

Beech Farm Solar Park Stanton Fitzwarren Swindon

Archaeological Evaluation



for
CgMs Consulting

CA Project: 5486
CA Report: 15545

July 2015



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Stanton Fitzwarren
Swindon

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Document Control Grid						
Revision	Date	Author	Checked by	Status	Reasons for revision	Approved by
A	3 July 2015	Christopher Leonard	Richard Young	Internal review		Cliff Bateman
B	14 July 2015	Christopher Leonard	Richard Young	Final	Client comment	Cliff Bateman

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Fig. 1 Site location plan (1:25,000)

Fig. 2 Trench location plan, showing features and geophysical survey results (1:1250)



SUMMARY

Project Name:	Beech Farm Solar Park
Location:	Stanton Fitzwarren, Swindon
NGR:	SU 18374 90029
Type:	Evaluation
Date:	29 June – 2 July 2015
Location of Archive:	To be deposited with Swindon Museum and Art Gallery
Accession Number:	SWIMG:2015.010
Site Code:	BEE 15

An archaeological evaluation was undertaken by Cotswold Archaeology in June and July 2015 at Beech Farm Solar Park, Stanton Fitzwarren, Swindon. Seven trenches were excavated.

Evidence for ridge and furrow agriculture was identified in four of the trenches, confirming the interpretation of a geophysical survey. The ridge and furrow appeared to follow three distinct alignments, suggesting that the site had previously been divided into three separate furlongs. Historical mapping shows that the site has been one field since at least 1876, suggesting that the ridge and furrow may have a medieval or post-medieval origin.

No features pre-dating the ridge and furrow were identified during the evaluation.



1. INTRODUCTION

- 1.1 In June and July 2015 Cotswold Archaeology (CA) carried out an archaeological evaluation for CgMs Consulting at Beech Farm Solar Park, Stanton Fitzwarren, Swindon (centred on NGR: SU 18374 90029; Fig. 1). The site is proposed for the development of a solar farm. The evaluation was undertaken prior to the submission of a planning application to Swindon Borough Council (SBC).
- 1.2 The evaluation was carried out in accordance with a detailed *Written Scheme of Investigation* (WSI) produced by CA (2015) and approved by Melanie Pomeroy-Kellinger, Wiltshire and Swindon Archaeology Service (WASAS), the archaeological advisor to SBC. The fieldwork also followed *Standard and guidance: Archaeological field evaluation* (ClfA 2014), the *Statement of Standards and Practices Appropriate for Archaeological Fieldwork in Wiltshire* (WCC 1996), the *Management of Archaeological Projects* (English Heritage 1991) and the *Management of Research Projects in the Historic Environment (MORPHE): Project Manager's Guide* (English Heritage 2006). It was monitored by Melanie Pomeroy-Kellinger, including a site visit on 2nd July 2015.

The site

- 1.3 The proposed development area is approximately 10ha in extent, and comprises a large field, currently given over to arable farming, located to the south-east of the village of Stanton Fitzwarren. The site is bounded to the west by a minor road leading to the village and by Stanton Country Park, on the remaining sides it is surrounded by agricultural land. The site lies on a gentle south-facing slope. The ground level is approximately 125m above Ordnance Datum (AOD) in the north-east corner of the site, dropping to approximately 116m in the south-west corner.
- 1.4 The underlying bedrock geology of the area is mapped as Stanford Formation Limestone of the Jurassic Period, with no overlying superficial deposits (BGS 2015). Limestone bedrock and brash were revealed in all of the trenches.

2. ARCHAEOLOGICAL BACKGROUND

- 2.1 An archaeological desk-based assessment of the site has previously been undertaken, the results of which are summarised below (CgMs 2015).

Prehistoric

- 2.2 The Historic Environment Record (HER) and National Monuments Record (NMR) record chance finds of a number of prehistoric lithic tools in the vicinity of the site: a Neolithic flint scraper and a hammer stone (HER MWI16741) approximately 680m north-west of the site, a Neolithic polished flint axe (NMR 867694) approximately 800m north-west of the site, and Neolithic or Bronze Age flint tools (HER MWI15848) at Kingsdown Lodge approximately 850m south-west of the site.
- 2.3 The HER also records the discovery of a single sherd of black sandy pottery (HER MWI15849) during an archaeological evaluation undertaken approximately 735m south-east of the site. The characteristics of the sherd may suggest a Late Bronze Age or Iron Age date. An Iron Age settlement (HER MWI15855) is recorded by the HER at Viscount Way, South Marston, approximately 1km south of the site, which remained occupied into the Roman period.

Roman

- 2.4 Chance finds of Roman pottery in the vicinity include a 4th century soft pink ware vase (HER MWI15868) located 100m south-west of the site. Pottery fragments were also identified associated with Romano-British building stone (HER MWI16780) 675m west of the study site, and a single sherd of Romano-British pottery (HER MWI15907) was recovered during a watching brief at Kingsdown Lodge, located almost 1km south-west of the site.
- 2.5 A Roman villa and bath house (HER MWI16754, NMR 222169, NHL 1016328) is recorded by the HER and NMR west of Stanton House, approximately 670m west of the current site. This villa site is a Scheduled Monument (*Roman villa 530m west of Stanton House*, NHL 1016328) and is a well preserved example of its class which has been shown, through small scale excavation and geophysical survey, to contain archaeological and environmental deposits relating to the monument and its landscape. Wall foundations and two tessellated pavements were discovered during the construction of a railway line in the 19th century, and excavations in 1969 revealed the remains of a bath house. Geophysical survey in 1997 identified a range of features interpreted as the main dwelling.

- 2.6 The NMR records the site of a second possible Roman villa (NMR 867696) approximately 350m north-west of the site, where large quantities of building stone and Roman pottery has been identified south of The Avenue. The discovery of 2nd-3rd century pottery and a packed stone layer may indicate the location of a possible third Roman villa site (NMR 222183) approximately 600m north of the site.

Early medieval and medieval

- 2.7 A Saxon inhumation with a tanged knife (HER MWI16793) was identified during the digging of a pond in the early 20th century approximately 400m north-east of the site.
- 2.8 Stanton Fitzwarren is recorded in the Domesday Survey as Stantone (Williams and Martin 2003); it was part of the Higham hundred and held by Grimbold the goldsmith. The HER records the core of the medieval village (HER MWI16806) as being located 160m west of the current site in the area of St Leonard's Church (NMR 222190), which itself is of Norman origin, and located approximately 260m west of the site.
- 2.9 The HER records evidence that the vicinity of the current site formed part of the agricultural hinterland of Stanton Fitzwarren during the medieval period. Such evidence includes a number of linear cropmarks (HER MWI14645) 500m north-west of the site, possible medieval ridge and furrow (HER MWI16842) 350m north of the site and a medieval farmstead (HER MWI15926) at Hunts Copse Farm, 900m south of the site.

Post-medieval and Modern

- 2.10 Historic map regression and information from the HER/NMR has shown that the current site has been used for agricultural purposes throughout the post-medieval and modern periods.
- 2.11 A geophysical survey has been undertaken throughout the current site. Preliminary results provided by the surveyors identified evidence of ridge and furrow. No other anomalies of a probable archaeological origin were recorded. A number of linear and discrete features that may be of possible archaeological origin were identified; however these could equally be of a natural or modern agricultural origin (Stratascan 2015).

3. AIMS AND OBJECTIVES

- 3.1 The objectives of the evaluation are to provide information about the archaeological resource within the site, including its presence/absence, character, extent, date, integrity, state of preservation and quality, in accordance with the Chartered Institute for Archaeologists *Standard and guidance: Archaeological field evaluation* (CIfA 2014). This information will enable SBC to identify and assess the particular significance of any heritage asset, consider the impact of the proposed development upon it, and to avoid or minimise conflict between the heritage asset's conservation and any aspect of the development proposal, in line with the *National Planning Policy Framework* (DCLG 2012).

4. METHODOLOGY

- 4.1 The fieldwork comprised the excavation of seven trenches in the locations shown on the attached plan (Fig. 2). The trenches were all 50m long and 2m wide. The trenches were set out on OS National Grid (NGR) co-ordinates using Leica GPS and surveyed in accordance with CA Technical Manual 4 *Survey Manual*.
- 4.2 All trenches were excavated by mechanical excavator equipped with a toothless grading bucket. All machine excavation was undertaken under constant archaeological supervision to the top of the first significant archaeological horizon or the natural substrate, whichever was encountered first. Where archaeological deposits were encountered they were excavated by hand in accordance with CA Technical Manual 1: *Fieldwork Recording Manual*.
- 4.3 Deposits were assessed for their palaeoenvironmental potential in accordance with CA Technical Manual 2: *The Taking and Processing of Environmental and Other Samples from Archaeological Sites* but no deposits were identified that required sampling.
- 4.4 The site archive from the evaluation is currently held by CA at their offices in Kemble and will be deposited with Swindon Museum and Art Gallery under accession number SWIMG:2015.010. A summary of information from this project, set out within Appendix B, will be entered onto the OASIS online database of archaeological projects in Britain.

5. RESULTS (FIG. 2)

- 5.1 This section provides an overview of the evaluation results; detailed summaries of the recorded contexts are to be found in Appendix A.
- 5.2 The natural geological substrate, comprising limestone bedrock and brash, was encountered at a depth of between 0.25–0.4m below present ground level (bpgl). It was overlain by a layer of subsoil, up to 0.2m thick, which was in turn sealed by up to 0.24m of topsoil. Both the topsoil and the subsoil contained a high proportion of limestone fragments indicating that the natural substrate had been disturbed by ploughing.
- 5.3 Plough furrows, indicative of ridge and furrow, were recorded in Trenches 1, 2, 3, 4 and 6. The furrows in Trenches 1, 2 and 3 were aligned north-west/south-east, while those in Trenches 4 and 6 were on broadly north-east/south-west alignments; this confirmed the results of the geophysical survey. Not all of the furrows identified in the geophysics were visible in the trenches, suggesting that in some cases they were not deep enough to cut the natural bedrock and were detected in the survey as subsoil features.
- 5.4 Areas of magnetic variation identified during the geophysical survey and targeted by Trenches 3 and 5 coincided with areas where the natural substrate contained more brash, confirming their interpretation as naturally derived responses. A north/south aligned linear geophysical anomaly within Trench 7 was excavated and found to be a modern field drain.

6. DISCUSSION

- 6.1 Despite the location of the site in an area of known Roman activity, no evidence for settlement of this date was identified during the evaluation. Given the location of as many as three villas relatively close to the site, it is probable that the site formed part of the agricultural landscape between the villas and was not itself directly settled. It is, however, possible, given the shallow nature of the topsoil, that any pre-medieval features on the site have been truncated by later agricultural activity.
- 6.2 The evaluation confirmed the evidence for ridge and furrow agriculture identified by the geophysical survey. The ridge and furrow appears to be on three distinct

alignments, indicating that the current site was at some time divided into at least three separate furlongs (blocks or groups of ridge and furrow strips), which were ploughed in different directions. Historical mapping depicts the site as a single field from at least the compilation of the Ordnance Survey County Series map of 1876 (Old Maps 2015), suggesting that the ridge and furrow may have a medieval or post-medieval origin.

7. CA PROJECT TEAM

Fieldwork was undertaken and the report written by Christopher Leonard. The illustrations were prepared by Leo Heatley. The archive has been compiled and prepared for deposition by Hazel O'Neill. The project was managed for CA by Richard Young.

8. REFERENCES

BGS (British Geological Survey) 2015 *Geology of Britain Viewer* <http://mapapps.bgs.ac.uk/geologyofbritain/home.html> Accessed 1 July 2015

CA (Cotswold Archaeology) 2015 *Beech Farm Solar Park, Stanton Fitzwarren, Swindon: Written Scheme of Investigation for an Archaeological Watching Brief*

CgMs Consulting 2015 *Beech Farm Solar Park, Stanton Fitzwarren, Swindon, Wiltshire: Archaeological Desk Based Assessment*

DCLG (Department of Communities and Local Government) 2012 *National Planning Policy Framework*

Old Maps 2015 <https://www.old-maps.co.uk/index.html#/> Accessed 1 July 2015

Stratascan 2015 *Preliminary Geophysical Survey Results*



APPENDIX A: CONTEXT DESCRIPTIONS

Tr.	Context	Type	Interpretation	Description	Thickness (m)
1	100	Layer	Topsoil	Dark yellow-brown sandy silt. Common small stones	0.2
1	101	Layer	Subsoil	Light yellow-brown sandy silt. Frequent small stones	0.05
1	102	Layer	Natural	Limestone bedrock and brash	
2	200	Layer	Topsoil	Dark yellow-brown sandy silt. Common small stones	0.24
2	201	Layer	Subsoil	Light yellow-brown sandy silt. Frequent small stones	0.09
2	202	Layer	Natural	Limestone bedrock and brash	
3	300	Layer	Topsoil	Dark yellow-brown sandy silt. Common small stones	0.22
3	301	Layer	Subsoil	Light yellow-brown sandy silt. Frequent small stones	0.06
3	302	Layer	Natural	Limestone bedrock and brash	
4	400	Layer	Topsoil	Dark yellow-brown sandy silt. Common small stones	0.2
4	401	Layer	Subsoil	Light yellow-brown sandy silt. Frequent small stones	0.2
4	402	Layer	Natural	Limestone bedrock and brash	
5	500	Layer	Topsoil	Dark yellow-brown sandy silt. Common small stones	0.19
5	501	Layer	Subsoil	Light yellow-brown sandy silt. Frequent small stones	0.06
5	502	Layer	Natural	Limestone bedrock and brash	
6	600	Layer	Topsoil	Dark yellow-brown sandy silt. Common small stones	0.18
6	601	Layer	Subsoil	Light yellow-brown sandy silt. Frequent small stones	0.1
6	602	Layer	Natural	Limestone bedrock and brash	
7	700	Layer	Topsoil	Dark yellow-brown sandy silt. Common small stones	0.2
7	701	Layer	Subsoil	Light yellow-brown sandy silt. Frequent small stones	0.05
7	702	Layer	Natural	Limestone bedrock and brash	

APPENDIX B: OASIS REPORT FORM

PROJECT DETAILS		
Project Name	Beech Farm Solar Park, Stanton Fitzwarren, Swindon	
Short description	<p>An archaeological evaluation was undertaken by Cotswold Archaeology in June and July 2015 at Beech Farm Solar Park, Stanton Fitzwarren, Swindon. Seven trenches were excavated.</p> <p>Evidence for ridge and furrow agriculture was identified in four of the trenches, confirming the interpretation of a geophysical survey. The ridge and furrow appeared to follow three distinct alignments, suggesting that the site had previously been divided into three separate furlongs. Historical mapping shows that the site has been one field since at least 1876, suggesting that the ridge and furrow may have a medieval or post-medieval origin.</p> <p>No features pre-dating the ridge and furrow were identified during the evaluation.</p>	
Project dates	29 June – 2 July 2015	
Project type	Field Evaluation	
Previous work	Desk-based Assessment (CgMs 2015) Geophysical Survey (Stratascan 2015)	
Future work	Unknown	
PROJECT LOCATION		
Site Location	Beech Farm Solar Park, Stanton Fitzwarren, Swindon	
Study area	10ha	
Site co-ordinates	SU 18374 90029	
PROJECT CREATORS		
Name of organisation	Cotswold Archaeology	
Project Brief originator		
Project Design (WSI) originator	Cotswold Archaeology	
Project Manager	Richard Young	
Project Supervisor	Christopher Leonard	
MONUMENT TYPE	None	
SIGNIFICANT FINDS	None	
PROJECT ARCHIVES		
	Intended final location of archive	Content
Physical	-	-
Paper	Swindon Museum and Art Gallery (accession number SWIMG:2015.010)	Trench recording forms
Digital	Swindon Museum and Art Gallery (accession number SWIMG:2015.010)	Database, digital photos
BIBLIOGRAPHY		
CA (Cotswold Archaeology) 2015 <i>Beech Farm Solar Park, Stanton Fitzwarren, Swindon: Archaeological Evaluation</i> . CA typescript report 15545		

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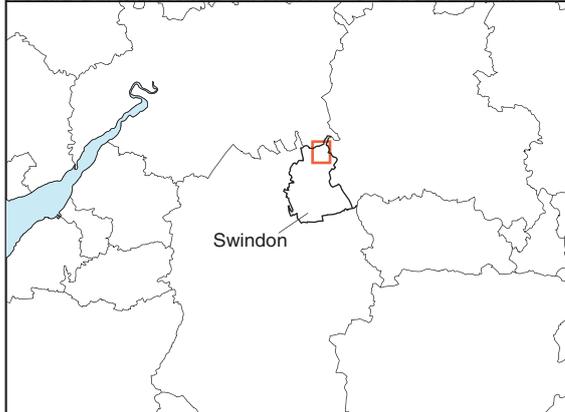
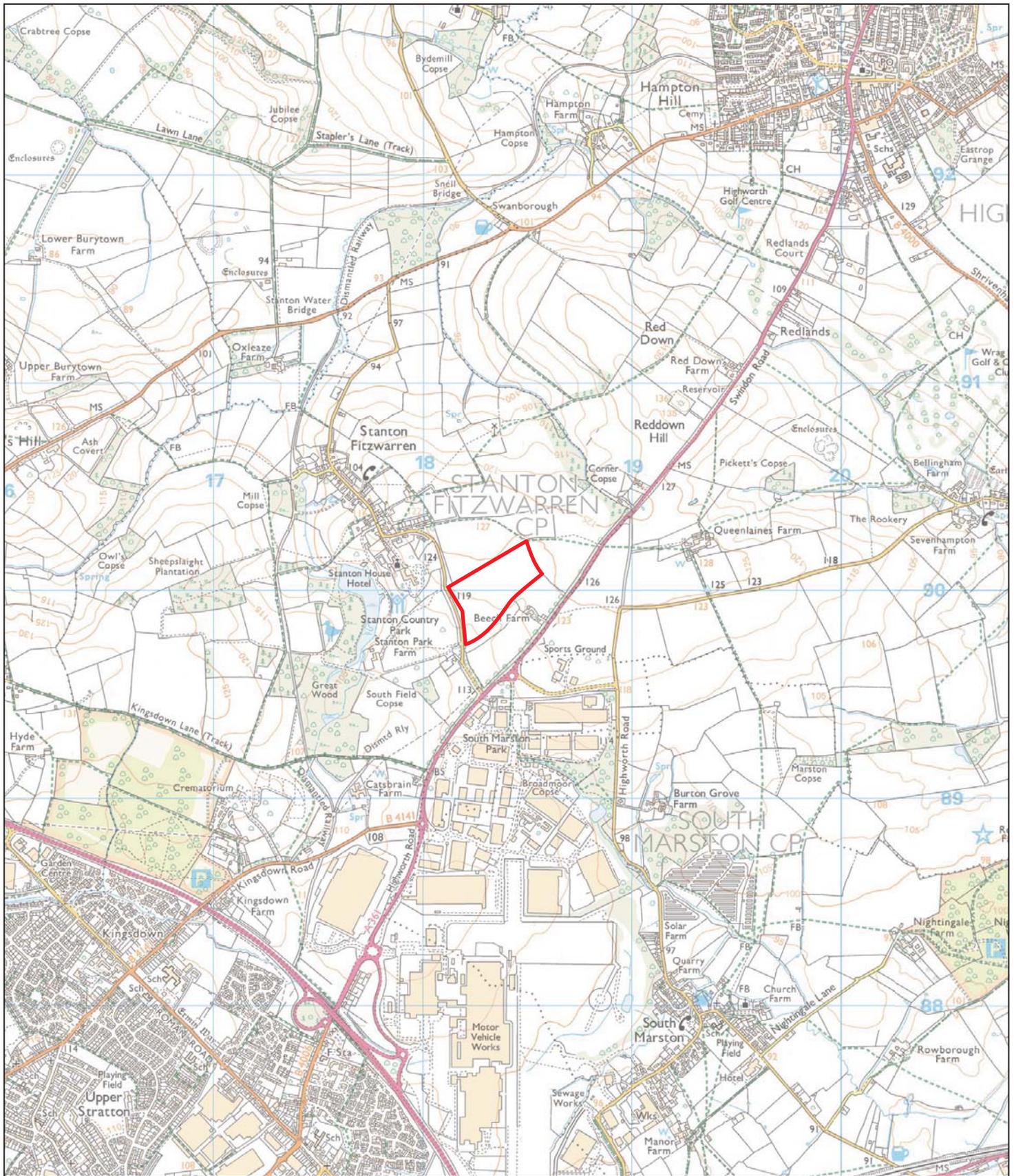
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PROJECT TITLE
 Beech Farm Solar Park
 Stanton Fitzwarren, Swindon

FIGURE TITLE
 Site location plan

DRAWN BY LJH	PROJECT NO. 5486	FIGURE NO.
CHECKED BY JB	DATE 08/07/15	
APPROVED BY REY	SCALE@A4 1:25,000	1

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- site boundary
- evaluation trench
- furrow
- field drain
- direction of ridge and furrow
- overhead services

Geophysical survey results (Stratascan 2015)

- Possible Archaeology**
- Positive anomaly / weak positive anomaly - possible cut feature of archaeological origin
- Other Anomalies**
- Closely spaced parallel linear anomalies - probably related to agricultural activity such as ploughing
 - Magnetic disturbance associated with nearby metal object such as service or field boundary
 - Area of amorphous magnetic variation - probable natural (e.g. geological or pedological) origin
 - Magnetic spike - probable ferrous object



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PROJECT TITLE
Beech Farm Solar Park
Stanton Fitzwarren, Swindon

FIGURE TITLE
Trench location plan, showing features and geophysical survey results

DRAWN BY LJH	PROJECT NO. 5486	FIGURE NO.
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