

# An Archaeological Evaluation at Spires Academy Bredlands Lane, Sturry Canterbury, Kent

NGR 619710 161700 (TR 19710 61700)

Site Code: SAC 10 ASE Project No: 4577

ASE Report No. 2011113 OASIS No. 101222

By Kathryn Grant BA MSc AIFA

With contributions from Anna Doherty Karine Le Hégarat and Lucy Allott Illustrations by Dylan Hopkinson An Archaeological Evaluation at Spires Academy Bredlands Lane, Sturry Canterbury, Kent

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#### Abstract

Archaeology South East (ASE) conducted an archaeological evaluation at Spires Academy, Sturry, near Canterbury. The archaeological work was commissioned by Carillion and was carried out between 21<sup>st</sup> and 25<sup>th</sup> February 2011. The evaluation was carried out in advance of proposed redevelopment. Eighteen, thirty metre long trial trenches were excavated.

Evaluation trenches 2-5, 8, 14 and 15 revealed various archaeological features including pits, postholes, stake-holes and ditches, but most features contained no clear dating evidence, however, two small pottery sherds of Late Bronze Age/Early Iron Age date were recovered from a feature Trench 3 and 1<sup>st</sup> century AD pottery was recovered from the topsoil in Trench 2. The other trenches were negative. The evaluation follows an archaeological watching brief on test-pit excavations carried out by ASE in 2010 which had identified two archaeological features containing single finds of Roman brick fragments.

The natural geology, comprising varied brownish orange silty, gravelly clays, was encountered at approximately 36.3m AOD in the southwest of the site falling to 35.15m AOD in the southeast. All of the features were sealed by an intact layer of accumulated subsoil. With the exception of abundant land drains located across the site and the geotechnical text-pit excavations (carried out in October 2010) no modern intrusion or truncation of the subsoil was revealed within the trial-trenches.

The evaluation and preceding watching brief have therefore highlighted that Roman and prehistoric archaeology exists on the site and that the pristine nature of the site suggests that any further potential archaeological features will be well preserved.

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#### 1.0 Introduction

## 1.1 Site Background

- 1.1.1 Archaeology South-East (ASE), a division of University College London Centre for Applied Archaeology (UCLCAA), was commissioned by Carillion to undertake an archaeological evaluation at Spires Academy, Bredlands Lane, Sturry, Westbere, near Canterbury, Kent, NGR 619710 161700, henceforth referred to as the site (Figure 1).
- 1.1.2 Eighteen 30m trial-trenches were excavated to identify archaeological remains in advance of the redevelopment of the site.

## 1.2 Planning Background

1.2.1 A planning application for the erection of a new state-of-the-art educational building together with outdoor sports pitches, a new 3 court MUGA, new parking provision, drop off zones, new circulatory access and pedestrian access, landscaping and ancillary works has been submitted to the County Planning Authority. In response to this planning application the Heritage Conservation Group (HCG) at Kent County Council (KCC) advised that:

It is possible that significant archaeological remains may be present at the site which would be affected by the development proposals....and recommended that....provision is made in any forthcoming planning consent for an archaeological evaluation to be followed by appropriate excavation and/or preservation in situ.

1.2.2 A specification document for an archaeological evaluation was prepared by the Heritage Conservation Group at Kent County Council (KCC 2011). This document outlined the requirements for the archaeological fieldwork. Twentyeight trial trenches were initially proposed for investigation, but this number was reduced to eighteen.

#### 1.3 Aims

- 1.3.1 Eighteen trenches were positioned to assess the archaeological potential of the site and to ascertain the threat posed by the development on any archaeological remains present (Figure 2).
- 1.3.2 The aims and objectives for the evaluation were laid out in the specification (*ibid*) and these are reproduced below:
  - To assess the likely impact of the proposed development on any archaeological remains that may be present at the site;
  - To assess the potential of the site to contain nationally important remains, using English Heritage assessment criteria;
  - To relate any findings to those made along the line of Island Road;
  - To place any remains exposed in their wider setting and contribute to our understanding of the history of the area;
  - To contribute to the environmental and landscape history of the area;
     and
  - To contribute to the objectives of the South East Regional Research

#### Framework.

1.3.3 More generally, the evaluation set out to determine, as far as was reasonably possible, the location, form, extent, date, character, condition, significance and quality/degree of survival of any surviving archaeological remains, irrespective of period, liable to be threatened by the proposed development. An adequate representative sample of all areas where archaeological remains were potentially threatened was studied, and attention given to features and deposits of all periods (inclusive of evidence of past environments).

## 1.4 Scope of the Report

- 1.4.1 An interim report summarising the results of this evaluation was submitted to KCC and the client in March 2011. This document presents the results of the archaeological evaluation carried out at Spires Academy, between 21<sup>st</sup> and 25<sup>th</sup> February 2011 in full.
- 1.4.2 The fieldwork was undertaken by Kathryn Grant with the assistance of Roddy Mattinson and Sam Whitehead. The trenches and features were surveyed by Lesley Davidson (Surveyor). The project was managed by Andy Leonard (Project Manager) and Jim Stevenson (Post-excavation Manager).

#### 2.0 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

## 2.1 Site Location, Topography and Geology

- 2.1.1 The site is located to the east of Canterbury, between the villages of Westbere and Hersden.
- 2.1.2 The site is generally level at c. 35m AOD. Prior to the archaeological evaluation the site was used as playing fields for the existing Spires Academy. It was bounded to the south by Island Road (A28) and to the north and east by open fields.
- 2.1.3 The site lies on a head deposit of undifferentiated clays, silts, sands and gravels which overlie clay and silt of the London Clay Formation (BGS Map 273, 1974).

## 2.2 Archaeological Summary

- 2.2.1 The site's archaeological potential is based on the proximity of archaeological remains presently recorded in the HER. The presence of Romano British and Anglo-Saxon remains within the surrounding landscape demonstrate that the site lies within an area of archaeological potential.
- 2.2.2 The site lies to the north of a Roman Road connecting Canterbury and the Isle of Thanet. This is the route of Island Road (A28), immediately to the south of the site (Figures 1 and 2). Recent archaeological investigations at the site associated with archaeological monitoring of geotechnical test-pitting identified archaeological remains, probably of Roman date, at the site (ASE 2010). These remains were thought to relate to roadside activity in the Romano-British Period.
- 2.2.3 Other nearby archaeological investigations (alongside the road) have found evidence for pre-Roman activity. It is therefore possible that the Roman road followed a route that had been in-use during the later prehistoric period. Such remains include Late Iron Age/Early Roman enclosures some 250m to the south-east and an important Iron Age and Roman settlement which was found further along Island Road at the Lakeview Business Park.
- 2.2.4 Later archaeological sites within the proximity of the site include an Anglo-Saxon burial ground on the opposite side of Island Road (Rady 2006; Barrett 2006). The cemetery is noted as containing cremations and inhumations with burials dating from the early sixth to seventh centuries AD.
- 2.2.5 Additionally, an archaeological watching brief on test-pit excavations carried out by ASE in 2010 identified two archaeological features containing single finds of Roman date.

#### 3.0 METHODOLOGY

#### 3.1 Fieldwork

- 3.1.1 Eighteen archaeological trenches excavated under archaeological supervision using a 13 tonne mechanical excavator fitted with a toothless bucket. The trenches were positioned across the development area so as to ensure that an optimum sample of the area was uncovered (Figure 2). The trenches were 30m long and 1.8m wide. Trench 16 was cut short by 2m due to a northwest-southeast orientated service located at its eastern end. The depths of the trenches varied depending on the level of archaeological remains or the natural horizon, whichever was highest.
- 3.1.2 Prior to the commencement of excavation on site, the investigation area was secured with Heras fencing.
- 3.1.3 The trenches were located approximately according to the proposed trench location plan and flexibility for the trench locations was approved in case of any onsite constraints. Due to the slight relocation/resizing of some trenches it was necessary to re-plan their new positions using a Total Station fitted with a Global Positioning System (GPS). These are accurately shown on Figure 2.
- 3.1.4 The potential locations of below-ground services were located with a CAT scanner and highlighted with yellow spray-paint. With the exception of known services and frequent land-drains which were observed criss-crossing the entire site, an unrecorded service was located in the western field on a northwest-southeast orientation (by Trench 16). The onsite Carillion representative was shown the location of this service.
- 3.1.5 The excavations were taken down to the top of the underlying geology or to the surface of any significant archaeological deposit; whichever was higher. When removed, topsoil and subsoil were kept separate to ensure that they could be replaced sequentially. Revealed surfaces were manually cleaned in an attempt to identify individual archaeological features and trench sections were selectively cleaned to observe and record stratigraphy. The removed spoil was scanned for the presence of any stray, unstratified artefacts which were recovered and bagged for dating and analysis. All archaeological deposits, features and finds were excavated and recorded in accordance with accepted professional standards (IFA 2000 & 2001, EH 1991) using proforma context record sheets.
- 3.1.6 The trenches were located and levelled using a Total Station (Figure 2) and tied into the Ordnance Survey 1:1250 scale map of the area. Any uncovered archaeological features or deposits were planned and sections of every feature were drawn. A photographic record of the site, trenches and archaeological features was maintained throughout the evaluation. Samples of archaeological deposits were collected for environmental processing. The trenches were fully recorded on trial trench record sheets and ASE context sheets. Each deposit uncovered during the archaeological trial-trenching was assigned its own unique context number prefixed with the trench number. These numbers can be differentiated from those assigned during the watching brief on geotechnical investigations as they are not prefixed by SAT, TP or CBR.

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#### The Site Archive 3.2

The project archive is currently held at offices of ASE. The contents of the 3.2.1 archive are tabulated below for reference in this report (Table 1).

Number of Trenches	18
Number of Contexts	80
No. of files/paper record	1 file
Plan and sections sheets	1
Bulk Samples	6 (14 Buckets)
Photographs	c.80
Bulk finds	1 small box
Registered finds	0
Environmental flots/residue	1 small box

Table 1: Quantification of the site archive

## 4.0 RESULTS (Figures 2 -6)

#### 4.1 Introduction

- 4.1.1 Eighteen trial trenches were excavated to an accumulative length of c. 538m. Twenty-eight trenches were originally proposed (KCC 2011), but ten of the trenches were not excavated due to their position in a field to the north not due for immediate development. Seven of the eighteen trenches (Trenches 2-5, 8, 14 and 15) excavated during the evaluation contained archaeological features (four postholes, three pits, three ditches and three stake-holes). All of the archaeological remains uncovered on the site were located in the trenches nearer to the road with a small cluster of remains in Trenches 2-5 and 8 (Figure 2).
- 4.1.2 A total of eighty contexts were recorded during the evaluation. These contexts have been tabulated and described below by trench.
- 4.1.3 Natural geology comprising varied orange-brown silty, gravelly clays was encountered at approximately 36.3m AOD in the southwest of the site falling to 35.15m AOD in the southeast. Water seepage, as a result of the perched water table, was observed in the bases of most trenches, particularly in the south-eastern corner of the site where the natural horizon was recorded at its lowest. Natural geology was sealed by an intact thin layer of accumulated mid orange-brown clayey silt subsoil which was generally very sterile with few inclusions. All of the trenches were covered by a layer of mid brown clayey silt topsoil with a thickness of 250mm and 300mm.

#### 4.2 Trench 1

4.2.1 This trench was 30m long and 1.8m wide. It was on a northeast-southwest orientation and was located to the east of the site.

Context Number	Context Type	Context Description	Max. Thickness (mm)	Heights m AOD
1/001	Layer	Topsoil	300	35.57 – 35.60
1/002	Layer	Subsoil	300	-
1/003	Deposit	Natural	-	35.16 – 35.19

Table 2: List of recorded contexts from Trench 1

## 4.2.2 Context Summary

Natural geology [1/003] comprising orange brown clay and gravel was encountered at 35.16m AOD in the south-western end of the trench and 35.19m AOD in the northeast. Natural geology was overlain by a layer of mid orange-brown clayey silt subsoil [1/002] and mid brown clayey silt topsoil [1/001]. Several land drains were recorded across the trench and considerable water seepage was observed within the trench base. No archaeological features or finds were identified within this trench.

## **4.3 Trench 2** (Figure 3)

4.3.1 This trench was 30m long and 1.8m wide. It was on a northwest-southeast orientation and was located to the east of the site.

Context Number	Context Type	Context Description	Max. Thickness (mm)	Heights m AOD
2/001	Layer	Topsoil	300	35.64 – 35.91
2/002	Deposit	Natural	-	35.31 – 35.49
2/003	Fill	Fill of [2/004]	220	-
2/004	Cut	Posthole	-	35.20
2/005	Fill	Fill of [2/006]	150	-
2/006	Cut	Posthole	-	35.25
2/007	Layer	Subsoil	300	-

Table 3: List of recorded contexts from Trench 2

#### 4.3.2 Context Summary

Natural geology [2/002] comprising orange brown clay and gravel was encountered at 35.64m AOD in the south-eastern end of the trench and 35.49m AOD in the northwest. Two postholes [2/004] (0.4m in diameter and 0.22m deep) and [2/006] (0.35m in diameter and 0.15m deep) were recorded towards the south-eastern end of the trench. These features contained single fills ([2/003] and [2/005] respectively) comprising mid brownish grey silty clay with frequent charcoal fleck inclusions. No artefacts were recovered from these features. These fills were sampled (<1> and <2>) for environmental processing (see section 6.0). The postholes were cut into the natural and sealed by subsoil [2/007].

The trench was sealed by mid brown clayey silt topsoil [2/001] from which three sherds of AD60-100 Roman pottery were recovered.

## **4.4 Trench 3** (Figure 3)

4.4.1 This trench was 30m long and 1.8m wide. It was on a northeast-southwest orientation and was located to the east of the site.

Context Number	Context Type	Context Description	Max. Thickness (mm)	Heights m AOD
3/001	Layer	Topsoil	300	35.62 – 35.68
3/002	Deposit	Natural	-	35.16 - 35.30
3/003	Cut	Pit	-	35.25
3/004	Fill	Fill of [3/003]	180	-
3/005	Fill	Fill of [3/006]	280	-
3/006	Cut	Amorphous Pit	-	35.17
3/007	Fill	NE-SW Gully Terminus	-	35.17
3/008	Fill	Fill of [3/007]	200	-
3/009	Layer	Subsoil	150	-

Table 4: List of recorded contexts from Trench 3

## 4.4.2 Context Summary

Natural geology [3/002] comprising orange brown clay and gravel was encountered at 35.16m AOD in the western end of the trench and 35.30m AOD in the east. A sub-rectangular pit [3/003] (c.0.85m in diameter, 0.18m deep) with moderately sloping sides and a flat base was encountered in the eastern end of the trench. This feature was filled with mid-to-dark brownish grey silty clay [3/004] with very frequent charcoal inclusions and occasional small rounded stones. No artefacts were recovered from within this fill, but a sample <3> was taken for environmental processing (see section 6.0).

Towards the middle of the trench a terminating gully [3/007] (c.1.65m long, c.0.8m wide and 0.2m deep) was recorded on a northeast-southwest alignment. This feature was filled with soft light brown clayey silt [3/008] which had probably formed through natural silting after use. The gully was cut by an amorphous pit-like feature [3/006] (c.1.1m wide and 0.28m thick) containing a dark grey charcoal rich silty clay fill [3/005] with burnt stone inclusions. This fill deposit was sampled <5> for environmental processing (see section 6.0) and was found to contain two small prehistoric pottery sherds of Late Bronze Age/Early Iron Age date. It should be noted that there was a lot of rooting and bioturbation around this feature which made its edges fairly irregular and may be responsible for causing vertical movement and residuality within the surrounding contexts. The features within this trench were cut into the natural and sealed by subsoil [3/009]. The trench was sealed by mid brown clayey silt topsoil [3/001].

## **4.5** Trench **4** (Figure 4)

4.5.1 This trench was 30m long and 1.8m wide. It was on a northwest-southeast orientation and was located to the south of the eastern field.

Context	Context	Context	Max.	Heights
Number	Type	Description	Thickness (mm)	m AOD
4/001	Layer	Topsoil	300	35.69 - 35.96
4/002	Deposit	Natural	-	35.44 - 35.46
4/003	Fill	Fill of [4/004]	150	-
4/004	Cut	Stake-hole	-	35.48
4/005	Fill	Fill of [4/006]	120	-
4/006	Cut	Stake-hole	-	35.48
4/007	Fill	Fill of [4/008]	230	-
4/008	Cut	Stake-hole	-	35.48
4/009	Layer	Subsoil	150	-

Table 5: List of recorded contexts from Trench 4

#### 4.5.2 Context Summary

Natural geology [4/002] comprising orange brown clay and gravel was encountered at 35.44m AOD in the northern end of the trench and 35.46m AOD in the south. Three stake-holes [4/004], [4/006] and [4/008] (0.18m-0.23m in diameter, 0.12m-0.23m deep) were encountered towards the northern end of this trench. All three stake-holes had fairly steep sides and concave bases and were filled (contexts [4/003], [4/005] and [4/007] respectively) with mid brownish grey clayey silt with frequent charcoal fleck

inclusions. No artefacts were recovered from these features. The features were cut into the natural and sealed by subsoil [4/009]. The trench was sealed by mid brown clayey silt topsoil [4/001].

## **4.6 Trench 5** (Figure 4)

4.6.1 This trench was 30m long and 1.8m wide. It was on an east-west orientation and was located to the south of the eastern field.

Context Number	Context Type	Context Description	Max. Thickness (mm)	Heights m AOD
5/001		Topsoil		35.87 – 35.97
3/001	Layer		300	33.67 - 33.97
5/002	Layer	Subsoil	200	-
5/003	Deposit	Natural	=	35.41 – 35.61
5/004	Cut	Gully	•	35.46
5/005	Fill	Fill of [5/004]	280	-

Table 6: List of recorded contexts from Trench 5

#### 4.6.2 Context Summary

Natural geology [5/003] comprising orange brown clay and gravel was encountered at 35.41m AOD in the western end of the trench and 35.61m AOD in the east. A northwest-southeast aligned linear gully [5/004] (0.6m wide and 0.28m deep) was recorded in the eastern end of this trench. This feature contained light brownish grey silty clay [5/005] with rare gravel and charcoal fleck inclusions. No artefacts were recovered from this fill, but a sample <5> was taken for environmental processing (see section 6.0). This feature was cut into the natural and sealed by subsoil [5/002]. The trench was sealed by mid brown clayey silt topsoil [5/003].

#### 4.7 Trench 6

4.7.1 This trench was 30m long and 1.8m wide. It was on a northwest-southeast orientation and was located in the south-western corner of the eastern field.

Context Number	Context Type	Context Description	Max. Thickness (mm)	Heights m AOD
6/001	Laver	Topsoil	280	35.88 – 36.14
6/002	Layer	Subsoil	260	-
6/003	Deposit	Natural	-	35.61 – 35.62

Table 7: List of recorded contexts from Trench 6

#### 4.7.2 Context Summary

Natural geology [6/003] comprising orange brown clay and gravel was encountered at 36.61m AOD in the northern end of the trench and 35.62m AOD in the south. Natural geology was overlain by a layer of mid orange-brown clayey silt subsoil [6/002] and mid brown clayey silt topsoil [6/001]. No archaeological features or finds were identified within this trench.

#### 4.8 Trench 7

4.8.1 This trench was 30m long and 1.8m wide. It was on an east-west orientation and was located in the middle of the eastern field.

Context Number	Context Type	Context Description	Max. Thickness (mm)	Heights m AOD
7/001	Layer	Topsoil	300	36.15 - 36.16
7/002	Layer	Subsoil	180	-
7/003	Deposit	Natural	=	35.57 - 35.83

Table 8: List of recorded contexts from Trench 7

#### 4.8.2 Context Summary

Natural geology [7/003] comprising orange brown clay and gravel was encountered at 35.57m AOD in the western end of the trench and 35.83m AOD in the east. Natural geology was overlain by a layer of mid orange-brown clayey silt subsoil [7/002] and mid brown clayey silt topsoil [7/001]. No archaeological features or finds were identified within this trench.

## **4.9 Trench 8** (Figure 5)

4.9.1 This trench was 30m long and 1.8m wide. It was on a northwest-southeast orientation and was located in the middle of the eastern field.

Context	Context	Context	Max.	Heights
Number	Type	Description	Thickness (mm)	m AOD
8/001	Layer	Topsoil	350	36.04 - 36.12
8/002	Layer	Subsoil	180	-
8/003	Deposit	Natural	-	35.52 - 35.69
8/004	Cut	Ditch	=	35.57
8/005	Fill	Fill of [8/004]	200	-

Table 9: List of recorded contexts from Trench 8

## 4.9.2 Context Summary

Natural geology [8/003] comprising orange brown clay and gravel was encountered at 35.52m AOD in the northern end of the trench and 35.69m AOD in the south. An east-west gully [8/004] (0.75m wide and 0.2m deep) with concave sides and base was recorded crossing the southern end of Trench 8. This feature was truncated by a modern land drain and is on the same alignment which would suggest that it may have been an earlier drainage gully. The feature was filled with mid greyish brown clayey silt [8/005] with occasional sub-angular flint gravel. No artefacts were recovered from this fill. The feature was cut into the natural and sealed by subsoil [8/002]. The trench was sealed by mid brown clayey silt topsoil [8/003].

#### 4.10 Trench 9

4.10.1 This trench was 30m long and 1.8m wide. It was on an east-west orientation and was located in the middle of the eastern field.

Context Number	Context Type	Context Description	Max. Thickness (mm)	Heights m AOD
9/001	Layer	Topsoil	250	35.98 - 36.12
9/002	Layer	Subsoil	200	-
9/003	Deposit	Natural	-	35.60 - 35.62

Table 10: List of recorded contexts from Trench 9

#### 4.10.2 Context Summary

Natural geology [9/003] comprising orange brown clay and gravel was encountered at 35.60m AOD in the western end of the trench and 35.62m AOD in the east. Natural geology was overlain by a layer of mid orange-brown clayey silt subsoil [9/002] and mid brown clayey silt topsoil [9/001]. No archaeological features or finds were identified within this trench.

## 4.11 Trench 10

4.11.1 This trench was 30m long and 1.8m wide. It was on a northwest-southeast orientation and was located to the north of the eastern field.

Context Number	Context Type	Context Description	Max. Thickness (mm)	Heights m AOD	
10/001	Layer	Topsoil	300	36.20 - 36.26	
10/002	Layer	Subsoil	200	-	
10/003	Deposit	Natural	-	35.85 - 35.92	

Table 11: List of recorded contexts from Trench 10

#### 4.11.2 Context Summary

Natural geology [10/003] comprising orange brown clay and gravel was encountered at 35.85m AOD in the southern end of the trench and 35.92m AOD in the north. Natural geology was overlain by a layer of mid orange-brown clayey silt subsoil [10/002] and mid brown clayey silt topsoil [10/001]. No archaeological features or finds were identified within this trench.

#### 4.12 Trench 11

4.12.1 This trench was 30m long and 1.8m wide. It was on an east-west orientation and was located to the north of the eastern field.

Context Number	Context Type	Context Description	Max. Thickness (mm)	Heights m AOD
11/001	Layer	Topsoil	310	36.22 - 36.24
11/002	Layer	Subsoil	220	-
11/003	Deposit	Natural	=	35.71 – 35.85

Table 12: List of recorded contexts from Trench 11

## 4.12.2 Context Summary

Natural geology [11/003] comprising orange brown clay and gravel was encountered at 35.71m AOD in the western end of the trench and 35.85m AOD in the east. Natural geology was overlain by a layer of mid orange-brown clayey silt subsoil [11/002] and mid brown clayey silt topsoil [11/001]. No archaeological features or finds were identified within this trench.

## 4.13 Trench 12

4.13.1 This trench was 30m long and 1.8m wide. It was on a northwest-southeast orientation and was located to the east of the site.

Context Number	Context Type	Context Description	Max. Thickness (mm)	Heights m AOD	
12/001	Layer	Topsoil	290	36.20 - 36.38	
12/002	Layer	Subsoil	210	-	
12/003	Deposit	Natural	-	35.74 – 35.97	

Table 13: List of recorded contexts from Trench 12

## 4.13.2 Context Summary

Natural geology [12/003] comprising orange brown clay and gravel was encountered at 35.74m AOD in the southern end of the trench and 35.97m AOD in the north. Natural geology was overlain by a layer of mid orange-brown clayey silt subsoil [12/002] and mid brown clayey silt topsoil [12/001]. No archaeological features or finds were identified within this trench.

#### 4.14 Trench 13

4.14.1 This trench was 30m long and 1.8m wide. It was on a northwest-southeast orientation and was located to the east of the western field

Context Number	Context Type	Context Description	Max. Thickness (mm)	Heights m AOD	
13/001	Layer	Topsoil	250	36.07 - 36.19	
13/002	Layer	Subsoil	150	-	
13/003	Deposit	Natural	-	35.69 – 35.82	

Table 14: List of recorded contexts from Trench 13

## 4.14.2 Context Summary

Natural geology [13/003] comprising orange brown clay and gravel was encountered at 35.69m AOD in the northern end of the trench and 35.82m AOD in the south. Natural geology was overlain by a layer of mid orange-brown clayey silt subsoil [13/002] and mid brown clayey silt topsoil [13/001]. No archaeological features or finds were identified within this trench.

## **4.15** Trench **14** (Figure 6)

4.15.1 This trench was 30m long and 1.8m wide. It was on a northeast-southwest orientation and was located to the southeast of the western field

Context Number	Context Type	Context Description	Max. Thickness (mm)	Heights m AOD	
14/001	Layer	Topsoil	300	36.04 - 36.21	
14/002	Layer	Subsoil	100	•	
14/003	Deposit	Natural	=	35.77 - 35.81	
14/004	Cut	Posthole	=	35.76	
14/005	Fill	Fill of [14/004]	160	•	
14/006	Cut	Posthole	- 35.7		
14/007	Fill	Fill of [14/006]	160	-	

Table 15: List of recorded contexts from Trench 14

#### 4.15.2 Context Summary

Natural geology [14/003] comprising orange brown clay and gravel was encountered at 35.77m AOD in the eastern end of the trench and 35.81m AOD in the west. Two postholes [14/004] and [14/006] (0.35m in diameter, 0.16m deep) were encountered at the eastern end of this trench. The postholes, with moderately sloping sides and concave bases, were filled with mid brown clayey silt ([14/005] and [14/007]) with occasional sub-angular flint stones. No artefacts were recovered from within the fill. The feature was cut into the natural and sealed by subsoil [8/002]. The trench was sealed by mid brown clayey silt topsoil [14/001].

## **4.16** Trench **15** (Figure 6)

4.16.1 This trench was 30m long and 1.8m wide. It was on a northwest-southeast orientation and was located in the middle of the western field.

Context	Context	Context	Max.	Heights m AOD		
Number	Type	Description	Thickness (mm)	m AOD		
15/001	Layer	Topsoil	250	36.42 - 36.33		
15/002	Layer	Subsoil	250	•		
15/003	Deposit	Natural	=	35.96 - 36.20		
15/004	Cut	Pit	=	36.00		
15/005	Fill	Fill of [15/004]	250	-		

Table 16: List of recorded contexts from Trench 15

#### 4.16.2 Context Summary

Natural geology [15/003] comprising orange brown clay and gravel was encountered at 36.20m AOD in the southern end of the trench and 35.96m AOD in the north. A circular pit [15/004] (0.75m in diameter and 0.25m deep) with concave sides and a flattish base was encountered in the northern end of this trench. This feature contained a mid grey brown silty clay fill [15/00] with a dark charcoal-rich lens observed in section. No artefacts were recovered from this fill, but a sample <6> was taken for environmental processing (see

section 6.0). This feature was cut into the natural and sealed by subsoil [15/002]. The trench was sealed by mid brown clayey silt topsoil [15/003].

#### 4.17 Trench 16

4.17.1 This trench was 28m long and 1.8m wide. It was on an east-west orientation and was located to the west of the site.

Context Number	Context Type	Context Description	Max. Thickness (mm)	Heights m AOD
16/001	Layer	Topsoil	250	36.55 - 36.65
16/002	Layer	Subsoil	150	-
16/003	Deposit	Natural	=	36.20 - 36.31

Table 17: List of recorded contexts from Trench 16

## 4.17.2 Context Summary

Natural geology [16/003] comprising orange brown clay and gravel was encountered at 36.20m AOD in the eastern end of the trench and 36.31m AOD in the west. Natural geology was overlain by a layer of mid orange-brown clayey silt subsoil [16/002] and mid brown clayey silt topsoil [16/001]. No archaeological features or finds were identified within this trench.

#### 4.18 Trench 17

4.18.1 This trench was 30m long and 1.8m wide. It was on an east-west orientation and was located to the north of the western field.

Context Number	Context Type	Context Description	Max. Thickness (mm)	Heights m AOD
17/001	Layer	Topsoil	300	36.33 - 36.41
17/002	Layer	Subsoil	200	-
17/003	Deposit	Natural	-	35.91 – 36.07

Table 18: List of recorded contexts from Trench 17

## 4.18.2 Context Summary

Natural geology [17/003] comprising orange brown clay and gravel was encountered at 35.91m AOD in the east of the trench and 36.07 in the west. Natural geology was overlain by a layer of mid orange-brown clayey silt subsoil [17/002] and mid brown clayey silt topsoil [17/001]. No archaeological features or finds were identified within this trench.

#### 4.19 Trench 18

4.19.1 This trench was 30m long and 1.8m wide. It was on a northwest-southeast orientation and was located to the west of the site.

Context Number	Context Type	Context Description	Max. Thickness (mm)	Heights m AOD	
18/001	Layer	Topsoil	250	36.47 – 36.54	
18/002	Layer	Subsoil	150	-	
18/003	Deposit	Natural	-	35.97 – 36.20	

Table 19: List of recorded contexts from Trench 18

## 4.19.2 Context Summery

Natural geology [18/003] comprising orange brown clay and gravel was encountered at 36.20m AOD in the northern end of the trench and 35.97m AOD in the south. Natural geology was overlain by a layer of mid orangebrown clayey silt subsoil [18/002] and mid brown clayey silt topsoil [18/001]. A rooty tree-bole was identified in the middle of this trench. No archaeological features or finds were identified within this trench.

#### 5.0 THE FINDS

#### 5.1 Introduction

5.1.1 The finds have been weighed and quantified and recorded on pro forma recording forms and retained as part of the archive. The finds have been tabulated below:

Context	Pot	Wt (g)		
2/001	3	20		

Table 20: Quantification of hand-collected finds

## **5.2** The Pottery by Anna Doherty

## 5.2.1 Prehistoric pottery

Two very small sherds, together weighing 2 grams, were retrieved from the residue of the environmental sample from context [3/005] (quantified in table 21). Both are in very similar fabrics containing sparse to moderate ill-sorted flint and grog temper in the size range 1-3mm. Although similar fabrics might be encountered across a range of prehistoric periods, wares of this type are most commonly associated with assemblages of the Late Bronze Age/ Early Iron Age period in East Kent.

#### 5.2.2 Roman pottery

Context [2/001] produced three bodysherds of pottery including the neck of a jar in Canterbury coarse oxidised ware and two sherds in a fine oxidised grog-tempered ware. The association of these two fabric types suggests that the deposit dates to around AD60-100.

## 6.0 ENVIRONMENTAL SAMPLES by Karine Le Hégarat and Lucy Allott

#### 6.1 Introduction

6.1.1 Six environmental samples were taken to establish the presence of environmental indicators such as charcoal, macrobotanical remains, fauna and mollusca. The samples were taken from six features: two postholes ([2/004] and [2/006]), two pits ([3/003] and [15/004]), one ditch [3/006] and one gully [5/004].

#### 6.2 Method

6.2.1 The samples were processed in their entirety in a flotation tank and the flots and residues were retained on 250 and 500µm meshes respectively. Residues were sieved through 2mm and 4mm geological sieves and each fraction sorted for artefact and environmental remains (Table 21). The flots were scanned under a stereozoom microscope at x7-45 magnifications and an overview of their contents recorded (Table 22). Nomenclature used follows Stace (1997).

#### 6.3 Results

- 6.3.1 The flots were dominated by uncharred vegetation (between 78% and 97% of each flots) including modern rootlets, fruiting structures and infrequent uncharred wild/weed seeds such as blackberry/raspberry (*Rubus fruticosus/idaeus*), black-bindweed (*Fallopia convolvulus*), black nightshade (*Solanum nigrum*) and seeds from the pink (Caryophyllaceae) family. In addition the flots from samples <1> and <5> contained moderate numbers of earthworm egg-like capsules which are probably modern. The significant level of uncharred vegetation present in these features could indicate a degree of vertical movement within the deposits and potential contamination by intrusive elements.
- 6.3.2 Nonetheless, sampling confirmed the presence of a significant assemblage of wood charcoal fragments. These were particularly abundant in the residues which contained fragments >25mm in size and pit feature [3/003] produced the largest assemblage. Varying degrees of preservation were revealed. While the assemblages from samples <3>, <6> and <4> were dominated by well preserved fragments, the assemblages from samples <1, 2 and 5> included some sediment infiltrated pieces.
- 6.3.3 Other charred botanical remains were infrequent. The only charred macroplants were recorded in the flot from sample <3> and consisted of a single wild/weed seed from the goosefoot (Chenopodiaceae) family, one unidentified seed and some charred stem fragments. No other biological remains were represented within the deposits sampled.
- 6.3.4 Small quantities of burnt unworked flints, a single small piece of burnt clay as well as two sherds of pottery were recorded in the residues.

#### 6.4 Discussion

6.4.1 The bulk environmental samples taken during the evaluation work confirmed the presence of environmental remains preserved through carbonisation. Wood charcoal fragments are relatively prominent and many of the fragments are well enough preserved for identification. Preservation was variable however and the presence of sediment infiltrated pieces within the assemblages from posthole features [2/004], [2/006] and gully feature [5/004] may restrict the level of identifications obtainable for these assemblages. Although sampling has revealed potential movements within the deposits, the charcoal assemblage contained large enough fragments that, depending on the species identified, might be suitable for dating. The limited assemblage of charred macroplants holds no potential for further analysis.

#### 7.0 **DISCUSSION AND CONCLUSIONS**

- 7.1 The evaluation revealed archaeological features in seven of the eighteen excavated trenches (Trenches 2-5, 8, 14 and 15). These were four postholes, three pits, three ditches and three stake-holes. All of the archaeological remains uncovered on the site were located in the trenches closer to the road with a small density of remains in Trenches 2-5 and 8 (Figure 1).
- 7.2 Roman pottery sherds (AD60-100) were recovered from the topsoil covering Trench 2 and the 2010 watching brief on geotechnical test-pits encountered two features which contained Roman brick fragments. Two small pottery sherds of Late Bronze Age/Early Iron Age date were also recovered from the environmental sample collected from the amorphous pit uncovered in Trench
- 7.3 This indicates that Roman and perhaps earlier prehistoric evidence exists on the site.
- 7.4 Natural geology comprising varied orange-brown silty, gravelly clays was encountered at approximately 36.3m AOD in the southwest of the site falling to 35.15m AOD in the southeast. Water seepage, as a result of the perched water table, was observed in the bases of most trenches, particularly in the south-eastern corner of the site where the natural horizon was recorded at its lowest. All of the features were sealed by an intact thin layer of accumulated subsoil which was generally very sterile with few inclusions.
- 7.5 With the exception of abundant land drains located across the site and the geotechnical test-pit excavations (carried out in October 2010) no modern intrusion or truncation of the subsoil was revealed within the trial-trenches.
- 7.6 The evaluation and preceding watching brief have therefore highlighted that Roman and prehistoric activity exists on the site and that the pristine nature of the site suggests that any further potential archaeological features will be well preserved.

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#### **ACKNOWLEDGEMENTS**

The author would like to thank all those involved with the project with particular thanks to Carillion for commissioning the work and to Ben Found of KCC for his guidance throughout the project.

## **APPENDIX 1: SMR Summary Form**

Site Code	SAC 10	SAC 10							
Identification Name and Address	Spires Academy, Bredlands Lane, Sturry, Canterbury								
County, District &/or Borough	Kent	Kent							
OS Grid Refs.	NGR:619710	161700							
Geology	Head deposit	of undifferenti	ated clays, sil	ts and grav	vels ov	er Londo	on Clay		
Arch. South-East Project Number	4577								
Type of Fieldwork	Eval.	Excav.	Watching Brief	Standing Structure		Survey	Other		
Type of Site	Green Field	Shallow Urban	Deep Urban	Other	Other				
Dates of Fieldwork	Eval. 21/02/2011 – 25/02/2011	Excav.	WB.	Other					
Sponsor/Client	Carillion								
Project Manager	Andy Leonard								
Project Supervisor	Kathryn Grant								
Period Summary	Palaeo.	Meso.	Neo.		ВА	IA	RB		
	AS	MED	PM Modern						

100 Word Summary

Archaeology South East (ASE) conducted an archaeological evaluation at Spires Academy, Sturry, near Canterbury. The archaeological work was commissioned by Carillion and was carried out between 21<sup>st</sup> and 25<sup>th</sup> February 2011. The evaluation was carried out in advance of proposed redevelopment. Eighteen, thirty metre long trial trenches were excavated.

Evaluation trenches 2-5, 8, 14 and 15 revealed various archaeological features including pits, postholes, stake-holes and ditches, but most features contained no clear dating evidence, however, two small pottery sherds of Late Bronze Age/Early Iron Age date were recovered from a feature Trench 3 and 1<sup>st</sup> century AD pottery was recovered from the topsoil in Trench 2. The other trenches were negative. The evaluation follows an archaeological watching brief on test-pit excavations carried out by ASE in 2010 which had identified two archaeological features containing single finds of Roman brick fragments.

The natural geology, comprising varied brownish orange silty, gravelly clays, was encountered at approximately 36.3m AOD in the southwest of the site falling to 35.15m AOD in the southeast. All of the features were sealed by an intact layer of accumulated subsoil. With the exception of abundant land drains located across the site and the geotechnical text-pit excavations (carried out in October 2010) no modern intrusion or truncation of the subsoil was revealed within the trial-trenches.

The evaluation and preceding watching brief have therefore highlighted that Roman and prehistoric archaeology exists on the site and that the pristine nature of the site suggests that any further potential archaeological features will be well preserved.

#### APPENDIX 2: OASIS FORM

#### OASIS ID: archaeol6-101222

**Project details** 

Project name Spires Academy, Canterbury

Short description of the project

Archaeology South East (ASE) conducted an archaeological evaluation at Spires Academy, Sturry, near Canterbury. The archaeological work was commissioned by Carillion and was carried out between 21<sup>st</sup> and 25<sup>th</sup> February 2011. The evaluation was carried out in advance of proposed redevelopment. Eighteen, thirty metre long trial trenches were excavated.

Evaluation trenches 2-5, 8, 14 and 15 revealed various archaeological features including pits, postholes, stake-holes and ditches, but most features contained no clear dating evidence, however, two small pottery sherds of Late Bronze Age/Early Iron Age date were recovered from a feature Trench 3 and 1<sup>st</sup> century AD pottery was recovered from the topsoil in Trench 2. The other trenches were negative. The evaluation follows an archaeological watching brief on test-pit excavations carried out by ASE in 2010 which had identified two archaeological features containing single finds of Roman brick fragments.

The natural geology, comprising varied brownish orange silty, gravelly clays, was encountered at approximately 36.3m AOD in the southwest of the site falling to 35.15m AOD in the southeast. All of the features were sealed by an intact layer of accumulated subsoil. With the exception of abundant land drains located across the site and the geotechnical text-pit excavations (carried out in October 2010) no modern intrusion or truncation of the subsoil was revealed within the trial-trenches.

The evaluation and preceding watching brief have therefore highlighted that Roman and prehistoric archaeology exists on the site and that the pristine nature of the site suggests that any further potential archaeological features will be well preserved.

Project dates Start: 21-02-2011 End: 25-02-2011

Previous/future work

Yes / Yes

Any associated project reference codes

SAC 10 - Sitecode

Type of project Field evaluation

Current Land use Other 14 - Recreational usage

Monument type PIT Early Iron Age

Monument type PIT Uncertain

Monument type POSTHOLES Uncertain

Monument type DITCHES Uncertain

Monument type STAKE-HOLES Uncertain

Significant Finds POTTERY Early Iron Age

## **Archaeology South-East**

Eval. Spires Academy, Sturry, Canterbury, Kent

ASE Report: 2011113

Significant Finds POTTERY Roman

Methods & techniques

'Sample Trenches'

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

etc.)

Prompt Planning condition

**Project location** 

Country England

Site location KENT CANTERBURY STURRY Spires Academy, Bredlands Lane,

Sturry, Canterbury

Postcode CT2 0HD

Site coordinates TQ 19710 61700 51.3412527708 -0.281130666350 51 20 28 N 000 16

52 W Point

Height OD / Depth Min: 35.15m Max: 36.30m

**Project creators** 

Name of Organisation

Archaeology South East

Project

director/manager

Andy Leonard

Project supervisor Kathryn Grant

Name of sponsor/funding

sponso

Carillion

Entered by Kathryn Grant (kathryn.grant@ucl.ac.uk)

Entered on 18 May 2011

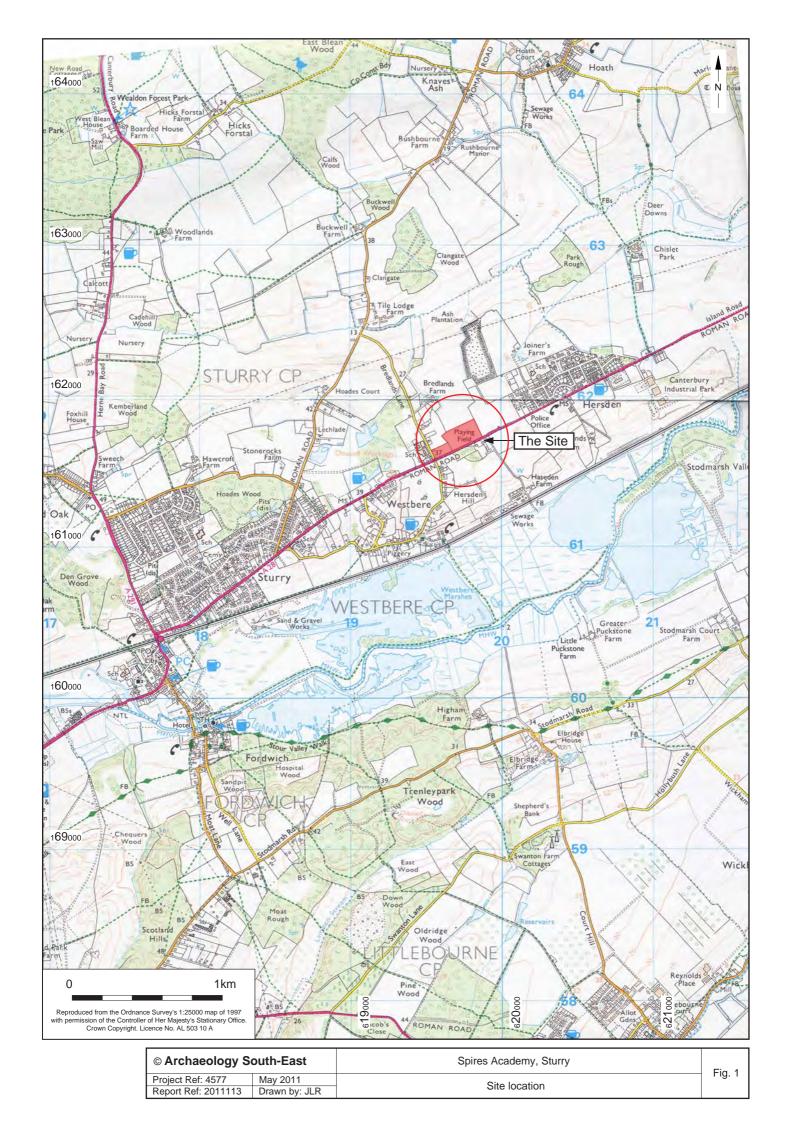
## **APPENDIX 3: ENVIRONMENTAL SAMPLE TABLES**

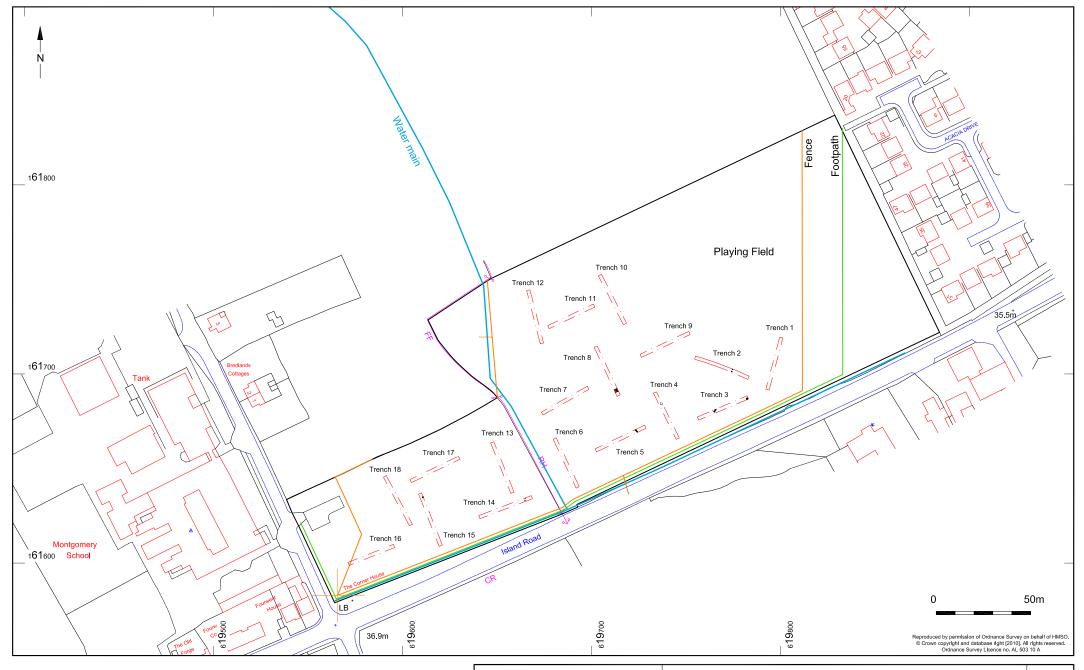
Table 21: Residue Quantification (\* = 1-10, \*\* = 11-50, \*\*\* = 51-250, \*\*\*\* = >250) and weights in grams. Charcoal <4mm: \* = partly sorted

Sample Number	Context	Context / deposit type	Sample Volume litres	sub-Sample Volume litres	Charcoal >4mm	Weight (g)	Charcoal <4mm	Weight (g)	Charred botanicals (other than charcoal)	Weight (g)	Other (eg ind, pot, cbm)
1	2/003	Fill of posthole [2/004]	10	10	**	54	*	12 *			
2	2/005	Fill of posthole [2/006]	10	10	**	24	**	6			FCF */10g
3	3/004	Fill of pit [3/003]	30	30	***	276	***	166 *			FCF **/80g
4	3/005	Fill of ditch [3/006]	30	30	***	106	***	36			Pottery */2g
5	5/005	Fill of gully [5/004]	40	40	**	6	**	2	* unident. CPR	<2	FCF*/1g
6	15/005	Fill of pit [15/004]	20	20	***	26	***	10 *			FCF */2g - F. Clay */1g

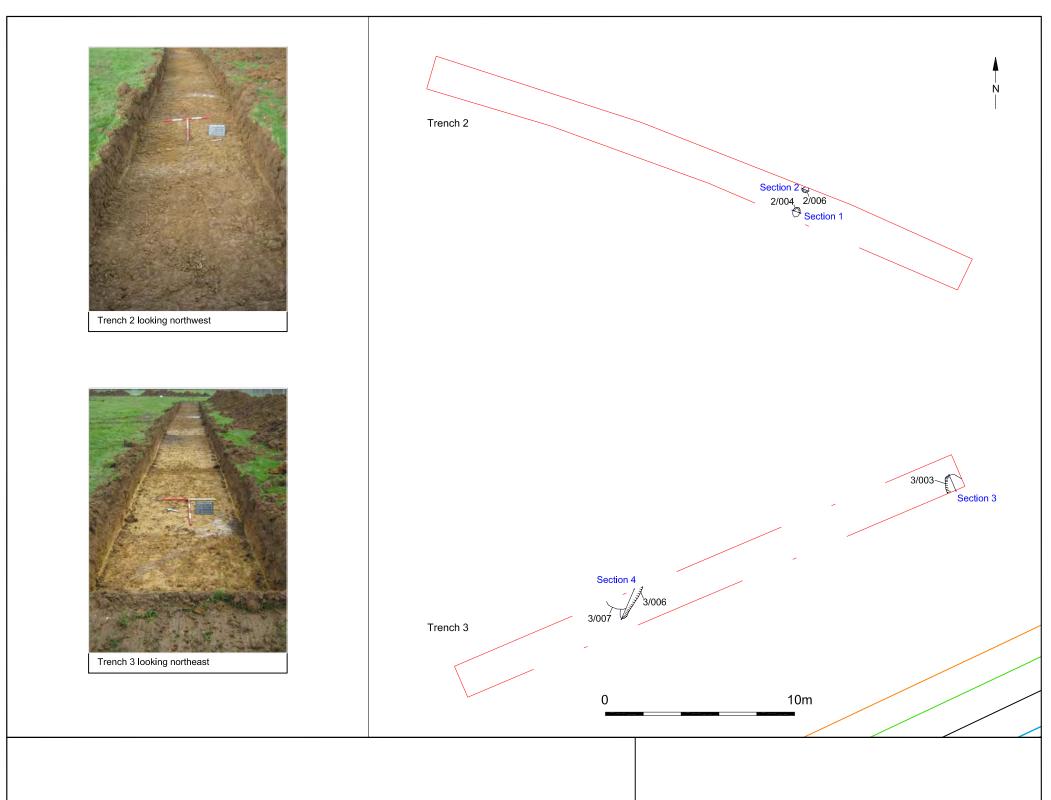
Table 22: Flot Quantification (\* = 1-10, \*\* = 11-50, \*\*\* = 51-250, \*\*\*\* = >250) and preservation (+ = poor, ++ = moderate, +++ = good)

Sample Number	Context	Weight g	Flot volume ml	Uncharred %	Sediment %	Seeds/fruits uncharred	Charcoal >4mm	Charcoal <4mm	Charcoal <2mm	Weed seeds charred	Identifications	Preservation	Other botanical charred	Identifications	Preservation
1	2/003	<2	2	82	10				***						
2	2/005	<2	3	92	4			*	*						
3	3/004	8	75	78	3	* Rubus sp., Caryophyllac eae, fruiting structures		**	***	*	Chenopodiaceae, unident. seed	++ to +	*	stem frags.	++
4	3/005	<2	15	96	1	* Fallopia convolvulus			***						
5	5/005	4	65	97	1				*						
6	15/005	8	70	80	2	* Solanum nigrum, unident. Seed	*	**	***						



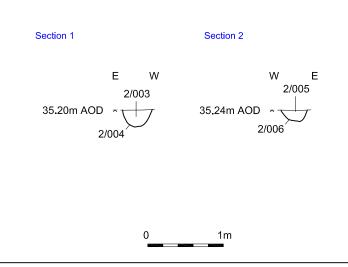


© Archaeology S	outh-East	Spires Academy, Sturry		
Project Ref: 4577	May 2011	Trench location	Fig. 2	
Report Ref: 2011113	Drawn by: JLR	Trench jocation		







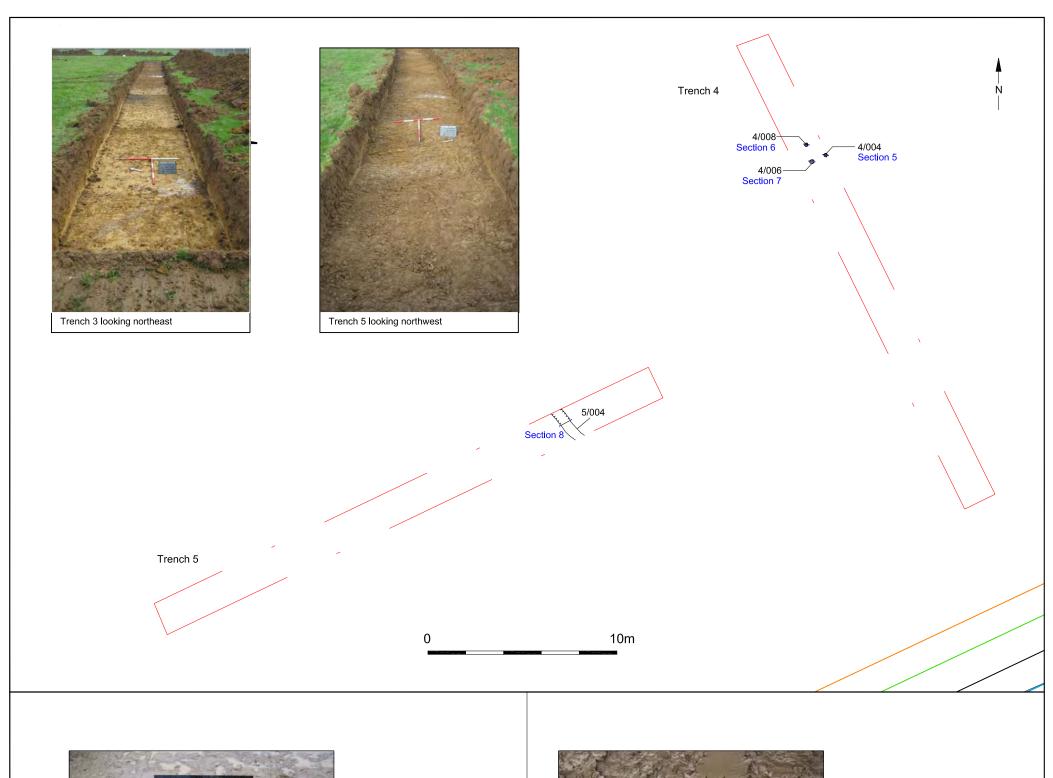




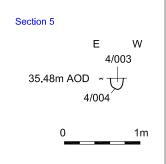


Section 3 Section 4	
N S S N 3/004 3/008 3/005 35.23m AOD 3/003 3/006	
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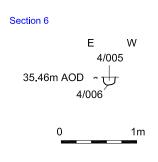
⊚ Archaeology S	outh-East	Spires Academy, Sturry	Fig. 3
Project Ref: 4577	May 2011	Trenches 2 and 3 plan, sections and photographs	1 19.5
Report Ref: 2011113	Drawn by: DJH	Trenches 2 and 3 plan, sections and photographs	





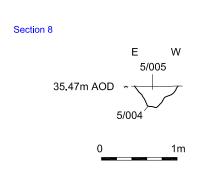




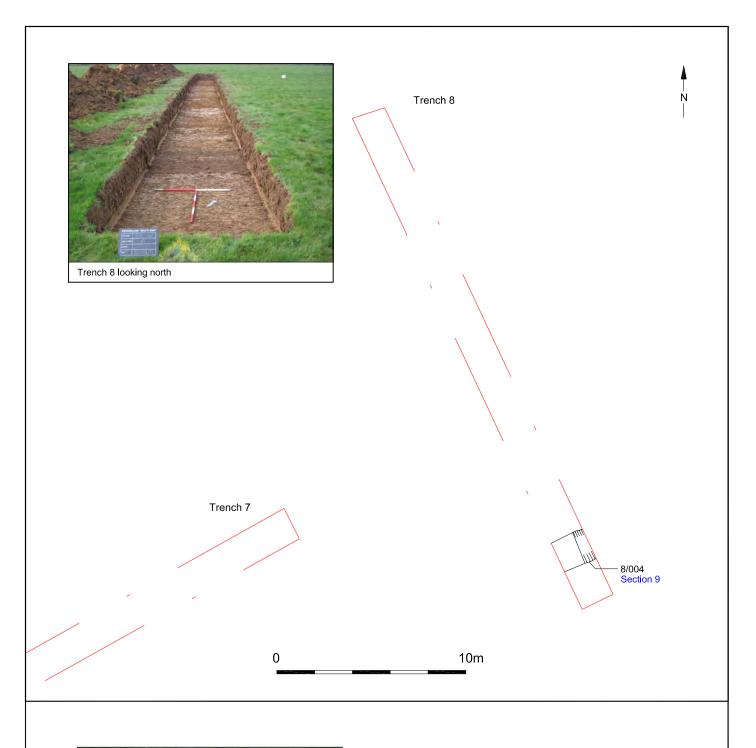




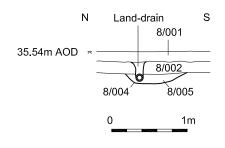




© Archaeology S	outh-East	Spires Academy, Sturry	Fig. 4
Project Ref: 4577	May 2011	Trenches 4 and 5 plan, sections and photographs	1 ig. 4
Report Ref: 2011113	Drawn by: DJH	Trendies 4 and 5 plan, sections and photographs	

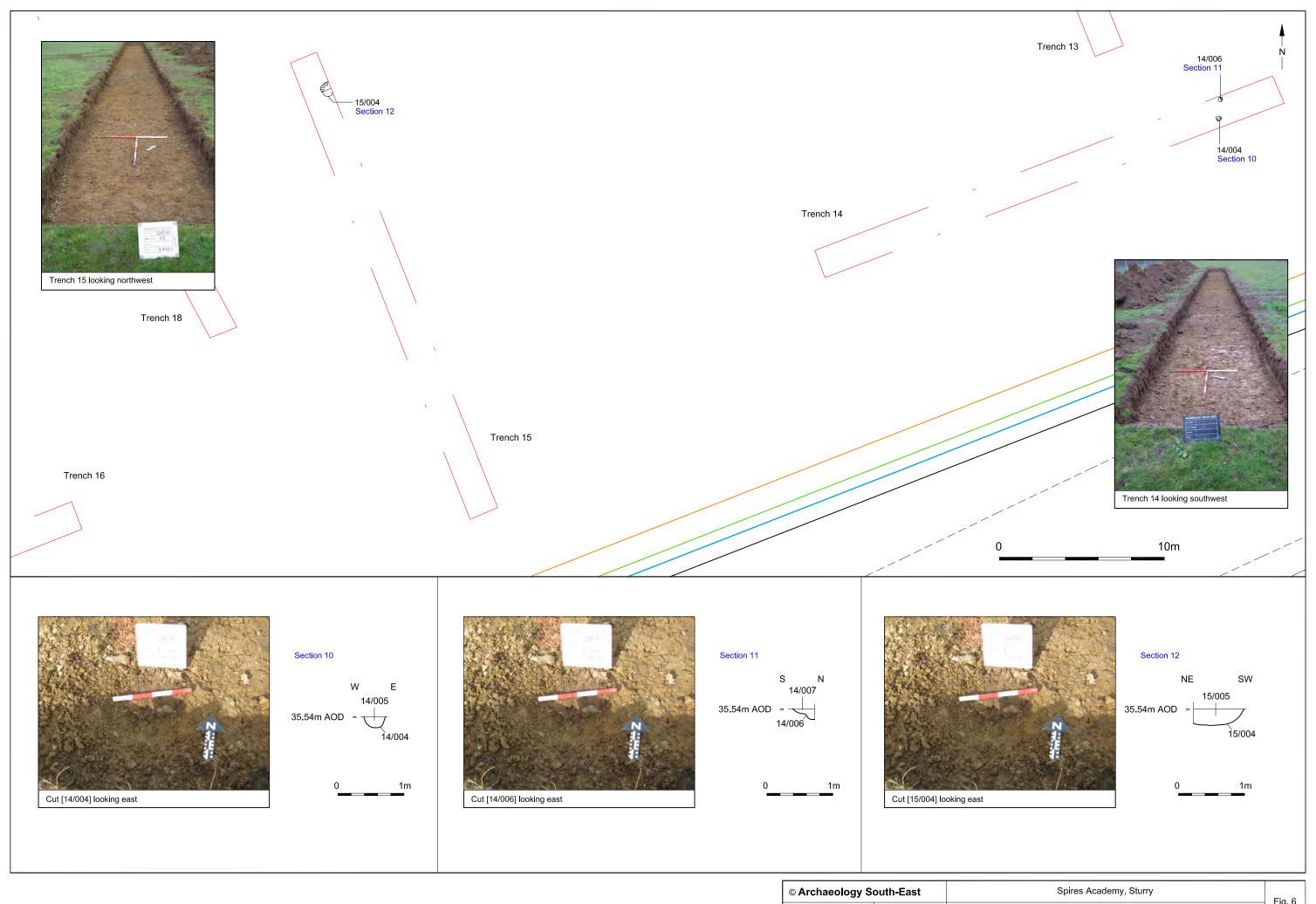






© Archaeology S	outh-East	Spires Academy, Sturry	Fig. 5	١
Project Ref: 4577	May 2011	Trench 8 plan, sections and photographs	1 lg. 5	ı
Report Ref: 2011113	Drawn by: DJH	Trench o plan, sections and photographs		ı

Section 9



	© Archaeology S	outh-East	Spires Academy, Sturry	Fig. 6
	Project Ref. 4577	May 2011	Trenches 14 and 15 plan, sections and photographs	i ig. o
	Report Ref: 2011113	Drawn by: DJH	Trenches 14 and 15 plant, sections and photographs	

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