CHANNEL TUNNEL RAIL LINK
Union Railways (South) Ltd

Project Area 420

WHITE HORSE STONE, PILGRIM'S WAY AND WEST OF BOARLEY FARM

ARC WHS 98
ARC PIL 98
ARC BFW 98

DETAILED ARCHAEOLOGICAL WORKS
INTERIM REPORT
FINAL

Contracts
S/300/SP/0007 P380
S/400/SP/0009/P482A

Oxford Archaeological Unit
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Prepared By: **Date:**	
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1 INTRODUCTION

1.1 Location and specification

1.1.1 Oxford Archaeological Unit (OAU) was commissioned by Union Railways (South) Ltd (URS) to undertake archaeological investigations at White Horse Stone, Pilgrim's Way and West of Boarley Farm, north of Maidstone, Kent (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).

1.1.2 The sites are centred on URL grid point 55300E 40200N and NGR grid point TQ 7350 6010 (Figure 2). White Horse Stone and Pilgrim's Way were specified as detailed excavations and West of Boarley Farm was specified as strip, map and sample. White Horse Stone was *c.* 4.4 ha in extent, Pilgrim's way *c.* 1.4 ha and West of Boarley Farm *c.* 1.0 ha (*c.* 6.8 ha in total).

1.1.3 These three sites have been grouped together because of broad similiarities in the landscape setting and the range of archaeological deposits present. In addition, White Horse Stone and Pilgrim's Way eventually formed a continuous excavated area, while West of Boarley Farm lies less than 200 m to the west and the intervening area will be monitored during the routewide watching brief. The main phases of fieldwork were carried out between 10th August 1998 and 5th March 1999.

1.2 Geology and topography

1.2.1 The sites lie at the foot of the escarpment of the North Downs, on the east side of the Medway Gap. The solid geology is Middle Chalk.

1.2.2 The excavation areas included two dry valleys, the largest of which lies between two spurs outcropping from the Downs below Bluebell Hill. The lower part of the valley, where it opens out into an undulating chalk landscape, coincided with the White Horse Stone and Pilgrim's Way excavation areas. The second, much smaller dry valley, lies further to the east and was investigated in the West of Boarley Farm site.

1.2.3 The Holocene soil sequence ranged from topsoil directly overlying bedrock on the higher ground, to deep sedimentary sequences up to a maximum of 2.95 m thick in the base of the main dry valley. The latter consisted of chalky colluvial sediments, with flint clasts interbedded with silt horizons. The best-preserved sequence is at the lower end of the main dry valley at White Horse Stone, around the point of intersection with the Pilgrim's Way trackway, where darker horizons have been interpreted as remnant palaeosols. These deposits overlie coarse gravel deposits, which are present throughout the valley, and are probably solifluction sediments deposited in the late Devensian.

1.2.4 Natural sarsen boulders occur buried under the colluvial deposits in the White Horse Stone and Pilgrim's Way valley bottom. Such boulders are found in large numbers on either side of the Medway Gap. They are thought to be the product of differential hardening of the Tertiary beds, which formerly covered the chalk, formed by infiltration of iron and silica salts in solution. As the softer sands eroded the boulders were left stranded on the chalk plateau, from where they have tended to accumulate at the foot of the Downs escarpment. Human activity has been responsible for the extensive movement of these stones, usually to remove them from farmland, where they obstruct ploughing.

1.3 Background

1.3.1 A bridleway crossing the White Horse Stone site from north to south has traditionally been identified as the line of the Roman road from Rochester to Hastings. The bridleway follows a natural chalk spur, providing a convenient route across the Downs escarpment.

1.3.2 The 'North Downs trackways' have in the past been identified as a major prehistoric 'dual' route: They include the ridgeway, following the top edge of the Downs escarpment, and the Pilgrim's Way, or terraceway, which follows the chalk at the foot of the escarpment. The site lies between the two tracks, with the Pilgrim's Way, forming the boundary between the White Horse Stone and Pilgrim's Way sites. The latter track also marks the parish boundary between Aylesford and Boxley at this point.

1.3.3 No other archaeological sites have previously been recorded within the CTRL land-take area, but the excavations lie in the midst of a cluster of reputedly Neolithic monuments known as the 'Medway Megaliths'. The Upper and Lower White Horse Stones and Smythe's Megalith lie immediately adjacent to the White Horse Stone site. 'Kit's Coty' (TQ745609), Little Kit's Coty (or 'The Countless Stones'), and the 'Coffin Stone', all lie within a 1 km radius of the excavations. A more distant cluster of three sites, including the Addington, Chestnuts and Coldrum long-barrows, lie on the opposite side of the Medway Gap, *c.*10 km to the west. The Medway Megaliths have no parallel east of the Berkshire Downs and are virtually the only visible monuments of the first farmers in Kent. Only one of the sites has previously been investigated to modern standards. Excavations at 'The Chestnuts', Addington, in 1959, produced sherds of Grimston, Peterborough and Beaker pottery, flint arrowheads and the cremated remains of at least ten individuals.

1.3.4 The most famous of the group, Kit's Coty House, is a scheduled ancient monument, consisting of a chambered tomb and the remnants of a long barrow, located 0.5 km north-west of the site. It was first described by William Lambarde in his '*Perambulation of Kent* in 1576. Trial trenching carried out by the OAU in the vicinity of the monument in 1991 failed to identify any associated Neolithic remains, but did find a number of late Iron Age features.

1.3.5 The 'Upper White Horse Stone', which stands immediately adjacent to the White Horse Stone site, on the line of the Pilgrims' Way, is commonly cited as the possible remnant of a Neolithic chambered tomb. A number of local legends attached to the stone are mostly inherited from the Lower White Horse Stone, another upright sarsen removed from close to the junction of the Pilgrims' Way and the Maidstone-Chatham road in 1823. The legends appear to have no historical foundation.

1.3.6 As with certain others of the Medway Megaliths, the origin of the White Horse Stone has to be regarded with extreme caution. Natural sarsen boulders are very common at the foot of the Downs on either side of the Medway Gap, and it is clear from documentary and archaeological sources that many have been dug out of the fields by farmers since at least the Iron Age, often being moved to the edge of fields or dumped in convenient hollows to remove them from the ploughsoil. Antiquarian speculation and local legends aside, the stone may have no better claim to a prehistoric origin than many of the smaller sarsens which lie beside the Pilgrim's Way at this point, some of which are known to have been placed there in recent years by the present farmer.

1.3.7 There is some doubt over the precise location of Smythe's Megalith, as the Ordnance Survey originally marked it close to the eastern edge of the field, by Westfield Wood. This was altered on later edition Ordnance Survey maps at the instigation of J.H.Evans, who pointed out the existence of a map by Bensted in Maidstone Museum, compiled at

some time before 1863, which places the monument in the valley bottom, *c.* 40 m north of the excavation area. Bensteds' source is unknown, but the depth of the overlying deposits as recorded by Smythe, supports a valley bottom location. The monument was reportedly found by workmen removing sarsens from the ploughsoil on Warren Farm in 1823. The circumstances and location of the discovery cast considerable doubt on it's identification as a prehistoric burial monument.

1.3.8 Other sites recorded in the area include a Roman building, possibly a temple, on the top edge of the escarpment, *c.*300m to the north of the White Horse Stone site. A scattered group of Roman burials were recorded to the north-west of the site in 1871, in the north-west corner of the same field.

1.3.9 In 1994 archaeological fieldwork carried out in advance of the CTRL construction included surface artefact collection survey, which identified a small but relatively concentrated scatter of worked flint, tentatively dated to the Neolithic. Burnt flint occurred mainly to the north and east of the site. Two prehistoric pot sherds, including one late Bronze Age/ early Iron Age and one Iron Age sherd, were found in the same area as the worked flint. Only a small number of Roman sherds were recovered.

1.3.10 An evaluation of the White Horse Stone site, carried out in advance of CTRL construction, identified a series of late Bronze Age or early Iron Age features (*c.* 1000 BC – 600 BC) concentrated on the spur to the west of the dry valley. These consisted of linear features and a pit deposit consisting of two neo-natal lambs, adult sheep bones, and the base of a late Bronze Age/ early Iron Age pot. The fill of the pit was exceptionally rich in charred grain of several different species, suggesting deliberate deposition, probably in the pottery vessel. Further linear features were identified at the northern and southern ends of the dry valley. The features at the southern end were sealed beneath thick colluvial deposits and cut through an extensive buried soil horizon (*Archaeological Evaluation at White Horse Stone, Ayelseford, Kent. Channel Tunnel Rail Link*, OAU report for Union Railways Ltd, 1997).

1.3.11 An evaluation of the Pilgrims' Way site, carried out in 1998, revealed further archaeological features, mainly concentrated along the western slope of the dry valley. They comprised six pits, a human cremation, and two ditches. Both ditches produced late Bronze Age/early Iron Age pottery, although the sherds from one of the ditches were small and abraded and may have been residual. An adult human cremation within a pit contained a flat-topped bone pin, which indicated a date in the Iron Age or Roman period. None of the other pits produced artefactual evidence. Dating evidence from the evaluation as a whole was sparse (11 pottery sherds in total), the majority of the sherds being of late Bronze Age or early Iron Age date. A buried soil was identified in three of the trenches and was interpreted as a continuation of the buried soil identified in the White Horse Stone evaluation. Two small pottery sherds were recovered from the buried soil, and while the dating of these was inconclusive, an Iron Age date was thought most likely. A sherd of medieval pottery of the 12th-14th century was recovered from a broad cut at the base of the colluvium in the northernmost trench, possibly a sarsen removal hole (*Archaeological Evaluation at Pilgrim's Way, Boxley, Kent. Channel Tunnel Rail Link*, OAU report for Union Railways Ltd, 1998).

1.3.12 An evaluation at Boarley Farm, carried out in 1997, identified an area of Late Iron Age/ early Romano-British activity situated on high ground to the south-west of Boarley Farm, less than 200 m west of the Pilgrims' Way site. Two animal burials (one cattle and one sheep), a posthole, pit and ditch were recorded (*Archaeological Evaluation at West of Boarley Farm, Boxley, Kent. Channel Tunnel Rail Link*, MoLAS report for Union Railways Ltd, 1997).

2 SUMMARY OF RESULTS

2.1 Site Summary

2.1.1 The group of sites uncovered evidence for settlement occupation in the Neolithic period (*c.* 4000 BC – 2000 BC), possibly the middle Bronze Age (*c.* 1750 BC – 1150 BC), and the transitional period between the late Bronze Age and early Iron Age (*c.* 900 BC – 600 BC). There is evidence for peripheral settlement activity and ritual use of the landscape in the late Iron Age, including a possible post-hole structure, cremation deposits and animal burials. Agricultural features including field boundaries of various periods, indistinct post-hole enclosures of the late Iron Age and early Roman periods (*c.* 100 BC – 200 AD), and an early medieval corn-drier (*c.*1100 AD – 1300 AD), were also found.

Neolithic (c. 4000 BC – 2000 BC)

2.1.2 Major discoveries include the clearly defined traces of a longhouse, found near the bottom of the dry valley, apparently sealed by a later prehistoric palaeosol (Figures 4 and 5). It is thought to date from the early Neolithic (*c* 3750 BC), although mid-late Neolithic pottery (Grooved Ware and Peterborough Ware) was also recovered from features in the immediate vicinity, suggesting activity on the site over a long period of time (*c.* 3750 BC – 2250 BC). The structure was defined by a substantial array of postholes, bedding trenches, pits and hearths. Associated activity areas in the form of utilised tree throw holes, pits and ditches lay to the south and east of the building. Finds of pottery, flint and animal bone from the postholes suggest that it was perhaps more likely to have been a domestic rather than a ceremonial structure. It is unlikely to have been an ordinary dwelling, but could have been used as a communal building.

Early/ middle Bronze Age (c. 2000 BC – 1150 BC)

2.1.3 A sub-rectangular posthole structure uncovered during a watching brief to the south-east of the Pilgrim's Way site has been tentatively ascribed to the Bronze Age due to its form and pottery retrieved from adjacent features (Figure 7). There is at present no clear picture of activity in the early/ middle Bronze Age. Occasional sherds of Bronze Age pottery have been identified within some contexts (from the upper buried soil in the main dry valley) and comprehensive dating of all contexts may reveal a continuity of settlement between the main Neolithic and late Bronze-Age/ early Iron Age phases.

Late Bronze Age/ early Iron Age (c. 1150 BC – 600 BC)

2.1.4 The late Bronze Age/ early Iron Age settlement was found on the chalk spur forming the western side of the dry valley, on the White Horse Stone site. Patterns of postholes indicate possible roundhouses and numerous four-post structures, and there were a considerable number of pits, probably originally used for storage (Figure 3). No occupation horizons were preserved in this area due to the thinness of soil cover and consequent plough truncation. The pits, however, were rich in pottery, animal bones, flint and charred remains, suggestive of domestic refuse, and three human pit burials were also recorded. The bone was generally well-preserved and in some cases suggested ritual deposition. The single cremation deposit produced an exceptional group of Iron Age artefacts, including an iron knife, four iron awls, a whetstone, a small curved iron blade and a group of at least six pottery vessels, one of which was a large urn containing a deposit of grain. A metal-working area located on the eastern side of the settlement produced furnace bases and pits containing large quantities of slag (Figure 3).

Middle Iron Age

2.1.5 No clear phase of activity has been ascribed to the middle Iron Age. The items of metalwork found with the cremation described above are suggestive of this period (although this contrasts with the pottery dating and may be due to the rarity of comparisons for metalwork in the early Iron Age). Spot dating from contexts within the late Bronze Age/ early Iron Age settlement has identified occasional sherds of middle Iron Age pottery that may suggest (in the light of further analysis) a diminishing intensity of settlement activity extending into this period.

Late Iron Age/ early Romano-British (c. 100 BC – 200 AD)

2.1.6 By the late Iron Age or early Romano-British period there seems to have been a significant settlement shift, to the south-east of the Pilgrim's Way. There is no clear evidence for a settlement of this date, but several dispersed post-hole structures and alignments, cremations, pits and animal burials have been found at the Pilgrim's Way and West of Boarley Farm sites, probably indicating occupation on or near the sites (Figures 7 - 8).

2.1.7 A number of field boundaries and drainage ditches, overlying the late Bronze Age settlement site and running along the centre of the dry valley, have been dated to the Romano-British period (Figures 3 and 4). No other unequivocal Romano-British domestic deposits or features were identified, suggesting that the site was used exclusively for agricultural purposes during this period.

Medieval (c. 1100 AD – 1500 AD)

2.1.8 The medieval features consist of trackways, including the Pilgrim's Way itself and a plough-levelled hollow way running north-south across the Pilgrim's Way site (Figure 7). The bridleway which crosses the White Horse Stone site (Figure 3), traditionally identified as the line of the Rochester-Hastings Roman road, produced modern material from wheel ruts cut into the chalk at the base of the hollow way. However the depth of the hollow way (which has been filled within the last fifteen years), suggests that it could be at least medieval in origin. The only other medieval feature comprised a corndrier found on the Pilgrim's Way site (Figure 7), which utilised sarsen fragments in its construction, and possibly a human burial found next to the Pilgrim's Way (Figure 6).

2.1.9 A section excavated through the Pilgrim's Way failed to identify any trackway surfaces earlier than the medieval period. The human burial found beside the track, near the top of the sequence, should provide some useful radiocarbon dating evidence for the underlying colluvial sequence (Figure 6).

The White Horse Stone/Pilgrims Way dry valley soil sequence.

2.1.10 The main dry valley was in-filled with a series of late glacial solifluction deposits. Within these the remnants of a Pleistocene palaeosol were located, possibly dating from the Allerød interstadial. These deposits were sealed by a substantial, well-preserved Holocene buried soil which is truncated by a clearly defined Iron Age ploughsoil. This in turn is overlain by a deep sequence of deposits resulting from a combination of ploughing and colluvial processes from the Iron Age to the present day. The deepest and best preserved section of the sequence lay at the intersection of the Pilgrim's Way with the dry valley bottom (Figure 6). At this point the total depth of deposits was *c.* 4.75 m, including *c.* 1.8 m of medieval? to modern trackway deposits, 1.8 m of accumulated Iron Age to medieval hillwash deposits and 1.15 m of interleaved prehistoric palaeosols and solifluction deposits.

2.1.11 A large-scale sampling programme has been carried out, recovering a range of samples from a transect across the dry valley, and from particularly well-preserved points in the sequence. Grid sampling of the later prehistoric palaeosol was also carried out, to investigate possible traces of localised variations in vegetation cover. The evaluation and initial assessment results indicate that these deposits have considerable potential for environmental reconstruction.

The Pilgrim's Way

2.1.12 The section through the Pilgrim's Way trackway revealed that the early dry valley deposits, including the later prehistoric (Iron Age) buried soil horizon, are continuous and undisturbed below the present Pilgrim's Way trackway, and that deposits and features representing the first use of the trackway (wheel ruts and compacted stone surfaces) first appear at a horizon thought to be of medieval date (Figure 6). There is therefore no evidence to suggest that the trackway has been in use since prehistoric times, and some evidence that the present line of the trackway is medieval in origin. This does not exclude the possibility that the line of the track has shifted through time, or that earlier trackway surfaces were not metalled and have left no trace.

2.2 Periods Represented

2.2.1 Settlement occupation is represented in the Neolithic period (*c.* 4000 BC – *c.* 2000 BC), possibly the middle Bronze Age (*c.* 1750 BC – 1150 BC), and in the transitional period between the late Bronze Age and early Iron Age (*c.* 1000 BC – 600 BC). Identification of Beaker, middle Bronze Age and middle Iron Age pottery in a few contexts may suggest continuity of settlement throughout the Neolithic and Bronze Age. This cannot be determined at present because of the limited artefactual analysis carried out to date, and the large amounts of material retrieved from the main activity periods.

2.2.2 The late Iron Age and early Romano-British periods (*c.* 100 BC – 200 AD) are represented by ritual and agricultural features, probably on the periphery of a settlement site.

2.2.3 In the Romano-British period the only features present are field boundaries.

2.2.4 Medieval activity is represented by the early medieval corn-drier (*c.* 1100 AD – 1300 AD), which does not necessarily indicate settlement in the immediate vicinity.

2.2.5 The dating of the dry valley colluvial sequence and buried soils relies at present on artefactual evidence, which can be unreliable on dry valley sites, where colluvial erosion results in much redeposition. The removal of buried sarsen boulders from the colluvium, which has probably taken place regularly from the Neolithic to the present day, results in localised areas of deep disturbance, introducing a considerable risk of intrusive material being present. Nevertheless the dating of the sequence appears to be generally reliable, with Neolithic material found in features sealed by the upper palaeosol, late Bronze Age/ early Iron Age material occurring within the upper palaeosol, a few Romano-British sherds and field boundary ditches present in the middle part of the sequence and medieval material present in the upper part. The presence of the late Bronze Age and Iron Age settlement on the spur to the north means that pottery of that period is found in small quantities throughout the sequence.

2.2.6 Absolute dating of the sequence will rely on the identification of suitable sample material which demonstrably derives from *in situ* deposits. Radiocarbon dating of an articulated (medieval?) human burial, found beside the Pilgrim's Way, cut into the

top of the colluvial layers and sealed by early trackway deposits, should provide a *terminus post quem* at least for the upper part of the sequence. *In situ* organic material from earlier deposits include animal bone from a later Neolithic (Grooved Ware) pit from the area of the Neolithic longhouse. Palaeomagnetism and OSL samples have been collected from points in the sequence, including the later prehistoric buried soil, which may help to establish an absolute chronology for the deposits themselves.

2.3 Feature Types

Structures

2.3.1 Structures of Neolithic, Bronze Age, early Iron Age and late Iron Age/ early Romano-British date were present. All were predominantly post-built, although the Neolithic longhouse also had wall foundation gullies. None of the possible houses had surviving floor surfaces or occupation layers, which means that interpretation of the structures relies on spatial rather than stratigraphic relationships.

2.3.2 The Neolithic longhouse was an aisled structure measuring *c.* 18 m x 8 m, with a probable porched entrance on the long south-west side (Figure 5). At least one small, circular structure, *c.* 3.75 m in diameter, was identified close to the south-east end of the building. No occupation horizon was preserved due to truncation by an Iron Age ploughsoil. The structure was defined by a substantial array of postholes, bedding trenches, pits and hearths. Associated activity areas in the form of utilised tree throws, pits and ditches lay to the south and east of the building.

2.3.3 The possible middle Bronze Age structure consisted of a rectilinear arrangement of postholes measuring *c.* 11 m x 4 m (Figure 7). At present there is little evidence for associated activity, and the dating requires confirmation.

2.3.4 The late Bronze Age/ early Iron Age settlement plan is dominated by four-post structures, which often seem to have been dismantled and rebuilt on almost the same site, in some cases on successive occasions (Figure 3). Variations include possible six-post structures. Other identified structures include dense clusters of postholes, usually with no clear plan. A single penannular gully, *c.* 10 m in diameter, may be a house gully but could also be associated with the four-post structure it encloses.

2.3.5 Other posthole structures include a poorly defined series of dispersed post-hole groups and alignments at West of Boarley Farm, which could represent fenced stock enclosures (Figure 8).

2.3.6 The ill-defined late Iron Age or early Romano-British structure on the Pilgrim's Way site covers *c.* 4 m x 17 m. Again, the dating relies on a very few sherds of pottery and requires confirmation.

Pits

2.3.7 Pits were associated with all of the main periods of occupation.

2.3.8 A group of three pits within the footprint of the early Neolithic longhouse included one with a comparatively large assemblage of Grooved Ware (late Neolithic).

2.3.9 Numerous late Bronze Age/ early Iron Age pits were found cut into the chalk, with a wide range of characteristics. Some outstanding assemblages of charred grain and pottery have been recovered from probable storage pits.

Ritual deposits

2.3.10 Possible ritual deposits are well represented within all three excavation areas.

2.3.11 The late Bronze Age/ early Iron Age settlement site produced a single richly furnished cremation (2.4.11) and three human pit burials. Two of the latter were tightly crouched inhumations, placed in fairly deep storage pits. The third was very shallow and severely plough-truncated but may have been crouched in its own grave cut. The evaluation produced evidence for structured deposition in a ritual context, in the form of a shallow pit containing the bones of two neo-natal lambs, some adult sheep bones and a very rich deposit of grain, apparently placed in a pottery vessel.

2.3.12 The late Iron Age/ early Romano-British activity on the Pilgrim's Way site included several cremations.

2.3.13 The Boarley Farm excavations produced three possible ritual deposits, including burials of a cow, a sheep and a horse, of probable late Iron Age or early Romano-British date.

Linear features

2.3.14 Boundary ditches were comparatively rare, and were mostly associated with the Romano-British field system. Trackway ditches and hollow-ways were a more common feature, including the Pilgrim's Way and the putative Roman road crossing the White Horse Stone site.

Industrial and agricultural features

2.3.15 A metal-working area located on the eastern side of the late Bronze Age/ early Iron Age settlement produced hearth bottoms and pits containing large quantities of slag.

2.3.16 An early medieval corn-drying or malting kiln was found on the Pilgrim's Way site, The chamber of the kiln comprised a sub-rectangular pit, with an entrance on the north side leading into a large, irregular bowl-shaped depression with a flat base (*c.* 2.55 m in diameter). This feature was probably intended to provide access to the kiln. A group of sarsen boulders in the base of the depression appeared not to be *in situ*, but could be a dump of material from the kiln superstructure. The entrance to the kiln chamber was flanked by a pair of roughly shaped sarsen fragments, placed upright in sockets cut into the chalk and packed with flint cobbles. The hearth was placed between the sarsens. The feature produced pottery probably of 11^{th} – 13^{th} century date.

2.4 Artefactual remains

Worked flint

2.4.1 Approximately 1200 pieces of worked and burnt flint were recovered from the site.

2.4.2 In general terms the flint consisted largely of debitage. Few retouched pieces were recovered, and the examples that were found are not particularly dateable. However, it has been possible to suggest a broad date range, given the technological characteristics of the material and its associations with Neolithic and Bronze Age pottery. The importance of the assemblage lies in the recovery of flint from the earlier Neolithic longhouse and a late Neolithic Grooved Ware pit, amongst other features. The rarity of longhouses in Britain and thus associated flint assemblages, increases the importance of this assemblage.

2.4.3 Retouched forms include a range of generally neatly retouched scrapers, serrated flakes, and miscellaneous retouched forms, probably of early and mid-late Neolithic date. The debitage is consistent with this, but does not contain a strong blade-based element as might be expected with earlier Neolithic assemblages. Cores include single platform, multi-platform and keeled examples, the latter being more

commonly found with mid-late Neolithic assemblages. Several contexts produced groups which would appear to contain suitable material for refitting analysis.

Pottery

2.4.4 A large pottery assemblage was recovered (*c.* 8800 sherds from 495 contexts from White Horse Stone), the bulk of which is of late Bronze Age to early Iron Age date and comes from the excavated settlement. In addition, there is a small quantity of Neolithic pottery, most of which was recovered from the area of the Neolithic structures that were sealed by colluvium.

2.4.5 A small collection of flint-tempered pottery from the postholes of the Neolithic longhouse represents the earliest pottery from the site. This is likely to belong to the Plain Bowl tradition of the early Neolithic. Similar pottery has been found at the Chestnuts chambered tomb. Some middle Neolithic Peterborough Ware was also recovered and further material, including a large part of a bowl, came from the Pilgrim's Way site. An important group of late Neolithic Grooved Ware was recovered from pits within the footprint of the longhouse and some Beaker sherds were residual in the later prehistoric buried soil.

2.4.6 Although this assemblage of Neolithic pottery is relatively small, the contexts and associations are of considerable importance. Neolithic pottery is perhaps under-represented in Kent when compared with other regions of south-east England.

2.4.7 Some of the pottery from Pilgrim's Way could derive from middle Bronze Age Bucket Urns. These sherds were found in association with a post-built structure.

2.4.8 Most of the late Bronze Age and Iron Age material was recovered from the excavated settlement at White Horse Stone, generally from discreet features such as pits and postholes. Preservation and condition is excellent, with the recovery of several examples of semi-complete vessels. Some groups of material can be placed firmly within the late Bronze Age and groups of transitional late Bronze Age/ early Iron Age pottery are also present. However, most of the pottery can be placed within the early Iron Age. There are noticeable differences in forms and fabrics with the change from bipartite to tripartite forms and the introduction of new fabric types such as shell and sand. These should provide chronological indicators that can then be used to define the phasing. A scan of the assemblage would suggest that middle Iron Age material is almost absent.

2.4.9 The recovery of pottery that ranges in date from the late Bronze Age through to the early Iron Age, from a single site, is of significance and should provide a sequence of ceramic groups that can be used to illustrate changes in form, fabric and assemblage variation. The assemblage includes several large groups of vessels. One such group was associated with cremated bone and ironwork. Such a deposit is likely to provide information of more than regional importance for prehistoric artefact studies.

2.4.10 Pottery of other dates including Romano-British, medieval and post-medieval, occurs in small quantities. Detailed study of this material and its context will be of importance principally for establishing the site phasing.

Metalwork

2.4.11 The single cremation from the late Bronze Age/ early Iron Age settlement produced an outstanding group of ironwork including a knife, four iron awls and a small curved iron blade. Also present was a whetstone and a group of at least six pottery vessels, one of which contained a huge quantity of charred grain (2.5.8). The preservation of the metalwork is exceptional. This factor, together with the secure

context, apparently early date and associations with other outstanding artefact and economic assemblages, may indicate that this group is of national importance.

2.4.12 The late Bronze Age/ early Iron Age settlement also produced evidence for metal-working, including a group of pits filled with iron slag and hearth bottoms. No associated furnaces were identified, but it is possible that they lie outside the excavation, in the area to be preserved *in situ*.

2.5 Palaeo-environmental and economic evidence

Sampling strategy

2.5.1 Environmental sampling was intensive throughout the programme of excavation. The overall strategy involved sampling a percentage of features for the retrieval of animal bones, artefacts and charred remains, with an emphasis on selecting a representative spatial distribution of the major feature types, and applying more detailed sampling to contexts with particularly good preservation. Samples were generally collected without removing artefacts or animal bones, except in the case of fragile finds.

2.5.2 Bulk soil sampling on a grid pattern was employed in areas where spatial distribution of remains might be significant, including the early Iron Age metal-working area on the White Horse Stone site, and the Holocene buried soil in the base of the dry valley.

2.5.3 Particular importance was placed on the long sequence of deposits best preserved at the lower end of the valley within the White Horse Stone site. A series of bulk samples, incremental samples and intact monoliths were taken, to look for various environmental indicators and for analysis of the deposits themselves. Samples were taken for mollusc and insect analysis, recovery of charred plant remains, artefacts and animal bone, palaeomagnetic dating, micromorphology, pollen, OSL dating, pedology, particle size analysis and soil chemistry. Comparative samples were taken from the much shallower dry valley sequence at the West of Boarley Farm site.

The later prehistoric buried soil

2.5.4 The evaluation results have indicated that the extensive later prehistoric (probably late Bronze Age/ early Iron Age) buried soil preserved in the dry valley bottom at White Horse Stone has very high potential for palaeo-environmental reconstruction (provided that the dating suggested by the artefactual evidence is confirmed). This will be particularly important if local variations in vegetation cover can be discerned within the soil horizon. The buried soil produced mainly woodland mollusc species in some trenches, and mainly open country species from others. The disturbed nature of the soil suggests that it could represent a ploughsoil formed shortly after woodland clearance. The successive colluvial layers overlying the buried soil produced mainly open country species. Further study could therefore shed considerable light on the impact of man on the landscape in the later prehistoric period. Although direct associations with the buried soil and colluvial layers are lacking for the Neolithic period, the current interpretation of the later deposits suggests that the Neolithic longhouse, which lay beneath the buried soil, might have been located in a wooded or partially wooded setting. It is of interest to note that the natural spread of sarsen boulders in the valley bottom may well have been a visible landscape feature at that time.

2.5.5 Limited assessment of the samples recovered during the excavation of the buried soil indicate that charred remains are present in small quantities, as is worked flint.

The flots are dominated by snails, and variation between the samples can be seen in the quantities of snails, pottery, burnt stone and worked flint. All samples examined have at least a small percentage of modern intrusive material, such as herbaceous plant roots, burrowing snails, insect pupa cases, and coal fragments. These are most common in the buried soil flots, where they make up about one-third of the volume of the flot, which means that the soil is biologically active down to that level.

Posts in the Neolithic structure:

2.5.6 One kilogram sub-samples from a Neolithic posthole fill and the associated postpipe fill have been assessed at this stage. There are clear differences between the content of the postpipe and posthole, with small numbers of burnt stones and small pottery fragments (1-4 mm across) present in the post-pipe and absent from the post-hole fill. Charred remains are virtually absent from both deposits.

Neolithic Grooved Ware pit fill within the footprint of the long-house:

2.5.7 The fill of the Grooved Ware pit was very gravelly and contained little material, comprising mainly snail shells, with very few charred remains. Worked flint pieces were present in small numbers, although small flakes were almost absent. Seven pieces of burnt stone included sarsen fragments. Animal bones were present in some quantity (15 bones) but were poorly preserved, with heavy chemical pitting, and no small animal bones survived.

Early Iron Age Cremation

2.5.8 The small volume processed to date from the early Iron Age cremation (12 litres) produced a vast flot (830 g) of very clean and well-preserved material, with little modern contamination. This is dominated by grain, a conservative guess of numbers being 10,000 items. The grain seems to have been placed in a large pottery vessel. Chaff was also present, but weed seeds were not obvious. This is similar in quality to the flot recovered during the evaluation from a probable ritual deposit of similar date. Well-preserved burnt daub with some sooty or tarry coating was present in some quantity (39 items).

Phytoliths (plant opals):

2.5.9 A fine ash deposit from one of the late Bronze Age/ early Iron Age pits was found to be composed almost entirely of phytoliths, probably from the use of grassy material (such as grain stalks or chaff) as fuel.

Animal bone

2.5.10 A small quantity of animal bone has been recovered from the Grooved Ware pit in the footprint of the Neolithic longhouse. The material is poorly preserved, and has not been identified at this stage. It is expected that a limited amount of further material will be recovered from the soil samples when processed.

2.5.11 Animal bones are well preserved in late Bronze Age and Iron Age pit deposits, but except for possible ritual deposits such as the two lambs found in a late Bronze Age/ early Iron Age pit during the evaluation, and a group of three complete late Iron Age/ early Romano-British animal burials at West of Boarley Farm, the animal bone assemblage is comparatively small (*c.* 4426 pieces from White Horse Stone). The animal burials are of intrinsic interest because of the completeness of the skeletons, in addition to any light they may shed on ritual practises in the later prehistoric period.

FIELDWORK EVENT AIMS

2.6 The sites fall within the North Downs landscape zone and are of particular relevance to the 'Early Agriculturalists' (4500 – 2000 BC) and 'Farming Communities' periods (2000 BC – 100 BC). The following general and specific research aims were identified prior to the fieldwork:

White Horse Stone and Pilgrim's Way

- To determine the local landscape setting of the Medway Megaliths and to study later prehistoric landscape organisation and settlement function, particularly through the recovery and study of ceramic and palaeo-botanical remains.
- To recover suitable samples to establish changes in the palaeo-environment for the area and its immediate hinterland, and to make comparisons with, and augment the sequence preserved on the north side of the North Downs.
- To determine the late glacial landscape and environment within the area
- To determine the landscape setting and contemporary environment of the Medway Megaliths in the immediate area.
- To determine the environment of local late prehistoric agricultural communities
- To recover suitable samples, and individual artefacts and artefact assemblages to establish the economic basis of late prehistoric agricultural communities, including:
- Recovery of late Bronze Age/ early Iron Age pottery assemblages to contrast with assemblages from elsewhere in Kent;
- Recovery of later prehistoric archaeo-botanical remains to establish the relative importance of emmer and spelt wheat;
- Identification of the extent, morphology and function of, and interaction between, settlement and possible ceremonial features in the area.

West of Boarley Farm

- To establish the extent, morphology and function of, and interaction between, occupation remains and possible ceremonial features.
- To recover individual artefacts and artefact assemblages and other indicators, such as faunal and charred plant remains from securely dated sequences to establish the economic basis of agricultural communities.
- To determine the local environment of the site through the recovery of palaeo-environmental data, particularly the recovery of molluscs from cut features and colluvial sequences in the dry valley.

2.7 The results of the excavations have exceeded expectations in almost every respect. The presence of Neolithic occupation was unexpected after the largely negative findings of the evaluation trenching in this respect. Similiarly, the later prehistoric settlement, although anticipated by the evaluation, has produced far greater intensity of occupation than predicted, and unexpectedly good feature preservation.

2.8 The extensive environmental sampling programme has the potential to address all of the above aims relating to the palaeoenvironment and economy. However, the value of the data from the dry valley sequence will be heavily dependent on the quality of the dating evidence obtained. The evidence currently available suggests that a broad chronology may be established on artefactual grounds alone, but the occurrence of intrusive and residual material is likely to be high, and may blur the data unless it is supported by absolute dating methods. The most important evidence will be from radiocarbon dates obtained from organic material that can be shown to be *in situ*, although samples have also been taken for OSL and palaeomagnetic dating of the deposits themselves. Animal bone and charred remains from undisturbed features such as the Grooved Ware pit, near the base of the sequence, will be of prime importance if the preservation is sufficiently good. For the upper part of the sequence the human burial beside the Pilgrim's Way, which is thought to be of medieval date, may also be of considerable importance.

Neolithic

2.9 The form and dimensions of the Neolithic longhouse have been firmly established. The structure is likely to belong to the very start of the Neolithic (*c*.3750 BC). Finds of pottery, flint and animal bone from the postholes suggest that it was more likely to have been a domestic rather than a ceremonial structure. Although it is unlikely to have been an ordinary dwelling, it could have been used as a communal building. Reassessment of existing archaeological evidence relating to the Medway Megaliths will be required in the light of this new information.

2.10 The Neolithic samples may not be particularly rich, but it is hoped that sufficient organic material will be present to obtain radiocarbon dates, both from potentially early Neolithic structural features and from the later Neolithic pits and other features in the vicinity. There is a clear contrast in artefact content between the postpipe and posthole fill of the single posthole so far examined in detail. Detailed spatial analysis of material from the pits and postholes may therefore permit study of activity areas within the building.

2.11 Current interpretation of the dry valley sequence suggests that buried land surfaces belonging to the Neolithic do not survive. However, the suggestion that the colluvial sequence developed as a result of woodland clearance in the later prehistoric period, indicates that the area may have been at least partially wooded in preceding periods. This has clear implications for the landscape setting of the Medway Megaliths, but detailed analysis is required to confirm the interpretation.

Middle Bronze Age

2.12 Evidence for middle Bronze Age activity was unexpected and is still somewhat uncertain. The small amount of pottery associated with the possible rectilinear building found on the Pilgrim's Way site requires more detailed analysis. If the dating is correct, the structure is of intrinsic interest and may suggest continuity of occupation on the site from the Neolithic into the Bronze Age.

Late Bronze Age/ early Iron Age

2.13 For the late Bronze Age to the early Iron Age it should be possible to link the settlement evidence with contemporary environmental evidence from the buried soil horizon in the base of the dry valley at White Horse Stone and rich assemblages of charred plant remains. There is therefore excellent potential for reconstructing aspects of the local environment and the agricultural economy of the settlement.

2.14 The charred plant remains from the settlement itself are exceptionally well-preserved in a variety of contexts, and two ritual deposits have produced enormous quantities of grain. The association of charred material with pottery groups assignable to the late Bronze age, the early Iron Age or the transitional period between them, may allow changes in the environment and economy to be detected. With evidence of this quality, particular questions, such as the relative importance of emmer and spelt wheats, may be addressed in some detail. Currently available evidence suggests that this period may have seen extensive clearance of woodland from the area, precipitating the process of colluvial erosion. This highlights the potential for understanding the impact of man on the landscape.

2.15 Ritual deposits are a notable feature of the late Bronze Age/ early Iron Age site, occurring exclusively within or on the edge of the occupation area, including three human pit burials, a unique richly furnished cremation, and a structured pit deposit including remains of two neo-natal lambs and a pot filled with grain. Apart from the cremation, these deposits fall within a well-known Iron Age tradition of human and animal burials in and around settlement sites. There is certainly mounting evidence, mainly the identification of Iron Age inhumation cemeteries by radiocarbon dating, that human pit burials do not represent the normal Iron Age burial rite, but have some other significance, possibly representing sacrificial offerings.

2.16 The animal burials at West of Boarley Farm, which are thought to be of late Iron Age date, are more difficult to characterise as specifically ritual deposits. It is possible that they represent burials of diseased animals, for example. However, numerous examples from Iron Age sites (*eg.* Danebury) suggest that a ritual context is more likely.

3 SUMMARY OF POTENTIAL

3.1 This group of sites has revealed evidence of evolving human occupation and land management from the early Neolithic period to the present day. There is evidence for settlement occupation potentially spanning much of the Neolithic period (*c.*4000 BC – *c.*2000 BC), possibly the middle Bronze Age (*c.*1750 BC – 1150 BC), and the transitional period between the late Bronze Age and early Iron Age (*c.* 800 BC – 600 BC).

3.2 The Neolithic structure is the first to be found in the Home Counties (although potentially contemporary, circular structures such as that at Grovehurst, Sittingbourne are known but rare), and one of a comparatively small number in the UK. It is particularly important because of its location in the midst of a cluster of actual and reputed megalithic chambered tombs (the eastern group of the Medway Megaliths), and sealed within a sequence of late- and post-glacial hillwash deposits and buried soils. The latter may provide evidence for changes in vegetation cover and land-use at the time of the earliest farming communities in Britain. The building and its associated features therefore offer considerable research possibilities.

3.3 Possible parallels for the longhouse include examples of putative post-built structures found underlying Cotswold-Severn longbarrows at Hazleton North, Sale's Lot, Withington and Ascott-under-Wychwood. These are loosely dated to the early or middle Neolithic (radiocarbon dates from Hazleton North suggest a date of *c.* 3780 BC – 3690), and are of interest because of the close association between buildings and burial monuments. A recent discovery from Yarnton, Oxfordshire, provides an example of a well-defined longhouse which has been dated to the early Neolithic on the basis of radiocarbon dates, but also had a Grooved Ware (late Neolithic) pit within the footprint, and Peterborough Ware from a hearth.

3.4 The detailed interpretation of the structural, artefactual and economic/ environmental remains may allow a reconstruction of the social/domestic activities and local environment associated with the building. This evidence, and comparison with other sites in the British Isles and on the continent, may provide insight into the relationship between the ritual landscape, represented by the Medway Megaliths, and the domestic/ economic landscape. The burial monuments and the house may well have been sited close together deliberately so that the houses of the living and the dead were intervisible. The longhouse is physically the closest example in the British Isles to the continent, and therefore the most likely to contain evidence for continental influences.

3.5 Given the scarcity of stratigraphic relationships in the late Bronze Age/ early Iron Age settlement, and the predominance of post-hole structures, there is little potential for phasing the site on stratigraphic grounds. Analysis of the pottery is likely to be the only means available for establishing an internal site chronology. Fortunately the pottery assemblage for this period is large and generally well-preserved, and has considerable potential for chronological analysis. Potential for spatial analysis of artefacts is largely restricted to the pottery, which is likely to be only assemblage large enough to produce useful results. Detailed examination of the pit deposits, including soil micromorphology, will help to establish the character of occupation on the site.

3.6 An additional, unforeseen aspect of the late Bronze Age and early Iron Age settlement is the evidence for metalworking. This is of considerable potential significance for establishing the status of the site, as well as investigating the

technological aspects of early iron-working, particularly in view of the important group of iron objects recovered from the site (2.4.11). Metallurgical analysis of the slag and iron objects could potentially point to the source of the iron ore and establish whether the items were made locally.

3.7 The environmental evidence recovered from the deep sequence of buried soils and colluvial deposits, and from archaeological features, is of particular importance and could potentially provide evidence for changes in vegetation cover and landscape use from the late glacial (*c.*10,000 BC) to the post-medieval period. This has some limited potential for shedding light on the landscape setting of the Medway Megaliths and the Neolithic longhouse. The late Bronze Age and early Iron Age deposits, including an extensive buried soil horizon and some outstanding charred grain assemblages, may have the potential to generate particularly important results.

3.8 The late Iron Age, Romano-British and medieval features are of interest principally for the light they shed on the evolving landscape. However, the late Iron Age/ early Roman cremations are of interest for comparison with other contemporary urban and rural burial sites excavated along the CTRL route, and the animal burials have potential both for studies of animal husbandry and ritual practises. The medieval corn-drier is of intrinsic interest as a variation on a well-known form of kiln, usually interpreted as corn-driers, bread ovens or malting kilns (*eg.* Wharram Percy, Brighton Hill South). The former interpretation is favoured in this case because of the apparently isolated location of the feature in relation to any known medieval settlement.

APPENDIX 1

ARCHIVE INDEX

WHITE HORSE STONE (ARC_WHS_98)

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	2546		
A1 plans	47		
A4 plans	23		
A1 sections	2		
A4 sections	665		
Small finds	120		
Films (monochrome) S=slide; PR=print	36		
Films (Colour) S=slide; PR=print	45		
Flint (boxes)	13 size 3	1179	W, M
Pottery (boxes)	13 size 1 7 size 2 2 size 3	8798	W, M
Fired clay (boxes)	1 size 2	210	W, M
CBM (boxes)	1 size 3	36	W, M
Stone (boxes)	3 size2	252	W, M
Glass (boxes)	1 size 4	2	P
Copper alloy (boxes)	see Misc	3	P
Iron	see Misc	14	P
Slag (boxes)	7 size 2	314	P
Human Bone (boxes)	1 size 1 3 size 2	1610	W, M
Animal Bone (boxes)	4 size 1 1 size 2	4426	W, M
Bone objects			
Shell	see Misc	18	P
Misc.	1 size 4		
Soil Samples (bags/tubs)	686		UP
Soil Samples (Monolith/kubiena tin)	262		UP
Sarsen samples	4		P

Key to box sizes

Cardboard boxes

Size 1 = Bulk box	391mm x 238mm x 210mm
Size 2 = 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

Size 4 = Small	(dimensions as size 4 cardboard)
Size 8 = Medium	260mm x 184mm x 108mm
Size 9 = Large	308mm x 216mm x 144mm

PILGRIM'S WAY (ARC_PIL_98)

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	406		
A1 plans	4		
A4 plans	11		
A1 sections	2		
A4 sections	140		
Small finds	7		
Films (monochrome) S=slide; PR=print	11		
Films (Colour) S=slide; PR=print	9		
Flint (boxes)	1 size 3	208	W, M
Pottery (boxes)	1 size 3	250	W, M
Fired clay (boxes)			W, M
CBM (boxes)	1 size 4	14	W, M
Stone (boxes)	see Misc	6	W, M
Glass (boxes)	1 size 4	3	P
Copper alloy (boxes)			
Iron	1 size 4	22	P
Slag (boxes)			
Human Bone (boxes)	2 size 3	6	P
Animal Bone (boxes)	1 size 3	218	W, M
Bone objects	see Bone	1	W, M
Shell	see Misc	21	P
Misc.	1 size 4		
Soil Samples (bags/tubs)	122		UP
Soil Samples (Monolith/kubiena tin)	29		UP
Sarsen samples			

Key to box sizes

Cardboard boxes

Size 1 = Bulk box	391mm x 238mm x 210mm
Size 2 = 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

Size 4 = Small	(dimensions as size 4 cardboard)
Size 8 = Medium	260mm x 184mm x 108mm
Size 9 = Large	308mm x 216mm x 144mm

WEST OF BOARLEY FARM (ARC_BFW_98)

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	179		
A1 plans	16		
A4 plans	6		
A1 sections	1		
A4 sections	59		
Small finds	0		
Films (monochrome) S=slide; PR=print	4		
Films (Colour) S=slide; PR=print	4		
Flint (boxes)	see Misc	2	W, M
Pottery (boxes)	1 size 3	105	W, M
Fired clay (boxes)	1 size 1	623	W, M
CBM (boxes)	see Misc	13	W, M
Stone (boxes)	see Misc	124	W, M
Glass (boxes)	see Misc	10	P
Copper alloy (boxes)			
Iron	1 size 4	9	P
Slag (boxes)	see Misc	58	P
Human Bone (boxes)	0		W, M
Animal Bone (boxes)	4 size 1 2 size 6	4582	W, M
Bone objects			W, M
Shell	see Misc	101	W, M
Misc.	1 size 2		
Soil Samples (bags/tubs)	18		P
Soil Samples (Monolith/kubiena tin)	34		P
Sarsen samples			

Key to box sizes

Cardboard boxes

Size 1 = Bulk box	391mm x 238mm x 210mm
Size 2 = 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

Size 4 = Small	(dimensions as size 4 cardboard)
Size 8 = Medium	260mm x 184mm x 108mm
Size 9 = Large	308mm x 216mm x 144mm

APPENDIX 2

SUMMARY REPORT

White Horse Stone, Pilgrim's Way and West of Boarley Farm (NGR TQ 7350 6010)

The Oxford Archaeological Unit (OAU) was commissioned by Union Railways (South) Ltd (URS) to undertake archaeological investigations on the adjacent sites of White Horse Stone, Pilgrim's Way and West of Boarley Farm, north of Maidstone, Kent. These excavations, with a combined area of 6.8 ha, formed part of an extensive programme of archaeological investigation carried out in advance of the construction of the Channel Tunnel Rail Link.

Neolithic

Major discoveries include the clearly defined traces of a longhouse, found near the bottom of the dry valley, apparently sealed by a later prehistoric palaeosol. It is thought to date from the early Neolithic (*c*.3750 BC), although mid-late Neolithic pottery (Grooved Ware and Peterborough Ware) was also recovered from features in the immediate vicinity, suggesting activity on the site over a long period of time. The structure was defined by a substantial array of postholes, bedding trenches, pits and hearths. Associated activity areas in the form of utilised tree throw holes, pits and ditches lay to the south and east of the building.

Early/ middle Bronze Age

A sub-rectangular posthole structure to the south-east of the Pilgrim's Way site has been tentatively ascribed to the Bronze Age on the basis of it's form, and pottery retrieved from adjacent features.

Late Bronze Age/ early Iron Age

A late Bronze Age / early Iron Age settlement was found on the chalk spur forming the western side of the dry valley, on the White Horse Stone site. Patterns of postholes suggest possible roundhouses and numerous four-post structures. A number of pits contained rich deposits of pottery and animal bone suggestive of domestic refuse, and three human pit burials were also recorded. A unique cremation deposit produced an exceptional group of transitional late Bronze Age/ early Iron Age artefacts, including an iron knife, four iron awls, a whetstone, a small curved iron blade and a group of at least six pottery vessels, one of which was a large urn containing a deposit of grain. A metal-working area located on the eastern side of the settlement produced furnace bases and pits containing large quantities of slag.

A very few sherds were found that may suggest a diminishing intensity of activity extending into the middle Iron Age.

Late Iron Age/ early Romano-British

By the late Iron Age or early Roman period there seems to have been a significant settlement shift, to the south-east of the Pilgrim's Way. There is no clear evidence for a settlement of this date, but several dispersed posthole structures and alignments, cremations, pits and animal burials have been found at the Pilgrim's Way and West of Boarley Farm sites, probably indicating occupation on or near the sites.

Medieval

The medieval features consist of trackways, including the Pilgrim's Way and a plough-levelled hollow way running north-south across the Pilgrim's Way site. Other medieval features comprised a corn-drying kiln found on the Pilgrim's Way site, which utilised sarsen fragments in its construction, and possibly a human burial found next to the Pilgrim's Way.

A section excavated through the Pilgrim's Way failed to identify any trackway surfaces earlier than the medieval period.

The dry valley soil sequence.

The main dry valley at White Horse Stone was in-filled with a series of late glacial solifluction deposits. Within these the remnants of a Pleistocene palaeosol were located, possibly dating from the Allerød Interstadial. These deposits were sealed by a substantial, well-preserved Holocene buried soil which is truncated by an Iron Age ploughsoil. This in turn is overlain by a deep colluvial sequence dating from the Iron Age to the present day. Initial assessment indicates that these deposits have considerable potential for environmental reconstruction.

APPENDIX 3

SMR SHEET

Site Name:
White Horse Stone, Aylesford, Kent
Pilgrim's Way, Boxley, Kent
West of Boarley Farm, Boxley, Kent

Summary:

The Oxford Archaeological Unit (OAU) was commissioned by Union Railways (South) Limited (URS) to undertake archaeological investigations on the adjacent sites of White Horse Stone, Pilgrim's Way and West of Boarley Farm, north of Maidstone, Kent. These excavations, with a combined area of c. 6.8 ha, formed part of an extensive programme of archaeological investigation carried out in advance of the construction of the CTRL. The unexcavated areas between the sites will eventually be stripped and subject to an archaeological watching brief. The sites, which are located on the chalk at the foot of the North Downs escarpment in a dry valley setting, uncovered evidence for settlement occupation in the Neolithic period (c.3750 BC – 2000 BC), possibly the middle Bronze Age (c.1750 BC – 1150 BC), and the transitional period between the late Bronze Age and early Iron Age (c. 900 BC – 600 BC). There is evidence for peripheral settlement activity and ritual use of the landscape in the late Iron Age, including a possible post-hole structure, cremation deposits and animal burials. Agricultural features including field boundaries of various periods, indistinct post-hole enclosures of the late Iron Age and early Romano-British periods (c.100 BC – 200 AD), and an early medieval corn-drier (c.1100 AD – 1300 AD), were also found.

District: Maidstone	**Parish:** Aylesford/ Boxley

Period(s):

1. Neolithic (Early and mid-late)
2. Middle Bronze Age?
3. Late Bronze Age/ early Iron Age
4. Late Iron Age/ Romano-British
5. Medieval

NGR Easting: TQ 7525	**NGR Northing:** 6030

Type of Recording: ~~Evaluation~~ ~~Watching Brief~~ ~~Field Walking~~

(Delete) Excavation ~~Geophysical Survey~~ ~~Measured Survey~~

Date of Recording: (From) 10/8/98 (To) 5/3/99

Unit Undertaking Recording: Oxford Archaeological Unit

Summary of Fieldwork Results:

Major discoveries include the clearly defined traces of a longhouse, found near the bottom of the dry valley, apparently sealed by a later prehistoric palaeosol. It is thought to date from the early Neolithic (c.3750 BC), although mid-late Neolithic pottery (Grooved Ware and Peterborough Ware) was also recovered from features in the immediate vicinity, suggesting activity on the site over a long period of time. The structure was defined by a substantial array of postholes, bedding trenches, pits and hearths. Associated activity areas in the form of utilised tree throw holes, pits and ditches lay to the south and east of the building.

A sub-rectangular posthole structure to the south-east of the Pilgrim's Way site has been tentatively ascribed to the Bronze Age on the basis of it's form, and pottery retrieved from adjacent features.

A late Bronze Age / early Iron Age settlement was found on the chalk spur forming the western side of the dry valley, on the White Horse Stone site. Patterns of postholes suggest possible roundhouses and numerous four-post structures. A number of pits contained rich deposits of pottery and animal bone suggestive of domestic refuse, and three human pit burials were also recorded. A unique cremation deposit produced an exceptional group of transitional late Bronze Age/ early Iron Age artefacts, including an iron knife, four iron awls, a whetstone, a small curved iron blade and a group of at least six pottery vessels, one of which was a large urn containing a deposit of grain. A metal-working area located on the eastern side of the settlement produced furnace bases and pits containing large quantities of slag.

A very few sherds were found that may suggest a diminishing intensity of activity extending into the middle Iron Age.

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The medieval features consist of trackways, including the Pilgrim's Way and a plough-levelled hollow way running north-south across the Pilgrim's Way site. Other medieval features comprised a corn-drying kiln found on the Pilgrim's Way site, which utilised sarsen fragments in its construction, and possibly a human burial found next to the Pilgrim's Way. A section excavated through the Pilgrim's Way failed to identify any trackway surfaces earlier than the medieval period.

The main dry valley at White Horse Stone was in-filled with a series of late glacial solifluction deposits. Within these the remnants of a Pleistocene palaeosol were located, possibly dating from the Allerød Interstadial. These deposits were sealed by a substantial, well-preserved Holocene buried soil which is truncated by an Iron Age ploughsoil. This in turn is overlain by a deep colluvial sequence dating from the Iron Age to the present day. Initial assessment indicates that these deposits have considerable potential for environmental reconstruction

Location of Archive / Finds:

Bibliography:

Summary Compiler: Stuart Foreman	**Date:** 5/8/99