## Land West of Pine Dell and Ashcroft, London Road, Capel St Mary, Suffolk

Planning application: B/14/00100/OUT/LJB

HER Ref: CSM 045

# Archaeological Evaluation and Excavation Report and Post Excavation Assessment

(© John Newman BA MCIFA, 2 Pearsons Place, Henley, Ipswich, IP6 0RA) (September 2017)

(Tel: 01473 832896 Email: johnnewman2@btinternet.com)

#### **Site details for HER**

Name: Land west Pine Dell and Ashcroft, London Road, Capel St Mary, Suffolk

Clients: Capel Properties Ltd (evaluation) and Foregain Ltd (excavation & report)

Planning authority: Babergh DC

Planning application ref: B/14/00100/OUT/LJB

Development: Erection of 24 dwellings

Dates of fieldwork: 28 & 29 June, 2016 (evaluation) and 27 & 28 March, 2017

(excavation)

Event ref: ESF 24190

HER ref: CSM 045

OASIS ref: johnnewm1-255657

Grid ref: TM 0984 3842

Site area: 4000m<sup>2</sup>

Suffolk CC HER search invoice ref: 9205685

Recent land use: Rough ground/paddock

#### **Contents**

#### Summary

- Introduction & background
- 2. Evaluation methodology
- 3. Evaluation results

Table 1: Trench details

- 4. Excavation methodology & results
- 5. The Pottery and associated kiln
- 6. Conclusion & Post excavation assessment

Fig. 1: Site location

Fig. 2: Location of evaluation trenches

Fig.3: Trenches 1 & 3 plans and sections (Sue Holden)

Fig. 4: Excavation plan and section of kiln 0005 (Sue Holden)

#### List of appendices

Appendix I- Selected images

Appendix II- Written scheme for evaluation & excavation

Appendix III- Context list

Appendix IV- The Pottery and kiln assessment (S Benfield)

Appendix V- Assessment of the charred plant macrofossils (V Fryer)

Appendix VI- OASIS data collection form

Appendix VII- Task list and timetable for analysis, reporting and archiving

Summary: Capel St Mary, land west of Pine Dell and Ashcroft, London Road (CSM 045, TM 0984 3842) evaluation trenching for a residential development adjacent to the Old London Road, which is on the line of major Roman period road, revealed a double pottery kiln of mid-late 1<sup>st</sup> century AD date which produced mainly oxidised, primarily buff coloured, wares with a large proportion being flagons, beakers and jars. In this case only the base of the double kiln could be recorded due to previous ground truncation. In addition small ditches of early Roman date and Post medieval date were also recorded but the site did not produce any other evidence of significant past activity (John Newman Archaeological Services for Capel Properties Ltd & Foregain Ltd).

#### 1. Introduction & background

- 1.1 Shallish Associates Ltd on behalf of their client Capel Properties Ltd commissioned John Newman Archaeological Services (JNAS) to undertake the archaeological evaluation works for a residential development on land to the west of Pine Dell and Ashcroft, London Road, Caple St Mary (see Fig. 1) that has been given planning consent under application B/14/00100/OUT/LJB. The evaluation requirements were set by Mrs R Abraham of the Suffolk CC Archaeological Service (SCCAS) with the aim of gaining a representative sample by trial trenching of the development area concerned. The Written Scheme of Investigation for the archaeological evaluation (see Appendix II) was subsequently prepared by JNAS in order to gain a conditional discharge and allow the trenching to go ahead before any other ground works are undertaken. One evaluation trench revealed an oven/kiln type feature of Roman date and therefore it was agreed with SCCAS that this area of the site should be subject to more detailed investigation with a small scale excavation when the main programme of works was started. This latter work was funded by Foregain Ltd who had taken over the development and this report brings together the evaluation results, the detail of the later excavation and includes a postexcavation assessment which considers the overall results and recommends where further dissemination of the site findings should be published.
- 1.2 Capel St Mary lies to the south of Ipswich and is now a large village having seen extensive development since the middle of the 20th century around what was originally a settlement strung out along a main street with other, scattered cottages and farms in the parish. What was the main Roman road (HER CSM 014) from London to the East Anglia cuts across the eastern part of the parish and is now largely under the historic line of the A 12/London Road which is 50m to the east of this development site. Evidence for a substantial Roman period site (HER CSM 002), which has been interpreted as a villa complex, has been recorded around Windmill Hill to the west of the parish church and on the eastern side of a small stream since the mid-20<sup>th</sup> century with associated Roman period cremation burials (HER CSM 010 & 013) having been found near the church. In addition presumably peripheral Roman period activity near the Windmill Hill villa site has been examined at The Drift (HER CSM 027) some 1600m south-west of the Pine Dell site and more recently an archaeological investigation recorded deposits of early Roman date at Days Road (HER CSM 030) 1000m to the east of the Pine Dell site indicative of settlement type activity. Finally a recent archaeological evaluation (HER CSM 047) of the area immediately to the west of the Pine Dell site did not reveal any Roman period features though a small number of Roman pottery sherds were recovered as residual finds. This development site at Pine Dell is located 1200m east of the medieval core of the village around the parish church and 1500m east of Windmill Hill (see Fig. 1). The site will have a new access road linking it to the London Road.
- 1.3 Topographically the planned development site on land adjacent to Pine Dell is flat at 46m OD and the British Geological Survey describes the drift deposits as

being part of the Lowestoft Formation formed of heavy chalky till and this site investigation exposed a pale to mid brown chalky clay with flints. At the time of the evaluation the site was rough grassland and has been used relatively recently as dog kennels site.

1.3 Archaeological interest in this development was generated by its proximity to the line of the main Roman period road (Margary 3c) linking Colchester and London to the south-east with the eastern and central parts of East Anglia with this road ultimately continuing north on the line of the A 140 towards the major Roman town at Caistor St Edmund to the south of Norwich. With this proximity to a major Roman period road line evidence for settlement and burials could therefore be anticipated as has been recorded 2000m to the south-west around Lattinford Hill and bridge along this road line (HER CSM 003, 004, 005 & 007).

#### 2. Evaluation methodology

- 2.1 The development area was trenched to an agreed plan (see Fig. 2). The trenching was carried out using a 360 equipped with a 1500mm flat bucket which was under archaeological supervision at all times and any indistinct areas were hand cleaned as necessary to improve clarity with all of the trenches being 1.80m wide.
- 2.2 The sides and base of trenches and the upcast spoil were examined visually and scanned with a metal detector for any finds as the evaluation progressed. Site visibility for features and finds is considered to have been good throughout the evaluation which was undertaken under dry weather conditions. At the end of the evaluation the location of the trenches was plotted from nearby mapped features and as the works progressed a full photographic record in digital format (see Appendix I) was taken.

#### 3. Evaluation Results

3.1 The relevant details for the evaluation trenches are summarised in the table below (see also Figs. 2 & 3 & Appendices I – Images & III- Context list):

Trench	Orientation	Length (m)	Topsoil depth (mm)	Subsoil depth (mm)	Drift geology	Archaeological/natural features & finds
1	Northwest- southeast	30	300	300 of mid brown clay subsoil	Pale to mid brown clay with flints	Few stray finds (0001) and one ditch (0002) 900mm wide x 300mm deep, RB sherds from fill (0003)
2	East-west	30	300	300 as T1	As T1	No finds or features
3	Northeast- southwest	20	300	300 as T1	As T1	No features except a recent field drain and no finds
4	Northeast- southwest	30	300	300 as T1	As T1	No features or finds
5	North-south	30	300	200 as T1	As T1	No features except a field drain of recent date and no finds

6	North-south	30	300	400 as T1	As T1	No features or finds
7	East-west	30	300	300 as T1	As T1	One area of heavily burnt clay fragments (0005) with occasional RB sherds 11m from western end, left in situ for later investigation
8	North-south	30	300	300 as T1	As T1	One E-W ditch (0017) 700mm wide x 200mm deep with one peg tile fragment in the fill (00018)
		230 (414m²)	300	200-400		One small Roman ditch (0002) in T1 and a Pmed ditch(0017) in T8 plus a feature with evidence of heavy burning (0005) in T7, very few stray finds of any date

Table 1: Trench details

- 3.2 As outlined in table 1 above the trenches in general varied between a depth of 500mm and 700mm with the topsoil being a uniform 300mm in depth and the mid brown clay subsoil varying between 200mm and 400mm across what is a flat site. Below the subsoil the natural glaciofluvial deposit proved to be a consistent stiff pale to mid brown clay with flints across the site cut by a few field drains of recent date.
- 3.3 The 230m of evaluation trenching revealed three features with one being a 900mm wide and 300mm deep north-east orientated ditch (0002) in trench 1 and another being a 700mm wide and 200mm deep east-west ditch (0017) in trench 8. These were sampled with standard 1000mm wide section slots and one (0002) was sampled for palaeo-environmental material as it was clearly of an early (Roman period) date while the other one (0017) was not as finds indicated a Post medieval date. The remaining feature revealed was an extensive spread (0005) of heavily burnt clay fragments in trench 7 which was revealed at the base of the subsoil. As this feature extended beyond the width of the trench it was agreed with SCCAS that this feature, which produced a few Roman period pottery sherds from its surface, should be fully revealed, investigated and recorded when the main site construction works started and the complete extent of the feature could be exposed.
- 3.4 While Roman period features were revealed in trenches 1 and 7 a thorough metal detector search of the trenches, upcast spoil and areas between the trenches only recovered a few non-ferrous finds of recent date. In addition very few stray ceramic finds were recovered from the upcast spoil.

#### 4. Excavation methodology and results

4.1 When the main development stage of works started at the site a 360 machine with a flat 1500mm wide flat bucket stripped the area over and around the area of burnt clay fragments (0005) that had been revealed in trench 7 of the evaluation. This soil stripping was undertaken under archaeological supervision and below the 600mm depth of top and subsoil removed in the evaluation trench a further 200mm-

250mm of subsoil covered what was clearly a kiln or oven with two heavily burnt components and adjacent likely stoke or raking out pits containing large amounts of carbonised material. Once revealed this kiln/oven complex was cleaned by hand and then sectioned on its 8m long axis with the section then being recorded and finds being separated from each component. Following this stage the complete complex was fully excavated and recorded in plan and photographed with paleoenvironmental samples being taken from each principal recorded context. In addition an area extending up to 4m to 5m around this complex was stripped under supervision but no further archaeological features were revealed.

- 4.2 The kiln/oven complex (0005- see Appendix I & Appendix III) as indicated above was nearly 8m long (see Fig. 4) on a north-east to south-west axis and close to 1.80m wide at certain points. The complex (0005) from its south-western end comprised a round bottomed pit (0006) that was 1100mm by 1100mm and 240mm deep which contained a dark brown clay fill (0007) containing a lot of charcoal and fire-reddened clay fragments and this opened on its north-eastern side into a 2800mm long (NE-SW) and 1360mm wide reddened and fire baked clay surface (0008) under 180mm of fill (0009) that contained more fire reddened clay fragments. The north-eastern end of this fire-baked surface entered another round bottomed pit (0011) that was 1000mm along the long axis of the complex, 1600mm wide and 270mm deep with another fill (0012) comprising dark brown clay with numerous charcoal and small baked clay fragments. On both internal sides of this pit (0011) small probable stake holes (0013 & 0016) were identified. These latter features were only 120mm wide with a similar depth. To the north-east of this central pit in the complex another fire reddened and baked clay surface (0014) was revealed with a similar size to the one (0008) to the south-west, however ground truncation at this point was greater and virtually no fill survived. Finally at the north-eastern end of the complex further ground truncation was evident and only the shadow of a probable pit type feature (0015) that had contained charcoal fragments was visible in the top of the underlying natural clay deposit.
- 4.3 Within the kiln/oven complex pottery sherds were recovered from contexts 0007, 0009, 0012 and 0014 with the majority coming from the three former fills covering the central and south-eastern parts of the complex (0005). In addition paleoenvironmental samples were taken from 0007, 0009 and 0012 (see Appendix V).

# 5. The Pottery and associated kiln (Including samples)

- 5.1 In total 128 sherds (wt. 2083g) of pottery were recovered from the evaluation and excavation of the kiln complex and the full assessment report on these finds plus an assessment of the complex by Stephen Benfield is included below as Appendix IV. All of the pottery recovered from the site is of Roman date.
- 5.2 In summary 5 sherds (wt. 36g) were stray finds recovered in the evaluation while a further 11 sherds (wt. 173g) came from the fill (0003) of the small ditch (0002)

identified in trench 1 on the northern side of the site. On the basis of these sherds this feature (0002) dates from the mid/late 1<sup>st</sup> to early 2<sup>nd</sup> century AD with a different make-up to the kiln complex.

5.3 The majority of the sherds recovered (112, wt. 1874g) came from the kiln/oven complex (0005) initially identified in trench 7. This pottery group (from 0007, 0009, 0012 & 0014) is identified as evidence for pottery production of early-mid 1<sup>st</sup> century AD date with most sherds being of oxidised, primarily buff coloured wares with other sherds of a more sandy/gritty fabric. Flagon and beakers forms dominate the group. The uniformity of the group plus some evidence of mis-firing and fragments of clay with a vitrified surface supports the evidence for pottery production and while the kiln complex is unusual it is not seen as being totally dissimilar to other known earlier Roman period recorded kilns lacking any central pedestal or other obvious support structure.

5.4 An assessment of the charred plant macrofossil and other remains by Val Fryer is included as Appendix V below. In summary this report confirms the evidence for high temperature combustion as might be expected from a kiln using wood and charcoal as the primary fuels with other waste used as tinder or kindling. In addition it is noted that the complex appears to have been kept clean. The assemblage from the small ditch (0002) as with the pottery is different confirming that this feature and the kiln complex (0005) should be seen as separate phases/areas of past activity.

#### 6. Conclusion and Post-excavation assessment

6.1 To put this site into its local Roman period context a search was commissioned from the County HER. With reference to HER records with information relating to the Roman period within 1500m of the site as outlined in section 1.2 above it is some 1500m east of a recorded wealthy Roman period villa complex (HER CSM 002- see Fig. 1) at Windmill Hill where a small area was investigated recently (HER CSM 041). In addition past records indicate the former presence of a Roman period kiln at the villa site though it was largely destroyed when seen in building work and whether it was a pottery or tile kiln is uncertain. The Roman period evidence for activity close to the Windmill Hill villa is further enhanced by recorded evidence for excavated settlement type activity at The Drift (HER CSM 027) and cremation burials recorded close to the parish church (HER CSM 010 & CSM 013). Within the parish and 1000m to the west of the kiln site at Pine Dell evidence for early Roman period settlement has been recorded during the investigation of a multi-period site at Days Road (HER CSM 030). No other evidence for Roman period activity is recorded in the search area except a small artefact scatter (HER CSM 018) to the south though only limited other formal archaeological investigation work has been carried out. However it can be noted that a geophysical survey (HER CSM 047) has been carried out over the area immediately to the west of this site at Pine Dell with negative results though this should not be taken as definitive evidence for a lack of past activity in this area as a later trench evaluation did not record any features of Roman period date but did recover 4 pottery sherds (wt. 64g) of 'early Roman date' (Doherty, 2016, 21) as residual finds in the southern part of the area investigated and therefore relatively close to the kiln complex revealed at Pine Dell. Finally this site at Pine Dell is 50m west of the line of the main Roman period 'Pye Road' (HER CSM 014- Margary 3c) that linked Colchester and London to the south to the area of central East Anglia and ultimately the only major Roman period town in Norfolk or Suffolk at Caistor St Edmund near Norwich. Historically this road line has survived over extensive lengths and now forms the old London Road running in front of Pine Dell and the adjacent houses.

6.2 The greater part of this site produced little evidence for past activity with one small ditch (0002) of earlier Roman date in trench 1 on its northern edge and a Post medieval ditch (0017) in trench 8. These can be interpreted as local field/plot boundaries in these respective periods. However the kiln complex (0005) of mid-late 1<sup>st</sup> century AD date recorded in the southern part of the site initially in trench 7 and then fully excavated and recorded is a significant feature. Pottery is of course a primary dating artefact in any period where it is made as the products will be also be found on other sites and evidence of industrial production is therefore a significant indicator of economic activity. In addition the form of this kiln structure adds another aspect to Roman period pottery production and would pay further research to find similar structures. In this case an interpretation that this is a structure comprising two twin flue kilns sharing a central stoking pit seems to be the most likely method of pottery manufacture.

6.3 It is therefore proposed that the archaeological significance of the kiln discovery and its associated pottery and macrofossil assemblage should be studied and analysed further and the information disseminated via a publication paper, with illustrations of the kiln complex and a representative number of pottery sherds, which will be submitted to the Journal of Roman Pottery Studies where it would be seen by the relevant specialists and a timetabled task list is included as Appendix VII below. A full summary will also be prepared for the Proceedings of the Suffolk Institute of Archaeology and History illustrated with the kiln plan and section. In addition this initial report will be disseminated via the County HER and the OASIS library of grey literature reports. The publication would bring the archaeological programme of works to a conclusion commensurate with the findings from this site as the kiln (0005) and its products that have been recorded should be seen as being of local and regional significance. Finally the completed publication report will be added to this report and submitted to the County HER along with the finds, samples, context sheets, photographs, plans, sections and any other relevant material as the final site archive.

6.4 To support the case for further analysis and publication of the kiln the revised regional research framework (Medlycott, 2011) notes:

- 6.4.1 Increased local published information on pottery production, including another 1<sup>st</sup> century kiln complex nearby at Wherstead, has increased information for dating and sourcing pottery groups (*ibid. 40*) denoting the archaeological importance of the publication of kiln sites and their products.
- 6.4.2 Evidence for the early Roman military influence in the area should be studied further as both the Wherstead kilns and this Capel St Mary example fall into the period of post-Boudican re-conquest and consolidation of the region as part of Roman Britain with flagon products, particularly in pale fabrics, being popular with the military (*ibid. 44*). Perhaps the apparent short lived use of these kiln sites should also be considered as this may well give evidence that the military largely departed the area by the later 1<sup>st</sup> century.
- 6.4.3 The importance of the study of evidence for manufacturing and industry particularly in the early Roman period (*ibid. 48*) is outlined.
- 6.4.4 The assessment of the plant macrofossil and other charred remains suggests that these residues could be studied to estimate the temperature range for the kiln complex operation. Further specialist advice has indicated that this is unlikely to be a fruitful area of analysis as too many variables have to be considered (Dana Challinor pers. comm.). However information relating to the types of wood used to fire the kilns and possible data relating to woodland management can be gained from the residues and therefore this study will form part of the overall further analysis and publication programme.

#### Ref:

Doherty, A	2016	'Prehistoric and Roman Pottery' in 'Archaeological Evaluation- Land to the east of Longfield Road, Capel St Mary, Suffolk,' K Clover, Archaeology South East report 20166471 (HER CSM 047)	
Medlycott, M	2011	'Research and Archaeology Revisited: A Revised Framework For The East Of England,' East Anglian Archaeology Occasional Paper 24	

Archive- to be deposited with the Suffolk CC Archaeological Service under the HER ref: CSM 045.

(Acknowledgements: JNAS is grateful to everyone on site in each phase of the works for their close cooperation, to Rachael Abraham of Suffolk CC for her close cooperation, useful comments and for providing relevant local site information, to Val and Robert Fryer for assessing and processing the samples, to Stephen Benfield for his specialist work on the pottery and kiln evidence and to Sue Holden for her specialist illustration work)

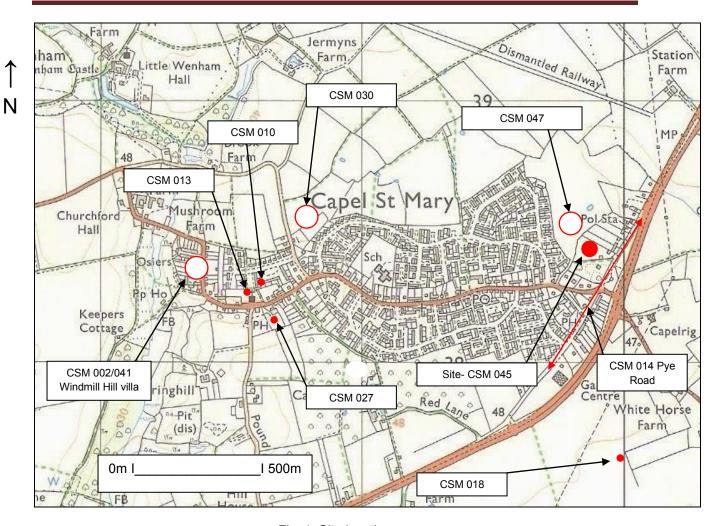
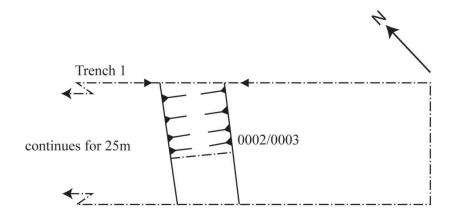
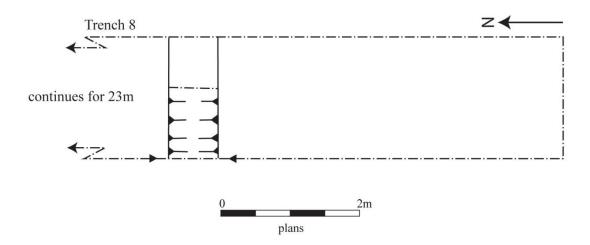


Fig. 1: Site location
(Ordnance Survey © Crown copyright 2006 All rights reserved Licence No 100049722)



Fig.2: Location of evaluation trenches
(light blue- planned footprint areas, red- ditch lines, green- area of kiln 0005)
(Ordnance Survey © Crown copyright 2017 All rights reserved Licence No 100049722)





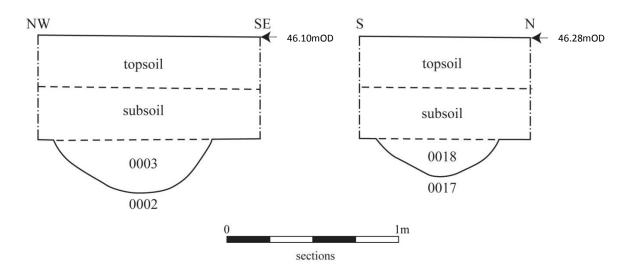


Fig. 3: Trench plans and sections.

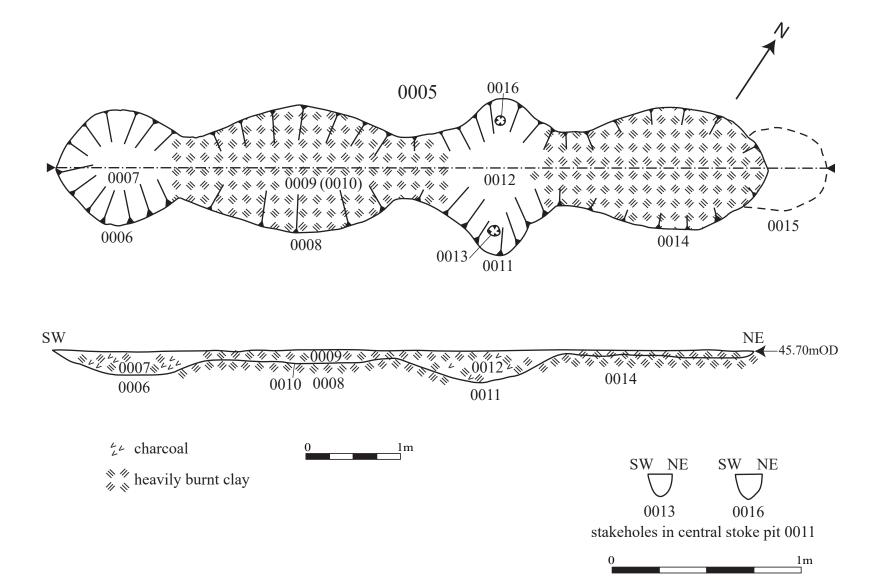


Fig. 4: Excavation plan and section of kiln 0005.

### Appendix I- Images



Trench 1 from southeast



Trench 1 ditch 0002 from south



Trench 2 from east



Trench 3 from north



Trench 4 from north



Trench 5 from north



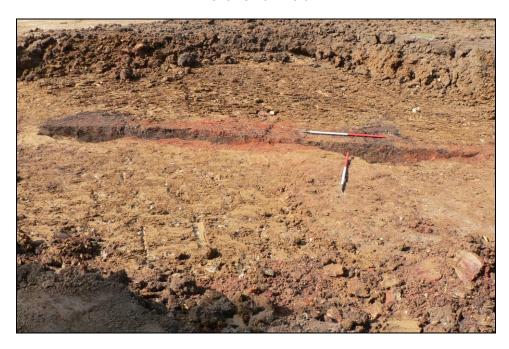
Trench 6 from south



Trench 7 kiln 0005 as exposed



Trench 8 from north



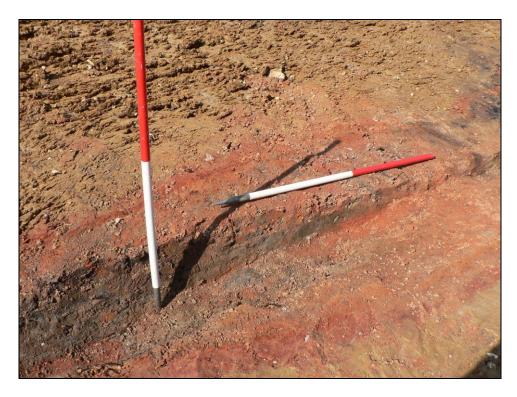
Kiln 0005 from east



Kiln 0005 from southwest



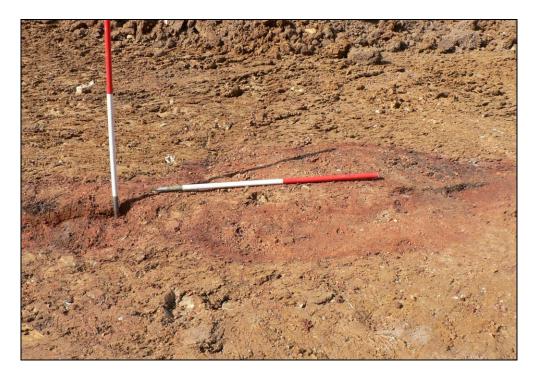
Kiln 0005 raking out pit 0006 at SW end



Kiln 0005 southern firing chamber 0008 from east



Kiln 0005 central raking out pit 0011 from east



Kiln 0005 northern firing chamber 0014 from NE

# Land west of Pine Dell and Ashcroft, London Road, Capel St Mary, Suffolk

## Written Scheme of Investigation for Archaeological Evaluation

(Tel: 01473 832896 Email: johnnewman2@btinternet.com)

#### Site details

Name: Land west of Pine Dell and Ashcroft, London Road, Capel St Mary, Suffolk,

IP9 2JR

Client: Capel Properties Ltd

Local planning authority: Babergh DC

Planning application ref: B/14/00100/OUT/LJB

Proposed development: Erection of up to 24 dwellings incorporating new access

road

Proposed date for evaluation: tbc

Brief ref: SCCAS (RA) Brief for a Trenched Archaeological Evaluation\_Land west of

Pine Dell and Ashcroft, London Road, Capel St Mary\_00100

Grid ref: TM 0984 3842

#### **Contents**

1. Introduction

- 2. Location, Topography & Geology
- 3. Archaeological & Historical Background
- 4. Aims of the Site Evaluation
- 5. Methodology
- 6. Risk Assessment
- 7. Specialists

Proposed location of trial trenches

#### 1. Introduction

- 1.1 Shallish Associates Ltd on behalf of their client Capel Properties Ltd have commissioned John Newman Archaeological Services (JNAS) to undertake the archaeological site evaluation for a proposed residential development that has received consent to go ahead. This written scheme of investigation (WSI) details the background to the archaeological requirements for planning application B/14/00100/OUT/ LJB, and how JNAS will implement the requirements of the Brief for Archaeological Evaluation set by Mrs R Abraham of the Suffolk CC Archaeological Service (SCCAS). The WSI will also set out how potential risks will be mitigated This proposed development concerns the construction of up to 24 new dwellings incorporating a new access road at land west of Pine Dell and Ashcroft, London Road, Capel St Mary.
- 1.2 The evaluation will be carried out to the standards set regionally in the Standards for Field Archaeology in the East of England (EAA Occ. Papers 14, 2003), locally in Requirements for Trenched Archaeological Evaluation 2011 Ver. 1.1 (Suffolk CC) and nationally in Standards and Guidance for Archaeological Field Evaluation (Chartered Institute for Archaeologists 1994, revised 2001and re-issued 2014).

#### 2. Location, Topography & Geology

- 2.1 Capel St Mary lies to the south of Ipswich and is now a large village having seen extensive development since the middle of the 20<sup>th</sup> century around what was originally a settlement strung out along a main street with other, scattered cottages and farms in the parish. What was the main Roman road from London to the East Anglia cuts across the eastern part of the parish and is now largely under the historic line of the A 12/London Road which is 50m to the east of the proposed development site (PDS). Evidence for a substantial Roman period site, which has been interpreted as a villa complex, has been recorded around Windmill Hill to the west of the parish church and on the eastern side of a small stream since the mid 20<sup>th</sup> century. The PDS is located 1200m east of the medieval core of the village around the parish church and 1500m east of Windmill Hill and the main part of the PDS is 50m west of the line of the Roman road noted above. The PDS will have a new access road linking it to the London Road.
- 2.2 The PDS is a flat area located just above the 45m OD contour and the main part is soft ground under a grass cover with the planned access road strip being largely under the current drive, a garage and outbuildings. Drift geology in the area of the PDS varies between lighter and better drained sands and gravel close to water courses and heavier sandy clays on the interfluves and the latter can be anticipated at this site.

#### 3. Archaeological & Historical Background

- 3.1 To quote from the relevant Brief '.The proposed housing development lies in an area of archaeological interest, as recorded in the County Historic Environment Record (HER). The site is located adjacent to a known Roman road (CSM 014), and there is potential for Roman road-side settlement and burials to be discovered at this location. Although there are no recorded heritage assets within the proposed development site itself, this has not been the subject of previous systematic investigation and recording. The proposed works would cause significant ground disturbance that has potential to damage any archaeological deposits and below ground heritage assets that exist.' A site evaluation by trial trenching is therefore required to:
  - Identify the date, approximate form and purpose of any archaeological deposit, together with its likely extent, localised depth and quality of preservation.
  - Evaluate the likely impact of past land uses, and the possible presence of masking colluvial/alluvial deposits.
  - Establish the potential for the survival of environmental evidence.
  - Provide sufficient information to construct an archaeological conservation strategy, dealing with preservation, the recording of archaeological deposits, working practices, timetables and orders of cost.
- 3.2 Should the results of the evaluation indicate the need for further archaeological works within the development area prior to any other works commencing this will require an additional brief from SCCAS/CT and approved WSI.

#### 4. Aims of the Site Evaluation

4.1 As outlined in section 3 above the main archaeological potential relates to the site's location close to the line of a major Roman road where deposits of this date might be anticipated. The aim of the evaluation is therefore to examine the specified sample of the proposed development areas with evaluation trenching under controlled conditions so, if archaeological deposits are revealed they can be sampled and characterised. With this information a strategy can then be formulated for their possible preservation in situ or, failing that, the systematic recording of these deposits and the associated working practices, timetables and orders of cost.

#### 5. Methodology

5.1 The proposed development is for up to 24 new dwellings with garages on land to the west of Pine Dell and Ashcroft, London Road, Capel St Mary. To inform the

evaluation a search of the area within 500m of the PDS will be commissioned from the County Historic Environment Record.

- 5.2 The Brief requires 220m of 1.8m wide trenching across the planned development area. This will be undertaken using a wide toothless ditching bucket on a suitably sized machine operated by an experienced driver with a trench plan as set out below. The machine will be closely supervised by an experienced archaeologist as the overburden is removed in shallow spits to the top of any archaeological deposits that are present, where hand investigation will start, or to expose the underlying drift geology which will be further hand cleaned and examined as required. The spoil will be stored adjacent to the excavated trench with top and sub soil kept separate to allow for subsequent sequential backfilling. No trenches will be backfilled until the relevant officer at SCCAS has been consulted and should any modification to the trench layout be required due to any unforeseen circumstances, such as local services, then SCCAS will be contacted immediately. A metal detector search will be carried out by an experienced operator at all stages of the evaluation. The up cast spoil will also be closely examined for unstratified artefacts as evidence for past activity in rural areas in particular is often as evident via artefact scatters as by undisturbed archaeological deposits.
- 5.3 Site records will be made under a continuous and unique numbering system of contexts under an overall site HER number obtained from the Suffolk CC HER beforehand in combination with an event number. All contexts will be numbered and finds recorded by context. Conventions compatible with the county HER will be used throughout the monitoring. Site plans will be drawn at 1:20 or 1:50 as appropriate and sections at 1:10 or 1:20 (all on plastic drawing film) and related to OS map cover. Sections will be levelled to a datum OD. A photographic record in high resolution digital images will be made of the site and exposed features.
- 5.4 As necessary and to define archaeological deposits exposed surfaces will be trowelled clean before appropriate hand investigation and recording. Exposed archaeological features will be sampled at standard levels with care being taken to cause minimum disturbance to the site consistent with evaluation to a level adequate to properly form a subsequent mitigation strategy. Significant features such as solid or bonded structural remains, building slots or post holes (where fills are sampled) will have their integrity maintained (and during backfilling). Otherwise for discrete, contained, features, sampling will be at 50%- possibly rising to 100% if requested, and 1m wide sampling slots across linear features. If human burial evidence is revealed the SCCAS Officer will be informed and the clear presumption must be to preserve such remains in situ with minimum disturbance during this evaluation stage. If this is not possible then a Ministry of Justice licence will be obtained prior to full on site recording (total 100% sampling if a cremation deposit) and removal of the remains followed by examination by the relevant specialist and possibly scientific dating. If human remains do have to be recorded, removed from site and reported on then these works will add an additional cost to the evaluation works which may

involve radiocarbon dating (in this case being close to a major Roman road line the likelihood of revealing human burial evidence is assessed as being medium).

5.5 All finds will be collected and processed unless any variation is agreed with the relevant SCCAS Officer. Finds will be assessed by recognised period specialists and their interpretation will form an integral part of the overall report. Finds will be stored according to ICON guidelines with specialist advice/treatment sought for fragile ones. Every effort will be made to gain the deposit of the site finds to the SCCAS Store under their relevant HER code and site numbering for future reference. If this is not possible then the SCCAS Officer will be consulted over any requirements for additional recording (which may have an additional cost implication). Any discard policy will be discussed and agreed with the relevant SCCAS Officer. Any potential Treasure Act finds will be reported to the County FLO and in turn to the local Coroner.

5.6 Where appropriate palaeoenvironmental samples will be taken for processing and assessment by a specialist conversant with regional archaeological standards and research agendas. The sampling, processing and assessment will follow the guidelines as detailed in Environmental Archaeology: A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation (English Heritage, 2011). In accordance with standard practice bulk samples of 40 litres (or 100% of the deposit where less) will be taken from a representative cross section of archaeological deposits of all periods (respecting defined fills within features), in consultation with the relevant SCCAS Officer (and RSA if the deposits merit more targeted advice) including deposits that cannot be immediately dated by their artefact preservation and full content, the state of archaeological palaeoenvironmental potential of the deposits can be assessed and any further sampling, should further field work take place, be systematically planned and fully costed. Archaeological deposits of all types may reveal valuable data through the processing and assessment of samples with high priority features including the primary fills of pits, wells and cesspits, layers of middens, occupation surfaces and structural features as well as other discrete activity areas, contents of hearths, ovens, and other craft related or industrial structures. In addition more generalised settlement and land use features such as ditches may also yield valuable and informative data when sampling is undertaken systematically as the sum of all the assessment results can add considerably to the interpretation of a site and its landscape. Through an integrated study of all the data recovered from the evaluation the results from the assessment of the samples will be reviewed in terms of:

 What is the quality and state of preservation of charred plant remains, mineralised plant and animal related remains, small vertebrates and industrial residues such as evidence for iron working (contributing to the fullest interpretation of the evaluation results and to aid the planning of any further field work- if any RC dates are required for features containing suitable material but no easily dateable finds then this will incur an additional cost).

- What is the concentration of macro-remains (to inform sampling strategy in any further field work), in particular how might bulk sampling inform the interpretation of burial deposits.
- Can any patterning or similarities/differences be ascertained between deposits from different periods represented on site, similarly can any useful comparisons be made with undated and unphased deposits (to aid interpretation of the evaluation results and help in the study of undated deposits which may otherwise be overlooked and which may via sampling yield material for RC dating)
- Do waterlogged deposits exist on site, if so is there potential for palaeoenvironmental data from preserved insects or pollen and do such deposits contain organic material suitable for RC dating from samples taken as advised by the relevant soil specialist (who would also coordinate the assessment for pollen and insect remains), the RSA will also be consulted in such cases in conjunction with the relevant SCCAS Officer. Incremental column samples will be taken should waterlogged deposits be revealed in close consultation with the evaluation soils specialist with 10-20 litre sample sizes which will be sub-sampled for preserved pollen, insects, diatoms, preserved parasite eggs etc. If waterlogged wood is encountered it will ideal to leave in situ, if it has to be lifted it will be packed while wet in black polythene and stored at 5C until it can be transferred to a specialist for species identification, assessment and potential for RC dating is undertaken (should RC dating be required in the evaluation on such deposits this will incur an additional cost and will take time to obtain, examination of the topographic location of the site indicates that the presence of waterlogged deposits is unlikely unless deep deposits are revealed).
- Deep blanket type deposits resulting from both natural and human derived actions and events can yield valuable land use and palaeoenvironmental information. In particular such deposits can form at the base of a slope, if located in the evaluation the relevant SCCAS Officer and RSA will be consulted over monolith sampling and assessment by the relevant evaluation specialist (the composition of such deposits may give information on past land use in the area through a study of the soil matrix notwithstanding additional data if it is waterlogged)
- 5.7 An archive of all records and finds will be prepared consistent with the principles of *MoRPHE* (and the guidelines in the Archaeological Archives Forum: a guide to best practice 2007). This archive will be deposited with the Suffolk CC HER within 3 months of working finishing on site under the relevant HER number and following the guidelines outlined in '*Archaeological Archives in Suffolk- Guidelines for preparation and deposition*' (SCCAS Conservation Team 2015). As necessary the site digital

archive will deposited with the Archaeology Data Service (ADS) within the agreed allowance for the monitoring and reporting works.

- 5.8 The evaluation report will be consistent with the principles of *MoRPHE* and this report will summarise the methodology employed and relate the archaeological record directly to the aims of this WSI and section 4 above in particular. The report will give an objective account of the deposits and stratigraphy recorded and finds recovered with an inventory of the latter. The report will include an assessment of palaeoenvironmental remains recovered from palaeosols and cut features in relation to both dated and undated features and in terms of patterning across the site.
- 5.9 Any interpretation of the evaluation will be clearly separated from the objective account of the evaluation and its results and the results will be discussed with the relevant SCCAS Officer at an early stage in the reporting process following reporting on the day of the immediately apparent conclusions. The report will give a clear statement regarding the results of the site evaluation in relation to both the more detailed aims in section 4 above and their significance in the context of local HER records and of the Regional Research Framework (EAA Occ. Papers 3, 8 & 24, 1997, 2000 & 2011). There will be no further work on site until the evaluation results have been assessed and the SCCAS Officer has considered whether further archaeological works are required if this application receives consent. The report may give an opinion regarding the necessity for further evaluation work as appropriate. A draft copy of the report will be presented to SCCAS following completion of the site works. Once accepted a bound hard copy will be provided for the County HER with a digital version on disc. As required the site evaluation will be registered on the OASIS online archaeological record followed by submission of the final draft in .pdf format. An HER summary sheet will be completed and a summary prepared of any positive results for inclusion in the annual PSIAH round-up. As appropriate a vector plan of the trench locations will be provided in .dxf format for inclusion in the County HER.

#### 6. Risk Assessment

- 6.1 Protective clothing will be worn on site (hard hat, high visibility vest/coat, steel-toe cap boots, and ear muffs if required). A safe working method will be agreed with the machine operator for excavation of the trenches and examination of the up cast spoil while at the same time allowing efficient use of plant. Suitable clothing will be available to mitigate against extremes of weather.
- 6.2 Vehicles will be safely parked away from work areas and lines of access.
- 6.3 Prior to evaluation work starting on site the client will be consulted with regard to any potential contamination at the site. No overhead services impinge on the trench locations. Gloves and hand wash/wipes be available and any information on possible ground contamination revealed during the evaluation will be passed to finds and environmental specialists.

- 6.4 A fully charged mobile phone will be carried and a first aid kit will be taken to site.
- 6.5 It is unlikely that any trench plus excavated feature depth will go below c1/1.3m from the present ground level. If any excavations need to go deeper measures such as stepping in the sides will be employed.
- 6.6 JNAS holds full insurance cover for archaeological site works from the specialist provider Towergate Risk Solutions covering Public & Products Liability, details can be supplied on request.

#### 7. Specialists

Conservation: Conservation Services

Faunal remains: J Curl (Sylvanus Archaeology)

Human remains: S Anderson (CFA Archaeology)

Metal detecting: J Armes (experienced freelance)

Palaeoenvironmental samples: V Fryer (Freelance)

Soils specialist R Macphail (UCL)

Pre-historic flint: S Bates (Freelance)

Pre-historic pottery: S Percival (Freelance)

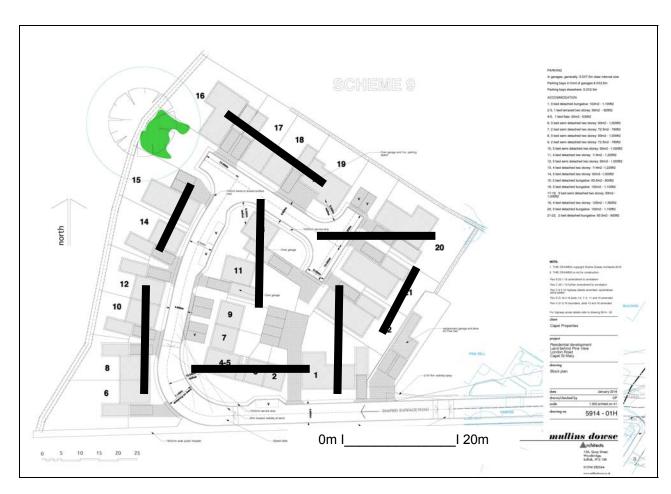
Post Roman ceramics & CBM: S Anderson (CFA Archaeology)

Roman period small finds: N Crummy (Freelance)

Roman period ceramics: S Benfield (CAT)

Medieval coins: M Allen (Fitzwilliam Museum)

Post Roman small finds: JNAS



Proposed location of trial trenches (6 x 30m and 2 x 20m)

#### Land west of Pine Dell and Ashcroft, London Road, Capel St Mary, Suffolk

# Addendum to Written Scheme of Investigation for Archaeological Evaluation to cover Excavation Stage

Planning application: B/14/00100/OUT/LJB

HER Event ref: ESF 24190

HER No: CSM 045

Client: Capel Properties Ltd

Proposal: Erection of up to 24 dwellings

#### 1 Background

- 1.1 The archaeological evaluation required under the relevant planning condition for the planned residential development on land to the west of Pine Dell and Ashcroft, London Road, Capel St Mary under application B/14/00100/OUT/LJB was carried out by John Newman Archaeological Services (JNAS) on 28 and 29 June, 2016. The full length of 220m of evaluation trenching was carried out with 8 trenches in a grid pattern across the site with the trenches being 600mm to 700mm deep where archaeological features could be defined. This trenching revealed a shallow Roman period ditch close to the northern edge of the site whose fill contained a few pottery sherds, a shallow ditch of uncertain date in the central area and a Roman period clay built oven near the southern edge of the site. A metal detector search was carried out as part of the evaluation across the trenches, upcast spoil and areas between the trenches but this only recovered a few non-ferrous finds of 19<sup>th</sup> and 20<sup>th</sup> century date.
- 1.2 Following these evaluation results a site meeting was held with Mrs R Abraham of the Suffolk CC Archaeological Service (SCCAS) and it was agreed that the next stage of the archaeological programme of works at the site should be a small scale excavation to fully investigate and record the Roman period clay oven revealed in trench 6 with an initial area of 15m x 15m (see below) to be opened centred on the oven and a nearby partially exposed feature. This area may need to be extended if more archaeological features are revealed though the trenches nearest to trench 6 were blank apart from the ditch of uncertain date noted above. Elsewhere on the site it was agreed with SCCAS that development works can start.
- 1.3 In addition works to create the access road to the development should be the subject of archaeological monitoring as this strip of land was not accessible during the evaluation stage as it is presently covered by the existing drive and some outbuildings. Following the completion of the archaeological excavation and monitoring it was agreed with SCCAS that reporting can be in a combined evaluation, excavation and monitoring report.

#### 2 Archaeological excavation and monitoring works

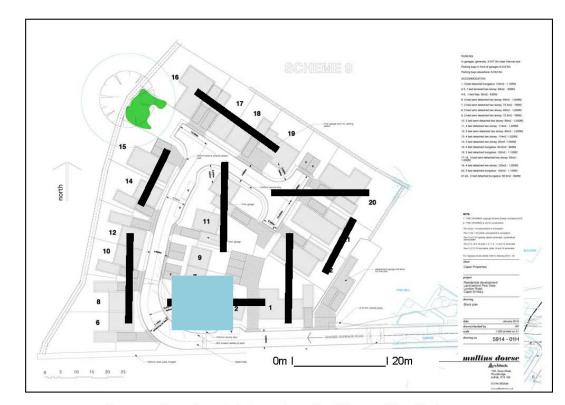
- 2.1 The archaeological excavation will be undertaken by JNAS commencing with the archaeologically supervised mechanical stripping of the top and subsoil across the initial 15m x 15m area to expose the top of the oven structure. SCCAS will be given notice of when the archaeological are planned to start and then informed of finding as the work progresses.
- 2.2 Investigation by hand will then be undertaken to fully investigate and then record and report on the oven, and any other archaeological features that are revealed, under the methodology set out in sections 5.3 to 5.9 of the WSI prepared for the evaluation with the addition that any structures, such as the oven, will be fully investigated in plan and section with relevant sampling for palaeoenvironmental

evidence. In addition any human burials will be fully investigated and recorded once SCCAS have been informed and a Ministry of Justice licence for excavation has been applied for and issued. Archiving of the archaeological results from the site will follow the relevant SCCAS guidelines current at the time of deposition.

- 2.3 Similarly the archaeological monitoring of the access road area will be undertaken by JNAS under the same methodology where possible given any constraints caused by the depth of new service trenches.
- 2.4 The archaeological specialists for the combined reporting stage will remain as set out in the WSI for the evaluation.

1

Ν



Proposed location of trial trenches (6 x 30m and 2 x 20m)

Excavation area centred on Roman oven



Roman period oven in trench 6

# **Appendix III- Context list**

# Evaluation

Trench	Context No	Туре	Part of	Description	Date
1	0002	Ditch	0002	Ditch, NE-SW aligned, 900mm wide and 300mm deep (50m north of oven/kiln in T7)	
1	0003	Fill	0002	Fill of ditch 0002, mid brown clay with charcoal and daub fragments	RB (late 1 <sup>st</sup> - early 2 <sup>nd</sup> C)
7	0005	Kiln complex	0005	NE-SW aligned 8m long feature with a lot of burnt clay and charcoal fragments in subsoil above this feature, not investigated during the evaluation	RB (mid- late 1 <sup>st</sup> C)
8	0017	Ditch	0017	Ditch, east-west aligned, 700mm wide and 200mm deep	
8	0018	Fill	0017	Fill of ditch 0004, mid brown clay, one peg tile fragment	Pmed

Excavation of kiln 0005 in area of trench 7

Context	Туре	Part of	Description	Date
0006	Stoke pit	0005	Stoke hole at southern end of kiln complex 0005, 1200mm across (NE-SW) by 1300mm long, 240mm deep with a rounded base	
0007	Fill	0005	Fill of southern stoke hole 0006, dark brown clay with a lot of small charcoal and fired clay fragments, to SW of southern stoke hole 0006 and SE of central stoke hole 0011	
8000	Firing chamber	0005	Southern oven/kiln chamber, 1300mm wide and 2600mm long with reddened burnt clay base 120mm thick	
0009	Fill	0005/0008	Fill of 0008, mid brown clay with a lot of fire reddened clay and charcoal fragments	
0010	Base	0005/0008	Fire baked base to kiln chamber 0008	
0011	Stoke pit	0005	Central stoke hole to kiln complex 0005 between chambers 0008 and 0014, 1200mm long, 1640mm wide and 320mm deep	
0012	Fill	0005/0011	Fill of 0011, dark brown clay with a lot of small baked clay and charcoal fragments	
0013	Stake hole	0005/0011	Small stake hole on southern side of central stoke pit 0011, 120mm wide and 120mm deep	
0014	Firing chamber	0005/0014	Northern kiln chamber, 2200mm long and 1280mm wide but at a higher level than southern chamber 0008 so very little fill survived, fired clay base 80mm thick	
0015	Stoke pit	0005	Traces of charcoal at base of level machined in natural clay indicating the location of a northern stoke hole at the NE end of the oven/kiln complex but at a higher level than the components to the SW	
0016	Stake	0005/0011	Small stake hole on northern side of	

hole	central stoke pit 0011, 120mm wide and	
	120mm deep, mirrors 0013 on southern	
	side of stoke pit 0011	

# Appendix IV- The pottery and assessment of the kiln complex

Stephen Benfield

### Introduction

A significant group of pottery together with a few piece of fired clay (including pieces with vitrified surfaces) were recovered from several features making up a structure associated with the generation of high temperatures (0005). This is identified as the remains of Early Roman pottery production (*circa* mid-late 1<sup>st</sup> century). In relation to this group of finds this report is primarily a detailed assessment report. A small amount of Roman pottery was also recovered from a ditch (0002) and from topsoil during the initial archaeological evaluation and is also included in the report.

The structure consisted of two, possibly three charcoal rich pits and two firing chambers with baked clay floors arranged in an unusual linear configuration. Although not directly paralleled the component parts can be compared with those of Early Roman pottery kilns (Woods 1974, Gibson & Lucas 2002). The nature of the pottery assemblage associated with it also indicates that it is the remains of a pottery production site. In terms of the types of pottery recovered the nearest comparable rural production site of this period is at Wherstead, Suffolk (Gill et al, 2001) while the largest production site in the region is urban based and located at Colchester (CAR 10, 491-94). For ease of writing the structure (0005) is referred to as a kiln in the following report and the component parts (0007, 0009, 0012 & 0014) as stoke holes/raking pits and furnace chambers.

With regard to the other pottery finds, the more closely dated of the small number of pottery sherds from the fill of ditch 0002 (0003) are also of early Roman date. But this pottery is completely different in nature to that associated with the kiln and in that sense appears unrelated to it, or at least nor directly so. A few Roman sherds were recovered from topsoil and spoil from two of the evaluation trenches (0001 & 0004). All of the finds are listed and described by context in the finds catalogue Appendix 1 below.

# **Pottery**

In total there are 128 sherds of Roman pottery with combined weight of 2083 g. Approximately 90% of this, both by sherd count (number) and weight, comes from the kiln structure 0005 (0007, 0009, 0012 & 0014); the remaining few sherds coming from the fill of the ditch (0002) and topsoil/spoil contexts (0001 & 0004). The pottery was catalogued using the Colchester Roman fabric type series and the *Camulodunum* (Colchester) Roman pottery type series (Hawkes & Hull 1947, Hull 1958 & *CAR* 10).

The Colchester fabric series was chosen to record the pottery as this had previously been used to record the pottery from the kilns at Wherstead (Gill et al, 2001, table 2). Most of the pottery consists of oxidised, primarily buff coloured wares recovered from structure 0005 and which make up 85% by sherd count and 90% by weight of the pottery associated with it. These include both coarse (Fabric DJ) and relatively fine (Fabric DZ) fabrics related to vessel type, although the fabric base of both appears very similar. A few sherds are in a slightly more sandy/gritty fabric (Fabric DJ2). The notable exception to this is a group of rims from narrow-necked jars that are in reduced (grey) coarseware fabric (Fabric GX). It was also apparent that on some sherds the colour suggested misfiring, notably oxidised wares (Fabric DJ) where, for example, ring neck flagons presumed intended buff had fired a grey-buff. It was therefore decided to divide the buff fabrics visually based on colour as well as taking note of the fabric itself (Fabric DJ R & Fabric DJ2 R), these possibly misfired sherds make up

approximately 14.9% (by count and weight) of the pottery from the kiln structure. The resulting fabric classification is set out in Table 01. The quantities of each Fabric recorded are listed in Table 02 where the pottery is presented as two groups, that from the kiln and that from other features. The quantity of pottery by Fabric is shown for each context in Table 03.

Fabric	Fabric Code	Fabric description
Black surface ware	BSW	Dark grey/black surface with distinct, commonly red-brown, fabric
		core
Coarse oxidised ware 1	DJ	Oxidised buff/red coloured fabric (sometimes tending to pale grey- buff or greenish-buff) silty fine-medium sand fabric, occasional small dark red/dark reddish-brown natural sandy or ?fired clay inclusions in some sherds
Coarse oxidised ware 1 (part reduced)	DJ R	As Fabric DJ although fabric colour tending to pale grey or grey-buff with, silty fine-medium sand fabric, generally lacking visible reddish-brown/dark red inclusions of Fabric DJ – almost all without doubt
		Fabric DJ misfired
Coarse oxidised ware 2	DJ 2	Oxidised fabric with sandy (fine-medium sand) fabric, moderately hard, slightly sandy/gritty feel
Coarse oxidised ware 2 (part reduced)	DJ 2R	As Fabric DJ 2 but pale grey/grey-buff in colour, probably misfired
Coarse oxidised ware 3	DJ 3	Coarse sandy fabric, otherwise similar to DJ 1, occasional small dark red/dark reddish-brown natural sandy or ?fired clay inclusions
Coarse oxidised ware 4	DJ 4	Sandy fabric, brownish red with pale margins and surfaces
Fine oxidised ware	DZ	Similar fabric to DJ but slightly finer and used for beaker forms
Coarse greywares	GX	Miscellaneous sandy grey/reduced wares
Romanising coarseware	RCW	Wheel thrown with dark grog and black, burnt ?organic inclusions
Terra nigra-type wares in various fabrics	UR	Gallo-Belgic forms (platters) in Fabrics DJ & DJ R & GX (individually listed)

Table 01: Pottery fabrics

Fabric	No	%No	Wt/g	% Wt	EVE
Kiln:					
DJ	66	57.9	1070	56.3	1.60
DJ R	15	13.2	270	14.2	0.47
DJ 2	4	3.5	246	12.9	0.41
DJ 2R	2	1.7	14	0.7	
DJ 3	1	0.9	24	1.3	0.06
DJ 4	1	0.9	40	2.1	
DZ	8	7.0	48	2.5	0.76
GX	12	10.5	158	8.3	0.66
UR	5	4.4	30	1.6	0.12
sub-total	114	100	1900	99.9	4.08
Other:					
BSW	9		118		
DJ	1		3		
GX	3		18		
RCW	1		44		
sub-total	14		183		
Total all pottery	128		2083		

Table 02: Fabric quantities for the kiln and other features

Ctxt	BSW	DJ	DJ R	DJ 2	DJ 2R	DJ 3	DJ 4	DZ	GX	RCW	UR
Kiln:											
0005								1 (4g)			
0007		8 (148g)	5 (168g)		1 (8g)						
0009		22 (214g)	3 (12g)					1 (4g)	1 (22g)		5 (30g)
0012		31 (668g)	7 (90g)	4 (246g)	1 (6g)	1 (24g)	1 (40g)	6 (40g)	11 (136g)		
0014		5 (40g)									
Ditch:											
0003	7 (100g)	1 (3g)								1 (44g)	
Other:											
0001									3 (18g)		
0004	2 (18g)										

Table 03: Pottery Fabric quantity by context

### Pottery from the kiln structure (0005)

The majority of the pottery was recovered from the fill of the probable stoke hole/raking pit 0012, with lesser amounts from the remaining fill of the two bunt firing chambers (0009, 0014) and another stoke hole/raking pit at the west end of the structure (0007). The assemblage was recorded in some detail as initial inspection suggested that it represented kiln production waste. This interpretation appears to have been confirmed by the identification of a number of near identical pots representing a small number of particular vessel types (primarily flagons & beakers) which dominate the group. These would usually make up only a small part of a normal domestic assemblage and other pots, such as coarseware jars, would have a much larger presence. The range of fabrics is also limited, being heavily dominated by oxidised buff and red coloured fabrics.

#### Vessel forms

In total a minimum of 26 individual pots are represented among the assemblage. These are individually numbered (prefixed by the letter P) and are listed by context in Table 004. The very broken nature of the pottery means that individual vessels have been identified primarily by rim sherds and in some instances, for example narrow-necked jars, the nature of the pot below the rim and neck is not clear making comparisons with other published vessels difficult.

Ctxt	Flagons (Cam 154/155)	Flagons (Cam 140)	Beakers	Platters	Dishes/ bowls	Bowls	Narrow neck jars	Jar/bowls (inc Cam 218)	Lids
0007	2 (P1 P2)					(1) (P4)			(1) (P3)
0009	3 (P21 P22 P23)			3 (P24 P25a/25 b P26)			1 (P20)		
0012	2 (P6 P12)	1 (P7)	5 (P5 P8 P9 P13 P14)		2 (P18 P19)		2 (p15 P16 P17)	2 (P10 P11)	

Table 04: Individual pottery vessels from the kiln by context (with pot numbers)

**Flagons**: Sherds from the rims of 8 individual flagons can be identified. Seven ring neck flagons are represented and one collared flagon. All were recovered from the fill of stoke/rake-out pits 0007 & 0012 and the west furnace chamber 0009 (Table 04). These are in buff, pale

greenish-buff, grey-buff (presumed misfired) and orange coloured fabrics (Fabric DJ, Fabric DJ R). The ring neck flagons have relatively upright necks with rather flattened rings small and neat, flat-topped rims; complete examples have 4 or 6 rings. The most complete flagon neck and rim (P1) is slightly more everted than the others. The vessels with upright necks could be considered to be form Cam 154 (Hawkes & Hull 1947, 245), dated at Colchester as Claudian, but which is difficult to separate from Cam 154/155 dated there as Claudio-Neronian (*CAR* 10 475). The single collared flagon is of form Cam 140, dated Claudian-early Flavian (*ibid* 474).

Overall, pieces from flagons clearly represent a large proportion of the pottery recovered. Among a number of pieces from flagon handles there are two near complete examples (with 2 and 3 ribs) recovered from 0012. Of significance is the top of another handle in a pale greenish-buff fabric from the same context which has a glassy deposit together with fired clay baked onto it suggesting exposure to high heat levels. There are a total of ten base sherds, ranging from complete bases to base edge sherds, that are typical of flagon bases (most of which can be shown to represent separate individual vessels) and many of the plain curving body sherds Fabrics DJ &, DJ R are almost certainly from flagons.

```
P1 0007 Cam 154/155 (4 rings), broken at neck/body join, buff-brownish orange fabric (DJ)
P2 0007 Cam 154/155 (5 rings), pale red/orange fabric, traces of worn buff surface (DJ)
P6 0012 Cam 154/155 (min 6 rings) orange & grey-buff fabric (DJ)
P12 0012 Cam 154/155 6 rings, fabric slightly soft/powdery (DJ)
P21 0009 Cam 154/155 (min 4 rings) pale grey & pinky-brown fabric (DJ)
P22 0009 Cam 154/155 (min 4 rings) pale greenish buff fabric (DJ)
P3 0009 Cam 154/155 (min 4 rings) pale greenish buff fabric (DJ)
P7 0012 Cam 140 buff fabric (DJ)
```

**Beakers:** There are rims from five individual beakers, all of which come from stoke/rake-out pit 0012 (Table 04). These are in a relatively fine (thin walled) oxidised buff fabric with one that is orange coloured. Because of the nature of the pots they have been classified as Fabric DZ, although the fabric does not appear to be significantly different from the finer buff sherds that can be attributed to some of the flagons. The body has a high, rather abrupt, shoulder with a rounded carination below a small everted rim. The rim internal is slightly concave giving a lid seated (cupped) effect. Externally there is a small groove just below the rim. The surviving upper parts of the body walls are undecorated and there are no indented body sherds so that the body would appear to have been relatively plain; however, it can be noted that a single rouletted body sherd (Fabric DZ) that is probably from a beaker was also recovered from 0012. The more complete rim sections indicate a rim diameter of about 240 mm.

In terms of body shape the closest parallels with this high shouldered form at Colchester are among the Early colour-coated ware and classified as Cam 94B (Hawkes & Hill 1947, 235 & CAR 10, Fabric EC, fig 5.11, nos 57-60). These copy pre-Flavian import types but may have continued in production into the Flavian period (CAR 10, 233). The form appears also appears Colchester in fine buff wares (Fabric DZ) (CAR 10 fig 5.27, nos 93 & 103) although in general round shouldered types appear to dominate beakers in that fabric. It is also common among Early Roman beakers in mica-dusted wares and other fabrics - seen most commonly in London (Arthur & Marsh 1978, fig 6.9 Types 20-21 & fig 6.10 Type 22) – although no direct parallel with these is proposed. All of these beaker types are broadly dated to the mid-late 1<sup>st</sup> century.

```
    P5 0012 Beaker with small everted, concave/lid seated rim, groove below shoulder – buff fabric (DZ)
    P8 0012 Beaker with small everted, concave/lid seated rim, groove below shoulder – buff fabric (DZ)
    P9 0012 Beaker with small concave/lid seated rim – orange fabric (DZ)
    P13 0012 Beaker with small everted, concave/lid seated rim, groove below shoulder – buff fabric (DZ)
    P14 0012 Beaker with small everted, concave/lid seated rim, groove below shoulder – buff fabric (DZ)
```

**Platters:** Three sherds with small (vestigial) foot rings, typical of Gallo-Belgic inspired platters of the late 1<sup>st</sup> century BC-1st century AD, were recovered from the west firing chamber 0009. These are broadly classified as Fabric UR (*CAR* 10, 212). Two are in a fine, red-brown silty/fine sand fabric with a grey exterior surface and are possibly from the same platter. The other, unusually, is in a buff fabric. There are also two joining rim sherds from 0009 in a pale reddish-buff coloured fabric that are probably from a platter of *circa* 200 mm diameter. This has a simple curving wall similar to Cam 16, broadly dated as Claudian-Flavian (*CAR* 10, 469)

**P24** 0009 Platter, low foot ring in buff fabric (UR/DJ)

**P25a** & **P25b** 0009, similar sherds with low foot ring, probably from the same platter, red-brown fabric with grey surface on exterior (UR/BSW)

**P26** 0009 Platter (Cam 16-type), rim (joining sherds), rounded wall, *circa* 200 mm dia at rim buff fabric (UR)

**Dishes/bowls:** There are a profile and rim sherds from two pots that can be classified as dishes or bowls.

One dish is represented by a large sherd making up a complete profile and comes from the stoke/rake-out pit 0012. The fabric is has a slightly sandy/gritty feel and has fired to an orange-red with reddish buff/brown surfaces (Fabric DJ 2). The rim is triangular with a flat top and there are a series of four distinct shallow grooves running around the inside of the straight sided wall. The form is broadly comparable with a range of straight walled dishes that appear in the early Roman (conquest) period and at Colchester are dated to the Claudio-Neronian but might remain current into the late 1<sup>st</sup>/early 2<sup>nd</sup> century; see Hawkes & Hull (1947) plate LI nos 41-044a.

Two large, joining sherds from the stoke/rake-out pit 0012 appear to be from a large dish with a relatively shallow, curving wall. The rim curvature suggests a diameter at the rim of circa 370 mm. There is a distinct groove below the rim running around the body. The fabric is has a sandy/gritty feel and has fired to an orange-red (Fabric DJ 2). The wall angle is too shallow to be from a flange and while it might possibly represent a large lid, the form is more suggestive of a dish with an overall form appears similar to some Pompeian-Red ware platters (see Cam 17). It is noticeable that some of the rims of platters attributed to form Cam 21 & Cam 16 at Whersted are not dissimilar to the profile of this sherd (Gill et al 2001, fig 13 nos 63-67).

**P19** 0012 Large sherd (profile)from a bowl with flat-topped triangular rim, sandy red/orange-buff fabric (DJ) (see Cam, 42) (dated probably Claudio-Neronian)

**P18** 0012 Large dish (or possibly a ?lid) with curving wall and external groove below rim (two joining sherds) some similarity of form with Cam 17, some traces of cream slip-like deposit on all surfaces, but this extends to areas of the sherd breaks and so not original, orange-red fabric with sandy feel (DJ 2)

**Bowl:** A rim sherd that appears to be from a bowl was recovered from stoke/rake-out pit 0007. This has an upright, cupped rim with a slight bead formed by a groove below the rim top. The surviving part of the relatively upright body has faint indentations from rouletting across the surface. The rim curvature suggests a rim diameter in the region of 200 mm. The off-set rim has similarities with a number of pots in oxidised and reduced wares at Colchester classified as Cam 68/329 which have a broad date range from the Claudio-Neronian period to the 2<sup>nd</sup> century (*CAR* **10**, 471).

**P4** 0007 Bowl with lid seated rim and rouletted body, upright rim with bead top defined by external groove, brownish-orange buff fabric (DJ)

**Narrow necked jars:** Rims sherds from a minimum of four narrow necked jars were recovered, three from the stoke/rake-out pit 0012 and one from the west furnace chamber 0009. All are grey and it appears clear that this is the intended colour, although one rim (P15) is part grey and pale orange suggesting that it may be misfired. Similar forms appear to have been made at Wherstead, and although only rim sherds there are no indications of any neck cordons. This suggests they may be closer to the narrow necked jars produced at Wherstead than to types found at Colchester (Gill et al 2001, fig 11 nos 10 & 15).

**P15** 0012 Narrow neck jar rim, internal ledge, surface & fabric clouded orange-grey (possibly intended to be grey?) relatively fine sand/silty fabric (DJ 2) C 100 mm

**P16** 0012 Narrow neck jar rim, light/medium grey -powdery surfaces, sandy fabric (GX) C 110 mm **P17** 0012 Narrow neck jar rim, external lip on rim lower edge, grey & reddish-brown surfaces & fabric, misfired(?) (GX) C 110 mm c 130 mm

**P20** 0009 Narrow neck jar rim, groove around rim edge, sandy, medium grey fabric, powdery surfaces (GX)

Jars/deep bowls: Two sherds, from two deep bowls/jars were recovered from the fill of the stoke/rake-out pit 0012. One, represented by a flaking (probably heat damaged) body sherd can be attributed to the form Cam 218, current in the 1<sup>st</sup> century and into the early 2<sup>nd</sup> century. The example here is in a Roman fabric (Fabric GX) and of post-conquest date. There are also two rim sherds from a wide mouth jar/deep bowl from the same context. These are in a pale grey surfaced fabric with a pale pink/grey core and could possibly have been intended to be oxidised, although this is not clear. The small section of rim suggests a vessel dia at the rim of circa 200 mm.

**P11** 0012 Deep bowl/jar, probably Cam 218-type, body sherd with carinated shoulder and cordon above, badly fired, surfaces degrading (GX)

P10 0012 Rim from a deep bowl, light grey fabric, beginning of cordon at shoulder (GX)

*Lids:* A rim sherd in buff fabric is probably from a lid (rather than a bowl). This has a small bead rim with a pronounced external off-set below. The other possibility, that it represents a bowl, appears less likely and it is noted that a pronounced off-set is generally more easily paralleled among lids (see *CAR* **10** Fabric GX fig 6.82 nos 792 & 795).

P3 0007 Sherd, probably from the rim of a domed lid (rather than a bowl) buff/pale yellow fabric (DJ)

# Fired clay

Apart from crumbs and small fragments, four pieces of fired clay were recovered from the base of the west furnace chamber (0009). These are medium size pieces, the longest surviving dimension being between 50 mm – 60 mm, and are up to 40 mm thick. Three of these are from a furnace wall, having a glassy, light grey, vitrified surface consistent with exposure to high temperatures; although the red baked backing clay is still soft enough to be marked with a fingernail. The fabric is slightly sandy with occasional small stones and rare small pieces of chaff/straw. On two pieces this glassy deposit extends partly over some edges, possibly suggesting cracks in the furnace wall. One of these pieces has a curving finger wipe mark consistent with having been moulded in place by hand. The third piece, which is not vitrified, has a grey surface that for the most part is relatively flat (although uneven) with a sloping, chamfer-like edge. The fabric is similar to that of the vitrified pieces, but appears possibly to be slightly denser. One possibility is that this might represent part of an object, such as a fire-bar, but this is not clear.

### **Discussion**

The nature of the finds indicates the remains of early Roman pottery manufacture here and is demonstrated by the nature of the pottery assemblage recovered from the structure 0005.

This consists of the remains of a minimum of 26 pots that make up a limited range of contemporary vessel forms, the great majority in oxidised fabrics (*circa* 85%-90%) and is clearly different from a normal domestic assemblage. Combined with this is the evidence of high temperatures in the form of vitrified surfaces on fired clay pieces and a similar (glassy) deposit on one of the pottery sherds. The varied nature of the colour of the oxidised pottery, ranging between buff, orange/red and grey, with these colours appearing across the same vessel type also suggests a few of them with partly reduced surfaces (*circa* 15%) are misfired (Fabric DJ R & Fabric DJ2 R). While not necessarily wasters they could be seen as unsuitable rejects or seconds. The assemblage, dominated by these oxidised fabrics, (primarily buff coloured wares) is also strikingly different to that recovered from a nearby Roman ditch. The pottery from the ditch (0002) consists of a few sherds that, by contrast, are almost all in reduced fabrics, the more closely datable of which are Early Roman (mid-1<sup>st</sup>-early 2<sup>nd</sup> century). That all of the pottery and fired clay indicating pottery manufacture is associated with one group of features (0005) indicates that, although unusual in layout, these represent the remains of the kiln or kilns in which the pottery was fired.

The discolouration see on some buff fabric sherds is the main indication of possible misfiring. There is no indication of the warping/distortion of vessels suggesting over firing, although one flagon handle has a glassy deposit and fired clay baked fused onto it from exposure to high heat levels. The slight powdery nature of some sherds might rather indicate under firing as a possible cause for their abandonment, although soil conditions might also have affected the pottery surfaces. While much of the pottery appears as if it might have been serviceable, other possible problems such as cracking or simple breakage are less detectable given the broken-up nature of the assemblage. It is noted that one pot base (0007) has a firing line around body from kiln staking, although this is a relatively common feature often seen on pots among domestic assemblages.

A broad date range for the pottery making up the assemblage would be mid-late1st century. The most obvious kiln products are the vessels types that are the most numerous, upright ring-necked flagons (Cam 154/155), everted rim beakers (Cam 94B-type) with high (pronounced) shoulders and narrow-necked jars; although there appears to be a lack of clear body sherds to go with the rims from these beakers. Other pots, collared flagon (Cam 140), Gallo-Belgic style platters, as well as dishes, bowls & cordoned deep bowl/jars appear as one or a couple of examples. Given the relatively small assemblage and limited survival of the feature fills most, if not all of these other pots, can also be considered likely to be kiln products. The presence of the flagon forms Cam 154/155 & Cam 140 and the beakers (Cam 94B-type) suggest that the overall dating can probably be refined to production in the Claudio-Neronian or early Flavian period.

The date of the pottery allows the production here to be seen within a wider context of Early Roman pottery production on rural sites in East Anglia and the southeast Midlands. Several of production sites are known which share a number of characteristics (Gibson & Lucas 2002) some of which are also seen here at Capel St Mary. Typically the production is based around relatively light kiln technology and relatively short term production. This appears to reflect response to a local need and possibly reflects the pre-existing pottery supply systems of the Late Iron Age. The production sites do not develop into more nucleated pottery production centres. Where the lower parts of the kilns survive, dug to below ground level, they typically feature small/shallow stoke hole/rake-out pits, flues and furnace chambers in a variety of shapes. These are based around either a chamber with a single flue and stoke hole/rake-out pit, or with oval furnace chambers and two flues — one at each end (Woods 1974, Gibson & Lucas 2002). That clear remains of kilns of this type are not known prior to the conquest suggests this change in technology occurs that time (Gibson & Lucas 2002, 110) presumably

related to the requirements for producing more specialist wares. The potters themselves generally produce a range of forms, often in a range of fabrics, that suggest a certain amount of experimentation with technology and method.

Assuming the structure 0005 is the remains of the kiln, while not having an exact parallel, the oval chambers with fired clay bases and the small charcoal rich pit features at their ends appear comparable with aspects of known Early Roman kiln technology, notably with flues and stoke hole/rake-out pits at each end of an oval chamber. If all of one phase, the closest parallel might be one that Woods classified as Type IIB and which had two adjacent furnace chambers producing a total length of 4.9 m (Woods 1974, 272 & plate XXX). In that case the vestigial stoke hole/rake-out pit 0015 proposed at the east end of structure 0005 would probably not be required. However, the plan of 0005 might also suggest two twin flue kilns sharing a central stoke hole/rake-out pit. The lack of any certain kiln furniture here is not necessarily unusual given the poor level of survival of the structure and as in these types of early kiln it was commonly removable and transportable. It can be noted that at Greehouse Farm Cambridgeshire, where a number of Early Roman kilns were excavated, only broken or damaged fragments of Kiln furniture were recovered (Gibson & Lucas 2002,103).

The nearest excavated rural production site of this period producing a range of post-conquest Gallo-Roman forms (flagons, everted rim beakers & platters), is at Wherstead and is dated to the late 1<sup>st</sup> century, *circa* AD 50-80 (Gill et al 2001, 24). Two kilns were located there, each with a furnace chamber having a flue at each end; one kiln directly replacing the other. The range of products includes flagons (Cam 155), everted rim beakers, Gallo-Belgic style platters and narrow necked jars. These forms echo the pottery here at Capel St Mary. The forms at Wherstead are seen as close to contemporary pottery being produced at Colchester. To some extent this is the case at Capel St Mary, most notably the ring-necked flagons (Cam 154), collared flagons (Cam 140) and the beakers (Cam 94B-type), although the narrow-necked jar forms produced here appear less easy to closely match among the Colchester type series.

Further afield, in addition to sites previously mentioned, flagons appear to have been the main production at a site at Duxford, Cambridgeshire, dated *circa* AD 50-80 (Anderson & Woolhouse 2016). These consisted of both ring neck (Cam 154/155) and collar neck (Cam 140) types. The kilns themselves are of the more usual keyhole form, with single round furnace chambers and single flue. Collared flagons also feature among a wider range of products associated with early kilns at the military works-depot at Longthorpe, Cambridegshire (dated *circa* AD 48-62), although again the kilns are broadly of the keyhole form (Dannell & Wild 1987).

Many or all in some cases all of the types of vessel produced in these early kilns are rare in contemporary rural assemblages but are more typical of major Roman sites that have a population with a strong Gallo-Roman cultural background such as the Fortress & early *Colonia* at Colchester and the Longthorpe vexillation fortress. They are considered to have been operated by non-local immigrant potters producing for a specialist markets. However, although the kilns of this period at Colchester and Longthorpe are clearly directly sited to supply these two centres, many of the known examples within this group of Early kilns occupy a peripheral location in relation to these sites, although some appear to be close to probable tribal or to more locally determined gathering places (Gibson & Lucas 2002, 113-14).

# Recommendations for further work

The main interest is the pottery assemblage associated with the presumed kiln structure (0005) and the structure itself. This structure together with the associated pottery sherds are

of archaeological significance in their own right, but also in relation to other similar sites in the southeast of Britain and should be properly published.

As a pottery kiln the structure is not directly paralleled, although the components are similar to those of a number of Early Roman kilns recorded from other rural sites. Further research and thought might shed light on how its components functioned, whether as one kiln or possibly as two conjoined but separated kilns.

The pottery has been quantified based on the Colchester Roman fabric and where possible vessel form (Cam) series - following the publication for the kilns at Wherstead. Each fabric is recorded by count, weight and EVE. Within these existing fabric codes the characteristics of the individual fabrics here have been described and the codes augmented to record possible misfired (discoloured) pottery. It should be noted that Fabric UR (*terra nigra*-type wares) is fabric group based on vessel types rather than any individual fabric type. Some further discussion of fabrics and vessels forms is desirable. Parallels should be further examined and tightened with regard to date and comparison with other related assemblages. At a minimum, one of each vessel type and typological variation should be illustrated, although a range of examples would be preferable.

The kiln and the pottery should be more fully discussed in relation to other Early Roman kiln sites and their interpretation. This would help to place the site within the emerging and developing Roman technological, economic and cultural structures within the province and the requirements for pottery supply.

#### Refs:

Anderson, K., & Woolhouse, T., 2016, 'Continental potters? First-century Roman flag on production at Duxford, Cambridgeshire, *Britannia*, Volume 47, 43-69

Arthur, P., & Marsh, G., 1978, Early fine wares in Roman Britain, BAR British Series 57

*CAR* **10** 1999, Robin Symonds and Sue Wade, *Roman pottery from excavations in Colchester, 1971-86*, Colchester Archaeological Report 10

Dannel, G., & Wild, J., 1987, Longthorpe II, The military works-depot: an episode in landscape history, Britannia Monograph Series No. 8

Gibson, D., & Lucas, G., 2002, 'Pre-Flavian kilns at Greenhouse farm and the social context of early Roman pottery production in Cambridgeshire' in *Britannia*, Volume 33, 95-127

Gill, D., Plouviez, J., Symonds, R., & Tester, C., 2001, *Roman pottery manufacture at Bourne Hill, Wherstead*, EAA Occasional Papers 9

Hawkes, C., & Hull, R., 1958, Camulodunum, first report on the excavations at Colchester 1930-1939, RRSCAL 14

Hull, R., 1958, Roman Colchester, RRSCAL 20

Woods, P., 1974, 'Types of Late Belgic and early Romano-British pottery kilns in the Nene Valley' in *Britannia*, Volume 5 262-281)

# Appendix 1 (Finds catalogue CSM 045)

Ctxt	Ctxt type	Pottery	No	Wt(g)	Eve	Abr/	Form	Notes	Spot date	Pot no.
	,	Fabric		(8)		poor fired				
0001	Soil in T1 (eval)	GX	3	18	13	(A)		Joining sherds, jar rim, cordon on shoulder		
0003	Ditch 0002 (eval)	BSW	4	34		(A)		Body sherds		
0003	Ditch 0002 (evaluation)	BSW	1	12	14		J/B	rim	M1-E2C	
0003	Ditch 0002 (evaluation)	BSW?	1	12		*		Body sherd, slightly coarse, sandy, misfired or burnt at one corner, orange & black, possibly intended BSW		
0003	Ditch 0002 (evaluation)	BSW?	1	42		*		Body sherd, slightly coarse, sandy, red- brown fabric – probably Fabric BSW		
0003	Ditch 0002 (evaluation)	DJ	1	3	3	(A)		Thin wall with simple (rounded) rim, possibly from a bowl	C M1- E2C	P27
0003	Ditch 0002 (evaluation)	GX	2	26	12	(A)	J	Jar rim and shoulder sherd	Prob M1- E2C	
0003	Ditch 0002 (evaluation)	RCW	1	44			J/B	Body sherd, relatively thin, wheel-turned	M- L1/E2C	
0004	Soil from T5 (evaluation)	BSW	2	18		(A)		Body sherds		
0005	Oven/kiln (evaluation)	DZ	1	4		(A)		Body sherd in fine, silty fabric		
0007	Fill of S stoke hole pit	DJ	1	54	50	*	Cam 154/155 flagon	Upright ring neck flagon (4 rings), broken at neck/body join, buff- brownish orange fabric	Claudio- Neroian	P1
0007	Fill of S stoke hole pit	DJ	1	10	15	(*)	Cam 154/155 flagon	Upright ring neck flagon (5 rings), pale red/orange fabric, traces of worn buff surface Claudio- Neroian	Claudio- Neroian	P2
0007	Fill of S stoke hole pit	DJ	1	12	(8)	(*)	lid	Probably from a domed lid, buff/pale yellow fabric (see Wattisfield kilns fig 13 nos 60-61)		P3

Ctxt	Ctxt type	Pottery Fabric	No	Wt(g)	Eve	Abr/ poor fired	Form	Notes	Spot date	Pot no.
0007	Fill of S stoke hole pit	DJ	1	16	9	(*)	Bowl?	?Bowl with lid seated rim and rouletted body, upright rim with bead top defined by external groove		P4
0007	Fill of S stoke hole pit	DJ	1	24		(*)	F	Flagon handle (one or possibly two handled flagon) three ribs, 35 mm broad, faintly greenish-buff fabric		
0007	Fill of S stoke hole pit	DJ	1	16			F	Part of a base ring probably from a flagon, pale buff fabric		
0007	Fill of S stoke hole pit	DJ	2	16		*	F	Flagon, handle to neck join sherd, possible collar-like rim, faintly greenish-buff fabric		
0007	Fill of S stoke hole pit	DJ 2R	1	8		(*)		Pale grey fabric, possibly mis- fired/ partly reduced		
0007	Fill of S stoke hole pit	DJ R	2	24				Body sherds, both from the same pot, firing line around body from kiln staking, moderately well fired sandy fabric		
0007	Fill of S stoke hole pit	DJ R	2	24		*		Pale grey fabric, possibly mis- fired/ partly reduced		
0007	Fill of S stoke hole pit	DJ R	1	120		*	F?	Large sherd, possibly from a large flagon, clouded grey surfaces and part grey & buff fabric colour		
0009	Base oven/kiln 0005/0008		3	178				Fired clay pieces, sandy fabric with occasional small stones - up to 45 mm		

Ctxt	Ctxt type	Pottery Fabric	No	Wt(g)	Eve	Abr/ poor fired	Form	Notes	Spot date	Pot no.
								thick – all with glassy, grey, vitrified surface, fabric brownish-red, hard fired, but can be scratched with a fingernail – two pieces concave one probably made by finger wiping of wet clay surface		
0009	Base oven/kiln 0005/0008		1	76				Fired clay Single piece up to 26 mm thick, roughly flat medium grey surface, not vitrified, one edge sloping away - hard fired, but can be scratched with a fingernail (fabric similar to vitrified pieces)		
0009	Base oven/kiln 0005/0008	DJ	1	8	7	*	Cam 154/155	Upright ring neck flagon (min 4 rings), pale greenish buff fabric	Claudio- Neronian	P22
0009	Base oven/kiln 0005/0008	DJ	1	6	12	*	Cam 154/155	Upright ring neck flagon (min 4 rings), pale greenish buff fabric		P23
0009	Base oven/kiln 0005/0008	DJ	1	12		(*)	F	Base sherd, probably from a flagon, faintly greenish buff fabric		
0009	Base oven/kiln 0005/0008	DJ	1	14		(*)	F	Base sherd, possibly from a flagon, buff fabric		
0009	Base oven/kiln 0005/0008	DJ	1	10		(*)	F	Handle in pinkish/buff- red fabric, three ribs, 25 mm broad		
0009	Base oven/kiln 0005/0008	DJ	4	68		(*)		Misc body sherds - buff fabric		
0009	Base oven/kiln 0005/0008	DJ	5	50		(*)		Misc body sherds – faintly greenish		

Ctxt	Ctxt type	Pottery Fabric	No	Wt(g)	Eve	Abr/ poor fired	Form	Notes	Spot date	Pot no.
								cream/buff fabric – one with reddish kiln slurry on interior and breaks`		
0009	Base oven/kiln 0005/0008	DJ	1	12		(*)	F	Sherd with handle scar, faintly greenish cream/buff fabric		
0009	Base oven/kiln 0005/0008	DJ	7	34		(*)		Body sherds - orange-red fabric		
0009	Base oven/kiln 0005/0008	DJ R	1	6	12	*	Cam 154/155	Upright ring neck flagon (min 4 rings), pale grey & pinky-brown fabric		P21
0009	Base oven/kiln 0005/0008	DJ R	2	6		*		Body sherds		
0009	Base oven/kiln 0005/0008	DZ	1	4		*	Bk	Thin sherd from a beaker?		
0009	Base oven/kiln 0005/0008	GX	1	22	15		NNJ	Narrow neck jar rim, groove around rim edge – medium grey - powdery surfaces, sandy fabric		P20
0009	Base oven/kiln 0005/0008	UR	1	8		*	platter	Low foot ring, buff fabric (DJ)	Claudio- Neronian/ Flavian	P24
0009	Base oven/kiln 0005/0008	UR	1	4		*	platter	Low foot ring, buff fabric (GX) red- brown fabric with grey surface on exterior – possibly same as P25b	Claudio- Neronian/ Flavian	P25a
0009	Base oven/kiln 0005/0008	UR	1	6		*	platter	Low foot ring, buff fabric (GX) red- brown fabric with grey surface on exterior, edge lipping up to platter wall – possibly same as P25a but more abraded	Claudio- Neronian/ Flavian	P25b
0009	Base oven/kiln 0005/0008	UR	2	12	12	*	platter	Rim, rounded wall, buff fabric (joining sherds)	Claudio- Neronian/ Flavian	P26

Ctxt	Ctxt type	Pottery Fabric	No	Wt(g)	Eve	Abr/ poor fired	Form	Notes	Spot date	Pot no.
0012	Fill oven/kiln 0005/0011	DJ	1	44		(*)	F?	Most of a base, probably from a flagon		
0012	Fill oven/kiln 0005/0011	DJ	1	32		(*)	F?	Part of a base, probably from a flagon		
0012	Fill oven/kiln 0005/0011	DJ	1	18		(*)	(J/B?)	Part of a base, poss from a small jar or beaker		
0012	Fill oven/kiln 0005/0011	DJ	1	36		*	F?	Part of a base, probably from a flagon		
0012	Fill oven/kiln 0005/0011	DJ	1	30		(*)	F	Most of a handle from a flagon		
0012	Fill oven/kiln 0005/0011	DJ	1	32		(*)	F	Most of a handle (35 mm broad) from a flagon, 3 ribs		
0012	Fill oven/kiln 0005/0011	DJ	1	26		(*)	F	Most of a handle (27 mm broad) from a flagon, 2 ribs		
0012	Fill oven/kiln 0005/0011	DJ	1	32		*	F	Most of a handle from a flagon, 3 ribs (40 mm broad) slightly greenish buff fabric – glassy deposit and fired clay baked onto top of handle		
0012	Fill oven/kiln 0005/0011	DJ	1	32		(*)	F	Most of a handle from a flagon, 3 ribs		
0012	Fill oven/kiln 0005/0011	DJ	2	56		(*)	F	Part of a base probably from a flagon (joining sherds)		
0012	Fill oven/kiln 0005/0011	DJ	1	16	30	*	Cam 154/155 flagon	Upright ring neck flagon (min 5 rings), orange fabric	Claudio- Neronian	
0012	Fill oven/kiln 0005/0011	DJ	1	12	25	*	Cam 140 flagon	Collar rim flagon	Claudio- Neronian	P7
0012	Fill oven/kiln 0005/0011	DJ	5	106		(*)	F?	Buff - misc sherds, flagon type sherds		
0012	Fill oven/kiln 0005/0011	DJ	5	38		(*)		Red – misc body sherds		
0012	Fill oven/kiln 0005/0011	DJ	1	14	20	(*)	Cam 154/155 flagon	Slightly soft - powdery	Claudio- Neronian	P12
0012	Fill oven/kiln 0005/0011	DJ	1	60		(*)	F	Complete base, probably from a flagon		
0012	Fill oven/kiln 0005/0011	DJ	1	12		(*)	F	Sherd from base edge,		

Ctxt	Ctxt type	Pottery Fabric	No	Wt(g)	Eve	Abr/ poor fired	Form	Notes	Spot date	Pot no.
								probably from a flagon		
0012	Fill oven/kiln 0005/0011	DJ	5	72				Body sherds, buff/buff with red fabric core		
0012	Fill oven/kiln 0005/0011	DJ 2	1	14	14	*	NNJ	Narrow neck jar rim, internal ledge, surface & fabric clouded orange-grey (possibly intended to be grey?) relatively fine sand/silty fabric		P15
0012	Fill oven/kiln 0005/0011	DJ 2	2	162	22	(*)	dish	Large dish or ?lid with curving wall and external groove below rim (joining sherds) – some similarity of form with Cam 17 - orange-red fabric with sandy feel – some traces of cream slip-like deposit on all surfaces, but this extends to areas of the sherd breaks and so not original		P18
0012	Fill oven/kiln 0005/0011	DJ 2	1	88	5	*	bowl	Large sherd (profile)from a bowl with flat- topped triangular rim, sandy red/orange- buff fabric (see Cam, 42 – dated Claudian)	Claudio- Neronian?	P19
0012	Fill oven/kiln 0005/0011	DJ 2R	1	6		*		Grey/orange clouded surface		
0012	Fill oven/kiln 0005/0011	DJ 3	1	24	6	(*)		Rim/flange, internal flange edge break has been roughly smoothed-off		
0012	Fill oven/kiln 0005/0011	DJ 4	1	40				Fabric appears distinct, normal firing, not obviously much abraded		

Ctxt	Ctxt type	Pottery Fabric	No	Wt(g)	Eve	Abr/ poor fired	Form	Notes	Spot date	Pot no.
0012	Fill oven/kiln 0005/0011	DJ R	2	32		*	F	Flagon neck grey-buff (joining sherds) SV 1?		
0012	Fill oven/kiln 0005/0011	DJ R	1	10		*	F	Flagon neck grey-buff with handle scar SV1?		
0012	Fill oven/kiln 0005/0011	DJ R	1	22	35	*	Cam 154/155 flagon	Upright ring neck flagon (min 6 rings), orange & grey-buff SV1?	Claudio- Neronian	P6
0012	Fill oven/kiln 0005/0011	DJ R	1	2		*		Pitted, flaking surface		
0012	Fill oven/kiln 0005/0011	DJ R	2	24		(*)		Body sherds, pale grey, powdery		
0012	Fill oven/kiln 0005/0011	DZ	1	14	30	*	Bk	Beaker with small concave/lid seated rim, groove around shoulder - buff	Claudio- Neronian/ Flavian	P5
0012	Fill oven/kiln 0005/0011	DZ	1	4	6	*	Bk	Beaker with small everted, concave/lid seated rim, groove around shoulder - buff	Claudio- Neronian/ Flavian	P8
0012	Fill oven/kiln 0005/0011	DZ	1	4	9	*	Bk	Beaker with small concave/lid seated rim - orange	Claudio- Neronian/ Flavian	P9
0012	Fill oven/kiln 0005/0011	DZ	1	4		(*)	Bk	Rouletted body sherd	M1-E2C Claudio- Neronian/ Flavian	
0012	Fill oven/kiln 0005/0011	DZ	1	8	16			Jar/beaker with small everted, concave/lid seated rim, groove around shoulder - buff	Claudio- Neronian/ Flavian	P13
0012	Fill oven/kiln 0005/0011	DZ	1	6	15		Bk	Beaker with small everted, concave/lid seated rim, groove around shoulder - buff	Claudio- Neronian/ Flavian	P14
0012	Fill oven/kiln 0005/0011	GX	2	26	15	(*)	bowl	Bowl rim, light grey fabric, beginning of cordon at shoulder	M1-E2C	P10
0012	Fill oven/kiln 0005/0011	GX	1	20		*	Cam 218 deep bowl/	Deep bowl/jar, probably Cam 218. badly fired, surfaces	M1- L1/E2C	P11

Ctxt	Ctxt type	Pottery Fabric	No	Wt(g)	Eve	Abr/ poor fired	Form	Notes	Spot date	Pot no.
							jar	degrading		
0012	Fill oven/kiln 0005/0011	GX	6	54		(*)		Misc sherds		
0012	Fill oven/kiln 0005/0011	GX	1	24	21	(*)	NNJ	Narrow neck jar rim – light/medium grey -powdery surfaces, sandy fabric		P16
0012	Fill oven/kiln 0005/0011	GX	1	12	15	*	NNJ	Narrow neck jar rim, external lip on rim lower edge – grey & reddish-brown surfaces & fabric, misfired		P17
0014	Fill oven/kiln 0005/0014	DJ	3	20		A		Moderately thin, pale orange		
0014	Fill oven/kiln 0005/0014	DJ	2	20		(A)	F	Includes sherd from base, probably from a flagon		

# Appendix V- Assessment of the charred macrofossil material

Val Fryer, Environmental Archaeologist August 2017

# Introduction and method statement

Excavations at Capel St. Mary, undertaken by John Newman, recorded an unusual double oven (feature [0005]) and an associated ditch of Roman date. Samples for the retrieval of the plant macrofossil assemblages were taken from the ditch fill (0003), from the southern and central stoke pits of the oven (0007 and 0012 respectively) and from the fill of the southern oven (0009). The northern oven and stoke pit were both too severely truncated for effective sampling.

The samples were processed by manual water flotation/washover, with the flots being 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 (2010). All plant remains were charred.

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

# Results

Although charcoal/charred wood fragments are present throughout, other plant macrofossils are very scarce and are only recorded within the stoke pit fills. Preservation is generally poor, with most remains being both puffed and distorted (probably as a result of high temperature combustion) and very fragmented. It is also noted that much of the charcoal has a distinctive flaked appearance, which again is possibly indicative of very high temperatures of combustion.

Barley (*Hordeum* sp.) and wheat (*Triticum* sp.) grains are noted, along with a spelt wheat (*T. spelta*) glume base, an indeterminate wheat spikelet base and individual seeds of brome (*Bromus* sp.), a small legume (Fabaceae) and goosegrass (*Galium aparine*). Other plant remains include small pieces of charred root/stem and an indeterminate culm node. Other remains are also quite scarce, although small clumps of orange/red burnt or mineralised soil are common within the features associated with the oven. Small pieces of black porous/tarry material and vitreous conglomerations (all probable residues of the combustion of organic remains) are also recorded along with splinters of heat shattered stone, a burnt bone fragment, a burnt fish vertebra and small pieces of coal. However, it is currently unclear whether the latter are contemporary with the features from which the samples were taken, or later contaminants.

# Conclusions and recommendations for further work

In summary, the composition of the three assemblages from the oven would appear to indicate that wood/charcoal were the prime fuels in use, with cereal processing waste and/or dried herbage possibly being employed as tinder or kindling. This may indicate that the structure was heated to very high temperatures; further analysis of the charcoal may be able to ascertain the range of temperatures attainable. As the assemblages are relatively small in

size (i.e. up to circa 0.3 litres in volume), it would appear that the oven was cleaned on a regular basis, possibly as a means of preventing accidental fires. The assemblage from ditch [0002] may be derived from a separate source, as the burnt soil concretions, which are noted within the oven samples, are entirely absent.

Although none of the current assemblages contain a sufficient density of material for quantification (i.e. 100+ specimens), as stated above, identification and analysis of the charcoal may provide valuable data regarding the use of the oven and the management of local fuel resources.

# Reference

Stace, C., 2010

New Flora of the British Isles. 3<sup>rd</sup> edition. Cambridge University Press

# Key to Table

Context No.	0003	0007	0009	0012
Feature No.	0002	0006	8000	
Feature type	Ditch	SSP	SO	CSP
Plant macrofossils				
Hordeum sp. (grain)				xcf
Triticum sp. (grains)				xcf
(spikelet base)				х
T. spelta L. (glume base)		Х		
Cereal indet. (grains)				Х
Bromus sp.		Х		х
Fabaceae indet.		Х		
Galium aparine L.		Х		
Charcoal <2mm	XX	XXXX	XXXX	xxxx
Charcoal >2mm	XX	XXXX	XXXX	XXXX
Charcoal >5mm	Х	XXX	XX	XXX
Charcoal >10mm	х	XX	Х	х
Charred root/stem	х	Х		
Indet. culm node		Х		
Other remains				
Black porous/tarry material	Х	Х	Х	
Bone	xb			
Burnt/fired clay		XX	Х	
Burnt stone		Х	Х	х
Burnt/mineral replaced soil concretions		XXX	XX	XX
Fish bone			xb	
Pottery			Х	
Small coal frags.	х	х	х	
Vitreous material		х	Х	
Sample volume (litres)	30	45	30	45
Volume of flot (litres)	<0.1	0.3	<0.1	0.3
% flot sorted	100%	50%	100%	50%

# OASIS ID: johnnewm1-255657

Project details

Project name

Land West of Pine Dell and Ashcroft, London Road, Capel St

Mary, Suffolk- Archaeological Evaluation Report

Capel St Mary, land west of Pine Dell and Ashcroft, London Road (CSM 045, TM 0984 3842) evaluation trenching for a residential development adjacent to the Old London Road, which is on the line of major Roman period road, revealed a double pottery kiln of mid-late 1st century AD date which produced mainly oxidised, primarily buff coloured, wares

Short description of the project

with a large proportion being flagons, beakers and jars. In this case only the base of the double kiln could be recorded due to previous ground truncation. In addition small ditches of early Roman date and Post medieval date were also recorded but the site did not produce any other evidence of significant past

activity.

Project dates Start: 28-06-2016 End: 28-03-2017

Previous/future work No / Yes

Any associated

project reference

ESF 24190 - HER event no.

codes

Any associated

project reference

codes

CSM 045 - Related HER No.

Any associated

project reference

project reference

codes

B/14/00100/OUT/LJB - Planning Application No.

Type of project Field evaluation

Site status None

Current Land use Grassland Heathland 3 - Disturbed

Monument type DITCH Roman

Monument type DITCH Post Medieval

Monument type KILN Roman

Significant Finds POTTERY Roman

Significant Finds BRICK Post Medieval

Significant Finds KILN DEBRIS Roman

Methods & techniques

"Sample Trenches"

Development type Rural residential

Prompt Planning condition

Position in the planning process

After full determination (eg. As a condition)

**Project location** 

Country England

SUFFOLK BABERGH CAPEL ST MARY LAND WEST Site location

OF PINE DELL AND ASHCROFT, LONDON ROAD

Postcode IP9 2JR

Study area 7900 Square metres

TM 0984 3842 52.003959704219 1.057563481728 52 00 14 Site coordinates

N 001 03 27 E Point

Min: 47m Max: 48m Height OD / Depth

Project creators

Name of Organisation

John Newman Archaeological Services

Project brief Local Authority Archaeologist and/or Planning

originator Authority/advisory body

Project design

John Newman originator

**Project** 

director/manager

John Newman

Project supervisor John Newman

Type of

sponsor/funding

Developer

body

Project archives

Physical Archive

recipient

Suffolk CC Archaeological Service

**Physical Contents** "Ceramics"

Digital Archive

recipient

Suffolk CC Archaeological Service

"Ceramics" Digital Contents

Digital Media

available

"Images raster / digital photography", "Text"

Paper Archive

recipient

Suffolk CC Archaeological Service

Paper Contents "Ceramics"

Paper Media available

"Plan", "Report", "Section"

Project bibliography

Publication type Grey literature (unpublished document/manuscript)

Land West of Pine Dell and Ashcroft, London Road, Capel St

Title Mary, Suffolk- Archaeological Evaluation and Excavation

Report

Author(s)/Editor(s) Newman, J

Date 2017

Issuer or publisher John Newman Archaeological Services

Place of issue or

publication

Henley, Suffolk

Description Loose bound client report and pdf

Entered by John Newman (johnnewman2@btinternet.com)

Entered on 11 October 2017

# **Appendix VII- Timetabled task list**

SB- Stephen Benfield, Colchester Archaeological Trust

DC- Dana Challinor- Freelance specialist, Oxford

EH- Emma Holloway, Colchester Archaeological Trust

JN- John Newman, JNAS

(Publication plan and section figure already produced by Sue Holden)

Task	Specialist	Timetable				
Overall management	JN	January-April 2018 (1 day)				
Illustrations	EH	January-February 2018 (2 days)				
(c30 sherds)						
Research of similar	SB	January-February 2018 (1.5 days)				
RB kiln sites						
Refinement of pottery	SB	January-February 2018 (1 day)				
catalogue						
Study of macrofossil	DC	Early March 2018 (1 day)				
residues						
Background text for	JN	February 2018 (0.5 day)				
publication						
Production of	SB	February-March 2018 (2.5 days)				
publication text						
Submission to the	SB/JN	April 2018				
Journal of Roman						
Pottery Studies						
Submission of	JN	Mid 2018 (when publication paper has been				
archive to Suffolk CC		accepted- 1 box of pottery plus residues and				
HER	15.1	1 small box paper archive)				
Preparation of final	JN	April/May 2018				
archive report						
integrating the						
updated analysis						
work to be added to						
the excavation report						
as an additional						
appendix and sent to the HER and						
uploaded to OASIS						