Channel Tunnel Rail Link
Union Railways (South) Ltd

Project Area 330

TOLLGATE
ARC TLG 98

ARCHAEOLOGICAL EXCAVATION
INTERIM REPORT

Contract S/300/0052 P381

MUSEUM OF LONDON

Museum of London Archaeology Service

September 1999

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INTERIM REPORT

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

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Museum of London Archaeology Service
87 Queen Victoria Street
London EC4V 4AB

September 1999

1 INTRODUCTION

1.1 The Museum of London Archaeology Service (MoLAS) was commissioned by Union Railways (South) Limited (URS) to undertake palaeo-environmental investigations at Tollgate, to the south of the A2 near Gravesend, Kent, in 1998 (Figure 1). This work formed part of an extensive programme of archaeological investigation carried out in advance of the construction of the Channel Tunnel Rail Link (CTRL).

1.2 The site comprised one trench laid out across the line of the proposed CTRL on the eastern side of a dry valley (Figure 2). The trench measured 60m long and up to 5m wide, positioned to the east of the A227, and centred on URS grid point 44005 50990, corresponding approximately to Ordnance Survey national grid reference (NGR) TQ 6410 7100. The area of the trench totalled roughly 300 sq m. The ground in which the trench was cut sloped down from east to west with the trench positioned north to south approximately half way down the slope.

1.3 The method of investigation was specified as 'strip, map and sample', intended to determine a broad picture of human occupation and land utilisation through time, in accordance with the archaeological aims set out in a Written Scheme of Investigation (prepared by URS) detailing the scope and methods of excavation was agreed with English Heritage and the local authority. Work was undertaken in September 1998.

Background

1.4 The natural solid geology of the area consists of the Upper Chalk of the North Downs. The site lies on the northern dip-slope of the Downs, on the eastern side of a dry valley running northwards to the Thames Estuary. In the area of the site the Upper Chalk is overlaid by a deep colluvial sequence.

1.5 A preliminary desk-top assessment conducted for URL identified the site as having possible archaeological interest (URL 1994, vol 1, 106), especially in view of the presence 50–100m to its east of a probable Neolithic mortuary (URL 1994, vol 2, drawing 3014; vol 3, gazetteer 1921), and cropmarks 50–100m to its north suggestive of a possible Roman settlement (URL 1994, vol 3, gazetteer 1920). The vicinity of the site has yielded evidence for prehistoric and Roman occupation, Anglo-Saxon burials, and medieval and post-medieval farming and villages. A road running 150m to the north of the site, the modern A2, is on the line of a major Roman Road later known as Watling Street.

1.6 An archaeological evaluation commissioned by URL was carried out on this site by MoLAS in 1997 (URL 1997), when a Palaeolithic hand axe, Late Iron Age/ early Romano-British features and a deep deposit of colluvial material were recorded.

2 SUMMARY OF RESULTS

2.1 Periods Represented

Prehistoric and general date

2.1.1 The site was designed to retrieve palaeo-environmental data and consisted of a deep, stepped excavation exposing a section through the colluvial deposits. A sedimentary specialist sampled and recorded this section. Archaeologists compiled a drawn record of the site.

2.2 Feature Types

2.2.1 None were recorded.

2.3 Artefactual Remains

2.3.1 None were recovered.

2.4 Palaeo-Environmental and Economic Evidence

2.4.1 Soil samples were taken from a section for potential analysis of palaeo-ecological conditions. To this end, both undisturbed (monolith) and disturbed (bulk) samples were collected. Unfortunately it was not possible to collect monoliths from the entire sequence owing to the presence of a band of what is possibly Coombe rock, which prevented the sample from being obtained. Three attempts were made, but the core fell apart in each case. The monoliths were collected to assist description of the sequence, for microfossil analysis such as palynology and sedimentary analyses such as magnetic susceptibility. Three columns of volumetrically controlled bulk samples were collected adjacent to the monolith tins. These were collected for microfossils such as molluscs.

2.4.2 The samples have not been processed but were scanned by a sedimentologist for the purpose of this report. Monolith sample M4 was sampled through the base of the trench into the underlying units at 43.62m OD. The base of the sequence was a yellowish brown well sorted fine silt with some sand and clay present, also nodular flecks of iron. No other inclusions were observed. This was succeeded by a well sorted dark yellowish brown coarse silt with some sand, also with continued presence of nodular iron flecks. Tin M3 (base at 44.83m OD) overlapped slightly with M4 and the lower half of the sample continues as reflected in the top of this latter sample. This was sealed by a well sorted dark yellowish brown silt, with low percentages of clay and sand. Chalk flecking is present, but the nodular iron flecks are no longer apparent. Tin M3 overlaps with M2 (base at 45.24m OD) but was located on a higher step and a little way from M3. The sequence commences with a well sorted dark yellowish brown sand/silt with occasional flecks of iron. This sequence shows a fining-up tendency until half way through, when the fine matrix is found to incorporate flint fragments (to 60mm) and chalk flecks. There is a break in the sequence of sampling at this point, represented by a substantial band of ?Coombe rock. This was examined in detail in the field and did not appear to have potential for microfossil recovery. M1 penetrated to 46.66m OD. A well sorted yellow-brown sandy silt forms the matrix, with inclusions of chalk flecks. Rootlets are present in this sample and thought to be derived from the topsoil. The density of chalk flecks increases toward the surface with a tendency to greater coarseness.

3 FIELDWORK EVENT AIMS

3.1 Previous desk-based and field works have recorded an area of earthworks and scatters of cultural material.

3.2 The primary excavation aims were:

- to recover palaeo-environmental data to determine the nature of the contemporary environment of the monument, a presumed Neolithic mortuary, and its immediate area;
- to recover palaeo-environmental data to determine the nature of the contemporary environment of subsequent agricultural settlement in the area;
- to relate the data recovered to the palaeo-environmental development of the A2 corridor.

3.3 Preliminary results from the samples scan appear to indicate that it would be necessary to undertake an assessment of pollen content, as there appears to be the lack of mollusc remains, in order to meet these research aims.

4 SUMMARY OF POTENTIAL

4.1 The sequence, with the exception of the possible Coombe Rock deposits, is well sorted and apparently colluvial in origin. No molluscs have been observed in the monolith samples, which may indicate that the potential for analysis of palaeo-ecological conditions would be difficult. An assessment for pollen content is strongly recommended.

5 ACKNOWLEDGEMENTS

This interim report was prepared by Jane Sidell and Niall Roycroft. The archaeological plans were digitised by Kate Pollard.

6 BIBLIOGRAPHY

URL [Union Railways Limited], 1994 *Channel Tunnel Rail Link, assessment of historic and cultural effects, final report*, Oxford Archaeological Unit

URL 1995 *Channel Tunnel Rail Link, assessment of historic and cultural effects, supplementary fieldwork report*, Oxford Archaeological Unit

URL, 1998 *Agreement for the provision of archaeological investigations at Pepper Hill to the River Medway (package 381)*

URL 1997 *South East of Tollgate ARC TGS 97 evaluation report*, Museum of London Archaeology Service

APPENDIX 1 - ARCHIVE INDEX

ITEM	**NUMBER OF ITEMS**	**NUMBER OF FRAGMENTS**	**CONDITION (No. of items)** (W=washed; UW=unwashed; M=marked; P=processed; UP=unprocessed; D=digitised; I=indexed)
Contexts records	25		
A1 plans	1		D
A4 plans			
A1 sections			
A4 sections	3		
Small finds (boxes)			UW
Films (monochrome) S=slide; PR=print			
Films (Colour) S=slide; PR=print	1PR (+ second set)		
Flint (boxes)			
Pottery (boxes)			
Fired clay (boxes)			
CBM (boxes)			
Stone (boxes)			
Metalwork (boxes)			
Glass (boxes)			
Slag (boxes)			
Human Bone (boxes)			
Animal Bone (boxes)			
Soil Samples (No.)	7		
Soil Samples (bags/tubs)	310 litres		UP
Soil Samples (Monolith/kubina tin)	4 Monolith		UP

APPENDIX 2: INTERIM SUMMARY REPORT

As part of a larger programme of archaeological investigation along the route of the Channel Tunnel Rail Link, Union Railways (South) Limited (URS) commissioned the Museum of London Archaeology Service (MoLAS) to undertake an archaeological excavation at Tollgate (site code ARC TLG 98), to the south of the A2 near Gravesend, Kent, in 1998. The site had been previously evaluated in 1997. The excavation examined a colluvial sequence with a trench located on the eastern side of a dry valley.

The site comprised one trench measuring approximately 60m by 5m, positioned on the hill slope to the east of the A227. The trench was stepped to allow access to the deep, exposed section through the colluvial sequence. The section was cleaned and recorded by drawing and levelling the identified contexts to Ordnance Datum. Samples were requested for potential analysis of palaeo-ecological conditions. To this end, both undisturbed (monolith) and disturbed (bulk) samples were collected. The monoliths were collected to assist description of the sequence, for microfossil analysis, such as palynology, and sedimentary analyses, such as magnetic susceptibility. Three columns of volumetrically controlled bulk samples were collected adjacent to the monolith tins. These were collected for microfossils such as molluscs.

The sequence, with the exception of some possible Coombe Rock deposits is well sorted and apparently colluvial in origin. No molluscs have been observed in the monolith samples, which would perhaps indicate that the potential for analysis of palaeo-ecological conditions may be difficult and an assessment for pollen content is strongly recommended.

APPENDIX 3: KENT SMR RECORD SHEET

Site Name: Tollgate Area 15, Kent **Site code:** ARC TLG 98			
Summary: A deep section was sampled and recorded through a colluvial sequence, commissioned by Union Railways (South) Limited and undertaken in September 1998, after evaluation in 1997.			
District: Gravesham		**Parish:** Cobham CP	
Period(s): **1.** prehistoric colluvial deposits			
NGR (to centre):		100 km ref: TQ	
NGR Easting 6410		**NGR Northing** 7100	
Type of Recording: **(Delete)**	~~**Evaluation**~~ **Excavation**	~~**Watching Brief**~~ ~~**Geophysical Survey**~~	~~**Field Walking**~~ ~~**Measured Survey**~~
Date of Recording: (From) September 1998		**(To)** September 1998	
Unit Undertaking Recording: Museum of London Archaeology Service, Walker House, 87 Queen Victoria Street, London EC4V 4AB			
Summary of Field Results: The sequence, with the exception of some possible Coombe Rock deposits is well sorted and apparently colluvial in origin. No molluscs have been observed in the monolith samples, which may indicate that the potential for analysis of palaeo-ecological conditions may be difficult. An assessment for pollen content is strongly recommended.			
Location of Archive/Finds:		MoLAS Temporarily	
Bibliography:	URL 1994 *Channel Tunnel Rail Link, assessment of historic and cultural effects, final report* (Oxford Archaeological Unit), vol 1, 106 URL 1999 *South East of Tollgate (ARC TGS 97) archaeological excavation,* Museum of London Archaeology Service URL 1999 *Tollgate (ARC TLG 98) archaeological excavation, interim report*, Museum of London Archaeology Service		
Summary Compiler:	Niall Roycroft	**Date:**	23 July 1999