

# Bicester Aerodrome Bicester Oxfordshire

**Archaeological Evaluation** 

Archaeology Warwickshire Report No: 2234.3 April 2022







Archaeological Evaluation April 2022

**Commissioned by:** RPS Consulting

Site Code: OBA22

**Planning Reference:** 21/01224/OUT

**Planning Authority:** Cherwell District Council

National Grid Reference: SP 59777 24584

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**Report reference:** Griffiths, A, 2022 Bicester Aerodrome, Bicester,

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#### **FIGURES**

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#### **SUMMARY**

An archaeological evaluation was undertaken at Bicester Aerodrome ahead of the construction of an Automotive Experience Quarter comprising commercial, learning uses and a vehicle circuit.

A preceding geophysical survey suggested the presence of some potentially prehistoric settlement activity at the eastern extent of the site, though this area is not to be affected by the proposed development and thus was not subject to trial trenching.

The evaluation revealed some linear features that correspond with boundaries on  $19^{th}$  century mapping, an undated pit and a stone-lined well that would have served the demolished Hungerhill Farm complex.



#### 1 INTRODUCTION

- 1.1 Planning permission is sought from Cherwell District Council for an Automotive Experience Quarter comprising commercial, business and services uses, light industrial, local community, learning uses and vehicle circuit at Land at former RAF Bicester, Bicester, Oxfordshire (Planning Reference: 21/01224/OUT).
- 1.2 In comments on the application dated 13th May 2021, Richard Oram, the Lead Archaeologist for Oxfordshire County Council, requested that an archaeological field evaluation be undertaken prior to determination of the planning application. Archaeology Warwickshire carried out a programme of archaeological trial trenching in accordance with a Written Scheme of Investigation approved by the planning authority between 29<sup>th</sup> March and 1<sup>st</sup> April 2022. This report presents the results of that work.
- 1.3 The project archive consisting of: 19 trench sheets, 8 context sheets, 1 section drawing sheet, a location plan and 88 digital photographs will be deposited with Oxfordshire Museums Service at Museums Resource Centre but will be maintained by AW under Site Code OBA22 in an appropriate manner until deposition is confirmed. The non-duplicated digital data will be transferred to the ADS as per the Oxfordshire Museums Service transfer policy (2021).
- 1.4 The work was carried out in accordance with *The Chartered Institute for Archaeologists Standard and Guidance for Archaeological Field Evaluation* (CIfA 2014).



#### 2 SITE LOCATION

- 2.1 The site lies within Bicester Aerodrome 2.5km northeast of Bicester town centre, centred on National Grid Reference SP 59777 24584. The 179ha site currently comprises the entire airfield and technical site and two areas directly north-east of the aerodrome that were formerly part of the Stratton Audley Quarry.
- 2.2 Formerly RAF Bicester, the site is naturally flat, some 83m above Ordnance Datum. The aerodrome retains Second World War buildings and hangars near the western boundary, bomb stores along the south-eastern boundary, concrete and tarmacadam taxiways and the grass airfield. Along the south-western boundary are two small wooded areas. The former quarry is evident as ponds surrounded by scrub and a few trees.
- 2.3 The underlying bedrock geology is mapped as Cornbrash Formation, a limestone bedrock formed in the Jurassic Period (BGS 2022). No overlying superficial deposits are recorded.



#### 3 BASELINE ARCHAEOLOGICAL DATA

- 3.1 The baseline archaeological data has been described in the foregoing Archaeological Desk-Based Assessment (Bray 2019), geophysical survey (Roseveare 2021) and Written Scheme of Investigation (Bradbury 2022), which are summarised below.
- 3.2 The 2021 geophysical survey identified extensive areas of possible prehistoric anomalies at the eastern and western edges of the survey. The eastern anomalies, partly below the runway, include evidence for settlement indicated by circular buildings. The western anomalies were different, with a palimpsest of linear features without coherent layout.
- 3.3 The site is adjacent to the projected line of the Roman road between Alchester and Towcester and three villa/settlement sites and burials have been identified in the area. However, evaluative work carried out in 2018 and 2019 inside Bicester Airfield, to the west and south-west of the development area (Oxford Archaeology 2018; 2019) did not record any preairfield remains other than a single ditch possibly associated with the Roman road.
- 3.4 Evidence for the medieval and/or post-medieval field system is evident from the anomalies representing ridge and furrow ploughing mapped by the geophysical survey. Later agricultural use of the land is evident through the survival of former field boundary ditches, mostly as mapped in 1814 but with one or two additions in the southern part of the survey. The site of Hungerhill Farm has been detected but no detail is evident.
- 3.5 Bicester Aerodrome, now known as Bicester Heritage, remained undeveloped through recorded history until the beginning of the twentieth century when it was used as the flying field for RFC Bicester. It was transformed into a permanent bomber base RAF Bicester in 1925. The airfield was substantially enlarged and the western side of the site



developed as a technical site. A railway line was added along the southern

boundary and bomb stores along the eastern boundary.

3.6 The geophysical survey identified various elements from the airfields including the "landing circle", the differently-constructed east end of the east-west runway and the probable site of one of the early hangers at the northern edge. In the north-east corner, the site of the aircraft breaking works is apparent as extensive areas of buried debris within a number of distinct zones. Small ring-shaped anomalies in two locations outside the

perimeter taxiway may mark the site of airfield defences.

3.7 The quarry in the northern part of the site was in operation during the

second half of the twentieth century.

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#### 4 AIMS AND METHODS

- 4.1 The main aim of the evaluation was to determine if there are any significant archaeological remains in the area to be developed; to form an understanding of their value and their potential to shed light on the development of the area and to disseminate the results in an appropriate format.
- 4.2 Secondary aims included placing the results in their wider local and regional contexts and assessing them against appropriate period research agendas set out in the Solent-Thames Research Framework for the Historic Environment Resource Assessments and Research Agendas (Hey and Hind 2014).
- 4.3 The area was evaluated by means of 950m of trial trenching, consisting of nineteen 50m trenches in positions agreed with the planning archaeologist. The trenches were positioned within the area of development, with trenches 8, 11, 13 and 14 targeting ambiguous anomalies and trenches 10 and 12 positioned to intercept more likely features. Of these geophysical anomalies, only modern linear anomalies were discovered.
- 4.4 Topsoil, former ploughsoils and demonstrably modern overburden were removed by an appropriate machine using a toothless bucket under direct archaeological supervision. Ground reduction was carried out in shallow spits until the uppermost archaeological horizon, or the geological natural was reached (whichever the higher).
- 4.5 Trenches 16 and 18 were moved slightly to avoid underground services detected by CAT scanner. Trench 15 was moved more to the north due to an existing boundary fence.



#### 5 RESULTS

#### **Geological natural**

5.1 The geological natural across the site varied from limestone brash and bedrock to yellow clayey gravel and brownish red slit (104, 203, 302, 402, 504, 604, 702, 802, 902, 1003, 1102, 1202, 1302, 1402, 1502, 1602, 1702, 1802, 1902). It was exposed between 0.29m and 0.54m below the current ground surface.

#### **Deposit sequence** (Photos 1-7)

5.2 The geological natural was overlain by a simple sequence of plough derived subsoil (101, 201, 301, 401, 501, 601, 701, 801, 901, 1001, 1101, 1201, 1301, 1401, 1501, 1601, 1701, 1801 and 1901) overlain by a sandy loam topsoil (100, 200, 300, 400, 500, 600, 700, 800, 900, 1000, 1100, 1200, 1300, 1400, 1500, 1600, 1700, 1800 and 1900).

#### Archaeological features and deposits

- 5.3 A limestone-lined well 202 (Photos 8, 9 and 10) in Trench 2 was 1.72m wide with a c.1m diameter central shaft at least 0.95m deep. It contained c.0.3m of slumped former topsoil overlying c.0.65m of rubble, bricks and stones and a small assemblage of  $19^{th} 20^{th}$  century pottery.
- 5.4 An undated circular pit in Trench 16 (1603 Photo 11) was 0.68m in diameter by 0.11m deep and was filled by a single deposit of dark yellowy brown clayey silt containing abundant limestone (1604). It contained no dateable material.
- 5.5 Trench 6 contained an undated NW-SE aligned ditch 602 (Photo 12), which was 0.72m wide by 0.07m deep and corresponded to the position and alignment of a former field boundary visible on the 1<sup>st</sup> edition Ordnance Survey map of 1887.



5.6 NE-SW aligned ditch 1203, in Trench 12, had vertical edges and was filled with layers of redeposited natural containing 20<sup>th</sup> century pottery and broadly aligned with a field boundary on 19<sup>th</sup> century mapping.



#### 6 CONCLUSIONS

- 6.1 The evaluation revealed four archaeological features of which two ditches (602 and 1203) align with field boundaries on the 1<sup>st</sup> edition Ordnance Survey map of 1887. Pit 1604 was found within the circular training target within the airfield and may therefore be early to mid-20<sup>th</sup> century.
- 6.2 A stone-lined well probably relates to Hungerhill Farm, the brick and other ceramics found in it are all of late 19<sup>th</sup> to early 20<sup>th</sup> century date. No other evidence of Hungerhill Farm buildings survived in trench 2 suggesting that the farm was comprehensively removed.
- 6.3 The absence of evidence for the geophysical anomalies, particularly those in trenches 10 and 12 where linear features were suggested, may simply reflect that the signatures were confined to the topsoil. There was limited evidence for artificial levelling across the site. This work does not preclude the possibility of significant archaeological features surviving outside the areas examined.



**ACKNOWLEDGEMENTS** 

Archaeology Warwickshire would like to thank RPS Consulting for commissioning the work, Bicester Heritage for their assistance on site and to Victoria Green of Oxfordshire County Archaeological Services for monitoring the works on behalf of the Planning Authority.



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1: Trench 6, looking west



2: Trench 15, looking south-west





3: Trench 14, looking south-east



4: Trench 7, looking north-west



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5: Trench 10 showing location of probable culvert, facing south-east.



6: General view of south-west facing sections of Trench 2 showing the typical stratigraphy of the site.



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7: General view of south-west facing section of Trench 3 showing modern make up deposits



8: Well 202 pre-excavation



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9: Well 202, post-excavation showing construction of the well



10: Well 202, post-excavation, facing north-east



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11: Small pit 1603, facing south-east



12: Former field boundary 602, facing north-west



### **APPENDICES**

#### A List of contexts

Context	Dogarintian	Width	Thickness	Ca mama a mt
Context	Description	(m)	(m)	Comment
100	Loose brown silty clay		0.28	Topsoil
101	Loose brown clayey silt containing tile, brick, scrap metal		0.26	Rubble
102	Dense layer of coal containing tile and brick		0.19	Fill of 103
103	Irregular in plan, exceeding 200m in diameter		0.19	Cut for area of infill
104	Brownish yellow sandy gravel and stone		n/a	Natural geology
200	Loose dark brown sandy silt		0.26	Topsoil
201	Reddish brown gravely silt		0.08	Subsoil
202	Fill of 206, sub circular in plan, comprising limestone blocks with no bonding material	1.72m	>0.9	Masonry
203	Light reddish brown limestone and sand		n/a	Natural geology
204	Dark brown sandy silt, sample 0.9		0.35	Top fill of well 202
205	Dark greyish brown sandy silt, containing large stone, brick, CBM and pottery.	0.9	0.78	Lower fill of well 202
206	Sub circular in plan with vertical sides	1.8	>0.9	Cut for well 202
300	Loose brown sandy silt		0.25	Topsoil
301	Reddish brown silty sand		0.07	Subsoil
302	Brownish red gravel and limestone		n/a	Natural geology



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303 Irregular in plan, exceeding <1m Cut of la	ge
80m in diameter depression	on
Brown silty sand, containing <1m Fill of 30 brick rubble	3
400 Loose brown sandy silt 0.24 Topsoil	
<b>401</b> Reddish brown silty sand 0.05 Subsoil	
402 Brownish red gravel and n/a Natural g	eology
limestone	
NW-SE orientated linear <1.2m n/a Furrows unexcavated furrows	
500 Loose brown sandy silt 0.29 Topsoil	
<b>501</b> Yellowish brown sandy silt 0.05 Subsoil	
NW-SE orientated linear <1.2 0.2 Cut of fu	rrow
furrow with gradually breaking sides and a concave base	
Yellowish brown clayey silt <1.2m n/a Fill of fur containing frequently occurring small to medium limestone	row 502
Yellow and brown limestone n/a Natural g and sand	eology
600 Loose brown sandy silt 0.22 Topsoil	
601 Yellowish brown sandy silt 0.11 Subsoil	
Linear in plan with gradually breaking sides and a concave base, orientated NW-SE.  visible on 1st edition ordnance survey of 1887.	rmer field ,
containing frequently boundary	mer field / 602
occurring limestone	
604 Yellowish brown limestone n/a Natural g	eology
-	eology



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702	Limestone brash and brownish yellow gravel	n/a	Natural geology
800	Loose brown sandy silt	0.3	Topsoil
801	Reddish brown silty sand	0.11	Subsoil
802	Limestone brash and brownish yellow gravel	n/a	Natural geology
900	Loose brown sandy silt	0.27	Topsoil
901	Reddish brown silty sand	0.09	Subsoil
902	Brownish yellow and red sand and gravel	n/a	Natural geology
903	Yellowish brown and red silty sand and gravel, redeposited natural	0.21	Top fill of 905
904	Reddish brown silty gravel	0.67	Bottom fill of 905
905	Unknown shape in plan, exceeded 50mx25m in total	0.87	Cut for large depression
1000	Loose brown sandy silt	0.32	Topsoil
1001	Reddish brown silty sand	0.18	Subsoil
1002	Yellowish brown and red silty sandy gravel	0.09	Redeposited natural
1003	Brownish yellow and red sand and gravel	n/a	Natural geology
1004	Unexcavated linear drainage pipes	n/a	Drainage pipes
1100	Reddish brown clayey loam	0.23	Topsoil
1101	Light brown silty sand	0.35	Subsoil
1102	Yellow silty clay and limestone	n/a	Redeposited natural
1103	Unexcavated linear drainage pipes	n/a	Drainage pipes
1200	Reddish brown clayey loam	0.3	Topsoil
1201	Light brown silty sand	0.32	Subsoil
1202	Yellow and red clayey gravel	n/a	Natural geology



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1203	Linear in plan, vertical sided	<1.9	>0.4	Cut of ditch
1203	, ,	71.9		Cut of ditter
	with an uneven base,			
	orientated NE-SW			
1204	Brownish red silt and yellow	<1.9	>0.4	Fill of ditch
	clay			
1205	Orientated NW-SE,	<0.9		Furrows
	unexcavated			
1300	Loose brown sandy silt		0.21	Topsoil
1301	Reddish brown silty sand		0.04	Subsoil
1302	Limestone brash		n/a	Natural geology
1303	Reddish brown fine silty clay,	<1.4	0.2	Furrows
	orientated NE-SW			
1400	Loose brown sandy silt		0.28	Topsoil
1401	Reddish brown silty sand		0.05	Subsoil
1402	Limestone brash and yellow n/a		Natural geology	
	gravel			
1403	Reddish brown fine silty clay,	<1.1	0.3	Furrows
	orientated ENE-WSW			
1500	Loose brown sandy silt		0.26	Topsoil
1501	Reddish brown silty sand		0.09	Subsoil
1502	Limestone brash	n/a Natur		Natural geology
1503	Reddish brown fine clayey silt, <1.3 <0.35 Furrows		Furrows	
	orientated NW-SE			
1600	Loose brown sandy silt		0.26	Topsoil
1601	Reddish brown silty sand		0.08	Subsoil
1602	Limestone brash		n/a	Natural geology
1603	Circular in plan with irregular 0.68 0.11 Cut of		Cut of small pit	
	sides and a concave base			
1604	Dark yellowish brown clayey	0.68	0.11	Fill of small pit
	silt and limestone, no finds,			
	sample <2>			
1700	Loose brown sandy silt		0.27	Topsoil
1701	Reddish brown silty sand		0.05	Subsoil
1702	Limestone brash		n/a	Natural geology
	<u> </u>			



1801 1802	Reddish brown silty gravel Brownish red and yellow		0.04 n/a	Subsoil  Natural geology
1800	gravel  Loose brown sandy silt		0.23	natural Topsoil
1704	Brownish yellow clay and		0.15	Redeposited
1703	Orientated NE-SW, filled by a reddish brown sandy silt	<0.9		Furrow



#### B List of Finds

Trench	Context	Туре	Number	Comment
1	101	Glass	1	Complete clear glass jar for pickles (return to owner)
				(return to owner)
1	101	Metal	1	Licence plate PA 66 B (return to owner)
2	205	Pottery	2	MGW 1 blue transfer 1 tan glaze with white decoration
2	205	Animal bone	3	2 ?rib fragments 1 unidentifiable fragment
2	205	СВМ	6	1 handmade brick unfrogged 5 fragments of hand made roof tile
2	205	Iron	3	2 nails 1 sheet fragment
2	205	Copper	4	Wire
2	205	Glass	3	Clear jar base fragment Clear jar neck fragment



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## Summary for archaeol27-505992

OASIS ID (UID)	archaeol27-505992
Project Name	Bicester Airfield, Oxfordshire, Archaeological Evaluation
Sitename	-
Activity type	Evaluation
Project Identifier(s)	OBA22 Bicester Airfield
Planning Id	21/01224/OUT
Reason For Investigation	Planning: Between application and determination
Organisation Responsible for work	Archaeology Warwickshire
Project Dates	29-Mar-2022 - 01-Apr-2022
Location	Bicester Airfield, Bicester, Oxfordshire
	NGR : SP 59777 24584
	LL: 51.916584031255, -1.13229627561426
	12 Fig : 459777,224584
Administrative Areas	Country : England
	County : Oxfordshire
	District : Cherwell
	Parish : Launton
Project Methodology	The area was evaluated by means of 950m of trial trenching, consisting of nineteen 50m trenches. The work was carried out in accordance with The Chartered Institute for Archaeologists Standard and Guidance for Archaeological Field Evaluation (CIfA 2014).
Project Results	The evaluation revealed four archaeological features The two ditches were present on the 1st edition Ordnance Survey map of 1887, whereas small pit 1604 is positioned within the known circular training target within the airfield, and if associated would date from the early to mid-20th century.
	A stone built well was recorded within the former location of Hungerhill Farm, brick and other ceramics found within date its infilling from the late 19th to early 20th century. It is likely that the demolition and subsequent infilling of the well are contemporary to the removal of the farm. No other evidence of Hungerhill Farm buildings survived in trench 2. This lack of features and building rubble suggests that the area was compressively razed, and that great attention was paid to remove all building remains. It is possible that the rubble from Hungerhill Farm was included in the deposits found in trenches 1 and 3.
	The absence of Prehistoric and Roman features and finds may, in part, be due to the extensive terracing and groundworks associated with the construction, development and maintenance of the airfield.

Keywords	Well - UNCERTAIN - FISH Thesaurus of Monument Types
	Pit - UNCERTAIN - FISH Thesaurus of Monument Types
	Base Sherd - POST MEDIEVAL - FISH Archaeological Objects
	Thesaurus
	Brick - POST MEDIEVAL - FISH Archaeological Objects Thesaurus
	Roof Tile - POST MEDIEVAL - FISH Archaeological Objects Thesaurus
	Animal Remains - UNCERTAIN - FISH Archaeological Objects
	Thesaurus
	Nail - UNCERTAIN - FISH Archaeological Objects Thesaurus
	Sherd - POST MEDIEVAL - FISH Archaeological Objects Thesaurus
	Wire - UNCERTAIN - FISH Archaeological Objects Thesaurus
Funder	
HER	Oxfordshire HER - unRev - STANDARD
Person Responsible for work	Griffiths, Adam
HER Identifiers	
Archives	Documentary Archive - to be deposited with Oxfordshire Museums
	Service
	Digital Archive - to be deposited with Archaeology Data Service Archive



#### WRITTEN SCHEME OF INVESTIGATION: ARCHAEOLOGICAL EVALUATION

March 2022

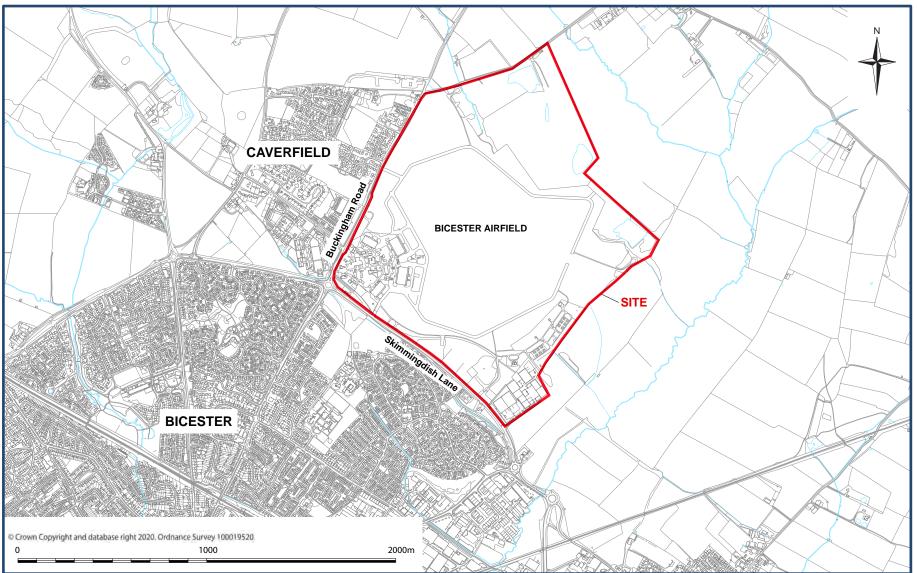


Fig 1: Location of site

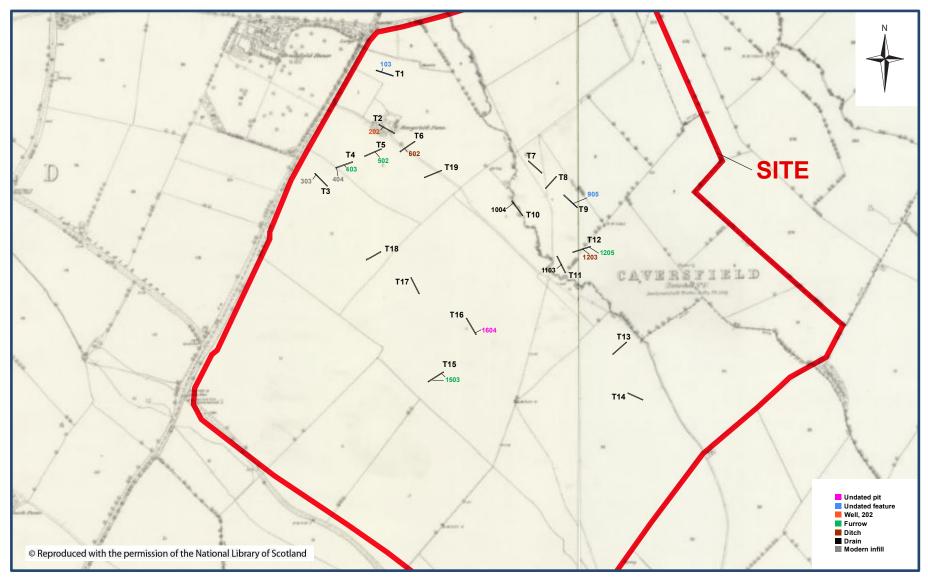


Fig 2: Detail from First Edition Ordnance Survey 1:2500 map of 1887 (Oxfordshire XXXII.2 and 3)

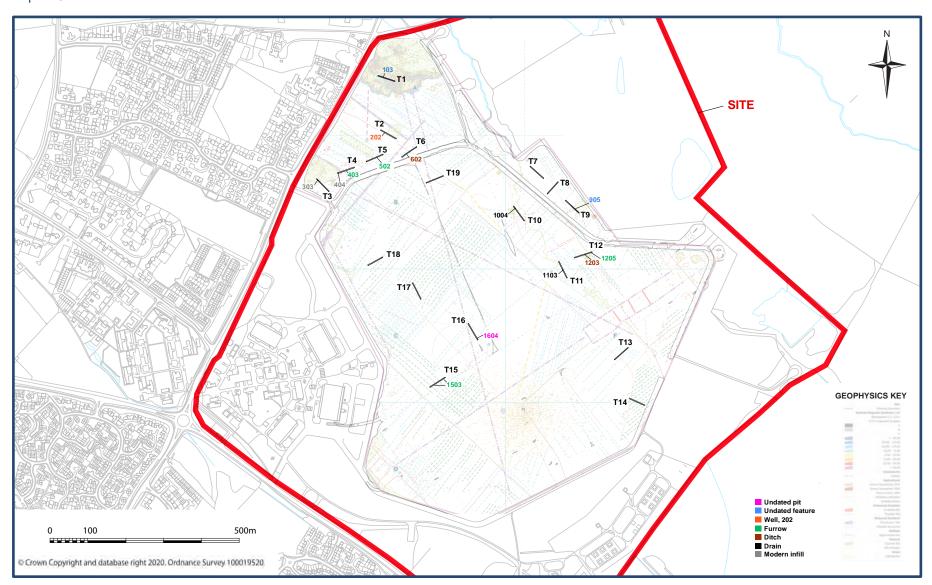


Fig 3: Location of excavated with geophysical survey

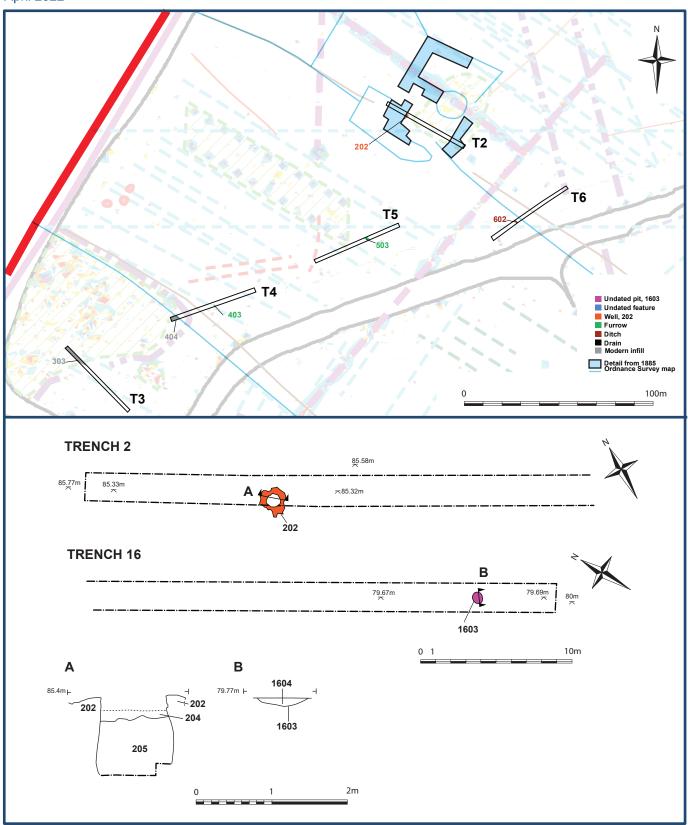


Fig 4: Detail of trenches with 1885 mapping, and trenches 2 and 16 with associated sections A and B