

SLCP/01



# STANTON LOW COUNTRY PARK, MILTON KEYNES

## Geophysical Survey

commissioned by Sue Brown, Urban Design and Landscape  
Architecture, Milton Keynes Council

July 2014



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# CONTENTS

1	<b>INTRODUCTION</b>	1
2	<b>LOCATION</b>	1
	2.1 SITE GEOLOGY	1
3	<b>AIMS AND OBJECTIVES</b>	1
4	<b>METHOD</b>	1
	4.1 THE SURVEY	1
5	<b>RESULTS</b>	5
	5.1 AREA A	5
	Potential for survival within area A	5
	5.2 AREA B	5
	Potential for survival within area B	5
	5.3 AREA C	5
	Potential for survival within area C	5
	5.4 AREA D	5
	Potential for survival within area D	5
	5.5 AREA E	5
	Potential for survival within area E	5
	5.6 AREA F	5
	Potential for survival within area F	5
	5.7 AREA G	5
	Potential for survival within area G	6
	5.8 AREA H	6
	Potential for survival within area H	6
	5.9 AREA I	6
	Potential for survival within area I	6
	5.10 AREA J	6
	Potential for survival within area J	6
	5.11 AREA K	6
	Potential for survival within area K	6
	5.12 DISCUSSION	6
6	<b>CONCLUSION</b>	6
7	<b>ARCHIVE</b>	6
8	<b>BIBLIOGRAPHY</b>	7

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## LIST OF ILLUSTRATIONS

<b>ILLUS 1</b>	VI
Site location	
<b>ILLUS 2</b>	2
Grey scale plot of the resistivity data	
<b>ILLUS 3</b>	3
Colour plot of the resistivity data	
<b>ILLUS 4</b>	4
Interpretive plot of the resistivity data from the Stanton Low Park Survey	



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ILLUS 1  
Site location

# STANTON LOW COUNTRY PARK, MILTON KEYNES

## Geophysical Survey

Headland Archaeology (UK) Ltd was commissioned to undertake a Geophysical Survey within the grounds of Stanton Low Country Park, Milton Keynes.

The geophysical Survey was conducted in June 2014 and identified a series of anomalies that represent evidence for structural remains and garden features associated with the former manor house.

The geophysical survey has highlighted that the potential for survival of early structural remains associated with a house and garden within Stanton Low Country Park is extremely high.

### 1 INTRODUCTION

Headland Archaeology (UK) Ltd was commissioned by Sue Brown of Urban Design and Landscape Architecture, Milton Keynes Council to undertake a geophysical survey using resistivity as defined by a brief issued by the Senior Archaeological Officer of Milton Keynes Council, Nick Crank.

The geophysical Survey was conducted between the 4th - 13th of June 2014.

### 2 LOCATION

The investigation site comprises an area of rough former pasture containing earthworks associated with the formal gardens of a medieval and later-17th century manor house. It lies to the south and west of the village of Stanton and the ruinous parish church and church yard of St Peters (grade II listed) (NGR SP 835 426).

#### 2.1 SITE GEOLOGY

The geology beneath the site consists of Argillaceous Rocks with Subordinate Sandstone and Limestone of the Rutland Formation. A Sedimentary Bedrock formed approximately 165 to 172 million years ago in the Jurassic Period, indicating a local environment previously dominated by shallow seas.

The superficial deposits are recorded as sand and gravel, glaciofluvial deposits, originating from the Mid Pleistocene period and formed up to 2 million years ago.

(<http://www.bgs.ac.uk/discoveringGeology/geologyOfBritain/viewer.html>).

### 3 AIMS AND OBJECTIVES

The aims and objectives of the archaeological geophysical survey were to:

- ascertain the potential location and extent of buried garden and manorial archaeological features on the site.
- undertake a resistivity survey of the survey area with a survey sample area of 1m x1m, including 1 hectare at the increased density of 0.5m x 0.5m
- produce a concise report with recommendations.

### 4 METHOD

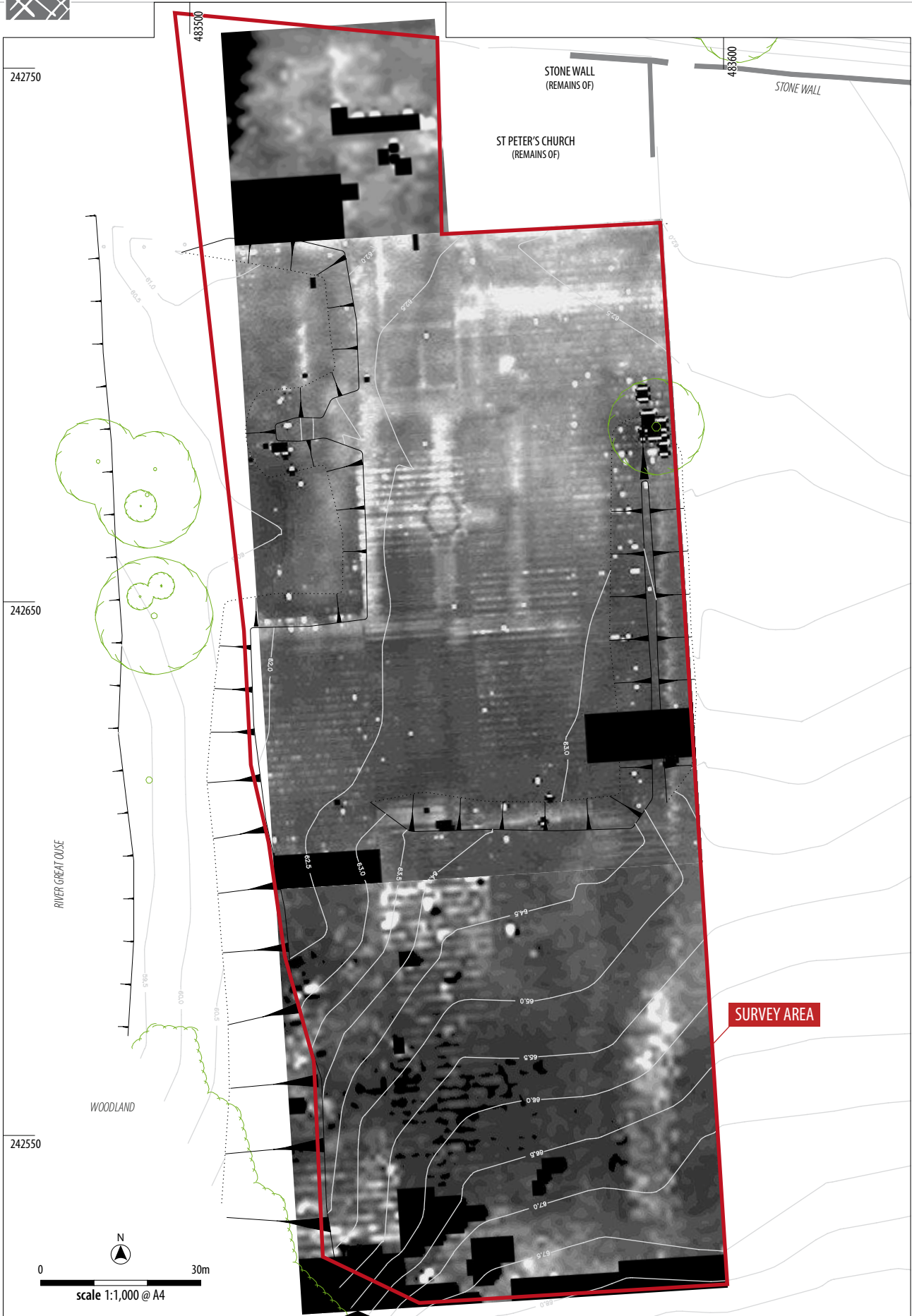
The survey was conducted in line with guidance contained in Geophysical Survey in Archaeological Field Evaluation, English Heritage Research and Professional Services Guideline No. 1 (English Heritage 2008 a and b) and The Use of Geophysical Techniques in Archaeological Evaluations, Institute of Field Archaeologists Paper, No. 6 (IfA 2002) and the DRAFT Standards and Guidance for Geophysical Survey, IfA Technical Paper (IfA, Pending Ratification).

#### 4.1 THE SURVEY

The geophysical survey was undertaken using a RM15 (Geoscan) resistivity meter and a PA5 electrode array over an area of 1.2 hectares with data collection points 1m apart on 1m spaced traverses and an intensive survey of c. 1.0 hectares with the data collection points set at 0.50m on 0.50m spaced traverses.

At each location, data was collected using a MX15 multiplexer with a mobile electrode spacing of 0.5m – which sees to about 0.75m maximum depth.

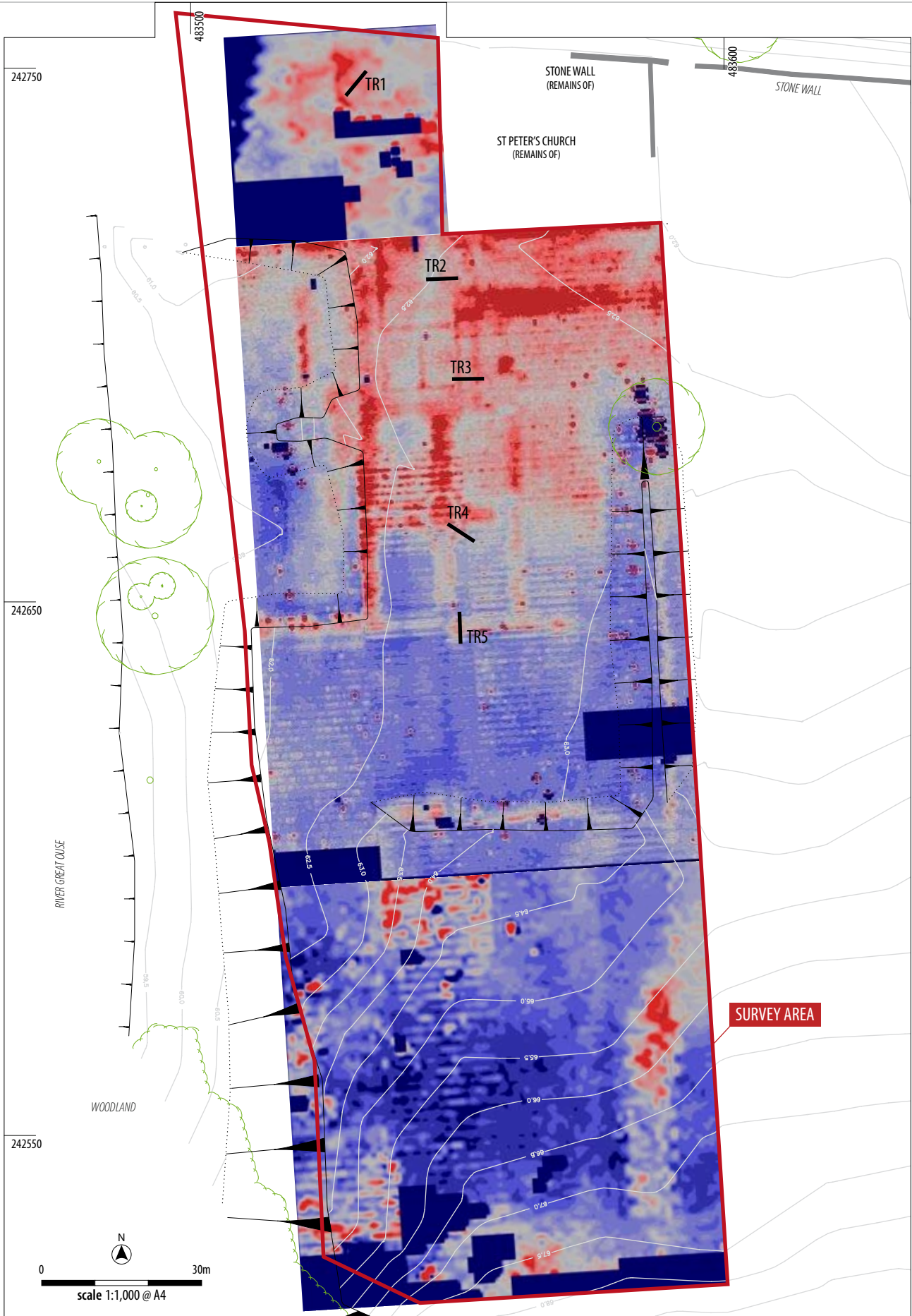




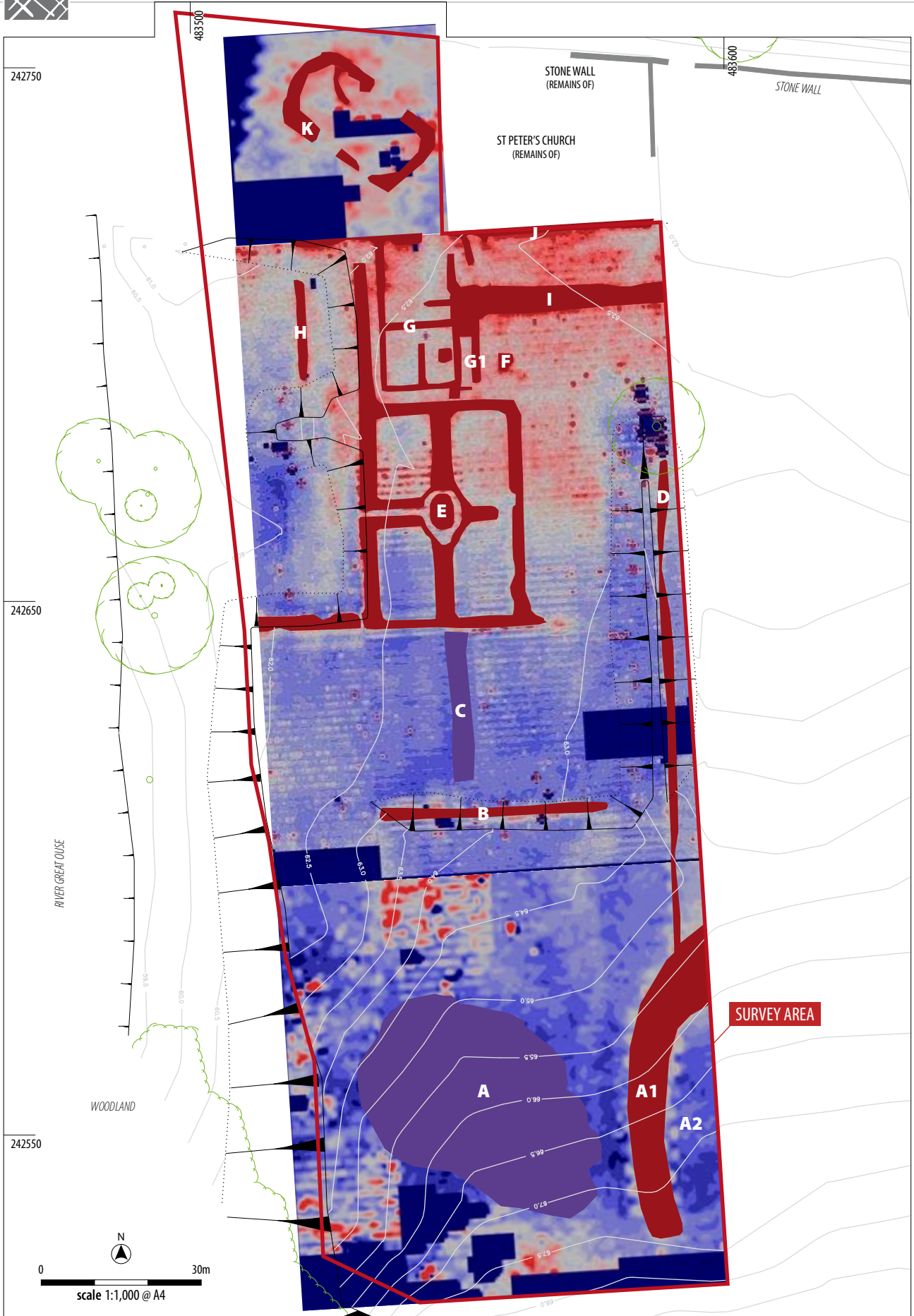
ILLUS 2

Grey scale plot of the resistivity data





ILLUS 3  
Colour plot of the resistivity data



ILLUS 4  
Interpretive plot of the resistivity data from the Stanton Low Park Survey

## 5 RESULTS

The results of the survey have been divided into areas/anomalies (see **Illus 2-4**). In some cases these simply reflect a single response, whilst in others they have been subdivided to aid discussion. At the end of each section an indication as to the potential value of the identified anomaly is given.

### 5.1 AREA A

Located to the south of the survey area anomaly A is approximately 48m by 30m and formed from an area of relatively low resistance. The edges are unclear and the survey results suggest the anomaly may extend east out of the survey extents (A2) with A1, a sweeping anomaly of an area of relatively high resistance approximately 7m wide and over 50m in length, separating A and A2.

#### Potential for survival within area A

Anomaly A is an area of low resistance with undefined edges and may represent a pond feature or watery area. Anomaly A1 is a sweeping feature of relatively high resistance when compared to the general background level and may represent a wide track way cutting across areas A and A2

It is uncertain whether this group of anomalies formed an associated feature within the landscape of the former manor house or relates to something else.

### 5.2 AREA B

Area B comprises a linear anomaly, aligned east west and measuring approximately 42m in length, the anomaly may not represent an actual physical buried feature but could be a response formed by a change in ground levels within the study area.

#### Potential for survival within area B

Anomaly B represents the remains of a physical feature within the landscape caused by a change in ground levels due to earthworks in this part of the site.

### 5.3 AREA C

Anomaly C represents an area of relatively low resistance within the general background levels. The linear nature of the anomaly may indicate the presence of an earth-type path way or track way, aligned north-south. The anomaly is approximately 4m in width with a length of 28m.

#### Potential for survival within area C

The potential of anomaly C forming a feature formerly associated with the house and garden is high based upon its location and connection with anomaly E.

### 5.4 AREA D

Anomaly D represents a linear anomaly, approximately 90m in length, with an average width of 1.5m. Aligned north-south, the anomaly is located on the line of a large bank running along the edge of the surveyed area and continues past the point where the visible bank intersects with the change in levels created within the vicinity of anomaly B.

#### Potential for survival within area D

The potential of anomaly D representing a physical feature within the landscape is high. It is probably caused as a result of the construction of the raised bank or walk way and it is interesting to note that the anomaly appears to extend further south than the extent of the visible raised bank.

### 5.5 AREA E

Anomaly E is a group area of responses that represent an area of formal garden design, a rectangular area, measuring 42m by 30m. It is divided into four distinct rectangular quarters at the centre of which was a circular feature of approximately 4m diameter. The panel design is probably created by hard formed path ways. Within the eastern central path way a small channel can be seen to intersect/join the central circular feature.

#### Potential for survival within area E

The potential for survival of historic features associated with the garden layout of the former manor house within the area of anomaly E is extremely high. The survey has shown that the formal garden layout survives in detail.

### 5.6 AREA F

Anomaly F is represented by a small rectangular anomaly of high resistance within an area of general high background resistance, and measuring approximately 3.8m by 4m.

#### Potential for survival within area F

While the potential for survival of archaeological remains associated with the former manor house and gardens within the area of anomaly F is high it is difficult to be certain what this anomaly represents. Its north and west edges align with other anomalies nearby.

### 5.7 AREA G

Anomaly G is an area containing a group of responses of high resistance that form a rectangular structure aligned north south, approximately 28m in length and 15m in width. Internal divisions are suggestive of three room spaces, the walls of the structure are approximately 1.14m in thickness. The southern portion of the group is divided by a linear anomaly, into two areas, east and west, with similar dimensions, 10.36 m by 5.9m and 10.49m by 5.4m respectively. A break in the central division between the southern, east-west internal areas may indicate the presence of an opening. The northern area is generally clear of any indication of internal





divisions, however, a small east-west linear anomaly, aligned with anomaly I, may suggest a small vestibule attached to the structure.

Located approximately 1.9m towards the west of anomaly G, anomaly G1 represents a linear feature with an approximate width of 1.5m, aligned north-south. This may indicate that the footprint of anomaly G extended further to the west.

### Potential for survival within area G

The potential for survival of structural remains indicating the location of the former manor house is extremely high. The survey has highlighted that the structure shows the possible layout of internal rooms.

### 5.8 AREA H

Located within a lower lying portion of the site anomaly H is approximately 18m in length and 1.8m wide, the anomaly is aligned north-south.

### Potential for survival within area H

The potential for survival of structural remains within the area of anomaly H is medium. It is difficult to be clear about the type of feature causing the anomaly and its association with the former manor house and garden from the survey results alone.

### 5.9 AREA I

Anomaly I is aligned east-west and forms a large linear anomaly that intersects anomaly G, with a width of approximately 4.5m and a visible length within the survey area of approximately 35m. The alignment and apparent connection with anomaly G would suggest that anomaly I could represent the formal approach to the house.

### Potential for survival within area I

The potential for the survival of physical remains associated with the former manor house and garden is high.

### 5.10 AREA J

Partially obscured by the upstanding brick-built boundary of the ruins of the former parish church and church yard of St Peters, anomaly J is a linear response of relatively high resistance compared with the general high background responses within this part of the survey.

The anomaly is aligned east-west and measures approximately 37m in length with a visible width of approximately 1.2m. The east-west alignment of anomaly J intersects with the northern limits of anomaly G, but may extend further westwards too.

### Potential for survival within area J

The potential for the survival of physical remains associated with the former manor house and garden is high in this part of the site.

### 5.11 AREA K

Located towards the north of the study area, anomaly K is represented by a series of scattered higher resistance readings within a general background of high resistance responses. The result of the survey appears to suggest that anomaly K has some shape and structure, forming a rectangular feature aligned northwest – southeast and measuring approximately 15m by 30m with a series of openings on the long elevations.

### Potential for survival within area K

The potential for the survival of physical remains associated with the former manor house and garden within the area of anomaly K is low-medium, due to the overall conditions of the area. The survey results have indicated that there is the potential for a rectangular structure within the area but it is not as clearly defined as the features to the south.

### 5.12 DISCUSSION

The method of survey involved sampling the survey site using two different resistivity survey collection resolutions.

Approximately 1.2 hectares was surveyed with data collection points 1m apart on 1m spaced traverses and an intensive survey of 1.0 hectares with the data collection points set at 0.50m on 0.50m spaced traverses.

The survey has highlighted that there is high potential for the survival of both a formally laid out garden area (E) and the layout of the associated building (G), approach road (I) and a boundary wall (J).

A possible pond-like response was identified to the south of the site (A).

It is difficult to be sure whether a number of other features identified in the area would have been associated with the house and garden or are later adaptations within the landscape (e.g. B, D, H and K).

## 6 CONCLUSION

The survey has clearly indicated the layout of archaeological remains associated with the former manor house and garden. The proposed location of test trenches is indicated in **Illus 3**. These are designed to test the results of this survey, the requirements of the project brief and the results of previous survey work at the site (Bamford et al 2005).

## 7 ARCHIVE

The archive is to be deposited with Buckingham Museum Services

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