

# GEOPHYSICAL SURVEY REPORT

# sumo

Survey

**GEOPHYSICS FOR  
ARCHAEOLOGY &  
ENGINEERING**

**Land off Monastery Lane,  
Storrington, West Sussex**

Client  
**Archaeology Collective**

For  
**Millwood Designer Homes**

Survey Report  
**11252**

Date  
**June 2017**

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## GEOPHYSICAL SURVEY REPORT

Project name:  
**Land off Monastery Lane,  
Storrington, West Sussex**

SUMO Job reference:  
**11252**

Client:  
**Archaeology Collective**

For:  
**Millwood Designer Homes**

Survey date:  
**1 May 2017**

Report date:  
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## TABLE OF CONTENTS

1	SUMMARY OF RESULTS	1
2	INTRODUCTION	1
3	METHODS, PROCESSING & PRESENTATION	2
4	RESULTS	3
5	DATA APPRAISAL & CONFIDENCE ASSESSMENT	3
6	CONCLUSION	3
7	REFERENCES	4

Appendix A Technical Information: Magnetometer Survey Method

Appendix B Technical Information: Magnetic Theory

## LIST OF FIGURES

Figure 01	1:25 000	Site Location Diagram
Figure 02	1:1250	Location of Survey Area
Figure 03	1:1000	Magnetometer Survey - Greyscale Plot
Figure 04	1:1000	Magnetometer Data - Colour Plot
Figure 05	1:1000	XY Trace Plot
Figure 06	1:1000	Magnetometer Survey - Interpretation

## DIGITAL CONTENT (Archive Data)

- Minimally Processed Greyscale Images and XY Trace Plots in DWG format
- DWG Viewer
- Digital Copies of Report Text and Figures (both PDF and native formats)

## 1 SUMMARY OF RESULTS

A detailed magnetometer survey was conducted over approximately 1.9ha of grassland. The data are dominated by several linear ferrous disturbances resulting from fencing, which runs across the site in several directions. No definite archaeological anomalies have been identified, though a poorly defined linear anomaly and several curved trends of uncertain origin have been detected.

## 2 INTRODUCTION

### 2.1 Background synopsis

**SUMO Services Ltd** were commissioned to undertake a geophysical survey of an area outlined for residential development. This survey forms part of an archaeological investigation being undertaken by **Archaeology Collective** on behalf of **Millwood Designer Homes**.

### 2.2 Site details

<b>NGR / Postcode</b>	TQ084 142 / RH20 4JB
<b>Location</b>	The area under investigation is located some twenty miles west of Brighton, just outside Storrington town centre, and is bordered on the south by School Lane on the west by Monastery Lane and on the north by West Street. The east of the site is adjacent to residential housing.
<b>HER/SMR</b>	West Sussex
<b>District West</b>	Horsham, West Sussex County
<b>Parish</b>	Storrington and Sullington Civil Parish
<b>Topography</b>	Hilly
<b>Current Land Use</b>	Grassland
<b>Weather</b>	Sunny
<b>Geology</b>	Solid: Folkestone Formation – Sandstone. Superficial: Head - Clay, Silt, Sand And Gravel (BGS 2017).
<b>Soils</b>	Fyfield 1 (571d). Association - well drained coarse and fine loamy soils over soft sandstones (SSEW 1983).
<b>Archaeology</b>	<i>There is middle Bronze Age activity within the study area, mainly in the form of barrow cemeteries about 1km east and 2km south of the application site. These may indicate the general presence of Bronze Age agriculture and settlement in the area. There is also medieval occupation in Storrington itself, attested by the presence of the grade II* listed Church of St Mary the Virgin. However, evaluation excavations in Monastery Lane and Kithurst Lane, close to the application site, have not revealed any significant archaeological features or finds (AC, 2017).</i>
<b>Survey Methods</b>	Magnetometer survey (fluxgate gradiometer)
<b>Study Area</b>	1.9 ha

### 2.3 Aims and Objectives

To locate and characterise any anomalies of possible archaeological interest within the study area.

### 3 METHODS, PROCESSING & PRESENTATION

#### 3.1 Standards & Guidance

This report and all fieldwork have been conducted in accordance with the latest guidance documents issued by Historic England (EH 2008) (then English Heritage), the Chartered Institute for Archaeologists (CIfA 2014) and the European Archaeological Council (EAC 2016).

#### 3.2 Survey methods

Detailed magnetic survey was chosen as an efficient and effective method of locating archaeological anomalies.

Technique	Instrument	Traverse Interval	Sample Interval
Magnetometer	Bartington Grad 601-2	1.0m	0.25m

More information regarding this technique is included in Appendix A.

#### 3.3 Data Processing

The following basic processing steps have been carried out on the data used in this report:

De-stripe  
De-stagger  
Interpolate

#### 3.4 Presentation of results and interpretation

The presentation of the results for each site involves a grey-scale plot of processed data. Magnetic anomalies are identified, interpreted and plotted onto the 'Interpretation' drawings. The minimally processed data are provided as a greyscale image in the Archive Data Folder with an XY trace plot in CAD format. A CAD viewer is also provided.

When interpreting the results, several factors are taken into consideration, including the nature of archaeological features being investigated and the local conditions at the site (geology, pedology, topography etc.). Anomalies are categorised by their potential origin. Where responses can be related to other existing evidence, the anomalies will be given specific categories, such as: *Abbey Wall* or *Roman Road*. Where the interpretation is based largely on the geophysical data, levels of confidence are implied, for example: *Probable*, or *Possible Archaeology*. The former is used for a confident interpretation, based on anomaly definition and/or other corroborative data such as cropmarks. Poor anomaly definition, a lack of clear patterns to the responses and an absence of other supporting data reduces confidence, hence the classification *Possible*.

## 4 RESULTS

### 4.1 *Probable/Possible Archaeology*

- 4.1.1 No magnetic responses have been recorded that could be interpreted as being of archaeological interest.

### 4.2 *Uncertain*

- 4.2.1 Weak positive linear and curvilinear trends have been detected, primarily in the north-west of the site. Responses may be of archaeological origin, however they are more likely to be of natural or agricultural origin.

### 4.3 *Former Field Boundary*

- 4.3.1 A weak linear trend has been detected in the north-east of the site and is related to a former field boundary, visible on available historic OS mapping from 1888 to 1913.

### 4.4 *Ferrous / Magnetic Disturbance*

- 4.4.1 Ferrous responses running across the site and close to the boundaries are due to adjacent fences and gates. Smaller scale ferrous anomalies ("iron spikes") are present throughout the data and their form is best illustrated in the XY trace plots. These responses are characteristic of small pieces of ferrous debris (or brick/tile) in the topsoil and are commonly assigned a modern origin. Only the most prominent of these are highlighted on the interpretation diagram.

## 5 DATA APPRAISAL & CONFIDENCE ASSESSMENT

- 5.1 Historic England guidelines (EH 2008) Table 4 states that the average magnetic response on sandstone is variable. The detection of an old field boundary and several anomalies of uncertain origin suggests that this survey is likely to have detected any archaeological features, if present. However, it should be noted that the magnetic disturbance across the site has the potential to mask weaker features.

## 6 CONCLUSION

- 6.1 The survey at Storrington has not identified any responses of obvious archaeological origin, despite the potential for possible evidence of middle Bronze Age activity. A number of weak curved, linear anomalies may be of archaeological interest, however their interpretation as such is tentative. A former field boundary, shown in historical mapping, has been detected.
- 6.2 The site is largely dominated by areas of strong magnetic debris, caused by several metal fences running across the site.

## 7 REFERENCES

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