

# LITTLE DARTMOUTH FARM DARTMOUTH DEVON

Results of a Desk-Based Assessment and  
Archaeological Monitoring and Excavation



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# Little Dartmouth Farm, Dartmouth, Devon Results of a Desk-Based Assessment & Archaeological Monitoring and Excavation

*For*

Amanda Burden of Luscombe Maye  
on behalf of Mr. and Mrs. E. Benthal

*By*



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## *Summary*

*A series of archaeological investigations were undertaken at Little Dartmouth Farm in advance of agricultural and domestic development. The proposed works included the demolition and replacement of existing 20<sup>th</sup> century agricultural buildings, the creation of a new garden and wildflower meadow, and a new entrance and drive to the farmhouse. These archaeological investigations were prompted by the identification of a large oval enclosure visible around the area of the development on aerial photographs.*

*Excavations within the footprint of the new agricultural building revealed a number of prehistoric features, none of which conformed to any readily-discernible plan or pattern. These features included a large, deep pit containing multiple re-cuts all dating to the late Mesolithic. A large pond-like feature, thought to be a midden, was also identified. This contained flint-knapping waste and a range of flint tools dominated by scrapers and arrowheads and yielded radiocarbon dates clustered in the 19<sup>th</sup> century cal BC. These two features are almost unparalleled, but the closest comparable examples have been excavated at Stonehenge and Durrington Walls.*

*A range of other, smaller features were also excavated, one of which contained several sherds of decorated Beaker pottery together with charcoal that was dated to the 22<sup>nd</sup> or 23<sup>rd</sup> century cal BC.*

*Other features on the site produced two possible stone axe roughouts. Petrological analysis has confirmed the roughouts came from the cliffs above the Dancing Beggars, indicating the presence of an axe production site nearby.*

*No trace of the oval enclosure was detected during the limited topsoil stripping that took place in the field to the south-west of the farm buildings, but the archaeological features and finds excavated at Little Dartmouth suggest it might be a hengiform monument.*

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<b>District:</b>	South Hams
<b>County:</b>	Devon
<b>NGR:</b>	SX876449
<b>Planning App. No:</b>	15/0185/08/F
<b>HES ref:</b>	Arch/dc/sh/13331
<b>OS Map copying Licence No:</b>	100044808
<b>Oasis ID:</b>	southwes1-42958

### 1.1 Background

This report presents the results of a desk-based assessment and archaeological excavation and recording carried out by South West Archaeology at Little Dartmouth Farm, Devon (see Figure 1 and Figure 2) in May-June 2008, August-September 2008 and January-February 2009. The work was commissioned by Amanda Burden of Luscombe Maye on behalf of Mr and Mrs E. Benthall (the Client), in order to fulfil a planning condition imposed by South Hams District Council. This work was undertaken to investigate and record any archaeological features and material affected by the replacement of a building with a workshop and garden store, the replacement of an agricultural building (the “Cow Palace”) and extensive landscaping.

Little Dartmouth lies *c.*2.5km south of Dartmouth and *c.*0.75km inland from the South Devon coast between the mouth of the River Dart and Warren Point, east of Stoke Fleming (Figure 1). The settlement, consisting of a small complex of dwelling, gardens and agricultural buildings, is situated 120m AOD at the centre of a shallow south-facing depression in the hillside.

The underlying rocks fall within the Lower Devonian Dartmouth Group, a sequence of mudstones, siltstones and sandstones interbedded with basaltic lavas and volcanoclastic rocks, which are cut by narrow Diabase dikes orientated south-east to north-west (British Geological Survey 2004). The soils of this area are predominantly well-drained, fine loamy or fine silty soils of the Denbigh 1 Association (Soil Survey of England and Wales 1983). The Devon County Historic Landscape Characterisation defines the area as “Barton Fields”, post-medieval enclosures overlying medieval strip fields.

### 1.2 Archaeological Background

Little Dartmouth is a settlement of probably medieval origin, developing in the post-medieval period into an elaborate farmstead with multiple service buildings. It was for a long time the possession of the Roope Family who may have occupied a large house here and in whose hands the farm prospered. Purchase by the Seale Family in the later 18<sup>th</sup> century resulted in a period of tenancy and decline. New ownership in the mid-19<sup>th</sup> century injected new energy into the farm and led to radical alterations in the spirit of a 19<sup>th</sup> century ‘model farm’ with a more compact lay-out, a completely new residence and a newly landscaped curtilage.

The Devon County HER 62837 records a cropmark, apparently representing part of a curvilinear enclosure, just to the north of Little Dartmouth Farm. In an aerial photograph of 1990 (Figure 14), this can be seen as a gently curving dark line, and on an earlier aerial photograph (Figure 13) a similar curving line can be seen closer to the group of buildings. This feature reflects the line of a field boundary that was present in 1841 between field 679 and 680, but which was removed before 1884. This missing field boundary was slightly curved and appears to represent a continuation of the distinctly curved boundary to its west. In a landscape

characterised by straight boundaries and rectilinear fields, these curving boundaries are strikingly at odds with the rest and may represent the remains of a univallate – possibly bivallate – enclosure. Ground disturbance during the proposed scheme of development stood a good chance of uncovering evidence for both the medieval and/or post-medieval history of the farmstead, and potentially evidence of prehistoric or early medieval settlement or farming activity.

Apart from the aerial survey, no previous fieldwork had taken place at Little Dartmouth. However, it has been noted elsewhere (Parker Pearson 1981, 22) that a single polished axe from the site at Churston (9km to the northeast) might have been sourced from the intrusive igneous rocks that outcrop at the Dancing Beggars *c.*750m to the south of the farm

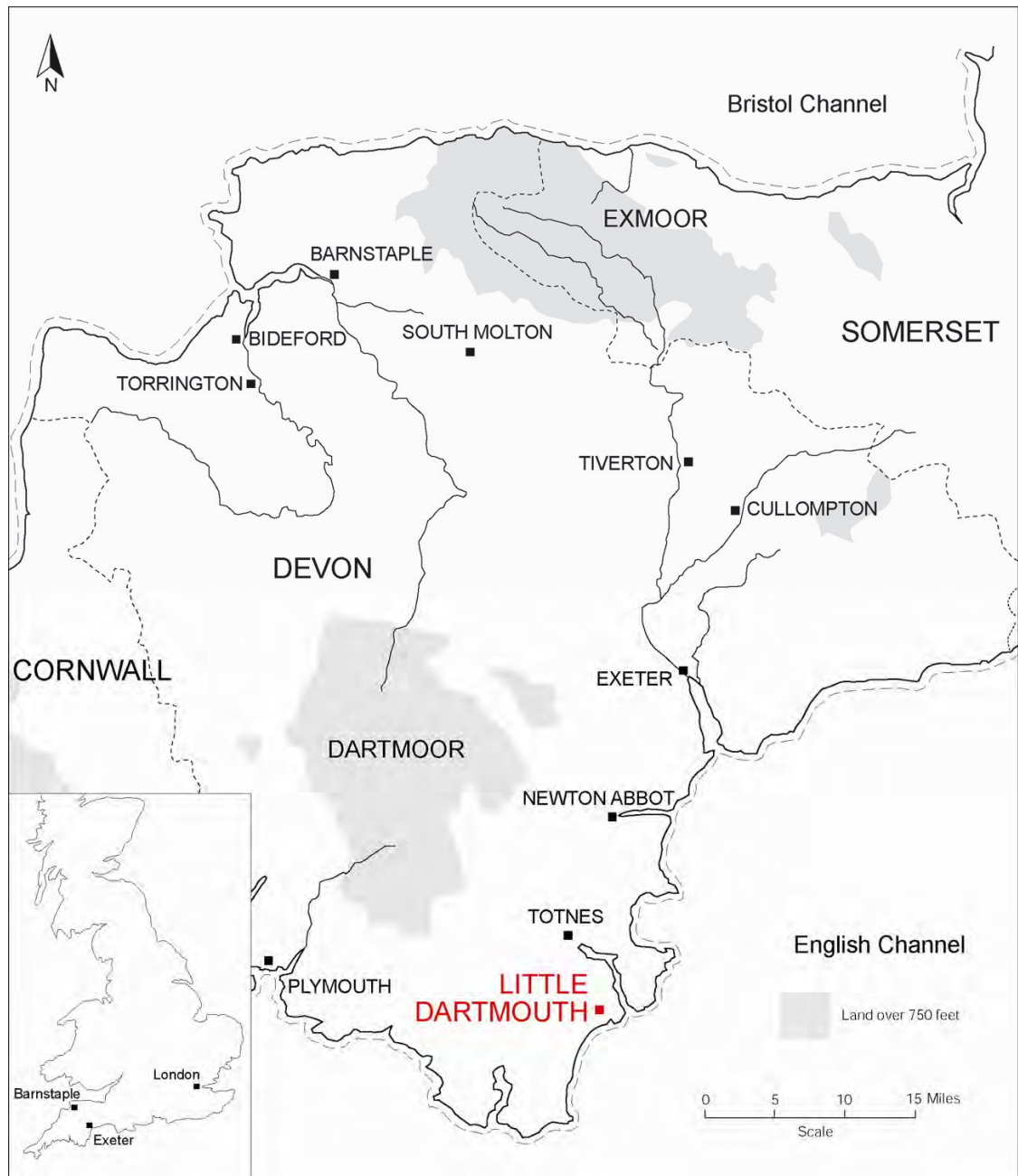


Figure 1: Regional Location.

### 1.3 Methodology

The desk-based assessment and archaeological investigation were carried out in accordance with a Written Scheme of Investigation (WSI) drawn up in consultation with DCHES (see Appendices 1 and 2).

The desk-based assessment was undertaken in order to place the buildings and archaeology at Little Dartmouth in their historical and archaeological context. The assessment was based on the cartographic material held at the Devon Record Office and the West Country Studies Library as well as an examination of records and aerial photographs held by DCHES. This work was carried out in May-June 2008 by T. Green, and the site was visited on 11<sup>th</sup> July, 2008.

Three areas around the farm were subject to archaeological monitoring (Figure 3). Area A was approximately 110×60m in extent, of which an undisturbed area 83m long by 11-15m wide to the north of the extant agricultural building (the “Cow Palace”) was stripped by a tracked excavator with a 1.8m wide toothless grading bucket under strict archaeological supervision. The site was found to be covered by a layer of colluvium up to 0.6m thick, which was itself sealed by 0.4-0.6m of upcast topsoil and subsoil from previous earthmoving on the site. A range of archaeological features were identified and excavated in accordance with the agreed WSI (and see below). This work took place between 23<sup>rd</sup> June and 1<sup>st</sup> August 2008 and was directed by J. Freeman. Bursts of heavy rain during July 2008 made excavation more difficult, as water was directed into the excavated area from the whole of the field above.

Area B was located to the east of the 19<sup>th</sup> century farm buildings and directly in front of three 19<sup>th</sup> century cottages (West Cottage, Kauri Cottage and Willow Cottage). This area was 50×30m in extent, and no archaeological features were identified. This work was monitored while Area A was under excavation.

Area C was located to the west of the farm. Here monitoring and excavation took place in advance of the creation of a wildflower meadow and a new access road for the farmhouse. A significant proportion of the field was partly, but not wholly, stripped of topsoil in order to create the conditions favoured by wild flowers, and preliminary fieldwalking took place before this occurred. The area of the new drive (as shown in Figure 3) was stripped to the level of the subsoil by a tracked excavator with a 1.8m wide toothless grading bucket under strict archaeological supervision, and this work took place in two stages – January 2009 and October 2009 – and was directed by M. Tingle. An area approximately 180×60m in extent was partially stripped for the wildflower meadow, with an area 150×5m stripped to subsoil for the new driveway.

For all excavated areas a photographic record, a drawn record at appropriate scales (1:10 to 1:200) and a written record of standard single context sheets was compiled.

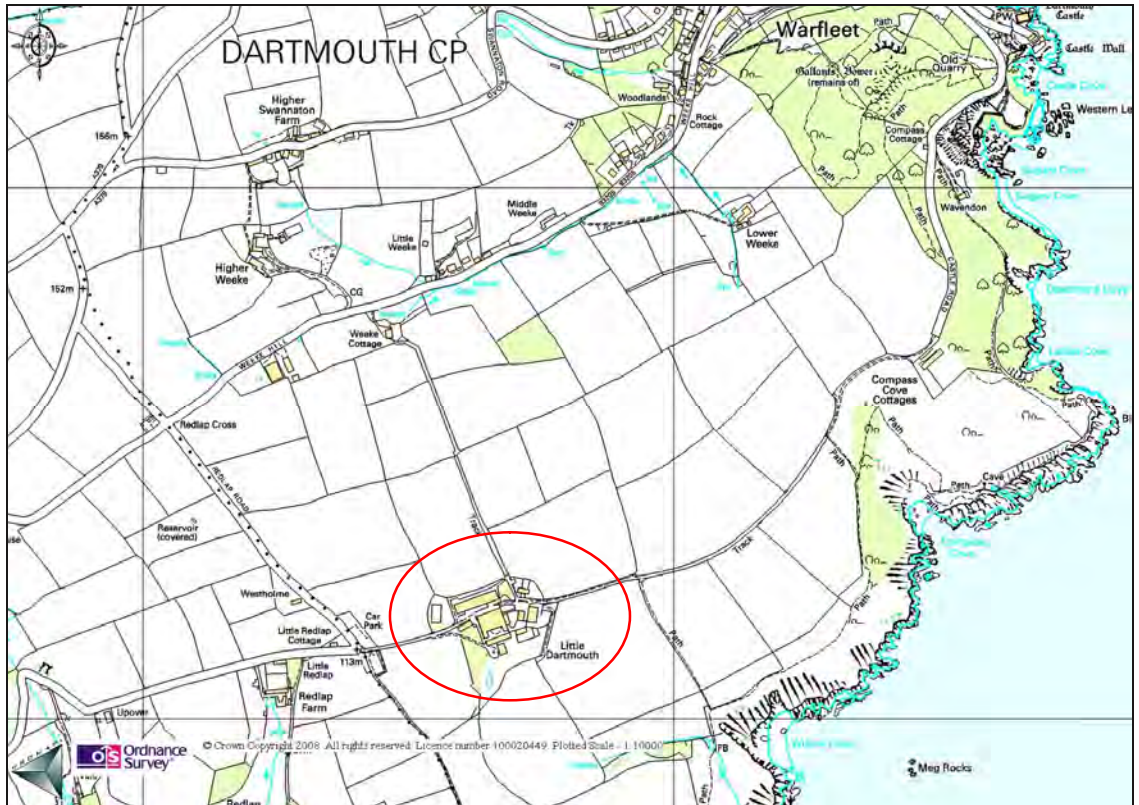


Figure 2: Location map (the site is indicated).

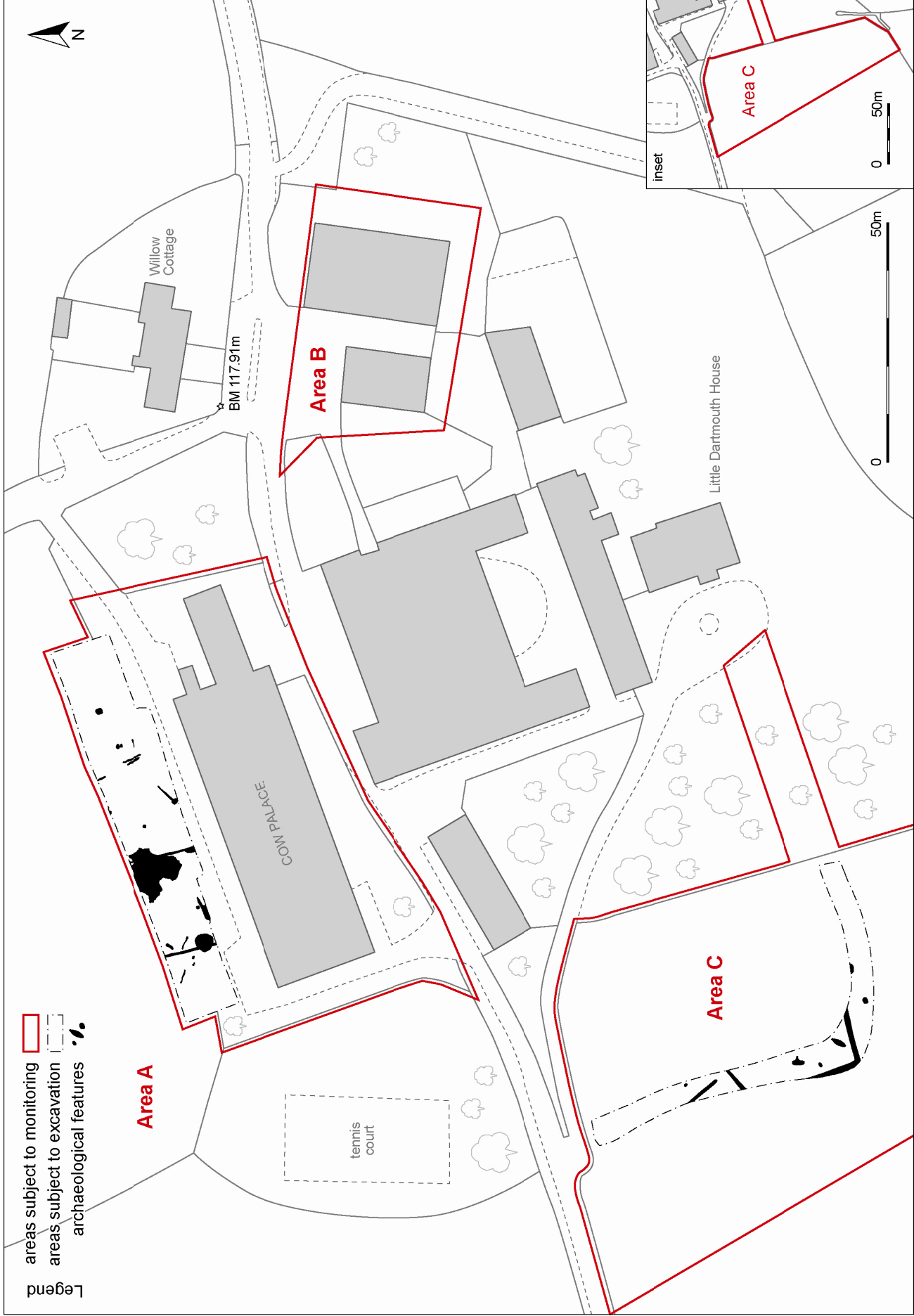


Figure 3: Plan of Little Dartmouth Farm with monitored/excavated areas shown (the inset shows the full extent of Area C).



## 2.0 Results of the Desk-Based Assessment

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### 2.1 Introduction

Little Dartmouth lies *c.*2.5km south of Dartmouth and *c.*0.75km inland from the South Devon coast between the mouth of the River Dart and Warren Point east of Stoke Fleming. The settlement, consisting of a complex group of dwelling, gardens and agricultural buildings, is situated on the 120m contour on south-facing ground with a view to the sea.

### 2.2 Historic Background

#### 2.2.1 The Medieval Period

The early history of Dartmouth and Little Dartmouth is complex. Although now within the civil parish of Dartmouth, Little Dartmouth was previously in the ecclesiastical parish of Townstall. In 1086 the manor of Townstall was held by Walscin de Duaco, who also held Stoke Fleming which included St Petrocks at the mouth of the Dart. In the Exeter Domesday, the record for Stoke Fleming includes the information that ‘a certain woman has half a hide which Walscin gave her in alms...’ It is suggested (Watkin 1935, 3) that this information refers to Little Dartmouth.

The earliest (though oblique) reference to Little Dartmouth dates from 1192. In that year a deed was drawn up by William, son of Stephen of Townstall, restoring to Richard the Fleming ‘all the land of *Dertmuta* which is above Wyke between the monastery of St. Peter (Petrock) and the land of Stoke’. The name ‘Dartmouth’ originally referred to all the land beside the mouth of the river, the town of Dartmouth not coming into being until the 13<sup>th</sup> century through the coalescence of the riverside settlements of Hardness and Clifton (Hoskins 1992 ed., 382). Within this area the land ‘above Wyke’ would presumably be the high ground to the south of Higher Week, while the land ‘between the monastery of St. Peter (Petrock) and the land of Stoke’ would refer to the coastal land between Blackstone Point and Stoke Fleming. Topographically therefore, the document must refer to the settlement and land of Little Dartmouth (Russell 1950, 38).

The earliest known reference to Little Dartmouth by name dates from *c.*1300, when Robert de Cruces of Little Dartmouth was a witness affirming the age (14) of Eleanor, heiress to the manor of Stoke Fleming, allowing her to take possession of it (Stoke Fleming Parish History, 5). This single reference is probably sufficient indication that Little Dartmouth was a medieval (sub) manor with a settlement at its core. One field name, *Culver Park* (number 682 on the tithe map, see Figure 9) recorded in the tithe apportionment of 1840 suggests a high status medieval settlement, the keeping of pigeons for the pot being a standard element of the medieval estate. Nevertheless, it is not clear to what extent the settlement and surrounding land represents medieval farming activity. The pattern of more-or-less rectilinear fields surrounding the settlement is characterised by the Devon Historic Landscape Characterisation programme as ‘Barton fields’, i.e. relatively large, regular enclosures laid out in the 15<sup>th</sup>-16<sup>th</sup> century with perhaps some hint of earlier medieval arrangements.

#### 2.2.2 Post-Medieval - Modern

It is not until the 16<sup>th</sup> century that Little Dartmouth achieves any (documented) prominence through its owners or inhabitants. An indenture of 1543 (DRO: 231 M/F 5) records that Thomas Yarde had inherited from his father various lands including Little Dartmouth. Thirty years later in 1573, a decree of the Court of Wards and Liveries (DRO: 231 M/F 6) records that Edward Yarde, son of Thomas, was in possession of both Little and Great Dartmouth which were let to John Roope, Dorothy, his wife and John Roope, their son. In the 16<sup>th</sup> to early 17<sup>th</sup> century the

most prominent family in Dartmouth was that of Roope. In the 1550s the brothers Gilbert and Nicholas Roope were successively Mayor of Dartmouth and both represented Dartmouth in Parliament. The Dartmouth Corporation minute book (DRO: DD61461) records that on 21<sup>st</sup> January, 1605 the Corporation agreed that John Roope of Little Dartmouth was to hold the 'New House' to his own forever, the town having no claim on it. It is not certain that the 'new house' was at Little Dartmouth; on the other hand, it would not be at all unusual at this period that an original medieval dwelling should be replaced or rebuilt in the style of the time. The scale of the house may be judged from the Hearth Tax return for Tunstall parish in 1674, in which Ambrose Roope was credited with 11 hearths. Ambrose Roope also had a house at Warfleet (also within Townstall parish) and it may be that the 11 hearths represent a total of the two dwellings; on the other hand, in 1690 Ambrose Roope *of Little Dartmouth* acquired a sacrament certificate, i.e. proof of having received Holy Communion according to the rites of the Church of England (DRO QS/21/1690/99).

Little Dartmouth remained in the possession of the Roope Family until the later 18<sup>th</sup> century, when the widow of George Roope bequeathed the estate to her 'good and worthy friend, Holdsworth Newman' (DRO: 59/7/4/15/1). Shortly after coming into possession of the estate, Holdsworth Newman went bankrupt and was forced to sell. The purchaser in 1791 was John Seale of Mount Boone. John Seale took enough interest in his new possession to have a map drawn up in 1798 (Figure 5), but from 1791 onwards, the farm was let out to tenants.

Shortly after 1850 Little Dartmouth was sold to a Mr Hayward. In 1855 the Dartmouth Chronicle reported that 50 workmen were engaged in building at Little Dartmouth, from which we may deduce that at or about this date the old house was demolished and the new one begun. Hayward apparently sold it on to a Mr Baxendale whose executors on his death attempted to sell it in 1873, when it was described in an advertisement in the Dartmouth Chronicle (27<sup>th</sup> June, 1873) as 'a gentlemanly residence of modern erection' with gardens, pleasure grounds, four cottages and a 'most convenient model farm homestead'. It failed to reach its reserve of £40,000 at auction. Presumably a sale of some sort was arranged, however, since at the beginning of the 20<sup>th</sup> century it was owned by Jasper Bartlett, who owned a brewery at Warfleet and a large grocery shop in Dartmouth (the above information courtesy of Ray Freeman). It appears from 20<sup>th</sup> century cartographic and photographic evidence (see below) that until relatively recently the buildings were maintained by successive owners at the level which they had reached in the later 19<sup>th</sup> century.





Figure 4: Map of the south Devon coast in 1693, by Captain Grenville Collins, showing Little Dartmouth as a notable coastal landmark.



### 2.2.3 Cartographic History

The earliest cartographic representation of Little Dartmouth is on a map of the south Devon coast dated to 1693 (see Figure 4). This map, produced by the King's Hydrographer Captain Grenville Collins, depicts the coastline and its hazards in some detail, as well as conspicuous coastal landmarks. It seems likely that Little Dartmouth is shown precisely because it marked the location of the rocks of the Dancing Beggars. The detail (see inset) shows a large, twin-gabled house of 17<sup>th</sup> type surrounded by trees – perhaps the 'new house' of John Roope (see above). While such depictions are usually of doubtful value, as this is a map designed to provide navigational landmarks, it stands a good chance of being reasonably accurate.

The earliest detailed depiction is an estate map drawn up on the orders of John Seale in 1798 (Figure 5). Unfortunately only a photocopy was available to this study, but comparison of the blown-up extract (Figure 6) showing the lay-out of the buildings in 1798 with that shown in the title map of 1841 (Figure 9), suggests that it is a fair representation and that the house may at that date have had an extended rear wing. The Ordnance Survey Surveyor's Draft map of c.1804 (Figure 7) shows in its usual schematic fashion a complex of buildings with a garden and orchards to the south. The Greenwood map surveyed between 1825 and 1827 (Figure 8) also clearly shows a large complex. Neither of these gives any clear indication of the footprint of the buildings.

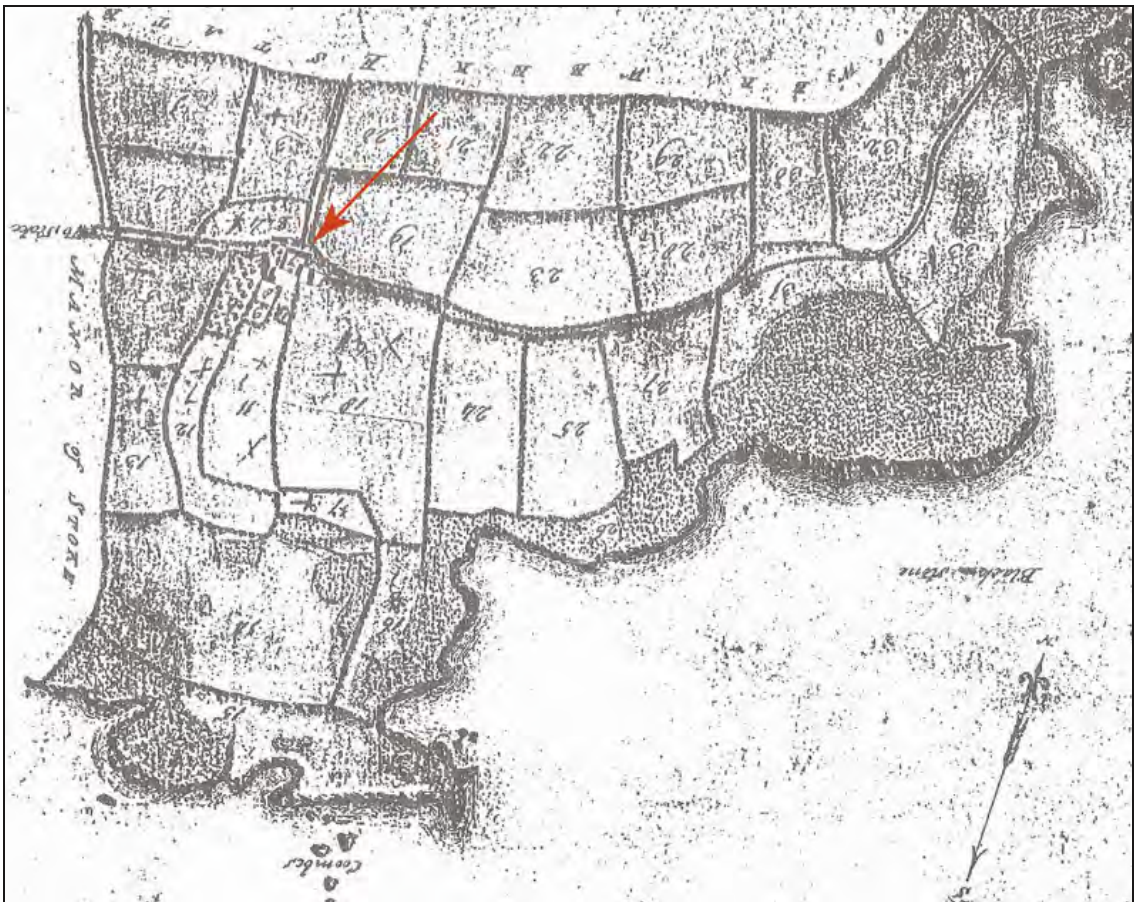


Figure 5: Photocopy of a map of the Little Dartmouth estate drawn up in 1798 on the behest of John Seale (Seale Family Papers, courtesy of Mrs Ray Freeman). The settlement is indicated.



Figure 6: Enlarged view of the buildings, as shown on the Seale map. The house is indicated.





Figure 7: Extract from the Ordnance Survey draft map of c.1804. The map shows the buildings schematically, but it is clearly already a large complex. The pattern of field boundaries is not to be relied on (WCSL).



Figure 8: Extract from the Brothers Greenwood map of Devon, 1827 (WCSL).



The Townstall tithe map of 1841 (Figure 9) presents the settlement clearly for the first time. It is evident from the tithe map that the farm settlement had by this date reached a level of some complexity with an extensive range of buildings, one of which had a horse engine house attached. Number 684 on the map is interpreted in the tithe apportionment of 1840 as ‘Little Dartmouth House, Yard, Offices and Road’. Without the usual colour coding (pink for domestic buildings, grey for non-domestic) it is not immediately clear which building is the house, but from the location of 686 and 687 – both interpreted as ‘Garden’ – it is likely that the block on the north side of 686 was the house at that date. This would appear to be a simple rectangular building of no exceptional size, i.e. unlikely to represent the house of 11 hearths recorded in 1674. On the other hand it is *possible* that the house had been reduced by this date, losing the rear wing suggested above.



Figure 9: Extract from the Townstall tithe map of 1841, showing the house and farm buildings at that date. The house is presumed to be the block on the north side of garden 686. Note the engine house is to the right (DRO).

A comparison with the Ordnance Survey First Edition 1:2500 map, surveyed in 1884 and published in 1889 (Figure 11), provides evidence of drastic remodelling in the mid-19<sup>th</sup> century (apparently to create a ‘model’ farm). On the later map the complex as recorded in 1841 is all but unrecognisable. All the buildings to the east have been removed, while to the north-west there is now a block of four elements of which those to east and west may at least in part represent long buildings in similar locations in 1841, while that to the north partly overlaps the site of the earlier long building in this area. Examination of the existing building in this location suggests that its western end may in fact be a remnant of that recorded in 1841, while the eastern portion has the characteristics of a mid-19<sup>th</sup> century structure.





Figure 10: Extract from the Townstall tithe map of 1841, taking a broader view of the surrounding landscape. Note the curving boundaries of field 680 (DRO).

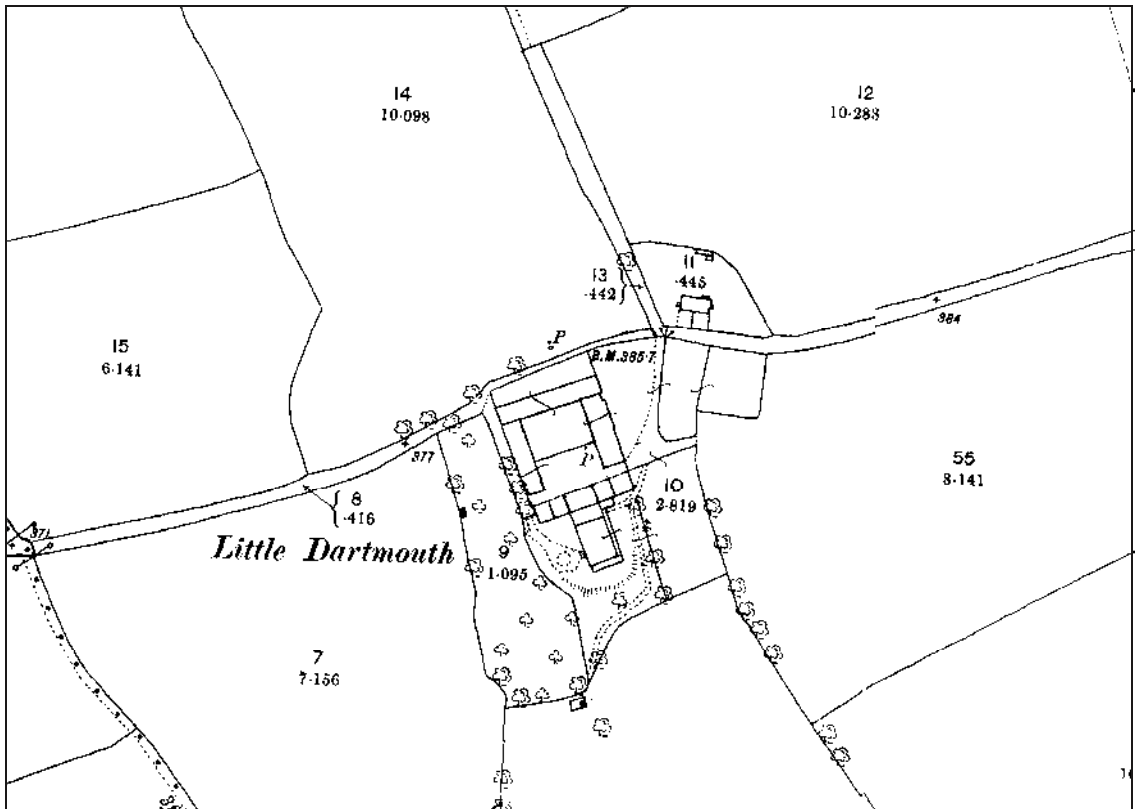


Figure 11: Extract from the Ordnance Survey First Edition 1:2500 map surveyed in 1884 and published in 1889 (Devon sheet 133.4) (WCSL).

To the south of this group is a line of buildings that may be stables, and to the south of those is a new house built on a platform within the former garden. The new house has a porch on the west side with a carriage entrance and turning circle before it. To the north of the group of buildings there has been some reconfiguration of boundaries including the introduction of a curving boundary enclosing the south-west corner of the field to the north-east. Within this small enclosure a building has been erected. Comparison with Figure 10 indicates that a gently curving boundary to the north of the complex has also been removed.

The Ordnance Survey Second Edition 1:2500 map (Figure 12) published in 1904 shows no significant change since 1884. Similarly, an aerial photograph of 1946 (Figure 13) suggests no further developments during the first half of the 20<sup>th</sup> century. On the other hand, an aerial photograph of 1990 (Figure 14), and the most recent mapping, indicate the development of buildings to the east and to the north of the complex between 1946 and 1990.

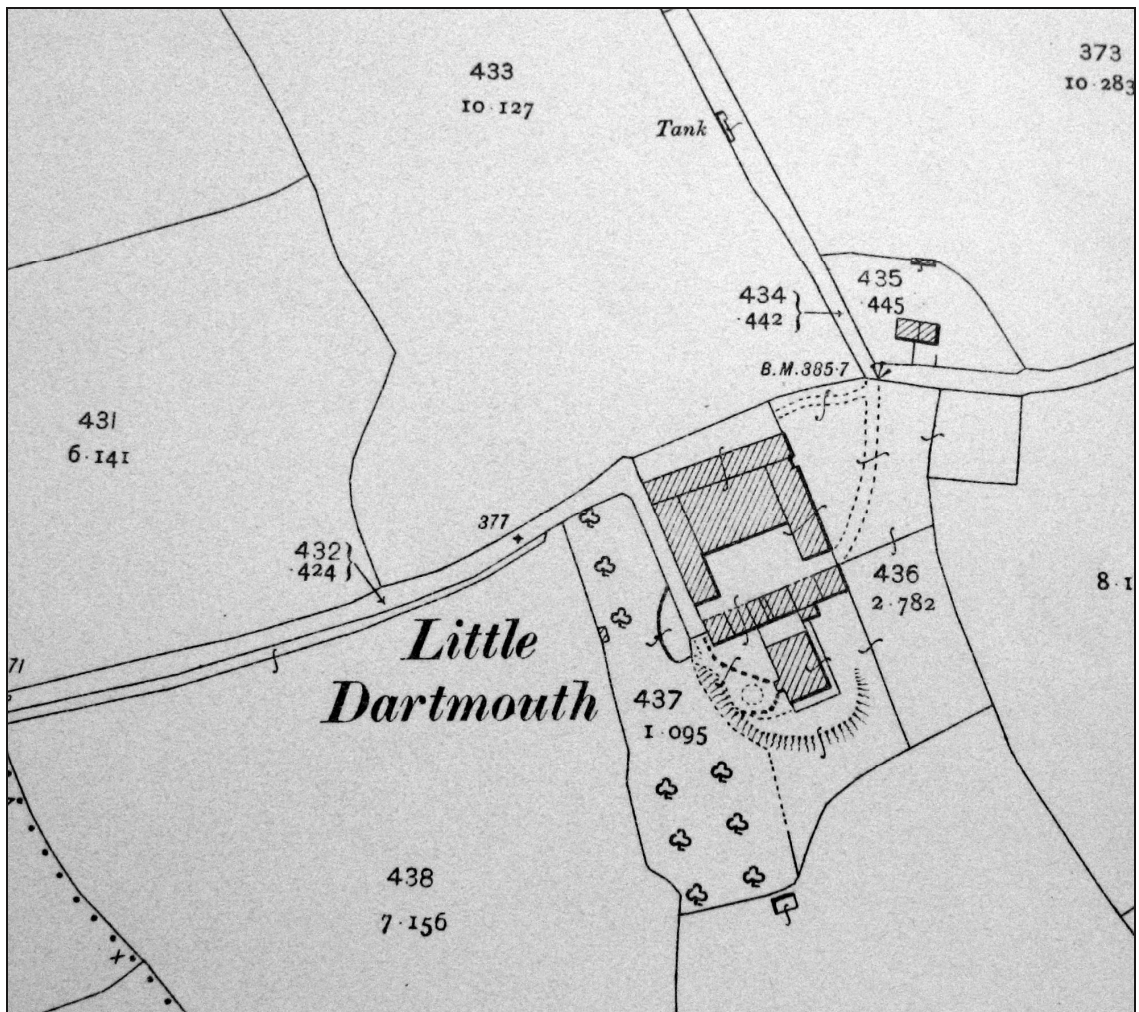


Figure 12: Extract from the Ordnance Survey Second Edition 1:2500 map published in 1904 (DRO).

#### 2.2.4 Current Archaeological Record

Devon County HER 62837 records a cropmark, apparently representing part of a curvilinear enclosure, just to the north of Little Dartmouth Farm. In an aerial photograph of 1990 (Figure 14) this can be seen as a gently curving dark line showing in a grain crop. On an earlier aerial photograph (Figure 13) a similarly curving line can be seen closer to the group of buildings. This feature reflects the line of a field boundary which was present in 1841 between field 679 and 680 (Figure 10), but which was removed before 1884. The lost field boundary was slightly curved and appears to represent a continuation of the distinctly curved boundary to its west.





Figure 13: 1946 RAF aerial photograph of Little Dartmouth Farm (CPE/UK/1890 courtesy of DCHES).



Figure 14: 1990 aerial photograph of Little Dartmouth Farm (Griffith DAP/SS 6 courtesy of DCHES).



In a landscape characterised by straight rectilinear boundaries, these curving boundaries are strikingly at odds with the rest and may well reflect the line of a pre-existing bank or ditch. The cropmark noted to the north (Figure 13), together with the existing and formerly existing curving boundaries immediately to the north of the settlement, may be evidence of a ditched or banked – possibly double-ditched and banked – enclosure within which the settlement is located. Note that the short length of curving boundary to the north-east of the settlement does not fall into the same category as it post-dates the tithe map.

#### 2.2.5 Archaeological Implications of the Proposed Works

The likely impacts of the proposed development based on the cartographic evidence were identified as:

1. Removal of the buildings to the east and any consequent groundwork as well as the laying out of any new garden is likely to reveal remnants of post-medieval/early modern agricultural buildings (Area B).
2. Removal of the large building in the centre and the creation of a garden is also likely to reveal traces of earlier use.
3. Removal of the building on the north side of the west-east path or track and any new works extending northwards, i.e. the historically least disturbed part of the site, may reveal evidence of early medieval or prehistoric occupation (Area A).
4. Additionally, if the crop-mark discussed above and the existing and former curving boundary do represent remnants of an early enclosure, then any ground disturbance anywhere within the site has the potential to uncover evidence of early occupation.
5. Any ground disturbance across the line of the lost boundary should be monitored for datable deposits.

Note: The Hearth Tax record of 1674 enumerating 11 hearths under the name of Ambrose Roope suggests a considerable residence at that time. If in fact this was located at Little Dartmouth, there may be evidence of a post-medieval high status dwelling within the curtilage. Comparison of the cartographic evidence (insofar as it is possible to make accurate comparison) suggests that remnants of the main dwelling as existing in 1841 are likely to be found within the open courtyard area to the north of the existing house and the line of stables(?). It should also be noted however, that the proposed construction of a new drive through ground to the west of the existing house will cut through an area of irregular and raised topography which *may* represent the site of a former building or buildings.

## 3.0 Results of Archaeological Monitoring and Excavation

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As outlined above, three separate areas around Little Dartmouth Farm were monitored while groundworks and demolition took place. The results are presented below.

### 3.1 AREA A: Excavation

An area approximately 83×11-15m in extent to the north of the 'Cow Palace' was stripped to the level of the subsoil (see Figure 15), here revealed as a variable yellowish-grey silty clay with common shale lithorelicts, although at the eastern extremity of the excavated area fine grey siltstone was encountered. In no instances was quartz veining or free quartz a component of the bedrock. The topsoil across the entire site was a mid- to dark brown clayey silt up to 0.6m thick. The removal of this material, together with colluvial layer (173), revealed several additional layers of material and a series of features cut into the subsoil. With three notable exceptions, these comprised an unremarkable suite of linear features and pits that contained little or no material culture and conformed to no readily discernable pattern. The exceptions were: a small pit [174] containing a non-funerary deposit of early Bronze Age Beaker Pottery, a broad hollow [186] containing a succession of Bronze Age fills, and pit [113], an enormous and almost unprecedented Mesolithic feature dating to the 6<sup>th</sup> millennium BC.

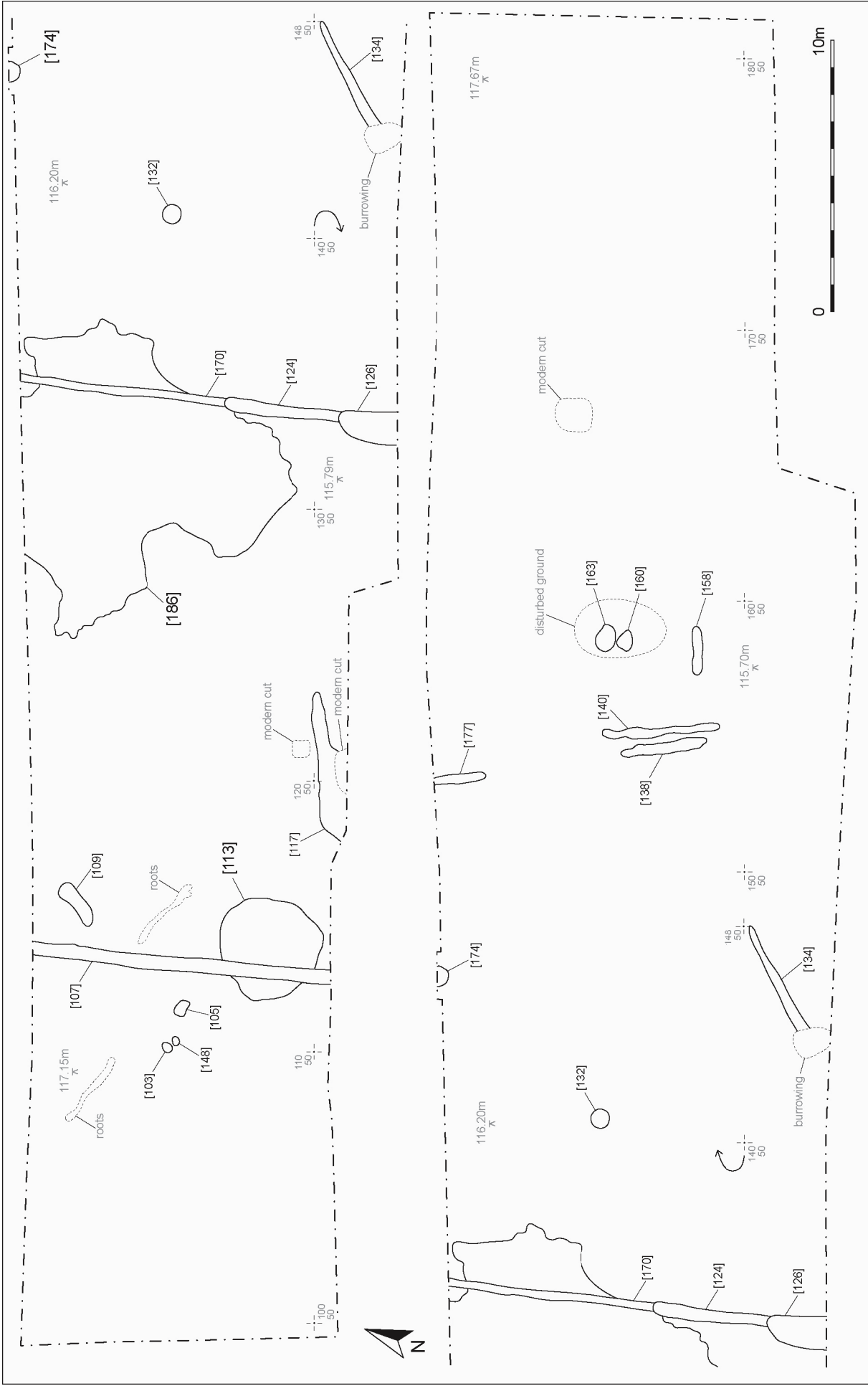


Figure 15: Site plan of Area A.

### 3.1.1 The Beaker Pit (see Figure 16 and Figure 17)

Pit [174] barely projected from beneath the northern baulk. As a result, its precise dimensions are unknown but it was probably up to 0.6m in diameter and up to 0.2m deep, with steep sides and a flat base. It contained two fills. The primary fill (175) was a yellowish-brown clayey silt containing common charcoal inclusions. Set within (175) was a second fill, (180), a soft, dark brown clayey silt that contained abundant charcoal inclusions, occasional inclusions of shale and common sub-angular quartzite fragments up to 150mm in size.

Pit [174] did not appear to be a posthole with packing and post pipe. It seems probable both fills actually represent some form of structured deposition of material. Fills (175) and (180) contained 17 sherds of Bronze Age pottery, six of them being examples of decorated Beaker pottery (see Figure 42). The stones in context (180) also included a broken pebble fragment and an elongate pebble tool. A fragment of Hazel (*Corylus*) charcoal from context (180) was radiocarbon dated to 3770±35 BP (SUERC-24614) (see Appendices 12 & 13).



Figure 16: Feature [174] under excavation (scale 0.4m & 0.5m).

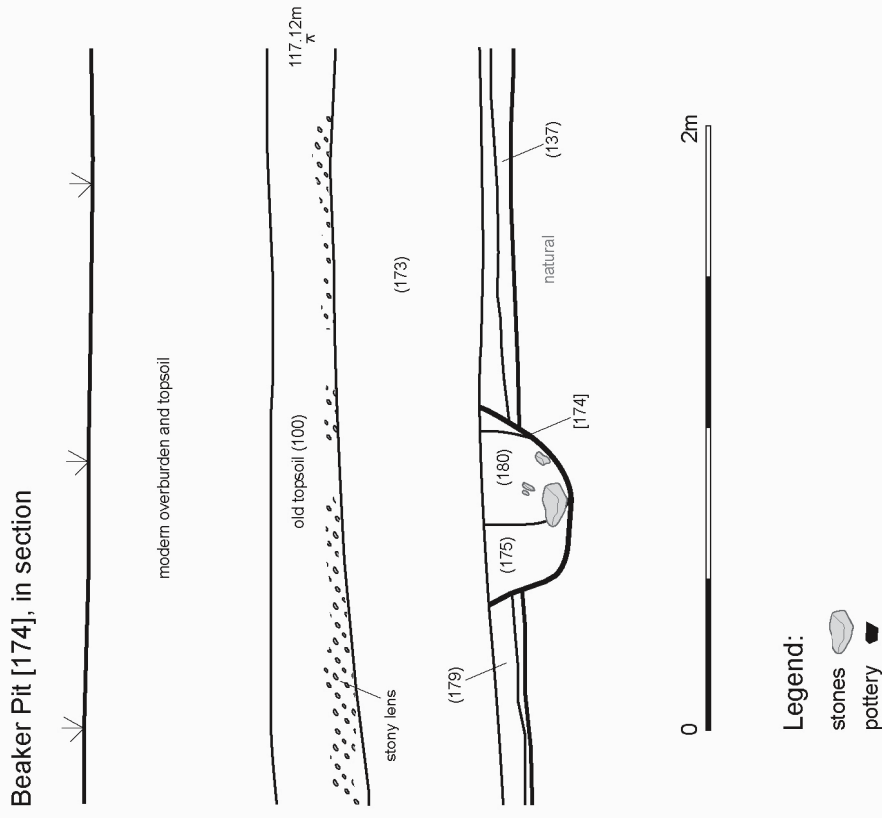
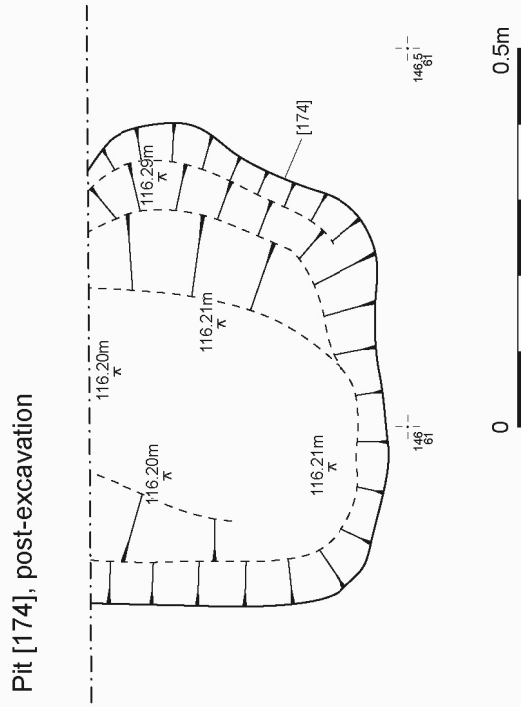
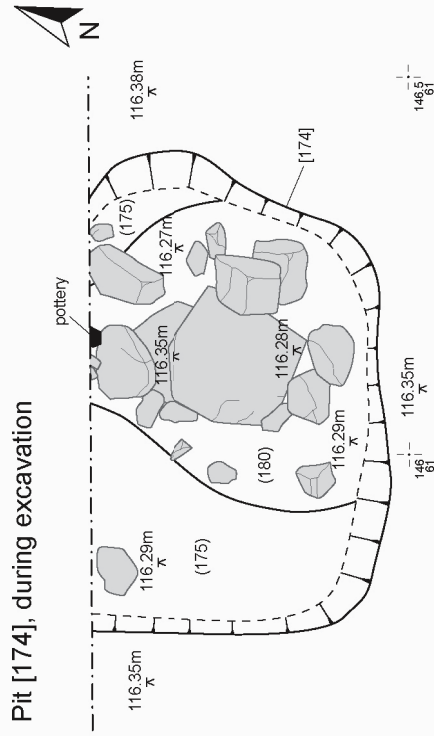


Figure 17: Plans and section of pit [174].



### 3.1.2 Hollow [186] (see Figures 18-20)

At the centre of the site, and at its lowest point, was a large irregular hollow containing a series of fills. The total extent of hollow [186] is unknown as it continued beyond the edge of excavation to the north, but the exposed portion measured up to 10 x 10m and was a maximum of 0.6m deep. The depth of the feature decreased to the south and east, and the upper fills were not present for this part of the feature, probably due to truncation in antiquity.

The primary fill was (183), a deposit of very compact, predominantly angular, quartz gravel in a greyish- to yellowish-brown clay matrix. It was up to 0.12m thick and contained four retouched flint tools, 60 partial or whole flint cores and nine utilised stones.

Context (183) was overlain by (182), a dense and clean plastic mid-brown clay up to 0.2m thick containing occasional shale and charcoal inclusions. It contained six retouched tools, 18 partial or whole flint cores, 13 utilised stones and two sherds of abraded Bronze Age pottery.

Above this was (181), a layer of dark brown silt up to 0.05m thick that contained a very high proportion of charcoal fragments. There was no evidence of *in situ* burning, yet the charcoal was very well-preserved, making it unlikely it had reached the site via natural processes of erosion. In addition to the abundant charcoal, context (181) also contained three retouched flint tools, five partial or whole flint cores, three utilised stones and eight sherds of abraded Bronze Age pottery.

Finally, the feature was overlain with up to 0.22m of greyish-brown silty clay (123) containing occasional to frequent charcoal fragments and occasional small, sub-rounded shale inclusions. It also contained two retouched flint tools (including a barbed-and-tanged arrowhead), 15 partial or whole flint cores, a single elongate pebble tool and five sherds of abraded Bronze Age pottery. Deposit (176) probably forms a continuation of this deposit, continuing *c.*3m to the east to feature [186].



Figure 18: The northern half of hollow [186], viewed from the south-east, looking north-west. Note the dark, charcoal-rich horizon of context (181) (scale 0.4m & 0.5m).



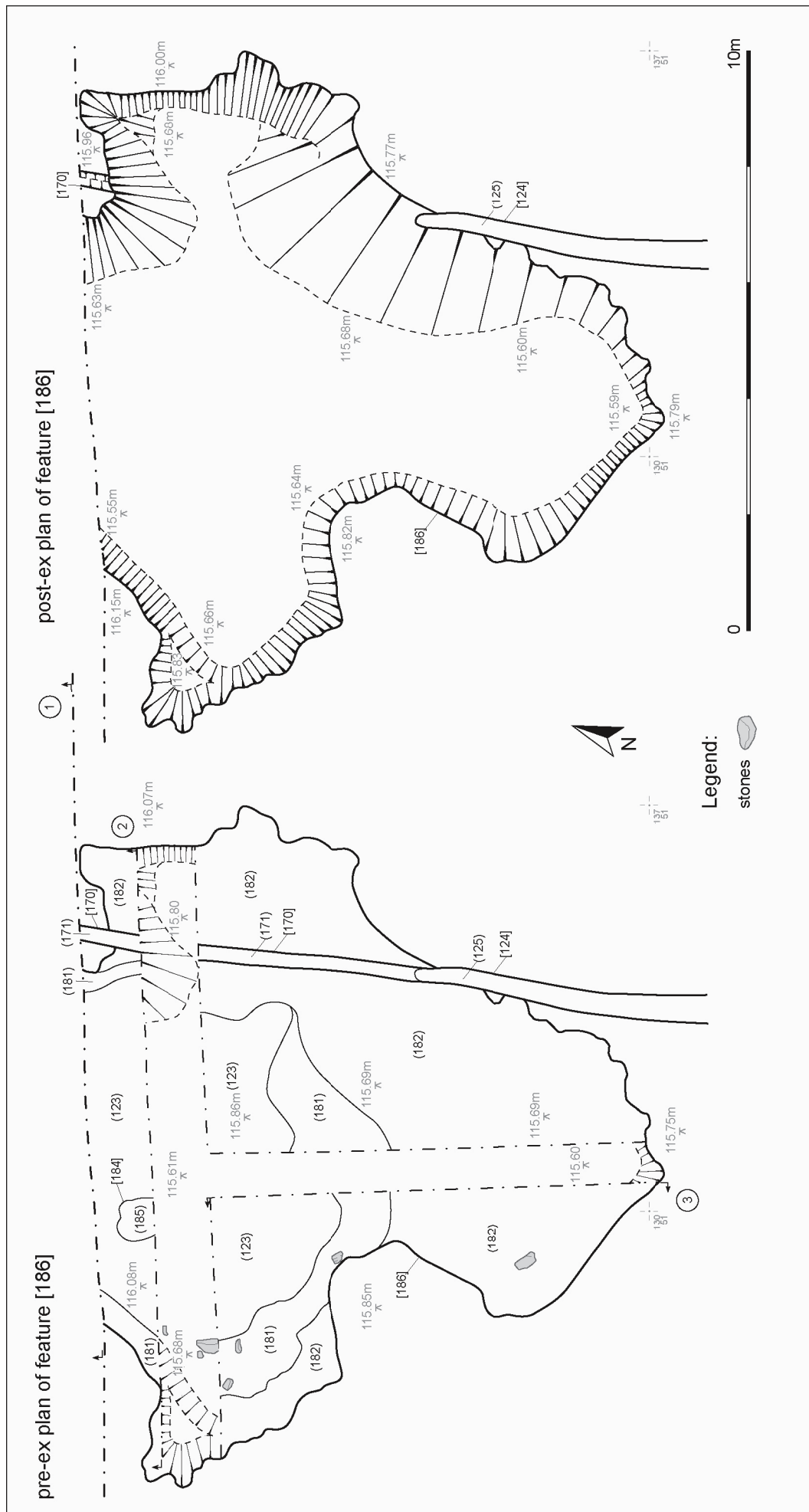


Figure 19: Pre- and post-excavation plans of feature [186].

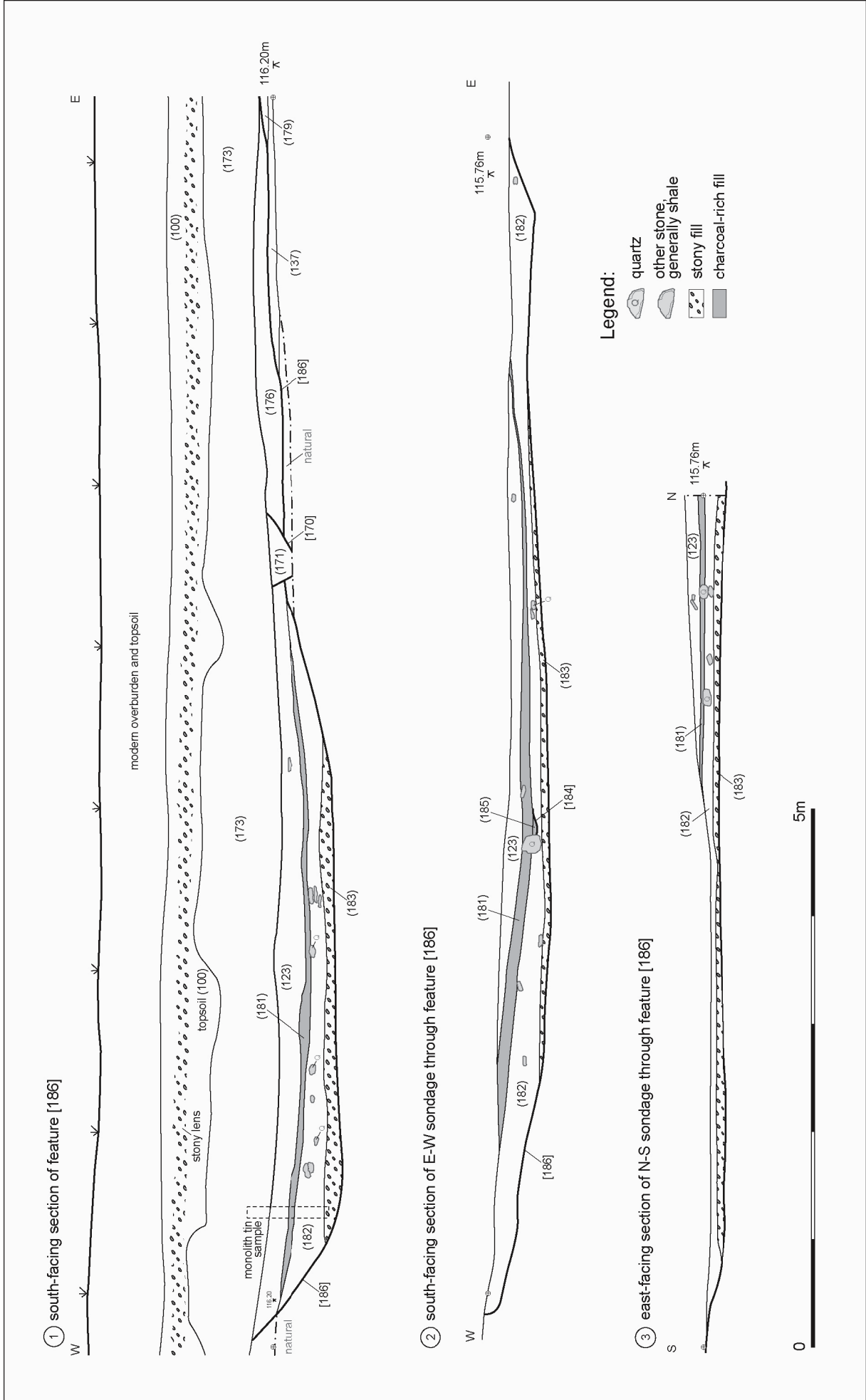


Figure 20: Sections through feature [186].

Cut into fill (182) and located near the northern limit of the feature was a shallow circular pit [184] *c.*0.6m across and 0.3m deep (see Figure 21 and Figure 22). This contained common sub-angular to sub-rounded stones up to 0.2m in diameter and was filled by (185), a charcoal-rich silt very similar to (181) and probably forming a part of that fill. Pit [184] was sealed by (123).

Fragments of Hazel (*Corylus*) charcoal from several contexts was sent for radiocarbon dating. Fill (181) was dated to 3635±35 BP (SUERC-24610), (182) to 3590±35 BP (SUERC-24609) and (185) to 3590±35 BP (SUERC-24608) (see Appendices 12 & 13).

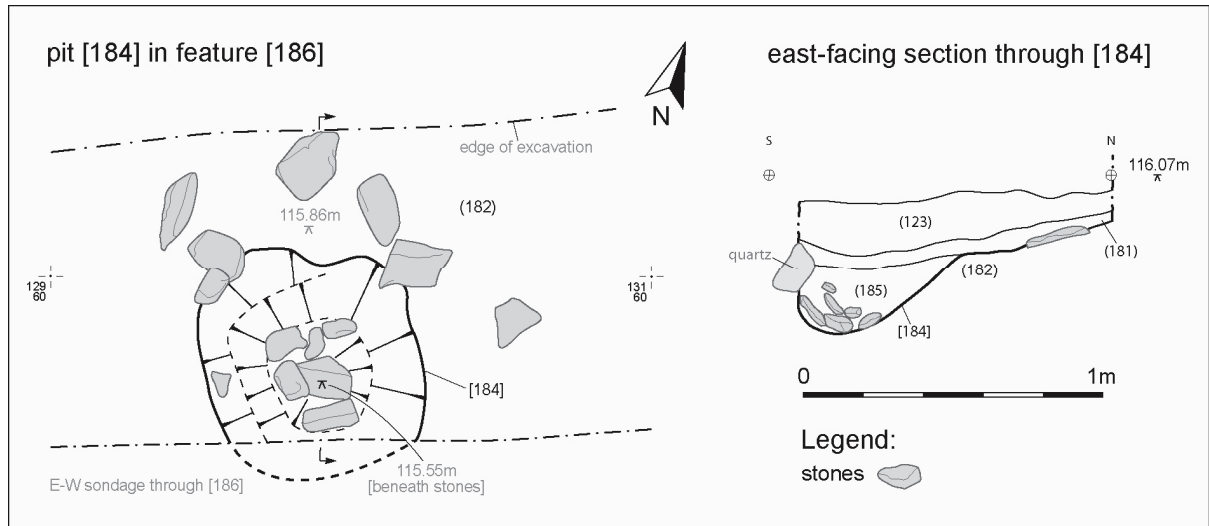


Figure 21: Plan and section of pit [184] in feature [186].



Figure 22: East-facing section through pit [184] (scale 0.5m).



### 3.1.3 Mesolithic Pit [113] (see Figures 23-26)

Large pit [113] was nearly circular in plan and was approximately 3.8m in diameter. It was 1.8m deep with very steep, almost vertical if irregular sides with a pronounced step on its western side 0.5m up from the base. It contained at least one and probably two re-cuts; the pit was cut into the weathered but indurate upper bedrock of the site, and as such possessed great structural durability. The pit contained nine fills and at least one definite re-cut: pit [188]. None of the fills of this pit contained tipping lines, suggesting most had accumulated naturally, but the heat-affected stones in context (156), and the well-preserved charcoal from contexts (153) and (154), indicates at least some material had been deliberately dumped.

The basal fill of pit [113] was context (162), a fine, soft, clayey silt, brownish-grey with orange mottling arising from natural variation in the oxidation state of iron within the fill. This deposit was 0.1m thick. Above this was context (157), a soft, greyish-brown sandy silt up to 0.2m thick that contained common sub-angular stones, some of which were quartz, with most being less than 200mm in size. A carbonised hazelnut (*Corylus avellana*) shell from this context was radiocarbon dated to 6645±35 BP (SUERC-24615) (see Appendices 12 & 13).

Above (157) lay context (167), a lens of greyish-brown compact silt 0.16m thick and only 1.1m in lateral extent. This was overlain by (156), a friable, gritty, greyish-brown silty sand up to 0.45m thick containing numerous large, sub-angular stone and quartz inclusions up to 300mm in size, some of which appear to have been heated. It also produced an elongate pebble tool. A carbonised hazelnut (*Corylus avellana*) shell from (156) was dated to 6705±35 BP (SUERC-24616) (see Appendices 12 & 13).



Figure 23: Pit [113] under excavation. Viewed from the north-east, looking south-west.

The pronounced step in the base of the pit may well represent a first re-cut of [113]. This being the case, the primary fill of re-cut [187] would have been context (166), a soft, brown silty clay with orange mottling. It varied in thickness between 0.15-0.3m and contained sub-rounded to sub-angular fragments of quartz and shale. This was overlain by context (154), a thick (c.1.1m) deposit of homogeneous, firm, yellowish-brown clayey silt containing common shale inclusions and fragments of clay and frequent charcoal fragments.



Both (166) and (154) seem to represent extended natural silting events, after which the pit was definitely re-cut, perhaps for the second time. This pit [188] was *c.*3.1m in diameter and *c.*1.1m deep, with sloping sides and a concave base. It contained three fills, the lowest of which was (165), a friable, mid-brown clayey silt *c.*0.3m thick. Above this lay (153), a thin charcoal-rich lens of friable, greyish-brown silt. A fragment of carbonised ivy (*Hedera Helix*) from this context was dated to  $5970 \pm 35$  BP (SUERC-24617), making it *c.*600-1000 years younger than the charcoal from contexts (156) and (157) (see Appendix 12). The final fill of pit [188] was (114), a friable, mid- greyish-brown clayey silt up to 0.65m thick.

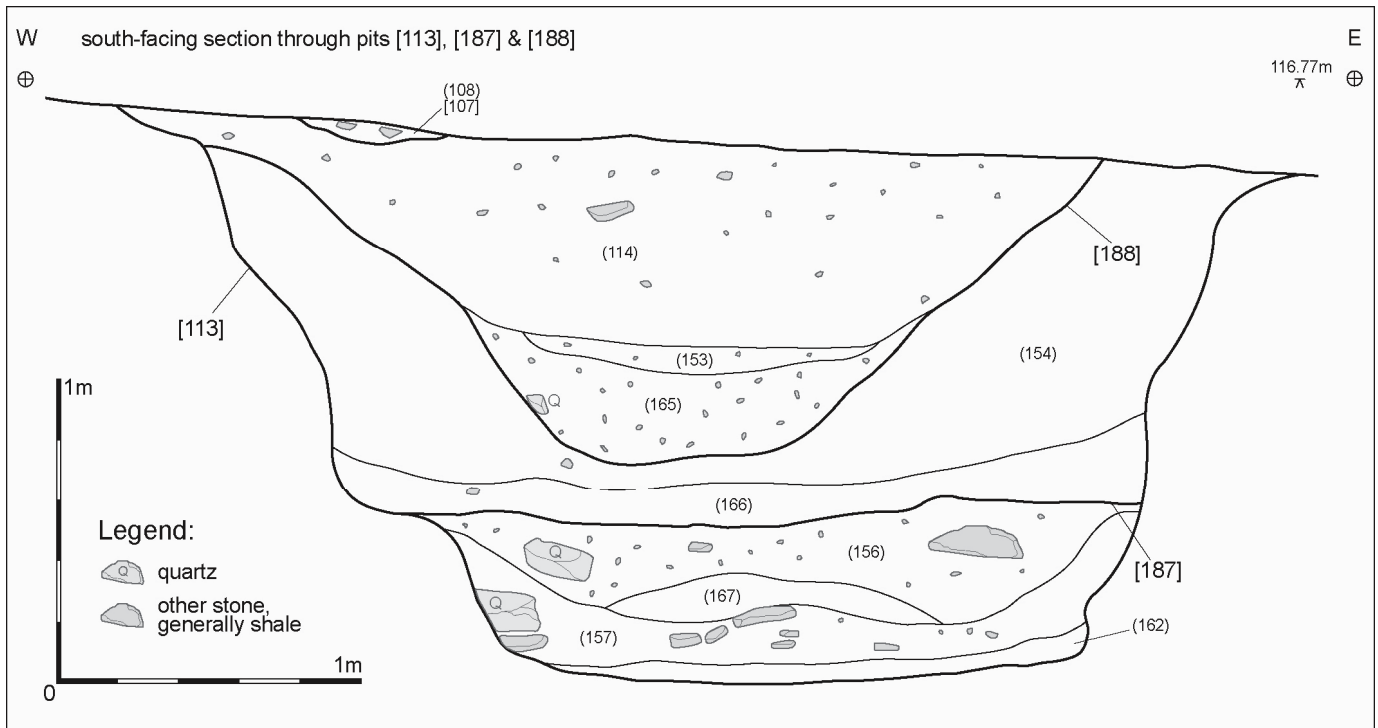


Figure 24: South-facing section through pit [113].



Figure 25: South-facing section through pit [113] (scale 1m).

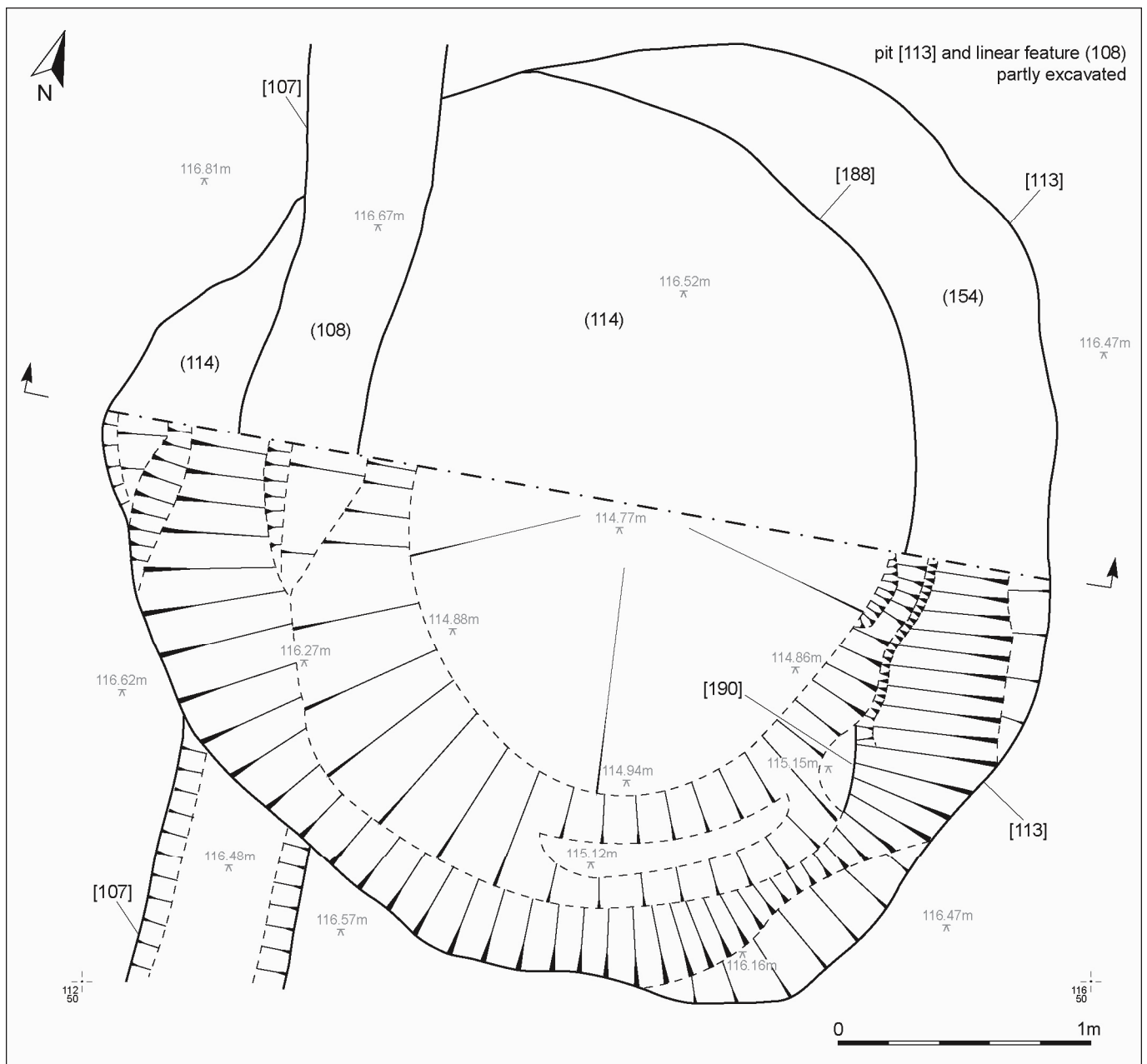


Figure 26: Plan of pit [113].

A small recess [190] was noted in the eastern face of [113] with an irregular sub-rounded shape, less than 0.3m wide and high and less than 0.15m deep, tapering to a flat back 0.18m across. It was filled by context (156), and seems to represent a void generated by the removal of a large stone during the original excavation of [113].

### 3.1.4 Linear features (see Figures 26 & 28-29)

Linear [107] was 0.6m wide and *c.*0.6m deep, with a steeply sloping sides and a broad, concave base (see Figure 26). It crossed the stripped area north to south and was filled with (108), a mid-brown silty clay containing frequent shale inclusions. It produced a single sherd of unglazed medieval Totnes-type pottery. [107] was cut down through colluvial layer (173) and, while it must therefore be considerably later in date than all the other features on the site, it need not necessarily be a modern or recent feature.

Irregular linear [134] was c.5.4m long and orientated northwest-southeast, with a maximum depth of 0.1-0.15m and a width up to 0.3m (see Figure 28). It had a shallow, concave profile and was filled with a compact, mid-brown silty clay (135). This contained frequent, small shale inclusions, occasional angular stones less than 50mm in size, occasional fibrous roots and a possible stone axe blank.

Linear [138] was orientated approximately north to south, was 3.5m long and had a maximum width of 0.4m (see Figure 29). Its concave profile reached a maximum depth of 0.2m at the centre with a flatter, shallower profile at each end. It was filled with a mid-brown to grey-brown silty clay (139) that contained frequent shale inclusions, occasional angular stones of less than 50mm in size and occasional fibrous roots. It also contained a single sherd of abraded Bronze Age pottery. Linear [138] lay adjacent and parallel to linear [140], and shared a common line and alignment with linear [177].

Linear [140] was 4m long with a maximum width of 0.45m at the centre (see Figure 29). It had an irregular, undulating profile with a maximum depth of 0.25m. The southern terminal was somewhat rounded with a concave base while the northern terminal was more irregular. It was filled with a mid-brown silty clay (141) that contained frequent small shale inclusions, occasional angular stones less than 50mm in size, occasional fibrous roots and rare small charcoal fragments. This feature lay adjacent and parallel to linear [138].

Linear [177] was 0.42m in width and exposed for 1.82m in length (see Figure 28). It projected into the excavated area from beneath the northern edge of excavation and contained (178), a mid-brown to grey-brown silty clay that contained frequent shale inclusions, occasional angular stones less than 50mm in size and occasional fibrous roots. Linear [177] was orientated approximately north to south, and shared a common line and alignment with linear [138].

*Linear Group {189}* (see Figure 27)

Linear Group {189} consisted of linear features [124], [126] and [170]. While quite different in width, depth and profile, these three features nonetheless shared a common alignment (almost north to south), with [124] and [126] appearing to be partial re-cuts of [170]. Linear group {189} ran parallel to linear [107], and if the two are related, linear [107] may preserve a relatively early alignment.

Linear [170] was a shallow feature with an excavated length of 7.2m. It was less than 0.3m wide and 0.1m deep, and at its south end it was cut and continued by [124]. It was filled by (171), a mid-brown, friable clayey silt. [170] cut the fills of hollow [186].

Linear [124] cut and continued the line of [170] for a further 6.4m, with a width that varied considerably between 0.35m and 0.85m. It had a V-shaped profile and varied in depth between 0.15m and 0.48m. It is possible this feature was somewhat truncated at its northern end. It was filled with (125), a firm, mid-brown clayey silt that contained a single, tiny fragment of undiagnostic slag. It was cut at its southern end by [126].

Linear [126] cut the southern end of [124]. Its observed length was 2.2m, being 0.5m wide at its northern end and 1.05m wide at the edge of excavation. It had a wide, concave profile up to 0.06m deep and contained (127), a compact, mid-brown silty clay, which contained occasional inclusions of shale and quartz.



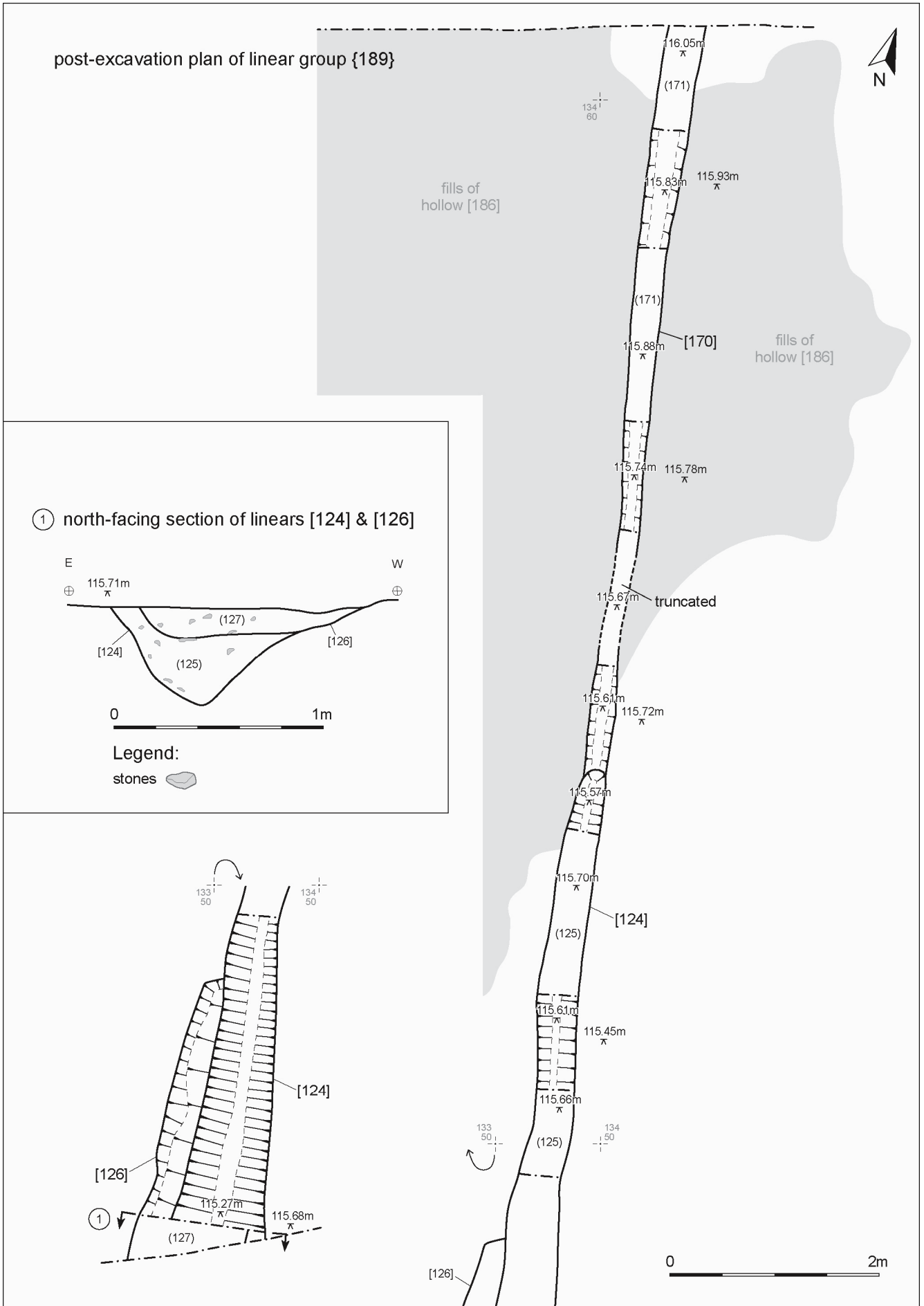


Figure 27: Linear feature group {189}.

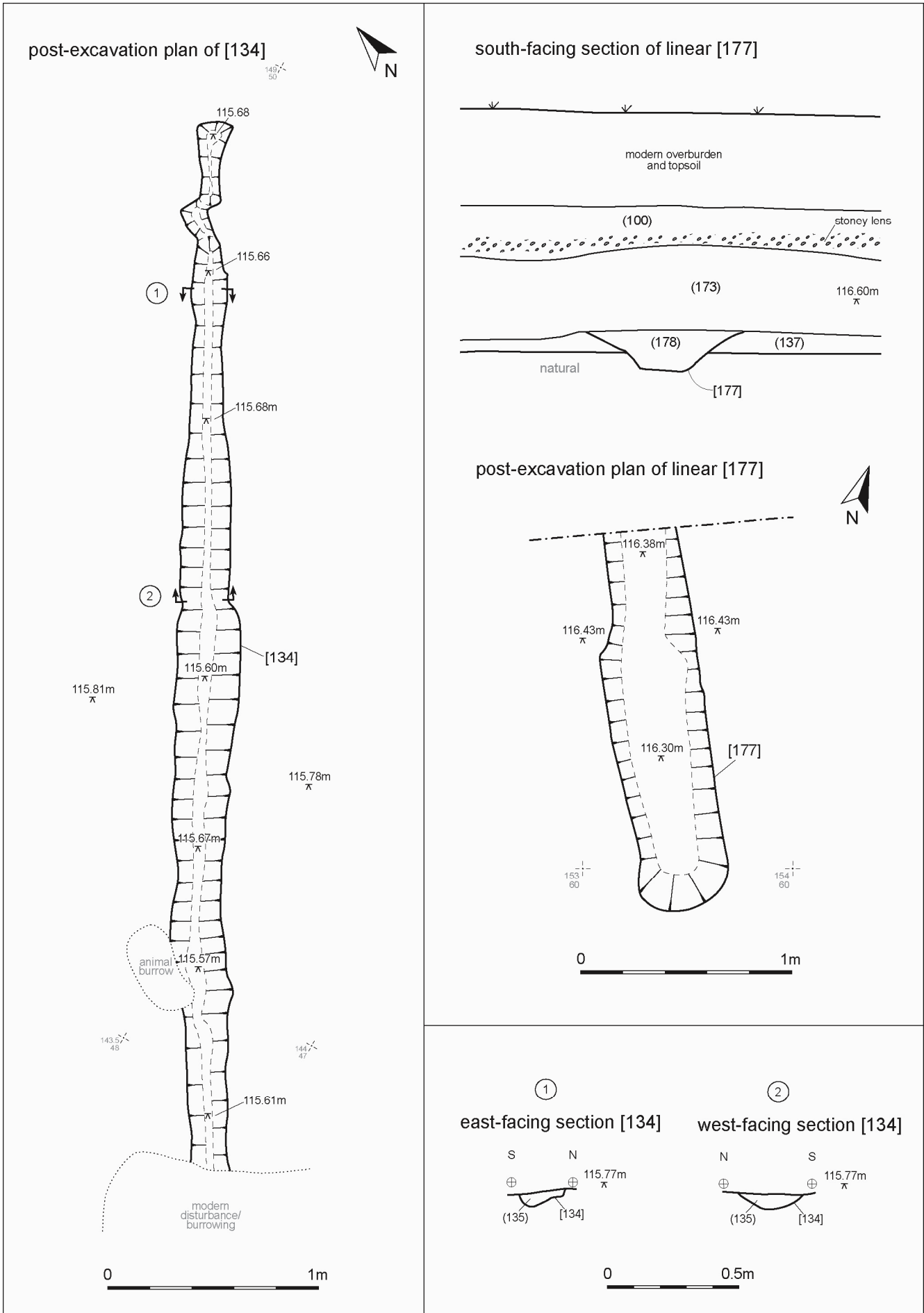


Figure 28: Linear features [134] and [177].

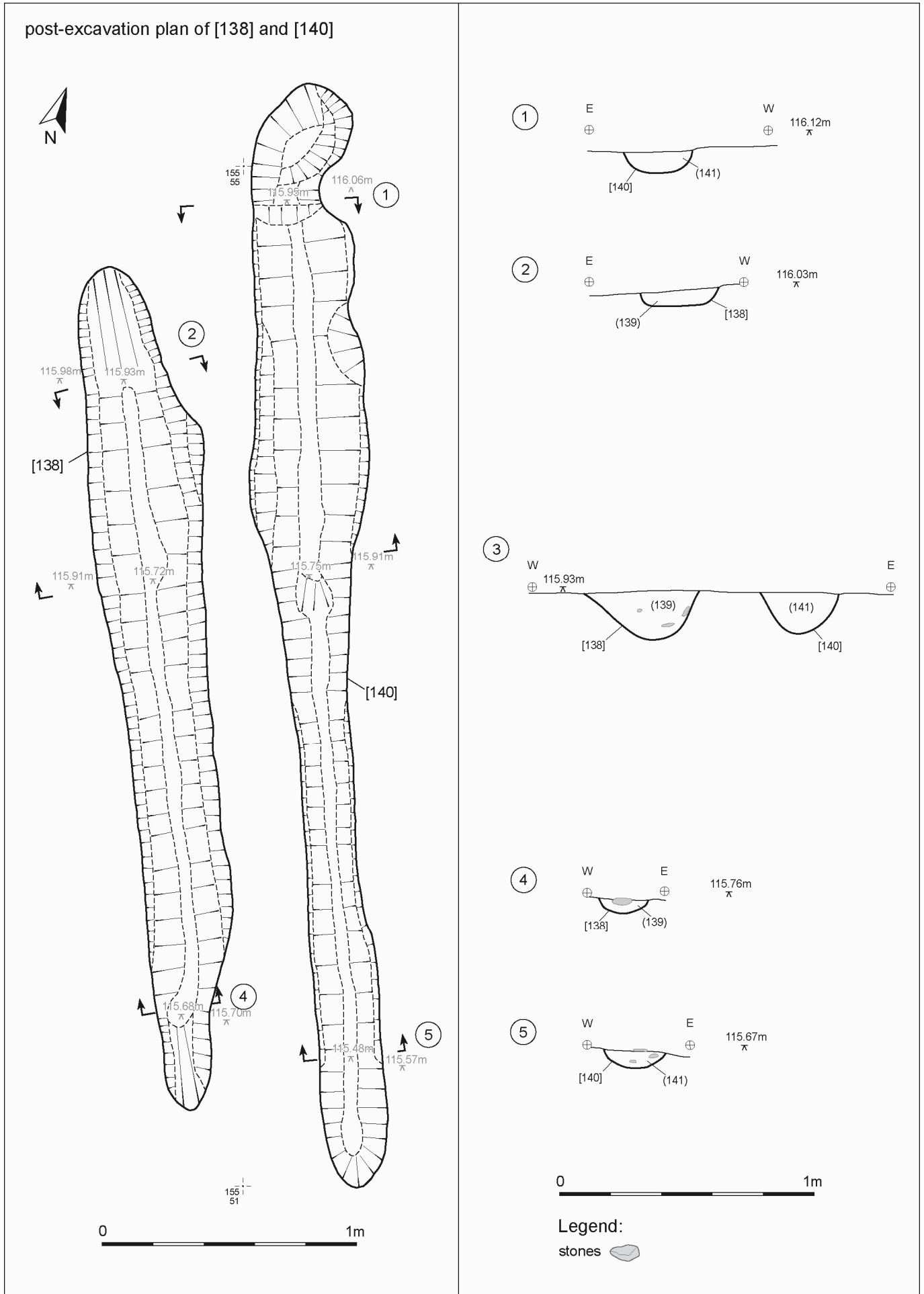


Figure 29: Linear features [138] and [140].  
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### 3.1.5 Irregular Pits (see Figures 30-31)

Pit [105] was an irregular oval shape between 0.72m (north-west to south-east) and 0.45m (north-east to south-west) across and 0.25m deep with steep edges and a flat bottom. It was filled by (106), a dense and compact pinkish-brown silty clay containing frequent shale inclusions.

Pit [109] was irregularly rectilinear in shape, ranged in width from 0.6m to 1.3m and was up to 0.3m in deep. It had an irregular, pitted base and was filled with (110), a pinkish-brown silty clay that contained frequent shale inclusions.

Irregular pit [117] was located on the southern edge of the excavated area and extended beyond the edge of excavation. The observed portion was 5.4m in length and between 0.6m and 1.0m wide and varied in depth from 0.2m to 0.4m. Its profile was irregular, varying from concave at its western end to a shallow linear extension to the east. Its upper fill (118) was a greyish-brown silty clay with occasional shale inclusions and some charcoal fragments. It also contained a single sherd of abraded Bronze Age pottery. The lower fill (152) was a compact, orange-brown lens of clay with a maximum thickness of 0.1m.

Linear pit [158] was orientated approximately east to west, *c.*1.7m long with an average width and depth of *c.*0.35m, and was notably irregular both in plan and in profile. It was filled with (159), a dense, compact pinkish-brown clay that contained frequent small shale inclusions and occasional angular quartz fragments. It also contained a single sherd of abraded Bronze Age pottery. Linear pit [158] was sealed by deposit (143).

Small pit [160] was an oval between 0.5m and 0.65m across, 0.15-0.20m deep with shallow edges and a flat base and was situated in an area of ground disturbed by animal burrowing. It was filled with (161), a heterogeneous fill comprised of a compact, grey silt containing frequent small shale inclusions and abundant patches of yellowish-red clay, probably lumps of redeposited natural material. It also contained two sherds of abraded Bronze Age pottery and was overlain by deposit (145).

Irregular pit [163] was 0.7-1m across with an irregular and undulating base. It was up to 0.3m deep and contained a single fill, (164). Fill (164) was a compact grey silt containing frequent small shale inclusions. Pit [163] lay adjacent to [160] within the same area of disturbed ground.

### 3.1.6 Circular pits (see Figure 32)

Pit [103] was approximately oval in shape, being 0.28×0.36m across by 0.16m deep. It contained a single fill, (104), a greyish-brown clay silt that contained occasional small shale inclusions.

Pit [132] was 0.7m in diameter with a broad concave profile (also see Figure 33). It contained two fills, the uppermost of which (133) was a reddish-grey silt-clay that contained occasional inclusions of shale and small sub-angular quartz and frequent charcoal fragments. The lower fill (155) was a very compact gritty clay with frequent small sub-angular platy stones 60-100mm in size, frequent fine gritty quartz fragments and small flecks and fragments of charcoal.

Small oval pit [148] was 0.28×0.42m across with an irregular concave profile that was 0.15m deep. It was located immediately to the south-east of pit [103] and had a very similar fill; a compact, greyish-brown clayey silt (149) that included frequent small shale inclusions and occasional angular quartz fragments.

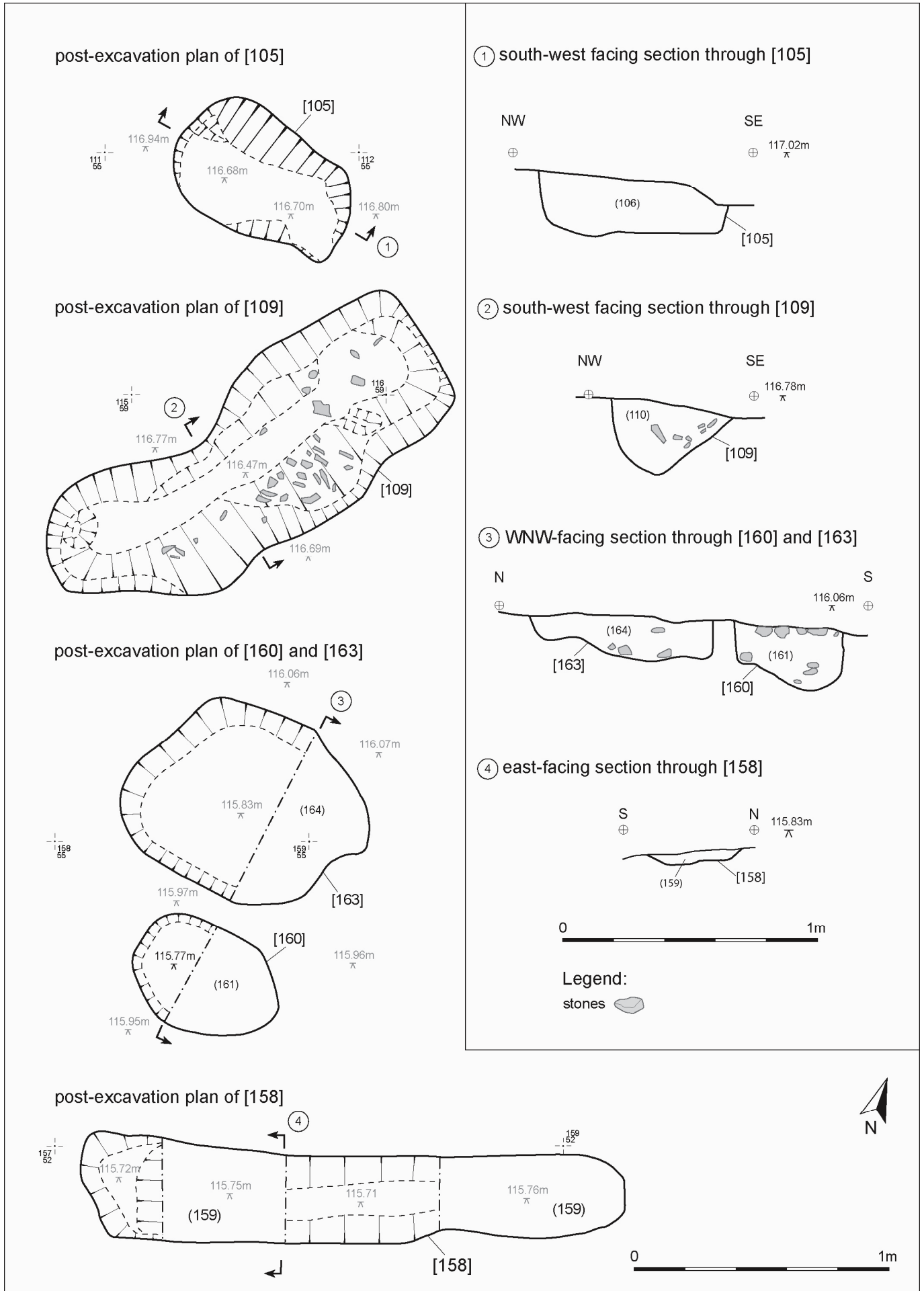


Figure 30: Irregular pits [105], [109], [158], [160] and [163].  
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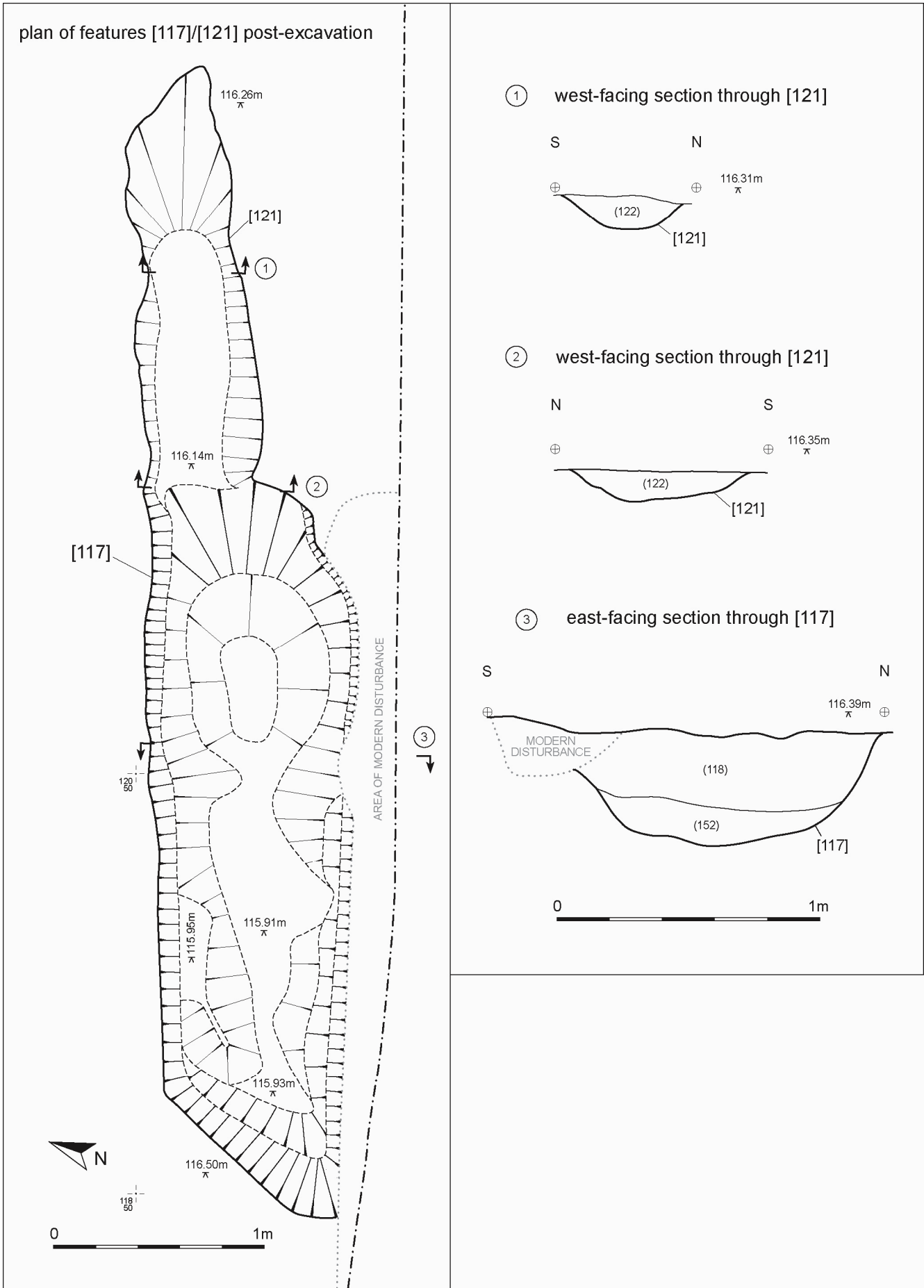


Figure 31: Irregular pit [117].



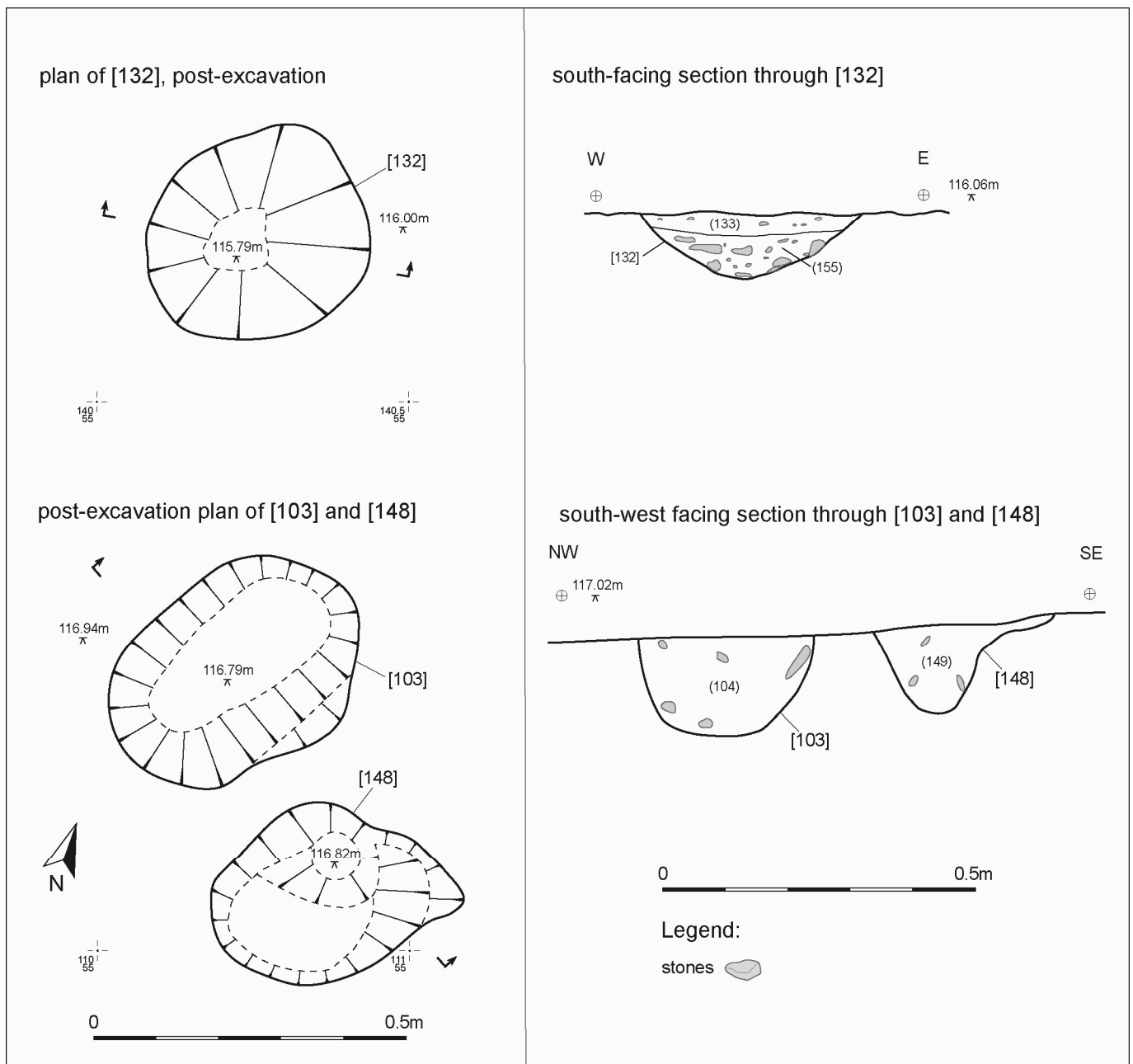


Figure 32: Circular pits [103], [132] and [148].

### 3.1.7 Deposits

Two similar but distinct deposits or layers of material, (136) & (137), overlay the natural subsoil across much of the centre of the site. Deposit (136) was a greyish-brown silty clay up to 0.01-0.02m thick that contained occasional charcoal flecks and fibrous roots. It also produced a single retouched flint flake. Deposit (136) sealed pit [113] and may have formed part of deposit (137). Deposit (137), mainly found towards the east of the site, was a firm mid-grey silty clay up to 0.2m thick. It also produced a single retouched flint flake. Deposit (137) was cut by features [174] and [177].

Deposit (137) also sealed another soil horizon, (143), a firm greyish-brown clay, which in turn sealed linear feature [158]. (143) contained occasional charcoal fragments and fibrous roots and was much disturbed by animal burrows. It produced a single flint scraper.



Figure 33: Pit [132] under excavation. Viewed from the south, looking north (scale 0.5m).

Located east of linear features [138] and [140], deposit (145) covered an area approximately 5×2m. It contained occasional charcoal fragments and fibrous roots and was again much disturbed by animal burrowing. It produced a single flint scraper, three utilised stones (including the possible axe blank) and five sherds of abraded Bronze Age pottery.

To the east of hollow [186] was a series of successive layers of material. In this area (137) was overlain by (179), a mid greyish-brown silty clay up to 0.1m thick containing abundant platy shale fragments. This extended some 6.5m east to west. Overlying (179), and extending some 3m to the east of hollow [186], was (176), a greyish-brown silty clay that probably formed an extension of fill (123). (137) was cut by linear [170], both (137) and (179) were cut by Beaker pit [174], and (176) was cut by linear [170].

### 3.1.8 Colluvial Layer (173)

Most of the features identified in Area A were sealed beneath a thick layer of colluvial material (173). This was a reddish-brown silty clay, comprised of a combination of hillwash, eroded soil and *in situ* soil formation. This layer varied in thickness across the site, being up to 0.7m deep at the centre (above hollow [186]), c.0.4m thick at the western end, and almost entirely absent from the eastern end, where true bedrock was exposed.

### 3.1.9 Interpretation

The most significant feature identified in Area A was the Mesolithic pit [113], a very large cut feature with few parallels in the archaeological record of the British Mesolithic. The morphology of pit [113] suggests it saw multiple successive phases of use: its asymmetric profile and the pronounced step c.0.5m up from the base points to an early and substantial re-cut of the original feature, with context (166) the initial silting of this re-cut. This feature, pit [187], then appears to have nearly or completely filled by context (154) – possibly deliberately – and subsequently re-cut again. The second re-cut, pit [188], lay entirely within context (154) and was filled with contexts (165), (153) and finally (114). The three radiocarbon dates demonstrate that while the lower fills of the feature are broadly contemporary – 5710-5550 cal

BC (95.4%) for context (156) and 5640-5510 cal BC (95.4%) for context (157) – the second fill of the second re-cut, context (153), was much later: 4950-4720 cal BC (95.4%). This gives a notional date range between the basal fills and those of the possible second re-cut of between 600 and 1000 years. The character of the fills of this pit – lacking both a high proportion of coarse material derived directly from the bedrock, and the characteristic talus slopes that usually develop at the base of an eroding feature – indicates these are indeed re-cuts and do not simply represent collapsed material. Two of the upper fills of the pit produced good charcoal assemblages, the earlier of which (154) was dominated by oak, including heartwood, while the later (153) revealed a mixture of oak, hazel and ivy, implying there had been a shift in the character of local vegetation.

There were comparatively few finds within this feature in relation to its size and most of these were from the upper contexts. The thin basal layer (162) contained only two pieces of worked chert while the two contexts above; (162), (157) and (167), contained no worked stone. Above these, (156) included 7 pieces of worked flint, 3 pieces of chert and a single piece of worked quartz together with an elongated pebble tool. The remaining worked stone derived from fills that accumulated after the pit seems to have been re-cut. (154) contained 31 pieces of worked flint and 5 of chert while the uppermost fill of the feature (114) produced 80 pieces of worked flint and 10 of chert including the only retouched tool, a flint rod (SF no 21, see Figure 40). With the exception of this latter piece, this assemblage is highly unusual in that the normal suite of Mesolithic tool-types (i.e. microliths, burins, axes and blades) are absent. This implies pit [113] represents a new type of assemblage and also that, in the absence of radiocarbon dates, similar Mesolithic assemblages could easily be misdated and may be more common than previously appreciated.

Aside from pit [113], the remaining features comprise a collection of pits, linear features and a series of spreads or layers of material that, with some exceptions, probably date to the late Neolithic/early Bronze Age.

Perhaps the most enigmatic Bronze Age feature was hollow [186]. This highly irregular depression was originally interpreted as a pond that had silted up over time, but geoarchaeological analysis of a soil monolith taken through its fills (see Appendix 10) demonstrated that none of the material had been deposited in water, although basal fill (183) might have been seasonally waterlogged. Fill (183), being a compact layer of gravel predominantly composed of angular quartz fragments, was unusual to say the least, as it does not reflect the local character of the subsoil, which was at this point a highly weathered, largely stoneless silty clay. This fill produced an unusually large number of utilised and worked stone artefacts, including 60 flint cores or core fragments. The geoarchaeological assessment indicated the layer was highly mixed and physically bioturbated, perhaps deliberately, suggesting (183) may in fact form a deliberately laid and trampled gravel surface.

Fill (183) was overlain by (182), a mid-brown clay. The geoarchaeological assessment determined that this deposit was not waterlain either, although sedimentary structures such as lamination or banding could have been destroyed by extensive bioturbation. This layer also produced 13 utilised stones, six retouched stone tools (including a plano-convex knife), and 18 flint cores or core fragments. Fill (182) was radiocarbon dated to 2040-1870 cal BC (93.7%).

Fill (182) was overlain by (181), a thin layer of dark silt containing abundant charcoal. There was no evidence of *in situ* burning, but its abrupt boundary with (182), and its well-preserved charcoal, strongly suggests this deposit was deliberately dumped rather than washed in naturally. Fill (181) was restricted to the northern half of hollow [186], but it originally extended across the whole feature; heavy rain removed the remainder before it could be recorded. The charcoal assemblage was dominated by hazel (40%), but contained a wide range of other species, including: hawthorn group (24%), oak (9%), blackthorn (9%), alder/hazel (6%), cherry type (5%), broom/gorse (2%), ivy (2%) and ash (2%) (percentages expressed as the proportion of 100 analysed fragments per context – see Appendix 9). These are predominantly light-shade or hedgerow and heath species, suggesting the landscape was largely open. This layer was radiocarbon dated to 2060-1900 cal BC (80.6%).



Fill (182) was cut by a small circular pit [184] near the northern edge of excavation. This ostensibly looked like a possible fire pit – with stones arranged within and around the feature – but there was no trace of *in situ* burning, and its charcoal-rich fill (185) seemed to form just an unusually thick part of (181). Analysis of the charcoal from this feature demonstrated the species composition was markedly different, with fewer species present: hazel (41%), hawthorn group (28%), oak (4%), holly (1%) and, interestingly, wild cherry (19%), suggesting pit [184] could have been dug specifically for the deposition of a restricted range of fuelwood species. The charcoal was radiocarbon dated to 2040-1870 cal BC (93.7%).

Pit [184] was sealed by the final fill of hollow [186], context (123). The geoarchaeological assessment determined this was clearly colluvial in nature, with little evidence of deliberate infill. The abrupt contact with fill (181) indicated a relatively rapid deposition of material, with no evidence of trampling. This fill seems to have extended beyond the hollow to the east.

Hollow [186] remains difficult to interpret. It may well be natural but its infill is clearly the result of human agency, including the dumping of material and possibly the creation of a deliberately laid surface. Lithic finds from the initial fill (183) are characteristic of the reduction of local flint pebbles of which there are numerous examples, some with only a single flake removed, together with chert hammerstones and significant numbers of primary and secondary flakes. There is similar evidence of flint working in the upper fills, contexts (182) and (123). Above (181) is a clean, clay-rich fill (182) which could represent a build-up of sediment, repeatedly disturbed through use, after which a large dump of charcoal (181) was brought in from elsewhere and spread out across it. The degree of preservation suggests the subsequent deposit (123) was laid down rapidly, perhaps deliberately, and might indicate whatever role the hollow played within local Bronze Age society had changed or diminished. No pottery was present in the lower fills (181 & 182), and none of the pottery recovered from (183) bore classic Beaker decoration.

In fact, the only decorated Beaker pottery on site came from pit [174], where a charcoal-rich deposit containing stones, pottery and flint was deposited. A few sherds from three or four different vessels were recovered, indicating this formed a deliberate, if partial, structured deposition of material. In addition, 79% of the charcoal analysed could be identified as hazel, strongly hinting at deliberate species selection. Charcoal from fill (180) was radiocarbon dated to 2300-2120 cal BC (85.3%). While it did not produce any finds, pit [132] appears to be similar in both form and content, and may represent the truncated remains of a comparable feature.

Some of the features excavated were identified as being either natural or modern during the course of the excavation (features [101], [111], [119] and [147]; see Appendix 3 for details), although feature [147] did produce a single sherd of residual Bronze Age pottery. Four small pits, contexts [103] [105], [132] and [148], contained neither prehistoric pottery nor worked flint and therefore might also be recent in date, although date cannot be assigned on the basis of the absence of evidence alone.

Only one feature, linear [107], produced historical dating evidence, a single unglazed medieval sherd. The segmented linear group {189} was devoid of finds but ran parallel to linear [107] at a distance of approximately 20m, which would imply the two were contemporary. However, one of the elements within group {189}, linear [170], was overlain by colluvial layer (173), which would suggest it was of some antiquity. The most likely interpretation of these two linears is that they constitute features which subdivided the larger field and enabled a degree of water management.

Linears [138] and [177] (with [140]) may form the surviving elements of another north-south linear feature, located approximately 20m to the east of linear group {189} but not parallel to that group. Again, linear [177] is sealed by colluvial layer (173), but cuts (137). The fills of both [138] and [140] contained small quantities of worked stone, and [138] produced a single abraded sherd of Bronze Age pottery. It may well be these features, together with [170],

represent truncated or just very slight prehistoric field or perhaps enclosure ditches. In either case, the restricted extent of the excavated area makes it difficult to be conclusive.

The remaining five features – two small pits, two elongate pits and an irregular pit – are probably prehistoric in date. Pits [160] and [163] are immediately adjacent to one another. The larger of the two, [163], contained only five fragments of worked stone, but pit [160] produced 20 pieces of worked stone and two sherds of abraded Bronze Age pottery and both were sealed by the same spread or layer of grey silt clay (145), which itself contained 289 pieces of worked stone (including the possible axe blank) and five sherds of Bronze Age pottery.

Of the two elongate pits, pit [158] produced a single sherd of Bronze Age pottery and 43 pieces of worked stone while pit [109] yielded 33 pieces of worked stone. The irregular feature [117] is cut by two apparently modern features and contained Beaker pottery but only 5 fragments of worked stone.

The spreads or layers of material across the site are of variable depth and composition, seal some features (features [113], [159], [160] and [163]) and are cut by others (features [170], [174] and [177]), implying more than one phase of Bronze Age activity. It is probable that most, if not all these layers represent the surviving elements of buried soils, themselves at least partly colluvial in nature. They are all composed of grey silty clays and may form discontinuous elements of the same layer.

Colluvial layer (173) has done much to protect the prehistoric remains from damage, but its dating and development remain problematical. There are no associated finds, and it is cut by linear [107], potentially a medieval feature. It could only have developed during a period of intense arable exploitation, which should be medieval, but could perhaps be Roman or late Iron Age in date.

### 3.2 AREA B: Monitoring

The underlying subsoil revealed during groundworks was very similar to that encountered in Area A, being a variable, yellowish-grey silty clay with common shale inclusions. No topsoil survived. As stated above, no finds or features of archaeological interest were observed in this area. Much of the site was occupied by agricultural buildings prior to their demolition, and it is likely the disturbance and groundworks accompanying the construction and use of these structures had already destroyed any archaeological features in the area.

### 3.3 AREA C: Monitoring and Excavation

The underlying subsoil revealed in this area was 0.15-0.20m deep and consisted of a mid- to dark brown silty clay containing abundant angular platy stones up to 0.20m across. Below this lay the upper part of the shattered siltstone bedrock. In no instances was quartz-veining or free quartz a component of this material. The topsoil was a mid-brown silty clay approximately 0.35m deep containing frequent stones up to 0.2m across including water-rounded pebbles as well as post medieval pottery and roofing slate fragments. A large part of the field was partially stripped of topsoil to simulate the nutrient-poor conditions favoured by native wildflowers, but it was only along the course of the new driveway that the subsoil was exposed. In this area a small number of irregular pits and part of a probable enclosure were uncovered. The driveway was approximately 100m long by *c.* 5m wide, with an additional 50m stripped in October 2009 (see Figure 34).

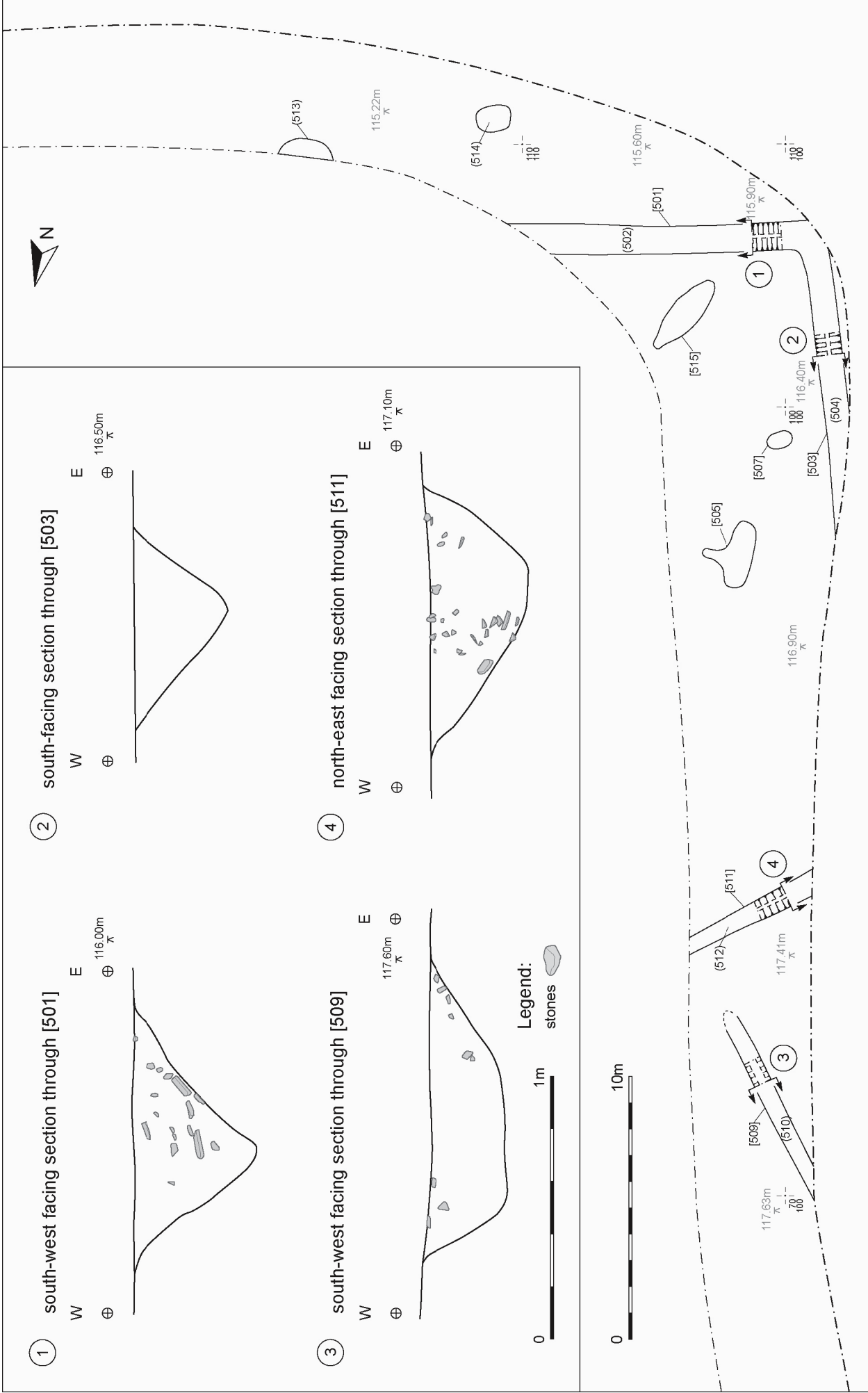


Figure 34: Site plan of Area C, with sections through the linear features.



### 3.3.1 Linear Features (see Figure 34)

Linear [501] was orientated approximately east to west with an observed length of *c.*11m. It was just under 1m wide by 0.45m-0.65 deep, with a steep-sided, 'V'-shaped profile. It contained a single fill, (502), a loose light brown sandy silt containing common small sub-rounded stones up to 40mm in diameter. At its western end linear [501] joined linear [503], and the two ditches may well have formed two sides of an enclosure. The precise relationship between [501] and [503] was, however, not entirely clear, and given the restricted area uncovered during these works it is possible they actually formed part of a more extensive field system (e.g. see Butterworth 1999, 18-37).

Linear [503] was slightly narrower than [501], but was otherwise similar in form and profile. It had an observed length of *c.*12m, was 0.95m wide and 0.4-0.5m deep. It contained a single fill, (504), a loose light brown sandy silt containing common small sub-rounded stones up to 40mm in diameter.

Linear [511] was *c.*0.8m wide and 0.4-0.5m deep, with a 'V'-shaped profile and was orientated ENE to WSW with an observed length of *c.*5m. It contained a single fill, (512), a loose light brown sandy silt and contained common small sub-rounded stones up to 40mm in size and a single small fragment of partially burnt coal.

Linear [509] was *c.*0.6m wide by up to 0.45m deep, with a gentle concave profile. It had an observed length of *c.*8m, and its south-eastern end terminated or was ploughed out *c.*2.5m north of linear [511]. It contained a single fill, (510), a light brown sandy silt similar to (502) (504) and (512).

### 3.3.2 Other Features (see Figure 35)

Pit [507] was a small oval feature 0.95×0.6m in extent and 0.15-0.2m deep. It had a gentle, concave profile and contained a single fill, (508), a light brown sandy silt that contained common, small, sub-rounded stones up to 50mm in size and occasional small fragments of charcoal.

Pit [505] was an ovate feature *c.*2.6m long by *c.*0.96m wide and 0.4-0.55m deep, with a shallow irregular extension to the south-east. It had a steep-sided profile with a flat base and contained a single homogenous fill, context (506). This was a light brown sandy silt and contained occasional sub-rounded stones up to 60mm in size. At its base on the southern side, (506) contained a single lens of material *c.*0.1m thick containing abundant thin sheets of angular shale up to 120mm in size. Two small but unabraded sherds of probable middle Bronze Age pottery were recovered from above this feature during the topsoil stripping (see Appendix 7). This represents the only dating evidence from Area C.

Pit [515] was an ovate feature *c.* 3.4m long, *c.*1.1m wide and up to 0.35m deep, with a shallow profile. It had a concave and slightly irregular base. Feature [515] contained a single fill, (516), a loose, light brown sandy silt.

### 3.3.3 Burnt Patches (see Figure 34)

Two small heat-affected areas of natural, (513) and (514), were identified, the former extending outside the area of the excavation. They were both less than 10mm thick.

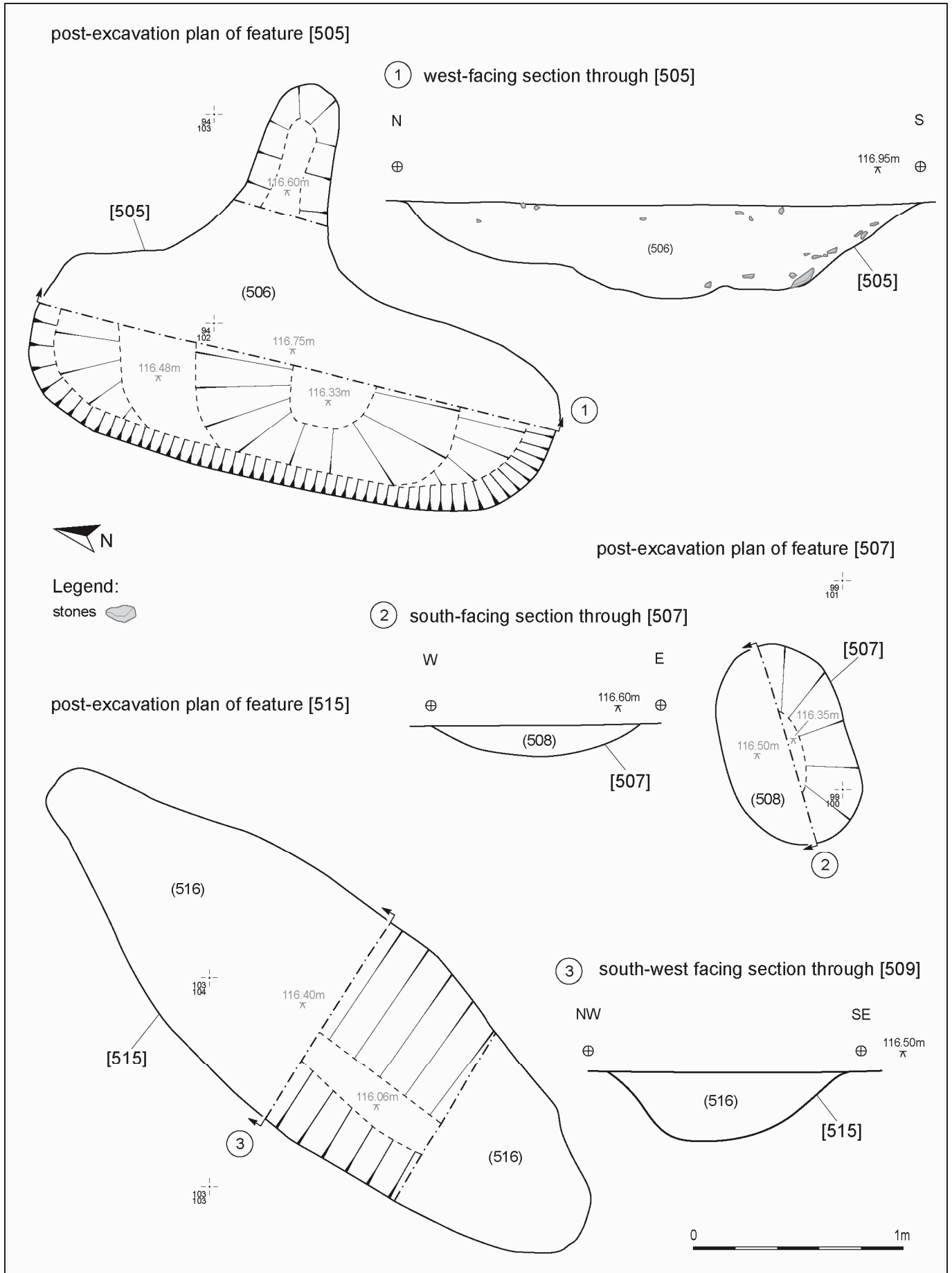


Figure 35: Features in Area C: pits [505], [507] and [515].

### 3.3.4 Interpretation

Very few finds were recovered: two small sherds of pottery from above (506) and a single small piece of partially burnt coal from linear [511] (probably intrusive). The linear features are on approximately the same alignment as the current field boundaries and may therefore be contemporary. However, if linears [501], [503] and [511] form three sides of an enclosure, as seems plausible, it is more likely that they delimit a small enclosure or part of a field system, dated somewhat tenuously to the middle Bronze Age.

Field systems comprised of small rectangular enclosures are not unique to any one period, but a comparison can be made with the middle Bronze Age field system at Castle Hill near Honiton, which was also associated with pits containing Beaker pottery. The Castle Hill field system was composed of ditches of various sizes and profiles, but included some that were 'V'-shaped. These ditches were of a comparable size to those in Area C, tended to have single fills and contained very few finds (Butterworth 1999, 18-37). If the pottery from above (506) can date the features in Area C to the middle Bronze Age, it suggests that the focus for activity at Little Dartmouth had shifted slightly to the south-west.

A stone fragment recovered from the topsoil during the archaeological monitoring may well be part of a polished axe, although the extent of later damage makes firm identification problematic.

The possible enclosure interpreted from the 1946 air photo appears to have a flattened circular/elliptical shape. If this formed a continuous circuit, it could be expected to have been present in Area C but was not identified. However, subsoil features were only clearly identified within the stripped area of the driveway, and this may not have intersected the projected course of the enclosure.



Figure 36: The south part of Area C, linear [501] in the foreground. Viewed from the west, looking east.



## 4.0 Finds Synopsis

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The specialist reports on the worked stone, pottery and palaeoenvironmental remains can be found in Appendices 5-11, but an outline of the major points can be found below.

### 4.1 The Worked Flint, Chert and Quartz (see Appendix 5)

The site as a whole produced an assemblage of 1504 pieces of worked stone weighing a total of 19.29kg derived in the main from the late Mesolithic pit [113], Beaker pit [174], a series of amorphous fills in hollow [186] and from a small number of features, all of which were sealed beneath a thick colluvial deposit. The Mesolithic worked stone assemblage, although small, is the only known example in the UK from a cut feature with radiocarbon dates, the Stonehenge car park pits and those recently excavated at Warren Field, Crathes, being both devoid of worked stone. The Beaker flint assemblage is one of the few in the South West which is associated with pottery and radiocarbon dates. It should be noted that none of this material – not even the quartz – is a natural or likely component of the bedrock, and thus must have been brought to the site from elsewhere.

### 4.2 The Stone Artefacts (see Appendices 6 and 14)

The excavations recovered 34 pieces of stone that were thought either to represent artefacts or imported material. These included: 14 elongated pebble tools, an artefact usually associated with Mesolithic coastal sites, and two possible axe pre-forms which may be associated with a local source of epidiorite. In addition, a broken pebble from context (182) was identified as probably deriving from pebble beds located in East Devon around Budleigh Salterton (R. Taylor *pers. comm.*). There are two possible hone fragments, a possible quern fragment and at least 3 chert hammerstones from [186] and a quartz fragment from [156]. The remaining part of the assemblage is made up of partially worked or unworked beach pebbles. The petrological analysis of the axe pre-forms and the broken axe from Area C confirm that they are all derived from the basic igneous intrusion forming the Dancing Beggars and adjacent cliffs. With the exception of the work currently being undertaken in the Mounts Bay area (Roger Taylor, *pers. comm.*), this is first direct evidence to date of an axe production site in the South West and the first such site identified in the UK since 1968.

### 4.3 The Pottery (see Appendix 7)

This is the first Devon site with Beaker pottery found in non-funerary contexts to be radiocarbon dated. A total of 45 sherds of Bronze Age pottery were recovered, weighing a total of 179g and comprised of two distinct fabrics. Fabric analysis suggests that some of the pottery was made from clay that originated around the Dartmoor granite while the others are thought to be fashioned from estuarine clays and may be of local manufacture. Pit [174] contained 17 sherds (75g) and was dated to 2300-2130 cal BC (95%). Two fresh sherds of Middle Bronze Age Gabbroic pottery were recovered from Area C. Very little later pottery was encountered: only one medieval and two post-medieval sherds.

### 4.4 Plant Macrofossils (see Appendix 8)

Samples from six contexts from five features were examined, all of which produced hazelnut fragments. A single barley grain was recovered from the Mesolithic pit (context (154)) but was found to be a modern contaminant.

#### 4.5 Wood Charcoal (see Appendix 9)

The features at Little Dartmouth produced a regionally significance charcoal assemblage. Wood charcoal from the Mesolithic pit [113] and two dated Bronze Age features (pit [174] and hollow [186]) were analysed. Five contexts within the Mesolithic pit were sampled, two of which – (154) and (153) – produced reasonable quantities of charcoal that, for the Mesolithic, was unusually well-preserved. The former was dominated by oak while the latter contained a more mixed range of species including oak, hazel and ivy, implying there had been a change in the composition or extent of oak woodland.

Of the Bronze Age features sampled, the contents of pit [174] were dominated by hazel while [184] and [186] revealed a mixture of hazel, hawthorn and cherry/blackthorn. Since all of these samples are likely to reflect the exploitation of local woodland for fuel, it is notable that the Mesolithic contexts were dominated by mature oak and hazel, while those of the late Neolithic/early Bronze Age reflect the exploitation of a far more mixed and open landscape.

The significant features at Little Dartmouth represent two, possibly three, main periods of activity – the late Mesolithic, the late Neolithic and early Bronze Age, and the middle Bronze Age periods. The archaeological evidence demonstrates that in all three instances this activity took place over a period of several centuries.

The generally accepted view of the Mesolithic as a period devoid of monuments has been increasingly challenged in the last decade. The debate has been characterised by an emphasis on the likely use or adaptation of natural features in the landscape such as prominent outcrops, headlands, rivers and caves, and the possible modification of natural features such as the carving of living trees. It has also been noted that features such as shell middens were not simple refuse dumps but impressively large constructions created over time, in which human remains were sometimes deposited (Cummings 2003, 76). The recognition of Mesolithic cut features has been similarly recent. The Stonehenge car park Mesolithic pit alignment, found in 1966, scientifically dated after publication and revisited in 1988, had been known about for some time although it made little impact on the archaeological literature until 1995 (Allen & Gardiner, 2002, 141). In the last decade, Mesolithic houses have also been discovered at Howick and East Barns, the former showing evidence of having been re-built at least twice over the site of the original footprint (Waddington 2007, 104-107; Gooder 2007, 50-52). In the South West, elements of a possible Mesolithic structure have been excavated at Hawkcombe Head, Exmoor (Gardiner, 2007, 82).

Perhaps the most unexpected aspect of many of the Mesolithic features now identified is their longevity of use and their apparent association with later monuments. At Warren Field, Crathes, Aberdeenshire, a Mesolithic pit alignment has recently been excavated, with radiocarbon dates that indicate that some of the pits were initially excavated in the first half of the 8<sup>th</sup> millennium cal BC. Like pit [113], the largest of these, pit 5, revealed an extraordinary sequence of re-cutting episodes taking place in the late Mesolithic, although in this case it continued into the early Neolithic, showing that this site had been in active use over a period of four millennia (Murray *et al.* 2009, 5-12).

The relationship between Mesolithic communities and coastal zones has recently been reviewed, demonstrating that while there were significant sea-level changes during the period, these were largely complete by the 5<sup>th</sup> millennium BC (Long 2010). Direct evidence for Mesolithic seafaring is sparse; several craft have been found in Denmark and Holland, but the only possible English example was found at a site in Bantham, 20km to the west of Little Dartmouth. Here, a storm in March 1923 uncovered the remains of a submerged forest of oak and hazel in which the possible bow of a dug-out canoe was found in association with the tip of a tranchet axe, a “beautiful flint core as black as jet” (possibly of Portland type chert), a quartz pebble with an oval depression and “at least two eoliths” (possibly elongated pebble tools) (Winder 1923, 122-3). It is conjectured that skin boats were also in use during this period, given the colonisation of island groups such as the Shetlands and the Outer Hebrides. This, by necessity, required long and potentially hazardous sea crossings (Cobb *et al.* 2010).

The late Mesolithic pit [113] at Little Dartmouth has no parallel in the South West and few even remotely similar counterparts nationally. In plan and section it resembles, albeit on a larger scale, one of the pits excavated in 1988 in the car park at Stonehenge, although that feature produced radiocarbon dates approximately two millennia earlier than [113] (Allen 1995, 44). The pit at Stonehenge was located close to three other contemporary pits found in 1966 containing substantial pine post-settings but with no artefactual dating evidence (Vacher 1973, 61). Although the fills of the Stonehenge car park pit did not possess the same structural profile as its neighbours, it was suggested that a post had originally been present and that a late re-cut



was an enlargement of the pit so that the post could be removed (Allen 1995, 45). Pit [113] at Little Dartmouth would certainly have been deep enough to accommodate a substantial post, any trace of which could have been removed by a re-cut above the level of context (159). That said, unless the post was truly enormous it is difficult to rationalise the excavation of a hole of this size.

Three Holes Cave, Torbryan, is a site in the middle reaches of the Dart Valley 20km north of Little Dartmouth, with evidence of Mesolithic exploitation of coastal resources. Radiocarbon dates on red deer bone from the site yielded ranges of  $4380\pm75$  BC (oxA4491) and  $4170\pm75$  BC (oxA 4492) (Barton & Roberts 2004, 352) suggesting activity on the site is a somewhat later, but still broadly contemporary with pit [113] and can be used to shed light on the human context of the latter. At Three Holes Cave an *in situ* late Mesolithic occupation layer was identified outside the entrance to the cave (Roberts 1996, 168). It comprised a layer 0.2-0.3m deep from which a range of Mesolithic flint tools and debitage were recovered together with a faunal assemblage and 32 perforated or modified marine shells. The lithic assemblage was composed of beach-derived flint that had been intensively worked to produce small bladelets, predominantly consisting of scalene triangles and narrow rods, which were similar to those of assemblages from sites on Dartmoor such as Gidleigh Common and Postbridge (Roberts 1996, 201). Other lithic finds included a tranchet axe-sharpening flake and a sandstone beach pebble rubber. The shell assemblage was composed of periwinkles with single perforations and cowries with double perforations, making up a group of such size and rarity that it can only be compared with that from Culverwell (Isle of Portland). The faunal assemblage is one of the few that can be unequivocally associated with Mesolithic radiocarbon dates and is made up of red and roe deer and wild pig. The bones, which may represent only single animals, are fragmented and burnt, showing occasional cut-marks from stone tools. It is suggested that the site represents a temporary occupation mid-way between Dartmoor and the coast that may have been seasonally occupied by small Mesolithic groups with larger, residential communities based in the richer and more ecologically diverse estuarine wetlands and coastal habitats (Barton & Roberts 2004, 355). This model has recently been challenged, as stable carbon and nitrogen isotope analysis of human and dog remains has identified an apparent lack of marine protein components in samples from inland sites. This would seem to argue against regular movement between the coast and the interior, but is based on a very small data set (Shulting 2010, 14).

Two speculative questions are raised by pit [113]. Firstly, is it an isolated feature or could it be part of an alignment? Secondly, could its presence have had any connection to the later Neolithic features at the site? Two Mesolithic pit alignments have been identified elsewhere (see above) and others may exist associated with later prehistoric sites at Thornborough and Bryn Celli Ddu (Murray 2009, 24). In all these cases the pits form part of an alignment rather than existing in isolation or as a scattered group. The Little Dartmouth example lies adjacent to the southern edge of an excavated area that was only 10m across. It is therefore eminently possible that further pits could still exist to the north of the site, the area to the south having been removed during previous building works. The question of whether a Mesolithic feature could influence the location of later activity is a subject of much debate, particularly in the context of the post-pits at Stonehenge. Logic would dictate that the significant period of time separating the two phase of activity ensure that their sharing a common location is a matter of chance, but the evidence from Warren Field, of pits re-cut across millennia, demonstrates that this need not be the case.

In terms of the late Neolithic and early Bronze Age occupation at Little Dartmouth, the apparently random scatter of features identified within what was a fairly limited area of excavation makes it difficult to draw any concrete conclusions. It is, however, a fair reflection of the wider picture for this period, as evidence for settlement at this time is usually insubstantial, with no clear demarcation between what we might term domestic and ceremonial spheres of activity (see Pollard & Healy 2007, 80-2).

The two axe roughouts are of clear and immediate interest. As discussed in Appendix 6, axe ‘factories’ have proved notoriously difficult to identify in the South West. Axe production techniques – pecking, grinding and polishing – leave little identifiable debitage, and if rounded beach pebbles were sought out and adapted for use, there need be no associated quarrying activity. As a result, most south-western axe groups have tentatively been assigned to the geologically diverse Mounts Bay area of Cornwall. The presence of roughouts at Little Dartmouth, derived from the rock of the nearby cliffs, strongly suggests that some axes were produced here, or in the immediate vicinity, during the Neolithic. The presence of an axe ‘factory’ can only enhance the social and ritual significance of this place. This work, together with ongoing work in the Mounts Bay area (R. Taylor *pers. comm.*) have identified the first axe production sites in the South West, and the first nationally since 1968.

The small pit containing Beaker pottery at Little Dartmouth has parallels elsewhere in Devon and Cornwall (see Jones & Quinnell 2006; Quinnell 2003), and falls neatly into an identified late Neolithic and early Bronze Age tradition of structured deposition in shallow pits. Open-topped, shallow and rapidly infilled, such pits appear to be dug specifically for the burial of selected material, including pottery and burnt material/charcoal (Pollard & Healy 2007, 82; Thomas 1999). Devon examples have been excavated at Castle Hill, Feniton (Butterworth 1999), Topsham (Smith 1975), Bray valley, Brayford and Westward Ho!, Northam (Quinnell 2003).

The small pit group at Mare Lane, Beer, was, like Little Dartmouth, a coastal site on a cliff-top location overlooking the sea. This site was initially excavated to determine whether there were any subsoil features associated with a marked surface concentration of retouched tools. An area of *c.*750m<sup>2</sup> was machine-stripped to reveal one large and three smaller pits. All the pits contained sherds of Beaker pottery and flint debitage, while two of the smaller pits were conjoined and contained four scrapers and two arrowheads. The larger Beaker-period pit contained an unusual group of lithic finds and a substantial amount of charcoal over which a cairn had been constructed (Tingle 1998, 71). This latter example bore many of the features associated with the cairns and flint rings of Broad Down, a group of monuments sited on a greensand spur (Tingle 1998, 87).

Hollow [186] at Little Dartmouth, with its four constituent fills, clearly extended beyond the excavated area, and produced a substantial proportion of the total finds assemblage from the site. It may initially have been a natural feature in which cultural material accumulated, but was subsequently sealed by later colluviation. Analysis of the distribution of material within each context reveals that *in situ* reduction of flint and chert was taking place, but that at the same time there is evidence for the disposal of certain artefacts, notably arrowheads and scrapers, that were made from non-local flint and may have been brought to the site as finished pieces.

The closest local analogy for this feature can be found 20 miles to the north at Twinyeo Farm, Kingsteignton, where a shallow (*c.*0.12m) natural hollow 23×8m across was excavated in 2007. It contained a single fill, a charcoal-rich silty clay similar to context (181) that contained some worked flint and three sherds of late Neolithic/early Bronze Age pottery (Robinson & Evans 2008).

Further afield, a recent discovery and close parallel for [186] appears to be the midden material excavated outside the eastern entrance of Durrington Walls, which was deposited before the construction of the enclosure (Chan 2006, 5). Midden deposits are known from sites in Scotland but are rare in southern England, probably due to later episodes of ploughing (Woodward 2002, 1040), the Durrington example being preserved beneath a layer of colluvium. This midden deposit measured 20 metres by 30 metres, within which three concentrations of material were observed next to three houses and bounded by a stake fence. These concentrations contained substantial amounts of flint-working debris, pottery and, thanks to the alkaline soils, bone –

something sadly lacking at Little Dartmouth. The bone at Durrington was dominated by that of young pigs that appeared to have been consumed in “wasteful feasting episodes” (Chan 2006, 5). The worked stone assemblage at Durrington is very similar to that from Little Dartmouth, revealing a complete *chaîne opératoire* of lithic reduction, from primary core trimming to the disposal of tools, utilising local materials in which the formal retouched tool assemblage is dominated by scrapers and arrowheads, and, in particular, oblique arrowheads. Some of the examples were unusually large, up to 5cms in length and well made, closely resembling the arrowhead from (123). The association between oblique arrowheads and henges has been noted during previous excavations at Durrington and was confirmed during this more recent work (Chan 2006, 4; Wainwright & Longworth 1971). In these excavations, the presence of the arrowheads in the midden was explained by some intriguing interpretations of the faunal analysis. Several of the bones of domesticated pigs were found to include intrusive pieces of flint, one of which could be positively identified as the tip of an arrowhead. Slaughtering a domestic animal with a bow and arrow may appear bizarre but it seemed that several of the animals had been shot in their limbs, implying that rather than being dispatched at close range, the animal had been shot at from a distance as if they were being ritually hunted (Chan 2006, 5). As no bone survived at Little Dartmouth it is impossible to speculate if similar activities were taking place, but it remains an interesting possibility.

The lithic finds from hollow [186] included large numbers of locally derived flint cores, many of which were beach pebbles that had only had a single flake removed before being discarded. This could be interpreted as the testing and rejection of potential raw materials except that two of the primary flakes thus removed were then made into scrapers. Rather than a purely technological process, this appears more to resemble the extravagantly wasteful consumption of flint observed at the Durrington midden (Chan 2006, 4). The most notable difference between the two sites are their dates. The settlement at Durrington has been dated to 2600-2500 BC (Parker Pearson 2007, 21) while fill (182) was radiocarbon dated to 2040-1870 cal BC (93.7%), which would make it a contemporary of the henge at Durrington Walls rather than the preceding settlement.

The presence of a layer dominated by angular quartz gravels in hollow [186], and the occurrence of quartz on site, is at odds with the general lack of quartz-veining or free quartz in the local bedrock. Quartz as a material seems to have been highly significant for the Bronze Age inhabitants of the South West, and was often incorporated into barrows and other monuments, with good examples from Cornwall (e.g. see Tilley 1995, 46) and Exmoor (Quinnell 1997; Grinsell 1970, 124). Turning to other monuments, quartz blocks make up 61 of the 161 stones comprising White Ladder stone row near Burcombe on Exmoor (Quinnell 1997, 17; Riley & Wilson-North 2001, 37), and a quartz ‘pavement’ was excavated at The Hurlers on Bodmin (see below). Quartz, like the other lithic materials encountered, was deliberately brought in and deposited on site, and was clearly accorded a strong cultural significance.

More generally, the lithic assemblage is highly unusual, with a high proportion of flint and chert cores recovered in relation to the number of flakes and retouched tools found. At Little Dartmouth 82 cores and 86 core fragments were recovered, from a total of 1,577 pieces of utilised stone (10% total). This can be compared to the figures for Carn Brea in Cornwall, where 86 cores formed part of an assemblage of 22,549 utilised stones/stone fragments (<1% total).

This leads onto a further intriguing possibility. Archaeological investigations at Little Dartmouth were initiated because of the oval enclosure identified on the aerial photographs. If this feature could be demonstrated to be real, it would occupy an area of approximately two hectares just below the crest of a low hill overlooking Start Bay. A circular enclosure of such dimensions, associated with Beaker pits and a flint tool assemblage in which scrapers and finely-made oblique arrowheads predominate, together with a possible association with a Mesolithic pit (as at Stonehenge and possibly also Thornborough) hints at the presence of a



significant ceremonial complex. A comparison can also be drawn with the stone circles at The Hurlers, Cornwall (Nowakowski *et al.* 2009; Radford 1935; 1938), where a contemporary gravel surface incorporating quartz crystals was found within the central circle. In addition, the name for rocks off the coast at Little Dartmouth – the Dancing Beggars (Figure 37) – falls neatly into a class of folkloric names often ascribed to stone circles. The Hurlers and the Merry Maidens (also known as the Dawn’s Men from *Dans Maen*, the Stone Dance), both in Cornwall, are stone circles that bear similar folkloric place-names. This would all suggest the farm at Little Dartmouth sits astride a (now vanished) stone circle or hengiform monument. This notwithstanding, the unusual suite of finds and features at Little Dartmouth Farm marks it out as a site of regional if not national importance.



Figure 37: The Dancing Beggars. Viewed from the north-west, looking south-east.

It seems ironic that a site which has produced so much unexpected and extraordinary information should fail to throw any significant light on the landscape feature that attracted attention to it at the outset. The apparent existence of part of an oval enclosure is quite convincingly visible on the air photograph of 1946 but failed to appear in the limited topsoil stripping in Area C. The fact that it was not observed does not mean it is not, or was never, present, but only further fieldwork can resolve this issue.

The prehistoric remains that were found at Little Dartmouth are extraordinary. Pit [113] is unique in the South West, and the only comparable examples in England lie beneath the car park at Stonehenge, although those examples were older, smaller and lacked the finds of Little Dartmouth. The atypical suite of finds from pit [113] implies comparable (if perhaps rather smaller) Mesolithic features could easily be misidentified. This feature can be added to the handful of known Mesolithic features in the country, demonstrating that, contrary to expectations, such coastal finds will not always be made on the uplifting edge of the northern North Sea littoral. In addition, the charcoal assemblage from the feature is of regional significance.

Although it was only possible to sample part of it, the midden deposit [186] produced the densest concentration of finds from the entire site. This assemblage produced evidence not only of intensive stone-working but also included a small group of possibly imported artefacts, all of which provide some evidence for extravagant consumption. The extremely high proportion of flint or chert cores and core fragments in relation to the number of flakes and retouched tools also points to unusual use or depositional factors. A midden deposit with a similar composition was recently excavated outside the earthwork at Durrington Walls, and it is striking that both pit [113] and the midden have their closest parallels in England within a few kilometres of one another in the environs of Stonehenge. Indeed, the oval enclosure identified in the aerial photographs may well be a henge itself, although further work would be required to confirm such a bold statement.

The discovery of two possible axe roughouts within stratified contexts adds a further dimension to the site. The petrological analysis has confirmed that these artefacts did indeed come from the cliffs above the Dancing Beggars, strongly suggesting the presence of an axe production site at or near the site. If this could be confirmed, this would represent a significant discovery of national importance, and would underscore the social and ritual significance of this remarkable site during the Neolithic and early Bronze Age.

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Townstall Tithe Map 1841  
Townstall Tithe Apportionment 1840  
Documents: QS/21/1690/99  
                  231 M/F 5  
                  231 M/F 6  
                  DD61461  
                  59/7/4/15/1

Ordnance Survey Second Edition map at 1:2500, 1904, Devon sheet 133.4

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*DCHES:*

HER 16128, 62837  
Aerial photograph CPE/UK/1890: 10 Dec 46 58 SQDN 2066  
Aerial Photograph DAP/SS 6 (Griffith, F.M.)

*Other:*

Seale Papers: Little Dartmouth Estate map, 1798.  
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# Appendix 1

## BRIEF FOR ARCHAEOLOGICAL ASSESSMENT AND MONITORING & RECORDING

Location: Little Dartmouth, Dartmouth, TQ6 0JP

Parish: Dartmouth

District: South Hams

County: Devon

NGR: SX87644922

Planning Application no: 15/0185/08/F

Proposal: Replacement of building with workshop & garden store, replacement of cow palace and extensive landscaping

Historic Environment Service ref: Arch/dc/sh/13331

### 1. INTRODUCTION AND ARCHAEOLOGICAL BACKGROUND

1.1 This brief has been prepared by the Devon County Council Historic Environment Service (HES), at the request of Colin Humphreys of South West Archaeology, with regard to the archaeological works required as a condition of planning consent for the above works at Little Dartmouth, Dartmouth.

1.2 In accordance with PPG16 (1990) Archaeology and Planning Policy, and the Local Development Framework Policy on archaeology, consent has been granted, conditional upon a programme of archaeological work being undertaken. This condition requires that:

*'No development shall take place until the applicant has secured the implementation of a programme of archaeological work in accordance with a written scheme of investigation which has been submitted by the applicant and approved by the Local Authority.' The development shall be carried out at all times in strict accordance with the approved scheme, or such other details as may be subsequently agreed in writing by the Local Planning Authority.*

1.3 The principal objective of the programme shall be to investigate, excavate and record any surviving below-ground archaeological artefacts and deposits across the area affected by the proposed development.

1.4 This proposed development consists of replacing a "cow palace" with new agricultural building, two barns to be replaced by a farm workshop and a proposed garden shed. In addition the roof of the grain store will be removed and various landscaping will be carried out. This includes landscaping to the north of the new agricultural building, as well as landscaping to the south and west of the settlement to create a new drive.

Documentary evidence for settlement at Little Dartmouth dates back to the early medieval period; the site of the settlement of Little Dartmouth was included in the manor of Stoke Fleming in the Domesday survey. In addition, cropmark evidence from aerial photographs shows a (probably prehistoric) enclosure located just to the north of the proposed new agricultural building.

For these reasons, assessment and archaeological monitoring and recording is required for this site. This will consist of:

- Assessment of the areas affected by this development and the rest of the settlement to put this in context.
- Archaeological monitoring and recording in the area affected by landscaping to the north of the new agricultural building, the landscaping for the new farm workshop and garden shed buildings (only for groundworks where they impact any potential archaeology), as well as the new drive.

1.5 This Brief covers the application area as defined in the plans submitted in support of this application.

### 2. WRITTEN SCHEME OF INVESTIGATION

This document sets out the scope of the works required to record the extent and character of any surviving archaeological deposits within the application area and will form the basis of the *Written Scheme of Investigation* (WSI) to be prepared by the archaeological consultant and approved by the HES and the Local Planning Authority (LPA).

The WSI will clearly identify areas that will be subject to groundworks in this development, and which of these areas will be subject to archaeological monitoring and recording, as well as areas that are archaeologically sterile. These will be clearly marked on a plan.

### 3. PROGRAMME OF ARCHAEOLOGICAL WORKS

#### 3.1 *Desk-based assessment*

The programme of work shall include an element of desk-based research to place the development site into its historic and archaeological context. This work will consist of map regression based on the Ordnance Survey maps and the Tithe Map(s) and Apportionments. An examination will also be made of records and aerial photographs held by the HER. In addition, it will involve the examination of other *known* relevant cartographic, documentary and photographic sources held by the Devon Record Office, West Country Studies Library and the County Historic Environment Service. The reporting requirements for the desk-based work will be confirmed in consultation with the HES.

If a full report is prepared then this information will be presented as part of the final report along with the results of the fieldwork.

3.2 *Archaeological monitoring and recording* in the area affected by landscaping to the north of the new agricultural building, the areas affected by the landscaping for the new farm workshop and garden shed buildings and the new drive.

Topsoil removal and all groundworks across the site will be undertaken by a 360° tracked or wheeled JCB-type mechanical excavator fitted with a toothless grading bucket under the supervision and control of the site



- archaeologist to the depth of formation, the surface of *in situ* subsoil/weathered natural or archaeological deposits whichever is highest in the stratigraphic sequence. Should archaeological deposits be exposed machining will cease in that area to allow the site archaeologist to investigate the exposed deposits.
- 3.3 Archaeological features will be cleaned and excavated by hand, investigated and fully recorded by context as per the Institute of Field Archaeologist *Standards and Guidance for an Archaeological Watching Brief* (1994 - revised 2001). All features shall be recorded in plan and section at a minimum scale of 1:20, larger where necessary.  
As a minimum:  
i) small discrete features will be fully excavated;  
ii) larger discrete features will be half-sectioned (50% excavated); and  
iii) long linear features will be excavated to sample 20% of their length - with investigative excavations distributed along the exposed length of any such feature.  
Should the above % excavation not yield sufficient information to allow the form and function of archaeological features/deposits to be determined full excavation of such features/deposits will be required. Additional excavation may also be required for the taking of palaeoenvironmental samples and recovery of artefacts.  
Any variation of the above will be undertaken in agreement with the HES.
- 3.4 Spoil will be examined for the recovery of artefacts.
- 3.5 Should deposits be exposed that contain palaeoenvironmental or datable elements appropriate sampling strategies will be initiated. The project will be organised so that specialist consultants who might be required to conserve or report on finds or advise or report on other aspects of the investigation (e.g. palaeoenvironmental analysis) can be called upon and undertake assessment and analysis of such deposits - if required.
- 3.6 In the event of particularly significant discoveries, the HES will be informed and a site meeting between the consultant, the HES and the client/applicant to determine the appropriate mitigation.
- 3.7 The photographic record shall be made in B/W print supplemented by digital or colour transparency. If digital imagery is to be the sole photographic record then suitably archivable prints must be made of the digital images by a photographic laboratory. Laser or inkjet prints of digital images, while acceptable for inclusion in the report, are not an acceptable medium for archives. The drawn and written record will be on an appropriately archivable medium.
- 3.8 Human remains must initially be left in-situ, covered and protected. Removal can only take place under appropriate Ministry of Justice and environmental health regulations. Such removal must be in compliance with the relevant primary legislation.
- 3.9 Should gold or silver artefacts be exposed, these will be removed to a safe place and reported to the local coroner according to the procedures relating to the Treasure Act 1996. Where removal cannot be effected on the same working day as the discovery suitable security measures will be taken to protect the finds from theft.
- 4. MONITORING**
- 4.1 The archaeological consultant shall agree monitoring arrangements with the HES. A copy of the draft assessment report will be made available to the HES before commencement of any fieldwork. If necessary the WSI will be revised in light of information derived in the assessment.
- 4.2 The archaeological contractor will give two weeks notice of commencement of fieldwork, unless a shorter period is agreed, as well as regular progress reports.  
*The HES shall inspect the site and monitor the fieldwork being undertaken by the archaeological contractor. This monitoring will include examination of excavated areas as well as the primary site record (context sheets, drawings, sample record sheets etc). No areas subject to archaeological work will be regarded as completed and available for construction without such monitoring and upon confirmation from the HES that the agreed works in those areas have been satisfactorily completed. The WSI will set out the monitoring stages and the archaeological contractor will give the HES adequate notice of such stages during the course of the archaeological fieldwork.*
- 4.3 Details will be agreed of any monitoring points where decisions on options within the programme are to be made.
- 4.4 Monitoring will continue until the deposition of the site archive and finds, and the satisfactory completion of an OASIS report - see 5.5 below.
- 5. REPORTING**
- 5.1 The reporting requirements will be confirmed with the HES on completion of the site work. In the event that few or no archaeological remains are exposed, only minimal reporting would be required. The results may be presented in the form of a short entry to the Historic Environment Record (HER), sent to the HES either digitally or as a hard-copy. If archaeological deposits or remains are exposed during the course of the works, then more detailed reporting would be required, in the form of an illustrated summary report submitted both in hard-copy and digitally and, if merited, wider publication.
- 5.2 The report shall be prepared collating the written, graphic, visible and recorded information outlined above. The report shall include the results of the desk-based work, along with plans of exposed archaeological features, including their location, description of deposits and artefacts together with their interpretation. It is recommended that a draft report is submitted to the HES for comment prior to its formal submission to the Local Planning Authority. A copy of this brief shall be included in the report.
- 5.3 The HES would normally expect to receive the report within three months of completion of fieldwork - dependant upon the provision of specialist reports, radiocarbon dating results etc the production of which may exceed this period. If a substantial delay is anticipated then an interim report will be produced.

- 5.4 On completion of the report, in addition to copies required by the Client, hard copies of the report shall be supplied to the HES on the understanding that one of these copies will be deposited for public reference in the HER. In addition to the hard copies of the report, one copy shall be provided to the County Historic Environment Service in digital format - in a format to be agreed in advance with the HES - on the understanding that a digital version of the report may in future be made available to researchers via a web-based version of the Historic Environment Record.
- 5.5 The archaeological consultant shall complete an online OASIS (*Online AccesS to the Index of archaeological investigationS*) form in respect of the archaeological work. This will include a digital version of the report. The report or short entry to the Historic Environment Record will also include the OASIS ID number.
- 5.6 *Publication*  
Should particularly significant archaeological remains, finds and/or deposits be encountered, then these, because of their importance, are likely to merit wider publication in line with government planning guidance (PPG16). If such remains are encountered, the publication requirements – including any further analysis that may be necessary – will be confirmed with the HES.
- 6. PERSONNEL**
- 6.1 The work shall be carried out by a recognised archaeological consultant, agreed with the HES. Staff must be suitably qualified and experienced for their project roles. All work should be carried out under the control of a Member of the Institute of Field Archaeologists (MIFA), or by a person of similar standing. The Written Scheme of Investigation will contain details of key project staff and specialists who may contribute during the course of the works - excavation and post-excavation.
- 6.2 Health and Safety matters, including site security, are matters for the consultant. However, adherence to all relevant regulations will be required.
- 6.3 The work shall be carried out in accordance with *IFA Standards and Guidance for Archaeological Watching Brief (1994)*, as amended (*2001*).
- 7. DEPOSITION OF ARCHIVE AND FINDS**
- 7.1 The archaeological consultant shall contact the museum that will receive the site archive to obtain an accession number and agree conditions for deposition. *The accession number will be quoted in the Written Scheme of Investigation*, and within the final report or the short entry to the Historic Environment Record.
- 7.2 Archaeological finds resulting from the investigation (which are the property of the landowner), should be deposited with the appropriate museum - in a format to be agreed with the museum, and within a timetable to be agreed with the HES. The museum's guidelines for the deposition of archives for long-term storage should be adhered to. If ownership of all or any of the finds is to remain with the landowner, provision and agreement must be made for the time-limited retention of the material and its full analysis and recording, by appropriate specialists.
- 7.3 The artefact discard policy must be set out in the Written Scheme of Investigation.
- 7.4 The condition placed upon this development will not be regarded as discharged until the report has been produced and submitted to the HES and the LPA, the site archive deposited and the OASIS form submitted.
- 8. CONTACT NAME AND ADDRESS**  
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20<sup>th</sup> May 2008

## Appendix 2

### WRITTEN SCHEME OF INVESTIGATION FOR MONITORING AND RECORDING AT LITTLE DARTMOUTH, DARTMOUTH, DEVON.

**Location:** Little Dartmouth  
**Parish:** Dartmouth  
**District:** South Hams  
**County:** Devon  
**NGR:** SX87644922  
**Planning Application no:** 15/0185/08/F  
**Proposal:** Replacement of building with workshop & garden store, replacement of cow palace and extensive landscaping.  
**HES ref:** Arch/dc/sh/13331

#### 1.0 INTRODUCTION

1.1 This document forms a Written Scheme of Investigation (WSI) and details the proposed scheme of historical building recording and archaeological monitoring and recording at Little Dartmouth, Dartmouth, Devon. It has been drawn up by South West Archaeology (SWARCH) at the request of Amanda Burden of Luscombe Maye for Mr and Mrs E. Benthal (the Client), with regard to the archaeological works required as a condition of planning consent for the above works at Little Dartmouth Farm, Dartmouth. The WSI and the schedule of work it proposes conforms to a brief as supplied by the Devon County Historic Environment Service (DCHES). In accordance with PPG16 (1990) Archaeology and Planning Policy and the Local Development Framework Policy on archaeology, consent has been granted, conditional upon a programme of archaeological work being undertaken. This condition requires that:

*'No development shall take place until the applicant has secured the implementation of a programme of archaeological work in accordance with a written scheme of investigation which has been submitted by the applicant and approved by the Local Authority.'* The development shall be carried out at all times in strict accordance with the approved scheme, or such other details as may be subsequently agreed in writing by the Local Planning Authority.

1.2 The work covered by this WSI consists of:

1.2.1 Desk-based research to place the development site in its historic and archaeological context.

1.2.2 Monitoring groundworks associated with the development to allow any exposed archaeological deposits to be investigated and recorded;

#### 2.0 ARCHAEOLOGICAL BACKGROUND

2.1 Documentary evidence for settlement at Little Dartmouth dates back to the early medieval period; the site of the settlement of Little Dartmouth was included in the manor of Stoke Fleming in the Domesday survey. In addition, cropmark evidence from aerial photographs shows a (probably prehistoric) enclosure located just to the north of the proposed new agricultural building.

#### 3.0 AIMS

3.1 The principal objectives of the work will be to:

3.1.1 Establish the historic context and development of the site.

3.1.2 To observe, investigate, excavate and record any surviving below-ground archaeological artefacts and deposits in areas affected by groundworks associated with the development.

3.1.3 Analyse and report on the results of the project as appropriate.

#### 4.0 METHOD

4.1 A desktop assessment of the known history and archaeology of the site will be undertaken to inform the recording and monitoring work. This will collate cartographic and documentary information held in the Devon Record Office, and the West Country Studies Library as well as records and photographs held on the Devon Historic Environment Service Historic Environment Record (HER). If necessary the WSI for further archaeological works will be revised in light of information derived in this assessment.

4.2 Monitoring of groundworks will take place in areas of surviving below-ground archaeological deposits across the area affected by the proposed development (see attached plan). This is likely to be the area affected by landscaping to the north of the new agricultural building, the areas affected by the landscaping for the new farm workshop and garden shed buildings and the new drive. A revised plan of the specific areas to be monitored, which includes any known archaeologically sterile areas may be produced in the light of the findings of the desk-based research and will be agreed with DCHES.

4.3 Health and Safety requirements will be observed at all times by any archaeological staff working on site.

4.3.1 Appropriate PPE will be employed at all times.

4.3.2 The site archaeologist will undertake any site safety induction course provided by the Client.

4.3.3 Should the sides of any trenches, or any built structures be deemed unstable, by virtue of depth or composition, trenches or built structures will be adequately shored, shuttered or stepped to allow safe access. The provision of such measures will be the responsibility of the client.

4.4 Archaeological monitoring and recording of groundworks:

The archaeological work deemed necessary will be carried out in accordance with the Institute of Field Archaeologists (IFA) *Standard and Guidance for an Archaeological Excavation (revised 2001)* and the *Standard and Guidance for an Archaeological Watching Brief (revised 2001)*. All groundworks in selected

- areas including hand and machine excavation, removal of surfaces, level reduction and trenching are to be carried out under close archaeological supervision.
- 4.4.1 Machine excavation will be undertaken using a 360° tracked or wheeled JCB-type mechanical excavator fitted with a toothless, grading bucket.
- 4.4.2 Excavation will proceed to the surface of archaeological deposits, the surface of *in situ* weathered subsoil or to a depth that will not be affected by the development, whichever is highest in the stratigraphic sequence. Where necessary, to clarify features and soil marks, the area will be cleaned by hand. Should archaeological or palaeoenvironmental remains be exposed, machining will cease in that area to allow the site archaeologist to investigate, record and sample such deposits. The examination will be undertaken before the exposed level is affected by any further construction work and before plant and machinery is driven over it and sufficient time should be allowed in the construction programme to allow the site archaeologist to undertake these investigations. Any archaeological features discovered will then be cleaned, excavated by hand and recorded to IFA guidelines and as per below.
- 4.4.3 In exceptional circumstances where materials of a particularly compact nature are encountered, these may be removed with a toothed bucket, subject to agreement with archaeological staff on site.
- 4.4.4 If unanticipated complex or extraordinary archaeological deposits or features are exposed which are of sufficient significance to merit an alternative approach, such as contingency excavation or physical preservation, the need for any amendment to this WSI will be discussed with the client and DCHES.
- 4.4.5 Human remains must be left *in-situ*, covered and protected. Removal can only take place under appropriate Ministry of Justice and environmental health regulations. Such removal must be in compliance with the relevant primary legislation.
- 4.4.6 Should gold or silver artefacts be exposed, these will be removed to a safe place and reported to the local coroner according to the procedures relating to the Treasure Act 1996. Where removal cannot be effected on the same working day as the discovery suitable security measures will be taken to protect the finds from theft.
- 4.4.7 Spoil will be examined for the recovery of artefacts.
- 4.5 Archaeological recording will be based on IFA guidelines and those advised by DCHES and will consist of:
- 4.5.1 Survey and location of archaeological deposits and features.
- 4.5.2 Labelling and bagging of finds on site. Post-1800 unstratified pottery may be discarded on site after a representative sample has been retained.
- 4.5.3 Should suitable deposits be exposed that contain palaeoenvironmental or datable elements, appropriate sampling strategies will be initiated. The project will be organised so that specialist consultants who might be required to conserve or report on other aspects of the investigation (e.g. palaeoenvironmental analysis) can be called upon and undertake assessment and analysis of such deposits.
- 4.5.4 If archaeological features are exposed, then as a *minimum*:
- i. Small discrete features will be fully excavated.
  - ii. Larger discrete features will be half-sectioned (50% excavated)
  - iii. Long linear features will be excavated to sample 20% of their length - with investigative excavations distributed along the exposed length of any such feature.
- Should the above % excavation not yield sufficient information to allow the form and function of archaeological features/deposits to be determined full excavation of such features/deposits will be required. Additional excavation may also be required for the taking of palaeoenvironmental samples and recovery of artefacts.
- 4.5.5 Records will consist of standardised single context recording sheets. All features will be recorded in plan and section at a minimum scale of 1:20, larger where necessary. The drawn and written record will be on an appropriately archivable medium. The photographic record will be made digitally supplemented by B/W print where appropriate. If digital imagery is to be the sole photographic record then suitably archivable prints must be made of the digital images by a photographic laboratory.
- 4.6 SWARCH will agree monitoring arrangements with DCHES and give two weeks notice, unless a shorter period is agreed, of commencement of the fieldwork.
- 4.6.1 The DCHES shall inspect the site and monitor the fieldwork being undertaken by the archaeological contractor. This monitoring will include examination of excavated areas as well as the primary site record (context sheets, drawings, sample record sheets etc). No areas subject to archaeological work will be regarded as completed and available for construction without such monitoring and upon confirmation from the DCHES that the agreed works in those areas have been satisfactorily completed.
- 4.6.2 The monitoring stages agreed with DCHES are relevant points, normally when trenches /excavations are visible and/or when significant features/finds are uncovered, SWARCH will inform the DCHES of such stages during the course of the archaeological fieldwork.
- 4.6.3 Details will be agreed of any monitoring points where decisions on options within the programme are to be made. Monitoring will continue until the deposition of the site archive and finds and the completion of an OASIS record (see 5.7 below).

## 5.0 ARCHIVE AND REPORT



- 5.1 An ordered and integrated site archive will be prepared in accordance with *The Management of Archaeological Projects* (English Heritage, 1991 2nd edition) upon completion of the entire project. This will include relevant correspondence together with context sheets, field drawings, and environmental, artefactual and photographic records. The archive will be deposited with the Plymouth City Museum under accession number AR.2008.28.
- 5.2 Archaeological finds resulting from the investigation (which are the property of the landowner), will also be deposited with the above museum (under the accession number above) in a format to be agreed with the museum, and within a timetable to be agreed with the HES. The museum's guidelines for the deposition of archives for long-term storage will be adhered to and any sampling procedures will be carried out prior to deposition and in consultation with the museum. If ownership of all or any of the finds is to remain with the landowner, provision and agreement must be made for the time-limited retention of the material and its full analysis and recording, by appropriate specialists.
- 5.3 A copy of the draft desk-based assessment report will be made available to the HES before commencement of any fieldwork.
- 5.4 If significant archaeological deposits are exposed by these works an illustrated summary report will be produced as soon as possible following completion of fieldwork, and submitted to Devon County Historic Environment Service and the Client. If few or no archaeological deposits are exposed then, with advance agreement with the DCHES, the submission of a short HER entry will be acceptable. If a report is produced, this will include the following elements:
- 5.4.1 A copy of the DCCCHES brief;
  - 5.4.2 Results of the desk-based study;
  - 5.4.3 Relevant historic maps, plans and images;
  - 5.4.4 A location plan and overall site plan showing the area subject to the watching brief as well as the distribution of any archaeological features;
  - 5.4.5 Plans and sections of exposed features or deposits at a relevant scale;
  - 5.4.6 A description of any remains and deposits identified including an interpretation of their character and significance;
  - 5.4.7 An assessment of significant artefacts, environmental and scientific samples together with recommendations for further analysis;
  - 5.4.8 Any specialist reports commissioned;
  - 5.4.9 Discussion of the archaeological deposits encountered and their context.
- 5.5 DCCCHES will receive the report within three months of completion of fieldwork, dependant on the provision of specialist reports, radiocarbon dating results etc, the production of which may exceed this period. If a substantial delay is anticipated then an interim report will be produced. The report will be supplied to the HES on the understanding that one of these copies will be deposited for public reference in the HER. In addition to the hard copies of the report, one copy will be provided to the HES in digital format, in a format to be agreed in advance with the HES, on the understanding that it may in future be made available to researchers via a web-based version of the HER.
- 5.6 Should they merit it, the results of these investigations will be published in an appropriate academic journal. If required, after the production of a summary report, a programme and timetable for this will be submitted to Devon County Historic Environment Service and the Client for approval.
- 5.7 A copy of the report detailing the results of these investigations will be submitted to the OASIS (*Online Access to the Index of archaeological Investigations*) database under ref. southwes 1-42958.
- 6.0 **PERSONNEL**  
The project will be managed by Colin Humphreys of SWARCH. Relevant staff of the DCHES will be consulted as appropriate. Where necessary appropriate specialist advice will be sought, (see list of consultant specialists in Appendix 1 below).

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#### List of specialists

##### **Building recording**

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##### **Conservation**

*Richard and Helena Jaeschke*, 2 Bydown Cottages, Swimbridge, Barnstaple EX32 0QD, Tel: 01271 830891

##### **Curatorial**

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##### **Geophysical Survey**

*Ross Dean*, South West Archaeology Limited.

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##### **Human Bones**

*Seana Cummins*, South West Archaeology Limited.

*Louise Lou*, Head of Heritage Burial Services, Oxford Archaeology, Janus House, Osney Mead, Oxford, OX2 OES  
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**Lithics**

*Martin Tingle*, Higher Brownston, Brownston, Modbury, Devon, PL21 OSQ, martin@mtingle.freereserve.co.uk

**Metallurgy**

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**Palaeoenvironmental/Organic**

*Vanessa Straker*, English Heritage SW, 29 Queen Square, Bristol BS1 4ND, Tel: 0117 9287961  
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*Dana Challinor* (wood identification), Lavender Cottage, Little Lane, Aynho, Oxfordshire OX17 3BJ  
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*Julie Jones* (plant macro-fossils), juliedjones@blueyonder.co.uk

*Heather Tinsley* (pollen analysis), heathertinsley@aol.com

*Ralph Fyffe* (pollen analysis) University of Plymouth

**Pottery**

*John Allen*, Exeter Archaeology, Bradninch Place, Gandy Street, Exeter EX4 3LS, Tel: 01392 665918

*Henrietta Quinnell*, 9 Thornton Hill, Exeter EX4 4NN, Tel: 01392 433214

**Timber Conservation**

*Liz Goodman*, Specialist Services, Conservation Museum of London, 150 London Wall, London, EC2Y 5HN  
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## Appendix 3

### List of Contexts

Context	Description	Depth
(100)	<i>Topsoil</i> Mid- to dark brown clay silt loam. Common small sub-rounded stones <30mm in diameter, with a pronounced band of stony material near the base c.0.1m thick.	0.6m
[101]	<i>Cut</i> Animal burrow.	
(102)	<i>Fill</i> Animal burrow.	
[103]	<i>Cut</i> Pit, approximately oval, 0.28×0.36m across and 0.16m deep. Contains (104).	0.16m
(104)	<i>Fill</i> Fill of pit [103]. Greyish-brown clay silt containing occasional shale inclusions.	0.16m
[105]	<i>Cut</i> Pit Irregular oval, 0.72m NW- SE, 0.45m NE. Contains (106).	0.25m
(106)	<i>Fill</i> Fill of pit [105]. Dense and compact pinkish-brown silt-clay containing frequent shale inclusions.	0.25m
[107]	<i>Cut</i> Linear, c.0.6m wide. Steep sides and concave base. Crosses site north-south, parallel to group {189}. Cuts (173), contains (108), overlain by (100). Medieval or post-medieval field division?	0.6m
(108)	<i>Fill</i> Fill of linear [107]. Mid-brown silty clay with frequent shale inclusions.	0.6m
[109]	<i>Cut</i> Pit, irregular shape with sides ranging from vertical to 45 degrees, that ranged in width from 0.6 to 1.3m in length. Contains (110).	0.3m
(110)	<i>Fill</i> Fill of pit [109]. Pinkish-brown silt-clay containing frequent shale inclusions.	
[111]	<i>Cut</i> Animal burrow or root disturbance.	
(112)	<i>Fill</i> Animal burrow or root disturbance.	
[113]	<i>Cut</i> Pit, c.3.8m in diameter by 1.8m deep. Steep, often vertical sides and flat base, pronounced step 0.5m from base of feature on west side. Contains nine fills: (114), (152), (153), (154), (156), (157), (165), (166), (167) and two re-cuts [187] and [188]. Cut by [107]. Mesolithic pit with multiple phases of reuse.	1.8m
(114)	<i>Fill</i> Fill of pit [113], re-cut [188]. Friable mid- greyish-brown clay silt. Overlies (153), cut by [107].	0.65m
115	NOT USED	
116	NOT USED	
[117]	<i>Cut</i> Pit, irregular sub-lanceolate with a concave profile with shallow linear extensions 5.3m in length, 1.0m width. Contains (118) and (152).	0.40m
(118)	<i>Fill</i> Upper fill of [117]. Greyish-brown silty clay containing occasional shale and charcoal inclusions.	0.40m
119	NOT USED	
120	NOT USED	
121	NOT USED – part of [117].	
122	NOT USED – part of (118).	
(123)	<i>Fill</i> Upper fill of hollow [186]. Firm greyish-brown silty clay containing occasional charcoal fragments and small, <20mm, sub-rounded shale inclusions. Overlies (181) and (185), overlain by (173), same as (176). Rapidly deposited colluvium (possibly deliberate?).	0.22m
[124]	<i>Cut</i> Linear, variable width and depth, c.0.35-0.85m wide, surviving length 6.4m. Orientated north-south. "V"-shaped profile. Cuts (171), contains (125), cut by [126].	0.15-0.48m
(125)	<i>Fill</i> Fill of linear [124]. Firm compact mid-brown clay silt. Cut by [126].	0.15-0.48m
[126]	<i>Cut</i> Linear, variable width and depth, c.0.5-1.05m wide, surviving length 2.2m. Orientated north-south. Cuts (125), contains (127).	0.15m
(127)	<i>Fill</i> Fill of linear [126]. Compact mid-brown silt clay containing occasional shale inclusions and angular quartz fragments.	0.15m
128	NOT USED	
129	NOT USED	
130	NOT USED	
131	NOT USED	
[132]	<i>Cut</i> Pit, c.0.7m in diameter, broad concave profile. Contains (133) and (155).	0.40m
(133)	<i>Fill</i> Upper fill of pit [132]. Humic dark grey silty clay containing occasional shale inclusions and small sub-angular quartz fragments.	0.15m
[134]	<i>Cut</i> Linear, c.5.4m long by 0.3m wide, orientated northwest-southeast.	0.1-0.15m

		Shallow concave profile. Contains (135).	
(135)	<i>Fill</i>	Fill of linear [134]. Compact mid-brown silt clay, containing frequent shale inclusions, occasional angular stones <50mm and fibrous roots.	0.1-0.15m
(136)	<i>Layer</i>	Spread of greyish-brown silty clay containing occasional charcoal flecks and fibrous roots. Restricted to the west of hollow [186]. Overlies [133]. Same as (137)? Remnant soil?	0.01m
(137)	<i>Layer</i>	Spread of firm mid-grey silty clay. Cut by [174] and [177], overlies (143), overlain by (176) and (179). Same as (136)? Remnant soil?	0.2m
[138]	<i>Cut</i>	Linear, c.3.5m by up to 0.4m. Concave profile, shallower at each end. Orientated north-south. Contains (139). Parallel and adjacent to [140], same alignment as [177].	0.2m
(139)	<i>Fill</i>	Fill of linear (139). Mid-brown to greyish-brown silty clay, containing frequent shale inclusions, occasional sub-angular stones <50mm and fibrous roots.	0.2m
[140]	<i>Cut</i>	Linear, c.4m by up to 0.45m wide. An irregular and undulating profile, rounded northern terminal and irregular southern terminal. Orientated north-south. Contains (141). Parallel and adjacent to [138].	0.25m
(141)	<i>Fill</i>	Fill of linear [140]. Mid-brown silt clay, containing frequent shale inclusions, occasional angular stones <50mm, occasional fibrous roots and rare charcoal fragments.	0.25m
142		NOT USED	
(143)	<i>Layer</i>	Spread of firm greyish-brown clay containing occasional charcoal fragments and fibrous roots, much disturbed by animal burrows. Overlies [158]	0.02m
144		NOT USED	
(145)	<i>Layer</i>	Spread of firm friable grey silt clay with occasional small charcoal fragments covering an area of approximately 5x2m. Overlies [160] and [163].	0.03m
[146]	<i>Cut</i>	Modern feature.	
(147)	<i>Fill</i>	Modern feature	
[148]	<i>Cut</i>	Pit, approximately oval, 0.28x0.42m across. Irregular concave profile. Contains (149).	0.16m
(149)	<i>Fill</i>	Fill of pit [148]. A compact greyish-brown clay silt, containing frequent shale inclusions and occasional angular fragments of quartz.	0.16m
[150]	<i>Cut</i>	Modern feature.	
(151)	<i>Fill</i>	Modern feature.	
(152)	<i>Fill</i>	Lower fill of pit [117]. Compact orange-brown lens of clay.	0.1m
(153)	<i>Fill</i>	Fill of pit [113], re-cut [188]. Friable greyish-brown clay silt containing abundant charcoal. Overlies (165), overlain by (114).	0.12m
(154)	<i>Fill</i>	Fill of pit [113], re-cut [187]. Homogenous firm yellowish-brown clay silt. Contains common shale inclusions, fragments of redeposited clay and frequent charcoal fragments. Overlies (166), cut by [188]. Natural silting but well-preserved charcoal suggests element of deliberate filling.	1.1m
(155)	<i>Fill</i>	Lower fill of pit [132]. Very compact gritty clay with common fine gritty quartz fragments and frequent small flecks and fragments of charcoal.	0.25
(156)	<i>Fill</i>	Fill of pit [113]. Friable gritty greyish-brown silty sand. Contains common large, sub-angular stones up to 300mm across, some of which appear to have been heated. Overlies (167), cut by [187].	0.45m
(157)	<i>Fill</i>	Fill of pit [113]. Soft greyish-brown sandy silt. Contains common sub-angular stones, some being quartz, high average size 100-200mm. Overlies (162), overlain by (167).	0.2m
[158]	<i>Cut</i>	Linear pit, c.1.7m long by c.0.35m wide. Notably irregular in plan and profile. Contains (159).	0.35m
(159)	<i>Fill</i>	Fill of linear pit [158]. Dense compact pinkish-brown clay containing frequent shale inclusions and occasional angular quartz fragments. Overlain by (143).	0.35m
[160]	<i>Cut</i>	Oval pit, 0.5-0.65m in diameter and 0.15-0.2m deep. Irregular profile, with a western side vertical edge and very irregular shallow eastern edge (possible animal damage).	0.2m
(161)	<i>Fill</i>	Fill of pit [160]. Heterogeneous compact grey silt containing frequent shale inclusions and abundant patches of yellowish-red clay (redeposited natural). Adjacent to [163]. Overlain by (145).	0.25m
(162)	<i>Fill</i>	Basal fill of pit [113]. Fine soft brownish-grey clay silt with orange mottling. Overlain by (157).	0.1m
[163]	<i>Cut</i>	Irregular pit, 0.7-1.0m across with an irregular and undulating base.	0.18m



		Contains (164). Overlain by (145).	
(164)	<i>Fill</i>	Fill of pit [163]. Compact grey silt containing frequent small shale inclusions.	0.25-0.3m
(165)	<i>Fill</i>	Fill of pit [113], re-cut [188]. Friable mid-brown clay silt. Overlies (154), overlain by (153).	0.3m
(166)	<i>Fill</i>	Fill of pit [113], re-cut [187]. Soft brown silty clay with orange mottling. Contains common sub-rounded to sub-angular fragments of quartz and shale. Overlies (167), overlain by (154).	0.15-0.3m
(167)	<i>Fill</i>	Fill of pit [113]. Lens of compact greyish-brown silt only 1.1m in extent. Overlies (157), overlain by (156).	0.16m
[168]	<i>Cut</i>	Animal burrow.	
[169]	<i>Fill</i>	Animal burrow.	
[170]	<i>Cut</i>	Linear, c.0.3m wide, surviving length 7.2m. Orientated north-south. Cuts (123/176), contains (171), cut by [124].	0.1m
(171)	<i>Fill</i>	Fill of linear [170]. Mid-brown friable clay silt. Cut by [124].	0.1m
172		NOT USED	
(173)	<i>Colluvium</i>	Colluvial layer sealing all archaeological features apart from [107]. Firm reddish-brown silty clay. Occasional sub-rounded to sub-angular stones <40mm.	up to 0.7m
[174]	<i>Cut</i>	Small shallow pit, c.0.6m in diameter by 0.2m deep. Steep sides with flat base. Contains two fills: (175) and (180). Cuts layers (179) and (137), overlain by (173).	0.2m
(175)	<i>Fill</i>	?upper fill of pit [174]. Yellowish-brown clay silt containing common charcoal fragments.	?0.2m
(176)	<i>Layer</i>	Spread of greyish-brown silty clay, probably forming an extension of fill (123). Overlies (137) and (179), cut by [170].	0.16m
[177]	<i>Cut</i>	Linear, c.1.82m in length and 0.42m wide. Gentle profile and flat base. Orientated north-south. Projected into the excavated area from northern baulk. Contains (178)	0.2m
(178)	<i>Fill</i>	Fill of linear [177]. Mid-brown to greyish-brown silty clay. Contains frequent shale inclusions and occasional sub-rounded stones <50mm.	0.2m
(179)		of mid greyish-brown silty clay containing abundant shale inclusions. East of hollow [186], overlies (137), cut by [174] and [177].	0.1m
(180)	<i>Fill</i>	?lower fill of pit [174]. Soft dark brown clay silt with abundant charcoal flecks and fragments. Common sub-angular quartzite stones up to 150mm in size and occasional shale inclusions. Structured deposit of Beaker pottery with burnt material.	?0.2m
(181)	<i>Fill</i>	Fill of hollow [186]. Dark brown silt with abundant charcoal. Deliberate dump of material – closing deposit? Overlies (182), overlain by (123).	0.05m
(182)	<i>Fill</i>	Fill of hollow [186]. Dense clean plastic mid-brown clay. Occasional shale and charcoal inclusions. Overlies (183), overlain by (181), cut by [184].	0.2m
(183)	<i>Fill</i>	Basal fill of hollow [186]. Compact gravel layer largely composed of angular quartz set in a matrix of greyish- to yellowish-brown clay matrix. ?Surface. Overlain by (182).	0.1m
[184]	<i>Cut</i>	Shallow pit cut into (182), c.0.6m in diameter by 0.3m deep. Shallow sloping sides. Contains (185).	0.3m
(185)	<i>Fill</i>	Fill of pit [184]	0.3m
[186]	<i>Cut/hollow</i>	Large irregular hollow, probably natural, later modified. Highly irregular outline, variable height and angle of sides with a flat base. Up to 10×10m in size and up to 0.8m deep; feature continues beneath edge of excavation to north. Contains (123), (181), (182), (183) [with [184] and (185)]. Cut by [170]. Modified hollow with laid floor and evidence of subsequent use and closure.	0.8m
[187]	<i>Cut</i>	First re-cut of pit [113]. c.3.8m in diameter by 1.3m deep. Steep, nearly vertical sides. Cuts (156), contains (166) and (154).	1.2m
[188]	<i>Cut</i>	Second re-cut of pit [113]. c.3.1m in diameter by 1.1m deep, sloping sides and concave base. Cuts (154), contains (114), (153) and (165).	1.1m
{189}	<i>Group</i>	Group context, comprising linear features [124], [126] and [170].	-
[190]	<i>Cut</i>	Small recess in west side of [113]. Irregular sub-rounded profile, <0.3m wide and <0.15m deep, tapering to a flat back <0.15m across. Filled by (156). Probable stone socket.	-
(500)	<i>Topsoil</i>	A mid brown silty clay containing abundant platey stones up to 0.2m across including water-rounded pebble and post medieval pottery and roofing slate	0.35m
[501]	<i>Cut</i>	Linear, observed length c.11m long and c.1m wide. Steep-sided “V”-	0.45-0.65m

		shaped profile. Orientated east-west. Contains (502). Same as [503].	
(502)	<i>Fill</i>	Fill of linear [501]. Loose light brown sandy silt containing common small sub-rounded stones up to 40mm across. Same as (504).	0.45-0.65m
[503]	<i>Cut</i>	Linear, observed length c.12m and c.0.95m wide. Steep-sided "V"-shaped profile. Orientated north-south. Contains (504). Same as [501].	0.40-0.55m
(504)	<i>Fill</i>	Fill of linear [503]. Loose light brown sandy silt containing common small sub-rounded stones up to 40mm across. Same as (502).	0.40-0.55m
[505]	<i>Cut</i>	Pit, ovate, c.2.96m long by c.0.96m wide. Steep-sided profile with a flat base, with an irregular extension to the southeast. Contains (506).	0.4-0.55m
(506)	<i>Fill</i>	Fill of pit [505]. Light brown sandy silt containing occasional sub-rounded stones up to 60mm across. Distinct lens of large, thin (5mm) platy shale fragments up to 120mm across at the base on the deposit on the south side.	0.4-0.55m
[507]	<i>Cut</i>	Pit, approximately oval, 0.95x0.6m in extent. Gentle, concave profile. Contains (508).	0.15-0.2m
(508)	<i>Fill</i>	Fill of pit [507]. Light brown sandy silt containing common small sub-rounded stones up to 50mm across and occasional small fragments of charcoal.	0.15-0.2m
[509]	<i>Cut</i>	Linear, observed length of c.8m and c.0.6m wide. Gentle, concave profile. Contains (510).	0.45m
(510)	<i>Fill</i>	Fill of linear [509]. Light brown sandy silt.	0.45m
[511]	<i>Cut</i>	Linear, observed length of c.5m and c.0.8m wide. Sloping "V"-shaped profile. Orientated ENE-WSW. Contains (512).	0.4-0.5m
(512)	<i>Fill</i>	Fill of linear [511]. Light brown sandy silt containing common small sub-rounded stones up to 40mm across.	0.4-0.5m
(513)		Heat-affected natural, possibly circular 2m observed width	0.01m
(514)		Heat-affected natural, circular 1m -1.1m diameter	0.01m
[515]	<i>Cut</i>	Pit, ovate, c.3.4m long by c.1.1m wide. Concave profile and irregular base. Contains (516).	0.35m
(516)	<i>Fill</i>	Fill of pit [515]. Light brown loose sandy silt.	0.35m
{517}	<i>Group</i>	Linears [501], [503] and [511] forming a single small enclosure.	-

## Appendix 4 Concordance of Finds

		Pottery			Worked stone			Worked flint/chert/quartz			Other material		
Context	sherds	wgt (kg)	notes	frags.	wgt (kg)	notes	frags.	wgt (kg)	notes	frags.	wgt (kg)	notes	
100	1	0.003	PM marbled slipware					0.407	RT flake	1	0.032	Fe object	
108	1	0.006	Med . Totnes-type					0.017					
110								0.150					
114								1.115					
118	1	0.004	Pfabric 2					0.027					
120	1	0.002	C17-18 Westerwald SW										
123	5	0.014	x3 Pfabric 1 x2 Pfabric 2	1	0.050	EPT	171	2.016	B&T AH; OAH; x9 cores; x6 core frags.	7	0.011	Slag, undiag.	
125								0.002					
127								0.004					
135				1	0.222	?axe rough-out	4	0.054					
136								0.136	RT flake				
137								0.132	RT flake				
139	1	0.001	Pfabric 1					0.019					
141								0.024					
143								0.341	Scraper				
145	5	0.014	Pfabric 1	3	1.111	?axe blank; x2 EPT	286	2.320	Scraper				
146	1	0.001	Pfabric 1					0.007		1	0.003	Burnt clay	
154								0.415					
156				2	0.332	EPT; quartz frag.	10	0.164					
159	1	0.003	Pfabric 2					0.246	Scraper				
161	2	0.003	Pfabric 1					0.126					
164				4	0.028		4	0.028					
169				1	0.006		1	0.006					
175/180	17	0.075	x8 Pfabric 1 x9 Pfabric 2	2	0.342	EPT; pebble frag.	13	0.285					
181	8	0.038	x5 Pfabric 1 x3 Pfabric 2	3	0.568	EPT; x2 pebbles	94	0.729	x2 piecer; scraper; x2 cores; x5 core frags.				
182	2	0.006	Pfabric 1	13	5.040	x3 EPT; x2 pebble frags.; x6 pebbles; ?quern frag.; ?hone frag.	311	4.672	x2 RT flake; OAH; PC knife; piecer; scraper; x10 cores; x8 core frags.				
183				9	3.058	x5 EPT; x3 pebbles; ?hone	291	5.832	x2 scraper; OAH; piercer; x43 cores; x17 core frags.				
185	2	0.020	Pfabric 1				4	0.015					
506	2	0.014	Middle BA pottery										
<b>TOTALS</b>	<b>50</b>	<b>0.204</b>		<b>34</b>	<b>10.723</b>		<b>1577</b>	<b>19.289</b>					

Nb. Contexts in grey are the fills of hollow [186]

## Appendix 5

### The Worked Flint, Chert and Quartz, by *Martin Tingle*

#### **Introduction**

The assemblage is composed of 1538 pieces weighing a total of 30,020g, derived largely from a series of amorphous s, an enigmatic feature [186] which may be a shallow pit or an accumulation of material within a natural feature, as well as from a small number of other cut features, all of which were sealed beneath a substantial thickness of colluvium. The finds suggest that most of the features appear to date from the late Neolithic to early Bronze Age. The single notable exception to this is the assemblage from a substantial pit [113] which seems to have been re-cut on at one, if not two occasions, but which yielded no pottery. Three radiocarbon dates indicate a later Mesolithic date for this feature. Thus this report will initially consider the assemblage as a whole when looking at its utilisation of raw materials, but in other aspects such as composition and technology, tool types and distribution, the Mesolithic and late Neolithic finds will be considered separately. In doing this one must make the assumption that most of the assemblage found in dated Neolithic contexts was actually created at that time and is not residual Mesolithic material. In many ways this is difficult to justify since almost the only artefacts from the site commonly associated with the Mesolithic are the elongated pebble tools, all but one of which were found in contexts that also included prehistoric pottery. It is also possible that some of the other features may date from later prehistory or beyond.

#### **Raw Materials**

The assemblage is made up of 1368 pieces of worked flint (16081g), 133 pieces of worked chert (3168g) and 3 pieces of worked quartz (48g). There are, in addition, 34 examples of non-flint stone which may either have been worked or utilised, or retained for some other purpose, weighing 10,723g (see Appendix 6). Within the categories of flint and chert several different sources are represented, as is shown by the classification of retouched tools (below). Of the flint that retains significant amounts of dorsal cortex, much of it appears to derive from beach pebbles, although there are examples that do not display the characteristic water-worn cortex. The flint is largely unpatinated and exhibits a variety of colours from greenish-grey to dark orange-brown. Amongst these are examples of a black flawless flint with a thick cortex which closely resembles a type identified during fieldwork at Beer Head, and there are numerous examples of a mottled, dark blue-grey flint, visually similar to chalk-derived flint found at other sites in the South West such as Beer, Membury and Hembury (Tingle 1998, 63; 2006, 17, 48).

The site is situated within a large area of Devonian mudstones, siltstones and sandstones of the Dartmouth Group. The precise source of the flint and chert at the site is unclear since most of the identifiable pieces are beach pebbles which may even derive from submarine deposits. Beach pebbles are a common component of the coarse-grained sands on nearby beaches at Blackpool and Slapton Sands. *In situ* flint has been identified to the north and south of Newton Abbot in the Bovey and Decoy Basins, approximately 20-25km to the north of the site (Newberry 2002, 17). This flint derives from residual flint deposits and fluvial sediments, which have been transported from primary chalk sources and re-deposited. It can vary in size, depth of cortex and levels of abrasion while internally it can be either fine- or coarse-textured and occurs in a variety of colours from light grey to brownish-red (Newberry 2002, 18). It is considered to be a high quality raw material and appears to have been exploited throughout prehistory; although it is unclear whether it is present at Little Dartmouth. Beer Head, although approximately 60km east of Little Dartmouth, may have been an accessible source for some of the assemblage depending on many factors, not least how regular coastal sea journeys were in this period. There are also two pieces of Portland-type chert: a single utilised flake found in the topsoil and an uncorticated flake from context (161), which will have originated in either Dorset or Wiltshire.

#### **Composition and technology of the flint and chert assemblage from Neolithic contexts**

The assemblage shows evidence of a variety of different approaches to lithic reduction, with examples of both intensive controlled reduction as well as casual expedient working. This is perhaps best illustrated by the presence of 6 core trimming flakes, the by-product of platform modification in order to maintain core viability. In contrast, there are also 25 unsystematically worked flint and chert pebbles where only a limited number of flakes (sometimes only one) have been removed. These may possibly be rejected cores or the results of raw material testing. Experimental knapping of beach pebbles has emphasised the importance of



the original shape and size of the pebble in the removal of the first flake. Since it is impossible to determine the workability of the pebble until the first flake is detached, it might be reasonable to assume that a significant number are discarded at this point (Mithen *et al.* 2001, 530).

The 82 intact cores within the assemblage represent an unusually large number for the South West, given that the excavations at Carn Brea produced only 86 cores but 20,311 flakes and 2152 retouched tools (Saville 1981, 102-4). In addition, there are 80 core fragments and 25 worked pebbles. The mean weight at which the cores were discarded gives some indication of the intensity with which they were worked. The cores which show evidence of systematic multi-platform reduction have a mean weight of 40.9g while the single platform and blade cores have a mean weight of 31g and 32g respectively. In contrast, the unsystematically worked cores and worked pebbles had means weights of 46.7g and 85g. In comparison, the mean weight of 159 systematic and 464 unsystematically worked cores recovered by surface collection around Beer Head was 111g and 188.3g respectively while for the 86 cores from Carn Brea, the figure was 29.8g (Tingle 1998, 41; Saville 1981, 118).

Find	No.	Weight (g)	Mean Weight (g)
Primary Flake	105	2397	22.8
Secondary Flake	118	1665	14.1
Tertiary Flake	262	2422	9.2
Uncorticated Flake	253	855	3.3
Broken Flake	406	933.5	2.2
Blade	7	11	1.5
Blade Segment	1	1	1
Spall	39	8	0.2
Burnt Worked Flint	28	205	7.3
Blade Core	5	160	32
Systematic Core	16	647	40.4
Single Platform Core	29	899	31
Unsystematic Core	37	1730	46.7
Core Fragment	70	2182	31.1
Worked Pebbles	25	2125	85
Core Trimming Flake	6	51	8.5
Hammerstone	4	1220	305
Retouched Flake	5	52	10.4
Scraper	7	149	21.2
Knife	1	11	11
Piercer	4	74	18.5
Arrowheads	4	16	4

Table 1: The composition of the Neolithic lithic assemblage.

### The Retouched Tools (see Figure 38, Figure 39 & Figure 40)

A total of 21 retouched tools were recovered during the excavation and, aside from a retouched flake from the topsoil and a scraper from an irregular linear feature [159], they all derived from s of material located across the site. The greatest concentration of tools came from the hollow [186], where 13 retouched implements were recovered from contexts (181), (182) and (183), with a further two arrowheads deriving from the deposit of material that sealed these (123).

The retouched tool assemblage is composed of 5 retouched flakes (24%), 7 scrapers (33%), 4 piercers (19%), one plano-convex knife (5%) and – unusually – 4 arrowheads (19%). In comparison, the same tool types from the surface collection Beer Head were: retouched flakes 41%, scrapers 35%, piercers 14%, knives 0.1% and arrowheads 0.2%.

The stone types were divided into categories on the basis of their general appearance. There were up to eight different stone types:

1. Mottled light brown chert
2. Black/grey-brown pebble flint
3. Dark brown pebble chert patinated blue/grey
4. Pale brown flint
5. Pale grey flint
6. Mottled light grey/green chert (similar to 1.)
7. Dark grey/black flint (apparently chalk derived)
8. Dark grey Portland-type chert

Types 2 and 3 appear to derive from pebble flint that could well be local, but Type 7 more closely resembles chalk-derived flint. There appears to be a clear link between the types of stone used for individual tools. All of the arrowheads, and the plano-convex knife, are made from the chalk-derived flint while three of the four piercers are made from greensand chert. The seven scrapers are made from a variety of stone sources determined at least in part by the level of working apparent on each piece. Three examples are simply retouched primary flakes removed from beach pebbles, a single thumbnail scraper is made from a pale brown flint and a steeply retouched side scraper is made of greensand chert. The remaining two scrapers are made of a chalk-derived flint. One is a small invasively retouched piece while the other is a larger discoidal scraper with extensive signs of re-sharpening.

The arrowheads, three oblique and one barbed and tanged, are all complete and in pristine condition and made from a fine dark grey, apparently chalk-derived, flint. One in particular (SF no. 10) is an unusually large, finely made example that would almost certainly have broken if it had been put to practical use. It would seem likely that its main use was decorative, since many such arrowheads have been found in funerary and other ceremonial contexts (Edmonds 1995, 100). Large numbers of similar oversized and finely made oblique arrowheads have found in recent excavations at Durrington Walls (Chan 2006, 4).

Tool	SF no.	Context	Stone type	Flake type
Utilised/retouched	11	100	8	Broken flake
B&T arrowhead	9	123	7	Uncorticated flake
Oblique arrowhead	10	123	7	Uncorticated flake
Retouched flake	5	136	2	Broken flake
Retouched flake	6	137	5	Tertiary flake
Scraper	7	143	6	Uncorticated flake
Scraper	8	145	2	Primary flake
Scraper	4	159	4	Uncorticated flake
Pieler	20	181	1	Uncorticated flake
Pieler	19	181	5	Uncorticated flake
Scraper	18	181	7	Tertiary flake
Oblique arrowhead	13	182	7	Tertiary flake
Pieler	15	182	1	Uncorticated flake
Plano-convex knife	12	182	7	Tertiary flake
Retouched flake	17	182	1	Uncorticated flake
Retouched flake	16	182	7	Uncorticated flake
Scraper	14	182	2	Tertiary flake
Oblique arrowhead	21	183	7	Tertiary flake
Pieler	1	183	1	Tertiary flake
Scraper	2	183	2	Primary flake
Scraper	3	183	3	Primary flake

Table 2: The retouched tools.

### Distribution of flint and chert in hollow [186]

The worked lithic assemblage was recovered from 36 contexts within 31 cuts, and the greatest concentration was 871 pieces (13,264g) from the 4 fills of the hollow [186].

Datable pieces within the assemblage include the 3 oblique arrowheads, the single barbed and tanged arrowhead and the plano-convex knife. All of these can be dated to the period between the late Neolithic and early Bronze Age, often associated, as in this case, with finds of Beaker pottery. The question of how much, if any, material found in Neolithic contexts is residual Mesolithic debitage is impossible to determine.

In order to determine whether there are significant change in the composition of each separate context Table 3 summarises both the numbers and the mean weights of each class of find.

Find	(123)	Av Wgt (g)	(181)	Av Wgt (g)	(182)	Av Wgt (g)	(183)	Av Wgt (g)
Primary Flake	14	17	4	7.7	23	16	37	24.6
Secondary Flake	11	13.2	9	10.5	44	15.8	18	18.5
Tertiary Flake	37	10.1	12	10.8	56	8.6	52	8.6
Uncorticated Flake	32	3.9	35	2.3	66	2.9	44	5
Broken Flake	37	2.4	21	3.1	75	2.4	65	3.1
Blade					2	1.5		
Blade segment					2	0.5		
Trimming Flake			2	8.5	1	17	3	5.6
Burnt worked flint	9	13	-		3	8.3	2	6
<b>Sub Total</b>	<b>140</b>		<b>83</b>		<b>272</b>		<b>221</b>	
Piercer			2	10	1	24	1	30
Retouched					2	11	-	
Arrowhead	2	4	-		1	4	1	4
Scraper			1	12	1	7	2	33.5
Knife			-		1	11		
<b>Sub Total</b>	<b>2</b>		<b>3</b>		<b>6</b>		<b>4</b>	
Systematic Core	13	30.9	2	27.5	3	35	18	33.6
Unsystematic Core	2	15			7	42.2	20	60
Pebble Core			1	106	14	96	6	42
Core Fragment	16	32.5	5	22.8	8	9	17	36.2
<b>Sub Total</b>	<b>31</b>		<b>8</b>		<b>32</b>		<b>61</b>	
EPT	1	49	2	233	4	197.5	6	270
?Hone			-		2	461	-	
Hammerstone			-		5	260	2	510
<b>Sub Total</b>	<b>1</b>		<b>2</b>		<b>11</b>		<b>8</b>	

Table 3: Worked stone from hollow [186].

The worked stone from lower contexts of [186] ((182) and (183)) show evidence of the *in-situ* working of flint and chert pebbles. In (183) particularly, there are significant numbers of primary flakes with almost hemispherical profiles, which probably result from the detachment of bulbous projections on beach pebbles in order to create a flaking platform. Both of the scrapers from (183) were made from such flakes. There are high numbers of all classes of flakes with reducing mean weights and numerous small cores with multiple flake scars in a variety of planes. As well as the two hammerstones (chert and quartzite pebbles), there are 4 pebbles of a presumably local sedimentary rock with edge damage and two possible hone fragments. The debitage in (182) is of a similar nature although with a greater use of, and it appears, rejection of pebble flint resulting in fewer systematic cores. This may indicate a more restricted selection of raw material. There is much less debitage from the dump of burnt material (181), which is to be expected given its relative size although there is, unsurprisingly, a notable increase in the amount of burnt worked flint. The upper context (123) is similar to (183) except that it does not include the element of discarded pebble cores. The distribution of retouched tools within [186] appears to show two separate elements: the making use and discard of basic retouched tools from locally worked materials and the discard of apparently little used or unused and unusual artefacts made from non-local materials which were possibly brought to the site as finished objects. In (183) there are two scrapers and a piercer of apparently local manufacture and a single intact oblique arrowhead made from chalk-derived flint. In (182), a chert piercer and two retouched flakes are of local material while another intact arrowhead (with modern break) and a plano-convex knife are made from chalk-derived flint as is a small finely retouched scraper. In (181) two piercers are made from chert and pebble flint while a single large scraper is of chalk-derived flint as are the two arrowheads in (123), one of which is abnormally oversized.

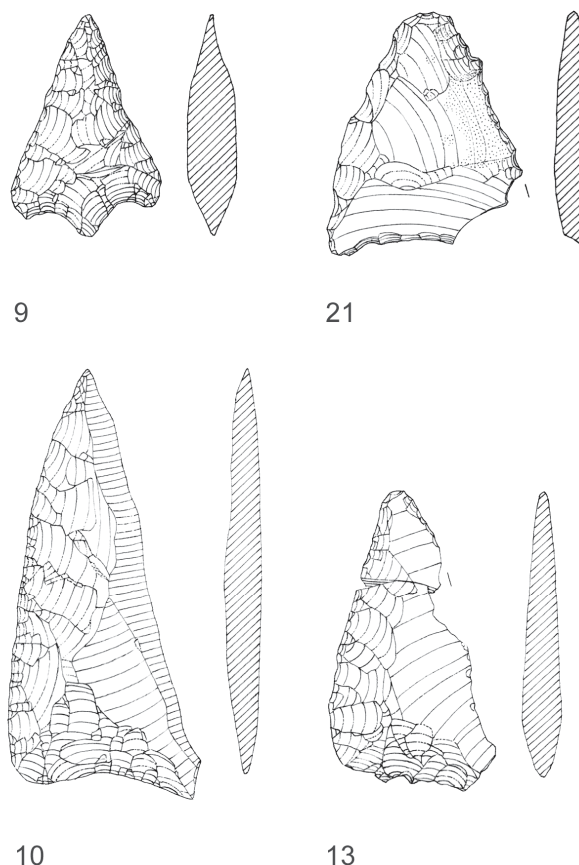


Figure 38: Worked flint: barbed & tanged arrowhead (9) and oblique arrowheads (10, 13, 21) (scale 1:1).

### The Distribution and composition of the Mesolithic flint and chert

The distribution of finds within the largest feature on the site, pit [113], is suggestive of occasional deposition rather than gradual accumulation. The thin basal layer (162) contained only two pieces of worked chert. The contexts above (162) – (157) and (167) – contained no worked stone. Above these (156) included 7 pieces of worked flint, 3 pieces of chert and a single piece of worked quartz together with an elongated pebble tool. The remaining worked stone derived from fills that accumulated after the pit seems to have been re-cut. (154) contained 31 pieces of worked flint and 5 of chert while the uppermost fill of the feature, (114), produced 80 pieces of worked flint and 10 of chert including the only retouched tool, a flint rod (SF no.21).

Find	No.	Weight (g)	Mean Weight (g)
Primary Flake	8	148	18.5
Secondary Flake	8	170	21.25
Tertiary Flake	26	214	8.23
Uncorticated Flake	44	201	4.5
Broken Flake	30	101.5	3.3
Blade Segment	1	2	2
Burnt Worked Flint	6	14	2.3
Unsystematic Core	3	543	181
Core Fragment	10	295	29.5
Core Trimming Flake	1	8	8
Rod	1	0.5	0.5

Table 4: The Mesolithic lithic assemblage.



Little can be suggested of the lithic reduction strategies employed in this period from such a sample although the fact that secondary flakes appear to be larger than primary flakes may indicate that the initial removal of dorsal cortex was taking place elsewhere.

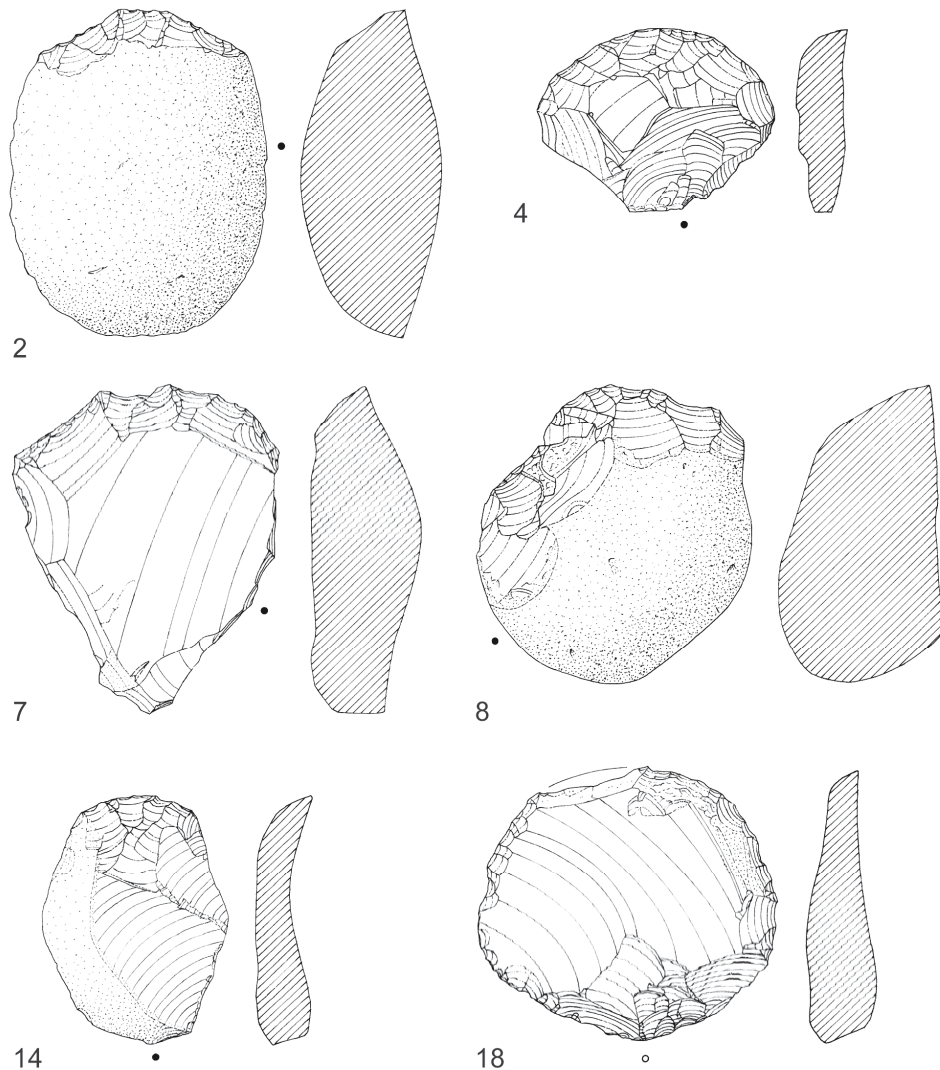


Figure 39: Worked flint: scrapers (scale 1:1).

## Conclusion

The most striking feature of the Mesolithic assemblage is how atypical it is compared to other contemporary groups of finds. There are no microliths, burins or axes, no blades and only a single blade segment. The only clue to its possible date available from the lithic assemblage was the single flint rod from (114) and the elongated pebble tool from (156), although the 13 other elongated pebble tools from the site were found as presumed residual finds in contexts that also contained Beaker pottery.

Of the material from late Neolithic/early Bronze Age contexts, 45% of it derives from a single feature [186], which seems to have been a natural hollow into which archaeological material was deposited/accumulated (58% if material from (123) is included). The assemblage from [186] represents the debris of stone tool production and includes examples of the tools themselves, perhaps lost or discarded during manufacture. There is also a distinct element of well-made chalk-derived flint tools that are dominated by a high concentration of arrowheads including the unusually large oblique arrowhead (SF no.10). Arrowheads of comparable size and quality have been found with Beaker pottery and articulated pig bones in pits outside the entrance to Durrington Walls (Parker Pearson *et al.* 2006).

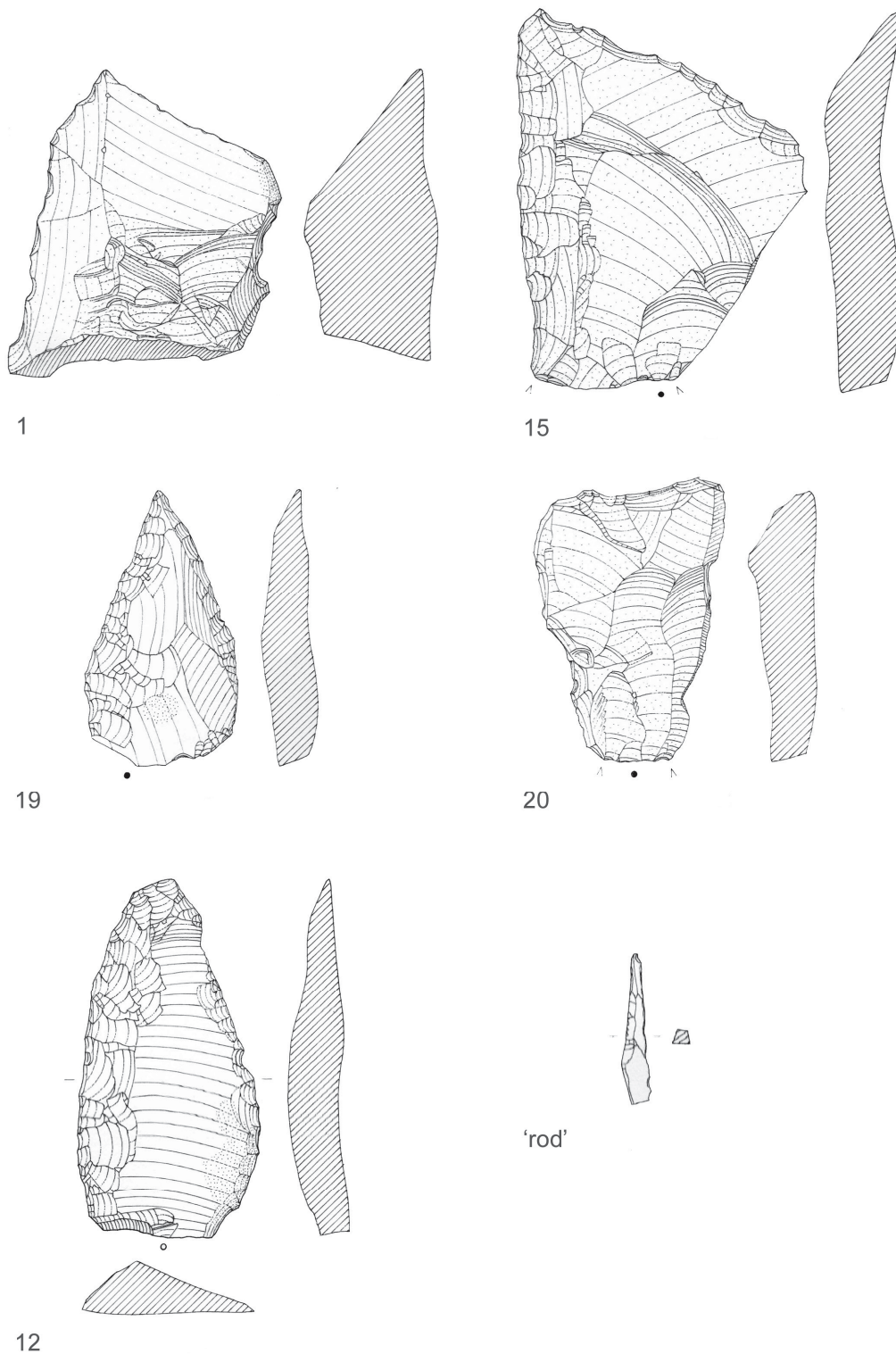


Figure 40: Worked flint: piercers (1, 15, 19, 20), plano-convex knife (12) and rod (scale 1:1).

The only comparable assemblage from the immediate vicinity of the site is that from the surface collections and subsequent excavations at Churston, approximately 8km to the north east, on the opposite side of the Dart estuary. Here 350 hectares were subject to systematic surface collection followed by the excavation of 4 trenches, which in total produced 1,108 pieces of worked stone (Parker Pearson 1981). This unstratified assemblage dates from the Mesolithic to the later Bronze Age but includes some elements that are contemporary with Little Dartmouth. There are similarities in the use of beach pebbles as a lithic source and the presence of small quantities of apparently imported flint and Portland-type chert. However, the Churston

assemblage also features 7 polished axes and one shaft-hole implement, a class of artefact absent from excavated assemblage from Little Dartmouth. The significance of two possible axe roughouts from features [135] and [145], together with finds of a possible axe fragment from surface collection at Little Dartmouth, are discussed in Appendix 6.

## Terminology

Throughout this analysis the term 'cortex' refers to the natural weathered exterior surface of a piece of flint while patination denotes the colouration of the flaked surfaces exposed by human or natural agency. Following Andrevsky (1998, 104) dorsal cortex is divided into four categories: the term primary flake refers to those with cortex covering 100% of the dorsal face while secondary flakes have cortex on between 50% to 99% of the dorsal face. Tertiary flakes have cortex on 1% to 49% of the dorsal face while flakes with no dorsal cortex are referred to as non-cortical

A blade is defined as an elongated flake whose length is at least twice as great as its breadth. These often have parallel dorsal flake scars, a feature that can assist in the identification of broken blades that, by definition, have an indeterminate length/breadth ratio.

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## Appendix 6

### The Stone Artefacts, by *Martin Tingle*

In addition to the worked flint, chert and quartz, a range of stone fragments were recovered that seem to have been utilised as artefacts, having upon them some form of wear or damage. These are composed of possible quern or hone fragments, utilised pebbles, unworked stones, a group of elongated pebble tools (EPT) and two possible axe roughouts.

No.	Context	Find Description	Rock type	Wgt (g)	Extent of Wear or Damage
1	123	EPT	Sedimentary	50	Single end wear
2	135	?Axe roughout	?Metamorphic	222	Extensive bifacial working
3	145	EPT	Sedimentary	116	Single end wear
4	145	?Axe blank	?Metamorphic	860	Some bifacial working
5	145	EPT	Sedimentary	135	No evidence of wear
6	180	EPT	Sedimentary	146	No evidence of wear
7	180	Pebble fragment	Sedimentary	196	Broken and worn
8	181	Lunate pebble	Quartzite	240	No evidence of wear
9	181	EPT	Quartzite	222	Single end wear
10	181	Pebble	Quartzite	106	No evidence of wear
11	182	Bottuloid pebble	?Sedimentary	1440	End breakage and tip wear
12	182	Pebble	Quartzite	274	?Hone with small patch of wear
13	182	Pebble	Chert	362	?Hammerstone; heavily battered end
14	182	EPT	Quartzite	302	Single end damage
15	182	? Hone fragment	?Igneous	616	Limited evidence of wear
16	182	Pebble	Sedimentary	306	No evidence of wear
17	182	Pebble fragment	Quartzite	446	Broken with tip wear
18	182	Pebble	Chert	132	?Hammerstone; heavily battered end
19	182	EPT	Sedimentary	170	Broken end
20	182	? Quern fragment	Igneous	642	Limited evidence of wear
21	182	EPT	Sedimentary	164	No evidence of wear
22	182	Pebble Fragment	Quartzite	104	Broken fragment
23	182	Pebble	Sedimentary	82	Broken fragment
24	183	EPT	Sedimentary	334	No evidence of wear
25	183	EPT	Sedimentary	172	Single end wear
26	183	Battered pebble	Chert	406	?Hammerstone. Heavily battered end
27	183	EPT	Igneous	168	Bipolar end wear
28	183	? Hone	Quartzite	114	No evidence of wear
29	183	Pebble	Quartzite	616	Bipolar end wear
30	183	EPT	Igneous	422	Bipolar end wear
31	183	EPT	Igneous	414	Single end wear
32	183	Pebble	Sedimentary	412	Single end wear
33	156	EPT	Igneous	116	Single end wear
34	156	Quartz Fragment	Igneous	216	No evidence of wear

Table 5: The utilised stone artefacts.

It is not currently possible to source most of the stone, although the two possible axe pre-forms (Finds 2 and 4) may be from local deposits of epidiorite. In addition, a broken pebble from context (182) was identified as probably derived from pebble beds located in East Devon around Budleigh Salterton (R. Taylor *pers. comm.*). Some examples show no obvious signs of utilisation and were treated as finds simply because they were non-local. While their appearance at the site is undateable, it is possible that they are contemporary with the flint assemblage since recent excavations of a Beaker site at Stannon Down in Cornwall revealed substantial numbers of imported beach pebbles (Jones 2005).



## **The Elongated Pebble Tools (EPT)**

Elongated Pebble Tools are usually regarded as a Mesolithic class of artefact, having first been identified during the excavation of Scottish shell middens in the 19<sup>th</sup> century, where they were originally described as 'Limpet Hammers' (Barlow & Mithen 2000, 513). More recently, this ascription has been challenged and alternative uses have been proposed ranging from 'soft hammers' for flint working to hide processing tools (Barlow & Mithen 2000, 513).

All but one of the 14 examples from Little Dartmouth derive from later Prehistoric contexts and are therefore likely to be residual. The single exception is from context (156), a stony layer towards the base of Mesolithic pit [113], which produced a small elongated pebble with limited signs of single end damage.

## **Axe Production**

The surface collections and subsequent excavations at Churston, approximately 8km to the north east of Little Dartmouth, on the opposite side of the Dart estuary, produced 1,108 pieces of worked stone (Parker Pearson, 1981). This unstratified assemblage included 7 polished axes one of which, a fragmented butt of a ground axe, is made from an epidiorite. Although this rock may well be from Cornwall, another possible source was identified: the Dancing Beggars, a group of rocks in the sea 500m south of Little Dartmouth (Parker Pearson 1981, 22). In the course of the archaeological monitoring in Area C, a possible fragmentary polished axe was recovered. To this should be added two pieces of worked stone from the excavation (see Figure 41). Find No.2 (Table 5) is a flat oval piece of metamorphic rock which has minimal bi-facial working, and may be a blank for an axe. This was derived from context (145), a firm grey silt clay covering an area approximately 5m north-south by 2m east-west. Find No.4 (Table 5) is a botuloid piece of metamorphic rock that has extensive bi-facial working to form an axe or chisel roughout. It is from context (135), a compact mid-brown silt clay which formed the fill of an irregular gully.

Although axe production is first seen in the early Neolithic, it continued into the later Neolithic and it has been argued that this was the period in which the geographical distribution of axes reached its greatest extent (Bradley & Edmonds 1993, 179). Discussions of the nature and location of stone axe production in the South West has been limited by the fact that no actual production sites have ever been identified. To date, all the proposed production sites are in Cornwall with the majority being sited around Mounts Bay. Their illusiveness has been attributed to the likely production methods of pecking and grinding, which would not leave any identifiable debitage. However, Berridge (1994, 47) has argued that other physical traces such as unfinished axes (pre-forms and roughouts), those broken in the course of production as well as hammerstones and grinding slabs, would identify production sites. He points out that while Axe Group V was originally thought on petrological grounds to be located in Cornwall, it was eventually located in Perthshire (1994, 48). The few finds from Little Dartmouth are the first evidence of a possible production site to be found in Devon and clearly warrant further investigation. A detailed petrological report of these artefacts can be found in Appendix 14.

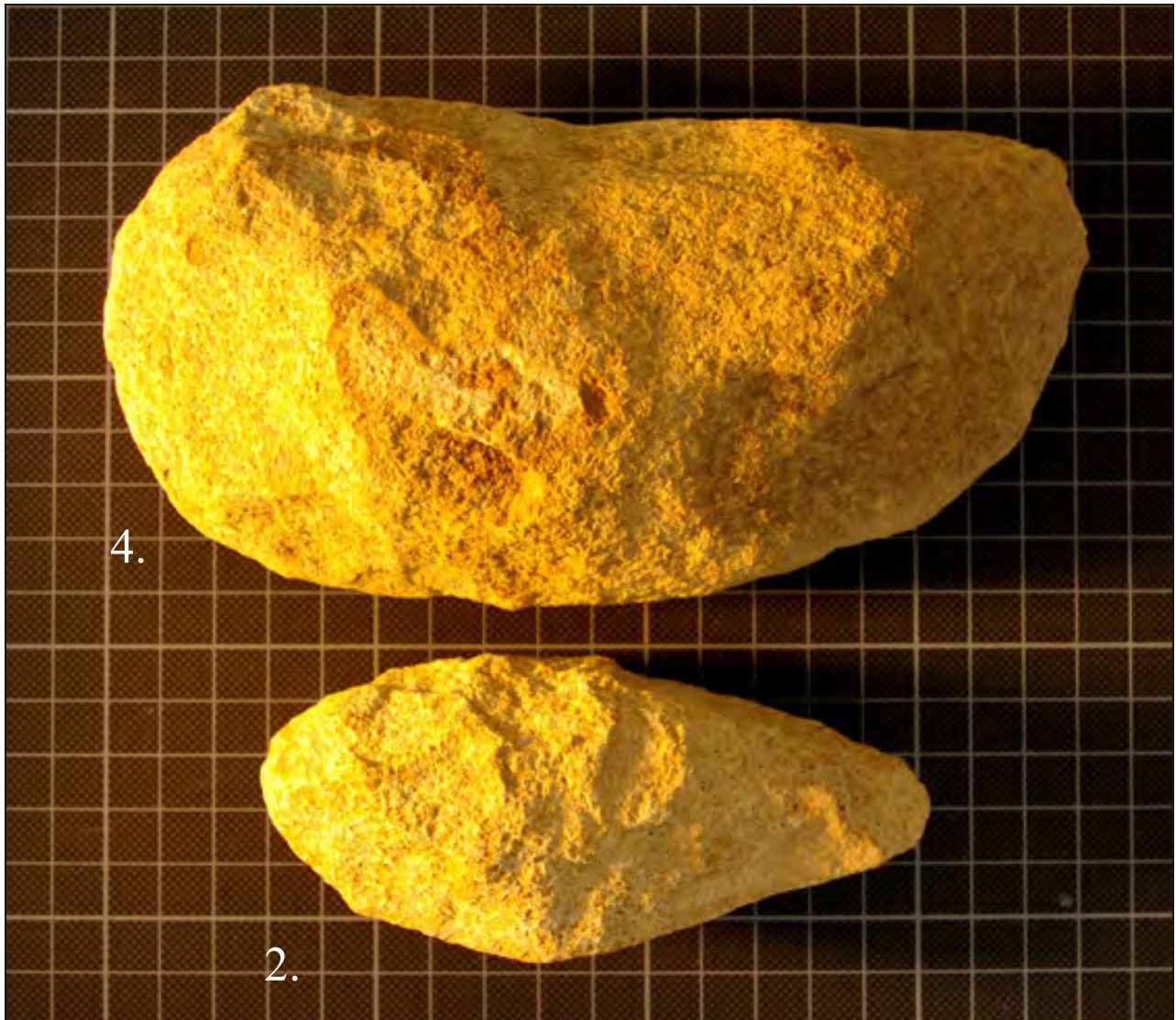


Figure 41: The axe blanks (stone artefacts nos. 2 and 4) under oblique light (scale in centimetres).

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## Appendix 7

### The Pottery, by *Henrietta Quinnell with Roger Taylor*

Context	Description	Fabric 1		Fabric 2	
		No.	Wgt.(g)	No.	Wgt.(g)
118	Upper fill in pit [117]			1	4
185	In (184) in base of hollow [186]	2	20		
182	Beneath (181) in hollow [186]			2	6
181	Beneath (123) in hollow [186]	5	17	3	21
123	Top layer in hollow [186]	3	8	2	6
175	In pit [174] <b>P1</b>	4	18		
175	In pit [174] <b>P2</b>	3	8		
175	In pit [174] <b>P3</b>			1	5
175	In pit [174] unassigned			2	22
180	In pit [174]	1	1	6	21
139	In gully [138]	1	1		
145	over pit [160]	5	14		
161	In pit [160]	2	3		
159	In linear pit [158]			1	3
146	Modern pit fill	1	1		
	<b>Totals</b>	<b>27</b>	<b>91</b>	<b>18</b>	<b>88</b>
Context	Description	Middle BA Gabbroic admixture			
				No.	Wgt.(g)
506	Above pit [505].			2	14
	<b>Totals</b>			<b>2</b>	<b>14</b>

Table 6: Detail of the Prehistoric pottery.

### Introduction

The Beaker assemblages consisted of 45 sherds weighing 179g. Two fabrics were identified by Roger Taylor, based on microscopic examination of the numbered vessels. There were 27 sherds weighing 91 grammes of Fabric 1, and 18 sherds weighing 88 grammes of Fabric 2.

### Fabrics

P1 Fabric 1: Temper 10-15% *Quartz* – transparent to translucent colourless and faintly yellow, angular grains, some with abraded edges, some showing traces of crystal outlines, mainly 0.5-1mm. *Feldspar* – a scatter of soft white altered sub-angular grains, 0.1-0.8mm. *Mica* – biotite, a scatter of dark brown cleavage flakes, some with abraded edges, 0.1-0.5mm; muscovite, cleavage flakes up to 0.05 mm. *Tourmaline* – rare black glossy sub-angular grains, 0.1mm. *Rock fragments* – sparse micaceous slate silvery buff weathered tabular rounded fragments, 0.25-1.2mm; sandstone, fine-grained quartzose sub-angular fragment, 3.5mm. *Matrix* – finely sandy with quartz and feldspar. *Comment* a granite derived fabric.

P2 Fabric 1: Temper 10-15% *Quartz* – transparent colourless angular to sub-rounded grains, 0.1-1mm. *Feldspar* – sparse white altered sub-angular grains, 0.1-0.8mm. *Mica* – biotite, a scatter of dark brown cleavage flakes, some showing hexagonal crystal outlines, 0.1-0.6mm; muscovite, cleavage flakes, up to 0.05mm. *Tourmaline* – rare black glossy grains, 0.05mm. *Rock fragments* – micaceous slate, a scatter of tabular fragments, 0.5-2.5mm. *Matrix* – finely sandy with grains of feldspar and quartz. *Comment* a granite derived fabric.

P3 Fabric 2: Temper c.2%