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APETHORPE HALL, APETHORPE, NORTHAMPTONSHIRE OPENING UP: VOLUME FOUR

HISTORIC BUILDING REPORT

Nick Hill



ASSESSMENT



ENGLISH HERITAGE

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**APETHORPE HALL, APETHORPE, NORTHAMPTONSHIRE
RECORD OF OPENING UP: VOLUME FOUR
HISTORIC BUILDING REPORT**

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SUMMARY

This is a further record of areas opened up as part of the research programme at Apethorpe Hall. As such, it supplements reports by Kathryn A. Morrison, 'Apethorpe Hall, Apethorpe, Northamptonshire: Record of Areas Opened Up Prior to Phase 1 Repairs', English Heritage Research Department Report Series 30/2006, by Claire Martin, 'Apethorpe Hall, Apethorpe, Northamptonshire: Record of Opening Up Volume Two', English Heritage Research Department Report Series 4/2008 and by Hannah Waugh 'Apethorpe Hall, Apethorpe, Northamptonshire, Record of Areas Opened Up Volume Three', English Heritage Research Department Report Series 79/2009.

The areas discussed in the present volume were uncovered during the Phase 1B and 1C repairs programme (the north range, Features 1-4), and during the Phase 2 repairs programme (hall range, Feature 5), between 2010 and 2012.

CONTRIBUTORS

The drawings were prepared by Rodney Melville & Partners.

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The report was edited by Kathryn Morrison and the layout was prepared by Martin Jeffs.

ARCHIVE LOCATION

This report will be deposited in the English Heritage Archive, Swindon.

DATE OF INVESTIGATION

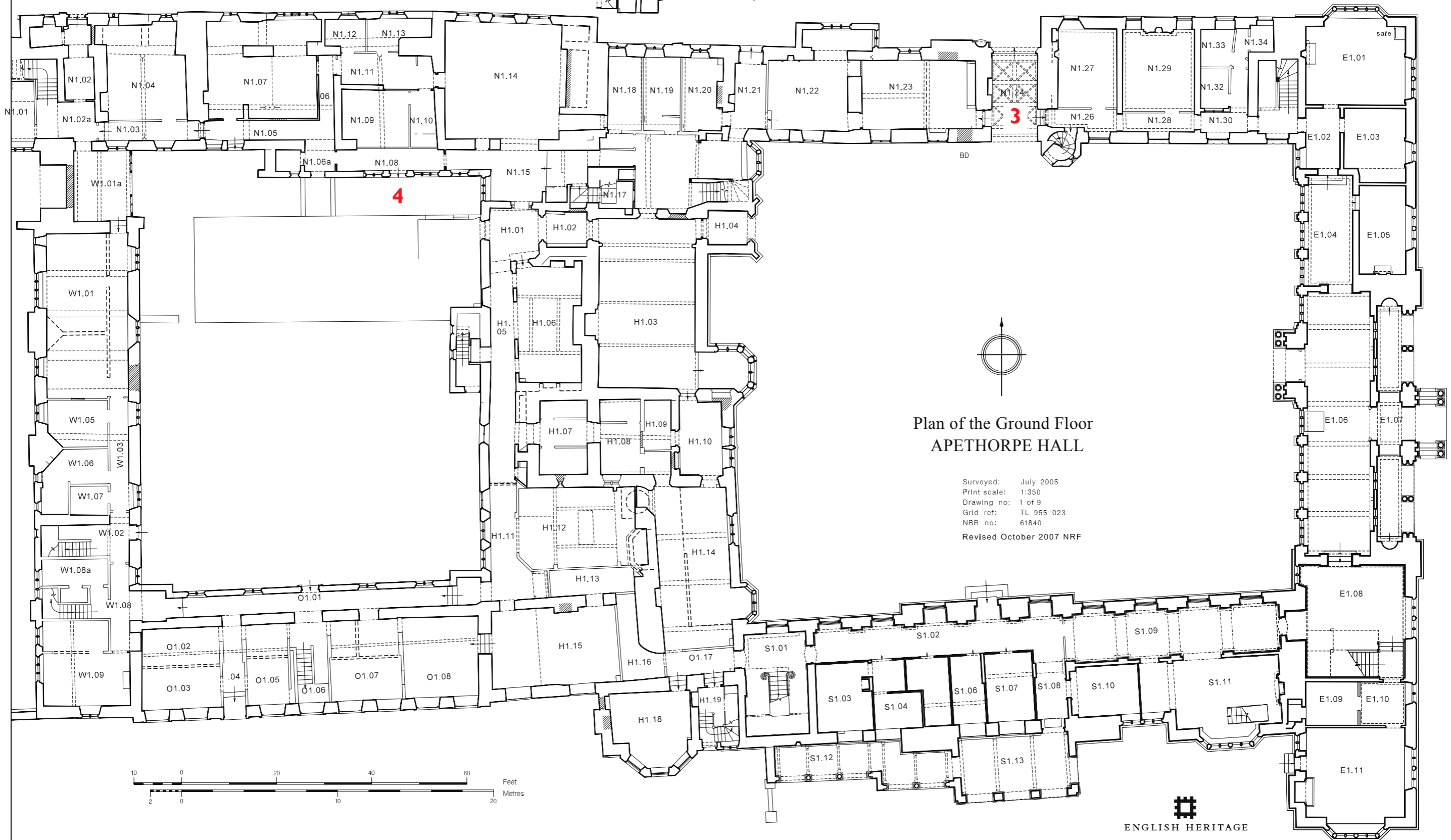
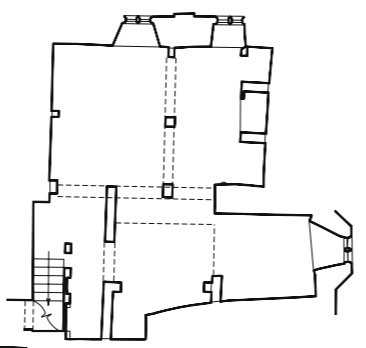
Opening up and survey work were carried out in 2011-12.

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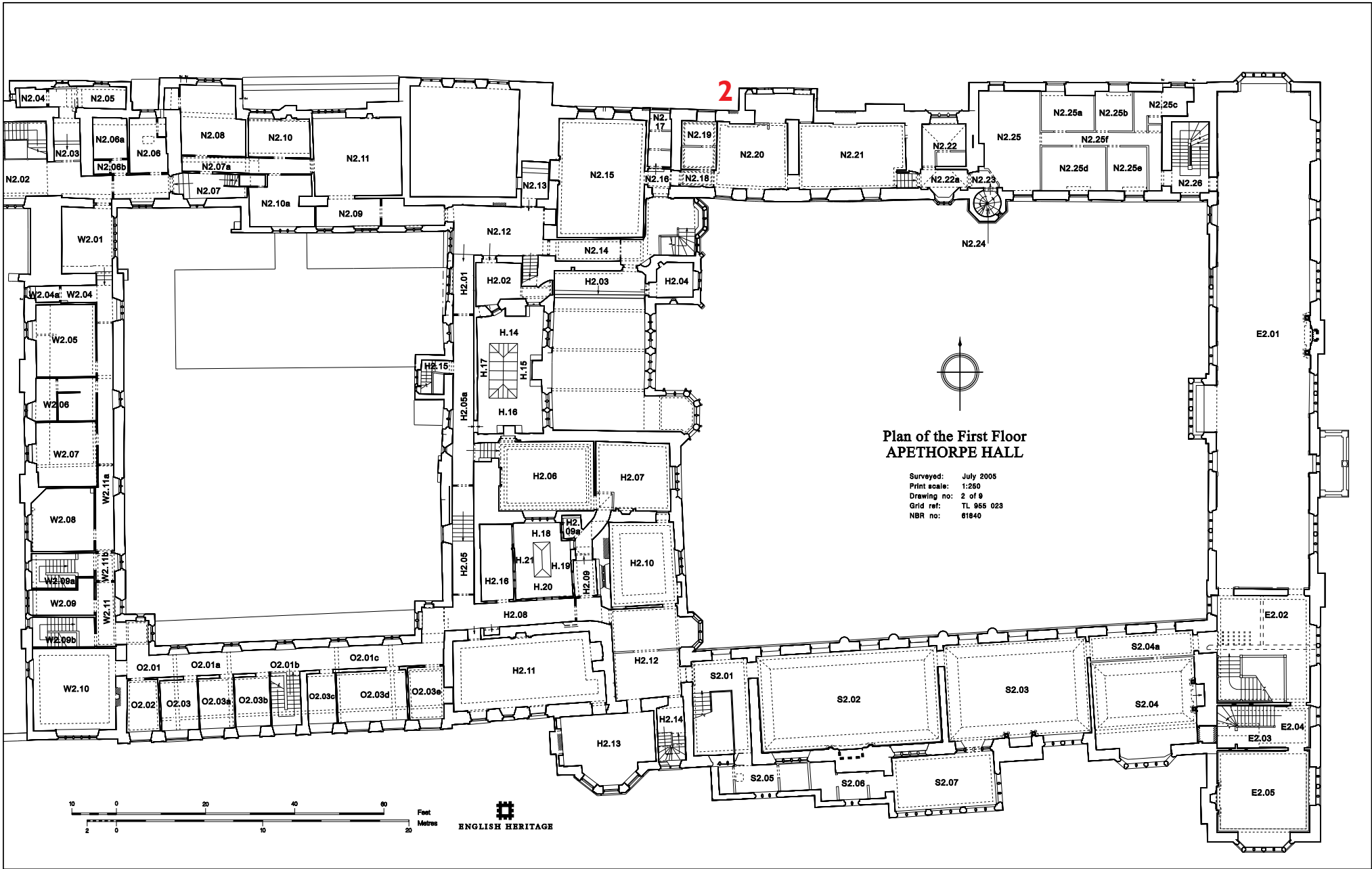
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Plan of the Ground Floor
APETHORPE HALL

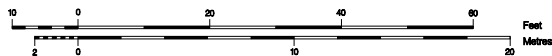
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Drawing no: 1 of 9
Grid ref: TL 955 023
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**Plan of the First Floor
APETHORPE HALL**

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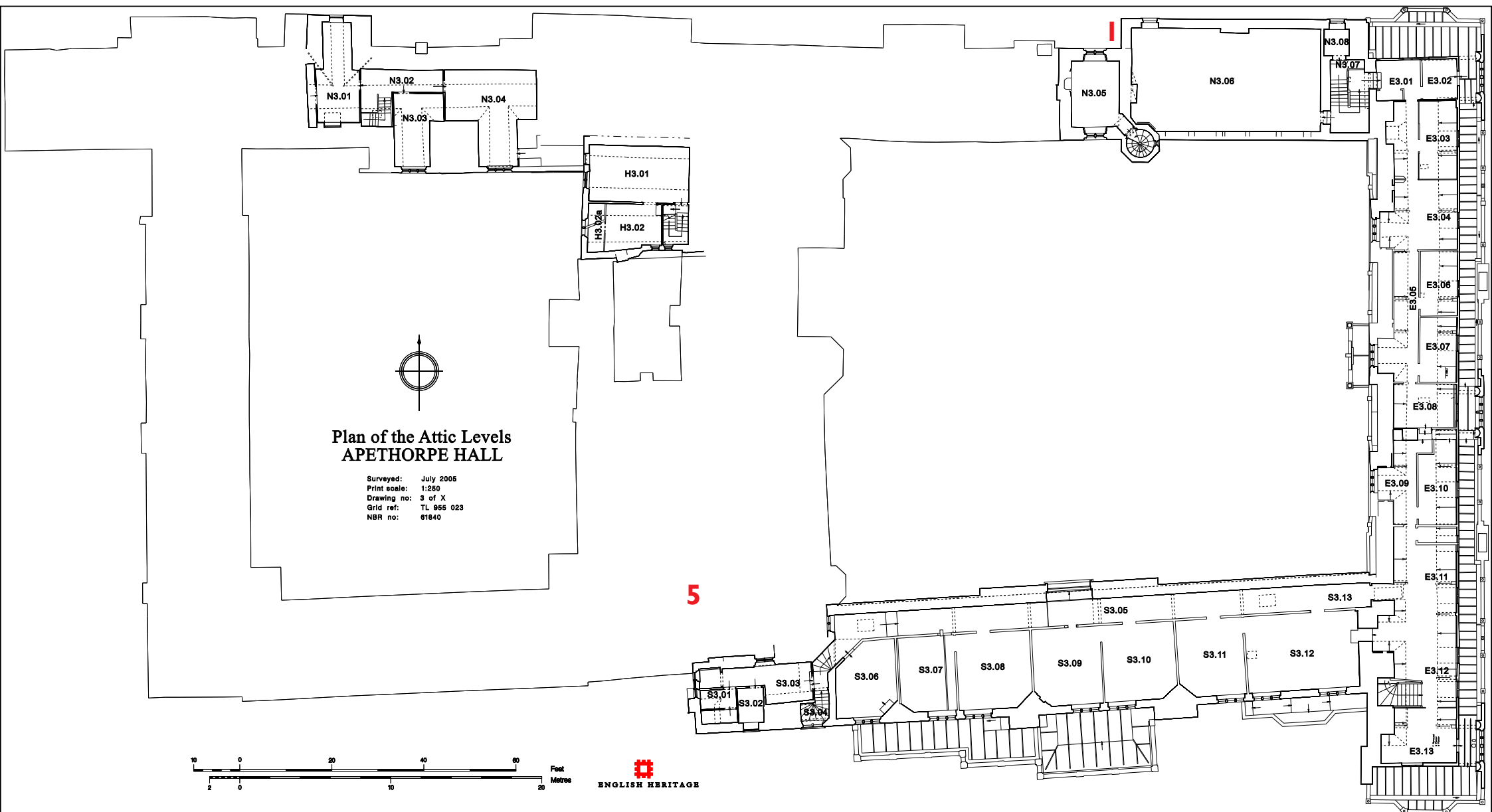


Plan of the Attic Levels
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INTRODUCTION

1.1 Apethorpe Hall

Apethorpe Hall is a Grade I listed country house, located in north-east Northamptonshire. The oldest parts of the house, including the hall, were erected by the courtier Sir Guy Wolston in the late 15th century. Additions were made at various times in the course of the 16th century, and in the early 1560s Sir Walter Mildmay remodelled the house to provide state apartments. This paid off, as Queen Elizabeth I visited in 1566, initiating a long royal association with the property.

King James I visited Apethorpe on numerous occasions. In 1622, he ordered the new owner, Sir Francis Fane, soon to become the 1st Earl of Westmorland, to extend and refurbish the state apartments. The sequence of fine rooms created by Fane in 1622-24 is located in the south and east ranges. These rooms retain elaborate plasterwork ceilings and carved stone fireplaces; they are of supreme historical, artistic and architectural importance.

Plans to remodel the house as a Palladian palace with two vast domes were prepared around 1740 by the 7th Earl, John Fane, and his architect, Roger Morris. This scheme was never fully realised, but resulted in some significant alterations. Then, in the mid-19th century, the Stamford architects Bryan and Edward Browning made various additions and alterations, including the erection of a loggia and conservatory against the south front, and the rearrangement of the 17th-century loggia in the east range.

In 1904, the impoverished Westmorlands sold the estate to Leonard Brassey, who engaged Sir Reginald Blomfield to undertake a great deal of work on the house and gardens. In 1947, Brassey sold the house to the Roman Catholic Diocese of Northampton; it became an approved school, and later a community school. Alterations, most reversible, were made to fit the house for this purpose, initially in 1949-50, and later in the mid-1970s. The school closed in 1982.

1.2 The role of English Heritage at Apethorpe Hall

After the closure of the school, Apethorpe Hall was sold, but the new owner lived elsewhere and neglected the property, which was deemed a 'building at risk'. Following the issue of several urgent works notices, the house was subject to a Compulsory Purchase Order in 2004. It was handed over by the Department of Culture, Media and Sport (DCMS) to English Heritage, which assumed responsibility for instituting a phased programme of repairs and securing a viable future for the property.

I.3 Recently Uncovered Features

Features uncovered during previous phases of the repair programme have already been published. These are:

Kathryn Morrison 'Record of Areas Opened up Prior to Phase I Repairs' EH Research Department Report Series no. 30-2006

Claire Martin 'Record of Areas Opened up, Volume 2', EH Research Department Report Series no. 4-2008

Hannah Waugh, 'Record of Areas Opened up, Volume 3', EH Research Department Report Series no. 79-2009

Where relevant, individually numbered features are located by reference to room numbers assigned by English Heritage (see annotated floor plans).

AREAS OPENED UP

No.1

Feature:

External plaster

Location:

At the junction of the north Gatehouse tower with the Library block. At the upper part of the straight joint to the north-east corner of the Gatehouse tower.



Fig 1.1 Junction of the north face of the Gatehouse tower (right) with the Library block (left) (Nick Hill).



Fig 1.2 Plaster finish to rubble masonry of gatehouse, trapped by addition of Library block. An ashlar joint pressed into the plaster face is visible (Nick Hill).

Description:

A plaster finish to the masonry of the north face of the gatehouse has been trapped and preserved behind the 1740s addition of the Library block (figs 1.1 and 1.2). The Library masonry abuts the tower with a straight joint, and the plaster finish runs in behind this for the upper two storeys of the tower. The plaster is around 15mm thick, with no clearly discernible paint finish. It has been marked out with imitation ashlar joints, scribed or pressed into the plaster finish. The plasterwork pre-dates the 1740s addition, and might be the original late 15th century work. Early plasterwork can be seen surviving over rubble masonry on various parts of the main north and south faces to the tower on early photos, but was later removed in these locations.

No.2

Feature:

External plaster

Location:

At the junction of the north elevation of the north range (room N2.20, the 'Pink Bedroom' on the 1858 plan) with the block (presumed to be a garderobe block) which projects to the north, at first-floor level.

Description:

A plaster finish to the wall of the north elevation of the north range has been trapped and preserved behind the later addition of the garderobe block (figs 2.1, 2.2 and 2.3). The north range wall here has a later inserted chimneystack of brick, but it seems the plaster finish, which would have been applied to earlier rubble masonry, has survived the insertion of the brick stack. The plaster finish survives only to the first floor section of the wall junction, as the ground floor walling has been refaced.

This feature provides further evidence that the rubble walling of the late medieval house was covered with plaster. It also provides some clues to the development of this section of the building. A straight joint on the north face of the garderobe block shows that the western section of this is a later addition, as also indicated by the trapped plaster face on the main north wall. The joint at the junction of the east side of the garderobe block to the main wall has no visible surviving plasterwork.



Fig 2.1 Junction of garderobe block with north wall of north range (Nick Hill).

This could indicate that the garderobe block is contemporary with the main block, though it could also just be that the plaster was removed in this location before addition of the garderobe block. In the added western section of the garderobe block, there is a blocked slit window with a curved arched head at first-floor level. The surviving plaster confirms that this section of wall, together with the slit window, are a later addition to the garderobe block.



Fig 2.2 Junction of garderobe block (left) and north wall of the north range (right) (Nick Hill).



Fig 2.3 Plaster finish to north range, trapped by addition of western section of garderobe block (to left) (Nick Hill).

No.3

Feature:

Ashlar wall structure

Location:

Ground-floor entry area of the north Gatehouse tower (NI.24), east wall

Description:

Several blocks of ashlar masonry were cut out for repair to the east wall here (figs 3.1 and 3.2). It was observed that the ashlar is well bonded to the rubble core of the wall structure and is of irregular thickness. It is also set in the same clay-based mortar as the wall core. This indicates that the ashlar facing to the east (and west) walls of the entry area is the original late 15th century finish, not a later re-facing. Mason's marks were previously noted on the stone blocks here, which also indicated that the stone facing is original. It is interesting that an expensive ashlar finish was used here, in contrast to the external walling, where ashlar was used only for dressings, with plaster finish on rubble stone for the main wall faces. This entrance area was clearly an important space.



Fig 3.1 East face of Gatehouse entry, with stone ashlar lining (Nick Hill).



Fig 3.2 Detail of stone ashlar lining, which is well bonded and integral to the 15th-century wall structure of the Gatehouse (Nick Hill).

No.4

Feature:

Masonry wall with former openings

Location:

North elevation of the kitchen courtyard, ground floor to rooms NI.06a and NI.08.

Description:

Opening up was undertaken around the external doorway at the west end of corridor NI.08. This doorway was cut through in the school era for access to the new dining room block (demolished in 2005-6). The doorway has been removed and the previous detail of a window (as shown on Brassey album photo of 1922, fig 4.1) has been restored.



Fig 4.1 North elevation of Kitchen Court in 1922 (courtesy of Lord Brassey).

Opening up (fig 4.2) enabled inspection of more detail to the former opening here, which had a row of three large ashlar blocks across its head. This former opening is shown as a wide window on the 1858 plan. By the time of the 1913 plan, the area of NI.06a had been re-formed, with a paired set of windows (as seen on the 1922 photo see fig 4.1).



Fig 4.2 Opening up of north wall of Kitchen Court, where modern window was inserted in place of mid-20th-century doorway (Nick Hill).

The row of ashlar blocks at the head of the former opening is the full thickness of the wall (400mm). The rear faces of some of the blocks were also already visible in the first-floor room above, N2.10a. On the underside of the external edge there is a 60mm plain chamfer, which has the remains of a mitred return to the east side (figs 4.3 and 4.4). It is not possible to see whether the remaining jamb to the west was chamfered, or square-edged. The fine vertical joints to the ashlar blocks have joints formed with molten lead (fig 4.5). The soffit of the exposed block has a 'joggle' of c.30mm to the fine ashlar joint (fig 4.6). It also has white paint to the internal 170mm, then the mark of a former timber frame, probably from the window shown on the 1858 plan. The exposed wall section of rubble stone to the east of the former opening has irregular and fairly thinly coursed rubble, set in clay mortar (fig 4.7). The internal face has been partly re-faced in 20th-century brickwork, of commons type with frogs, set in cement mortar. One remaining stone, together with the internal face of the wall to the east of the opened up section, shows that the rubble wall was built to a 400mm thickness, with stone rubble also to the internal face. This area of wall to the east is generally built in clay mortar, but with some areas of lime mortar.



Fig 4.3 Lintel block with chamfer (Nick Hill).



Fig 4.4 Detail of chamfer, with remains of mitred return to jamb (Nick Hill).



Fig 4.5 Joggled joint to lintel blocks, visible on soffit (Nick Hill).



Fig 4.6 Ashlar joint filled with lead, poured in when molten (Nick Hill).



Fig 4.7 Wall core to east side of opening, with stone rubble laid in clay mortar and modern brick facing (Nick Hill).

Within the former opening, one of the pair of stone windows inserted between 1858 and 1913 survives. It is of fine-grained Ketton stone, and with tooling visible on some areas, of closely-set, regular chisel marks.

There is a further row of seven similar ashlar blocks to the east, running from the west jamb of the west window of NI.08 up to the corner junction with the hall range (fig 4.8). Raking out has indicated that these blocks also all have lead jointing to the fine vertical joints, and that the west and east jambs are square-edged. The detail at the head has not been exposed, but it seems likely that this was chamfered, as the infill blocks overlap the original masonry, indicating that the infill is cut to fill in the former chamfer. The walling above, where various areas have been raked out for repointing etc, is largely of good lime mortar, but clay mortar is visible in one or two places. The original ashlar blocks to both sections are of a fine-grained, brownish coloured limestone, with some shell, occasionally visible as narrow banding, which may be King's Cliffe stone, but could be Stamford stone (as it is very fine-grained). The large size of the stone blocks indicates that this could not be reused material.



Fig 4.8 Row of seven ashlar blocks to east, with later infill of doorway and three windows (Nick Hill)..

Below the longer row of ashlar blocks to the east, three stone windows and a doorway have been inserted, with fine-jointed ashlar masonry, all of fine-grained Ketton stone (fig 4.9). The 1858 drawing shows that this masonry was inserted before 1858, and prior to the insertion of the paired windows at the west end. An exposed section internally by the west jamb of the west window of NI.08 shows that the Ketton masonry has brickwork internally. This brickwork is partly cut into the ashlar jamb of the earlier opening (fig 4.10). The bricks are of handmade red type, 65-70mm on bed (no other brick dimensions visible) and have raised marks from being stacked to dry before firing. The bricks are similar to those seen in the 18th-century work at Apethorpe, though could also date from the 19th century, or could be re-used in this context.



Fig 4.9 East jamb of former eastern opening, with square reveal (Nick Hill).

Inspection of the upper wall above the row of ashlar blocks indicates that the whole of this wall is of a single build, all of 400mm thickness and set generally in lime mortar. The stone mullion windows with cavetto moulding, irregular outer edges to the masonry framing and the use of King's Cliffe stone, are all typical features of the 1560s work, as seen on the adjoining Cock Loft block. However, the fine-jointed, plain masonry, and lead jointing of the ground floor all point to a date for the wall of the later 18th or early 19th century. Such a date is also suggested by the plan development, with this wall forming a corridor addition to the late medieval house, though it may also represent a rebuilding of an earlier pentice/corridor. The mullioned windows, and perhaps also the gable kneelers and copings, are probably reused fabric from the 16th-century house. It seems likely that they came from the earlier external wall in this location, which may in that case have had gables to the second floor.



Fig 4.10 West jamb of west window to the former eastern opening, with 18th or 19th-century brickwork cut into the original jamb (Nick Hill).

The construction details of the row of ashlar blocks indicate that they were built to form a series of flat-headed structural openings in the wall. The unusual use of full-depth ashlar blocks and lead jointing with joggles (perhaps also with concealed iron dowels) would have enabled the blocks to span across openings of around 2.3m width, as seen in the surviving evidence of the eastern opening. Here, the two blocks to each side of the former opening acted as corbels and supported the longer, central block via the joggled lead joint. It is likely that the long row of seven blocks to the east had a similar arrangement, with three openings of similar width as that to the west. The lintel over each opening would have had corbel stones to the sides and a central large block. The row of ashlar blocks must have been supported on two masonry piers to carry the weight of the masonry wall above, though no evidence is now visible for such piers. However, both of the ashlar blocks which stood over the probable central piers have vertical cracks, which relate to the stresses imposed on these blocks when they acted as corbels.

The arrangement of a row of four plain, ashlar-framed openings to the ground floor wall is a most peculiar feature. The most likely explanation is that the primary purpose for construction of the wall was not related to the ground floor, but was to create a corridor on the first floor, with improved access to the bedrooms here, together perhaps with extra space for the second floor attic rooms. The 1848 and 1858 plans show that, on the ground floor, the east end of the current corridor was blocked, with the connection into the scullery and larders to the west being via the kitchen, not a corridor. The 1858 plan also shows a section of wall at the west end, which is clearly the former external wall of the original building, with a door and window indicated. It is likely that there was a similar section of walling with windows to the east, the windows providing necessary lighting to the scullery. The ground floor addition here would have formed a row of three alcoves with full-height openings into the courtyard. Besides retaining light to the scullery, the alcoves may have provided useful storage space in connection with the kitchen court. But their primary purpose was simply to support the upper floors.

Key Measurements:

The width of the former western opening from the straight joint at the west jamb to the outside edge of the mitred return of the eastern jamb is 2280mm. The corbel block to the west is 990mm long, of which 410mm is over the former opening. The central lintel block is 1440mm long. The east corbel block is 700mm long, of which 430mm is over the former opening. The height from current external ground level is around 2100mm. The thickness of the wall is 400mm.

The total width of the former openings to the east is 7430mm. If there were three openings of the same width as that to the west (2280mm), then this would leave 590mm for two piers, each around 300mm wide. The central blocks which probably acted as lintels to the three openings are 1130mm long to the west, 1220mm to the centre and 1110mm to the east. The height of the visible line of the former opening is 2180mm above ground beside the current doorway.

No.5

Feature:

Roof structure

Location:

Over H2.11 ('Lady Westmorland's Bed Room' & 'Dressing Room' on 1858 plan), also referred to as the 'Steward's Block'.

Description:

No tree-ring dating has been carried out to this roof. This roof is in two sections (figs 5.1 and 5.2). That to the east is arch-braced, of the same type as other late 15th-century roofs over the great chamber and parlour blocks, and is probably also late 15th century. That to the west has a single A-frame truss, which may be of the same or later date. The two sections were previously divided by a masonry wall containing chimneystacks, as shown on the 1858 plan, but removed in 1912-13, as shown on the 1913 plan.



Fig 5.1 View over roof of H2.11 from the west (Nick Hill).



Fig 5.2 View over roof of H2.11 from the east (Nick Hill).

East section

The east section is of the same vaulted type as over H2.10/12 (parlour block) and H2.06/7 (great chamber crosswing block), but with a shallower vault (figs 5.3 to 5.6). A-frame common rafter trusses with collar, arch-braces, clasped purlin and no ridge. The principal rafters do not diminish at the purlin height. The main section has eight original trusses (T2-T9) set at c.800mm centres, with a further truss (T1) in the valley junction with the parlour roof at the east end. Between these trusses are set pairs of common rafters, with no collars or braces; these provided support for the roofing slates, but not for the barrel-vaulted ceiling. The truss collars are cranked, with tenoned/pegged joints to the rafters and arch-braces. Bridle joint to rafter apex. The rafters to the intermediate rafter couples are pegged to purlins, but the main truss rafters are not. The original purlins are in a single length, with no scarf joints. Evidence shows this roof had no wind-braces. The original vaulted ceiling had laths with a long span from one truss to the next – hand-made nails, lath marks and a few pieces of lath survive. It seems this ceiling survived until the 1912-13 alterations.



Fig 5.3 East end of roof H2.11, abutting parlour block (Nick Hill).



Fig 5.4 East section of roof H2.11, looking west (Nick Hill).



Fig 5.5 East section of roof H2.11, looking east (Nick Hill).



Fig 5.6 East section of roof H2.11, looking east (Nick Hill).

At the east end, to fit the line of the cross wall at the junction of H2.11 to H2.12, there is an end to the vault – simply two slanting nailed-on joists survive to show this, with some pieces of lath (fig 5.8). The next truss to the east (T2) has no nails to underside, and has much thinner arch-braces, showing that it was never designed to receive a vaulted ceiling. The stack to the north here appears to be a later insertion, as it cuts into and is built around the north end of both trusses T2 and T3 and the clasped purlin (fig 5.7). But the west face of the stack has the vault line on it too, with whitewash and a small V indent to receive the ends of the laths, so the barrel vault was made good after the insertion of the stack.



Fig 5.7 Truss T2 with south end cut off by inserted chimneystack, and canted joists to support the end of the vaulted ceiling (Nick Hill).

The valley junction to H2.12 to the east is intact and original, a neatly framed lay-on valley rafter triangle, all neatly jointed at angles. Truss T1 has a simple dovetail lapped collar, fixed with a single peg, the face side being to the east. There is no clasped purlin here, which terminated at T2. There are no nails (except a few strays) to the backs of rafters in the valley joint area – nails for roofing laths would be evident if this valley area had ever been roofed. So this roof appears to be the same date as H2.10/12 to east. No indication of other junctions abutting, eg: to north. The first three valley rafter couples, up to truss T1 have the apex set c.250mm lower and offset to the north compared to the main roof trusses (fig 5.9). This is a key diagnostic feature. The evidence indicates that the roof over H2.10/2.12 to the parlour block incorporated, from the start, a small projecting roof of gabled form. As this projecting roof does not align with the main roof



Fig 5.8 Detail of canted joists to support the end of the vaulted ceiling (Nick Hill).



Fig 5.9 The three rafter couples at the east end of the roof which are off-set and lower than the rest of the structure (Nick Hill).

over H2.11, it must relate to an original feature of the parlour block roof, presumably a lateral stack to the west wall of the parlour block, with the projecting roof abutting against this. The evidence proves that H2.11 was a later addition, not contemporary with H2.10/2.12.

Trusses T2-T9 have a full set of carpenters' marks – short and chisel-cut, unlike other marks in adjoining 15th-century roofs (figs 5.10 to 5.15). Such marks usually indicate a later date, of 17th or 18th centuries, but those here appear original and in situ, not a later re-working. The marks are on the collar, rafter and brace, as far as they survive. Marks also survive to the apex of the two rafters of T4, though some other apexes seem never to have had marks. All marks are on the west face of the trusses, except for the end truss T9, where it is on the east face, no doubt as this was against the lost masonry cross-wall. There are no marks on T1. The marks to the left side of the truss are distinguished by an additional 'tag', with no 'tag' to the right side. Standard Roman numerals, not in the truss sequence, are used as follows:

T3: II
T4: IIII
T5: III
T6: VII
T7: I
T9: V



Fig 5.10 Carpenter's mark to truss T5: III with a tag (Nick Hill).



Fig 5.11 Carpenter's mark to truss T6: VII with a tag (Nick Hill).



Fig 5.12 Carpenter's mark to truss T2, south end (Nick Hill).



Fig 5.13 Carpenter's mark to truss T2, north end (Nick Hill).



Fig 5.14 Carpenter's mark to truss T8, south end (Nick Hill).



Fig 5.15 Carpenter's mark to truss T8, north end (Nick Hill).

Marks to T2 and T8 have other forms. The numerals VI and VIII are, for some reason, not used.

Knife-cut marks to set out the cutting of joints are also visible around the collar/rafter junction, particularly for the cut-out to receive the clasped purlin (Fig 5.16). An oddity is that several of these cut-outs have an enlarged cut-out, now filled with a packer; though also with knife-cut setting out marks. These larger cut-outs appear to be original, not a later re-working, and may have been made to ease insertion of the clasped purlin.



Fig 5.16 Detail of clasped purlin joint to east section of roof. Note the setting-out line and filler block for enlarged cut-out to receive purlin (Nick Hill).

West section

At the former cross-wall position, the structure changes, though later repairs/bodging obscure this somewhat. There is a single truss (T10) to the centre of this section, of A-frame type with a flat (not cranked) collar; missing arch-braces, clasped purlin and no ridge (figs 5.17 to 5.20). The principal rafters do not diminish at the purlin height. The collar is dovetail-lapped to the rafters, not tenoned. The missing arch braces have only short mortices, with two pegs, to the collar and rafter, so were not of the full arching form seen in the east roof. The 'face' side of the truss is to west. Slightly curving wind-braces rise from principal to purlin, though one of the original four is missing to north-east. These braces are tenoned and pegged at the foot, but lapped with a nailed (not pegged) joint at the top (to the purlins). Lath nails for a former sloping ceiling line survive on the underside of the principal rafters. The purlins (in a single length) bear into the masonry of the west gable wall, and show marks where they used to bear into the missing cross-wall. Many of the rafter couples are probably original, but have been much re-set. The rafters are not generally pegged to the purlins.

The gable at the west end has early brick (around 16th to 17th century) to the apex, a flue, and various large ashlar blocks, possibly re-set.

The roof has various later supporting timbers, including the inserted ceiling, with softwood joists, coving to the lateral walls and lath and plaster ceiling. This ceiling is of 1912-13, when the cross-wall was removed and a new stack built to the north side.



Fig 5.17 West section of roof H2.11, looking west (Nick Hill).



Fig 5.18 Truss T10 of west section, west face – note missing arch-brace (Nick Hill).



Fig 5.19 West section of roof, looking towards west gable (Nick Hill).



Fig 5.20 Detail of wind-brace to west section of roof, with original lapped and nailed joint to purlin (Nick Hill).

DISCUSSION

There is no clear evidence at roof level to indicate if the west end section is an addition, or built at the same time as the main east section.

The offset rafter evidence at the east end junction to the parlour block roof shows that the H2.II block was a later addition. As originally built, the parlour block had a lateral chimneystack to the south end of its west wall, with a 'dormer' type gabled roof structure to its east side.

It seems that, when the H2.II block was added, this lateral stack was retained, being accommodated (very tightly) between T2 and T3. The stack was later taken down and relocated further N, truncating the N ends of T2 and T3. The rebuilt stack may incorporate some masonry from the original parlour block stack. By the time of the 1848 plan, there were two splayed fireplaces to the ground floor of the former parlour, so the rebuilt stack may well date from the time these were inserted.

The repair work of 2010 is shown in fig 5.21.

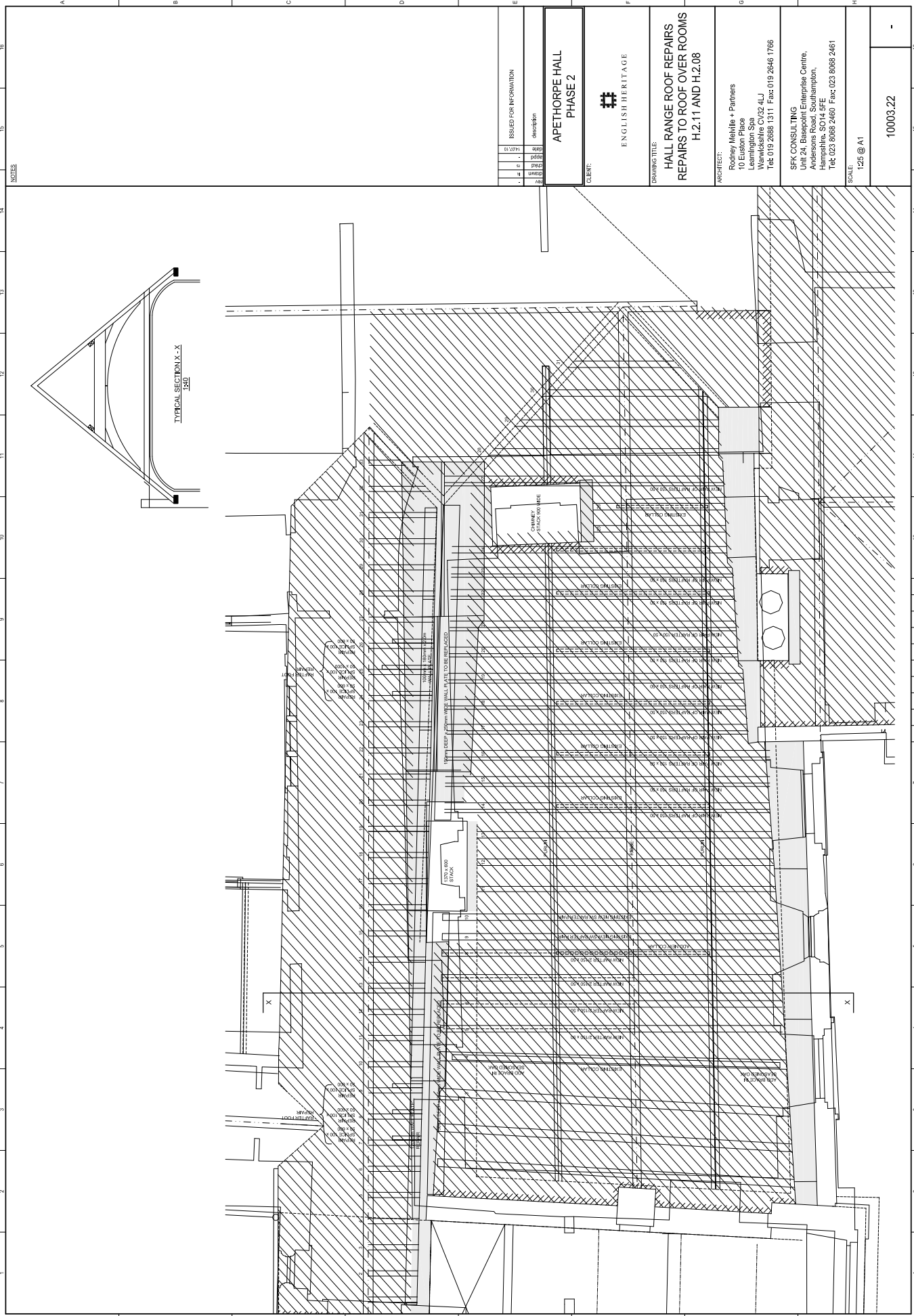


Fig 5.21 Plan of Hall Range roof repairs to roof over rooms H2.11 and H2.08' (Rodney Melville Architects/SFK Consulting Engineers, Ref 10003.22, 14 July 2010).



ENGLISH HERITAGE RESEARCH AND THE HISTORIC ENVIRONMENT

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The Heritage Protection Department provides English Heritage with this capacity in the fields of building history, archaeology, archaeological science, imaging and visualisation, landscape history, and remote sensing. It brings together four teams with complementary investigative, analytical and technical skills to provide integrated applied research expertise across the range of the historic environment. These are:

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