and right valves present may indicate that the deposit of oyster shells represents consumption and preparation waste; the mussel shell most likely represents consumption waste. The shells indicate the use of food sources from beyond the immediate area and surrounding hinterland, most likely arriving by river transportation; shellfish are known to have formed part of the Late Saxon, early medieval and medieval diets. The shells represent general discarded food waste and, although not closely datable in themselves, they may be dated by their association with pottery or other material also recovered from the features.

Retention, dispersal or display

C.3.8 Should further work be undertaken, the shell should be incorporated into any later catalogue.

Trench	Test Pit	Context	Species	Common Name	Habitat	No. shells or frags	No. left valve	No. right valve	Description/ Comment	Weight (kg)
1	2	30	*Ostrea edulis*	Oyster	Estuarine and shallow coastal water	1	1		Single, large old (relatively thick) near-complete shell, with some post-depositional damage and obvious shucking mark.	0.077
			Mytilus edulis	Mussel	Intertidal zone	1		1	Partial shell, some surface loss, probable post-depositional damage	0.003
	3	40	*Ostrea edulis*	Oyster	Estuarine and shallow coastal water	1	1		Single, large old (thick) near-complete shell, with some post-depositional damage and probable shucking mark.	0.134
			Mytilus edulis	Mussel	Intertidal zone	4		2	One complete, one near-complete shell with post-depositional damage	0.010
	4	8 <1>	*Littorina littorea*	Winkle	*Intertidal zone*	1			Single complete shell, slight damage to the shell's lower edge may be the result of consumption of the winkle	0.002
			Mytilus edulis	Mussel	*Intertidal zone*	568	12 (85)	17 (57)	Complete and near-complete left and right valves are present, and fragmentary but identifiable valve fragments, alongside many non-identifiable fragments. Most damage is likely to be post-depositional	0.318
		9	*Mytilus edulis*	Mussel	Intertidal zone	2			Two fragmentary shells	0.002
		12	*Ostrea edulis*	Oyster	Estuarine and shallow coastal water	2	1	1	Two partial shells, one patinated and iridised bronze	0.021
3		2	*Ostrea edulis*	Oyster	Estuarine and shallow coastal water	3			Near complete left valve, lower edge missing (relatively old thick shell) and two fragments of ?right valve	0.024
			Mytilus edulis	Mussel	Intertidal zone	7	2	1	One partial and two fragmentary right valves and one complete, one partial and two fragmentary left valves, of varying sizes	0.008
	6	20	*Ostrea edulis*	Oyster	Estuarine and shallow coastal water	1			Single fragment of shell, uncertain of handedness of valve	0.003
			Mytilus edulis	Mussel	Intertidal zone	17	2		One complete, one near-complete and three fragmentary left valves. One complete, two near-complete and five fragmentary or partial right valves. Four fragments of shell the handedness of which cannot be established. All the complete shells are relatively small, young individuals	0.023
	8	24	*Ostrea edulis*	Oyster	Estuarine and shallow coastal water	1	1		Near-complete right valve, damaged at lower edge, uncertain if shucked or due to post-depositional damage	0.014

Table 8: Mollusca Table

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APPENDIX E OASIS REPORT FORM

Project Details

OASIS Number	oxfordar3 - 300751
Project Name	Gravel End, Coveney

Start of Fieldwork	09-10-17	End of Fieldwork	13-10-17
Previous Work	No	Future Work	

Project Reference Codes

Site Code	CVYGRA17	Planning App. No.	17/00549/OUT
HER Number	ECB5224	Related Numbers	

Prompt	Cambs CC Historic Environment Team
Development Type	Residential
Place in Planning Process	After outline determination (eg. A a reserved matter)

Techniques used (tick all that apply)

☐	Aerial Photography – interpretation	☐	Grab-sampling	☐	Remote Operated Vehicle Survey
☐	Aerial Photography - new	☐	Gravity-core	☒	Sample Trenches
☐	Annotated Sketch	☐	Laser Scanning	☐	Survey/Recording of Fabric/Structure
☐	Augering	☐	Measured Survey	☐	Targeted Trenches
☐	Dendrochonological Survey	☐	Metal Detectors	☒	Test Pits
☐	Documentary Search	☐	Phosphate Survey	☐	Topographic Survey
☐	Environmental Sampling	☐	Photogrammetric Survey	☐	Vibro-core
☐	Fieldwalking	☐	Photographic Survey	☐	Visual Inspection (Initial Site Visit)
☐	Geophysical Survey	☐	Rectified Photography		

Monument	Period
Midden	Medieval (1066 to 1540)
	Choose an item.
	Choose an item.

Object	Period
Pottery	Medieval (1066 to 1540)
Metalwork	Medieval (1066 to 1540)
Animal bone	Choose an item.

Insert more lines as appropriate.

Project Location

County	Cambridgeshire
District	East Cambs
Parish	Coveney
HER office	Cambs
Size of Study Area	0.2 hectares
National Grid Ref	TL 4907 8247

Address (including Postcode)

Gravel End, Coveney, CB6 2DN

Project Originators

Organisation	Cambs CC Historic Environment Team
Project Brief Originator	Gemma Stewart

Project Design Originator	Tom Phillips
Project Manager	Tom Phillips
Project Supervisor	Paddy Lambert

Project Archives

	Location	ID
Physical Archive (Finds)	Cambs CC stores (Deepstore)	CVYGRA17
Digital Archive	OA East	CVYGRA17
Paper Archive	Cambs CC stores (Deepstore)	CVYGRA17

Physical Contents	Present?	Digital files associated with Finds	Paperwork associated with Finds
Animal Bones	☒	☒	☐
Ceramics	☒	☒	☒
Environmental	☒	☒	☐
Glass	☒	☒	☐
Human Remains	☐	☐	☐
Industrial	☐	☐	☐
Leather	☐	☐	☐
Metal	☒	☒	☐
Stratigraphic		☐	☐
Survey		☐	☐
Textiles	☐	☐	☐
Wood	☐	☐	☐
Worked Bone	☐	☐	☐
Worked Stone/Lithic	☒	☒	☐
None	☐	☐	☐
Other	☐	☐	☐

Digital Media		Paper Media	
Database	☒	Aerial Photos	☐
GIS	☐	Context Sheets	☒
Geophysics	☐	Correspondence	☒
Images (Digital photos)	☒	Diary	☐
Illustrations (Figures/Plates)	☒	Drawing	☒
Moving Image	☐	Manuscript	☐
Spreadsheets	☒	Map	☐
Survey	☒	Matrices	☐
Text	☒	Microfiche	☐
Virtual Reality	☐	Miscellaneous	☐
		Research/Notes	☐
		Photos (negatives/prints/slides)	☐
		Plans	☒
		Report	☒
		Sections	☒
		Survey	☐

Further Comments

Figure 1: Site location showing selected CHER entries and archaeological trenches (black) in development area (red) Scale 1:7500

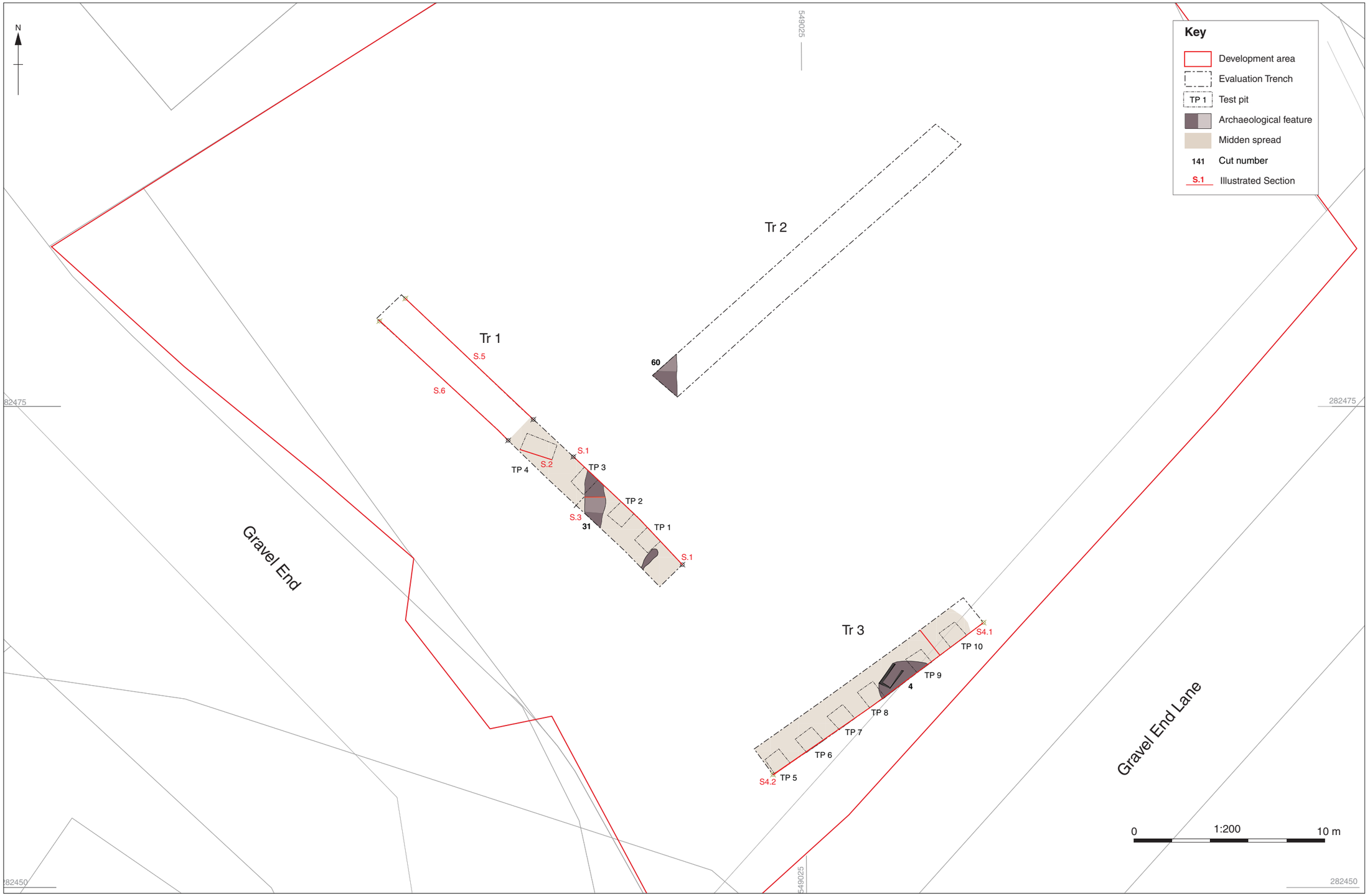
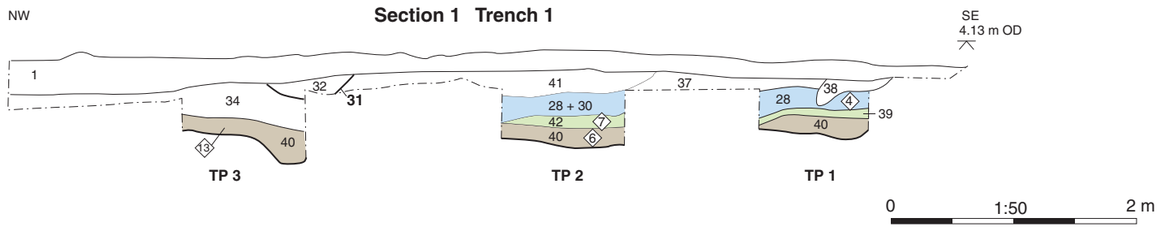
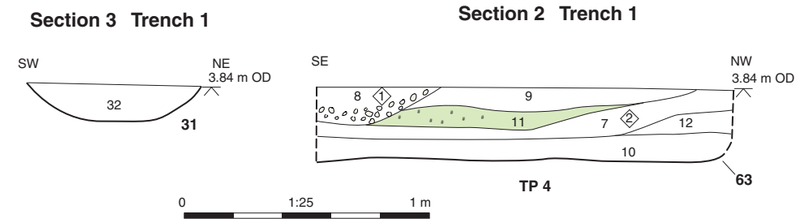
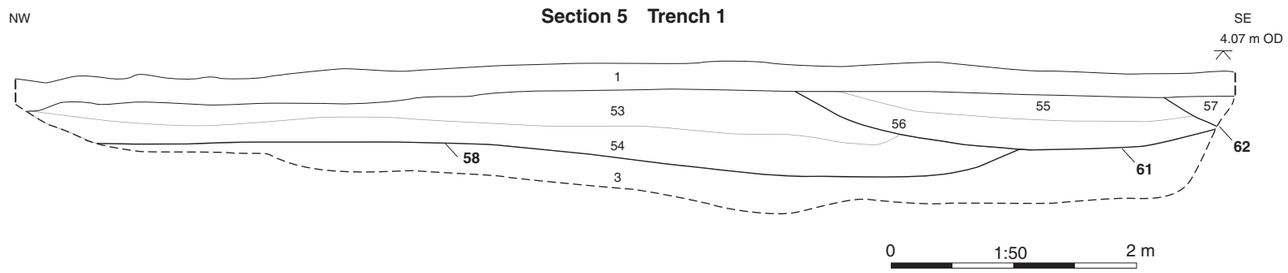
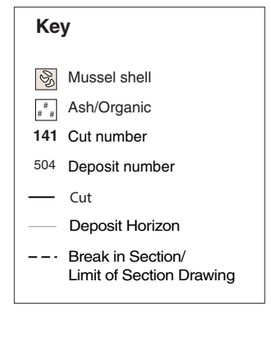


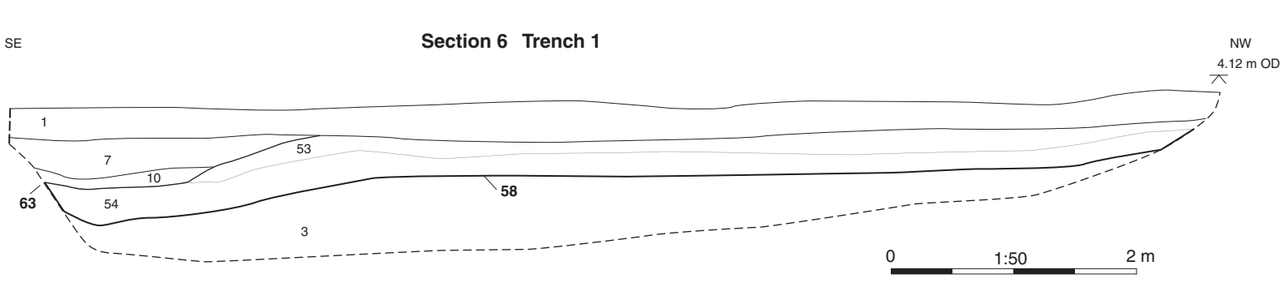
Figure 2: Trench plan with Test Pit locations. Scale 1:200











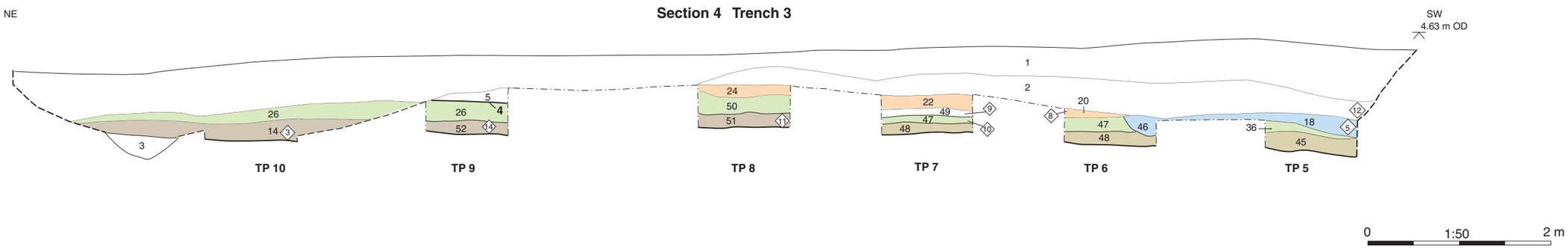


Figure 3: Selected sections with equivalent context numbers in Test Pits colour coded.

Plate 1: Trench 1 - TP4 looking south-west

Plate 2: Trench 1 - TP 1 looking north-east

Plate 3: Trench 1 - TP 2 looking north-east

Plate 4: Trench 1 - TP 3 and Ditch **31** looking north-east

Plate 5: Trench 1 - TP 1 and TP 2 looking north-east

Plate 6: Trench 1 baulk sections 5 and 6 looking north-west

Plate 7: Trench 1 looking north-east

Plate 8: Trench 1 looking north-west

Plate 9: Trench 3 - Modern feature **4** looking north

Plate 10: Trench 3 - TP 5 looking south-east

Plate 11: Trench 3 - TP 6 looking south-east

Plate 12: Trench 3 - TP 7 looking south-east

Plate 13: Trench 3 - TP 10 looking south-east

Plate 14: Trench 3 general topography looking north-east

Plate 15: Trench 3 looking south-west

Plate 16 Working shot in Trench 3 looking south-west

Plate 17 Trench 2 looking north-east

oxfordarchaeology

Head Office/Registered Office/ OA South

Janus House
Osney Mead
Oxford OX2 0ES

t: +44 (0) 1865 263 800
f: +44 (0) 1865 793 496
e: info@oxfordarchaeology.com
w: http://oxfordarchaeology.com

OA North

Mill 3
Moor Lane
Lancaster LA1 1QD

t: +44 (0) 1524 541 000
f: +44 (0) 1524 848 606
e: oanorth@oxfordarchaeology.com
w: http://oxfordarchaeology.com

OA East

15 Trafalgar Way
Bar Hill
Cambridgeshire
CB23 8SQ

t: +44 (0) 1223 850500
e: oaeast@oxfordarchaeology.com
w: http://oxfordarchaeology.com