Further Geoarchaeological Assessment Queenborough and Rushenden, Regeneration Swale, Kent



Geoarchaeological Field Investigation Report



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Further geoarchaeological test pits at Rushenden Neatscourt, Queenborough, Swale, Kent

GEOARCHAEOLOGICAL FIELD ASSESSMENT REPORT

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SUMMARY

Oxford Archaeology (OA) carried out a six test pit field evaluation at Queenborough and Rushenden, Swale, Kent in early March 2008. The investigation was commissioned by Campbell Reith Hill Engineers on behalf of the South East England Development Agency (SEEDA), as part of the Swale Redevelopment Project. The total area of development is c 20 hectares and is located to the south of the new A249 link road. The proposed regeneration project will include the establishment of improved access to Rushenden by a link road from the A249. This phase of work relates to the Rushenden Relief Road Planning Application (Kent County Council SW/07/01).

The present phase of test-pitting follows the Stage 1 Cultural Heritage Environmental Impact Assessment, a programme of geoarchaeological test pits and a main phase of archaeological evaluation. The main geoarchaeological test pit programme comprised 42 test pits, mostly concentrated within the Neatscourt Phase 1 development area, and is the subject of a separate report (OA, March 2007). The present report details findings from six further test pits, to the west of the railway line that were previously unavailable for evaluation due to land access constraints. The six test pits are numbered TP1, TP2, TP3, TP4, TP5 and TP6.

The test pits identified no areas of archaeological significance. In total five out of the six test pits were successfully completed. In general the test pits appear to have low archaeological potential with all areas showing made ground deposits between 0.60 m to 1 m in depth, consisting of either redeposited chalk or modern industrial refuse. The made ground in Test Pit 3 extended to the full depth of excavation (1.80m). Underlying these deposits was an alluvial sequence that consisted of gleyed bluish grey alluvial clays overlying weathered London Clay. No significant peat horizons or archaeological finds were identified within the alluvial sequence. However, this sequence was sealed by a moderately thin organic horizon, which probably represents the former marsh surface prior to reclamation. Within most of the test pits this surface had been disturbed and compacted during reclamation.

Historic maps show that this area of the marsh was reclaimed in the late 19th century for industrial development.

1 INTRODUCTION

1.1 Location and scope of work

- 1.1.1 Oxford Archaeology carried out a field evaluation at Rushenden Neatscourt, Queenborough, Swale, Kent, on the 3rd March 2008 (Fig. 1). The investigation was commissioned by Campbell Reith Hill Engineers on behalf of SEEDA, as part of the Swale Redevelopment Project. The proposed regeneration project will comprise the establishment of improved access to Rushenden by a link road from the new A249 and the development of approximately 120 hectares for light industrial, residential and recreational purposes. The area to be developed comprises urban and wasteland areas with car depots, industrial buildings and a large area of grazing marsh with associated drainage features and wetland/estuarine habitats. The present applications relate to the Rushenden Relief Road and *c* 20 hectares of development to the south of the new A249 link road (Planning application: Neatscourt Phase 1 - Swale Borough Council SW/06/1468; Rushenden Relief Road - Kent County Council SW/07/01). The site is centred on NGR 592230 171350.
- 1.1.2 The current phase of geoarchaeological field assessment, consisting of six test pits, follows the Stage 1 Cultural Heritage Environmental Impact Assessment, a main programme of geoarchaeological test pits, and an extensive phase of trial trenches. The Cultural Heritage review incorporated preliminary desk-based assessment of potential cultural heritage impacts while the geoarchaeological test pits were used to model sub-surface deposit sequences in order to identify areas where significant prehistoric and later archaeology could be buried under alluvium at the edge of the floodplain.
- 1.1.3 The main geoarchaeological programme, conducted in summer 2007, comprised 42 test pits focussed predominantly within the Neatscourt Phase 1 development area and is the subject of a separate report. The additional six test pits that form the focus of this report lie along the western end of the centreline of the proposed Rushenden Relief Road. This area was previously unavailable during the main phase of work due to land access constraints.
- 1.1.4 The combined results of both phases of geoarchaeological test pitting will be used to assess possible impacts on the Cultural Heritage that may be caused by the proposed development, so that they can be minimised, or suitable mitigation measures adopted.

1.2 **Topography and geology**

1.2.1 The site is situated within Neatscourt marshes and is overlooked by Furze and Barrow Hill to the north-east. Part of the marshes were converted to hardstanding in the 1970s and used for car pounds and industrial units. To the north-west is Queenborough Conservation Area with its associated Listed Buildings and the Queenborough Castle, a Scheduled Ancient Monument (SAM 23030), while to the

west lies the Sheerness railway, Swale foreshore and tidal flats, parts of which were widely developed as industrial complexes in the late 19th century and remain extensively occupied by factory buildings and areas of hardstanding. The site is bordered to the north-east by the A249.

- 1.2.2 The topography of the proposed development area rises from west to east. The western extent of the proposed development lies at c 2.5m OD and its eastern extent lies at c 9.85m OD.
- 1.2.3 The geology of the site has been examined and modelled in a previous phase of work using data from geoarchaeological and geotechnical test pits (OA May 2007) and is summarised below.
- 1.2.4 The underlying bedrock across the site is identified as London Clay, which outcrops under Queenborough, Rushenden and the slopes of Barrow and Furze Hill (British Geological Survey sheet 272). In the test pits it was generally recorded as stiff grey structureless clay and produced elevations between 4.00 and -3.00m OD reflecting a sharp drop in the bedrock surface across the site from south-east to north-west.
- 1.2.5 Weathered London Clay in the form of stiff reddish brown clay with occasional inclusions of mudstone and pockets of coarse sand was identified at elevations between 2.5m and -1.3m OD. This deposit was identified in test pits from the middle to the north-west of the site varied in thickness from 0.10 2.10m, with the thickest deposits located to the north-west.
- 1.2.6 An organic horizon *c* 0.10m thick was identified in a number of test pits to the north of site (OA TP10, 11, 12, 13, 14, 15, 16, 17, 18 and 23). This mid/dark brown organic silty clay produced charcoal, pottery, burnt clay and flint and was observed at elevations between 1.98 and 2.53m OD.
- 1.2.7 Two alluvial deposits were identified across the site and have been classed as Alluvium I and Alluvium II. Alluvium I, a bluish grey silty clay and clay silt, was encountered in two test pits (OA TP 10 and 11) to the north-west of the site along the proposed Rushenden Relief Road. The deposit ranged in thickness from 0.10 0.20m and was encountered at elevations between 1.30- 1.70m OD. This deposit contained varying amounts of organic material and may indicate that a range of different depositional environments could have existed at the same time and any archaeological material associated with this deposit is likely to have been redeposited within this depositional sequence.
- 1.2.8 Alluvium II extends across the eastern part of the site and is characterised by a yellow brown silty clay and clay silts with evidence of root action and weathering at the upper surface. It ranges in thickness from 0.20 0.70 m and was encountered at elevations of 1.45 3.10 m OD. This deposit represents the most recent episode of sedimentation within the Thames floodplain and the fine-grained nature indicates low energy deposition and any archaeological material within this deposit is likely to have

undergone low levels of lateral movement. It is possible that some of this material along the eastern boundary has formed through colluvial action.

- 1.2.9 Encountering peat deposits is always a possibility within waterlogged environments. Although no peat was encountered during the geoarchaeological and trial trenching phase, peat was identified along the north-western edge of the proposed Rushenden Relief Road within two geotechnical test pits (GSG TP 11 and 12) at elevations of 0.50 1.50m OD. Although a precise age has not been confirmed by radiocarbon dating, these elevations are consistent with Roman peat recorded elsewhere in the Lower Thames. Peat is a low energy deposit and any archaeological material associated with this deposit is likely to have undergone little disturbance and is likely found near place of deposition.
- 1.2.10 Topsoil levels across the site were generally consistent and ranged between 0.20 and 0.40m in thickness. The deposit was recorded as silty clay with frequent roots and occasional round pebble inclusions.

1.3 Archaeological and historical background

- 1.3.1 There are a number of known sites with archaeological remains adjacent to the development area. While several sites take the form of cropmarks, perhaps indicating post-medieval drains and former field systems, the most extensive indicator of archaeological remains is demonstrated by the results of the 2004 open area excavations conducted by Northampton Archaeology along the line of the A249 Queenborough to Iwade Link Road immediately to the north of the development area. Detailed reports are not yet available however, draft specialist assessment reports and site summaries provided by CgMs Consulting demonstrate remains ranging in date from late Neolithic through to the medieval period. These include c.40 Roman cremation burials, many with associated burial goods, dating from *c* 1st-2nd century AD. Results of the main phase of trial trenching, conducted by OA in early 2007, are consistent with the findings from the 2004 excavations.
- 1.3.2 The development area has been subject to a previous desk-based assessment, carried out as part of the Cultural Heritage and Environmental Impact Assessment (OA, 2006), summarised below.

Palaeolithic/Mesolithic

1.3.3 Although North Kent is recognised to have a high concentration of Palaeolithic remains, only a single hand axe has been discovered *c* 2 km to the north west of the study area and no Mesolithic finds or sites have been identified within the study area. Palaeolithic and Mesolithic remains are generally ephemeral in nature and where present are likely to be deeply buried by layers of alluvial deposits. If present these sites are likely to be located to the western part of the development area. The possibility that evidence for at least seasonal early prehistoric exploitation of a tidal and/or wetland environment exists within the confines of the study area cannot be discounted. The wetland nature of the western part of the development area means

that organic structural elements and deposits such as trackways, boats and fish traps may be well preserved in waterlogged conditions.

Neolithic (c 4500 - c 2000 BC) - Bronze Age (c 2000 - c 700 BC)

- 1.3.4 Limited late Neolithic or early Bronze Age archaeological remains were identified in the 2004 excavations along the new route of the A249 and were concentrated at the western end of the new road. Bronze Age pottery was also recovered from the alluvium within a number of geotechnical test pits and trial trenches excavated in 2007 to the west of the development area. This may suggest a that prehistoric land surface is buried beneath the alluvium along the margins of the former marsh.
- 1.3.5 During the Bronze Age sea levels were higher than that of today and in all probability the lower lying areas of the development would have been inundated. On the higher land to the east, outside the development area, evidence for large-scale organisation of the landscape has been recorded, indicating a strong presence in this area. If present, settlement evidence is likely to survive on the higher margins in the east of the area as suggested by the A249 excavations. The prehistoric pottery assemblage from this site includes a few abraded sherds of possible Grooved Ware and a larger assemblage of Beaker pottery, possibly from several vessels albeit within a single context.

Iron Age (c 700 BC - c AD 50)

- 1.3.6 Evidence for Iron Age occupation was identified in both the 2007 evaluation and open area excavation in 2004 along the route of the A249 Iwade to Queenborough Link Road. Most finds of this dates were concentrated in a group of enclosure or trackway ditches and pits found on the westernmost roundabout of the new link road. The irregular enclosures are typical of later prehistoric settlement and perhaps represent stock enclosures and droveways. The site has earlier and later evidence but the largest pottery assemblage dates from the mid-late Iron Age. The pottery and charred plant remains suggest domestic occupation on or close to the site. The identified features were cut into subsoil and sealed by c 0.20 0.40m of topsoil and subsoil. The relatively shallow depth at which these remains were found suggests that the site was comparatively dry, although located on the edge of an established marsh, by this period.
- 1.3.7 The Beaker feature (transitional late Neolithic/early Bronze Age) found in the A249 excavations was located in the same area as the Iron Age features, which may indicate some degree of continuity in land-use from the early prehistoric period, although there was no evidence for activity in the intervening mid-late Bronze Age.
- 1.3.8 Territories established on the higher ground of the mainland may potentially have been using the Swale marshes as part of their wider agricultural system. The development of Neatscourt and Minster Marshes as a managed marshland environment within the inter-tidal zone may have become established at this time or even earlier. The settlement pattern generally appears to conform to that established

during the later Neolithic and Bronze Age periods, showing a preference for locations on lower slopes overlooking valleys.

1.3.9 The development of a widespread salt-making industry within and adjacent to coastal marshland may be first attributed to the Iron Age. A number of salterns and saltings are present within 1.5 km of the study area. No dating is available for the majority of these, though a medieval or later date is normally suggested. It is possible that some may be earlier.

Romano-British (c AD 50 - c AD 410)

- 1.3.10 The pattern of later Iron Age settlement continues into the Roman period with an apparent intensification of agriculture in river valley locations. Settlement generally favoured lower slope locations and this is corroborated by the presence of excavated Roman occupation deposits and enclosures on the line of the new A249. These remains are concentrated in the same area as Iron Age features perhaps indicating some degree of continuity in settlement or land use.
- 1.3.11 The most prominent Romano-British remains identified in the A249 excavations immediately to the north of Neatscourt Phase 1 are the five cremation cemetery groups containing 40 cremation burials. Most groups were located on the rising ground immediately to the north and east of Neatscourt Phase 1 with the largest containing approximately 20 burials. Many of the cremation burials contained pottery grave goods dating from the 1st 2nd century AD. Three cremation burials with associated grave goods also dating from the 1st 2nd century AD have subsequently been discovered within Neatscourt Phase 1 development area during the main phase of trial trenching. The three burials were located in two trenches (53 and 66) widely separated on the higher ground to the east of the development, perhaps suggesting the cemetery extends from the A249 excavation south into the eastern part of Neatscourt Phase 1. Other Roman burials within the wider area are limited to an inhumation c 2 km to the north-east at Sheppey High School.
- 1.3.12 A significant Roman salt industry has been identified on the Isle of Sheppy and it is probable that this may have extended towards Queenborough. It is possible that some of the salterns identified within the wider area may be ascribed a Roman date. The site also lies just to the north-east of the important Upchurch pottery production area, which seems to have had its main focus *c* 10km to the south-west of Queenborough, but extends over the southern side of the Medway estuary, from Gillingham to Iwade. Pottery production in the area flourished from the 1st to the mid-3rd century AD. It is possible that salt-working and pottery production were carried out in conjunction on some sites. Both processes require access to wood for firing, and clay for making vessels and kiln furniture. Ready access to Watling Street (now the A2), 7 km to the south of Queenborough, and water transport must also have been important considerations in the location of these industries.

Medieval (c AD 410 - c AD 1530)

- 1.3.13 No sites or finds of early medieval date have been identified within the study area and only one possible late medieval site lies within the development area; a possible saltworking.
- 1.3.14 There is a general lack of archaeological evidence for the period following the decline of Roman infrastructure in the 5th to 6th centuries AD and the collapse of regional potteries seems to have heralded a period of relatively aceramic settlement. Many Saxon sites could easily have not been recognised during the excavation of the later phases of Romano-British sites or the earlier phases of later medieval sites, due to this relative lack of cultural material.
- 1.3.15 The Swale is likely to have remained an attractive waterway and anchorage during the early medieval period. By the 10th century the North Sea herring fisheries had become established and may have used anchorages in the Swale. Evidence for early dock structures and other maritime features may potentially survive in foreshore deposits and in the vicinity of creeks.
- 1.3.16 The easy approaches and sheltered water with easy grounding may also have led to the Swale becoming utilised as a semi-permanent base of operations for Danish raiders, Halstead indicates Sheppey had become a base of sorts by AD 832 (Halstead 1797). The presence of a Danish fort established in AD 893 has been suggested in the location of the later Queenborough Castle (Tyler). Ringworks were a typical Scandinavian form and it is not impossible that the circular form of the later medieval castle was in part owed to a pre-existing structure.
- 1.3.17 Edward III instructed the construction of Queenborough Castle in 1361. In 1366 he granted his Royal favour to the town by Charter making it the seat of a borough and a corporation. Prior to this date, Queenborough was little more than a small hamlet called "Binney", meaning an eyot within a marsh (Tyler).
- 1.3.18 The founding of Queenborough as a planned Town so late in the medieval period is significant because such late foundations are relatively rare. The award of Admiralty rights and a Wool Staple by Edward III (Page 1926), strongly suggest that the local economy was grounded on Sheep rearing and the Maritime industry at this point and oyster dredging is recorded as an important economic activity in the town from at least the late medieval period.
- 1.3.19 A significant addition to the Borough's economy was the foundation by Brabantine Matthias Falconer of a Copperas works in the 15th century (Taylor 1932). This may potentially be the earliest documented chemical factory in Britain. The location of the original works is unknown but may potentially lie under the remains of the Sheppey Glue works to the north-west of the development area.

8

Post-medieval (c AD 1530 - c AD 1850)

- 1.3.20 One Grade II Listed Building, Neats Court, lies within the study area. Others lie within the Queenborough Conservation Area to the north-west. Many maritime sites exist just to the west, including wrecks, barges and wharves associated with the foreshore.
- 1.3.21 The area just to the north-east of the study area to the south of Queenborough became increasingly important for its post-medieval industries. Queenborough continued to be an important manufacturing centre for Copperas throughout the 17th and 18th centuries.

Modern (c 1850 - present)

1.3.22 From the late 19th century, the area of marshland west of the Sheerness Railway has been developed for residential and industrial purposes. The area of Rushenden stands on higher ground, but between this and Queenborough, marsh reclamation has occurred. This reclamation may have utilised the higher ground that forms on the seaward edge of tidal saltmarsh but a degree of deliberate drainage must have occurred to allow building to take place.

2 AIMS

2.1.1 The objectives of the test pitting were to:

- Identify any archaeological deposits or features that may be present and assess the overall archaeological potential of the site.
- Identify any archaeological horizons within the site that may exist buried within or sealed by alluvium.
- Characterise the sequence of sediments and patterns of accumulation across the site, including the depth and lateral extent of major stratigraphic units, and the character of any potential land surfaces/buried soils within or pre-dating these sediments.
- Identify the location and extent of any waterlogged organic deposits. Where appropriate and practicable suitable samples will be retrieved to assess the potential for the preservation of palaeoenvironmental remains and material for scientific dating.
- Clarify the relationships between sediment sequences and other deposit types, including periods of 'soil', peat growth, archaeological remains, and the effects of relatively recent human disturbance, including the location and extent of made-ground.

3 EVALUATION METHODOLOGY

3.1 Scope of fieldwork

3.1.1 Six test pits were proposed in total, comprising four along the centreline of the proposed Rushenden Relief Road (TP1, TP2, TP3 and TP4) and two on the site of proposed north /south link road (TP5 and TP6) (Figs. 2). Only five pits could be completed during this phase of work, as further permission for access to dig TP6 could not be agreed with the occupier.

3.2 Fieldwork methods and recording

- 3.2.1 All test pits were excavated using a JCB excavator fitted with a flat toothless bucket. The trenches were approximately 2 m wide and 3 m long and machined in 0.20 m spits to the first significant archaeological horizon, if present, or otherwise to the weathered London Clay. Made ground and natural deposits were kept separate and reinstated in sequence. Test pits locations were set out with a hand-held GPS unit and in accordance with the Written Scheme of Investigation.
- 3.2.2 The trenches were cleaned by hand where necessary any revealed features were sampled to determine their extent and nature, and to retrieve finds and environmental samples where appropriate. All test pits were photographed using colour slide film and a digital camera. Recording followed procedures laid down in the *OAU Fieldwork Manual* (ed. D Wilkinson, 1992).

3.3 Finds

3.3.1 No finds were recovered during the course of the test pitting.

3.4 **Palaeo-environmental evidence**

3.4.1 No deposits suitable for the recovery of palaeo-environmental samples were uncovered during the test pitting. The exposed alluvial layers were not found to be suitable for the preservation of waterlogged material at the excavated level, nor were there significant levels of charred remains suitable for further examination.

3.5 **Presentation of results**

3.5.1 Factual results from the test pits are described in Section 4. Test pit locations are shown in Figure 2 and a west-east cross section is shown in Figure 3. Sample plans and sections are illustrated in Figure 4. Context descriptions, and the deposit sequence in each test pit, are tabulated in Appendix 1.

4 **RESULTS: GENERAL**

4.1 **Distribution of archaeological deposits**

4.1.1 No significant cut features or archaeological deposits were identified (other than dumped refuse and made ground deposits).

5 **RESULTS: DESCRIPTIONS**

See Appendix 1, for the Context Inventory for deposit depths in all test pits.

5.1 **Test Pit 1**

5.1.1 Test pit 1 was excavated to a depth of 1.20 m OD (1.70 m below present ground level) to weathered London Clay. The weathered bedrock (107) was overlain by four alluvial layers (106, 105, 104 and 103), re-deposited chalk (102) and modern car pak foundations (101). The alluvium was encountered between 1.62 m and 0.90 m in depth, and comprised a soft mid bluish grey silty clay. A thin band of fibrous reed peat (105) was identified at +1.99 m OD (0.82m in depth) near to the surface of the alluvium. This was overlain by a thin deposit of greyish alluvium (104) and the organic clay (103). This was sealed by 0.60 m of compacted redeposited Chalk (102) and tarmac (101).

5.2 Test Pit 2

- 5.2.1 Test Pit 2 was excavated to +0.32 m OD (2.40 m below present ground level) through modern makeup deposits (201 and 202) and four alluvial layers (206, 205, 204, 203) overlying the weathered London Clay (207). The alluvial sequence was sealed by an organic horizon (203) that potentially represents the natural marsh surface prior to reclamation.
- 5.2.2 This was overlain by 0.95 m of made ground deposits comprising compacted redeposited Chalk (102) and carpark foundations (101). This material appears to have been deposited directly onto the alluvial sequence in order to elevate the ground above the level of flooding.

5.3 **Test Pit 3**

- 5.3.1 Test Pit 3 was excavated to +0.90 m OD (1.80 m below present ground surface) through modern made ground deposits. The bedrock was not reached within the test pit due to collapsing sides.
- 5.3.2 It appears that the natural alluvial sequence has been significantly truncated in this area of the site. The deposits possible indicate the location of a rubbish pit.

5.4 **Test Pit 4**

- 5.4.1 Test pit 4 was excavated to +0.98 m OD (1.70 m below present ground surface) to the weathered London Clay (405). This was overlain by two alluvial deposits (404 and 403) and made ground deposits (402 and 401).
- 5.4.2 The alluvial sequence comprised of 0.52 m of structureless grey silty clay (404) overlain by thin organic silty clay; 0.10 m in thickness with frequently rootlets (403). This was sealed by 1 m of made ground comprising of redeposited alluvium (402) and modern industrial rubbish (401).

5.5 **Test Pit 5**

5.5.1 Test pit 5 was excavated to +0.87 m OD (1.60 m below present ground level). The weathered London Clay was overlain by two soft light mid bluish grey clay alluvial deposits (504 and 503) and sealed by a thin upper organic horizon (502). This was overlain by 1 m of modern industrial rubbish (501).

6 **DISCUSSION AND INTERPRETATION**

6.1 Reliability of field investigation

- 6.1.1 The work covered an area not previously investigated during the previous work. The trenches provide additional information on the western low-lying areas of the Rushenden Relief Road, which were previously inaccessible for trenching.
- 6.1.2 The test pits follow an earlier phase of geoarchaeological test pitting, the conclusions of which are briefly reviewed and up-dated below, where relevant.

6.2 **Overall interpretation**

- 6.2.1 The test pits identified no areas or deposits of archaeological significance. The work has confirmed that this area was reclaimed in modern times. The ground was made up using compacted chalk and rubble deposits. This activity has disturbed, but not always significantly truncated, the underlying natural alluvial sequence.
- 6.2.2 In general the results of the additional test pits conform with the sequence predicted by the deposited model presented in the main phase of test pitting. These deposits probably relate to the gleyed alluvium I deposit that were identified at the western end of the previous work (OA, March 2007). These are low energy water-lain deposits that potentially represent deposition within a tidal creek system. The archaeological potential of these deposits is therefore considered to be low.
- 6.2.3 The closest archaeological finds identified within this area were from evaluation Trench 2 and Test Pit 12. The surface of the artefact spread appears to dip down quite sharply from east to west. This is in an area where the surface deposit model of the weathered Bedrock predicts the edge of a possible tidal creek.
- 6.2.4 Late prehistoric pottery sherds recovered during the main geoarchaeological and evaluation work has identified significant archaeological deposits on the higher high ground to the east of the railway. This appears to associated with a distinct buried landsurface that was gradually inundated through rising sea level.

6.3 Archaeological mitigation

6.3.1 No further work is recommended within the area west of the railway line. In light of the findings of this report, combined with the earlier phase of evaluation and geoarchaeological test pitting, several areas requiring archaeological mitigation have been previously identified. The results of this work support the findings of this work and do not add to or change the original areas identified for further mitigation.

APPENDICES

APPENDIX 1 ARCHAEOLOGICAL CONTEXT INVENTORY

Test Pit	Arch. Present	Ctxt No	Туре	Depth. (m)	Comment	Finds	No./ wt	Date
TP1								
	No	101	Layer	0 m- 0.30 m	Tarmac and foundations			
		102	Layer	0.30 m- 0.60 m	Redeposited compacted chalk (make up deposits)			
		103	Layer	0.60 m- 0.65 m	Soft mid brown organic silt clay with frequent plant inclusions			
		104	Layer	0.65 m- 0.82 m	Soft Light greyish brown clay silt with occasional pockets of peat and root voids			
		105	Layer	0.82 m- 0.90m	Fibrous reed peat			
		106	Layer	0.90 m- 1.60 m	Soft mid bluish grey structureless clay			
		107	Layer	1.60 m- 1.70 m	Firm reddish yellow silty clay (Weathered London Clay)			
TP2								
	No	201	Layer	0 m- 0.35 m	Tarmac and foundations			
		202	Layer	0.35 m- 0.95 m	Compacted Chalk with occasional large sub- angular nodules of flint. (ground make up)			
		203	Layer	0.95 m- 1.10 m	Soft mid brown organic silty clay with frequent wood fragments and rootlets.			
		204	Layer	1.10 m- 1.30m	Soft brownish yellow structureless silty clay.			
		205	Layer	1.30m- 1.66 m	Soft olive grey structureless silty clay with no inclusions.			

Test Pit	Arch. Present	Ctxt No	Туре	Depth. (m)	Comment	Finds	No./ wt	Date
		206	Layer	1.66 m- 2.30 m	Soft reddish grey silty clay.			
		207	Layer	2.30 m- 2.40 m	Firm reddish mottled silty clay (weathered London Clay)			
TP3							·	
	No	301	Layer	0 m- 1.80 m	Modern Made ground (Rubbish pit)			
TP4								
	No	401	Layer	0 m- 0.66 m	Modern industrial rubbish (Made ground)			
		402	Layer	0.66 m- 1.0 m	Mid brown grey clay. (redeposited or disturbed alluvium)			
		403	Layer	1.0 m- 1.10 m	Soft slightly organic silty clay with rootlets			
		404	Layer	1.10 m- 1.62 m	Mid grey structureless silty clay with yellowish mottles .			
		405	Layer	1.62 m- 1.70 m	Mid reddish yellow clay. (Weathered London Clay)			
TP5								·
	No	501	Layer	0 m-1.0 m	Made ground			
		502	Layer	1.0 m- 1.10 m	Dark brown silty reed peat			
		503	Layer	1.10 m- 1.39 m	Soft mid bluish grey silty clay			
		504	Layer	1.39 m- 1.52 m	Soft light bluish grey structureless silty clay			
		505	Layer	1.52 m- 1.60 m	Mid reddish brown clay (Weathered London Clay).			

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APPENDIX 3 SUMMARY OF SITE DETAILS

Site name: Queenborough and Rushenden Neatscourt Site code: QUEEN 08

Grid reference: NGR 592230E 171350N

Type of evaluation: Six 3 m long and 2 m wide test pits

Date and duration of project: 03/03/08

Area of site: Part of *c* 20 hectare development. Test pits were located along the proposed Rushenden Relief Road, just west of the present railway line.

Summary of results: This additional test pits complete a planned series of test pits across the Rushenden Relief Road development at Queenborough and Rushenden, Swale, Kent. No distinct archaeological features or finds were discovered in the course of the additional work. The sequences were limited to an alluvial sequence overlain by made ground, which produced no archaeological finds. This deposit may be equivalent to alluvium I, a water-lain creek deposit identified in the previous deposit modelling.

Location of archive: The archive is currently held at OA, Janus House, Osney Mead, Oxford, OX2 0ES, and will be deposited with QueenboroughGuildhall Museum in due course, under the following accession number: QUEEN08.





Scale 1:25,000

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Figure 1: Site location



3 X:\Queenborough_Neatscourt_phase1 \03_Geomatics \CAD\003Archive \Queensborough_QUEENEV_Proposed_Trench_Locations_180308.dwg(figure 2)***** 18 Mar 2008







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Figure 4: Test pit sections



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