

SOUTH-EAST OF TOLLGATE (ARC TGS 97) EVALUATION REPORT

UNION RAILWAYS LIMITED

SOUTH-EAST OF TOLLGATE

ARC TGS 97

An Archaeological Evaluation

Contract No. 194/870

museum of
LONDON 

Museum of London Archaeology Service

July 1997

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ARC TGS 97

An Archaeological Evaluation

Volume 1 of 1

Contract No. 194/870

Prepared by:
Date:
Checked by:
Date:
Approved by:
Position:
Date:



Museum of London Archaeology Service

July 1997

SOUTH-EAST OF TOLLGATE

ARCHAEOLOGICAL EVALUATION

SUMMARY

As part of a larger programme of archaeological investigation along the route of the Channel tunnel, Rail Link, Union Railways Limited (URL) commissioned the Museum of London Archaeology Service (MoLAS) to undertake a field evaluation to the south-east of Tollgate.

The site lies approximately 4km to the south of Gravesend in Kent, to the south of the A2 and to the east of the A227. The evaluation covered an area of 8 hectares over three fields, on a shallow north-facing slope. The two northern fields were pasture, and the southern field was under arable crop. A recent geophysical survey identified the western pasture area of the site as having high magnetic susceptibility readings.

A Lower Palaeolithic pointed biface (handaxe) was found incorporated within a later deposit of material; the object had been moved from the site of original deposition by later soil processes.

A large pit, 6 metres across, was dated from finds of pottery and burnt and struck flint to the Late Iron Age/Romano-British period. A linear feature containing charcoal and struck flint was also recorded. No other archaeological deposits or cut features were encountered.

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SECTION 1: FACTUAL STATEMENT**1 BACKGROUND****1.1 Introduction**

- 1.1.1 The evaluation forms part of a programme of archaeological investigation along the line of the Channel Tunnel Rail Link, the aim of which is to assess the effect of the construction of the new railway upon the cultural heritage. An Environmental Assessment has been prepared (URL 1994). This evaluation is within route window 15.
- 1.1.2 The work was carried out according to a Specification for Archaeological Investigations, prepared by URL, detailing the scope and methods of the evaluation, including this report. The area of the evaluation is shown on Fig 2.
- 1.1.3 Analyses of magnetic susceptibility and magnetometer surveys¹ undertaken prior to the evaluation recorded a number of geophysical anomalies in the north-west area of the site by trenches 1867TT - 1870TT, 1879TT, 1881TT, 1883TT and 1884TT. These were interpreted as having a possible archaeological origin rather than a product of the local geology or agriculture.

1.2 GEOLOGY, LANDSCAPE AND LANDUSE

- 1.2.1 The specific geological deposits encountered within each trench are described in the 'Results' section. The site is located on a gentle north-facing slope of the North Downs. The solid geology was of white chalk with bands of flints; this was interpreted as a head deposit of the Upper Chalk [016], which was formed in the Cretaceous period².
- 1.2.2 The geology of the site was complex as it was at the irregular interface between the chalk and possibly Eocene deposits derived from the Thanet Beds and Blackheath Beds. Twenty-four different superficial geological deposits were recorded; these were mostly highly localised.

1.3 Table 1: Natural deposits recorded

CONTEXT	DESCRIPTION	PROCESS	COMMENTS	AGE
[001]	topsoil			
[002]*	fine silt	colluvial	similar to 'brickearth'	
[003]*	fine silt w. flints	solifluction	>25,000BP	Quaternary
[004]	sandy silt	colluvial / fluvial?	reworked	Tertiary
[005]*	fine sand	colluvial / fluvial	reworked	Tertiary
[006]	clay silt	fluvial?	reworked?	Tertiary?
[007]	sand	fluvial		Tertiary?
CONTEXT	DESCRIPTION	PROCESS	COMMENTS	AGE
[008]	silty sand	colluvial / fluvial	same as [020]	Tertiary

¹ URL, 1996. Geophysical Surveys. Vol I and II (Prepared for URL by A Bartlett and Associates)

² Geological Survey of Great Britain. Sheet 271.

[009]	sandy silt	colluvial	similar to [002]	
[010]*	silt and chalk	weathered head	>25,000BP	Quaternary
[011]	fine sandy silt		Thanet Sand?	Eocene?
[012]*	clay w. flints	Periglacial?	>25,000BP	Quaternary
[013]	clay silt	colluvial?	overlay [011]	Eocene?
[014]	silty sand	fluvial		
[015]	silt		overlay [010]	
[016]	chalk		Upper Chalk	Cretaceous
[017]	sandy silt		reworked subsoil	
[018]	fine silt			
[019]	slightly sandy silt			
[020]*	fine sand	colluvial / fluvial	reworked	Tertiary
[021]*	fine-medium sand		reworked?	Tertiary
[022]*	sands and gravel			Tertiary
[023]*	sands and gravel		Blackheath Beds?	Eocene?
[024]	silty sand & gravel		Blackheath Beds?	Eocene?

* Based on fieldwork at the site completed by Dr. Peter Allen. See Appendix 5

- 1.3.1 The land was divided into three fields; the northern half of the site was divided into north-western and north-eastern fields which were grazed by horses, the southern half of the site was under arable crop.
- 1.3.2 The arable field to the south lay on a plateau the highest point of which was recorded at a height of 64.82m OD (south end of 1877TT). The two northern fields were on a slightly steeper gradient, the slope at the top of these fields was recorded at a height of 62.66m OD (south end of 1870TT); the bottom of the slope (within the site boundary) was recorded at a height of 60.33m OD (north end of 1863TT). The maximum variation in height across the site was *c.*4.5 metres.

2 SPECIFICATIONS

2.1 Aims

2.1.1 The Specification for Archaeological Investigations, Appendix B Annex II, described the general aims of the archaeological works, that all the evaluations shall aim to provide information to determine:

- the presence / absence, extent, condition, character, quality and date of any archaeological remains within the area of the evaluation.
- the presence and potential of environmental and economic indicators preserved in any archaeological features or deposits.
- the local, regional, national and international importance of such remains, and the potential for further archaeological fieldwork to fulfil local regional and national research objectives.

2.1.2 The site specific aims described in the specification were to:

- determine the presence / absence etc. of any subsoil features or deposits of archaeological interest which may be associated with, or in close proximity to, anomalies recorded during geophysical prospecting.

3 METHODS

3.1 General

- 3.1.1 A detailed project design for the evaluation was agreed by URL with the County Archaeologist and English Heritage. The following summarises the archaeological aspects of the methodology and notes any deviation from the original specification.

3.2 Survey

- 3.2.1 The trench locations (Fig 2), specified by URL, were established using a total station EDM from URL permanent ground markers.
- 3.2.2 After excavation trenches were positioned precisely using total stations and traversing off Ordnance Survey control.
- 3.2.3 The standard error of the trench positioning was set to normal engineering standards, a traverse accuracy of +/- 15mm over 1km. The trench location plan is based on this information. Drawn plans have been digitised using on AutoCAD graphics programme.
- 3.2.4 The central site coordinate according to the given URL grid was 44693/50820.

3.3 Excavation

- 3.3.1 Twenty-two trenches, each measuring 30 x 2 metres, were set out across the 8.0 hectare site. A 2m x 3m extension was added to the south-western corner of trench 1863TT following the discovery of a pointed flint biface and 1867TT was deepened during excavation to the surface of the drift geology in order to allow observations by the Palaeolithic specialist.
- 3.3.2 The trenches were excavated using a 360° machine excavator fitted with a ditching blade. Topsoil and overburden was excavated down to deposits of archaeological significance; the machine stripping was supervised by an archaeologist.
- 3.3.3 Where no archaeological deposits were encountered the trenches were excavated to the top of the natural chalk or to a safe working depth of 1.2 metres.

3.4 Recording

- 3.4.1 Each deposit was given an individual context number and described on context sheets, and a stratigraphic matrix (Appendix 6) was compiled to plot the relationship between each context. Scale plans and sections were drawn and all heights indicated on the field drawings were related to Ordnance Survey heights above sea level.

- 3.4.2 A photographic record of the site was kept, using two Nikon F3 35mm SLR cameras with a variety of lenses and colour transparency and monochrome film. A photographic record of the condition of the site before and after the fieldwork was made.
- 3.4.3 A unique site code has been assigned to this investigation, all records can be referenced from this code: ARC TGS 97.

3.5 Artefacts

- 3.5.1 Artefacts were recovered by hand collection or through dry and wet sieving, to provide a reliable date for features.

3.6 Palaeoenvironmental sampling

- 3.6.1 Environmental sampling was directed towards establishing the presence and potential of environmental and economic indicators preserved in archaeological features and deposits and also to test natural deposits where appropriate.

3.7 Investigation of Tertiary and Quaternary deposits

- 3.7.1 A Lower Palaeolithic pointed flint biface was recovered from trench 1863TT. To assess the deposits from which the object came specialist advice was sought from Dr Peter Allen, a geologist and geomorphologist, and Dr Francis Wenban-Smith a Palaeolithic research specialist.

4 RESULTS

4.1 General

- 4.1.1 The main components of the trenches are described below. A summary of all the archaeological contexts and associated finds appears in the Archaeological Context Inventory (Section 6.2). Detailed reports on the pottery, environmental remains, flint and geology are contained in Appendices 1-5. The site archive has been prepared and includes Datasets for the fieldwork Event, Contexts, Bulk Finds, Environmental Samples and Graphical output.
- 4.1.2 In each trench the deposits immediately below the topsoil consist of either colluvium [002] or a subsoil. A description for colluvium [002] is given by Dr Peter Allen in Appendix 5 as a sandy clay lacking in obvious structures and is considered to be a superficial geological deposit. The subsoil 'B' horizon comprises of an undifferentiated overburden. The lack of horizontal structure within the deposit suggest that this material has either been tilled/ploughed or represents a horizon within an active soil sequence. Both the colluvium and the subsoil was removed in spits under careful archaeological observation unless archaeological features were identified within them.
- 4.1.3 Archaeological features were recorded in trenches 1881TT and 1882TT. A Lower Palaeolithic pointed biface (handaxe) was recovered from natural deposits in trench 1863TT, in the north-western area of the site.
- 4.1.4 A linear feature was recorded in trench 1881TT and a large pit, which may possibly represent quarrying, was recorded in trench 1882TT. Finds from the pit were dated to the Late Iron Age/Romano-British period. No artefacts were recovered from the linear feature recorded in trench 1881TT.

5 TRENCH DESCRIPTIONS

5.1 North-west field (pasture)

Trench 1863TT - Lower Palaeolithic pointed biface. (Figs. 3, 5 & 6).

- 5.1.1 The trench was located towards the north-west of the site and orientated north to south. Turf was stripped and 0.25m topsoil was removed and kept separately from the colluvium. The surface heights of the trench rose from 60.33m OD at the north to 60.84m OD at the south.
- 5.1.2 No features were recorded in the sandy clay colluvium [002]; the deposit was up to 0.80m thick and was removed in 200mm spits by machine. As the colluvium sealed the palaeolandscape it is considered to form part of the superficial geological deposits.
- 5.1.3 A mid orange brown sandy/clayey soil matrix [003] was recorded below the colluvium which contained large angular flints. A pointed flint biface (handaxe) was recovered from this deposit at the southern end of the trench at a height of approximately 60.3m OD. The biface was dated by type to the Lower Palaeolithic (500,000 - 50,000 BP); pollen and mollusc samples were taken from the surrounding deposit to assess the environment and so qualify the age of the biface. The pointed blade was unabraded and unrolled, indicating that it may not have travelled very far (see 5.1.5 and 5.1.6 below).
- 5.1.4 Trench 1863TT was extended with a 2m x 3m box trench at the south-western corner, near to the site of the recovered biface. The colluvial deposit [002] was removed in spits using a ditching blade and the surface of [003] was cleaned in order to identify possible flint scatters. As the deposit was excavated flints were numbered, planned and levelled; few of the flints had been worked, three were burnt. The surface of the underlying deposit [006] was also cleaned and recorded in the same way; no flints were recovered. A 1000 litre soil sample of deposit [003] was dry-sieved through a 8mm mesh and apparent worked flints were collected; 10 burnt flints were found from the 141 collected. Very little knapping was found (see Appendix 4).
- 5.1.5 The trench section was examined by a geologist and the deposition of soil [003] was interpreted as solifluction or soil creep; a process associated with periglacial conditions and in this instance dated to over 25,000 BP (see Appendix 5).
- 5.1.6 The biface was not in situ but had moved by processes of solifluction within deposit [003]. Jonathan Cotton suggests in Appendix 4 that the object would have moved a relatively short distance due its unabraded and unrolled condition. Dr Peter Allen suggests in Appendix 5 that the surface of [003] has a palaeoslope to the south-east and that higher ground occupied the area to the north-west of the site which may suggest a south-easterly movement.
- 5.1.7 Deposit [003] overlay a series of reworked Tertiary deposits. The maximum depth of the trench was 58.31m OD.

Trench 1864TT - No archaeological features.

5.1.8 The trench was located at the north-west of the site and was orientated east to west. Turf was stripped and 0.28m topsoil was removed and kept separately from the subsoil. The ground surface prior to machining rose from 61.42m OD at the west to 61.77m OD at the east.

5.1.9 Natural head deposits were mixed and consisted of clay with flints [012], silt and sandy silt [002]/[009] and fine sandy silt [011], recorded at a height of c. 60.80m OD. The top of the chalk head natural [016] was at a height of 60.17m OD and natural clean sand [011] was also recorded at this height which may be Thanet Sand.

Trench 1865TT - No archaeological features.

5.1.10 The trench was located towards the north-west of the site and orientated north to south. Turf was stripped and 0.30m of topsoil was removed and kept separately from the colluvium. The ground surface prior to machining rose from 61.19m OD at the north to 61.73m OD at the south.

5.1.11 Natural deposits were recorded. Colluvium [002] overlay sandy silt [009], which overlay chalk mixed with silt [010]. The maximum depth of the trench was 59.90m OD.

Trench 1866TT - No archaeological features.

5.1.12 The trench was located towards the north of the site and orientated east to west. Turf was stripped and 0.25-0.30m topsoil was removed and kept separately from the colluvium. The ground surface prior to machining rose from 61.69m OD at the west to 61.81m OD at the east.

5.1.13 Natural deposits were recorded. Colluvium [002] overlay a sandy silt deposit [009]. The maximum depth of the trench was 60.58m OD.

Trench 1867TT - A reworked / ploughed subsoil.

5.1.14 The trench was located towards the west of the site and was orientated east to west. Turf was stripped and 0.28m topsoil was removed and kept separately from the subsoil. The ground surface prior to machining rose from 60.79m OD at the west to 61.12m OD at the east.

5.1.15 A reworked or ploughed subsoil [017], 0.32m thick, was noted in the section. Post-medieval blue transfer ware was recorded within this deposit.

5.1.16 Natural deposits were recorded and interpreted as 'head' deposits consisting of Pleistocene accumulations of weathered debris which had moved down palaeoslopes. They were mixed and consisted of clay with flints [012] and silt mixed with chalk [010] were recorded at a height of 60.65m OD. The top of the chalk head natural [016] was at a height of 60.09m OD.

Trench 1868TT - No archaeological features.

- 5.1.17 The trench was located towards the west of the site and was orientated north to south. Turf was stripped and 0.20-0.30m topsoil was removed and kept separately from the subsoil. The ground surface prior to machining rose from 61.86m OD at the north to 61.91m OD at the south.
- 5.1.18 Natural superficial geology was recorded and consisted of head deposits. A 0.20m thick deposit of silt [015] overlay a fine sandy silt [011] up to 0.70m thick. Silt and chalk [010] was recorded at the southern end of the trench. The maximum depth of the trench was 60.68m OD.

Trench 1869TT - No archaeological features.

- 5.1.19 The trench was located towards the west of the site and was orientated east to west. Turf was stripped and 0.25m topsoil was removed and kept separately from the subsoil. The ground surface prior to machining rose from 62.77m OD at the west to 62.96m OD at the east.

- 5.1.20 Natural deposits were recorded. Head deposits were mixed and consisted of clay with flints [012], fine sandy silt [011] and silt mixed with chalk [010] recorded at a height of 62.63m OD. The top of the chalk head natural [016] was at a height of 61.79m OD.

Trench 1870TT - No archaeological features.

- 5.1.21 The trench was located close to centre of the site and was orientated north to south. Turf was stripped and 0.25m topsoil was removed and kept separately from the colluvium. The ground surface prior to machining rose from 62.66m OD at the south to 63.39m OD at the north.

- 5.1.22 Natural deposits were recorded. Head deposits were mixed and consisted of; colluvium [002], clay with flints [012], fine sandy silt [011] and silt mixed with chalk [010] recorded at a height of c.62.8m OD. The maximum depth of the trench was 61.61m OD.

5.2 South field (arable)

Trench 1871TT - No archaeological features.

- 5.2.1 The trench was located towards the west of the site and was orientated east to west. A crop was stripped and 0.25m topsoil was removed and kept separately from the subsoil. The ground surface prior to machining rose from 61.58m OD at the west to 62.58m OD at the east.

- 5.2.2 Natural deposits were recorded. Head deposits were mixed and consisted of clay silt [013] which overlay fine sandy silt [011] (Thanet Sand), which was mixed with clay with flints [012]. Chalk head or silt mixed with chalk [010]/[016] was recorded at a height of 60.74m OD.

Trench 1872TT - No archaeological features.

5.2.3 The trench was located towards the west of the site and orientated north to south. A crop was stripped and 0.30m topsoil was removed and kept separately from the subsoil. The ground surface prior to machining rose from 63.22m OD at the north to 63.50m OD at the south.

5.2.4 Natural deposits were recorded. A silty sand deposit [014] overlay fine sandy silt [011] (Thanet Sand?) and sandy silt [009] at the southern half of the trench. At the northern half silt [015] overlay sandy silt [009] silt and chalk [010]. The maximum depth of the trench was 62.28m OD.

Trench 1873TT - No archaeological features.

5.2.5 The trench was located towards the west of the site and was orientated east to west. A crop was stripped and 0.28m topsoil was removed and kept separately from the subsoil. The ground surface prior to machining rose from 63.25m OD at the west to 63.84m OD at the east.

5.2.6 Natural deposits were recorded. A deposit of silt [015] (possibly colluvium) up to 0.98m thick, overlay a deposit of silt and chalk [010]. The colluvial type material appeared to be filling a large hole in the chalk (>19.20m across), which was interpreted as natural feature. The top of the chalk natural [016] was recorded at a height of 63.21.

Trench 1874TT - No archaeological features.

5.2.7 The trench was located at the south-west corner of the site and was orientated north to south. A crop was stripped and 0.31m topsoil was removed and kept separately from the colluvium. The ground surface prior to machining rose from 64.02m OD at the north to 64.29m OD at the south.

5.2.8 Natural deposits were recorded. A thin deposit of colluvium [002] overlay a deposit of silt and chalk [010] and chalk. The top of the chalk natural [016] was recorded at a height of c.63.3m OD. A discrete deposit of the sandy silt [011] or Thanet Sand was also recorded.

Trench 1875T - No archaeological features.

5.2.9 The trench was located towards the south of the site and was orientated north to south. A crop was stripped and 0.28m topsoil was removed and kept separately from the colluvium. The ground surface prior to machining rose from 64.16m OD at the north to 64.55m OD at the south.

5.2.10 Natural deposits were recorded. Head deposits were mixed and consisted of a colluvial deposit [002] which overlay fine sandy silt [011] (Thanet Sand), which was mixed with, Clay with flints [012] and silt mixed with chalk [010]. The maximum depth of the trench was 63.18m OD.

Trench 1876TT - No archaeological features.

5.2.11 The trench was located towards the south of the site and was orientated east to west. A crop was stripped and 0.28m topsoil was removed and kept separately from the subsoil. The surface heights of the trench rose from 63.95m OD at the east to 64.33m OD at the west.

5.2.12 Natural deposits were recorded. A silt deposit [015] overlay clay with flints [012] and silt mixed with chalk [010]. The maximum depth of the trench was 63.25m OD.

Trench 1877TT - No archaeological features.

5.2.13 The trench was located towards the south of the site and was orientated north to south. A crop was stripped and 0.26m topsoil was removed and kept separately from the subsoil. The ground surface prior to machining rose from 64.53m OD at the north to 64.82m OD at the south.

5.2.14 Natural deposits were recorded. Mixed deposits of clay with flints [012] and silt mixed with chalk [010] were recorded. The maximum depth of the trench was 64.27m OD.

Trench 1878TT - No archaeological features.

5.2.15 The trench was located towards the south-east of the site and was orientated north to south. A crop was stripped and 0.28m topsoil was removed and kept separately from the subsoil. The ground surface prior to machining rose from 63.75m OD at the north to 64.16m OD at the south.

5.2.16 Natural deposits were recorded. A thick deposit of sandy silt [009] overlay a fine sandy silt [011] (Thanet Sand). The maximum depth of the trench was 62.49m OD.

5.3 North-east field (pasture)

Trench 1879TT - No archaeological features.

5.3.1 The trench was located close to the centre of the site and orientated east to west. Turf was stripped and 0.25-0.30m topsoil was removed and kept separately from the colluvium. The ground surface prior to machining rose from 63.01m OD at the east to 63.21m OD at the west.

5.3.2 Natural deposits were recorded. A deposit of colluvium [002], up to 1.02m thick, overlay mixed deposits of silt mixed with chalk [010], fine sandy silt [011] (Thanet Sand) and Clay with flints [012]. The maximum depth of the trench was 61.93m OD.

Trench 1880TT - No archaeological features.

5.3.3 The trench was located towards the north of the site and orientated north to south. Turf was stripped and 0.30m topsoil was removed and kept separately from the colluvium. The ground surface prior to machining rose from 61.35m OD at the south to 62.24m OD at the north.

5.3.4 Natural deposits were recorded. A 0.70m thick deposit of colluvium [002], overlay a fine sandy silt [009]. The maximum depth of the trench was 60.00m OD.

Trench 1881TT - A linear feature. (Fig 4)

5.3.5 The trench was located towards the east of the site and orientated north to south. Turf was stripped and 0.30m topsoil was removed and kept separately from the subsoil. The

surface heights of the trench rose from 62.99m OD at the south to 62.68m OD at the north.

- 5.3.6 An east to west orientated linear feature was recorded cut into a deposit of sandy silt (colluvium?) [019]. The ditch cut [101] was 0.98m wide and 0.34m deep with a smooth u-shape profile. At the eastern end of the feature was a possible terminal. The cut was poorly defined and may have a natural origin.
- 5.3.7 The extant feature was fully excavated, there was a single fill [100] which contained occasional charcoal fragments, there were also reddish lenses indicative of burning in situ. A flint flake was recovered from the fill, otherwise the feature was undated. A bulk environmental sample was taken to further assess the feature, the results of which added little information.
- 5.3.8 Natural deposits were recorded. Sandy silt [019] overlay colluvium [002]. The maximum depth of the trench was 62.56m OD.

Trench 1882TT - Late Iron Age / Romano British pit feature. (Fig 4).

- 5.3.9 The trench was located towards the north-east of the site and was orientated north to south. Turf was stripped and 0.34m topsoil was removed and kept separately from the colluvium. The ground surface prior to machining rose from 62.21m OD at the south to 61.33m OD at the north.
- 5.3.10 A large circular pit with steep sides was recorded cut into colluvium [002]. The cut [103] was 6.0m across and was c. 2.0m deep. The feature was filled with a single deposit of mid yellowish brown fine sandy silt [102].
- 5.3.11 Sherds of pottery, struck flint and burnt flint were recovered from the fill. The pottery finds were of a Late Iron Age / Romano-British date.
- 5.3.12 The purpose of the pit is unclear and although it may possibly represent quarrying, this interpretation must remain open as the feature did not appear to cut into the chalk or flint nodules underlying the colluvium.
- 5.3.13 A natural deposit of colluvium [002] was recorded. The maximum depth of both the trench and cut [103] was 58.83m OD.

Trench 1883TT - No archaeological features.

- 5.3.14 The trench was located towards the east of the site and orientated east to west. Turf was stripped and 0.25-0.30m topsoil was removed and kept separately from the colluvium. The ground surface prior to machining rose from 62.79m OD at the east to 63.01m OD at the west.
- 5.3.15 Natural deposits were recorded. A deposit of colluvium [002], up to 0.85m thick, overlay a fine sandy silt [009]. The maximum depth of the trench was 61.64m

Trench 1884TT - No archaeological features.

- 5.3.16 The trench was located towards the east of the site and orientated north to south. Turf was stripped and 0.30m topsoil was removed and kept separately from the colluvium.

The surface heights of the trench rose from 59.89m OD at the north to 60.56m OD at the south.

- 5.3.17 A natural deposit of colluvium [002] was recorded. The maximum depth of the trench was 58.69m OD.

6 ARCHAEOLOGICAL DATA SETS

6.1 Table 2: Events Dataset

EVENT_NAME: South-East of Tollgate
EVENT_CODE: ARC TGS 97
EVENT_TYPE: Evaluation
CONTRACTOR: Museum of London Archaeology Service
DATE: 1/5/97-14/5/97
GRID: 44693/50820
PROJECT:
COUNTY: Kent
DISTRICT: Gravesham
PARISH:
SMR:
SITE_TYPE: Cultivated Land depth >0.25m
PERIOD: Lower Palaeolithic; Late Iron Age-Romano British
METHOD: Mechanical removal of topsoil; hand excavation and recording of archaeological features.
PHASING: Late Iron Age- Romano British.
ENVIRON: 2 samples from cut features contained few environmental remains
FINDS: 1 Lower Palaeolithic flint pointed biface, occ. struck flint, occ. burnt flint, v. occ. Late Iron Age-Romano British pottery.
GEOLOGY: Upper Chalk. Some evidence of Thanet Beds and Blackheath Beds.
CONTEXT_NUM: 28
THREAT: CTRL
SAMPLE: 1.6%
SUMMARY: A pit, 6m across, was dated to Late Iron Age-Romano-British period from pottery finds. The function of the pit was uncertain (a quarry?). An undated linear feature was also recorded. A Lower Palaeolithic pointed biface was recovered from a later soliflucted deposit.
ARCHIVE:
ACC_NUM:

6.2 Table 3: Archaeological context inventory

Key:

PH = Prehistoric

multi = this context occurs in several trenches, see Table 1

TRENCH	CONTEXT	TYPE	PERIOD	ASSOCIATION	COMMENTS
multi	1	Deposit			Topsoil
multi	2	Deposit			Colluvium
multi	3	Deposit			Soliflucted deposit
multi	4	Deposit			Sandy silt natural
multi	5	Deposit			Fine sand natural
multi	6	Deposit			Clay silt natural
multi	7	Deposit			Sand natural
multi	8	Deposit			Sandy silt natural
multi	9	Deposit			Sandy silt natural
multi	10	Deposit			Silt and chalk natural
multi	11	Deposit			Thanet? sand natural
multi	12	Deposit			Clay with flints natural
multi	13	Deposit			Clay silt natural
multi	14	Deposit			Silty sand natural
multi	15	Deposit			Silt natural
multi	16	Deposit			Chalk natural
multi	17	Deposit			Re-worked soil
multi	18	Deposit			Light brown silt natural
multi	19	Deposit			Mid brown silt natural
1863TT	20	Deposit			Fine sand natural
1863TT	21	Deposit			Fine to medium sand natural
1863TT	22	Deposit			Sand and gravel natural
1863TT	23	Deposit			Sand and gravel natural
1881TT	100	Deposit		101	Fill of linear feature
1881TT	101	Cut			Linear cut
1882TT	102	Deposit	PH	103	Fill of large pit cut. Dated to LIRB
1882TT	103	Cut			Quarry pit cut

SECTION 2: STATEMENT OF IMPORTANCE**7 CONCLUSIONS****7.1 Extent of archaeological cut features and deposits**

7.1.1 Archaeological cut features (a large pit and a linear feature) were found only in evaluation trenches 1881TT and 1882TT on the eastern side of the site.

7.1.2 There were no archaeological cut features or deposits in the remaining trenches.

7.2 Nature of archaeological cut features and deposits

7.2.1 The evaluation identified a large pit, and a linear feature; these were both located on the eastern side of the site. Pottery from the fill of the pit was of a Late Iron Age / Romano-British date.

7.3 Character of the site

7.3.1 Activity represented by archaeological cut features and deposits appears to have been discrete and of low density; a large pit and linear feature may reflect and characterise an area of low landuse activity. The only dating evidence was of a Late Iron Age / Romano-British date.

7.3.2 A pointed flint biface, or handaxe, of a Lower Palaeolithic type (c. 500,000-50,000 BP) was found within a later deposit of material (c. 25,000-20,000 BP) that had been carried onto the site through a natural soil process of solifluction. Therefore, no evidence for the original deposition of the object was found; further investigation of deposits close to the location of the biface indicated that no intact surfaces of a Lower Palaeolithic date had survived erosion processes of the Pleistocene in the area.

7.4 Date of occupation

7.4.1 The pottery assemblage from the evaluation was Late Iron Age / Romano-British. Seven sherds were collected from fill [102] of the large pit [103].

7.4.2 Struck flint was collected from the large pit and the linear feature, however these were undiagnostic.

7.4.3 A sherd of Roman pot was picked up from topsoil close to the site.

7.5 Environmental evidence

7.5.1 Environmental samples were taken to assess the quality of preservation, abundance and diversity of any organic remains.

7.5.2 Bulk samples were taken from each of the fills of the pit [102] (sample <6>) and the linear feature [101] (sample <5>). The results of these provided little information.

- 7.5.3 Pollen and Mollusc samples were taken from deposits associated with the biface. Sample <1> was from deposit [003], the solifluction layer in which the object was found. Sample <2> was from deposit [006], the layer below [003].
- 7.5.4 A 1000 litre sample (<4>) of deposit [003] was sieved through an 8mm mesh, to collect flint that may be associated with nodule reduction associated with the biface.
- 7.5.5 The preservation of environmental remains from the bulk samples was poor. The features were of low potential for sampling as the fills did not appear to contain rubbish, but had naturally silted up.

7.6 Truncation by ploughing and other activities

- 7.6.1 Only cut features (negative features) were discovered. Other horizontal archaeological deposits (positive features) may have been truncated by ploughing, however this damage was limited, no plough marks were recorded cut into the natural subsoil or chalk.
- 7.6.2 No intrusive modern features (eg services and pits) were recorded. No recent field drainage system had been laid anywhere within the trenches.

8 IMPORTANCE OF THE ARCHAEOLOGICAL REMAINS

8.1 Survival and condition

- 8.1.1 Only cut features were recorded at the site. Had other archaeological features been present it seems likely that they would not have survived later ploughing.
- 8.1.2 The site appears only to have been under agricultural usage; aerial photographs record that the two northern fields were once orchards and part of a ploughshare retrieved from trench 1864TT may be indicative of earlier agricultural activity.
- 8.1.3 Environmental evidence has survived, but of low potential. Each bulk sample contained charcoal, an indicator of activity, but root material and seeds from the samples appeared to be intrusive and of limited value.
- 8.1.4 The majority of artefacts recovered were pottery sherds. Flint was also retrieved.

LIA-ERB fabric groups 17g
 Roman fabric groups 4g (unstratified)

22 pieces of unworked burnt flint
 37 worked flints
 c.160 pieces of thermally shattered flint

There was one special numbered find:
 (acc. No <1>) A pointed biface made from a nodule of Bullhead Bed flint of Lower Palaeolithic type.

8.2 Period

8.2.1 Lower Palaeolithic

A Lower Palaeolithic biface was found within a deposit of soliflucted material formed between approximately 25,000 and 20,000 years; the artefact was not in a context of original deposition. For this reason the find can be regarded as residual evidence of early human activity in the region, as the original site of deposition may have been some distance beyond the limits of the site.

8.2.2 Late prehistoric / Late Iron Age-Romano-British

The large pit found at the east of the site in 1882TT was the only demonstrable evidence of activity. Eight sherds of pottery recovered from the fill were of a Late Iron Age-early Romano British fabric. Burnt and struck flint were also recovered from the fill.

8.2.3 Undated

A linear feature orientated east to west was recorded in 1881TT. Although no datable finds were recovered from the fill, a struck flint and evidence of in situ burning suggest that this was an anthropogenic feature rather than a product of erosion or plant/animal action even though the edges were poorly defined and similar to root disturbance.

8.3 Rarity

- 8.3.1 Many finds of a Lower Palaeolithic date have been found in the area of the Lower Thames Valley, a site of particular note is Swanscombe, six kilometres to the east of this site. The region is of high potential for the discovery of Palaeolithic finds; of greater rarity is the discovery of intact surfaces. In the case of South-East of Tollgate glacial and periglacial processes had eroded the Upper Chalk, such that no intact land surfaces would be expected to survive.

8.4 Fragility / vulnerability

- 8.4.1 The comparatively shallow topsoil means that any archaeological deposits would be vulnerable to ground disturbance.

8.5 Diversity

- 8.5.1 The area of archaeological cut features may be isolated. The nature of the features; one large pit [103] from 1882TT and a linear cut [101] in 1881TT does not suggest intensive landuse and the paucity of finds, consisting of 17g of LIA/RB and 4g of Roman sherds and 37 worked flints, indicate very limited diversity.
- 8.5.2 Few associated deposits or features would be expected.

8.6 Documentation

- 8.6.1 A Geophysical survey report commissioned by URL for the Channel Tunnel Rail Link provide the only existing document specific to the site³. To the immediate west of the site archaeological deposits and cut features were recorded at the site of Tollgate Cropmark Complex (TLG95)⁴. As the A2 broadly follows the line of Roman Watling Street some activity of that date can be expected close to the road. The Victoria County History records that in 1922 a Roman tile-lined cist was found to the north of the Tollgate Motor Hotel, which may have been a road side burial⁵. Also a Roman well or rubbish pit was found in the same area.

8.7 Group value

- 8.7.1 The Late Iron Age - early Romano-British large pit [103] may be significant in the study of landuse patterns if it represents quarrying. Distribution densities of quarries indicate both sources of raw materials and the local demand for those materials.

8.8 Potential

- 8.8.1 The results of the archaeological evaluation indicate that the site does not have potential for addressing local, regional or national research issues. Dr Allen states in Appendix 5

³ URL, 1996 Geophysical Surveys (Second Tranche of Surveys). Final Report. Volume 2 of 2. (Prepared for URL by A. Bartlett & Associates)

⁴ *ibid.*

⁵ URL, 1994 Channel Tunnel Rail Link. Assessment of Historic and Cultural Effects. Final Report. Volume 1 of 4. p106 (Prepared for URL by OAU)

that the deposits indicate an environment not favouring human occupation. This is supported by the lack of archaeological features and finds.

9 BIBLIOGRAPHY

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(Prepared for URL by A. Bartlett & Associates)
- URL, 1997a
Agreement for the Provision of Archaeological Investigations. Contract 194/870
(URL)
- URL, 1997b
Neolithic Potential West of Tollgate, Gravesham, Kent.
Archaeological Evaluation Report. (Prepared for URL by J Partridge, MoLAS)
- URL, 1997c
Thurnham Roman Villa and Land South of Corbier Hall, Thurnham, Kent.
Archaeological Evaluation Report. (Prepared for URL by A Mudd, OAU)

APPENDIX 1**POTTERY***By R. P. Symonds***1. Introduction**

- 1.1. The evaluation produced a total of 8 sherds (21g) of late Iron Age - early Roman date. The material is in poor condition with many abraded sherds. The average sherd weight is just under 3g. The pottery was examined using a x20 binocular microscope and recorded using standard MoLAS codes on pro-forma sheets. Quantification of the material was by sherd count and weight. Pottery was recorded from one context and unstratified clearing.

2. Fabrics

- 2.1. The fabrics identified fall into three broad temper types. The fabrics have been defined on the basis of their main inclusions, and were not divided into defined fabric types. The broad temper types represent fabric traditions of the pre-Roman period, that continued to be used into the 1st century AD.

Table 5: Fabric groups

Sand-tempered fabrics	4 sherds	15g
Flint-tempered fabrics	2 sherds	1g
Grog-tempered fabrics	2 sherds	5g

3. Forms

- 3.1. No forms could be discerned due to the undiagnostic nature of the material. Only 1 decorated sherd was present; a hand made reduced sandy fabric with a wavy combed decoration. No other feature sherds are present.

4. Chronology

- 4.1. All of the fabric types identified were established prior to the Roman conquest. Flint tempered fabrics have a long tradition of use, throughout the Iron Age in the Medway valley and across East Kent (Pollard 1988, 31). Grog-tempered fabrics are in use across Kent from the latest Pre-Roman Iron Age (*c.*100 BC onwards), but continue into the Roman Period. The size of the group, lack of diagnostic sherds and condition of the material makes precise dating impossible.

5. General comments

- 5.1. The material recovered is typical for the area in the late Iron Age - early Roman period. Precise dating of pre- and post-conquest groups is notoriously difficult due to the lack of

well stratified sequences and independent datable artefacts. The assemblage from ARC TGS 97 would appear to fit into the ceramic tradition that spans the later 1st century BC to the later 1st century. AD The absence of any strongly Romanised finds from this site may suggest the material is either pre- or early post-conquest in date.

6. Assessment of Potential and further work

- 6.1. The present assemblage is of little potential when considered in isolation. However, when examined in conjunction with other material from this area it would contribute to the understanding of the ceramics for this period. Although the distribution of fabric types is well documented for this area, further assemblages are required to refine our understanding of the relative proportions of fabric types and their chronologies.

7. Bibliography

Pollard, R. J. 1988, *The Roman pottery of Kent*.

Table 6: Bulk dataset, pottery

Key: LIA-ERB = Late Iron Age to Early Romano British

TRENCH	CONTEXT	MATERIAL	COUNT	WEIGHT	COMMENTS
site	0	Pot	1	4	Comb decorated; Roman. Unstratified.
1882TT	102	Pot	7	17	LIA - ERB

APPENDIX 2

THE PLANT REMAINS*By John Giorgi***1. Introduction**

- 1.1. Two environmental samples of 20 litres were collected during the evaluation for the potential retrieval of charred plant remains, from a possible prehistoric deposit [100] (sample <5>) from 1881TT and the fill [102] (sample <6>) from 1882TT of a large pit dated as Late Iron Age - Early Romano-British.
- 1.2. The purpose of the assessment was to evaluate the quality of preservation and abundance and diversity of charred plant remains in the samples.

2. Methods

- 2.1. The two samples were processed in a flotation tank and the flots recovered on a 0.25mm mesh. The residues were retained on a 1mm mesh, dried, and sorted for biological and artefactual remains.
- 2.2. Once dried, each of the two flots was scanned under a binocular microscope and modes of preservation, abundance and diversity of organic remains noted. The results are summarised in Table 5. Abundance was recorded as follows: + = 1-10 items, ++ = 11-100 items, +++ = > 100 items.

3. Results

- 3.1. *?Prehistoric deposit [100] (sample <5>, flot vol. 20ml.):* This flot contained small fragments and flecks of charcoal together with a large quantity of root fragments. A small number of uncharred seeds of *Chenopodium* spp. (goosefoot etc.), *Urtica* sp. (nettle) and *Stellaria* spp. (chickweed/stitchwort) and terrestrial molluscs were also present.
- 3.2. *Pitfill (undated) [102] (sample <6>, flot vol. 5ml.):* This flot consisted virtually entirely of flecks and small fragments of charcoal plus root fragments. Occasional uncharred seeds, eg. *Chenopodium* spp. (goosefoot etc.), *Rumex* sp. (dock) and terrestrial molluscs were also noted.

4. Summary of the Organic Remains in the Flots

Table 7: Charred and Uncharred Plant Remains, Molluscs

Sample	5	6
CHARRED PLANT REMAINS		
Charcoal	+++	+++
UNCHARRED PLANT REMAINS		
Roots	+++	++
Seeds	++	+
MOLLUSCS	+	++

5. Statement of Potential

5.1. Charred plant remains in the two flots were limited to small quantities of charcoal fragments, which are of limited use in providing information on human activities at the site, particularly as no secure dates have been established for either feature. The small number of uncharred seeds (and possibly some of the molluscs) are probably of recent origin, with the frequent root fragments suggesting the presence of intrusive material.

6. Recommendations

6.1. On the basis of the assessment results, further analysis of the plant remains in the two flots is not necessary.

7. Environmental dataset

Table 8: Plant remains

TRENCH	CONTEXT	SAMPLE_NUM	METHOD	SUMMARY	COMMENTS
1881TT	100	5	flotation (0.25mm sieve)	uncharred seeds++; roots+++; charcoal +++; molluscs+	poor potential, no further work required
1882TT	102	6	flotation (0.25mm sieve)	uncharred seeds+; roots+++; charcoal++; molluscs++	poor potential, no further work required

APPENDIX 3

ASSESSMENT OF TERRESTRIAL MOLLUSCS: TGS97

By Kevin Rielly, with Jane Sidell

1. Introduction

- 1.1. One sample was collected from this site which contained mollusc remains. The specific research aim considered was the characterisation of local ecological conditions.
- 1.2. The sample was a bulk sample and therefore sieved on a flotation tank through a 1mm sieve. The residue was dried and molluscs were then removed from any remaining matrix.
- 1.3. The mollusc assemblage was scanned under a low power binocular microscope. Individual shells were identified to species or genus level where possible in order to quantify species diversity. However, this assessment does not aim to provide an exhaustive identification list, but rather comments on abundance and diversity which can then be used to assess the potential of the material for full analysis. Codes were assigned for abundance ratings, and are as follows:

1-10	individual apices	1
11-20	individual apices	2
21-50	individual apices	3
50+	individual apices	4

2. Results

- 2.1. The sample came from the fill of a large quarry pit, provisionally dated to the late Iron Age/early Roman period.

Table 9: Sample 1 from quarry pit [103]

Sample	1
<i>Valonia sp.</i>	1
Zonitidae?	1

- 2.2. Preservation was extremely poor, with only a few individual apices surviving. It should be borne in mind that several other samples were collected from this site for mollusc analysis which yielded no remains. This may be associated with the potentially acidic nature of the sedimentary matrix, although the basal chalk would be favourable to mollusc preservation. The limited number of remains precludes any detailed statement on the assemblage.

3. Statement of Potential

- 3.1. There is no potential to address the research objectives with the mollusc assemblage from this site.

4. Recommendations

- 4.1. The material should be deposited with the local receiving body as part of the archaeological archive for this site.

APPENDIX 4

FLINT

By Jonathan Cotton

1. Summary

- 1.1. In the region of 220 pieces of flint were retrieved from the evaluation. The vast majority (c 160 pieces) consist of thermally-shattered flints from a natural deposit. There are also 22 pieces of unworked burnt flint.
- 1.2. Of the remaining worked flints, the most notable item is a pointed biface (Acc. No <1>) recovered from a natural deposit and made from a nodule of Bullhead Bed flint with ochreous staining. There is modern damage both to the tip and one lateral edge. Its unabraded and unrolled condition suggests that it has not travelled very far. This biface is of Lower Palaeolithic type.
- 1.3. The rest of the worked flints are largely unremarkable. There is one very crude opposed-platform core. A large flake with an abraded platform was possibly used as a chopper. One other retouched flake may have been a very crude scraper. A small number of flakes have either been notched or marginally retouched while a few of the thermally-shattered flakes also show some signs of modification or utilisation.

Aside from the biface, the collection contains very little in the way of purposeful knapping of nodule reduction and is not susceptible to close dating. It could be from Mesolithic through to Bronze Age in date.

Bulk dataset**Table10: Flint**

TRENCH	CONTEXT	MATERIAL	COUNT	WEIGHT	COMMENTS
1863TT	0	FLINT	2	56	Flint from spoil
1863TT	0/003?	FLINT	1	16	
1881TT	0	FLINT	1	22	
1883TT	0	FLINT	2	200	001/002 interface
1884TT	0	FLINT	1	74	Burnt
1884TT	0	FLINT	2	102	1884 TT
1863TT	2	FLINT	2	34	Ext.
1863TT	3	FLINT	1	70	FIND [209]
1863TT	3	FLINT	1	145	FIND [201]
1863TT	3	FLINT	1	22	FIND [202]
1863TT	3	FLINT	1	12	Burnt Ext. FIND [214]
1863 TT	3	FLINT	1	8	Burnt. Ext. FIND [219]
1863 TT	3	FLINT	1	12	Ext. FIND [212]
1863 TT	3	FLINT	1	6	Ext. FIND [213]
1863 TT	3	FLINT	1	6	Ext. FIND [215]
1863 TT	3	FLINT	1	2	Ext. FIND [205]
1863 TT	3	FLINT	1	12	Ext. FIND [218]
1863 TT	3	FLINT	1	8	Ext. FIND [203]
1863 TT	3	FLINT	1	10	Burnt. Ext. FIND [220]
1863 TT	3	FLINT	1	135	Ext. FIND [216]
1863 TT	3	FLINT	1	2	Ext. FIND [210]
1863 TT	3	FLINT	1	24	Ext. FIND [211]
1863 TT	3	FLINT	1	2	Ext. FIND [207]
1863 TT	3	FLINT	1	28	Ext. FIND [200]
1863 TT	3	FLINT	1	2	Ext. FIND [208]
1863 TT	3	FLINT	1	36	Ext. FIND [217]
1863 TT	3	FLINT	1	26	Ext. FIND [206]
1863 TT	3	FLINT	1	14	Ext. FIND [204]
1863 TT	3	FLINT	10	272	Burnt. Ext. Residue of 8mm dry sieved sample 3
1863 TT	3	FLINT	110	740	Ext. Residue of 8mm dry sieved sample 3
1863 TT	3	FLINT	31	2400	Ext. Residue of 8mm dry sieved sample 3
1881TT	100	FLINT	2	32	
1882TT	102	FLINT	18	355	
1882TT	102	FLINT	1	540	
1882TT	102	FLINT	8	350	Burnt
1882TT	102	FLINT	7	275	
1882TT	102	FLINT	1	550	

Table 11: Special flint

TRENCH	CONTEXT	SPECIAL_NUM	MATERIAL	TYPE	COMMENTS
1863TT	3	1	FLINT	BIFACE	Hand Axe. Whole

APPENDIX 5

GEOLOGY*By Dr Peter Allen***1. Introduction**

- 1.1. Geological beds were recorded at the north end of a north-south orientated evaluation trench (1863TT).
- 1.2. The beds are numbered from the base upwards and accord with those illustrated in Figure 5.

2. Results

- 2.1. Bed [022]. The lower exposure revealed alternating beds of fine sand and of small gravel, the clasts having a maximum diameter of 40mm but mostly of 40mm or less. The gravel was virtually all (>99%) rounded black flints with chatter-marked surfaces; there were occasional white pebbles of vein quartz. These beds are considered to be in situ Tertiary pebble beds, part of the Upnor Formation.
- 2.2. Bed [021]. This bed comprised of plane bedded fine to medium sand, slightly clay enriched, with some deformation by loading. It was moist and easily worked.
- 2.3. A thin (mostly <20mm) veneer of sand was resting on bed [021], becoming more pebbly to the south end of the section.
- 2.4. Bed [005]. A fine sand with a slight clay enrichment. Very small ripples (<10mm) were seen in places.
- 2.5. Beds [021] and [005] could have been Tertiary (shallow marine) or could have been fluviually reworked Tertiary material. The range of structures present was not sufficient to determine which.
- 2.6. Bed [020]. The next bed comprised a brown loam, mostly homogenised and lacking clear structures, probably reworked Tertiary material. In the basal area there were slightly greyer (?humic) areas, with small sub-vertical sandy structures about 10mm long and 2mm across, considered to be root casts. The lack of structures and mixture of clay and sand suggested this was a colluvial deposit, a slopewash accumulation from rainwater or, given the thickness, snowmelt.
- 2.7. Bed [003]. This bed was exposed for much of the length of the trench. It comprised a thin (?150mm) layer of angular flints, derived directly from the Chalk, set in a sandy clayey matrix, typical of the head found in the region. The flint layer was lower on the east side of the trench and it also lost height to the south. Within the general slope of the flint layer there was a concavity, approximately 5m across, seen on both sides of the trench. As the head is a surface deposit it indicates the form of the palaeosurface, in this

case indicating a palaeoslope to the south-east, in contrast to the present land surface, and the concavity indicating a minor channel running from west to east.

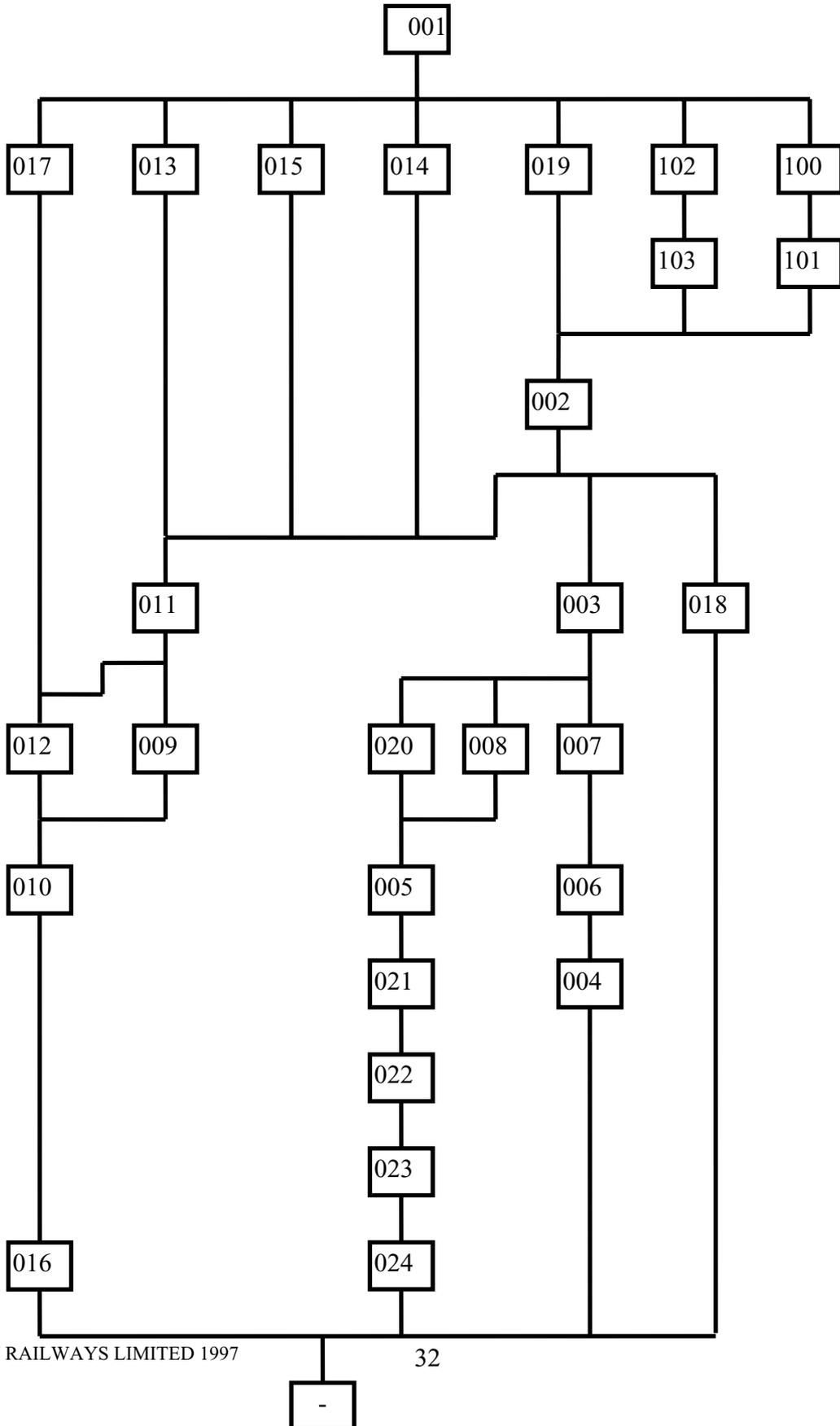
- 2.8. Bed [002]. This was a further sandy clay, lacking any obvious structures, found only in the central and southern parts of the trench, thickening southwards as the head layer lost height in that direction. The bed is again typical of the colluvium of the area, that infilled the lower areas and muted the palaeolandscape indicated by the head.

3. Interpretation

- 3.1. The palaeolandscape indicated by the head varies so much from the present surface, that a great deal of erosion must have occurred to form the current landscape. The palaeoslope indicates there was higher land to the west or north-west, an area now occupied by a dry valley running northwards into Gravesend. It is known that the dry valleys were formed or overdeepened during the Loch Lomond Stadial, broadly 11,000 to 10,000 years ago. This suggests that the post-Tertiary deposits at the site were laid down during the main part of the Devensian, between 70,000 and 14,000 years ago. Whilst older dates can be argued, the amount of erosion and solifluction and colluvial accumulation that occurred during the short duration of the Loch Lomond Stadial indicates that chalk landscapes were particularly vulnerable, so older dates are highly unlikely. Within the 70,000-14,000 year time span, prior to 20/25,000 years ago, the climate was drier and so not fostering slope movements. Thus the head and colluvium are most likely to be younger than 25,000 years.
- 3.2. In general the deposits indicate a harsh, cold, wet climate, not favouring human occupation. The hand-axe found at the site is almost certainly derived.

4. APPENDIX 6

4.1. HARRIS MATRIX



EVENT_NAME	EVENT_CODE	GRAPH_NUM	GRAPH_TYPE	DESCRIPTION
SE OF TOLLGATE	ARC TGS 97	1	Site plan	
SE OF TOLLGATE	ARC TGS 97	2	Section 1	1863TT: Section of natural deposits; [002], [003], [006], [007]
SE OF TOLLGATE	ARC TGS 97	3	Section 2a	1863TT: Section of natural deposits; [003], [020], [008], [005]
SE OF TOLLGATE	ARC TGS 97	4	Section 2b	1863TT: Section of natural deposits; [005] etc
SE OF TOLLGATE	ARC TGS 97	5	Section 2c	1863TT: Section of natural deposits annotated by geologist, Dr Peter Allen.
SE OF TOLLGATE	ARC TGS 97	6	Section 2d	1863TT: Composite section of natural deposits for fig 5
SE OF TOLLGATE	ARC TGS 97	7	Section 3	1863TText: Section of natural deposits; [002], [003], [007]
SE OF TOLLGATE	ARC TGS 97	8	Section 4	1863TT: East facing trench section of natural deposits; showing [003]
SE OF TOLLGATE	ARC TGS 97	9	Section 5	1863TText: Section of natural deposits; [002], [003], [006]

SE OF TOLLGATE	ARC TGS 97	10 Section 5	1863TTText: Section of natural deposits; [002], [003]
SE OF TOLLGATE	ARC TGS 97	11 Section 6	1863TTText: Section of natural deposits; [002], [003]
SE OF TOLLGATE	ARC TGS 97	12 Section 7	1863TTText: Section of natural deposits; [002], [003]
SE OF TOLLGATE	ARC TGS 97	13 Section 8	1881TT: Section of linear cut [101]
SE OF TOLLGATE	ARC TGS 97	14 Section 9a	1882TT: Composite section of quarry cut [103]
SE OF TOLLGATE	ARC TGS 97	15 Section 9b	1882TT: Composite section of quarry cut [103]
SE OF TOLLGATE	ARC TGS 97	16 Plan [003]	1863TT ext: Plan of flints (find nos. [201]-[220] recovered from [003])
SE OF TOLLGATE	ARC TGS 97	17 Plan [006]	1863TT ext: Plan of surface of deposit [006]
SE OF TOLLGATE	ARC TGS 97	18 Plan [101]	1881TT: Linear cut [101], fill [100]
SE OF TOLLGATE	ARC TGS 97	19 Plan [103]	1882TT: ?quarry cut [103], fill [102]
SE OF TOLLGATE	ARC TGS 97	20 Plan 1863TT	1863TT 1:50 plan of trench
SE OF TOLLGATE	ARC TGS 97	21 Map	Report Fig 1
SE OF TOLLGATE	ARC TGS 97	22 CAD plan	Report Fig 2
SE OF TOLLGATE	ARC TGS 97	23 CAD plan	Report Fig 3
SE OF TOLLGATE	ARC TGS 97	24 CAD plan	Report Fig 4
SE OF TOLLGATE	ARC TGS 97	25 Section	Report Fig 5
SE OF TOLLGATE	ARC TGS 97	26 Section	Report Fig 6

SE OF TOLLGATE	ARC TGS 97	27 Col. print of colour print negatives	Report cover: flint biface
SE OF TOLLGATE	ARC TGS 97	28 Col. Frame 1	1881TT: Linear feature [101] looking west
SE OF TOLLGATE	ARC TGS 97	29 Col. Frame 2	1881TT: Linear feature [101] looking west
SE OF TOLLGATE	ARC TGS 97	30 Col. Frame 3	1881TT: Linear feature [101] looking west
SE OF TOLLGATE	ARC TGS 97	31 Monochrome neg. 166/97/01	1881TT: Linear feature [101] looking west
SE OF TOLLGATE	ARC TGS 97	32 Monochrome neg. 166/97/01	1881TT: Linear feature [101] looking west
SE OF TOLLGATE	ARC TGS 97	33 Monochrome neg. 166/97/01	1881TT: Linear feature [101] looking west
SE OF TOLLGATE	ARC TGS 97	34 colour print negatives	Flint biface
SE OF TOLLGATE	ARC TGS 97	35 colour print negatives	Flint biface
SE OF TOLLGATE	ARC TGS 97	36 colour print negatives	Flint biface
SE OF TOLLGATE	ARC TGS 97	37 colour print negatives	Flint biface

Fig 1 Site location plan
SOUTH-EAST OF TOLLGATE (ARC TGS 97)

Fig 2 Trench location plan (ARC TGS 97)

limit of excavation

Fig 3a

Fig 3b

Fig 4 Plan of 1863TT and locations of Figs 5-7

East facing section of linear feature [101] *188ITT*

[001] indistinguishable from [002] [002] [100] cut [101]

West facing section of possible quarry pit [103] *1882TT*

[001] [002] [102] cut [103] estimated cut edge

Concentration of flint scatters
at the surface of context [003]
including a bifaced hand axe

section section section section section section

Fig 5

[001] Mid greyish brown silt - topsoil

[002] Mid orange brown silt - natural ?fluvial or wind blown deposit

[003] Mid orange brown sandy silt and flint pebbles - natural deposit

limit of excavation

[007] [004] [003] [003] topsoil topsoil topsoil