Archaeology, Excavation & Surveys.

Land South of Brickhills, Willingham
Cambridgeshire

An Archaeological Trenched Evaluation

Report No. AES/2014/9

BRICKHILLS
WILLINGHAM, CAMBRIDGESHIRE

AN ARCHAEOLOGICAL TRENCHED EVALUATION

Written and compiled by

Dawn Keen BA MA (Arch), PCIFA

With Contributions by

Paul Blinkhorn
Val Fryer
M rit Gaimster
Keith Reilly

August 2014

Site Code: **WILBH14**
TL 4077 7057

Report No. AES/2014/9
Event No: ECB4144
Oasis id: archaeol15-174915

Edited by: C. Duhig, PhD, FSA, MCIFA

Non-technical Summary

An archaeological evaluation of a 5400 square metre area on former gardens/farmland was undertaken between 21 May and 2 June 2014 in response to a planning requirement set by Andy Thomas, Senior Archaeologist, prior to the development of the site nineteen dwellings with associated services and access (planning ref: S/0733/11*).*

Fifteen linear trenches, totaling 160m in length and representing a 5% sample of the total Proposed Development Area (PDA) were opened using a 20 tonne 360 degree tracked excavator with toothless ditching bucket under archaeological supervision.

A further 17 test-pits (1.8m x 1m) were opened across the site on a ten metre grid to characterize the artefact content of the topsoil. All exposed trench bases and spoil were scanned by an experienced metal detectorist.

The trenches were cleaned and planned using a Leica 1200 GPS Smart Rover (GPS).

The archaeological survey revealed 29 features in 7 of the trenches opened. Two areas of archaeological significance were recorded (figure 2, areas A and B).

Trenches 7 and 12 revealed linear features containing Mid Iron Age pottery and a largely complete 15th century transitional pot (figure 2, area A). Features in trenches 9, 10, 12 and 15 containing sherds of Ely and Hedingham wares were dated to the 10th – 12th century (Blinkhorn, 2014). The remainder of the trenches produced only those features relating to the sites history as gardens and allotments.

A linear feature was recorded, aligned east west parallel to Church Street in trenches 1, 5 & 6 (figure 2, Area B). A small sherd of Ely ware from trench 1 dated the linear feature to the 12th century. It is suggested that this feature forms a Medieval boundary to Church Street. Additionally, metal detecting of the spoil above the linear feature recovered a late Medieval buckle, decorative bronze pendent and a possible Medieval lead fishing weight.

CONTENTS

FIGURES

1.0 Introduction

1.1 Project background

Archaeology, Excavation and Surveys (AES) were commissioned to carry out an archaeological evaluation by Paul Richards of Crestel Partnerships, in response to a planning requirement set by Andy Thomas, Senior Archaeologist prior to the development of the site nineteen dwellings with associated services and access (planning ref: S/0733/11). The village of Willingham is located in North Cambridgeshire, with the development site itself located between the estate of Brickhills and the High Street of the historic village of Willingham, (NGR TL4077 7057). The Proposed Development Area (PDA) lies on vacated farmland and disused gardens, within a residential area. The work was undertaken between 21 May and 2 June 2014.

1.2 Aims and objectives

The aims and objectives of the evaluation were as follows:

- to enable the archaeological resource, both in quantity and extent, to be accurately quantified;
- to identify the date, approximate form and purpose of any archaeological deposits, together with its likely extent, localized depth and quality of preservation;
- to identify the potential for environmental deposits;
- to further elaborate on the development of the village of Willingham; to enhance the understanding of Willingham through the examination of the date, form and character within its local, regional and national context;
- to produce a permanent record of the site in an archive that will be deposited with Cambridgeshire Historic Environment Record (CHER).

The aims were to be achieved using the methodologies of a linear trenched evaluation, bucket sampling and metal detecting survey. This report details the results of the investigation together with an assessment of the archaeological evidence discovered.

2.0 Compliance

When completing the work, Archaeology, Excavation and Surveys (AES) adhered to the requirements established by Cambridgeshire Historic Environment Team (CHET). Namely, the ÔStandards for Field Archaeology in the East of England (EAA Occasional Paper 14), Research and Archaeology Revisited: a revised framework for the East of England (EAA Occasional Paper No 24, 2011). Adherence was also made to paragraph 128 of the National Planning Policy Framework (2012), recommending that in advance of the determination of this planning application the applicant should provide the results of a programme of archaeological trial trenching, together with an appraisal which describes the significance of any heritage assets contained within the site and how these would be affected by the proposed development and the Institute of Field Archaeologists (IFA) ÔStandards and guidance for archaeological field evaluationÕ (Nov 2013).

A Written Scheme of Investigation was prepared by AES and approved by Andy Thomas, Senior Archaeologist (CHERT) before the evaluation commenced.

3.0 Geology and Topography

The PDA lies in the centre of the village of Willingham to the south of the parish church. The geology of the area consists of second/third terrace river gravel deposits and ampthill clays.

4.0 Archaeological and historical background

From documentary sources and cartographic evidence, it has been possible to build up a picture of the archaeological and historical background appertaining to the PDA, on the land between Brickhills housing estate and Willingham High Street.

The parish of Willingham, until the 18th century was also known as Wivelingham, it lies on the fen edge south of the river Ouse or Old West River, forming a triangle with a base on the river and an apex to the south (VCH, 1989).

The PDA is located close to the Church in the centre of the village. Visible in the walls of the Church (CHER 05794a) are fragments of an Anglo-Saxon stone cross, which is first documented in the 9th century. Extensive multi-period activity has to date been discovered in Willingham village ranging from prehistoric activity to the north of the village (CHER 05599 and 05733), Late Bronze and early Iron age features (MCB14092) and ditch to the west of the High Street (MCB15004). The Aldreth causeway possibly a Bronze Age route crosses the eastern part of the parish. On the edge of the fen it passes through Belsars Hill, a ringwork, which may date from 1071 in its present form.

North and east of the village is recorded as being densely settled from the Roman period. Iron age and Roman features in the form of cropmarks (CHER0577b & c) lie to the northeast of the village. Roman activity is also represented from a plethora of entries in the HER, in the form of a ditch on Church Street (MCB14621), pottery (CHER05602, 05603 and 05604) and coin (CHER05730).

Also of note is an evaluation on the High Street close to the proposed development area (PDA), which revealed a Roman grave (CHER1193a), evidence for Roman activity can also be found to the north (ECB2308), and towards the southern edge of the village, coins and pewter plate were discovered (CHER1162, CHER05562, 05563 and 05564), also of Roman date.

Evidence for Anglo-Saxon activity in the vicinity of the PDA has to date been recorded from excavations in the High Street in the form of eight complete post-built ôhallsõ (CHER11973b), early, middle and late Anglo-Saxon/early post-conquest wares were found, further excavations revealed more evidence of Saxon settlement (MCB17885, MCB18148, ECB1114, ECB2653) to the south of the PDA. Other finds of historical and archaeological consequence include fragments of an Anglo-Saxon stone cross (CHER07594a), an assemblage of late Saxon pottery (CHER 08606a) and Late Saxon coins (CHER11781a).

Medieval activity, discovered through archaeological evaluation and excavation in Willingham, consists of pits and ditches (MCB14092), Medieval features along Green Street, High Street (CHER11973c) and Church Street (MCB16302).

Evidence for Post Medieval activity on the PDA has been ascertained from cartographic sources. The tithe map of 1855 shows that the PDA lay under apportioned land, apportionment numbers 202, 203 and 215 (figures 27 & 28). From

1886 the land is shown as lying under orchard and farmland, and continued as such until the introduction of greenhouses as per the ordnance survey map of 1974, which appeared to remain until 1976 (figures 29 to 33). From 1976 to the present the land continued to be utilized as farmland (local knowledge)

In the immediate vicinity of the PDA fieldwork by Archaeological Solutions (CHER 17111; AS Report 1420) revealed evidence of Medieval and Post Medieval activity. Work by the Archaeological Field Unit of Cambridgeshire County Council encountered evidence for Late Bronze Age, Iron Age, Roman activity and Anglo-Saxon and Medieval settlement (CHER 18148, 17885. 11973. 17936, 11973, 14621, 16302).

Although little has been recorded archaeologically to the immediate north and north-east of the PDA, the plethora of sites recorded of interest to the south of the site, some of which have been noted above, indicate that there is a **high probability** of multi-period activity on the PDA.

5.0 Methodology

The evaluation trenching represented a 5% sample of 5400 square metres of former farmland and gardens This equated to 270msq of linear trenching with each trench measuring 1.8 x 10m in width.

Machining was carried out under constant archaeological supervision using a 13 tonne tracked 360° excavator with a 1.8m wide toothless ditching bucket.

Bucket sampling of the topsoil was undertaken on a 20m grid to determine and characterize the extent, date and significance of artefactual evidence within the plough-soil.

The trenches and testpits were tied into the National Grid using a Leica 1200 GPS Smart Rover with RTK differential correction giving global positioning accuracy to within 2cm.

Spoil, exposed surfaces and features were scanned with a metal detector and hand collected finds were retained for inspection, other than those which were obviously modern.

All archaeological features, deposits and layers were recorded using AES *pro forma* context sheets. Trench locations, plans and sections were recorded at appropriate scales and site photographs were taken of all trenches, profiles and any features using a Canon EOS 1100 SLR digital camera and a Nikon F55 SLR manual camera for Black & White photography.

The work was completed in varied conditions from good, sunny and dry to stormy and wet. Ground water was encountered at a depth of approximately 0.90m.

Prior to the fieldwork an event code (ECB4144) was obtained from the CHET Officer. This number was clearly marked on any documentation relating to the work and in any reports arising from the work.

6.0 Archive

A total of 82 contexts from 29 features were excavated and recorded and artefacts including pottery; animal bone; glass; tobacco pipe and ceramic building material were recovered and catalogued. All documentary records and accompanying artefacts have been assembled into a catalogued archive in line with MoRPHE

(2009), in accordance with the *Guidelines for the preparation of excavation archives for long term storage* (Walker 1990), and are at present currently being stored at the AES offices and will be deposited within the Cambridge County store.

Information on the Site will be placed on the online information resource OASIS. (Oasis id: archaeol15-174915).

7.0 Results

7.1 Overview of Results

The results of the evaluation are presented sequentially by trench and bucket sample test-pits. A full context list can be found in Appendix 5. Archaeological features were found in 7 of those trenches opened, within which were two areas of potential archaeological significance (Figure 2; Areas A & B). Trenches 1, 5 and 6 revealed the remnants of an east/west aligned linear feature. Trenches 7 and 12 revealed shallow linear features dating to the Middle Iron Age. Trenches 9, 10,13, 14 and 15 revealed 20th century features relating to the sites history as gardens and allotments. Trenches 2, 3, 4, 8 and 11 revealed no archaeological features.

7.1.1 Trench 1

Trench 1 measured 20m x 1.8m and was orientated north to south (figures 5 and 6). The trench was machined to a depth of 0.45m where the natural clays were encountered. The topsoil (01) was ≤0.45m in depth.

The trench contained two features.

The first feature, a linear **[05]** was located in the middle of the trench and orientated east/west and measured >2m length x 1.16m in width x 0.40m in depth and extended beyond the limits of excavation (figures 6 and 7). It was filled with a firm dark grey/brown sandy clay (04). A single small sherd of Ely ware was recovered from the fill (04) dating to the mid 12th century (Blinkhorn, 2014). This linear feature was in alignment with features in trenches 5 and 6 and parallel to the Medieval street frontage of Church Street and possibly represents the Medieval boundary to these properties.

The second feature, a posthole **[03]** was found at the northern end of the trench, circular in plan 0.3m in diameter and 0.05m deep, and filled with a firm mid-dark grey sandy clay (02). No finds were recovered from the feature.

7.1.2 Trench 2

Trench 2 measured 10m x 1.8m and was orientated east to west (figure 54). The trench was machined to a depth of 0.40m in depth where the natural clays were encountered.

The topsoil (01) was found overlying the natural soil, a sandy gravel.

No archaeological features or finds were recovered.

7.1.3 Trench 3

Trench 3 measured 10m x 1.8m and was orientated east to west (figure 55). The trench was machined to a depth of 0.40m in depth where the natural clays were encountered.

The topsoil (01) was found overlying the natural geology.

No archaeological features or finds were recovered.

7.1.4 Trench 4

Trench 4 measured 10m x 1.8m and was orientated east/west (figure 56).

The topsoil (01) was found overlying the natural geology.

No archaeological features or finds were recovered.

7.1.5 Trench 5

Trench 5 measured 10m x 1.8m and was orientated east to west (figures 9 and 10).

Two features were located within the trench.

The first feature a square cut pit **[47]** was located at the southern end of the trench and measured >0.98m in length x 1.25m in width x 0.68m in depth (figures 11 and 12). It was filled with (45), a light-mid yellow/orange sandy gravel, and (46) a light-mid grey sandy silty clay. No finds were recovered from the fills although in consideration of its shape and that it was cut through the topsoil, it is suggested that the feature possibly represents a 20th century geotechnical testpit for the development.

The second feature a linear **[49]** was located in the middle of the trench, measuring >1.9m in length x 1.5m in width x 0.40m in depth, was aligned east/west. The ditch contained a single fill (48), a light-mid brown firm silty clay (figures 13 and 14). Although no finds were recovered from the feature its alignment with linear features in trenches 1 and 6, parallel to the Medieval street frontage of Church Street presents the possibility that the feature represents the Medieval boundary of these properties.

No dateable finds were recovered.

7.1.6 Trench 6

Trench 6 measured 10m x 1.8m and was orientated north to south (figures 15 and 16). The trench contained three features.

The first feature a linear **[63]** was located in the middle of the trench, >3.8 in length x 1.4m in width x 0.34m in depth, aligned east/west (figure 17 and 18). It was filled by a single fill (62), a light-mid olive brown silty clay. The linear feature was found to be cut by the second feature, a 20th century rectangular pit **[61]**. Although no finds were recovered from the fill, a late Medieval belt buckle and decorative pendant were recovered from the spoil heap. The linear feature was found on a similar alignment

to those in trenches 1 and 5, parallel to Church Street, it is suggested that this feature represents a Medieval boundary to these properties.

The third feature, a rectangular pit **[61]** was located in the middle of the trench, 1.7m in length x 1.0m in width x 0.62m in depth (figures 17 and 18). The feature was found to cut linear feature [63], and filled by (56, 58, 57, 59 and 60). The morphology of the fills indicated deliberate backfilling. The primary fill (60), was a firm mid grey brown sandy silt. The secondary fill (59) consisted of a firm mid grey/brown sandy silt. This was sealed by (58), a light orange brown sandy silt, which was in turn sealed by a (57), a mid black/brown sandy silt. The final fill (56), was a light grey/brown sandy silt.

CBM dating to the 20th century recovered gives a modern date of construction with a possible function as a rubbish pit.

7.1.7 Trench 7

Trench 7 measured 10m x 1.8m and was orientated east to west (figures 19 and 20). Two features were located in the trench:

The first feature a pond, unexcavated and filled with (70) a mid dark grey/brown silty clay. CBM recovered from the fill of the pond suggests a 20th century date. The pond was found to cut a linear feature **[25]**.

The second feature a linear **[25]** was located at the western of the trench and aligned east/west, measuring >2m in length x 0.8m in width x 0.34m in depth. It was filled by a single fill (24), a light-mid grey silty clay (figures 21 and 22). A single pottery sherd was recovered from the fill, of Middle Iron Age (MIA) date (Blinkhorn, 2014).

Environmental samples were also taken from fill (24) of linear feature **[25]** revealing the presence of charred plant remains (Fryer, 2014).

7.1.8 Trench 8

Trench 8 measured 10m x 1.8m and was orientated east to west (figure 57).

No archaeological features or finds were recovered.

7.1.9 Trench 9

Trench 9 measured 10m x 1.8m and was orientated east to west (figures 23 and 24). Two features were recorded. A single large pit **[54]** was recorded at the western end of the trench. A tree bowl **[55]** was recorded at the eastern end of the trench.

The first feature a large pit **[54]** was located at western end of the trench, measuring >2m in length x >2.2m in width x 0.94m in depth (figures 25 and 26). It was filled by two fills (52 and 53). Fill (52) comprised of a firm dark greyish black sandy silt. This was overlained by (53), a firm light greyish brown silty sandy silt (51), at a depth of 0.19m, also numbered as (001).

Artefacts recovered from the fills ranged in date from 20th century glass medicine bottles to sherds of Romano-British, St Neots, Thetford and Ely wares dating to the mid 12th century (Blinkhorn, 2014).

The second feature, a possible tree bowl **[55]** at the eastern end of the trench, was an irregular oval in plan and measuring approximately 0.58m in length x 0.29m in width x 0.20m in depth was filled by (80), a dark grey/orange sandy silt.

7.1.10 Trench 10

Trench 10 measured 10m x 1.8m and was orientated north-east to south-west (figures 27 and 28).

Two features were located within the trench:

The first feature, a dog burial **[10]** was in the middle of the trench, measuring approximately 0.29m in length x 0.25m in width x 0.04m in depth and was filled by (8), a dark brown sandy silt. The remains of a degraded wooden coffin (9), was also recorded.

The second feature, a tree bowl was in middle of the trench filled with **F19**, a dark grey/brown sandy clay, measuring approximately 0.74m in length x 0.84m in width x 0.27m in depth. The fill (19) contained abraded pottery sherds of St Neots Ware (SNW) and miscellaneous coarse wares (EMW), overall date 12th century (Blinkhorn, 2014).

7.1.11 Trench 11

Trench 11 measured 10m x 1.8m and was orientated east to west (figure 58).

No archaeological features or artefacts were found.

7.1.12 Trench 12

Trench 12 measured 10m x 1.8m and was orientated north-east to south-west (figures 29 and 30).

A total of seven features were located within the trench.

The first feature, a linear **[27]** was at the western end of the trench, aligned east/west, >2.8m in length x 0.8m in width x 0.28m in depth, containing a single fill (26) consisting of a light-mid grey brown silty clay (figures 31 and 32), a single sherd of Mid Iron-Age (MIA) pottery was recovered from the fill (Blinkhorn, 2014).

The second feature, a linear **[67]** was located in the centre of the trench and aligned east/west, measured >2m x 0.36m x and 0.11m in depth. It contained a single fill (66), consisting of a dark grey brown loose sandy silt (figures 33 and 34).

The third feature, an undated linear was located in the centre of the trench, aligned east/west **[69]** measured >2m in length x 1.1m in width x 0.38m in depth, with a fill (68) consisting of a light-mid grey brown silty clay (figures 35 and 36).

The fourth feature, a large pit or linear **[79]**, >2.0m x 2.0m, was located at the northern end of the trench and extending beyond. The top fill (78), consisted of a dark grey brown loose sandy silt (figure 29 and 30). The feature remained unexcavated due to extreme waterlogging. The feature revealed 15th century pottery (Blinkhorn, 2014).

A fifth feature, a circular posthole **[29]** located at the western end of the trench had steep sides and a flat base, measuring 0.3m in diameter x 0.18m in depth, and located to the south of linear feature **[27]**. Filled by (28) of light-mid grey brown silty clay (figure 30).

A sixth feature, located in the centre of the trench a tree bowl **[72]**, measuring 1.86m in length x >0.8m in width x 0.42m in depth, was filled by (71) consisting of a light-mid olive grey sandy silty clay (figure 30). The tree bowl was found to be truncating fill (68) of linear feature **[69]** to the north and fill (73) of an animal burial **[74]** to the north.

The final feature, a pig burial **[74]** located in the centre of the trench, measuring approximately >1.2m in length x 1m x 0.48m in depth, was filled with (73) a light-mid olive grey silty clay (figure 30). The feature was truncated by tree bowl **[72]**. A single sherd of Ely ware (mid 12th century) was recovered from the fill (Blinkhorn, 2014).

Environmental samples were taken from linear features **[27]** and **[69]** revealing the presence of charred plant remains (Fryer, 2014).

7.1.13 Trench 13

Trench 13 measured 10m x 1.8m and was orientated east to west (figures 37 and 38).

The trench was set into the old garden plots of properties fronting the High Street. A total of five features dating to the 20th century were located within the trench.

The first feature a possible tree bowl **[21]** located in the centre of the trench, irregular in plan and measuring 0.50m in length x 0.46m in width x 0.20m in depth, was filled by (20), comprising a mid grey brown sandy silt (figure 38).

The second feature a linear **[33]** located at the eastern end of the trench and orientated approximately north/south, measured >1.9m in length x >1.1m in width x 0.52m in depth (figures 39 to 42). The linear feature was filled by a single deposit (31), consisting of a light-mid brown grey clayey silt. The linear feature was re-cut by a linear feature **[32]** on the same alignment and filled by (30), a mid-grey firm clayey silt. CBM recovered from the fills indicate a 20th century date for construction and it is likely that the feature relates to the sites recent history as gardens and allotments.

The third feature a field drain **[42]** located at the western end of the trench aligned approximately north/south, measuring >1.8m in length x 0.20m in width x 0.20m in depth (figures 43 to 45), was filled by (39) light-mid grey brown firm silty clay.

The final feature a linear **[44]** located at the western end of trench and aligned approximately north/south was approximately >1.2m in length x >0.6m in width x 0.4m in depth (figures 43 to 45), and filled by (43) a mixed orange light grey silty sand.

No artefacts were recovered.

7.1.14 Trench 14

Trench 14 measured 10m x 1.8m and was orientated north-west to south-east (figures 46 and 47). The trench was set into the old garden plots of properties fronting the High Street. Two modern features were located.

The first feature a rubbish pit **[38]**, located at the eastern end of the trench measured >1m x 1m x 1m x 0.4m deep (figures 48 and 49). The feature contained 6 fills (81, 34, 35, 36, 37, 40), including lenses of ash deposits. The primary fill (37) consisted of a mid-dark brown firm silty clay >1m in length x 0.06m wide x 0.05m in depth. This

was sealed by (36) a light grey brown firm sandy silt >1m in length x 0.5m in width x 0.2m in depth. Overlying (36) was a thin lens (40) consisting of loose dark brown sandy silt with frequent flecks of charcoal, >1m in length x 0.35m in width x 0.05 in depth. Overlying this layer was fill (35) consisting of a loose grey/green sandy silt >1m in length x 0.4m in width x 0.05m in depth. Sealing this fill was (34), consisting of a dark brown/black loose slightly sandy silt with frequent flecks of charcoal, >1m in length x 0.3m in width x 0.05m in depth. The final fill (81) was 0.4m wide x 0.1m deep, consisting of a dark grey brown loose sandy silt with occasional flecks of charcoal.

Finds from the feature consisted of iron nails, buckets and plastic bags supports the interpretation of a rubbish pit.

The second feature a rubbish pit **[65]**, was located at the eastern end of the trench measuring approximately 1.30m in length x >1.18m in width x 0.36m in depth. It contained a fill (64) consisting of a firm dark grey sandy silt. Pottery sherds recovered from the fill included St Neots Ware (SNW), early 12th century, Hertfordshire grey ware (HGW), 12th to 14th century, and glazed red earthenware (GRE), 16th to 19th century and miscellaneous (MOD) (Blinkhorn, 2014). Other finds recovered from the feature consisted of a base of iron oil drum, animal bone and 20th century CBM. The feature remained partially excavated due to a rapidly rising water level and a high proportion of 20th finds.

7.1.14 Trench 15

Trench 15 measured 10m x 1.8m, and was orientated east to west (figures 50 and 51). The trench was set into the old garden/allotment plots. Three modern features were located.

The first feature, a linear **[14]** located at the eastern end of the trench, aligned approximately east/west, measured >1.8m in length x >1.1m in width x 0.20m in depth (figures 52 and 53). The feature contained two fills (13, & 17). Primary silting was represented by (17), a loose, grey green sandy silt. The main fill (13) was represented by a light grey sandy silt. A single sherd of pottery from the fill was identified as Romano British ware (Blinkhorn, 2014).

The second feature, a linear **[16]** was located at the eastern end of the trench and aligned approximately east/west, measured >1.8m in length x 1.3m in width x 0.32m depth. Two primary fills (15, 18) were recorded consisting of mid orange brown silty sand. The main fill (11) consisted of a mid grey brown sandy silt. Pottery sherds from fills (11,15 and 18) were identified as Ely, Hedingham (HED) and Thetford wares, dating the fill between 10th to late 12th century (Blinkhorn, 2014).

The third feature, a square cut pit **[82]** located at the western end of the trench, >1m in length x 1.9m in width. The upper fill (50) consisted of, a mid grey black loose sandy silt with frequent charcoal flecks. Finds recovered included a single sherd of Ely ware of mid 12th century date and sherds of 20th century white china, glass and iron objects. The shape, fill and finds of this feature suggest a function as a rubbish pit. The feature remained largely unexcavated due to the recovery of 20th century china and ferrous objects.

7.2 Testpit Results

Bucket sampling of the topsoil was undertaken on a 10m grid to determine and characterize the extent, date and significance of artefactual evidence within the ploughsoil (figure 2).

The soil profiles were found to be similar in all testpits, being Topsoil (1) overlying a colluvial layer (2) overlying natural. No artefacts were recovered during the test pitting other than 20th century material, which was discarded.

Testpit 1 was 0.9m deep.

Testpit 2 was 0.55m deep.

Testpit 3 was 0.35m deep.

Testpit 4 was 0.35m deep.

Testpit 5 was 0.50m deep.

Testpit 6 was 0.55m deep.

Testpit 7 was 0.55m deep.

Testpit 8 was 0.55m deep.

Testpit 9 was 0.50m deep.

Testpit 10 was 0.45m deep.

7.3 Metal detectorist survey

Prior to the evaluation AES completed a metal detector survey over the site using experienced metal detectorists. This yielded surprisingly few artefacts other than a high proportion of aluminium fragments possibly relating to the sites use for greenhouses for the cultivation of flowers. During the evaluation all exposed trench bases and spoil, were also scanned by experienced metal detectorists. This recovered a late Medieval buckle and decorative pendant, and a lead Medieval fish weight (Gaimster, 2014).

8.0 Conclusions plus confidence rating

Archaeological remains of some significance are present on the site, dating from the Middle Iron Age to the fifteenth century. These were mainly in two areas A and B concentrated in trenches 1, 5, 6,7 and 12 (figure 2).

Trenches 1, 5 and 6 recorded a linear feature aligned east/west and parallel to Church Street and Medieval properties. Material recovered from spoilheaps associated with the linear feature and a small stratified sherd of Ely ware within the fill (04) of the linear feature in trench 1, suggest an early to late Medieval date and in consideration of its location parallel to Church Street it is suggested that this feature represents a Medieval boundary.

Trenches 9, 10, 12 and 15 contained a few features with sherds of Ely and Hedingham wares dating to the 10th 12th century (Blinkhorn, 2014). However the features also contained 20th century material and supports the interpretation that these features represented the sites recent history as gardens and allotments.

Trench 7 contained a linear feature, cut **[25]**, dating to the Middle Iron Age. This was cut by a large, deep feature 20th century in date, possibly representing a pond from which 20th century CBM was recovered.

Trench 12 contained two linear features **[27]** and **[69]** of note. Linear feature **[69]** appeared to be on the same alignment as the linear feature **[25]** in trench 7, which was dated to the Middle Iron Age. A modern linear feature **[67]**, a 20th century tree bowl **[72]** and animal burial **[74]** were also recorded in the centre of the trench.

Although undated, due to the similarity of the fill (24) within linear feature **[25]** trench 7 to that of (26) within **[27]** trench 12 respectively, it is possible that it also dates to a contemporary Middle Iron Age date. The fill of circular posthole **[29]** again, undated, was also similar to the Middle Iron Age linear feature **[27]** and in consideration of its proximity to the linear the posthole may also have a similar date.

The remaining features in trenches, 13, 14 & 15 on the western end of the site contained 20th century linears and pits relating to the sites recent history as gardens and allotments.

A linear feature **[44]** in trench 13 on the same alignment as an existing hedge is likely to represent a grubbed out section of the hedge.

Conditions on site were, in general, favourable for the identification and recording of any archaeological remains. The trial trenching was appropriate to the nature and extent of the development. It has demonstrated that the site has some archaeology of potential significance.

Acknowledgements

Archaeology, Excavation & Surveys would like to thank Paul Richards of Crestel Partnerships for commissioning the survey. The assistance of Andy Thomas, Senior Archaeologist of Cambridgeshire County Council in providing the initial Project Brief and for commenting on the Written Scheme of Investigation and final report.

The site work was completed, under the direction of Simon Bray and Dawn Keen, assisted by Caroline Sims and Fiona Fletcher. Lawrence Morgan-Shelbourne of Pre Construct Archaeology (Central) must be thanked for coming out to tie in the trenches by GPS.

Finally, thanks must go to Rob Parker and Chris Montague for their diligence in completing a metal detecting survey of the site and for scanning the spoil heaps and exposed trench surfaces.

Bibliography

Archaeology Data Service, (2011) ÒDigital Archives from Excavation and Fieldwork: Guide to Good PracticeÓ

Association for Environmental Archaeology, (1995*), Environmental archaeology and archaeological evaluations -. Recommendations concerning the environmental archaeology component of archaeological evaluations in England.*

Balchin, N. and Filby, P. (2001). Ò*A Guide to the Industrial Archaeology of Cambridgeshire & Peterborough.*ÕAssociation for Industrial Archaeology, S 09, p. 20.

Department for Communities and Local Government (2012), National Planning Policy Framework .

Dobney, K., Hall, A., Kenward, H. and Milles, A., (1992*), A working classification of sample types for environmental archaeology.* Circaea 9.1 (1992 for 1991), pg. 24-26;

EAA (2011), Ò*Research and Archaeology Revisited: a revised framework for the East of England'* Occasional Paper No 24.

EAA *'Standards for Field Archaeology in the East of England'.* Occasional Paper 14.

English Heritage, (2011), *Environmental Archaeology: A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation (second edition).*

English Heritage, (2008), *Investigative Conservation: Guidance on How the Detailed Examination of Artefacts from Archaeological Sites Can Shed Light on Their Manufacture and Use*;

English Heritage, (2012), *Waterlogged Organic Artefacts: Guidelines on Their Recovery, Analysis and Conservation*;), *Waterlogged Wood: Guidelines on the Recovery, Sampling, Conservation and Curation of Waterlogged)Wood.*

Hall, D., (1996) Ò*The Fenland Project, Number 10: Cambridgeshire Survey, Isle of Ely and Wisbech'*, East Anglian Archaeology Report No 79.

Institute for Field Archaeologists (Nov 2013) Ò*Standard guidance for archaeological field evaluations'.*

Lee, E., (2006). *Management of Research Projects in the Historic Environment (MoRPHE),* English Heritage.

Phillips, C.W. (ed.) (1970). Ò*The Fenland in Roman times: studies of a major area of peasant colonization with a gazetteer covering all known sites and finds'*. Royal Geographic Society Research Series Number 5, pg. 201.

Ravensdale, J. R., (1974) Ò*Liable to Floods, Village landscape on the edge of the fens A.D. 450-1850*,Õ C.U.P.

Riley, D.N. (1945. Ò*Aerial reconnaissance of the Fen Basin'*. Antiquity 19: pg. 145-53.

Walker, K (1990) Guidelines for the preparation of excavation archives for long- term storage.

Webb, J., (1981) Ò*Buckles identified'*, Historic Publications.

Wright, A. P. M., & Lewis, C. P., (1989) (eds *Cambridge and the Isle of Ely: Volume 9: Chesterton, Northstowe and Papworth Hundreds*Õ

Working Papers of the Association for Environmental Archaeology 2, 8 ff. York: Association for Environmental Archaeology.
-

APPENDIX 1: Site location

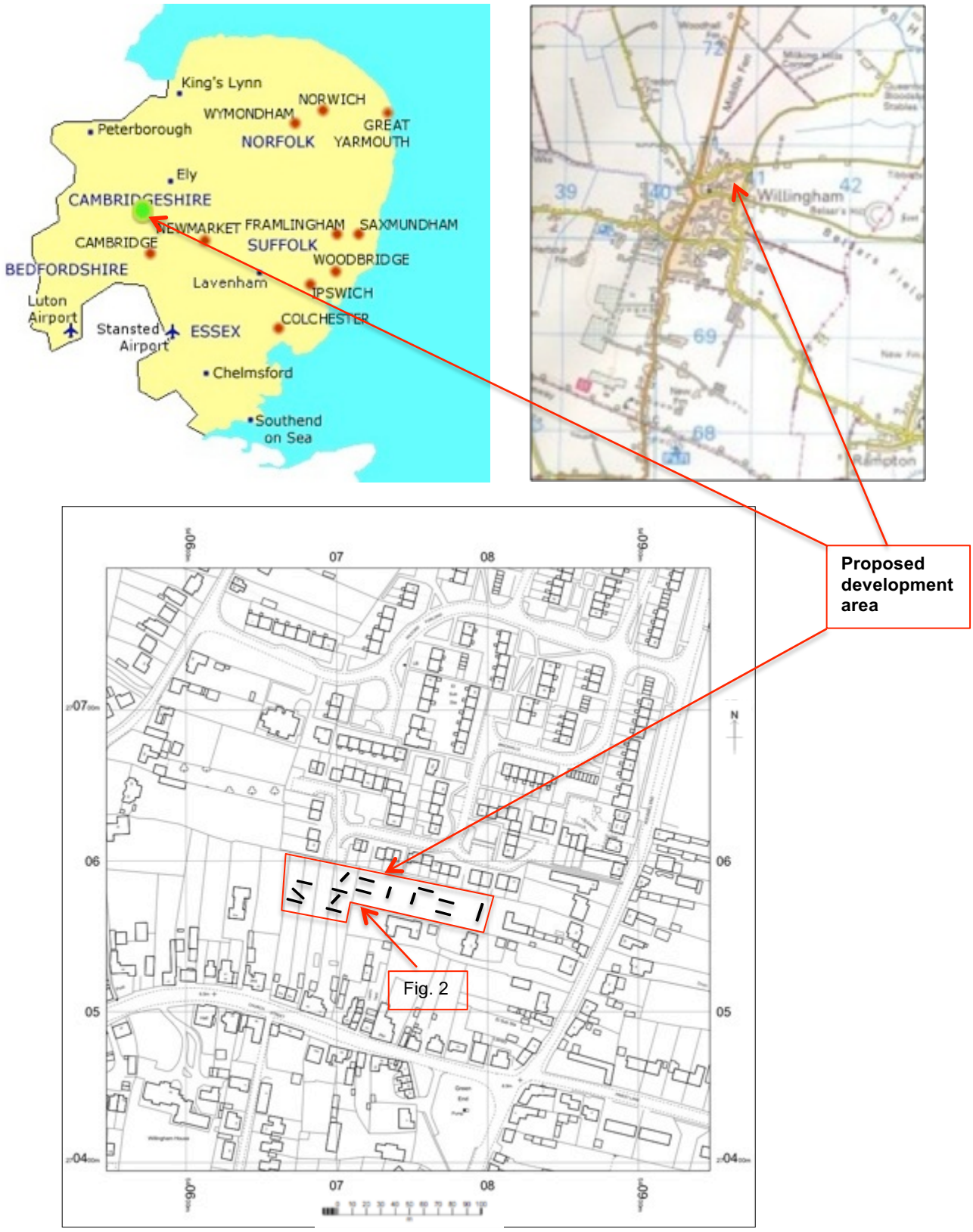

Figure 1: Site location plans for land off Brickhills, Willingham

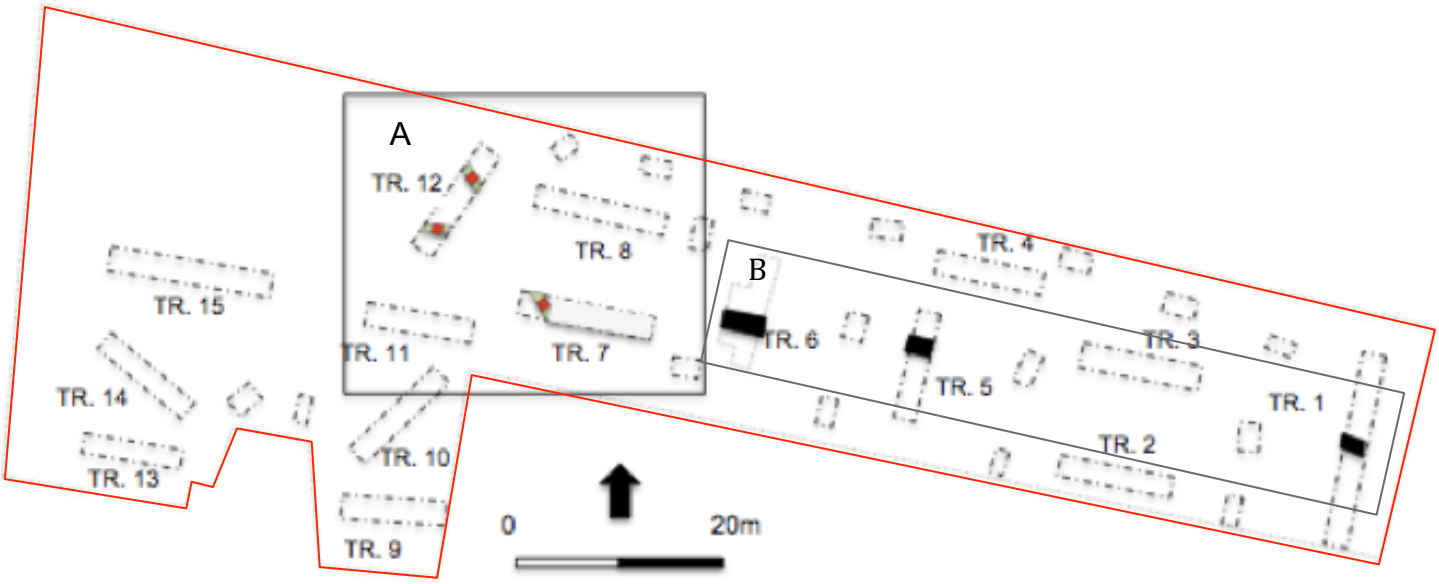

Figure 2: Location plan of trenches and test pits

APPENDIX 2: Site photographs

Figure 3: Pre evaluation East facing photo of PDA

Figure 4: Pre-evaluation - North facing photo of PDA

Trench 1, plan and section

Figure 5: North facing photo of trench 1

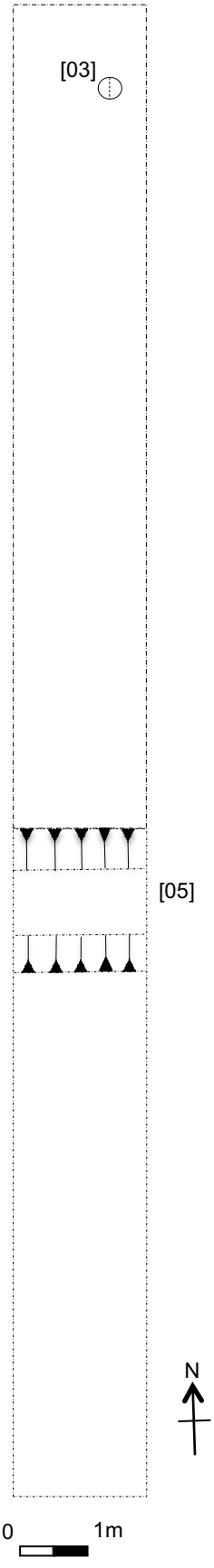

Figure 6: Plan of trench 1

Figure 7: West facing photo of section through linear **[05]**

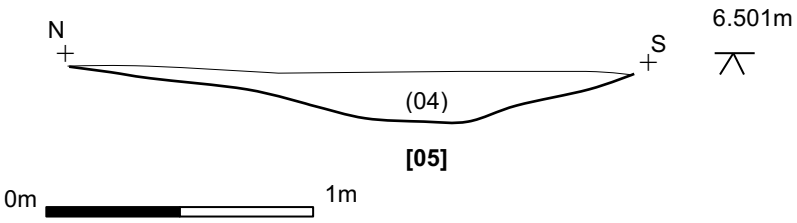

Figure 8: West facing section through linear **[05]**

Trench 5, plan and sections

Figure 9: North facing photo of trench 5

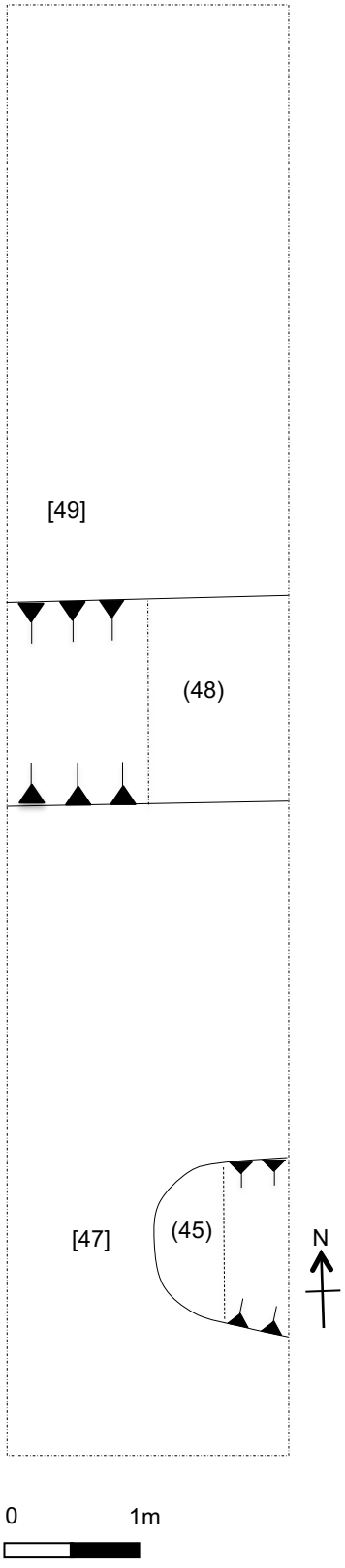

Figure 10: Plan of trench 5

Figure 11: West facing photo of section through Geo-technical test pit **[47]**

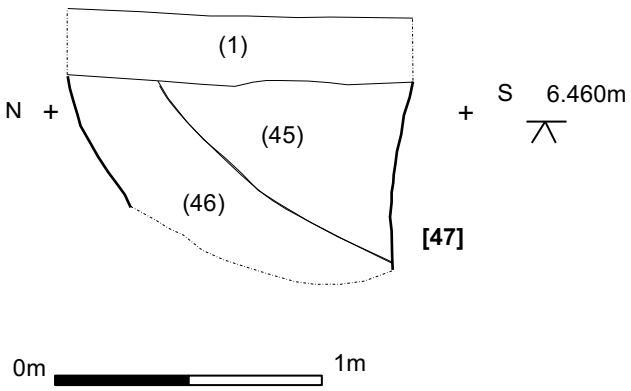

Figure 12: West facing section through Geo-technical test pit **[47]**

Figure 13: East facing photo of section through pit **[49]**

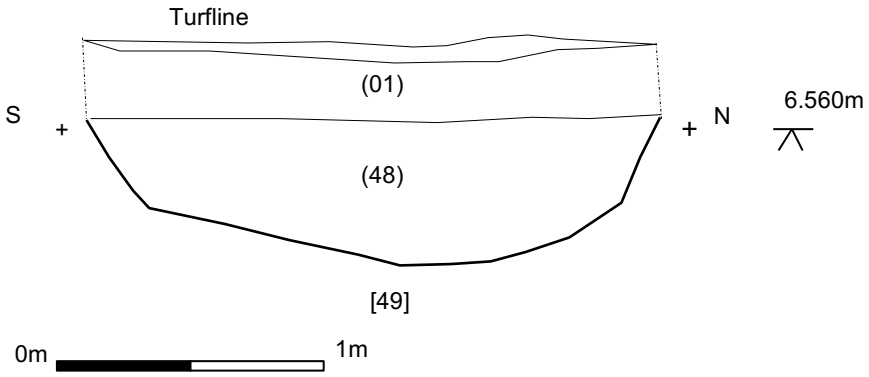

Figure 14: East facing section through pit **[49]**

Trench 6, plan and sections

Figure 15: North facing photo of trench 6

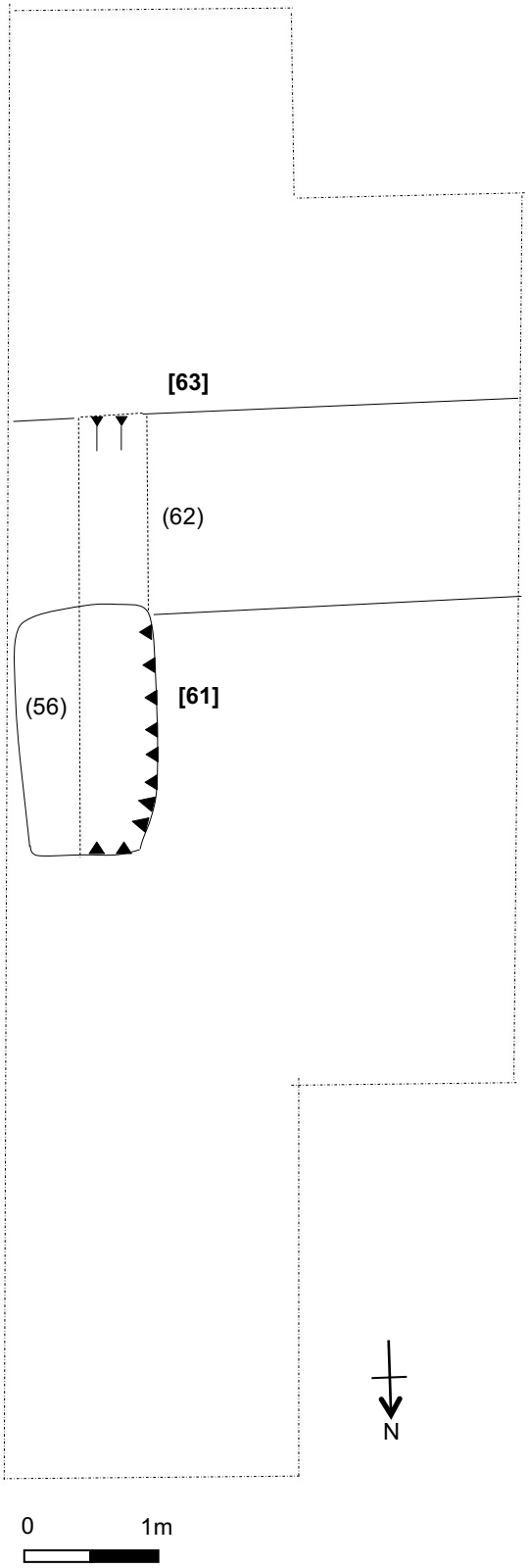

Figure 16: Plan of trench 6

Figure 17: West facing photo of rubbish pit **[61]** and ?Medieval linear **[63]**

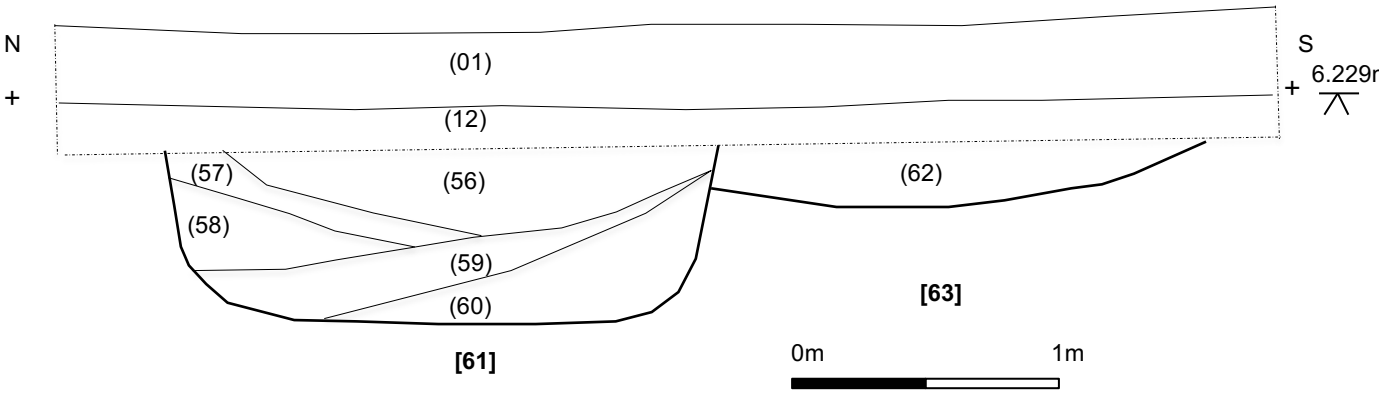

Figure 18: West facing sections through pit **[61]** and ?Medieval linear **[63]**

Trench 7, plan and section

Figure 19: West facing photo of trench 7

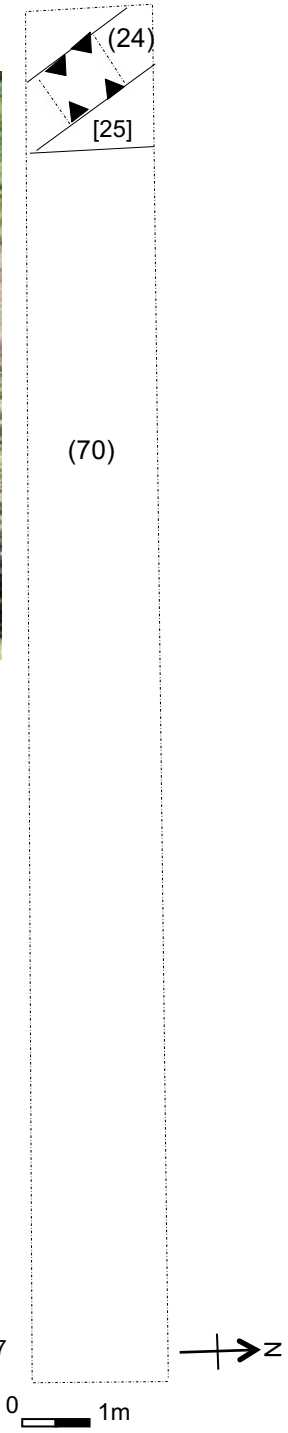

Figure 20: Plan of trench 7

Figure 21: South facing photo of section through linear **[25]**

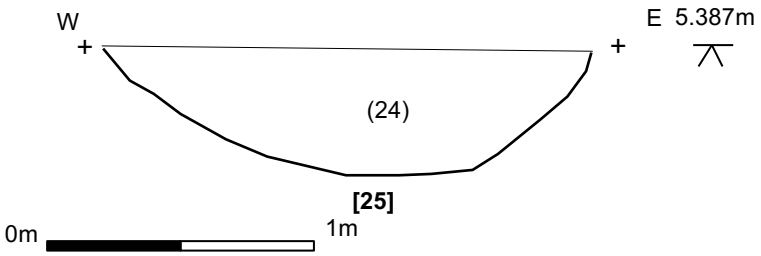

Figure 22: South facing section through linear **[25]**

Trench 9, plan and sections

Figure 23: West facing photo of trench 9

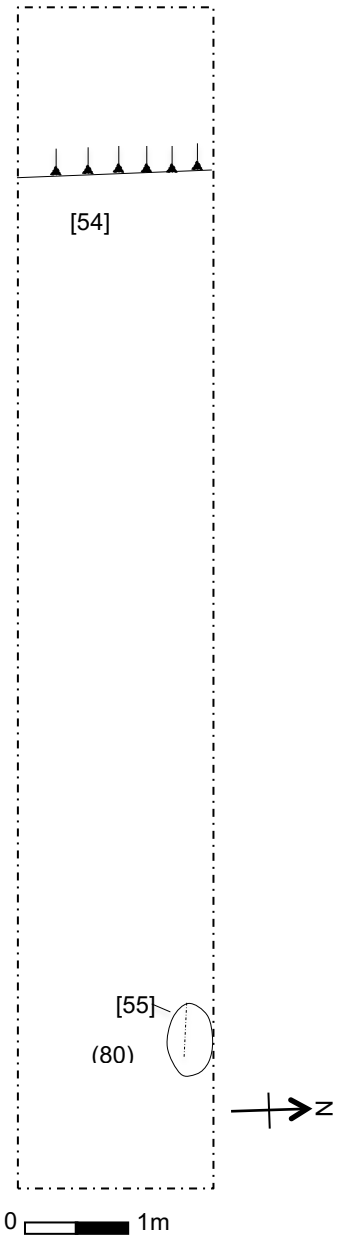

Figure 24: Plan of trench 9

Figure 25: East facing photo of section through ?pit **[54]**

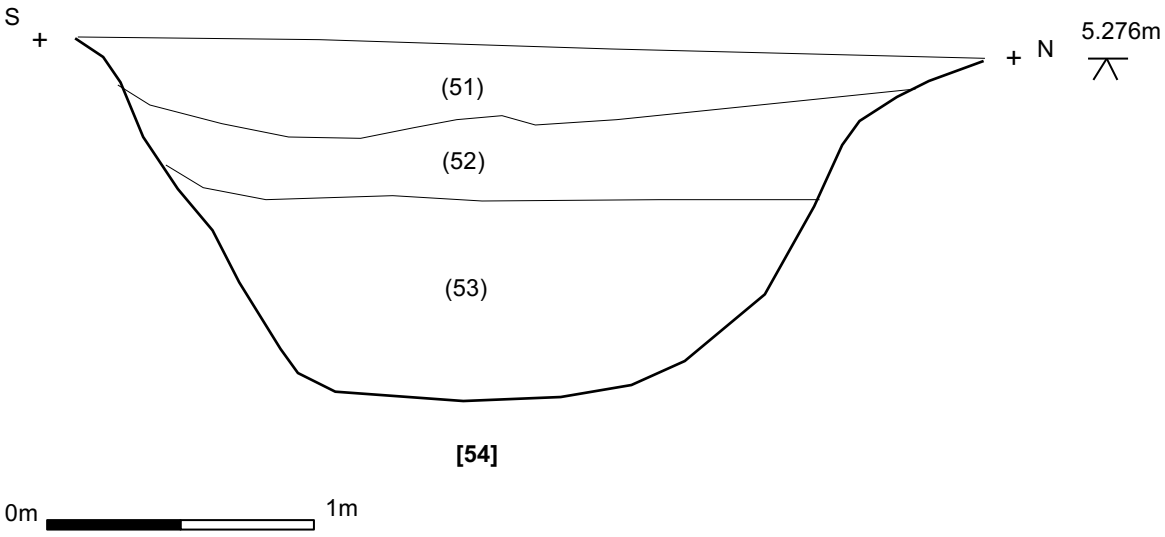

Figure 26: East facing section through ?pit **[54]**

Trench 10, plan and sections

Figure 27: South west facing photo of trench 10

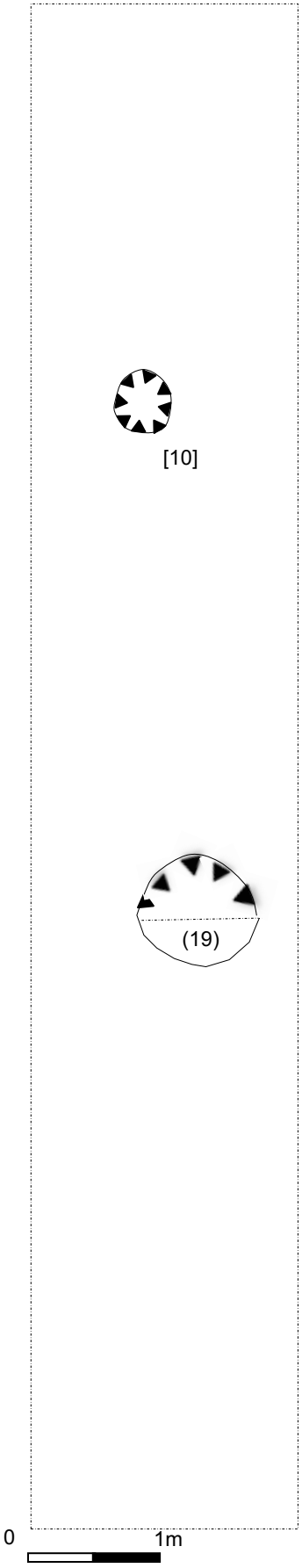

Figure 28: Plan of trench 10

Trench 12 plan and sections

Figure 29: South west facing photo of trench 12

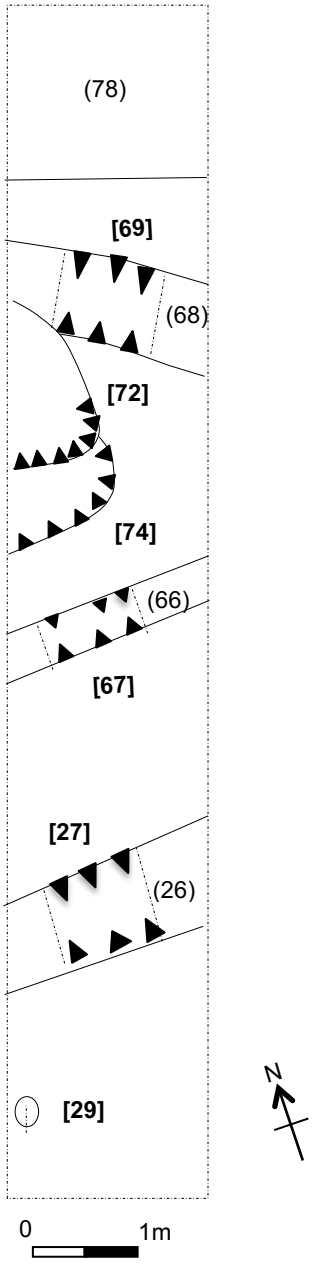

Figure 30: Plan of trench 12

Figure 31: West facing photo of section through linear **[27]**

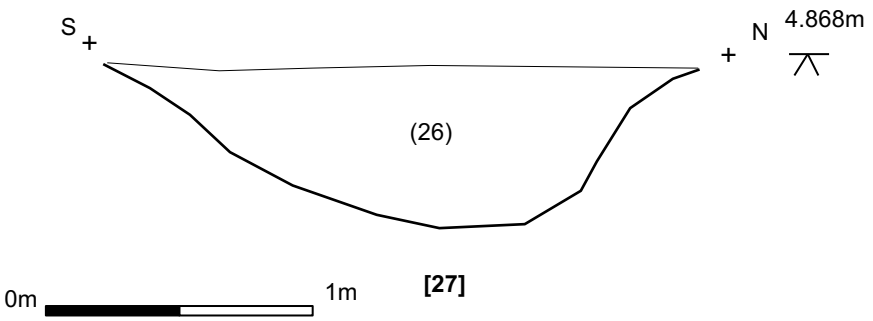

Figure 32: West facing section through linear **[27]**

Figure 33: East facing photo of section through linear **[67]**

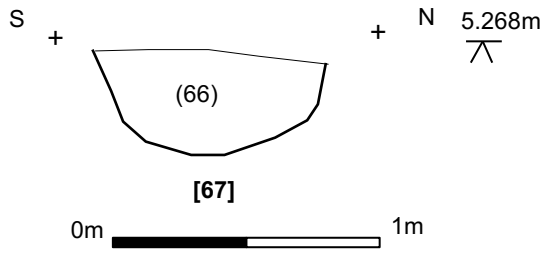

Figure 34: East facing section through linear **[67]**

Figure 35: South east facing photo of section through linear **[69]**

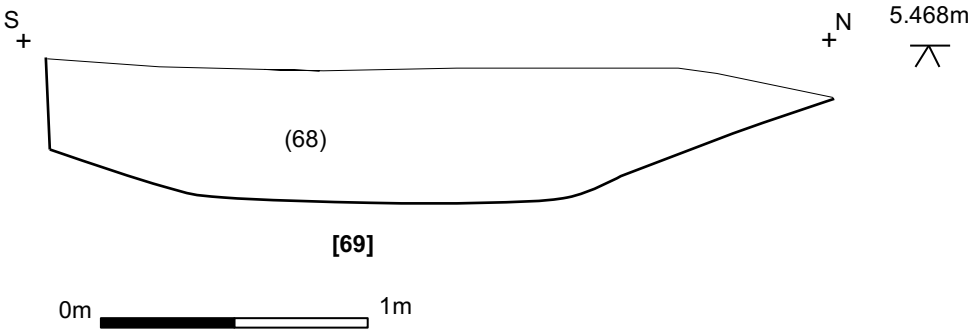

Figure 36: South east facing section through linear **[69]**

Trench 13 plan and sections

Figure 37: East facing photo of trench 13

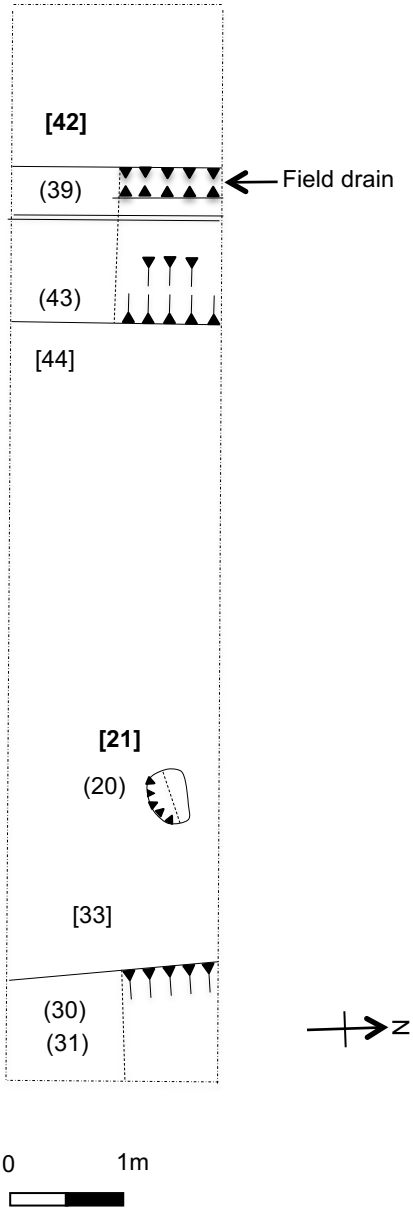

Figure 38: Plan of trench 13

Figure 39: South facing photo of section through linear **[33]** and recut **[32]**

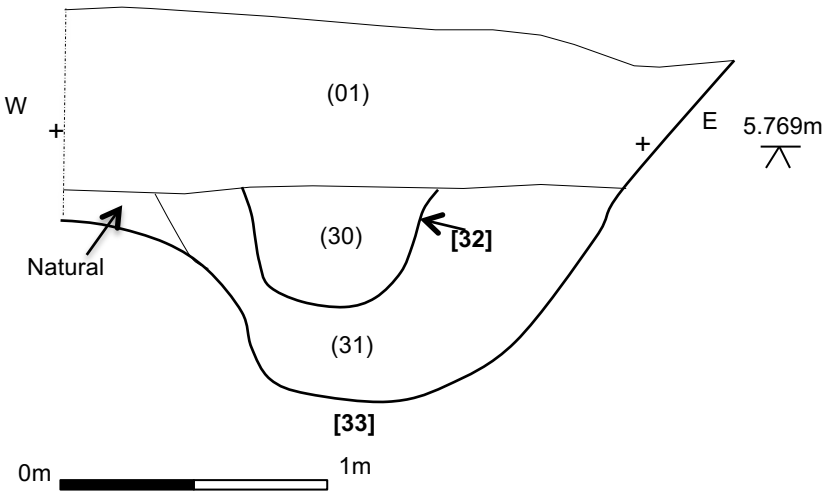

Figure 40: South facing section through linear **[33]** and recut **[32]**

Figure 41: North facing photo of section through linear **[33]** and recut **[32]**

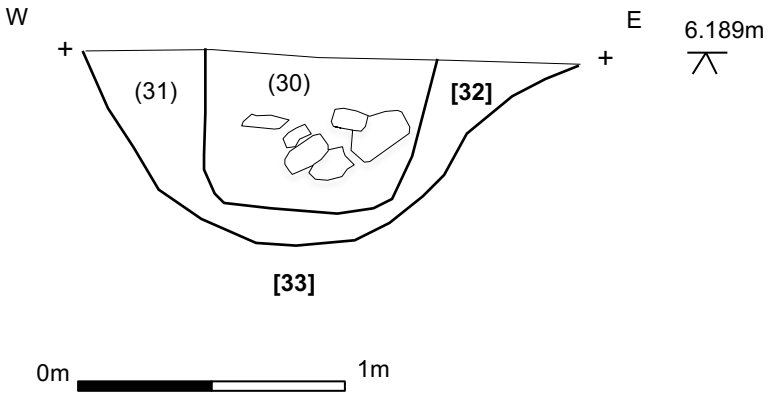

Figure 42: North facing section through linear **[33]** and recut **[32]**

Figure 43: South facing photo section through linears **[42]** & **[44]**

Figure 44:North facing photo of linears **[42]** & **[44]**

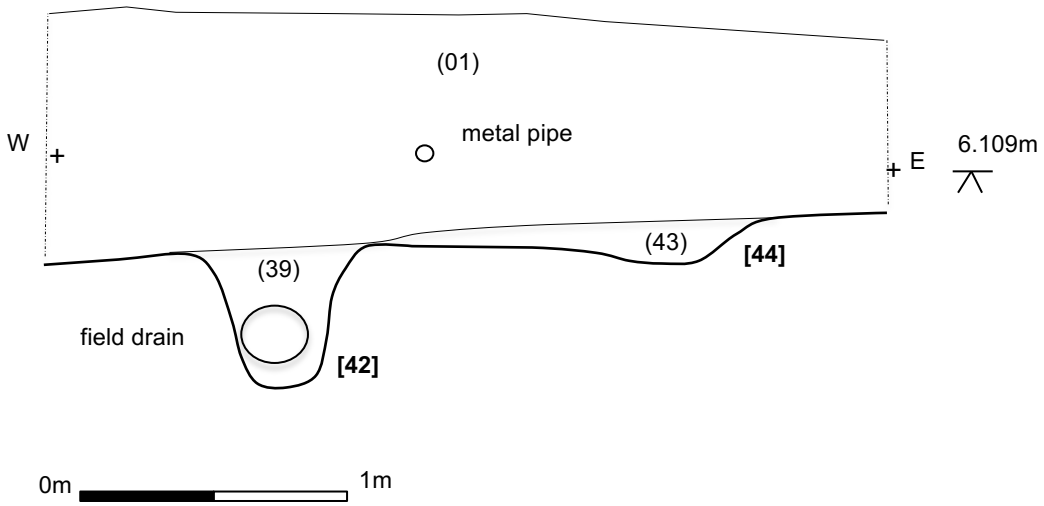

Figure 45: South facing section through field drain **[42]** and hedge line **[44]**

Trench 14: plan and sections

Figure 46: East facing photo of trench 14

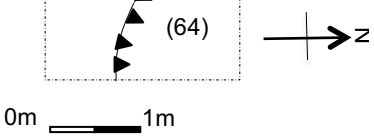

Figure 47: Plan of trench 14

Figure 48: North facing photo of section through 20th century rubbish pit **[38]**

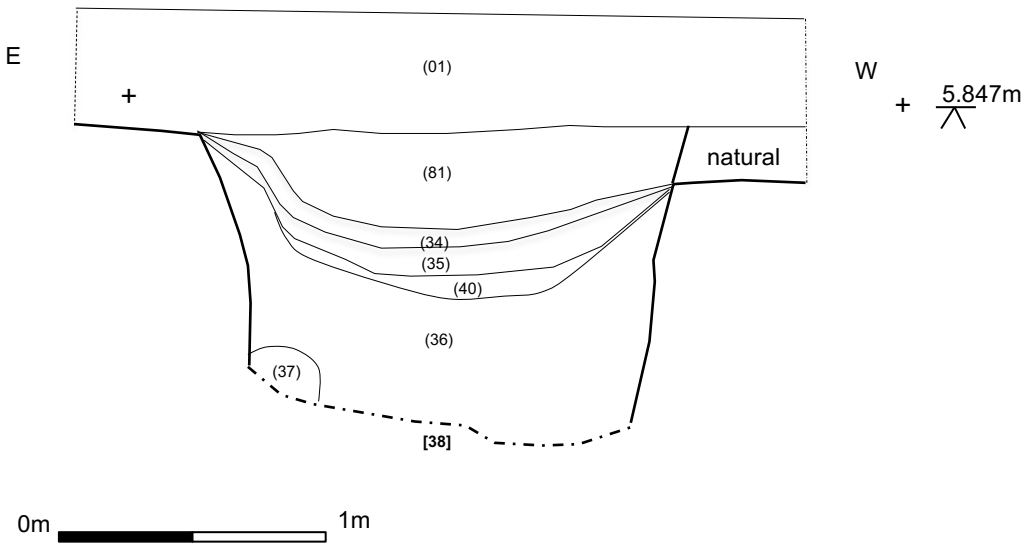

Figure 49: North facing section through 20th century rubbish pit **[38]**

Trench 15: plan and sections

Figure 50: East facing photo of trench 15

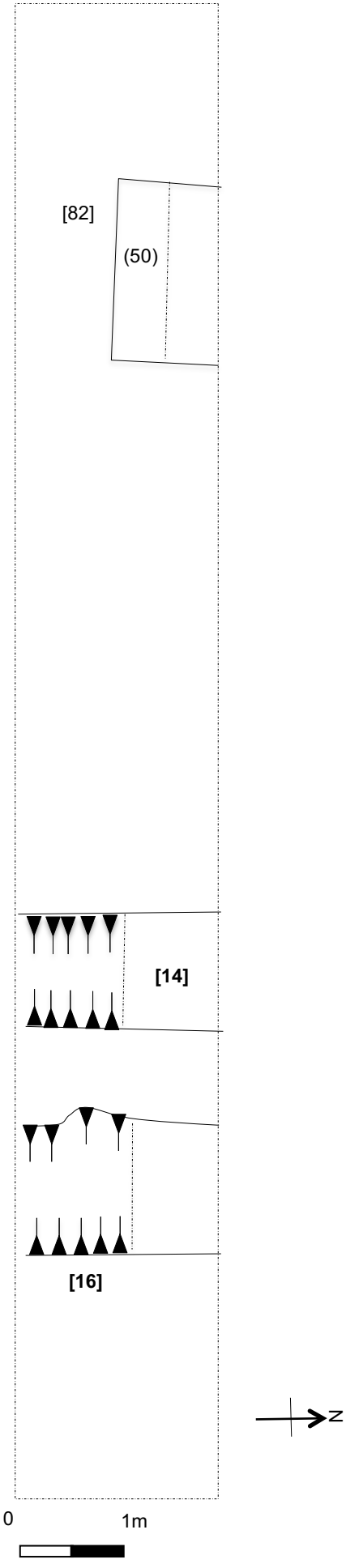

Figure 51: Plan of trench 15

Figure 52: North facing photo of section through 20th century linear **[14]**

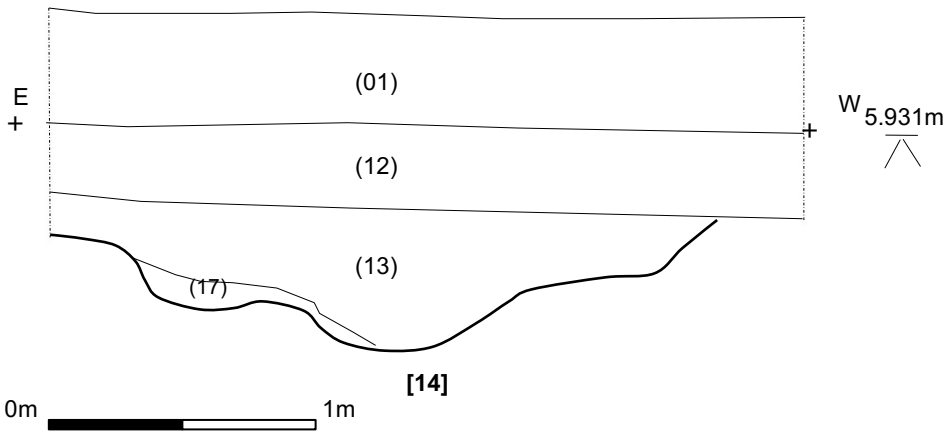

Figure 53:North facing section through 20th century linear **[14]**

Trenches with no archaeological features

Figure 54: East facing photo of trench 2

Figure 55: East facing photo of trench 3

Figure 56: West facing photo of trench 4

Figure 57: East facing photo of trench 8

Figure 58: South west facing photo of trench 11

APPENDIX 3: Cartographic sources

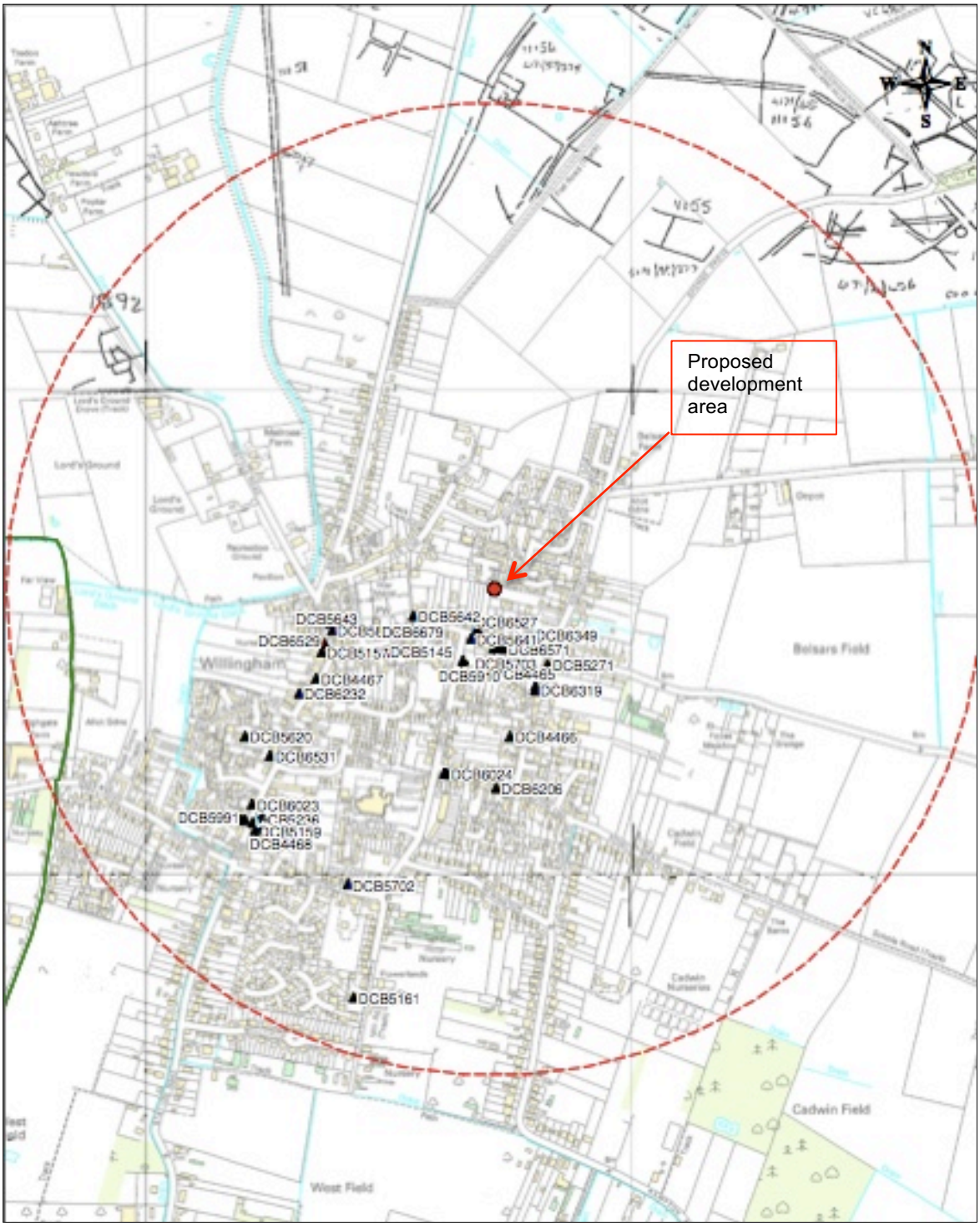

Figure 59: Historic environment data land off Brickhills, Willingham

Figure 60: 1855 Ttthe map

Figure 61: 1855 tithe map showing the PDA

Figure 62: 1886 ordnance survey map, 1:2500

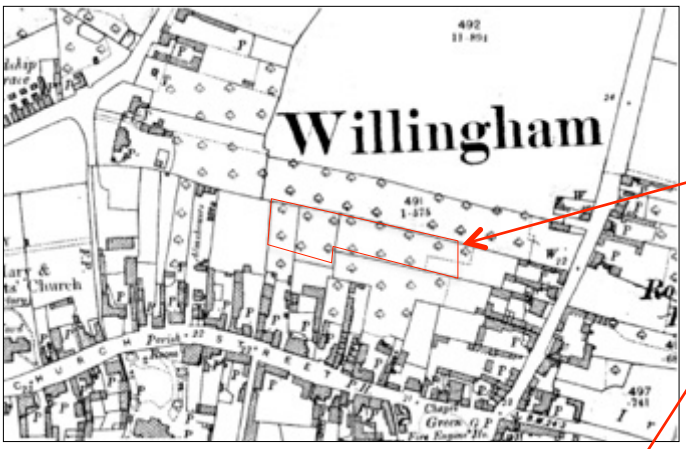

Figure 63: 1902 ordnance survey map, 1:2,500

Proposed development area

Figure 64: 1926 ordnance survey map, 1:2,500

Figure 65: 1974 ordnance survey map, 1: 2,500

Figure 66: 1976 ordnance survey map, 1: 10,560

Proposed development area

APPENDIX 4: Archive qualification (Site Code: WILBH14)

Recorded Contexts: 82 contexts

Digital Photographic Archive: 90 photographs

Black & White Archive: 36 photographs

Drawn Plans Archive: 2 x A3 sheets at 1:50

Drawn Sections Archive: 5 x A3 sheets, 20 at 1:10

Level Diary Yes

GPS plot: Leica 1200 GPS Smart Rover with RTK differential correction giving global positioning accuracy to within 2cm

FINDS

Small Finds:
SF1: Copper alloy buckle c. 14th century
SF2: Copper alloy pendant Late Medieval?
SF3: Copper allot disc Post Medieval
SF4: Folded lead sheet (window lead) Late Medieval

Bulk Finds: CBM.

Environmental Samples:
Sample 1
Sample 2
Sample 3

Level Diary: See GPS Data

APPENDIX 5: Context summary

Cxt No.	Tr. No.	Description	Interpretation	Date
1	All	mid-dark grey sandy silt	topsoil	20th century
2	1	mid-dark grey sandy clay	fill of p/h [3]	20th century
[3]	1	circular, steep sides, concave base	cut of p/h	20th century
4	1	dark grey/brown sandy clay	fill of linear [5]	Mid 12th century
[5]	1	linear, aligned e/w	cut of linear	?14th century
6	8	mid orangery brown sandy clay	fill of natural feature	
7	10	dog burial		20th century
8	10	dark grey brown sandy silt	fill of [10]	20th century
9	10	degraded wood	animal coffin?	20th century
[10]	10	circular, steep sides/concave base	cut of animal burial	20th century
11	15	mid grey/grey brown sandy silt	fill of linear [16]	Mid 12th century
12	15	layer	subsoil	20th century
13	15	light grey sandy silt	fill of linear [14]	Undated
[14]	15	linear aligned n/s	cut of linear	Romano-British
15	15	mid grey/brown orange silty sand	primary fill of [16]	12th-15th century
[16]	15	linear aligned n/s	cut of linear	Late 12th-15th century
17	15	mid grey/green sandy silt	primary fill of [14]	Undated
18	15	mid grey/brown orange silty sand	primary fill of [16]	10th 12th century
19	10	dark grey/brown sandy clay	fill of tree bowl	10th 12th century
20	13	mid grey/brown sandy silt	fill of tree bowl [21]	Undated
[21]	13	irregular oval, concave sides, irregular base	cut of tree bowl	Undated
22		number assigned in error		
23		number assigned in error		
24	7	light-mid grey silty clay	fill of linear [25]	Mid Iron Age
[25]	7	linear aligned nw/se	cut of linear	Mid Iron Age
26	12	light-mid grey/brown silty clay	fill of linear [27]	Undated
[27]	12	linear aligned nw/se	cut of linear	Undated
28	12	light-mid grey/brown silty clay	fill of p/h[29]	Undated
[29]	12	square, steep sides, flat base	cut of p/h	Undated
30	13	mid-dark grey clayey silt	fill of linear [32]	20th century
31	13	light-mid grey/brown clayey silt	fill of linear [33]	20th century
[32]	13	linear aligned n/s	re-cut of [33]	20th century
[33]	13	linear aligned n/s	cut of linear	20th century
34	14	dark slightly sandy silt	fill of linear? [38]	20th century
35	14	light-mid greeny/brown sandy silt	fill of linear? [38]	20th century
36	14	light grey/brown sandy silt	fill of linear? [38]	20th century
37	14	dark brown silty clay	fill of linear? [38]	20th century
[38]	14	linear aligned e/w	cut of linear	20th century
39	13	light-mid grey brown firm silty clay	fill of field drain [42]	20th century
40	14	dark brown/black sandy silt	fill of linear? [38]	20th century
41	13	number assigned in error		
[42]	13	linear aligned n/s	cut of field drain	20th century
43	13	light orange/grey silty sand	fill of [44]	20th century
[44]	13	linear aligned n/s	possible bedding trench for hedge	20th century
45	5	light-mid yellow/orange sandy gravel	fill of [47]	20th century
46	5	light-mid grey sandy silty clay	fill of [47]	20th century
[47]	5	square cut pit	cut of geotechnical testpit?	20th century

Cxt No.	Tr. No.	Description	Interpretation	Finds
48	5	light-mid brown firm silty clay	fill of linear [49]	?14th century
[49]	5	linear aligned e/w	cut of linear	
50	15	mid grey/black sandy silt	fill of modern pit [82]	20th century
51	9	dark grey clayey silt	same as (1)	20th century
52	9	dark greyish brown clayey silt	fill of [54]	20th century
53	9	light greyish brown silty clay	fill of [54]	mid 12th century
[54]	9	linear/pit	cut of pit/linear	20th century
[55]	9	dark grey/orange sandy silt	cut of tree bowl	20th century
56	6	light grey/brown sandy silty	fill of pit [61]	20th century
57	6	mid grey/brown sandy silt	fill of pit [61]	20th century
58	6	light orangery/brown sandy silt	fill of pit [61]	20th century
59	6	mid grey/brown sandy silt	fill of pit [61]	20th century
60	6	mid grey/brown sandy silt	fill of pit [61]	20th century
[61]	6	rectangular pit	cut of pit	20th century
62	6	light-mid olive brown silty clay	fill of linear [63]	?14th century
[63]	6	linear aligned e/w, concave base and sides	cut of linear	20th century
64	14	dark grey sandy silt	fill of pit [65]	mid 19th century
[65]	14	irregular oval, steep sides	cut of rubbish pit	20th century
66	12	dark grey/brown silty sand	fill of linear [67]	?20th century
[67]	12	linear aligned e/w	cut of linear	?20th century
68	12	light-mid grey/brown silty clay	fill linear [69]	?6th century
[69]	12	linear aligned e/w	cut of linear	?6th century
70	7	mid dark grey/brown silty clay	fill of pond (unexcavated)	?20th century
71	12	light-mid olive grey sandy silty clay	fill of [72]	?20th century
[72]	12	irregular oval	tree bowl	?20th century
73	12	light-mid olive grey silty clay	fill of pit [74]	?20th century
[74]	12	?circular, steep sides	cut of animal burial	?20th century
75		number assigned in error		
76		number assigned in error		
77		number assigned in error		
78	12	mid-dark brown firm clayey silt	fill of linear/pit [79]	15th century
[79]	12	unexcavated	cut of linear [79]	15th century
80	9	dark grey/orange sandy silt	fill of tree bowl	20th century
81	14	dark greyish/brown loose sandy silt	fill of rubbish pit [38]	20th century
[82]	15	rectangular pit	rubbish pit	20th century

APPENDIX 6: Photographic register

Photo reg no.	Digital No	Direction taken from	description of shot	Initials/date
1	2898	East	pre-evaluation	DK 20/05/2014
2	2899	North	pre-evaluation	DK 20/05/2014
3	2901	South	pre-evaluation	DK 20/05/2014
4	2902	South west	pre-evaluation	DK 20/05/2014
5	2903	South west	pre-evaluation	DK 20/05/2014
6	2904	East	pre-evaluation	DK 20/05/2014
7	2905	South	pre-evaluation	DK 20/05/2014
8	2906	East	pre-evaluation	DK 20/05/2014
9	2907	South-east	trench 1	DK 20/05/2014
10	2908	West	working shot	DK 20/05/2014
11	2909	West	working shot	DK 20/05/2014
12	2910	West	trench 7	DK 20/05/2014
13	2911	West	trench 7	DK 20/05/2014
14	2914	West	trench 8	DK 21/05/2014
15	2916	West	working shot trench 12	DK 21/05/2014
16	2918	West	trench 8	DK 21/05/2014
17	2919	South	trench 1	DK 22/05/2014
18	2920	South	trench 1	DK 22/05/2014
19	2921	East	trench 2	DK 22/05/2014
20	2922	East	trench 2	DK 22/05/2014
21	2923	East	trench 3	DK 22/05/2014
22	2924	East	trench 3	DK 22/05/2014
23	2925	East	trench 4	DK 22/05/2014
24	2926	East	trench 4	DK 22/05/2014
25	2927	North	trench 5	DK 22/05/2014
26	2928	North	trench 5	DK 22/05/2014
27	2931	North	trench 6	DK 22/05/2014
28	2932	North	trench 6	DK 22/05/2014
29	2933	East	trench 8	DK 22/05/2014
30	2934	East	trench 8	DK 22/05/2014
31	2935	West	trench 9	DK 22/05/2014
32	2936	West	trench 9	DK 22/05/2014
33	2937	South west	trench 10	DK 22/05/2014
34	2938	South west	trench 10	DK 22/05/2014
35	2940	South west	trench 10	DK 22/05/2014
36	2941	South west	trench 10	DK 22/05/2014
37	2943	South west	trench 12	DK 22/05/2014
38	2944	South west	trench 12	DK 22/05/2014
39	2946	East	trench 13	DK 23/05/2014
40	2947	East	trench 13	DK 23/05/2014
41	2948	West	trench13	DK 23/05/2014
42	2949	West	trench 13	DK 23/05/2014
43	2950	West	animal burial tr 10, cut [10]	DK 23/05/2014
44	2951	West	animal burial tr 10, cut [10]	DK 23/05/2014
45	2952	East	trench 14	DK 23/05/2014
46	2953	East	trench 14	DK 23/05/2014
47	2954	East	trench 15	DK 23/05/2014
48	2955	East	trench 15	DK 23/05/2014
49	2957	South	trench 9	DK 23/05/2014
50	2958	East	working shot trench 9	DK 23/05/2014
51	2961	South	working shot trench 9	DK 23/05/2014

Photo reg no.	Digital No	Direction taken from	description of shot	Initials/date
52	2962	South	working shot trench 9	DK 23/05/2014
53	2963	South	working shot trench 9	DK 23/05/2014
54	2964	North	trench 15, linear cut [14]	DK 27/05/2014
55	2966	North	trench 15 linear cut [16]	DK 27/05/2014
56	2968	South	trench 13 pit [21]	DK 28/05/2014
57	2969	South west	trench 10 tree bowl (19)	DK 28/05/2014
58	2970	West	trench 12 linear [27]	DK 28/05/2014
59	2972	East	working shot trench 14	SB 28/05/2014
60	2974	West	working shot trench 12	SB 28/05/2014
61	2976	North	working shot trench 9	SB 28/05/2014
62	2979	North east	trench 14 pit cut [38]	DK 29/05/2014
63	2980	North east	trench 14 pit cut [38]	DK 29/05/2014
64	2983	South	trench 13 linear cuts [42] [44]	DK 29/05/2014
65	2985	South	trench 13 linear cut [33, 35]	DK 29/05/2014
66	2988	North	trench 13 linear cut [33, 35]	DK 29/05/2014
67	2990	West	trench 4 pit cut [47]	SB 29/05/2014
68	2992	East	trench 4 linear cut [49]	SB 29/05/2014
69	2996	North	trench 13 linear cut [44]	DK 30/05/2014
70	2997	North	trench 13 linear cut [44]	DK 30/05/2014
71	2998	West	trench 9 linear cut [54]	DK 30/05/2014
72	3001	South	trench 9 tree root? cut [55]	DK 30/05/2014
73	3002	South	trench 9 tree root? cut [55]	DK 30/05/2014
74	3003	West	working shot - trench 14	DK 30/05/2014
75	3007	West	trench 6 pit cut [61][63]	DK 30/05/2014
76	3009	West	trench 6 pit cut [61][63]	DK 30/05/2014
77	3010	West	trench 6 pit cut [61][63]	DK 30/05/2014
78	3013	West	trench14 pit cut [65]	DK 03/06/3014
79	3015	South	trench 12 linear cut [67]	DK 03/06/2014
80	3017	South east	trench 12 linear cut [67]	DK 03/06/2014
81	3018	South east	trench 12 linear cut [69]	DK 03/06/2014
82	3020	South east	trench 12 linear	DK 03/06/2014
83	3021	South east	trench 12 linear	DK 03/06/2014
84	3030	South east	trench 7 linear [25]	DK 03/06/2014
85	3031	South east	trench 7 linear [25]	DK 03/06/2014
86	3039	South east	trench 12 pit [72][74]	DK 05/06/2014
87	3041	South east	trench 12 pit [72][74]	DK 05/06/2014
88	3042	South east	trench 12 pit [72][74]	DK 05/06/2014
89	3043	West	trench 1 linear [05] not [77]	DK 07/06/2014
90	3044	West	trench 1 linear [05] not [77]	DK 07/06/2014

Black/White No.	Direction taken from	description of shot	Initials/date
1	South-east	trench 1	DK 20/05/2014
2	West	trench 7	DK 20/05/2014
3	West	trench 7	DK 20/05/2014
4	West	trench 8	DK 21/05/2014
5	West	working shot trench 12	DK 21/05/2014
6	East	trench 2	DK 22/05/2014
7	East	trench 3	DK 22/05/2014
8	East	trench 4	DK 22/05/2014
9	North	trench 5	DK 22/05/2014
10	North	trench 6	DK 22/05/2014
11	East	trench 8	DK 22/05/2014
12	West	trench 9	DK 22/05/2014
13	South west	trench 10	DK 22/05/2014
14	South west	trench 12	DK 22/05/2014
15	East	trench 13	DK 23/05/2014
16	East	trench 14	DK 23/05/2014
17	East	trench 15	DK 23/05/2014
18	South	trench 9	DK 23/05/2014
19	North	trench 15, linear cut [14]	DK 27/05/2014
20	North	trench 15 linear cut [16]	DK 27/05/2014
21	South	trench 13 pit [21]	DK 28/05/2014
22	West	trench 12 linear [27]	DK 28/05/2014
23	North east	trench 14 pit cut [38]	DK 29/05/2014
24	South	trench 13 linear cut [33, 35]	DK 29/05/2014
25	West	trench 4 pit cut [47]	SB 29/05/2014
26	East	trench 4 linear cut [49]	SB 29/05/2014
27	North	trench 13 linear cut [44]	DK 30/05/2014
28	West	trench 9 linear cut [54]	DK 30/05/2014
29	West	trench 6 pit cut [61][63]	DK 30/05/2014
30	West	trench14 pit cut [65]	DK 03/06/3014
31	South	trench 12 linear cut [67]	DK 03/06/2014
32	South east	trench 12 linear cut [69]	DK 03/06/2014
33	South east	trench 12 linear	DK 03/06/2014
34	South east	trench 7 linear [25]	DK 03/06/2014
35	South east	trench 12 pit [72][74]	DK 05/06/2014
36	West	trench 1 linear [05] not [77]	DK 07/06/2014

APPENDIX 7: Specialists' reports

Pottery from Willingham, Cambridgeshire (Site WILBH14)

Paul Blinkhorn

The pottery assemblage comprised 51 sherds with a total weight of 827g. It was largely Saxo-Norman or Medieval, although small quantities of prehistoric, Romano-British and post-Medieval material were also present. The following fabric types were noted:

IA: Middle Iron Age. Hand-built. Fine, slightly sandy fabric, sparse to moderate sub-rounded calcareous material up to 1mm. Outer surface lightly burnished. 1 sherd, 44g.

RB: Miscellaneous Romano-British Wares, 1st - 4th century. 2 sherds, 21g.

SNW: St Neots Ware, c. AD900-1150 (Denham 1985). Fabric moderate to dense finely crushed fossil shell, with varying quantities of quartz and/or ironstone. Usually purplish-black, black or grey, with fairly fine, dense inclusions. Main forms small jars with sagging bases and bowls, although a few lamps are known. 7 sherds, 70g.

THET: Thetford-type ware, 10th 12th century (Rogerson and Dallas 1984) Range of reduced, wheel-thrown and hand-finished fabrics mainly comprising quartz sand up to 1mm. Produced at many centres in eastern England, although most of these appear to be the products of the eponymous Norfolk centre. 3 sherds, 28g.

EMW: Miscellaneous Sandy Coarsewares. 11th 14th century. A range of quartz-tempered coarsewares that are found throughout the east midlands and East Anglia. 2 sherds, 10g.

ELY: Ely Ware, mid 12th -15th century (Spoerry 2008). Generic name for a quartz sand and calcareous tempered group of pottery fabrics mainly manufactured in Ely, but also with a second possible source in the Huntingdonshire Fenland. Jars, bowls and jugs dominate the assemblage. Earlier vessels hand-built and turntable finished, later vessels finer and usually wheel-thrown. 12 sherds, 96g.

HGW: Hertfordshire Grey ware, reduced sandy wares, probably from a number of sources, including Hitchin (Turner-Rugg 1993). Mid 12th 14th century (Turner-Rugg 1993). 2 sherds, 21g,
HED: Hedingham Ware: Late 12th 14th century. Fine micaceous mainly unglazed jars and glazed jugs (Walker 2012). 1 sherd, 2g.

LMT: Late Medieval Transitional wares. 15th 16th century. Very hard fine ware in a range of developed late Medieval utilitarian forms, some with a dark green and/or reddish-brown glaze. 16 sherds, 511g.

GRE: Glazed Red Earthenware, 16th 19th century. Fine sandy earthenware, usually with a brown or green glaze, occurring in a range of utilitarian forms. Such 'country pottery' was first made in the 16th century, and in some areas continued in use until the 19th century (Brears 1969). 2 sherds, 16g.

MOD: Miscellaneous 19th and 20th century wares. Mass-produced white earthenwares, stonewares etc. 3 sherds, 8g.

The pottery occurrence by number and weight of sherds per context by fabric type is shown in Table 1. Each date should be regarded as a *terminus post quem*. The range of fabric types is typical of sites in the region. The assemblage is generally in good condition, with the sherds showing little sign of abrasion, although most appear to be the result of secondary deposition, other than the sherds of LMT from context 71, which are all from the base and lower body of a single vessel, a large jar or cistern with internal glazing.

The Saxo-Norman material, SNW and THET, is largely fragments of jars, although a single sherd from a THET storage jar with applied strip decoration is also present. The Medieval material consists largely of unglazed jars, although a few sherds from glazed jugs were also noted. These are entirely typical domestic vessel consumption patterns for the period.

Bibliography

Brears, P C D (1969. *The English country pottery: its history and techniques'.* Newton Abbot: David & Charles.

Denham, V, (1985). Ø*The Pottery in JH Williams, M Shaw and V Denham Middle Saxon Palaces at Northampton* ÔNorthampton Development Corporation Monog Ser **4**, pg. 46-64.

Rogerson, A, and Dallas, C, (1984). *Excavations in Thetford 1948-59 and 1973-80".* East Ang lian Archaeology **22.**

Spoerry, P, (2008). Ø*Ely Wares'.* East Anglian Archaeology **122.**

Turner-Rugg, A, (1993). Ø*Medieval Pottery in Hertfordshire: a gazetteer of the principle collections '.* Hertfordshire Archaeology, **11**, pg. 30 53.

Walker, H, (2012). Ø*Hedingham Ware: A Medieval Pottery Industry in North Essex; its Production and Distribution'.* East Anglian Archaeology p. **148**

Pottery occurrence by number and weight (in g) of sherds per context by fabric type

			MIA		RB		SNW		THET		EMW		HGW		ELY		HED		LMT		GRE		MOD		
Tr	F	Cntxt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	Date
1	5	4													1	4									M12thC
4		U/S																	2	28					U/S
6		U/S									1	2			1	2									U/S
7	25	24	1	44																					MIA?
9		U/S											1	17	1	5							1	4	U/S
9	54	53			1	17	4	40	2	16					1	5									M12thC
10		U/S													2	13									U/S
10		19					2	12			1	8													12thC
12	74	73													1	16									M12thC
12	65	64					1	18					1	4							2	16	2	4	19thC
15	14	12			1	4																			RB
15	16	18							1	12															10thC
15	16	11													4	23									M12thC
15	16	15															1	2							L12thC
15		50													1	28									M12thC
		75																	14	483					15thC
		Total	1	44	2	21	7	70	3	28	2	10	2	21	12	96	1	2	16	511	2	16	3	8	

An evaluation of the plant macrofossils and other remains from Willingham, Cambridgeshire (WILBH 14)

Val Fryer, Church Farm, Sisland, Loddon, Norwich, Norfolk, NR14 6EF June 2014

Introduction and method statement

Excavations at Willingham, undertaken by Archaeology Excavation and Surveys, recorded three ditches of possible sixth century date. Samples for the evaluation of the content and preservation of the plant macrofossil assemblages were taken from the ditch fills, and three were submitted for assessment.

The samples were processed by manual water flotation/washover and the flots were collected in a 300 micron mesh sieve. The dried flots were scanned under a binocular microscope at magnifications up to x 16 and the plant macrofossils and other remains noted are listed in Table 1. Nomenclature within the table follows Stace (1997) for the plant macrofossils and Kerney and Cameron (1979) and Macan (1977) for the mollusc shells. Both charred and de-watered plant macrofossils were recorded, with the latter being denoted in the table by a lower case ÔwÕ suffix. Modern un-charred roots and seeds were also recorded.

The non-floating residues were collected in a 1mm mesh sieve and will be sorted when dry. Any artefacts/ecofacts will be retained for further specialist analysis.

Results

All three assemblages are small and extremely limited in composition. Charred cereal grains, including two specimens of wheat (*Triticum* sp.), are recorded, along with a single, small grass (Poaceae) fruit. Sample 2, from ditch [69], includes de-watered bramble (*Rubus* sect. *Glandulosus*) ÔpipsÕ and elderberry (*Sambucus nigra*) seeds, but it is currently unclear whether these are contemporary with the ditch fill or later contaminants. Charcoal/charred wood fragments are present within all three assemblages, but other macrofossils are scarce.

The black porous residues, which are present within all three samples, are all thought to be bi-products of the combustion of coal, small pieces of which are also recorded. Such remains are often seen where night soil was spread on the land during the later Medieval and post-Medieval periods, or where steam implements were used during the early modern era.

Shells of terrestrial and marsh/freshwater slum molluscs are present at a low density within all three assemblages. As most specimens retain delicate surface structuring, it is thought most likely that all are intrusive within the feature fills.

Conclusions and recommendations for further work

In summary, anthropogenic remains, in the form of charred grains and weed seeds, are sparse within these assemblages, and it is thought most likely that all are derived from scattered refuse of unknown origin. All three features would appear to have undergone a certain degree of post-depositional disturbance and/or bioturbation resulting in the incorporation of intrusive materials including coal, de-watered plant materials and mollusc shells.

Although the current assemblages are limited in composition, they do illustrate that

charred plant remains are present within the archaeological horizon in this area of Willingham. Therefore, if further interventions are planned, it is recommended that additional plant macrofossil samples of 20 40 litres in volume are taken from all well-sealed and dated contexts recorded during excavation. Specific advice about future sampling strategies for the area can be given if required.

References

Kerney, M.P. and *A., (1979). 'Field Guide to the Land Snails of Britain and North-west Europe'*. Collins Cameron, R.A.D.

Macan, T.T., (1977). Ô*British Fresh- and Brackish-Water Gastropods: A Key'.* Freshwater Biological Association Scientific Publication No. **13.**

Stace. C., (1997). Ô*New Flora of the British Isles'*. 2nd edition. Cambridge University Press.

Sample No.	**1**	**2**	**3**
Context No.	**26**	**68**	**24**
Feature No.	**27**	**69**	
Feature type	**Ditch**	**Ditch**	**Ditch**
Trench No.	**12**	**12**	**7**
Cereals			
Triticum sp. (grains)	x	x	
Cereal indet. (grains)	xfg		xfg
Herbs			
Small Poaceae indet.	x		
Tree/shrub macrofossils			
Rubus sect. *Glandulosus* Wimmer & Grab		xw	
Sambucus nigra L.		xw	
Other plant macrofossils			
Charcoal <2mm	x	x	x
Charcoal >2mm		x	x
Waterlogged root/stem		xx	
Indet. moss fronds		xw	
Indet. seeds		xw	
Other remains			
Black porous 'cokey' material	xx	x	x
Bone	xx		x
Burnt/fired clay	x		
Small coal frags.	xx	x	x
Small mammal/amphibian bones	x		x
Waterlogged arthropods		x	
Mollusc shells			
Woodland/shade loving species			
Zonitidae indet.			x
Open country species			
Vallonia sp.	x	x	x
V. costata	x	x	x
V. excentrica	xcf		
Catholic species			
Trichia hispida group	x	x	x
Marsh/ freshwater slum species			
Anisus leucostoma	x		
Lymnaea sp.	x	xx	x
L. truncatula		x	
Sample volume (litres)	**20**	**21**	**20**
Volume of flot (litres)	**<0.1**	**<0.1**	**<0.1**
% flot sorted	**100%**	**100%**	**100%**

Key to Table

x=1 10specimens xx=11 50specimens fg = fragment w = de-watered cf = compare

The small finds

By M rit Gaimster

Four metal objects were retrieved from the excavations, all collected by metal detector; they are listed in the table below. A complete copper-alloy buckle with lipped frame and narrowed offset bar is of a well-known late Medieval form (sf 1; Griffiths *et al.* 2007, 88 and fig. 2.5.1 type 4; cf. Egan and Pritchard 1991, 70 and fig. 42 nos 279□83). Possibly late Medieval is also a decoratively shaped pendant of stamped copper-alloy sheet (sf 2). Remaining edges suggest a trilobe shape with a broad neck at the top which still retains part of a suspension hole. The pendant is decorated with lines of small punched circles along the edges, with four larger circles and the interjection of the lobes; at the centre is a rosette of five small punched circles. The decoration suggests a possible late Medieval date, with parallels in decorated horse-harness pendants with backgrounds filled with small punched circles (cf. Griffiths 1995, fig. 47 nos 53 and 56). Medieval harness pendants, however, tend to have far sturdier necks with the suspension hole parallel to the face of the pendant so the pendant from Willingham may have had a different function. The folded part of a lead sheet (sf 4) may be the remnant of a rolled fishing weight or net sinker, known to have been used during the Middle Ages (Steane and Foreman 1991, 96□97). A copper-alloy disc, finally, is stamped with three pairs of letters or initials, IMÕ/ ?ÕPÕ/ ÔMÕ one pair above the other (sf 3). The disc, possibly a heavily worn coin, is likely to be post-Medieval, and may represent some form of impromptu token.

Significance and recommendations for further work

Metal and small finds form an integral component of the material recovered during excavation and should, where relevant, be included in any further publication of the site. The four metal finds from Willingham are particularly interesting with at least one object relating to Medieval settlement on or near the site. For the purpose of publication further identification should be sought for the possible late Medieval harness pendant; parallels for the Post-Medieval token should also be explored. Two of the objects, the copper-alloy pendant and the stamped token, should be x-rayed to facilitate full identification.

References

Egan, G. and Pritchard, F. (1991). Ô*Dress Accessories c.1150 – c.1450'*. Medieval finds from excavations in London: 3. HMSO London.

Griffiths, N. (1995). Ô*Harness pendants and associated fittings',* pg. 61-71 in J. Clark, Ô*The Medieval Horse and its Equipment'*, Medieval Finds from Excavations in London 5, London HSMO.

Griffiths, D., Philpott, R. A. and Egan, G., (2007). Ô*Meols. The Archaeology of the North Wirral Coast.*Õ

'Discoveries and observations in the 19th and 20th centuries,with a catalogue of collections'. Oxford University School of Archaeology: Monograph 68. Oxford.

Steane, J. M. and Foreman, M. (1991). Ô*The archaeology of Medieval fishing tackle'*, pg. 88-101, in G. L. Good, R. H. Jones and M. W. Ponsford (eds), *Waterfront Archaeology*, CBA Research Report 74, London.

Assessment of animal bone from an archaeological evaluation at land south of Brick Hills, Willingham, Cambridgeshire CB24 5JH (WILBH14)

Kevin Rielly, July 2014

Introduction

Willingham is a small village just north of Cambridge. Excavations situated just south of the Brick Hills estate, in the northern part of the village provided some evidence for Iron Age and Medieval occupation prior to extensive modern stratigraphy dated to the 20th century. All of the bones, collected by hand, were taken from these upper fills/deposits.

Methodology

The bone was recorded to species/taxonomic category where possible and to size class in the case of unidentifiable bones such as ribs, fragments of longbone shaft and the majority of vertebra fragments. Recording follows the established techniques whereby details of the element, species, bone portion, state of fusion, wear of the dentition, anatomical measurements and taphonomic including natural and anthropogenic modifications to the bone were registered.

Description of faunal assemblage

The site provided a grand total of 163 hand collected animal bones, these derived from a variety of layers and fills (see Table 1), all essentially dated to the 20th century. This collection was well preserved and there was no indication of gross fragmentation.

Feature:	T	DB	TB	LC	P/LC	LC	TB
Trench:	all	7	16	32	54	65	72
Species							
Cattle	3				4		
Dog		54			25		
Cattle-size	2		1		15		
Equid					2	1	
Sheep/Goat	1				1		
Sheep-size				2			
Pig					2		50
Grand Total	6	54	1	2	49	1	50

Table 1. Species representation by feature and trench, where T is topsoil, DB is dog burial, P/LC is pit/linear cut and TB is tree bowl.

A notably large proportion of the site assemblage was provided by the remains of three partial articulations (see Table 2), including that of an adult dog (noted as Ôdog burialÕ in Table 1), comprising 54 bones; plus a juvenile dog from pit/linear cut [54] and the remains of an adult pig from tree bowl [72] with 25 and 50 bones respectively. The more complete dog skeleton provided a humerus with a greatest length of 117.3mm, which following Harcourt (1974) translates to a shoulder height of 375.8mm. This corresponds to a medium-sized dog, equivalent to a modern beagle. It is not possible to assess the size of the juvenile dog, however, the pig is clearly quite large. A scapula length measurement of 230.5mm translates to a shoulder height of 875.9mm (after von den Driesch and Boessneck 1974). The size of this animal is clearly suggestive of a modern breed or at least dating from at least the 19th century (see Rixson 2000, 220-1). Several of the ribs belonging to this skeleton as

well as the proximal scapula showed a degree of weathering, indicating that theses bones had been left in the open air for some time prior to burial. It can be surmised from the articulation of the bones that this animal had not been eaten with disease providing the most likely explanation. However, it can perhaps be assumed that the carcass had been left in the open or at least poorly buried, allowing for dismemberment by scavengers, thus providing the conditions for the aforementioned weathering of the bones, prior to their eventual burial.

Species	Context	Feature	Description
Pig	71	TB [72]	A large part of an adult individual comprising the R scapula, 15 vertebrae (1 cervical and 14 thoracics) and 21 rib proximal ends (12 complete) plus 10 distal rib fragments.
Dog	7	DB	An adult skeleton with the L/R humerus, L radius and ulna, L tibia, R metatarsal 2 to 5, plus several ribs and vertebrae.
Dog	53	P/LC [54]	A partial juvenile skeleton, with the R maxilla, L/R mandibles, atlas and one cervical vertebra, L scapula, L humerus, L radius, L ulna, R pelvis, R tibia, L calcaneus and L astragalus, plus an assortment of metapodials (5) and some ribs.

Table 2. Description of skeletons/articulations

The remaining bones include a small collection of cattle, sheep/goat and equid bones, the former represented by a variety of parts, sheep by a mandible and a humerus and equid by two pelves and a third phalange. Both of the equid pelves were found within the pit/linear cut [54] and could possibly represent a pair from an adult individual.

Conclusion and recommendations for further work

This site provided a relatively large collection of well dated and well preserved bones. There are clearly points of interest, especially concerning the large pig skeleton and the dog burials. Information is undoubtedly available concerning the types of such animals being used during the later occupation of this area. It is unfortunate that there were no earlier collections; however, the presence of pre-20th century deposits suggests the possibility of finding such bones following more extensive excavation.

References

Driesch, A, von den and Boessneck, J A, (1974). *'Kritische Anmerkungen zur Widerristhöhenberechnung aus Längenmaßen vor- und frühgeschichtlicher Tierknochen',* Saugetierkundliche Mitteilungen 22, pg. 325-348

Harcourt, R A, (1974) *'The dog in prehistoric and early historic Britain'*. J Archaeol Science 1, pg. 151-75

Rixson, D, (2000). *'The History of Meat Trading',* Nottingham University Press

WILBH14 notes

All weights in grammes.

Context	Samp	Phase	Cattle	O/C	Pig	Comments
1	7		424	18		TR 2. 3 cattle bones, all mps
7						An adult dog skelly with l/r hum, l rad+uln,l tib, r mt2-5, plus several ribs and vertebrae.
11						A csz fragment in poor condition
30						2 ssz ribs
51						Large part of an equid pelvis
53			133	25	25	TR 9: Another partial dog skeleton, this one juvenile, with r max, l/r mand, atlas and one cev, l scp, l hum, l rad, l uln, r pel, r tib, l cal, and l ast and an assortment of mtp (5), plus some ribs.
64						Equid 3rd phalange
71					998	A large part of an adult pig skeleton comprising r scap, 1 cev, last cev or 1st thor, 14 thor (clearly a full compliment) and 21 prox ribs (12 complete) plus 10 distal rib fragments. This is a large animal, ?post-Medieval and certainly fully adult. The scapula allows a length measurement of 230.5mm which translates as a shoulder height of 875.9mm. How big is this? Slight abrasion to several ribs and vertebrae plus abraded proximal end scapula. Fusion of vertebrae differs from unfused cev to just fusing to fully fused by the end of the thoracic column.

APPENDIX 8: Archaeological Brief

BRIEF FOR ARCHAEOLOGICAL EVALUATION Historic Environment Team

Site: Land South of Brickhills, Willingham

Planning Application: S/0733/11

Company: AES

Location: NGR TL 4077 7057

This design brief is only valid for six months after the date of issue. After this period the Historic Environment Team (HET) should be contacted. Any specifications resulting from this brief will only be considered for the same period. Please note that this document is written for archaeological project managers to facilitate the production of an archaeological specification of work; the term project manager is used to denote the archaeological project manager only.

The project manager is strongly advised to visit the site before completing their specification, as there may be implications for accurately costing the project. The project manager must consult the Cambridgeshire Historic Environment Record (CHER) as part of the evaluation. Any response to this brief should follow IfA Standard and Guidance for Archaeological Field Evaluations, 2008.

NO FIELDWORK MAY COMMENCE UNTIL WRITTEN APPROVAL OF A SPECIFICATION HAS BEEN ISSUED BY THE HISTORIC ENVIRONMENT TEAM

1.0 Site Description

1.1 The site is located in the historic village of Willingham.

1.2 The site is located in the Medieval core of the village, approximately 220m east of the Medieval parish church of St Mary and All Saints. Archaeological investigations to the south have revealed extensive evidence for the Saxon and Medieval development of the settlement (HER ECB1114, ECB2653). There is also evidence for Roman activity to the north (HER ECB2308).

1.3 Detailed archaeological evidence and references for these and other sites is contained in the HER search attached to this brief. Please complete and return the licence attached to the search data provided with this brief to obtain the GIS files from the HER. Reproduction of spatial data by any other means is not recommended.

2.0 The nature of the development and archaeological requirements

2.1 The development is for the erection of 19 dwellings.

2.2 Due to the high archaeological potential of the site, a condition has been placed on planning consent requiring a scheme of archaeological work to be undertaken at the site. The first phase of this work will be an archaeological evaluation to assess the nature and potential of the site. This brief deals solely with the evaluation phase.

2.3 The evaluation should include a suitable level of documentary research, including further consultation with information held in the CHER as necessary, to set the results in their geographical, topographical, archaeological and historical context.

2.4 The required scheme shall include a field evaluation of the application area.

2.5 A fieldwalking or test pitting programme should be included in the evaluation scheme to characterise the artefact contents of the ploughsoil and any lower soil horizons. This may assist in the final location of trenches and also provide indication of the condition of underlying archaeological remains.

2.6 The evaluation should include a programme of linear trial trenching and/or test-pitting to adequately sample the threatened available area and will excavate sufficient archaeological features to conform to section 3.0 below.

2.7 The use of metal detectors on site to aid the recovery of artefacts is required. The detector should not be set to discriminate against iron.

2.8 All features must be investigated and recorded unless otherwise agreed with HET. Investigation slots through all linear features must be at least 1m in width. Discrete features must be half-sectioned or excavated in quadrants where they are large or found to be deep. The use of boreholes is recommended to gain information from very deep deposits.

2.9 The evaluation results will be used to determine the need, design and extent of any mitigation works that may be required.

2.10 The mitigation of construction impacts to archaeological remains that are identified during this evaluation will be outlined in a further Design Brief.

3.0 Objectives

3.1 The evaluation should aim to determine, the location, extent, date, character, condition, significance and quality of any surviving archaeological remains liable to be threatened by the proposed development. An adequate representative sample of all areas where archaeological remains are potentially threatened should be studied. This office will be particularly concerned with the amount of truncation to buried deposits, the presence or absence of a palaeosol or 'B' horizon, the preservation of deposits within negative features, site formation processes generally. To these ends buried soils and associated deposits should be inspected on site by a suitably qualified soil scientist and his/her advice sought on the whether soil micromorphological study or other analytical techniques will enhance understanding of the site. If so, suitable samples should be taken from relevant deposits/features and assessed.

3.2 Aerial photographic assessment is not required for this site.

3.3 Geophysical survey is not required for this site.

3.4 The assessment of the environmental potential of the site through examination of suitable deposits must also be arranged with a suitably qualified specialist. Attention should be paid:

- to the retrieval of charred plant macrofossils and land molluscs from former dry-land palaeosols and cut features, and to soil pollen analysis;
- to the retrieval of plant macrofossils, insect, molluscs and pollen from waterlogged deposits located.
- provision for the absolute dating of critical contacts should be made: *eg* the basal contacts of peats over former dryland surfaces; distinct landuse or landmark change in urban contexts

The assessment of environmental potential should consider the guidelines set out in the following documents:

- English Heritage, 2011, *Environmental Archaeology: A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation (second edition).* - Association for Environmental Archaeology, 1995*, Environmental archaeology and archaeological evaluations. Recommendations concerning the environmental archaeology component of archaeological evaluations in England.* Working Papers of the Association for Environmental Archaeology 2, 8 ff. York: Association for Environmental Archaeology;

- Dobney, K., Hall, A., Kenward, H. and Milles, A., 1992*, A working classification of sample types for environmental archaeology.* Circaea 9.1 (1992 for 1991), pg. 24-26;

- Murphy, P.L. and Wiltshire, P.E.J., 1994, *A guide to sampling archaeological deposits for environmental analysis*.

The Project Manager is also advised to consult the following guidance documents in order to provide an adequate strategy for the excavation, field treatment and conservation of any delicate organic materials: English Heritage, 2012, *Waterlogged Organic Artefacts: Guidelines on Their Recovery, Analysis and Conservation*; English Heritage, 2008, *Investigative Conservation: Guidance on How the Detailed Examination of Artefacts from Archaeological Sites Can Shed Light on Their Manufacture and Use*; English Heritage, 2010, *Waterlogged Wood: Guidelines on the Recovery, Sampling, Conservation and Curation of Waterlogged Wood.*
The project manager must ensure that the results of palaeoenvironmental investigation or industrial residue assessments/analyses are included in a full report and sent to the English Heritage Science Advisor.

3.5 The evaluation should also carefully consider any artefact or economic information, in particular the survival of faunal evidence, and provide an assessment of the viability for further study of such information. It will be particularly important to provide an indication of the relative importance of such material for any subsequent decision-making regarding mitigation strategies. Advice is to be sought from a suitably qualified specialist in Faunal Remains on the potential of sites for producing bones of fish and small mammals. If there is potential, a sieving programme is to be undertaken. Faunal remains collected by hand and sieving are to be assessed and analysed if appropriate.

3.6 The evaluation should include a comprehensive, illustrated assessment of the regional context within which the archaeological evidence rests and should aim to highlight any relevant research issues within a national and regional research framework.

3.7 The evaluation should provide a predictive model of surviving archaeological remains detailing zones of relative importance against known development proposals. An impact assessment should also be provided.

3.8 If any of these areas of analysis are not considered appropriate the report will detail justification for their exclusion.

4.0 Requirements

4.1 The evaluation must be undertaken by an archaeological team of recognised competence, fully experienced in work of this character and formally acknowledged by the HET officers, advisors to the Local Planning Authority (LPA). Inclusion in The Institute for ArchaeologistsÕ Register of Archaeological Organisations is recommended. Details, including the name, qualifications and experience, of the site director and all other key project personnel (including specialist staff) will be communicated to HET as part of a specification of works to be submitted by the archaeological contractor undertaking the programme. The specification must conform to the guidance in English HeritageÕs MoRPHE publication (*Management of Research Projects in the Historic Environment. The MoRPHE Project Manager's Guide.* EH 2006). This specification must:

1. be supported by a research design which sets out the site specific objectives of the archaeological works.

2. detail the proposed works as precisely as is reasonably possible, indicating clearly on plan their location and extent.

3. provide a timetable for the proposed works including a ÒsafetyÓ margin in the event of bad weather or any other unforeseen circumstances that may effect this timetabling.

4.2 Care must be taken in the siting of offices and other support structures in order to minimise impact on the environment. Extreme care must also be taken in the structure and maintenance

of spoil heaps for the same reasons and to facilitate a high quality reinstatement. This is particularly important in relation to pastureland.

4.3 The archaeological project manager must satisfy themselves that all constraints to groundworks have been identified, including the siting of live services, Tree Preservation Orders and public footpaths. The HET officers bear no responsibility for the inclusion or exclusion of such information within this brief.

4.4 Care must be taken in dealing with human remains and the appropriate guidance issued by the Ministry of Justice should be followed. Environmental health regulations must also be followed. The Cambridgeshire Historic Environment Team and the local Coroner must be informed immediately upon discovery of human remains. If found during an evaluation, the human remains must be left *in situ*, covered and protected when discovered. No further investigation should normally be permitted beyond that necessary to establish the date, condition and character of the burial. If removal is essential an exhumation licence should be requested from the MoJ.

4.5 All aspects of the evaluation shall be conducted in accordance with the Institute for Archaeologists' *Code of Conduct*, the *Standard and Guidance for Archaeological Field Evaluations* (2008), and *Standards for Field Archaeology in the East of England* (EAA Occasional Paper 14). Reference should also be made to *Research and Archaeology Revisited: a revised framework for the East of England* (EAA Occ. Paper No 24, 2011) .

4.6 **Before commencing work the project manager must carry out a risk assessment and liase with the site owner, client and HET in ensuring that all potential risks are minimised. A copy of this must be given to HET before the commencement of works.**

4.7 Project Managers are reminded of the need to comply with the requirements of the Treasure Act 1996 (with subsequent amendments). Advice and guidance on compliance with Treasure Act issues can be obtained from the Cambridgeshire Historic Environment Team (CHET) office. Any finds that could be considered treasure under the terms of the Act made during the process of fieldwork should be **immediately** reported to the Finds Liaison Officer of the Portable Antiquities Scheme based in CHET, so that it is reported to the appropriate Coroner within 14 days of discovery in line with the Act1.

4.8 The site archive specification should conform to the guidelines in MoRPHE (EH 2006), eg section 2.5.3 and be deposited within the County Archaeology Store on completion of site analysis and any ensuing publication.

4.9 To assist with the curation of the projectõ archive, the Project Manager must contact the CHER office to obtain an **event number**. CHER will use this number as a unique identifier linking all physical and digital components of the archive. **The unique event number must be clearly indicated on any specification received for this project, on relevant ensuing reports and on the OASIS data collection form (see 4.11 below).**

4.10 Arrangements for the long term storage and deposition of all artefacts must be agreed with the landowner and CHER before the commencement of fieldwork. The Project Manager should consult document ref HER 2004/1 (available from our website2) regarding the requirements for the deposition of the archive, which must be deposited in the County Store on completion of post-excavation analysis and publication.

4.11 Cambridgeshire County Councilõ Historic Environment Team supports the national programme: Online Access to the Index of Archaeological Investigations (OASIS III) project and requires archaeological contractors working in Cambridgeshire to support this initiative.

1 Please see http://finds.org.uk/treasure for further information.
2 http://www.cambridgeshire.gov.uk/leisure/archaeology/archives/herstore.htm

In order that a record is made of all archaeological events within the county occurring through

the planning system, the archaeological contractor is required to input details of this project online at the ADS internet site3: The OASIS reference ID and Data Collection Form should be clearly presented in the relevant report. **Any report that does not contain this information will not be approved**.

4.12 An unbound hard copy of the report, clearly marked **DRAFT**, should be prepared and presented to HET within four weeks of the completion of site works (unless there are reasonable grounds for more time). This report must conform to the format contained within the document **HET Eval rev 06** dealing with the production of archaeological evaluation reports. Copies can be obtained from the address below. IfA *Standard and Guidance for Archaeological Field Evaluation* (2008) Annex 2, Report Contents, should be used.

4.13 Following acceptance, **one copy** of the approved report of the results should be submitted to the CHER. The approved report should also be uploaded to the OASIS database within **two weeks** of approval.

4.14 HET officers are responsible for monitoring all archaeological work within Cambridgeshire and will need to inspect site works at an appropriate time during the fieldwork, and review the progress of excavation reports and/or archive preparation. Further trenching or deposit testing may be a requirement of the site monitoring visit if unclear archaeological remains or geomorphological features present difficulties of interpretation, or to assist with the formulation of a mitigation strategy. Appropriate provision should be made for this eventuality. The project manager must inform HET in writing **at least one week in advance** of the proposed start date for the project.

4.15 Any changes to the specifications that the project manager may wish to make after approval by this office should be communicated directly to HET for approval.

4.16 HET should be kept regularly informed about developments both during the site works and subsequent post-excavation work.

4.17 The involvement of HET should be acknowledged in any report or publication generated by this project.

As part of our desire to provide a quality service to all our clients we would welcome any comments you may have on the content or presentation of this design brief. Please address them to the author at the address below.

Andy Thomas
Senior Archaeologist

Historic Environment Team
Box CC1008,
Shire Hall,
Castle Hill,
Cambridge CB3 0AP

3 http://ads.ahds.ac.uk/project/oasis

APPENDIX 9: AES OASIS Report Form **OASIS ID Number:** archaeol15-174915

PROJECT DETAILS					
Project Name:			Land off Brickhills: An Archaeological Evaluation		
Short Description:			*An archaeological evaluation of a 5400 square metre area on former gardens/farmland was undertaken between 21 May and 2 June 2014 in response to a planning requirement set by Andy Thomas, Senior Archaeologist prior to the development of the site nineteen dwellings with associated services and access (planning ref:* S/0733/11*).* *Fifteen linear trenches, totaling 160m in length and representing a 5% sample of the total Proposed Development Area (PDA) were opened using a 20 tonne 360 degree tracked excavator with toothless ditching bucket under archaeological supervision.* *A further 17 test-pits (1.8m x 1m) were opened across the site on a ten metre grid to characterize the artefact content of the topsoil. All exposed trench bases and spoil were scanned by an experienced metal detectorist.* *The trenches were manually cleaned by hand and planned using a Leica 1200 GPS Smart Rover (GPS).* *The archaeological survey revealed 25 features. Two areas of archaeological significance were recorded (figure 2, areas A and B).* *Features in trenches 7 and 12 revealed linears containing Mid Iron Age pottery and a largely complete 15th century transitional pot (figure 2, area A). The remainder of the trenches did not produce any features of antiquity, only those relating to the sites history as gardens and allotments.* *A linear feature was recorded aligned east west parallel to Church Street in Trenches 1, 5 & 6 (figure 2, Area B). It is suggested that this feature forms the boundary of Medieval burgage plots. Metal Detecting recovered a late Medieval buckle and a decorative bronze pendent.*		
Project Dates:	Start	21st May 2014	End	2nd June 2014	
Previous work:	No		Future work:	No	
Associated Project Reference Codes:			WILBH14		
Type of Project:			Archaeological Trenched Evaluation		
Site Status:			None		
Current land use: (list all that apply)			Farmland/allotments		
Planned development:			Residential		
Monument types/period (list all that apply)			None		
Significant finds: Artefact type / period (List all that apply)			None		
PROJECT LOCATION					
County:	Cambridgeshire		Parish:	Willingham	
HER for region:			Cambridgeshire		
Site address: (including postcode)			Land South of Brickhills, Willingham, CB24 5JH		
Study area (sq m or ha)			5400 square metres		
National Grid Reference	Easting (6 figures)	TL 4077	Northing (6 figures)	7057	
Height OD	Max OD		Min OD		

PROJECT ORIGINATORS		
Organisation:	Archaeology, Excavation & Surveys	
Project brief originator:	Andy Thomas	
Project design originator:	Dawn Keen	
Sponsor or funding body:	Developer	
ARCHIVES	**Location and accession number**	**Content (eg. Pottery, animal bone, database, context sheet etc)**
Physical		Pottery, Faunal, Metalwork
Paper		Evaluation
Digital	AES	Report, illustrations
BIBLIOGRAPHY		
Full title:	Land South of Brickhills, Willingham Cambridgeshire, An Archaeological Trenched Evaluation	
Report No.:	AES/2014/9	
Series title and volume:		
Page numbers:	1 - 74	
Author(s)	Dawn Keen	