

ARCHAEOLOGICAL EVALUATION OF LAND AT THE STABLE YARD, HARDWICK HALL, AULT HUCKNALL, DERBYSHIRE (HHSY 07)

Work Undertaken For **XX** THE NATIONAL TRUST

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ARCHAEOLOGICAL PROJECT SERVICES





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1. SUMMARY

An archaeological evaluation was undertaken on land at the stable yard, Hardwick Hall, Ault Hucknall, Derbyshire. The evaluation was undertaken in advance of proposed redevelopment of the south range of the stable yard.

The site lies within the post-medieval (AD 1540-1900) stableyard belonging to Hardwick Hall. The buildings that form the stableyard date to between the 17th and 19th centuries. Northwest of the site lies the Old Hall which mostly dates to the late 16th century, though has its origins as a medieval (AD 1066-1540) manor. Romano-British (AD 43-410) and prehistoric remains have also been recorded in the vicinity.

The evaluation identified a sequence of natural, post-medieval and modern deposits. The earliest features recorded were focussed on the Smithy that dates to the 16th – 17th centuries. A 19th century cobble and stone path was recorded and is a rare survival at the site as indicated by widespread modern truncation recorded particularly along the western part of the evaluated area.

Finds retrieved from the investigation comprised a range of post-medieval and later pottery, glass, brick and tile. Also found were industrial residues associated with the Smithy and a small number of animal bones.

2. INTRODUCTION

2.1 Definition of an Evaluation

An archaeological evaluation is defined as, >a limited programme of non-intrusive and/or intrusive fieldwork which determines the presence or absence of archaeological features, structures,

deposits, artefacts or ecofacts within a specified area or site. If such archaeological remains are present Field Evaluation defines their character and extent, quality and preservation, and it enables an assessment of their worth in a local, regional, national or international context as appropriate = (IFA 1999).

2.2 Planning Background

Archaeological Project Services was commissioned by The National Trust to undertake an archaeological evaluation of the stable yard, Hardwick Hall, Ault Hucknall, Derbyshire, in advance of proposed redevelopment of the site. The work was undertaken between the 7th and 31st January 2008 in accordance with a brief prepared by the National Trust Archaeological Advisor (Appendix 1).

2.3 Topography and Geology

Hardwick Hall is located 10km southeast of Chesterfield and 18km east of Matlock, in the civil parish of Ault Hucknall, Derbyshire (Fig. 1).

The stable yard lies 270m to the south of Hardwick Hall at National Grid Reference SK 4631 6347 (Fig. 2). The southern range of the stable yard was evaluated and is located at heights of between 175m and 170m OD with a slight slope down to the east and south with an abrupt drop in height along the southern edge.

Local soils are of the Aberford Association, typical brown earths (Hodge *et al.* 1984, 268). These are developed on a solid geology of Permo-Triassic Lower Magnesian Limestone with Lower Permian Marl and Carboniferous sandstones of the Coal Measures at the southern edge of the site (GSGB 1971).

2.4 Archaeological Setting

Hardwick Hall is located in an area of known archaeological remains dating from the Neolithic to the present day. A saddle quern along with Neolithic and Bronze Age flints was found in the vicinity (Hart 1981, 37). A Romano-British enclosed settlement has been identified to the northwest of the hall.

Medieval remains include the earthworks of the former village of Blingsby that lies to the north of Hardwick Hall (*ibid.*, 128). This settlement is first mentioned in the Domesday Survey of *c*. 1086 where it is recorded as being held by Roger de Poitou and contained meadow and extensive woodland (Williams and Martin 2002, 744). Additional earthworks of ridge and furrow of the medieval field system are recorded to the west of the hall.

Hardwick is first mentioned in 1257 and derives from the Old English *heorde-wīc* meaning a sheep farm (Cameron 1959, 269) and was probably a farm within Blingsby. Hardwick Hall is first mentioned in 1431 (*ibid.*) and perhaps relates to a manor house, elements of which are incorporated into the Old Hall (Smith and Beamish 1985, 40).

The Old Hall was built between 1578 and 1590, but before the hall was finished, work started on the New Hall in 1590, which was completed in 1594 (*ibid.*). At the same time, the park was enclosed by a pale and represents an early example of a deer park.

The range of buildings, comprising cottages, barns, cart shed and a smithy, that form the service court date between the 17th and 19th centuries. The west range is Grade II listed and the southern range Grade II*. An early account mentions the existence of a bakehouse, brew-house, washhouse, dairy, slaughterhouse,

chandler's house and near a second stable was a still house and smithy (Henderson 2005, 13).

3. AIMS

The aim of the evaluation, as detailed in the project brief (Appendix 1), was to gather information to establish the presence or absence, extent, condition, character, quality and date of any archaeological deposits in order to enable the National Trust archaeological advisor to formulate a policy for the management of archaeological resources present on the site.

In addition to the archaeological evaluation, an inventory of items removed from the smithy was to be produced (Appendix 4). This was followed by mapping the differing surface treatments of the smithy floor.

4. METHODS

The positioning of the test pits was determined by the National Trust archaeological advisor to provide sample coverage within the proposed development area (Fig. 3). These were excavated by hand to the level of underlying geology or to a suitable depth from the ground surface. Following excavation, the base and sides of the trenches were cleaned and rendered vertical. Each deposit exposed during the evaluation was allocated a unique reference number (context number) with an individual written description. A list of all contexts and interpretations appears as Appendix 2. Sections were drawn at a scale of 1:10 and plans at 1:10 and 1:20. A photographic record was also compiled. Recording of the deposits encountered was undertaken based on the single context approach developed by the Museum of London (MoLAS 1994) with

minor modifications by Archaeological Project Services.

The location of the excavated trenches was surveyed in relation to fixed points on boundaries and to existing buildings.

Following excavation, all records were checked and ordered to ensure that they constituted a complete MAP II (English Heritage 1991) archive and a stratigraphic matrix of all identified deposits was produced. Finds were also examined and a period date assigned where possible (Appendix 3). Phasing was based on the nature of the deposits and recognisable relationships between them and supplemented by artefact dating.

5. RESULTS

Archaeological contexts are listed and described below. The numbers in brackets are the context numbers assigned in the field.

Smithy Floor (Fig. 4)

The earliest and most extensive surface within the smithy was an earth floor comprising brownish grey silt and straw (041).

Set into this floor at the southern side of the smithy were a number of limestone slabs (039) of a stone floor. Immediately west of these, a small area of brick surfacing was apparent (040).

Immediately in front of the forge was a sandstone block (044) measuring 0.7m by 0.45m which would have provided a base for an anvil.

Remaining features comprised a sandstone flagstone (043) at the base of the stairs and a discrete area of light grey mortar (042) that provided a support or bedding for the staircase to the first floor.

Test Pit 1 (Fig. 5)

The earliest deposit encountered at the base of this test pit was a layer of red sandy clay (031) identified as the underlying natural.

Adjacent to the smithy, the natural was overlain by a layer of grey silt (032) that was 30mm thick, and perhaps represents a former topsoil. This was overlain by a possible construction deposit comprising yellowish grey sandstone fragments (030).

Overlying this was a dumped deposit of black silt, sand and stone fragments with frequent coal (025) which may extend north as a similar dumped deposit (028). These layers measured between 90mm and 100mm thick.

Overlying dumped deposit (028) towards the north of the trench was a layer of red clay with frequent coal fragments (022) which provided make-up for an east-west aligned sandstone path (023).

The path had been replaced by a grey mortar and stone surface (014 and 015) that was 90mm thick. This was subsequently sealed by a further surface comprising a 0.12m thick layer of black stone fragments and silt (007 and 009). At the northern end of the trench was a layer of brown sandy mortar (008) of another surface, which contained a 18th to 19th century glass bottle.

Cut into these surfaces was an east-west aligned service trench (012). This measured 0.58m wide and 0.7m deep and contained a single fill of brown/black silty clay with stone, sand and a lead pipe (013).

A squared sandstone structure (010) representing the step into the smithy was recorded along with a repair to the doorway (024).

Sealing the service trench was a layer of

yellowish brown gravel (002) of a former path which was in turn sealed by topsoil of brown sandy and clayey silt (001).

Test Pit 2 (Fig. 6)

At the base of this test pit was a layer comprising yellowish pink mortar with frequent stone fragments (019) of a former surface.

Cut into this surface was a north-south aligned foundation trench (018). This was over 0.25m wide and 0.1m deep. Within the base of the foundation trench was a series of bedding layers, comprising greyish yellow mortar (020), followed by grey silty clay and sandstone fragments (029), grey sandstone fragments and coal (021), yellow sand (027) and then grey mortar (026) upon which was the west wall/threshold of the smithy. foundation trench had been backfilled with grey clayey silt and charcoal (017).

Butting against this wall was a layer of sandstone fragments (011) of a surface that measured 0.15m thick. This lay beneath a further surface of brownish yellow sandy mortar (004).

Cutting this surface was a posthole (005) that measured over 0.3m long, wider than 0.15m and 0.15m deep. A single fill of grey clayey silt (006) was recorded from which 17th to 18th century pottery was retrieved.

Sealing the posthole was a layer of soil build-up/trample comprising brownish grey clayey silt (003).

Test Pit 3 (Fig. 7)

This test pit was also excavated adjacent to the sandstone wall (033) of the smithy. Butting against the wall was a layer of brownish grey sand, silt with stone and brick fragments (034) including a fragment of worked stone (035) which was not removed from the site.

Test Pit 4 (Fig. 7)

Butting against the sandstone wall (036) of the smithy was a layer of brown/black clayey silt containing a significant number of worked stone fragments (038), which were not retained, representing collapse or demolition of part of the smithy, and a quantity of glass, mostly from windows. Some of this glass indicates the windows had been glazed with leaded diamond-shaped panels. This was overlain by reddish brown and mid red clayey silt (037) of the current topsoil that was 0.48m thick.

Test Pit 5 (Fig. 8)

The earliest feature within this test pit was the squared sandstone wall (047) of the smithy. Dumped against this wall was a layer of brown/black silt with sandstone fragments and frequent coal (046). This measured over 0.2m thick.

Sealing this dumped layer was the current topsoil comprising a 0.23m thick layer of brown/black silt (045).

Test Pit 6 (Fig. 8)

Natural was identified as a layer of reddish brown sandy clay with sandstone (110). Laid directly on this was a cobble and sandstone block surface (109) that measured 0.14m thick and was restricted to the eastern part of the test pit.

Abutting the surface to the west was a layer of brown silty clay with gravel (108).

Above this were two layers of hardstanding, a lower of greyish brown gravel and stone (107) separated by a layer of geotextile from an upper of yellowish brown crushed stone (106).

Test Pit 7 (Fig. 8)

The earliest deposit within this test pit was a layer of reddish brown silty clay (060).

Upon the natural, two roughly dressed

sandstone blocks (059) had been laid to form a kerb and to contain a brown pebble surface (058) along the west side of the test pit. The area east of the kerb had been backfilled with brown silty clay and gravel (057).

Sealing all deposits was a former topsoil comprising greyish brown clayey silt (056) which measured 0.2m thick. This had in turn been sealed by hardstanding deposits, one of greyish brown gravel and stone (055) and the upper of yellowish brown crushed limestone (054).

Test Pit 8 (Fig. 9)

Reddish brown clayey silt with sandstone (079) constituted the natural in this pit. This was sealed by a grey silt with coal fragments (078) that was 70mm thick and subsequently sealed by concrete (077). The Test Pit was extended westwards to avoid a modern drainage trench.

Test Pit 9 (Fig. 9)

Natural yellowish red sandstone (053) was the earliest deposit encountered. This was overlain by a layer, perhaps a former topsoil, of brown silty sand (050) that was 0.18m thick.

Above this was a 0.1m thick deposit of grey silty sand with sandstone fragments (049), associated with the construction of the adjacent buildings.

This was cut by a trench (052) of horticultural origin that contained a fill of grey silty sand (051). This was sealed by a 0.35m thick topsoil of grey silty sand (048).

Test Pit 10 (Fig. 9)

Either constructed upon or trench built into a natural of red clayey sand (115) was the squared sandstone south wall of the barn (113). Butting against this was a short length of a north-south sandstone wall (114), indicating an internal division. Overlying the wall was a deposit of yellowish brown silty sand with frequent limestone fragments (112) that was sealed beneath a grey sandy silt (111) representing soil-build up within the leanto barn.

Test Pit 11 (Fig. 9)

Natural comprised a reddish brown silty clay (076) which was sealed by a former topsoil of greyish brown clayey silt with sandstone fragments (075) that contained several fragments of glass vessels of late 18th to early 19th century date. This measured 0.18m thick and had been sealed by a 0.15m thick concrete surface (074).

Test Pit 12 (Fig. 10)

The natural geology of yellowish red sandstone and marl (063) was overlain by a 0.18m thick former topsoil of brown silty sand (062). This was sealed beneath concrete (061).

Test Pit 13 (Fig. 10)

A greenish yellow to yellowish red sandstone (068) was identified as natural. Cut into this was a sub-circular feature (067), perhaps a former service trench. This was over 0.36m long, wider than 0.19m and 0.15m deep. A single fill of brown silty sand with copper wires (066) was recorded.

Sealing this feature was a former topsoil comprising an 80mm thick layer of brown silty sand (065) which was in turn sealed by a concrete surface (064).

Test Pit 14 (Fig. 10)

Natural was recorded as a red sandstone and marl (073) deposit. This was overlain by a former topsoil of greyish brown sand (070).

This had been cut by a small circular feature (072) in which a tubular metal pole had been inserted and then backfilled with concrete (071). A concrete surface (069)

sealed this feature.

Test Pit 15 (Fig. 10)

A red sandstone (100) was identified as the natural geology in this pit. It was overlain by a compacted red brick and sandstone surface (099) that was 80mm thick. This was sealed by a mixed topsoil layer of grey silty sand (098) from which late $18^{th} - 19^{th}$ century glass was retrieved.

Cutting the mixed topsoil layer was a feature (097) located on the south side of the trench. Representing a cut for an adjacent manhole, this was filled with concrete and sandstone fragments (096).

Sealing all deposits was the current topsoil of grey silty sand (095).

Test Pit 16 (Fig. 11)

A yellowish red sandstone (110) was overlain by a compacted red brick and brown sandstone surface (104) from beneath which was a 1921 penny.

Above this was a dumped deposit of grey limestone chippings (103) which was sealed by a mixed topsoil of grey silty sand with brick/tile fragments (102). A topsoil comprising a 90mm thick layer of grey silty sand (101) completed the sequence.

Test Pit 17 (Fig. 11)

This trench was excavated against the north facing wall (086) of a barn. A recent ceramic drain (087) had been inserted through the wall.

At the base of the pit was a layer of yellowish brown silty sand with broken drain fragments (088). This is likely to be the fill of a service trench, the limits of which were not defined but had truncated the ceramic drain and was over 0.32m deep.

Above this was a layer of grey silty sand with frequent small stones (085) into

which was a concrete slab (084) set in front of the door to the barn. This had subsequently been sealed by the tarmac surface (083) of the road.

Test Pit 18 (Fig. 11)

Brownish yellow sandstone (091) was sealed by a 0.12m thick layer of grey sand (090) that provided make-up for the tarmac road surface (089).

Test Pit 19 (Fig. 11)

Natural layers of reddish and yellowish brown sandy clay (094) was sealed by greyish brown clayey silt with sandstone fragments (093). This was 80mm thick and had been overlain by tarmac (092).

Test Pit 20 (Fig. 11)

A similar sequence was recorded in this trench with natural of yellowish brown clayey sand (082) overlain by greyish brown clayey silt with cobbles and sandstone fragments (081) providing a make-up layer for the tarmac road surface (080).

6. DISCUSSION

Natural deposits comprise sandy clays, silty clays, clayey silt with sandstone, sandstone, marl and clayey sands. These represent the upper weathered surface of the underlying solid geology.

No archaeological remains earlier than the post-medieval period were identified during the evaluation.

The earliest deposits are focussed on the Smithy area, the building being first depicted on maps dating to 1610 though perhaps dating to the late 16th century (Simons and Watson 2007). Although a number of surfaces/paths were identified within and around this structure, few produced artefacts that could date these associated features. The use of the Smithy

was indicated by dumped deposits containing coal. On the east side of the Smithy was a deposit containing a number of worked stone pieces including window jambs. Remains of first floor windows have previously been recorded and these may relate to this or later remodelling of other windows within the structure. Some windows were glazed with diamond shaped pieces, affixed with lead cames.

The southern range of the Stable Yard largely dates to the 19th century. Presumably contemporary with this are the stone and cobble surfaces identified in Test Pits 6 and 7 which provide a path to the east stables. A 20th century brick surface was recorded in Test Pits 15 and 16.

Elsewhere, the Test Pits appear to indicate that large scale truncation of earlier deposits has occurred. The date at which this happened is unclear. However, concrete surfaces and the tarmac roads around the south range would suggest that these are not of a great age, perhaps less than thirty years old. A drainage map of 1993 suggests they could be more recent.

Pottery retrieved during the investigation comprises a wide range of post-medieval wares, though few types were present that could date to the 16th century, the majority dating to the 18th and 19th centuries. Brick and tile was also found in some quantity, as was glass. A range of iron, industrial residues and ferrous concretions all appear to be associated with the Smithy. A small collection of animal bone, including horse, was also recovered.

7. CONCLUSIONS

Archaeological evaluation was undertaken at the stable yard, Hardwick Hall, in order to determine the range of archaeological deposits prior to redevelopment of the site. The standing buildings range in date from the 17th to 19th centuries.

Apart from the walls of a Smithy, nothing earlier than the 17th century was encountered during the investigation, though associated surfaces and paths may be contemporary. There appears to be a paucity of remains dating to the 17th and 18th centuries and only a path dating to the 19th century. Widespread modern truncation of deposits is recorded in many of the trenches.

Finds retrieved from the investigation include post-medieval pottery, brick, tile and glass. Finds relating to the use of the Smithy were also encountered along with a small number of animal bones.

8. ACKNOWLEDGEMENTS

Archaeological Project Services wishes to acknowledge the assistance of Mr Mark Newman, Archaeological Advisor to The National Trust, for commissioning the fieldwork and post-excavation analysis. Access to the site was granted by Claire Hammond, Project Development Officer, The National Trust, who also provided a 1993 service plan of the investigated area and background information. Further background material was provided by Rachael Hall of the National Trust. The work was coordinated by Gary Taylor who edited this report along with Tom Lane. Dave Start kindly allowed access to the library maintained Heritage by Lincolnshire.

9. PERSONNEL

Project Coordinator: Gary Taylor

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Site Staff: Neil Parker, Mark Peachey Photographic reproduction: Sue Unsworth

Illustration: Paul Cope-Faulkner

Post-excavation Analyst: Paul Cope-Faulkner

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11. ABBREVIATIONS

APS Archaeological Project Services

GSGB Geological Survey of Great Britain

IFA Institute of Field Archaeologists

MoLAS Museum of London Archaeology Service

NT National Trust



Figure 1 - General location plan

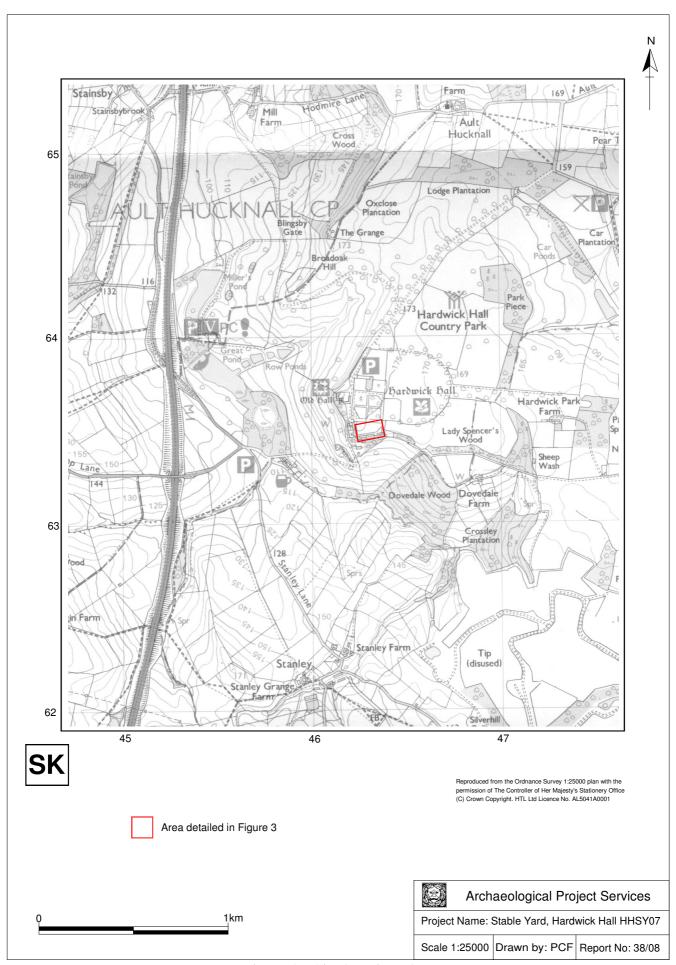


Figure 2 - Site location plan

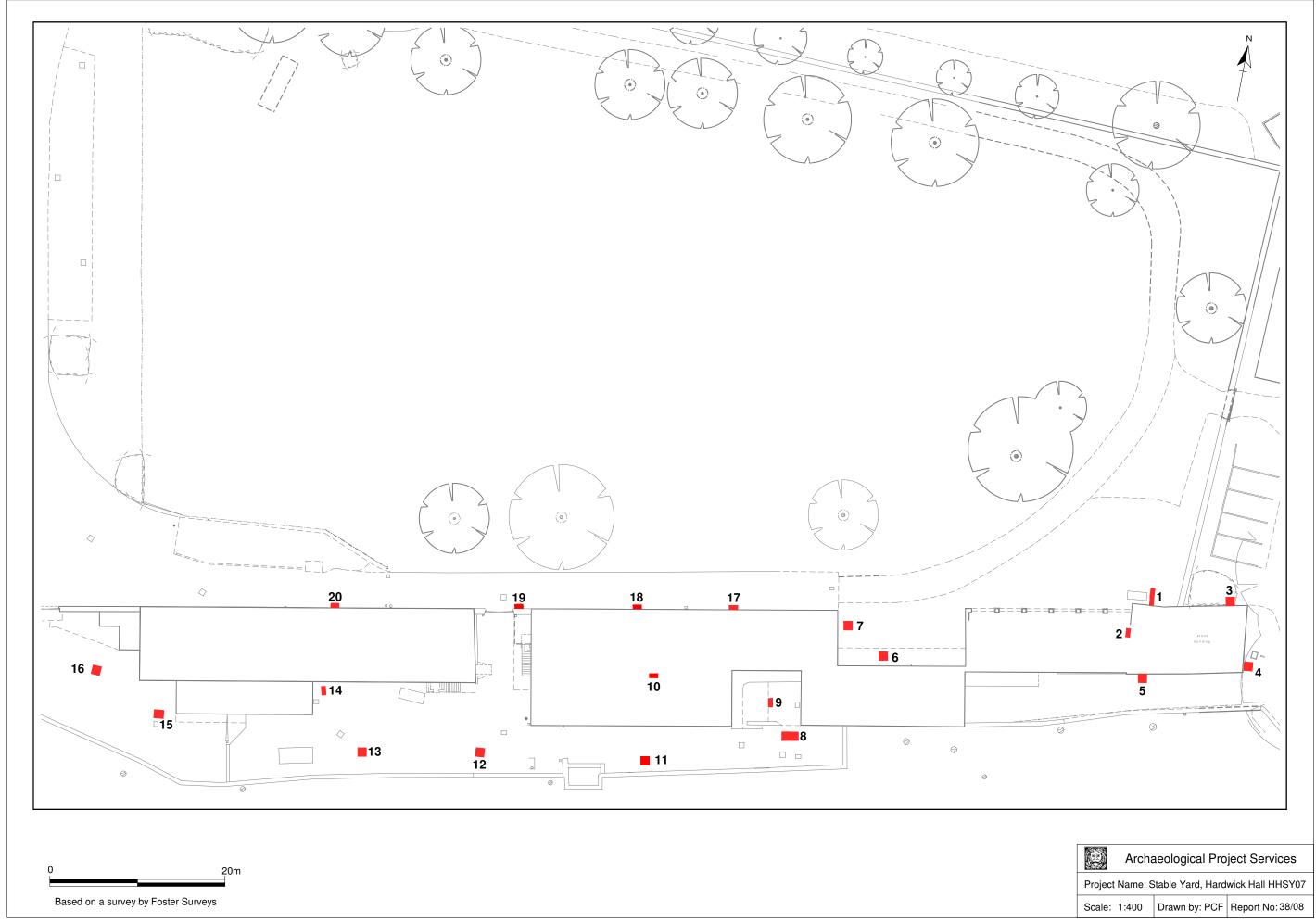


Figure 3 - Test Pit location plan

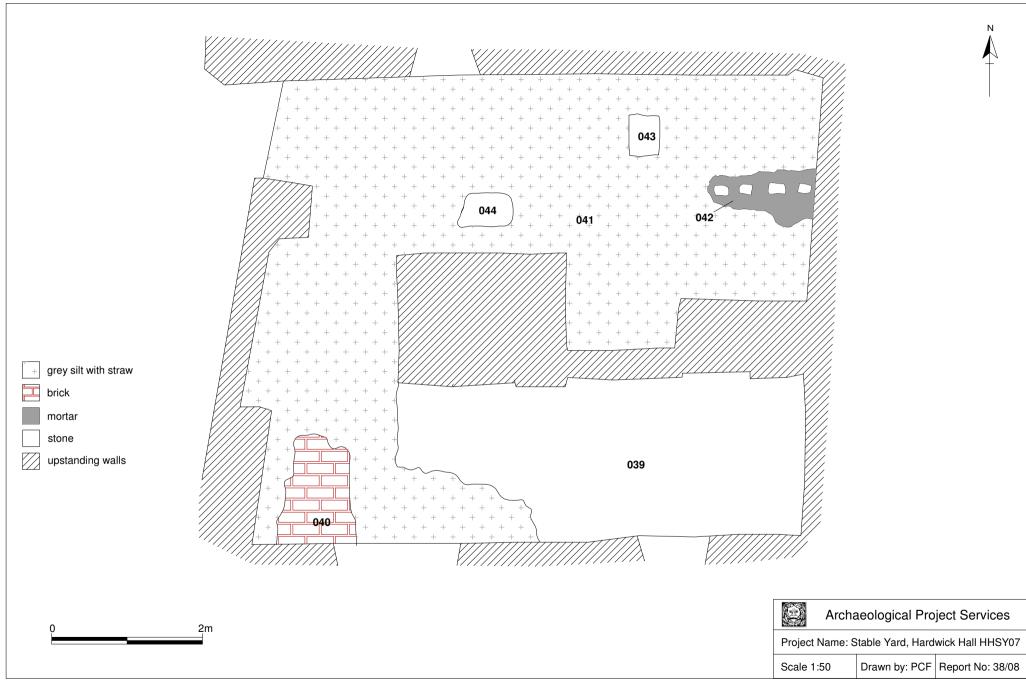


Figure 4 - Plan of the Smithy Floor showing different surface treatments

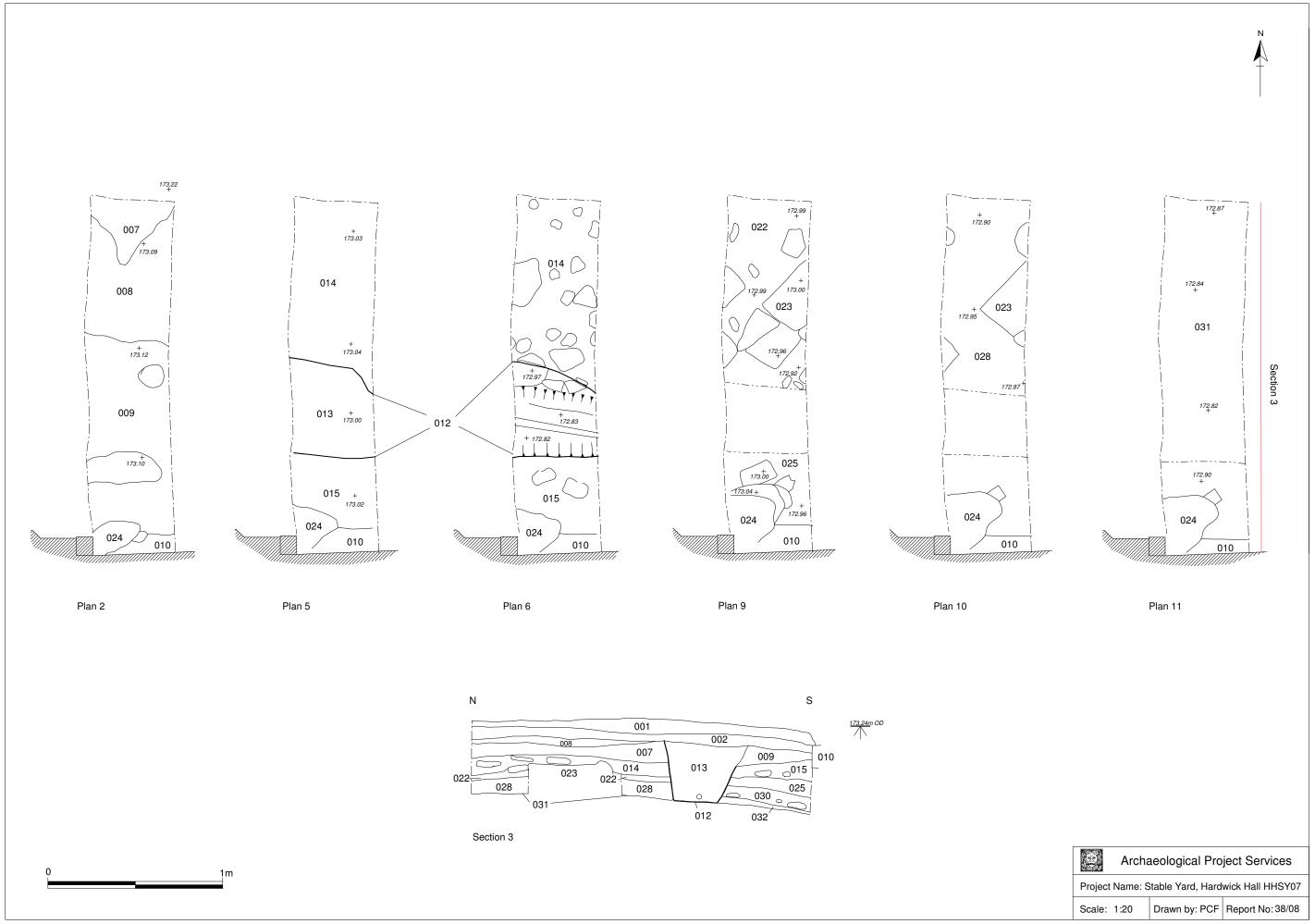


Figure 5 - Test Pit 1: Plans and section

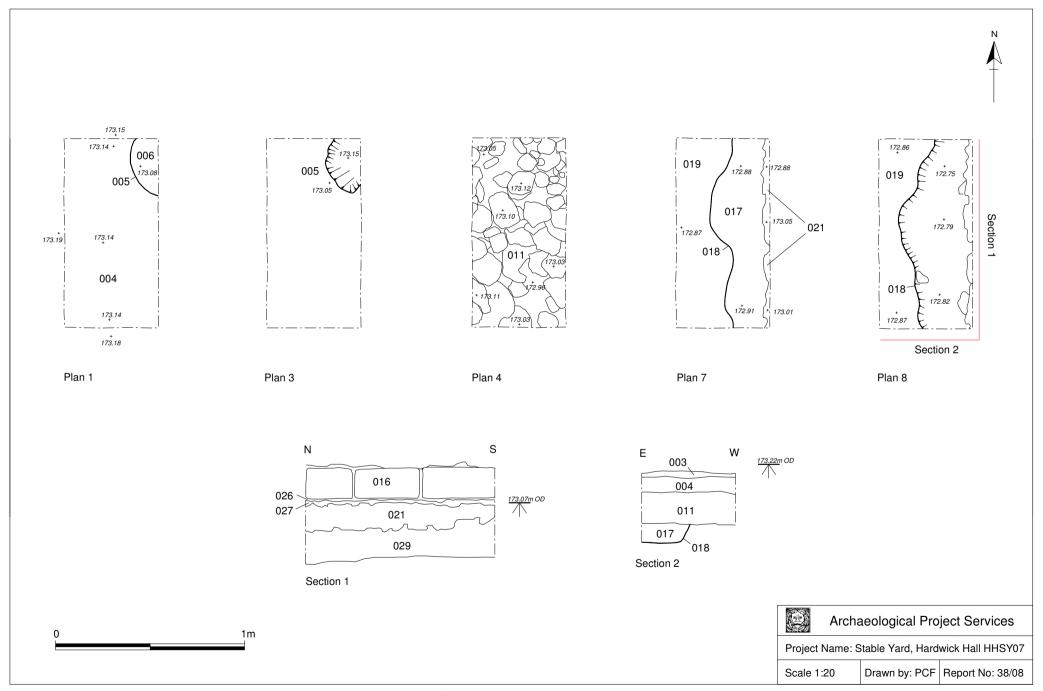


Figure 6 - Test Pit 2: Plans and sections

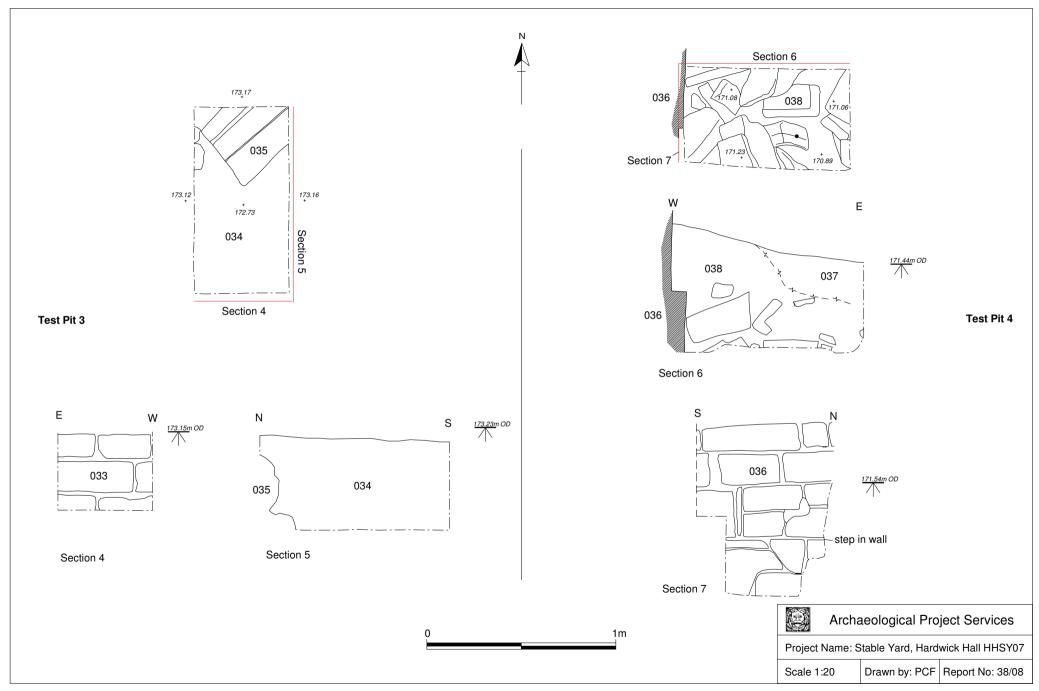


Figure 7 - Test Pits 3 and 4: Plans and sections

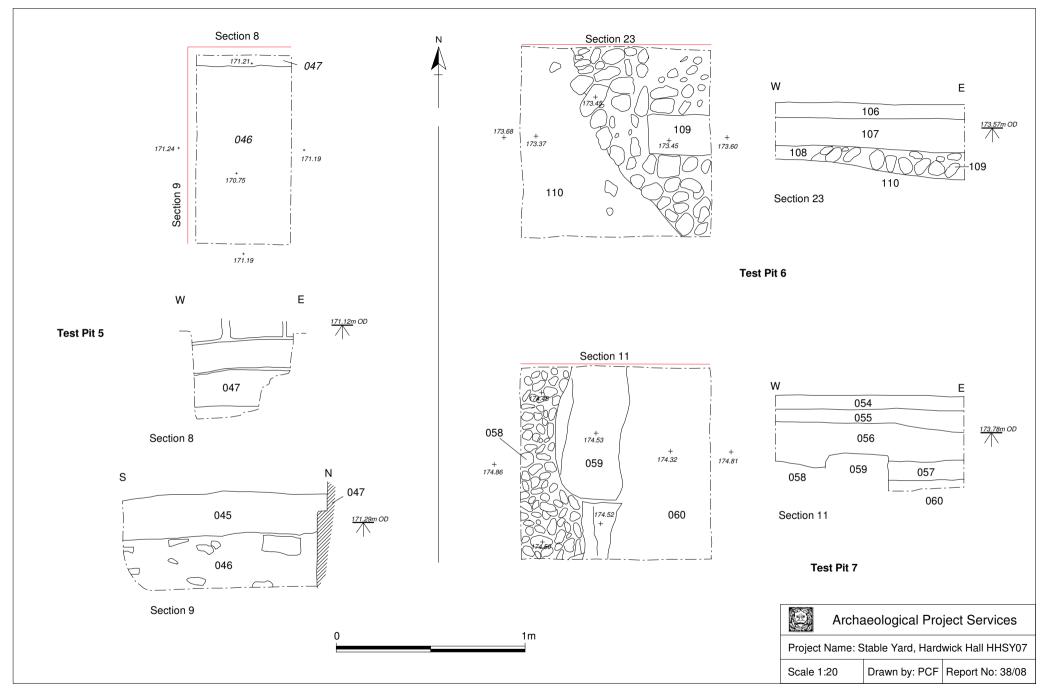


Figure 8 - Test Pits 5 to 7: Plans and sections

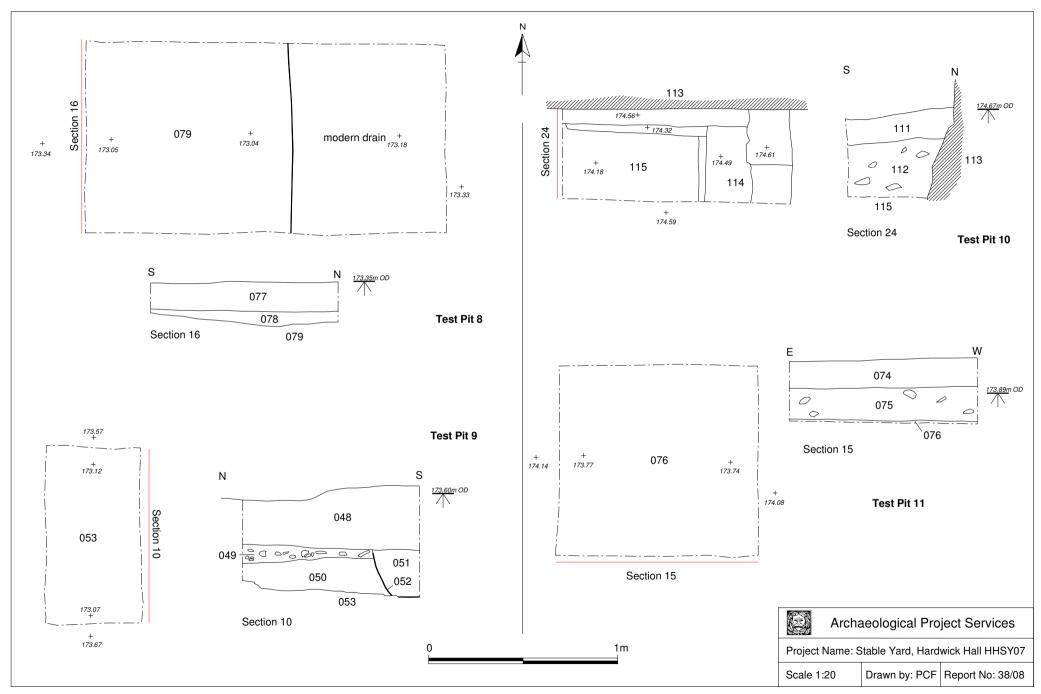


Figure 9 - Test Pits 8 to 11: Plans and sections

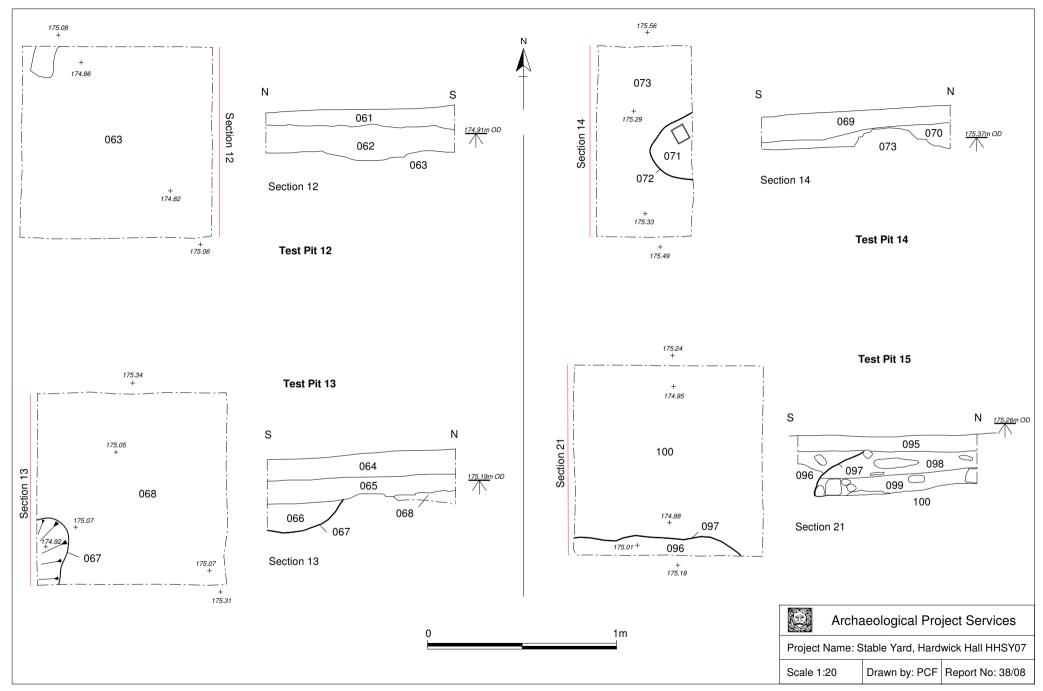


Figure 10 - Test Pits 12 to 15: Plans and sections

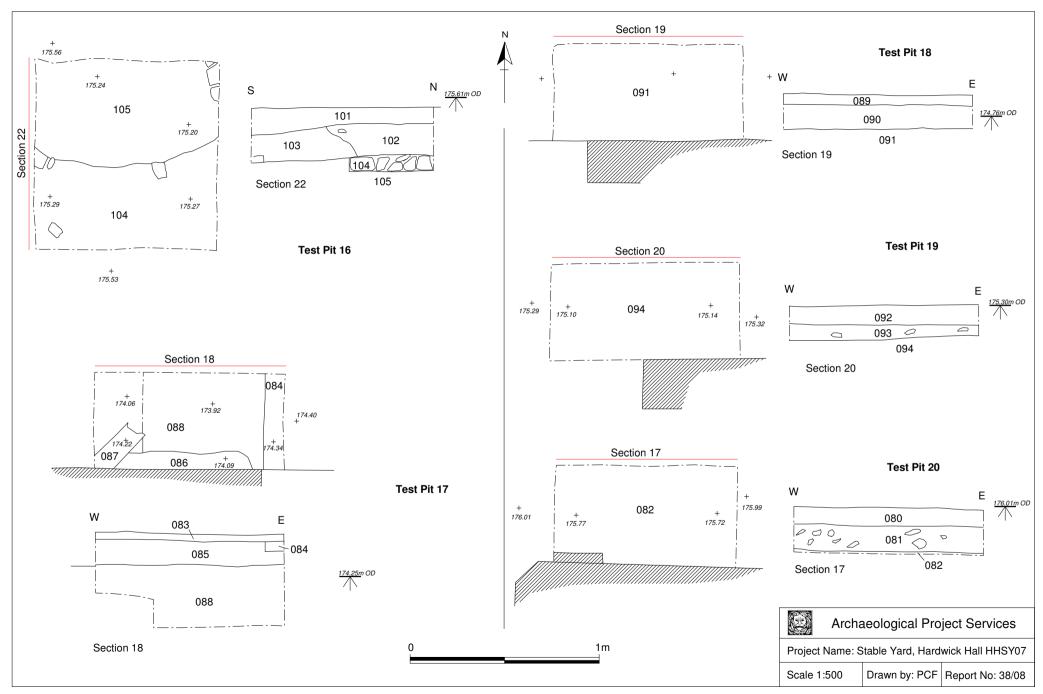


Figure 11 - Test Pits 16 to 20: Plans and sections



Plate $1-View\ of\ the\ south\ range\ of\ the\ Stable\ Yard,\ looking\ southeast$



Plate 2 - View of the rear of the south range, looking west



Plate 3 – Test Pit 1, with surfaces (023) and (024), looking south



Plate 4 – Test Pit 1, Section 3, looking east



Plate 5 – Test Pit 2 after excavation, looking east



Plate 6 – Test Pit 3, Section 5, looking east



Plate 7 – Test Pit 4, with worked stone fragments, looking north



Plate 8 – Test Pit 5, post-excavation, looking northwest



Plate 9 – Test Pit 6 showing cobble surface (109), looking southeast



Plate 10 - Test Pit 7 with cobble surface (058) and kerb (059), looking west



Plate 11 – Test Pit 9, Section 10, looking east



Plate 12 – Test Pit 10, post-excavation, looking north



Plate 13 – Test Pit 11, post-excavation, looking south



Plate 14 – Test Pit 13, with possible service Test Pit (067), looking west



Plate 15 – Test Pit 16 showing partial removal of brick surface (104), looking northwest



Plate 16 – Test Pit 17 showing inserted drain (087) through wall, looking west



Plate 17 – Test Pit 20, post-excavation, looking east



Plate 18 – Items recorded in the smithy



Plate 19 – Items recorded in the smithy

ARCHAEOLOGICAL PROJECT BRIEF - ARCHAEOLOGICAL EVALUATIONS, HARDWICK STABLEYARD, SOUTH RANGE

Non-technical summary

This project will undertake the excavation of a series of evaluation trenches and other archaeological works in and around the buildings of the south range of the Stableyard at Hardwick Hall (NTSMR site 60023). The purpose of this work is to determine the extent, nature and importance of any subsurface deposits to inform planning for reuse of the building range, and to progress clearance and evaluation of the Smithy building.

Excavation will be limited in extent, but will be extended through the depth of in situ deposits (unless specified to the contrary for specific trenches).

This work will be carried out in a fashion consistent with standards and guidelines for excavation and post-excavation work published by the Institute of Field Archaeologists.

Site Description

The magnificent Elizabethan mansion of Hardwick Hall dominates the landscape overlooking the M1 at the Derbyshire/Nottinghamshire border SK 4631 6351). Just as the hall itself was an innovation in the planning for domestic architecture, the Stableyard ranges contained equally innovative structures designed to provide for the house and estate's service needs. The earliest of these, the Smithy, dates to the 1590s, and there were successive additions through to the opening of the twentieth century.

The stable yard lies to the south of the main hall and garden complex. Its built structures mainly lie along its western and southern sides, with the garden wall demarcating its northern boundary, and a gated boundary wall the eastern side. The main entrance to the yard is through its north-west corner.

For a detailed description of the components of the south range, please see the standing buildings recording completed early in 2007 (AOC, 2007) and the draft Conservation Plan (Thacker & Peers, RMP, 2007). It would, in brief, appear that the range contains early, and therefore rare, examples of a range of different types of utilitarian structures, accumulating into a multi-functional estate yard before the construction of such *en suite* became fashionable.

Archaeological and planning background

Although there is great deal of research on the main house, the more menial buildings of the stableyard are – predictably - much less well recorded, researched and understood. This balance has been redressed recently through a detailed standing buildings recording exercise completed by AOC Ltd and the preparation of a Conservation Plan by Rodney Melville and Partners.

Nevertheless, little is known of the archaeological remains in and around the buildings. It may be predicted that a high proportion of evidence of the long history of the buildings, their management, use and change, lies buried in archaeological form as opposed to lying in documents. However, this has yet to be tested.

The present excavations will determine whether identifiable remains survive; what the nature of such deposits may be; and comment on the importance of these remains. This information will then be used to design the detail of reuse proposals in such a way that maximum significance is preserved.

There is also a need to clear and investigate the interior of the Smithy, identified in the Standing Buildings Survey of the site completed by AOC early in 2007.

Outline of required methodology:

A series of trenches will be excavated at locations, and in forms, decided by the NT archaeological adviser to the property (working in collaboration with the rest of the project team, including the consultant architect). The trenches will be sited to evaluate areas at particular risk from likely development needs/pressures, while commenting on likely archaeological significance over the whole area.

The following trenches are to be excavated.

- a) 6# 1metre square evaluation trenches in the enclosed area to the south of the main body of the range (Plan 1)
- b) 9# 0.50mx1m sample trenches in and immediately outside the "workshop ranges" (Plans 2 & 3)
- c) 4# 0.50m x 1 sample trenches around the Smithy relating to planned drainage (Plan 4)
- d) 1 evaluation trench 0.50m E/W by 2.0m N/S running north from beside the west jamb of door 140 to examine yard surfaces north of the entrance to the Smithy and determine original ground level (Plan 4)
- e) 1 evaluation trench 0.50m E/W by 1.0m N/S to examine floor surfaces at the hemmel threshold from the Smithy, extending west from beneath the north jamb of the door between A31 and A32 (Plan 4)

Excavation will be conducted by usual "single context recording" methods. Recording will consist of photographic records, drawn plans and sections and written context records. The excavations will be reported in a standard professional fashion, with the need for specialist reports being agreed with the NT early in post-excavation processing. Samples for laboratory examination make be taken from some trenches.

In addition the contents of the Smithy (including loose building materials) are to be described and removed by archaeological means, producing a catalogue of items recording form, location and interpretation of whether they belong to the building or have just been stored there. Each shall be noted for retention or disposal, those for retention being labelled.

Once the floor of the Smithy has been cleared, it will be gently investigated to map different surface treatments including the presence/absence of beaten earth floor.

All excavations will be backfilled at the completion of works, unless there are specific instructions to the contrary issued by the project manager or property staff at Hardwick Hall.

Outline of managerial parameters:

Whilst on NT land, the contractor will be expected to confirm to NT bye-laws. For the purposes of the Treasure Act, 2003 (and for no other purposes) they will be deemed to be archaeologists in the employ of the National Trust. The Contractor shall have full responsibility for the Health and Safety of their staff engaged in working on this project (at a minimum to the full legally required standard) as well as that NT staff and the general public in as far as they may be affected by the completion of this project.

The National Trust will reserve copyright over any and all materials arising from the completion of this fieldwork, while recognising the right of recognition of the originators.

Access to NT land is granted for the purposes of completing the described fieldwork and for no other purpose. As the majority of the land involved is subject to agricultural tenancy all access must be agreed with NT property staff, who will agree access with the farm tenants.

Monitoring arrangements:

The Contractor and the Project Manager will meet to finalise the specification for works at the outset of the contract. The Project Manager may, with prior agreement of the Contractor, visit the excavation site while the excavation is in progress. The Contractor should plan to produce a draft report which will then be subject to detailed review by the Project Manager, to ensure alignment with NT standards and needs. This may to a greater level of detail than is sometimes experienced in contract archaeological work.

Reporting requirements:

The excavation will be described in an archival report at the conclusion of the project. In brief, this will consist of a description of the excavation location and methodology; the archaeological background; a description of encountered features and deposits; a brief report on recovered artifacts (supported if necessary by specialist reports as appendices); an interpretation of the excavated sequences; a predictive model for the survival of archaeological deposits across the site; identification of key archaeological potentials and sensitivities in such deposits.

The report should integrate the information that it presents with the contents of the Standing Buildings Recording completed early in 2007.

The archive will also contain original site records; the photographic archive; the artefactual assemblage in suitable archival quality storage media; copies of report materials in digital format.

Archive deposition:

At the conclusion of the project, the archive (including all reporting materials and original field materials) will be deposited with the National Trust. It will be stored either in central filing systems, at the East Midlands Regional Office, or on the property. Digitised information will be stored on the NTHBSMR, and made available to the NMR and ADS through centralised processes. Copies of the final report will be deposited with Derbyshire CC HER and Nottinghamshire CC HER.

Health and Safety provision:

Responsibility for the Health and Safety management of the project will reside with the contractor, subject to agreeing practices with the Project Manager. This will extend to all of the activities undertaken by the Contractor's staff, and the safety of the public and NT staff in as far as this is influenced by the actions of the Contractor's staff. A full Risk Assessment for all aspects of the project will be completed and supplied to the NT in advance of work commencing, and will require NT agreement. The Contractor will also be expected to comply with practices outlined in the NT "General guidelines for Countryside and Garden work".

Insurance coverage:

The Contractor will be expected to carry Public Liability Insurance to a value of not less than £5,000,000, and to provide proof of insurance to the Project Manager prior to the commencement of works.

Compliance with guidance/standards:

In the execution of all aspects of the described fieldwork, the Contractor will be expected to comply with the professional standards published by the Institute of Field Archaeologists, and guidelines produced by the National Trust.

CONTEXT DESCRIPTIONS

SF = Smithy Floor

No.	Test Pit	Description	Interpretation
001	1	Soft dark brown sandy and clayey silt, 90mm thick	Topsoil
002	1	Firm light yellowish brown gravel, 70mm thick	Path
003	2	Firm dark brownish grey clayey silt, 30mm thick	Trample
004	2	Firm to friable light brownish yellow sandy mortar, 90mm thick	Surface
005	2	Possible circular feature, >0.3m long by >0.15m wide and 0.15m deep,	Posthole
006	2	Firm dark grey clayey silt	Fill of (005)
007	1	Firm black stone fragments and silt, 0.12m thick	Surface
008	1	Firm light brown sandy mortar, 50mm thick	Surface
009	1	Firm black stone fragments and silt, 0.12m thick	Surface
010	1	Sandstone structure, squared, >0.35m long by >0.15m wide and 0.12m high	Step
011	2	Sandstone floor, roughly hewn	Surface
012	1	Linear feature, aligned east-west, >0.5m long by 0.58m wide and 0.7m deep, steep sides and flattish base	Service trench
013	1	Loose to firm dark brown/black silty clay, stone and sand with lead pipe	Fill of (012)
014	1	Firm mid to light grey mortar and stone, 90mm thick	Surface
015	1	Firm mid to light grey mortar and stone, 90mm thick	Surface
016	2	Sandstone structure, squared blocks, aligned east-west	Threshold
017	2	Soft dark grey clayey silt and charcoal	Fill of (018)
018	2	Linear feature, aligned north-south, >1m long by >0.25m wide and 0.11m deep, steep sides and flat base	Foundation trench for (016)
019	2	Friable light yellowish pink mortar with frequent stone fragments	Surface
020	2	Hard light greyish yellow mortar	Bedding for (016)
021	2	Hard dark grey sandstone fragments with frequent charcoal, 0.15m thick	Bedding for (016)
022	1	Firm mid red clay with frequent coal fragments, 30mm thick	Make-up for (023)
023	1	Sandstone floor	Path
024	1	Mixed sandstone, brick and concrete structure,	Doorway repair
025	1	Firm black silt, sand and stone fragments with frequent coal fragments, 0.1m thick	Dumped deposit
026	2	Hard light grey mortar, 20mm thick	Bedding for (016)
027	2	Soft light yellow sand, 40mm thick	Bedding for (016)
028	1	Soft black sand, silt and coal fragments, 90mm thick	Dumped deposit
029	2	Hard dark grey silty clay and sandstone fragments, 0.15m thick	Bedding for (016)
030	1	Firm light yellowish grey sandstone fragments, 80mm thick	Construction deposit
031	1	Firm mid red sandy clay	Natural deposit
032	1	Firm dark grey silt, 30mm thick	Former topsoil
033	3	Sandstone structure, squared in random coursing, aligned east-west	Smithy wall

No.	Test Pit	Description	Interpretation
034	3	Friable dark brownish grey sand, silt with stone and brick fragments,	Topsoil
035	3	Worked sandstone fragment	
036	4	Sandstone structure, rough hewn in regular coursing	Smithy wall
037	4	Soft dark reddish brown and mid red clayey silt, 0.48m thick	Topsoil
038	4	Soft to loose dark brown/black clayey silt with worked stone fragments	Demolition deposit
039	SF	Sandstone structure, rough hewn	Surface
040	SF	Brick (220mm x 110mm x 80mm) structure, lain flat	Surface
041	SF	Firm dark brownish grey silt with straw	Surface
042	SF	Firm to friable light grey mortar	Support for staircase
043	SF	Sandstone block, 500mm x 500mm	Flagstone
044	SF	Sandstone block, 700mm x 450mm	Anvil base
045	5	Soft dark brown/black silt, 0.23m thick	Topsoil
046	5	Loose to firm dark brown/black silt with sandstone fragments and frequent coal, >0.2m thick	Dumped deposit
047	5	Sandstone structure, squared in regular coursing	Smithy wall
048	9	Loose dark grey silty sand, 0.35m thick	Topsoil
049	9	Compacted dark grey silty sand with sandstone fragments, 0.1m thick	Construction deposit
050	9	Firm mid brown silty sand, 0.18m thick	Soil build-up
051	9	Loose dark grey silty sand	Fill of (052)
052	9	?linear feature, aligned east-west, >0.5m long by >0.2m wide and 0.24m deep, steep sides and flattish base	Horticultural trench
053	9	Indurated mid yellowish red sandstone	Natural deposit
054	7	Loose light yellowish brown crushed limestone, 80mm thick	Hardstanding
055	7	Loose mid greyish brown gravel and stone, 70mm thick	Hardstanding
056	7	Friable dark greyish brown clayey silt, 0.2m thick	Former topsoil
057	7	Loose dark brown silty clay with rounded gravel, 0.1m thick	Mixed deposit
058	7	Firm dark brown rounded pebbles	Surface
059	7	2 sandstone blocks, roughly dressed	Kerb to (058)
060	7	Firm dark reddish brown silty clay	Natural deposit
061	12	Indurated light grey concrete, 0.15m thick	Surface
062	12	Firm to soft dark brown silty sand, 0.18m thick	Former topsoil
063	12	Indurated mid yellowish red sandstone and marl	Natural deposit
064	13	Indurated light grey concrete, 0.12m thick	Surface
065	13	Soft dark brown silty sand, 80mm thick	Former topsoil
066	13	Soft dark brown silty sand with copper wire	Fill of (067)
067	13	Sub-circular feature, >0.36m long by >0.19m wide and 0.15m deep, steep sides and rounded base	Possible service trench
068	13	Indurated mid greenish yellow to yellowish red sandstone, >0.15m thick	Natural deposit
069	14	Indurated light grey concrete, 0.13m thick	Surface
070	14	Friable dark greyish brown sand, 0.12m thick	Former topsoil
071	14	Indurated light pinkish grey concrete with tubular steel pipe	Fill of (072)
072	14	Circular feature, 0.28m diameter, not excavated	Posthole

No.	Test Pit	Description	Interpretation
073	14	Indurated mid red sandstone and marl	Natural deposit
074	11	Indurated mid grey concrete, 0.15m thick	Surface
075	11	Friable dark greyish brown clayey silt with sandstone fragments, 0.18m thick	Former topsoil
076	11	Firm dark reddish brown silty clay	Natural deposit
077	8	Indurated mid grey concrete, 0.15m thick	Surface
078	8	Friable dark grey silt with frequent coal fragments, 70mm thick	Former topsoil
079	8	Firm dark reddish brown clayey silt with sandstone	Natural deposit
080	20	Indurated black tarmac, 0.1m thick	Road
081	20	Friable dark greyish brown clayey silt with rounded cobbles and sandstone fragments, 0.15m thick	Mixed deposit
082	20	Firm mid yellowish brown clayey sand	Natural deposit
083	17	Indurated black tarmac, 40mm thick	Road
084	17	Indurated mid red concrete, 50mm thick	Step
085	17	Firm dark grey silty sand with frequent small stones, 0.12m thick	Make-up for (083)
086	17	Sandstone structure, aligned east-west, rough hewn in regular coursing	North wall of barn
087	17	Ceramic drain pipe, inserted through wall (086)	Drain
088	17	Loose mid yellowish brown silty sand with moderate broken drain fragments, >0.32m thick	Backfill of service trench
089	18	Indurated black tarmac, 60mm thick	Road
090	18	Firm dark grey sand, 0.12m thick	Make-up for (089)
091	18	Hard mid brownish yellow sandstone	Natural deposit
092	19	Indurated black tarmac, 0.1m thick	Road
093	19	Loose mid greyish brown clayey silt with sandstone fragments, 80mm thick	Make-up for (092)
094	19	Firm mid reddish and yellowish brown sandy clay	Natural deposit
095	15	Soft dark grey silty sand, 80mm thick	Topsoil
096	15	Indurated light grey concrete with sandstone fragments	Fill of (097)
097	15	Possible rectangular feature, >1m long by >0.35m wide and >0.26m deep, steep becoming vertical sides, not excavated	Cut for adjacent manhole
098	15	Firm dark grey silty sand, 0.16m thick	Mixed topsoil
099	15	Compacted mixed red brick and light brown sandstone, 80mm thick	Surface
100	15	Indurated dark red sandstone	Natural deposit
101	16	Soft dark grey silty sand, 90mm thick	Topsoil
102	16	Firm dark brownish grey silty sand with brick/tile fragments, 0.16m thick	Mixed topsoil
103	16	Firm light grey limestone fragments, 0.15m thick	Dumped deposit
104	16	Compacted mid red brick and light brown sandstone fragments, 90mm thick	Surface
105	16	Indurated dark yellowish red sandstone	Natural deposit
106	6	Loose light yellowish brown crushed stone, 80mm thick	Hardstanding
107	6	Loose mid greyish brown gravel and stone, 0.17m thick	Hardstanding
108	6	Loose dark brown silty clay with gravel, 70mm thick	Mixed deposit
109	6	Hard rounded cobbles and sandstone block, 0.14m thick	Surface
110	6	Firm mid reddish brown sandy clay with sandstone	Natural deposit

No.	Test Pit	Description	Interpretation
111	10	Soft dark grey sandy silt, 0.16m thick	Soil build-up
112	10	Firm dark yellowish brown silty sand with frequent sandstone fragments, 0.31m thick	Dumped deposit
113	10	Sandstone structure, squared in regular coursing	South wall of barn
114	10	Sandstone structure, squared, butts against wall (113)	Internal wall
115	10	Firm dark red clayey sand	Natural deposit

THE FINDS

INTRODUCTION

A large assemblage of artefacts, 227 items weighing a total of 12430g, was recovered from 27 separate contexts. Contexts containing artefacts were especially common in Test Pit 1 and, to a lesser extent, Test Pit 9. These two test pits, and test pit 11, also contained moderate quantities of artefacts, though the largest group of items was from Test Pit 4. Glass is particularly abundant, though pottery, brick/tile, metals and industrial residue were all fairly plentiful. The large quantity of glass probably reflects demolition activities at the location of these finds, while the industrial residues and metals relate to industrial activities at the known smithy.

A small assemblage of faunal remains, 9 pieces weighing 281g, was also recovered.

POST ROMAN POTTERY

By Anne Boyle

Introduction

All the material was recorded at archive level in accordance with the guidelines laid out in Slowikowski *et al.* 2001. The pottery codenames (Cname) are in accordance with the Post Roman pottery type series for Lincolnshire (Young *et al*, 2005) and North Derbyshire (Cumberpatch 2003). Forty-six sherds from 32 vessels, weighing 438 grams were recovered from the site. The assemblage contains post medieval and early modern pottery.

Methodology

The material was laid out and viewed in context order. Sherds were counted and weighed by individual vessel within each context. The pottery was examined visually and using x20 magnification. This data was then added to an Access database. A detailed list of the pottery is included in Archive Catalogue 1. A summary of the pottery is included in Table 1.

Condition

The assemblage is in slightly abraded condition, as indicated by an average sherd weight of less than ten grams. Some of the sherds have soot residues which are likely to indicate post deposition conditions.

Results

Table 1, Summary of Post Roman Pottery

Cname	Full name	Derbyshire cname	Earliest date	Latest date	NoS	NoV	W (g)
BERTH	Brown glazed earthenware	Brown Glazed Coarseware	1550	1800	4	3	94
BL	Black-glazed wares	Blackware	1550	1750	1	1	14
CREA	Creamware	-	1770	1830	1	1	4
ENGS	Unspecified English Stoneware	-	1750	1900	1	1	4
LERTH	Late Earthenwares	-	1750	1900	3	1	47
NOTS	Nottingham stoneware	-	1690	1900	16	9	190
PEARL	Pearlware	-	1770	1900	9	7	37
STMO	Staffordshire/Bristol mottled-glazed	-	1670	1800	1	1	2
TPW	Transfer printed ware	-	1770	1900	4	3	31
WHITE	Modern whiteware	-	1850	1900	6	5	15
	•	•	•	TOTAL:	45	31	436

Provenance

Pottery was found in many of the test pits, although some of these only produced single sherds. Test pits 9 and 11 produced the largest assemblages but neither can be linked to primary deposition of material, as the fragments are small with a high proportion of vessels represented by single sherds.

Range

As the pottery dates to the post medieval and early modern periods it is difficult to provenance, though producers of such wares are known in Derbyshire and Yorkshire. The assemblage contains a range of domestic pottery for utilitarian tasks, dining and other uses. The range of forms is difficult to ascertain given the condition of the assemblage.

Potential

There is limited potential for further work, although the pottery should be reassessed in light of any future investigations at the site. The pottery is stable and poses no problems for long term storage.

Summary

A small post medieval and early modern assemblage was recovered from the site. It contains a range of wares which are commonly associated with domestic activities.

CERAMIC BUILDING MATERIAL

By Anne Boyle

Introduction

All the material was recorded at archive level in accordance with the guidelines laid out in the ACBMG guidelines (2001). Thirty-four fragments of ceramic building material, weighing 8,104 grams were recovered from the site.

Methodology

The material was laid out and viewed in context order. The ceramic building material was examined visually and using x20 magnification. This data was then added to an Access database. An archive list of the ceramic building material is included in Archive Catalogue 2; a summary of the material is included in Table 2.

Condition

The material is in variable condition and includes abraded fragments and a complete brick. Most of the material is in slightly abraded condition.

Results

Table 2, Summary of Ceramic Building Material

Cname	Full name	Earliest date	Latest date	NoF	W (g)
BRK	Brick	1300	1900	8	6563
CBM	Ceramic building material	-	-	3	28
MODDRAIN	Modern land drain	1800	2000	6	693
MODTIL	Modern tile	1600	1900	15	683
PANT	Pantile	1600	1900	2	137
			TOTAL:	34	8104

Provenance

The ceramic building material was recovered from several of the test pits. The material does not seem to concentrate in one area and suggests a general spread of brick and tile in deposits across the area.

Range

The ceramic building material includes brick, tile and drain fragments. A single Pantile is also present. Most of the material is difficult to provenance, although several of the bricks have a distinctive shale/iron fabric which suggests they may be produced in the same place. A single complete brick from context (046) is stamped "Hardwick" and may have been made locally for the hall.

Potential

The assemblage holds limited potential for further work. The ceramic building material is stable and poses no problems for long term storage. Some of the fragments are suitable for discard.

Summary

A small mixed assemblage of ceramic building material was recovered from the site.

FAUNAL REMAINS

By Paul Cope-Faulkner

Introduction

A total of 9 (281g) fragments of animal bone were recovered from stratified contexts.

Provenance

The bone was retrieved from a surface (011), topsoil (038 and 048) and former topsoils (056, 070, 075 and 078).

Condition

The overall condition of the remains was good to moderate and provides no problem for archive storage.

Results

Table 3, Fragments Identified to Taxa

Cxt	Taxon	Element	Number	W (g)	Comments
011	medium mammal	unknown	1	1	
038	sheep/goat	vertebra	1	1	
048	horse	rib	1	18	
056	horse	rib	1	24	sawn at one end
070	bird	unknown	1	1	poss chicken
075	horse	scapula	3	206	3 pieces link
078	cattle	rib	1	30	sawn at one end

Summary

The number of horse bones is explained by the site's position in the Stableyard, and would imply on-site disposal of dead horse, though they show no clear focus. One horse bone shows evidence of butchery, as does a cattle rib, and smaller animals such as sheep and chicken are also representative of its setting. There is limited potential for further work given the overall small size of the assemblage.

GLASS

By Gary Taylor

Introduction

A large quantity of glass, 114 pieces weighing a total of 1457g, was recovered from 11 separate contexts.

Condition

The glass is in good condition though several of the older pieces are heavily coated with iridescence, some of which is flaking off.

Results

Table 4, Glass Archive

Cxt	Test pit	Description	NoF	W (g)	Date
	1	Colourless window glass, 20th century	3	5	20 th
002		Colourless window glass, ridged, 20th century	1	1	century
		Brown bottle, 20th century	1	3	
800	1	Dark green bottle, much iridescence	1	55	18th-19th century
011	2	Colourless window glass, slight iridescence, 20th century	3	2	19 th -early 20 th
011		Olive green vessel, slight iridescence,19th-20th century	3	3	century

	4	Colourless window glass, 20th century	57	305	
		Colourless window glass, diamond-shaped quarries, 20th century	9	59	
		Colourless window glass, traces of light blue paint, 20th century	16	128	
038		Pale green window glass, 20th century	1	1	20 th
		Brown bottle glass, 20th century	1	1	century
		Colourless rectangular medicine bottle, moulded ridges and "[T]ABLE SPOONS", 20th century	3(link)	310	
		Colourless moulded bottle, punt mark of Rockware Glass Ltd, 20th century	4	135	
046	5	Colourless window glass	1	2	20 th century
049	9	Brown rectangular bottle	1	16	20 th century
	14	Colourless window glass, 20th century	1	2	20 th
070		Colourless plate glass, 20th century	1	21	century
		Brown bottle, 20th century	1	3	Contary
	11	Pale green vessel glass, moderate iridescence,	1	2	
		Dark green bottle neck, string rim, much iridescence, 18th century	1	27	
075		Dark green bottle base, steep kick-up, much iridescence, 18th century	1	49	Late 18 th - early 19 th
		Dark green hex- or octagonal bottle base, slight kick-up, much iridescence, mid 18th century	1	84	century
		Dark green bottle base and neck string rim, late 18th-early 19th century	3(2 link)	191	
098	15	Dark green bottle base, very steep kick-up, much iridescence, limy encrustation over break, 18th century	1	34	18 th -early 19 th
		Medium green bottle, much iridescence, 18th-early 19th century	1	8	century
099	15	Light green vessel, much iridescence	1	3	18th-19th century
102	16	Colourless bottle	1	7	20 th century
Totals			119	1457	

Provenance

The glass was recovered from surfaces (002, 008, 011, 099), a demolition deposit (038), a dumped deposit (046), a construction deposit (049), former topsoils (070, 075), and mixed topsoils (098, 102).

Range

Over 80% of the assemblage is window glass of probable 19th-20th century date. There is also vessel glass which has a wider date range, from the mid 18th to the 20th century. Amongst this is part of an angular bottle of the mid 18th century, closely similar to one of 1740 illustrated by Hume (1991, fig 11). Another bottle, though of 20th century date, has a puntmark of Rockware Glass Ltd, who had factories at Knottingley (W. Yorkshire), Ayrshire, St. Helens, and Doncaster (Emhart 1982, 29).

Potential

In general, the potential of the glass is low, though the large group of window glass from (038) indicates not only demolition activities but also some indication of decoration and glazing patterns. Dating evidence is also provided by the glass.

OTHER FINDS

By Gary Taylor

Introduction

A mixed assemblage of other finds, comprising 33 items weighing a total of 2431g, was recovered from 14 separate contexts.

Condition

Most of the artefacts are in good condition, though a few of the iron items are suffering from laminar flaking. Archive storage will be by material type.

Results

Table 5, Other Materials

Cxt	Test pit	Material	Description	NoF	W (g)	Date
001	1	Iron	Punch or nail	1	16	
002	1	Coal	Coal	1	5	
	1	Clay pipe	Stem, burnt (post-use), bore 4/64", 19th century	1	3	
007		Stone	Welsh roofing slate, late post-medieval	1	11	19 th century
007		Iron	Nail, 4" wire, round head, late post medieval	1	20	19" Century
		Iron	Nail/tack	1	2	
011	2	Fire residue	Coal	1	5	
011		Iron	Rectangular sectioned spike	1	37	
	1	Industrial residue	Iron smithing slag	1	179	Post-
013		Ferrous concretion	Amorphous ferrous concretion, contains coal, post- medieval	2	25	medieval
025	1	Ferrous concretion	Amorphous ferrous concretion	2	63	
023		Ferrous concretion	Ferrous concretion, contains triangular sheet of iron	1	76	-
028	1	Ferrous concretion	Amorphous ferrous concretion, contains coal	1	26	Post- medieval
032	1	Industrial residue	Iron smithing slag, plano-convex hearth bottom	1	237	
	4	Fire residue	Cinder	1	1	
		Trampled earth	Compacted flooring/trample, contains straw	4	1	-
038		Iron	Rectangular strip, 208mm x 10mm x 4mm, rivet hole at one end	1	84	Post- medieval
		Lead	Window came, post-medieval	1	7	
		Lead	Off-cut, triangular, post-medieval	1	64	
	5	Industrial residue	Iron smithing slag	2	295	
046		Iron	Nail	1	5	
		Lead	Rectangular sheet/flashing, 174mm x 116mm x 3mm, post-medieval	1	573	
048	9	Plastic	Green ?vessel rim, 20th century	1	1	20th century
010		Plastic	White aeroplane toy, 20 th century	1	1	20 0011101 y
050	9	Iron	T-headed nail	1	31	
056	7	Iron	Bolt	1	653	Post- medieval
104	16	Copper alloy	Coin, 1d, George V	1	10	1921
Totals				33	2431	

Provenance

The other materials were recovered from surfaces (002, 007, 011), a service trench fill (013), a former topsoil (032), a demolition deposit (038), a dumped deposit (046), and topsoil (048).

Range

Metals, their corrosion products, and industrial residues dominate the assemblage of other finds and reflect that part of the investigation examined the environs of a smithy. Fire residues were recovered and probably also relate to the smithy. A few other materials, clay pipe, stone and plastic, were also recovered.

Potential

In general, the potential of the other finds is low, though a few pieces provide dating evidence and the industrial residues relate to the known smithy at the site.

SPOT DATING

The dating in table 6 is based on the evidence provided by the finds detailed above.

Table 6, Spot dates

Cxt	Test Pit	Date	Comments
001	1	undateable	
002	1	20 th	
006	2	Late 17 th to 18 th	Date on a single sherd
007	1	19 th	Date on single piece of clay pipe
800	1	18 th -19 th	
011	2	19th-20th	
013	1	18th to 19th	Date on CBM
025	1	Undateable	
028	1	Post-medieval	Date on industrial residue
032	1	Undateable	
038	4	20 th	
046	5	Late 19th to 20th	
048	9	20 th	
049	9	20 th	Date on single piece of glass
050	9	19 th	
051	9	19 th	Date on a single sherd
056	7	19 th	Date on a single sherd
065	13	19 th	Date on a single sherd
070	14	20 th	Date on glass
075	11	Late 18th to 19th	
078	8	17 th to 18 th	
098	15	18th-early 19th, or 19th	Data on glass: Later data on a single fragment of CDM
090	15	to 20th	Date on glass; Later date on a single fragment of CBM
099	15	Late 18th to 19th	
102	16	19th to 20th	

Cxt	Test Pit	Date	Comments
104	16	20th, after 1921	Date on coin
111	10	19 th	
112	10	18 th to 19 th	Date on single fragment of CBM

ABBREVIATIONS

ACBMG Archaeological Ceramic Building Materials Group

BS Body sherd

CBM Ceramic Building Material

CXT Context

LHJ Lower Handle Join

NoF Number of Fragments

NoS Number of sherds

NoV Number of vessels

UHJ Upper Handle Join

W (g) Weight (grams)

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ARCHIVE CATALOGUES

Archive catalogue 1, Post Roman Pottery

Test pit	Cxt	Cname	Form	NoS	NoV	W (g)	Decoration	Part	Description	Date
01	002	NOTS	Open	1	1	25		Base	Worn basal angle	
01	002	TPW	Closed	1	1	2	Internal transfer print	BS	Burnt	
02	006	NOTS	?	2	1	6		BS		
02	006	NOTS	?	1	1	13		Base		
05	046	NOTS	Jar	1	1	6	Roller stamp decoration	Rim	Round rim	

05	Test pit	Cxt	Cname	Form	NoS	NoV	W (g)	Decoration	Part	Description	Date
0.9	05	046	STMO	?	1	1	2		BS		
1	09	048	ENGS	Jar	1	1	4		Rim	Cuff rim; early	
09	09	048	LERTH	Garden pot	3	1	47		Base		
	09	048	TPW	?	1	1	1	Blue transfer print	BS		
09	09				1	1	14		BS	Yorks or Derbys	18 th
Description											
09	09			·	1	1		print and moulded design		? ID or WHITE	
D9											
Chinoiserie design Chinoise Chinoise	09	050				1	3				
09	09	050	PEARL	Cup	3	1	5	chinoiserie design			
07 056 WHITE Cup 1 1 1 1 BS ? ID or late PEARL 13 065 WHITE ? 1 1 1 BS ? ID or late PEARL 14 070 CREA Dish/ bowl 1 1 4 BS ? ID or late PEARL 11 075 NOTS Jug 4 1 72 Multiple stamps heck BS + heck 11 075 NOTS Bowl 2 1 39 Rim + BS Rim + BS 11 075 NOTS Jar 3 1 17 Multiple stamps and incised horizontal line Rim + BS 11 075 NOTS Jar 1 1 7 Incised horizontal Rim roller stamping Soct over break roller stamping 11 075 NOTS Bowl/ dish 1 1 4 Blue transfer print BS Abraded; ?ID or late 19th PEARL 08 078 BERTH Bowl 1 1 <td< td=""><td></td><td></td><td></td><td>?</td><td></td><td></td><td>1</td><td>Blue transfer print</td><td></td><td>? ID or late PEARL</td><td></td></td<>				?			1	Blue transfer print		? ID or late PEARL	
13											
14	07			Cup	1	1	1		BS	? ID or late PEARL	
11										? ID or late PEARL	
11	14	070	CREA	Dish/ bowl	1	1	4				
11 075 NOTS Jar 3 1 17 Multiple stamps and incised horizontal line 11 075 NOTS Jar 1 1 7 Incised horizontal BS lines 11 075 NOTS Bowl/ dish 1 1 5 Multiple horizontal Rim roller stamping 11 075 WHITE Bowl/ dish 1 1 4 Blue transfer print BS Abraded; ?ID or late 19th PEARL 08 078 BERTH Bowl 1 1 39 BS Internal glaze; patchy soot 15 098 PEARL Lid seated jar 1 1 8 Blue transfer print BS 16 104 BERTH Bowl 2 1 24 BS Mortar over break; one flake; fe slipped; internal glaze and possible deposit 10 111 PEARL ? 1 1 4 Black transfer print with over glaze paint; chinoiserie design	11	075	NOTS	Jug	4	1	72	Multiple stamps			
and incised horizontal line 11 075 NOTS Jar 1 1 7 Incised horizontal BS lines 11 075 NOTS Bowl/ dish 1 1 5 Multiple horizontal Rim roller stamping 11 075 WHITE Bowl/ dish 1 1 4 Blue transfer print BS Abraded; ?ID or late 19 th 11 075 WHITE Bowl 1 1 39 BS Internal glaze; patchy soot 12 098 PEARL Lid seated jar 1 1 8 Blue transfer print BS Mortar over break; one flake; fe slipped; internal glaze and possible deposit 13 11 PEARL ? 1 1 4 Black transfer print with over glaze paint; chinoiserie design	11	075	NOTS	Bowl	2	1	39				
Ines	11	075	NOTS	Jar	3	1	17	Multiple stamps and incised		Hooked rim	
roller stamping 11 075 WHITE Bowl/ dish 1 1 4 Blue transfer print BS Abraded; ?ID or late 19th PEARL 08 078 BERTH Bowl 1 1 39 BS Internal glaze; patchy soot 15 098 PEARL Lid seated 1 1 8 Blue transfer print BS 16 104 BERTH Bowl 2 1 24 BS Mortar over break; one flake; fe slipped; internal glaze and possible deposit 10 111 PEARL ? 1 1 4 Black transfer print with over glaze paint; chinoiserie design	11	075	NOTS	Jar	1	1	7		BS		
11 075 WHITE Bowl/ dish 1 1 4 Blue transfer print BS Abraded; ?ID or late 19th PEARL 08 078 BERTH Bowl 1 1 39 BS Internal glaze; patchy soot 15 098 PEARL Lid seated 1 1 8 Blue transfer print BS 16 104 BERTH Bowl 2 1 24 BS Mortar over break; one flake; fe slipped; internal glaze and possible deposit 10 111 PEARL ? 1 1 4 Black transfer print with over glaze paint; chinoiserie design	11	075	NOTS	Bowl/ dish	1	1	5		Rim	Soot over break	
08 078 BERTH Jar 1 1 31 BS Internal glaze; patchy soot 15 098 PEARL Lid seated jar 1 1 8 Blue transfer print BS 16 104 BERTH Bowl 2 1 24 BS Mortar over break; one flake; fe slipped; internal glaze and possible deposit 10 111 PEARL ? 1 1 4 Black transfer print with over glaze paint; chinoiserie design	11	075	WHITE	Bowl/ dish	1	1	4		BS		19 th
15 098 PEARL Lid seated jar	08	078	BERTH	Bowl	1	1	39		BS		
15 098 PEARL Lid seated jar 1 1 8 Blue transfer print BS 16 104 BERTH Bowl 2 1 24 BS Mortar over break; one flake; fe slipped; internal glaze and possible deposit 10 111 PEARL ? 1 1 4 Black transfer print with over glaze paint; chinoiserie design	08	078	BERTH	Jar	1	1	31		BS		
one flake; fe slipped; internal glaze and possible deposit 10 111 PEARL ? 1 1 4 Black transfer print with over glaze paint; chinoiserie design	15	098	PEARL		1	1	8	Blue transfer print	BS		
print with over glaze paint; chinoiserie design			BERTH	• •	2	1	24			one flake; fe slipped; internal glaze and possible	
	10	111	PEARL	?	1	1	4	print with over glaze paint;			
	10	111	TPW	Dish/ bowl	2	1	28			Concretion	

Archive catalogue 2, Ceramic Building Material

Test pit	Cxt	Cname	Fabric	NoF	W (g)	Decoration	Description	Date
01	002	CBM		1	21		Abraded	18 th to
								20 th

Test pit	Cxt	Cname	Fabric	NoF	W (g)	Decoration	Description	Date
01	002	MODTIL	Vitrified	1	6	Moulded edge		18 th to 19 th
01	002	MODDRAIN		1	47			18 th to 19 th
01	007	CBM		1	6		Affected by heat?; laminated fabric	
01	013	BRK	Oxidised	1	342		Mortar over break; handmade; slop moulded; corner	18 th to 19 th
01	013	BRK	Oxidised + shale/fe	1	547		Mortar over break; corner; handmade; slop moulded; 70- 75mm depth	Mid 18 th to 19 th
04	038	CBM		1	1		Burnt glaze/ residue	
04	038	MODTIL		1	2		Wall tile	19 th to 20 th
04	038	MODTIL		1	1		Flake; same tile as (046)?; burnt/sooting; possible hearth tile	
04	038	MODTIL		1	16			18 th to 19 th
05	046	BRK	Hard; oxidised fine sandy + fe	1	3648		Complete; handmade; slop moulded; even arrises; sunken central oval frog; stamped "HARDWICK"	Late 19 th to 20 th
05	046	MODTIL		3	190		Includes one flake; same tile?; burnt/sooting; possible hearth tile; same tile as (038)?	18 th to 19 th
09	049	PANT		2	137		Same tile?; mortar	19 th to 20 th
07	056	MODDRAIN	Vitrified	4	445		Dark internal deposit	18 th to 19 th
15	098	MODTIL		1	23		Wall tile	19 th to 20 th
15	099	BRK	Vitrified; coarse shale/fe	1	652		Mortar; handmade; 110mm width/depth; corner	late 18 th to 19 th
15	099	BRK	Oxidised; coarse shale/fe	1	389		Mortar; salt surfaces; handmade; sand bedded; 110mm width/depth; corner	late 18 th to 19 th
16	102	BRK	Oxidised + shale/fe	1	531		Cut sides; salt surfaces; even arrises; solid; industrially made?; 75mm depth	19 th to 20 th
16	102	MODTIL		1	349		Mortar/deposit; floor or wall tile; 15mm x 150mm; stamped "HAUN"	19 th to 20 th
16	102	MODTIL		1	5		Wall tile; mortar	19 th to 20 th
16	102	MODTIL		3	51	Moulded	Same tile; green glaze; wall tile; patchy soot	19 th to 20 th
16	104	BRK	Marbled red and light firing + shale/fe	2	454		Handmade; slop moulded; same brick; mortar; strike marks; corner; 73mm depth	late 18 th to 19 th
16	104	MODTIL		1	17		Wall tile	19 th to 20 th
16	104	MODTIL		1	23		Wall tile; corner	19 th to

Test pit	Cxt	Cname	Fabric	NoF	W (g)	Decoration	Description	Date
								20 th
10	112	MODDRAIN	Marbled red and light firing	1	201		?ID or ridge tile	18 th to 19 th

INVENTORY OF ITEMS REMOVED FROM THE SMITHY

Item	Material	No.	Description
V-section Bar	Fe	2	1 x 300mm length, 1 x 500m length
Pipe	Fe	1	40mm by 280mm
Flat bars	Fe	2	1 x 25mm by 1m, 1 x 15mm by 0.73m
Hinge	Fe	1	230mm x 60mm
Unknown	Fe	1	200mm x 90mm x 50mm
Door	Fe	1	
Scythe blade	Fe	1	820mm x 75mm
Decorated piece	Fe	1	
Sprung chair seat		1	
Gear system		1	620mm long
Sign board	wood	1	
Bags of sand		3	
Bag of cement		1	
V-section bar	plastic	1	420mm x 12mm
Bottle	glass	1	
Bottle	plastic	1	
CD case	plastic	1	

GLOSSARY

Bronze Age A period characterised by the introduction of bronze into the country for tools, between

2250 and 800 BC.

Context An archaeological context represents a distinct archaeological event or process. For

example, the action of digging a pit creates a context (the cut) as does the process of its subsequent backfill (the fill). Each context encountered during an archaeological investigation is allocated a unique number by the archaeologist and a record sheet detailing the description and interpretations of the context (the context sheet) is created and placed in the site archive. Context numbers are identified within the report text by

brackets, e.g.(004).

Cut A cut refers to the physical action of digging a posthole, pit, ditch, foundation trench,

etc. Once the fills of these features are removed during an archaeological investigation

the original 'cut' is therefore exposed and subsequently recorded.

Dumped deposits These are deposits, often laid down intentionally, that raise a land surface. They may be

the result of casual waste disposal or may be deliberate attempts to raise the ground

surface.

Fill Once a feature has been dug it begins to silt up (either slowly or rapidly) or it can be

back-filled manually. The soil(s) which become contained by the 'cut' are referred to as

its fill(s).

Layer A layer is a term to describe an accumulation of soil or other material that is not

contained within a cut.

Medieval The Middle Ages, dating from approximately AD 1066-1500.

Natural Undisturbed deposit(s) of soil or rock which have accumulated without the influence of

human activity.

Neolithic The 'New Stone Age' period, part of the prehistoric era, dating from approximately

4500-2250 BC.

Post-medieval The period following the Middle Ages, dating from approximately AD 1500-1800.

Prehistoric The period of human history prior to the introduction of writing. In Britain the

prehistoric period lasts from the first evidence of human occupation about 500,000 BC,

until the Roman invasion in the middle of the 1st century AD.

Romano-British Pertaining to the period dating from AD 43-410 when the Romans occupied Britain.

THE ARCHIVE

The archive consists of:

- 115 Context records
- 4 Photographic record sheets
- 28 Sheets of scale drawings
- 1 Stratigraphic matrix
- 1 Box of finds

All primary records and finds are currently kept at:

Archaeological Project Services The Old School Cameron Street Heckington Sleaford Lincolnshire NG34 9RW

The ultimate destination of the project archive is:

The National Trust National Trust Regional Office Clumber Park Stableyards Worksop Nottinghamshire S80 3BE

Alternative arrangements for the archive is to store it at Hardwick Hall.

Archaeological Project Services Site Code:

HHSY 07

The discussion and comments provided in this report are based on the archaeology revealed during the site investigations. Other archaeological finds and features may exist on the development site but away from the areas exposed during the course of this fieldwork. *Archaeological Project Services* cannot confirm that those areas unexposed are free from archaeology nor that any archaeology present there is of a similar character to that revealed during the current investigation.

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