

Archaeological strip map and sample excavation at  
Hanbury Hall, School Road,  
Hanbury, Worcestershire  
Worcestershire Archaeology  
*for The National Trust*

December 2022



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# HANBURY HALL, SCHOOL ROAD, HANBURY, WORCESTERSHIRE

Archaeological strip map and sample report

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## SITE INFORMATION

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Site name: Hanbury Hall café  
Local planning authority: Wychavon District Council  
Planning reference: 20/00416/FUL  
Central NGR: SO 94380 63750  
Commissioning client: The National Trust  
WA project number: P6169  
WA report number: 3007  
HER reference: WSM 77991  
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Museum accession number: -

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# CONTENTS

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<b>SUMMARY</b> .....	<b>1</b>
<b>REPORT</b> .....	<b>2</b>
<b>1 INTRODUCTION</b> .....	<b>2</b>
1.1 Background to the project .....	2
1.2 Site location, topography and geology.....	2
<b>2 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND</b> .....	<b>2</b>
2.1 Hanbury Hall .....	2
2.2 Previous archaeological work on site.....	6
<b>3 PROJECT AIMS</b> .....	<b>7</b>
<b>4 PROJECT METHODOLOGY</b> .....	<b>7</b>
<b>5 ARCHAEOLOGICAL RESULTS</b> .....	<b>8</b>
5.1 Introduction .....	8
5.2 Phasing descriptions.....	8
5.2.1 Natural deposits .....	8
5.2.2 Phase 1: 1701 to 1732 .....	8
5.2.3 Phase 2: c 1830.....	9
5.2.4 Phase 3: c 1830 to 1877 .....	9
5.2.5 Phase 4: 1880 to earlier 20 <sup>th</sup> century .....	9
5.2.6 Phase 5: mid-20 <sup>th</sup> century.....	9
<b>6 ARTEFACTUAL EVIDENCE</b> .....	<b>10</b>
<b>7 ENVIRONMENTAL EVIDENCE</b> .....	<b>10</b>
<b>8 CONCLUSION</b> .....	<b>11</b>
<b>9 PROJECT PERSONNEL</b> .....	<b>11</b>
<b>10 ACKNOWLEDGEMENTS</b> .....	<b>11</b>
<b>11 BIBLIOGRAPHY</b> .....	<b>11</b>
<b>12 CARTOGRAPHIC AND PLAN SOURCES</b> .....	<b>12</b>

## FIGURES

## PLATES

## APPENDIX 1: CONTEXT SUMMARY

## APPENDIX 2: SUMMARY OF PROJECT ARCHIVE (WSM 77991)

## APPENDIX 3: SUMMARY OF DATA FOR HER

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# Archaeological strip map and sample excavation at Hanbury Hall, School Road, Hanbury, Worcestershire

By Tim Cornah and Graham Arnold

With contributions by Robert Hedge and Tom Vaughan

Illustrations by Tim Cornah

## Summary

An archaeological strip map and sample excavation was undertaken at Hanbury Hall, School Road, Hanbury, Worcestershire (NGR SO 94380 63750). The project was commissioned by The National Trust, in advance of construction of a new café in the service yard to the west of the main house. Planning permission had been granted subject to a programme of archaeological works.

The earliest element were two sections of wall, which would have been a single structure originally, with external surfaces on the north-east side, and internal features such as a corner fireplace to the south-west. This layout does not clearly fit any known plan, though its dimensions would be most consistent with that mapped in 1732 at the point it joins the main building. No suggestion of the angled wall as mapped was present, though it is possible that this was a partially covered, external area originally.

The building was remodelled by 1830, at which point it was planned with the functions of the rooms identified. These included a kitchen, brewhouse and scullery on the ground floor. The majority of the structural features revealed dated to this phase, including a culvert under what was at that point shown as a covered walkway. This walkway was later changed to become a corridor in the later 19th century, and further remodelled in the 20th century. The building was demolished in the 1960s and levelling layers placed on top of the structure to form the present courtyard.

The artefactual evidence consisted largely of modern material that was retained on site, with the exception of some perforated tiles reused within an 1830 wall. These tiles are an unusual survival. They suggest that malting or drying was taking place on the estate during the 18th century, probably associated with the production of beer, as seen by the brewhouse at the north-west end of the building on the 1830 plan. They should be retained, and further research into the likely site of the drying floor, and the associated activities, may yield valuable insights into the economy of the estate in the 18th and early-19th century.

# Report

## 1 Introduction

### 1.1 Background to the project

An archaeological excavation was undertaken by Worcestershire Archaeology (WA) in February 2022 at Hanbury Hall, School Road, Hanbury, Worcestershire (Centred on NGR SO 94380 63750). The project was commissioned by The National Trust, in advance of construction of a new café in the service yard to the west of the main house. Planning permission had been granted subject to a programme of archaeological works (planning reference 20/00416/FUL).

The Archaeology and Planning Advisor to Wychavon District Council (WDC) considered that the proposed development had the potential to impact upon specific heritage assets (WDC 2020). Previous watching brief and evaluation works on the site had identified structures from the former service wing, including brick surfaces, a tiled floor of a corridor, brick walls and a brick drainage culvert dating to the 19<sup>th</sup> century.

No brief was provided but a Written Scheme of Investigation (WSI) was prepared by Worcestershire Archaeology (WA 2022) and approved by the Archaeology and Planning Advisor to WDC. The excavation also conforms to the industry guidelines and standards set out by the Chartered Institute for Archaeologists in *Standard and guidance: for archaeological excavation* (ClfA 2014a) and the *Standards and guidelines for archaeological projects in Worcestershire* (WCC 2019)

### 1.2 Site location, topography and geology

The excavation area is located alongside the parterre wall on the south-west side of the service yard, to the west of Hanbury Hall (Figure 1), with the coach house, stables and outhouses to the north-east. The excavation area covers 225m, the approximate footprint of the new café. The service yard is a flat terraced area, currently gravelled, with a turfed slope down to the Lower Yard to the north-west. The service yard lies within the wider landscape of Hanbury Hall park and gardens (Figure 1).

The underlying geology comprises bedrock of the Branscombe mudstone formation, with no superficial deposits recorded (BGS 2022).

## 2 Archaeological and historical background

By Tom Vaughan, Tim Cornah and Graham Arnold

The background to the site is given in *A Historic Building Report and Heritage Impact Assessment* (HIA) by Donald Insall Associates (DIA 2021). This includes a phased map regression of the service wing (*ibid*, 28). The *Archaeological Impact Assessment* for the associated Biomass Boiler works also includes information about the service yard (Fearn Heritage and Archaeology 2021).

### 2.1 Hanbury Hall

Hanbury Hall is a Grade I listed building (NHLE 1350164). The Historic England National Heritage List Entry for the building is as follows:

Country house in landscaped park. Dated 1701 with early and mid-C19 alterations. Built by William Rudhall for Thomas Vernon. Red brick in Flemish bond with ashlar dressings; plain tiled hipped roof with broad eaves and large brick stacks. Central block with wings to front and rear returning to project on side elevations as independent pavilions. Two storeys and attic with dormers and central cupola; moulded plinth, band between storeys and wood modillion eaves cornice; Queen Anne style. South-east entrance elevation: 3:1:3:1:3 bays; outer three bays wings; central three bays break forward, are pedimented and are flanked by engaged Corinthian columns on high pedestals. Windows are mainly 18-pane sashes, most retaining their thick glazing bars, and have moulded



architraves, sills and keyblocks; central first-floor window has an elaborately carved surround with large scrolls and an apron carved with the Vernon coat of arms flanked by the date "1701". The dormers are pedimented, the pediments of the central five bays being alternately segmental, and have 12-pane sash windows; contained within the central entrance pediment is an oeil-de-boeuf window. The entrance porch with its two Corinthian columns and entablature is an early C19 addition; the front and sides have glazed infill and, within, are the half-glazed double entrance doors. The central octagonal timber cupola was rebuilt in 1809 and has glazed semi-circular headed sides, a clockface to front and rear, a moulded cornice and an ogee dome with ball finial and weathervane. The south-west side elevation is articulated by a regular 2:7:2 arrangement; the north-east side elevation is of 3:4:2 composition, the left bay of the recessed centre having a blocked doorway with pedimented surround. The rear elevation has two small square mid-C19 additions in the angles with the wings. The lead rainwater goods throughout are decorated with lions' heads and rosettes.

Interior: Hall occupies five central front bays and is panelled and has painted ceiling with trompe l'oeil saucer domes; wall facing the entrance has an original bolection-moulded chimney-piece above which is niche containing white marble bust of Thomas Vernon, possibly by Francis Bird; against right wall are set three Corinthian half-columns and to left side of hall is the staircase. Staircase: large open-well type with turned and fluted balusters, some original parquet on landings; former dado removed to make way for wall paintings by Sir James Thornhill, c1710. These are set within architectural surrounds and depict scenes from the Life of Achilles; the ceiling above shows an assembly of the classical deities. There are also two panels by Thornhill on the ceiling of the Long Room of Apollo and Leukothea and the Rape of Orithyia; in the same room is an ornate Rococo chimney-piece of c1750. During the late C18 Emma Vernon undertook some internal alterations including the redecoration of the Library and Drawing Room in the front wings in a Neo-Classical style. In the Parlour to the rear of the Hall is further panelling and another bolection-moulded chimney-piece. Upstairs a similar chimney-piece survives in a complete three-room apartment (known as the Hercules apartment), to the rear of the south-west wing which is panelled throughout and has an additional small corner fireplace with pilastered surround and ogee canopy.

The actual authorship of Hanbury Hall is uncertain. It incorporates elements of William Talman's designs, notably the centre-piece of Thoresby, Nottinghamshire of the 1680's, the garden front at Swallowfed Park, Berkshire of 1689-91 and the interior layout of Fetcham Park, Surrey of 1705. It also bears strong similarities to the nearby Ragley Hall, Warwickshire of 1679-83 by Robert Hooke with its old-fashioned hipped roof, central pediment and "pavilion" wings. The surviving drawing by the builder William Rudhall is not unlike Thoresby and, as it is quite possible Rudhall may have worked at Ragley, the consequent design of Hanbury could be his amalgamation of these two influences. Hanbury Hall was the seat of the Vernon family until 1953 when it was given to the National Trust. <https://historicengland.org.uk/listing/the-list/list-entry/1350164>

The coach house, stables, attached wall and archway on the north-east side of the service yard are Grade II listed (NHLE: 1081235; WSM 35762). The List Entry is as follows:

HANBURY CP SCHOOL ROAD (north side) SO 96 SW 3/127 Coach house, stables and attached wall and archway adjoining Hanbury Hall to the north-east GV II Coach house, stables and attached wall and archway. Early C18 with mid-C19 and mid-C20 alterations. Brick with ashlar dressings; plain tiled hipped roofs. Large rectangular block aligned north-west/south-east of 3:1:3 bays; central bay breaks forward slightly and was originally open for coach access; the large semi-circular headed archways on both elevations are now blocked.

Two storeys; moulded eaves cornice to north-east elevation. North-east entrance elevation: chamfered end quoins; central blocked archway has ashlar jambs; flanking bays have blind semi-circular arched openings with keyblocks; central bay and three bays to right have inserted garage doors. A five-bay wing adjoins the north-west end, having three doors, two with transom lights, a double door and a 6-pane upper level window in its north-east elevation. The attached wall is about

10 feet high and where it adjoins the house there is an archway with an angled head, similar to those in the forecourt wall (qv). The coach house and attached wall enclose the rear courtyard to the north-east of Hanbury Hall(qv) near the Long Gallery (qv).  
<https://historicengland.org.uk/listing/the-list/list-entry/1081235>

The landscape within which the Hall lies is a Grade II registered park and garden (NHLE: 1000883; WSM 05800). The List Entry is as follows:

**LOCATION, AREA, BOUNDARIES, LANDFORM, SETTING** Hanbury lies within the bounds of the medieval forest of Feckenham, c 6km east of Droitwich and c 7km south of Bromsgrove. Hanbury Park lies 2km west of Hanbury village, and south-west of Hanbury's isolated hilltop church. The park, of c 50ha, is bounded to the south-east, its longest side, by the minor road from Hanbury to the B4090 Droitwich to Alcester road. A minor road north off the former marks the east end of the park. Otherwise its bounds follow field edges. The local topography is mostly level, and overlooked from the low rise on which the Hall sits. The lowest part of the park is to the north-west; here the tendency for the underlying clay to produce waterlogging is most marked.

**ENTRANCES AND APPROACHES** The curving main drive approaches the forecourt of Hanbury Park from Pumphouse Lane, the minor road leading south-west from Hanbury village. An unusually large, three-bay lodge, probably late C18, of brick with ashlar details (listed grade II) marks the entrance. Near the Hall the drive swings to approach the forecourt up the centre of the avenue of trees which leads south-east from the Hall. In the early C18 the drive presumably ran straight down the avenue to the Hanbury road. The date of the change of alignment is unknown although it probably took place c 1770 when the formal landscape was swept away.

West Lodge, a brick cottage of C19 date, lies at the south-western extremity of the park. In the late C19 an avenue ran north-east from the lodge almost to the ha-ha around the Hall's grounds, but there is no evidence that this was ever an approach route.

A secondary approach lies east of the main drive, leading off the Hanbury road opposite Beck's Farm and leading to the rear of the Hall. Lines of trees were planted to either side of that drive in the late C20 along the first section off the public road. The approach was created before 1880; it presumably replaced a track to the Hall c 100m to the west, present in 1830.

**PRINCIPAL BUILDING** Hanbury Hall (listed grade I) was rebuilt and fitted out between c 1679 and c 1715. It replaced an earlier building; a pond immediately west of the Hall may be a section of the moat round the medieval house. Although designs by three men exist the Hall's architect remains unknown. Of brick with stone dressings, the main, south-east front is of two storeys and eleven bays, the centre five recessed and with a pediment supported on half columns over the centre three. The date 1701 appears between the front door and a richly framed centre window. The side elevations are also of eleven bays, those to the centre recessed to create pavilions to each corner. Extensive alterations and restoration works took place 1856-9. A Long Gallery (listed grade II\*) of c 1701 lies c 30m to the north-west of the Hall, and linked to it by a 6m high brick wall. Service buildings to the rear (north) of the Hall include early C18 stables (listed grade II) and an C18 brick game larder (listed grade II).

**GARDENS AND PLEASURE GROUNDS** Hanbury's main, south-east facade faces a forecourt with walls, gate piers and Moorish gazebos, all designed c 1855 by R W Billings (1813-74) (listed grade II). Until the C20 the walls incorporated ironwork whose elaboration matched that of the brick and stone work. Beds around the edge of the forecourt and a statue in the centre represent a mid C20 re-ordering and softening of the interior of the court, replacing a path and a fountain. In the early C18 and until c 1770 (when they were removed) there was a different arrangement, of a short inner court with statuary and a longer outer one, both with elaborate gates and screens. In the 1850s Sir Thomas Vernon reinstated the present forecourt. The gates installed at that time may have been replaced by the present ones in 1923.

The gardens around the house were apparently designed by George London (d 1714) at about the time the Hall was completed (c 1701). Early C18 views show those gardens which lay principally on the south-west side of the Hall and which were apparently destroyed by the later 1770s when a more naturalistic landscape was contrived. In 1993 a restoration of the early C18 layout was undertaken based on the contemporary views and archaeological investigations. As reconstructed the gardens comprise a sunken, quartered, parterre garden against the south-west front of the Hall, abutted by a fruit garden to the north, a segmented parterre to the south, and a woodland garden cut through with rides (the Wilderness) to the west. A pair of trellis pavilions (early 1990s) lie at the far (north-west) end of the Fruit Garden.

The main element of the early C18 gardens to survive the clearance works of the 1770s was the Cedar Walk, which led north-west from the formal gardens, continuing the main axis through them. One cedar remained in 1997; otherwise the Cedar Walk comprises a double avenue of oaks, perhaps of late C19 date. Further planting in the late C20 extended the line of the Walk to close to the west boundary of the park.

In the mid C18 the garden area was apparently extended to the west, and c 1745 a nine-bay brick orangery (listed grade II\*) with stone details and a low pediment, embellished with a finely carved basked of fruit and flowers, was built beyond the Wilderness. A mushroom house of c 1860 abuts the rear of the orangery.

It was probably when the early C18 layout was swept away in the 1770s that the ha-ha (listed grade II) was constructed, sweeping around the south-east side of the Hall before turning up its north-east side and enclosing some 9ha. A Buckler drawing of 1833 showing deer close to the Hall is probably fanciful. The main planting of the pleasure grounds within the ha-ha probably took place in c 1860 following the reconstruction of the Hall, and many of the specimen conifers date from that time.

**PARK** The park is permanent pasture in 1997 and little of it appears to have been ploughed since the early C18. Extensive areas of relatively narrow ridge and furrow of C18 or early C19 date survive underlying the parkland features, especially in the northern part of the park and in the area south-west of the kitchen gardens. The park was probably created c 1700, at the time the house was rebuilt and the formal gardens laid out. Its easternmost section, between Beck's Farm and St Mary's Church, was added to it 1830 - 1884. Deer were last kept in the park in the 1920s.

A number of avenues were laid out c 1700, and as with the gardens, George London may have been involved. The principal avenues were those which approached either side of the forecourt from the south-east, flanking the main approach. About 1970 the elm avenue in that position was replaced by one of lime; at the same time the avenue was carried south-east of the Hanbury road by c 300m, reintroducing a mid to late C19 extension of the avenue. Little if any trace remained in the late C20 of the other avenues and tree-lined walks laid out in the early C18: the 584 yard Lime Tree Walk running north-east to the park boundary, and the 633 yard Long Walk. The latter, north of the Hall but not aligned on it, led north-north-east to the park boundary past the north side of the fan-like Semicircle. The Semicircle (for which a design by London survives) was set on a slight promontory on the highest point of the park and intended to give distant views to hills and church steeples. A mature, widely spaced plantation covered the area of The Semicircle in 1997.

A good deal of planting in the park appears to have gone on in the second half of the C19. The continuation of the Cedar Walk has already been mentioned, probably of a similar date being a line of oaks which runs parallel with and west of the west wall of the kitchen gardens. The park as a whole contains numerous mature specimen trees, largely oaks, scattered, in clumps, and as the survivors of shelter belts. It also contains specimen coniferous trees, again probably mid to late C19; especially notable is a clump of Wellingtonia c 150m north of the Cedar Walk.

Other features in the park include numerous ponds and marl pits, among the former Brick Kiln Pool, c 300m north of the Hall and reputedly the source of the clay for its bricks. West of that pool is a

brick and stone monument to the horse 'Pulpit' (d 1857), with at its foot a grave marker of 'Allan' (d 1872). Further west still, adjoining the west boundary of the park, are the earthworks of the kennels present in the late C19 and early C20.

A medieval deer park in the eastern part of the parish (and not impinging on the later park) was inclosed in the C17.

**KITCHEN GARDEN** The walled gardens lie c 200m west of the Hall, and are approached from the area to its rear by the straight, evergreen-hedged, Primrose Walk (later C19) which enters the main garden compartment through an arched gateway. The Primrose Walk vista was originally carried across that garden and out to the park beyond through a gate, later blocked, in the west wall of the garden. The gardens were apparently developed in this area only after the 1730s, and the walls (listed grade II) are of the C18 and especially the C19. A range of sheds of c 1860, adapted c 1990 for use by the National Trust, runs across the interior of the main compartment. No glasshouses survive, and the interior is grass. Abutting that compartment to the south, and separated from the park by railings, is Kyte's Orchard. The main orchard area, newly replanted in the 1980s, lies north of the Primrose Walk. Immediately north of that is the Gardener's Cottage, a substantial mock half-timbered and tile-hung house of c 1860.

North of the kitchen gardens and orchards is a further, five-sided, walled and iron-railed compartment of probably C18 date, with Ice House Cottage (listed grade II) of like date at its south-east corner. Immediately to the west of the compartment is a series of three ponds, the lowest where ice was made for storage in the C18 icehouse (listed grade II) east of the cottage. In the C18 called Lower Menagerie, and adjoined to the south by an enclosure called Upper Menagerie, the compartment may at some stage have been a kennels court. The Listing description records a tradition that Ice House Cottage was built as a garden pavilion. Eight tons of Westmorland slate are recorded in the Vernon family archives as having been bought for the Menagerie in 1780. <https://historicengland.org.uk/listing/the-list/list-entry/1000883>

## 2.2 Previous archaeological work on site

In 1999 Worcestershire Archaeological Service undertook monitoring of topsoil stripping within the service yard to the west of Hanbury Hall. The limited scope of the works restricted observation to relatively superficial deposits which were dated to the 19th or 20<sup>th</sup> century including a brick surface (Hurst 2000). These were considered to relate to the former servants' quarters which had been demolished in the 1960s.

The recent geophysical survey and evaluation associated with the current development are summarised in Fearn Heritage and Archaeology AIA (2021, 7), as follows:

In 2018, a geophysical survey (GPR and electromagnetic) was carried out in the service yard to identify services. The survey also identified probable remains of earlier buildings and shallow modern surfaces (SUMO 2018). The buildings in the centre and south of the yard were between 0.35m and 1.10m below ground level (BGL); the modern surfaces were in the east of the yard and at a depth of 0.25m. No building remains were identified on the north side of the yard or beyond the yard towards the game larder to the north.

In 2019, two evaluation trenches were excavated within the service yard (Border Archaeology 2019). Trench 1 was positioned at the west corner. It showed modern gravel and builders' sand, overlying rubble, which was probably from the mid-20th century demolition. Natural mudstone deposits were found 0.70m below the ground level.

Trench 2 was positioned in the south of the yard over an area of buried building remains located in the 2018 geophysical survey. The trench revealed the remains of the late 18<sup>th</sup> / early 19<sup>th</sup> century addition to the kitchen block. They consisted of the stubs of two north-west to south-east brick walls at c 0.35m below ground level, enclosing a well-preserved tiled corridor surface at c 1m below ground level. On the north side was a blue brick yard surface at a depth of 0.35m. A brick culvert

was noted running underneath the corridor (north-west to south-east) at c 1.10m below ground level.

It appears that the walls had been demolished to the level of the blue brick yard (0.35m BGL), and then the area was backfilled with rubble, overlain with modern builders' sand and sealed with tarmac to create the current service yard surface. The culvert was not identified on the geophysical survey as a service but appears to be the same construction as the corridor and follows the same north-west to south-east orientation. The two brick walls either side of the corridor were clearly identified in the geophysical survey).

In late 2021 and early 2022 Worcestershire Archaeology undertook a watching brief of the groundworks associated with the installation of a new biomass boiler on behalf of The National Trust (Arnold and Vaughan 2022; WSM 77814). The boiler was located outside the service yard, to the north, adjacent to the game larder, while service trenches were excavated along the north-east and south-east sides of the service yard and either side of the present excavation area (*ibid*, figure 2). Brick drainage features and boundary walls were observed adjacent to the game larder. Brick walls and cobbled surfacing of the former stables were noted on the north-west side of the extant stable block at the north end of the service yard, which are visible on the 1st edition 1885 Ordnance Survey map and subsequent editions of 1903 and 1927. Elsewhere across the service yard a series of wall footings and a drain were recorded, dating to the early 18th century and shown on the map of 1732. The majority of the trenching followed existing modern services so did not disturb archaeological deposits. No archaeological deposits or structures were exposed, or in situ finds recovered pre-dating the establishment of the present Hall in the 1700s, nor was there evidence of the possible moat to the west of the Lower Yard, the holloway to the north-west or of a medieval manor house.

### 3 Project aims

The aims of the investigations were:

- to make a full record of the archaeological remains within the excavation area;
- to determine the extent, condition, character, and date of any archaeological remains present;
- to assess the significance of any archaeological remains revealed, placing them within their local, regional, and national context
- to enable, where appropriate, the preservation in-situ of any archaeological remains revealed;
- to undertake a CCTV investigation of the culvert identified in the evaluation (Border Archaeology, 2019, 11, Trench 2).

### 4 Project methodology

A WSI was prepared by Worcestershire Archaeology (WA 2022). Fieldwork was undertaken between 7 and 17 February 2022.

The excavation, amounting to 225m<sup>2</sup> in area, was located over the footprint of the previous west wing and the proposed café footprint (Figures 1, 2 and 3). The original proposed 525m<sup>2</sup> area was reduced following discussion with the Archaeology and Planning Advisor to WDC after analysing the impact levels on modern made ground deposits.

The section of hedge on the north-west edge of the excavation area along the north-west side of the service yard was removed by The National Trust ecologists prior to the archaeological works. The modern porch to the south was removed by contractors during the initial machining of the area, under archaeological supervision.

Deposits considered not to be significant were removed under constant archaeological supervision using a JCB 3CX type wheeled excavator, employing a toothless bucket. Subsequent excavation was

undertaken by hand. Clean surfaces were inspected and selected deposits were excavated to retrieve artefactual material and environmental samples, as well as to determine their nature. Deposits were recorded according to standard Worcestershire Archaeology practice (WA 2012) and trench and feature locations were surveyed using a GNSS device with an accuracy limit set at <0.04m.

The area was also recorded photogrammetrically with a UAV (drone) to create a plan and [3D model](https://sketchfab.com/3d-models/outbuilding-footings-30c511f7b3834e14a35c6f1153dd5df3) of all of the structures exposed (<https://sketchfab.com/3d-models/outbuilding-footings-30c511f7b3834e14a35c6f1153dd5df3>). On completion of the excavation, the area was not backfilled, but left open for piling to be positioned to avoid archaeologically sensitive areas.

All fieldwork records were checked and cross-referenced. Analysis was undertaken through a combination of structural and artefactual evidence, allied to the information derived from other sources.

After discussion with the Archaeology and Planning Advisor to WDC it was decided that CCTV was not required for the culvert as it had been identified at both ends of the site and the outline was able to be recorded. Following the excavation, the culvert was further recorded when a section was removed in order to lay service pipes into the site.

The project archive is currently held at the offices of Worcestershire Archaeology. Subject to the agreement of the landowner it is anticipated that it will be deposited with Museums Worcestershire.

## 5 Archaeological results

### 5.1 Introduction

The features and structures recorded in the excavation area are shown in Figures 2-5 and Plates 1-22. The trench and context inventory are presented in Appendix 1. This section is laid out in phases of the building, from earliest to latest and later modern deposits. A 3d model of the excavated features can be accessed here:

<https://sketchfab.com/3d-models/outbuilding-footings-30c511f7b3834e14a35c6f1153dd5df3>

### 5.2 Phasing descriptions

#### 5.2.1 Natural deposits

The natural reddish-brown weathered mudstone and clay, 1005, was only recorded in a sondage close to the house and the service trench to the north-west end of the excavation area (Arnold and Vaughan 2022: Trench 5). These were overlain and cut by the structures of the service wing and brick drainage culvert. No extant topsoils or subsoils were revealed, except along the bank to the north-west of the excavation area, (1003).

#### 5.2.2 Phase 1: 1701 to 1732

The earliest features were in the north-west end of the area in the form of surfaces and walls. These could not be related to any specific maps or plans, but were earliest stratigraphically. Surface (1022) was formed of pebbles, either side of stone slabs (1023) within its middle, and wall (1020) to the south (Plate 14). It is probable that (1022) was an external surface, though its function remained unclear.

Walls (1039) (bricks 8 ½ by 4 ½ by 2 ¼ inch) and (1041) (bricks 9 ¼ by 4 ½ by 2 ½ inch) (Plate 4) may be related to these surfaces, their phasing was not clear, but the degree of overall truncation suggests a relatively early date.

Within the south-eastern end of the area was brick wall (1026) (bricks 9 by 4 ½ by 2 ¾ inch) (Plate 23) running to the north-west. This may represent a continuation of wall (1020) to the north-west. On the south of (1026) was a further brick triangular structure (1027) (bricks 9 by 4 ½ by 2 ¾ inch), the most likely function of which was a corner fireplace which were typical in the earlier 18<sup>th</sup> century. On the north-east side of, and butting, wall (1026) was an element of packed pebble stone layer (1037)

which may have formed an exterior surface. This alignment fits closest with the 1732 Doharty map, though it is not exact (DIA 2021, p24).

It is probable that walls (1020 and 1026) were originally part of the same structure with surfaces (1022, 1023 and 1037) being external to this on the north-east side, with the features to the south-west being internal. This layout does not clearly fit any known plan, though its dimensions would be most consistent with that mapped in 1732 when it connected with the main Hall building.

### **5.2.3 Phase 2: c 1830**

The insertion of brick walls (1029) and (1016) (bricks 9 by 4 ¼ by 2 ¾ inch) saw the construction of the building as remained into the 20<sup>th</sup> century and planned for the first time in 1830 (DIA 2021, p31).

At the north-west end was a fireplace (Plate 12) which would have heated a room labelled as a brewhouse in 1830, with a scullery and kitchen to the south-east. It is likely that the scullery was defined by walls (1045, 1047) with brick floor surface (1024) a slightly later addition (see Section 5.2.5). Walls (1018, 1033, and 1048) (bricks 9 by 4 ¼ by 2 ¾ inch) did not fit closely with any of the planned walls, though it is possible that these were for supports for flooring.

The entrance to the building appears to have been on its north-east side as planned in 1830, though with at least three changes of position as represented by brick wall (1025), with the later entrance to the south of this. Tiles formerly from a brewery were reused within this (Plate 8; see Section 6).

The brick culvert (1017) (Plates 19 to 22) was 0.60m wide and 1.20m deep internally, and c 1.00m wide externally. It had an arched top, constructed of a double skin of bricks, constructed of red bricks 9" x 4" x 3" in a cement mortar. The base was lined with slate. Pipes had been inserted into it, but it was otherwise in a very good state of repair. The culvert had been blocked at its north-west end with a brick wall in the Lower Yard. The course of this feature has been mapped and discussed in the watching brief report (Arnold and Vaughan 2022: Trench 5, 503) and is known to have run under the Phase 3 corridor.

### **5.2.4 Phase 3: c 1830 to 1877**

The 1830 plan shows a corridor on the north-east side of the building, though colonnaded, rather than a full wall, so would have been part open. This arrangement was formalised with a brick wall (1010) (bricks 9 by 4 ¼ by 2 ¾ inch) by the time of the 1877 drainage plan and shown again on the 1885 1<sup>st</sup> edition Ordnance Survey map. Brick surface (1015) ran under surface (1014) and is considered to be the original flooring of the corridor.

### **5.2.5 Phase 4: 1885 to earlier 20<sup>th</sup> century**

Within the room labelled as the scullery on the 1830 plan, a brick floor was laid (1024) (Plate 17 and 18), probably at the same time as the ceramic drain pipes and lead piping, which truncated the earlier phases of the building.

### **5.2.6 Phase 5: mid-20<sup>th</sup> century**

The main clear addition of this phase were the tiles in the corridor, (1013) along with concrete steps (1011) (Plates 5 to 7). They were mass-produced machine-made tiles, as seen by the imprints on their base (Plate 9). After the laying of this floor, the corridor was blocked by brick wall (1012), and the tiles on its north-west side removed, leaving the bare subsurface (1014).

The building was demolished in 1965 (DIA 2021) with a demolition layer left (1004 / 1006) and landscaping of the area in 1996 (monitored by Worcestershire County Council Archaeology Service; Hurst 2000) raised the area, putting down a mixed made ground layer of redeposited natural and mixed soils, overlain by modern sands and gravels in the newly constructed terraced area, with the area nearest the building having York stone slabs, and a tarmac service yard.

## 6 Artefactual evidence

By Robert Hedge, MCIfA

Recovery of artefacts was undertaken according to standard Worcestershire Archaeology practice (WA 2012).

Finds were largely confined to material within demolition rubble and levelling deposits and included a typical range of later-19<sup>th</sup> and early-20<sup>th</sup> century transfer-printed whitewares (fabric 85), late stoneware (fabric 81.4) preserve jars, glass bottles, and kitchen waste including butchered mammal bone and oyster shell. This material was retained on-site at the request of The National Trust.

The only finds recovered for analysis were samples of re-used tiles from within wall 1025 (Plate 8). They comprise examples of two different designs of perforated tile, of a type typically used in the construction of floors for grain drying and malting kilns.

The first type were rectangular tiles around 10" x 7" ½, and approximately 1" 1/8 in depth. They were hand-made. From the sanded side, an irregular grid of 5 x 7 conical cells had been punched into the tile. Each cell was around 22mm in diameter, and terminated in a 4-5mm perforation through the smooth upper face of the tile. According to Crew's (2021) classification system, these tiles can be categorised as '1C/5x7'. The fabric was bright red, with sparse red sandstone inclusions and occasional flecks of mica: it is essentially a typical 17<sup>th</sup>/18<sup>th</sup> century tile fabric.

The second type were also rectangular, although no complete examples were recovered. The length was over 7" ½, and they were 6" ¾ wide with a thickness of ¾". These were a somewhat more sophisticated design: a regular, diagonal grid of diamond-shaped cells punched into the sanded side each terminated in 4 perforations on the smooth side. The cells were c 14mm in width, and each perforation 3mm in diameter. These could be categorised as '4D'. The fabric was red, with the sparse rounded iron-rich nodules common in post-medieval tiles in the region; it was comparable to 18<sup>th</sup> century roof tiles.

Crew (2021) notes that from the early-19<sup>th</sup> century onwards, large machine-pressed 12" square tiles were widely commercially available, with a small number of firms dominating the market from the mid-19<sup>th</sup> century. The tiles represented here appear to pre-date this mechanisation and homogenisation and are most likely to be 18<sup>th</sup> century in date. The 4D tiles would appear to be chronologically later than the 1C tiles by virtue of their increased sophistication. Crew notes that the early handmade tiles vary widely, and the manufacturers are not easy to identify. The particular styles represented here are not recorded in Crew's typology; nor, for that matter, do any Worcestershire sites feature in his index of sites. A contemporary account from the 1750s references the manufacture of kiln floor tiles at Stourbridge (Berg and Berg 2001), which would be a possible source.

These tiles are, therefore, an unusual survival. They suggest that malting or drying was taking place on the estate during the 18<sup>th</sup> century, probably associated with the production of beer, as seen by the brewhouse at the north-west end of the building on the 1830 plan. They should be retained, and further research into the likely site of the drying floor, and the associated activities, may yield valuable insights into the economy of the estate in the 18<sup>th</sup> and early-19<sup>th</sup> century.

## 7 Environmental evidence

Environmental sampling was undertaken according to standard Worcestershire Archaeology practice (WA 2012). In the event no deposits were identified which were considered to be suitable for environmental analysis. The material overlying the cobbled surfaces were contaminated with later drainage trench backfilling and 1960s demolition material.



## 8 Conclusion

The excavations uncovered the former west wing of the servants' quarters of Hanbury Hall including a scullery, kitchens and brewhouse as annotated on a plan of 1830. Features of this date made up the largest percentage of the features, though some elements of a pre-existing structure remained which are likely to be contemporary with the construction of Hanbury Hall itself in the early 18<sup>th</sup> century.

The earliest element were two sections of wall, which would have been a single structure originally, with external surfaces on the north-east side, and features such as a corner fireplace to the south-west being internal. This layout does not clearly fit any known plan, though its dimensions would be most consistent with that mapped in 1732 at the point it joins the main building. No suggestion of the angled wall as mapped was present, though it is possible that this was a partially covered, external area originally.

The building was remodelled by 1830, at which point it was planned and the functions of the rooms included. These included a kitchen, brewhouse and scullery. The majority of the features present dated to this time, including a culvert under what was at that point shown as a covered walkway. This walkway was later changed to become a corridor in the later 19<sup>th</sup> century, and then amended further in the 20<sup>th</sup> century. The building was demolished in the 1960s and levelling layers placed on top of the structure to form a courtyard.

The artefactual evidence consisted largely of modern material that was retained on site, with the exception of some perforated tiles reused within an 1830 wall. These tiles are an unusual survival. They suggest that malting or drying was taking place on the estate during the 18<sup>th</sup> century, probably associated with the production of beer, as seen by the brewhouse at the north-west end of the building on the 1830 plan. They should be retained, and further research into the likely site of the drying floor, and the associated activities, may yield valuable insights into the economy of the estate in the 18<sup>th</sup> and early-19<sup>th</sup> century.

The methods adopted allow a high degree of confidence that the aims of the project have been achieved. Conditions were suitable in all of the trenches to identify the presence or absence of archaeological features.

## 9 Project personnel

The fieldwork was led by Graham Arnold, PCIfA, assisted by Abbie Horton and Constance Mitchell. Tim Cornah, ACIfA, undertook the drone flight and photogrammetry.

The project was managed by Tom Vaughan, MCIfA. The report was produced and collated by Tim Cornah and Graham Arnold. Specialist contributions and individual sections of the report are attributed to the relevant authors throughout the text.

## 10 Acknowledgements

Worcestershire Archaeology would like to thank the following for the successful conclusion of the project: The National Trust staff at Hanbury Hall, Melanie McCarthy (Project Manager, National Trust), Janine Young (Archaeologist West Midlands Region, The National Trust), and Aidan Smyth (Archaeology and Planning Advisor for Wychavon District Council).

## 11 Bibliography

AAF 2011 *Archaeological archives: a guide to the best practice in the creation, compilation, transfer and curation*. Archaeological Archives Forum

Arnold, G, and Vaughan, TM, 2022 *Archaeological watching brief at Hanbury Hall, School Lane, Hanbury, Worcestershire*, Worcestershire Archaeology Unpubl report **3006**, version 2 dated 29 April 2022, WSM 77814, Fieldsec1-504811, Worcestershire County Council

- Berg, T, and Berg, P, 2001 *R R Angerstein's Illustrated Travel Diary 1753-1755*, Science Museum
- BGS 2022 Geology of Britain viewer. Available: <http://mapapps.bgs.ac.uk/geologyofbritain/home.html>  
Accessed 21 February 2022
- Border Archaeology 2019 *Archaeological Field Evaluation for The National Trust concerning a proposed café extension at Hanbury Hall, School Road, Hanbury, Worcestershire*, Unpubl report **BA1906HHW/REP**, WSM 71334, dated 29 March 2019
- ClfA 2014a *Standard and guidance: for archaeological excavation*. Reading: Chartered Institute for Archaeologists, published December 2014
- ClfA 2014b *Standard and guidance: for collection, documentation, conservation and research of archaeological materials*. Reading: Chartered Institute for Archaeologists, published December 2014
- ClfA 2014c *Standard and guidance: for the creation, compilation, transfer and deposition of archaeological archives*. Reading: Chartered Institute for Archaeologists, published December 2014, updated 5 June 2020
- Crew, P, 2021 *Perforated tiles from grain drying kilns and malt kilns - an introduction*. Available: [https://www.academia.edu/5296626/A\\_catalogue\\_of\\_perforated\\_tiles\\_from\\_grain\\_drying\\_kilns\\_and\\_malt\\_kilns\\_v\\_8\\_2021](https://www.academia.edu/5296626/A_catalogue_of_perforated_tiles_from_grain_drying_kilns_and_malt_kilns_v_8_2021) Accessed 18 March 2022
- DIA 2021 *Hanbury Hall Historic Building Report and Heritage Impact Assessment* Donald Insall Associates, Unpubl report dated September 2021
- English Heritage 2011 *Environmental archaeology: a guide to the theory and practice of methods, from sampling and recovery to post-excavation*. English Heritage, Centre for Archaeology Guidelines
- Fearn Heritage and Archaeology, 2021 *Hanbury Hall Biomass Boiler Archaeological Impact Assessment*, Unpubl report dated 21 July 2021
- Historic England 2021 *National Heritage List for England (NHLE)*, <https://historicengland.org.uk/listing/the-list/> Accessed 28 October 2021
- Hurst, D, 2000 *Watching brief at Hanbury Hall (WSM 29232), Worcestershire*, Archaeological Service, Unpubl report **827**, dated 19 April 2000, P1779, Worcestershire County Council
- SUMO 2018 *Geophysical Survey Report: Hanbury Hall*, SUMO Survey unpublished report no. 13587, dated 26 October 2018
- WA 2012 *Manual of service practice, recording manual*, Worcestershire Archaeology Unpubl report **1842**. Worcestershire County Council
- WA 2022 *Written Scheme of Investigation for an archaeological strip, map and sample excavation at the Service Yard, Hanbury Hall, School Road, Hanbury, Worcestershire*, Worcestershire Archaeology Unpubl document **P6169** version 2 dated 24 January 2022. Worcestershire County Council
- WAAS 2017 Worcestershire Ceramics Online Database. Available: <https://www.worcestershireceramics.org/> Accessed 3 March 2022
- WCC 2019 *Standards and guidelines for archaeological projects in Worcestershire*, Planning Advisory Section, Worcestershire Archive and Archaeology Service, Unpubl report **604**, updated November 2019, Worcestershire County Council
- WDC 2020 *Heritage Consultation Response – Archaeology*, Wychavon District Council unpublished document, dated 31 March 2020

## 12 Cartographic and plan sources

1732 Dougharty plan (WRO BA 5310)

1830 Matthew Habershon plan of 1830 (WRO 705:7, BA7335\_146) (Figures 4 and 5)

1838 Tithe map of Hanbury (WRO X760-314)

1868 Roos's plan of 1868 (WRO 705:7, BA7335\_146)

1877 Drainage plan, courtesy of the National Trust

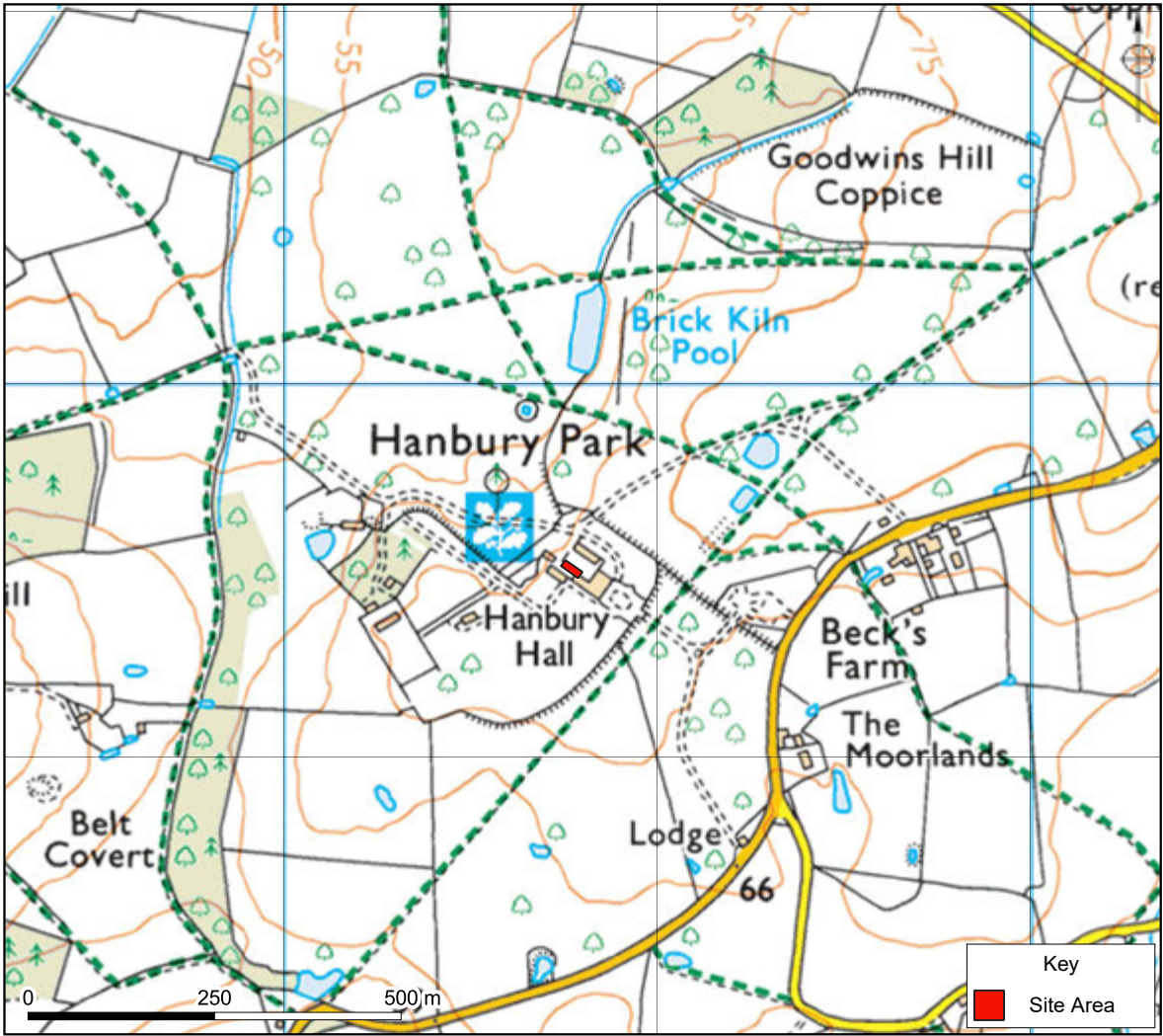
1885 1<sup>st</sup> Edition Ordnance Survey Map 1:10,560 (Figures 6 and 7)

1903 Ordnance Survey Map 1:10,560

1927 Ordnance Survey Map 1:10,560



## Figures



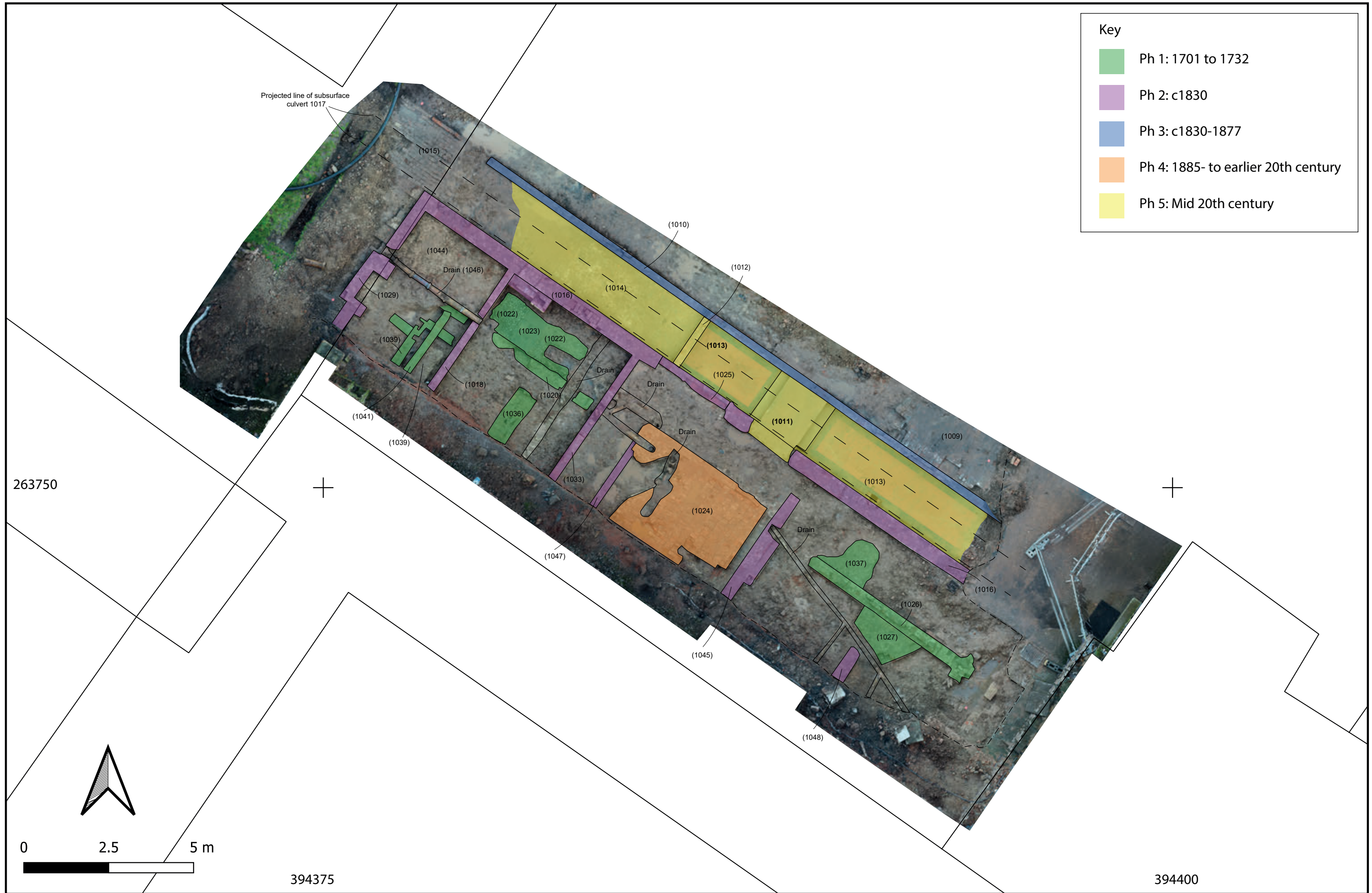
Location of the site

Figure 1



Photogrammetric plan with numbered features overlain onto modern map

Figure 2



**Key**

- Ph 1: 1701 to 1732
- Ph 2: c1830
- Ph 3: c1830-1877
- Ph 4: 1885- to earlier 20th century
- Ph 5: Mid 20th century

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*Phased photogrammetric plan with numbered features overlain onto modern map*

*Figure 3*





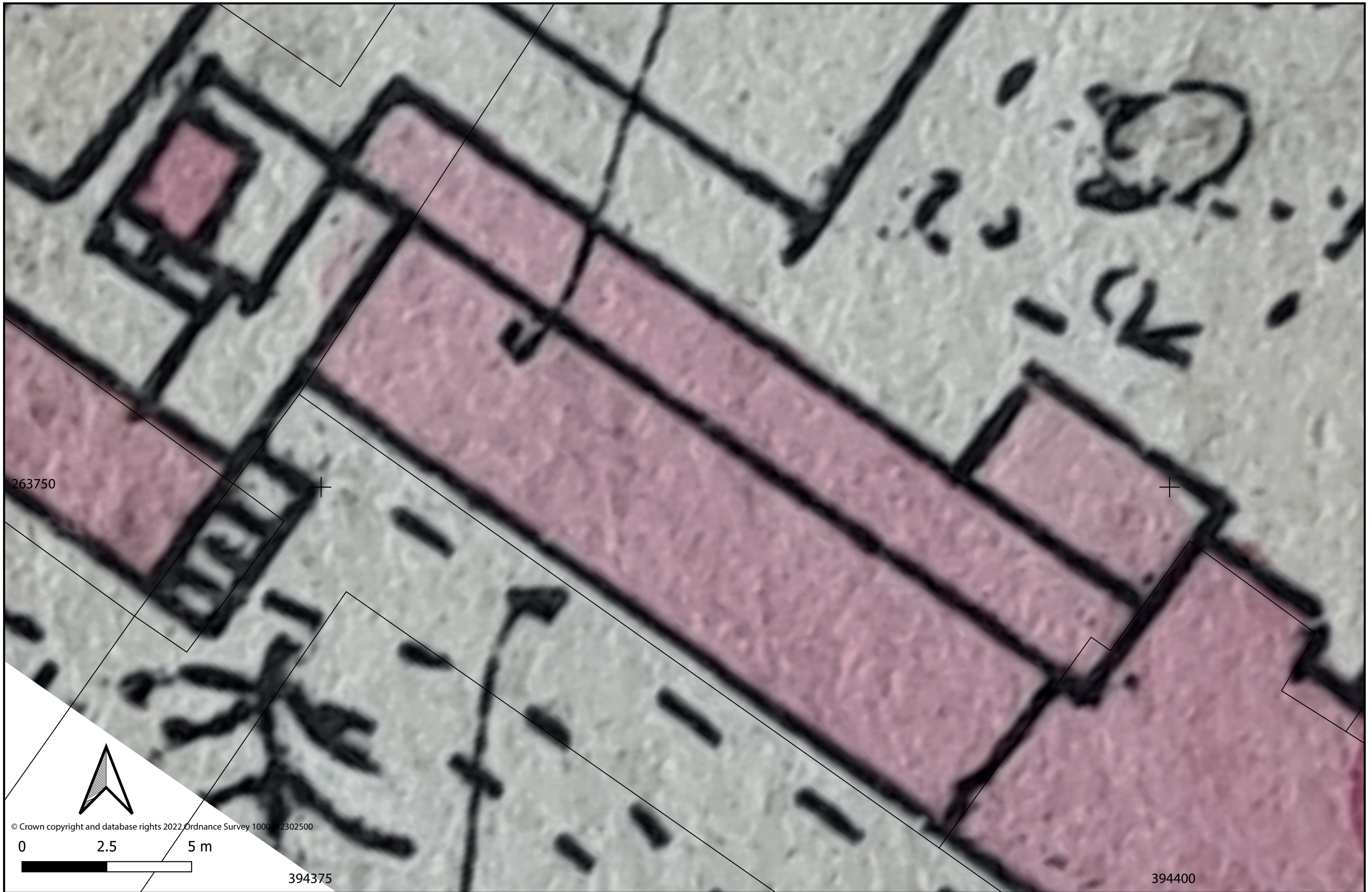
Matthew Habershon plan of 1830 (WRO 705:7, BA7335\_146), overlain on modern map

Figure 4



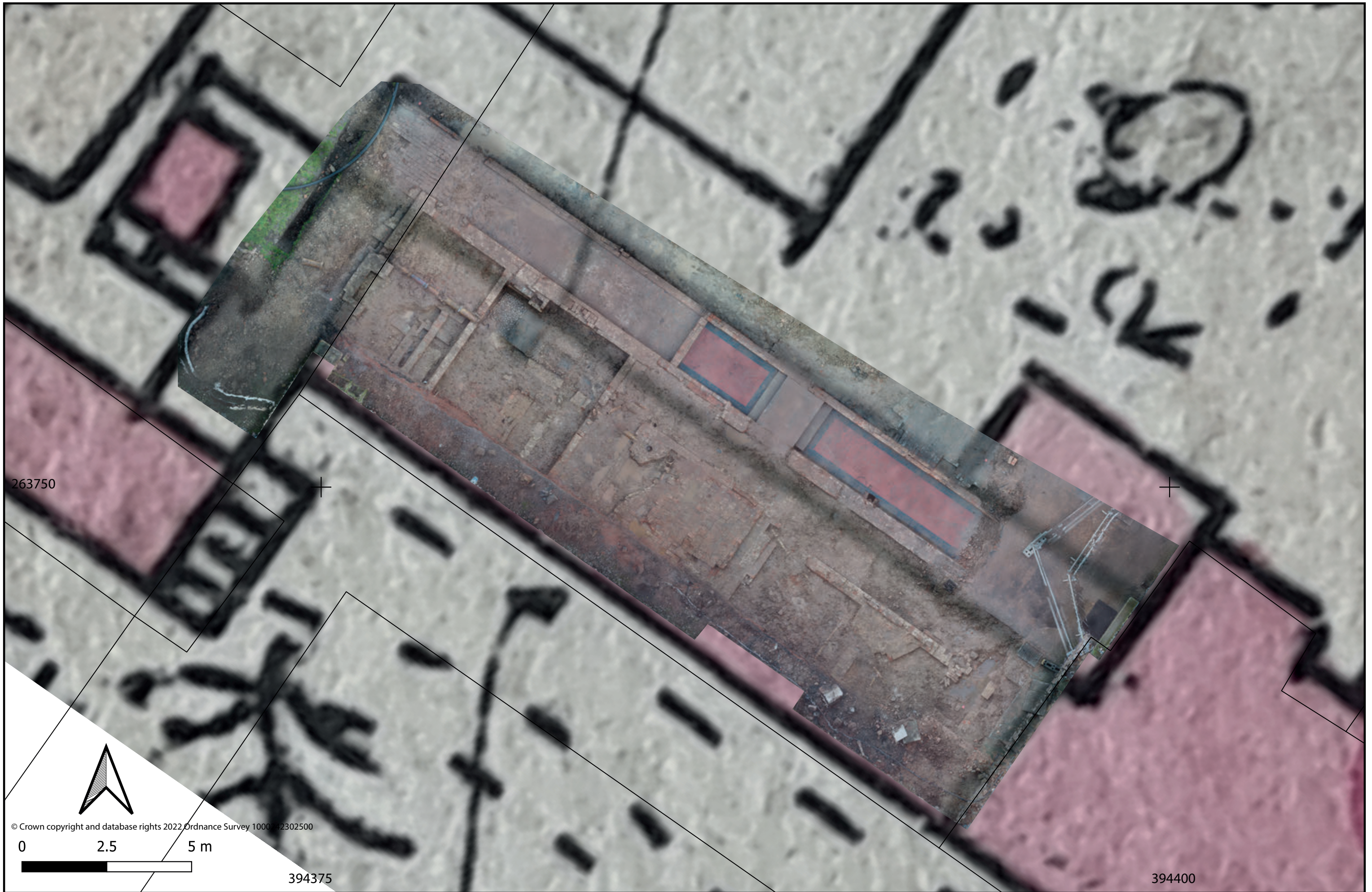
Matthew Habershon plan of 1830 (WRO 705:7, BA7335\_146)  
 with modern map and photogrammetric plan transparent overlay

Figure 5



1885 Ordnance Survey map, overlain on modern map

Figure 6



1885 Ordnance Survey Map with modern map and photogrammetric plan transparent overlay

Figure 7

## Plates



*Plate 1: General south-east view of the excavation area; no scales*



*Plate 2: General west view of the excavation area; no scales*



*Plate 3: Wall 2026 (south-east end) cut by later scullery floor 1024 and pipes, butted by cobbles 1037, view north-west; 1m scale*



*Plate 4: Alignment of wall 1020, cut by later drainage 1046 from scullery, abutted by cobbles 1022 and slab 1023, in the background; walls 1018, 1039 and 1041 in the foreground; view south-east; 1m scale*



*Plate 5: North-west end of corridor, subsurface 1014, view south-east; 2x 1m scales*



*Plate 6: Tiled surface of porch corridor 1013 (south-east), with BA evaluation sondage to culvert 1017, view north-east; 0.4m scale*



*Plate 7: Tiled surface of porch 1013 (north-west) and later wall 1012, view west; 2x 1m scales*



*Plate 8: Reused brewery tiles in wall 1025, adjacent to porch corridor 1013 (north-west), view north-east; no scale*





*Plate 9: Corridor subsurface 1014 to north-west where tiles had been removed; 0.4m scale*



*Plate 10: Earlier brick surface 1036 in north-west half of site, view north-west; 1m scale*



*Plate 11: Earlier intercut walls 1039 and 1041 in north-west end of site, with sand and gravel either side, view south-east; 2x 1m scales*



*Plate 12: Fireplace 1029 at north-west end, in area previously used as brewhouse, view north-west; 1m scale*



*Plate 13: North-west end of building with rooms, hearth and earlier cobbled floor, view south; 2x 1m scales*



*Plate 14: Cobbled floor 1022 and footpath 1023 to former entrance of the building, and wall footing 1020, truncated by drainage 1046, view north; 2x 1m scales*



*Plate 15: Cobbled floor 1022 and footpath 1023 to former entrance of the building, truncated by drainage 1046, view north-west; 1m scale*



*Plate 16: Coal stained grey brick floor 1009 to north-east side of building, view south-west to parterre wall; 2x 1m scales*



*Plate 17: Brick floor of Scullery 1024, view south-west to parterre wall; 2x 1m scales*



*Plate 18: Brick floor of Scullery 1024, view west to parterre wall; 2x 1m scales*



*Plate 19: Top of culvert brick arch 1017, disturbed by modern services, on turfed slope at north-west edge of main excavation area, view south-east; 0.4m and 1m scales (initially exposed during the watching brief for the Biomass Boiler; WSM 77814; Arnold and Vaughan 2022)*



*Plate 20: Top of culvert brick arch 1017, disturbed by modern services, on turfed slope at north-west edge of main excavation area, view south-east; 0.4m and 1m scales (initially exposed during the watching brief for the Biomass Boiler; WSM 77814; Arnold and Vaughan 2022)*



*Plate 21a/b: Internal views of brick culvert 1017: (a) inserted pipe to south-east; (b) brick wall blocking to north-east, possibly inserted due to damage from modern drainage*



*Plate 22: Blocked former outlet of brick culvert 1017 in Lower Yard to the north-west, view south-east; 1m scale*

## Appendix 1: Context Summary



## Context summary:

Context	Feature type	Context type	Description	Height/ depth (m)	Deposit description
1000	Modern Layer	Layer	Road Stone of car park outside seating area	0.15	Moderately compact grey Hardcore
1001	Modern Layer	Layer	Builders sand levelling terraced area	0.25	Soft red sand
1002	Modern Layer	Layer	Modern mixed made ground levelling material backfilling modern pipe	0.60	Moderately compact brownish grey silty clay
1003	Modern Layer	Layer	Topsoil landscaped bank and turf	0.70	Friable blackish grey silty sand
1004	Modern Layer	Layer	1960s demolition levelling layer		
1005	Natural	Layer	Natural	1.00	Firm reddish brown clay
1006	Layer	Layer	Loose rubble in corridor	0.40	rubble
1007	Surface	Layer	York Stone Stab courtyard	0.08	
1008	Surface	Layer	Tarmac road of service yard	0.15	Tarmac
1009	Surface	Structure	Outbuilding brick floor of engineering bricks measuring 9" x 4 1/2" x 2 3/4"	0.10	
1010	Wall	Structure	Outer wall of corridor		
1011	Surface	Structure	Concrete step		
1012	Wall	Structure	Additional wall ending corridor, added between 1922 and 1964		
1013	Floor	Structure	Tiled floor of corridor 4" square tiles red terracotta and black		
1014	Floor	Structure	Screed floor of corridor		
1015	Surface	Structure	Brick surface under corridor floor		
1016	Wall	Structure	Internal outline wall of 1885 building		
1017	Drain	Structure	Brick drainage culvert below corridor area		Same as WB Tr5: 503
1018	Wall	Structure	Internal wall cut by scullery drains		
1019	Floor	Structure	Internal mortar flooring of 1885-1965 building phase		
1020	Wall	Structure	NW-SE wall of late 18th C building phase, same as 1026 to SW adjacent to cobbles and cut by later scullery floor and drainage		
1021	Drain	Structure	Brick drain in 1884 building		
1022	Surface	Structure	Cobble surface - central area		
1023	Surface	Structure	Worn stone slabs between cobble yard surface.		Entrance to late 18th C building
1024	Floor	Structure	Scullery brick floor		
1025	Surface	Structure	Re-used hop kiln tiles within wall 1016 NW-SE wall		
1026	Wall	Structure	Same as 1020		

1027	Surface	Structure	Quadrant curved floor surface in kitchen		
1028	Floor	Structure	Brick floor near main house, heavily truncated by modern drainage		
1029	Hearth	Structure	NW wall fireplace		
1030	Drain	Structure	Drain in NW wall		
1031	Wall	Structure	Wall in service trench		
1032	Drain	Structure	Culvert in service trench		
1033	Wall	Structure	NE-SW wall of building (1885 phase)		
1034	Wall	Structure	NE-SW wall of building (1885 phase)		
1035	Layer	Structure	Mortar between cobbles 1022		
1036	Floor	Structure	Brick floor west of cobbles 1022		
1037	Surface	Structure	Cobbles in hallway, abbutted to wall 1026		
1038	Floor	Structure	Mortar floor in NW room, only mortar surviving		
1039	Wall	Structure	Brick wall in NW room		
1040	Wall	Structure	Brick wall in NW room		
1041	Wall	Structure	Wall overlying 1039		
1042	Wall	Structure	Main parterre wall on west side of excavation		
1043	Surface	Structure	Cobbles on NW corner of building, abutting 1029		
1044	Layer	Layer	Sand layer in NW corner of site	0.30	Soft yellowish brown sand
1045	Wall	Structure	brick wall SE of Scullery		
1046	Drain	Structure	Drain pipe from Scullery through brewhouse floor		
1047	Wall	Structure	brick wall NW of Scullery		
1048	Wall	Structure	brick wall SE end of kitchen		

## Appendix 2: Summary of project archive (WSM 77991)

TYPE	DETAILS*
Paper	Context sheet, Correspondence, Diary (Field progress form), Drawing
Digital	Database, GIS, Images raster/digital photography, Spreadsheets, Survey, Text

*\*OASIS terminology*

The project archive is currently held at the offices of Worcestershire Archaeology. Subject to the agreement of the landowner it is anticipated that it will be deposited at Museums Worcestershire.

## Appendix 3: Summary of data for HER

WSM 77991

### Environmental

No environmental samples taken

### Artefactual

Finds were largely confined to a typical range of later-19<sup>th</sup> and early-20<sup>th</sup> century transfer-printed whitewares (fabric 85), late stoneware (fabric 81.4) preserve jars, glass bottles, and kitchen waste including butchered mammal bone and oyster shell.

Two different designs of perforated tile were recovered, of a type typically used in the construction of floors for grain drying and malting kilns.

The first type: rectangular, c 10" x 7" ½, and 1" 1/8 thick; hand-made; on sanded side: an irregular grid of 5 x 7 conical cells punched through; each cell c 22mm diameter, terminated in 4-5mm perforation through the smooth upper face; Crew's (2021) classification system: '1C/5x7'; bright red fabric, with sparse red sandstone and occasional mica fleck inclusions of typical 17<sup>th</sup>/18<sup>th</sup> century tile fabric.

The second type: rectangular, although no complete examples; length > 7" ½, width 6" ¾ wide, and ¾" thick; regular diagonal grid of diamond-shaped cells punch into sanded side, terminating in 4 perforations on smooth side; cells c 14mm wide, each perforation 3mm diameter. Crew's (2021) classification system: '4D'; fabric red, with sparse rounded iron-rich nodules; comparable to 18<sup>th</sup> century roof tiles.