KEITH PARFITT AND RICHARD HOSKINS

The Dover Archaeological Group was engaged to maintain a watching-brief during the construction of a new barn, stables and equestrian arena/sand school at Martin, on the dip-slope of the North Downs near Dover (Fig. 1). Groundworks were conducted across two areas, in 2012 and 2015. The excavations in 2012 unexpectedly revealed the partial outline of a substantial prehistoric ring-ditch, several pits and evidence for Bronze Age flint-knapping. The work in 2015, further up-slope, allowed the recovery of more prehistoric flints but exposed no associated features.

The areas investigated (NGR TR 33842 46619, centred and NGR TR 33811 46676, centred; Fig. 1) lie within the modern civil parish of Langdon and occupy paddocks bounded by East Langdon Road on the south-east side, further paddocks to the north-west and north-east and by open agricultural fields to the south-west. The medieval parish church of East Langdon is some 830m to the south-west.

The ring-ditch discovered in 2012 lay towards the bottom of a long, south-east facing slope, at an elevation of almost 70m AOD (Fig. 1 and Fig. 2). The slope defines one side of a broad, dry Downland valley (Lay Bottom), running northeast towards the coast. Chalk ridges on either side of this valley overlook the site and rise to between 80 and 90m AOD. The natural geology here consists of Upper Chalk (Seaford Formation) capped by a thin, flinty yellow-brown clay Head deposit (i.e. hill slope material moved under periglacial conditions). The Tithe Map of the 1840s and the 1936 Land Utilisation Survey of Great Britain (map Sheet 117, accessed online, 22/8/16) show the area as then being arable land, rather than pasture as today.

The fall of the ground necessitated cut-and-fill terracing of the hill-slope for the new building work and parts of the site were reduced to a depth of 1.25m into the natural subsoil. As exposed during these excavations, the surface of the chalk below the clay was found to be heavily eroded, with numerous natural silt-filled runnels and solution hollows present (Fig. 3). Several natural features were initially mistaken as being archaeological.

Archaeological background

The Downland of this region is exceptionally rich in cropmarks and forms part of the 'Sutton Wedge', a triangular block of rolling, waterless chalk country extending between Dover, Deal and Adisham (Fig. 1, Perkins 2010). More than 350 round barrow sites, nearly all known as ring-ditch cropmarks on aerial photographs rather

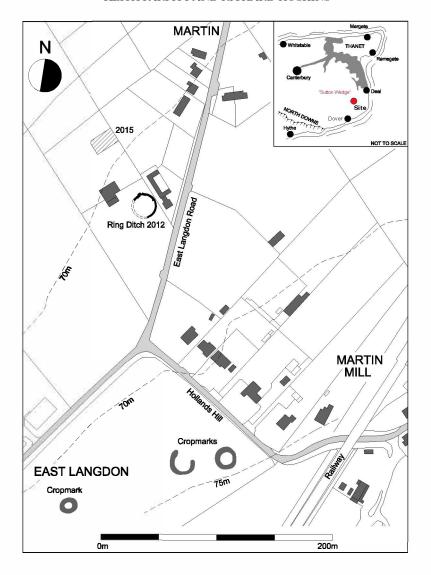


Fig. 1 Plan showing location of excavated ring-ditch and ground cleared in 2015.

than standing field monuments, have been recorded here (Perkins 2010). Significant numbers of cropmark sites, including enclosures, field-systems, trackways and ring-ditches are known in the fields around Langdon and Martin, although none has been excavated. Nothing was known of the present monument before the investigations began but there are cropmarks of several similar ring-ditch sites in the vicinity. These are all most likely to represent plough-damaged round barrows (see below). About 225m to the south of the present site, cropmarks of two such ring-ditches occur near the summit of the ridge (Hollands Hill), with another one about half way down the hill-side around 100m further to the south-west of these



Fig. 2 General view of the site from the south. The central barn now lies over the ring-ditch.



Fig. 3 The ring-ditch under excavation, looking downhill to the south-east.

(Fig. 1). Google Earth imagery (2007) shows the clear outlines of several others at no great distance, with examples located about 765m to the north-west, 804m to the north and 818m to the west of the excavated site. These various ring-ditches are all 15-20m in diameter and most appear as single monuments. They tend to be located on the mid/upper north-west facing slopes of ridges, at elevations of between 73 and 88m AOD. Such locations stand in contrast to the south-east facing aspect, and near valley-bottom positioning, of the 2012 ring-ditch.

Other evidence for ancient activity in the region is provided by scatters of prehistoric flintwork. An area producing such lithic material was recorded during the construction of the East Langdon village hall car park, about 380m to the southwest of the present site in 2005 (Parfitt and Parfitt 2005). Nevertheless, a general paucity of struck flints within fields in the immediate vicinity of East Langdon and Martin has been previously observed (Tina Parfitt pers. comm.). This contrasts markedly with the general situation across this part of east Kent where such finds are frequently abundant in the local fields.

EXCAVATED REMAINS

The clearance work undertaken during 2012 exposed the partial outline of a substantial prehistoric ring-ditch (Fig. 3). Subsequently, in 2015, a piece of ground around 50m further upslope to the north-west of the ring-ditch was cleared down to the surface of the natural subsoil (Fig. 1). This new area measured about 13.00m (NW-SE) by 21.50m (NE-SW) but revealed nothing of further archaeological interest beyond a small collection of prehistoric struck flints contained within the upper soil deposits.

Despite cold, wet conditions, the investigations of 2012 succeeded in revealing about one-third of the circumference of a prehistoric ring-ditch (F. 5). Additional trenching established that the overall diameter of this was about 20m (Fig. 3 and Fig. 4). Several deliberately cut pits and a possible central grave were also recorded. A series of hand-dug trenches was cut across the ring-ditch, whilst a careful examination of the central part of the enclosed area was conducted to reveal the possible grave. Around half the monument remained un-investigated and should now lie preserved below the finished level of the new development and in the adjacent field to the south-west.

The outer ring-ditch, F. 5

Cutting through a number of natural solution hollows, the ring-ditch (F. 5) where exposed was unbroken by any entrance causeway and was mainly filled by a succession of clay silts, without doubt derived from the clays naturally occurring on the site (Fig. 3). It was possible to excavate and record nine separate sections through the ditch in three sectors (designated North, East and South sectors). Details are set out below.

North sector: at 21m in length this was by far the longest sector of ditch exposed (Fig. 3): a total of 9.70m was fully excavated here in seven separate trenches (Fig. 4). The ditch generally had a truncated V-shaped profile, with a slightly dished

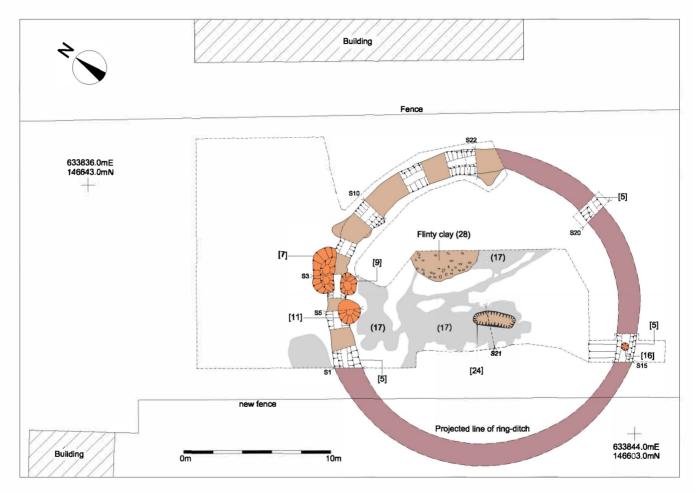


Fig. 4 General plan of the excavated ring-ditch.

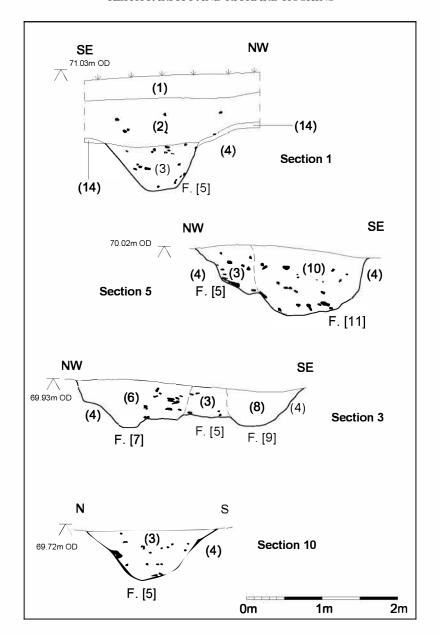


Fig. 5 Sections across ring-ditch F. 5 and later pits Fs 7, 9 and 11.

and, in places, a flat base which was about 0.50m wide. It varied in width between 1.20 and 1.70m at the top, with slightly convex sloping sides, becoming steeper and sometimes almost vertical towards the base. The depth ranged between 0.55 and 0.70m (Figs 5 and 6).

The generally fresh appearance of its sides at the lower levels clearly indicated that these represented the original profile of the ditch, whilst the upper, shallower

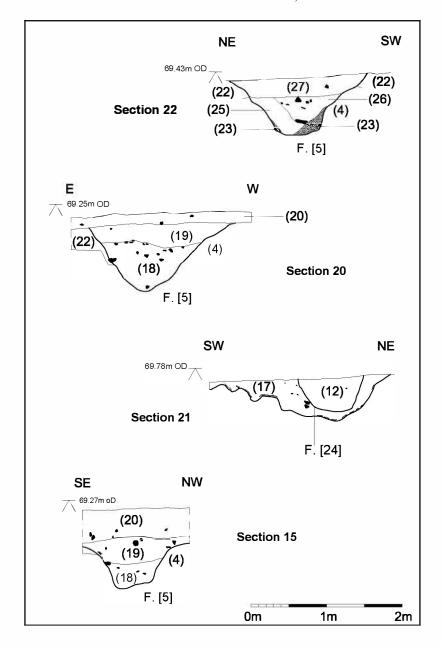


Fig. 6 Sections across ring-ditch F. 5 and central pit F. 24.

slopes suggested subsequent weathering of the ditch sides, creating a width somewhat greater than that first dug. In several places on the base of the ditch localised areas of a primary silt were represented by a cream-coloured chalky deposit containing very frequent small chalk lumps. This was generally found lying on the inner edge of the ditch, although occasionally it was also present on

the outer edge (Fig. 6, Section 22, Context 23). No finds were recovered from this layer. Elsewhere on the northern side the lowest filling comprised a firm yellow-brown silty clay containing moderate quantities of medium and large natural flint nodules as well as occasional small black pebbles (Context 21; *not shown on sections*). This deposit appeared to have eroded into the ditch from the outside and was very similar to Context 25, observed on the east side (Fig. 6, Section 22). No archaeological finds were contained within either deposit.

Above the lowest layers, the filling of the ring-ditch was generally quite uniform, consisting of an orange-brown clay with moderate quantities of small, medium and large flint nodules and angular flints as well as very occasional small black flint pebbles (Fig. 5, Sections 1, 3, 5 and 10, Context 3). This deposit yielded a combined total of seventy-seven prehistoric struck flints, a single calcined (burnt) flint, and ten small sherds of prehistoric pottery. The majority of these finds were discovered in the upper half of the deposit, with the lower part being almost devoid of finds. At one point, a localised group of struck flints, including several which were later found to join, were noted, implying *in situ* flint knapping. The potsherds recovered consist of a single (residual) piece of probable Early Neolithic ware, four Early Bronze Age Beaker fragments and five sherds of Bronze Age Collared Urn (see below).

An upper ditch fill recorded on the north-east side (Fig. 6, Section 22, Context 27) contained more than fifty struck flints, including a retouched blade but there was no associated pottery. Subsequently, on the north-west side, three substantial prehistoric pits were found to have been cut into the infilled ring-ditch (Fig. 4: Fs 7, 9 and 11, see below).

East sector: a single trench measuring 2.50 by 0.85m was dug on the eastern side of the ring-ditch (Section 20 as shown on Fig. 4). Here, the slope of the natural chalk was pronounced, being some 0.30m higher on the western (inner) side of the ring-ditch than on the east (Fig. 6, Section 20). This differential, however, may have been exaggerated by the presence of a large solution hollow on the eastern side (Context 22).

The ring-ditch was both wider and deeper here than elsewhere, being 1.75-1.85m wide at the top and 0.85-0.90m deep. The base was 0.55m wide and rounded. The main lower filling of the ditch here (Fig. 6, Section 20, Context 18) consisted of a soft orange-brown clay containing moderate quantities of natural angular flint. This was overlain by an upper deposit of firm yellow-brown clay with lesser amounts of flint (Section 20, Context 19). A small number of struck flints was recovered from this upper fill but no pottery was present.

South sector: although the finished level of the proposed works at the southern end of the site was well above the visible top of the ring-ditch, the land-owner willingly agreed to machine-excavate an additional deeper trench (Fig. 4, Section 15) in order to locate more of the ditch and allow its full diameter to be ascertained. The trench was about 4.0m long and 1.50-2.00m wide.

Removal of more than one metre of topsoil, clay and flint over-burden here exposed the eroded surface of the natural chalk. Reflecting the natural slope of the ground, the edge of the chalk on the north-western side of the ditch was found to

lie about 0.15m higher than on the south-east side. The top of the ditch, however, could be seen to cut in from the overlying clay between 0.10 and 0.15m above the chalk surface.

A two-metre length of the ring-ditch was fully excavated. This varied in width across the top from 1.15m on the south-west side to 1.45m on the north-east side. It was between 0.65 and 0.70m deep, with slightly convex, sloping sides near the top, giving way to much steeper, almost vertical, sides towards the base (Fig. 6, Section 15). The base itself was 0.55-0.65m wide.

Two fills occurred within the ring-ditch here. These were the same as those recorded in the East sector (Fig. 6, Section No. 15, Contexts 18 and 19). The upper deposit (19) tailed back some way to the north-west, beyond the uphill edge of the ditch. A moderate quantity of struck flint was recovered from this upper filling but there was no pottery. Subsequently, a shallow pit containing much more struck flint had been cut into the top of Context 19, over the main ditch (Fig. 4, F. 16, see below).

The area enclosed by the ring-ditch

A careful search was made for contemporary features, particularly burials, enclosed within the ring-ditch. An area of about $120m^2$ was examined but the presence of an extensive complex of clay filled solution hollows across much of the area hampered the work (Fig. 4, Context 17; see above). Two features of archaeological interest were eventually identified – a centrally located pit (Fig. 4, F. 24) which might have been a grave and, a little further to the north, a localised spread of flinty clay that could represent a final remnant of any associated barrow mound (Fig. 4, Context 28).

Central pit F.24: cut into natural solution hollow (Context 17) was a pit (F.24). This lay close to the centre of the area enclosed by the ring-ditch, occupying a position where any burials associated with the monument might have been expected. The pit, itself, was an elongated oval in shape and measured about 2.54m (NW-SE) by 0.90-1.06m (NE-SW), its main axis following the natural fall of the ground (Fig. 4). It was 0.32 to 0.44m deep, with steep/sloping sides and a rounded base (Fig. 6, Section 21). The filling consisted of a uniform layer of soft brownish-yellow clay (Context 12) which contained occasional large flint nodules, thin lenses of natural manganese and a number of small black pebbles. It was fully excavated and a twenty-litre sample of the filling was wet-sieved for additional finds, with a negative result. In the central part of the pit, nine prehistoric pot-sherds and a similar number of struck flints were found within the upper zone of the filling. The pot-sherds have been tentatively identified as probably being of the Early Neolithic period and are most likely to be residual (see below).

Clay layer, Context 28: a distinctive patch of dark brown clay (Context 28), measuring approximately 4.50m (NW-SE) by at least 2.00m (SW-NE) and containing more frequent angular flints than all the adjacent deposits, was noted a short distance to the north of the central pit (Fig. 4). This thin layer extended across an area of shallow solution hollows and might have constituted nothing more than the uppermost filling of these, but there is a possibility that it represented the last

remnants of a clay barrow mound set within the ditched area. No archaeological material was recovered but the deposit could not be investigated in any detail.

Later pits cutting the ring-ditch, Fs 7, 9, 11 and 16

A group of three later pits was identified in the North sector (Fig. 4, Fs 7, 9 and 11). These were closely spaced and appeared to be partially dug into the ring-ditch filling, although their edges were very difficult to define outside the chalk-cut portions. A shallower fourth pit was located in the South sector (Fig. 4, F. 16).

- Pit F.7: this was the largest pit located, cutting into the outer edge of the ring-ditch on its north-west side. It was roughly oval in shape, measuring about 3.20m (NE-SW) by 1.60m (NW-SE). It was up to 0.81m deep with irregular, sloping sides and an uneven base. The filling (Context 6) consisted of yellow-brown silty clay containing a moderate quantity of small angular flints, occasional very large flint nodules and very occasional small black pebbles, together with forty-one prehistoric struck flints (Fig. 5, Section 3). These were found evenly distributed throughout the filling down to the lowest level but there was no associated pottery.
- Pit F.9: this lay immediately south-east of pit F. 7 cutting the inner lip of the ring-ditch. It was oval in shape, up to 1.90m in diameter and 0.55m deep. The sides were steeply sloping with a dished base. The filling (Context 8) consisted of a single deposit of yellow-brown silty clay containing frequent small and medium sized angular flints and very occasional small black flint pebbles (Fig. 5, Section 3). Seven pieces of struck flint were contained within the upper 0.20m of the filling.
- Pit F.11: this lay just south of pit F. 7, adjacent to pit F. 9 and again appeared to cut the inner lip of the ditch. It was circular in shape, 1.50m in diameter and 0.79m deep. The sides were very steep and the base rounded. The filling (Context 10) again consisted of a single deposit of yellow-brown silty clay containing moderate quantities of small and medium sized angular flints, occasional large angular flints and very occasional small black flint pebbles (Fig. 5, Section 5). All the archaeological finds occurred in the upper 0.20m of the fill and consisted of two struck flints and three large sherds from a Late Bronze Age pottery beaker (Fig. 7, see below).
- Pit F.16: this circular, flint-filled pit was found cutting into the ring-ditch in the South sector (Fig. 4). Excavation showed it to constitute nothing more than a shallow depression, about 0.08m deep and 0.55m in diameter. Its greybrown clay filling (Context 15, not shown on section) proved to be full of prehistoric struck flints and other knapping debris that extended a little beyond the depression to cover an area up to one metre across. More than 250 struck flints were recovered from this deposit during excavation (Table 1). The entire fill of the pit was retained and subsequently wet-sieved. This yielded further numerous extremely small struck flints and micro-debitage, amounting to 102g of additional material (see below). A small, intrusive sherd of early Roman pottery was also recovered.

TABLE 1. DISTRIBUTION OF PREHISTORIC FLINTWORK

Context No.	Description	No. of flints	
2012			
1	Ploughsoil/unstratified	64	
2	Hillwash	44	
	Lower filling of ring-ditch, F. 5	•	
3, 19, 27	Upper filling of ring-ditch, F. 5	158	
6	Filling of pit, F. 7, cutting ring-ditch	41	
8	Filling of pit, F. 9, cutting ring-ditch	7	
1•	Filling of pit, F. 11, cutting ring-ditch	2	
15	Filling of pit, F. 16, cutting ring-ditch	270	
12	Uppermost filling of pit, F. 24 (?grave)	9	
2015			
1	Ploughsoil/unstratified	63	
Total		658	

Subsequent deposits (Contexts 1, 2 and 20)

The natural Head deposit (Context 14), the infilled ring-ditch and the later pits were all sealed by a layer of down-washed clay (Figs 5 and 6, Sections 1, 15 and 20, Contexts 2 and 20). This was of almost identical composition to the Head deposit, making the junction between the two virtually impossible to define in many areas. These two clay subsoil layers were 0.35-0.65m in combined thickness and were overlain by 0.28-0.37m of recent plough soil and turf (Fig. 5, Section 1, Context 1).

FINDS

Relatively small assemblages of prehistoric pottery and flintwork were recovered during the fieldwork. Metal-detector searches of the ring-ditch area failed to reveal any significant finds. The material collected currently remains in the possession of the Dover Archaeological Group but, subject to agreement, will be transferred to Dover Museum in due course. Notes on the finds are set out below.

Pottery by Nigel Macpherson-Grant

A small collection of pottery was recovered during the 2012 excavations. The bulk of this material is prehistoric in date and from stratified contexts. In addition, one medieval sherd came from the topsoil (Context 1) and one post-medieval sherd from the hillwash (Context 2) during the machine work (not included below). Most of the stratified sherds were small. Three large pieces found in the top of pit F. 11 unfortunately crumbled into more than one hundred fragments during and after their lifting from the rain-saturated ground.

The material submitted for examination forms a multi-period assemblage consisting of 124 pieces (719g). This overall figure includes the fragmented sherds recovered from pit F. 11 and may be sub-divided into three main period groups – Early Prehistoric, Later Prehistoric and Early Roman. The majority of the material is readily identifiable and on the basis of its association with the ring-ditch, probably derives from the monument's original and subsequent use. However, ten sherds provisionally dated to the Early Neolithic, most probably relate to premonument activity.

Early Prehistoric pottery (Neolithic and Early Bronze Age)

Early Neolithic: ten sherds of possible Early Neolithic date were recorded from two contexts – one fragment from the upper fill of the main ring-ditch (Context 3) and nine from the filling of pit F. 24, at the centre of the ring-ditch (Context 12). The small fragment from the upper ditch fill is fresh and unworn. Those from F. 24 are small or fairly small and represent fragments from three or four different vessels. All share the same wear pattern – slightly worn externally, fresh internally – clearly they were all deposited at the same time, with their internal surfaces face down.

The manufacturing trends of these pieces are a little ambiguous. The fairly coarse and moderately sparse flint tempering of this group would be in keeping with observed Early Neolithic potting trends – similar material has recently been noted from the Early Neolithic causewayed enclosure at Court Stairs, Ramsgate. However, broadly comparable fabrics can be found in certain fineware bowls of the Early–Middle Iron Age period. The present pieces are not quite typical of Iron Age material and, on balance, an Early Neolithic date is preferred here.

Beaker: Context 3, the main fill of ring-ditch, also produced a small quantity of Early Bronze Age sherds. These consisted of four Beaker fragments and five Collared Um sherds. The Beaker tradition is represented by one fineware and three coarseware elements. There is a small body sherd from a rather drab redbrown oxidised Beaker made with a potting-mix containing fine grog and sparse, sometimes rather coarse, flint. The surviving decoration consists of three or four somewhat irregular horizontal lines framing a probable panel containing vertical sub-divisions. The decoration was made using a rather worn fine-toothed comb with rectangular teeth. The coarseware component consists of three moderate-sized sherds, two conjoining, from a fairly large-diameter vessel made in a mixed-temper, grog and flint, fabric fired a drab brown-buff in oxidising conditions – and decorated with wide-spaced finger-nail and finger-pinch impressions. There is no reason to assume that they are not broadly contemporary with the fineware sherd, and the relative crudeness of the latter's fabric and decoration suggests a fairly late Beaker, c.2000-1700 BC.

Collared Urn: the second tradition is represented by five small or fairly small body sherds, all made in a low-fired near-black greasy, coarsely grog-tempered fabric. Two small fragments carry traces of worn cord-impressed decoration. All the pieces are fairly heavily worn and come from the same crudely-made thin-

walled vessel. Whilst its difference in condition compared with the rather better-fired Beaker sherds could, and may, suggest a later date – it could also be due to the radically poorer potting and softer fabric. The Collared Urn tradition began around 2000 BC and had a longer currency than Beakers so that a date range between c.2000 and 1600 BC is initially reasonable.

Later Prehistoric

The Late Bronze Age beaker from Pit F. 11: the upper filling of pit F. 11 produced 103 highly fragmented small to fairly large sherds weighing 638g (see above). These are from a single fineware vessel whose sherds are near-fresh with little or no obvious edge-wear – and clearly all deposited at the same time. Their soft and fragile nature meant that it was impractical to clean them – other than a superficial removal of excess soil. Although the complete profile is technically restorable, any reconstruction could only be based on a few larger elements, with any observation of surface detail reduced to a minimum by remnant soil. The reconstruction (Fig. 7) is unapologetically simple with no attempt to indicate surface details or finish except for main formal aspects. The resulting beaker or deep bowl is made of fine sandy-silty clay tempered with fairly profuse moderately fine flint grits. It is moderately hard-fired with completely reduced dark grey-black surfaces. It was neatly made with a mostly even and fairly thin body wall. The rim is neat and even and the body profile elegantly smooth. Its apparently undecorated exterior was finished with a moderate but even burnish – its interior similarly, except towards the base which was only roughly wiped.

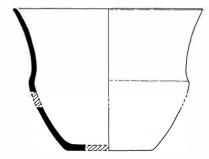


Fig. 7 Pottery vessel recovered from pit F. 11 (1/4).

Finding ready parallels within the existing regional comparanda is difficult. In a way its form is, superficially, fairly closely related to an angle-shouldered fineware bowl from the lower ditch fill of the square Enclosure B70 at Highstead, Chislet – and typologically dated to that site's Period 2, c.900-600 BC. The construction of the enclosure and its first use was considered to be fairly early within that range, partly on the basis of the bowl, which had a relatively close parallel in Belgium dated to Halstatt B2/B3, c.900-700 BC (Couldrey 2007, 118

and fig. 57, no.1). However, this bowl has different body proportions compared with the present vessel. Again, in a way, the latter's profile is not dissimilar to the likely form of a flaring-necked coarseware jar from recent Channel Tunnel Rail Link-associated work at Cobham Golf Course (Morris 2006, fig. 3.5a, CGC/16). More significantly, that site also produced an undecorated fineware beaker with similar vertical body-portion ratios to the Martin vessel (*op. cit.* fig. 3.5a CGC/12). Both the Cobham vessels were associated with a radiocarbon date of *c.*980-820 cal. BC, and considered to belong to the currently-termed 'Plainware' tradition of the Late Bronze Age, dated – within the radiocarbon sequence established for CTRL's Later Prehistoric assemblages – to 1150-800 cal. BC (Morris 2006, fig. 3.2). Unfortunately, the Martin vessel lacks useful associations – contemporary pottery, metalwork or radiocarbon dating. Despite this absence, it is considered to be stylistically nearer to the Cobham beaker than the Highstead bowl – and more likely closer to Late Bronze traditions than those of Earliest Iron Age date. On this basis, it could initially be placed *c.*1000-800 BC.

However, a suite of radiocarbon dates obtained by Wessex Archaeology for a sequence of early first millennium BC pottery from Cliffsend, Thanet, has allowed for a modification of the original 2006 CTRL dating of c.800 BC for the beginning of the Kentish Earliest Iron Age – at least within the eastern part of the region. This indicates that although ceramic elements of EIA character were appearing c.1000-900 cal. BC, the main surge of EIA-type ceramic now appears to have begun as early as 900 cal. BC (Barclay and Leivers pers. comm.). For the Martin beaker, if a typological inclination towards the Late Bronze Age is correct, its form suggests it could be in a 'halfway house' between the Cobham beaker and Highstead bowl. 'Marrying' the scientific and typological dating quoted thus could place it c.1000-900 BC – and within the cultural interface between the Late Bronze and Earliest Iron Age traditions. (A full report is held in the site archive.)

Early Roman

Two small, worn body-sherds were recovered. One came from the hillwash (Context 2), the other was intrusive in the top of pit, F. 16. Both sherds are probably derived from later first century and earlier second century AD agricultural manuring scatters. They are local wares, one native grog-tempered and one a Canterbury sandy ware product.

Prehistoric flintwork by Geoff Halliwell

Almost 600 prehistoric struck flints (nearly 17.5kg) were found during the course of the 2012 investigations, with a further 63 recovered in 2015 from deposits upslope to the north-west. The complete assemblage (658 pieces; almost 20.75kg) is described in more detail below; none of the flints recovered is worthy of illustration and relatively few tools are present.

Distribution: the bulk of the flint material recovered came from the 2012 excavations on the ring-ditch site (Table 1). Here, just over a quarter of the flintwork was contained within the upper filling of the ring-ditch itself (158 pieces). At several

points around its circumference, localised clusters of flakes suggested that episodes of flint knapping had occurred within the partially infilled ditch. Study of these flint clusters has enabled some refitting of flakes to cores, largely confirming the point. Significant post ring-ditch groups are represented by the flints recovered from pits F. 7 and F. 16. In particular, the small pit F. 16 was full of struck material and other flint-knapping debris. The work of 2015, up-hill from the ring-ditch, showed that there prehistoric flints were more sparsely scattered, with no associated features. Table 1 above summarises the distribution of flint material recovered.

Methodology: all struck flint recovered by hand during the investigations was allocated by context number, washed and initially graded according to the degree of patination (Table 2). Each piece was then examined for evidence of manufacture into a specific tool type, signs of use, or was noted as unaltered, and then catalogued accordingly. Examination for working revealed comparatively few definite tools. Where retouch of some kind was found, the piece was allocated to one of five groups, namely, scraper, point, rod, miscellaneous retouch, or 'other' (which includes serrated flakes, cores, notched pieces, etc.), as summarised in Table 3.

TABLE 2. ATTRIBUTION OF STRUCK FLINT ACCORDING TO PATINATION

Туре	No.
Unpatinated	50 6
Slight blue-mottled	123
Well patinated blue-white	15
Deep white	14
Total	658

TABLE 3. TOOL TYPES AND WORKED OR UTILISED FLINTS FROM THE INVESTIGATIONS

Context	Scraper	Point	Rod	Misc. retouch	Other	Total
2012, Topsoil and subsoil	4	6	1	10	5	26
2015, Topsoil and subsoil	4	5	1	16	•	26
2012, Features	6	1	•	•	3	10
Total	14	12	2	26	8	62

A more detailed study was undertaken for the material recovered from pit F. 16, which appeared to contain a dump of knapping debris. Following the hand removal of all the visible lithic material contained within the filling of this pit (Table 1), the remaining soil was wet-sieved through a 2mm mesh, with the result that a further 102g of flint fragments was recovered. A weighed representative sample of this material was counted using a hand lens.

Raw material: the bulk of the struck material recovered had been produced from locally collected mottled grey Downland flint, characterised by a cream-white chalky cortex. The use of Bullhead flint, also readily found in the immediate area of the site, was surprisingly limited, with only about a dozen pieces present in the assemblage. No water rolled, river or sea derived flint had been utilised. Given the evidence for *in situ* knapping at the site (see below), the enclosing ring-ditch or its associated barrow mound was very probably the immediate source of the raw material being worked here.

Patination: the majority (96%) of the struck flint material recovered was either unpatinated or showed only slight, mottled blue patination (Table 2). Since, in very general terms, patination equates with the length of time that has elapsed since fracturing of the initial flint nodule took place, it constitutes one component of the criteria for the dating of any flint artefact. In the context of the present site, pieces with limited patination are likely to fall later in the prehistoric sequence than those with a denser patination, which account for just 4% of the total flint assemblage. More than half the flints with dense patination came from the topsoil and subsoil deposits. These pieces are likely to represent residual and derived material not directly associated with the ring-ditch monument.

Refitting material: at various locations around the ring-ditch, its upper filling contained re-fitting sequences of flakes (Context 3, three refitting flakes; Context 19, one flake refitting a large core; Context 27, one group of three and one group of four refitting flakes). In Context 27 one of the flakes had been used, probably only momentarily, as an end-scraper, thus linking the flint-knapping process to subsequent tool production, although the result is not particularly diagnostic in terms of dating.

The sieved and counted material from pit F. 16 showed at least 1,500 fragments of micro-debitage, fully confirming that the filling of this pit contained material directly associated with an episode of flint knapping.

Worked material: a total of sixty-two pieces of flint showed some evidence of being worked, 9.5% of the total assemblage (Table 3). Twenty-six of these flints came from topsoil and subsoil deposits in the immediate area of the ring-ditch (Contexts 1 and 2), with another twenty-six from the 2015 area. These flints cannot be directly associated with any particular features and many of them are likely to be derived from prehistoric activity higher up the slope. Fourteen of the worked pieces could be classified as scrapers, 12 as points or piercers, 2 as rods and the remainder as flakes with miscellaneous retouching, prepared for a particular function of the moment then discarded.

Dating: the sequence of excavated features at the ring-ditch site would suggest the presence of at least two phases of on-site flint knapping; initially when the ring-ditch was partially silted and later, after it was completely filled and pit F. 16 was cut into it. It is unfortunate that, considering the total amount of struck flint recovered from the site, there are no really diagnostic pieces such as axes, knives or arrowheads, etc. It would appear that any large tools resulting from the specific

knapping sequences recorded were taken away to be used elsewhere, if only in the immediate vicinity. This very absence of well-made tools and the occurrence of expedient flint use, indicates a date late in the prehistoric period, probably the latter part of the Bronze Age, for the bulk of the assemblage recovered. The few more heavily patinated pieces present within the assemblage are likely to represent older, residual material. One or two of the deepest patinated pieces could be as early as the Palaeolithic period.

Calcined flint: only four calcined (burnt) flints were found, all from the 2012 excavations. Of these, one was from the topsoil (Context 1) and one from the hillwash (Context 2). Two more came from excavated contexts: one from the fill of the ring-ditch and the other from the top of the central pit, F. 24.

Other finds

Very few other finds were recovered and all that were found came from either the topsoil (Context 1) or the hillwash (Context 2) during the machine excavation. These consisted of three fragments of medieval peg tile, one fragment of modern red brick and one small lump of black-coloured fired clay or daub. Any animal bone and marine shell did not survive due to the acidic soil conditions.

DATING AND DISCUSSION

In the absence of well-dated primary deposits, the exact date of the ring-ditch at Martin is difficult to establish. That it is prehistoric seems certain, with the finds of Neolithic and Bronze Age pottery and flintwork surely confirming its general period. Most frequently, ring-ditches of this size originally enclosed round barrows whose mounds often have not survived. Such monuments were being constructed throughout the Late Neolithic and Early Bronze Age periods, *c*.2500-1500 BC (Garwood 2007).

Round barrows are regularly associated with burials containing Beakers and Collared Urns. Sherds from vessels of these types in the upper filling of the ring-ditch at Martin are consistent with such a date here. The ultimate origin of the potsherds recovered, however, is less certain. They seem too small in both number and size to be derived from burials and the only possible grave identified (F. 24, see below) contained no bones or obvious grave items.

Evidence for pre-monument activity appears to be provided by pot-sherds tentatively dated to the Early Neolithic period (see above) together perhaps with some of the struck flints. Most of the early sherds came from the top of the central pit, F. 24, initially hinting that this might be an earlier feature that had provided a focus for the subsequent monument. On balance, it seems more likely, however, that these are residual pieces in a later feature that was broadly contemporary with the ring-ditch.

Four pits cutting the ring-ditch (Fig. 4, Fs 7, 9, 11 and 16) are indicative of subsequent activity at the site. Pit, F. 16 is clearly linked to a late episode of flint working (see below) but the function of the others is less clear. Their filling contained very little so they are unlikely to represent rubbish pits associated with

nearby settlement. The bowl sherds from the upper filling of F. 11 (Fig. 7) could suggest that these pits are Late Bronze Age but they need not all be of the same date. On Thanet, large irregular pits cutting barrow ditches have been interpreted as quarries, dug to provide extra material to enlarge the associated mound (e.g. Monkton Ring-ditches III & IV; Bennett *et al.* 2008, 23-32). The pits at Martin are too small for this and other functions must be sought. Perhaps they were casual excavations aimed at recovering further flint nodules for knapping.

Several aspects of the Martin ring-ditch are worthy of further consideration:

the positioning within the local landscape; the presence or not of an associated barrow mound; the presence or not of burials; the monument's later use as a flint-knapping site.

Positioning: prehistoric round barrows are traditionally regarded as being mainly confined to areas of higher land. Certainly, such locations are regularly encountered in Kent. The thinner soils generally found on high ground are often well-suited to the formation of cropmarks at levelled barrow sites, so accentuating the perceived pattern (Hammond 2014, fig. 37).

Sites on lower ground, however, are now being increasingly recognised (Woodward 2000, 58). There remains a bias in the recorded distribution of barrow sites, with higher elevation monuments still tending to outnumber sites located on lower valley sides and in valley bottoms. At these lower elevation sites, deeper soils frequently curtail cropmark formation and accumulated colluvium must seal many such monuments. Unknown before excavations began, the ring-ditch at Martin, located towards the bottom of a long slope (Figs 1 and 2) and buried under hillwash, provides further evidence that such sites are significantly underrepresented in the archaeological record. Accordingly, Perkins's (2010) estimate for the number of ring-ditches present within the area of the Sutton Wedge is likely to be somewhat conservative.

Barrow mound?: surface examination of the area at the start of the groundworks at Martin had shown no surface undulations that could relate to any sort of barrow. Excavation revealed no clear evidence for any surviving mound material within the ring-ditch, beyond a thin localised flinty clay deposit (Context 28) which could just represent the last remnants (Fig. 4). The question arises as to whether any significant mound was ever present. On higher ground, the absence or denuded form of many barrows can be readily attributed to centuries of plough erosion. At the present site, however, ploughing further up-slope eventually led to the ring-ditch being sealed by up to half a metre of hillwash. It seems unlikely that any substantial barrow mound here could have been destroyed by ploughing before the site was buried; nevertheless, the former presence of a small, low barrow remains a possibility.

Burials?: no human remains, either as inhumations or cremations, were recovered during the excavations in either primary or secondary contexts, although the general absence of unburnt bone can be readily explained by the acidic sub-soil.

A large pit discovered close to the centre of the ring-ditch (F. 24) could represent

a grave but total excavation failed to reveal any skeleton or grave-goods. The uniform clay filling (Section 21, Context 12) was largely sterile, although a small collection of probably residual Early Neolithic pottery and nine struck flints came from its uppermost level.

The overall size of the pit (Fig. 4) is a little larger than would be expected for a typical prehistoric crouched inhumation or a cremation but it would be consistent with that required for an extended inhumation, of which no trace had survived.

Pit F. 24 might equally represent a feature dug in connection with some other activity at the centre of the monument. Although fresh, there seems little doubt that the Early Neolithic pot-sherds found in the top of this pit represent unrelated residual material, much older than the ring-ditch. It seems improbable that a significantly earlier pit had subsequently been enclosed by the ditch.

Flint knapping: this had occurred on the site sometime after the ring-ditch had been constructed. At least two successive episodes are implied; the first when the ring-ditch was still partially open and later, after the ditch was completely filled, when pit F. 16 was cut into its top. Possibly, the still part-open ditch and any mound had provided convenient exposures of raw flint material, with the earthworks also giving a certain amount of shelter for those engaged in the knapping. Similar activity has been recorded at a number of other local ring-ditch sites (e.g. Mill Hill, Deal; Parfitt 1990, 10-11).

Any large tools produced were apparently taken away for use elsewhere. Contemporary habitation in the area is thus implied, and some locally known enclosure cropmarks could represent associated settlements.

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