# CHANNEL TUNNEL RAIL LINK Union Railways (South) Ltd

# **Project Area 440**

CHURCH LANE, SMEETH, KENT
ARCCHL 98
&
EAST OF STATION ROAD, SMEETH, KENT
ARCSTR 99

# DETAILED ARCHAEOLOGICAL WORKS INTERIM REPORT FINAL

Contract S/400/SP/0009 P484B

Oxford Archaeological Unit 9<sup>th</sup> September 1999

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# DETAILED ARCHAEOLOGICAL WORKS INTERIM REPORT FINAL

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Contract S/400/SP/0009 P484B

Oxford Archaeological Unit Janus House Osney Mead Oxford OX2 0ES 9<sup>th</sup> September 1999

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### 1. INTRODUCTION

## 1.1 Location and Specification

- 1.1.1 The Oxford Archaeological Unit (OAU) was commissioned by Union Railways (South) Ltd (URS) to undertake detailed archaeological investigations at the adjacent sites of Church Lane and East of Station Road, in the parish of Smeeth, near Sellindge, Kent (centred on URL grid point 87800,18400, NGR TR 07796 38400) (Figure 1). The work formed part of an extensive programme of archaeological investigation carried out in advance of the construction of the CTRL.
- 1.1.2 The Church Lane site (Figure 3) was specified as a detailed excavation 3.5 hectares in extent. The area was divided into four zones (1-4), with different approaches applied to each. The method adopted for each zone reflected the perceived archaeological potential, the type of deposits expected and engineering considerations. In the event, the very low density of archaeological features, combined with the difficulties of stripping a clay site under winter conditions, led to a substantial reduction in the area excavated (from c.3.5 ha to c.2.1 ha). An additional trench (Trench 2) was machine excavated on the north west side of the ridge to determine the degree of erosion of deposits, and assess the northern extent of the Mesolithic material.
- 1.1.3 The East of Station Road site (Figure 4) was specified as a detailed excavation. Partly in response to the largely negative results from Church Lane, and partly due to anticipated difficulties in stripping the site and limitations on spoil storage areas, the total excavation area was significantly reduced (from 3.62 ha to c.2.5 ha). The reduction was achieved by excavating the site in a series of parallel, 15 m wide trenches, which were expanded as necessary to expose potentially significant archaeological features (Figure 3). Baulks were removed between Trenches 12 and 14 to form an open area excavation in the zone with the greatest density of archaeological features. In addition, a deep trench was machine-excavated in the lowest part of the site (Trench 17) in order to recover waterlogged environmental indicators.

## 1.2 Geology and Topography

- 1.2.1 The two sites were both located between the M20 motorway and the London to Folkestone Railway, and were separated by an unnamed stream which is a tributary of the East Stour River.
- 1.2.2 The excavation areas lie within two adjacent, large arable fields. The eastern field, including the Church Lane site, is dominated by a low hill, and the ground falls away in all directions from the centre of the field. The excavation area skirted around the top of the hill and extended onto the low-lying ground beside the stream. However, a strip immediately beside the stream was left undisturbed to minimise intrusion on the alluvial deposits in bottom of the valley.
- 1.2.3 The East of Station Road site lay at the foot of a low ridge, forming the north-western side of the stream valley. The excavated area lay on the low-lying ground along the margins of the stream. The geology of both sites consists of Atherfield Clay overlain by alluvium and colluvium in the stream valley and around the foot of the hill to the west of Church Lane.

## 1.3 Background

- 1.3.1 Little was known of the archaeology of the site prior to the Assessment of Historic and Cultural Effects. However, previous finds from the general area include a scatter of more than 160 flints, including 32 scrapers and an axe, dated to the Mesolithic period. The CTRL Surface Collection Survey, carried out between 1991 and 1993, recovered a general spread of worked flint, with no clear concentrations.
- 1.3.2 The archaeological evaluation of both sites took place as a single operation in 1997 (Station Road to Church Lane, Sellindge, Kent, ARC SCL 97, Archaeological Evaluation Report, Union Railways Limited 1997).
- 1.3.3 The evaluation trenches uncovered remains of a dispersed nature. Ploughing and slope erosion seemed to have destroyed any features or deposits on the hill top, and the few dated features appeared to be of Bronze Age or Iron Age date. Mesolithic worked flint was recovered from low on the western slope of the ridge, in colluvial/alluvial deposits (Trench 1786TT), although it was considered unlikely to be *in situ*. The area was nevertheless considered to have some potential for the investigation of Mesolithic and later prehistoric activity.
- 1.3.4 At the East of Station Road site the four evaluation trenches that fell within the excavation area demonstrated the presence of late Iron Age/ early Romano-British and undated ditches, sealed beneath colluvial and alluvial sediments. Artefacts were sparse but some waterlogged material was recovered. On the higher ground to the north, a slightly greater density of prehistoric and late Iron Age/ early Romano-British activity was identified, with an assemblage of pottery dating to the 1st century BC 1st century AD from Trench 1755TT, perhaps indicating a more intensive, albeit short lived, occupation to the north of the excavation area.
- 1.3.5 The excavation site was therefore seen to have some potential for the investigation of prehistoric and Roman0-British activity, and potential for recovery of waterlogged remains and environmental indicators.

#### 2. SUMMARY OF RESULTS

## 2.1 Site Summary

*Church Lane* (Figure 3)

- Zone 4, which was c.0.18 ha in extent, was intended to investigate the potential Mesolithic finds scatter. Only the western part of Zone 4 contained alluvial/colluvial deposits, which yielded over 160 flint flakes from an area of c.200 m². A further scatter of flint flakes was revealed on the eastern side of the hill although here the accumulation of colluvium was more modest and the density of finds much lower. As in the evaluation, the indications are that this material represents a mixture of Mesolithic and later prehistoric material, which has accumulated at the foot of the hill as a result of slope erosion.
- 2.1.2 The topsoil stripping revealed a small number of linear features which produced pottery of middle or late Bronze Age date (c.1150 BC 900 BC). The ditches extended down the western side of the hill towards the stream. Towards the top of the hill the features were heavily truncated by ploughing and slope erosion.
- 2.1.3 Also revealed was an arrangement of post-medieval and modern land drains, particularly extensive in the area between the ridge and the stream. A thin scatter of Roman, medieval and post-medieval pottery, generally showing signs of considerable abrasion, was recovered during the machining.

East of Station Road (Figure 4)

- 2.1.4 A light distribution of struck flint from the site suggests earlier prehistoric activity in the area, although it is unlikely that any of features, even the stratigraphically early ones, are earlier in date than the late Iron Age.
- 2.1.5 A number of sparsely distributed ditches and gullies were revealed under layers of colluvium and alluvium. Finds were sparse and the pottery was mainly late Iron Age/early Roman grog-tempered ware, suggesting that the site represents a series of field boundaries and drainage ditches dating to c.100BC AD100. A small concentration of pottery from the central part of the site, in association with some minor gullies and possible post-holes, suggests limited occupation of some kind here, although no structures could be identified. The baulks between Trenches 12 and 14 were removed to expose an area of intercutting ditches.
- 2.1.6 A number of post-medieval linear features, including a large east-west aligned ditch, were exposed. The other features revealed were land-drains of several phases.
- 2.1.7 A deep trench was machine-excavated in the lowest part of the site (Trench 17) in order to recover waterlogged environmental indicators. Samples were taken for macro-organic material, pollen, insects and snails. The stump of an oak tree was also recovered. Pottery recovered from the section indicates that the upper part of the alluvial sequence is of late Iron Age date.

## 2.2 Periods Represented

Earlier prehistoric

2.2.1 Two scatters of struck flint were recorded, concentrated in Zone 4 and on the eastern shoulder of the hill, but also present to the west of the stream. This material is very unlikely to have been *in situ*, and probably derives from erosion of an area of prehistoric activity on the top of the hill. The flint appears to be dated from the Mesolithic (*c*.6000 B.C) to the Middle Bronze Age (*c*.1000 BC).

3

- 2.2.2 Well-preserved waterlogged deposits within a palaeochannel to the west of the East of Station Road site, may contain an earlier prehistoric element, perhaps dating from as early as the immediate post-glacial period (*c*.9000 BC), although this requires further assessment.
- 2.2.3 Two ditches situated on the western slope of the hill on the Church Lane site, contained middle or late Bronze Age pottery.

Late Iron Age/early Roman (c.100 BC – AD 100)

2.2.4 A small assemblage of late Iron Age/ early Roman material was recovered in the excavations. The pottery was largely hand-made grog-tempered ware of the late Iron Age, although some Roman pottery was also recovered. Most of the features to the west of the stream appear to date from this period. No features of a similar date were found on the east side of the stream, although a quantity of very abraded pottery sherds were recovered during the machining.

Medieval/post-medieval (after c. 1500 AD)

2.2.5 A single shallow north-south ditch was located on the southern slope of the hill, possibly representing a fairly recent land division. Otherwise, there was no evidence of any significant activity, apart from the construction of field drains.

## 2.3 Feature Types

- 2.3.1 The features encountered were almost exclusively linear ditches. Relict stream channels (of both Roman and pre-Roman date) were also encountered. A small number of possible post-holes were examined, although they could not be interpreted in structural terms, and three shallow 'fire-pits' showing signs of *in situ* burning were excavated.
- 2.3.2 The limited range of features suggest that neither site contained a focus of settlement, although some light peripheral occupation is possible. Any early prehistoric occupation evidence which may have existed on the upper slopes of the hill east of the stream has long since been eroded by a combination of plough damage and slope erosion. The features present are consistent with agricultural use of the site in the later prehistoric and early Roman periods, possibly on the periphery of a settlement site.

## 2.4 Artefactual Remains

2.4.1 The quality and quantity of artefactual material is low from both sites.

Church Lane

- 2.4.2 A total of 895 struck flints were recovered from the Church Lane site. They were in varied condition and of mixed date. Most were recovered from topsoil and subsoil layers, colluvium or alluvium. The flint scatters recorded were generally thinly distributed and concentrated at the foot of the hillslope, which suggests that they are an accumulation of material resulting from slope erosion.
- 2.4.3 156 sherds of pottery were recovered, including 55 middle/late Bronze Age, 66 Roman, and 35 medieval/post-medieval. The Roman and medieval/post-medieval pottery was fragmentary and very abraded, making provisional identification difficult.

- 2.4.4 Other finds include 8 fragments of ceramic building material and 10 fragments of worked stone, all of which were very abraded.
- 2.4.5 No animal bone was recovered from the excavations.
  - East of Station Road
- 2.4.6 150 struck flints were recovered. These were generally in a sharp, unabraded condition, but were either unstratified or residual in later contexts.
- 2.4.7 324 sherds of pottery were collected from the excavations, including 280 late Iron Age/early Roman and 44 post-medieval sherds. The late Iron Age/ early Roman pottery was fragmentary and abraded.
- 2.4.8 A single fragment from a Colchester-type brooch was also recovered, probably dating from the 1<sup>st</sup> century AD.
- 2.4.9 58 fragments of animal bone were recovered, almost all from a single context. They were poorly preserved.

#### 2.5 Palaeo-environmental and Economic Evidence

- 2.5.1 A large number of the ditches on the East of Station Road site contained charred remains (17 samples taken). Most remains appeared to be wood charcoal, although it is possible that cereals and other crops are also represented.
- 2.5.2 The deep excavation in Trench 17 revealed well-preserved organic remains. Samples were taken for macro-organic material, pollen and snails. The stump of an oak tree was also recovered. Pottery recovered from the section indicates that the upper part of the alluvial sequence is of Late Iron Age date.
- 2.5.3 No deposits with palaeo-environmental potential were seen in the excavated areas of the Church Lane site, and no samples were taken.

## 3. FIELDWORK EVENT AIMS

- 3.1 The fieldwork aims were as follows:
- Establish a record of the extent, morphology and function of the remains of all periods.
- Recover dated environmental and economic indicators where present
- Recover pottery assemblages for assessment and analysis
- Determine the landscape setting of the site and its interaction with the contemporary local environment
- Recover paleoenvironmental indicators from well-dated sequences, palaeosols and waterlogged deposits.
- Characterise the date and nature of the Mesolithic artefact scatter at Church Lane.
- 3.2 In broad terms the excavations achieved the aims of the WSI, with some reservations.

- 3.3 The Church Lane site has been characterised as an area of sporadic activity of generally low intensity. The Mesolithic flints, although almost certainly not *in situ*, suggest that there was some early prehistoric occupation of the hill to the east, which has long since been eroded and/or truncated. The Bronze Age activity was slight and probably associated with field demarcation and drainage, although the small pottery assemblage is suggestive of occupation in the vicinity.
- 3.4 The very small quantities of pottery and lack of clear structural evidence from both sites suggest a normal level of agricultural usage at all periods, with no evidence for occupation within the excavated areas at any period.
- 3.5 There was an absence of waterlogged deposits from the Roman ditches. On present evidence the waterlogged material recovered in the evaluation is likely to have derived from the underlying palaeochannel.
- 3.6 The practical problems of working under winter conditions mitigated against the thorough examination of the alluvial/colluvial deposits between the hill and the stream on the Church Lane site. However, most of the deposits associated with the stream channel were designated for preservation *in situ*, which meant that Zone 4 only exposed the eastern margin of the alluvial deposits. There was no indication in those deposits that significant *in situ* prehistoric occupation or palaeo-environmental deposits were present. The prehistoric finds scatter appears to be a mixed accumulation of Mesolithic and later prehistoric material, probably deriving from the hill to the east of the stream, as a result of slope erosion.
- An investigation of the alluvial deposits was carried out under more favourable conditions at the East of Station Road site, resulting in the recovery of a full environmental sequence from the waterlogged stream deposits. The upper part of the sequence was directly associated with late Iron Age pottery, but the remainder is as yet undated. The potential for a well-dated environmental sequence from the waterlogged palaeochannel may be limited by tree-root disturbances and hydrological factors. However, molluscs, insects and waterlogged wood (a section from a tree-trunk) were present and pollen preservation is expected to be good.

## 4. SUMMARY OF POTENTIAL

- 4.1 The most important aspect of the investigation is likely to be the environmental sequence recovered from the stream deposits. Securely dated late Iron Age/ early Roman deposits are certainly present in the upper part of the sequence. However the complexity of the lower part of the recorded sequence, including tree rooting activity and other natural disturbance, may limit the value of the environmental evidence for earlier periods. The excavations have some potential to contribute to the following aspects of the CTRL research strategy:
- The study of the natural environment, geomorphology and hydrology of the Wealden Greensand landscape zone, with reference to human impacts and land-use. Periods represented include 'hunter-foragers' (400,000 BC 4500 BC), 'farming communities' (2000 BC 100 BC) and 'towns and their rural landscapes' (subperiod 100 BC 410 AD).
- The organisation of the landscape in the Bronze Age and immediate pre-Roman and Roman periods, more specifically the use of land on the periphery of settlement.

## APPENDIX 1

## ARCHIVE INDEX

# **CHURCH LANE (ARCCHL98)**

ITEM	NUMBER OF	NUMBER OF	CONDITION (No. of items)
	ITEMS	FRAGMENTS	(W=washed; UW=unwashed; M=marked;
			P=processed; UP=unprocessed;
			D=digitised; I=indexed)
Contexts records	37	-	
A1 plans	6	-	
A3 plans	1	-	
A4 plans	2	-	
A1 sections	1	Ī	
A4 sections	9	I	
Small finds	921	I	
Films (monochrome)	2	=	
S=slide; PR=print			
Films (Colour) S=slide;	2	-	
PR=print			
Flint (boxes)	5 size 3	895	W,M
	1 size 4		
Pottery (boxes)	1 size 3	156	W,M
Fired clay (boxes)	-	Ī	
CBM (boxes)	1 size 4	Ī	W,M
Stone (boxes)	see CBM	10	W,M
Metalwork (boxes)	-	I	
Glass (boxes)	-	I	
Slag (boxes)	-	ı	
Human Bone (boxes)	-	ı	
Animal Bone (boxes)	-	=	
Misc.	-	-	
Soil Samples (No.)	-	-	
Soil Samples (bags/tubs)	-	-	
Soil Samples	-	-	
(Monolith/kubiena tin)			

# **EAST OF STATION ROAD (ARCSTR 99)**

ITEM	NUMBER OF	NUMBER OF	CONDITION (No. of items)
	ITEMS	FRAGMENTS	(W=washed; UW=unwashed; M=marked;
			P=processed; UP=unprocessed;
			D=digitised; I=indexed)
Contexts records	351		
A1 plans	20		
A4 plans	-		
A1 sections	1		
A4 sections	69		
Small finds	6		
Films (monochrome)	2		
S=slide; PR=print			
Films (Colour) S=slide;	3		
PR=print			
Flint (boxes)	2 size 3	150	W,M
Pottery (boxes)	1 size 3	280	W,M
Fired clay (boxes)		11	W,M
CBM (boxes)	1 size 4	12	W,M
Stone (boxes)	-	5	W,M
Metalwork (boxes)	1	6	P
Slag (boxes)	-	2	P
Human Bone (boxes)	-		
Animal Bone (boxes)	1 size 3	58	W,M
Misc.			
Soil Samples (No.)	23		UP
Soil Samples (bags/tubs)	25		UP
Soil Samples			UP
(Monolith/kubiena tin)			

## Key to box sizes

## Cardboard boxes

Size $1 = Bulk box$	391mm x 238mm x 210mm
Size $2 = \text{Half box}$	391mm x 238mm x 100mm
Size $3 = Quarter box$	386mm x 108 mm x 100mm
Size $4 = Eighth box$	213 mm x 102 mm x 80 mm
Size $5 = Sixteenth box$	110mm x 88 mm x 60 mm
Size $6 = $ Skeleton box	600 mm x 241 mm x 225 mm

## Plastic boxes

 $\begin{array}{ll} \text{Size 4 = Small} & \text{(dimensions as size 4 cardboard)} \\ \text{Size 8 = Medium} & 260\text{mm x } 184\text{mm x } 108\text{mm} \\ \text{Size 9 = Large} & 308\text{mm x } 216\text{mm x } 144\text{mm} \end{array}$ 

## **APPENDIX 2**

#### **SUMMARY REPORT**

## **Church Lane and East of Station Road (NGR TR 07796 38400)**

The Oxford Archaeological Unit was commissioned by Union Railways (South) Ltd (URS) to undertake detailed archaeological investigations at the adjacent sites of Church Lane and East of Station Road, in the parish of Smeeth, near Sellindge, Kent (centred on NGR TR 07796 38400). The stripped areas were 2.5 ha and 2.1 ha in extent respectively. The work formed part of an extensive programme of archaeological investigation carried out in advance of the construction of the CTRL. The two sites were separated by an unnamed stream (a tributary of the East Stour River).

#### Church Lane

Zone 4, which was c. 0.18 ha in extent, was intended to investigate a potential Mesolithic finds scatter on the margins of the stream. Only the western part of Zone 4 contained alluvial/colluvial deposits, which yielded over 160 flint flakes from an area of c. 200 m<sup>2</sup>. A further scatter of flint flakes was revealed on the eastern side of the hill to east of the stream, although here the accumulation of colluvium was more modest and the density of finds much lower. As in the evaluation, the indications are that this material represents a mixture of Mesolithic and later prehistoric material, which has accumulated at the foot of the hill as a result of slope erosion.

The topsoil stripping revealed two linear features which produced pottery of middle or late Bronze Age date (c.1150 BC - 900 BC). The ditches extended down the western side of the hill towards the stream. Towards the top of the hill the features were heavily truncated by ploughing and slope erosion.

A thin scatter of unstratified Roman, medieval and post-medieval pottery, all showing signs of considerable abrasion, was recovered during the machining.

#### East of Station Road

A light distribution of struck flint from the site suggests earlier prehistoric activity in the area, although it is unlikely that any of features, even the stratigraphically early ones, are earlier in date than the late Iron Age.

A number of sparsely distributed ditches and gullies were revealed under layers of colluvium and alluvium. Finds were sparse and the pottery was mainly late Iron Age/ early Roman grog-tempered ware, suggesting that the site represents a series of field boundaries and drainage ditches dating to c. 100BC – AD100. A small concentration of pottery from the central part of the site, in association with some minor gullies and possible post-holes, suggests limited occupation of some kind here, although no structures could be identified. The baulks between trenches 12 and 14 were removed to expose an area of intercutting ditches.

A deep trench was machine-excavated in the lowest part of the site (Trench 17) in order to recover waterlogged environmental indicators. Samples were taken for macro-organic material, pollen, insects and snails. The stump of an oak tree was also recovered. Pottery recovered from the section indicates that the upper part of the alluvial sequence is of Late Iron Age date.

A number of post-medieval linear features were also present, principally including a large east-west aligned ditch. The other features were land-drains of several phases.

#### **APPENDIX 3**

#### **SMR SHEET**

Site Name: Church Lane and East of Station Road, Smeeth, Kent

**Summary:** The site has produced mostly linear field boundaries and drainage features of various dates, including middle or late Bronze Age, late Iron Age/ early Roman and post-medieval/ modern. There is no evidence for human occupation on the site at any date, although Bronze Age and late Iron Age/ Romano-British settlements may be located in the vicinity.

Parish: Smeeth
3. Late Iron Age/ early Romano-British
4. Post-medieval/ modern
NGR Northing: 38400
Watching Brief Field Walking
Geophysical Survey Measured Survey
(To) 21/1/99 (Church Lane) (To) 25/6/99 (East of Station Road)

## **Summary of Fieldwork Results:**

Unit Undertaking Recording: Oxford Archaeological Unit

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Location of Archive / Finds:		
Bibliography:		
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