

**CHANNEL TUNNEL RAIL LINK
UNION RAILWAYS LIMITED**

**Archaeological Evaluation at Temple East of Springhead
(ARC STP97), Gravesend, Kent
Environmental Statement Route Window 14**

4th September 1997

**Contract no. 194/870
WA Report no. 43500c**

Wessex Archaeology

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Volume 1 of 1

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4th September 1997

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Archaeological Evaluation at Temple East of Springhead (ARC STP97), Gravesend, Kent Environmental Statement Route Window 14

Executive Summary

Wessex Archaeology was commissioned by Union Railways Limited to carry out an archaeological evaluation on a site to the south-west of Gravesend (centred on URL grid point 42250 51900; NGR grid point TQ 62300 71900), known as Temple East of Springhead. The potential for archaeological remains within the evaluation area had been identified by an earlier Environmental Statement (URL 1994) and geophysical survey (GSB 1996). This potential was defined as the possibility of discovering features and remains associated with the scheduled Romano-British temple immediately to the north-west, and of discovering archaeological features that correspond to geophysical anomalies.

The evaluation revealed a small number of dated and undated archaeological features, predominantly concentrated towards the higher ground to the south-west, which is formed by a massive (single undifferentiated) deposit of Loessic sand against the side of a Chalk valley. The archaeological features comprise ditches, post-holes, a relict watercourse and a probable terrace. Three ditches, one identified as Late Iron Age or early Romano-British, may correspond to some of the broadly south-east to north-west aligned fainter linear geophysical anomalies previously recorded. There was no evidence to suggest an extension of the Romano-British Temple or associated features into the evaluation area.

Colluvial deposits are identified within the valley floor, including a primary pedogenic horizon of probable Late Bronze Age date. However, no settlement evidence was recorded to associate with the colluvial development. A considerable quantity of worked flint recorded from topsoil contexts towards the base of the valley side may be derived from disturbed settlement features affected by more recent ploughing.

FACTUAL STATEMENT

1 INTRODUCTION

1.1 Project Background

- 1.1.1 Wessex Archaeology was commissioned by Union Railways Limited (URL) to carry out an archaeological evaluation on a site to the south-west of Gravesend (centred on URL grid point 42250 51900; NGR grid point TQ 62300 71900; **Figure 1**), known as **Temple East of Springhead** (site code ARC STP97; Environmental Statement Route Window 14).
- 1.1.2 The evaluation forms part of a programme of archaeological investigation along the proposed route of the Channel Tunnel Rail Link (CTRL), and was preceded by an Environmental Assessment (URL 1994) and geophysical survey (URL 1996).
- 1.1.3 The fieldwork was conducted in accordance with a written *Specification for Archaeological Investigations* (URL 1997), which defined the scope, aims and methods for the project. In addition to general aims, the following site specific aims were identified:
- *determine the presence/absence etc. of any structures, features and deposits associated with, or in close proximity to, the scheduled Roman temple (KE 198);*
 - *determine the presence/absence etc. of any subsoil features or deposits which may be associated with, or in close proximity to, recorded geophysical anomalies.*
- 1.1.4 The fieldwork was carried out between 28th April 1997 and 9th May 1997, with preliminary survey work carried out on 24th April 1997.

1.2 Site Description, Topography, Geology and Hydrography

- 1.2.1 The site was situated within the north-west corner of farmland defined by the A2 Trunk road to the north and New Barn Road to the east, and covered an area of *c.* 17 hectares. The evaluation comprised 41 machine trenches (trench 1369TT - trench 1409TT inclusive), each measuring 30 m by 1.50 m.
- 1.2.2 At the time of the evaluation seven distinct plots were identified within the site limits, comprising a recently seeded lettuce field (Plot 1), two cabbage fields (Plot 2 and Plot 4), two ploughed fields of indeterminate crop (Plot 3 and Plot 5), one arable field not under cultivation (Plot 6) and one strawberry field (Plot 7).
- 1.2.3 The site occupied the level brow and the south-west side of a south-east to north-west aligned valley (**Figure 2**), the moderate slope ranging from convex to concave in profile. The major modern feature occupying the valley is the A2 Trunk Road (Watling Street). The opposing side of this valley comprises a steep chalk cliff. The ground surface within the evaluation area descended in height from *c.* 27 m above Ordnance Datum (aOD) to 12.80 m aOD at the base of the valley.
- 1.2.4 Underlying drift geology for the area is recorded as Pleistocene Head deposits located at the northern end of the site, associated with the relict former course of the River Ebbsfleet that now springs further to the north-west. Solid geology is recorded as comprising Cretaceous Upper Chalk, with overlying caps of Palaeocene Thanet Beds identified to the south forming the higher ground (Ordnance Survey 1977).
- 1.2.5 There are no extant watercourses either within or in the immediate vicinity of the site. However, the Pleistocene Head deposits located at the base of the slope on which the site is located are indicative of the former course of the south-east to north-west flowing River Ebbsfleet. This river now springs further down the valley to the north-west, and ultimately feeds into the River Thames between Swanscombe Marsh and Northfleet.

1.3 Methodology

- 1.3.1 As noted above (paragraph 1.1.3), the fieldwork was conducted in accordance with a written *Specification for Archaeological Investigations* (URL 1997), which contains a detailed methodology for all aspects of the evaluation fieldwork. This methodology will not be repeated in full here, although a brief summary is reiterated below:

- *allowing for agreed variations noted below, all trenches were located to a horizontal accuracy of ± 0.50 m and elevation accuracy of ± 0.02 m (per kilometre traverse) in relation to trench location plans provided and Ordnance Datum (Newlyn);*

- *all trenches were excavated in discrete 0.10-0.20 m spits using a tracked excavator with a 1.50 m wide toothless ditching bucket under close archaeological supervision, to either 1.20 m depth, the surface of in situ geology, or the surface at which archaeological remains could be identified, whichever was encountered first;*
- *all trenches were cleaned manually, with a sufficient sample of all exposed features investigated, and sampled where appropriate, in order to fulfil the aims of the evaluation; and,*
- *all recording conformed to the standards of current best practice, and includes a full graphic and photographic record of all stages of the evaluation.*

1.3.2 For ease of reference, the evaluation area was divided into seven identifiable fields, or plots (**Figure 3**). Trenches within each plot are tabulated below (**Table 1**).

Table 1: Correlation of Plot and Trench numbers

Plot number	Trenches
Plot 1	1369TT, 1372TT, 1377TT, 1396TT, 1397TT, 1399TT
Plot 2	1370TT, 1371TT, 1373TT, 1374TT, 1375TT, 1376TT, 1378TT, 1379TT, 1380TT, 1381TT, 1382TT, 1386TT, 1387TT, 1388TT, 1389TT, 1390TT, 1405TT
Plot 3	1383TT, 1384TT, 1385TT, 1400TT, 1401TT, 1402TT, 1403TT, 1406TT (north)
Plot 4	1404TT, 1407TT, 1408TT, 1409TT
Plot 5	1406TT (south)
Plot 6	1392TT, 1393TT, 1394TT, 1395TT, 1398TT
Plot 7	1391TT

1.4 Variations

1.4.1 The following agreed variations were actioned during the course of the fieldwork.

- *trench 1376TT interrupted to avoid buried services.*
- *trench 1391TT extended to the north to expose the full width of an archaeological feature.*
- *trench 1397TT interrupted to preserve the line of a farm track.*
- *trench 1398TT relocated to the south to avoid overhead power lines and a farm track.*
- *trench 1399TT relocated to the north and realigned as an east to west trench to avoid overhead power lines, interrupted to avoid buried services and extended to maintain a length of 30 m.*

- *trench 1400TT relocated to the north to avoid overhead power lines.*
- *trench 1401TT relocated to the north to avoid overhead power lines.*
- *trench 1404TT relocated to the west to avoid overhead power lines.*
- *trench 1406TT interrupted to preserve the line of a farm track.*
- *trench 1409TT relocated to the north and realigned as a north to south trench to avoid overhead power lines.*
- *Geotechnic pits excavated below 1.20 m depth in trenches 1369TT, 1370TT, 1371TT, 1373TT, 1376TT, 1379TT and 1382TT.*

2 RESULTS

2.1 General

- 2.1.1 In summary, 41 evaluation trenches were excavated within the seven defined plots (**Figure 3**), revealing 23 archaeological or potentially archaeological features, all of which were investigated. These features are predominantly, but not exclusively, located on the higher ground to the south, and include five plough furrows (trench 1377TT **210** and **212**; trench 1391TT **428**; trench 1393TT **417** and trench 1398TT **435**), one root disturbance (trench 1398TT **433**), one animal disturbance (trench 1393TT **415**) and four modern service trenches (of which only one was recorded by context; trench 1400TT **130**). The features listed above will not be discussed further here.
- 2.1.2 Of the remaining features, six were identified as ditches (trench 1391TT **426**; trench 1396TT **406** and **409**; trench 1397TT **305** and trench 1406TT **321** and **323**), four as post-holes (trench 1401TT **224**, **226**, **228** and **230**), one as a relict watercourse (trench 1370TT **110**) and one as a terrace or similar landscape feature (trench 1377TT **204**). Few datable artefacts were recovered from these features, although a sherd of Late Iron Age or early Romano-British pottery was recovered from ditch **305** (trench 1397TT).
- 2.1.3 In addition, colluvial and possibly alluvial layers were also recorded on the lower ground to the north, as well as a developed subsoil predominantly recorded in trenches on the higher ground to the south, and probably the result of occasional recent deep ploughing. Several sherds of Late Bronze Age pottery were recovered from the colluvium.
- 2.1.4 A context inventory (by trench) is provided in **Appendix 1**, whilst deposits and features of note are described below.

2.2 Stratigraphy

2.2.1 The stratigraphic sequence identified within the evaluation area (**Figure 4**) can be broadly summarised as:

- Valley gravel (probably Head deposit) in the base of the valley;
- Loessic sand sealing the gravel and forming the south-west valley side;
- reworked Thanet Beds capping the Loessic sand to the south-west;
- alluvial and colluvial deposits in the valley base;
- developed subsoil on the level ground to the south-west; and
- modern topsoil.

Valley gravel

2.2.2 This gravel deposit was predominantly recorded within trenches on the valley floor (trenches 1369TT-1374TT, trench 1376TT and trenches 1386TT-1390TT), sealed by colluvium, and comprised poorly sorted small to large subrounded flint gravel in a coarse sandy matrix. The gravel was also encountered at the base of geotechnic pits excavated through the Loessic sand valley side (trenches 1379TT and 1382TT).

Loessic sand

2.2.3 The deposit formed the south-west valley side, and comprised at least 3 m of pure coarse silty decalcified loess (cf. Catt 1978). The loess was massive (a single undifferentiated deposit), with some calcareous root pseudomorphs at depth, although no significant horizons were noted from the geotechnic pit faces. It is possible that this may relate to the Lower Loam deposits at Swanscombe, although the evaluation deposit seems to be more finely sorted. The Loess is similar to deposits at Monkton (Macphail pers. comm.), and has presumably been deposited or re-worked in the Devensian period (i.e. c. 30,000 - 10,000 BP). The Loess deposit is one of the deepest deposits recorded in Kent; the key site at Pegwell Bay being slightly over 4 m where exposed (Pitcher *et al.* 1954) and dated to about 14,800 BP; while other deposits in southern England range in date from c. 18,800 to 14,500 BP (Wintle 1981).

Reworked Thanet Beds

2.2.4 This deposit comprised a 0.30 m thick layer of slightly humic reddish brown clayey silt with occasional chalk flecks and frequent poorly sorted small to large subrounded flint gravel. The degree of sorting and humic component suggest some localised movement downslope, probably during the Holocene. It was noted on the highest ground towards the south-western edge of the evaluation area (trenches 1391TT-1395TT), and identified as sealing Loessic sand in geotechnic pits excavated on the site. It is therefore unlikely to be *in situ* Thanet Beds, which are recorded slightly further to the south (Ordnance

Survey 1977), and would predate the earliest formation date for the Loessic sand of 30,000 BP.

Alluvium and Colluvium

- 2.2.5 Towards the north-west limit of the evaluation area was a moist, stone-free, structureless slightly silty alluvial clay, overlying the Valley Gravel, whose depositional origin was not clear. This probably consists of fines (silts and clays) deposited under local fluvial conditions, either from downslope run-off, or from overbank flooding of season streams (bornes/lavants) in the valley flowing north-west towards the Ebbsfleet. This may be Holocene in date, but could be earlier, and was identified in trench 1369TT (layer **249**).
- 2.2.6 Colluvium was recorded in all trenches on the valley floor and on the foot of the sloping valley side within the evaluation area. The colluvial sequence can be broadly characterised as comprising three principal elements; a primary dark yellowish brown slightly clayey silt containing occasional small to medium subrounded flint gravel; a secondary brownish yellow fine grained silty clay with very few inclusions; and an upper distinctive chalk-flecked brownish yellow clayey silt with occasional small subrounded flint gravel. Not all trenches contained the full colluvial sequence, although if more than one deposit was identified, the sequence was observed in the following order.
- 2.2.7 The primary colluvium contained localised evidence of pedogenesis, indicating a stabilisation horizon, although probably largely in 'fluvial' clay parent material. Artefacts recovered from the primary colluvium included a concentration of worked flint, Late Bronze Age pottery and burnt flint from trench 1373TT (layer **218**), and a smaller quantity of worked flint and similarly dated pottery from trench 1375TT (layer **446**) (i.e. only at the footslope, above the floor of the lower-lying valley). Although the majority of the diagnostic material from this primary layer is Late Bronze Age, a single sherd of probable Late Iron Age pottery was also recovered from the same deposit in trench 1373TT. This later sherd may be an intrusive find, either the result of post-depositional activity (i.e., ploughing, animal burrows, root action, etc.), or due to disturbance associated with the excavation of the trench itself.
- 2.2.8 The secondary colluvium is undated, but if the identification of the primary colluvium as Late Bronze Age in origin is valid, it is likely that the secondary undated layer represents gradual accumulation throughout the remaining prehistoric period. However, the morphological similarities between this material and the alluvium noted above preclude positive identification of either material in trenches where the pedogenic primary colluvium has not been revealed.
- 2.2.9 The upper chalk-flecked colluvial layer produced Late Iron Age pottery (trench 1386TT **119**), and therefore possibly represents Late Iron Age/ early Romano-British and later activity. The chalk flecking perhaps indicates that

the colluvium is partially derived from ploughing on the chalk ridge to the north of the site.

Developed subsoil

- 2.2.10 Comparatively recent developed subsoil, characterised as brownish yellow fine sandy silt containing occasional chalk flecks and small subrounded flint gravel, was recorded in two distinct zones: the higher level ground to the south-west, and the valley side towards the southern edge of the colluvial zone. In general this material was 0.15 - 0.16 m thick, though varying between 0.03 m and 0.27 m.
- 2.2.11 It is likely that the subsoil on the higher ground represents relatively recent occasional deeper ploughing, which has remained relatively close to source in the absence of any substantial downslope movement. However, most of the archaeological features recorded were sealed by subsoil and it is therefore possible that the subsoil represents denuded upcast material from the original excavation of features.
- 2.2.12 Although the subsoil towards the edge of the colluvium may also be the result of deeper ploughing, it may also be indicative of the difficulties in confidently distinguishing thin peripheral layers of colluvium in this zone.

Topsoil

- 2.2.13 In general, topsoil encountered throughout the evaluation area comprised 0.25 - 0.35 m thickness of mid to dark brown clayey loam with moderate amounts of small to medium subrounded flint gravel, and very occasional small chalk flecks.
- 2.2.14 Towards the northern edge of the evaluation area a buried topsoil horizon of similar matrix to that observed on the surface of the site was encountered (trench 1369TT **207**; trench 1370TT **104**). The buried almost certainly resulting from construction work and reinstatement associated with the embanked section of the A2 Watling Street adjacent to the north. A similar deposit recorded in trench 1374TT (**112**) may be a result of groundworks associated with modern service runs recorded in the vicinity (see trench 1376TT).
- 2.2.15 Although the topsoil represents a disturbed modern context, a number of residual finds were recorded from this horizon. These include a considerable quantity of worked flint from a broadly linear zone encompassing trenches 1369TT–1372TT, 1374TT, 1377TT, 1379TT–1380TT, 1382TT, 1384TT, 1386TT and 1406TT. It should also be noted that a considerable quantity of worked flint was noted, but not recovered, on the ground surface whilst moving between trenches. Other examples of worked flint were recovered from topsoil contexts in trenches 1394TT and 1397TT. In addition, medieval pottery has also been recovered from topsoil contexts (trenches 1394TT and 1382TT).

2.3 Structural Report (Figures 3, 5 and 6)

Trench 1370TT (Figure 5)

- 2.3.1 A north-east to south-west aligned linear feature (**110**) crossed the northern end of the trench, cut from the surface of the primary colluvium layer (107) and sealed by the secondary colluvium (106). It was 1.20 m wide and 0.18 m deep, with irregular moderate sloping sides and a flat base, and was filled with brown silty clay containing rare chalk flecks (109). No artefacts, or other anthropogenic components, were recorded from this feature, and on the basis of its morphology it has therefore been provisionally interpreted as a relict natural watercourse or similar run-off feature.

Trench 1377TT (Figure 5)

- 2.3.2 A north to south aligned east-facing shallow slope or terrace (**204**) was recorded at the east end of the trench, parallel to the adjacent field boundary between Plots 1 and 2, and appearing to correspond to a drop in ground surface of c. 1.50 m between these plots. This cut was at least 2.60 m across and 0.38 m deep, and extended to the east beyond the end of the trench. The feature was recorded as cut from the upper surface of the natural geology. It was filled with a greyish brown friable clayey loam containing occasional small subrounded flint gravel and worked and burnt flints (203). Although recorded as a cut feature, this may represent a natural slope in the ground surface, filled with a headland deposit. It is unlikely that the examples of prehistoric worked flint recovered reflect the actual date for the formation of the deposit filling this feature.

Trench 1391TT (Figure 5)

- 2.3.3 An east to west aligned ditch (**426**) crossed the northern end of the trench, cutting the surface of natural gravel (424) and was sealed by a developed subsoil (422). It was 1.32 m wide and 0.24 m deep, with shallow sloping slightly concave sides and a rounded base. It was filled with light yellowish brown sandy silt containing frequent small to medium mixed flint gravel (425). No artefacts were recovered from this feature, on the basis of its proximity to an existing east to west farm track it may possibly represent a former field boundary.

Trench 1396TT (Figure 5)

- 2.3.4 A north to south aligned ditch (**406**) crossed the central portion of the trench, cut from the surface of natural gravel (403) and sealed by developed subsoil (402). It was 0.64 m wide and 0.17 m deep, with an irregular offset 'V'-shaped profile, and was filled with light yellowish brown clayey silt containing occasional small to medium mixed flint gravel (405). A fragment of clay pipe and undiagnostic ceramic building material were recovered from this feature, suggesting a post-medieval date.
- 2.3.5 A north to south aligned ditch (**409**) crossed the eastern portion of the trench, cut from the surface of natural gravel (403) and sealed by developed subsoil (402). It was 0.50 m wide and 0.36 m deep, with a steep 'U'-shaped profile, and was filled with light yellowish brown clayey silt containing occasional

small to medium mixed flint gravel (407), overlying a similar matrix with moderate flint gravel (408), in turn overlying a primary fill of similar matrix and frequent flint gravel (410). A piece of worked flint was recovered from the upper fill, suggesting a prehistoric date.

Trench 1397TT (Figure 6)

- 2.3.6 A west-north-west to east-south-east aligned ditch (305) crossed the northern portion of the trench, cut from the surface of natural Loessic sand (607) and sealed by developed subsoil (302). It was 2.60 m wide and 0.84 m deep, with a moderate sloping convex sides and a broad rounded base, and was filled with yellowish brown silty clay containing frequent small to medium subangular flint gravel (303), overlying a primary fill of greyish brown silty clay containing occasional small subangular flint gravel. A sherd of Late Iron Age or early Romano-British pottery, as well as worked and burnt flints, were recovered from the upper fill of this feature.

Trench 1401TT (Figure 6)

- 2.3.7 A subcircular post-hole (224) was located in the southern portion of the trench, cut from the surface of natural Loessic sand (222) and sealed by developed subsoil (221). It was 0.20 m in diameter and 0.11 m deep, with a slightly concave 'V'-shaped profile, and was filled with greyish brown clayey silt containing occasional small subangular flint gravel (223). Fragments of ceramic building material or fired clay were recorded within this feature, although they were too small to recover.
- 2.3.8 A subcircular post-hole (226) was located in the central portion of the trench, cut from the surface of natural Loessic sand (222) and sealed by developed subsoil (221). It was 0.15 m in diameter and 0.10 m deep, with a slightly concave 'V'-shaped profile, and was filled with greyish brown clayey silt containing occasional small subangular flint gravel (225). Fragments of ceramic building material or fired clay were recorded within this feature, although too small to recover.
- 2.3.9 A subcircular post-hole (228) was located at the northern end of the trench, cut from the surface of natural Loessic sand (222) and sealed by developed subsoil (221). It was 0.37 m in diameter and 0.15 m deep, with a concave 'U'-shaped profile, and was filled with greyish brown clayey silt containing occasional small subangular flint gravel (227). Fragments of ceramic building material or fired clay were recorded within this feature, although they were too small to recover. This feature was immediately to the west of post-hole 230.
- 2.3.10 An elliptical north to south aligned subcircular post-hole (230) was located at the northern end of the trench, cut from the surface of natural Loessic sand (222) and sealed by developed subsoil (221). It was 0.29 m long, 0.20 m wide and 0.11 m deep, with a concave 'U'-shaped profile, and was filled with greyish brown clayey silt containing occasional small subangular flint gravel (229). Fragments of ceramic building material or fired clay were recorded

within this feature, although they were too small to recover. This feature was immediately to the east of post-hole **228**.

Trench 1406TT (Figure 6)

- 2.3.11 An east to west aligned ditch (**321**) crossed the southern end of the trench, cut from the surface of natural Loessic sand (320) and sealed by topsoil (319). It was 0.48 m wide and 0.29 m deep, with a slightly irregular 'V'-shaped profile, and was filled with brownish grey silty clay containing frequent small to medium subrounded flint gravel and moderate chalk flecks (322). A piece of worked flint was recovered from the fill, suggesting a prehistoric date.
- 2.3.12 An east to west aligned ditch (**323**) crossed the southern portion of the trench, cut from the surface of natural Loessic sand (320) and sealed by developed subsoil (325). It was 1.10 m wide and 0.35 m deep, with irregular moderate to steep sloping concave and convex sides and an even slightly sloping base, and was filled with reddish brown silty clay containing moderate small to medium subangular flint gravel and rare chalk flecks (324). A piece of worked flint and an iron nail were recovered from the fill, suggesting a late prehistoric or later date.

2.4 Artefactual Report by Lorraine Mephram

- 2.4.1 Small quantities of artefactual material, in a limited range of material types, were recovered from 23 trenches, predominantly from topsoil contexts, but also from colluvial deposits and a small number of archaeological features. Finds totals, by material type and by context, are given in **Appendix 2**, which also includes artefacts retrieved from environmental samples. The date range of much of the material recovered is post-medieval or modern, although some earlier material, in the form of worked and burnt flint and pottery, was present. Post-medieval/modern finds are not described in detail here, but are summarised in **section 2.4.8**. Other finds are briefly described by material type below.

Worked and Burnt Flint

- 2.4.2 The worked flint assemblage exhibits a mixture of different technologies and probably spans a wide chronological range. The raw material utilised covers a mixture of locally derived sources, including one piece of Bullhead flint. Flint from most contexts exhibits a variable degree of edge damage, and the patination ranges from unpatinated, or with a light film of patination, to heavy greyish-white patination. One piece is rolled. The range of types includes blades, both narrow and squat flakes, and cores. Cores include a mixture of prepared and unprepared platform types, but are primarily flake cores. Tools are limited to one possible edge-retouched flake, which is not chronologically diagnostic; there are also three hammerstones.
- 2.4.3 On a technological basis, the majority of the flint assemblage is likely to be broadly of Late Neolithic or Bronze Age date; the absence of chronologically diagnostic forms precludes closer dating within this range. The presence of

blades, however, might indicate an earlier component, of Mesolithic or Early Neolithic date. Most if not all of the flint appears to be redeposited.

- 2.4.4 Burnt, unworked flint was also recovered from several trenches. This material type is intrinsically undatable, and its origin is uncertain, but frequent association with prehistoric material has led to its use as an indicator of prehistoric activity.

Pottery

- 2.4.5 The post-medieval and modern pottery is summarised below. Earlier pottery comprised 11 sherds, which are of prehistoric and medieval date.
- 2.4.6 Nine sherds were identified as prehistoric, entirely on the basis of fabric type since all are plain and undiagnostic body sherds. These comprise four small sherds in coarse, flint-tempered fabrics which are likely to be of Late Bronze Age date, although a date later in the 1st millennium BC cannot be entirely discounted (trench 1373TT **218**; trench 1375TT **446**; trench 1406TT **325**); one sherd in a slightly finer, better-finished flint-tempered fabric, possibly of Late Iron Age date (trench 1386TT **119**); two shell-tempered and two grog-tempered sherds, including one rim (trench 1373TT **218**; trench 1386TT **119**; trench 1397TT **303**; trench 1406TT **322**), which are probably of similar date, or possibly early Romano-British (1st century BC/1st century AD).
- 2.4.7 One rim sherd from topsoil in trench 1394TT (**501**), in a moderately fine, oxidised sandy fabric, is probably of medieval date (14th or 15th century), while a second sherd from topsoil in trench 1382TT (**503**), in a visually similar fabric, could be of similar date.

Post-medieval and modern finds

- 2.4.8 These comprise ceramic building material, clay pipe, glass, pottery, stone and iron, and are summarised in **Table 2** below:

Table 2: Post-medieval artefact summary

Category	Description
CBM:	fragments of bricks, roof tiles and drainpipes
Clay pipe:	all plain stem fragments, not closely datable
Glass:	fragments of bottles, jars and other vessels; 18th century or later
Pottery:	glazed and unglazed redwares (probably 18th century or later); stonewares (19th/20th century); industrial white wares (19th/20th century); porcelain (20th century)
Stone:	one fragment of roofing slate; not closely datable
Iron:	one iron nail; not closely datable

2.5 Environmental Report by Michael J Allen

Introduction

- 2.5.1 Three 10 litre bulk samples were taken from ditch fills (trench 1397TT **305**, trench 1406TT **321** and **323**) for the retrieval of charred plant remains. These samples were processed as follows. Samples (usually of 10 or 15 litres) were pre-soaked in water, often with the addition of small quantities of hydrogen peroxide (100vol. c. 30% H₂O₂). After soaking the samples were transferred to the flotation tank, where they were placed in a wire basket holding a nylon mesh of 0.5mm aperture. Water was pumped through the sample and the flot retained on a 0.5mm nylon mesh. The residues were fractionated into 5.60 mm, 2 mm and 1 mm fractions and dried (**Appendix 3**). The coarse fractions (>5.60 mm) were sorted, weighed and discarded.
- 2.5.2 The three ditch samples all produced small to average flots (average flot size for 10 litres is 60 ml) with up to 90% rooty material and high numbers of uncharred weed seeds, possibly indicative of stratigraphic movement. A few charred grain fragments were observed as well as low numbers of charred weed seeds and molluscs.

Charcoal

- 2.5.3 Charcoal was noted from the sample flots, as well as a few charcoal fragments greater than 5.60 mm. The charcoal consisted of was large wood fragments, not twigs.

Molluscs

- 2.5.4 Samples were not taken for snails, but their presence in the ditch samples is worthy of comment. The sample from ditch **321** (trench 1406TT) contained a few shells, predominantly modern specimens of the burrowing species *Cecilioides acicula*. A mixed assemblage of predominately open country species was noted and included *Vallonia* spp., and *Trichia hispida*.
- 2.5.5 The sample from ditch **323** (trench 1406TT) contained largely open country species (*Vallonia* spp.) but also *Trichia hispida*, *Cepaea* sp., and at least two specimens of the Introduced Helicellids (*Candidula* spp.), which are not though to have arrived in Britain until the medieval period. A large number of modern specimens of the burrowing snail, *Cecilioides acicula*, were present, and many of the *Vallonia* spp. still retained the perisotricum indicating they too were modern.
- 2.5.6 Both samples were similar, and contained modern shells indicating that these were probably shallow, poorly sealed contexts. The assemblage from ditch **305** (trench 1397TT; dated as Late Iron Age/ Early Romano-British) indicates a post-clearance environment suggesting that this may not relate to earlier prehistoric activity. The presence of well worn specimens of Introduced Helicellids from ditch 323 may indicate a medieval or post medieval date for this deposit.

STATEMENT OF IMPORTANCE

3 CONCLUSIONS

3.1 Extent of Archaeological Remains

3.1.1 Archaeological features were predominantly recorded in trenches on the higher level ground towards the southern limit of the evaluation area (trenches 1391TT, 1396TT, 1397TT, 1401TT, 1406TT) and overlooking the north-north-west facing slope of the site (trench 1377TT). There were no perceived concentrations within this area, although a group of four post-holes were identified within one trench (1401TT). Finds evidence indicates that these features represent more than one period of activity, with diagnostic material of Late Iron Age/ Early Romano-British and post-medieval recovered, as well as undiagnostic prehistoric flintwork, recovered from securely stratified deposits.

3.1.2 Colluvium, comprising up to three distinct horizons, was recorded in all trenches within the lower northern section of the evaluation area (i.e. trenches 1369TT, 1373TT, 1376TT, 1386TT). Dating evidence from the primary horizon includes Late Bronze Age pottery from trenches 1373TT and 1375TT, the former associated with a concentration of undiagnostic prehistoric flintwork. Late Iron Age pottery was recovered from the chalk-flecked upper colluvial horizon in trench 1386TT.

3.1.3 The preliminary geophysical survey of the evaluation area (GSB 1996) highlighted a number of geophysical anomalies that were considered to be archaeological in origin. The results of the evaluation would suggest that the weak linear parallel anomalies identified in Area K reflect the line of ditch **305** (trench 1397TT) and ditches **321** and **323** (trench 1406TT). However, the geophysical survey could not trace these anomalies across Area E (i.e. the area of trench 1397TT) to the north-west, and as such their interpretation as the archaeological features identified during the evaluation should be viewed with caution.

3.1.4 The distinctive anomalies in Area H could not be positively identified, it is probable that the subcircular feature represents geological variations. East to west aligned linear features (i.e. trench 1391TT **426**) were recorded in this area, though not explicitly where they were predicted by the geophysical survey.

3.2 Nature of Archaeological Remains

3.2.1 All archaeological features survived as cuts excavated into the surface of *in situ* subsurface geological deposits. Inter-relationships between features were not observed. With the exception of three ditches (trench 1396TT **406** **409** and trench 1406TT **321**), all features were sealed by a developed subsoil.

It is suggested, but not proven, that this subsoil horizon may indicate denuded upcast material associated with the initial excavation of the feature.

- 3.2.2 Structural remains, comprising four shallow post-holes, were recorded in one trench (trench 1401TT **204 206 208 210**). An insufficient area was exposed to identify characteristic patterns that may indicate a building plan. At this stage it is perhaps more likely that they represent a fenceline, if all elements prove to be contemporaneous.
- 3.2.3 Remaining features were all linear in nature, probably representing field boundaries, enclosure ditches, drainage features, etc. In general, single fills were recorded within these features, although occasional features contained multiple deposits (1396TT **409**, 1397TT **305**). There were no fills of features that were considered either artefactually or environmentally significant.
- 3.2.4 A considerable proportion of all artefacts recovered were provenanced from topsoil contexts, including a concentration of worked flint of chronologically mixed origins towards the base of the valley side. It is possible to suggest that this volume of material represents more than just casual losses in an agricultural environment, and that settlement contemporaneous with these finds occurred in the vicinity. Few features can be positively or provisionally identified with such settlement, and the cluster may therefore represent downslope movement from a settlement area that has since been almost completely removed by ploughing.

3.3 Character of Site

- 3.3.1 No confirmed evidence for settlement activity of any period was recorded within the evaluation area, although the shallow post-holes in trench 1401TT are undated. The artefact concentration within the primary colluvial horizon in trench 1373TT is unlikely to be *in situ*, but is further indirect evidence for settlement activity, of probable Late Bronze Age date, towards the higher ground to the south. Considering the degree of upslope erosion required to generate up to 1.20 m of colluvial deposits downslope, it could be tentatively suggested that the more ephemeral remains associated with prehistoric settlement (i.e., post-holes, drainage gullies, etc.) may have been removed by subsequent ploughing.
- 3.3.2 Late Iron Age and Romano-British evidence comprises a single large ditch and a few stray finds. It is therefore likely that this evidence indicates an area given over to agricultural activity during these periods. No evidence was recorded to suggest that the Roman Temple site in the north-west corner of the site was part of a larger complex, of either ritual or domestic function, extending into the evaluation area.
- 3.3.3 On the basis of the comparative absence of any material from the Romano-British period, including very few stray finds that may be introduced through manuring, it may be suggested that even agricultural activity was of limited extent and intensity. The proximity of the Roman Temple, and the

possibility that an area beyond this building was considered 'sacred', and hence avoided, may indicate why this area is comparatively free from contemporaneous material. Although this statement may appear dichotomous with the volume of colluvium generated principally from ploughing, a significant proportion of this colluvium (i.e. the primary and secondary horizons) is considered pre-Roman in origin.

- 3.3.4 The characteristically chalk-flecked upper colluvial horizon has produced Late Iron Age pottery, and is therefore considered Late Prehistoric or later. Although solid geology beneath the site comprises Upper Chalk, this was not exposed within the evaluation area, and the chalk-flecking must therefore have been transported to the site by some means. Whilst it is possible that at least some of the chalk-flecking is a result of medieval and post-medieval marling, such activity to treat light sandy soils is recorded from the Iron Age (Field 1993, 85). Alternatively, ploughing and similar activity on the south-facing chalk ridge opposing the site may have introduced a considerable volume of chalk into the upper colluvial zone. Such activity is presumed to relate to intensification of settlement during the Romano-British period (i.e. the establishment of the settlement at *Vagniacae*).

3.4 Site Chronology

- 3.4.1 As summarised above, datable remains have indicated Late Bronze Age, Late Iron Age/ Early Romano-British and post-medieval activity within the evaluation area. Stratigraphic relationships were not identified to enable a stratigraphic sequence to be defined, and many of the features and deposits recorded remain undated.

4 IMPORTANCE OF REMAINS

4.1 Scheduled Monument Criteria

- 4.1.1 The Secretary of State's criteria for scheduling monuments has been addressed. The remains recorded during this evaluation do not appear to satisfy any of the criteria as defined.

4.2 Condition

- 4.2.1 Archaeological features recorded during the evaluation are preserved as cuts in the surface of *in situ* geological deposits. All but three of these features were sealed by a layer of developed subsoil which probably serves to partially protect these features from present-day ploughing. However, although not quantifiable, it is very likely that these features have been truncated by ploughing in the past, as emphasised by the relatively shallow nature of the post-holes in trench 1401TT.
- 4.2.2 Conversely, the eroded material moved downslope as a result of ploughing has formed substantial deposits of colluvial material. This accumulated

material may seal and therefore protect earlier remains downslope, particularly of prehistoric date, from subsequent plough damage. However, no archaeological features were recorded either within or beneath the colluvium where examined.

- 4.2.3 Cultural remains have survived, including pottery, worked flint, burnt flint and metal objects. However, with the exception of worked flint, these finds are not prolific, and seldom encountered within the relatively small area of a feature exposed within an evaluation trench. Worked flint is most coherently represented in the topsoil horizons, and includes material noted but not recovered between trenches.
- 4.2.4 Environmental analysis has demonstrated that palaeo-environmental material, including mollusca, does survive, although the acidic nature of the sandy soils appeared to prohibit the survival of bone. Carbonised grain and other material is present, although again, not prolific.

4.3 Period

- 4.3.1 The pre-Holocene Devensian period is represented by the deposition of the massive deposit of Loessic sand within the chalk valley, and now forming the south-west side of the valley. Although undated, such deposits are dated elsewhere and are generally between 30,000 and 10,000 years BP.
- 4.3.2 Prehistoric settlement patterns are not well-documented in the area, with the exception of the Ebbsfleet Neolithic pottery site, and associated timber trackway, to the north-west. The known archaeological resource (Harker 1980, Philp and Chenery 1996) for the area concentrates in the Romano-British period, with the establishment of *Vagniacae* (Springhead) to the north-west of the site. This town was established shortly after the Roman invasion (AD 43), and appears to have remained in use until at least the end of the 4th-century.
- 4.3.3 In addition to its strategic importance at the crossing point of the main route from Dover to London over the Ebbsfleet, the site appears to have held a certain ritual significance with a number of temples established during this period. This includes the scheduled example (KE 198) immediately to the north-west of the evaluation area. It is probable that this concentration of ritual activity demonstrates the presence of a pre-Roman area of worship, most likely associated with the Ebbsfleet spring.
- 4.3.4 Secure chronological indicators from the evaluation have demonstrated Late Bronze Age, Late Iron Age/ early Romano-British, medieval and post-medieval/ modern remains within the evaluation area. In addition, some residual flintwork may be of an earlier prehistoric date (i.e. Mesolithic or Neolithic). The mixed nature of the broadly undiagnostic prehistoric flintwork may indicate intermittent activity in the area throughout the period, with probable Late Bronze Age settlement as evidenced by the concentration of dated pottery and other artefacts within the primary colluvial layers.

- 4.3.5 Despite the proximity of an area of intensive and extensive Romano-British occupation, surprisingly few contemporaneous finds were recorded during the evaluation. As has been suggested, this may in part be due to the relative proximity of a Romano-British temple, which may have restricted settlement and agricultural activity in an area of perhaps enhanced religious/ ritualistic significance.

4.4 Rarity

- 4.4.1 The archaeological remains recorded during the evaluation are unremarkable, and represent a range of feature and artefact types frequently recorded on 'green-field' evaluation sites. Perhaps the only aspect of note is the relatively large amount of undiagnostic prehistoric flintwork to be found in topsoil horizons. It has been suggested that this may represent the vestigial remains of prehistoric settlement activity now completely removed through plough erosion.

4.5 Vulnerability

- 4.5.1 The Loessic sand subsoil and archaeological remains recorded on the higher level ground in the evaluation area are currently under little direct threat from agricultural activity. However, any deeper invasive groundwork will certainly impact on these remains. Similarly, the primary colluvial deposits forming part of the valley floor are protected from normal agricultural activity by the overlying subsequent layers of colluvium. This should not discount the significance of these later deposits, particularly in relation to a study of the entire sequence. Archaeological features located on the slope between the higher and lower zones are under threat from ploughing, with downslope movement of topsoil continually exposing subsurface remains to plough damage.

4.6 Diversity

- 4.6.1 Although a considerable range of deposits are recorded within the evaluation area (Valley Gravel, Loessic sand, alluvium, colluvium, reworked Thanet Beds, developed subsoils, feature fills and topsoils) there is no significant diversity of features or finds.

4.7 Documentation

- 4.7.1 Although the site of *Vagniacae* to the north-west is well-documented, little is recorded of the evaluation area. An earlier desk-based assessment (URL 1994) noted the significance of a number of archaeological sites, including *Vagniacae* and the location of a large assemblage of Neolithic pottery in association with a timber trackway adjacent to the river Ebbsfleet.

4.8 Group Value

- 4.8.1 There appears to be little group value that can be attributed to the results of this evaluation, although the provisionally dated colluvial sequence, in relation to underlying Loessic sand and Valley Gravel, may be considered of wider importance than merely site-specific.

4.9 Potential

Structural

- 4.9.1 The archaeological features recorded offer little potential for contributing to the understanding of settlement and agricultural activity in the area. On the basis of the available evidence, it is unlikely that any of the features represented indicate settlement activity, as opposed to landscape elements (i.e. field boundaries), although settlement activity possibly occurs in the vicinity.

Artefactual

- 4.9.2 The majority of finds are of post-medieval or modern date and have no further archaeological potential. The small prehistoric and medieval pottery assemblage is useful as an indication of activity at various periods, but is otherwise of limited significance, and there is no potential for further analysis. Although worked flint was recovered in larger quantities, the characterisation of this assemblage as largely redeposited and of mixed chronology leaves little potential for further analysis.

Environmental

- 4.9.3 Grain was present in two samples, but generally the samples are unremarkable. They do indicate the presence of occupation activity in the vicinity, albeit at a relatively low level. The charred remains themselves are not highly significant, and there is little potential for further analysis from these samples without a secure archaeological and chronological framework.

4.10 Discussion

- 4.10.1 The potential for archaeological remains within the evaluation area had been identified by an earlier Environmental Statement (URL 1994) and geophysical survey (GSB 1996). This potential was defined as the possibility of discovering features and remains associated with the scheduled Roman Temple immediately to the north-west, and discovering archaeological features that correspond to geophysical anomalies.
- 4.10.2 A small number of dated and undated archaeological features were found, predominantly concentrated towards the higher ground to the south-west. Linear ditches in this area, one identified as Late Iron Age or early Romano-British, may correspond to some of the fainter geophysical anomalies. The stronger responses appear to originate from subsurface geological variations.

There was no evidence to suggest an extension of the Romano-British Temple or associated features into the evaluation area.

- 4.10.3 Although colluvial deposits are identified within the valley floor, including a primary horizon of probable Late Bronze Age date, no settlement evidence was recorded to associate with the colluvial development. However, a considerable quantity of worked flint was recorded from topsoil contexts towards the base of the valley side, and it is possible that this material is derived from disturbed settlement features affected by more recent ploughing.
- 4.10.4 Geotechnical investigations have indicated a probable Loessic sand deposit within the evaluation area, forming the gentler sloping south-west side of the valley, partially sealed by colluvium and sealing an earlier Valley Gravel (probably a Head deposit). The construction of the CTRL may offer the opportunity for the retrieval of a dated suite of complimentary samples from the entire geotechnic and archaeological sedimentary sequence thus exposed.

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Appendix 1: Context Inventory

Context inventories per trench are provided in stratigraphic order where possible

Artefact quantification represents count only, see **Appendix 2** for full quantification. CBM = ceramic building material

EBA = Early Bronze Age; LBA = Late Bronze Age; LIA = Late Iron Age; ERB = Early Romano-British; PMed = Post-medieval

Trench	Context	Type	Associations	Finds	No.	Date
1369TT	206	Topsoil	seals 207	Burnt Flint Worked Flint Pottery	1 6 2	
	207	Buried topsoil	sealed by 206 seals 208			
	208	Chalk-flecked colluvium	sealed by 207 seals 209			
	249	Secondary colluvium ?	sealed by 208 seals 250			
	250	Gravel (Head deposit)	sealed by 249			
1370TT	103	Topsoil	seals 104	CBM Worked Flint Glass Pottery	2 6 2 1	
	104	Buried topsoil	sealed by 103 seals 105			
	105	Chalk-flecked colluvium	sealed by 104 seals 106			
	106	Secondary colluvium	sealed by 105 seals 109 and 107			
	109	Relict watercourse fill	sealed by 106 fill of 110			
	110	Relict SW/NE aligned watercourse	filled with 109 cuts 107			
	107	Primary colluvium	sealed by 106 cut by 110 seals 108			
	108	Gravel (Head deposit)	sealed by 107			
1371TT	213	Topsoil	seals 251	Worked Flint Glass Pottery Stone	10 3 1 1	Slate (modern ?)
	251	Chalk-flecked colluvium	sealed by 213 seals 214			
	214	Secondary colluvium	sealed by 251 seals 215			
	215	Primary colluvium	sealed by 214 seals 252			
	252	Gravel (Head deposit)	sealed by 215			
1372TT	101	Topsoil	seals 102	CBM Worked Flint Burnt Flint	2 3 1	
	102	Loessic sand mantle	sealed by 101			
1373TT	216	Topsoil	seals 219			
	219	Chalk-flecked colluvium	sealed by 216 seals 217			
	217	Secondary colluvium	sealed by 219 seals 218			
	218	Primary colluvium	sealed by 217 seals 604	Burnt Flint Worked Flint Pottery	1 17 3	2 LBA; 1 LIA/ERB
	604	Gravel (Head deposit)	sealed by 218			
1374TT	111	Topsoil	seals 112	Worked Flint Burnt Flint	2 1	
	112	Buried topsoil	sealed by 111 seals 113			
	113	Chalk-flecked colluvium	sealed by 112 seals 114			
	114	Gravel (Head deposit)	sealed by 113			
1375TT	443	Topsoil	seals 444			
	444	Chalk-flecked colluvium	sealed by 443 seals 445			
	445	Secondary colluvium	sealed by 444 seals 446	Worked Flint Burnt Flint	1 1	

Trench	Context	Type	Associations	Finds	No.	Date
	446	Primary ? colluvium	sealed by 445	Worked Flint Pottery	2 2	LBA
1376TT	122	Topsoil	seals 123			
	-	Two E/W aligned modern service runs (electricity) cross the trench (not allocated context numbers)	sealed by 122 cuts 123			
	123	Chalk-flecked colluvium	sealed by 122 seals 124			
	124	Colluvium	sealed by 123 seals 125			
	125	Primary colluvium	sealed by 124 seals 126			
	126	Gravel (Head deposit)	sealed by 125			
1377TT	201	Topsoil	seals 202	Burnt Flint Worked Flint	1 2	
	202	Developed subsoil (headland ?)	sealed by 201 seals 203 and 205			
	209	Plough furrow fill	sealed by 202 fill of 210			
	210	WNW/ESE aligned plough furrow	filled with 209 cuts 205			
	211	Plough furrow fill	sealed by 202 fill of 212			
	212	WNW/ESE aligned plough furrow	filled with 211 cuts 205			
	203	Fill of terrace 204	sealed by 202 fill of 204	Burnt Flint Worked Flint	3 7	
	204	N/S aligned E-facing terrace	filled with 203 cuts 205			
	205	Loessic sand mantle	sealed by 203 cut by 204			
1378TT	308	Topsoil	seals 309			
	309	Developed subsoil	sealed by 308 seals 310			
	310	Loessic sand mantle	sealed by 309			
1379TT	510	Topsoil	seals 511	Burnt Flint CBM Worked Flint Glass Shell	1 2 7 3 2	
	511	Developed subsoil/ chalk-flecked colluvium ?	sealed by 510 seals 512			
	512	Loessic sand mantle	sealed by 511 seals 513			
	513	Loessic sand	sealed by 512 seals 514			
	514	Loessic sand	sealed by 513 seals 515			
	515	Calcareous Loessic sand	sealed by 514 seals 516			
	516	Gravel (Head deposit)	sealed by 515			
1380TT	131	Topsoil	seals 132	Worked Flint	5	
	132	Developed subsoil/ chalk-flecked colluvium	sealed by 131 seals 133			
	133	Loessic sand mantle	sealed by 131			
1381TT	438	Topsoil	seals 439	CBM	2	
	439	Chalk-flecked colluvium	sealed by 438 seals 440	Worked Flint	1	
	440	Secondary colluvium ?	sealed by 439 seals 441			
	441	Secondary colluvium ?	sealed by 440 seals 442	Worked Flint	5	
	442	Primary colluvium	sealed by 441	Worked Flint Burnt Flint	3 1	
1382TT	503	Topsoil	seals 504	Pottery Worked Flint Burnt Flint	2 6 1	

Trench	Context	Type	Associations	Finds	No.	Date
	504	Developed subsoil/ colluvium ?	sealed by 503 seals 505			
	505	Loessic sand	sealed by 504 seals 506			
	506	Chalk-flecked Loessic sand	sealed by 505 seals 507			
	507	Calcareous Loessic sand	sealed by 506 seals 508			
	508	Very calcareous Loessic sand	sealed by 507 seals 509			
	509	Gravel (Head deposit)	sealed by 508			
1383TT	311	Topsoil	seals 312			
	312	Developed subsoil/ chalk-flecked colluvium ?	sealed by 311 seals 313			
	313	Loessic sand mantle	sealed by 312			
1384TT	601	Topsoil (upper horizon)	seals 602	Worked Flint	2	
	602	Topsoil (lower horizon)	sealed by 601 seals 603			
	603	Loessic sand mantle	sealed by 602			
1385TT	314	Topsoil (upper horizon)	seals 315			
	315	Topsoil (lower horizon)	sealed by 314 seals 316			
	316	Loessic sand mantle	sealed by 315			
1386TT	118	Topsoil	seals 119	Worked Flint	1	
	119	Chalk-flecked colluvium	sealed by 118 seals 120	Pottery Worked Flint	2 8	LIA
	120	Primary colluvium	sealed by 119 seals 121	Worked Flint	5	
	121	Gravel (Head deposit)	sealed by 120			
1387TT	242	Topsoil	seals 243			
	243	Developed subsoil	sealed by 242 seals 244			
	244	Chalk-flecked colluvium	sealed by 243 seals 245			
	245	Gravel (Head deposit)	sealed by 244			
1388TT	237	Topsoil (upper horizon)	seals 238			
	238	Topsoil (lower horizon)	sealed by 237 seals 239			
	239	Secondary colluvium ?	sealed by 238 seals 241			
	241	Gravel (Head deposit)	sealed by 239			
1389TT	234	Topsoil (upper horizon)	seals 235			
	235	Topsoil (lower horizon)	sealed by 234 seals 236			
	236	Secondary colluvium ?	sealed by 235 seals 240			
	240	Gravel (Head deposit)	sealed by 236			
1390TT	115	Topsoil	seals 116			
	116	Colluvium	sealed by 115 seals 117			
	117	Gravel (Head deposit)	sealed by 116			
1391TT	421	Topsoil	seals 422			
	422	Developed subsoil	sealed by 421 seals 423, 425 and 427	Pottery CBM Flint	1 1 1	Modern Modern
	425	Ditch fill	sealed by 422 fill of 426	CBM	2	PMed ?
	426	E/W aligned ditch	filled with 425 cuts 424			
	427	Plough furrow fill	sealed by 422 fill of 428			
	428	SSW/NNE aligned plough furrow	filled with 427 cuts 423			
	424	Gravel (reworked Thanet Bed ?)	sealed by 422 seals 423			
	423	Gravel (reworked Thanet Bed ?)	sealed by 424 seals 456			
	456	Loessic sand mantle	sealed by 423			

Trench	Context	Type	Associations	Finds	No.	Date
1392TT	418	Topsoil	seals 419			
	419	Developed subsoil	sealed by 418 seals 420			
	420	Gravel (reworked Thanet Bed ?)	sealed by 419			
1393TT	411	Topsoil (upper horizon)	seals 412	CBM	2	
	412	Topsoil (lower horizon)	sealed by 411 seals 413, 414 and 416			
	414	Animal burrow fill	sealed by 412 fill of 415	Worked Flint CBM	1 2	
	415	Animal burrow	filled with 414 cuts 413			
	416	Plough furrow fill	sealed by 412 fill of 417			
	417	WSW/ENE aligned plough furrow	filled with 416 cuts 413			
	413	Gravel (reworked Thanet Bed ?)	sealed by 412			
	606	Loessic sand mantle				
1394TT	501	Topsoil	seals 502	CBM Pottery Worked Flint	3 4 9	
	502	Gravel (reworked Thanet Bed ?)	sealed by 501 seals 605			
	605	Loessic sand mantle	sealed by 502			
1395TT	306	Topsoil	seals 307	CBM	1	
	307	Gravel (reworked Thanet Bed ?)	sealed by 306			
1396TT	401	Topsoil (upper horizon)	seals 402			
	402	Topsoil (lower horizon)	sealed by 401 seals 405, 407 and 403			
	405	Ditch fill	sealed by 402 fill of 406	Clay Pipe CBM	1 1	PMed PMed ?
	406	N/S aligned ditch	filled with 405 cuts 403			
	407	Upper ditch fill	sealed by 402 seals 408 fill of 409	Worked Flint	1	
	408	Secondary ditch fill	sealed by 407 seals 410 fill of 409			
	410	Primary ditch fill	sealed by 408 fill of 409			
	409	N/S aligned ditch	Filled with 407, 408 and 410 cuts 403			
	403	Gravel (reworked Thanet Bed ?)	sealed by 402 cut by 406 and 409 seals 404			
	404	Loessic sand mantle	sealed by 403			
1397TT	301	Topsoil	seals 302	Worked Flint	1	
	302	Developed subsoil	sealed by 301 seals 303 and			
	303	Upper ditch fill	sealed by 302 seals 304 fill of 305	Worked Flint Pottery Burnt Flint	6 1 6	LIA/ERB
	304	Primary ditch fill	sealed by 303 fill of 305			
	305	ESE/WNW aligned ditch	filled with 303 and 304 cuts 607			
	607	Loessic sand mantle	sealed by 302 cut by 305			
1398TT	429	Topsoil (upper horizon)	seals 430			
	430	Topsoil (lower horizon)	sealed by 429 seals 431	CBM Glass	2 1	
	432	Root disturbance fill	sealed by 430 fill of 433			
	433	Root disturbance	filled with 432 cuts 431			
	434	Plough furrow fill	sealed by 430 fill of 435			
	435	N/S aligned plough furrow	filled with 434 cuts 431			

Trench	Context	Type	Associations	Finds	No.	Date
1398TT	431	Loessic sand mantle	sealed by 430 cut by 433 and 435			
1399TT	436	Topsoil	seals 437	Pottery Clay Pipe CBM	2 1 3	
	-	SSE/NNW aligned modern service run (electricity) cross the trench (not allocated context numbers)	sealed by 436 cuts 437			
	437	Loessic sand mantle	sealed by 436			
1400TT	127	Topsoil	seals 128			
	608	Service trench fill	sealed by 127 fill of 130			
	130	N/S aligned service trench	filled with 608 cuts 128			
	128	Developed subsoil	sealed by 127 cut by 130 seals 129			
	129	Loessic sand mantle	sealed by 128			
1401TT	220	Topsoil	seals 221			
	221	Developed subsoil	sealed by 220 seals 223, 225, 227, 229 and 222			
	223	Post-hole fill	sealed by 221 fill of 224			
	224	Post-hole	filled with 223 cuts 222			
	225	Post-hole fill	sealed by 221 fill of 226			
	226	Post-hole	filled with 225 cuts 222			
	227	Post-hole fill	sealed by 221 fill of 228			
	228	Post-hole	filled with 227 cuts 222			
	229	Post-hole fill	sealed by 221 fill of 230			
	230	Post-hole	filled with 229 cuts 222			
	222	Loessic sand mantle	sealed by 221 cut by 224, 226, 228 and 230			
1402TT	231	Topsoil	seals 232			
	232	Developed subsoil	sealed by 231 seals 233			
	233	Loessic sand mantle	sealed by 232			
1403TT	317	Topsoil	seals 318			
	318	Loessic sand mantle	sealed by 317			
1404TT	447	Topsoil (upper horizon)	seals 448	CBM	1	
	448	Topsoil (lower horizon)	sealed by 447 seals 449			
	449	Loessic sand mantle	sealed by 448			
1405TT	246	Topsoil	seals 247			
	247	Developed subsoil/ colluvium ?	sealed by 246 seals 248			
	248	Loessic sand mantle	sealed by 247			
1406TT	319	Topsoil	seals 322, 324, 319 and 325	Worked Flint Shell	3 1	
	322	Ditch fill	sealed by 319 fills 321	Worked Flint	1	
	321	E/W aligned ditch	filled with 322 cuts 320			
	325	Developed subsoil	sealed by 319 seals 324 and 320	Burnt Flint Pottery	1 1	LBA
	324	Ditch fill	sealed by 325 fill of 323	Worked Flint Iron	1 1	
	323	E/W aligned ditch	filled with 324 cuts 320			
	320	Loessic sand mantle	sealed by 325 and 319			

Trench	Context	Type	Associations	Finds	No.	Date
1407TT	450	Topsoil (upper horizon)	seals 450			
	451	Topsoil (lower horizon)	sealed by 450 seals 452			
	452	Loessic sand mantle	sealed by 451			
1408TT	326	Topsoil	seals 327			
	327	Loessic sand mantle	sealed by 326			
1409TT	453	Topsoil	seals 454			
	454	Developed subsoil/ colluvium ?	sealed by 453 seals 455			
	455	Loessic sand mantle	sealed by 454			

Appendix 2: Artefact Quantification

NB. Quantities are presented by number/weight in grammes. CBM = ceramic building material

Trench	Context	Burnt Flint	CBM	Clay Pipe	Flint	Glass	Prehist. pot	Med. pot	P-med. pot	Shell	Stone	Iron
1369TT	206	1/8			6/114				2/6			
1370TT	103		2/51		6/256	2/28			1/17			
1371TT	213				10/340	3/25			1/34		1/20	
1372TT	101	1/9	2/90		3/60							
1373TT	218	1/1			17/516		2/3					
1374TT	111	1/3			2/14							
1375TT	445	1/8			1/20							
	446				2/10		2/1					
1377TT	201	1/5			2/6							
	203	3/58			7/122							
1379TT	510	1/16	2/70		7/235	3/24				2/6		
1380TT	131				5/46							
1381TT	438		2/26									
	439				1/100							
	441				5/72							
	442	1/1			3/372							
1382TT	503	1/24	1/7		6/43			1/5				
1384TT	601				2/12							
1386TT	118				1/14							
	119				8/335		2/20					
	120				5/266							
1391TT	422		1/30		1/5				1/5			
	425		2/6									
1393TT	411		2/32									
	414		2/1		1/1							
1394TT	501		3/122		9/276			1/10	3/55			
1395TT	307		1/42									
1396TT	405		1/4	1/1								
	407				1/7							
1397TT	301				1/24							
	303	15/345			9/389		1/4					
1398TT	430		2/8			1/2						
1399TT	436		3/67	1/4					2/15			
1404TT	447		1/31									
1406TT	319				3/26							
	322	2/6			1/18		1/8					
	324				1/29							1/8
	325	1/150					1/1					
TOTAL		30/634	27/587	2/5	126/3728	9/79	9/37	2/15	10/132	2/6	1/20	1/8

Appendix 3: Ecofact Quantification

Feature	Context	Sample	size litres	Flot							Residue
				flot size ml	Grain	Chaff	Weed seeds uncharred	Weed seeds charred	Charcoal >5.6mm	Other	Charcoal >5.6mm
Ditch 321	322	1003	10	20 (16)	C	-	a	-	C	mollusc (A)	-
Ditch 305	303	1001	10	60 (54)	-	-	a	C	C	-	-
Ditch 323	324	1004	10	10 (8.5)	C	-	a	C	-	mollusc (A)	-

KEY: A = ≥10 items, B = 9 - 5 items, C = < 5 items; flot is total, but flot in brackets = ml of rooty material;
uncharred weeds seeds in lower case to distinguish from charred remains