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Archaeological and Geoarchaeological Evaluation Report Plumpton College, Ditchling Road Plumpton, East Sussex

> NGR 535691 113589 (TQ 35691 13589)

Planning Ref: SDNP/16/04980/PRE
ASE Project No: 190650
Site Code: LPC 19
ASE Report No: 2019353
OASIS ID: archaeol6-374925



By Simon Stevens and Letty Ingrey

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#### Abstract

Archaeology South-East was commissioned by MJB Architecture on behalf of Plumpton College to undertake an archaeological and geoarchaeological evaluation in advance of redevelopment at Plumpton College, Ditchling Road, Plumpton, East Sussex. Thirty-one archaeological evaluation trenches and eleven geoarchaeological test-pits were excavated.

On the eastern part of the site a thick sequence of Quaternary deposits is preserved with clear palaeoenvironmental potential and the possibility for primary context Pleistocene or early Holocene artefacts and ecofacts.

Archaeological features including pits, post-holes, gullies and masonry were encountered in eleven of the trenches. A concentration of Middle to Late Iron Age pits in the eastern part of the site suggest proximate settlement. There was no evidence of Romano-British activity contemporary with the nearby villa complex. A group of post-holes are tentatively dated to the medieval period and suggest the presence of a post-built structure of some kind close to the medieval church. Masonry walls at the western end of the site represent the remains of Wales Farm. Several ditches in the central part of the site remain undated.

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#### 1.0 INTRODUCTION

# 1.1 Site Background

1.1.1 Archaeology South-East (ASE) was commissioned by MJB Architecture on behalf of Plumpton College to undertake an archaeological and geoarchaeological evaluation in advance of redevelopment at Plumpton College, Ditchling Road, Plumpton, East Sussex (centred at NGR535691 113589; Figure 1).

# 1.2 Geology and Topography

- 1.2.1 The College lies at the foot of the scarp slope of the South Downs, within the South Downs National Park, to the north of Ditchling Road (the B2116). The campus surrounds the Norman parish church of St. Michael and All Angels, a Grade I listed building. The current work is limited to a 2.8ha area of the College grounds mostly given over to horticulture at the present time.
- 1.2.2 The topography of the College incorporates a gentle slope downwards from south-west to north-east, from approximately 84mAOD in the south-western corner to 61mAOD in the north-east corner of the campus. Within the northern part of the site the land slopes away more sharply towards a small stream, running along the College's north-western boundary.
- 1.2.3 According to the latest data available from the British Geological Survey (BGS), the underlying geology at the site consists of the West Melbury Marly Chalk Formation, with the Gault Formation immediately to the north. Head deposits are recorded in the vicinity (BGS 2019).

## 1.3 Planning Background

- 1.3.1 The redevelopment scheme is currently undergoing pre-application consultation (South Downs National Park Planning Authority Planning Reference SDNP/16/04980/PRE). The current document provides results of Phase 1 of the overall scheme. Subsequent phases of the scheme will be subject to a similar programme of work to that set out in this document and will require separate Written Schemes of Investigation (WSIs), to be approved by the ESCC County Archaeologist.
- 1.3.2 Initial archaeological work consisted of the preparation of an Archaeological Desk-Based Assessment (DBA) for the overall scheme (ASE 2019a). Following consultation between ASE and the East Sussex County Council (ESCC) County Archaeologist, it was established that trial trenching should be undertaken as an initial stage of fieldwork at the site.
- 1.3.3 A Written Scheme of Investigation (ASE 2019b) was produced for the trial trenching which outlined the methodology to be used to evaluate the site, i.e. by mechanically excavated archaeological trial trenches and geoarchaeological test-pits, and in production of a report and a site archive. It was duly approved by East Sussex County Council on behalf of the Local

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Planning Authority before the commencement of work on site.

# 1.4 Scope of Report

1.4.1 This report details the results of the archaeological and geoarchaeological evaluation undertaken between the 11<sup>th</sup> and 22<sup>nd</sup> November 2019.

#### 2.0 GEOARCHAEOLOGICAL AND ARCHAEOLOGICAL BACKGROUND

#### 2.1 Introduction

2.1.1 The following archaeological background and research aims are taken from the approved WSI (ASE 2019b), with much of the information therein taken from the DBA (ASE 2019a) which utilised data held from known archaeological sites with a 1km radius of the site held on the East Sussex County Council Historic Environment Record (ESHER).

## 2.2 Quaternary Deposits

2.2.1 The site may contain sediments with potential to preserve important Quaternary material with associated prehistoric archaeology and palaeoenvironmental evidence. Specifically, the College is crossed by two low valleys where the BGS has mapped head deposits. Firstly, it should be noted that head deposit can be highly variable in nature from slope to alluvial character across a wide range of low to high energy depositional environments. Secondly, it should be noted that the BGS mapping will not include areas where the head deposits are less than 3m in depth and, consequently, exact boundaries need to be established in the field.

#### 2.3 Prehistoric

- 2.3.1 Boxgrove is the only site that contains large numbers of *in situ* finds of Palaeolithic date so far discovered in Sussex. A small number of isolated find spots are also known, with most having been recovered from geologically disturbed contexts. The majority of finds in the region have been associated with the raised beaches in the Upper Coastal Plain, as at Boxgrove and Slindon (Woodcock 1978). Other finds have been retrieved from clay-with-flint deposits on the chalk downland plateaux and the river gravel terraces, although these deposits are 'fragmentary and thin' (Woodcock 1999). More rarely, artefacts have also been retrieved from the downland slopes themselves (Pope 2000, 221-222).
- 2.3.2 Many Mesolithic sites in Sussex are represented by concentrations of flintwork rather than by settlement sites. These flint scatters are found in all parts of the county, forming clusters that may represent activity zones. The clusters predominate in the river valleys, with other sizeable concentrations along the Coastal Plain and on the High Weald. Examples have been found along the Greensand at the foot of the Downs at Hassocks and Selmeston.
- 2.3.3 Flintwork concentrations, causewayed enclosures and barrows indicate that settlement and farming during the Neolithic period was concentrated on the chalk downland and along the raised beaches. This period saw intensification in downland forest clearance (Drewett 1999, 16). A variety of different monument types are represented on the downland block between the Ouse and the Adur, including long barrows and two causewayed enclosures at Offham and Whitehawk.

- 2.3.4 Early Bronze Age settlement sites are still thought to be poorly represented in Sussex as a whole, although ritual landscapes in the form of round barrow cemeteries are common on the downland. By the Middle Bronze Age, however, increased population and perhaps drier soils had encouraged settlement to spread from the Downs onto the Coastal Plain (a pattern which continued to increase into the Late Bronze Age). The downland was quite densely settled at this period, particularly in the middle and late phases (Drewett, Rudling & Gardiner 1988).
- 2.3.5 Most of the evidence for Iron Age activity in Sussex is found on the downland. It is noticeably scarcer than that for Bronze Age activity. The most visible evidence relates to a series of defended enclosures, many of which originated in the Late Bronze Age (Hamilton & Manley 1997). Ditchling Beacon, just outside the Study Area, is an example of such a site.
- 2.3.6 Considerable evidence for prehistoric occupation has been found within the Study Area, including a small assemblage of flintwork discovered within the western part of the Site (1) and flintwork and possible Iron Age pottery recovered from Plumpton College Lake at Streat, in the western part of the Study Area (8). The greatest evidence, however, is from the downland scarp which runs east west across the southern part of the Study Area, and includes a possible Neolithic long barrow, a number of Bronze Age bowl barrows, and a saucer barrow (2-6). These form part of a series of barrows occupying the ridge an extending beyond the Study Area to the east and west. A prehistoric field system and possible ring ditch has also been identified on the scarp (7). Two entries on the ESHER have not been plotted on Fig. 1 due to the imprecise locations recorded: a Mesolithic tranchet axe found at Plumpton Hill, and a Bronze Age looped palstave (axe) found at Lentridge Farm, Plumpton.

## 2.4 Romano-British

- 2.4.1 During the Romano-British period, Sussex formed part of the client kingdom of the Regni. Most of the major sites of the period occupy the river valleys and coastal plains. Settlement on the downland consisted mainly of small agricultural settlements set within field systems, although the downland blocks west of the Adur valley attracted higher status occupation with a number of villas being established, together with temples (Rudling 1999).
- 2.4.2 Evidence of Romano-British activity has been recorded within the Study Area, with an ANA relating to a Roman villa complex spanning the northern boundary (ANA 86). Further Roman evidence has been obtained during excavation at Plumpton College Lake, close to the north-western boundary of the Study Area, where features comprising an enclosure, ditches and pits were recorded (9).

# 2.5 Anglo-Saxon

2.5.1 The area of densest Anglo-Saxon settlement in Sussex (as identified by cemeteries) is thought to have lain between the Ouse and Cuckmere rivers (Bell 1978, 64), although settlement quickly expanded into other areas of the region, following the main river valleys. Early Saxon settlements are rare, with most evidence derived from cemeteries, although work at Chalton in Hampshire suggests that the earliest settlements were established on the upper reaches of the chalk dipslope. They appear to have been abandoned by the 9<sup>th</sup> century, and settlement had shifted to the river valleys and the fertile Greensand shelf at the foot of the chalk scarp, forming the basis of the string of villages (including Ditchling and Westmeston) that still exist today. The manor of Plumpton belonged to the church of Bosham, and was held of Earl Godwin by Godwin the priest for 32 hides (Salzman 1940). It is feasible therefore that settlement was present during the Anglo-Saxon era

2.5.2 No Anglo-Saxon sites are recorded within the Study Area on the ESHER.

#### 2.6 Medieval

- 2.6.1 The medieval period saw the development of a distinctive settlement pattern along the northern edge of the South Downs. A line of agricultural villages developed along the Greensand shelf at the foot of the scarp, surrounded by open arable fields. The parishes were long and narrow, extending out into the Weald to the north, providing woodland pasture, and up onto the downland to the south, providing sheepwalks. The site lies within the manor of Plumpton, recorded in the Domesday Book of 1086 as Plumtune ('plum farm'), assessed at thirty hides, and with a church and two mills recorded. It formed part of the Rape of Lewes, given to William de Warenne after the Conquest, and was held of him by Hugh fitzRanulph (Williams & Martin 2002). The manor subsequently passed to the Bardolf family, and later in the period was held by the Carews, who leased and latterly sold the site of the manor along with the demesne lands, to John Mascall (Salzman 1940). The sheepwalks of the respective manors were accessed by deeply incised hollow-ways, or bostals such as Plumpton Bostal (13), which zig-zagged up the scarp slope, many predating the period by many centuries.
- 2.6.2 The parish church of St Michael and All Angels (10), which lies adjacent to the area to be evaluated (but outside the development area boundary), has its origins in the medieval period, if not earlier; according to the list description the oldest part of the building is the nave, dating to *c*.1100 (National Heritage List for England, list entry ref. 1238266). To the east of the College, the house at Plumpton Place (11), was built in 1568 by John Mascall, but occupies an earlier moated site.
- 2.6.3 The ESHER records a medieval hamlet at Plumpton (16; ANA 87 (west part). This suggests the settlement was around the church; however, the exact location and extent of the medieval settlement has not been

determined, but is usually considered to have been between the church and the manor house.

2.6.4 Other evidence for this period in the wider Study Area comprises medieval pottery and a fragment of medieval chimney pot found at Hackmans Farm (12), a possible medieval animal fold at Faulkner's Bottom entrenchment (14), a series of linear banks which are possible ridge and furrow (15), a partially extant medieval farmstead at Drews Farm (17) and a tree bole containing medieval pottery and a medieval pit recorded during excavations at Plumpton College Lake (18). Situated on the scarp slope in the southern part of the Study Area is a chalk hill figure known as the Ditchling Cross (19), thought to commemorate Henry III's defeat by Simon de Montfort at the battle of Lewes in 1264 and of possible medieval origin; it has been suggested the cross was created by the monks of Southover, Lewes.

#### 2.7 Post-Medieval

- 2.7.1 For much of the post-medieval period the site and its environs comprised a rural landscape of fields, formally enclosed from the 16<sup>th</sup> century onwards, within which Plumpton Place, St Michael's Church, and buildings at Wales Farm occupied relatively isolated positions. Eighteenth century maps show stylised plans of the church, Wales Farm and Plumpton Place (ASE 2019a Figures 3-5)
- 2.7.2 In the early 20<sup>th</sup> century, Plumpton College was established at the site. East Sussex County Council took a five-year lease of the 340-acre Wales Farm at Plumpton from the Chichester Estate in 1919. The freehold was purchased in 1924, and October 1926 saw the first intake of students. The institute was officially opened by the Minister of Agriculture in July 1927, and the college building was extended in 1937. During the Second World War the school was used for short courses to entrants to the Women's Land Army, and much of Wales Farm was used for food production (Plumpton College website). Approximate locations for two Second World War air crash sites are recorded within the Study Area (51 & 52), both of which are situated in close proximity to the Site boundary. These sites are legally protected.
- 2.7.3 Apart from the 11 Listed Buildings of post-medieval date and the Registered Park and Garden at Plumpton Place (21-30, 47 & 48), a further 22 post-medieval entries are recorded on the ESHER. These comprise:
  - Evidence for post-medieval buildings at Plumpton Lane and Fallbrook (31 & 32);
  - Site of 18<sup>th</sup> century (or earlier) barn at Plumpton College (33);
  - 19<sup>th</sup> century (or earlier) chalk pit and kiln north of Jubilee Plantation (34);
  - 19<sup>th</sup> century (or earlier) chalk pits at The Coombe (**35**);
  - Streat Bostal (36);
  - 19th century tree clump east of Middleton Manor (37);
  - 19th century (or earlier) chalk quarry west of Plumpton Bostal (38);
  - 19<sup>th</sup> century chalk guarry west of Plumpton Bostal (**39**):

- Evidence for a post-medieval building at Gote Farm, Streat (40);
- Partially extant 17<sup>th</sup> century farmstead at Gote Farm, Streat (41);
- Site of demolished 19<sup>th</sup> century outfarm at New Barn, Plumpton (42);
- Partially extant 19<sup>th</sup> century farmstead at Oakwood Farm, Streat (43):
- Partially extant 19<sup>th</sup> century farmstead at Wales Farm, Plumpton (44):
- Partially extant 17<sup>th</sup> century farmstead at Plumpton Place, Plumpton (45);
- Site of demolished 19<sup>th</sup> century outfarm at yard north-west of Drews Farm, Plumpton (46);
- 20 anti-tank buoys at Plumpton College (49);
- Land Army training site at Plumpton College (50);
- WW2 air crash site at Wales Farm (51);
- WW2 air crash site at Plumpton College (52);
- WW2 bunker at Wales Farm (53); and
- WW2 bomb recovered at Plumpton College (54).

#### 2.8 Undated

#### 2.8.1 Two undated records are also listed on the ESHER:

- Lynchet/removed field boundary in field east of Plumpton Place (55); and
- Undated features found during archaeological work at Plumpton College Lake (79 & 81).

## 2.9 Research Aims and Objectives

- 2.9.1 The general aims of the evaluation given in the WSI (ASE 2019b) were:
  - To define, insofar as possible, the date, character, form and function of any archaeological features observed on site.
  - To establish the presence or absence of archaeological remains within the footprint of the proposed development and to preserve by record any such remains
  - To determine the survival, extent and minimum depth below modern ground level of any such remains
  - To determine the nature and significance of any archaeological deposits
  - To establish to what extent the results of the work inform understanding of the chronology and development of landscape use within the site and whether this understanding enhances the known heritage assets in the wider area.
- 2.9.2 The specific aims of the evaluation given (*ibid*) were to:
  - To establish if Quaternary deposits survive at the site, and to identify their potential for sampling for the recovery of geoarchaeological material
  - To establish the presence or otherwise of activity dating to the prehistoric period. Is there evidence of sedentary agricultural activity along the base of the scarp slope in the distant past? Or is it more likely to consist of more transient hunter/gatherer activity.
  - To establish the presence or otherwise of activity contemporary with the local Roman villa, and the Romano-British material found during work on the nearby lake site.
  - To establish the presence or otherwise of activity dating to the Anglo-Saxon or Medieval period, and to attempt to put the isolated features found at the new lake site in context? Is there physical evidence of the presumed medieval settlement at the site (ANA 87)? Does it have origins dating back into the Anglo-Saxon period?
  - Was there any continuity of the presumed medieval settlement into the post-medieval period? If so, when was the site abandoned?

#### 3.0 ARCHAEOLOGICAL AND GEOARCHEOLOGICAL METHODOLOGY

(Figure 2)

# 3.1 Archaeological Methodology

- 3.1.1 A plan of thirty-one trenches (providing a c.4% sample of the site) was outlined in the WSI (ASE 2019b). In the event, the discovery of unrecorded buried live services in various areas of the site lead to some changes to the trench pattern, but following on-site discussions with the ESCC County Archaeologist, it was agreed that the altered trench layout still provided adequate coverage of the development site.
- 3.1.2 All work was carried out in accordance with the WSI (*ibid.*), the Standards and Guidance of the Chartered Institute for Archaeologists (CIfA 2019), and standards for Archaeological Work in Sussex (CDC, ESCC, WSCC, 2019).
- 3.1.3 Mechanical excavation, under constant archaeological supervision, using a flat-bladed bucket was undertaken in small spits down to the top of natural geological deposits, or to the top of any recognisable archaeological deposits, whichever was the higher. Care was taken not to damage archaeological deposits through excessive use of mechanical excavation. Revealed surfaces of natural geology were manually cleaned to identify archaeological features. Spoil was scanned for the presence of artefacts, both visually and with a metal detector.
- 3.1.4 All encountered archaeological deposits, features and finds were collected, sampled and recorded to accepted professional standards using standard Archaeology South-East recording forms.
- 3.1.5 The trench locations were planned using digital survey technology. A digital photographic record was maintained of all trenches and test-pits, and of the site in general.

# 3.2 Geoarchaeological Methodology

- 3.2.1 The geoarchaeological evaluation comprised the excavation of a total of 11 Geoarchaeological Test Pits (GTPs). These were excavated within the footprint of open evaluation trenches. Care was taken to only excavate test pits in parts of trenches that were blank for archaeological features.
- 3.2.2 The test pits were excavated by machine with a 1.8m flat bucket in spits of no more than 100mm, following sedimentary units where possible. Each test pit was taken to the reach of the machine, or the solid geology where possible. Excavation was constantly monitored by a geoarchaeologist and smaller spits of 50mm where taken for deposits with potential for in situ artefacts. 100L of sediment was sifted through at regular intervals, at minimum every 0.2m excavated, in order to search for artefacts. Test pits were entered after the removal of each spit and trowelled in order to search

for artefacts up to a depth of 1.2m. Beyond this depth the test pits were not entered.

- 3.2.3 The sequence of sedimentary units was recorded for each test pit. This included detailed descriptions of colour, lithological make up, and structure. A representative section from each test pit was photographed. Samples were taken of deposits that showed potential for palaeoenvironmental remains or dating.
- 3.2.4 Once excavated and recorded each test pit was backfilled as soon as possible.
- 3.2.5 Results from the geoarchaeological evaluation were fed into the Rockworks deposit modelling software to produce a litho-stratigraphic model of the site. This report has been produced on the basis of this along with the field observations.
- 3.2.6 It was not possible to excavate a test pit in the footprint of Trench 27 while the geoarchaeologist was on site as the area was in use by the college at the time.

#### 3.3 Archive

3.3.1 The site archive is currently held at the offices of ASE and will be offered to Lewes Castle and Museum in due course. However it should be noted that the museum is not currently in a position to accept archaeological archives and is subsequently not issuing accession numbers. The contents of the archive are tabulated below (Tables 1 and 2).

Context sheets	160
Section sheets	1
Digital photos	110 images
Photo register	3
Drawing register	1
Watching brief forms	0
Trench Record forms	31

Table 1: Quantification of site paper archive

Bulk finds (quantity e.g. 1 bag, 1 box,	1 box
0.5 box 0.5 of a box )	
Registered finds (number of)	0
Flots and environmental remains	0
from bulk samples	
Palaeoenvironmental specialists	0
sample samples (e.g. columns,	
prepared slides)	
Waterlogged wood	0
Wet sieved environmental remains	0
from bulk samples	

Table 2: Quantification of artefact and environmental samples

#### 4.0 RESULTS - ARCHAEOLOGICAL EVALUATION

#### 4.1 Introduction

- 4.1.1 The trenches were excavated during a two week period in November 2019. Weather conditions were highly varied ranging from low sunshine to heavy rain.
- 4.1.2 Roughly two-thirds of the evaluation trenches were devoid of archaeological features or deposits, archaeological features were identified, excavated and recorded in Trenches 3, 6, 7, 8, 9, 10, 20, 22, 25, 28 and 29.

## **4.2 Trench 3** (Figure 3)

Context	Туре	Description	Max. Width	Max Thickness	Height m AOD
			m	m	
3/001	Layer	Topsoil	Trench	0.23	65.27 - 66.27
3/002	Layer	Made	Trench	0.95	
		Ground			
3/003	Layer	Natural	Trench	-	62.76 - 64.93
3/004	Fill	Gully	-	0.24	
3/005	Cut	Gully	1.01		63.12

Table 3: Trench 3 list of recorded contexts

- 4.2.1 Trench 3 was located in a steeply-sloping pasture field to the north of the existing College complex and was excavated to a length of 30m. The overburden consisted of build-up of topsoil, context [3/001] over a dump of highly mixed made ground, context [3/002] (as seen in Trenches 4 and 5; see below).
- 4.2.2 The made ground thinned to the north, revealing the surface of the brownish orange silty clay Gault 'natural', context [3/003]. The only feature was shallow, flat-bottomed gully [3/005] which ran east to west across the trench. The single fill was a mid-brown silty clay, context [3/004], which contained a single cattle bone, but no datable material. The feature is shown on the Plumpton Tithe map of 1841 as part of a bank and ditch arrangement (Figure 15), and is presumed to be post-medieval in date.

# **4.3 Trench 6** (Figure 4)

Context	Туре	Description	Max. Width m	Max Thickness	Height m AOD
				m	
6/001	Layer	Hardstanding	Trench	0.35	66.25 -66.37
6/002	Layer	Made	Trench	0.18	-
		Ground			
6/003	Layer	Made	Trench	0.40	-
	-	Ground			
6/004	Layer	Natural	Trench	-	65.21 - 65.29
6/005	Fill	Backfill	-	>0.10	-
6/006	Masonry	Wall	0.30		
6/007	Cut	Construction	-	-	
		Cut			
6/008	Void				
6/009	Masonry	?Wall	-	-	
6/010	Cut	Construction	-	-	
		Cut			

Table 4: Trench 6 list of recorded contexts

- 4.3.1 Trench 6 was positioned close to the College's Pig Unit, on the site of the historic Wales Farm, in an area of hardstanding to the north of the walled paddock in which Trenches 7, 8 and 9 were located.
- 4.3.2 Below layers of crushed brick and concrete hardstanding, context [6/001], and layers of highly mixed made ground/demolition rubble, contexts [6/002] and [6/003], the 'natural' yellowish grey silty clay, context [6/004] was encountered. Two stretches of masonry were located and recorded both immediately below the hardstanding.
- 4.3.3 Wall [6/006] ran north to south across the trench. It consisted of red brick and tile bonded with a sandy mortar, set in construction cut [6/007]. A skim of material removed during hand cleaning of the masonry was given a separate context number to the other overlying made ground, context [6/005]. A single small sherd of 18<sup>th</sup> century pottery was recovered from it
- 4.3.4 The other masonry formed the scant remains of ?wall [6/009], only visible in the southern section of the trench and made from chalk and flint rubble. Associated construction cut [6/010] was not visible.
- 4.3.5 Masonry [6/006] does not exactly match any wall shown on the available cartographic sources, but matches the orientation of nearby walls in the Ordnance Survey map of the 1970s (Figure 18), suggesting a relatively recent date. Wall [9/009] more closely matches masonry shown on this map, again suggesting a probable 20<sup>th</sup> century date.

#### **4.4 Trench 7** (Figure 5)

Context	Туре	Description	Max. Width	Max Thickness	Height m AOD
			m	m	
7/001	Layer	Topsoil	Trench	0.22	66.81 - 68.89
7/002	Layer	Made Ground	Trench	0.50	-
7/003	Layer	Made Ground	Trench	0.41	-
7/004	Layer	Made Ground	Trench	-	66.74 - 67.43
7/005	Cut	Construction Cut		-	-
7/006	Masonry	Wall	0.25	-	-
7/007	Cut	Construction Cut		-	-
7/008	Masonry	Wall	0.24	-	-
7/009	Cut	Construction Cut	-	-	-
7/010	Masonry	Wall	0.40	-	-
7/011	Fill	Backfill	-	-	-
7/012	Masonry	Wall	0.20	-	-
7/013	Masonry	Floor	-	-	-
7/014	Layer	Levelling	-	-	-

Table 5: Trench 7 list of recorded contexts

- 4.4.1 Trench 7 was excavated to a length of 20m in a steeply-sloping walled paddock. Depth of the overburden and flooding hampered recording, as in the other trenches in this part of the site. The underlying geology was not encountered.
- 4.4.2 Again masonry remains were encountered below the thin of layer of topsoil, context [7/001]. Although there were associated made ground/demolition deposits, context [7/003] and [7/004].
- 4.4.3 Extensive masonry remains were encountered close to the north-western end of the trench. Wall [7/010] ran from east to west across the trench. It consisted of flint cobbles bonded with a yellow sandy mortar. The construction cut, [7/009] was not visible. There was an associated brick and tile floor/surface, bonded with grey sandy mortar, masonry [7/013] to the north-west, with a probable dividing brick-built wall [7/011]. Samples of brick and tile used in the floor could not be closely dated, but were clearly late post-medieval in date, Floor [7/013] had been laid on a bed of yellow sand and clay, context [7/014].
- 4.4.4 Further walls to the south-east ran parallel to Wall [010]. Wall [7/008] consisted of flint cobbles bonded in a yellowish sandy mortar, in undetected construction cut [7/007]. Wall [7/006] was different in character, brick-built but again bonded with a yellow sandy mortar. Associated construction cut [7/005] had been backfilled with a greyish brown silty clay, context [7/011].
- 4.4.5 All of the masonry encountered in the trench lies within the footprint of the farm building shown on the Tithe Map of 1841 (Figure 16), with continuing close matches for wall [7/010] and [7/013] until the 1970s Ordnance Survey map (Figure 18).

# 4.5 Trench 8 (Figure 6)

Context	Туре	Description	Max. Width m	Max Thickness m	Height m AOD
8/001	Layer	Topsoil	Trench	0.67	67.95 - 69.93
8/002	Layer	Made Ground	Trench	0.39	-
8/003	Layer	Natural	Trench	-	67.42 - 68.71
8/004	Masonry	Wall	0.40	-	
8/005	Cut	Construction Cut	-	-	

Table 6: Trench 8 list of recorded contexts

- 4.5.1 Trench 8 was excavated to a length of 18m (shortened to avoid a detected buried live service) in the walled paddock. Again, masonry remains associated with the former Wales Farm complex were encountered and recorded just below the topsoil, context [8/001]. The mid-grey silty clay 'natural' Gault deposit, context [8/003] was encountered in this trench, as well as a layer of the local highly made ground/demolition rubble, context [8/002]
- 4.5.2 Wall [8/004] was constructed from flint cobbles bonded with an orangey yellow sandy mortar. Associated construction cut [8/005] was not visible. This is clearly the remains of a farmyard wall shown on the Ordnance Survey map of the 1870s (Figure 17) and still *in situ* in the 1970s (Figure 18)

## **4.6 Trench 9** (Figure 7)

Context	Туре	Description	Max. Width m	Max Thickness m	Height m AOD
9/001	Layer	Topsoil	Trench	0.37	70.82 - 71.96
9/002	Layer	Made Ground	Trench	0.31	-
9/003	Layer	Head Deposit	Trench	0.44	-
9/004	Layer	Natural	-		69.85 - 70.74
9/005	Masonry	Wall	0.40		
9/006	Cut	Construction Cut			-

Table 7: Trench 9 list of recorded contexts

4.6.1 Trench 9 was the remaining trench excavated in the walled paddock. It was excavated to a length of 20m. Again a single stretch of masonry was encountered and recorded below the topsoil, context [9/001]. This trench also showed a more complex stratigraphic sequence with the mixed made ground /demolition deposit [9/002] seen to overlay a deposit of chalky Head Deposit, context [9/003], which in turn overlay the mid-grey silty Gault 'natural', context [9/004].

4.6.2 Wall [9/005] was constructed from flint cobbles bonded with an orangey yellow sandy mortar. Construction cut [9/006] was not detected but would have been cut into the layer of Head deposit [9/003]. The masonry is clearly the remains of a continuation of the farmyard wall seen in Trench 8 and on the Ordnance Survey maps (Figures 17 and 18).

## **4.7 Trench 10** (Figure 8)

Context	Туре	Description	Max. Width m	Max Thickness m	Height m AOD
10/001	Layer	Topsoil	Trench	0.35	75.43 - 75.48
10/002	Layer	?rooted Natural	Trench	0.20	-
10/003	Layer	Natural	Trench	-	74.93 - 74.96
10/004	Cut	Gully	0.75	-	75.08
10/005	Fill	Gully	-	0.38	-

Table 8: Trench 10 list of recorded contexts

- 4.7.1 Trench 10 was located partly within an area of vegetable planting and partly within an orchard close to the College's Horticulture Section. This situation is reflected in the stratigraphic sequence which consisted of a humic topsoil, context [10/001], which overlay a loose creamy grey silty clay, context [10/002] interpreted as root disturbed 'natural', which over the firmer whitish grey chalky clay 'natural' Head deposit, context [10/003]. A single archaeological feature was encountered, excavated and recorded.
- 4.7.2 Gully [10/004] ran north to south across the trench. There were two discernible fills, the oldest was a yellowish grey silty clay, context [10/005] from which fired clay and residual Mesolithic/Early Neolithic flintwork were recovered. The upper fill was a mid-yellowish grey silty clay, context [10/006]. No datable material was recovered from this fill. The feature remains undated.

#### **4.8** Trench **20** (Figure 9)

Context	Туре	Description	Max. Width	Max Thickness	Height m AOD
20/001	Layer	Topsoil	m Trench	<b>m</b> 0.25	74.49 - 74.87
		•			14.43 - 14.01
20/002	Layer	Subsoil/Interface	Trench	0.17	-
20/003	Layer	Natural	Trench	-	74.10 - 74.31
20/004	Layer	Made Ground	Trench	0.12	-
20/005	Layer	Made Ground	Trench	0.25	-
20/006	Cut	Post-Hole	0.25	-	74.15
20/007	Fill	Post-Hole	-	0.22	-
20/008	Cut	Post-Hole	0.37	-	74.06
20/009	Fill	Post-Hole	-	0.24	-
20/010	Cut	Post-Hole	0.35	-	74.16
20/011	Fill	Post-Hole	-	0.35	-
20/012	Cut	Post-Hole	0.28	-	74.18
20/013	Fill	Post-Hole	-	0.34	-
20/014	Cut	Post-Hole	0.40	-	74.20
20/015	Fill	Post-Hole	-	0.30	-
20/016	Cut	Post-Hole	>0.40		74.13
20/017	Fill	Post-Hole		0.45	-

Table 9: Trench 20 list of recorded contexts

- 4.8.1 Trench 20 was located in an area formerly occupied by raised beds and other planted areas. It was excavated to a length of 17m (shortened to avoid a detected buried live service). There were deposits of brick rubble made ground, context [20/005] and MOT Type 1 make-up at the western end, context [20/004], but the majority of the overburden consisted of humic midbrown silty clay topsoil, context [20/001], which overlay a creamy grey silty clay subsoil/interface layer, context [20/002], which overlay the whitish grey chalky clay 'natural' Head deposits, context [20/003]. A linear arrangement of six post-holes were encountered, excavated and recorded.
- 4.8.2 Post-holes [20/006], [20/008], [20/010], [20/012], [20/014] and [20/016] were all almost vertical-sided with flat bases with relatively little variation in diameter or depth, except for post-hole [20/016] which lay partially under the southern baulk and was larger and deeper than the other features. All of the fills (contexts [20/007], [20/009], [20/011], [20/013], [20/015] and [20/017] respectively) were creamy grey silty clays.
- 4.8.3 A single metal fixing (a loop-headed staple) from the fill of post-hole [20/012] was the only artefact recovered from these features. It is either medieval or perhaps slightly later in date, but suggests the features are of some antiquity. It is possible that this arrangement of post-holes represents the remains of a post-built structure of some kind, arguably medieval in date.

#### **4.9** Trench **22** (Figure 10)

Context	Туре	Description	Max. Width m	Max Thickness m	Height m AOD
22/001	Layer	Topsoil	Trench	0.33	75.83 - 76.26
22/002	Layer	Subsoil/Interface	Trench	0.40	-
22/003	Layer	Natural	Trench	-	75.30 - 75,91
22/004	Cut	Gully	1.20	-	75.56
22/005	Fill	Gully	-	0.17	-

Table 10: Trench 22 list of recorded contexts

- 4.9.1 Trench 22 was excavated to a length of 14m in an area of standing trees adjacent to the parish church of St. Michael and All Angels. The stratigraphic sequence was straightforward, consisting of a humic midbrown topsoil, context [22/001], which overlay a creamy grey silty clay subsoil/interface layer, context [22/002], which in turn overlay the whitish grey chalky clay 'natural' Head deposit, context [22/003]. A single archaeological feature was encountered, excavated ad recorded.
- 4.9.2 Shallow gully [22/004] ran north to south across the trench. The single fill was creamy grey silty clay, context [22/005]. No datable material was retrieved, although a horse tooth was recovered from the feature.

## **4.10** Trench **25** (Figure 11)

Context	Туре	Description	Max. Width	Max Thickness	Height m AOD
			m	m	
25/001	Layer	Topsoil	Trench	0.20	72.40 - 72.51
25/002	Layer	Subsoil/Interface	Trench	0.11	•
25/003	Layer	Natural	Trench	-	72.08 - 72.15
25/004	Cut	Pit	0.80	-	72.12
25/005	Fill	Pit	-	0.18	•
25/006	Cut	Pit	1.50	-	72.14
25/007	Fill	Pit	-	0.40	-
25/008	Fill	Pit	-	0.34	-

Table 11: Trench 25 list of recorded contexts

- 4.10.1 Trench 25 was excavated to a length of 15m in a plot given over to vines to the north of the church. The layers of overburden and 'natural' were similar in character to those seen to the south in Trench 22. Two archaeological features were identified, excavated and recorded.
- 4.10.2 The largest was pit [25/006]. There were two discernible fills but the boundary between them was somewhat diffuse. Context [25/007] was a light yellowish brown silty clay, and context [25/008] was a mid-yellowish brown clay. No datable material was recovered from the feature.
- 4.10.3 The smaller feature was pit [25/004]. The single fill was a mid-greyish brown

silty clay, context [25/005]. Again no datable material was recovered from the feature.

#### **4.11 Trench 26** (Figure 12)

Context	Туре	Description	Max. Width m	Max Thickness m	Height m AOD	
26/001	Layer	Topsoil	Trench	0.32	72.22 - 72.38	
26/002	Layer	Subsoil/Interface	Trench	0.28	-	
26/003	Layer	Natural	Trench	-	71.69 - 71.81	
26/004	Cut	Gully	0.56	-	71.83	
26/005	Fill	Gully	-	0.20	-	

Table 12: Trench 26 list of recorded contexts

- 4.11.1 Trench 26 was excavated immediately to the north of Trench 25 and displayed a similar stratigraphic sequence. It was 13m in length. A single archaeological feature was identified, excavated and recorded.
- 4.11.2 Gully [26/004] ran broadly north to south across the western end of the trench. The single fill was a light grey silty clay, context [26/005]. No datable material was recovered from the feature.

# 4.12 Trench 27 (No figure)

Context	Туре	Description	Max. Max Width Thickness m m		Height m AOD	
27/001	Layer	Hardstanding	Trench	0.23	70.29 - 70.90	
27/002	Layer	Head Deposit	Trench	1.20	-	
27/003	Layer	Natural	Trench	-	69.06 - 69.47	

Table 13: Trench 27 list of recorded contexts

- 4.12.1 Trench 27 was located in the area used for instruction in tractor driving and was excavated to a length of 20m. Although no archaeological features were encountered in the trench details are included here as bone was recovered from the trench.
- 4.12.2 The overburden consisted of the hardstanding used as the surface of the area, context [27/001], which overlay a thick deposit of creamy grey Head Deposit, context [27/002], which overlay the brownish orange silty clay Gault Formation 'natural', context [27/003]. Animal bone was recovered from context [27/002] at a depth of *c*.1m below the current ground surface.

#### **4.13** Trench **28** (Figure 13)

Context	Туре	Description	Max. Width	Max Thickness	Height m AOD
			m	m	
28/001	Layer	Topsoil	Trench	0.25	71.55 - 71.98
28/002	Layer	Subsoil/Interface	Trench	0.16	-
28/003	Layer	Natural	Trench	-	71.09 - 71.44
28/004	Cut	Pit	1.66	-	71.34
28/005	Fill	Pit	-	0.22	=
28/006	Cut	Pit	0.85	-	71.34
28/007	Fill	Pit	-	0.23	-
28/008	Cut	Pit	0.68	-	71.34
28/009	Fill	Pit	-	0.14	-
28/010	Cut	Pit	1.52	-	-
28/011	Fill	Pit	-	-	-
28/012	Cut	Pit	1.90	-	-
28/013	Fill	Pit	-	-	-
28/014	Cut	Pit	-	-	-
28/015	Fill	Pit	-	-	-

Table 14: Trench 28 list of recorded contexts

- 4.13.1 Trench 28 was located in a grassed area to the north of the church and was excavated to a length of 20m. The layers of overburden and 'natural' were similar in character to those seen in nearby Trench 25. A sherd of Middle/Late Iron Age pottery was recovered from the topsoil, context [28/001].
- 4.13.2 Six features were identified. Three intercutting pits were sectioned and two other pits had material removed from their fills, which could not be excavated owing to repeated flooding. A sixth was left unexcavated.
- 4.13.3 The largest of the intercutting features was pit [28/004]. The single fill was a mid-brownish grey silty clay, context [28/005]. Pit [28/006] contained a single fill of similar colour and character, context [28/007]. The latest of the features was pit [28/008]. The fill was a mid-greyish brown silty clay, context [28/009]. All three features contained sherds of Middle/Late Iron Age pottery.
- 4.13.4 It was not possible to establish the stratigraphic relationship between two features to the east, pits [28/010] and [28/012] owing to flooding. However a mid-yellowish brown clayey silt fill of pit [28/010], context [28/011] contained Late Iron Age pottery suggesting the feature was the latest in date, as the dark greyish brown clayey silt fill of pit [28/012], context [28/013] contained pottery dated to the Middle to Late Iron Age. Pit [28/014] could not be excavated owing to flooding.

#### **4.14 Trench 29** (Figure 14)

Context	Туре	Description	Max. Width m	Max Thickness m	Height m AOD	
29/001	Layer	Topsoil	Trench	0.24	72.30 - 72.58	
29/002	Layer	Natural	Trench		72.10 - 72.12	
29/003	Fill	Pit	0.80	-	-	
29/004	Cut	Pit	-	0.08	-	

Table 15: Trench 29 list of recorded contexts

- 4.14.1 Trench 29 was excavated to a length of 10m to the south of Trench 28. At this point in the grassed area, there was no observable subsoil, so topsoil [29/001] directly overlay the 'natural', context [29/002], which were similar in character to the equivalent deposits in Trench 28.
- 4.14.2 Shallow pit [29/004] contained small bones leading to the suspicion that the deposit represented the burial of a neonate close to the church boundary. Attempts to manually excavate the bones were severely hampered by flooding, and it was decided to retain the entire fill of the pit as a sample. However on discovery of a metal tag attached to one of the bones it became obvious that the material was from an animal burial of recent origin, and the sample was discarded.

# 4.8 The Remaining Trenches

- 4.8.1 The remaining trenches showed a range of stratigraphic sequences but contained no discernible archaeological features with the exception of Trench 2 which contained a possible gully and area of flint cobbling. However the trench rapidly flooded with water containing slurry from the adjacent field and was not therefore suitable for manual excavation.
- 4.8.2 Trench 1 showed relatively deep head deposits overlying the older Gault Formation 'natural', while Trenches 4 and 5 contained deep deposits of made ground, presumably spoil from the construction of the adjacent College buildings; Gault Formation 'natural' was encountered at depths of 1.8m in Trench 4 and 2.1m in Trench 5.
- 4.8.3 Trenches 15 and 16 were sited in an area which had been clearly raised above the surrounding area in the recent past and was tested by smaller trial holes, rather than trenches with the agreement of ESCC; that at the location of Trench 15 was abandoned when asbestos was encountered at a depth of 1.2m. That at the location of Trench 16 was converted into a geoarchaeological test pit (see below).
- 4.8.4 Trenches 23, 24, 30 and 31 were located in the grassed area to the north of the church and demonstrated the simple stratigraphic sequence seen there. Similar sequences were seen in trenches located in paddocks to the west; in Trenches 14, 17, 18 and 19, and in areas of planting beds or orchard; in Trenches 11, 12 and 13. Trench 21 adjacent to the church was

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in a location found to have been heavily disturbed by the laying of services in the recent past.

#### 5.0 **RESULTS - GEOARCHAEOLOGICAL EVALUATION**

#### 5.1 **Summary**

- 5.1.1 The 11 geoarchaeological test pits made it possible to map deposits across much of the site and assess their archaeological and palaeoenvironmental potential. Results were inputted into Rockworks software in order to build a model of these deposits. This was used to produce a map of the stratigraphy encountered in each test pit along with a transect of deposits across the site in order to understand the surface and underlying topography and stratigraphy across the area (Figures 2, 19-20).
- 5.1.2 Overall the geology and topography of the site shows a higher area of Cretaceous geology running through the site from the south to the north. The higher ground falls away to the west and east into two valleys running to the north, the slope to the west forming the western part of the site. Here the valley side has only minimal superficial deposits resulting in c.0.5m of colluvium overlying the solid geology. On the eastern edge of the site only the start of drop away into the eastern valley is within the site. However test pitting here has shown there is a much more pronounced drop in the Cretaceous geology further to the west of the present day eastern valley side (Figure 19). This shows an older valley which has subsequently been filled in with Quaternary deposits, and which the present day eastern valley is cut into. The ground also falls away to the north, where a thick deposit of made ground was encountered directly overlying the Gault Clay.
- As a result of the deposits encountered during the geoarchaeological 5.1.3 evaluation the site has been divided into 3 Geoarchaeological Potential Zones (GPZ 1-3) (Figure 21). Due to the distance between test pits across the site it has not been possible to map the exact extent of deposits for each GPZ and boundaries between zones should not be considered exact.

#### 5.2 **GPZ1 (GTPs 1, 4, 11)**

GPZ1 exists in the eastern part of the site. Each of the test pits in this area 5.2.1 showed a deep Quaternary sequence reaching the solid geology at depth. At the base of the sequence was the Gault Formation, here a pale grey mudstone, which was reached at c.69m OD in GTP4. At the base in GTP1 a gravel was present at 68.7m OD with some larger flint cobbles, however this was not encountered in the other test pits. Overlying this or the Gault clay and present in each test pit in GPZ1 was up to two meters of a fine grained silt (from c.70m OD). This deposit was pale grey with some iron staining and showed slight variation with some units clayeyer or sandier and some having occasional chalk flecks and rare angular flint gravel, GTP4 in particular showed possible structure within this fine grained deposit. Frequent snail shells were observed, and samples were taken for micropalaeontology and palaeoenvironmental analysis. Overlying this

was a Calcareous head, from c. 72m OD, a pale grey silt with some iron staining and layers of apparent iron panning with chalk pellet and subangular and angular flint gravel. In GTP11 a darker layer was observed within the calcareous head at 71.5m OD, possibly a buried land surface, which has been sampled for palaeoenvironmental remains. This was covered by a thin deposit of chalky colluvium and then topsoil.

- 5.2.2 It was not possible to excavate a test pit directly to the north of GTP4 while the geoarchaeologist was on site, however descriptions made during the archaeological evaluation of Trench 27 suggest the deposits described in GPZ1 continue to the north. Further to this, partially fossilised bone was recovered from a depth of 1.2m in Trench 27, suggesting Pleistocene faunal remains may be present in these deposits.
- 5.2.3 This area has a high geoarchaeological potential due to the thick sequence of Quaternary deposits surviving. The fact that the deposits in this area have been seen to preserve bone and mollusc shells means that there is a high likelihood of good palaeoenvironmental preservation, particularly regarding the fine grained head deposit. Further to this the fine grained nature of this deposit and the possible buried land surface observed in GTP11 mean there is the possibility of in situ archaeology.

# 5.3 **GPZ2 (GTPs 3 and 10)**

- 5.3.1 GPZ2 lies to the west of GPZ1 has a deposit up to 2m thick (thinning to the west) of calcareous head, a continuation of the calcareous head found in GPZ1. Here the deposit was found to directly overly the solid geology at c. 71m OD and the fine grained calcareous deposit was not present. It appears to be truncated to the north by made ground.
- 5.3.2 This area has moderate geoarchaeological potential. The calcareous head deposit is likely a Pleistocene cold stage solifluction or colluvial deposit from the scarp slope of the South Downs. It has the potential to contain ecofacts and artefacts, but these are unlikely to be in situ. However, this deposit was seen to contain a possible buried land surface in GTP11, which may extend further to the west. A buried land surface would have high geoarchaeological potential due to it signifying landscape stabilisation, having good palaeoenvironmental potential and the possibility for in situ archaeology.

# 5.4 GPZ3 (GTPs 2, 5, 6, 7, 8, 9)

5.4.1 GPZ3 encompasses the remainder of the site as it slopes down to the north and down into the valley to the west. To the west test pits GTP5 and GTP9, and the deposits recorded in Trench 14 show a shallow sequence of colluvium directly overlying the Gault Formation. To the north there is a deposit of made ground, up to 2m thick, containing a large amount of building rubble and directly overlying the solid geology (GTPs 2 and 7). As this drops away further north there is a thin deposit of colluvium, overlying weathered Gault clay (GTPs 6 and 8).

5.4.2 This area is considered to have low geoarchaeological potential due to the relative lack of Quaternary deposits overlying the solid geology.

# 5.5 Palaeoenvironmental Samples

5.5.1 Bulk samples were taken from deposits with potential to preserve palaeoenvironmental remains (Table 16). However no assessment of the palaeoenvironmental samples has so far taken place

GTP	Sample no.	Туре	Unit	Depth	Notes
1	1.1	1 x bag		2.4m	
	1.2	2 x bags		2.9m	
4	4.1	1 x bag		2.6m	
	4.2	1 x bag	[4/5]	2.3m	
6	6.1	1 x bag	[6/3]	0.5m	Weathered Gault?
11	11.1	1 x bag		0.9m	Buried soil

Table 16: Palaeoenvironmental samples collected during the geoarchaeological evaluation

#### 6.0 THE FINDS

# 6.1 Summary

6.1.1 A small assemblage of finds was recovered during the evaluation. All finds were washed and dried or air dried as appropriate. They were subsequently quantified by count and weight and bagged by material and context. The hand-collected bulk finds are quantified in Table 16. All finds have been packed and stored following ClfA guidelines (ClfA 2014c).

Context	Lithics	Weight (g)	Pottery	Weight (g)	СВМ	Weight (g)	Stone	Weight (g)	Iron	Weight (g)	Bone	Weight (g)	Fire Cracked Flint	Weight (g)	Fired Clay or Daub	Weight (g)
3/004											2	123				
6/005			1	1												
7/013					3	6140										
10/005	1	<1											3	7	2	3
20/013									1	13						
22/005											1	7				
27/002											3	42				
28/001			1	4									1	13		
28/005	1	23	1	4			1	34			1	8				
28/007			5	16							2	5	1	6		
28/009	1	6	2	35									3	81		
28/011	1	6	2	22									1	28		
28/013			8	63							2	5	3	84	3	5
Total	4	25	21	148	3	6140	1	34	1	13	11	190	12	219	5	8

Table 17: Quantification of hand-collected bulk finds

# 6.2 The Flintwork by Karine Le Hégarat

- 6.2.1 The evaluation has produced four pieces of struck flint weighing 25g and a small quantity of unworked burnt flint fragments (219g). Three of the four pieces of struck flint came from trench 28 and the remaining piece came from trench 10. The small assemblage comprised two flakes and two blades fragments. The blade fragments (from contexts [10/005] and [28/011]) are both recorticated to a white/light blue colour. They are relatively fresh and indicate a Mesolithic or Early Neolithic date.
- 6.2.2 The flakes were free from surface discolouration. They were made from a mid to dark grey flint. This variation between the blades and the flakes

suggest that there may be a chronological difference between them.

6.2.3 The burnt unworked flint fragments also came from trenches 10 and 28, but they were distributed in six numbered contexts. Burnt flints are frequently associated with prehistoric activities, but this small assemblage could relate to more recent burning events.

# **6.3** The Prehistoric Pottery by Anna Doherty

- 6.3.1 A small assemblage of prehistoric pottery, totalling 19 sherds, weighing 144g, was recovered from six individual contexts in Trench 28. Although the assemblage is undiagnostic, the range of fabrics is probably suggestive of Middle/Late Iron Age dating.
- 6.3.2 At present, the assemblage has been briefly examined using a x20 binocular microscope for the purposes of spot-dating and characterisation. It has not yet been formally quantified according to a fabric type-series. It is recommended that the pottery should be retained for possible further recording, in the event of future archaeological mitigation at the site.
- 6.3.3 Almost all of the sherds, including those in contexts [28/001], [28/005], [28/007], [28/009] and [28/013], comprise glauconitic fabrics, with some examples containing rare or sparse flint inclusions, mostly of less than 1mm, and in a few cases up to 2.5mm. One sherd, in [28/001], appears burnt and a few fragments in the small group from [28/011] are rather rounded with no surviving surfaces, making it difficult to ascertain whether they represent pottery or fired clay.
- 6.3.4 Glauconitic fabrics are fairly diagnostic of Iron Age dating in East Sussex. Assemblages where they are dominant and where they lack more common flint-tempering tend to belong to the Middle/Late Iron Age. They appear to persist at least up to the Roman Conquest at sites like Dittons Road, Polegate (Doherty in prep); however, by this stage, they make up a tiny minority of groups more dominated by grog-tempered wares. The current assemblage therefore seems unlikely to date this late.
- 6.3.5 One context in the current evaluation, [28/011], contained two grog-tempered sherds which are more certainly attributable to Late Iron Age (from the c. mid-1<sup>st</sup> century BC onwards). These may well be broadly contemporary with the rest of the assemblage although it remains possible that they represent a discrete later phase of activity. One of the two grog-tempered sherds features a thick internal burnt residue which may be suitable for future radiocarbon dating, should this feature prove important to the interpretation of the site.

# **6.4** The Post-Roman Pottery by Luke Barber

6.4.1 The evaluation recovered a single tiny sherd of post-Roman pottery from the site. This consists of a 1g scrap of late glazed red earthenware that is too small to be diagnostic of vessel form (context [6/005]). However, the sherd is almost certainly of the 18<sup>th</sup> century. The post-Roman sherd is not deemed suitable for long-term curation in a museum and has been discarded.

# 6.5 The Ceramic Building Material by Rae Regensberg

- 6.5.1 Three pieces of ceramic building material (CBM) weighing 6,038g were recovered from context [7/013]. These consisted of a post-medieval brick and two conjoined fragments of floor tile.
- 6.5.2 The CBM was quantified by form, weight and fabric and recorded on standard recording forms. This information was entered into a digital Excel table. Fabrics were identified with the aid of a x20 binocular microscope.
- 6.5.3 The brick was fully reduced and vitrified making fabric identification impossible. Furthermore, both headers and one stretcher had mould sand that had vitrified to a glaze on the surface; this is more likely to have occurred during the firing process than from heat exposure post-firing. The dimensions of the brick (224 x 100 x 50) and sharp arrises suggest a later post-medieval date, certainly post 1666. The floor tile was well fired, had sharp arrises, and consistent form, which also indicate a later post-medieval date. The floor tile had a deep orange micaceous fabric with common fine quartz.

# 6.6 The Fired Clay by Trista Clifford

6.6.1 A small assemblage of five pieces of fired clay weighing a total of 8g was recovered from two contexts [10/005] and [28/013]. The fragments are abraded and featureless, and individually too small to make an assessment of fabric. They are not considered to be of significance and are recommended for discard.

#### **6.7** The Geological Material by Luke Barber

6.7.1 Context [28/005] produced an irregular fragment (34g) of Upper Greensand. Although the piece has not been worked it has clearly been burnt though at what date this was done is uncertain. The stone is not deemed suitable for long-term curation in a museum and has been discarded.

#### **6.8** The Bulk Metalwork by Trista Clifford

6.8.1 A complete iron loop-headed staple weighing 13g was recovered from [20/013]. The staple measures 48.6mm in length and is comparable to an example from Winchester of medieval date (Goodall 2011, 182 H155), although a slightly later date is also possible.

# **6.9** The Animal Bone by Hayley Forsyth-Magee

6.9.1 A small assemblage of animal bone consisting of just 10 fragments weighing 190g was recovered from the archaeological evaluation. The faunal remains were retrieved through hand-collection, the majority of which are in a good-moderate state of preservation with evidence of taphonomic activity present. Domestic mammals dominate the assemblage. The majority of the assemblage has been tentatively spot dated by pottery to the Iron Age. At least one context containing bone has the potential to be of Pleistocene date.

#### Method

6.9.2 The assemblage has been recorded onto an Excel spreadsheet in accordance with the zoning system outlined by Serjeantson (1996). Wherever possible bone fragments have been identified to species and the skeletal element, part and proportion, represented (Schmid, 1972). Specimens that could not be confidently identified to taxa, such as long-bone and vertebrae fragments, have been recorded according to their size and categorised as 'Large', 'Medium' or 'Small' mammal. Age at death data has been collected for each specimen where observable. The state of epiphyseal and metaphyseal long bone fusion was recorded as 'fused', 'unfused' and 'fusing' (fusion line visible) categories. No measurable bones or ageable mandibles were present within the assemblage. All specimens were studied for the presence of gnawing (differentiating between carnivores and rodents), burning and butchery marks, noting the part and proportion of each bone affected. No pathology, burning or butchery was noted within the bones.

#### Assemblage

6.9.3 A limited range of taxa have been identified (Table 17). The assemblage consists of domesticate species including cattle and horse, as well as medium and large mammal bone fragments. No complete bones are present.

Taxa	NISP	Preservation					
Taxa		Good	Mod.	Poor			
Cattle	2	100%	-	-			
Horse	1	100%	-	-			
Medium mammal	2	-	100%	-			
Large mammal	5	60%	40%	-			

Table 18: The Number of Fragments, NISP (Number of Identifiable Specimens) count and Preservation levels of the assemblage by taxa

#### ?Pleistocene

6.9.4 A small collection of bone, consisting of just three large mammal long bone fragments, was recovered from context [27/002]. The overall morphology of these bones, specifically the bone texture, condition/preservation of the cortical surfaces and cancellous bone as well as the weight of the fragments, suggests that these remains are genuinely Pleistocene in origin.

#### Iron Age

6.9.5 Just five bones were recovered from potential Iron Age contexts, based upon pottery spot-dating. The assemblage was hand-collected from contexts [28/005], [28/007] and [28/013], the bones are in a moderate state of preservation and consist mostly of fragments. Context [28/005] contained a single cattle carpal bone, whilst two large mammal rib fragments and two medium mammal long bone fragments were recovered from contexts [28/007] and [28/013] respectively.

#### Undated

6.9.6 Just two fragments of bone were recovered from undated features. Context [3/004] produced a re-fitted fragmented cattle femur with evidence of canid gnawing, suggesting the bone was accessible for a time before disposal. Context [22/005] contained loose dentition consisting of a single adult worn horse incisor.

## 7.0 DISCUSSION AND CONCLUSIONS - Archaeological Evaluation

#### 7.1 Overview

7.1.1 The archaeological evaluation of the site by mechanically excavated trial trenches revealed a range of archaeological features comprising, pits, postholes, gullies and masonry.

# 7.2 Deposit Survival and Existing Impacts

- 7.2.1 Much of the site has clearly been subjected to substantial earthmoving/landscaping in the recent past, with significant deposits of made ground overlying some trenches, with others suggesting ground reduction given the absence of any discernible subsoil.
- 7.2.2 Despite this remodelling of the landscape, it is clear that a range of archaeological features have survived, some containing clear dating evidence.

# 7.3 Discussion of archaeological remains by period

## Mesolithic/Early Neolithic

7.3.1 Residual flintwork dated to this period was found in later deposits. It represents a 'background scatter' of material relating to hunter/gatherer activity in the wider landscape.

# Middle to Late Iron Age

- 7.3.2 Pottery recovered from the concentration of features in Trench 28 suggests the site was a focus of activity during the centuries preceding the Roman Conquest. It was unfortunate that continued flooding of this trench did not allow more detailed excavation of the deposits, but the features are clearly indicative of settlement to the north of the later parish church.
- 7.3.3 It is possible that otherwise-undated features in nearby Trenches 25 and 26 were also of this date.

#### Late Iron Age

7.3.4 The presence of pottery more closely datable to the Late Iron Age suggests some longevity of occupation at the site. This suggestion is given some credence by the presence of intercutting features, showing repeated deposition at the same location over time.

#### Medieval

7.3.5 It is possible that the post-holes encountered in Trench 20 are medieval in date based on the discovery of broadly datable material in the form of a metal fixing. As the arrangement strongly suggests the presence of a post-

built structure of some kind, the remains are of obvious significance.

7.3.6 The orientation of the undated gully encountered in Trench 22 mirrors that of the church boundary (and indeed of the church itself) and it is conceivable that this feature also has origins in the medieval period.

#### Post-Medieval

- 7.3.7 The buried masonry elements of the Wales Farm complex can be matched closely to different cartographic sources, suggesting the survival of elements from more than one phase in the development of the farm complex.
- 7.3.8 Although none of the masonry can be unequivocally linked to features marked on the Tithe Map of 1841, and certainly not on less detailed representation of the farmhouse on the maps/plans of the 1700s, the survival of the masonry is significant as it suggests that other earlier elements of the farm complex may also have survived the above-ground demolition.
- 7.3.9 The gully encountered in Trench 3 forms part of a bank and ditch arrangement on the valley side, clearly shown on the 1841 Plumpton Tithe Map.

#### Modern

7.3.10 The animal bones recovered from the pit in Trench 29 hold no archaeological significance

## 7.4 Consideration of Archaeological Research Aims

- 7.4.1 The identification, excavation and recording of a range of archaeological deposits clearly fulfilled the overarching research aims of the archaeological evaluation.
- 7.4.2 The background scatter of flintwork is clearly indicative of some level of hunter/gatherer activity in the general area.
- 7.4.3 The discovery of Middle to Late Iron Age material was unexpected, but suggests some level of continuity over a lengthy period of time. There was no clear evidence of activity contemporary with the occupation of the nearby villa complex at the current site.
- 7.4.4 The discovery of deposits tentatively identified as possibly medieval was less of a surprise, however the identification of a possible post-built structure was perhaps less anticipated. If the post-holes are from a medieval building then they provide clear evidence that some of the medieval settlement did lie to the north-west of the church. There were no obvious indications of any Anglo-Saxon antecedents.

## 7.5 Revised Archaeological Research Aims

- 7.5.1 The identification of archaeological deposits at the site has allowed the formulation of a more focussed set of research aims:
  - How extensive is the evidence of Middle to Late Iron Age occupation at the site? Is there evidence of change over time? Is there a distinct Late Iron Age phase?
  - Are the post-holes in Trench 20 the remains of a post-built medieval structure? Are there any associated deposits and/or structures? Does this suggest the medieval settlement spread west from the church as well as the postulated location to the east?
  - Are there any deposits relating to older farm buildings at the site of Wales Farm? Could deposits at the farm site offer assemblages of post-medieval pottery for study? Could this material go some way to address the need for rural assemblages (cf. Barber 2011, 193). Does the farm have medieval origins?

#### 7.6 Conclusions

7.6.1 A range of archaeological deposits were encountered and recorded during the archaeological evaluation of the site. The archaeological deposits range in date from the Middle Iron Age to the late post-medieval period.

#### 8.0 DISCUSSION AND CONCLUSIONS - Geoarchaeological Evaluation

#### 8.1 Overview of lithological sequence (Figure 19)

- 8.1.1 The following lithological units were encountered during the geoarchaeological evaluation:
  - The Gault Formation clay, encountered in GTPs 5, 6, 7, 8 which corresponds to the 'natural' encountered in Trenches 8 and 9 during the archaeological evaluation (8/003, 9/004).
  - The compact Upper Gault Formation which has more of a chalky appearance, encountered in GTPs 2, 3, 4, 9, 10 and which corresponds to the 'natural' encountered in Trench 22 (22/003).
  - The gravel in GTP1 which was not encountered elsewhere.
  - The fine grained head deposit encountered in GTPs 1, 4, 11, and possibly corresponding to (27/002) in the main archaeological evaluation.
  - The calcareous head deposit encountered in GTPs 1, 3, 4, 10, 11 and corresponding to the 'natural' in Trenches 20, 25, 28, 29 (20/003,25/003, 28/003, 29/002).
  - A colluvium or subsoil deposit encountered below topsoil in GTPs 1, 3, 4, 5, 6, 8, 9 and 10, and likely representative of separate depositional events across the site, which corresponds to the 'Subsoil/Interface' layer (22/002, 25/002, 26/002, 26/003, 28/002) and the 'Head Deposit' (9/003) recorded in the main archaeological evaluation.
  - The made ground deposit which was present in much of the north and west of the site.
  - Topsoil which topped the sequence across the site.
- 8.1.2 At the base of the sequence across the site was the Cretaceous geology of the Gault Formation. This varied from a blue clay in the lower areas of the site to a pale grey mudstone higher up as it met the chalk. Current topography of the site masks an older valley that was cut into the solid geology and infilled with Quaternary deposits, which likely deepen towards the east. The present day valley directly to the east of the site seems to cut through these deposits. A fine grained calcareous deposit fills the bottom two meters of the valley side and was seen to preserve bone and mollusc shells. This is covered by a calcareous head, a chalky gravel that extends further to the west.
- 8.1.3 Much of the area to the north and west is covered in significant amounts of made ground which directly overlies the Gault Formation. Elsewhere there is seen to be a thin deposit of colluvium, thickening slightly downslope and overlying the solid geology.

## 8.2 Deposit survival and existing impacts (Figure 19)

8.2.1 The eastern part of the site, GPZ1, has several meters of surviving Quaternary deposits, likely Pleistocene, infilling a valley cut into the solid geology. The calcareous nature of these deposits, in particular the fine grained lower deposit, mean that they have clear potential to preserve palaeoenvironmental material. Evidenced by the recovery of shells and bone. The calcareous head deposit is seen to survive to further to the west into GPZ2.

#### 8.3 Discussion of deposits

- 8.3.1 Elsewhere valleys cut from the scarp slopes of chalk downs have been seen to collect deposits than can provide important palaeoenvironmental remains spanning many thousands of years. One of the best studied of these is Holywell Coombe (Preece and Bridgland 1999) (Preece and Bridgland 2012), a valley cut into the scarp slope of the North Downs near Folkestone, but in a similar situation to the current site. Deposits within this valley were shown to span a Late Glacial to Holocene period and contain abundant palaeoenvironmental remains which enabled detailed palaeoenvironmental reconstruction throughout the period. Buried land surfaces were also present within the deposits at Holywell Coombe, including soil formed during the Allerød, a warm stage towards the end of the last glacial period.
- 8.3.2 While there is currently no dating for the deposits encountered at Plumpton, it is quite possible that these deposits extend at least as far back as the Late Glacial as in Holywell Coombe, and possibly further. The valley at Holywell Coombe appeared to have been previously emptied out of deposits by natural processes before the Late Glacial as no older deposits were encountered there. At the Plumpton College site it is not possible to ascertain whether this will also be the case or whether we potentially have earlier deposits preserved within the valley. The west-east transect generated using Rockworks (Figure 19) clearly illustrates the original shape of the valley running to the north which had subsequently filled with deposits. This is seen to extend further west than the present day valley which cuts into these deposits to the east, preserving the sequence of Quaternary deposits on the valley side.
- 8.3.3 The fine grained deposit encountered in GPZ1 is thought to be the most significant of the deposits encountered during the geoarchaeological evaluation. It has been seen to preserve both mollusc shells and bone, and is likely to preserve other palaeoenvironmental remains. Its fine grained nature means that any artefacts or ecofacts recovered from this deposit would potentially be primary context or even in situ. In GTP4 in particular this deposit was seen to have at least some structure, with certain beds being less stony or more iron stained than others. It is possible that with further investigation this unit will prove to have been deposited by more than one depositional event. Further to this the possibility of buried land surfaces being present should be considered. This deposit has not been dated, but is possibly late Pleistocene and could provide detailed

information about the palaeoenvironmental history of the area, along with the potential of holding primary context archaeological finds.

8.3.4 The more gravelly calcareous head deposit that covers the top 2m of GPZ1 and GPZ2 is possibly a cold stage solifluction or colluvial deposit that originated further up the scarp slope. While this deposit is capable of preserving artefacts and ecofacts these are unlikely to be in situ. However the presence of at least one possible buried land surface within this unit suggests evidence of a warmer period with landscape stabilisation and the potential for primary context archaeological and palaeoenvironmental remains.

#### 8.4 Consideration of research aims

- 8.4.1 The aim specific to the geoarchaeological evaluation, as outlined in the WSI was:
  - To establish if Quaternary deposits survive at the site, and to identify their potential for sampling for the recovery of geoarchaeological material.

The eastern part of the site, GPZ1, had c. 4m or surviving Quaternary, likely Pleistocene, deposits, the upper 2m of which extended into GPZ2. All these deposits were calcareous and have the potential to preserve ecofacts and artefacts. However both the fine grained lower deposit, which was seen to preserve shell and bone, and the buried land surface encountered in GTP11 have high potential for palaeoenvironmental remains and the potential for in situ archaeology. Sites at comparable positions in the landscape, such as Holywell Coombe have been shown to preserve an extensive palaeoenvironmental record.

## 8.5 Updated Research Agenda

- 8.5.1 In addition to the initial geoarchaeological research aim, deposits encountered during this evaluation also have the potential to address some of the needs outlined in the South East Regional Framework (SERF; KCC 2019):
  - 17 -Identification of areas of colluvial/solifluction deposits that may contain undisturbed or minimally disturbed concentrations of Palaeolithic remains
  - B.10 What are the vegetation histories of the Greensand and Chalk downland in the south-east region, and does the genesis of these landscapes relate to human activity during the Mesolithic period?
  - C.3 Does the scant evidence for Late Upper Palaeolithic south of the Thames and east of the Surrey Hills indicate that south-east England is an area of marginal occupation during the Late Glacial?
  - C.12 Now geoarchaeological and palaeoenvironmental studies are wellestablished and valued disciplines within archaeology, what standardised provision for their assessment can be delivered within the planning process, irrespective of direct human evidence?
  - C.12.1 Sites such as Horton (West Sussex) and Holywell Combe (Kent) provide the essential evidential base for understanding the environmental

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conditions prevalent in south-east England during the Late Pleistocene and Early Holocene. This is of immense importance to our understanding of human activity, arguably more so than recorded surface finds which might more routinely trigger an archaeological response ahead of development

## 8.6 Conclusions

8.6.1 On the eastern part of the site a thick sequence of well-preserved Quaternary deposits were recorded with clear palaeoenvironmental potential and the possibility for primary context Pleistocene or early Holocene artefacts and ecofacts, as defined by GPZ's 1 and 2 (Figure 21). If development impacts upon this sequence of deposits then it could alter the current state of preservation and/or disturb primary context artefacts/ecofacts and further geoarchaeological works should be considered.

## **BIBLIOGRAPHY**

ASE, 2019a Plumpton College, Ditchling Road, Plumpton, East Sussex Archaeological Desk-Based Assessment. Unpub. ASE Report 2019225-161133

ASE, 2019b Plumpton College, Ditchling Road, Plumpton, East Sussex Written Scheme of Investigation for Archaeological Evaluation. Unpub. ASE document

Barber, L, 2011 The Pottery, in D. Butcher, Excavation of a post-medieval cottage at Eartham, West Sussex, *Sussex Archaeological Collections* (hereafter SAC) 149, 191-4

Bell, M, 1978 Saxon Sussex, in P. Drewett (ed.), *Archaeology in Sussex to AD* 1500 (CBA Research Report 29)

BGS, 2019 British Geological Survey, Geology of Britain Viewer, accessed 25.11.2019 http://mapapps.bgs.ac.uk/geologyofbritain/home.html

ClfA, 2019 Regulations, Standard and Guidance for Archaeological Field Evaluation https://www.archaeologists.net/codes/cifa

Doherty, A, in prep The Late Iron Age and Roman pottery, in Stevens, S, Recent archaeological investigations at Polegate, East Sussex, To be submitted to SAC

Drewett, P, 1999 First Farming Communities and Communal Monuments, in K. Leslie & B. Short, B., *An Historical Atlas of Sussex*. Phillimore

Drewett, P, Rudling, D & Gardiner, M, 1988 The South-East to AD 1000. Longman

CDC, ESCC, WSCC, 2019 Standards for Archaeological Work in Sussex

Goodall, I, 2011 *Ironwork in Medieval Britain: An Archaeological Study*, Society for Medieval Archaeology Monograph 31

Hamilton, S & Manley, J, 1997 Points of View: Prominent Enclosures in 1st Millennium BC Sussex, *SAC* **135**, 93-112

KCC, 2019 South East Regional Framework (SERF) <a href="https://www.kent.gov.uk/leisure-and-community/history-and-heritage/south-east-research-framework">https://www.kent.gov.uk/leisure-and-community/history-and-heritage/south-east-research-framework</a>

Pope, M, 2000 Lower Palaeolithic surface finds from northern scarp of the Downs at Kithurst Hill, Near Storrington, West Sussex, SAC 138, 221-2

Preece, R, C and Bridgland, D, R, 1999 Holywell Coombe, Folkestone: a 13,000 year history of an English chalkland valley. *Quaternary Science Reviews*, 18 (8-9), p1075-1125

Preece, R and Bridgland, D, R, eds, 2012 Late Quaternary Environmental Change in North-west Europe: Excavations at Holywell Coombe, South-east England:

Excavations at Holywell Coombe, South-east England. Springer Science & Business Media

Rudling, D, 1999 Roman Sussex, in K. Leslie, & B. Short, (eds.), *An Historical Atlas of Sussex*. Phillimore

Salzman, L, F (ed.) 1940 Parishes: Plumpton, in *A History of the County of Sussex: Volume 7, the Rape of Lewes*, p.109-113

Schmid, E, 1972 Atlas of Animal Bones for pre-historians, archaeologists and quaternary geologists, Amsterdam, Elsevier Publishing Company

Serjeantson, D, 1996 The Animal Bones, in S. Needham & T. Spense (eds.), Runnymede Bridge Research Excavations, Volume 2: Refuse and Disposal at Area 16 East, Runnymede, 194-223

Williams, A and Martin, G, H, 2002 *The Domesday Book: A Complete Translation*. London: Penguin

Woodcock, A, 1978. The Palaeolithic in Sussex, in P. Drewett, (ed.) *Archaeology in Sussex to AD 1500 (CBA Research Report 29)* 

Woodcock, A, 1999 Earliest Inhabitants, in K. Leslie & B. Short (eds.), *An Historical Atlas of Sussex*. Phillimore

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Appendix 1: Recorded contexts in trenches with no archaeological features

Context	Туре	Interpretation	Max. Thickness	Height m AOD
1/001	Layer	Topsoil	0.13	63.87 - 64.07
1/002	Layer	Head Deposit	0.70	-
1/003	Layer	Natural	-	62.71 - 62.89
2/001	Layer	Topsoil	0.14	62.73 - 63.70
2/002	Layer	Subsoil/Interface	0.95	-
2/003	Layer	Natural	-	61.93 - 62.62
4/001	Layer	Topsoil	0.04	65.27 - 67.68
4/002	Layer	Made Ground	1.16	-
4/003	Layer	Buried Topsoil	0.10	-
4/004	Layer	Natural	-	64.33 - 66.48
5/001	Layer	Buried Topsoil	0.04	66.81 - 68.89
5/002	Layer	Made Ground	1.23	-
5/003	Layer	Buried Topsoil	0.04	-
5/004	Layer	Buried Subsoil	0.45	-
5/005	Layer	Natural	-	65.82 - 67.48
11/001	Layer	Topsoil	0.31	74.66 - 74.85
11/002	Layer	Subsoil/Interface	0.19	-
11/003	Layer	Natural	-	74.11 - 74.27
12/001	Layer	Topsoil	0.32	74.96 - 74.84
12/002	Layer	Subsoil/Interface	0.15	-
12/003	Layer	Made Ground	0.15	-
12/004	Layer	Natural	-	74.44 - 64.46
13/001	Layer	Topsoil	0.26	74.04 - 74.21
13/002	Layer	Subsoil/Interface	0.20	-
13/003	Layer	Made Ground	0.18	-
13/004	Layer	Natural	-	73.59 - 73.66
14/001	Layer	Topsoil	0.23	71.98 - 72.28
14/002	Layer	Subsoil/Interface	0.19	-
14/003	Layer	Topsoil	-	71.43 - 71.87
15/001	Layer	Made Ground	1.20	72.88
16/001	Layer	Made Ground	1.50	71.77
16/002	Layer	Head Deposit	0.80	-
16/003	Layer	Natural	-	69.47
17/001	Layer	Topsoil	0.26	72.59 - 72.66

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Context	Туре	Interpretation	Max. Thickness	Height
17/002	Layer	Natural	-	72.15 - 72.38
18/001	Layer	Topsoil	0.30	73.92 - 74.04
18/002	Layer	Subsoil/Interface	0.13	
18/003	Layer	Natural	-	73.56 - 73.58
19/001	Layer	Topsoil	0.23	73.76 - 73.77
19/002	Layer	Subsoil/Interface	0.10	
19/003	Layer	Natural	-	73.41 - 73.44
21/001	Layer	Topsoil	0.26	75.69 - 75.94
21/002	Layer	Subsoil/Interface	0.50	-
21/003	Layer	Natural	-	75.49 - 75.71
23/001	Layer	Topsoil	0.23	73.78 - 74.16
23/002	Layer	Subsoil/Interface	0.12	-
23/003	Layer	Natural	-	73.45 - 73.76
24/001	Layer	Topsoil	0.23	73.54 - 74.01
24/002	Layer	Subsoil/Interface	0.07	-
24/003	Layer	Natural		73.14 - 73.52
30/001	Layer	Topsoil	0.30	71.77 - 72.48
30/002	Layer	Natural	-	71.08 - 72.11
31/001	Layer	Topsoil	0.37	71.67 - 72.07
31/002	Layer	Natural	-	70.85 - 71.26

# Appendix 2: Geoarchaeological Test Pit Logs

## GTP1

Unit	Depth (m)	OD	Strat	Description	Coarse component	Sample	Notes
1	0	72.3096	Topsoil	Reddish Brown clay silt with sand	Frequent chalk flecks		
2	0.3	72.0096	Colluvium	Pale grey clay silt	40% chalk pellet gravel 1-30mm		
3	0.5	71.8096	Calcareous Head	Clay silt, pale yellow grey. Layers of Fe staining	60% chalk pellet gravel. Occasional SA flint gravel		
4	2.3	70.0096	Fine grained head	Pale brownish grey fine silty sand. Some Fe staining.	1% A-SA flint gravel. Occasional chalk flecks		Contains snail shells
5	3.6	68.7096	Gravel	Pale brownish grey sandy clay	40% SR-SA flint gravel 20-100mm. Round sandstone cobbles?		Base of hole 3.9m

#### GTP2

Unit	Depth (m)	OD	Strat	Description	Coarse component	Sample	Notes
1	0	71.7765	Made Ground	Made ground with large amount of building rubble			
2	1.5	70.2765	Gault Formation	Very compact silty, pale yellowish grey.	Sandstone present. No flint or chalk		

Unit	Depth (m)	OD	Strat	Description	Coarse component	Sample	Notes
1	0	73.5467	Topsoil				
2	0.3	73.2467	Subsoil				
3	0.5	73.0467	Calcareous Head	Pale grey clay silt. Iron staining	40% chalk pellet gravel 1-30mm. 10% SA-SR- R flint gravel 10-150mm. Sandstone also present		
4	2	71.5467	Gault Formation				

## GTP4

Unit	Depth (m)	OD	Strat	Description	Coarse component	Sample	Notes
1	0	71.9819	Topsoil		•		
2	0.3	71.6819	Subsoil				
3	0.5	71.4819	Calcareous Head	Pale grey clay silt. Some Fe staining	30% chalk pellet gravel 1-30mm. 20% A-SA- SR flint gravel		
4	1.5	70.4819	Fine grained head	Pale grey fine sandy silt. Fe staining	2% chalk pellet gravel 1-20mm. Occasional small <10mm A flint gravel		
5	1.7	70.2819	Fine grained head	Pale grey clay silt with frequent Fe staining. Mn rootlets. Looks quite alluvial?	Stone free		
6	2.5	69.4819	Fine grained head	Pale grey sandt silty clay. Soft. Some Fe staining	1% chalk pellet gravel. 1% small A flint gravel		
7	3.3	68.6819	Gault Formation				Base of hole 3.5m

Unit	Depth (m)	OD	Strat	Description	Coarse component	Sample	Notes
1	0	71.9629	Topsoil				
2	0.2	71.7629	Colluvium	Pale yellow brown silty clay			
3	0.6	71.3629	Weathered Gault	Pale brownish grey clay silt.	60% mudstone. No flint or chalk noted		
4	1	70.9629	Gault Formation				

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Unit	Depth (m)	OD	Strat	Description	Coarse component	Sample	Notes
1	0	63.3755	Topsoil				
2	0.2	63.1755	Colluvium	Greyish brown silty clay	20% A-SA- SR flint gravel 10- 50mm		
3	0.5	62.8755	Weathered Gault	Orange/grey mottled clay. Oxidised	1% A-SA flint gravel		
4	0.9	62.4755	Gault Formation	Pale blue grey/orange mottled soft silty clay. Becoming blue grey with Fe mottles with depth.	Completely stone free		Base of hole 2m

## GTP7

Unit	Depth (m)	OD	Strat	Description	Coarse component	Sample	Notes
1	0	68.6495	Made Ground	Frequent brick and building rubble			
2	2	66.6495	Gault Formation	Very blue clay			

Unit	Depth (m)	OD	Strat	Description	Coarse component	Sample	Notes
1	0	63.7053	Topsoil				
2	0.2	63.5053	Colluvium	Greyish brown silty clay	20% A-SA- SR flint gravel 10- 50mm		
3	0.5	63.2053	Weathered Gault	Orange/grey mottled clay. Oxidised	1% A-SA flint gravel		
4	0.9	62.8053	Gault Formation	Pale blue grey/orange mottled soft silty clay. Becoming blue grey with Fe mottles with depth.	Completely stone free		Base of hole 2m

## GTP9

Depth (m)	OD	Strat	Description	Coarse component	Sample	Notes
0	75.6952	Topsoil				
0.2	75.4952	Colluvium	Pale brownish grey silty clay	1% chalk pellet gravel. 5% A-SA flint gravel 10- 50mm		
0.8	74.8952	Gault	Pale grey			
	(m) 0 0.2	(m) 75.6952 0.2 75.4952	(m) 0 75.6952 Topsoil 0.2 75.4952 Colluvium	(m) 0 75.6952 Topsoil 0.2 75.4952 Colluvium Pale brownish grey silty clay 0.8 74.8952 Gault Pale grey	(m)component075.6952Topsoil0.275.4952ColluviumPale brownish grey silty clay1% chalk pellet gravel. 5% A-SA flint gravel 10-50mm0.874.8952GaultPale grey	(m)     component       0     75.6952     Topsoil       0.2     75.4952     Colluvium grey silty clay     1% chalk pellet gravel. 5% A-SA flint gravel 10-50mm       0.8     74.8952     Gault     Pale grey

## GTP10

Unit	Depth (m)	OD	Strat	Description	Coarse component	Sample	Notes
1	0	72.594	Topsoil				
2	0.2	72.394	Subsoil				
3	0.4	72.194	Calcareous Head	Pale greyish yellow sandy clay silt	40% SR-SA flint gravel 10- 80mm		
4	1.3	71.294	Gault Formation				Base of hole 1.3m

Unit	Depth (m)	OD	Strat	Description	Coarse component	Sample	Notes
1	0	72.4054	Topsoil				
2	0.2	72.2054	Calcareous Head	Pale yellowish grey clay silt	30% chalk pellet gravel, 20% SA-A flint gravel		
3	0.9	71.5054	Buried Soil	Reddish brown clay silt.			
4	1	71.4054	Calcareous Head	Pale yellow clay silt. Frequent iron staining and layers of iron panning	30% chalk pellet gravel, 20% SA-A flint gravel		
5	2	70.4054	Fine grained head	Fine grained compat pale grey clay.			Base of hole 2m (small machine, couldn't go further)

# **HER Summary**

Site code	LPC19				
Project code	190650				
Planning reference	SDNP/16/04	1980/PRE			
Site address	Plumpton C	ollege, Ditch	ling Road, Pl	umpton	
District/Borough	Lewes Distr	ict (South Do	owns Nationa	l Park)	
NGR (12 figures)	535691 113	589			
Geology		ry Marly Cha ad Deposits		, the Gault F	ormation and
Fieldwork type	Eval				
Date of fieldwork	11.11.2019	to 22.11.201	9		
Sponsor/client	MJB Archite	cture on beh	nalf of Plumpt	on College	
Project manager	Jon Sygrave	)			
Project supervisor	Simon Steve	ens and Lett	y Ingrey		
Period summary	Pleistocene		?Mesolithic	?Neolithic	
	Iron Age			?Medieval	Post-Medieval
Project summary	Thirty-one geoarchaeo	archaeologi logical test-p			s and eleven
	geoarchaeological test-pits were excavated.  On the eastern part of the site a thick sequence of Quaternary deposits is preserved with clear palaeoenvironmental potential and the possibility for primary context Pleistocene or early Holocene artefacts and ecofacts.				
	Archaeological features including pits, post-holes, gullies and masonry were encountered in eleven of the trenches. A concentration of Middle to Late Iron Age pits in the eastern part of the site suggest proximate settlement. There was no evidence of Romano-British activity contemporary with the nearby villa complex. A group of post-holes are tentatively dated to the medieval period and suggest the presence of a post-built structure of some kind close to the medieval church. Masonry walls at the western end of the site represent the remains of Wales Farm. Several ditches in the central part of the site remain undated.				

#### **OASIS Form**

#### OASIS ID: archaeol6-374925

Project details

Project name

Archaeological Evaluation Report - Plumpton College,

Ditchling Road, Plumpton, East Sussex

Thirty-one archaeological evaluation trenches and eleven geoarchaeological test-pits were excavated. On the eastern part of the site a thick sequence of Quaternary deposits is preserved with clear palaeoenvironmental potential and the possibility for primary context Pleistocene or early Holocene artefacts and ecofacts. Archaeological features including pits, post-holes, gullies and masonry were encountered in eleven of the trenches. A

Short description of the project

concentration of Middle to Late Iron Age pits in the eastern part of the site suggest proximate settlement. There was no evidence of Romano-British activity contemporary with the nearby villa complex. A group of post-holes are

the nearby villa complex. A group of post-holes are tentatively dated to the medieval period and suggest the presence of a post-built structure of some kind close to the medieval church. Masonry walls at the western end of the site represent the remains of Wales Farm. Several ditches

in the central part of the site remain undated.

Project dates Start: 12-11-2019 End: 22-11-2019

Previous/future

work

Yes / Not known

Any associated

project reference

codes

190650 - Contracting Unit No.

Any associated

project reference

codes

LPC19 - Sitecode

Any associated

project reference

codes

SDNP/16/04980/PRE - Planning Application No.

Type of project Field evaluation
Site status National Park

Current Land use Other 13 - Waste ground

Current Land use Other 1 - Allotment
Current Land use Other 10 - Orchard
Monument type PITS Middle Iron Age
Monument type PITS Late Iron Age
Monument type DITCHES Uncertain
Monument type POST HOLES Medieval

Monument type POST HOLES Medieval

Monument type MASONRY Post Medieval

Significant Finds FLINTWORK Late Prehistoric

#### **Archaeology South-East**

Eval: Plumpton College, Ditchling Road, Plumpton, East Sussex

ASE Report No: 2019353

Significant Finds POTTERY Middle Iron Age Significant Finds POTTERY Late Iron Age

Methods & techniques

"""Sample Trenches"""

Public building (e.g. school, church, hospital, medical Development type

centre, law courts etc.)

**Prompt** Direction from Local Planning Authority - PPS

Position in the planning process

Between deposition of an application and determination

**Project location** 

Country England

Site location EAST SUSSEX LEWES PLUMPTON Plumpton College

Study area 2.8 Hectares

TQ 35691 13589 50.905237712678 -0.069909991891 50 Site coordinates

54 18 N 000 04 11 W Point

Project creators

Name of Organisation

**Archaeology South-East** 

Project brief originator

East Sussex County Council

Project design originator

**Archaeology South-East** 

Project

director/manager

Simon Stevens

Project supervisor Jon Sygrave

Type of

sponsor/funding

body

Client

Name of

sponsor/funding

body

MJB Architecture on behalf of Plumpton College

Project archives

Physical Archive

Physical Contents

Lewes Museum

recipient

"Animal Bones", "Ceramics", "Worked stone/lithics"

**Digital Archive** 

recipient

Lewes Museum

**Digital Contents** "other"

Digital Media available

"Images raster / digital photography"

Paper Archive recipient

Lewes Museum

**Paper Contents** 

"other"

## **Archaeology South-East**

Eval: Plumpton College, Ditchling Road, Plumpton, East Sussex

ASE Report No: 2019353

"Context sheet", "Correspondence", "Miscellaneous

Paper Media available

Material", "Notebook - Excavation", "Research", "General Notes", "Plan", "Report", "Section", "Survey", "Unpublished

Text"

Project bibliography 1

Publication type Grey literature (unpublished document/manuscript)

Title Archaeological Evaluation Report - Plumpton College,

Ditchling Road, Plumpton, East Sussex

Author(s)/Editor(s) Stevens, S.

Other bibliographic

details

ASE Report No. 2019353

Date 2019

Issuer or publisher Archaeology South-East

Place of issue or

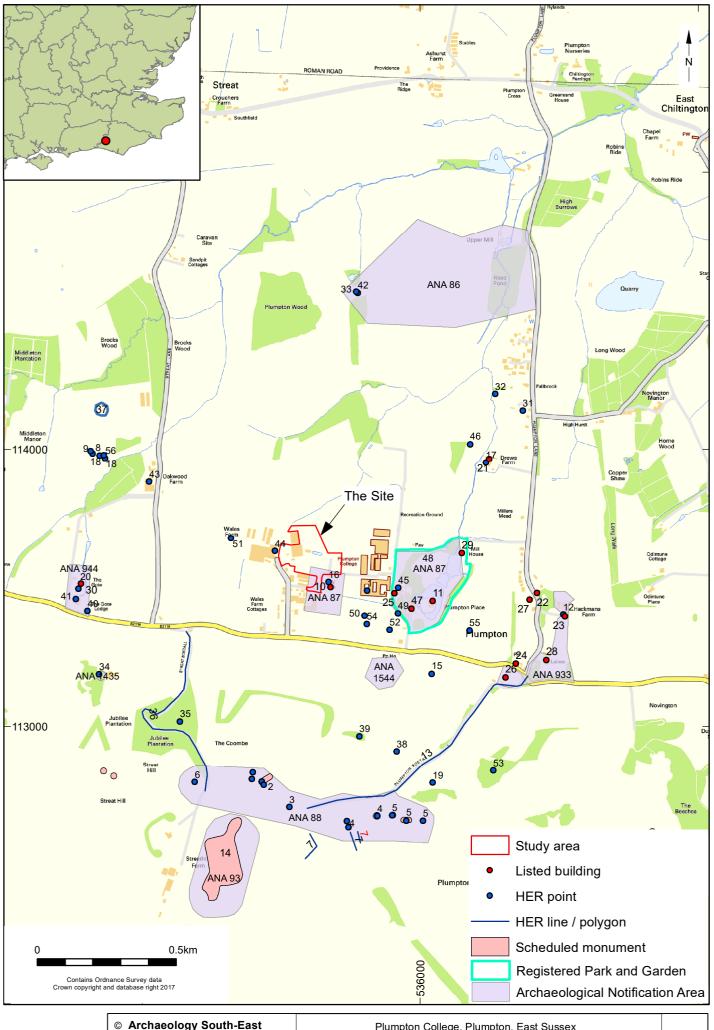
publication

Portslade, East Sussex

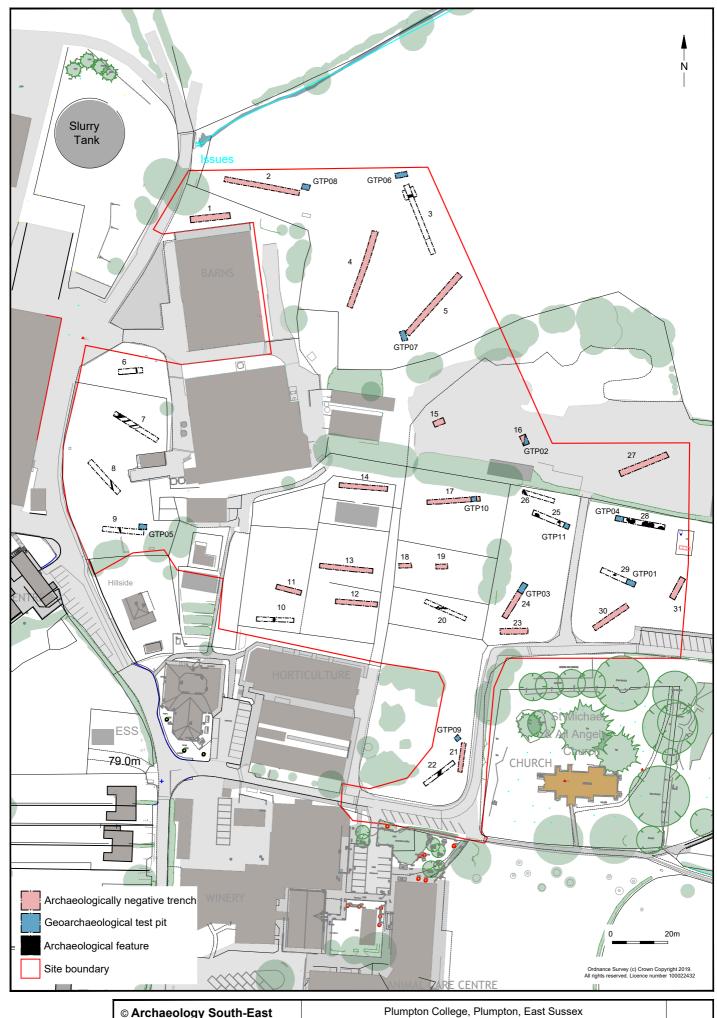
Description Standard ASE client report. A4-sized with cover logos

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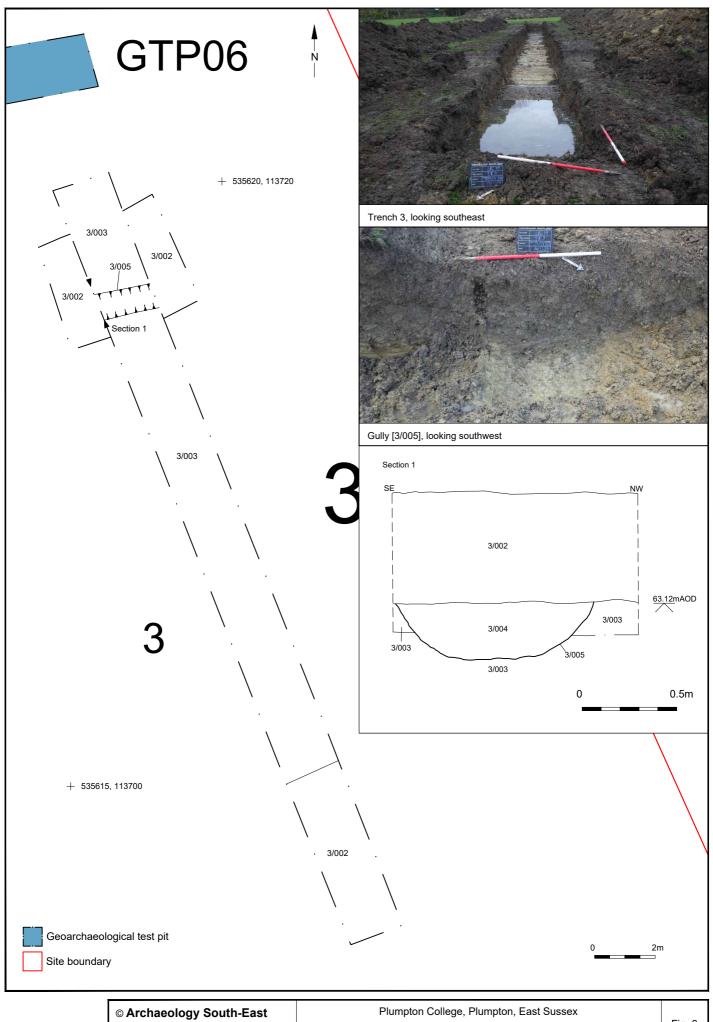
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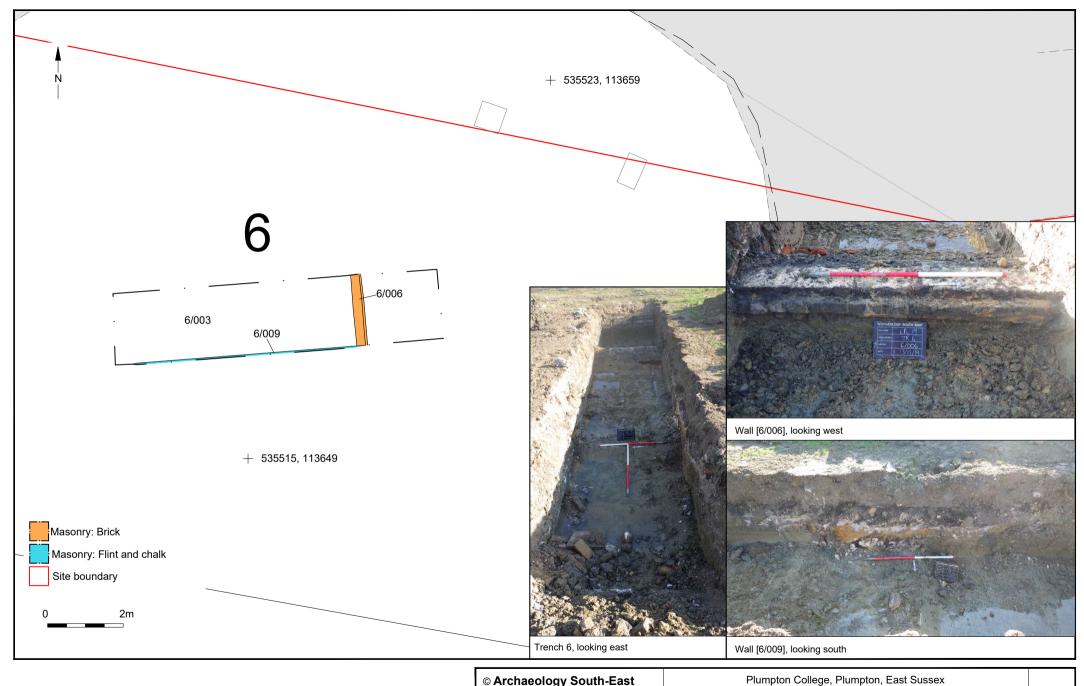
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Project Ref: 190650	December 2019	Site location and HER data		
Report Ref: 2019353	Drawn by: HS	Site location and HEIX data		



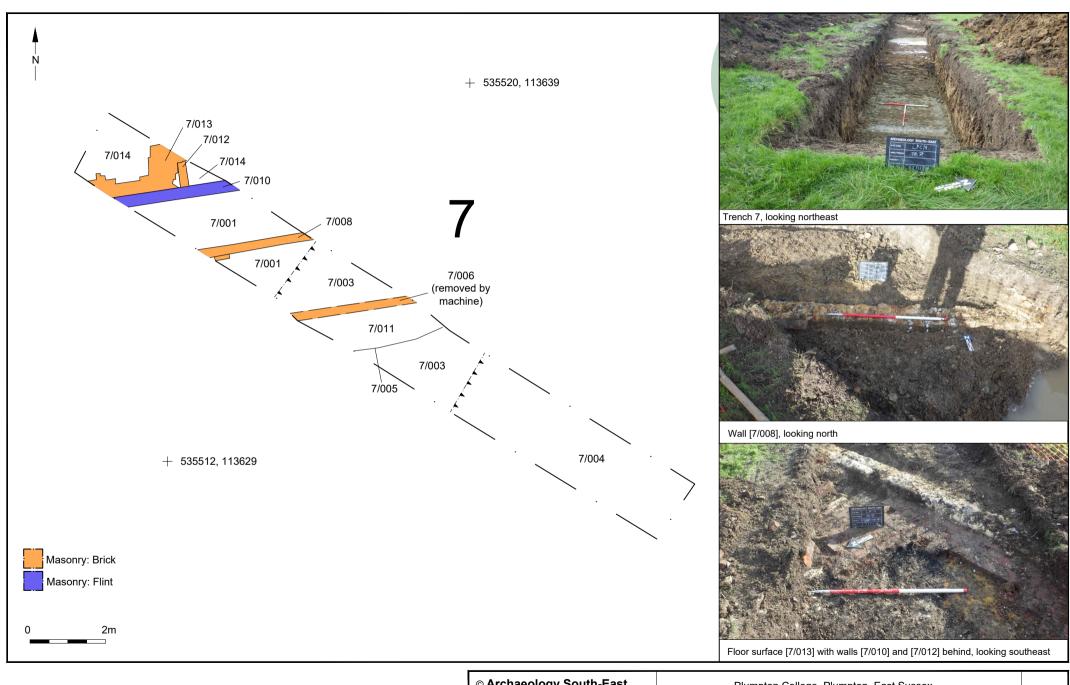
© Archaeology South-East		Plumpton College, Plumpton, East Sussex	
Project Ref: 190650	December 2019		Fig. 2
Report Ref: 2019353	Drawn by: NH	Site Plan	



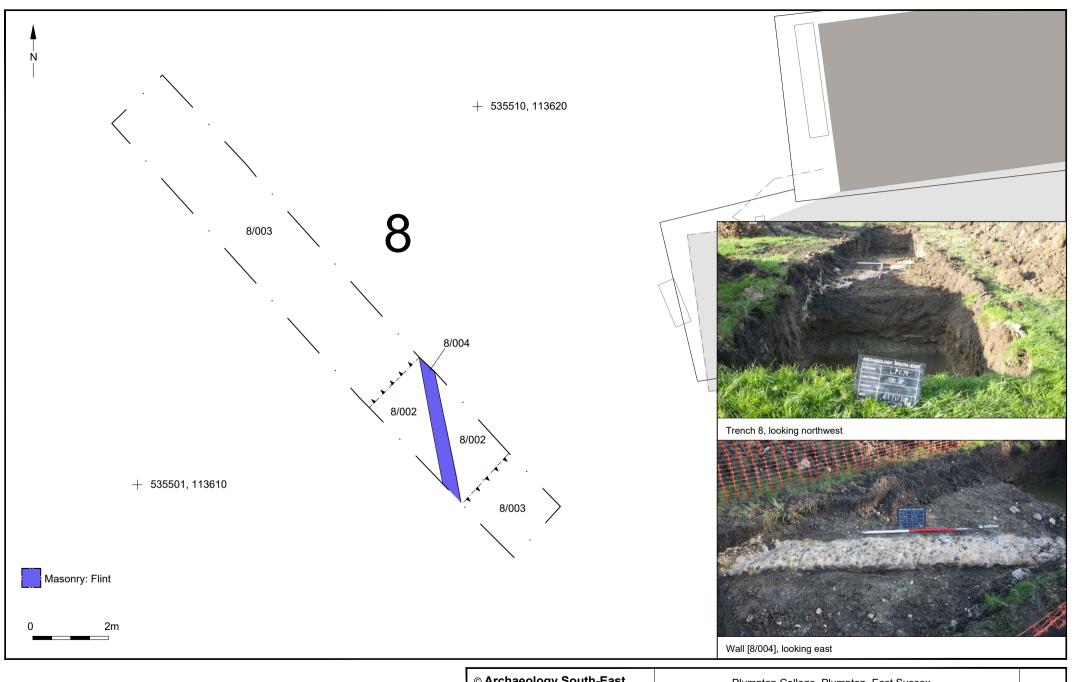
© Archaeology South-East		Plumpton College, Plumpton, East Sussex		
Project Ref: 190650	December 2019	Trench 3: Plan, section and photographs	Fig. 3	
Report Ref: 2019353	Drawn by: NH	Treficit 3. Flatt, Section and photographs		



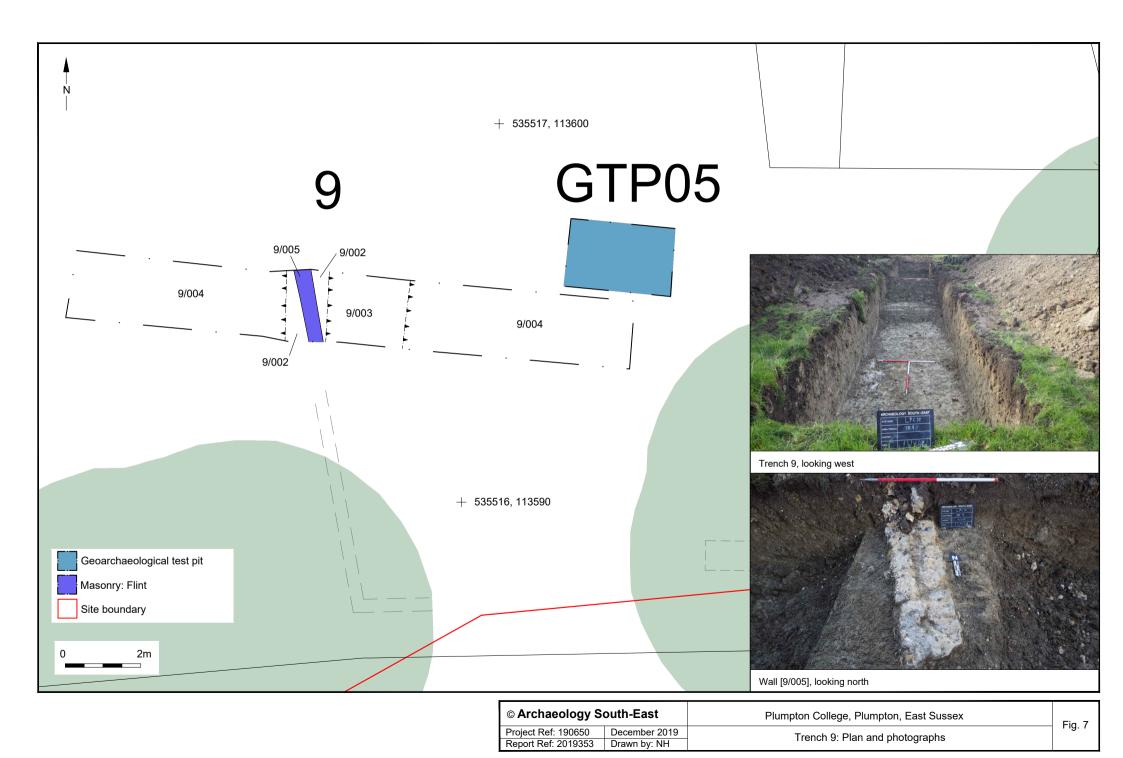
© Archaeology South-East		Plumpton College, Plumpton, East Sussex		l
Project Ref: 190650	December 2019	Trench 6: Plan and photographs	Fig. 4	l
Report Ref: 2019353	Drawn by: NH	Trenon o. Flan and photographs		ı

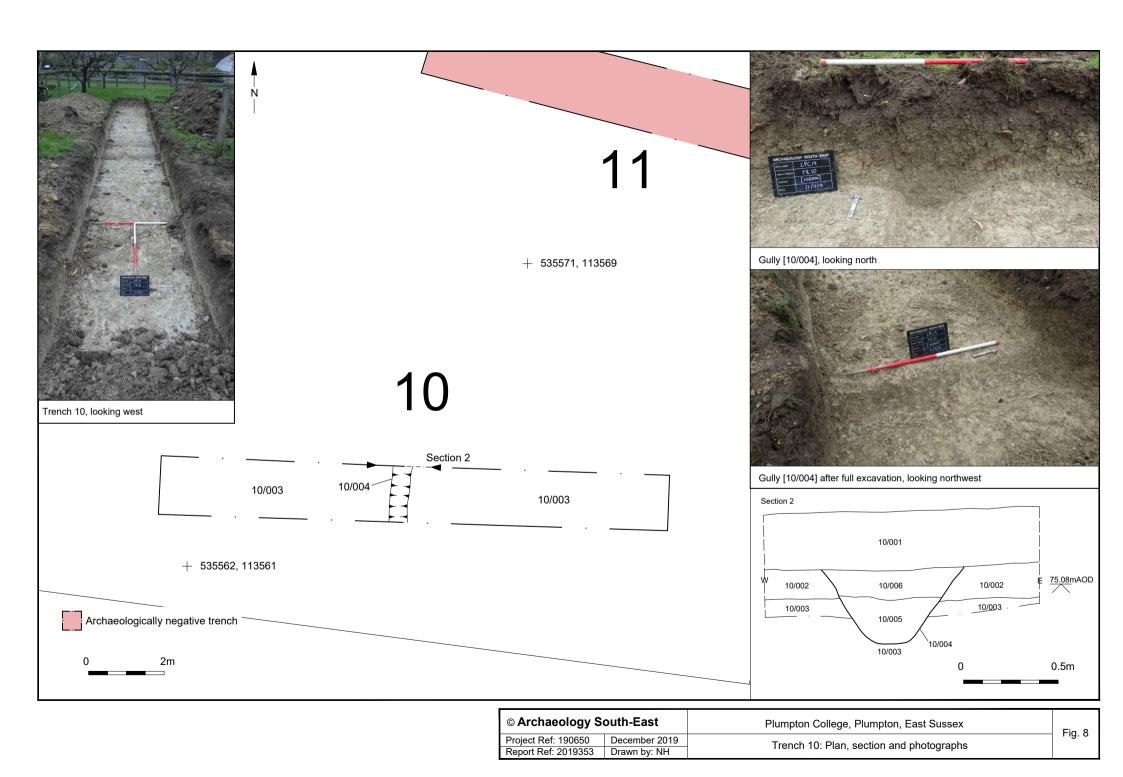


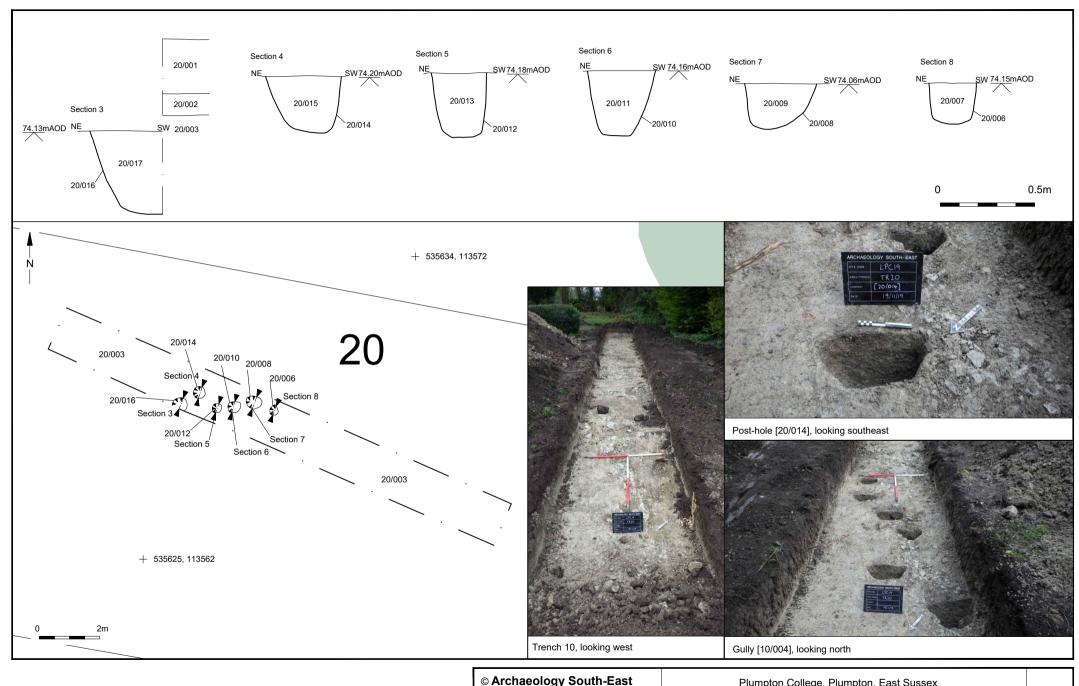
© Archaeology South-East		Plumpton College, Plumpton, East Sussex		
Project Ref: 190650	December 2019	Trench 7: Plan and photographs	Fig. 5	l
Report Ref: 2019353	Drawn by: NH	Trenon 7. Fran and photographs		ı



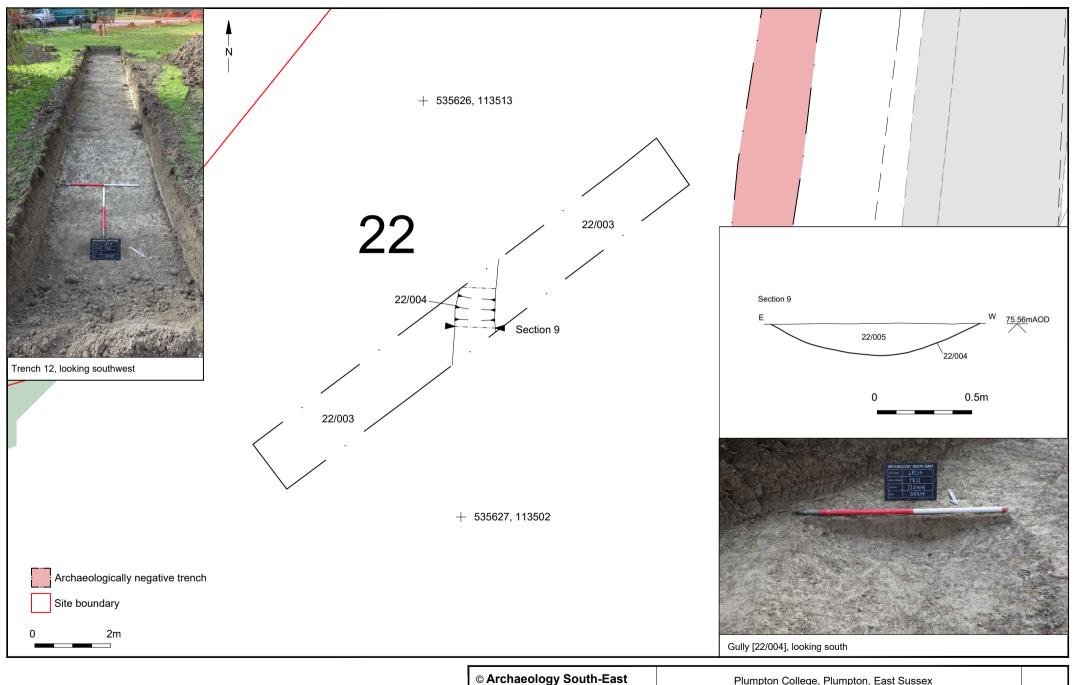
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Project Ref: 190650	December 2019	Trench 8: Plan and photographs	Fig. 6	İ
Report Ref: 2019353	Drawn by: NH	Trendrio. Francisco priotographs		İ



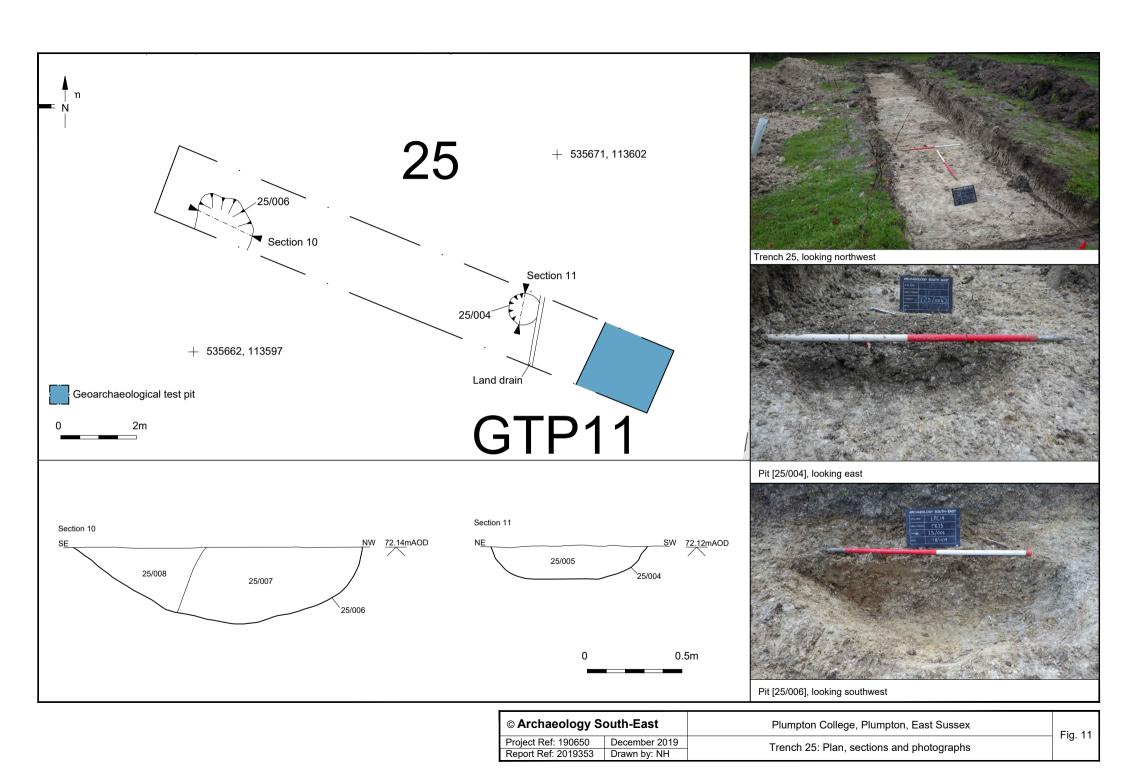




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Project Ref: 190650	December 2019	Trench 20: Plan, sections and photographs	— Fig. 9
Report Ref: 2019353	Drawn by: NH	Trenon 20. Flan, sections and photographs	

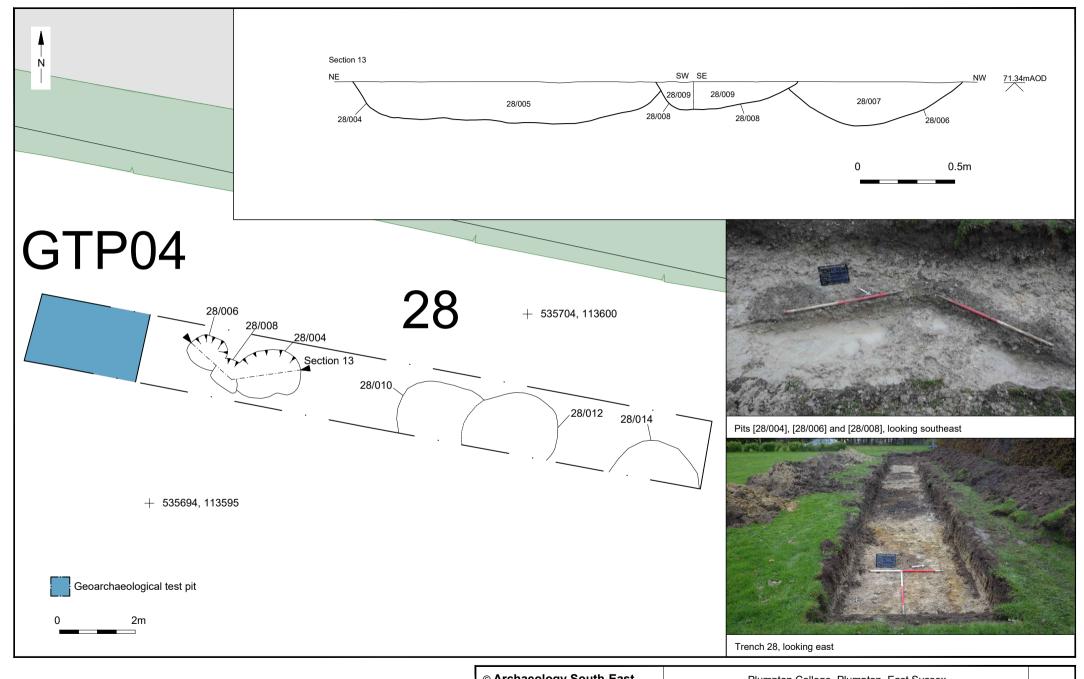


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Project Ref: 190650	December 2019	Tranch 22: Plan, section and photographs	Fig. 10	ĺ
Report Ref: 2019353	Drawn by: NH	Trench 22: Plan, section and photographs		ĺ

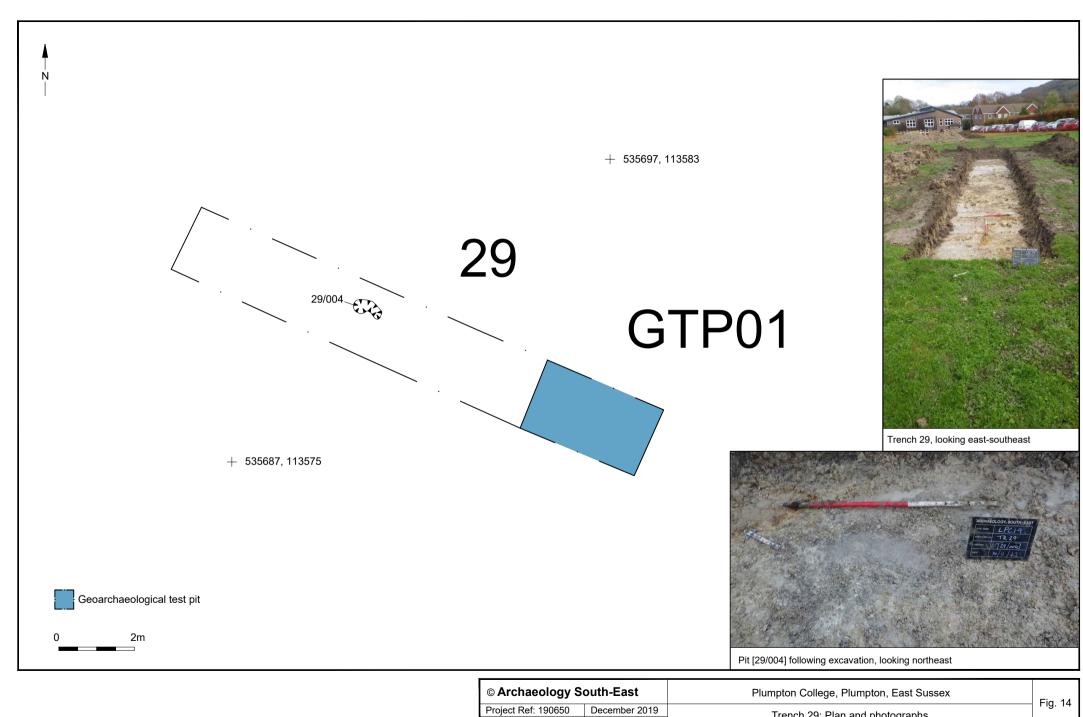




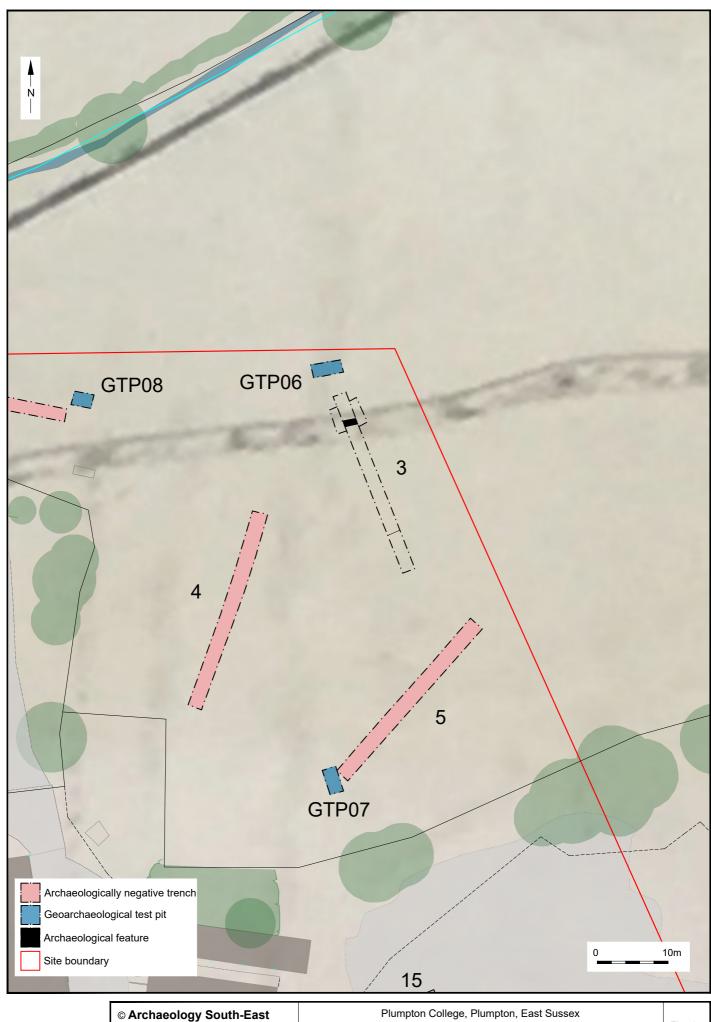
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Project Ref: 190650	December 2019	Trench 26: Plan, section and photographs	Fig. 12	l
Report Ref: 2019353	Drawn by: NH	Trenon 20. Flan, section and photographs		ı



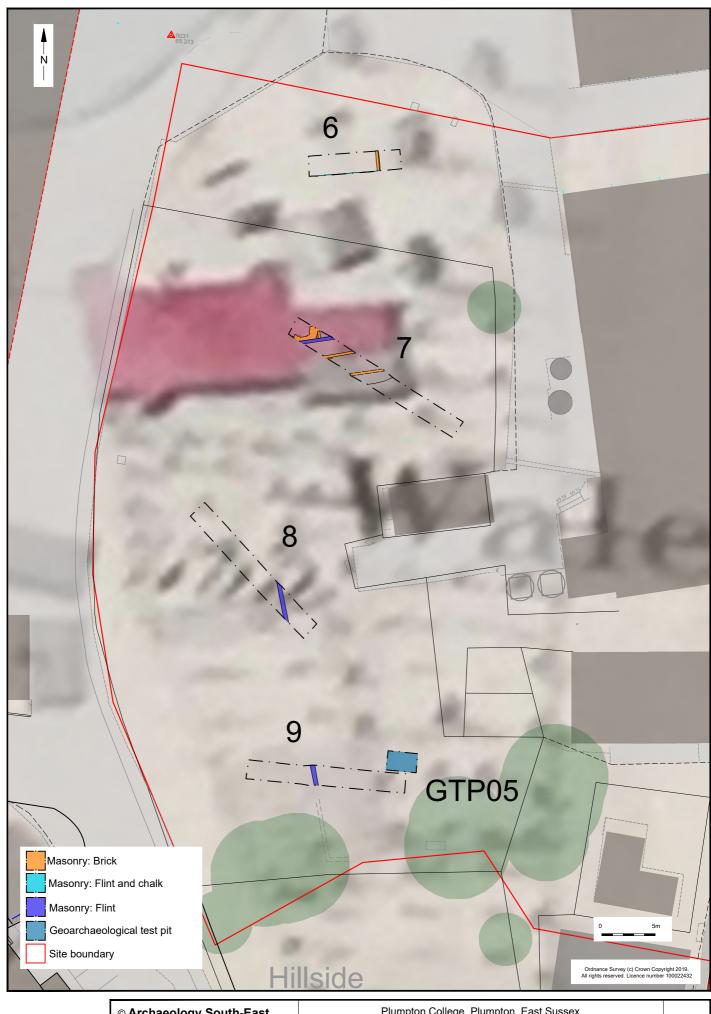
© Archaeology S	outh-East	Plumpton College, Plumpton, East Sussex	Fig. 13	
Project Ref: 190650	December 2019	Trench 26: Plan, section and photographs	1 lg. 13	ı
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Project Ref: 190650	December 2019	Trench 29: Plan and photographs	1 lg. 14
Report Ref: 2019353	Drawn by: NH	Trenen ze. i ian and photographs	



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Project Ref: 190650	December 2019	Plan showing ditch in Trench 3 with the Plumpton Tithe Map 1841 (best fit)	1 lg. 13
Report Ref: 2019353	Drawn by: NH	Fian showing ditornin french 3 with the Flumpton fittle Map 1041 (best lit)	

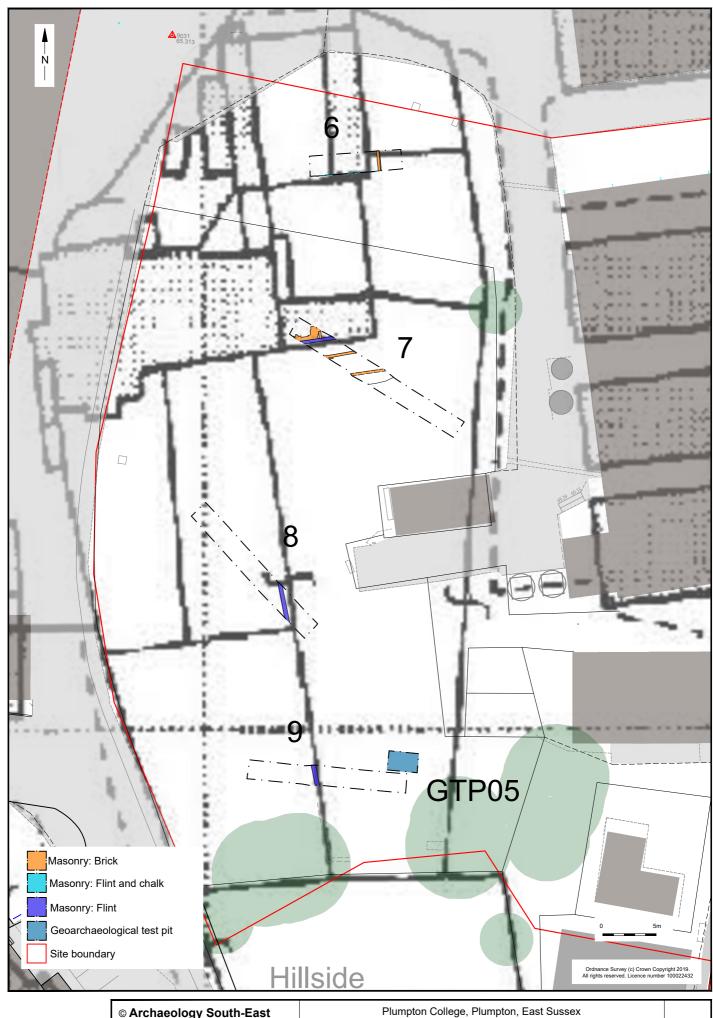


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Project F	Ref: 190650	December 2019	Plan showing features in trenches 6 - 9 with Plumpton Tithe Map 1841 (best	1
Report F	Ref: 2019353	Drawn by: NH	fit)	

Fig. 16

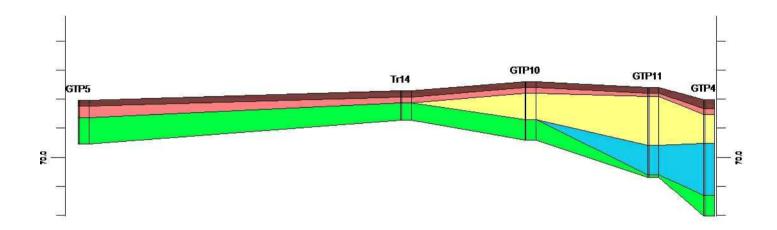


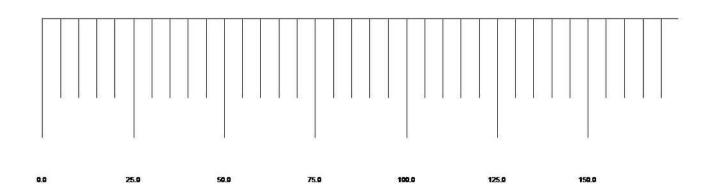
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Project Ref: 190650	December 2019	Plan showing features in trenches 6 - 9 with 1873-1874 OS	rig. 17
Report Ref: 2019353	Drawn by: NH	Fiant showing leatures in tienches 0 - 9 with 1075-1074 OS	



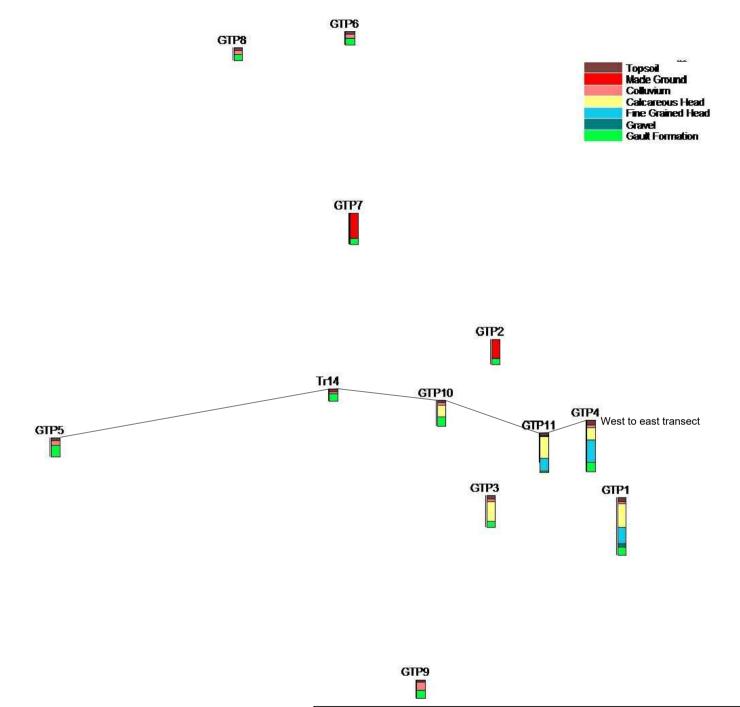
© Archaeology S	outh-East	Plumpton College, Plumpton, East Sussex	Fig. 18
Project Ref: 190650	December 2019	Plan showing features in trenches 6 - 9 with 1977-1978 OS	1 lg. 10
Report Ref: 2019353	Drawn by: NH	Fiail showing leatures in deficiles 0 - 9 with 1977-1970 OS	



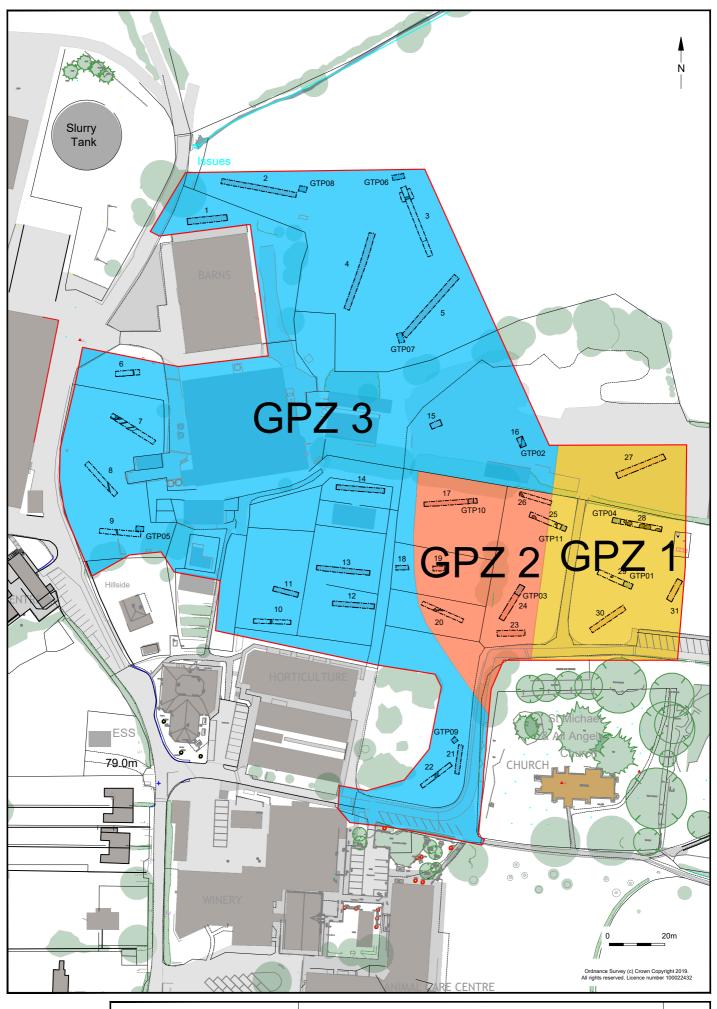




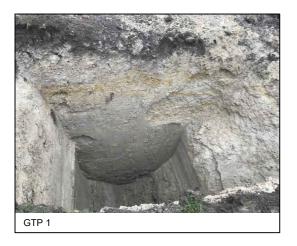
© Archaeology South-East		Plumpton College, Plumpton, East Sussex	Fig. 19	١
Project Ref: 190650	December 2019	Stratigraphic transect from West to East across the site	1 lg. 13	ı
Report Ref: 2019353	Drawn by: LI	Sualigraphic hansest from West to East across the site		ı



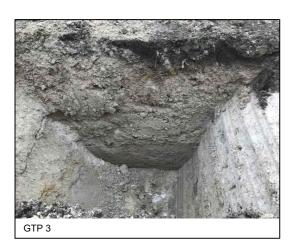
© Archaeology South-East		Plumpton College, Plumpton, East Sussex	Fig. 20
Project Ref: 190650	December 2019	Map showing summaries of stratigraphy for each GTP within the site and	1 ig. 20
Report Ref: 2019353	Drawn by: LI	position of transects shown in Figure 19	



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Project Ref: 190650 December 2019	Map showing Geoarchaeological Potential Zones (GPZ)	1 lg. 2 l
Report Ref: 2019353 Drawn by: NH	iliap showing Geoarchaeological Potential Zones (GPZ)	













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Project Ref: 190650	December 2019	Photographs of GTPs 1 - 6	rig.
Report Ref: 2019353	Drawn by: NH	Filologiaphis of GTFs 1 - 0	













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Project Ref: 190650	December 2019	Photographs of GTPs 7 - 11	1 lg. 23
Report Ref: 2019353	Drawn by: NH	Filologiaphs of GTFs 7 - 11	

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