Land at Chelveston Airfield, Bedfordshire, MK44 1AJ: An Archaeological Evaluation

June 2014



PRE-CONSTRUCT ARCHAEOLOGY R11769

LAND AT CHELVESTON AIRFIELD, BEDFORDSHIRE, MK44 1AJ

AN ARCHAEOLOGICAL EVALUATION

Quality Control

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Land at Chelveston Airfield, Bedfordshire, MK44 1AJ:

An Archaeological Trial Trench Evaluation

Local Planning Authority:	Bedfordshire Borough Council		
Planning Reference:	14/00469/MAF		
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Site Code:	BCAC14		
Report No.	R11769		
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ABSTRACT

This report describes the results of a seven trench archaeological evaluation carried out by Pre-Construct Archaeology on land at Chelveston Airfield, Bedfordshire MK44 1AJ (NGR TL 0098 6813) between the 17th and 18th of June 2014. The archaeological work was commissioned by CgMs Consulting in response to a planning condition attached to the extension of the solar farm. The aim of the work was to characterise the archaeological potential of the site.

The evaluation identified three ditches, two pits and a natural tree throw. None of the features yielded any finds to provide a date, however the features are likely associated with medieval rural activity as identified in the adjacent evaluation (Clarke & Muldowney 2013). Evidence of the former use of the area as an airfield was also identified.

1 INTRODUCTION

- 1.1 An archaeological trial trench evaluation was undertaken by Pre-Construct Archaeology Ltd (PCA) on land at Chelveston Airfield (former RAF), Chelveston, Bedfordshire MK44 1AJ (centred on Ordnance Survey National Grid Reference (NGR) TL 0105 6819) between the 17th and 18th of June 2014 (Figure 1; Plate 1).
- 1.2 The evaluation area comprised approximately 3.5ha of the former airfield (now a renewable energy park). The site is located on the western edge of the former airfield, midway between the villages of Chelveston to the northwest and Yelden to the southeast and on the Bedfordshire/Northamptonshire border. The site is bounded by agricultural land in all directions.
- 1.3 The archaeological work was commissioned by CgMs Consulting on behalf of Wykes Engineering Ltd and in response to an archaeological planning condition attached to the extension of the existing solar farm (Planning Reference 14/00469/MAF).
- 1.4 The evaluation was carried out in accordance with a Scheme for Archaeological Trial Trenching prepared by Myk Flitcroft of CgMs Consulting (Flitcroft 2014) in response to a request from Vanessa Clarke, Senior Archaeological Officer of Bedfordshire Borough Council.
- 1.5 The aim of the evaluation was to determine the location, date, extent, character, condition and quality of any archaeological remains on the site, to assess the significance of any such remains in a local, regional, or national context, as appropriate, and to assess the potential impact of the development proposals on the site's archaeology.
- 1.6 Seven c.50m long trenches were excavated, one of which was extended to 53.5m to avoid removal of modern services. The trenches were opened and recorded between 17th and 18th June. Remains relating to the use of the use of the land as a former airfield, along with six undated features including three ditches, two pits and a tree throw hollow were found.

1.7 This report describes the results of the evaluation and aims to inform the design of an appropriate archaeological mitigation strategy. The site archive will be deposited at Bedfordshire County Council Archaeology Store.

2 GEOLOGY AND TOPOGRAPHY

- 2.1 The bedrock geology of the site is recorded as Oxford Clay which formed approximately 156-165 million years ago, overlain by superficial deposits of glacial till (sands and gravels) (British Geological Survey 2014). Within the trial trenches, the glacial till was a silt-clay with (flint inclusions), present at a depth of 0.2-1.2m below modern ground level.
- 2.2 The site is situated at a height of approximately 88.5m AOD and is flat across the entire airfield. The site is located on the watershed between the River Nene to the northwest and the River Great Ouse.

3 ARCHAEOLOGICAL BACKGROUND

- 3.1 Most of the available information regarding the archaeological potential of the site relates to the WWII airfield development and use. However the presence of earlier remains were highlighted during removal of the airfield runway during the 1970s, when Early Iron Age pottery and quern fragments were discovered. The presence of Iron Age and early Roman features were confirmed during a previous evaluation to the immediate west of the proposed extension area (Flitcroft 2014) (Clarke & Muldowney 2013). A series of ditches and a single pit containing Middle-Late Iron Age pottery were excavated within the southern trenches of this earlier evaluation, whilst an early Roman ditch and medieval furrows were recorded in the trench immediately adjacent to the extension area. Although no evidence for occupation such as buildings and refuse pits were revealed in the evaluation, the pottery and faunal assemblage were indicative of domestic activity, and infer the presence of settlement in the vicinity.
- 3.2 Construction of Chelveston Airfield began in 1940 and the site was fully operational by August 1941. The airfield conformed to a standard RAF 'A' pattern of runways and when it passed to USAF in 1942, the layout was amended and extended. The airfield was closed officially in 1947 but recommissioned in 1951 to house USAF B-47 nuclear bombers. This led to additional runway re-designs and eventually the airfield was closed in 1962, with most of the runways and taxiways being removed thereafter. The proposed extension area lies to the southwest of the airfield, where a taxiway and two aircraft dispersal points are known to have existed.
- 3.3 The evaluation conducted to the west also found extensive evidence for modern activity and disturbance relating to the former use and development of the airfield (Flitcroft 2014).

4 METHODOLOGY

- 4.1 The archaeological evaluation comprised seven c. 50m long trial trenches.
- 4.2 Ground reduction was carried out under archaeological supervision using a mechanical excavator fitted with a 1.8m-wide toothless ditching bucket. Topsoil and subsoil deposits were removed in spits down to the level of the undisturbed natural geological deposits where potential archaeological features could be observed and recorded. Exposed surfaces were cleaned by trowel as appropriate and all further excavation was undertaken manually using hand tools.
- 4.3 The limits of excavations, heights above Ordnance Datum (m OD) and the locations of archaeological features and interventions were recorded using a Leica 1200 GPS rover unit with RTK differential correction, giving threedimensional accuracy of 20mm or better.
- 4.4 Deposits or the removal of deposits judged by the excavating archaeologist to constitute individual events were each assigned a unique record number (often referred to within British archaeology as 'context numbers') and recorded on individual pre-printed forms (Taylor and Brown 2009). Archaeological processes recognised by the deposition of material are signified in this report by round brackets (thus), while events constituting the removal of deposits are referred to here as 'cuts' and signified by square brackets [thus]. The record numbers assigned to cuts and deposits are entirely arbitrary and in no way reflect the chronological order in which events took place. All features and deposits recorded during the evaluation are listed in Appendix 2. Artefacts recovered during excavation were assigned to the record number of the deposit from which they were retrieved.
- 4.5 Metal-detecting was carried out during the topsoil and subsoil stripping and throughout the excavation process. Archaeological features and spoil heaps were scanned by metal-detector. Only objects of modern date were found and were not retained for accession.
- 4.6 High-resolution digital photographs were taken of all relevant features and

deposits, and were used to keep a record of the excavation process.

5 ARCHAEOLOGICAL RESULTS

5.1 Overview

5.1.1 Trench 1 contained three archaeological features; a shallow northeast to southwest aligned ditch terminus, a pit and a tree throw. In Trench 2 a northwest-southeast aligned ditch was present along with some modern features. Trench 3 contained a single modern feature. In Trench 4 only modern features were present. Trench 5 was devoid of any features due to considerable amounts of made-ground. Trench 6 was heavily disturbed by modern features, some of which relating to the previous phases of airfield. Trench 6 did, however, contain archaeological features; a small pit, a north-south aligned ditch and a tree throw. Trench 7 only a modern service was present.

5.2 Trench 1

5.2.1 A shallow northeast-southwest aligned ditch terminus [004] (1.2m long x 0.39m wide x 0.07m deep) was present at the western end of the trench extending out of the southern limit of excavation. It contained a single fill (005); a pale orange-brown silty clay and no material culture. There was also a small sub-oval pit [006] (0.55m long x 0.65m wide x 0.16m deep) present in the central area of Trench 1. It contained a dark grey-brown silty clay (007) but no finds.

5.3 Trench 2 (Figure 2, Plate 3)

5.3.1 Trench 2 contained a single northwest-southeast aligned ditch [019] (0.5m long x 1.27m wide x 0.28m deep). The ditch was filled by (020); a pale greybrown silty clay. The feature contained no dating evidence but is on a similar alignment to the modern services which suggests it may be fairly modern in date.

5.4 Trench 3

5.4.1 Trench 3 contained no features of archaeological interest, with only a modern pipe aligned northeast-southwest present midway along the trench.

5.5 Trench 4 (Figure 2, Plate 1)

5.5.1 There was no evidence for archaeological activity in Trench 4, with only

modern features present. Trench 4 contained three modern pits and a northeast-southwest aligned pipe.

5.6 Trench 5

5.6.1 The trench contained no evidence for archaeological features or deposits. The trench was machined to a depth of 1.2m and was still within modern made-ground (010); a dark grey brown silty clay which contained glass brick and tile. This deposit was presumably associated with the development of the airfield, seemingly established as a levelling layer to compensate for the sloping ground at the eastern end of the development area.

5.7 Trench 6 (Figure 2, Plate 2 and Plate 6)

- 5.7.1 This trench was heavily truncated by modern features, at the eastern end by modern water services and then at the western end of the trench by modern electricity cables and by areas of hard-core (012) an orange gravel deposit associated with former airfield runways.
- 5.7.2 Trench 6 did contain archaeological features. Towards the eastern end of the trench a sub-oval tree throw hollow [021] was excavated protruding from the southern limit of excavation, measuring 0.80m long, 0.71m wide, and 0.17m in depth. This feature contained a single fill (014); a dark grey-brown silty clay.
- 5.7.3 A ditch [017] aligned north-south was located midway along trench 6. A section was put across the ditch where it measured 0.77m wide and 0.28m in depth. It was filled by a solitary fill (018), which comprised a very dark blue-grey slightly silty clay. No finds were present but it may well be modern in date.
- 5.7.4 There was also a small pit [015] located towards the centre of the trench. The pit was sub-circular in plan and measured 0.56m long, 0.41m wide and 0.14m deep. This pit contained a single fill (016) which comprised a dark grey-brown silty clay. No finds were present to date the feature.
- 5.7.5 This trench also contained (012); an orange gravel deposit which measured 5.5m in length and 0.44m in depth in this trench. This deposit seemed to

have been laid down as hard-core, likely associated with runway remains found in Trench 6.

5.7.6 Trench 6 also contained a deposit of pale grey gravel and concrete mix (013). This was present towards the eastern end of the trench and measured 5.95m in length and 0.35m in depth. This deposit was undoubtedly associated with the use of the airfield and is probably related to deposit (012).

5.8 Trench 7

5.8.1 No features of archaeological significance were identified in this trench. One modern pipe was present, aligned northeast-southwest. Deposit (012) was also identified in this trench and is a continuation of the same deposit identified in Trench 6. In this trench the deposit was 43.5m in length and 0.4m in depth.

6 DISCUSSION

- 6.1 The evaluation identified three ditches [004], [017], and [019]. Ditch [004] was oriented northeast-southwest unlike any of the other archaeological or modern linear features. This could infer a date earlier than either the modern activity or even medieval agricultural activity previously identified on site. The ditch found in Trench 6 [017] was aligned north-south but the composition of the fill appears to be relatively modern in date. The third ditch [019] in Trench 2 was aligned similarly to known modern features including services and the runway remnants and is therefore likely to date to the 20th century.
- 6.2 There were two small, discrete pits identified in the evaluation; pit [006] and pit [015]. No dating evidence was recovered from these pits, although there was no indication that they had been cut from the modern ground level (i.e. they were sealed by the topsoil and subsoil deposits). The pits could feasibly relate to the Iron Age or Roman activity identified in the adjacent evaluation although this is merely speculative. An undated tree throw [021] was also excavated in the southern part of the site.
- 6.3 In the southern part of site there were significant amounts of modern disturbance, all of which appears to have derived from the former use of the airfield. Trench 6 in particular was the focus of this activity, with features associated with former runways, as well as gravel hard-core deposits relating to former areas of hard-standing.

7 CONCLUSIONS

- 7.1 The trial trenches revealed limited evidence for archaeological activity of uncertain date. The linear features identified in the evaluation are indicative of agricultural activity, most likely former filed divisions, relating to the medieval and post-medieval land use prior to the establishment of the airfield. The two pits could potentially date to an earlier phase of activity, perhaps even relating to the limited Iron Age and Roman activity identified in the adjacent evaluation, although little more can be said about the date or function of the pits given the lack of associated material culture.
- 7.2 Several modern features including services and deposits of hard-core were exposed in the trenches and undoubtedly relate to the development of the airfield.
- 7.3 The level of modern disturbance in areas of the evaluation could have feasibly removed traces of earlier archaeological features. This is particularly true of Trench 5 where a thick modern levelling deposit was encountered, completely masking the natural geological horizon.
- 7.4 Based on the results of the evaluation, the potential of the site to contain further significant archaeological remains is considered to be low.

8 ACKNOWLEDGEMENTS

8.1 Pre-Construct Archaeology Ltd would like to thank CgMs Consulting for commissioning the work. PCA are also grateful to Vanessa Clark of Bedfordshire Borough Council for monitoring the work. Figures accompanying this report were prepared by Jennifer Simonson of PCA's CAD Department. PCA would also like to thank Steve Jones of PCA Midlands for his work.

9 BIBLIOGRAPHY

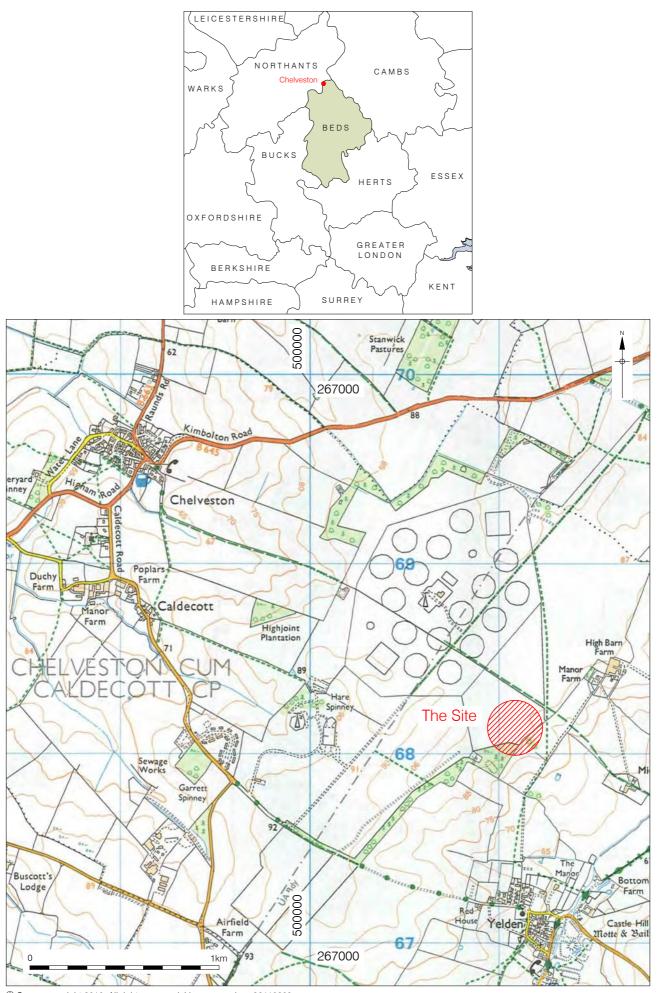
9.1 **Printed Sources**

Clarke, J. & Muldowney, M. 2013. Archaeological Evaluation of land at Chelveston Renewable Energy Park, Chelveston Airfield, Bedfordshire. Northamptonshire Archaeology Report 13/221.

Flitcroft, M. 2014. Scheme for Archaeological Trial Trenching. CgMs Consulting Document MF/MD/7507.

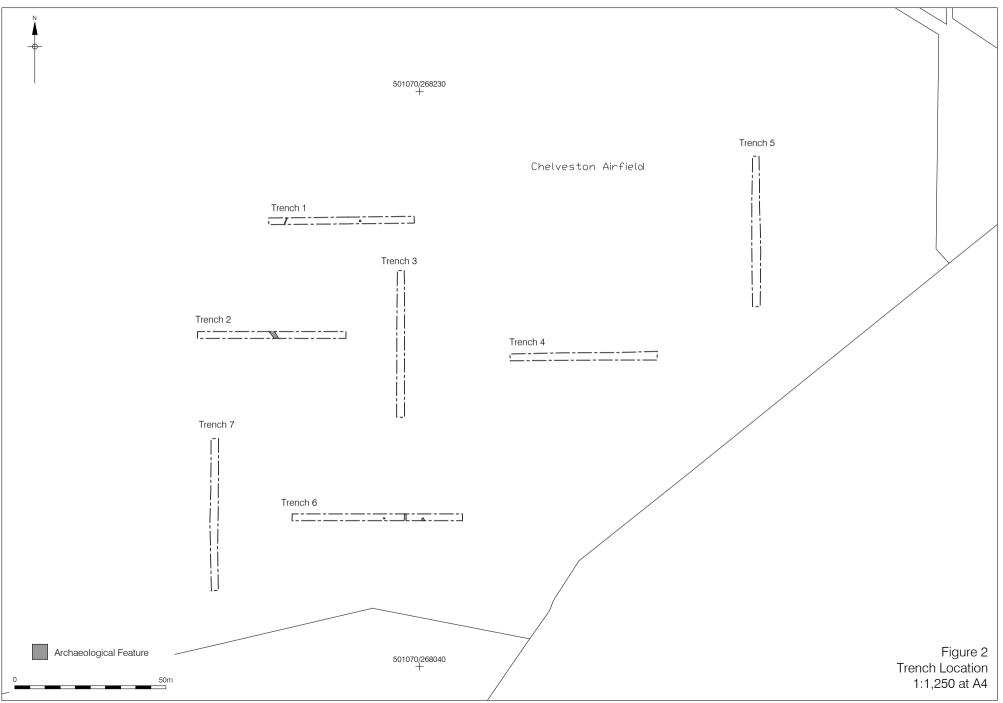
9.2 Websites

British Geological Survey 2014 Geology of Britain Viewer Date accessed 13/06/2014



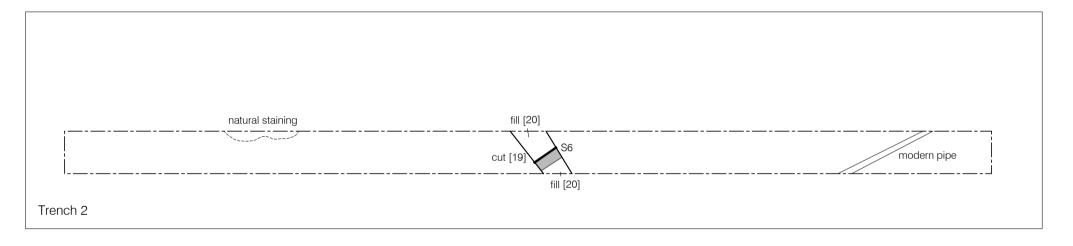
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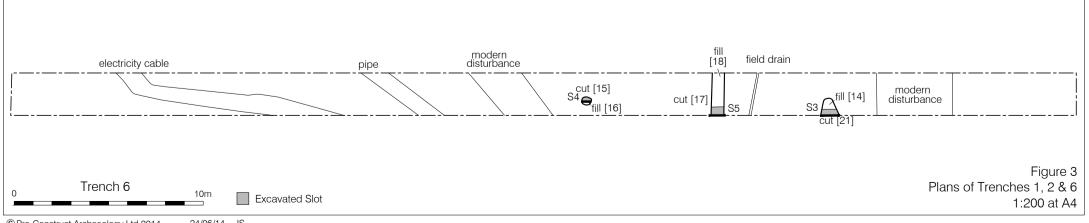
Figure 1 Site Location 1:2,000,000 & 25,000 at A4



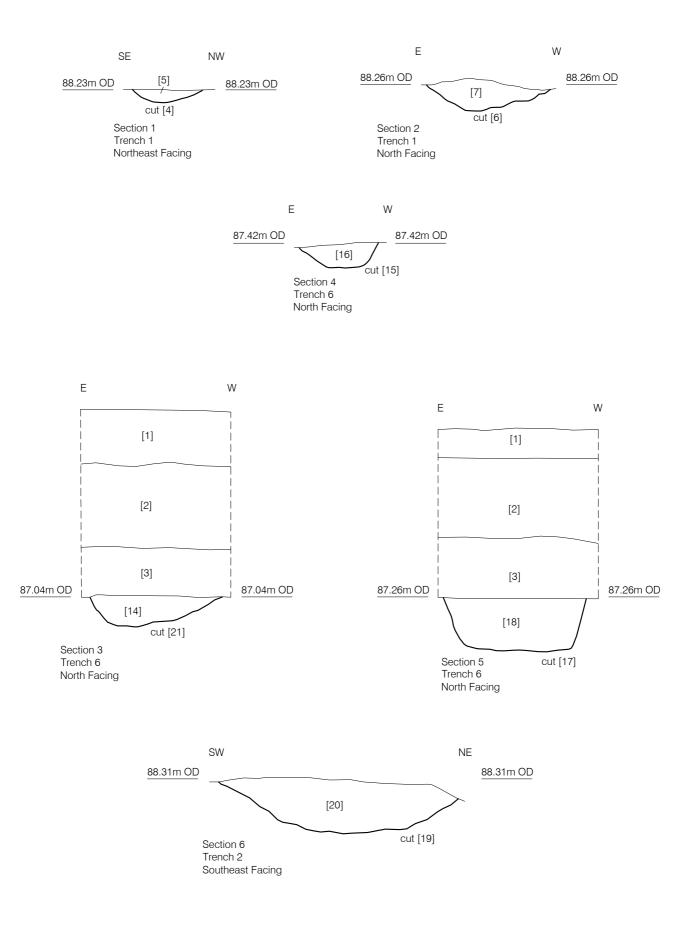
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	N
tree bowl fill [5]	S2 ₀ cut [6] fill [7]
Trench 1	





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Figure 4 Sections 1 - 6 1:20 at A4 Land at Chelveston Airfield, Bedfordshire MK44 1AJ: An Archaeological Evaluation ©Pre-Construct Archaeology Limited, June 2014

10 APPENDIX 1: PLATES



Plate 1: North facing view Trench 4 showing made ground (008)



Plate 2: North facing view of Trench 6 showing (013) WWII hard standing

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Plate 3: East facing view of Trench 2 showing ditch [019]

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Site code	Context	Cut	Туре	Category	Period	Interpretation
BCAC14	001	n/a	Layer	Topsoil	n/a	
BCAC14	002	n/a	Layer	Subsoil	n/a	
BCAC14	003	n/a	Layer	Subsoil	n/a	
BCAC14	004	004	Cut	Ditch	Undated	Boundary Ditch
BCAC14	005	004	Fill	Ditch	Undated	Boundary Ditch
BCAC14	006	006	Cut	Pit	Undated	
BCAC14	007	006	Fill	Pit	Undated	
BCAC14	008	n/a	Cut	Layer	1940-1960	Made-Ground
BCAC14	009	n/a	Fill	Layer	n/a	
BCAC14	010	n/a	Cut	Layer	n/a	
BCAC14	011	n/a	Fill	Layer	n/a	
BCAC14	012	n/a	Cut	Layer	1940-1960	Levelling deposit
BCAC14	013	n/a	Layer	Layer	1940-1960	Levelling deposit
BCAC14	014	021	Fill	Tree Throw	Undated	
BCAC14	015	015	Cut	Pit	Undated	
BCAC14	016	015	Fill	Pit	Undated	
BCAC14	017	017	Cut	Ditch	Undated	Boundary Ditch
BCAC14	018	017	Fill	Ditch	Undated	Boundary Ditch
BCAC14	019	019	Cut	Ditch	Undated	Boundary Ditch
BCAC14	020	019	Fill	Ditch	Undated	Boundary Ditch
BCAC14	021	021	Cut	Tree throw	Undated	

12 APPENDIX 3: OASIS FORM

OASIS ID: preconst1-182145

Project details	
Project name	Land at Chelveston Airfield, Bedfordshire
Short description of the project	A seven trench archaeological evaluation including three post medieval ditches, a tree throw, and two pits
Project dates	Start: 17-06-2014 End: 18-06-2014
Previous/future work	Yes / Not known
Any associated project reference codes	BCAC14 - Sitecode
Type of project	Field evaluation
Site status	None
Current Land use	Vacant Land 1 - Vacant land previously developed
Monument type	DITCH Post Medieval
Monument type	DITCH Post Medieval
Monument type	DITCH Post Medieval
Monument type	PIT Uncertain
Monument type	PIT Uncertain
Monument type	TREE THROW Uncertain
Significant Finds	NONE None
Significant Finds	NONE None
Methods & techniques	"Sample Trenches"
Development type	Service infrastructure (e.g. sewage works, reservoir, pumping station, etc.)
Prompt	Planning condition
Position in the planning process	After full determination (eg. As a condition)
Project location	
Country	England
Site location	BEDFORDSHIRE BEDFORD MELCHBOURNE AND YIELDEN Land at Chelveston Airfield Bedfordshire
Postcode	MK44 1AJ
Study area	3.50 Hectares
Site coordinates	TL 0098 6813 52.3016006646 -0.518914971075 52 18 05 N 000 31 08 W Point
Lat/Long Datum	Unknown
Height OD / Depth	Min: 87.30m Max: 88.50m
Posts of successfully	

Project creators

Name of Organisation	Pre-Construct Archaeology Ltd
Project brief originator	CgMs Consulting
Project design originator	Mark Hinman
Project director/manager	Mark Hinman
Project supervisor	Matthew Jones
Type of sponsor/funding body	Private Developer
Name of sponsor/funding body	Wykes Engineering Ltd
Project archives	
Physical Archive Exists?	No
Digital Archive recipient	Bedfordshire Museum
Digital Archive ID	BCAC14
Digital Contents	"none"
Digital Media available	"Database","Images raster / digital photography","Spreadsheets","Survey","Text"
Paper Archive recipient	Bedfordshire Museum
Paper Archive ID	BCAC14
Paper Contents	"none"
Paper Media available	"Aerial Photograph","Context sheet","Drawing","Photograph","Plan","Report","Section","Survey "
Project bibliography 1	
Publication type	Grey literature (unpublished document/manuscript)
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