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Interim Report for the M42 Junction 6 Improvement Scheme Archaeological Trial Trench Evaluation West Midlands

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Interim Report for the M42 Junction 6 Improvement Scheme Archaeological Trial Trench Evaluation West Midlands

Abstract

MOLA (Museum of London Archaeology) carried out an archaeological trial trench evaluation for the M42 Junction 6 Improvement Scheme (the Scheme) in the West Midlands. A total of 101 trial trenches will be investigated; at time of writing a total of 41 trenches have been investigated. Former ridge and furrow cultivation was confirmed in three fields, together with historic field boundaries that appear on early Ordnance Survey maps. This interim report will be followed by a full report after completion of the evaluation works.

1 INTRODUCTION

MOLA (Museum of London Archaeology) was commissioned by AECOM on behalf of Highways England to undertake an archaeological trial trench evaluation for the M42 Junction 6 Improvement Scheme (NGR SP 1850 8240). The works were undertaken in accordance with the *National Policy Statement for National Networks* (DT 2014), which states that ‘...the applicant should include an appropriate desk-based assessment and, where necessary, a field evaluation.’ The scope of the evaluation is defined in a Written Scheme of Investigation (WSI) for this work (Kilner 2018).

The excavation is being completed in two stages; Trenches 63 to 101, Trench 60 and Trench 37 were excavated during March–April 2019 and are presented within this interim report. The remainder of the evaluation trenches will be covered within an overall report at the end of the fieldwork.

All works were conducted in accordance with the Chartered Institute for Archaeologists’ *Code of Conduct* (CIfA 2014a) and *Standard and Guidance for Archaeological Field Evaluation* (CIfA 2014b) and the Historic England procedural document, *Management of Field Projects in the Historic Environment* (HE 2015).

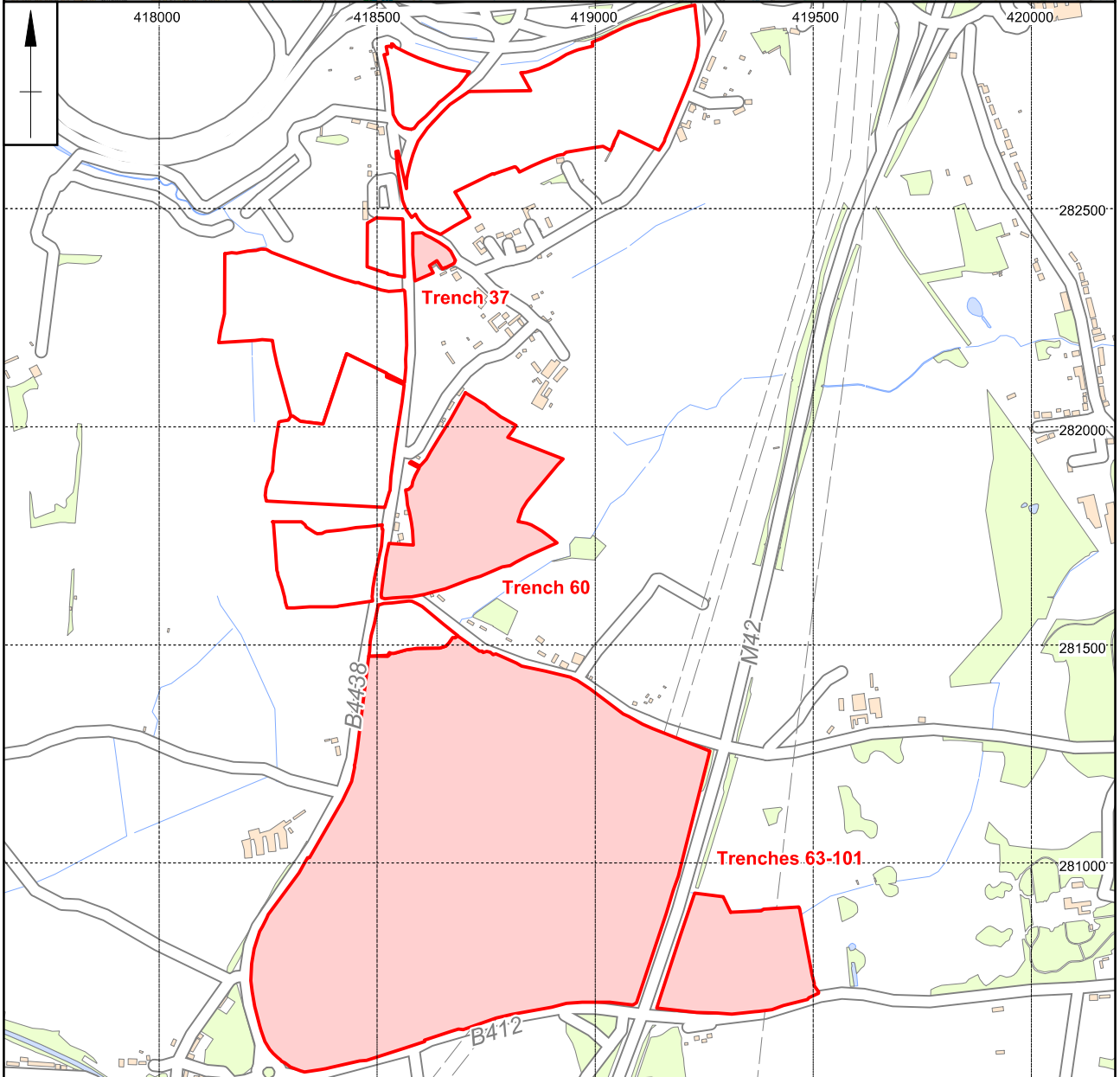
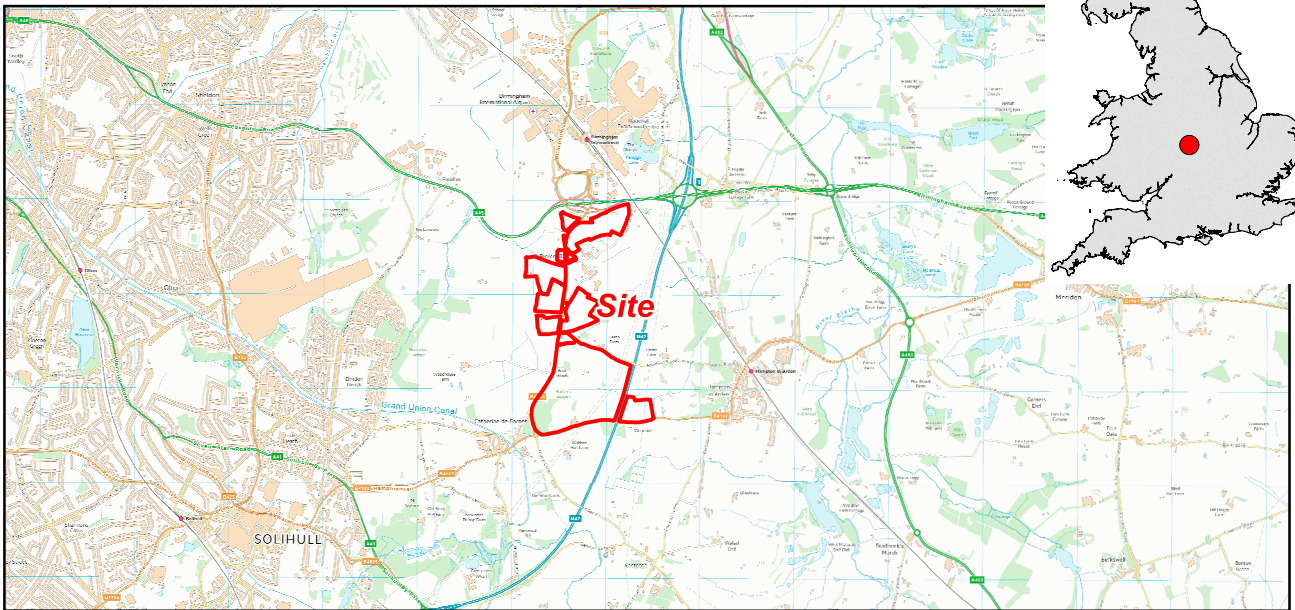
2 BACKGROUND

2.1 Location, topography and geology

The Scheme is located to the west of the existing M42, c.15km to the east of Birmingham, covering 25 fields of mixed agricultural land use (Fig 1, centred on NGR SP 185 824). The extent of land within the Scheme is c.50.2ha in size.

This interim report details work completed on the Gooch Estate (Fig 2, Trenches 63–101) and work completed to the north of this on land owned by Mr Jutla (Fig 3, Trench 37) and First Castle Development Limited (Fig 4, Trench 60).

The site lies at c.102m above Ordnance Datum and there are a variety of underlying geology types, with Branscombe and Sidmouth formations of mudstone as well as Arden sandstone formation. The superficial geology consists of Glaciofluvial deposits (sand and gravel) and alluvium (clay silt and gravel) although these are shown as patchy (BGS 2019).



OS OpenData contains Ordnance Survey data © Crown copyright and database right 2019
 Scale 1:15000 Site location Fig 1

The soils across the development are defined by the Cranfield Soil and Agrifood Institute as Soilscape 18 (CSAI 2019), which comprise slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils across 17.5% of England and Wales. The soils have impeded drainage and are moderately fertile comprising mainly seasonally wet pastures and woodland.

The land is mostly suited to grass production for dairying or beef with some cereal production often for feed. The land is tile drained and periodic mole plough or subsoiling is used to assist drainage.

3 METHODOLOGY

Initially a total of 41 trenches were investigated, each 50m long and 1.8m wide except where for Trenches 60, 37, 83 and 84, which were 1.6m wide. Trench 95 was unexcavated due to a live service. The locations of the trenches were outlined in the WSI; Trench 37 was moved to the north-east to avoid a soakaway.

The trenches were located using a Leica Survey Grade RTK GPS operating to an accuracy of +/-0.05m to Ordnance Survey National Grid and Datum and were positioned to examine a representative sample across the development area.

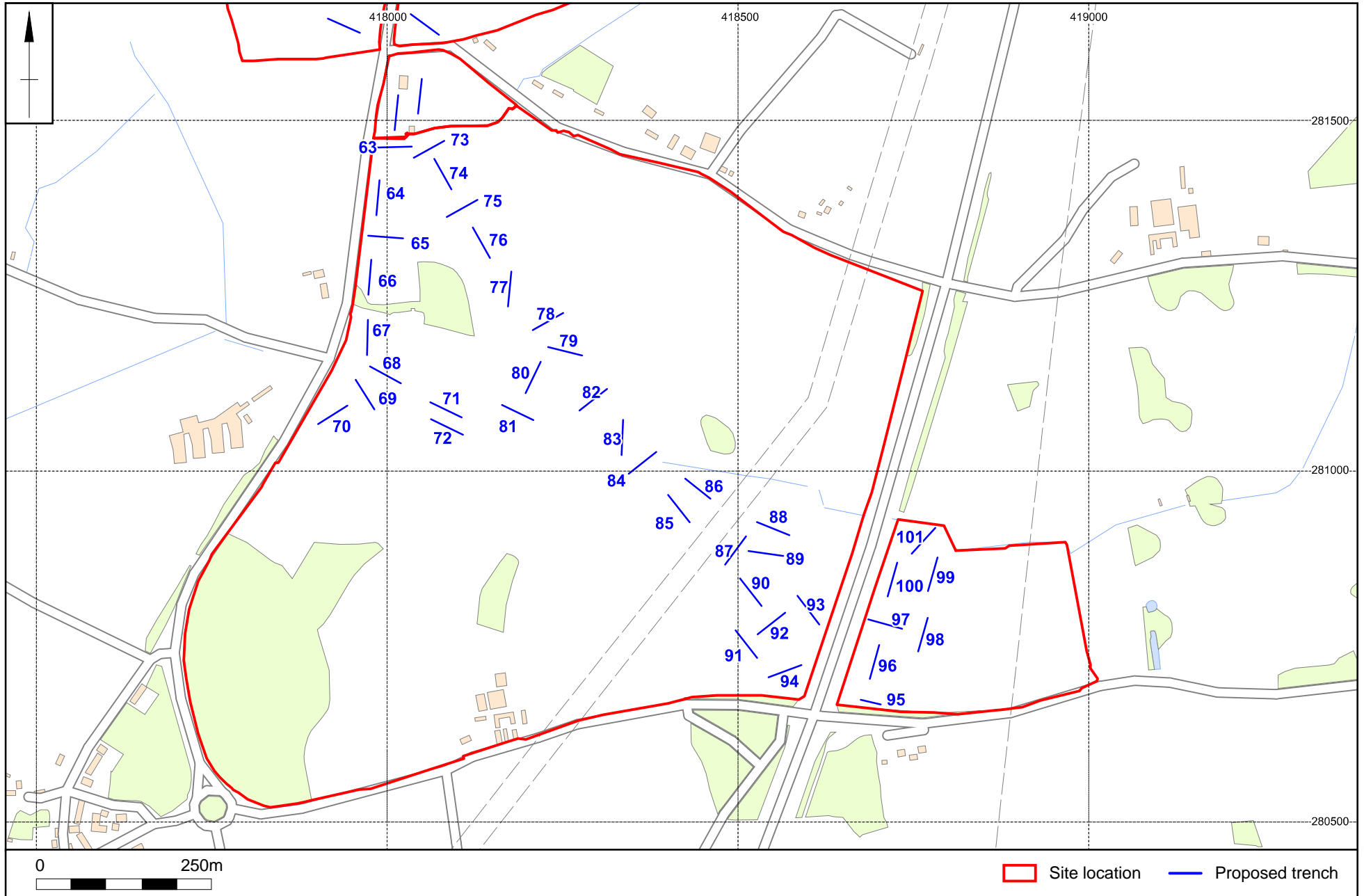
A 20-ton tracked excavator fitted with a 1.8m wide toothless ditching bucket and a JCB 3CX wheeled excavator fitted with 1.6m wide toothless ditching bucket were used to remove the overburden to the archaeological horizon or the natural substrate, whichever was encountered first. The trenches were cleaned sufficiently to enable the identification and definition of archaeological features. Archaeological deposits were examined by hand excavation to determine their nature.

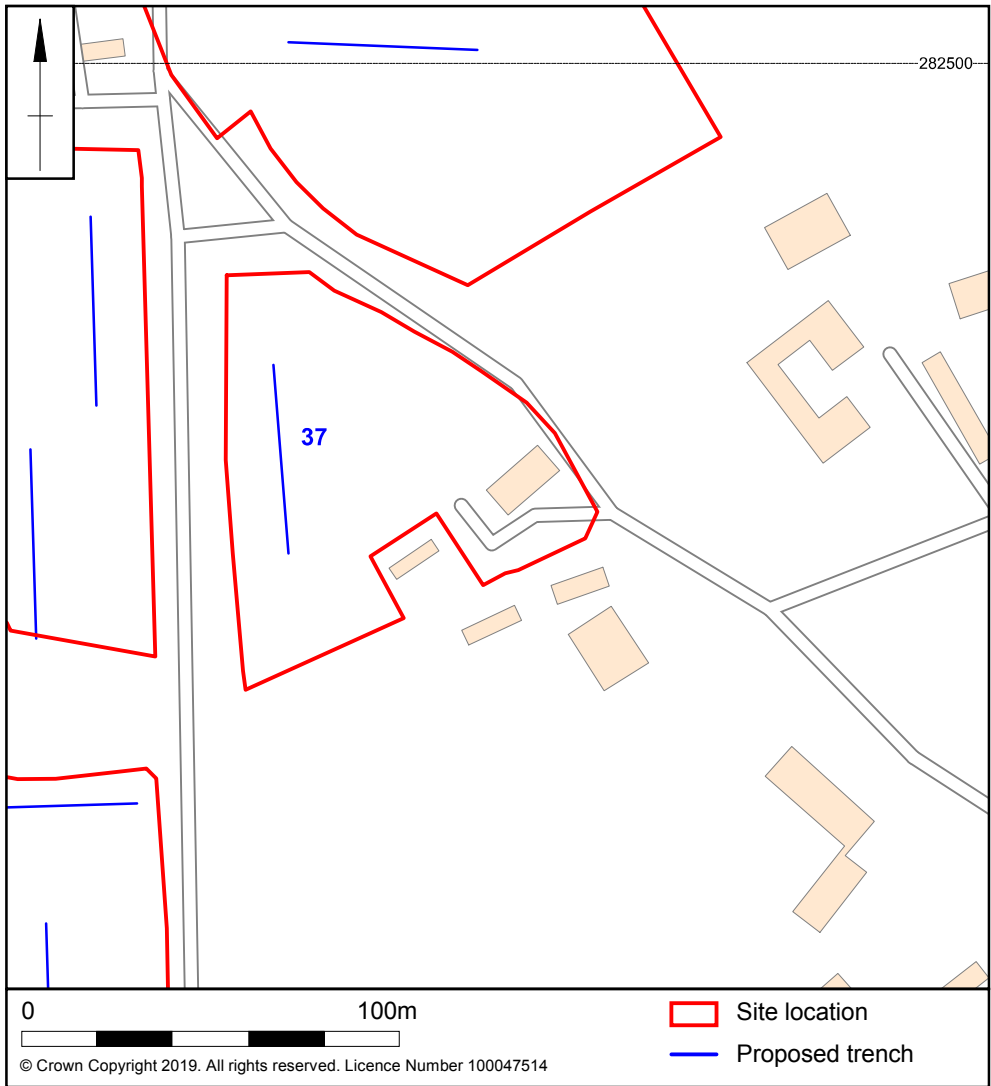
Recording followed standard MOLA Northampton procedures as described in the Fieldwork Manual (MOLA 2014). Deposits were described on *pro-forma* sheets to include measured and descriptive details of the context, its relationships, interpretation and a checklist of associated finds. A photographic record was compiled using digital images.

Archaeological features were then plotted on an overall plan at a scale of 1:50. Sections or profiles through features were drawn at a scale of 1:10, or 1:20 for long sections. All levels are related to Ordnance Datum.

Scale 1:7500 (A4)

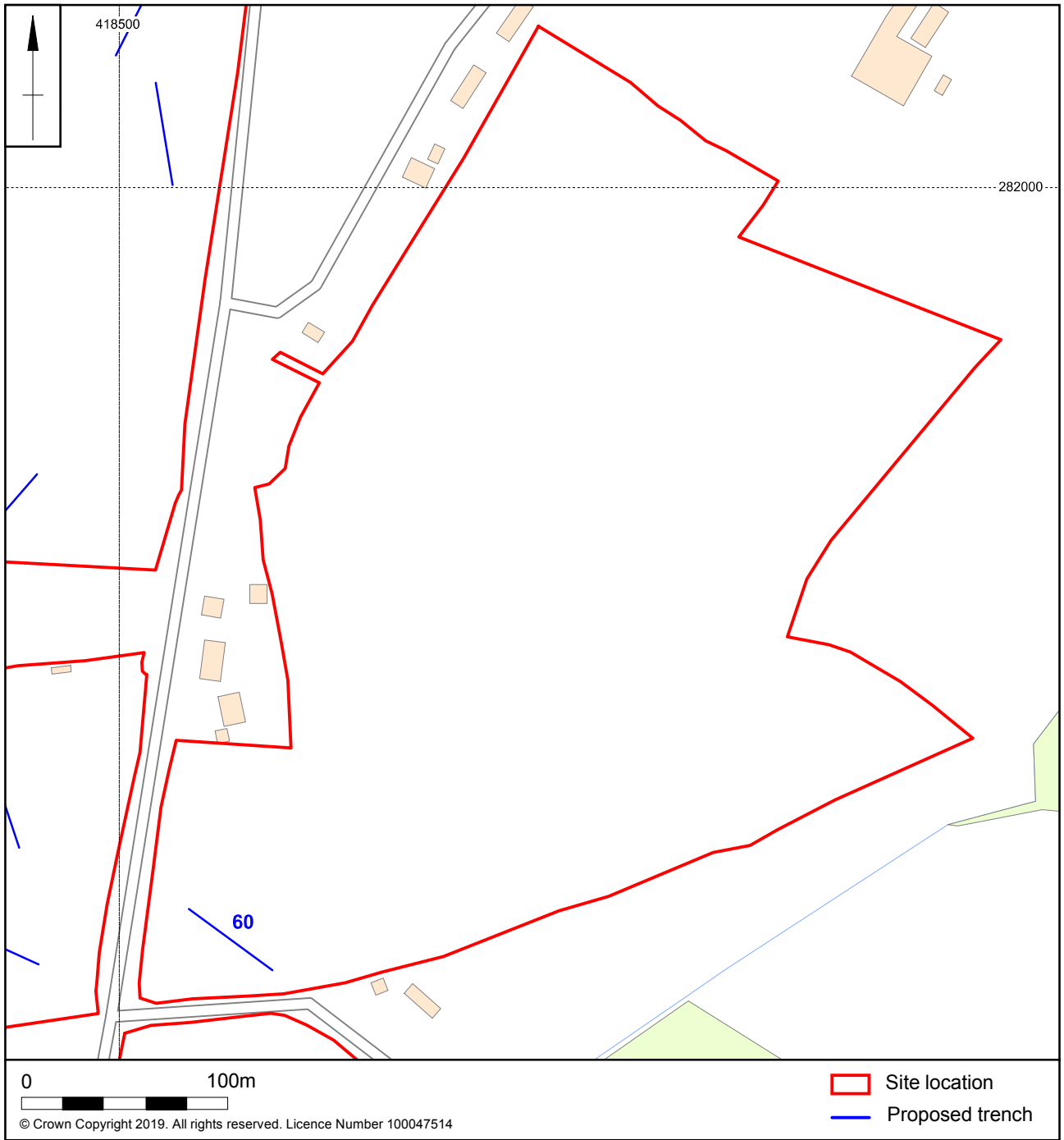
Gooch Estate trench locations Fig 2





Scale 1: 2000

Trench 37 location Fig 3



Scale 1: 3000

Trench 60 location Fig 4

4 THE EXCAVATED EVIDENCE

4.1 General stratigraphy

The natural geology observed within all of the trenches reported here comprised clay ranging in colour from grey-brown to red with occasional patches of sand and gravel. Although not observed in all trenches, red-brown clay silty subsoil with varying stone inclusions was c.0.12m thick. This was overlain by dark brown loamy clay topsoil between 0.25–0.45m thick.

4.2 The archaeological remains

The trenches described below all contained archaeological features; Trenches 63, 71, 76–77, 84–85 and 91. Sample excavation of two furrows in Trenches 63 and 71 confirmed the nature of these features, which were subsequently recorded elsewhere in plan based on their observed orientation, spacing and surface fill without further hand excavation.

Furrows were planned but not excavated in Trenches 63–66, and across the field remnants of these furrows became shallow towards Trenches 78–79 where they were only observed as soilmarks. Furrows were also located in Trenches 67, 71, 80 and 81 in the field immediately to the south but were equally truncated and also extended as far as Trenches 83 and 84. The remaining blank trenches are summarised in the Appendix.

Trench 63

There were six furrows present, one of which was investigated [6304]. The furrow contained dark brown-grey clay silt with occasional small rounded stones, which was 1.37m wide by 0.25m deep, and orientated north-west to south-east with rounded sides and base.



Furrow [6304], facing south Fig 5

Trench 71

A total of nine furrows were identified, one of which was investigated, furrow [7105]. The furrow contained mid grey-brown clay silt with occasional small rounded stones, which was 2.15m wide by 0.25m deep, and orientated north-west to south-east with a broad rounded profile.



Furrow [7105], facing north-east Fig 6

Trench 76

One field boundary ditch, [7606], was identified and investigated that contained dark grey-brown sandy clay with occasional small–medium rounded stones. The boundary was 1.70m wide by 0.29m deep, and orientated north-west to south-east with rounded sides and a flat base.



Field boundary ditch [7606], facing south Fig 7

Trench 77

One field boundary ditch, [7704], was present that contained dark grey-brown clayey silt with occasional small-medium rounded stones. The boundary was 1.46m wide by 0.40m deep, and orientated east-west with a broad rounded profile and flat base.



Field boundary ditch [7704], facing west Fig 8

Trench 84

A modern rubbish pit was located at the north-east end of the trench. A small slot was placed to investigate the pit which produced modern brick, glass and ceramic. No further work was carried out.

Trench 85

A root hollow, [8506], and field boundary ditch, [8508], were identified. The root hollow contained mottled and mixed grey brown sandy silt with occasional small stones, 0.36m in diameter and 0.24m deep, with steep sides and an uneven base.

The field boundary, [8508], contained dark brown silty clay with occasional-moderate sub-rounded stones, which was 1.50m wide by 0.42m deep, and orientated east-west with a broad rounded profile.



Field boundary ditch [8508], facing north-east Fig 9



Root hollow [8506], facing north Fig 10

Trench 91

Field boundary ditch [9106] contained mixed secondary dark grey brown silt clay with lenses of lighter brown silt, and light grey brown silt clay above it. The boundary ditch was 2.50m wide by 0.28m deep, and orientated east-west with steep sloping sides and flat base.



Field boundary ditch [9106], facing north-east Fig 11

5 DISCUSSION

The results of the evaluation covered by this interim report identified ridge and furrow cultivation, four field boundary ditches and one root hollow.

Ridge and furrow cultivation was identified in the northern fields of the Gooch Estate. The furrows were on a north-west to south-east alignment typically between 1.37–2.15m wide and up to 0.25m deep. Their overall distribution across the fields indicated heavy plough truncation. No dating was recovered and these furrows could be medieval or post-medieval in date. The open fields lay in the parish of Hampton in Arden and are probably associated with the village of Catherine-de-Barnes to the south, rather than Bickenhill that is to the north.

The root hollow in Trench 85 was fully excavated and had a clearly uneven and irregular form. The mottled and mixed grey brown sandy silt fill was slightly humic, which would be consistent with soil infused with the remains of the decayed roots.

The field boundaries were typically between 1.5–2.5m wide and 0.24–0.42m deep. Although no dating was recovered from these features, these boundaries were present within living memory (Paul Heritage pers comm, 28/04/19) and are depicted on Ordnance Survey dating from 1887.

The remainder of the trenches will be excavated over the upcoming months, and a full report discussing all the archaeological remains will be issued after the completion of fieldwork.

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Appendix: Context Inventory

Trench	Dimensions, orientation and depth	Archaeology
37 (JCB 3CX)	50m x 1.6m N-S 0.45m deep	None
60 (JCB 3CX)	50m x 1.6m NW-SE 0.50m deep	None
63	50m x 2m E-W 0.46m deep	[6304] Furrow
64	50m x 2m N-S 0.40m deep	None
65	50m x 2m E-W 0.40m deep	None
66	50m x 2m N-S 0.40m deep	None
67	50m x 2m N-S 0.30m deep	None
68	50m x 2m E-W 0.38m deep	None
69	50m x 2m N-S 0.40m deep	None
70	50m x 2m NE-SW 0.45m deep	None
71	50m x 2m E-W 0.40m deep	[7105] Furrow
72	50m x 2m NW-SE 0.30m deep	None
73	50m x 2m E-W 0.36m deep	None
74	50m x 2m NW-SE 0.41m deep	None
75	50m x 2m NE-SW 0.43m deep	None
76	50m x 2m NW-SE 0.42m deep	[7605] Field boundary ditch
77	50m x 2m N-S 0.45m deep	[7704] Furrow
78	50m x 2m NE-SW 0.43m deep	None
79	50m x 2m E-W 0.40m deep	None
80	50m x 2m NE-SW 0.30m deep	None
81	50m x 2m NW-SE 0.30m deep	None
82	50m x 2m NE-SW 0.45m deep	None
83 (JCB 3CX)	50m x 1.6m N-S 0.35m deep	None
84 (JCB 3CX)	50m x 1.6m NE-SW 0.30m deep	None
85	50m x 2m NW-SE 0.38m deep	[8506] Root hollow [8508] Field boundary
86	50m x 2m NE-SW 0.32m deep	None
87	50m x 2m NW-SE 0.37m deep	None
88	50m x 2m E-W 0.36m deep	None
89	50m x 2m WNW-ESE 0.50m deep	None
90	50m x 2m NW-SE 0.50m deep	None
91	50m x 2m NW-SE 0.50m deep	[9106] Furrow
92	50m x 2m NE-SW 0.55m deep	None
93	50m x 2m NW-SE 0.33m deep	None
94	50m x 2m WSE-ENE 0.50m deep	None
95	ABANDONED DUE TO SERVICE	N/A
96	50m x 2m NE-SW 0.52m deep	None
97	50m x 2m NW-SE 0.40m deep	None
98	50m x 2m NE-SW 0.32m deep	None
99	50m x 2m NE-SW 0.40m deep	None
100	50m x 2m NNE-SSW 0.22m deep	None
101	50m x 2m NE-SW 0.38m deep	None



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