# Archaeological monitoring and recording at the former Star Lane Brickworks, Great Wakering, Essex, SS3 0PP

# May - November 2015



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## on behalf of Taylor Wimpey, East London Division

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#### 1 Summary

Archaeological monitoring and recording took place at the former Star Lane Brickworks, Great Wakering, Essex in advance of the construction of a new housing estate. Two drains, an oil pipeline, in-filled chambers and the remains of several concrete slabs which formed the base of buildings were identified and were all associated with the former 20th century brickworks. No evidence for any earlier archaeological horizons was exposed.

#### 2 Introduction (Fig 1)

This is the archive report for archaeological monitoring and recording at the former Star Lane Brickworks, Great Wakering, Essex which was carried out in May and November 2015. The work was commissioned by Taylor Wimpey East London Division in advance of the construction of a new housing estate, and was undertaken by Colchester Archaeological Trust (CAT).

Prior to an application for the redevelopment of the site, the Historic Environment Team of Essex County Council Place Services (ECCPS) recommend that the standing buildings of the brickworks be recorded prior to their demolition. The site was cleared without this work being carried out and an archaeological condition for desk-based research and excavation was recommended to the local Planning Authority and applied to the planning application.

The archaeological desk-based assessment targeted at the brickworks themselves was carried out in 2015 (CAT Report 809, by Chris Lister). Subsequent to that DBA a brief for archaeological monitoring and recording during ground clearance was issued by Historic Environment Advisor Alison Bennett (ECCPS).

All archaeological work was carried out in accordance with the *Brief for archaeological monitoring, recording and excavation*, detailing the required archaeological work, written by Alison Bennett (ECCPS 2015), and a Written Scheme of Investigation (WSI) prepared by CAT in response to the brief and agreed with ECCPS (CAT 2015).

In addition to the brief and WSI, all fieldwork and reporting was done in accordance with English Heritage's *Management of Research Projects in the Historic Environment* (*MoRPHE*) (English Heritage 2006), and with *Standards for field archaeology in the East of England* (EAA **14** and **24**). This report mirrors standards and practices contained in the Institute for Archaeologists' *Standard and guidance for archaeological watching brief* (CIfA 2014a) and *Standard and guidance for the collection, documentation, conservation and research of archaeological materials* (CIfA 2014b).

#### 3 Archaeological background

The following archaeological background utilises the Essex Historic Environment Record (EHER) held at Essex County Council, County Hall, Chelmsford.

An archaeological desk-based assessment was first completed for the development site in 2012 (Bourn, 2012). Examination of the data from the Essex and Southend Historic Environment Records concluded that there was a relatively large amount of Bronze Age, Iron Age and Saxon remains recorded within 1km of the development site, although none on the site itself. In the medieval period, the site would have lain among agricultural fields located to the south west of the historic core of Great Wakering. An 1814 map of Manor Farm and Great Wakering Hall shows the site comprising parts of two fields, this remained the same on the Great Wakering Tithe Map and the first edition OS map (1880) (*ibid*, p10-11, figs 4-6). By the time of the 1898 OS map the field boundaries had been removed and the Star Lane Brickworks moved onto the site in 1932.

A second desk-based assessment was undertaken in 2015 (CAT Report 809) focussing on the Star Lane Brickworks. It concluded that the site still had potential for buried remains relating to the brickworks or earlier features.

The following history of the Star Lane Brickworks is taken from CAT Report 809:

The Star Lane Brickworks were opened in 1932 and operated by the Milton Hall (Southend) Brick Company Limited until 1984, when it was taken over by the London Brick Company (EHER 15369). The manufacture of stock bricks commenced in 1933, initially fired in a clamp and later in kilns. By 1970 there were four pairs of oil-fired downdraught intermittent kilns in use, with one chimney for each pair of kilns. Each of the eight kilns held 100,000-110,000 bricks. In January 1995 the fuel for firing the bricks was changed from oil to gas. By 1997 only six of the kilns were still in use. There was a large Deboer B.V. brick-making plant from Holland, producing 240,000 bricks per week and one Berry brick-making machine producing 10,000 bricks per week. The gas-fired drying process took 60 hours (Corder-Birch, 1997).

The remains of the Star Lane brickworks was extant until 2012 after which is was levelled of all upstanding remains. However, the reinforced concrete slabs that formed the bases of the buildings and the hardstanding between them had been left *in situ*, the removal of which is the focus of this report. Most, if not all, of the remains demolished in 2012 were buildings dating from the 1960s redevelopment of the site (CAT Report 809, p6).

#### 4 Results (Figs 2-3)

Monitoring and recording took place during clearance of the site when the surviving concrete slabs and hardstanding were being lifted and broken-up. This made archaeological monitoring difficult and it was agreed that the contractors would strip eight areas for further investigation of any archaeological remains. These areas were given trench numbers but did not form a systematic evaluation of the site, locations were picked for ease of access instead. Each trench measured 30-60m long by 5m wide, and was excavated by the contractors using a mechanical digger under archaeological supervision.

A plan of the former brickworks, produced by Hanson Bricks *c* 2003, was given to CAT during monitoring and has been overlaid on the trench plan (Fig 2).

Modern demolition debris associated with the removal/demolition of the concrete slabs/hardstanding overlaid the entire site (L1, c 300-410mm thick). In parts of the northeast corner L1 sealed a thin accumulation horizon (L2, c 70-140mm thick) which sealed natural clay (L3). Over the remainder of the site L1 sealed natural clay (L3).

Trench 1 (T1): no features were exposed.

Trench 2 (T2): a large drainage channel was identified running NW/SE.

Trench 3 (T3): a drain was identified running E/W.

**Trench 4 (T4):** two small sections of concrete slab were exposed running E/W along the southern edge of the trench and N/S.

Trench 5 (T5): a small section of concrete slab was exposed running N/S.

**Trench 6 (T6):** a small section of concrete slab was exposed running E/W, probably associated with brick kiln 1.

**Trench 7 (T7):** the remains of an oil pipeline was exposed, which presumably joined the above ground oil tanks that existed immediately to the east of the trench to brick kiln 5 and possibly also 8 (see Fig 2).

**Trench 8 (T8):** a small section of concrete slab was exposed running E/W along the northern edge of the trench, probably associated with brick kiln 2.

Large in-filled underground chambers were also identified during clearance in the southwest corner of the site.



Photograph 1 T1, looking W



Photograph 2 Remains of an underground chamber, looking S

#### 5 Finds

Large quantities of modern demolition material was observed throughout L1 consisting of crushed concrete and brick, pieces of steel rebar, timber and plastic.

#### 6 Discussion

We know from the desk-based assessments that the former Star Lane brickworks was extant until 2012 after which is was levelled of all upstanding remains. These remains were primarily, if not totally, from the 1960s redevelopment of the site that saw the construction of the eight downdraught kilns (CAT Report 809). The reinforced concrete slabs that formed the bases of the buildings and the hardstanding between them had been left *in situ* and were in the process of being removed during this monitoring. Small sections of these slabs were still in position in trenches T4-T6 and T8, but it was apparent that most had already been removed and a thick layer of building debris associated with this demolition process lay over the entire site.

Monitoring revealed that for the most part the concrete slabs sealed natural ground level. This suggests that the construction of these slabs required that the site was stripped before the concrete was laid down, potentially removing any earlier archaeological horizons that may have existed on the site. A thin layer of subsoil had survived in trenches T1 and T3 but no significant archaeological horizons were exposed when the subsoil was removed. It is possible that the underground chambers observed in the south-west corner of the site represent a pre-1960s phase of the brickworks as they are not present on the 2003 Hanson Brick plan of the site. However, map regression undertaken during the DBA (CAT Report 809) provided no indication of structures of this size in this area and it is impossible to be certain of their date. It is possible that these chambers were actually supporting structures for the concrete slab laid in the 1960s, perhaps made necessary by soft ground in this part of the site.

The only other remains identified on the site were drains in trenches T2-T3 and the oil pipeline in T7, all of which must have been associated with the 1960s buildings of the former brickworks. It is likely that the oil pipeline joined the above ground fuel tanks immediately to the east to brick kiln 5 and possibly also 8 (see Fig 2).

#### 7 Acknowledgements

CAT thanks Taylor Wimpey East London for commissioning and funding the work. The project was managed by C Lister, fieldwork was carried out by B Holloway. Figures are by L Pooley and E Holloway. The project was monitored for ECCPS by Alison Bennett.

#### 8 References

Note: all CAT reports, except for DBAs, are available online in PDF format at <a href="http://cat.essex.ac.uk">http://cat.essex.ac.uk</a>

Bourn, R	2012	Archaeological desk-based assessment: Star Lane, Great
		Wakering, Essex, CgMs Consulting
CAT	2014	Health & Safety Policy
CAT	2016	Written Scheme of Investigation (WSI) for archaeological
		monitoring and recording, evaluation and excavation at the
		former Brickworks, Star Lane, Great Wakering, Essex
CAT Report 809	2015	Archaeological desk-based assessment of the former brickworks
•		at Star Lane, Great Wakering, Essex
ClfA	2014a	Standard and Guidance for an archaeological watching briefs
ClfA	2014b	Standard and guidance for the collection, documentation,
		conservation and research of archaeological materials
Corder-Birch, A	1997	Survey of Brickworks in Essex
DCLG	2012	National Planning Policy Framework
ECC	2016	Brief for archaeological monitoring, recording and excavation at

Star Lane Brickworks site, Great Wakering

English Heritage 2006 Management of Research Projects in the Historic Environment

(MoRPHE)

Gurney, D 2003 Standards for field archaeology in the East of England. East

Anglian Archaeology Occasional Papers 14 (EAA 14).

Medlycott, M 2011 Research and archaeology revisited: A revised framework for the

East of England. East Anglian Archaeology Occasional Papers

24 (EAA 24)

#### 9 Abbreviations and glossary

CAT Colchester Archaeological Trust
ClfA Chartered Institute for Archaeologists

context specific location of finds on an archaeological site

ECCPS Essex County Council Place Services EHER Essex Historic Environment Record

feature (F) an identifiable thing like a pit, a wall, a drain: can contain 'contexts'

layer (L) distinct or distinguishable deposit of soil modern period from *c* AD 1800 to the present

natural geological deposit undisturbed by human activity

NGR National Grid Reference post-medieval from Henry VIII to c AD 1800

residual something out of its original context, eg a Roman coin in a modern pit Section (abbreviation sx or Sx) vertical slice through feature/s or layer/s

WSI Written Scheme of Investigation

#### 10 Contents of archive

Finds: n/a

Paper and digital record

One A4 document wallet containing: The report (CAT Report 1017)

ECC Evaluation Brief, CAT Written Scheme of Investigation Original site record (Feature and layer sheets, Finds record, plans)

Site digital photos and log, Architectural plans, Attendance register, Risk assessment

#### 11 Archive deposition

The paper and digital archive is currently held by the Colchester Archaeological Trust at Roman Circus House, Roman Circus Walk, Colchester, Essex CO2 7GZ, but will be permanently deposited with Southend Museum under accession code SOUMS: requested

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#### **Distribution list:**

Taylor Wimpey East London Division ECC Place Services Historic Environment Advisor Essex Historic Environment Record, Essex County Council



#### **Colchester Archaeological Trust**

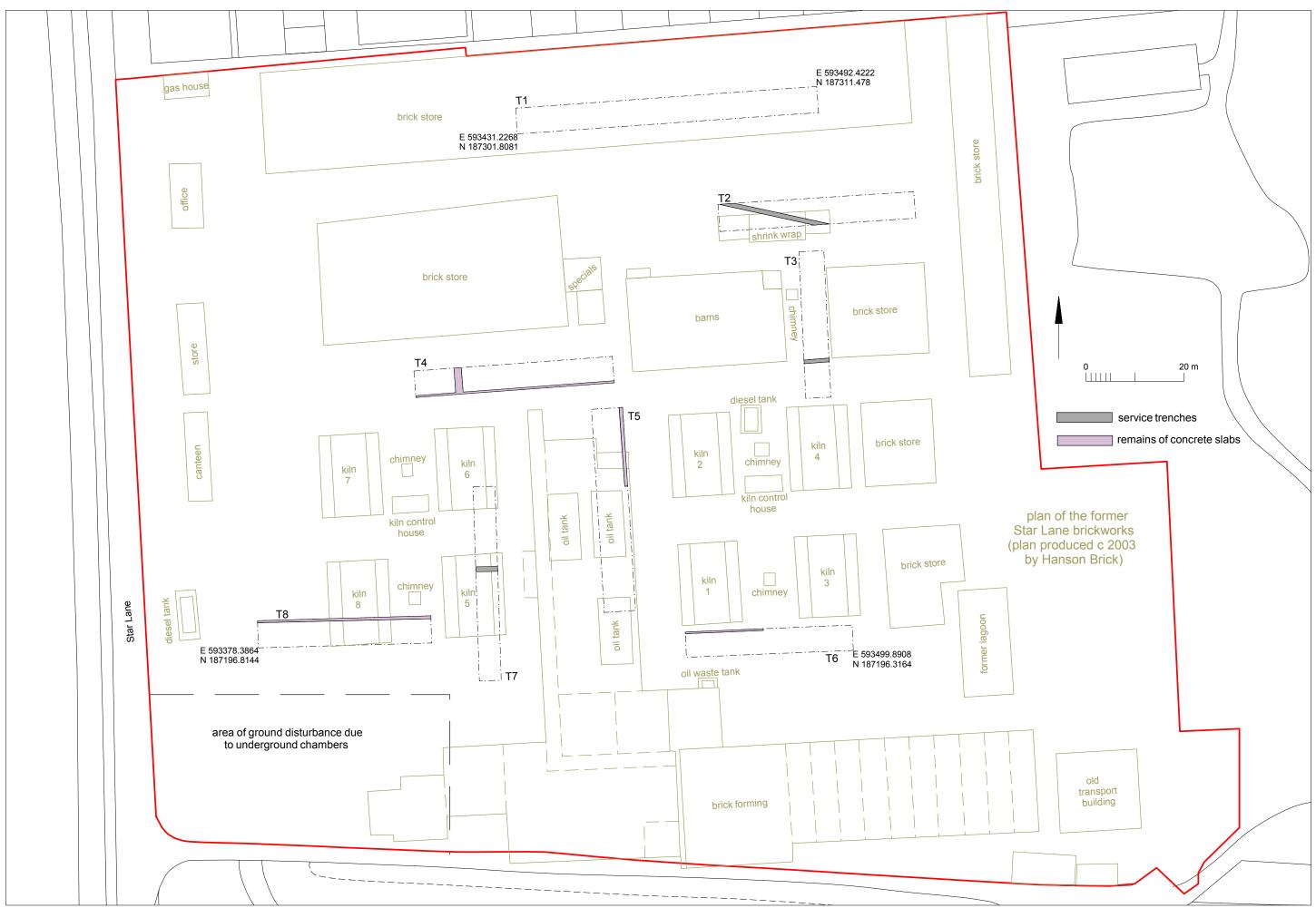
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Checked by: Philip Crummy Date: 18.11.2016



Fig 1 Site location.



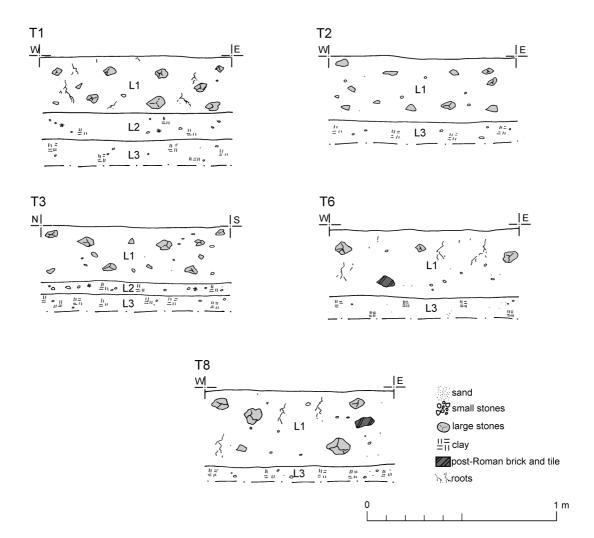


Fig 3 Representative trench sections.

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#### **Project details**

Project name Archaeological monitoring and recording at the former Star Lane Brickworks,

Great Wakering, Essex, SS3 0PP

Short description

Archaeological monitoring and recording took place at the former Star Lane of the project Brickworks, Great Wakering, Essex in advance of the construction of a new

housing estate. Two drains, an oil pipeline, in-filled chambers and the remains of several concrete slabs which formed the base of buildings were identified and were all associated with the former 20th-century brickworks. No evidence for any

earlier archaeological horizons was exposed.

Project dates Start: 12-05-2015 End: 03-11-2015

Previous/future

work

No / No

Any associated

project reference

codes

15/05c - Contracting Unit No.

Any associated project reference

codes

12/00252/FUL - Planning Application No.

Type of project Recording project

Site status None

Current Land use Industry and Commerce 1 - Industrial

Monument type **NONE None NONE None** Significant Finds

Investigation type "Watching Brief"

**Prompt** Planning condition

#### **Project location**

Country England

Site location ESSEX ROCHFORD GREAT WAKERING former Star Lane Brickworks

Postcode SS5 0PP

Study area 33122 Square metres Site coordinates TQ 934 872 51.549941583527 0.78980478392 51 32 59 N 000 47 23 E Point

#### **Project creators**

Name of

Colchester Archaeological Trust

Organisation Project brief

originator

HEM Team Officer, ECC

Project design

originator

Emma Holloway

**Project** 

Chris Lister

director/manager

Project supervisor Ben Holloway

Type of

Developer

sponsor/funding

body

Name of sponsor/funding

body

Taylor Wimpey East London

#### **Project archives**

Physical Archive

Exists?

No

Digital Archive

recipient

Southend Museum

Digital Archive ID requested **Digital Contents** "none"

Digital Media

available

"Images raster / digital photography", "Text"

Paper Archive

recipient

Southend Museum

Paper Archive ID requested "none" **Paper Contents** 

Paper Media available

"Photograph", "Plan", "Report", "Section"

#### **Project** bibliography 1

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