

# RAF Waddington, Waddington Lincolnshire

Archaeological Evaluation



Planning Ref: 22/0621/FUL Accession Number: LCNCC:2022.154

Ref: 268940.03 December 2022



© Wessex Archaeology Ltd 2022, all rights reserved.

Unit R6 Sheaf Bank Business Park Prospect Road Sheffield S2 3EN

#### www.wessexarch.co.uk

Wessex Archaeology Ltd is a Registered Charity no. 287786 (England & Wales) and SC042630 (Scotland)

#### Disclaimer

The material contained in this report was designed as an integral part of a report to an individual client and was prepared solely for the benefit of that client. The material contained in this report does not necessarily stand on its own and is not intended to nor should it be relied upon by any third party. To the fullest extent permitted by law Wessex Archaeology will not be liable by reason of breach of contract negligence or otherwise for any loss or damage (whether direct indirect or consequential) occasioned to any person acting or omitting to act or refraining from acting in reliance upon the material contained in this report arising from or connected with any error or omission in the material contained in the report. Loss or damage as referred to above shall be deemed to include, but is not limited to, any loss of profits or anticipated profits damage to reputation or goodwill loss of business or anticipated business damages costs expenses incurred or payable to any third party (in all cases whether direct indirect or consequential) or any other direct indirect or consequential loss or damage.

#### **Document Information**

Document title RAF Waddington, Waddington, Lincolnshire

Document subtitle Archaeological Evaluation

Document reference 268940.03

Client Jacobs UK (Southampton)

Address 1st Floor, North Wing

Kenneth Dibben House

**Enterprise Road** 

Southampton Science Park

Chilworth Southampton S016 7NS

Site location RAF Waddington,

High Dike, Waddington, LN5 9NB

County Lincolnshire

National grid reference (NGR) 498131 365242 (SK 98131 65242)

Statutory designations None

Planning authority North Kesteven District Council

Planning reference 22/0621/FUL

Museum name The Collection Museum, Art and Archaeology, Lincoln

Museum accession code LCNCC:2022.154
OASIS Id wessexar1-511505

WA project name RAF Waddington

WA project code 268940

Date(s) of fieldwork 21st November to 25th November 2022

Fieldwork directed by Jack Peverall

Assisted by Owen Jenkins and Richard Smith

Project management by Emily Eastwood

Document compiled by Andy Swann and Emma Metcalfe

Graphics by Carrie May

Document edited by David McOmish

#### **Quality Assurance**

Issue	Date	Author	Approved by
1	22/11/2022	ACS	Signature



	nary .		
Ackn	owled	gements	iii
1	INTR	ODUCTION	4
	1.1	Project and planning background	
	1.2	Scope of the report	
	1.3	Location, topography and geology	5
2	ARC	HAEOLOGICAL AND HISTORICAL BACKGROUND	5
	2.1	Introduction	5
	2.2	Previous investigations	
	2.3	Archaeological and historical context	
	2.4	Designated assets	
	2.5	Undesignated assets	6
3	AIMS	S AND OBJECTIVES	9
	3.1	General aims	9
	3.2	General objectives	9
	3.3	Site-specific objectives	. 10
4	FIFI	DWORK METHODS	10
_	4.1	Introduction	
	4.2	Fieldwork methods.	
	4.3	Monitoring	
_	_	ATIGRAPHIC EVIDENCE	
5	5.1	Introduction	
	5.1 5.2	Soil sequence and natural deposits	
	5.2	Modern	
6		S EVIDENCE	
7		RONMENTAL EVIDENCE	
1			
8		CLUSIONS	
	8.1	Discussion	. 12
9	ARC	HIVE STORAGE AND CURATION	. 12
	9.1	Museum	. 12
	9.2	Preparation of the archive	. 13
	9.3	Selection strategy	. 13
	9.4	Security copy	
	9.5	OASIS	. 14
10	COP	YRIGHT	. 14
		Archive and report copyright	
		Third party data copyright	
REFE	REN	CES	. 16
		CES	
APP		ndix 1 OASIS summary	
	whhe	TILIN TOAGIO SUITIITIALY	. 10
List	of Fig	ures	
Cove	_	Trench 3 viewed from the south-east (2 x 1 m scales)	
Figur		Site location and trench plan	
Figur		Trench 1 viewed from the south (2 x 1 m scales)	
Figur		Sondage in trench 1 viewed from the west (1 m scale)	



South-west-facing representative section of trench 3 (1 m scale) East-facing representative section of trench 1 (1 m scale) Figure 4

Figure 5

**List of Tables** 

Table 1 Trench summary table



#### **Summary**

Wessex Archaeology was commissioned by Jacobs UK, to undertake an archaeological evaluation, comprising the excavation, investigation and recording of two trial trenches on land located to the west and east of High Dike at RAF Waddington, Lincolnshire (Fig. 1). The evaluation was required as a condition of planning permission for a proposed development on the Site. The evaluation area is centred on 498131 365242 (SK 983131 65242).

The evaluation exposed made ground deposits associated with the modern uses of the Site. In trench 1, a thick layer of dense clay and sandstone was found to lie directly above the natural bedrock. It may represent a levelling or foundation deposit for the development of the air base. Above this, a layer of sand and stones provided a level surface on which the tarmac surface of a car park was laid. In trench 3, a layer of black, gravelly material covered the natural clay deposits. The black tarmac surface of an old tennis court was laid directly above this layer. No further archaeological features or deposits were found within either trench. No artefactual or environmental evidence was collected. The evaluation was not able to determine, within the constraints of the evaluation, the existence of any earlier archaeological features or deposits.

#### **Acknowledgements**

Wessex Archaeology would like to thank Jacobs UK (client), for commissioning the archaeological evaluation, in particular Nathan Thomas. Wessex Archaeology is also grateful for the advice of the Senior Historic Environment Officer for North Kesteven District Council, Denise Drury, who monitored the project for the LPA.



# RAF Waddington, Immingham Lincolnshire

# **Archaeological Evaluation**

#### 1 INTRODUCTION

# 1.1 Project and planning background

- 1.1.1 Wessex Archaeology was commissioned by Jacobs UK, to undertake an archaeological evaluation of a 3.7 ha parcel of land located at RAF Waddington, High Dike, Waddington, LN5 9NB centred on NGR 498131 365242 (SK 98131 65242) (Fig.1). The evaluation was required as a condition of planning permission for a proposed development on the site.
- 1.1.2 The proposed development (the 'Scheme') comprises the demolition of a number of extant structures and the construction of new buildings. A planning application (22/0621/FUL) submitted to North Kesteven District Council, was granted, subject to conditions, one of which relates to archaeological investigation.
  - 3. No development or site clearance/preparation shall take place unless and until the applicant, or their agents or successors in title, has secured the implementation of archaeological work in accordance with a written scheme of investigation which has been submitted to and approved in writing by the District Planning Authority. The works shall be implemented in full accordance with the approved scheme. Reason: To ensure adequate opportunity is provided for archaeological research in this location which is noted to be of historical interest so as to accord with policy LP25 of the Central Lincolnshire Local Plan (adopted 2017).
- 1.1.3 All works were undertaken in accordance with a written scheme of investigation (WSI) which detailed the aims, methodologies and standards to be employed in order to undertake the evaluation (Wessex Archaeology 2022). The Senior Historic Environment Officer for North Kesteven District Council approved the WSI, on behalf of the Local Planning Authority (LPA), prior to fieldwork commencing.
- 1.1.4 The Scheme comprises three areas (A, B and C) located within RAF Waddington. Area A is part of a tarmac surfaced car park, Area B consists of an undeveloped grassed area and Area C is an area of tarmac surfaced former tennis courts. The evaluation was originally designed to comprise the excavation, investigation and recording of two trial trenches in Area A and four in Area C, however, during the evaluation four of the original six trenches were removed from the scope of works, by agreement with the Senior Historic Environment Officer for North Kesteven District Council:
  - The presence of shallow buried underground services was indicated across Area C when it was scanned with a cable avoidance tool, therefore only one of the original four trenches was excavated;
  - Following excavation of the first trench in Area A, which exposed layers of made ground overlying the natural bedrock, it was agreed that the excavation of the second trench was no longer required.



1.1.5 Altogether, two trial trenches measuring 15 m by 2 m were excavated (Fig.1). Trench 1 was excavated in Area A and trench 3 in Area C. The work was undertaken between 21st November and 25th November 2022.

# 1.2 Scope of the report

- 1.2.1 The purpose of this report is to provide a detailed description of the results of the evaluation, to interpret the results within a local, regional or wider archaeological context and assess whether the aims of the evaluation have been met.
- 1.2.2 The results will provide further information on the archaeological resource that may be impacted by the proposed development. In addition it will facilitate informed decision making with regard to the requirement for, and methods of, any further archaeological mitigation.

# 1.3 Location, topography and geology

- 1.3.1 The evaluation areas are located to the west and east of High Dike Road, Waddington. Area A comprises part of a tarmac surfaced car park. Area C is an area of tarmac surfaced former tennis courts.
- 1.3.2 A topographic survey of the Scheme has been undertaken (Jacobs 2021a). In general, the Scheme comprises relatively flat ground between 74m and 75m above Ordnance Datum.
- 1.3.3 The solid geology of the Scheme comprises limestone of the Lower Lincolnshire Limestone Member. No superficial deposits are recorded (BGS, 2022). One previous trial pit is recorded within the Scheme (Area A). The trial pit (SK96NE223) was excavated to a depth of 1.65m Below Ground Level (BGL) and recorded 0.3m of topsoil over 0.55m of firm orange-brown clay. Below the clay was a layer of fragmented limestone 0.8m in depth. The impenetrable solid limestone was recorded below this layer at 1.65m BGL. Another test pit was excavated approximately 100m to the south of the Scheme (SK96NE222). A similar sequence of deposits was recorded within this intervention, with 0.3m of topsoil identified over 0.5m of clay. Below the clay was a deposit of fragmented limestone 1.15m in depth. The top of the solid limestone was recorded at 1.95m BGL.

#### 2 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

# 2.1 Introduction

2.1.1 The archaeological and historical background was assessed in a prior desk-based assessment (Jacobs 2021b), which considered the recorded historic environment resource within a 750m radius of the study area of the proposed development. A summary of the results was prepared as part of the WSI and is presented below, with relevant entry numbers from the Lincolnshire Historic Environment Record (HER) and the National Heritage List for England (NHLE) included. Additional sources of information are referenced, as appropriate.

#### 2.2 Previous investigations

- 2.2.1 No previous interventions within the footprint of the Scheme are recorded in the HER.
- 2.2.2 The nearest, previous, investigations to the Scheme include:
  - a record of the discovery in 1976, of a scatter of Roman and medieval pottery (HEMLI80925) in the field behind the Officer's Mess (HER ELI1373) immediately to the south-west of the Scheme (Area A);



- a programme of geophysical survey (HER ELI13127) and trial trenching (HER ELI13254) undertaken on land to the west of the Scheme (Area A) in advance of a recent residential development. The geophysical survey identified anomalies relating to medieval ridge-and-furrow cultivation and natural fracturing of the limestone geology (Stratascan, 2016). The trial trenching did not identify any archaeological evidence. The previously identified anomalies relating to geological fracturing were confirmed (CFA 2017); and
- a programme of geotechnical test pitting and drilling was undertaken by Geocon Site Investigations Ltd in 2022. This work added detail to the known underlying geology and soils. Indications of buried services were also highlighted within the evaluation areas.

#### 2.3 Archaeological and historical context

2.3.1 In addition to the interventions detailed above, a further 12 records relating to previous investigations are recorded within the study area. Where relevant the results of these interventions are discussed in the sections below.

#### 2.4 Designated assets

2.4.1 There are no designated archaeological assets (Scheduled Monuments) recorded within the Scheme or study area.

#### 2.5 Undesignated assets

Prehistoric Period (c.750,000 BC - AD 42)

- 2.5.1 There are no undesignated prehistoric assets recorded within the Scheme by the HER. Within the study area, three non-designated prehistoric assets are identified, including:
  - Two findspots of small scatters of worked flint (HER MLI81486 and HER MLI81493) found during groundworks for a replacement water pipe between Harmston and Bracebridge Heath along the route of Grantham Road (HER ELI1774 and ELI1534d). The finds were recorded approximately 375 m to the south-west and 600 m to the north-west of the Scheme, respectively; and
  - The findspot of a Bronze Age axe hammer (HER MLI80888) found approximately 550 m to the south-west of the Scheme in 1957.
- 2.5.2 These isolated finds indicate a low level of prehistoric activity within the vicinity of the Scheme and they are of negligible value. No direct evidence of deposits or features of prehistoric date has yet been found on the location of the Scheme or its immediate vicinity.

#### Romano-British Period (AD 43 – AD 410)

2.5.3 The projected course of Ermine Street (HER MLI60638), one of the most important roads during the Roman occupation of Britain, is recorded as passing through the centre of the Scheme, along the line of High Dike and then continuing north through Area B until it joins Grantham Road. Ermine Street was laid out in the first three decades following the Claudian invasion of Britain in AD 43 to provide direct access to the military centres at Lincoln and York from London. During runway construction in 1954, approximately 2 km to the south of the Scheme within RAF Waddington, excavation across the presumed line of Ermine Street revealed a metalled road. Further traces of Ermine Street were identified during the aforementioned water pipe replacement between Harmston and Bracebridge Heath (HER ELI1774 and ELI1534).



- 2.5.4 As noted above, in 1976 a scatter of Roman pottery (HER MLI80925) was also identified in a field adjacent to the Officer's Mess to the immediate south-west of the Scheme (Area A). Within the study area, numerous undesignated Roman assets are recorded, including:
  - Roman pottery found at two locations (HER MLI81488 and MLI81490) during groundworks for a replacement water pipe between Harmston and Bracebridge Heather along the route of Grantham Road. The finds were recorded approximately 300 m to the south-west and 300 m to the north-west of the Scheme, respectively.
  - The findspots of a number of Roman coins (HER MLI80887, MLI80917 and MLI80932) found 300 m to the south, 700 m to the north and 600 m to the southwest of the Scheme, respectively.
  - The findspots of Roman pottery (HER HER MLI80927, MLI81485 and MLI115746) found 600 m to the west, 350 m to the south-west and 700 m to the north of the Scheme, respectively.
  - A Roman occupation site identified to the west of Grantham Road (HER MLI80918) approximately 450 m to the north-west of the Scheme. A variety of artefacts were recovered from the area including pottery and metallic items.
  - The site of a possible Roman pottery kiln (HER MLI80923) identified to the west of Grantham Road approximately 550 m to the north-west of the Scheme; and
  - Roman pottery and coins (HER MLI80890) recovered from a quarry approximately 600 m to the south-west of the Scheme during works in the mid-20th century.
- 2.5.5 While it is acknowledged that there is clear evidence for sustained Roman activity within the vicinity of the Scheme, assets relating to findspots can only be attributed a negligible value. Assets that related to possible settlement sites are considered of local evidential interest and are considered to be of low value.
  - Early Medieval Period (AD 411 AD 1065)
- 2.5.6 There are no undesignated early medieval assets recorded by the HER within the Scheme or study area.
  - Medieval Period (AD 1066 AD 1550)
- 2.5.7 There are no undesignated medieval assets recorded by the HER within the Scheme.
- 2.5.8 The nearest evidence of medieval activity relates to a scatter of Roman and medieval pottery found to the south-west of the Officer's Mess (HER MLI80925) and traces of medieval ridge-and-furrow cultivation (HER MLI80926) found during the archaeological investigations undertaken in advance of the recent residential development to the west of the Scheme (HER ELI13254).
- 2.5.9 Within the study area, non-designated medieval assets predominantly relate to unstratified finds including:
- 2.5.10 Medieval pottery found at four locations (HER MLI81476, MLI81489, MLI81491 and MLI81494) during groundworks for a replacement water pipe between Harmston and Bracebridge Heath along the route of Grantham Road;



- 2.5.11 A sherd of medieval green glazed pottery (HER MLI80924) found approximately 600m to the north-west of the Scheme; and
- 2.5.12 Medieval and post-medieval finds (HER MLI80933), including pottery and a lead spindle whorl, found to the west of Grantham Road approximately 660m to the west of the Scheme.
- 2.5.13 These finds indicate a low level of medieval activity within the vicinity of the Scheme, probably related to agricultural manuring practices and they are of negligible value.

Post-medieval Period (AD 1551 – Present)

- 2.5.14 There are no post-medieval assets recorded within the Scheme by the HER. Within the study area, undesignated post-medieval assets identified by the HER include:
  - The site of Waterloo Farm (HER MLI119609), a former farmstead demolished in the 19th century and identified from documentary sources, located approximately 150m to the north-east of the Scheme.
  - Medieval and post-medieval finds (HER MLI80933), including pottery and a lead spindle whorl, found to the west of Grantham Road approximately 660m to the west of the Scheme.
  - Modern earthworks and stone buildings (HER MLI80906) identified from aerial photographs approximately 650m to the south of the Scheme.
  - The site of Waddington Lime works (HER MLI80913) identified from historic mapping and documentary sources and located approximately 650m to the southwest of the Scheme; and;
  - The site of Waddington Mill (HER MLI80929) identified from historic mapping and demolished in the early 20th century. The mill was located approximately 750m to the south-west of the Scheme.
- 2.5.15 Undesignated post-medieval assets including findspots and the sites of former buildings or industrial sites identified from historic sources and non-longer extant, are considered to be of negligible value.

Military remains

- 2.5.16 The Scheme is located within RAF Waddington which is identified as an undesignated heritage asset by the HER (HER MLI80900). RAF Waddington was established during the First World War as a Royal Flying Corps training station (1916). The available plans of the airfield at this time (Waddington Heritage Centre online, 2021) do not show any development within the area of the Scheme. The main focus of the base's activities were located in the south-east corner of the airfield.
- 2.5.17 During the interwar period, 1919 1936, the base was not used. However, as part of the pre-war expansion programme the base was redeveloped as a bomber station reopening in 1937. Plans of the base from 1939 (Waddington Heritage Centre online, 2021) show the Officer's Mess, Senior NCO's Mess and Airmen's Accommodation to have been constructed in the vicinity of the Scheme. The base has remained in active use since reopening in 1937.
- 2.5.18 As an undesignated heritage asset identified by the HER, RAF Waddington is considered of local historical and evidential interest and is therefore identified as of low value.



#### Undated

- 2.5.19 There are no undated undesignated assets recorded within the Scheme by the HER.
- 2.5.20 Within the study area, the only undesignated, undated, asset recorded by the HER comprises a series of cropmarks (HER MLI86048) identified from aerial photographs and thought to represent underlying variations in the natural geology. This asset is recorded approximately 350m to the north-west of the Scheme and is considered of negligible value.

#### **Designated Historic Buildings**

2.5.21 There are no designated historic buildings (Listed Buildings or Conservation Areas) within the Scheme or study area.

# **Undesignated Historic Buildings**

- 2.5.22 There are no undesignated historic buildings recorded within the Scheme.
- 2.5.23 Within the study area, one undesignated historic building is recorded by the HER. This comprises Waddington Grange (HER MLI80908) located approximately 650m to the north of the Scheme. Waddington Grange (also identified as Grange Farm) comprises an early 19<sup>th</sup>-century coursed rubble and brick farmhouse. The structure was formerly a Listed Building but was delisted in 1987. This asset is of limited local evidential and historical interest and is therefore considered to be of low value.

#### 3 AIMS AND OBJECTIVES

#### 3.1 General aims

- 3.1.1 The general aims of the evaluation, as stated in the WSI (Wessex Archaeology 2022) and in compliance with the ClfA *Standard and Guidance for Archaeological Field Evaluation* (ClfA 2014a), were to:
  - provide information about the archaeological potential of the site; and
  - inform either the scope and nature of any further archaeological work that may be required; or the formation of a mitigation strategy (to offset the impact of the development on the archaeological resource); or a management strategy.

# 3.2 General objectives

- 3.2.1 In order to achieve the above aims, the general objectives of the evaluation were to:
  - determine the presence or absence of archaeological features, deposits, structures, artefacts or ecofacts within the specified area;
  - establish, within the constraints of the evaluation, the extent, character, date, condition and quality of any surviving archaeological remains;
  - place any identified archaeological remains within a wider historical and archaeological context in order to assess their significance; and
  - make available information about the archaeological resource within the site by reporting on the results of the evaluation.



#### 3.3 Site-specific objectives

- 3.3.1 Following consideration of the archaeological potential of the site and the regional research framework (Knight, Vyner and Allen 2012) the site-specific objectives defined in the WSI (Wessex Archaeology 2022) were to:
  - examine evidence for remains of medieval/post-medieval ridge-and-furrow cultivation (recorded on geophysical survey close to Area A) and assess if this has impacted on any earlier remains;
  - assess the potential for the recovery of artefacts to assist in the development of type series within the region. Roman and medieval pottery finds have been located in the vicinity of Area A;
  - assess the potential for the recovery of prehistoric finds (worked flint) in all evaluation areas:
  - be aware of the possibility of un-planned remains from the air base when it was redeveloped as a bomber station in 1937.

#### 4 FIELDWORK METHODS

#### 4.1 Introduction

- 4.1.1 All works were undertaken in accordance with the detailed methods set out within the WSI (Wessex Archaeology 2022) and in general compliance with the standards outlined in ClfA guidance (ClfA 2014a).
- 4.1.2 Any significant variations to these methods were agreed in writing with the Senior Historic Environment Officer for North Kesteven District Council and the client prior to being implemented.
- 4.1.3 The evaluation comprised the excavation, investigation and recording of two trial trenches (each measuring 15m by 2m). The methods employed are summarised below.

#### 4.2 Fieldwork methods

General

- 4.2.1 The trench locations were set out using a Global Navigation Satellite System (GNSS), in the approximate positions proposed in the WSI (Fig. 1).
- 4.2.2 Two trenches, each measuring 15m in length and 2m wide, were excavated in level spits using a 360° excavator equipped with a toothless bucket, under the constant supervision and instruction of the monitoring archaeologist. Machine excavation proceeded until either the archaeological horizon or the natural geology was exposed.
- 4.2.3 Spoil from machine stripping and hand-excavated archaeological deposits was visually assessed for the purposes of finds retrieval.
- 4.2.4 Trenches completed to the satisfaction of the client and the Senior Historic Environment Officer for North Kesteven District Council were backfilled using excavated materials in the order in which they were excavated and left level. Tarmac removed from the road surface prior to excavation of the trenches was reinstated on completion.



#### Recording

- 4.2.5 All exposed archaeological deposits were recorded using Wessex Archaeology's pro forma recording system.
- 4.2.6 A Leica GNSS connected to Leica's SmartNet service surveyed the location of the excavated trenches. All survey data is recorded in OS National Grid coordinates and heights above OD (Newlyn), as defined by OSTN15 and OSGM15, with a three-dimensional accuracy of at least 50 mm.
- 4.2.7 A full photographic record was made using digital cameras equipped with an image sensor of not less than 16 megapixels. Digital images have been subject to managed quality control and curation processes, which has embedded appropriate metadata within the image and will ensure long-term accessibility of the image set.

# 4.3 Monitoring

4.3.1 The Senior Historic Environment Officer for North Kesteven District Council monitored the evaluation on behalf of the LPA. Any variations to the WSI were agreed in advance with the client and the Senior Historic Environment Officer for North Kesteven District Council.

#### 5 STRATIGRAPHIC EVIDENCE

#### 5.1 Introduction

5.1.1 Both trenches 1 (Figs 1 and 2) and 3 (Fig 1 and cover) exposed layers of made ground beneath the tarmac surface. No other archaeological features were exposed. Detailed descriptions of individual contexts are provided in the trench summary table (Table 1).

#### 5.2 Soil sequence and natural deposits

- 5.2.1 In trench 1 the natural stone bedrock limestone bedrock was exposed at a depth of 1.3 m (Fig. 3). This was directly overlain by layers of made ground beneath the tarmac surface.
- 5.2.2 In trench 3 the natural geological substrate, which comprised orange clay with uncommon irregular stone inclusions, was reached at a depth of 0.2 m (Fig. 4). This was directly overlain by a layer of made ground beneath the tarmac surface.

#### 5.3 Modern

- 5.3.1 The earliest deposit in trench 1 was investigated by the excavation of a 1.4 m deep sondage in the southern end of the trench (Fig. 3). It comprised a layer of dense clay and sandstone, possibly consisting of redeposited natural deposits. This deposit lay directly above the natural bedrock and was around 0.9 m thick. It may represent a levelling or foundation deposit for the original development of the air base. Overlying this there was a synthetic membrane beneath a layer of sand and stones of approximately 0.3 m in depth (Fig. 5). This provided a level surface on which the tarmac surface of the car park was laid.
- 5.3.2 In trench 3, the natural geology was overlain by a layer of black, gravelly material, approximately 0.14 m deep (Fig. 4). The black tarmac surface of the old tennis court was laid directly above this layer.
- 5.3.3 No other archaeological features or deposits were exposed within either trench and no artefactual evidence was recovered.



**Table 1** Trench summary table

Trench No 1	rench No 1 Length 15 m Width 2 m		Width 2 m	Depth 1.40 m		
Context	Fill Of/	Filled	Interpretative	Description		Depth BGL
Number	With		Category			
101			Surface	Tarmac. Modern car park.		0–0.13
102		Made ground	Levelling layer. Layer of sand and		0.13-0.40	
				stones used to level the ground to		
				build the car park. Placed on		
				Terram membrane.		
103			Made ground	Levelling layer. Clay and		0.40-1.30
				sandstone layer. Potentially built up		
				as part of airfield.		
Trench No 3 Length 15 m		n 15 m	Width 2 m	Depth 0.3	80 m	
Context	Fill Of/	Filled	Interpretative	Description		Depth BGL
Number	With		Category			
301			Surface	Tarmac. Black tarmac covering old 0-0.06		0-0.06
				tennis court.		
302			Made ground	Levelling layer. Black industrial 0.06–0.20		
				material, very loose.		
303			Natural	Orange clay with uncommon 0.20+		
				irregular white stones.		

#### 6 FINDS EVIDENCE

6.1.1 No artefactual evidence was found during the evaluation.

#### 7 ENVIRONMENTAL EVIDENCE

7.1.1 No environmental samples were taken during the evaluation.

#### 8 CONCLUSIONS

#### 8.1 Discussion

- 8.1.1 The archaeological evaluation exposed made ground deposits associated with the modern uses of the evaluation areas. It was not able to determine, within the constraints of the evaluation, the existence of any earlier archaeological features or deposits. No evidence for remains of medieval/post-medieval ridge-and-furrow cultivation, identified in geophysical survey to the west of the Scheme, was found. No artefactual evidence was recovered. No archaeological deposits suitable for environmental analysis were present.
- 8.1.2 It is possible that earlier archaeological evidence is present elsewhere within the evaluation area, however, it is likely that any archaeological remains would have been disturbed or destroyed by works associated with the modern development of the Site and by underground services. It is also possible that artefactual evidence of prehistoric and Roman date may be present elsewhere on the Site, but it is likely that any such evidence would be unstratified and removed from its original context, thus limiting its potential.

#### 9 ARCHIVE STORAGE AND CURATION

#### 9.1 Museum

9.1.1 The archive resulting from the evaluation is currently held at the offices of Wessex Archaeology in Sheffield. The Collection, Lincoln, Lincolnshire has agreed in principle to



accept the archive on completion of the project, under the accession code LCNCC:2022.154.

#### 9.2 Preparation of the archive

### Physical archive

- 9.2.1 The archive, which comprises paper records, will be prepared following the standard conditions for the acceptance of excavated archaeological material by The Collection, Lincoln, Lincolnshire, and in general following nationally recommended guidelines (Brown 2011; ClfA 2014b; SMA 1995).
- 9.2.2 All archive elements are marked with the site/accession code (268940/ LCNCC:2022.154), and a full index will be prepared. The physical archive currently comprises the following:
  - 1 files/document case of paper records

#### Digital archive

9.2.3 The digital archive generated by the project, which comprises born-digital data (e.g., site records, survey data, databases and spreadsheets, photographs and reports), will be deposited with a Trusted Digital Repository, in this instance the Archaeology Data Service (ADS), to ensure its long-term curation. Digital data will be prepared following ADS guidelines (ADS 2013 and online guidance) and accompanied by metadata.

# 9.3 Selection strategy

- 9.3.1 It is widely accepted that not all the records and materials (artefacts and ecofacts) collected or created during the course of an archaeological project require preservation in perpetuity. These records and materials will be subject to selection in order to establish what will be retained for long-term curation, with the aim of ensuring that all elements selected to be retained are appropriate to establish the significance of the project and support future research, outreach, engagement, display and learning activities, i.e., the retained archive should fulfil the requirements of both future researchers and the receiving Museum.
- 9.3.2 The selection strategy, which details the project-specific selection process, is underpinned by national guidelines on selection and retention (Brown 2011, section 4) and generic selection policies (SMA 1993; Wessex Archaeology's internal selection policy) and follows ClfA's *Toolkit for Selecting Archaeological Archives* (ClfA 2022b). It should be agreed by all stakeholders (Wessex Archaeology's internal specialists, external specialists, local authority, museum) and fully documented in the project archive.
- 9.3.3 In this instance, given the relatively low level of finds recovery, the selection process has been deferred until after the fieldwork stage was completed. Project-specific proposals for selection are presented below. These proposals are based on recommendations by Wessex Archaeology's internal specialists and external specialists and will be updated in line with any further comment by other stakeholders (museum, local authority). The selection strategy will be fully documented in the project archive.

#### Documentary records

9.3.4 Paper records comprise site registers (other pro-forma site records are digital), drawings and reports (WSI, client report). All will be retained and deposited with the project archive.

graphics)



#### Digital data

- 9.3.5 The digital data comprise site records (tablet-recorded on site) in spreadsheet format; finds records in spreadsheet format; survey data; photographs; reports. All will be deposited, although site photographs will be subject to selection to eliminate poor quality and duplicated images, and any others not considered directly relevant to the archaeology of the site.
- 9.3.6 The table below summarises the recommended selection and deposition strategy.

		•	0,	
Class	Element	Quantification	Depository	Format
Physical archive	Paper records	1 A4 file	The Collection, Lincoln, Lincolnshire	N/A
	Report	0 (0 MB)	ADS	.pdf
Digital archive	Digital recording sheets	0 (c. 0 MB)	ADS	.pdf
Digital archive	Images	c. 0 (0 MB)	ADS	.jpg
	Survey	0 MB	ADS	.dxf (vector

 Table 2
 Archive selection and deposition strategy

#### 9.4 Security copy

9.4.1 In line with current best practice (e.g., Brown 2011), on completion of the project a security copy of the written records will be prepared, in the form of a digital PDF/A file. PDF/A is an ISO-standardised version of the Portable Document Format (PDF) designed for the digital preservation of electronic documents through omission of features ill-suited to long-term archiving.

#### 9.5 OASIS

9.5.1 An OASIS (online access to the index of archaeological investigations) record (http://oasis.ac.uk) has been initiated, with key fields completed (Appendix 1). A .pdf version of the final report will be submitted following approval by the Senior Historic Environment Officer for North Kesteven District Council on behalf of the LPA. Subject to any contractual requirements on confidentiality, copies of the OASIS record will be integrated into the relevant local and national records and published through the Archaeology Data Service (ADS) ArchSearch catalogue.

#### 10 COPYRIGHT

#### 10.1 Archive and report copyright

- 10.1.1 The full copyright of the written/illustrative/digital archive relating to the project will be retained by Wessex Archaeology under the *Copyright, Designs and Patents Act 1988* with all rights reserved. The client will be licenced to use each report for the purposes that it was produced in relation to the project as described in the specification. The museum, however, will be granted an exclusive licence for the use of the archive for educational purposes, including academic research, providing that such use conforms to the *Copyright and Related Rights Regulations 2003*.
- 10.1.2 Information relating to the project will be deposited with the Historic Environment Record (HER) where it can be freely copied without reference to Wessex Archaeology for the purposes of archaeological research or development control within the planning process.



# 10.2 Third party data copyright

10.2.1 This document and the project archive may contain material that is non-Wessex Archaeology copyright (e.g., Ordnance Survey, British Geological Survey, Crown Copyright), or the intellectual property of third parties, which Wessex Archaeology are able to provide for limited reproduction under the terms of our own copyright licences, but for which copyright itself is non-transferable by Wessex Archaeology. Users remain bound by the conditions of the *Copyright, Designs and Patents Act 1988* with regard to multiple copying and electronic dissemination of such material.

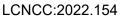


#### REFERENCES

- ADS 2013. Caring for Digital Data in Archaeology: a guide to good practice. Archaeology Data Service and Digital Antiquity Guides to Good Practice.
- British Geological Survey 2022. *BGS Geology Viewer* https://www.bgs.ac.uk/map-viewers/bgs-geology-viewer/ (accessed 2022).
- Brown, D. H. 2011. *Archaeological Archives: a guide to best practice in creation, compilation, transfer and curation* (revised edition). Archaeological Archives Forum.
- CFA 2017 Land at Grantham Road, Waddington. Trial trenching report. Unpublished report.

  Available online:

  <a href="https://archaeologydataservice.ac.uk/library/browse/issue.xhtml?recordId=1165192&recordType=GrevLitSeries">https://archaeologydataservice.ac.uk/library/browse/issue.xhtml?recordId=1165192&recordType=GrevLitSeries</a>
- Chartered Institute for Archaeologists [ClfA] 2014a. Standard and Guidance for Archaeological Field Evaluation (revised edition October 2020). Reading: Chartered Institute for Archaeologists.
- ClfA 2014b. Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives (revised edition October 2020). Reading: Chartered Institute for Archaeologists.
- ClfA 2022a. *Toolkit for Specialist Reporting* https://www.archaeologists.net/reporting-toolkit (accessed 2022).
- ClfA 2022b. *Toolkit for Selecting Archaeological Archives* https://www.archaeologists.net/selection-toolkit (accessed 2022).
- GEOCON 2022. Geotechnical site investigation and factual report of land at RAF Waddington, Waddington, Lincoln, LN5 9NB. Unpublished report.
- Jacobs 2021a. RAF Waddington SLA Topographical and Utilities Survey Report. Unpublished report ref 60ECAM08\_Wadd\_Surv\_RP\_001.
- Jacobs 2021b. RAF Waddington SLA Archaeological and Heritage Desk-Based Assessment. Southampton. Unpublished report.
- Knight, D., Vyner, B. and Allen, C. 2012. East Midlands Heritage: An Updated Research Agenda and Strategy for the Historic Environment of the East Midlands. https://archaeologydataservice.ac.uk/researchframeworks/eastmidlands/wiki/Main
- SMA 1993. Selection, Retention and Dispersal of Archaeological Collections. London: Society of Museum Archaeologists.
- SMA 1995. *Towards an Accessible Archaeological Archive*. London: Society of Museum Archaeologists.
- Stratascan 2016. Land to the North of Pottergate Close, Waddington. Geophysical Survey Report. Unpublished report.
- Waddington Heritage Centre 2021. A History of RAF Waddington. Available online: <a href="http://www.sbap.be/museum/waddington/waddington.htm">http://www.sbap.be/museum/waddington/waddington.htm</a>



RAF Waddington Archaeological Evaluation



Wessex Archaeology 2022. Written Scheme of Investigation for Archaeological Evaluation Salisbury. Unpublished report ref. 268940.01.



# **APPENDICES**

# Appendix 1 OASIS summary

OASIS ID (UID)	wessexar1-511505
Project Name	RAF Waddington, Lincolnshire. Archaeological Evaluation.
Sitename	RAF Waddington
Activity type	Archaeological Intervention
Planning Id	22/0621/FUL
Reason For Investigation	Planning requirement
Organisation Responsible for work	Wessex Archaeology
Project Dates	21-Nov-2022 - 25-Nov-2022
Location	
	RAF Waddington
	NGR : SK 98131 65242
	LL: 53.1752480756632, -0.533269611612465
	12 Fig : 498131,365242
Administrative Areas	
	Country : England
	County: Lincolnshire
	District : North Kesteven
	Parish : Waddington
Project Methodology	Wessex Archaeology carried out an archaeological evaluation on land to the west and east of High Dike Road at RAF Waddington, Lincolnshire. The evaluation comprised the excavation, investigation and recording of two trial trenches each measuring 15 m x 2 m.
Project Results	The evaluation trenches exposed made ground deposits associated with the modern uses of the Site. No other archaeological features or deposits were observed. No artefactual evidence was found. No environmental samples were taken.
HER	Lincolnshire HER
Archives	Documentary Archive, Digital Archive - to be deposited with The Collection: Art and Archaeology in Lincolnshire;

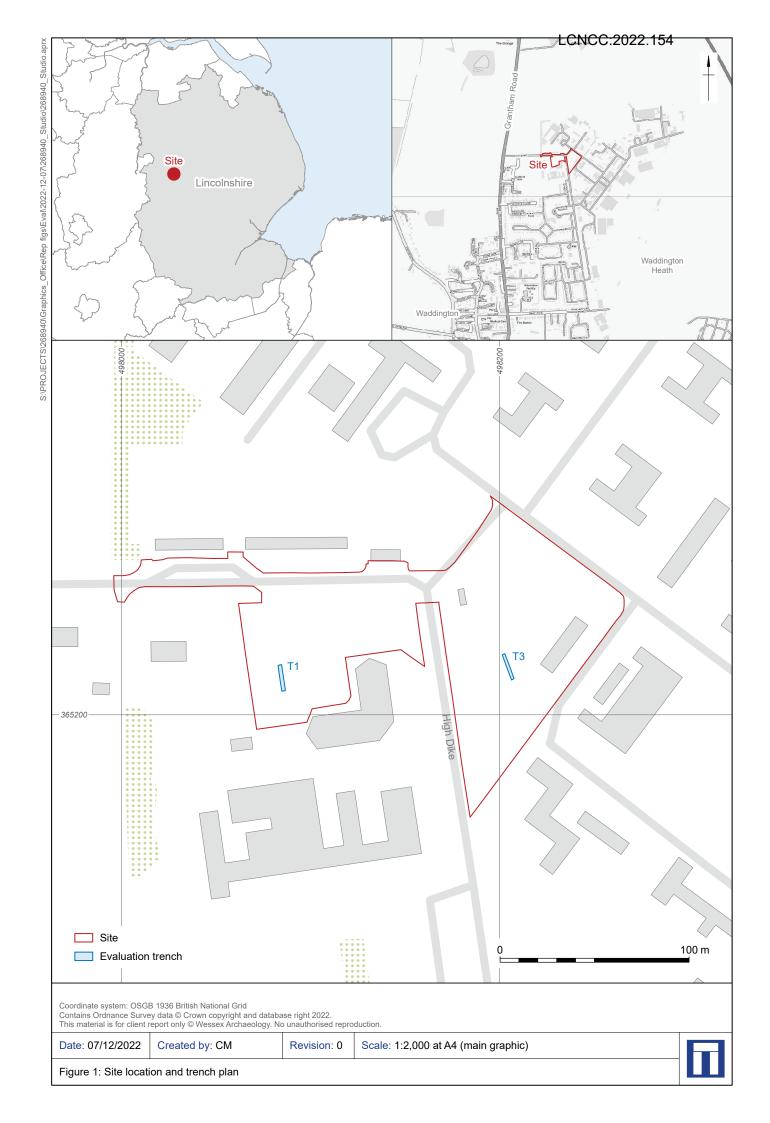




Figure 2: Trench 1 viewed from the south (2 x 1 m scales)



Figure 3: Sondage in trench 1 viewed from the west (1 m scale)

Created by: CM

Date: 07/12/2022







Figure 4: South-west facing representative section of trench 3 (1 m scale)

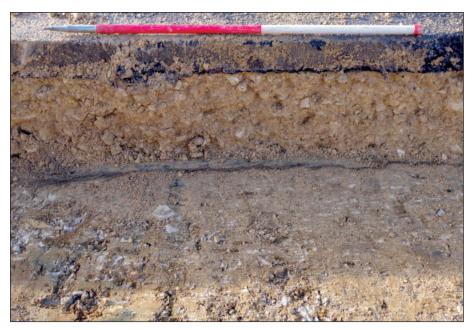


Figure 5: East facing representative section of trench 1 (1 m scale)

Created by: CM

Date: 07/12/2022

Revision: 0







