

# Chris Butler MIFA Archaeological Services Ltd



# Archaeological Monitoring on the site of the Plumpton Sandschool, Plumpton Green, East Sussex

Project No. CBAS0297

LW/11/0733

By
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#### **Summary**

An archaeological strip-and-map operation was maintained during levelling work for a new sandschool on land to the north of Ashurst Farm, Plumpton, East Sussex. No archaeological features, deposits or finds of note were recorded. Topsoil stripping revealed the earthworks on site to represent the remains of an equestrian arena, dating to the second half of the 20<sup>th</sup> century. The building debris used in its construction is likely to have concealed an 18<sup>th</sup> century pond at the east end of the site.

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# Appendix

Appendix 1: HER Summary Form

#### 1.0 Introduction

- 1.1 Chris Butler Archaeological Services Ltd was commissioned by Daniel Derbyshire (The Client) to carry out a programme of archaeological monitoring during the groundworks associated with the construction of a sandschool at TQ 3606 1546 to the north of Ashurst Farm, Plumpton, East Sussex (Fig. 1).
- 1.2 As a result of the site's location, and the archaeological potential of the area, the local planning authority placed a condition on the planning consent for the development (Planning Ref. LW/11/0733), requiring an appropriate programme of archaeological work to be undertaken.
- 1.3 The proposed development is situated directly outside an Archaeological Notification Area (Fig. 2) that defines the Roman road known as the Greensand Way, and the medieval and Post Medieval farm complex of Ashurst, which is first recorded in 1485 AD. Prehistoric and medieval finds have also been found during archaeological work in the immediate vicinity of the site.
- 1.4 The site is a rectangular plot of land, measuring 40m by 20m, located within the south end of a sub-triangular field of pasture. The field is bound by a fence with a raised driveway and a new stable block to the south, a lane to Jenner's Farm to the east, and a hedge to the west. It lies at *c*.50m OD and runs gently downslope to the north. The geology of the site, according to the British Geological Survey (sheet 318 / 333), is Wealden Clay. A superficial Head Deposit overlies the clay to the north of Jenner's Farm whilst Lower Greensand is found to the immediate south of the site.
- 1.5 The appropriate programme of archaeological work, in accordance with a brief prepared by East Sussex County Council, comprised an archaeological strip-and-map operation to monitor the groundworks connected with the construction of the sandschool. A written scheme of investigation was produced to cover the monitoring and was submitted to the local planning authority for approval<sup>1</sup>. The author undertook the fieldwork on the 10<sup>th</sup> and 11<sup>th</sup> May 2012.

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<sup>&</sup>lt;sup>1</sup> Butler, C. 2012. Written Scheme of Investigation for Archaeological Monitoring on the site of the Plumpton Sandschool, Plumpton Green, East Sussex. CBAS.

#### **2.0** Archaeological and Historical Background (Fig. 3)

- 2.1 The earliest activity in the vicinity of the site dates from the Mesolithic period. A Mesolithic camp was found at Streat Lane to the west of the site (MES7751), where excavation revealed a number of pits filled with fire-fractured flint and an assemblage of some 3,000 pieces of worked flint. C14 dating showed that the site was being used in the 7<sup>th</sup> millennium BC<sup>2</sup>. Other Mesolithic flintwork has been found nearby (e.g. MES1331, MES2026, MES2033, MES7754 and MES7757).
- 2.2 Evidence of Neolithic flintwork has also been found nearby (MES7753 & MES7757), and Neolithic and Bronze Age flintwork was recovered during the excavation of the Mesolithic site at Streat Lane (MES7751). A Bronze Age palstave was discovered to the west of the site near Streat (MES9413). Known Bronze Age sites are largely confined to the South Downs, where settlement and burial mounds are known. The field systems on the Downs probably continued in use into the Iron Age.
- 2.3 A Roman villa was discovered to the south of the site (MES1886), with geophysical survey and fieldwalking, suggesting a small villa complex probably set within a field system. A Roman road, the Greensand Way (MES7393), runs east to west immediately to the south of the site, linking settlements at Hassocks and Barcombe Mills. A section was excavated across the Greensand Way just to the west of the site in 2009<sup>3</sup>, revealing an 8m wide flint cobbled surface (EES14449 / EES14450). Other Roman finds are known from the area (e.g. MES7756), and Streat has been identified as the location of a possible Roman settlement (MES7755).
- 2.4 Ashurst Farm has medieval origins, having been first recorded in 1485 (MES7441). Some 12<sup>th</sup> century worked stones, probably originating from Lewes Priory, were found in the foundations of a barn at the farm (MES1878). St Michael's Church at Plumpton has a nave that dates from *c*.1100 and a tower of *c*.1200, which was altered in the 14<sup>th</sup> century. It also has 12<sup>th</sup> century wall paintings. Other medieval activity is evidenced by the discovery of medieval pottery during the excavation of the Roman road west of Ashurst Farm (MES15517), and a 14<sup>th</sup> century coin to the east of the site (MES9837).
- 2.5 There is a suggestion that Plumpton, Streat (MES7416) and East Chiltington (MES7417) are all shrunken medieval settlements. However, it is more likely that these should be seen as dispersed settlements, with a church and manor house at the core, and then dispersed farms, such as Ashurst Farm, Rylands Farm (MES7147) and others, across each parish. Other medieval settlement activity includes house platforms at Ducks Bridge (MES2035) and pottery kilns at Marchants Farm, both to the north of Streat (MES2034).

<sup>&</sup>lt;sup>2</sup> Butler, C. 2007 'A Mesolithic site at Streat Lane, Streat, East Sussex', Sussex Archaeological Collections 145.

<sup>&</sup>lt;sup>3</sup> Millum, D. 2009. Dissertation Report. CCE, University of Sussex.

- Ashurst Farm continued throughout the Post Medieval period, and is shown on a plan of Ashurst Farm dated 1758<sup>4</sup> when it belonged to Samuel Blunt, although the site of the sandschool is not shown as it is on the adjacent property of Mr Bradford. The farm also appears on Yeakell and Gardiner's map of 1778-83<sup>5</sup>, when a pond is shown at the location of the site. The tithe map of 1841<sup>6</sup> shows the site in the corner of a field to the north of Ashurst Farm, although no pond is shown.
- A number of Post Medieval mills are situated along Plumpton Lane, including Old Mill where there is a 17<sup>th</sup> century house (MES7143) and an 18<sup>th</sup> century watermill (MES7140), whilst at Upper Mill there is a 17<sup>th</sup> century building (MES7139). Other buildings along Plumpton Lane are present on early 19<sup>th</sup> century mapping (e.g. MES7421 & MES7423). The pattern of dispersed farms also continued, with a farm now also located at Plumpton Cross (MES7445).
- 2.8 In 1847 the Haywards Heath to Lewes Line railway line was opened, and a station was established at Plumpton (MES1880). The racecourse was established in 1876 when Thomas Henry Case founded the venue as the first enclosed hare coursing meeting and subsequently, in 1884, introduced horse racing (MES20245). The racecourse was situated on land that formed part of Ashurst Farm, which had been purchased *c*.1870 by Mr W. F. Wheatley.
- 2.9 The 1<sup>st</sup> Edition OS map of 1874 (Fig. 4) shows a similar situation to the tithe map. Later OS maps reveal that the site remained broadly unchanged by 1961-63, but by 1976-79 the pond had been backfilled. A driveway had been built along the south side of the paddock by 1992, perhaps in anticipation that planning permission would be granted for the construction of a caravan and camping site (Planning Ref. LW/92/0558)<sup>8</sup>. A stable block looks to have been recently built at the end of the driveway.

<sup>&</sup>lt;sup>4</sup> Provided by David Millum

<sup>&</sup>lt;sup>5</sup> http://www.envf.port.ac.uk/geo/research/historical/webmap/sussexmap/Yeakelllarge31.htm

<sup>&</sup>lt;sup>6</sup> ESRO TD/E95

<sup>&</sup>lt;sup>7</sup> http://plumptonracecourse.co.uk/general-information/history/

<sup>8</sup> http://planningpa.lewes.gov.uk/online-applications

#### 3.0 Methodology

- 3.1 The site was walked over in advance of machine excavation. A raised platform was observed to lie up against the south side of the site (Cover Plate and Plate 1). This sub-rectangular earthwork measured c.30.5m long west to east, and was c.16.5m wide at its west end and c.7.5m wide at its east end. It comprised two parts, with the rectangular area to the west measuring c.16.5m by c.14m, and c.0.4m high to its north side. It stood higher than the remaining platform to the east, the ill-defined north side of which appeared to show it narrowing eastwards. A large circular patch of burnt black earth was exposed to the immediate west of the platform.
- 3.2 Machining began once the site had been prepared, which involved dismantling the wooden fencing erected along the south side of the site. Ground reduction was undertaken with a 15.8 tonne machine using a 1.8m long flat-bladed bucket. After the topsoil had been removed across the site, the machine stripped off a second layer that exposed the natural clay within the southern third of the site and truncated it within the west end of the site by up to 0.43m.
- 3.3 To level the site, the deepest excavation occurred in the southwest corner, whilst ground reduction declined in depth to both the north and east. The south baulk of the site, therefore, had a depth of 710mm at its west end, 610mm at the middle, and just 250mm at its east end; each measurement, however, excludes the height of the driveway above the former field surface, which stands an additional 600mm, 460mm and 1m above each respective measurement. In contrast, no real baulk existed to the north side of the site, as this was only defined by the removal of the thin topsoil layer.
- 3.4 Initially spoil was removed, sometimes with the use of a small dumper, and deposited along the three open sides of the site for temporary storage. Some of this spoil, however, served as a revetment to the spoil used to raise the level of the ground within the north half of the site. Final levelling works involved limited ground reduction to the very west end of the site.
- 3.5 During ground reduction, one drainage trench was excavated with a mini excavator along the length of the site, close to the south baulk, in order to drain rainwater from the site into the existing drainage ditch lying to its immediate east. The drainage trench was 160mm wide and 230mm deep at its west end. Others were to be dug after the site had been levelled but the excavation of these trenches was not monitored, partly because their narrowness would have made it difficult to identify archaeological deposits. In addition, some of the drainage trenches would have been excavated through the made ground used to level up the ground in the north half of the site.

- 3.6 A Garrett ACE150 metal detector was used to scan for metal artefacts in the spoil and the machine exposed surfaces. The spoil was also closely monitored for any artefacts, metal or otherwise.
- 3.7 All deposits were recorded according to accepted professional standards, using context record sheets. Deposit colours were recorded by visual inspection and not with reference to a Munsell Colour chart.
- 3.8 A full photographic record of the work was kept as appropriate and will form part of the site archive. The archive is presently held by Chris Butler Archaeological Services Ltd. A site reference of PSS12 has been allocated, and the archive will be offered to Lewes Museum in due course.

- **4.0 Results** (Fig. 5 and Plates 2-7)
- **4.1** The topsoil across the site was essentially a layer of grass turf comprising a friable mid brown silty clay with a depth of between 70mm and 90mm (Context **001**).
- 4.2 A subsoil (Context 008) lay directly below the topsoil to the very northwest side of the site. This was a friable mid orangey greyish-brown clay that contained sparse flints (up to 120mm x 70mm x 25mm) and the occasional patch of frequent flint pebbles (up to several 10mm³).
- **4.3** Removal of the topsoil (Context **001**) also exposed what was evidently a former equestrian arena that extended under the raised driveway to the stable block. This arena incorporated a rectangular platform within the west half of the site, the exposed area of which measured 17.4m long west to east and 15.4m wide north to south. A thin belt of sand (Context **002**), c.2.3 2.4m wide, had been laid over the platform, around its circumference only, for use as a circuit ride.
- 4.4 The surface of the platform (Context 003) comprised mostly chalk rubble but also some sand with flints. This layer had been thinly deposited beyond the platform. To its east, it extended up to the site boundary to define a second lower platform of the arena, with the same width as the first. To its west, the deposit was only observed in the south baulk of the site where it was 80mm deep. Context 003 lay mostly over subsoil (Context 008) although it had been deposited over construction material (Context 004) along most of the south side of the site, which served to build up the level of the arena.
- 4.5 The first machine strip of the site also unearthed Context **004**, which was seen to extend west beyond the arena for *c*.4.1m. Here, the made ground contained concrete (up to 230mm x 200mm x 120mm) and paving slabs (up to 380mm x 240mm x 7mm). Deeper excavation elsewhere in the site revealed this deposit to also comprise gritty sand, bricks and loose broken down mortar, as well as a concentration of red tiles in the southeast corner of the site. This layer was between 90mm and 260mm deep and decreased in depth towards the west.
- 4.6 Two areas of burning (Contexts **005** and **007**) were recorded during archaeological monitoring, with each probably being the remains of a modern bonfire. Context **005** was located close to the northwest corner of the arena and measured 2m by 1.6m. It represents the large circular patch of burnt black earth seen on the ground surface prior to excavation. The earlier bonfire (Context **007**) was exposed below the topsoil (Context **001**) to the immediate north of the platform with the sand ride, and measured 1.35m by 1.3m.

- 4.7 An electric cable (Context **006**) ran west-southwest through the north half of the site, towards the stable block. It clipped the northwest corner of the arena and was excavated through the subsoil (Context **008**), as well as the natural orangey brown and bluish grey clay (Context **009**) as evidenced from the backfill. A second much narrower service (Context **010**), possibly for water, was seen when ground reduction of the site occurred for a second time. It ran west-northwest through the southern half of the site and so may not have served the stable block, unlike the electric cable.
- 4.8 Once levelling of the site had been completed, the only natural clay (Context 009) exposed was a strip beside the south baulk, c.6.3m wide. It stretched the length of the site, except the east end. A belt of subsoil (Context 008), c.2.8m wide, remained in situ to the immediate north of the natural, and the northern 3.5m of Context 003 (but more specifically of the chalk platform with the sand ride) had been retained beyond the subsoil. The land in the remaining north half of the site had been built up with spoil.
- 4.9 The east end of the site was devoid of this horizontally layered pattern. Instead, limited ground reduction here meant that the chalk deposit (Context 003) was left in situ to overlie the construction debris of Context 004. There is no clear evidence that, in addition to being used to construct the arena, Context 004 was also used to backfill the pond, which the OS maps show to have been present at the east end of the site until sometime between the early 1960's and the mid to late 1970's.
- **4.10** No other archaeological features or deposits were noted during the work.

#### 5.0 Finds

- **5.0.1** The only finds recovered from the monitoring work derived from the subsoil (Context **008**). The concentration of red tiles found within the made ground of Context **004** were not sampled.
- **5.0.2** The assemblage does not hold any potential for further analysis and is recommended for discard.
- **5.1 The Pottery** by Luke Barber
- **5.1.1** A small assemblage of late 19<sup>th</sup> or early 20<sup>th</sup> century pottery was recovered from Context **008**. The coarsewares consist of part of the base of an unglazed earthenware flower pot (13g), two abraded bodysherds of local glazed red earthenware (25g) and four sherds (77g) from at least two ginger beer bottles and a single close-ribbed preserve jar. The fineware assemblage is composed of two bodysherds (15g) from a moulded vessel in refined white earthenware and a 17g sherd from a transfer-printed ware plate with late blue floral pattern.
- **5.2 Geological Material** by Luke Barber
- **5.2.1** Context **008** produced four pieces (31g) of 19<sup>th</sup> century Welsh roofing slate.
- **5.3** Ceramic Building Material by Luke Barber
- **5.3.1** Four small pieces of brick (31g) were recovered from Context **008**. None have any original surfaces remaining as all are quite badly abraded. However, the general nature of the sparse fine sand tempered fabrics would be in keeping with a 19<sup>th</sup> to 20<sup>th</sup> century date. Three pieces (86g) of roofing tile were also recovered. These are all of very hard fired moulded types with no visible tempering, likely to be of the very late 19<sup>th</sup> or more likely, the early 20<sup>th</sup> century.

#### 6.0 Discussion

- 6.1 Archaeological monitoring of the strip-and-map operation, undertaken during levelling works for a sandschool, uncovered no archaeological features, deposits or finds of note. Ground reduction only exposed the natural Wealden clay in a broad strip along the slightly higher south side of the site, in an area that comprised less than a third of the site.
- 6.2 The small assemblage of finds were all recovered from the subsoil to the north side of the site and date exclusively to between *c*.1890-1925. Rather than suggesting the presence of a buried archaeological feature, the finds may imply that the subsoil has been thoroughly churned, perhaps through farming. Nevertheless, if any archaeological remains are present below the remaining subsoil, those located in the northern third of the site will be further protected under the spoil deposited to build up the ground level for the sandschool.
- 6.3 A former equestrian arena was exposed by the topsoil stripping, and accounted for the earthworks seen on the site prior to machining. The full size of this arena was not uncovered as it ran below the driveway to the stable block. It had fallen out of use by at least 1992, as the driveway had been built by this time.
- 6.4 There was no evidence within the site of the 18<sup>th</sup> century pond, which the OS maps show to have been backfilled sometime between the early 1960's and the mid to late 1970's, perhaps for the construction of the temporary poorly built arena. The material used to construct the arena was not fully stripped off to the east end of the site and probably conceals the pond.
- 6.5 The methodology adopted for this strip-and-map operation proved to be satisfactory, and the confidence rating should be considered to be very reliable.

## 7.0 Acknowledgements

- 7.1 We would like to thank the client, Mr Daniel Derbyshire, for appointing CBAS Ltd to undertake the archaeological strip-and-map operation. Thanks are extended to Jim and Dan Boyce of J. B. Arena for their co-operation on site.
- 7.2 The project was managed for CBAS Ltd by Chris Butler, and monitored for ESCC by Greg Chuter, the Assistant County Archaeologist.

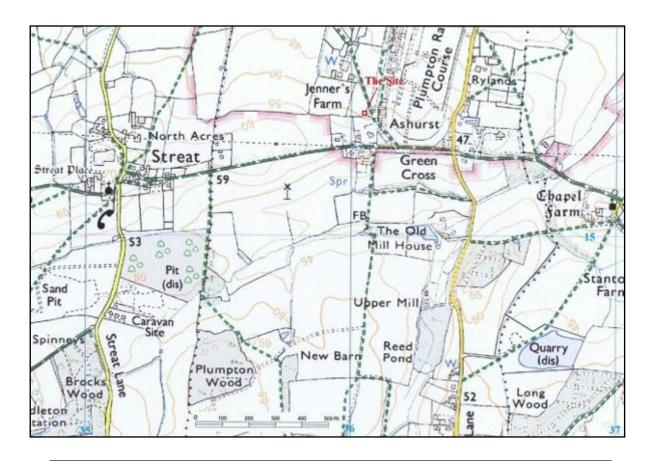


Fig. 1: Plumpton Sandschool: Site location map Ordnance Survey © Crown copyright. All rights reserved. Licence number 100037471

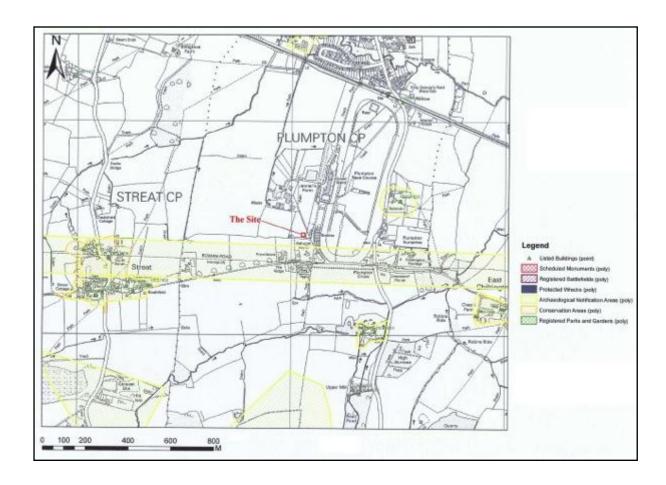


Fig. 2: Plumpton Sandschool: Map showing Archaeological Notification Areas (Adapted from map provided by ESCC)

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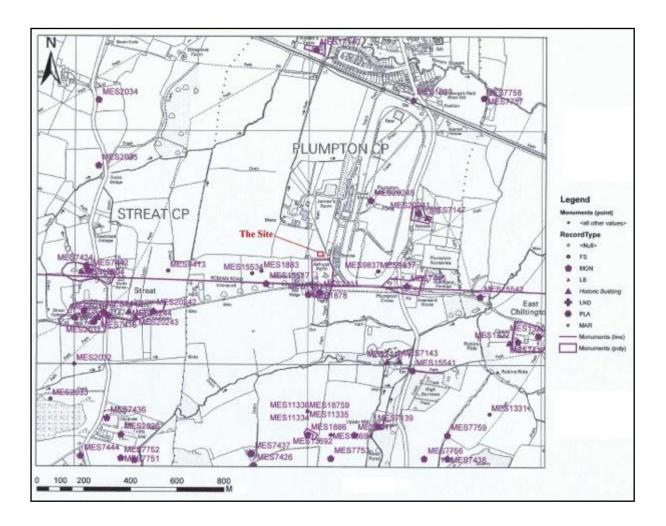


Fig. 3: Plumpton Sandschool: Map showing sites on the HER (Adapted from map provided by ESCC)

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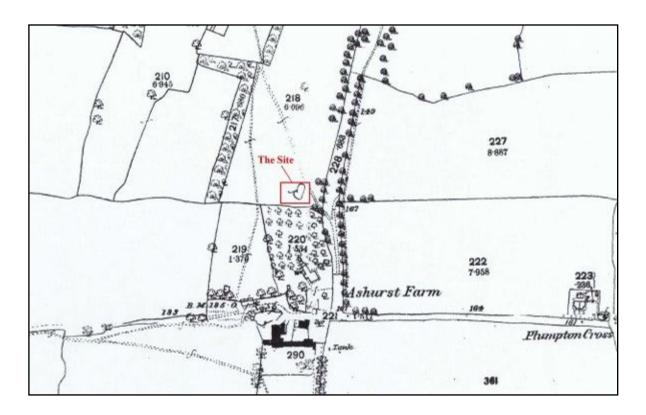


Fig. 4: Plumpton Sandschool: 1<sup>st</sup> Edition OS map (1874)

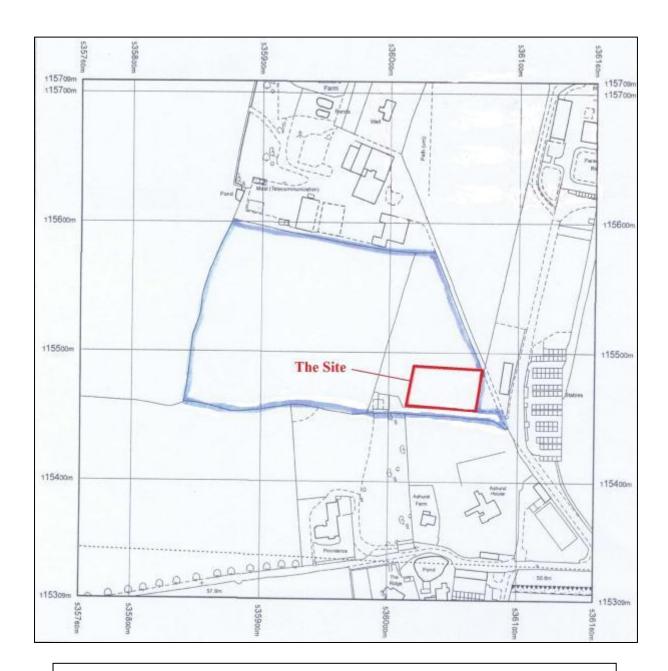


Fig. 5: Plumpton Sandschool: Site plan showing the location of the new equestrian arena



Plate 1: Plumpton Sandschool: Site showing earthwork and adjacent bonfire; looking southeast



Plate 2: Plumpton Sandschool: Site after topsoil stripping, showing equestrian arena; looking northeast



Plate 3: Plumpton Sandschool: Site after topsoil stripping, showing equestrian arena and bonfire to north of sand ride; looking southwest



Plate 4: Plumpton Sandschool: Site during second ground reduction strip, showing drainage ditch; looking west



Plate 5: Plumpton Sandschool: Site showing stratigraphy of second ground reduction strip; looking northeast



Plate 6: Plumpton Sandschool: West half of site after completion of levelling work; looking northwest



Plate 7: Plumpton Sandschool: East half of site after completion of ground reduction; looking northeast



Plate 8: Plumpton Sandschool: Dump of red tiles in made ground (Context **004**) in southeast corner of site; looking north

## **Appendix 1: HER Summary Form**

Site Code	PSS12								
Identification Name and Address	Plumpton Sandschool, Plumpton Green, East Sussex								
County, District &/or Borough	East Sussex County Council, Lewes District Council								
OS Grid Refs.	TQ 3606 1546								
Geology	Wealden Clay								
Type of Fieldwork	Eval.	Excav.	Watching Brief	Standing Structure	Survey	Other Strip & Map Operation			
Type of Site	Green Field <b>X</b>	Shallow Urban	Deep Urban	Other					
Dates of Fieldwork	Eval.	Excav.	WB.	Other 10 <sup>th</sup> and 11 May 2012					
Sponsor/Client	Mr Daniel Derbyshire								
Project Manager	Chris Butler MIfA								
Project Supervisor	Caroline Russell								
Period Summary	Palaeo.	Meso.	Neo.	BA	IA	RB			
	AS	MED	PM X	Other	<u>I</u>	I			

#### 100 Word Summary.

An archaeological strip-and-map operation was maintained during levelling work for a new sandschool on land to the north of Ashurst Farm, Plumpton, East Sussex. No archaeological features, deposits or finds of note were recorded. An earlier equestrian arena was exposed beneath the topsoil. The building debris used in its construction is likely to have concealed an 18<sup>th</sup> century pond in the east end of the site, which may have been backfilled with the same material.

#### **Chris Butler Archaeological Services Ltd**

Chris Butler has been an archaeologist since 1985, and formed the Mid Sussex Field Archaeological Team in 1987, since when it has carried out numerous fieldwork projects, and was runner up in the Pitt-Rivers Award at the British Archaeological Awards in 1996. Having previously worked as a Pensions Technical Manager and Administration Director in the financial services industry, Chris formed **Chris Butler Archaeological Services** at the beginning of 2002.

Chris is a Member of the Institute of Field Archaeologists, a committee member of the Lithic Studies Society, and is a part time lecturer in Archaeology at the University of Sussex. He continues to run the Mid Sussex Field Archaeological Team in his spare time.

Chris specialises in prehistoric flintwork analysis, but has directed excavations, landscape surveys and watching briefs, including the excavation of a Beaker Bowl Barrow, a Saxon cemetery and settlement, Roman pottery kilns, and a Mesolithic hunting camp. He has recently undertaken large landscape surveys of Ashdown Forest and Broadwater Warren and is Co-Director of the Barcombe Roman Villa excavation project.

His publications include *Prehistoric Flintwork*, *East Sussex Under Attack* and *West Sussex Under Attack*, all of which are published by Tempus Publishing Ltd.

Chris Butler Archaeological Services Ltd is available for Flintwork Analysis, Project Management, Military Archaeology, Desktop Assessments, Field Evaluations, Excavation work, Watching Briefs, Field Surveys & Fieldwalking, Post Excavation Services and Report Writing.

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