Marches Archaeology

Haden Hill Park Rowley Regis Sandwell

Report on a programme of archaeological work

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This report is produced by

Marches Archaeology

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Haden Hill Park Rowley Regis Sandwell

NGR: SJ 959 856

Report on a programme of archaeological work

Report by

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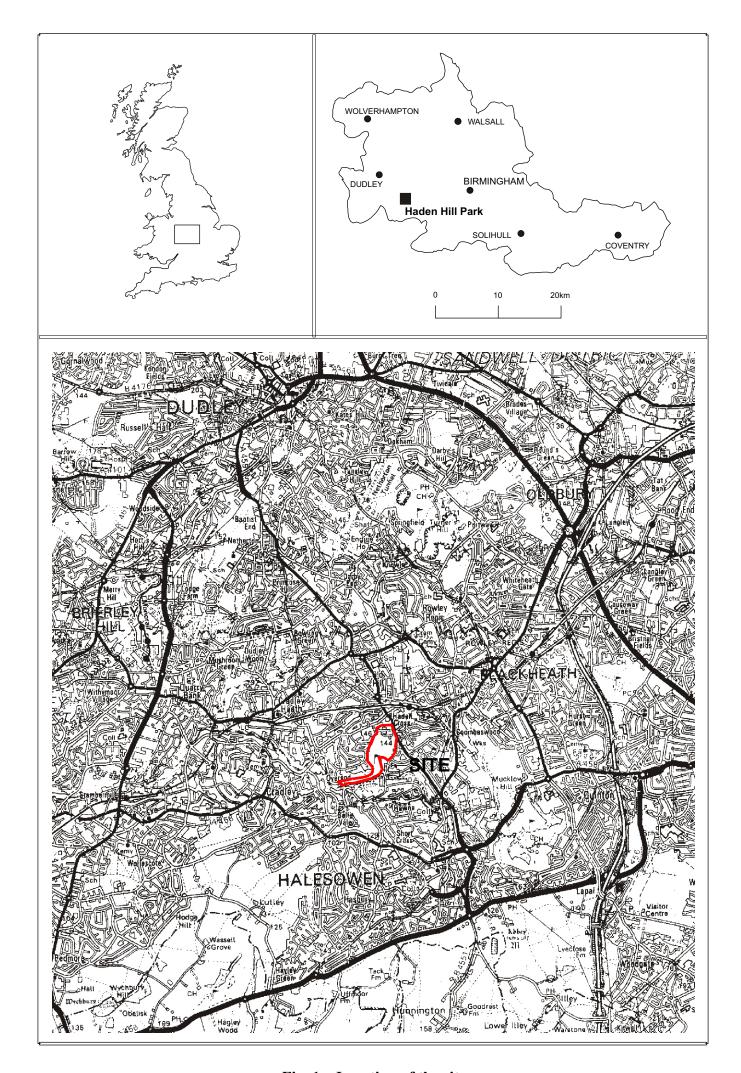


Fig. 1 Location of the site

Summary

Sandwell Council has been granted funding from a Heritage Lottery award to assist with the restoration of Haden Hill Park (NGR: SJ 959 856) to its former Victorian glory. The park consists of 28 ha of formal park land, woodland and water features. Within the park are several significant structures: principally there is a Victorian house (Grade II listed) and adjacent is an essentially 17th century hall (Grade II* Listed). Certain elements within the restoration programme required archaeological supervision so that historic information about the park would not be lost.

Marches Archaeology was commissioned by Sandwell MBC to undertaken a programme of archaeological works. The works began with a photographic record of the paths, important walls and tennis courts prior to the start of the restoration work. While the restoration work was being conducted two levels of observation, called a watching brief, were carried out. In areas that were considered as having a low potential for the survival of archaeological deposits only occasional observations of the landscape contractor's excavations were undertaken. In areas that were considered more likely to have surviving archaeological remains all excavations by the landscape contractor's were subject to an intensive watching brief.

The low intensity watching brief located nothing of archaeological interest. The more intensive watching brief, principally on the summit of the hill around the Victorian house and the Old Hall examined the trenches excavated for the new drainage, the creation of new steps and the resurfacing of the paths. Few archaeologically significant features were observed. The earliest features probably date to the 18th century. These consist of two undated walls which do not conform to the 19th century layout of the park and a brick drain which is of a style contemporary to this period. A lost Victorian wall was found to the south of the Looped Driveway.

A small excavation of a slot through the ha-ha to the south of the house and hall revealed that the wall was suffering from root damage and subsidence. A single body sherd of pottery dated the ha-ha to the late 17th or the 18th century.

In key areas the restoration programme was not allowed to commence work until the approval of the Borough Archaeologist had been sought. The Borough Archaeologist required more intensive archaeological works in these key areas before the contractors were allowed to redevelop. It was known that a ha-ha/retaining wall once stood in an area of lawn to the east of the Old Hall. Two evaluation trenches were excavated across the line of the wall to examine the profile of the terrain and to assess the build up of the wall. The evaluation located the wall and examined the profile of the terrain. It was noted that the build up of the wall occurred in two phases. The earliest phase was undated but the ha-ha is known from the cartographic map evidence to have been present as early as 1834. The second phase, a rebuild of the wall, probably occurred in the later Victorian era: when Haden-Best built the house. A subsequent watching brief was then carried out while the contractors exposed the wall.

A separate area of lawn was to be utilised as a purpose built events area. The lawn was in proximity to the Old Hall, which meant that there was a high potential for the survival of

archaeological remains which could potentially date to the 17th century. To investigate this possibility a geophsyical survey was carried out on the behalf of Marches Archaeology by ArchaeoPhysica Ltd, a specialist in this field. The results of the survey suggested that landscaping had occurred in the area but there were other anomalies that required further investigation. To investigate these features three evaluation trenches were excavated. The anomalies investigated turned out to be modern or natural features. anomalies seen with the evaluation trenches were of archaeological significance further development work was supervised with a watching brief. The watching brief demonstrated that that few archaeological deposits remained in the middle of the lawn. It seemed that features that may have once been present had been mostly removed by landscaping, which had been a regular occurrence since the 17th century. One surviving feature was a stone filled drain, which probably dates to the early 17th or 18th century. The features that had survived were located around the periphery of the area. The remains of an early 19th century wall were located to north of the looped driveway. To the south of the Old Hall and the Victorian house were the remains of a carriageway. Pottery and a nearby 'horseshoe' drain possibly indicate that this dates to the 18th century.

1 Introduction

Haden Hill Park is situated in Cradley Heath (NGR: SJ 959 856) (Fig. 1) and comprises formal parkland, woodland and water features set in 28 ha. Within the park are Haden Hill House and Hall which are registered on the local Sites and Monuments Record and are Listed Buildings. Sandwell Council with funding from a Heritage Lottery award wish to restore the estate to its former Victorian glory. Therefore, certain elements within the restoration programme required archaeological supervision.

The earliest dated building on the site is an 17th century hall (Grade II* Listed), though this may have been an extension of an earlier building (Morriss, 2002, 2.2.2.02). The Old Hall was rebuilt during recent restoration work. In the Victorian period George Haden-Best inherited all but the Congreaves section of the present Park. Almost immediately, Haden-Best began radical changes to the park including the building of a new Haden Hill House (Grade II listed) next to the Old Hall. The design of the house suggests Haden-Best originally intended to extend his house on the site of the Old Hall.

The Local Planning Authority's Archaeology Advisor has produced a series of "Briefs", (See Appendix 8) and a draft "Conservation Statement" has been prepared by Richard K. Morriss and Associates (2002). The initial Brief and the Conservation Statement addressed the mitigation strategy for contract 4 of the restoration programme (see below section 2). The additional Briefs were produced as the project developed either because additional restoration works not covered by the first Brief were added or because a more intensive investigation of the archaeology or potential archaeology was required. Sandwell Metropolitan Borough Council (the client) commissioned Marches Archaeology to provide the archaeological services during the restoration programme detailed in the Briefs.

For each separate stage of the restoration scheme a project proposal based on the particular Brief was written by Marches Archaeology and approved by the local archaeological advisor (Appendix 9). Each proposal followed the stipulations stated in the particular Brief and formed a written scheme of investigation for the archaeological works.

Alterations to the Briefs after the contract had begun were agreed in writing between Marches Archaeology and the Local Planning Authority's Archaeology Advisor. An addition to the initial Brief, 'Archaeological evaluation and watching brief, Haden Hill Park, Rowley Regis' (Appendix 8a), was the inclusion of an electrical resistance survey to investigate the lawn enclosed by Wall No.1A, which is situated to the south of the house and Old Hall. The survey was required as it was intended to redevelop part of the area to incorporate a public events area.

An addition to the final Brief, 'Haden Hill Park archaeological evaluation of the proposed public events area' (Appendix 8c), was the adoption of a watching brief whilst the location set aside was prepared for the construction of the new events area.

2 Scope and aims of the project

In 1998 Sandwell Metropolitian Borough Council successfully submitted a bid to the Heritage Lottery Fund to undertake works at Haden Hill Park. The main objective was to conserve, enhance and restore the estate to the time when the original layout was constructed from 1878-82 up to the 1919 Ordnance Survey plan when the maturing park was at its height. The restoration should be described more as a re-creation since contemporary pressures such as safety, disabled access and use by all ages and groups need to be addressed.

There are five main contracts associated with the restoration and enhancement of Haden Hill Park:

- Contract 1: Creation of a new car park and footpath resurfacing at Corngreaves Hall, and the restoration of the main Fishing Lake.
- Contract 2: Creation of a new car park and play area and the restoration of the former Duck Pond west of the main house.
- Contract 3: Continuation of the restoration of Haden Hall and Haden Hill House, plus restoration of Stables & Dovecot.
- Contract 4: In two parts: 4a mainly resurfacing and reconstruction of paths and driveways, plus a bandstand, restoration of the ha-ha and other works; 4b includes the creation of a walled garden east of the old Hall, main service drive etc.
- Contract 5: A 10 year management plan to arrange urgent works in 2001/2 And medium term works in 2002-4.

Contracts 1 and 2, and effectively contract 3, were completed prior to Marches Archaeology's appointment. This report addresses the findings from Contract 4a and 4b of the restoration programme. The scheme of works for contract 5 have not at this time started.

The scale and extent of the restoration work in Contract 4a was considerable in that it affected most areas within the park. The only areas in the park not affected by the works are those that have already been restored or enhanced in previous contracts. The following features in the park were affected by Contract 4a (Figs 2-6):

Outer Woodland Path 1 and 2, Middle Woodland Pathway 1 and 2, Crosspath, Lower Woodland Path 1, Main Vehicle Routeway 2 and 3, Lower Woodland Path 2 and 3, Link from Lee Road, Drainage to Bowl Area, Bowling Green Path from Car park, Bowling Green South Path, Rhododendren Walk, Looped Driveway, Sons of Rest 1 and 2, Sons of Rest 3, Sons of Rest 4, Main Vehicle Routeway 6, Main Vehicle Routeway 5, Rose Garden Parimeter Path, Access Way, East Path, Rose Garden and the paths in areas 1 to 6 that lead to Congreaves Hall (Stour Valley)¹.

The degree of archaeological sensitivity within the areas affected by contract 4a were considered in the draft Conservation Statement. The Statement divided the park into zones of archaeological sensitivity and allocated each a simple colour code, from the sensitive - Red - to the least - White (Morriss 2002, 103).

- Red Zones are of high archaeological significance and any groundworks within them should be accompanied by a properly staged mitigation strategy and will probably result in proper archaeological investigations in advance of and during the works. There may be a case for altering the design details if the archaeological deposits are considered to be important enough, and there will almost certainly be a need if not for good quality preservation by record.
- Orange Zones are of fairly high archaeological potential requiring an archaeological watching brief during groundworks to ensure that no significant material or information is lost or unrecorded. There should also be a contingency plan in case any significant deposits are uncovered for an appropriate upgrading of the archaeological response.
- Yellow Zones are areas of relatively low areas of archaeological potential but where a low-key watching brief may be appropriate. This would take the form of an archaeological assessment of groundworks and trenches after they have been excavated, rather than requiring archaeological input during their excavation.
- White Zones are areas in which modern interventions and landscaping, etc., have been so considerable that their archaeological potential is virtually zero unless considerable depths are groundworking is being considered.

The majority of the areas affected by contract 4a are within yellow zones and thus only warranted a low level archaeological strategy. Those in white zones required no observations. The exceptions were in more archaeologically sensitive orange areas and so required a more intensive watching brief. The following are areas within orange zones affected by contract 4a:

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¹Note: descriptions are based on drawings provided by Sandwell MBC, Building Services. The following drawings were consulted: C60103/LA-03, C60103/LA-04, C60103/LA-05, C60103/LA-06, C60103/LA-07, C60103/LA-08, C60103/LA-09

Rhododendren Walk, Looped Driveway, Sons of Rest 1 and 2, Sons of Rest 3, Sons of Rest 4, Main Vehicle Routeway 6 and Area 1, the site of Congreaves Forge in the Stour Valley.

The Brief, prepared by the borough archaeologist for Sandwell MBC, stated that the mitigation strategy for contract 4a would consist of:

A basic photographic record of the existing paths, walls and tennis courts

The excavation of two trial trenches (approx. 3m x 3m) on the line of the 'haha' to determine its nature, date and possible significance. The information from the evaluation will help with its repair and conservation in later contracts.

An archaeological watching brief during groundworks in Contract 4a. A low key watching brief was envisaged in the majority of the park, but a more intense watching brief was envisaged for areas of particular note, such as the area beside Corngreaves Forge and within the upper terrace where there may be surviving garden features which pre-date the Haden-Best era Also the Brief required that further information be provided on the date and method of construction of the terrace wall (Wall No. 3) together with its stratigraphic relationship with the new drive. The levels of the watching brief could be scaled down accordingly if no archaeological information was forth coming.

In addition to the initial Brief's stated strategies further archaeological work was required. It was Sandwell MBC intention to create a purpose built events area in the lawn to the south of the House and Hall highlighted in the Conservation Statement as being within an orange zone (Morriss, 2002, 104). Sandwell MBC drawing nos. 9-15-12/LA202 and C60103/DE-31 show the design intended for the events area: copies of these plans are included with this report (Appendix 10)

Due to the lawns close proximity to a red zone, the house and hall, the Borough Archaeologist considered that an appropriate mitigation strategy would need to be formulated. Marchae Archaeology suggested, and agreed by the Borough Archaeological Advisor, that a form of reconnaissance survey be undertaken. Following consultation with ArchaeoPhysica, specialists in reconnaissance and geophysics for archaeology, it was determined that an electrical resistance survey would be the best approach. The aim of the survey was to construct a predictive model of past human activity within the study area and the likely archaeological correlates.

The results from the resistivity survey of the lawn to the south of the house and hall suggested that potentially significant archaeological remains were *in situ* where the new events area was intended to be positioned. The borough archaeologist required that the anomalies indicated by the survey be investigated by an archaeological evaluation. The 'Brief' (Appendix 8c) required the excavation of three trenches:

Trench 1 10m by 2m orientated NW/SE. Trench 2 4m by 2m orientated N/S

Trench 3 4m by 2m orientated NE/SW

The aim of the evaluation was primarily to assess the presence, date, nature, extent, and significance of any surviving archaeological remains. The research aims of the evaluation were

To consider the development of the study area and, in particular, its relationship with the Old hall and Victorian House

To assess the success of the resistivity survey in mapping the archaeological resource

To recommend a future mitigation strategy/research strategy in accordance with the perceived significance of the archaeological remains

Following the evaluation, which produced negative results, a watching brief was set in place while the landscape contractors excavated the site for the new events area. A new brief by the borough archaeologist was not produced as the principal brief included a contingency to cover any ground breaking activities.

As part of the restoration programme set out within contract 4b Sandwell MBC wished to reinstate a length of retaining wall or ha-ha to the east of the Old Hall. During archaeological works in the first Brief two evaluation trenches across the remains of the ha-ha/retaining wall to the east of the Old Hall were excavated (see below). The retaining wall was located and the client was able to assess that the practicalities of its reinstatement. Drawings no. 9-15-12/LA202 and drawing no. 9-15-12/LA205 by Sandwell MBC, copies of which are included with this report (Appendix 10), indicate the intentions of the restoration. The Borough Archaeologist required that a watching brief be undertaken during the initial stages of the reinstatement. Marches Archaeology, produced, based on previous experience of the requirements of an archaeological brief, a project proposal for the works (Appendix 9b). The Borough Archaeologist's subsequent brief (Appendix 8b) summarised that the objectives of the watching brief were:

To undertake a record of the terrace wall

To assess the methods of construction, phasing and date(s) of the terrace wall

To determine whether it pre-dates or was rebuilt during the Haden best works

To provide further information and if appropriate, revise the conclusions of the initial evaluation

2.1 Definition of an archaeological evaluation

An archaeological evaluation aims to "gain information about the archaeological resource within a given area or site (including presence or absence, character, extent, date, integrity, state of preservation and quality) in order to make an assessment of its merit in the appropriate context, leading to one or more of the following: the formulation of a strategy to ensure the recording, preservation or management of the resource; the formulation of a strategy to initiate a threat to the archaeological resource; the formulation of a proposal for further archaeological investigation within a programme of research" (Institute of Field Archaeologists Standard and Guidance for Archaeological Field Evaluations).

2.2 Definition of an archaeological watching brief

The purpose of an archaeological watching brief is defined by the Institute of Field Archaeologists as:

'to allow, within the resources available, the preservation by record of archaeological deposits, the presence and nature of which could not be established (or established with sufficient accuracy) in advance of development or other potentially disruptive works'

and:

'to provide an opportunity, if needed, for the watching archaeologist to signal to all interested parties, before the destruction of the material in question, that an archaeological find has been made for which the resources allocated to the watching brief itself are not sufficient to support a treatment to a satisfactory and proper standard'.

3 Methodology

3.1 Documentary research

No documentary research on the site was undertaken as part of this project by Marches Archaeology. A draft Conservation Statement prepared by Richard K. Morriss and Associates includes an outline history and historic maps of Rowley Regis and the Haden Hill estate (2002, 2).

3.2 Fieldwork

3.2.1 *Photographic and written analysis of the paths*

A photographic record was taken before the main groundworks contractor commenced work on the paths. The record consists of black and white prints, negatives and colour slides which are accompanied by a photographic register for each film used. The register notes a print number and location letter. Cross referencing the location letter on a plan of the site indicates the location of the photograph and direction of the shot (Figs 23 & 24).

3.2.2 *Watching brief and evaluation trenches*

The watching brief was divided into two methodologies. In the yellow zones a low-key approach was adopted, while a more standard watching brief was engaged in the orange zones. Observations in the yellow zones were restricted to periodic visits to site, often only once a week. The groundwork contractor, Blakedown Landscapes, continued excavations and left some or part of the trenches for examination and appropriate recording.

In the orange zones, the activities in association with the enhancement, mostly were observed as the groundwork contractor carried out the work. Attendance on the site to observe the contractors activities relied upon Blakedown Landscapes contract manager contacting Marches Archaeology with instructions to attend the site.

The recording system includes written, drawn and photographic data. Context numbers were allocated and context record sheets completed. Plans were drawn showing the location of the trenches with detail plans of archaeological features drawn at 1:20, sections were drawn at

1:10 or 1:20. The photographic record consists of black and white negative and colour transparency film.

3.3 Office work

On completion of fieldwork a site archive was prepared. The written, drawn and photographic data was catalogued and cross-referenced and a summary produced. The artefactual data was processed, catalogued and cross-referenced.

4 Photographic and written analysis of the paths

A photographic survey of Haden Hill park was undertaken prior to the start of groundworks. Shots were taken of the tennis courts, but not before the groundwork contractors were using the most westerly court as a works compound. General shots around the park were taken of the paths and the walls. The photographs show the general characteristics of the features set in their surrounding context. An intensive photographic record of wall no.3 (ha-ha), to the south of the Rhododendron Walk was taken after the groundworkers had cleared the vegetation, but before restoration work was carried out.

The full results of the photographic survey, with shots in black and white and colour, has been reproduced in jpg. format on a cd-rom attached to this report (Appendix 11). A sample selection of photographs are attached to the report: see Plates 1-15.

Figs. 23 and 24 located in Appendix 1 illustrates the location and direction the shots taken. A letter code was allocated to each pair of shots: one in black and white and one in colour. The letters require cross-referencing with the gazetteer in Appendix 1. The gazetteer contains the details of each pair of photographs.

5 The watching brief and evaluation of the ha-ha east of the Old Hall

- 5.1 *The watching brief*
- 5.1.1 *The low-key watching brief*

Outer Woodland Path 1 and 2

Only part of the northern most drainage trench was available for observation. Within the 0.5m deep trench the earliest layer was a red brown clay (natural) with no inclusions. This was overlaid by 280mm of mid-grey brown topsoil [01].

Middle Woodland Pathway 1 and 2 (Fig. 2)

A 0.35-0.4m wide x 0.7m to 1.2m deep fin drainage trench was excavated on the slope, roughly 1m to the north of the path. The first 16m of the trench were observed. At the east end of the trench the lowest layer in the first 8m of the trench was a firm but friable orange brown sandstone [03]. 12m from the east end of the trench was a layer of orange clay with no inclusions. The relationship between [03] and [04] was not determined. Overlying both these layers was a orange brown compact sand with occasional flat sand stone pieces [02]. Apart from root disturbance there were no other inclusions. Above [02] was a grey brown sandy loam topsoil with a lot of root disturbance [01]. The layer varied in depth from 0.16m to 0.27m deep.

Lower Woodland Path 2 and 3 (Fig. 3)

A series of fin drains and collectors were excavated to the north of the paths. Only an orange-red firm loam with a high clay content below 2-300mm topsoil was observed. The trenches were 0.2m wide x 0.7-9m deep. Where one of the trenches crossed the Lower Woodland Path 3 a single layer of tarmac 60mm thick, with a similar deep layer of firm reddish sand with a high grit content below was observed above the loamy clay. It was evident that the pathway was scarped into the slope of the hill as below the southern 0.7m of the 2m wide path the layers forming the path covered what was once the topsoil.

The removal of the path revealed a 13m length of land drain in the most westerly corner of the Lower Woodlands Path 3 route. The drain was 0.2m wide and filled with stone; within the stone was occasional brick and tile fragments.

Drainage to Bowl Area (Fig. 3)

A series of fin drains, and collector drains and inspection chambers were excavated in the bowl area. Only the easternmost inspection chamber's trench was observed. It was $1.7m \times 1.4m \times 0.7m$ deep. No features were seen in the trench. The lowest layer was a mottled pale yellow and brown clay loam with an inclusion of less than 20mm diameter stones. Over lying this was 0.15m of turf and topsoil

Main Vehicle Routeway 5

A 0.2m wide x 0.7m deep trench for a flexible collector drain to the south of main vehicle routeway 5 was excavated in the bowl. The trench, which followed the curve of the roadway, revealed a firm yellow natural clay 0.34m below the ground surface. The natural subsoil was overlaid by a mid-brown friable sandy loam with charcoal flecks. This layer was 120-130mm thick and was sealed by 80mm thick layer of fine brick fragments. Above this was a thin (30mm) layer of loose midbrown sandy loam. Between this layer and the turf and topsoil was a thin (40mm) white mortar like layer. Cutting the layers below the thin brick layer were four concrete bases. The first was 1.4m from the north end of the trench, the second was 2.55m from the centre of the first. The third was 1.9m from the centre of the second; while the fourth was 1.7 from the centre of the third.

Rose Garden (Fig. 3)

Some rough sandstone blocks were found but no dressing was evident. It was not clear if they were from the cottages shown on the 1846 Tithe map (Morriss, 2002, 67) as the sandstone were not seen *in situ* but removed to the contractor's compound.

The path to Congreaves Hall that cross areas 2 to 6 (Figs. 4 & 5)

A series of fin drains excavated on the north side of the path within these areas were periodically examined for archaeological remains.

The most westerly trench in Area 2 came close to the remains of the embankment for the tramway that crossed the Stour. The 0.2 m wide trench was only 0.6-0.7m deep and in the first 10.5m from the west cut through a dark humic soil with a lot of stone and bricks. Occasionally a golf ball was found within the layer. The rest of this trench and the subsequent trenches had a fine brown silt` loam with occasional flat stones. No finds were seen in the sections of the trench.

Where the fin trenches where excavated along the slope between Areas 2 and 3 substantial sandstone blocks were encountered. The blocks were rough and unshaped and positioned irregularly. The irregular disposition of the sandstone would suggest that the blocks were redeposited, presumably they were dumped in this location when the golf course was constructed.

The fin drains next to the football pitch in Areas 3 and 4 seemed to only cut through made up ground. A 0.4m wide x 2m deep trench to direct the drained water into the river was excavated across the path. The trench was very deep as it had to go below a high voltage electricity cable. The stratigraphy was difficult to see but clearly there were deep modern layers. The workmen had found enamel pots and pans at about 1m below the ground surface. A gentleman walking his dog said that the area with the football pitches was used in the 1950s as a waste dump.

East Path (Fig. 3)

A series of new trenches were excavated to the east of the east path for a new water pipe. The trenches were very narrow and deep. The visible layer below the topsoil appeared to be a modern ground as there was a high content of modern pottery within its make-up.

Crosspath, Lower Woodland Path 1, Main Vehicle Routeway 2 and 3, Access Way and Rose Garden Parimeter Path

No observations during the works undertaken, investigation after groundbreaking activities revealed contractors methodology was not going to provide relevant information.

5.1.2 *The watching brief in the orange zones*

Rhododendron Walk (Fig. 6)

A trench between the looped driveway and Wall No. 3 (the retaining wall or so-called ha-ha) was excavated by the contractors and the then carefully checked for archaeology. The trench was 13.8m long x 300 wide, while at the north it was 0.68m deep and only 0.48m deep near to Wall No.3. The earliest layer was a yellow firm clay with no inclusions [09] that was seen at limit of excavation across the length of the trench apart from 1.3m from the north end where there was 2m of fine sand [08]. This pale yellow brown sand [08] had within its makeup various sized fragments of brick, some up to 80mm. It was not possible to determine whether this was a layer or a fill and cut due to the narrow trench and the heavy root disturbance. It is possible that this was a dump of material associated with the house's construction, no dating evidence was found. Above [08] was a grey-brown fine powdery topsoil with a very high tree root disturbance [07]. A higher content of sub-rectangular flat stones were present the nearer the layer was to Wall No. 3. The trench cut across Rhododendron Walk and revealed that the path was constructed on top of [07]. A thin (10mm) black layer of sand and grit had been used a scree [10] for the reddish brown gritty loam with fragments of brick that had been used to form the paths surface [05].

Wall no.3, the potential 18th century retaining wall [6], which is also referred to as a ha-ha, had the vegetation cleaned off its face so that its the upper part of the structure where collapses had occurred could be re-constructed (Plates 8-12). Before repairs to the walls were completed an evaluation excavation was undertaken in an area where the face had collapsed (Fig. 6) (Plates 13-15). At 31.5m to the east of the west end of the wall a 1m square slot was excavated (Fig 7). The wall [6] was taken down to reveal the break between the face and the foundations of the wall. The wall had been re-faced, and then stone had been

mortared into place. The face stones were repositioned further south, down the slope, from the original face or foundation. The wall was constructed from flat or flattish sandstone. The construction method consisted of larger stones in a rough layer with smaller stones being placed on top. Large stones were then placed on top of the smaller stones. Occasionally the sandstone was bonded with clay but mostly the stones were laid flat with no bonding. Soil and roots had worked its way in between the blocks of stone. Originally the wall appeared to be 0.7m wide before it was re-faced. A single base sherd of pottery was found within the make-up of the wall. The sherd was difficult to date but was either seventeenth or eighteenth century. An earlier date was more likely due to the quality of the fabric (Appendix 3).

The earliest layer behind the wall was a pale yellow clay with no inclusions [09], which had been cut back to construct the wall. The construction cut was difficult to determine as the clay had root disturbance and had interpenetrated with the stone work of the wall. However a clear vertical cut line could be seen in the west section (Fig. 8).

Above [9], but not present in the whole of the slot was [7], a layer of grey-brown sandy loam with heavy root disturbance. This layer appear to have built against the constructed wall and was pushing it southwards. On top of [7] was a thin layer of pale white mortar with fragments of brick [16]. Over the white mortar, but only present in the western part of the slot was a layer of grey-brown sandy loam high content of crushed brick fragments [15] (Fig. 8). Sealing [15] and [16] was a layer of red brick fragments [14]. In the east section (Fig. 9) above [14], and partially over the wall [6], was yellow green sand used to level out for the layer above [92]. Above this was a layer of grey sandy loam with a content of brick [13]. Over this, but only in the west half of the trench, was a thin layer of pink gritty sand [12], which was an earlier path surface. Covering [12] was a grey brown loam [11] which looks like it was either used to level out the area before a new path was constructed or it was a natural build up over the old path surface. On top of the loam was a 10mm thick black sand and grit [10] which was below the surface of the Rhododendron Walk [5].

The modern steps at the end east end of Rhododendron Walk, which allowed access to the sons of Rest Path no. 1 were removed so that new more in keeping steps could be constructed (Fig. 6). The removed steps did not reveal any new information about the retaining wall as not enough of it was removed. Section 2b of the retaining wall, to the north of the steps was partially stripped but there was no opportunity for analysis before the restoration occurred.

To link the Looped Driveway to the Rhododendron Walk a new set of stone steps were to be created near the west end both routeways (Fig. 6). The area excavated was stripped down as far as a pale orange clay [35]. Cutting into this layer was a brick and occasional sandstone drain [34] (Plate 16). The drain ran from the loop driveway down towards Wall No. 3. The drain stopped 12.86m from the wall on the south side of the looped driveway. The end of the drain was some form of soakaway. Four bricks, each being 225mm long x 110mm wide, positioned end to side to form a square with a hollow centre. To the north of the brick square was a sandstone block 0.38m x 0.36m. North of the block were 15 bricks loosely laid side to side and then there was another sandstone block, this one was 0.44m x .26m. The drain then continued northwards, another three bricks were exposed before the drain disappeared below the level of excavation. Below the side to side laid bricks was a channel. The channel was formed by a line of bricks, two courses high.

Cutting across the brick drain was a 5" ceramic drain, constructed from individual pipes each 12" long [33]. When the ceramic drain was laid the groundworkers must have encountered

the brick drain as the south west brick of the soakaway has the corner cut off the brick. Covering [33] was a mixed dark grey-brown loam with charcoal and brick fragments. Above this was a pale yellow gritty material with fragment of charcoal and bricks [31], similar to substances used as a scree in the Looped Driveway. Above this was humic topsoil [1].

Looped Driveway (Fig. 6)

The removal of the concrete kerbstones on the south side of the looped driveway revealed the remains of a wall [26]. The surviving foundation was constructed of flat sandstone without any bonding material. The sandstone was the same as that used on the wall to the north of the Looped Driveway. The wall extended between the entrance way to the Sons of Rest Path 1 and as far as Gully 5, which is around 30m. It was not determined during the works whether the wall [26] extended past Gully 5.

Part of the wall is still standing to the west of the entrance way from the looped driveway to the Sons of Rest path 1. The surviving wall is 0.5m high. The excavation of Gully 4, a 1.1m deep x 1.4 wide trench, next to the standing wall [26] exposed that the drystone wall continued below the surface of the looped driveway. The earliest layer was a natural clay, which was covered by 0.36m of orange clay [30]. The foundations for wall [26] were built on the orange clay [30]. The 0.28m deep foundation was much more roughly laid than the wall and included some brick 0.24m of the wall were below the tarmac of the looped driveway [82].

A trench for Gully 5 (Fig. 10) was excavated to a depth of 1.28m. The earliest layer was the orange clay [30]. Above this was a 0.32m layer of very dark brown clay silt with a content of bricks [87]. The south side of [87] was cut by a steep sided flat bottomed drainage trench [86]. The drainage trench contained a ceramic drain which was packed with substantial stones in a dark brown humic soil [87]. The stones are suspected to have been robbed from wall [26]. The pipe ran to a concrete capped manhole about 1m to the west of the new gully trench. The next layer was an orange grey silted-clay [84], which was probably redeposited natural. This was covered by scree [83] and the tarmac [82].

Gully 5a, (Fig. 11), again cut [30], but between the natural [30] and that made up the road surface was [29]. The road surface consisted of a layer of brick fragments [91], covered by black silt with stones, with a layer of sand and pebbles above [89]. Above this was a red pebbled sand [88], which in turn was covered by scree [83] and the tarmac [82].

A 124m long x 0.3m wide drainage trench was excavated along the middle of the looped driveway between Gully 3 and 4 and the east path. The depth of the trench varied depending upon the incline required for the new drain and incline of the slope of the driveway. The first 12m was excavated to a depth of 0.7m Above the natural clay [30], which was the same as that seen in Gully 4, was a rubble layer that included bricks [91]. Over the bricks was a scree of sub-rounded pebbles [83] with 60mm of tarmac [82]. After 12m the rubble layer became a layer of whole bricks [91] and then a layer of brown clay loam [29] started to appear between the clay and bricks. As the trench extended eastward [29] became thicker so that limit of excavation only penetrated as deep as [29]. The trench cut through an old ceramic drain near to Gully 5. At the bottom of the cut for the drain, which was 0.6m wide, was a midden of 19th century pottery. Layer [29] gradually became less deep and the trench was again penetrating [30]. At around 45m [29] stopped and layer [30] continued under the make-up of the road for about 10m. From then until the trench diverted from the road and went down the bank, the conglomerate stone [25] was below the road surface. Where the trench continued

down the slope, 5.4m to the west of the east path, was a structure buried by the turf and topsoil. The structure was only present in the south section and was made of blue bricks that were 240 x 120 x 80mm [93]. The bricks appeared to be slightly irregular in shape and so could have been hand made.

A series of fin drains was excavated along the north and north-west side of the looped driveway (Fig. 6), beyond Wall Section 1c and Wall No.5. The maximum width of the trench was 0.3m wide and depth varied up to 0.8m. The excavations were watched intermittently and some sections were left open so they could be checked. Where the trenches followed the curve of the driveway 0.52m below the surface was a very hard pale-yellow conglomerate of natural stone [25]. Above this was 0.16m thick mid brown friable loam with an inclusion of small stones [24]. Covering this was a thin layer, only 0.06m thick, of compacted reddish sand loam with a 30 to 40% inclusion of small stones [23]. This thin layer may have once been an earlier ground surface. Layer [23] was below turf and top soil which was 0.28m thick.

1.1m from the west end of the fin drain, near to the path that leads to the modern steps that cross the line of the retaining wall, was evidence of a structure. Cutting [29], a brown clay loam, was a 0.66m wide wall foundation [27]. The construction cut was only as wide as the wall required. The wall, which was 0.33m deep, was constructed from flat stone but bricks had been used in its foundation. To the west of the wall was a greybrown grit [28] that is probably associated with the construction of the nearby path. The end of Wall C1 had been constructed on top of the grit. The dry-stone wall had been covered by turf and topsoil. Any evidence for the wall in the trench running along the looped driveway was not found.

A trench across the Looped Driveway and the cut away corner of the lawn in front of the House and Hall (Fig.6)

The south east corner of the lawn in front of the house and hall was cut away (Figs. 12, 13). The corner was excavated by the contractor without archaeological supervision and the area was left open so that it could be examined. A drainage trench crossing the Looped Driveway connecting to the new trench between the Looped Driveway and Wall No. 3 (see above for description) was excavated under supervision (Fig.5). The earliest layer seen in the drainage trench was a mid-brown gritty clay with charcoal and green sandy patches [45]. The layer appeared to be the original topsoil before the inclusion of the Looped Driveway and the build up of the south east corner of the lawn.

Covering sub-soil [45] was a layer of mid brown gritty clay with red and yellow patches and areas of dark brown clay loam [42]. Covering this was a smooth red and yellow clay [41]. In the south west corner of the section was a mixed red and brown clay layer with lumps of smooth clay [40]. All of these layers dumps used to heighten the south east corner of the lawn. Cutting [40] and [41] was a irregular width drainage trench [45]. The trench, which varied from 0.8m to 1.15m, wide contained a 4" clay pipe and the trench was filled with large stones (100-180mm in diameter) [43]. Wall [36] had been built directly on top of the fill [43] of the drain.

Overlying [40] was a mid-brown clay loam layer [39] which was covered by a dark, almost black layer of ash and charcoal. [38]. Probably the ash was an industrial waste spread across the site, this had occurred in other parts of the park (Hodson, *pers. comm.*) The charcoal layer was below the turf and topsoil [37].

Sons of Rest 1 and 2 (Fig. 6)

Existing kerbstones on either side of the path were removed and the robbed out kerb trenches where shallowly excavated. Only the topsoil appeared to be disturbed.

Sons of Rest 3 (Fig. 6)

A trench 0.2 wide x up to 0.96m deep for a fin drain was excavated to the north of the path. The narrowness of the trench meant observation and recording was limited. The trench cut through a mid-brown compact powdery silt with a few stone inclusions [18], which was below the turf and topsoil [17]. At 2.1 m from the west end, the trench cut through a 1m wide dry stone wall or footing [19]. The top of the feature was 0.5m below the surface. The wall had near vertical sides and the cut [20] was only as wide as wall. The depth of the feature went below the limit of excavation which was 0.96m. It was very difficult to investigate the structure as the trench at this point was only 0.16m wide. It seemed that the structure cut the natural layer below [18]. The natural below seemed to be a friable clay [30].

A fin drain trench that went down the slope to link the above drainage trench to the lower drainage trenches in Lower Woodland Path 2 and 3 encountered a large amount of brick. The trench appeared to cut through part of the footing of the demolished Sons of Rest building.

Sons of Rest 4

No observations were made during the groundworks within this area.

Main Vehicle Routeway 6 (Fig. 6)

Wall no.6 was partially demolished as the stone that had been used to patch up the wall was a poor match, including bits of concrete slab. The stone was replaced with a better matching stone. The earliest layer behind the wall consisted of 0.16m of charcoal and ash [21a], above this was 20mm of yellow gritty sand [21b], this was covered 20mm of orange crushed brick [21c]. Sealing these layers was 0.32m of grey brown powdery loam with a few stones and brick fragments [21d] which was below the turf and topsoil. Clearly these layers had been built up when the flower bed was constructed.

Area 1: the site of Congreaves Forge (Fig. 14).

The path in Area 1 crosses the site of an historic forge site (SMR 4683). A forge had been present at NGR: SJ 954 848 since at least the mid-18th century (Morriss, 2002, 86). The Conservation Statement highlighted this area of importance, giving it an orange colour code. The works being carried out by the groundworks contractor required more strict supervision, unless it could be demonstrated that their methodology would not affect the underlying archaeology. After spending a morning watching the groundworkers prepare the existing path for re-surfacing it was determined that no archaeology would be affected. The work force simply removed the upper layer of the existing path leaving the stone exposed (Plate 6). The wooden edging for either side of the path removed more of the existing stone path put did not penetrate the topsoil below. Following consultation with the Borough Archaeologist the watching brief was reduced so that periodic checks were only made.

5.2 The evaluation of the ha-ha east of the Old Hall (Fig. 6)

5.2.1 Trench 1 (Figs. 15 and 16) (Plates 17 & 18)

The earliest layer encountered was within the eastern end of the slot that was excavated on the north side of the trench. The layer was a natural yellow clay with orange lenses [58].

There were no charcoal inclusions but there were silts and occasionally grit. Overlying [58] was a pinkish brown clay with a high content of grit [57]. This appeared to be another layer of natural. Above the gritty layer [57] was a similar but more yellow, pinky brown clay [56]. Where [57] became [56] was difficult to determine. This layer [56] was present in both the east and western half of the trench and was probably once a topsoil.

Roughly in the middle of the excavated slot was an irregular cut [55] through [56]. The cut on the west side was angled so that is cut into the bank, while the bottom was angled slightly, with a tip towards the west [55]. Near to the cut were flat sandstone pieces of various sizes, none of which were longer than 220mm. Overlying these was a combination of small flat stones and larger sub-rectangular stones [54]. One of the larger sub-rectangular stones was 340mm x 190mm. The stonework was mostly set in clay not dissimilar to [56].

On the east side of the structural feature there was a near vertical cut [53]. The cut [53] had on its west side removed part of [54] and cut into the clay [56]. The east side of the cut was not as vertical as the west. Where it cut [56] it had a more gradual break of slope before it curved around to a more vertical angle. The cut nearer to the limit of excavation bellowed eastward so that it cut into [58]. The actual bottom of the cut was not seen. Where the cut bellowed eastward right at the limit of excavation was a substantial sandstone block. To the west of this was a ceramic drain pipe [77] (0.18m in diameter x 0.52m long). The drain consisted of short lengths of pipe that were butted together, often with a gap as large as 10mm between each pipe.

Partially on top of the large stone block to the east of the pipe were smaller stones which may have been deposited as part of the pinky brown clay with a slight grit inclusion [52]. This clay, which was smoother than that of [56] was probably evidence of slumpage or deliberate backfilling. Directly on top of the large stone and in between the ceramic pipe [77] and [52] was a pinky gritty brown clay which was very similar to the natural [57].

On the west side of the pipe was a gap between the pipe and the cut [53]. Covering the pipe [77] were flat stones laid almost horizontally [50]. The stones varied in size with some stones being as large 0.4m across. The stones appear to be built up to form a foundation. On the east side near to the horizon of [56] a substantial stone with rubble was used as foundation block for the walls face. Filling the gap between [53] and the foundation block was a deposit of rubble. On top of the substantial stone were six flat stones laid horizontally with a vertical face facing east. Behind the face the stones were layered roughly horizontally, though in a random pattern. The stones were not bonded.

To the rear of the structure was a 0.26m wide near vertically sided cut [49]. The cut was filled with a black gritty material with white flecks [48]. The substance appears to be an industrial waste product which has been used as a form of drainage material. The depth of the cut varied depending upon where the excavators encountered stones forming [54].

Overlying the top of the wall, including the face, was a grey-brown loam, similar in appearance to the topsoil. The soil contained a large amount of stone from where the upper parts of the wall were demolished. Clearly this layer was created when the wall was partially demolished and the area was leveled to form a gradual sloped lawn. Across the top of the trench was a layer of turf and topsoil [46]. The topsoil was thicker where it covered the wall than anywhere else in the trench.

5.2.2 Trench 2 (Figs. 17 and 18) (Plates 19 & 20)

The earliest layer seen in trench 2 was the yellow grey natural [58]. Above [58] was a pinkish brown gritty clay [57], while above that layer was the less gritty yellow-pinky brown clay layer [56]. Cutting layer [56] was an almost vertically sided cut [55] that then horizontally cut into [58]. The cut was roughly horizontal for 0.54m and then dipped steeply. The feature contained layers of flat stones with squarer stones above. The stones were set in an orange brown clay [54]. Within [54], and part of the structure, was an area without large stones but instead had pebbles in a orange brown clay. The east side and the top of [54] had been cut [53]. To the east of cut [53] was a near vertical cut through [57] that is almost certainly the same cut [78]. Cut [78] had been excavated for drain [77], the same pipe run as seen in Trench 1. Flat stones and slate [76] were used to cover the top of the drain: probably to provide some protection from the fills above. A single base-body sherd of pottery was found within [76]. The pottery was an industrial slipware, most probably made in the Staffordshire potteries. Lathe turned with bands of blue and grey slip decoration. The sherd is probably from a tankard. The ware and form date to the early 1800s (Appendic 3).

A portion of [76] had been incorporated into the retaining walls construction [50]. The retaining wall was built up from a base of substantial flat stones lying on top of [58]. The face of the wall was constructed with larger flat stones at the bottom and then smaller stones were used on top. The face stones stood to height of 0.62m. The infill behind the wall's face was made up of flat stones roughly coursed. There was no bonding used in the construction. To the west and closer to the cut in the bank there were fewer stones which were bonded in a orange flecked clay [79]. The width of the structure was nearly 1.4m.

Covering the protective layer of stones and slate [76] and butting wall [50] was a mixed orange, orange-brown clay [75]. A similar material formed a 0.13m layer above it [74]. Layer [74] appeared to be re-deposit of [57], though it was had a more organic compound. On top of [74] was a mid-grey brown soil accumulation (0.17m thick), probably this was the original topsoil [73].

The east side of [79] and the top of [50] had been heavily disturbed [81]. The wall had been partially demolished with rubble being pushed eastwards so that it rested against the retaining walls face [80]. At the bottom of the rubble, on top of layer [73] was a crisp packet with promotional date ending 1984. Above the rubble and disturbed layer [80] was grey-brown loam similar to the topsoil [47]. Included within the layer was plastic sheeting and other modern rubbish.

To the west of the retaining wall was a substantial cut through [56]. The cut [70] was curved with a more gradual incline before becoming more vertical as the lower stratigraphy was cut. The bottom of the cut [70] was not seen. The feature had several fills. The earliest seen was a orange brown clay with charcoal flecks [69]. This was sealed by a sterile clay that as it sloped downwards became much thicker [68], 0.3m. Above [68] was a smooth yellow-brown clay [67]. On top of this was a layer of smooth pink clay [66] that spread across the area to the west of the wall. Cutting layer [66], near to the retaining wall and partially within the south section was a modern pit [61]. The pit contained two fills, [60] and [59]; the primary fill was mid-brown with a content of pink clay. A ridge tile was found within the fill The secondary fill [59] was a mixed black charcoal and brown clay. Sealing the pit and covering [66] was a pink-brown loam [65].

At the west end the trench, 0.5m wide was a substantial cut [72] for a linear feature. The cut did not extend across the whole width of the trench but turned sharply just before the south edge of the trench section and continued westward beyond the limit of the excavation. The cut was near vertically sided and was filled with large stones, up to $0.25m^2$, with dark ash in between [71]. If there was a relationship between drain [72] and drain [49] in trench 1 it could not be established. The soakaway in trench 2 was certainly much more substantial.

In the west end of the trench over [70] and partially over [65] was a thin layer of black ash with a distinct fleck of white [64]. Above this layer was a grey-brown loam, which in the west end was covered by a thin layer of sand. Above this was the turf and topsoil, which unlike trench 1 was much more uniform in its depth. [46]

5.3 The Watching Brief during the restoration of the ha-ha east of the Old Hall (Fig. 19)

The evaluation trenches across the known location of the ha-ha to the east of the house revealed a level of preservation that meant the surviving wall could be used as a foundation for reconstruction. The initial plans, drawn prior to the evaluation, were altered to suit the condition of the wall. Work to expose the wall began on 4th December 2002 with an archaeological watching brief being undertaken for six and half days.

The plan was not to expose the complete length of the buried wall which was likely to be surviving between the two driveways. Instead the plans required that the wall should be exposed from the southern looped driveway to just before the canopy of a substantial tree (Fig. 19). The reconstruction required that the wall's face be exposed and an area of slope to the east of the wall should be stripped away so that the ground would gradually fall away from the wall. Sandwell MBC's design required that a wall narrower than the original ha-ha, which meant that only a limited amount of the top of the wall, roughly 0.5m, was required to be exposed during the works. Therefore, further information on the method of the walls construction and relationship to the slope were not forthcoming and apart from some removal of topsoil the area to the rear of the wall was not damaged during the works.

The surface stripping to expose the face of the wall and to reduce the fall of the slope reduced the ground surface down to the yellow grey natural [58]. In the stripped area to the north of the existing steps there were no features. The stripping to the south of evaluation trench 2 revealed drain [77] continuing to the wall of the looped driveway. The 180mm wide clay pipe continued, with its slate covering etc, southwards for 1.14m from south edge of trench 2. Here the trench for the drain diverged from the retaining wall. An investigative trench across the drain revealed that the joint had been formed between two different sizes of pipe. Placed inside the larger 180mm pipe, was a 100mm pipe; there had been no attempt at forming a true bond. The narrow drainage run continued to utilise these 4" clay pipes that were 0.3m long and were roughly butted together. Next to the wall of the Looped Driveway the clay pipes ended at 90° bend that dropped vertically so that drainage run could pass beneath the much lower roadway. A deep excavation 1m north of trench 2 and extending 1.6m to the foundation of the steps in the north revealed no pipework. The drainage run must divert under the retaining wall in the 1m not exposed.

The exposed wall was found in various states of preservation. To the north of Trench 1 only a few courses survived and these were fairly loose (Plate 21 & 22). The best preservation was between Trench 1 and Trench 2, even where the foundation of the existing steps had cut the line of the wall. Here the wall had survived well, and was reasonably high (Plate 23). A

modern drain coming from the direction of the Old Hall had removed some of the upper courses. The wall between Trench 2 and the Looped Driveway was in a poorer condition (Plate 24). When the wall was demolished in 1983/4 more of the wall had been pushed over. The tumble revealed that the wall had been repaired, as sections of the sandstone block work had been bonded together with modern mortar. A 2m wide area of the standing wall was similarly roughly repaired (Fig. 19). It is not possible to date these repairs but they are more than likely to have been done since the 1950s.

Near to the northern limit of the excavated area the lost northern steps were located. These steps were one of two sets shown on the 1888 25" Ordnance Survey map (Morriss, 2002, 60). The other steps were located in the same place as the existing steps. The steps were constructed from brick and were only partially exposed (Plate 25). The contractors removed part of the steps along with part of the wall as far as the slot through trench 1. The trench created was covered by concrete before archaeological work could take place.

The existing steps were demolished down to the brick foundation. The existing steps had utilised an existing foundation that could have been part of the original steps shown on the 1888 25" Ordnance Survey Map (Morriss, 2002, 60) (Plate 26). The foundation was left *in situ* with the intention to incorporate it into the new design.

The electrical resistance survey and the programme of work in the lawn south of the Old Hall

6.1 The electrical resistance survey

The full report on the electrical resistance survey by ArchaeoPhysica is provided in Appendix 2: a brief summary of the findings is presented here.

The survey of the lawn by ArchaeoPhysica Limited, to the south of Haden Hill House and the older hall was successful in mapping variations in soil type and structures relating probably to the Victorian surroundings of the house. More significantly, anomalies within the area of the proposed events area were interpreted as traces of substantial infilled structures possibly associated with the earlier hall (Roseveare, 2002, i) No formal garden layouts earlier than the Victorian era appeared to be present.

6.2 The evaluation of the anomalies to the lawn to the south of the Old Hall

In order to assess the significance of the anomalies that would be affected by the construction of the events area three trenches were excavated (Fig. 20). The largest trench, trench 1 (10.2m x 2m), according to the Brief was to be orientated north west to south east with the intention to determine the significance of Anomaly 18 and its relationship to Anomaly 19. After consultation with the Borough archaeologist permission was granted to move the trench to a north south orientation. A narrow trench was excavated in the south west corner of the trench across where Anomaly 19 was recorded by the survey. The sondage was excavated down 1.25m below the surface. Cutting across the trench, orientated north west to south east, was the southern limit of an horizon of natural bedrock [102] (Figs. 20, 21). Above the bedrock was a natural yellow sandstone [101]. [101] was also seen as the limit of excavation in a narrow trench excavated further north along the west edge of the trench. In this trench overlying [101] was a smooth yellow clay [100].

Above [101] in the trench with the natural bedrock was a friable mixed pink and yellow clay with patches of manganese. There was a cluster of roots near to the vertical face of the bedrock. The depth of this natural layer, [99], varied as the layer appeared to follow the natural southerly falling slope of the land (Fig. 21). Overlying [99] and again following the natural slope was a stiff mottled orange clay [98]. The northern limit of the deposited layer was angled across the trench northwest to southeast, which correlated to the northern edge of Anomaly 19. Near to the southern limit of trench 1 and again running north west to south east was the start of another deposited layer [97]. This layer was a smooth yellow clay with no inclusions. Though only a small area of the layer could be seen it was obvious that the layer continued beyond the trench and was deposited as a levelling layer. The northern edge of layer [97] correlated to the southern edge of Anomaly 19. Above [97] in south west corner of trench 1, where the sondage was excavated, was a grey-brown clay loam with large lumps of clay [96]. The deposit, which had a content of mortar, modern brick fragments, pebbles and lumps of sandstone, extended within the confines of the located anomaly. Near to the middle of the trench cutting into the natural layer [100] was the remains of a tree bole [95], which deposit was indistinguishable from the layer above The layer above the tree bole, [94], was a reddish purple brown clay loam with small brick fragments, charcoal flecks, small lumps of coal and occasional sandstone pieces. The layer contained pottery of possible late 17th or 18th century date. Any evidence for the stone or brick filled hollow, Anomaly 18, was not apparent at the suspected level or at the levels described above. Above layer [94] and across the trench was a layer of fine black charcaol [38], exactly as was seen in the removed corner of the lawn. Similarly, charcoal layer was directly below the turf of the lawn.

Trench 2 was 4m by 2m and was located north to south to evaluate Anomaly 17 and to assess if any archaeological remains associated to the nearby old hall were present. The trench was excavated down to natural without seeing any features. Layer [94] overlay the natural [100] and thus the stratigraphy was then similar to that of trench 1. The absence of Anomaly 17 was not surprising as ArchaeoPhysica had interpreted the anomaly as likely to be a muddy strip caused by people walking across the grass (Roseveare, 2002, 2.16).

Trench 3 was 4m by 2m and was orientated north east by south west to assess the significance and relationship between Area 10 and Anomaly Group 20. The trench was excavated by machine until part of Anomaly Group 20 was clear. Excavation of the feature by hand revealed that Anomaly 20 was a machine cut trench [104] with a yellow plastic perforated pipe set in gravel, which was covered by a brown clay loam with large lumps of clay, mortar and brick [103].

6.3 The watching brief in the lawn to the south of the Old Hall (by S. O. Jeffery)

It was concluded that further archaeological intervention would be scaled down to a watching brief after the evaluation of the lawn indicated that there were no archaeological remains of major significance in this area. The monitoring lasted for a period of five days between the 28th January and the 14th February 2003. The methodology consisted of watching the site strip to a maximum depth of 800mm, which was carried out mechanically with a mini-digger, with hand digging in specific areas to aid the interpretation of any archaeological features that were uncovered.

The earliest feature (Fig. 22) was a stone filled channel [124] with steeply sloping sides 250mm deep, 400mm wide at the top, and narrowing to 180mm at the base. It contained small fragments of olive brown stone which appeared to have been packed into the channel

with sticky clods of clay [125] (Plate 27). This context had small brick inclusions, and a large single sherd of pottery with a mauve fabric and purple glaze which was recovered from the base of the cut. The cut appeared to terminate in a soak away to the west of evaluation Trench 1. The channel cut a deposit of sticky yellow clay [110/100] which also contained occasional brick fragments (Fig. 22). This deposit appears to have been dumped over bedrock [102/120] which was exposed in the north and north west at a depth of 500mm below the current ground surface. Above the bedrock, clay dumping and the channel there was a layer of topsoil [114] and [94] no more than 300mm thick. Between the topsoil and turf [37] was a thin black layer [108/38] of charcoal and clinker less than 200mm thick. These upper layers were visible over the total area of the site strip.

In the extreme north west corner of the area, a section of wall [107] 5m in length and 250mm wide was exposed, and a surface [105] extending 1.9m from the wall to the limit of excavation was also visible (Fig. 22; Plate 28). Below the wall and adjacent surface there was a buried soil [109] 250mm thick. It appeared to be a firm yellowish brown clay loam with occasional inclusions of small coal lumps. A complete brick 210mm x 105mm x 55mm was recovered from this context, and this may be comparable with the brickwork on the facade of the Old Hall. At the base of the soil a deposit of hard yellow clay [110] was partially excavated by hand and a single sherd of a vessel recovered from this context appears to be possibly a type of Midland Purple ware.

The wall [107] consisted of random courses of unbonded olive brown mud stone which were cut into small irregular slabs less than 100mm thick. The top of the south eastern edge of the wall was abutted by furnace waste [108] and below it, and also abutting the wall to the south, was a yellowish brown loamy clay [111] which had been deposited at the same time as the wall [107] had collapsed. It was observed that several courses of the wall had tumbled to the south, and then been incorporated into [111] before being buried under [108].

The surface [105] consisted of a pinkish brown sandy pea gravel 100mm thick, with approximately 10% of the matrix consisting of crushed brick and tile, and some lumps of slag up to 150mm across. Below the surface was another compacted dark brown layer of pea gravel [106] in a matrix of loamy clay less than 100mm thick. In this lower layer several sherds of blue and white transfer printed pottery were recovered, one being marked with the initials "J.T.H.", and another with the word "Staffordshire".

During the excavation of a trench for an electric cable, 12m to the west next to a manhole on the edge of the current driveway adjacent to the Victorian house, was a heavily disturbed deposit identical to [105] that was observed at a depth of 400mm (Fig. 6). The deposit was below a dark brown topsoil [118] and above a clay subsoil [119]. A large cut [121] to the north west probably relates to the existing manhole, however, another cut to the south east of [105] was seen to contain a horseshoe shaped/ U shaped ceramic drain [126].

Along the northern boundary of the excavation, where a security fence in front of the Old Hall had been removed, a modern dump of soil rubble [123] was excavated by machine. This contained plastic sheeting and lumps of concrete to a depth of between 300 and 500mm. The security fence was reinstalled 2.5m to the north of the old fence line and excavation of new post holes to a depth of 600mm showed nothing of any archaeological significance.

The earliest context seen in the southern part of the site strip was a buried soil [117] which was a firm greyish brown loamy clay with small inclusions of coal and mortar lumps. This

occurred at a depth of 0.98m below the lawn and the top of the looped driveway curb side wall, and was hand dug to a further depth of 0.2m. This context is probably the same as the buried soil found in a cut for a new drain [45] in the south east corner of the looped driveway. Although the base of the layer was not seen and no dating evidence was retrieved, it was below a dump of reddish brown clay [116], and a dump of yellowish brown clay [115] which contained small fragments of brick and occasional lumps of plaster and slag. It also produced a single sherd of blue and white transfer printed pottery, possibly of early 19th century origin. The dumping was buried under topsoil [114]. It produced Victorian pottery which abutted a wall [112].

The clay dumping and buried soil appeared to be truncated by a substantial wall [113] but no cut for this feature was found (Plate 29). The northern edge of this wall was excavated and recorded by hand to a depth of 1.2m but its base was not found. The wall consisted of random courses of irregular mudstone blocks upto 0.2m square with alternating courses of greyish green tap slag. These large glassy slabs were up to 0.4m long, 0.2m wide and 0.15m thick. Other smaller lumps of slag shaped into the form of a casting mould or crucible were also found in the wall make-up. No bonding material was visible but there were lenses of ash and charcoal between the slabs. This feature was capped by a more decorative dry stone wall [112] of three to four random courses of unbonded and small mud stone slabs. This wall stood to a height of 0.32m until it was used as a base for the kerb side wall of the Looped Driveway [36]. The wall was contemporary with the topsoil layer [114] until it was buried under [108].

7 Discussion

7.1 The low-key watching brief

The draft Conservation Statement suggested that the areas within yellow zones would be low areas of archaeological potential (Morriss, 2002, 103). The mitigation strategy required that a sample of groundworks and trenches be assessed after they have been excavated. This revealed little of archaeological interest. The lack of archaeological features within these zones establishes that the allocation within the conservation statement as areas of low archaeological potential was correct.

7.2 *The watching brief*

Excavations described as in orange zones by the draft Conservation Statement were subject to a standard watching brief. The methodology adopted by the groundwork contractors in the key area that crossed the site of Corngreaves Forge did not uncover the archaeology that clearly survives in that area. Unless the resource was disturbed when the existing path was constructed the archaeology should be reasonably well preserved.

Within the upper terrace evidence for surviving garden features which pre-date the Haden-Best era were slight and tentative. Two walls were seen, [19] and [27] that could date to this era. It was not possible to investigate either wall thoroughly as both features were seen in narrow trenches. No dating evidence was found but neither wall was aligned to Haden-Best features. This could be an indication that the walls are features with an earlier date. The brick drain [34] seen between the Looped Driveway and Wall No. 3 is also likely to be a pre-Haden-Best feature.

The 'Brief' required that further information be provided on the date and method of construction of the terrace wall (Wall No. 3). The slot through Wall No. 3, where part of the wall has already collapsed, indicated the method of construction, but it also highlighted that wall had been subject to at least one phase of rebuild or repair. The wall had been re-faced, often unsympathetically as old concrete slabs had been used amongst the stone. The face stones had been bonded together with mortar which did not fit in with the rest of the wall. The bonding and the re-facing were fairly recent events. The reason for the bonding was apparent once the wall was stripped down to level just below the current ground surface. The currently exposed face was moving southwards down the slope and was no longer on its original east-west alignment. It was not established whether the movement of the wall above ground was a phenomenon that was affecting the whole length of the wall; even where stonework on the face was not bonded and looked as if it was original.

There was no indication in the fill of the wall for any second phase build or rebuild. A single sherd of pottery from this fill dates to the 17th or 18th centuries. The quality of the fabric would suggest the earlier date. The map evidence with the draft conservation statement shows a wall on the 1834 map (Morriss, 2002), and the pottery evidence dates the wall's construction probably to the 18th century. However, there is only a a single sherd of pottery which means the evidence should be used with caution as it is possible for an earlier piece of pottery to be found within a later context.

The remains of a wall footing [26] on the south side of the Looped Driveway revealed no dating evidence but must have been contemporary with the establishment of the walls on the north side of the Looped Driveway. Morriss has established from cartographic evidence that the driveways are almost certainly a Haden-Best work (2002, 3D.1). The cartographic evidence does not show the walls but it seems probable, especially as the north wall acts partially as a retaining wall where the looped driveway was cut into the slope of the hill, that it was established at the same time. The south wall would not have had the same function but would have complemented the driveway and established symmetry. It therefore seems likely that the wall was a Haden-Best work.

7.3 The evaluation and the watching brief during the restoration of the ha-ha east of the Old Hall

The aim of the evaluation across the line of the ha-ha to the east of the Old Hall was to assess the original or altered profile of the terrain and the build up of the wall itself. The information could then be used to help Sandwell MBC with the design for the restoration. Previous to the evaluation the wall's location was only roughly known and its level of preservation had not been determined. The two trenches initially located the wall and allowed a more accurate positioning of the wall in the landscape. It also became evident that the wall, in the two positions excavated, was well enough preserved to be used as the foundation for the restoration work.

The narrow slots excavated through the wall in both trenches allowed the principal aims to be investigated. Examination of the sections in the trenches revealed that when the wall was built the ground surface was sloping away from the Old Hall, much as it was at the time of the evaluation. The one significant difference, as one would expect, was that the ground level was higher. The evidence, especially from Trench 2 showed that landscaping to the east of the wall had occurred. It seems that when the wall was constructed soil was stripped to level out the slope to the east of the wall's face. Above the landscaping the layers were built-

up again [74] or, such as [73] and [53], had naturally built-up during the 19th and 20th centuries. These layers were only covered over when the wall was partially demolished, which occurred in 1983 or 1984 based on the date on the crisp packet. In both the evaluation and subsequent watching brief there was no indication that when the wall was built there had been any attempt to excavate a ditch in front of the wall, which is the more usual characteristic of a ha-ha.

In order to construct the ha-ha/retaining wall a trench was dug along the slope [55] to secure the foundation. The cut contained flattish stones that had been layered with a natural clay bond to form the foundation [54]. The eastern part of the cut and the eastern part of the wall, including the face, were lost when the wall was later rebuilt. Unfortunately, there was no dating evidence for this the earliest phase of the wall. The cartographic evidence shows that a wall was present as early as 1834 (Morriss, 2002, 60). This phase must be associated to this period and possibly earlier. Exactly how much earlier than 1834 can only be speculated though it cannot be ruled out that it was present as early as the 18th century.

To rebuild the wall the original face and superstructure was cut away and demolished. At the same time a new cut [53; 78] to the east of the wall was dug; possibly to make sufficient room to work on the rebuild. For some reason in the northern half the builders decided to incorporate a ceramic drain [77] under the new wall [50]; in the southern half the drain was only partially covered by the wall [50] but when they reduced the pipe size the drainage run was diverted away from the wall.

The wall in the northern half the ceramic drain [77] was covered over by the wall's foundation. The foundation was built within the cut [53] using flat or square stones up to the ground level, the top of [53]. The vertical face of the wall was set back from the eastern edge of the foundation. When the wall was constructed the builders had carefully chosen the thinner stone block work for the face; the larger block work was used for the fill of the wall.

A different construction method was used in the south half of the ha-ha. Here the ceramic drain was partially exposed and a protective layer of slate and stone was placed on top of the pipe [76]. Part of the stonework was tied into the foundation and the face of the wall was built up [50]. The fill behind the wall consisted of flat sandstone blocks but there was the occasional reused hand made brick.

The evidence for the date of the rebuild is difficult to accurately pinpoint based on the available evidence. The available dating evidence is based on a single sherd of pottery, the slate used to protect the drain and ceramic pipe used to form the drain. What is clear form the evidence is that the rebuild did occur sometime in the 19th century. The pottery evidence consists of a single sherd [76] which was sealed by the slate covering the pipe. The sherd has been identified as belonging to a form dated to the early 1800s. However, the slate covering the drain indicates a slightly later date as slate was not transported *en masse* until the advent of the railways.

The ceramic pipes used to form the drain are more difficult to date accurately. Ceramic drains had been used since the 17th century but not usually to the diameter of the pipe present at Haden Hill. It was more usual to find ceramic drains of only 3" or 4" in diameter even in the 18th or early 19th centuries (Fussell, 1981, 24). The sherd and slate rule out any date earlier than the 19th century. An early 19th century date can be ruled out if Mr Parkes, writing in 1843 is to believed, he wrote that ceramic drains had fallen out of favour and that

no one had produced ceramic drains for 35 years or more (Fussell, 1981, 27). It seems the practice was not re-established until the 1840s possibly starting due to the use of machines in Essex that were noted as preparing perfect cylindrical pipes (Fussell, 1981, 28). A factor, not to be forgotten is the unusually large diameter of the ceramic pipe in question: a more customary size could be argued to indicate an earlier date as it would match other examples. This example corresponds more with late 19th century pipes that have been recorded in East Yorkshire and North Lincolnshire (Tibbles, 2002, *pers. comm.*). From the known history of the house and park there is little to indicate that such a work could have occurred at any other time than when the rest of the works were being undertaken in the 1870s by Haden-Best. Plates 30 and 31 show the wall, probably in the early part of the 20th century.

In the 20th century the southern half of the wall appeared to have significant problems as the wall was in one place rebuilt from the ground level up (Fig. 19). There was also an indication from the toppled remains that sections of the upper part of the wall had also been rebuilt. The methodology used for the rebuild was crude and unsympathetic to rest of the wall as mortar had been used to bond the stone block work together with no attempt to hide it. When the wall was to be demolished and covered over in 1984 the state of preservation must have been poor.

7.4 The electrical resistance survey and the programme of work in the lawn south of the Old Hall

The survey by ArchaeoPhysica Ltd found a number of anomalies of note (See Appendix 2). In the west half of the lawn the area not affected by the construction of the new events area, there appears to be good indication that Anomalies 8 and 4 are Victorian garden features (Appendix 2). There was no indication that earlier garden features were present and it was suggested both by the results of the survey (op. cit. 2.24) and the examination of the removed corner of the lawn during the watching brief that landscaping of the area of lawn had occurred.

In the area that was going to be affected by the construction of the events area there appeared to be a strong indication, Anomaly 18, for the remains of a structure (Roseveare, 2002, 2.17). The alignment of the structure suggested that it was more likely to be associated with the Old Hall (*op. cit.* 2.25). This and anomalies 17, 19 and 20 found within the proposed events area required further investigation and it was recommended that an evaluation was carried out to understand their significance.

The three trenches positioned to investigate the anomalies in the lawn that would be affected by the construction of the events area found no significant archaeological remains. The largest trench (trench 1) positioned north-south across where Anomaly 18 was supposed to be found no indication for the structure proposed in the survey results. A cause for the misinterpretation may have been a natural line of bedrock and the significant level of landscaping that had occurred in the area. A further factor could have been the layer of industrial waste spread across the area of the lawn just below the turf and topsoil.

The watching brief revealed that a considerable amount of landscaping had resulted in the levelling of the ground surface in the area to the south of the Old Hall. This appears to have been achieved by dumping large amounts of yellowish clay [110] and [100] directly onto the bedrock. The pottery recovered from the clay dumping, and a channel [124] cut into this dumping suggests an early post-medieval date for the initial phase of landscaping. The

channel itself was probably intended as a drain although it could also have been a wall footing for a garden structure which was completely removed by later landscaping activities.

The construction of wall [113] would have taken place after the initial phase of landscaping as a buried soil [117] was seen to the north of the wall line, and this was sealed by clay dumping [116] and [115]. This clay dumping took place before the construction of the looped driveway in the late 19th century. The pottery recovered from the clay dumping suggests an early 19th century date. The wall [113] was at least 0.7m wide and more than 1.5m high and it likely that the building material, which included metal working waste, was obtained from a local source to limit transport costs. The most obvious choice would be the nearby forges at Congreaves or Hayseach which was in use during the 18th century (Morriss, 2002, 2.2.2.01). The function of the wall may have been to act a garden terrace to the south of the Old Hall or as a ha-ha. The repositioning of a ha-ha/retaining wall to accommodate a new garden design is not unique as was found at Stowe Historic Landscape Gardens by geophysical survey and excavation (Jeffery, 1999).

The top of wall [113] was rebuilt with a more decorative but far less substantial dry stone wall [112] probably at the time of the construction of the looped driveway when the area to the south was infilled during the 19th century. A topsoil [114] abutted the new wall and this produced a large quantities of possible 18th century pottery and a few sherds of Victorian pottery. The dry stone wall was subsequently buried below industrial waste [108] and modern topsoil [94] after a kerb was built along the northern edge of the looped driveway.

The dating evidence for the carriageway [105] seen to the south of the Victorian house suggests an 18th century date as does the recovered pottery which was painted with the initials "J.T.H". If the initials do not belong to the artist, they could have belonged to a John Hadyn who owned the Old Hall in the mid-18th century (Lynn Foord, 2003, *pers. comm.*). Comparisons with the recent tree survey and age of various species, and the direction of the carriageway in a south westerly direction from the Old Hall could also indicate the existence of a planted avenue in keeping with an 18th century garden design. The nearby horseshoe shaped drain [124] may be contemporary with the driveway [105]. This style of drain was in use during the 18th century (Tibbles, 2002, *pers. comm.*), though they are recorded as still in use as late as 1843 (Fussell, 1981, 25)

8 Conclusions

The three Briefs prepared by the borough archaeologist for Sandwell MBC set out the aims and objectives for the project. The intitial brief required a photographic gazateer of the paths walls and tennis courts of the park. The results of this survey are presented in Appendix 1. The excavation of two trial trenches on the line of the 'ha-ha' achieved two out of the three principal aims. The evaluation did determine the nature and significance of the ha-ha, but it was not possible to accurately date the feature to a specific date earlier than the cartographic evidence supplied by Richard Morriss. The secondary aim of providing information that would help with the repair and conservation of the ha-ha was achieved. The succeeding watching brief during the restoration work for the ha-ha only managed to achieve one of the aims, which was to record the state of presevation of the wall before it was utilised by the reconstruction. Opportunities to investigate the other aims were not forthcoming.

The low key watching brief undertaken in the majority of the park, as was envisaged by the Borough archaelogist, found little of archaeological interest. This negative evidence confirms that the findings of the Conservation Statement (Morris, 2002) in regard to these areas was correct.

The more intense watching brief envisaged for the area beside Corngreaves Forge and within the upper terrace was as suggested in the Conservation Statement more archaeologically significant. Unfortunatly, the works undertaken at Congreaves Forge did not yield any information due to the methodology adopted by the landscape contractor. It was certainly clear that archaeology did survive in the area and should be preserved below the re-laid pathway. The principal aim of the watching brief on the upper terrace (orange zone around the house and hall but not including the area of lawn to the south of the house) was to see if there were any surviving garden features which pre-date the Haden-Best era. There was only a small amount of evidence for pre-Haden Best features. A brick drain [34] seen between the Looped Driveway and Wall no 3 was certainly from an earlier period but two potential walls [19 & 27] can only be tentatively assigned to this era. The other features seen were Hadenbest or later.

The slot through Wall No. 3 provided information on the method of construction and may have indicated a date for this part of the terrace wall. The sherd found may have been formed as early as the late 17th century. However, the dating evidence should be used hesitantly as only a single sherd of pottery was found. The sherd could have been deposited much later.

The intentions of the park authority to construct an events area allowed for the more intense investigation of the lawn in front of the house. A resistivity survey was employed to investigate the lawn to determine the past human activity within the study area and the likely archaeological correlates. The results indicated that landscaping had occurred but there seemed to be evidence for a structure. Three trenches across the anomalies found no significant features. The subsequent watching brief found that the landscaping in the 19th century had removed any earlier archaeology from the centre of the site, though their appeared to be evidence for earlier landscaping. On periphery of the area, which was impossible for the resistivity survey to investigate were several pre-Haden Best features, including a possible carriageway [105] with its associated 'horseshoe' drain [124] and a terrace wall [113].

The archaeological investigation has demonstrated that the Haden-Best works seriously affected the layout of the park. It seems that his works may have largely removed any earlier features from the terraced area. However, the archaeological work undertaken as part of this programme was only undertaken in limited areas and specifically in areas not directly adjacent to the Old Hall. The evidence from the watching brief during the construction of the events area would suggest that there are pockets of surviving archaeology predating the Victorian period near to the house and hall.

9 References

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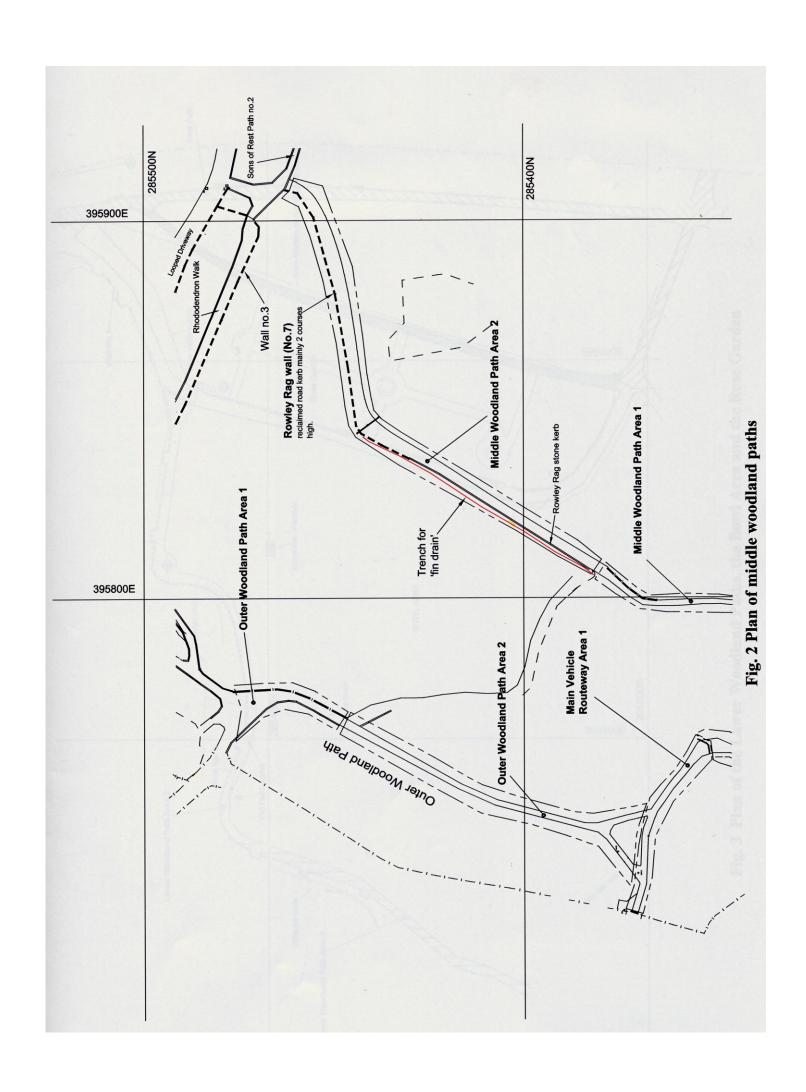
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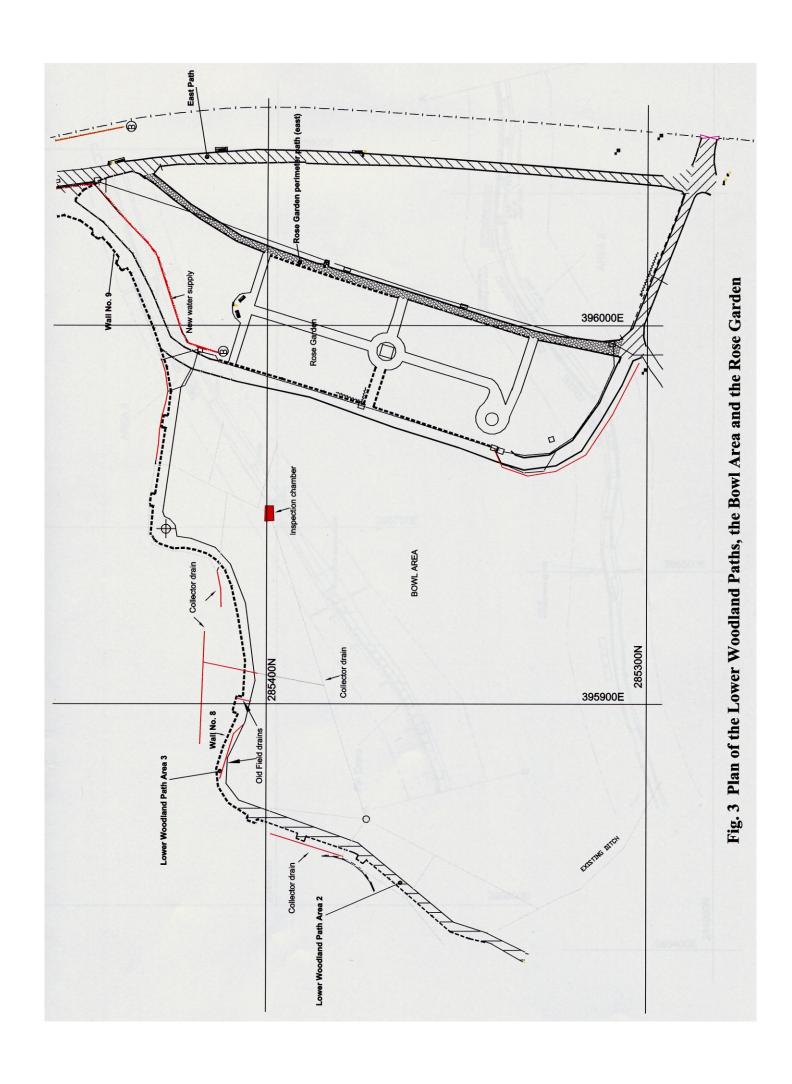
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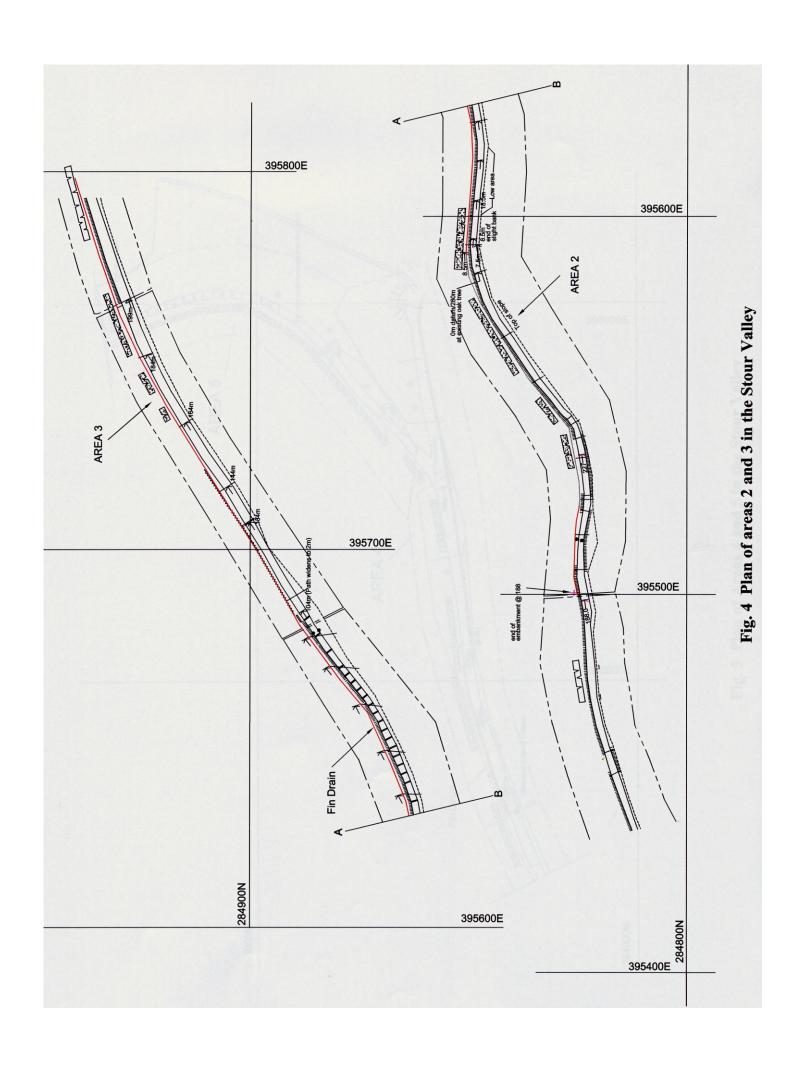
10 Acknowledgements

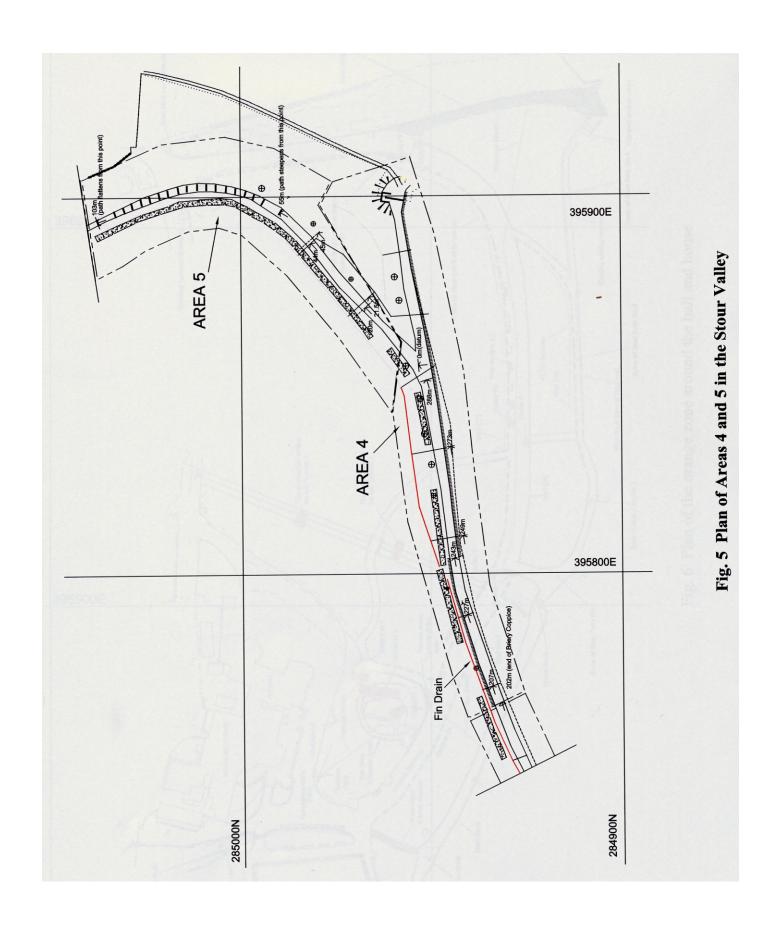
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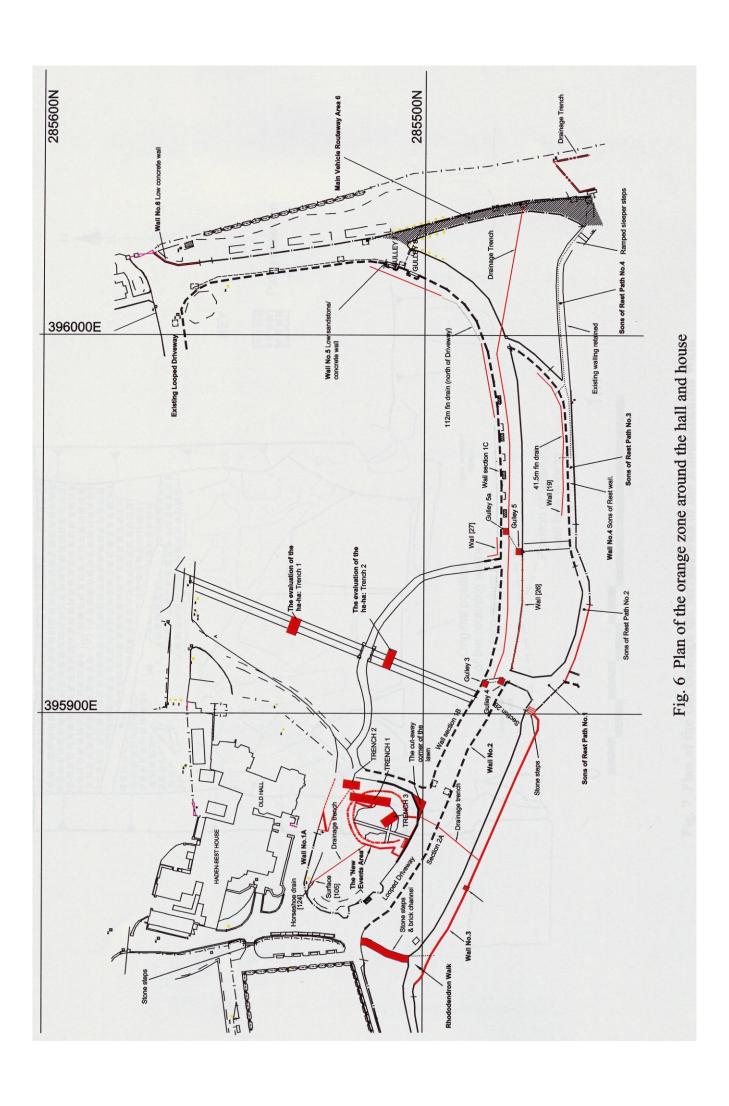
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Hilary Major, Essex County Council
John Tibbles, Archaeological Ceramic Building Materials Group
Blakedown Landscapes











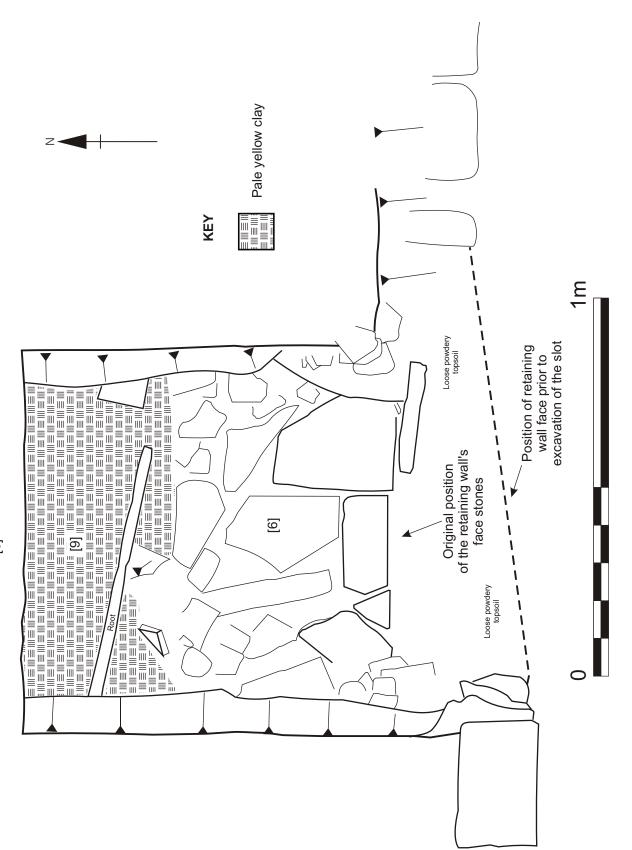


Fig. 7 Plan of the slot through the terrace wall of the Rhododendron Walk

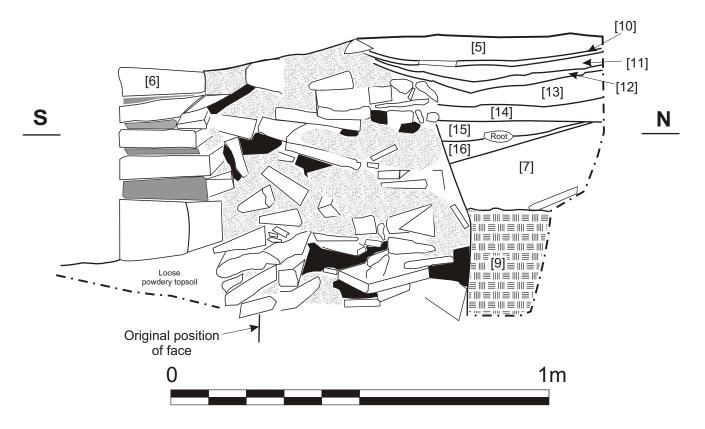


Fig. 8 West section of the slot through the terrace wall of the Rhododendron Walk

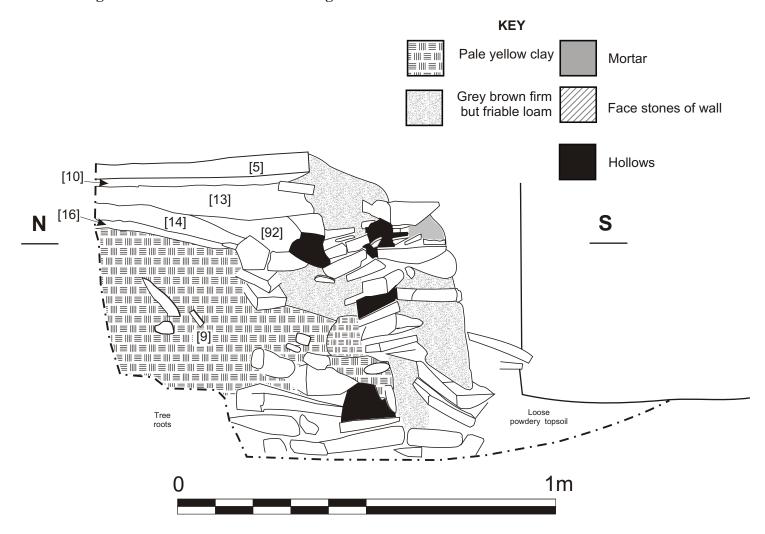


Fig. 9 East section of the slot through the terrace wall of the Rhododendron Walk

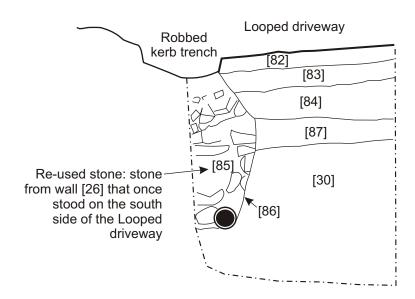


Fig. 10 West section of Gully 5



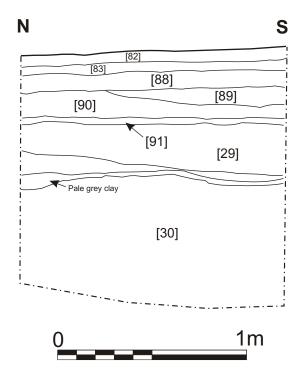


Fig. 11 East section of Gully 5a

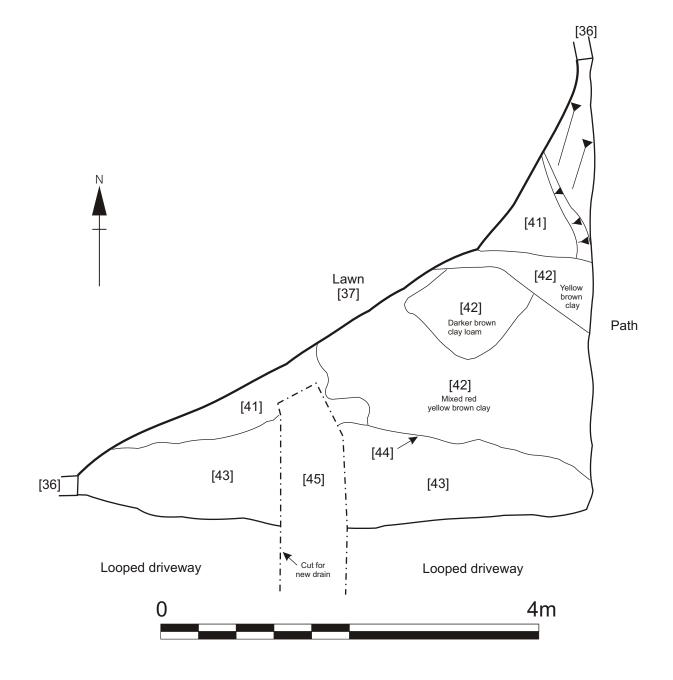


Fig. 12 Plan of the removed corner of the lawn

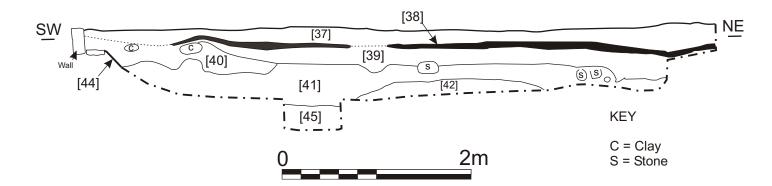
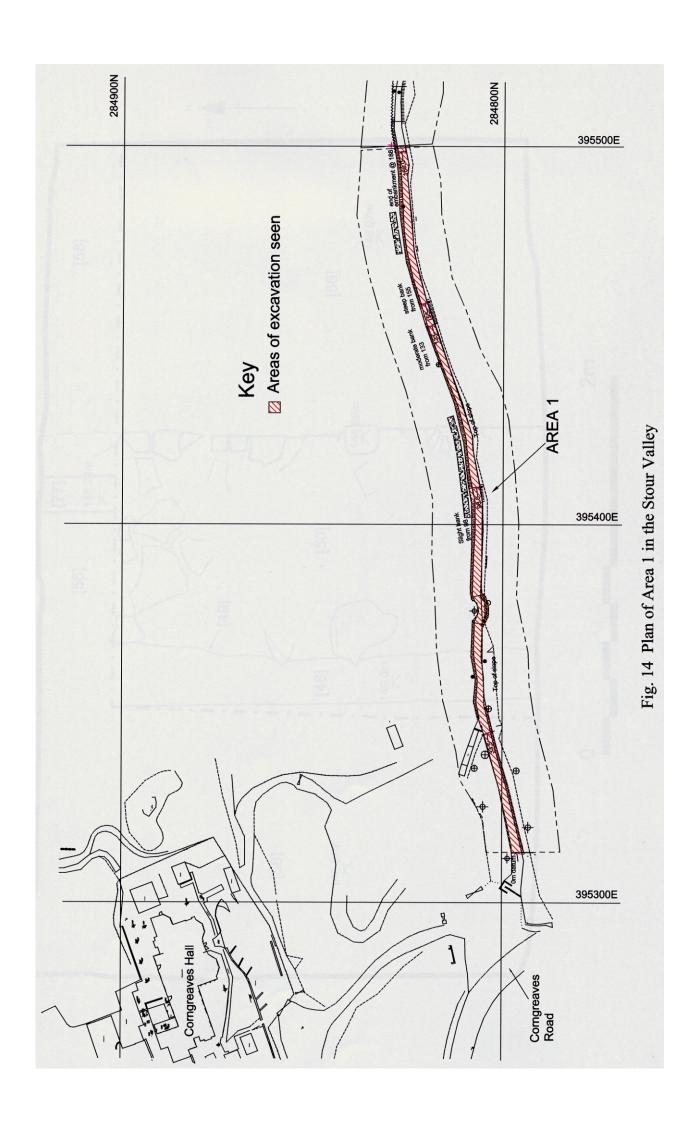


Fig. 13 North west section of the removed corner of the lawn





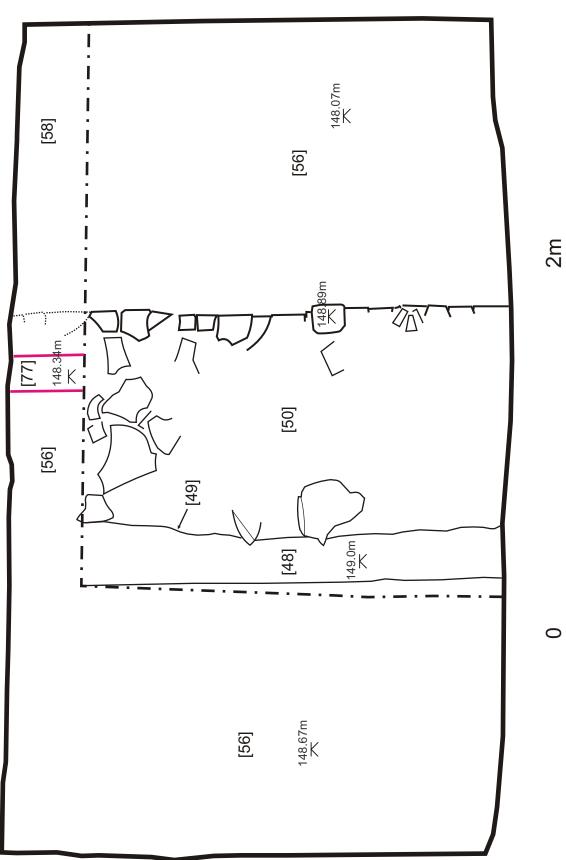


Fig. 15 Plan of trench 1 across the line of the ha-ha

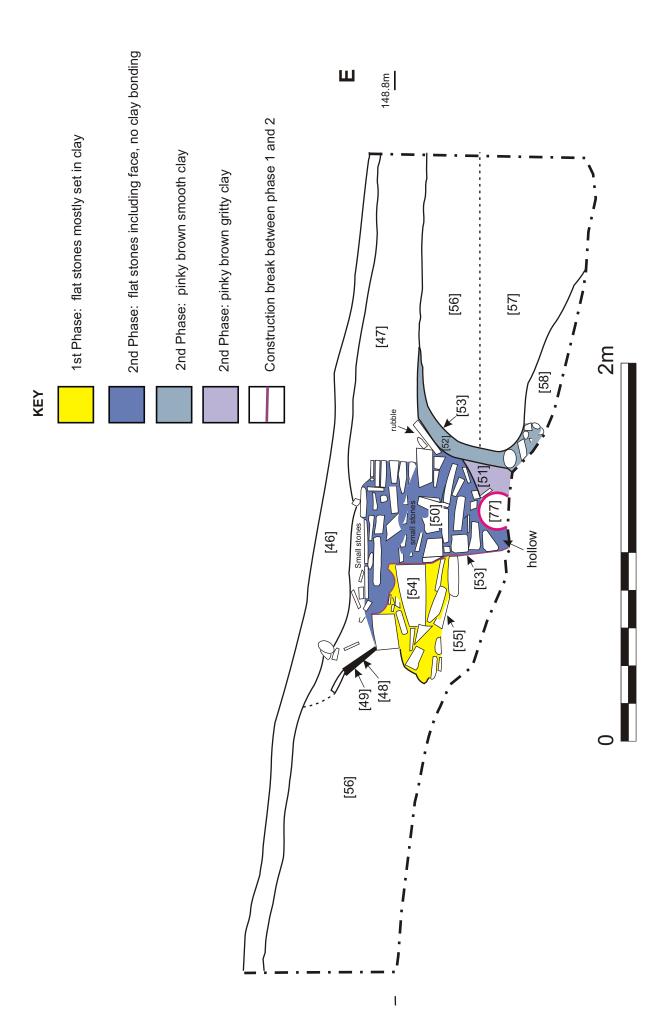


Fig. 16 North section of trench 1

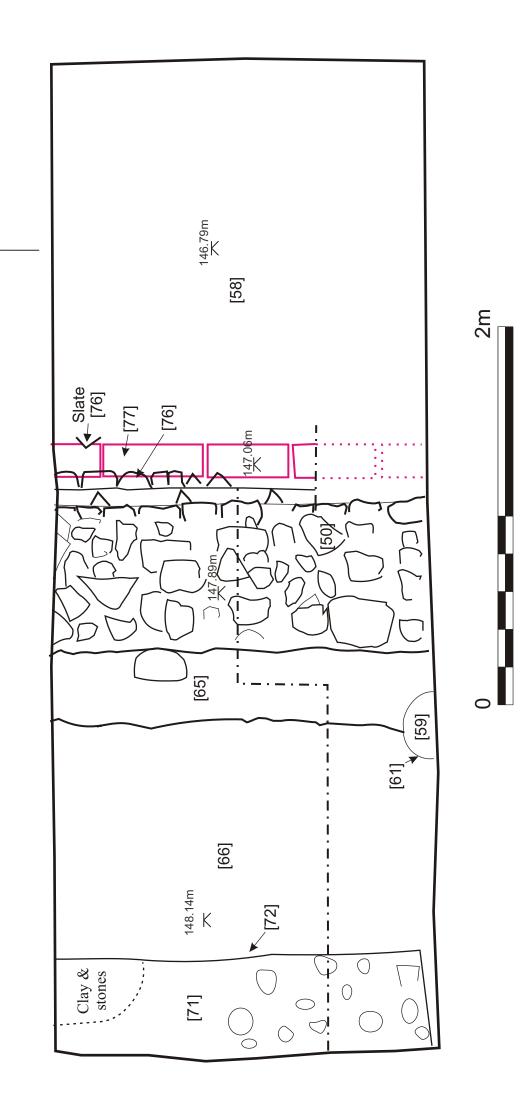


Fig. 17 Plan of evaluation trench 2 across the line of the Ha-ha

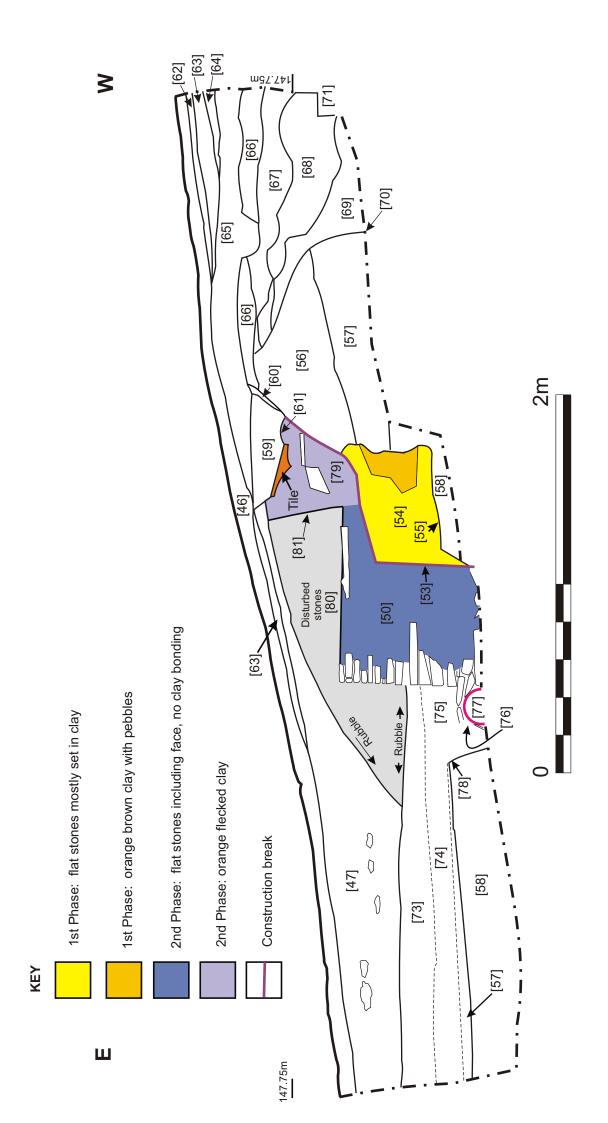
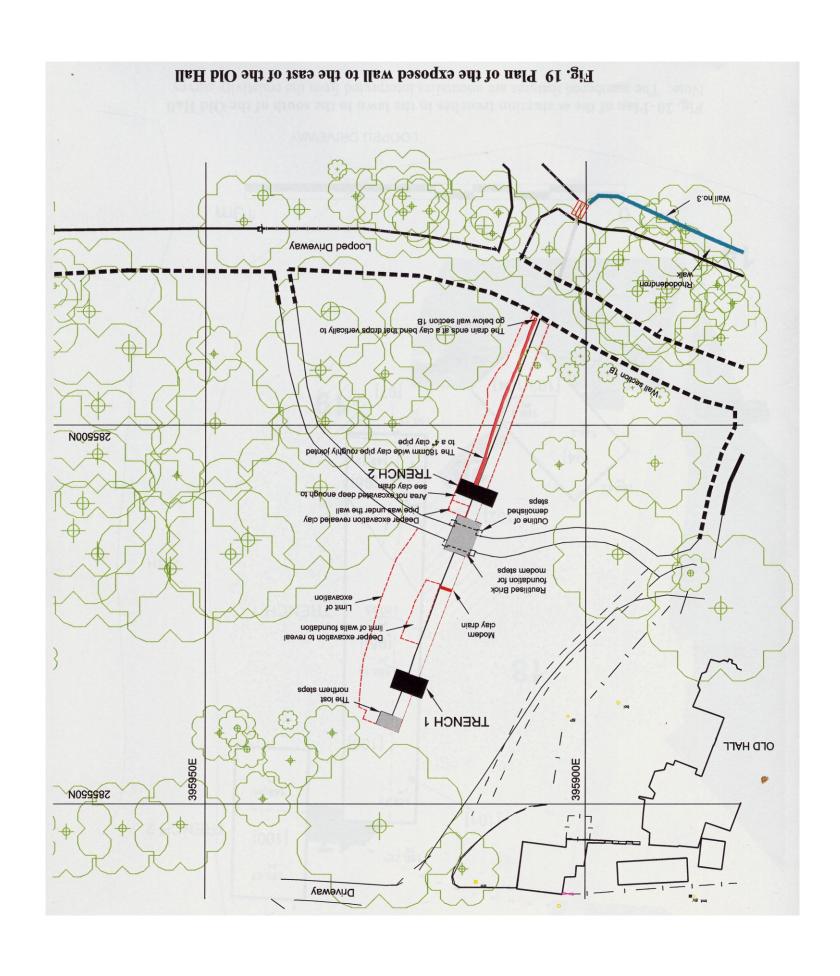


Fig. 18 South section of trench 2



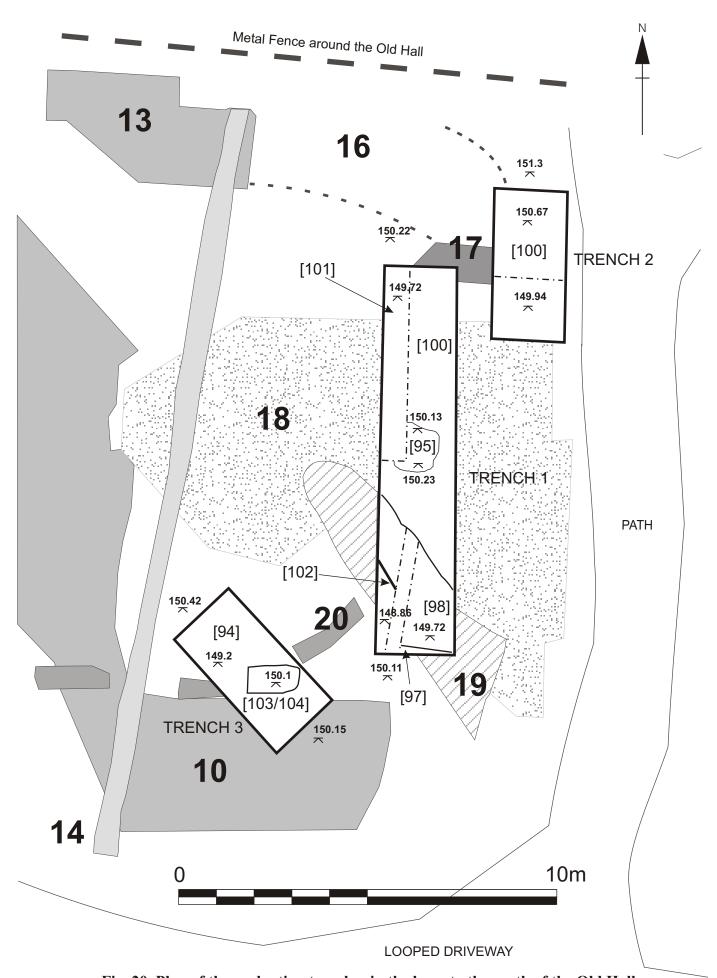


Fig. 20 Plan of the evaluation trenches in the lawn to the south of the Old Hall Note: The numbered features are anomalies interpreted from the resistivity survey

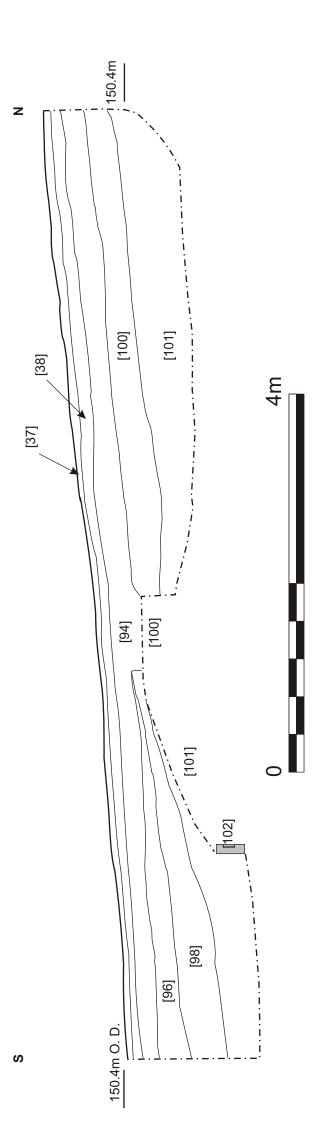


Fig. 21 The west section of evaluation trench 1 in the lawn south of the Old Hall

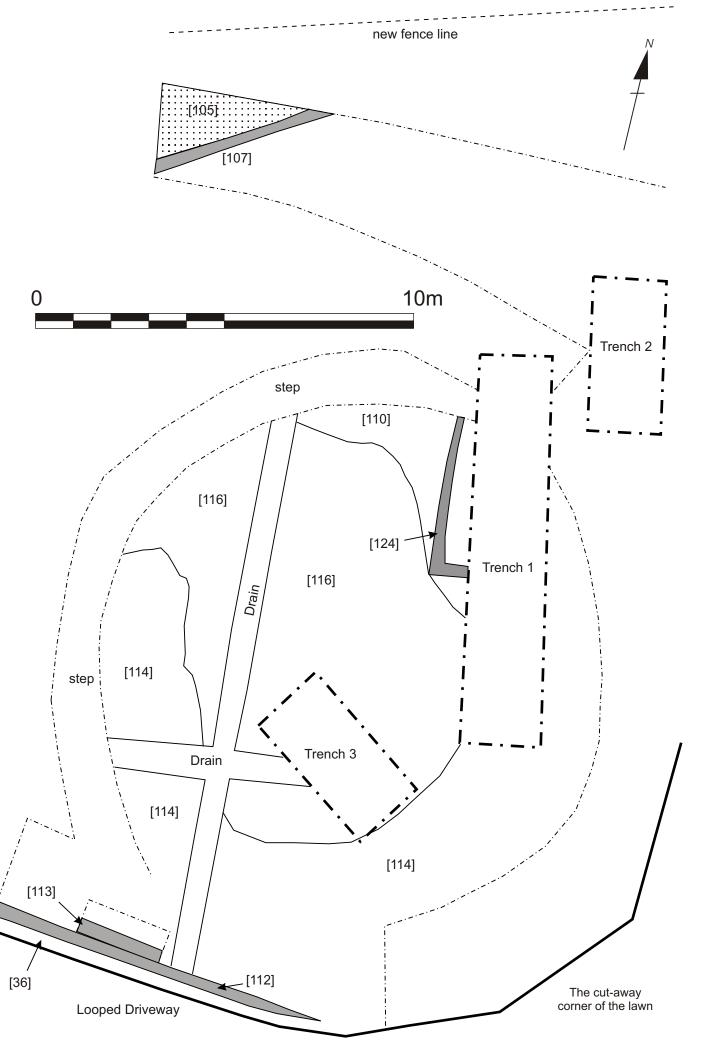


Fig. 22 A plan of the excavated 'new' events area



Plate 1 View B HHP 2.3 Tennis Court



Plate 2 - view E HHP 2.6 - looped driveway



Plate 3 - view N HHP 2.15 - Rose Garden



Plate 4 - view Z HHP 2.27 - middle woodland path



plate 5 - view AC HHP 2.31 - Sons of Rest path Number 1



Plate 6 - view AK HHP 6.1 - path in Area 1



Plate 7 View AM HHP 6.4 Path in Area 1



Plate 8 HHP4.17 Wall No.3 (Ha-ha)



Plate 9 HHP 4.20 Wall No.3 (Ha-ha)



Plate 10 HHP 4.23 Wall No. 3 (east of steps)



Plate 11 HPP 4.26 Wall No. 3 (Stripped section next to steps)



Plate 12 HHP 4.3 Wall No. 3 (ha-ha)



Plate 13 HHP4.30 Slot excavated through Wall No. 3

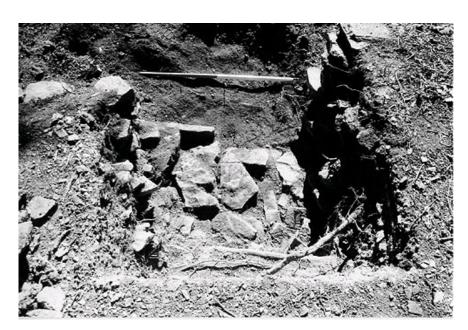


Plate 14 HHP 5.4 Slot excavated through Wall No.3



Plate 15 HHP 5.2 East section through slot excavated through Wall Number ${\bf 3}$



Plate 16 18th century drain [34]



Plate 17 Trench 1 of the evaluation of the ha-ha, looking south



Plate 18 Trench 1 of the evaluation of the ha-ha, looking west



Plate 19 Trench 2 of the evaluation of the ha-ha, looking west



Plate 20 Trench 2 of the evaluation of the ha-ha, looking south west



Plate 21 A view looking south along theexposed ha-ha



Plate 22 North end of the ha-ha looking south west



Plate 23 The ha-ha showing initial depth of excavation looking south west



Plate 24 The ha-ha south of Trench 2 looking south west



Plate 25 The missing north steps, looking west



Plate 26 The foundation utilised by the existing steps, looking west



Plate 27 Drain [124]seen during the event area watching brief, looking south



Plate 28 The 18th century carriageway [105] & wall [107], looking north east



Plate 29 Terrace wall [113], looking east

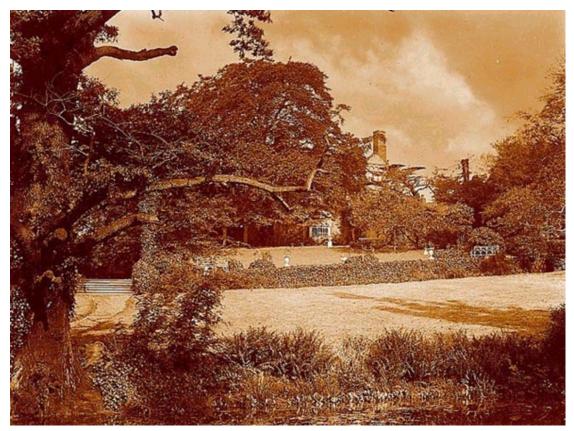


Plate 30 Antique view of the ha-ha, looking towards the hall (c 1920's) Sandwell MBC

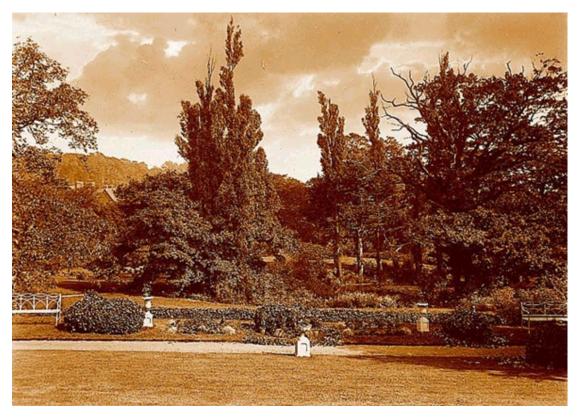


Plate 31 Antique view of the ha-ha looking away from the oldhall (c1920's) Sandwell MBC

Appendix 1: Inventory of the paths, walls and tennis courts

Appendix 1: Inventory of the paths, walls and tennis courts

View	B&W ref.	Colour	Name of feature	Description	Direction of view
		slide ref			
А	HHP 1.0a	HHP 2.2	Landscaping associated with the tennis courts	Landscaping 1920s or 30s	Looking NW
В	HHP 1.1a	HHP 2.3	Tennis courts		Looking NE
С	HHP 1.2a	HHP 2.4	Tennis courts		Looking WNW
С	HHP 1.3a		Tennis courts		Looking WNW
D	HHP 1.4a	HHP 2.5	Looped driveway	Tarmac path	Looking W
E	HHP 1.5a	HHP 2.6	Looped driveway	Tarmac driveway	Looking S
F	HHP 1.6a	HHP 2.7	Looped driveway	Tarmac driveway	Looking SW
Ð	HHP 1.7a	HHP 2.8	Sons of Rest Path No. 4	Gravel path with wooden steps	Looking W
Н	HHP 1.8a	HHP 2.9	Junction of Main Vehicle Routeway	Gravel path with wooden steps	Looking WSW
-	UUD 1 05	UUD 2 10	East Dath	Townson noth	Looking
٠	ППГ 1.7d	HHF 2.10	East Faul	Tainiac paul	LOUKING IN
J	HHP 1.10a	HHP 2.11	Main Vehicle Routeway Area 5	Tarmac path	Looking NW
K	HHP 1.11a	HHP 2.12	Main Vehicle Routeway Area 4	Tarmac path	Looking SW
Γ	HHP 1.12a	HHP 2.13	Main Vehicle Routeway Area 5 and Rose oarden	Tarmac path and raised beds	Looking NE
Σ	HHP 1.13a	HHP 2.14	Rose garden	Tarmac path and raised heds	Looking NW
Z	HHP 1.14a	HHP 2.15	Rose garden	Tarmac path and raised beds	Looking W
0	HHP 1.15a	HHP 2.16	Rose garden	Tarmac path and raised beds	Looking SSW
Ь	HHP 1.16a	HHP 2.17	Rose garden	Tarmac path and raised beds	Looking SSE
Ò	HHP 1.17a	HHP 2.18	Lower Woodland Path	Gravel path	Looking W
R	HHP 1.18a	HHP 2.19	Lower Woodland Path	Dirt covered gravel path	Looking NE
S	HHP 1.19a	HHP 2.20	Lower Woodland Path	Dirt covered gravel path	Looking N
Τ	HHP 1.20a	HHP 2.21	Crosspath	Earth path	Looking W
Ω	HHP 1.21a	HHP 2.22	Main Vehicle Routeway Area 4	Tarmac path	Looking NE
>	HHP 1.22a	HHP 2.23	Main Vehicle Routeway Area 3	Gravel path	Looking NW

×	HHP 1 23a	HHP 2 24	Woodland nath	Dirt covered gravel path	Looking NE
M	HHP 1.24a	HHP 2.25	Main Vehicle Routeway Area 2	Tarmac path	Looking NW
\prec	HHP 1.25a	HHP 2.26	Outer Woodland Path	Tarmac path	Looking N
Z	HHP 1.26a	HHP 2.27	Middle Woodland Path	Dirt covered gravel path	Looking N
AA	HHP 1.27a	HHP 2.28	Woodland path	Dirt covered gravel path	Looking ESE
AB	HHP 1.28a	HHP 2.29	Middle Woodland Path	Dirt covered gravel path	Looking NE
AC	HHP 1.29a	HHP 2.30	Sons of Rest Path No. 1	Gravel path	Looking SE
AC	HHP 1.30a	HHP 2.31	Sons of Rest Path No. 1	Tarmac path (left), gravel path (right)	Looking E
AD	HHP 1.31a	HHP 2.32	Rhododendron Walk	Gravel path	Looking NW
AE	HHP 1.32a	HHP 2.33	End of Rhododendron Walk	Gravel path	Looking SW
AF	HHP 1.33a	HHP 2.34	Dingley Dell	Earth path	Looking SW
AG	HHP 1.34a	HHP 2.35	19th century hall	South front and lawn	Looking ENE
AH	HHP 1.35a	HHP 2.36	17th century house	South elevation	Looking NE
AI	HHP 1.36a	HHP 2.37	17th century house	East elevation	Looking NW
AI		HHP 2.38	17th century house	East elevation	Looking NW
AK	HHP 5.6	HHP 6.1	Path in Area 1	Earth path	Looking ENE
AL	HHP 5.7	HHP 6.2	Path in Area 1	Earth path	Looking WSW
AL	HHP 5.8		Path in Area 1	Earth path	Looking WSW
AM	HHP 5.9	HHP 6.4	Path in Area 1	Earth path	Looking WSW
AN	HHP 5.10	HHP 6.5	Path in Area 1	Earth path	Looking NE
	HHP 3.11a	HHP 4.3	Wall No. 3 (Ha-ha)	East end of ha-ha, showing steps and	Looking W
				blockwork prior to removal	
	HHP 3.12a	HHP 4.4	Wall No. 3 (Ha-ha)	Shows stone blockwork on corner	Looking W
		HHP 4.6	Wall No. 3 (Ha-ha)	Showing break between blockwork and older ha-ha	Looking W
	HHP 3.20a	HHP 4.15	Wall No. 3 (Ha-ha)	West end, after overgrowth has been removed	Looking E
	HHP 3.22a	HHP 4.17	Wall No. 3 (Ha-ha)	West end, after overgrowth has been removed	Looking W
	HHP 3.23a	HHP 4.20	Wall No. 3 (Ha-ha)	Middle section, where tumble has fallen	Looking E
	HHP 3.24a		Wall No. 3 (Ha-ha)	Middle section, where tumble has fallen	Looking E

HHP 3.25a	HHP 4.21	HHP 3.25a HHP 4.21 Wall No. 3 (Ha-ha)	Next section	Looking E
HHP 3.28a	HHP 4.23	HHP 3.28a HHP 4.23 Wall No. 3 (Ha-ha)	Next section (east of the steps)	Looking W
HHP 3.29a	HHP 4.26	HHP 3.29a HHP 4.26 Wall No. 3 (Ha-ha)	Section next to steps at east end	Looking W
HHP 3.33a	HHP 4.30	HHP 3.33a HHP 4.30 Wall No. 3 (Ha-ha)	Excavated slot	Looking N
HHP 5.2	HHP 4.33	HHP 4.33 Wall No. 3 (Ha-ha)	East section in excavated slot	Looking E
HHP 5.4	HHP 4.35	HHP 4.35 Wall No. 3 (Ha-ha)	Excavated slot	Looking S

Appendix 2: Electrical Resistance Survey at Haden Hill House,

by M. J. Roseveare

Appendix 2:

HADEN HILL HOUSE, HALESOWEN

Electrical Resistance survey at Haden Hill House, Halesowen
On behalf of Marches Archaeology
Project HAL20021

November 2002





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NON-TECHNICAL SUMMARY

The electrical resistance survey at Haden Hill House has been successful in mapping variations in soil type and structures relating probably to the Victorian surroundings of the house. It has also found traces of substantial infilled structures possibly associated with the older house extant on the site.

No traces have been found of formal garden layouts but this is perhaps a result of landscaping that is implied by the geophysical data and by observations of exposed sections. The survey could possibly have benefited from being a little larger so as to better examine the context of the numerous variations in electrical resistance.

18th November 2002

I. INTRODUCTION

THE BRIEF

- A. This project is in response to a request for geophysical survey at Haden Hill House, Halesowen at grid reference NGR 39586 28552 from Marches Archaeology after consultation with Shane Gould, archaeologist at Sandwell Metropolitan Borough Council.
- B. The requirements for survey were discussed with Adrian Nash at Marches Archaeology.
- C. The objectives of this project were to try and locate any traces of formal gardens south of the house under an area of grass due to be partially excavated to form an amphitheatre. The house is Victorian and is built against a Tudor range that has been entirely reconstructed in recent years; the older house shows signs of several alterations and its original extent and form is unknown. There is a possibility that structures associated with this might have extended below the grass.

THE PROJECT

RESPONSE TO THE BRIEF

- D. Various options of methodology were discussed including magnetic gradiometry which was discounted due to the presence of slag or clinkers that would mask any weak anomalies from potential garden features. On site it was evident that a high steel fence around the rebuilt part of the house would prevent successful survey of much of the eastern end of the area.
- E. Electrical resistance survey was chosen as a technique ideally suited to the detection of garden features if conducted at sufficiently high resolutions, e.g., 0.5m x 0.5m. In addition, the option of survey at different apparent depths was possible, making the technique much more cost-effective than radar for example. This is achieved by using two probe separations, simultaneously in this case, of 0.5m and 1.0m. This resulted in two data sets, the lower sampled at 1.0m x 0.5m and the upper at 0.5m x 0.5m.
- F. Depth of survey in electrical resistance survey is a complex variable to determine. Each measurement at a particular probe spacing corresponds to a particular current flow within a discrete volume of arbitrary shape and dependent upon the dielectric properties of the buried materials. By widening the probe separation, measurements are biased towards deeper volumes and hence tend to reflect changes in the properties of deeper materials. Only in homogenous ground can the readings by taken to represent particular depths; in practice the wider probe spacing will usually reflect variations in resistance deeper than the narrower at the same measurement position and therefore provide a useful comparison with the shallower values.
- G. Survey was based upon a 30m grid was laid out with traverses aligned approximately east to west 1m apart. The grid was aligned with the Victorian terrace wall for convenience and tied in to CAD data provided by Marches Archaeology. Two 30m grids were surveyed in succession using a single position of the remote probes, ensuring continuity of resistance

with a multiplexed probe array.

values across grid boundaries. The meter used was a Geoscan Research 'RM15 Advanced'

BACKGROUND

- H. There are ongoing investigations by both Marches Archaeology and Richard Morriss into the development of structures at the site as redevelopment work continues. While the geophysical survey proceeded two trenches were excavated by Marches Archaeology onto a supposed ha-ha nearby. This provided an opportunity for the soil structure to be assessed and together with excavations by other contractors it became clear that at least superficial landscaping had occurred, probably within the Victorian era, but also later.
- I. Mixed surface pedology is evident with silty clays predominant under a mostly thin (< 0.2m) loamy topsoil. Some landscaping seems to have occurred (as is also suggested by the geophysical result) and there is reason to suspect that below the survey area the natural profile has been truncated at least in part. Some dumping of mixed clays and industrial waste to a depth of perhaps 0.4m was visible in a section cut into the southeast corner of the survey area. The presence of industrial waste is not unexpected and it was also found by Marches Archaeology, apparently infilling behind the retaining wall of the ha-ha. This has presumably been brought in from the numerous nineteenth century ironworks in the area.
- J. The whole of the survey area was mown grass. Tarmac drives and paths surround most of all four sides and the plot slopes gently to the south. To the north drainage into the area is thought to be reduced by the buildings on that side; to the south there is a steep slope down into woodland below the site. Open ground exists to the east and west. Natural drainage is probably fairly shallow due to the relatively impervious clays and is thought to be fairly minor due the lack of obvious sources uphill of the site. In this case background resistance values may decrease sharply after rainfall but recover fairly rapidly as the uppermost parts of the profile dries out again. The survey was completed after a period of fairly heavy rain and hence the soils above the clay are likely to have been wet but actively drying. This is also supported by the relatively low resistance values noted while setting up the instrument.
- K. A trench approaching 0.5m width from surface traces had been dug quite recently (within two or three years from personal communications) through the survey area from north to south for installation of a drain. No record seems to have been made while this proceeded so it is not known whether this could have assisted the interpretation of the results.
- L. Even after rain the grass of the eastern part of the survey area was lighter in colour and growth less pronounced than the other part. This seems to correlate with the basic result of the survey that the soil there is probably thinner and overlies resistive material; if this material comprises deposits of stone or brick rubble then the differential drainage may explain the greater retardation of growth earlier in the Summer.

QUALIFICATION OF RESULTS

M. There were no real constraints upon the survey other than its small size which is never ideal when interpreting potentially complex results. Sufficient data has been collected though to allow a fairly confident assessment to be made of the potential for archaeological

deposits within the area and some estimate made of their age when examined in their wider structural context.

N. The invasive works conducted in parallel with the survey by Marches Archaeology have allowed environmental parameters to be assessed with reasonable accuracy and their effect upon the geophysical data to be better understood. The recent rainfall was undoubtedly beneficial to the result in this case, as was the uniform surface of mowed grass.

GENERAL CONSIDERATIONS

- O. Geophysical anomalies are caused by discrete variations in the physical properties of underground materials and are therefore an indirect measure of archaeological features.
- P. The survival of archaeological features may be uneven across the survey and the variation in physical properties within archaeological and non-archaeological features is also likely to vary. For this reason geophysical survey can demonstrate the existence of archaeological features but cannot conclusively demonstrate their absence without *a priori* knowledge and comparative data. Where detectable materials vary with depth the nature of the geophysical response will be related to that depth and not necessarily the archaeology.

LIMITS OF INFERENCE

- Q. The date of any feature cannot be determined from geophysical data measured at or above the surface of the ground. Features may, from their plan form, appear to be of a certain archaeological era but cannot be taken as indicative of any particular antiquity from the data in this report alone. It is also difficult to be sure of relative dates where features impinge because the geophysical anomalies do not define the exact physical relationship between the archaeological features.
- R. Any indication of feature depth is based upon our knowledge of the geophysical properties of the subsurface. Calculations of depth from anomaly form alone is difficult and is complicated by the complexities of archaeological features and their surroundings. Sometimes, however, an estimate of depth is possible by studying other factors, e.g., landuse and soil type.
- S. The clarity of geophysical anomalies is limited by the resolution of the survey data. Some features may produce anomalies too low in amplitude to be measured by available equipment, in other cases the survey may be too coarse to detect the anomalies of small features or the detail of larger ones. From standard sampling theory an anomaly can only be identified if it is coherent over more than a single measured value and the very smallest anomaly that can be detected in any direction is equal in size to the minimum sampling interval in that direction.
- T. No assessment can be made of the nature or extent of buried features outside the survey area and care should be taken when extrapolating these findings into adjacent areas unless the physical and environmental properties of the subsurface are known.

II. DESCRIPTION OF RESULTS & INTERPRETATION

- A. For the following sections it will be useful to refer to drawing DWG 03, located after section three, entitled 'Reference', of the report. Numbers in bold refer to anomalies and features indexed graphically on the drawings.
- B. Very few of the identified responses relate to discrete sources most relate to changes in the electrical resistance of areas. It is likely that many are due at least in part to natural or modified natural deposits that have been differentially exposed by landscaping activity, probably within the Victorian period.

DESCRIPTION

Anomaly 1

C. This small area of low values marks the former extent of an extant flower bed. This alteration to its length is probably recent as there is a marked difference in the grass here.

Anomalies 2 & 5

D. This strip of slightly raised resistance some 2m wide is visible pointing towards the porch of the Victorian house. It is less distinct in the lower data where it seems to be a southwards continuation of a more irregular but similar resistance strip 5. In isolation it is tempting to interpret this feature as a path extending to the Victorian house but considered with 5 it may be natural. The most likely interpretation is that it is an area of Victorian ground surface 5 that continued as an area of grass 2 west of possible flower bed 4.

Anomaly 3

E. A strip of low resistance values along the southern edge of the survey in the upper data may indicate that the extant flower bed adjacent to this once extended further into the grass.

AREA 4

F. Within the upper survey data this seems to continue around the west and north edges of the grass, at least partially surrounding anomaly **8** including to the south. It seems to be a fairly shallow feature that overlies a higher resistance deposit **5**. In the context of **8**, could this be the garden soil of a flower bed?

Anomaly 6

G. These small faint anomalies are isolated within the survey area and may be of natural origin, however, their proximity to feature 8 may be significant. They could be remnants of drains.

Area 7

H. This seems to form most of the southern edge of the survey and is apparent as an area of variable but generally elevated resistance values devoid of any overall form. This may be caused by material dumped during landscaping and could be a continuation of the industrial waste and mixed clays noted in a section cut into the southeast corner of the survey during alterations (but see anomaly 18).

Anomaly 8

I. This large rectangular feature possesses marked high resistance values, implying the existence of resistive material like stone of brick, forming either the footings of a structure or the fill within a rectangular pit. There are faint signs of a central anomaly of lower resistance perhaps 1.5m diameter. Its position in the centre of the facade of the Victorian house and half way across the grassed area implies some relationship between the two. Could this be the remains of a stone pedestal or rockery situated within a large planted bed suggested by anomaly 4? A tree currently stands within this anomaly.

Anomaly 9

J. This discrete anomaly seems to relate to **8** and may be another part of that structure or perhaps a patch of rubble from it. It is difficult to interpret as a garden feature.

AREAS 10 & 13

K. These are considered to be parts of the same low resistance soil horizon, probably natural and possibly relating to the interface of the underlying clay and the material above. It has a fairly abrupt northeast edge which may hint at modification; this may be due to landscaping activity.

Anomalies 11 & 14

L. These two linear features are both thought to be service trenches. 14 is a known drain, 11 seems to pass along the front of the wire compound south of the older part of the house is therefore also likely to be modern.

Anomaly 12

M. A very small low resistance anomaly is crossed by the north edge of the survey. Its resistance is quite a lot less than the surrounding material which may imply it is the fill of a pit or ditch rather than a natural feature.

Anomaly 15

N. This may be an indistinct part of 17.

Anomaly 16

O. Another area of slightly elevated resistance values which may represent a natural variation or be related to **18**. The survey area is too small to permit a better interpretation.

Anomaly 17

P. The surface of the ground at this location is a muddy strip that was assumed to caused by people walking across the grass at this point. It is possible, however, that people were

walking along a slight hollow and that 17 indicates the presence of an infilled ditch or trench. It is impossible to be certain without surveying further area to the east.

AREA 18

- Q. This quite well-defined area would appear to be stone or brick fill within a hollow concealed below the turf. It has a very well defined northern edge which hints at a structural origin for the feature. Superficially this straight edge appears to be parallel to the end of the older house which implies that it may relate more to that than the Victorian garden. It seems to have been slightly cut into by the trench 14 for the drain, immediately west of which appears to be the edge of the feature. The angle of the northern edge of the feature as depicted on DWG 03 was generated from the lower data set but appears slightly erroneous when compared with the upper data. This may be due in part to the lower resolution of the lower survey data (1.0m instead of 0.5m).
- R. The thin low resistance anomaly along the eastern edge of this feature is likely to be an artifact caused by surveying close to the existing curbstones.

Anomaly 19

S. Cutting into 18 is a fairly well defined broad high resistance anomaly that could be interpreted as a rubble-filled hollow. If 18 is the remains of a structure 19 could be an infilled robber trench, for example. It may be related to the mixed clay fill visible in the section exposed in the edge of the grass area in the southeast corner.

Anomaly Group 20

T. Within the upper data in particular there is a series of narrow rather low resistance anomalies that are difficult to interpret. Superficially they could be interpreted as elongated pits or short sections of a narrow ditch but their curving pattern seems to mitigate against their interpretation as drains. They could be robber trenches dating from the removal of a stone or brick edging or a narrow path. Not all have been depicted on DWG 03 for clarity and also because the extent of some of them is difficult to judge because they are cut by modern drain 14.

ARCHAEOLOGICAL INTERPRETATION

CHRONOLOGY

U. It is difficult to assign a chronological structure to geophysical data but the two depths of survey do allow us to judge occasionally whether a particular material may pass over another. In this case it seems fairly clear that 4 extends over 5 and that if landscaping of the area has occurred around the house then various deep and probably natural deposits like 10 could outcrop. 19 does seem to be superimposed (not physically) upon 18 so if the former is the fill of a hollow then that hollow apparently exists in 18. The position of 8 and possibly 9 relative to the Victorian house suggests they are all part of a contemporary landscape.

EXTENT

V. There are significant variations in electrical resistance throughout the survey area and it is logical to assume they also continue beyond the bounds of this survey.

GENERAL INTERPRETATION

- W. The overall conclusion to the interpretation is that the area, in common with further east towards the ha-ha, has been landscaped, probably though not certainly during the Victorian habitation of the site. The existing planting and general scheme seems to reflect the Victorian garden and hence it is not surprising that few signs of earlier garden structures were found. Earlier ones may have been removed by later landscaping whereas the Victorians may not have contributed much more to the landscape than exists today.
- X. If the site has been landscaped in the area of the survey this may account for the numerous variations in electrical resistance across it. Natural strata may be exposed differentially across the site, e.g., 10 and 5, and this may also account for a general alignment of boundaries between regions of differing resistance along a line approximately northwest to southeast. Deep impervious clays may lay closer to the surface near the top of the slope but be deeper buried by more conductive material further downhill.
- Y. In summary it seems sensible to interpret the rectangular feature 8 as a Victorian garden feature situated within a fairly large area of planting suggested by area 4. This feature would be centrally placed with the Victorian facade and form an eye-catcher at this end of the garden. These were presumably created after the site received some degree of landscaping activity, probably to improve the slope down away from the house. This landscaping may have disturbed a feature 18, perhaps relating to a pre-Victorian structure associated with the older dwelling.
- Z. To consider briefly the two houses. The exposed facades of the older dwelling are various with only the narrow southern one presenting any uniform character. The eastern facade appears to be the rear of the building which would explain the absence of any principal entrance, this presumably having been located at the front facing west. This is now hidden by the Victorian building. This puts the survey area at the side of the older house but in front of the Victorian and hence it is unlikely that a formal pre-Victorian garden would have existed at this side. It seems more likely to have been beneath the later house. The side of the older house would have been a suitable site for kitchen gardens and perhaps detached service quarters. It may be the sites of these that have been detected at the east end of the survey.
- AA. More electrical resistance survey to the east would put some of the variations observed so far into a better context. The technique is responding well to conditions but the result is necessarily vague due to the small size of the area and potential complexities introduced by landscaping activity. Invasive studies are probably going to be essential for understanding the result more fully.

III. REFERENCE

ACKNOWLEDGMENTS

Adrian Nash & Nick Taverner of Marches Archaeology are thanked for their advice and support on site.

PUBLICATION & ARCHIVING STATEMENT

- A. The survey archive is primarily digital but also contains paper material in the form of correspondence, copies of reports, etc.. Digital storage is on magnetic tape, updated over the duration of the project as part of an integrated back-up system. Copies of reports are passed to the client for further dissemination; it is presumed that the client will forward copies to the relevant SMR, etc., although we will if requested.
- B. Publication of results may proceed if it can be demonstrated that they are of sufficient benefit to the wider archaeological community, after discussion with the client and the curator. Smaller summaries can be provided by inclusion in annual fieldwork summaries, etc.. Images may from time to time appear on our website; if the project has been cleared for publication and is not subject to any remaining confidentiality arrangements a small report may also be published using this medium. The exact location of any survey will not be made available on the internet.

STATEMENT OF COMPETENCE

- C. The principal staff at ArchaeoPhysica are Full Professional Members of the European Association of Archaeologists (EAA). All ArchaeoPhysica staff abide by the Principles of Conduct and the Code of Practice of the EAA and also the guidance on standards (IFA, 1999) published by the Institute of Field Archaeologists' (IFA), their "Code of Conduct" and their "Code of Approved Practice".
- D. Work is conducted to standards beyond those embodied within the English Heritage guidance document "Geophysical survey in archaeological field evaluation" (David, 1995), revision due after 2002.
- E. Analysis and interpretation is undertaken by a suitably qualified and experienced member of staff who was present during survey. At the discretion of the company this *competent* person is usually qualified to postgraduate level in archaeological prospecting.

LIST OF ILLUSTRATIONS

DWG 01 - Upper electrical resistance data after interpolation to 0.25m x 0.25m

DWG 02 - Lower electrical resistance data after interpolation to 0.5m x 0.25m

DWG 03 - Interpretative diagram

IV. TECHNICAL DETAILS

THIS PROJECT

SET OUT

- A. 30m grid size (2 grids east to west across slope and surveyed west first). Grids tied into CAD data supplied by Marches Archaeology.
- B. The set out used optical square and tapes rather than the usual total station or GPS as adequate precision could be achieved within an area of less than 0.1 hectares.

INSTRUMENTATION

C. Geoscan Research RM15 Advanced with multiplexed PA5 array using a configuration programmed by ArchaeoPhysica to provide surveys with probe separations of 0.5m and 1.0m with the 0.5m spacing sampled at a resolution of 0.5m x 0.5m.

SURVEY

D. Survey proceeded along lines east to west (across the slope) in zigzag fashion with measurements every 0.5m along each line and lines 1.0m apart. The meter was configured to record two adjacent 0.5m spaced probe separations to give 0.5m resolution in orthogonal directions.

ANALYSIS

E. Very little processing has been needed for this data, primarily due to the survey technique used and the short duration of the survey. Most analysis has been visual, based upon the generation of particular images using preparation techniques designed to clarify the detail within the data without undue distortion. A seconds stage of analysis applied the same visualisation techniques to the data after application of a high pass filter (subtractive lowpass) of diameter 3m in order to emphasis faint narrow anomalies that might correspond to buried garden features.

VISUALISATION

F. Numerical range compression (normalised arctangent) and contrast enhancement (histogram equalisation) have been employed.

DATA QUALITY

G. The data quality is high with no offsets in amplitude between grids, major spikes or other common defects. There are no obvious effects due to variations in environmental parameters during survey.

DESCRIPTION OF PROCESSING & VISUALISATION TECHNIQUES

EXAMPLES OF VISUALISATION TECHNIQUES

H. Interpolation: this is usually required at the lower resolutions of survey to remove the 'blockiness' of data in images. It is of purely cosmetic benefit and involves the creation of additional data located between field measurements to produce a 'smoother' image or model, usually by application of an exact polynomial interpolator. Data measured at intervals similar to or less than the sizes of the geophysical variations usually does not require interpolation to produce a satisfactory image.

- I. Contrast enhancement by range-clipping: many data sets exhibit statistical distributions with very small numbers of very high and very low values dominated by a large number of more central values. The 'outliers' tend to distort the linear attribution of image bands (e.g., grey-tones, contours, etc.) and their effect needs to be minimised. One approach is to remove these outliers from the data by 'clipping', sometimes achieved subjectively by eye but usually (by ArchaeoPhysica) by removing data above the 95th and below the 5th percentiles, thus leaving 90% (by number) of the data unaffected.
- J. Contrast enhancement by histogram equalisation: another approach to the same problem is to modify the mapping of a data set to the image bands. Histogram equalisation modifies the statistical distribution of data to spread more values towards the outliers and hence stretch small-amplitude variations near the dominant central values over greater numbers of image bands.
- K. Contrast enhancement by range compression: modifying the mapping of data to image bands can also be achieved by using a nonlinear mapping function. For contrast enhancement it is usual to select a function that places maximum emphasis upon the most numerous values and least upon the 'outliers'. A typical example is the arctangent function, carefully modified to provide the best 'fit' for the data studied.
- L. High & Low-pass filters: filters of this sort are not geophysical processes but are often used on geophysical data to enhance particular characteristics of the data. An example is the use of high-pass filters to reduce the effect of large-sized variations in electrical resistance data caused by geological sources. Various homologues exist within geophysical processing, e.g., 'upward continuation' of magnetic data to reduce the effect of small-scale variations.
- M. Image types: the type of image used to display geophysical data can have a significant effect upon the clarity and appearance of anomalies within it. For smoothly-variable data a simple contour plot may suffice, for other data only a grey (or colour) scale image will depict the required detail. For some data where the amplitude of archaeological anomalies may be very low, a 3D plot combining the benefits of relief (aspect and shadowing) with colour may be essential for depicting faint trends or patterns.

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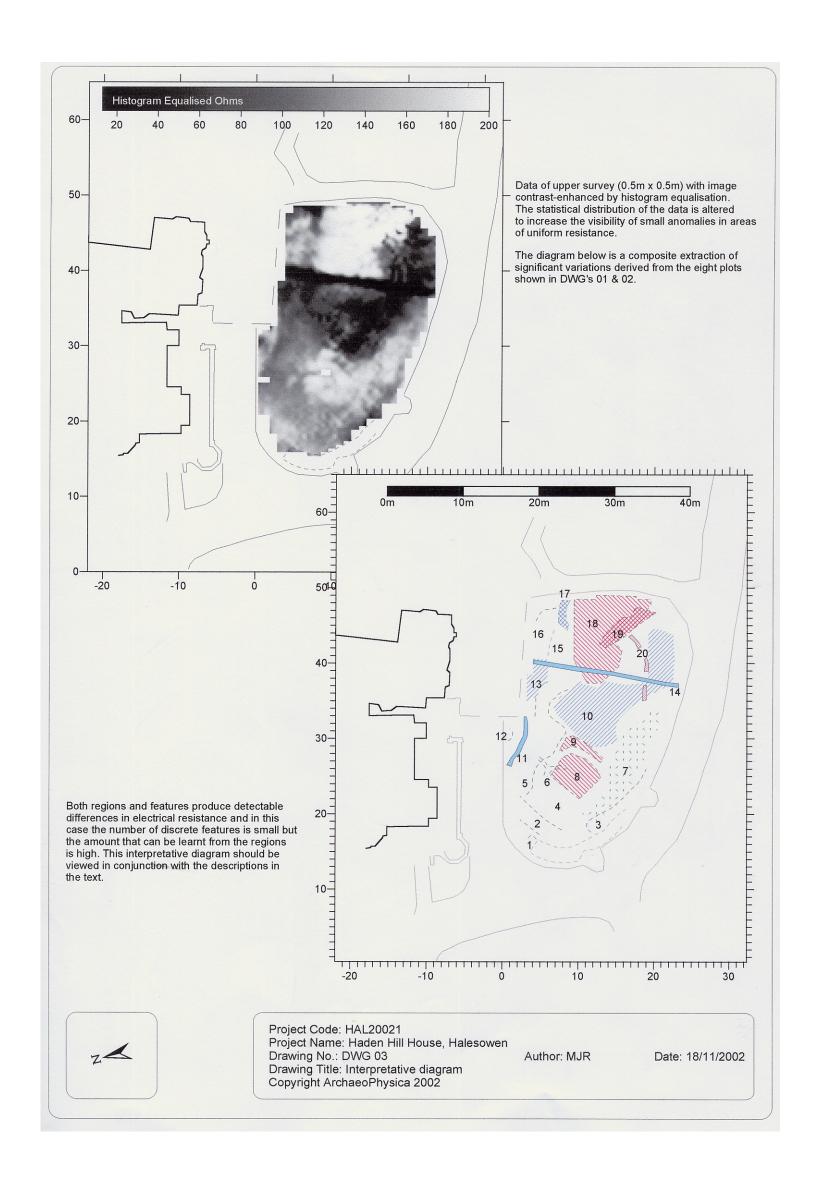
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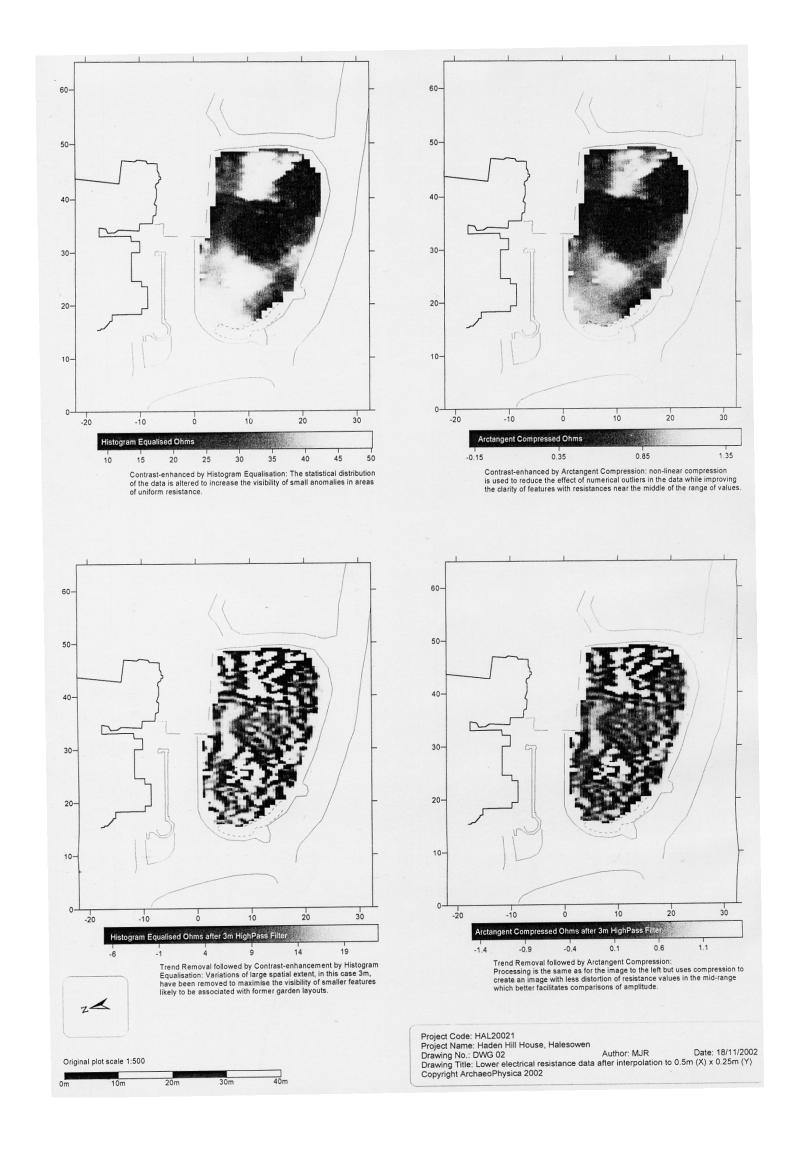
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Appendix 3: Pottery by S. Rátkai

HHP Evaluation slot through wall no.3 [6]

Base sherd. Pretty difficult to date, seventeenth or eighteenth century. Actually rather a nice fabric which may suggest earlier rather than later. Form could be either jar or bowl. Type of glaze higher up vessel is uncertain as is missing which could give it a close date. Place of manufacture uncertain, but find location may suggest Wednesbury. Utilitarian ware.

HHP (T2) [76]

Base-body sherd in industrial slipware, most probably made in the Staffordshire potteries. Lathe turned with bands of blue and grey slip decoration. The sherd is probably from a tankard. The ware and form date to the early 1800s.

Appendix 4: Context register with brief descriptions

	Archaeolog	By	Appeno	CONT	EXT INDI
SITE CODE	HHP02A		SITE NAME	Haden Hill Park, Rowley Regis	
CONTEXT	CATEGORY	PART OF	PLAN NO.	COMMENTS	CHECK
41	LAVER	MOONAMO		TOPSOIL IN WOODAND - MID BROWN	
2		Mooorano		ORANGE BROWN SAND	
3		WOODMO		ORANCE BROWN SMNOSTONE	
4		N		ORANGE CLAY	
5		84000 mm		FOOT PAIN NEAT TO HA-HA	
6	STRUCTURE	1		HA - MA	
7	LAYER	*		TOPSOIL	
8	Cur +FILE	N _A		5.5	
9		N		NATULAL CLAY - YOLOW	
10	LAYER.	W		BROWN SANOY ALDAN WITH CONCRED BY A	
11	LAYER	MA-HASIOT		BLACK SANIOY GEV	
12	LATER	HA - HA SLOT		PAR GENTY SAND	
13	LATER	HA-HASOT		GREY SANOY LOAM	
14				RED BRICK FRACTIONS	
15					
16				PALE WHITE MORTHAL	
17	WYERS:	T, NAPAN 3		THE AND TORSOIL	
18					
19	structule	T, NofPath3	-	POSSIBLE DRY STONE WALL	1
20	Cut	и		INDISCORANGEE CUT, FOR STEUTURE	
21	LAYER	WALL NEG		YARLOUS LAYERS	
2 2	THEF & TOPSOIL	TR N OF WALL 5		TURE MUD TOPSOIL	
23	LATER	4		REDDISH BROWN	
24	LAYER	4		YELON BROWN	
25	LAYOR	4		HARLAN FOR STONE.	
26	STRUCMRE	POPER DENEME		WALL - ON S SIDE OF LOOPING DRIVEWAY.	
27	STRUCTURE	TR N OF WALL		WALL CUT BY FIN DEMIN N OF WALL IC	
28	LATER	1		GREY BROWN GENT MODERN DEPOSIT	
29	LAMER			BROWN CLAY LOAM	
3.0	LAYER			Yellow orange clay.	
31	LAYER	NEW STEPS N OF NA HA		Below [1] - PANE YELLOW	
	LAMER	4		MINER THE BROWN AND DARK GREY.	
7 33	DEAIN	ч		BRUM 19th century IN use	
1 - 1	CLAY DRAIN	ų.		CLAY PIPES - REDUNDANT.	
	· NATURAL ??	κ.		CLAY,	
	STRUTURE	RETIONED CORNER		WALL AROUND LAWN IN FROM OF HOUSE.	
	LATER	u	-	THE MAD TOPSOIL	
38		н		CHARCON ASH LAYER,	
39	LAYER	Est No as		MID BROWN (LAY LOAM	
40	LAYER	h		MULTO RED + BROWN UNY	

SITE CODE	Нирода		SITE NAME	Haden Hill Park, Rowley Regis	*
CONTEXT		PART OF			CHECKE
4	1 LAYER	REHOVED COUNCE		RED + YELLOW CLAY	
42	2 LAYER	2.00 to K ²			
	BALLY.	6		MYO BROWN GRITY CLAY	
	GUT	Gray C		LARKE STOKES FORMUL FILL OF DRAIN CUT FOR DRAIN	
45	LAYER.	Local S		MED BROWN GRITTY CLAY - REQUIOUS G/SURFACE,	
46	LAMER	EVAL OF HA - HA		TR 1+2 - TULF + TOBOIL	
47	LAMER	N.		GLY BROWN WAM	
48	FILL	Example 6 at		BLACK CRITY MATERIAL	
49	Cut	u		NEAR VERTILAR CUT - DRAIN??	
	STRUCTURE	ι,		RETAINING WALL	
	FILL	ų		FILL OF [53]	
	FILL	и.		" PWKY BROWN CLAY.	
	cur	N		CONSTRUCTION CUT FOR ROTANING WALL	
54	5 manuel	Curter	new pero	POSSIBLE EARLIER RETAINING WALL	
55	cut	и		POSSIBLE CUT - STATET OF REBUILD [50] ??	
	LAMER	ч		YELLOW BROWN GRITTY CLAY	
	LAYER	u		PINCIEN BROWN GRITTY CLAY	
58	LATER	٩		Yarow CLAY	
59	Fire	k		MIKED BLACK CHARLOST AND GREY F	
	Fuc	ч		MID BROWN	
61	ux	~		ROUGHLY SUB-CIRCULAN CUT	
	LAMER	~		MODERN LAYER OF SAND	
	LAYER	N		SLEY BROWN LOAM	
	LAYER	n.	1	BLACK ADA/CHARLOAL	
	LAYER	u		PINKY BROWN LOAM	
	LAMER'	v		STROOTH PINK CLAY	
	File	n	5	inouth you blown cray	
	FILL	u	. }	KNOW SMOOTH BOLLDER CLAY	
	Fin	H.		PLANCE BROWN CLAY	
70		ii		CUT CONTAINING [69, 68, 67]	
71		li		ARUX STONES OVER A 4" PIPE	
+2	cur	•		DRAINAGE TRENCH.	
73	LAVER	н	^	110 GROW BROWN SILTY CLAY LOAH	
+4	LAYER	N		IXED GRANCE O GRANCE BROWN	
	FILE	n		NHXED MORANCES BROWNS CLAY LOAM #4	
76	FILL	q /		LATE AND STONES USED IN ARBITECT DOWN	
+7	DEAIN	n		Emm Ceramic Detin	
	CWT	γ.		IT THROUGH 58 - DRAWACE AND WALL CUT.	
		EVAL OF NA		RANCE FLECKED CLAY	
80	LAYOR	l i	I	EMOUSHED WALL STONE FROM R.T WALL (1984)	

Marches A	Archaeolog	v		CONTE	XT INDEX			
SITE CODE	инвога		SITE NAME	SITE NAME. HADEN HILL DARK				
CONTEXT	CATEGORY	PART OF	PLAN NO.	COMMENTS	CHECKED			
1	LAYER	MA-HA EVAL	al for a	WPPER PART OF THE HATHA				
82	LATIER	LOOPED	Sales	TARMAL SURFACE OF GODED DRIVEWAY				
83	LAYER	couly 5/		DARK GREY LOAM				
84	LAMER	Guny &		ORANGE BROWN CLAY				
85	FAL	court 5		STONES ABOVE A CUTY DEATH - SONES FROM [26]?				
86	86 cut "			CUT FOR DRAIN- GLOSP THAN ROAD.				
87	87 LAMER "			WELLY. DARK BROWN CLAY SILT				
88	LATER	Coury 54		RED SAND WITH SOME PEBBLED.				
89	LAYER	4		YEARY SAND WITH 80% IN OF PERSON				
90	LATER	•		BLACK SICT				
91	LAIPR	DUNENNY		BRUCK + BRUCK FAMILIENTS				
92	LAYER	Wa-hat		Yellow green sund				
	structure	Hu-hu slot Deventy		Bux Beun STENOWER				
4			+ numbers	continue in HHPO3a in a separate				
5	The second secon			carriagewell				
6	10 Bi							

	Archaeolog	y	OUTE MANAGE		EXT INDE
SITE CODE	HNP03a		SITE NAME	Haden Hill Park Rowley Regis	
CONTEXT	CATEGORY	PART OF	PLAN NO.	COMMENTS	CHECKET
14	Note:	Sequence	for con	text numbers continues from	
2		HUPOZA.		PHARMUNE FOLICER OR AMUNIC FOR CONTENTS.	
3				piece in a second	
94		TI, T2, T3		Reddyh purple brown clay lown.	
45		TI		tree bowl.	
46		ΤΙ	1	GREY BROWN CLAY LOAM.	
47		TI		Smooth Yellow day.	
98		TI		MOTHER ORANGE CLAY	
99		TI		Fruit mixed puch and yellow	
100		TI, T3		SMOOTH YELOW CLAY.	
101		Π, .		NATURAL YOU'S SANOSTONG	
102		π'		Bedrock	;
103		T3		MODERN DRAIN WINA CLAY FILL	`.
104		Т3		CUT FOR MODERA DRAIN.	
105	surface	w/B		carraigeway	
106				make-up for above	
107	wall			carraigeway wall	
108				Industrial waste	
109				aarden soil	
110	Y. The state of th			garden soil chay dumping garden soil retaining wall	
111				garden soil	
112	will			retaining wall	
113	wall			terrace way / Ha Ha?	
114				chay soil	
115				clay dumping	
116				clay dumping	
117				buried soil	
118				topsoil	
1(9				Culosa'l	
120				Periglacial deposit	
	cut			Modern cut	
	cut			drain	
123				modern soil duping	
124	cut			CI7th druin	
125	fiu			CIFT drain Fill of above Driveway drain	
	cut			Driveway Arain	
127	ful	126		Soil	
8		-			
9					
0					

Appendix 5: Photographic register

		chaeolo		APPENDIX	5		PHC	TOGF	RAPHIC	INDE
CAME 9	RA No.	FILM TYPI	≣ B&W/ G	MEDIUM FO		NEGATIVE / S	FP4	FILM SPEED	MARCHES FILM REF 344	SITE FIL No.
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02a	1a 2	VIEW	B					ii		21/8
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	3 a #	(ı	C	f16/60				ľ		- 1
	401 B	(ı	A					4		
	5 a B	N.	(E)					ų		
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	7a 8	u	(8)				Genel+	Legen		No.
	8a 8	u	(H)				grand.	"		
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	12a 13	tı	1-						NE	
	13a 14	u	M				tormac +			
	14a 18	11	N			tarmac		, 7	ω4 - ω -	
	15a 18	11	0				+ central		24-1-45	+
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SITE	FRAME No.	DESCRIPTION OF S UBJECT		SCALE LENGTH	TAKEN BY/ DATE

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HB2A	9A	11	SHOT OF TRANCH ON ROMO SHOUS NAT & TOPSON		hm `	In 28/8
	ioA	-	E END OF HAHA, Shows STEPS AND BLOCK WORK PRUE TO REMOVE IN	W	Im	an "
		13		1	r	
	12A	14			2.04	
	131	15				
	14A	-	"BROOK BEWEEN BLOCK WORK TO BE ROTWORD AND a DOM	MAHA	STAR CH	44
14	15 A	17	DRAINAGE TRANCH N OF PATH # SOUTH OF MA HA			
	16A		SHAPLE OF TREATCH SECTIONS, APRIX 2011 FROM SITNET, SHOW [01] 02][04]		Im	ч
16	IAA	18	DRAINAGE TRANCH BETWEEN ROMO AND HA-HA (N HALF, LKS)		2m	am 0/9/0
	18A	20		* ()	· ·	4
	APK	21	" (SHALF LK 19)	4	24	1
19	20 A	22	HA-HA- WEST END LK E, AFTER OVERCHOLTH RETIONERS	w	2n	- (1
	21	23		CW	"	"
21	22 A	24	" LK W		ч	٠.
22	23 A	25	11 " " "	66	4	
23	24A	26	HA - HA MIDDLE SECTION WHERE THIBLE HAS FALCEN L	K E	2m	"
24	25A	21	и и <i>и</i>	KE	4	L.
75	26A	28	NEXT SECTION L	KE	· ·	4
76	24A	28	NEXT SECTION L	KE	"	4
27	28A	30		k W	2m	4
28	139A	31	TH- HA SECTION NEW TO STEPS AF EAST END.	"a	1	4
			MA-KH SECTION NOT TO SEED IT ZIM FILE	ĸW	4	н
	311	35	SWSECTION OF TRANCH CROSSING PATTLY MY OUST NO THE BOWL. LI	KW	41	1,
	32A	34	W SECTION OF TRENCH CROSSING PAINWAY UNIT NOF THE BOLL I	LK W	u	1 .
	33A	3	HA-HA LKN AT SLOT THROUGH THE WALL		- tm	11/9/6
	34A	3	6 n		1	n
	351	1 3	LOOKING W AT SECTION THROUGH HA-HA			
	36A	1 3	8 n		11	1

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		2	и и	* *		11
HPOZA	1	1	SHOT OF TRENCH ON ROAD SHOWS NAT CLAY AND		lm	AFN 29/8
	3	1	EEND OF HA-HA, SHOWS STEPS AND STONEWOCK PRIOR TO RE	LOURL DEW	lm	•
	3	1	- 11		u	
	4	P	E END OF HA-HA - STONE WOLL TO BE LEHOLED		- (1	
	5	1	1		- 11	
	6	8	" BROAM BETWEEN MODERN INFILL AND A	1A - HA	ч	
	7	8	#			
	8	18	DRAINAGE TRENCH N OF PATH BEROW HAM IN WOODS		lm	L(
	9		SAMPLE OF SECTION OF DRAMAGE TREATED SHOWS [OI] [OZ] LOT		lm:	4
	b		DRAINAGE TRENCH BETWEEN ROAD AND HA-HA -(N HALF LK (S)		2m	afn 10/9/
	u	18		(FLASH)	11	41
	Q	1	" - (SHA-F, LK A)		ш	h
	13	10	HA-HA - WEST END, LK E - AFTER CLEANING BEFOR FE	suco.	2m	и
	M	10	* 4			4
	15	17	" LKW k		ч	. (1
	16	18	MA HA MOSO "	u	и	н
	17	10	HA HA MIDDLE SELTION WHERE TUMBLE HAS OLUMED	LKE	Zm	IX.
	18	25	ν	LRE		4
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		28	HA - HA "	KW	4	ч
	22	2	A Li	LK W	ч	ч
	23	28	HA-HA SECTION NEAR TO SEPS AT E ENO &	UK €	u	ч
	24	26	li A	и	u	ч
	25	2	BECTION OF TRENCH CROSSING PATHWAY NORTH OF BOWL	LK W	i.	
	26	28		LESE	I IM	-
	27	28	HA-HA - LK N AT SLOT THROUGH HA-HA	ZS W	Im	11/9/0
	28	36	(1)		K	N
		_	HA-HA- LKW AT SECTION TUROUCH HA-HA	24 E		
	1.40	30	The state of the s		4/	ч
	31	36	SLOT THROWN HA-HA LOOKING W SLOT THROWN HA-HA LOOKING & Eat section 1 " "		le	L,
	32	34	SECTION OF SLOT TUROUGH HA-HA looking W	\$4, E	li	ч
	33	of	SLOT THROWLA HA-HA LOOKING & Eat selion		4	41
	34	16	1 1 1 1 1		,	4
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	12 21	u ^ E	2m	u
	23. 22			
	24 23	LOCATION SHOT OF WEND OF TRENDS N OF PATH NO 3. LKS	2m	19/9/0
		FIN THAIN TO THE MOOTH OF PARMS NO 35 - STRUMBLE [14] IN A	24	٠ ٩
		" WALL NOS		u
		POST REMOVED OF LOW CONCRETE WALL NO 6 LM SE	2m	u
		CLOSE UP OF HARE UP GROUND BEHIND WALL NOG LKSE	IM	и
		LOCATION OF FINE DRAIN N OF PATH, EAST OF PT 188M LY W	IM	ч
		N SECTION OF ABOVE TRENCH LKN	lm	IV.
		PRESENT OF THE TENDEN HEXT PORTION OF THE FINN TRENCH LK E	lm	
		FIN TRANCU STARTING 288.5m FROM DATUM - LOCATION SUF VITA 1894	lm	124/9
		SAMOUT OF N SECTION OF ABOVE NEAR TO SLOPE STRAT.	In	male la
		FIN TRENCH NORTH OF WALL NOS, WEST END OF 1ST RIM LIKE	2m	20/9/0
	0.	2	2m	20/9/02
		N SECTION OF THE ABOVE	ĺm	11
			•	
	37	1 III Liferance		

CAME	RA No.	FILM TYPE PER / COLOUR NEGATIVE / SLIDE FILM	MARCHES	
12		THE TITLE SPEED 200	FILM REF	6 No.
SITE	FRAME No.	DESCRIPTION OF S UBJECT	SCALE LENGTH	TAKEN BY/ DATE
146	Ò	AK DID NOT COME OUT	2m	atn
	1	AK ONLY PARTIALLY CAME OUT ENOUGH TO SHOW	~	16/9/00
	2	AL -D inc renains of water mill	۴,	•
	3	AM - Shot at 188m from datum.	(,	н
	4		^	4
	5	AN -	١	
	. 6		_	
	7	LK E Arone Brown which FOOTPATH. SHOWS MANY DEPTH OF EXCAVATION FUND	3" / Zm	"
	8		4	4
	9	LK SE TRENUM TO SOLUTH OF THE ROSE GARDEN	1+2	ι
		LK E ESELTION OF ABOVE THENOU.	Im	l.
	11	LK W ARONG TRENCH NORTH OF WALL NO B. E END.	_	**
	12	LK E " WEND	la	и
	13	LK W ROADWAY NORTH OF THE BOWL POST EX	IM	ч
	14		lac	1.
	15	u k	lm.	
	16	LK S FIN DRAWN POF WALL Nº 4	2n	ч
	17	u "		ч
	18	STOUL VALLY LK W POST-EX	211	"
	19		ч	•
	20	u u u		. 4
	21	LOCATION SHOT OF TRENCH N OF PATH NO 3 LK S.	2m	19/9/02
		FINN DRAIN TO THE N OF PARM NO 3 - STELLULATE [19] LKN	Zm	u
		PMM	201	ч
		1) I OF WALL NO 5		
		POST REMOVED OF LOW CONCRETE WALL NO 6 LK SE.	211	н
		DETAIL OF MADE UP GROWND BEHIND WALL NOG LK SE	lm	и
		LOCATION OF FIN DRAIN (188 on from do hum) EAST OF 1881.	Im	ч
		N SECTION OF ABOVE TRANCH	Im	
		LIN E AT THE HEAT PART OF THE FIN DRAIN ACE TRENCH	Im	
		LOCATION of FIN TRANCH, TRANCH IS 288.5m from dahum	las	11
		SAMPLE OF N SELTION OF ABOVE THENCH NEAR TO STAKE OF SLOPE	lan	
		FIN TRENCH NORTH WALL NO 5, NEST END OF 1ST RUN LK W	2m	20/9/0
		u LKE	2m	20/9/0
	34			u
		N SECTION OF THE ABOVE.	IM	ч
		n section of the master.	IM	и
	37		,,,,	
	38			

Marc	hes Ar	chaeology	PHOTOGRAPHIC INDE			
CAME	RA No.	FILM TYPE (B&W) COLOUR NEGATIVE / SLIDE MEDIUM FORMAT / (35MM)	FILM SPEED 125	MARCHES FILM REF 350	SITE FILM	
SITE	FRAME No.	DESCRIPTION OF S UBJECT		SCALE LENGTH	TAKEN BY/ DATE	

HHRO2A	18 19	LKS AT MANHOUS IN BOWL	lm	an 7/10/02
			Im	· · · · ·
		LK N ROSE CAROON PATH POST EX	Lux2m	u
		DK S HODERAL FERRURE BEHAND KERBIOF ROAD (WORD CONSUMY)	1m	4
	22 5	LK W MODDLAND AFTH N°3 - LAND DAMN	2n	H
-	23 24	LK & DRAINAGE TRONGS ALONGSIDE OF FOOTBALL PITCH.		

10		Miles of Miles N. Tank.		1 1
HHPOZA	31	LKW-Along wall on 5. SIDE OF LOOPED: PRITERSAY	ZXYm	AFN 11/10
	3 2		1.11	14
ELVIA	33	LK. Sy 2m sample of wall on soside of looped	11	Ju palultz
	34		Urt _	111
L	35	Looking W. W. sechon of guily 5 (Note wall	W	41
	36	1 / Section and odd	IV	141
	37	-11 Slab in background	0	5
	38	END		

CAMER (O	A No.	FILM TYPE B&W COLOUR NEGATIVE (SLIDE SPEED 200	MARCHES FILM REF 282	SITE FILM No.
SITE CODE	FRAME No.	DESCRIPTION OF S UBJECT	SCALE LENGTH	TAKEN BY/ DATE
	n			
		4 P		
ļ				
		ble s as sande of is serrous		
			· Las	
		PILE GOLF &		
			Vs.	
		The set - 2 section 4 of the David Motor of Mar 16 - part 1.]		
		THE MONTH TORNING TRANSPORT OF LASSED DEPERT	281	
		ICK N. M. DELANGE OF BEGINNER PROMISE TO SHAW BOOK CONTINUE WAT		
		EXAL IN COUNCE COMOVER FROM LAWS AREA & MELLER IN BALANCE OF		
	3	the state of the s		
		LK N N SALADA OF LOOPIO DOLLARY - SHURE SHOULD WHERE		
		THE CHIEF BURNING DANIAGE STORE FROM THIS PORT BURN PROJECTION		
		DASH T LOURD SHE SHEET OF THESE RESEARCH AND IN STRUCT LINES.		
		DOE ALONG White growing of Loophin being business.		
				18/0
HPOZA	30	LK S AT MANHOLE IN BOWL	hy 1	atn = /
		s section of Hankoue in Boll		1/h 3/10/0
	32	· SATENTA	2×Im	ι(
		LKS HOODERN FEATURE BEHND KERS ON LOOPED DRINGWAY PUT WALL	2n	ч
		LKW - WOODLAND PATM N°3 - LAND DRAIN	2m	"
		LKE DRAWAGE TRANCH MONGSINE OF FOOTBREL /ITCH	2m	4

HHP OZA Marches Archaeology PHOTOGRAPHIC INDEX CAMERA No. FILM TYPE B&W / COURT NEGATIVE / SHIDE MARCHES SITE FILM SPEED FILM REF MEDIUM FORMAT / 35MM 125 339 SITE FRAME DESCRIPTION SCALE No. CODE LENGTH OF S UBJECT BY/ DATE 1 LK E E SECTION OF TRENCH - GULLET 5. SHOWS WAL BELOW KERLB am 11/10 3 LK E DRAMACE TRENCH IN LOOPED DRIVEWAY 750 × 300 64 2×1 neg s 11 5 LK S AT . S SECTION SAME 6 in 5 AT SATURE OF S SECTION 11 7 LKE E SECTION OF GULLY 5a 14/10 9 LKN Guy 3 M 10 n 4 11 LK S 12 4 13 LX SE - S'SECTION OF FIN DRAIN NORTH OF WALL IC- BALL I] 14 ^ -15 LK E ALONG DRAINAGE TRENCH IN LOOPED DRIVEWAY 2×1 . 17 LKN N SECTION OF DRAINAGE TRANCH - SHOWS BRUK CHERLYING MAT 18 n 19 LKINE AT CORNER REMOVED FROM LAND AREA - HOLDE IN BACKGROOM 2×1 15/10 15/10 Citist - up 221 21 LKE ALONG THE MODIE SELEON OF THE LOOPED DRINGING 16/10 4 23 LKN - N SECTION OF LOOPED DRIVEMAN - SAMPLE SHOWING WHERE 2m 24 THE CLAY OVERLED NATURAL STONE - FROM THIS POINT CLAY DISAPPEARS 25 USW - LOCATION SHOT OF THEN UN NEROSS AND IN STAND WHILEY " 26 IXE ALONG NET SETTION OF LOOPED DRIVEWAY 2m 1. 28 LK N ALONG TRENIUM ALROSS WORD DRIVENAY NEAR THE LANK 18/10 29 u 30 E SECTION OF THE ABOVE 121 " 32 LK NW - FORNER OF LAWN IN FRONT OF HOUSE - CHAMED 3×1 34 LK N "

+4

Im

36 LKS WALL IN DRAINAGE TRENCH

37

CAMERA No.		FILM TYPE B&W / COLOUR NEGATIVE (SLIDE SPEED 200	MARCHES FILM REF 293	SITE FILI
SITE	FRAME	DESCRIPTION	SCALE	TAKEN
CODE	No.	OF S UBJECT	LENGTH	BY/ DAT
ODE	0	OF STABLECT STATE OF STATE OF STABLECT STATE OF STABLECT STATE OF	ENGRA	
HPOZA	1	LK W ALONG WARE RAHMAS ON 'S' SIDE OF SLOPED DOVEWAY	2+1	am 11/12
nutr k	2	и	ų	L1
	3	LKS AT SAMPLE OF STONEWMENTS ON'S SIDE OF LOOKED DAMENTY	24	ч
	4	. ч		4
	5	LKW WESTERON OF GULLY 5 - NOTE WALL MAD DOD SLAB IN BALLBOUND	2+1	ч
	6	u u	4	ч
	7	LKE E SECTION OF GULLPY 5 - NOTE VALL BELOW KEED	2+1	"
	8	A -16 - Siers Conducto	e,	
	9	LKE DRAINAGE TRENCH IN LOSPEN DRIVEWAY 750 D * 300 W	2×1	u
	10		4	41
	. 11	LK N N SELTON OF ABOVE	lim	4
		LK & S " "	lai	4
	13	LKE E SECTION OF GULY 5A	lm	14/10
	14	N A 1	Im	u
	15	LK N GULLY 3	lm	1/14/0
		u u	Im	11
; ;	17	LK 3 way 4 Shows depth of foundation for math. [26] entance	Im	ы
		11 211		41
	19	LK SNE - S SECTION OF FIN DRATH N OF WALL SECTION IC - SHOWS WALL []	lm	, 4
		11 11 1 1 1 1 1 1	2.4	t,
	21		и	(4
	22	LIKE ALONG DRAINAGE TRONCH IN LOOPED DRIVEWAY NEXT SECTION	2 ×1	11
		EN C. Heart of Manual C. Heart of Express express. Heart Section.	2×1	1,
	24	UKIN N SECTION OF DRAWAGE TRENCH - Shows BRICK OVERLYING MATURAL	lm	e/u/a
	25		4	,,
		LK NE AT BECTION OF REMOVED CORNER - HOUSE IN BACKGROUND	1+2	15/10
	27	" (cost-uf	ч	11
		LK E ALONG PART OF THE MIDDLE SELANN OF DRAIN IN WORD DRIVEWAY	Zm	16/10
'\	29	EN T LIONE AND OF THE MIDDLE SECTION OF DICTION IN TOOLS DICTION.	4	4
+ 1		LK N-N SECTION-SHOWS CHANCES IN SOIL BETWEEN THE CLAY AND THE UNDER-	2m	.,
	31		ZM A	
	32	4 NHIMOR SHIPSTONE	-	11
	33			
	34	,	n	n
		" (12/m)	4_	a lake
	1	LK SN TRANCH CROSSING STOURLANDY PARTY NEAR FROMBURE 1174 (LOCASION)	•	A
	37	LK E ALONG THE HEAT SELVION OF THE TRENCH IN THE LOOPED DRIVEWAY.	^	n
	31	n n		

			OTOGF	KAPHIC	INDE
	RA No.	FILM TYPE B&W / CORDON NEGATIVE / SLIBE MEDIUM TORMAT / 35MM	FILM SPEED 125	MARCHES FILM REF 314	
SITE	FRAME No.	DESCRIPTION		SCALE	TAKE
OOBL	0	OF S UBJECT		LENGTH	BY/ DA
DIDN'T	come our O	NEW STORS IN BETWEEN THE HA-HA AND LOOPED DRIVEWAY	1	261	1 2
	L.	u u	MN	2,81 M	da 21/
	2	h & systemal of money through	и	1301	
	3	DETAIL OF THE DRAINS - ONE 19th ONE 18th ??	LKW	Im	4
	4	The same of the sa	W	Im	ч
	5	4 4	W	In	ч
	6	MA-HA- STEPS REMOVED		2× Im	
	7	Por H		н	•
	8	LKING S - AREA OF EVALUATION PRIOR TO EXCAVATION		2m	afn 31/10
	97	W - " House w DACKS	ren o	201	4
	10	NN "	и	lm	к
	11	LKW EVALUATION TRENCH I - POST EX	sakio Pilovico		Am 31/10/
	12	A P V			71 3.110
	13	A read of the A made as the page and will be then 1875 77		2+1	1/11/0
	12	u u		u	1 11 10
-	15	₩ ŧ√ n		2+1	
	16+ 17	LKS		u	
	.0	LK DETML OF HO-HA IN TRANCH I & SIDE		20	fe
	19	" N SIDE		2~	3 4,
	20.	LK S WEST END OF TRI - Shows NO FENTULES BEYOND HA -HA	All Roug	axi	ıl
	212	P pp		4	"
	2222	LK W TRI - PRIOR TO SLOT THROWIN THE HA-HA		3×1	1/1
	7 23	TREACH Z: WALL / ELENATION		3212	1/11/02
	24			77112	NT
	25				(4
	26	Le S · · · · · · · · · · · · · · · · · ·			(,
	27				
	28	1-29 + 30			· (1
31	7	THENM Z : GENERAL VIEW TE SHOWING DR	H	3x1m	(,
32	7	" + CLAY.			4
33	1 .31	(*			
	1	TE STEEL STOP OF THE PERSON OF THE SHALL PROPERTY WAS	V 11244		
	36	7 LKW - BUT EX AFTER SLOT THROUGH WALL HUD BEEN DONE		11	atn
	35	ETH TEL Roll to the Tribul HA IN		341	4/11/02
	36 7	TI - LK N N SELTION OF SLOT	123	3 x 1 en	9.7
	36 7	W THS 5 SECTION OF STON FINE		щ	٠,
	3.	ti de la companya de		٠,	.,
	2.5	and a life.			

Marc	hes Ar	chaeology PHOTOG	RAPHIC	INDEX
CAME	RA No.	FILM TYPE BAN / COLOUR NECTOR SPEED MEDIUM FORMAT / 35MM FILM SPEED 200	MARCHES FILM REF	
SITE CODE	FRAME No.	DESCRIPTION OF S UBJECT	SCALE LENGTH	TAKEN BY/ DAT
	0			afn
	1	LK H ALONG TRENCH ACROSS LOOPED DRIVE WAY NEAR LANN BY HOUSE	2m.	18/10
	2	u		
	3	WE SELLION OF ABOVE TRENU	1141	"
	4	u 41	ıı	ч
	5	LK NW CORNER OF LAWNED AREA (CLEANED)	3×1	ч
	6	u A	3×1	u
	7	LK N " "	3×1	
	8	4 (/	3×1	
	9	ч	u	4
	10	LKS WALL IN DRAINAGE TRENCH	Im	
	11	h	u	4
	12	LKN - NEW STEPS TO THE 'N' OF THE HA-HA LINKED TO THE LOWEDIQUE.	2×1	21/10/0
	13	II	2 ' '	an
		Down of the sale is a second with a light 22		
	15	DETAIL OF THE DAMINS IN THE ABOVE - ONE 14th + One 18th ??	Zm	ų.
	16	n n	lm 1	и
			· lm	N
		Mn Mn - STEPS Retracto	2×1 m	el el
	18		WZ Y IL	The same
		LKINGS - AREA OF EVALUATION CONTENTS PRIOR TO EX	2~	31/16/0
	20	W - " Nouse in BACKClauso	2/11	••
	21	NA "	Im	4
	22	LK W - EVALUATION TRENICH I POST - EX	2+1	1/11/
		w * 1	i,	•
	24	KW "	ч	
	25		ч	
	26	LK S h	н	
	27	rs company		
	28	LN W DETAL OF HA-HA IN TI N SIDE	,	2
	29		١,	
	30			
	31	" \$ 510E	. 4.	
	32	LRS WEST END OF TRANCH - POST EX - SHOUT MAIN FEMTURE WEST OF MAIN	41	
	33	WEST SET OF THE STATE OF THE PROPERTY OF SHEAT	1	
			3 × 1	
·	35	LKW - TRI PRIOR TO SLOT THROUGH HA-HA.		
	36	TRENCH Z : WALL /GENERAL SHUT I'ST CLEAN -> W	3x1m	1/11/0
	37	· · · · · · · · · · · · · · · · · · ·		.,(•
	38			
	30	and of John	1	

		FILM TYPE B&W / GOLDUR NEGATIVE / SHEE SPEED	MARCHES FILM REF 324	SITE FILM No.
SITE	FRAME No.	DESCRIPTION OF S UBJECT	SCALE LENGTH	TAKEN BY/ DATE
a akan maran da da	0		2, ,	
	1	S SECTION OF SLOT IN TI LKS	1+1	Am
	2	R 11	1+1	4/11/0
	3	A SECTION OF TI LK NE	3 × 1	u
	4	~	-	u
	5	TZ: SOUTH TREACH EDGE SECTION: CEMERAL - SA	3×1m	4/11
	6	12 - SING OF WAR BARD SELECT 200 - 1		N7
	7			'
	8		1/2	
	9			A. In to
	10	Es certal part of materia.		
	11	TZ. Central par of section		
	12			
	13	14 14 15 87 192 MB		
	14			
	· 15			
	173		92 1	1.35
	16 #	TZ Section + VIEW dang -> SW		
	17 18	0		
	184			
	19 4	VIEW of tranh with have to rear.	4	~ ~

		FILM TYPE BOW/COLOUR NEGATIVE/SLIDE	FILM	MARCHES	INDE)
12		MEDIUM FORMAT / 35MM		FILM REF 276	No. 14
SITE	FRAME No.	DESCRIPTION OF S UBJECT		SCALE LENGTH	TAKEN BY/ DAT
ODE	0	OF S CRIECT		LENGTH	BY/DATE
	1	TZ >hote quall -> W.		3x1m	NT
	2	0		4	1/11/0
	-0	5		• •	
	4	TZ: Detail of wall clustin ->W		h	
	5			ч	
	7 6	TZ SHOTS O, ASH DRAIN/CLAY etc -> E		٠(
	} 7	n .		N	
	8	"		((
	9 ار	a .		ų	
		TI - LK W POST OX AFTER SLOT THEALER RETRINING WA	u	(1	4/11/0
	<i>‡</i> 11	With the same purposed States, for the purposed of grade		4	7 m
	12			2 4	٠,
	13	TI LAS SI SECTION OF SLOT		2×1	u
	14		7	2 . 0	
	- 15	TI A SECTION UK NE		3×1	€.
	16	TI A SECTION LK NE	Adapt 1	1000	, ×
	17	TZ: S trench edge nection: general - SW		3x1m	NT/4
	18	The fact of the second second second		4	
	19	+ 20 "			4.5
	.20	TZ " early and	→ SW	111-	
	24	14 Hd 5 48 3ND - 3 " "		20 1 1	
	22	the state of the s		8 k 1 }	
		+24		tou i	er .
	25	WALL + contral bit			
	95	to a the of the draw mo be of 193.		284 1	*
	26	Lead to make the same of the water		2 = 1	4
	27				
	28	E COUNT WEST OF ST		241	
	29		THAT	2 1	
	30	The state of the s			
	31	+32		111	

Marc	hes Ar	chaeology		PHOTOGRAPHIC INDEX			
CAME	RA No.	FILM TYPE B&W LeaLour	NEGATIVE / SHIDE EDIUM PORMAT / 35MM	- Fus	FILM SPEED 400	MARCHES FILM REF 352	SITE FILM No. 15
SITE CODE	FRAME No.		DESCRIPTION OF S UBJECT		· , v	SCALE LENGTH	TAKEN BY/ DATE

MHFOZA	8	WB OF HA-HA- LK SW - Stows DEFREST, PRECEDEN OF STEPS	2+1	9/19/02
	9.	LK W	34	1 "
	10	LK W SAME OF WALL SHOWS LARGE STONES	2+1	4
	17	" " LK N DRAIN [77] PIPE REDUCES IN SIZE S OF TRANCY 2	2+1	10/12/02
	12	#		4
	13	" LKW " " delail	1+1	
e d	14		1+1	
	15	WB OF HA-HE LK W - STEP FOUNDAROW	2+1	11/12/02
. :/	16			
	17	" LK SN N EF STEPS DETALL OF JOH BETWEEN SPR'S ANNUAL	(+)	••
•	18		1+1	
	19		3×1	
	20		In	U
	26	LKS CUT + FILL OF DEAN [77] & of while	2m	(1
	22	LUS DITHE OF END OF LIPLE AND END OF [77]	2×1	
	23	LK NINE PRODUCTUE FACE OF THE MILL	2*1	
	24	н		
1	25		2+1	
J	26	LUSW WALL S OF INFILLED TO WALL OF COUSED PRINE	2	
	27	LX NE WALL N OF STEPS	2+1	
	28	LK W AREA WAREN ON DE (NO SILVES OF BREAM)	211	
	29	N STEPS LK W		
	30	LK S ALGAL. THE TOP OF THE WALL	2+1	
	31+32		271	13/12/02
	33	LK W SHANE SELMON - CHUN IN BW	2-1	
	34	GENERA SHOT OF WALL LHINK SW	301	13/12/05
	35			-
	36		1	
	37	11		

CAME	hes Ar	FILM TYPE POW / COLOUR NEW / SLIDE FILM	MARCHES	SITE FILE
		MEDIUM FORMAT / 35MM FUST 200	FILM REF	
SITE	FRAME No.	22001111 11011	SCALE	TAKEN
CODL	140.	OF S UBJECT	LENGTH	BY/ DAT
			4	
HHPOZ	10	WB OF HA-HA. LK SW - SHOWS DEPENT PAPER OF EXCHANGED HAT CAPT.	2+1	An 9/10/0
	11	" LK W	n'	41
W.	12	" LIK W - SAMPLE OF WALL FACE NOT LARGE STOLES	1+1	4
ulf oi	13	" LK N DRAM [77] PIRE REDUCES IN SIZE S OF TRENCH 2	2+1	10/12/0
	14	31 11 11 11 11 11 11 11 11 11 11 11 11 1	2+1	*
	15	" LKW "	1,1	
	16	and the same of th	1+1	"
Tree.	17	" LIK W STEP FOUND ATTOM	2+1	11/12/
	18	M SHO OF TEACH WE	2-1	<i>y</i>
	19	" LINSW DETEN OF STEAS BOXED TO WALL ON NOTH SIDE	141	N. 11
1. 6	20	" LK NW DETALL OF JUN BETWEEN WALL AMP STEPS, S SIDE OF STOR	1+1	The state of
	21	LK NU SHOT SHOWING MAT [77] DONNAMS GLOW MILL	3×1	₹.,
	22	" DETAIL SHOT OF 3 rd PHASE CEPAIR LK W	Im	u 1 ,
	23	Cui + FILE OF DARIN [77] LK S	201	
	24	DETALLES END OF WALL AND SHO OF [77] LKS	2X 1	
	25	LK NNE ALONG THE EXPOSED WALL	2+1	
	26	604 49/		
	27	BY 2M MILE 2 C. LEGACY.E	2+1	4
3/	28 .	in SV ware s of infile	2.	
	29	LK NET WALL N OF STOPS	2+1	
	30	LIN IN AREA CLEIA ROO (NO SIGNS OF ANY GREATLY	2+1	
	31	N STEPS. LK W	2×1	44
	32	LK S MONIC THE TOP OF THE WARL	2+1	
	33	1 KGI 10 KE 13 LL 15	2+1	13/12/0
	34	·	••	4
	35	GENERAL SHOT WE THE WALL LINK SW	2n	4
	36	from 1500 11 "		
	37	FIN		
	38			

04445			T	INDEX
Marches 2		FILM TYPE B&W COLOUR NEGATIVE SLIDE SPEED 400	MARCHES FILM REF 3 1 子	SITE FILM
SITE	FRAME No.	DESCRIPTION OF S UBJECT	SCALE LENGTH	TAKEN BY/ DAT
HP08	a o			
1	1	DESCRIPTION DESCRIPTION OF SCRIPT BY MES	H WELL	
		Ha-Ha Wall LK W Shot no 3	lm	ata Bliz
1 193	3	n no 4	ts.	
	4	" 4 LK N ALONG LENCH OF WALL	3×1	и
	5	LKS ALONG L. OF WALL STEPS AND WALL RETURED, CONCREDED before inspection	2m	20/12
	6	" " LK W WALL FACE POST CLEANING !	2+1	4
	7	n a a	q	ч
	8	1. 4 11 3	- ((h
	9	u . u 4	4	**
	10	" LK SW FACE UTO LOOPED DRIVEWAY	2×1	4(
	11	" Demie snot of the wave LK W	lm	
V	12	a land to the second se	(ii)	и
HP 63	ر م	EVENTS AREA Pre X of T3 LK NW	1+7	ST
1	14	II LK SE	и	15/01/0
3030	15	" LK NW	n	
	16	" Pre x of TI LR N	и	afn 16/61
	17	" LK S		4 11/01
	18	IN SUD OF TRENUM LKE	1+2	- 4
	19	4	1+ (
	20	" S END OF TREMUM IKNI	2+1	4
	21	11 TI - sample of the west section of the trench LKW	2+1	
	22	1 73 - modern dramage brench La NW	Im	17/03
	23	" TI Su coener = TIPS + during SW	1+2	,,,,,,
	24	II u N	и	.,
	25	" " N		/s
	26	" GEN STOT N	и .	,,
	27	" TI shrub / free boul S	lm	lı

FILM TYPE	ANW/COLOUR NESAFIYE/SLIDE	FILM SPEED FILM NUMBER		
	AREADY FORMAT / 35MM	200	284	18
FRAME NUMBER	DESCRIPTION OF SUBJECT	LENGTH OF SCALE	TAKEN BY	NEGATIVE NUMBER
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Appendix 6: Summary sheet

SANDWELL MBC/BLACK COUNTRY SMR SUMMARY SHEET

Site name/Address:					
Haden Hill Park, Rowley Regis, Sandwell					
Borough:	NGR:				
Sandwell	SJ 959 856				
Type of Work:	Site Code:				
Archaeological Evaluation & Watching Brief	CRHHO2 MA ref: HHP02A				
Contractor:	Date of Work:				
Marches Archaeology	Site Work carried out 29/08/02-14/02/03				
Location of Finds/Curating Museum:					
Marches House awaiting deposit					

Title of Report:

Haden Hill Park, Rowley Regis, Sandwell: A Programme of Archeological Works

SUMMARY OF FIELDWORK RESULTS:

Sandwell Council has been granted funding from a Heritage Lottery award to assist the restoration of Haden Hill Park to its former Victorian glory. The park consists of 28 ha of formal park land, woodland and water features. Within the park are several significant structures: principally there is a Victorian house (Grade II listed) and adjacent is an essentially 17th century hall (Grade II* Listed). Certain elements within the restoration programme required archaeological supervision so that historic information about the park would not be lost.

Marches Archaeology was commissioned by Sandwell MBC to undertaken a programme of archaeological works. The works began with a photographic record of the paths, important walls and tennis courts prior to the start of the restoration work. While the restoration work was being conducted two levels watching brief were undertaken. In areas that were considered as having a low potential for the survival of archaeological deposits only occasional observations of the landscape contractor's excavations were undertaken. In areas that were considered more likely to have surviving archaeological remains all excavations by the landscape contractor's were subject to an intensive watching brief.

The low intensity watching brief located nothing of archaeological interest. The more intensive watching brief, principally on the summit of the hill around the Victorian house and the Old Hall examined the trenches excavated for the new drainage, the creation of new steps and the resurfacing of the paths. Few archaeologically significant features were observed. The earliest features probably date to the 18th century. These consist of two undated walls which do not conform to the 19th century layout of the park and a brick drain which is of a style contemporary to this period. A lost Victorian wall was found to the south of the Looped Driveway.

A small excavation of a slot through the ha-ha to the south of the house and hall revealed that the wall was suffering from root damage and subsidence. A single body sherd of pottery dated the ha-ha to the late 17 or 18th century.

It was known that a ha-ha/retaining wall once stood in an area of lawn to the east of the Old Hall. Two evaluation trenches were excavated across the line of the wall to examine the profile of the terrain and to assess the build up of the wall. The evaluation located the wall and examined the profile of the terrain. It was noted that the build up of the wall occurred in two phases. The earliest phase was undated but the ha-ha is known from the cartographic evidence to have been present as early as 1834. The second phase, a rebuild of the wall, probably occurred in the later Victorian era: when Haden-Best built the house. A subsequent watching brief was then carried out while the contractors exposed the wall.

A separate area of lawn was to be utilised as a purpose built events area. The lawn was in proximity to the Old Hall, which suggested a high potential for the survival of archaeological remains. To investigate a geophsyical survey was carried out on the behalf of Marches Archaeology by ArchaeoPhysica Ltd.. The results of the survey suggested that landscaping had occurred in the area but there were other anomalies that required further investigation. Three evaluation trenches were excavated to investigate the anomalies. The anomalies investigated turned out to be modern or natural features. The subsequent watching brief demonstrated that features that may have once been present had been mostly removed by landscaping, which had been a regular occurrence since the 17th century. One surviving feature was a stone filled drain, which probably dates to the early 17th or 18th century. The features that had survived were located around the periphery of the area. The remains of an early 19th century wall were located to north of the looped driveway. To the south of the Old Hall and the Victorian house were the remains of a carriageway. Pottery and a nearby 'horseshoe' drain possibly indicate that this dates to the 18th century.

Author of Summary:	Date of Summary:
Adrian Nash	21/3/03

Appendix 7: Archive

The archive is currently held by Marches Archaeology awaiting transfer to an approved repository. It is intended to deposit the finds archive with Wednesbury Musuem and the paper and photographic archive with the Community History and Archive Service, Smethwick Library.

The site archive consists of:

4 context index

127 context sheets

1 levels sheets

2 index of drawings

19 sheets of site drawings

20 photographic index sheets

10 films black and white photographic negatives

10 films colour photographic slides

1 box of finds

1 computer disk [IBM - database files Lotus Approach 97, matrix Bonn v.4.0]

This report

The Marches Archaeology site code was HHP02A

Appendix 8a: Archaeological brief

ARCHAEOLOGICAL EVALUATION &

WATCHING BRIEF

HADEN HILL PARK, ROWLEY REGIS

AUGUST 2002

PHASE I

Borough Archaeologist: Shane Gould (0121 569 4025)

Parks Project Officer: Lynn Foord (01384 561052)

Lead Landscape Consultant: Danny Hodson (0121 569 4652)

1.0 Introduction

This Brief for a Phase I Archaeological Evaluation and Watching Brief at Haden Hill Estate, Rowley Regis has been prepared by the Borough Archaeologist for Sandwell MBC. A substantial grant has been awarded to the Council by the Heritage Lottery Fund (HLF) to restore the landscape to its former Victorian glory. A draft Conservation Statement has been prepared by Richard K Morriss and Associates (2002) and this Brief addresses the recommended mitigation strategy for Contract 4 of the restoration programme.

N.B. Further briefs will be issued for the remaining Contracts - Contract 3 and 5.

2.0 Overview

Haden Hill Park (SJ 959 856) is situated in Cradley Heath and comprises 28 ha of formal parkland, woodland, water features and Grade II and II* listed structures – Haden Hill House and Hall, a dovecote and Corngreaves Hall with its listed entrance piers and gates. Although the family is first recorded in the area in mid-fourteenth century, the earliest standing buildings date to the seventeenth century. A large Victorian House (Haden Hill House) was erected beside the Old Hall in 1878 and in 1922, the park was acquired by Rowley Regis Council.

3.0 Project Proposal

In 1998 Sandwell MBC successfully submitted a bid to the Heritage Lottery Fund for £2.1 million to undertake works at Haden Hill Park and Corngreaves Hall. The main objective being to conserve, enhance and restore the estate to the time when the original layout was constructed from 1878-82 up to the 1919 Ordnance Survey plan when the maturing park was at its height. The restoration should be described more as a re-creation since contemporary pressures such as safety, disabled access and use by all ages and groups need to be addressed.

A Conservation Statement has been prepared by R K Morriss (2002) to inform both the restoration programme and fulfil the Heritage Lottery Fund Contract Conditions. Having considered the historical development and tenurial history, the park has been divided into twelve character zones with each being supported by an assessment of the surviving historic environment. The report also contains an impact assessment and recommended mitigation strategy for each of the five Contracts.

A copy of the draft Conservation Statement will be given to successful Archaeological Contractor although the following statement is given for Contract 4:

Contract 4a: Resurfacing Paths, Restoration of the Rose Garden, etc.

Impact Assessment

Although broad reaching, the proposals to resurface the paths, repair revetments walls, and improve on-site drainage will have little impact on the archaeological integrity of the site, even where new path lines are being formed and stepped sections are being added.

The depth of excavation required to reform paths is quite shallow – with a maximum of 270mm and mostly far less - and will have no significant impact on archaeological deposits. The general hierarchy of path formations that presently exists within the park is also being retained in the repair strategy.

A watching brief of trial trenches across several of the existing paths indicated that there was little of importance in the make up of the paths. Paths proved to be a mixture of surfaces, varying from compressed scalpings over clay to more substantial tarmac over scalpings on a brick rubble sub-base.

Most of the revetment walls and curbs around the park appear to be either of 20^{th} century date or have been radically repaired and rebuilt in the 20^{th} century as part of ongoing maintenance. In some cases these are to be repaired again as part of the present scheme of works, but these repairs have clearly been well-thought out and will use appropriate materials and finishes.

More care is needed on the repair of the line of the terrace wall of the Rhododendron Walk (Wall No.3 on Drawing C60103/LA-03) as this is the line of a boundary that pre-dates the Haden-Best work. Similarly, repairs to the revetment walls where the 'new' drive cuts through the northern return of this suggested terrace should be treated carefully to avoid potential loss of archaeological information.

In many ways the reordering of the Rose Garden (*see* Section 3E.3.3) is the most controversial. Although the basic formality of the rectangular outline is to be preserved, a radical new arrangement of paired axial sinuous paths and beds is planned to replace the more traditional symmetrical beds placed here in 1986.

Given the evident degree of alterations made to the Rose Garden in the 20th century it is unlikely that the shallow nature of the changes proposed will have an impact on any buried archaeological deposits that have survived. Aesthetically, the new modern design is to be welcomed, a bold assertion of the continuing evolution of the gardens.

Mitigation Strategy

Because of the relatively low impact on the archaeological resource, it is suggested that only a very low key watching brief be undertaken as part of this phase of works. It is recommended that a straightforward photographic record of the paths and walls in their present state be undertaken prior to any works. Obviously, the contractor should be made aware that if anything of significance is exposed then it should be reported and subsequently recorded.

It is, however, suggested that the terrace wall (Wall No.3) and the revetment walls of the main drive on either side of where it cuts through the northward return of this wall (the southern end of the 'ha-ha') should be recorded in more detail photographically prior to any works commencing, and that it may be advisable for an archaeologist to visit the site once the walling has been broken out in readiness for repair.

Contract 4b: Restoration of the 'Ha-ha', Proposed Walled Garden, etc.

Impact Assessment

Although the details of Contract 4b are yet to be finalised, they are believed to include the creation of a large walled garden and overspill parking to the east of the old Hall on the site of the present tennis courts, and the restoration of the so-called 'ha-ha'. Despite the lack of details, an impact assessment can be formed on these outline proposals on the basis of available knowledge of the site.

The area of the tennis courts was effectively archaeologically sanitised when the courts were created in the 1920's or 30's. This had been an area of apparently low archaeological potential beforehand with no evidence for structures or earthworks or even significant planting schemes. The earthmoving required to create the flat levels for the tennis courts would have removed any significant deposits.

As a consequence, the necessary earthworks required to create the new walled garden will have virtually no impact on the archaeological potential of this area. The overspill car park is apparently to be built on the site of the two existing lower tennis courts and will have virtually no impact as well – and nor will the drive access to it.

The restoration of the so-called 'ha-ha' is less simple. This appears not to be a typical 'ha-ha' with a revetment wall on one side and a sloping bank on the other. Rather it seems to be a low terrace wall. The line appears on early-19th century maps and so predates the Haden-Best era. If it was terraced in that period then it would be an important garden feature and evidence of a fairly substantial man-made ornamental landscape associated with the old Hall.

It is assumed than the main works associated with the 'ha-ha' are associated with excavating the area to the east of the wall and removing the earthen bank against it. This has some potential to impact on the archaeology of the wall that will need to be addressed in the mitigation strategy.

Mitigation Strategy

The Tennis Courts Area

The low archaeological potential of the tennis court area means that there will be little need for any archaeological involvement during the works to form the walled garden and overspill car park. It is, however, suggested that, for the record, the site be photographed in advance of the works.

The 'Ha-Ha'

The restoration of the 'ha-ha' requires a more intense archaeological involvement. It is suggested that prior to any works starting, an archaeological evaluation be made that will include at least two trial trenches across the line of the 'ha-ha'. These trenches should be deliberately placed to avoid the positions of the two sets of steps shown on late-19th century maps. The trenches will be able to assess the original or altered profile of the terrain and the build up of the wall itself, information than can then help to inform the restoration itself.

During the works, it is suggested than an archaeological watching brief be undertaken to ensure that no significant information is lost without being recorded, and this will also involve the appropriate recording of the 'lost' northern steps. During the work, particular emphasis should be made to where the present drive cuts through the line of the 'ha-ha' so as to properly establish the relationships between the different phases of masonry.

4.0 General Methodology

- 4.1 All survey works are to be undertaken by a professional team of archaeologists with proven expertise and qualifications in the recording and investigation of archaeological remains of all periods. Details including the name, qualifications, and experience of the site director and all other project personnel together with a proposed timetable shall be included within the written scheme of investigation. CV's, previous examples of work and references from heritage curators may be requested prior to approving any resulting written scheme of investigation (WSI).
- 4.2 The contractor will operate with due regard for Health and Safety regulations. Those who wish to undertake the work should ensure they are adequately insured, to cover all eventualities, including risks to third parties. Sandwell MBC cannot be held responsible for any accidents which may occur to contractors engaged to undertake this survey while attempting to confirm to this Brief.
- 4.3 The contractor is expected to follow the Code of Conduct of the Institute of Field Archaeologists.
- 4.4 A site code must be obtained from the Borough Archaeologist.
- 4.5 The IFA's *Standards and Guidance for Archaeological Watching Briefs* and *Archaeological Evaluations* should be used for additional guidance in the production of the written scheme of investigation, the content of the report, and the general execution of the project.

5.0 Site Specific Methodology

The recommended mitigation strategy outlined in the Conservation Statement (Morriss 2002) is fully endorsed and the Archaeological Contractor is expected to undertake the following works:

- 5.1 Produce a basic photographic and written record of the paths, walls and tennis courts in their present form noting methods of construction and possible date. Much of this information should be set out in a gazetteer linked to an overall site plan; the plan being available from D Hodson.
- 5.2 Maintain an archaeological watching brief during groundworks in Contract 4a; the intensity of the watching brief being commensurate with the perceived significance of each character zone. The work is likely to be initially concentrated in Zone K beside Corngreaves Forge and within the upper terrace in Zone D where there may be surviving garden features which pre-date the Haden-Best era. For the latter, the Contractor should aim to provide further information on the date and method of construction of the terrace wall (Wall No. 3) together with its stratigraphic relationship with the new drive. It is accepted that the impact on the surviving archaeological resource both within these character zones and the park in general will be negligible and having established the degree of possible disturbance the watching brief is likely to be scaled down.
- 5.3 Excavate two machine cut test pits across the line of the 'ha-ha' (3m by 3m approx) in order to determine its nature, date and possible significance. The structure is to be exposed during Contract 4b and this information will assist in its repair and conservation.
- N.B. a machine fitted with a toothless bucket is to be supplied by the main groundwork's contractor

6.0 Recording Strategy

- 6.1 The contractor shall ensure detailed study of all mains service locations and avoid damage to these.
- 6.2 If appropriate the exposed sub-soil or archaeological horizon will be hand cleaned and any archaeological deposits or negative features planned.
- 6.3 Details of how all archaeological contexts and artefacts will be excavated, surveyed, recovered and recorded shall be provided. The site grid will be tied to the national grid.
- 6.4 Details of the site planning policy shall be given in the written scheme of investigation. The normal preferred policy for the scale of archaeological site plans is 1:20 and sections at 1:10, unless circumstances indicate that other scales would be more appropriate.
- 6.5 The photographic record shall consist of black and white prints, negatives and colour slides. This shall include both general and feature specific photographs with a scale (including north arrow) included on detailed photographs. The record must be accompanied by a photographic register and plan detailing as a minimum print number, location and direction of shot.

6.6 Should human remains be discovered the coroner will be informed and licence from the Home Office sought immediately. The Borough Archaeologist must also be notified immediately.

NOTE: In the unlikely event that significant remains are revealed which cannot be dealt in the course of a normal 'watching brief' both the agent and monitoring officer should be notified immediately.

7.0 Finds

- 7.1 Given the nature of the project, the finds policy needs to be drawn up in accordance with the site-specific methodology outlined in **5.0** above. Few, if any, of the objects are likely to be in their primary context.
- 7.2 All finds, where appropriate, shall be washed and marked with both the site code and context number.
- 7.3 The WSI shall include an agreed list of specialist consultants who might be required to conserve and/or report on finds, and advise or report on other aspects of the investigation.
- 7.4 Finds work should be to accepted professional standards and adhere to the Institute of Field Archaeologists *Guidelines for Finds Work*. Details of the finds retrieval policy must be included within the WSI.

8.0 Results

- 8.1 The full report including all specialist assessments of artefact assemblages shall be submitted within one month of completing the fieldwork, with five copies supplied to Borough Archaeologist for general distribution.
- 8.2 This report must contain:
- A concise non-technical summary of the project results
- The aims and methods adopted during the course of the investigation. This should also include a statement on the scale and extent of the restoration works
- The results of the photographic and written analysis of the paths, walls and tennis courts. Much of the detailed information is to be reproduced in an inventory at the back of the report
- The findings of the watching brief and archaeological evaluation. The Contractor is expected to discuss these results in the context of the existing Conservation Statement and provide an assessment on the condition of the 'ha-ha' wall
- Conclusions

- Illustrative material including location plans, historic maps and photographs (both black and white, and colour) in relation to the proposed works. All plans shall be tied to the national grid and the historic maps should be taken from the Conservation Statement
- The following appendices: The inventory of the paths, walls and tennis courts

All specialist reports or assessments Context register with brief descriptions

Photographic register

Completed summary sheet (copy attached to brief)

Summary of archive contents, location and date of deposition

Archaeological brief

Contractors Written Scheme of Investigation

9.0 Archive Deposition

- N.B. The finds together with a copy of the report are to be deposited at Wednesbury Museum, whereas the paper record, photographs, negatives, register and a second copy of the report should be archived at the Community History and Archives Service, Smethwick Library. There is currently a storage problem at Wednesbury Museum and in the short-term the archaeological finds will have to be held by the contractor pending further notice from the Borough Archaeologist
- 9.1 The requirements for archive storage shall be agreed with both Wednesbury Museum (Tel 0121 5560683) and the Community History and Archives Service, Smethwick Library (0121 5556064) before deposition.
- 9.2 Photographic prints should be re-produced at a minimum of five by four inches and labelled on the back using indelible ink with the film and frame number, date, photographers name together with the site code and grid reference; the photographs being mounted in archival sleeves.
- 9.3 A summary of the contents of the archive shall be supplied to Borough Archaeologist at the time of deposition.

10.0 Monitoring

- 10.1 The Borough Archaeologist will be responsible for monitoring progress and standards throughout the project and should be kept regularly informed during fieldwork, interpretation and reporting stages.
- 10.2 Written Notification of the start date will be given to the Borough Archaeologist at least one week before the commencement of work and once the fieldwork stage of the investigation has been completed. The latter should be accompanied by a timetable with fixed dates for report completion and archive deposition.

11.0 Contractors Written Scheme of Investigation

- 11.1 Any variations to the WSI shall be agreed with the Borough Archaeologist before being implemented.
- 11.2 This brief has been written following a cursory examination of the site and potential contractors are therefore strongly advised to carry out their own inspection before submitting a costed tender. If on first visiting the site or at any time during the recording exercise, it appears that:
- a part or the whole of the site is not amenable to the recording programme outlined above, and/or
- an alternative approach may be more appropriate or likely to produce more informative results, and/or
- any features that should be recorded as having a bearing on the interpretation of the site have been omitted,

then it is expected that the contractor will contact the Borough Archaeologist as a matter of urgency.

Bibliography

Nicholas Pearson Associates 1999 Historic Landscape Survey and Woodland Management Plan, Haden Hill Park (report produced for Sandwell MBC)

Collins and Clarke 1989 Cradley and Cradley Heath: A Joint Feasibility Study (report produced by the Ironbridge Institute for Sandwell MBC)

Collins and Smith 1990 A Survey of Surviving Industrial Remains along the Stour Valley (report produced by the Ironbridge Institute for Sandwell MBC)

Collins, Smith and Haddad 1992 An Historical & Archaeological Survey of the Surviving Industrial Remains at Corngreaves Bridge Forge (report produced by the Ironbridge Institute for Sandwell MBC)

Collins, White, Worthington, Horton and others 1992 An Historical & Archaeological Survey of the Surviving Industrial Remains at Cradley Forge (report produced by the Ironbridge Institute for Sandwell MBC)

Morriss R & Associates 2002 Haden Hill Estate Conservation Statement (Draft typescript report prepared for Sandwell MBC)

Sandwell MBC n.d. Haden Hill House and Park, Old Hill (Sandwell MBC)

For further information regarding the content of this brief please contact the author at the address below. As part of our desire to provide a quality service, we would welcome any comments you may have on the content and presentation of this archaeological brief.

Shane Gould Borough Archaeologist Sandwell MBC
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West Bromwich
West Midlands
B70 8RU

Tel (0121) 569 4025 Fax (0121) 569 4265 E-mail shane_gould@sandwell.gov.uk

WATCHING BRIEF DURING THE RESTORATION OF THE HA HA HADEN HILL HOUSE

Objectives

To undertake a record of the terrace wall

To assess the methods of construction, phasing and date(s) of the terrace wall

To determine whether it pre-dates or was rebuilt during the Haden Best works

To provide further information and if appropriate, revise the conclusions of the initial evaluation

Methodology

The recording system will include written, drawn and photographic data. The terrace wall should be marked on a plan of the site at an appropriate scale together with key features including changes in constructional material, phasing, steps, etc. Much of the recording will be photographic although it may be necessary to make drawn records of those areas which show clear evidence of phasing. Further guidance should be sought from the Borough Archaeologist.

Office Work

The report should contain the following illustrations: site location plan, copies of any historical maps/drawings/lithographs/photographs, the survey plan and a representative sample of the photographs including colour prints.

The following appendices should also be included:
Context register with summary descriptions
All specialist reports and assessments
Photographic register
Location and summary of the archive contents
Approved Contractors' Written Scheme of Investigation
Completed summary sheet (copy attached)

Six copies of the Report shall be submitted to the Borough Archaeologist within four weeks of completing the fieldwork for general circulation. The Contractor should initially provide the Borough Archaeologist with a draft copy for comment.

Archive

Contractors should note that the finds are to be deposited at Wednesbury Museum, whereas the paper record should be archived at the Community History and Archives Service, Smethwick Library. There is currently a storage problem at Wednesbury Museum and in the short-term the archaeological finds will have to be held by the Contractor pending further notice from the Borough Archaeologist. The date for archive deposition will be discussed further once the report has been formally approved.

The Finds Archive

Before commencing any fieldwork, the Contractor must contact Wednesbury Museum (Holyhead Rd., Wednesbury, West Midlands, WS10 7DF. Tel 0121 5560683) in order to determine the museum's requirements for the deposition of archaeological archives. A copy of the report must accompany the finds archive.

It is the responsibility of the Contractor to endeavour to obtain the written consent of the landowner for the deposition of finds with Wednesbury Museum.

Its is the responsibility of the Contractor to meet Wednesbury Museums requirements with regard to the preparation of archaeological archives for deposition.

Written notification of the commencement of fieldwork shall be given to Wednesbury Museum at the same time as the Borough Archaeologist.

A summary of the contents of the archive shall be supplied to Borough Archaeologist at the time of deposition.

The Paper and Photographic Archive

Before commencing any fieldwork, the Contractor must contact the Community History and Archives Service, Smethwick Library (Smethwick Library, High Street, Smethwick, West Midlands B661AB. Tel. 0121 5582561) to determine the requirements for the deposition of the paper archive.

The paper archive should include the photographs, negatives, colour slides, film register, field notes together with a copy of the report. Photographic prints should be re-produced at a minimum of five by four inches and labelled on the back using indelible ink with the film and frame number, date, photographers name together with the site code, name and grid reference; the photographs being mounted in archival quality sleeves.

It is the responsibility of the Contractor to meet the Community History and Archives Service requirements with regard to the preparation of material for deposition.

Written notification of the commencement of fieldwork shall be given to Community History and Archives Service at the same time as the Borough Archaeologist.

A summary of the contents of the paper archive shall be supplied to Borough Archaeologist at the time of deposition.

HADEN HILL PARK

ARCHAEOLOGICAL EVALUATION OF THE PROPOSED

PUBLIC EVENTS AREA

Project Background

A public events area is to be erected at Haden Hill Hall as part of the Heritage Lottery Fund restoration programme for the park. The proposed works lie in an area of high archaeological potential and a recent resistivity survey has identified buried deposits possibly associated with the Old Hall. This Outline Brief sets out the minimum requirements for an Archaeological Evaluation of the area.

Research Objectives

The objectives of the Archaeological Evaluation are as follows:

- To establish the presence, date, nature, extent and significance of any surviving archaeological remains
- To consider the development of the study area and in particular, its relationship with the Old Hall and Victorian house
- To assess the success of the resistivity survey in mapping the surviving archaeological resource
- To recommend a future mitigation/research strategy in accordance with the perceived significance of the archaeological remains

Recording Strategy

The following trench plan is based on the findings of the resistivity survey:

Trench 1 10m by 2m orientated NW/SE

Aim: To assess the significance of Area 18 and its relationship Anomaly 19

Trench 2 4m by 2m orientated N/S

Aim: To assess Anomaly 17 and in particular the presence/absence of archaeological remains beside the Old Hall

Trench 3 4m by 2m orientated NE/SW

Aim: To assess the significance and relationship between Area 10 and Anomaly Group 20

Trial trenches will be machine excavated using a toothless ditching bucket, and under the supervision and to the satisfaction of a professional archaeologist. The exposed sub-soil or archaeological horizon will be **hand cleaned in all trenches** and any archaeological deposits or negative features planned.

The Contractor shall ensure the detailed study of all mains' service locations and avoid damage to these.

Details of how all archaeological contexts and artefacts will be excavated, surveyed, recovered and recorded shall be provided. The site grid will be tied to the national grid.

Details of the site planning policy shall be given in the Written Scheme of Investigation. The normal preferred policy for archaeological site plans is 1:20 and sections at 1:10, unless circumstances indicate that other scales would be more appropriate.

At least 50% of all contained features shall be excavated. A stated percentage of linear/structural features to be excavated shall be provided in the Written Scheme of Investigation. In the absence of dateable finds the area of the feature to be excavated must be increased.

Where substantial masonry remains are encountered it may be necessary to excavate an exploratory sondage within the trench in order to examine the presence/absence/significance of earlier remains.

The trenches and site spoil heaps shall be checked by a metal detector with any finds recovered.

The photographic record shall consist of black and white photographs, negatives and colour slides. This shall include both general and feature specific photographs, a photographic scale (including north arrow) shall be included in the case of detailed photographs. A photographic register and supporting plan detailing as a minimum feature number, location, and direction of shot shall accompany the photographic record.

The contractor must arrange, through a suitably qualified specialist, the assessment of the environmental potential of the site through the examination of suitable deposits. Guidance should be sought from the appropriate English Heritage Regional Advisor in Archaeological Science and details of the methodology/specialist included within the Written Scheme of Investigation.

A contingency of 10 square metres of additional trenching shall be set aside for the opening-up of those areas that are likely to yield important information on the significance of the site. Consent from the Borough Archaeologist must be sought before using this contingency.

Finds

Finds work should be to accepted professional standards and adhere to the Institute of Field Archaeologists *Guidelines for Finds Work*. Details of the conservation/retrieval policy must be included within the Written Scheme of Investigation. Further clarification should be sought from the Borough Archaeologist once the on-site fieldwork has been completed.

The Written Scheme of Investigation shall include an agreed list of specialist consultants who might be required to conserve and/or report on finds, and advise or report on other aspects of the investigation.

Results

The Report must contain:

- A concise non-technical summary of the results
- The aims and methods adopted during the course of the evaluation
- A <u>brief</u> overview of the historical development of the site and in particular, the study area. The information being derived from the report by Richard Morriss and the resistivity survey.
- Detailed discussion of the results in accordance with the Research Objectives set out above.
- An assessment of the local/regional/national importance of the remains and a recommended mitigation strategy for their preservation and/or future excavation. The later should be supported by an outline Research Strategy.
- Conclusion.

The following illustrations should be included:

Site location plan

Copies of any historical maps/drawings/lithographs/photographs

Site survey plan and sections showing the location and deposits within all trenches. At least two corners of each trench shall be given 10 figure grid references

A representative sample of the photographs including colour prints.

The following appendices should also be included:

Context register with summary descriptions

All specialist reports and assessments

Photographic register

Location and summary of the archive contents

Completed summary sheet (copy attached to brief)

Archaeological Brief and the approved Contractors' Written Scheme of Investigation

Six copies of the Report shall be submitted to the Borough Archaeologist within four weeks of completing the fieldwork. The Contractor should initially provide the Borough Archaeologist with a draft copy for comment.

Archive

Contractors should note that the finds are to be deposited at Wednesbury Museum, whereas the paper record should be archived at the Community History and Archives Service, Smethwick Library. There is currently a storage problem at Wednesbury Museum and in the short-term the archaeological finds will have to be held by the Contractor pending further notice from the Borough Archaeologist. The date for archive deposition will be discussed further once the report has been formally approved.

The Finds Archive

Before commencing any fieldwork, the Contractor must contact Wednesbury Museum (Holyhead Rd., Wednesbury, West Midlands, WS10 7DF. Tel 0121 5560683) in order to determine the museum's requirements for the deposition of archaeological archives. A copy of the report must accompany the finds archive.

It is the responsibility of the Contractor to endeavour to obtain the written consent of the landowner for the deposition of finds with Wednesbury Museum.

It is the responsibility of the Contractor to meet Wednesbury Museums requirements with regard to the preparation of archaeological archives for deposition.

Written notification of the commencement of fieldwork shall be given to Wednesbury Museum at the same time as the Borough Archaeologist.

A summary of the contents of the archive shall be supplied to Borough Archaeologist at the time of deposition.

The Paper and Photographic Archive

Before commencing any fieldwork, the Contractor must contact the Community History and Archives Service, Smethwick Library (Smethwick Library, High Street, Smethwick, West Midlands B661AB. Tel. 0121 5582561) to determine the requirements for the deposition of the paper archive.

The paper archive should include the photographs, negatives, colour slides, film register, field notes together with a copy of the report. Photographic prints should be re-produced at a minimum of five by four inches and labelled on the back using indelible ink with the film and

frame number, date, photographers name together with the site code, name and grid reference; the photographs being mounted in archival quality sleeves.

Its is the responsibility of the Contractor to meet the Community History and Archives Service requirements with regard to the preparation of material for deposition.

Written notification of the commencement of fieldwork shall be given to Community History and Archives Service at the same time as the Borough Archaeologist.

A summary of the contents of the paper archive shall be supplied to Borough Archaeologist at the time of deposition.

Monitoring

The Borough Archaeologist will be responsible for monitoring progress and standards throughout the project and should be kept regularly informed during fieldwork, interpretation and reporting stages.

Written Notification of the start date will be given to the Borough Archaeologist at least one week before the commencement of work and once the fieldwork stage of the investigation has been completed.

Contractors Written Scheme of Investigation

Any variations to the Written Scheme of Investigation shall be agreed in writing with the Borough Archaeologist before being implemented.

This brief has been written following a cursory examination of the site and potential contractors are therefore strongly advised to carry out their own inspection before submitting a quote. If on first visiting the site or at any time during the recording exercise, it appears that:

- i) a part or the whole of the site is not amenable to the recording programme outlined above, and/or
- ii) an alternative approach may be more appropriate or likely to produce more informative results, and/or
- iii) any features that should be recorded as having a bearing on the interpretation of the site have been omitted.

then it is expected that the Contractor will contact the Borough Archaeologist as a matter of urgency.

Costings

The quotation for the work should be presented in the following manner:

A fixed sum for the fieldwork

A fixed sum for the office work, specialist assessments, preparation of client report and archive

A contingency sum for the additional 10 square metres of trenching

Appendix 9a: Contractors written scheme of investigation

Marches Archaeology

Project Proposal for an Archaeological Evaluation and Photographic Survey at

Haden Hill Park Sandwell Borough

Introduction

Haden Hill House and Hall are registered on the local Sites and Monuments Record and are Listed Buildings. As part of a Heritage Lottery bid to restore the estate to its original condition certain elements require archaeological supervision.

The Local Planning Authority's Archaeology Advisor has produced a "Archaeological Evaluation and Watching Brief". Sandwell Metropolitan Borough Council (the client) has requested Marchaeology to quote for providing the archaeological services detailed in the Brief.

This project proposal is based on the Brief and will follow its stipulations, unless specified below. This proposal forms a written scheme of investigation for the archaeological works and should be read in conjunction with the Brief and its attached plan(s). Any subsequent alterations to the brief will be agreed in writing between Marches Archaeology and the Local Planning Authority's Archaeology Advisor.

Archaeological and Historical Background

The Brief summarises the interest of the site.

Scope and aims of the project

The Brief states that the archaeological project will consist of:

A photographic record of the existing paths The excavation of two 3m x 3m trial pits on the line of the 'ha-ha'

Watching the insertion of new paths

An archaeological evaluation aims to "gain information about the archaeological resource within a given area or site (including presence or absence, character, extent, date, integrity, state of preservation and quality) in order to make an assessment of its merit in the appropriate context, leading to one or more of the following: the formulation of a strategy to ensure the recording, preservation or management of the resource; the formulation of a strategy to initiate a threat to the archaeological resource; the formulation of a proposal for further archaeological investigation within a programme of research" (Institute of Field Archaeologists Standard and Guidance for Archaeological Field Evaluations).

Methodology

Before the project commences two full sets of any existing relevant drawings (plans, elevations, sections etc.) including the development site and any building(s) as existing and as proposed will be provided to Marches Archaeology by the client. Two copies of any amendments or revisions to such drawings and of any additional drawings will be provided as the project continues. Copies will also be provided to Marches Archaeology of any additional relevant historical, archaeological, structural or other information is held by the client.

Documentary research

Primary and secondary sources will be consulted in order to inform the fieldwork phase. Initially a site visit will be made and the appropriate local Sites and Monuments Record consulted. The following sources will also be considered, as appropriate and subject to availability:

Ordnance Survey maps; Tithe maps; Estate maps and other historical maps; Previous published and unpublished archaeological reports and archive work; Written non-archaeological sources; Air photographs; Geological maps; Borehole and other engineering data.

Fieldwork

Before fieldwork commences the Local Planning Authority's Archaeology Advisor will be consulted to determine an appropriate repository for the archive.

It is presumed that there are no service trenches, hedges or other impediments either above or below ground in the area of the proposed archaeological ground works. It is the responsibility of the client to inform Marches Archaeology if there are any such impediments. Any costs to the project, whether archaeological or other, incurred by the presence of such impediments will not be borne by Marches Archaeology.

Two 3m x 3m trial pits will be excavated. Plant and machinery will be provided by the client.

The upper deposits will be excavated by mechanical excavator to a level determined to comprise deposits, features or horizons of archaeological significance. Further excavation will normally be by hand. Selected sampling may be continued by use of mechanical excavator to test deeper stratification, the level of natural deposits or other information required for the fulfilment of the aims and objectives of the Brief. Such features as are considered to be of value to the understanding and interpretation of the site may be selectively excavated, either in part or in full. All artefactual and ecofactual material recovered from hand excavation will initially be retained.

The recording system will include written, drawn and photographic data. Context numbers will be allocated and context record sheets completed. Site notebooks may also be used. A running matrix will be maintained if appropriate. Plans (normally 1:20), sections (normally 1:10) and other appropriate drawings of significant data will be made. Plans will normally be multi-context, but certain features may require single context planning. The photographic record will be made using black and white negative and colour transparency film. Samples

will be taken of deposits considered to have environmental, technological or scientific dating potential.

On completion of the fieldwork the trenches will be left open.

This project proposal does not cover the eventuality that there are human remains within the area to be investigated as additional legal requirements then come into force.

Office work

On completion of fieldwork a site archive will be prepared. The written, drawn and photographic data will be catalogued and cross-referenced and a summary produced. The artefactual and ecofactual data will be processed, catalogued and cross-referenced and summaries produced. After an initial assessment any unstratified non-diagnostic artefacts and ecofacts and non-diagnostic samples will be discarded. Further dispersal of artefacts and ecofacts will be in line with the collection policy of the recipient repository and will be documented in the archive. The checked site matrix will be produced if appropriate.

The freeholder(s) of the land to which this document relates has title to all objects (unless within the jurisdiction of the Treasure Act 1996) recovered from the land. The client shall secure the agreement of the freeholder(s) to donate the archive, together with any artefacts and ecofacts recovered during the fieldwork, to an appropriate repository. Marches Archaeology will arrange for such deposition.

Assessment will be based on the site archive. Any artefacts and ecofacts which require specialist assessment will be submitted for such work.

An illustrated client report will be produced which will detail the aims, methods, and results of the project A non-technical summary and details of the location and size of the archive will be included. Copyright of any reports is vested in Marches Archaeology.

The client will be provided with two copies of the report. Further copies will be deposited with the local Sites and Monuments Record, the Local Authority's archaeological service and the National Archaeological Record (one copy each).

If the project reveals that the quality and potential of the information resulting from the fieldwork is such that further analysis and/or formal publication is required the level of such work will be determined in discussions between the client, Marches Archaeology and the Local Planning Authority's Archaeological Advisor. Such works would be subject to a further Project Proposal which would be separately costed.

Management of the Project

Marches Archaeology recognises the Code of Conduct, Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology, By-Laws, Standards and other documents produced by the Institute of Field Archaeologists. The project will be managed by a Member of the Institute of Field Archaeologists.

The Safety Policy and General Risk Assessment operated by Marches Archaeology will be implemented. Copies of these documents are available on request. A risk assessment

specific to this project will be carried out before commencement of fieldwork to identify any risks not noted in the General Risk Assessment. If another body is responsible for Health and Safety on the site Marches Archaeology will conform to any policy which may be in force. If costs accrue due to Health and Safety issues not made apparent to Marches Archaeology by the time of submission of this Project Proposal these costs will be additional to any costs identified in the estimate. The requirements of Health and Safety legislation are deemed to take precedence over archaeological requirements.

Appropriate insurance cover will be held throughout the project.

The Local Planning Authority's Archaeology Advisor shall at any reasonable time be granted access to the site, with prior notice, for the purpose of monitoring the fieldwork.

Timetable

The timetable has not yet been finalised. This Proposal will be submitted for approval by the Local Planning Authority's Archaeology Advisor, who will be given at least one week's notice (or such shorter period as agreed between Marches Archaeology and the Local Planning Authority's Archaeology Advisor) of the commencement of the fieldwork. The report will be presented to the client within one month of completion of the fieldwork, unless otherwise agreed. The results will be reported to the Local Planning Authority's Archaeology Advisor and the local Sites and Monuments Record within one month of presentation, unless otherwise agreed. A summary report will be submitted for publication in an appropriate medium within one year of completion of all fieldwork.

Resources

The project will be managed by either Richard Stone or Nic Appleton-Fox, both of whom are Members of the Institute of Field Archaeologists with a registered Area of Competence in Archaeological Field Practice. Other field and post-excavation staff will be appropriately experienced. Where trainees are used they will be closely supervised by senior members of the project team. The Project Director will supervise or carry out any documentary study, the majority of which will normally be completed before commencement of fieldwork.

Specialist sub-contractors will be used as appropriate. Specialists will normally be people approved by English Heritage Ancient Monuments Laboratory. Those who might be expected to be called upon (dependent upon availability) include:

Jeremy Evans (Rátkai and Evans PX Partners) Stephanie Rátkai (Rátkai and Evans PX Partners)

David Barker (Stoke on Trent Museum)

Liz Pearson (Worcestershire Archaeological Service)

Ian Baxter (freelance)

Megan Brickley (Birmingham Univ. Field Archaeology Unit)

Roman ceramics medieval ceramics post-medieval ceramics environmental remains

animal bone human bone

Appendix 9b: Contractors written scheme of investigation

Marches Archaeology

Haden Hill Park Sandwell Borough

Project Proposal for a watching brief during the restoration of the ha ha of the walled garden to the east of the Old Hall

Introduction

Haden Hill House and Hall are registered on the local Sites and Monuments Record and are Listed Buildings. As part of a Heritage Lottery bid to restore the estate to its original condition certain elements require archaeological supervision.

As part of contract 4b of the restoration programme it is intended that a walled garden east of the old Hall be created. The proposed new wall is situated on the remains of a retaining wall, or ha-ha, that pre-dates the Haden-Best era. Following an evaluation within works undertaken as part of contract 4a it was decided that the existing wall would be re-instated with a new build placed on top of the existing wall.

The Local Planning Authority's Archaeology Advisor has advised that in order that the archaeological resource is adequately protected an archaeological watching brief be carried out during ground works associated with the proposed development.

The Local Planning Authority's Archaeology Advisor was not available at the time of writing and has not produced a Brief. This Project Proposal forms a written scheme of investigation and is based on previous experience with Sandwell Metropolitan Borough Council Briefs and Specifications. Any subsequent alterations to the Project Proposal will be agreed in writing between Marches Archaeology and the Local Planning Authority's Archaeology Advisor.

Sandwell Metropolitan Borough Council (the client) has requested Marches Archaeology to quote for providing the archaeological services requested by the Local Planning Authority's Archaeology Advisor.

Archaeological and historical background

A draft Conservation Statement produced on behalf of Sandwell MBC by R. Morriss and Associates has a more than adequate outline of the archaeological and historic background. No further documentary research is anticipated.

Scope and aims of the project

The scope of the project is:

- observation of all topsoil stripping, other earthmoving and trench excavation until natural subsoil is reached
- ♦ the sequence of soil deposits present and all archaeological deposits and features shall be appropriately recorded
- all artefacts shall be collected, identified and catalogued
- if significant archaeology is identified the archaeologist on site should inform the Borough Archaeological Officer and client immediately in order that appropriate action may be taken to minimise the damage to such deposits and to record them appropriately.

The purpose of an archaeological watching brief is defined by the Institute of Field Archaeologists as:

'to allow, within the resources available, the preservation by record of archaeological deposits, the presence and nature of which could not be established (or established with sufficient accuracy) in advance of development or other potentially disruptive works'

and:

'to provide an opportunity, if needed, for the watching archaeologist to signal to all interested parties, before the destruction of the material in question, that an archaeological find has been made for which the resources allocated to the watching brief itself are not sufficient to support a treatment to a satisfactory and proper standard'.

Methodology

Fieldwork

Before the project commences two full sets of any existing relevant drawings (plans, elevations, sections etc.) including the development site and any building(s) as existing and as proposed will be provided to Marches Archaeology by the client. Two copies of any amendments or revisions to such drawings and of any additional drawings will be provided as the project continues. Copies will also be provided to Marches Archaeology of any additional relevant historical, archaeological, structural or other information that is held by the client

Observations and appropriate recording will be undertaken of all ground breaking activity in association with this proposed development, unless otherwise prior agreement is made between Marches Archaeology, the Local Planning Authority's Archaeological Advisor and the client.

The archaeologist(s) shall have the power to suspend work on the excavation of material for short periods of time for the purpose of investigating areas of potential archaeological interest. If an area is deemed to require more detailed recording the archaeologist(s) shall have the power to suspend work in that area for the purpose of small scale excavation and recording of archaeological data in order to fulfil the requirements of the Brief.

The recording system will include written, drawn and photographic data. The primary written record will be by means of site notes, accompanied by sketches. Context numbers will be allocated and context record sheets completed as appropriate. A running matrix will be maintained as appropriate. Plans (normally 1:20), sections (normally 1:10) and other appropriate drawings of significant data will be made. Plans will normally be multi-context, but certain features may require single context planning. The photographic record will be made using black and white negative and colour transparency film. Samples will be taken of deposits considered to have environmental, technological or scientific dating potential.

It is assumed that outline drawings of the ha ha, associated features and any later remains will be required. More detailed recording would constitute a variation to this Project Proposal.

If deposits or features are encountered for which the resources allocated to the watching brief are not sufficient to support a treatment to a satisfactory and proper standard the client, the Local Planning Authority's Archaeological Advisor and any other relevant parties will be informed in order to discuss, agree and implement an appropriate response, either within a previously agreed contingency arrangement or supplemental thereto.

This project proposal does not cover the eventuality that there are human remains within the area to be investigated as additional legal requirements then come into force.

Office work

On completion of fieldwork a site archive will be prepared. The written, drawn and photographic data will be catalogued and cross-referenced and a summary produced. The artefactual and ecofactual data will be processed, catalogued and cross-referenced and summaries produced. After an initial assessment any unstratified non-diagnostic artefacts and ecofacts and non-diagnostic samples will be discarded. Further dispersal of artefacts and ecofacts will be in line with the collection policy of the recipient repository and will be documented in the archive. The checked site matrix will be produced if appropriate.

The freeholder(s) of the land to which this document relates has title to all objects (unless within the jurisdiction of the Treasure Act 1996) recovered from the land. The freeholder(s) shall agree to donate in perpetuity the archive, together with any artefacts and ecofacts recovered during the fieldwork, to an appropriate repository. Marches Archaeology will arrange for such deposition.

Assessment will be based on the site archive. Any artefacts and ecofacts which require specialist assessment will be submitted for such work.

An illustrated client report will be produced which will detail the aims, methods, and results of the project Representative photographs will be included, not exhaustive coverage. A non-technical summary and details of the location and size of the archive will be included. Copyright of any reports is vested in Marches Archaeology.

The client will be provided with two copies of the report. Further copies will be deposited with the local Sites and Monuments Record, the Local Authority's archaeological service and the National Archaeological Record (one copy each).

If the project reveals that the quality and potential of the information resulting from the fieldwork is such that further analysis and/or formal publication is required the level of such work will be determined in discussions between the client, Marches Archaeology and the Local Planning Authority's Archaeological Advisor. Such works would be subject to a further Project Proposal which would be separately costed.

Management of the project

Marches Archaeology recognises the Code of Conduct, Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology, By-Laws, Standards and other documents produced by the Institute of Field Archaeologists. The project will be managed by a Member of the Institute of Field Archaeologists.

The Safety Policy and General Risk Assessment operated by Marches Archaeology will be implemented. Copies of these documents are available on request. A risk assessment specific to this project will be carried out before commencement of fieldwork to identify any risks not noted in the General Risk Assessment. If another body is responsible for Health and Safety on the site Marches Archaeology will conform to any policy which may be in force. If costs accrue due to Health and Safety issues not made apparent to Marches Archaeology by the time of submission of this Project Proposal these costs will be additional to any costs identified in the estimate. The requirements of Health and Safety legislation are deemed to take precedence over archaeological requirements.

Appropriate insurance cover will be held throughout the project.

The Local Planning Authority's Archaeology Advisor shall at any reasonable time be granted access to the site, with prior notice, for the purpose of monitoring the fieldwork.

Timetable

The timetable has not yet been finalised but is understood to be due to start in early December 2002. This Proposal will be submitted for approval by the Local Planning Authority's Archaeology Advisor, who will be given at least one week's notice (or such shorter period as agreed between Marches Archaeology and the Local Planning Authority's Archaeology Advisor) of the commencement of the fieldwork. The report will be presented to the client within one month of the completion of the fieldwork, unless otherwise agreed. The results will be reported to the Local Planning Authority's Archaeology Advisor and the local Sites and Monuments Record within one month of presentation, unless otherwise agreed. A summary report will be submitted for publication in an appropriate medium within one year of completion of all fieldwork.

Resources

The project will be managed by Richard Stone a Members of the Institute of Field Archaeologists with a registered Area of Competence in Archaeological Field Practice. Other field and post-excavation staff will be appropriately experienced. Where trainees are used they will be closely supervised by senior members of the project team. Normal working hours are Mon-Thurs 8.30-4.30 and Fri 8.30-4.00. Additional hours constitute overtime.

The Project Director will undertake the documentary study, which will be completed before commencement of fieldwork.

Specialist sub-contractors will be used as appropriate. Specialists will normally be people approved by English Heritage Ancient Monuments Laboratory. Those who might be expected to be called upon (dependent upon availability) include:

Jeremy Evans (Rátkai and Evans PX Partners) Roman ceramics Stephanie Rátkai (Rátkai and Evans PX Partners) medieval ceramics David Barker (Stoke on Trent Museum) post-medieval ceramics Liz Pearson (Worcestershire Archaeological Service) environmental remains

Ian Baxter (Freelance) animal bone human bone

Megan Brickley (Birmingham Univ Field Archaeology Unit)

27 November 2002

Marches Archaeology

Project Proposal for an Archaeological Evaluation of the Proposed Public Events Area at

Haden Hill Park Sandwell Borough

Introduction

Haden Hill House and Hall are registered on the local Sites and Monuments Record and are Listed Buildings. As part of a Heritage Lottery bid to restore the estate to its original condition and enhance the park certain elements require archaeological supervision.

The Local Planning Authority's Archaeology Advisor has produced an outline brief for the evaluation of the proposed public events area or amphitheatre. The brief considered the results from the remote sensing survey by ArchaeoPhysica Ltd undertaken in a previous contract. Sandwell Metropolitan Borough Council (the client) has requested Marches Archaeology to quote for providing the archaeological services detailed in the Brief.

This project proposal is based on the Brief and will follow its stipulations, unless specified below. This proposal forms a written scheme of investigation for the archaeological works and should be read in conjunction with the Brief and its attached plan(s). Any subsequent alterations to the brief will be agreed in writing between Marches Archaeology and the Local Planning Authority's Archaeology Advisor.

Archaeological and Historical Background

A draft Conservation Statement produced on behalf of Sandwell MBC by R. Morriss and Associates has a more than adequate outline of the archaeological and historic background. No further documentary research is anticipated.

Scope and aims of the project

The Brief states that the archaeological objectives of the projects are:

To establish the presence, date, nature, extent, and significance of any surviving archaeological remains

To consider the development of the study area and, in particular, its relationship with the Old hall and Victorian House

To assess the success of the resistivity survey in mapping the archaeological resource

To recommend a future mitigation strategy/research strategy in accordance with the perceived significance of the archaeological remains

To achieve the stated objectives three trenches are to be excavated. The location of the trenches is based on the findings from the resistivity survey undertaken as part of contract 4 of the restoration programme.

Trench 1 10m by 2m orientated N/S. The Brief required the orientation to be NW/SE. The Borough Archaeologist was consulted and has approved the change of orientation.

Aim: To assess the significance of Area 18 and its relationship to Anomaly 19

Trench 2 4m by 2m orientated N/S

Aim: To assess Anomaly 17 and in particular the presence/absence of archaeological remains beside the Old Hall.

Trench 3 4m by 2m orientated NE/SW

Aim: To assess the significance and relationship between Area 10 and anomaly Group 20

An archaeological evaluation aims to "gain information about the archaeological resource within a given area or site (including presence or absence, character, extent, date, integrity, state of preservation and quality) in order to make an assessment of its merit in the appropriate context, leading to one or more of the following: the formulation of a strategy to ensure the recording, preservation or management of the resource; the formulation of a strategy to initiate a threat to the archaeological resource; the formulation of a proposal for further archaeological investigation within a programme of research" (Institute of Field Archaeologists Standard and Guidance for Archaeological Field Evaluations).

Methodology

Before the project commences two full sets of any existing relevant drawings (plans, elevations, sections etc.) including the development site and any building(s) as existing and as proposed will be provided to Marches Archaeology by the client. Two copies of any amendments or revisions to such drawings and of any additional drawings will be provided as the project continues. Copies will also be provided to Marches Archaeology of any additional relevant historical, archaeological, structural or other information is held by the client.

Fieldwork

Before fieldwork commences the Local Planning Authority's Archaeology Advisor will be consulted to determine an appropriate repository for the archive.

It is presumed that there are no service trenches, hedges or other impediments either above or below ground in the area of the proposed archaeological ground works. It is the responsibility of the client to inform Marches Archaeology if there are any such impediments. Any costs to the project, whether archaeological or other, incurred by the presence of such impediments will not be borne by Marches Archaeology.

Marches Archaeology will provide will provide plant and driver. The upper deposits will be excavated by mechanical excavator to a level determined to comprise deposits, features or horizons of archaeological significance. Further excavation will normally be by hand. Selected sampling may be continued by use of mechanical excavator to test deeper stratification, the level of natural deposits or other information required for the fulfilment of the aims and objectives of the Brief. At least 50% of the contained features will be excavated either in part or full. Prior to excavation the merits of each feature will be considered and valued according to how they will help with the understanding and interpretation of the site. Where linear/structural features are encountered 20% of the features will be excavated. In the absence of datable finds the area of the feature to be excavated will be increased. All artefactual and ecofactual material recovered from hand excavation will initially be retained.

The trenches and site spoil heaps shall be checked by a metal detector with any finds recovered.

The recording system will include written, drawn and photographic data. Context numbers will be allocated and context record sheets completed. Site notebooks may also be used. A running matrix will be maintained if appropriate. Plans (normally 1:20), sections (normally 1:10) and other appropriate drawings of significant data will be made. Plans will normally be multi-context, but certain features may require single context planning. The photographic record will be made using black and white negative and colour transparency film. Samples will be taken of deposits considered to have environmental, technological or scientific dating potential.

Soil from the excavation will be stock piled by the side the trenches. On completion of the fieldwork the trenches will be backfilled. For the duration of the project Heras fencing will be used to secure the site. The fencing will be removed on completion of the fieldwork and backfilling. If the fencing is required after the completion of the field work additional costs chargeable to the client will be incurred.

This project proposal does not cover the eventuality that there are human remains within the area to be investigated as additional legal requirements then come into force.

Office work

On completion of fieldwork a site archive will be prepared. The written, drawn and photographic data will be catalogued and cross-referenced and a summary produced. The artefactual and ecofactual data will be processed, catalogued and cross-referenced and summaries produced. After an initial assessment any unstratified non-diagnostic artefacts and ecofacts and non-diagnostic samples will be discarded. Further dispersal of artefacts and ecofacts will be in line with the collection policy of the recipient repository and will be documented in the archive. The checked site matrix will be produced if appropriate.

The freeholder(s) of the land to which this document relates has title to all objects (unless within the jurisdiction of the Treasure Act 1996) recovered from the land. The client shall secure the agreement of the freeholder(s) to donate the archive, together with any artefacts

and ecofacts recovered during the fieldwork, to an appropriate repository. Marches Archaeology will arrange for such deposition.

Assessment will be based on the site archive. Any artefacts and ecofacts which require specialist assessment will be submitted for such work.

An illustrated client report will be produced which will detail the aims, methods, and results of the project A non-technical summary and details of the location and size of the archive will be included. Copyright of any reports is vested in Marches Archaeology.

The client will be provided with two copies of the report. Further copies will be deposited with the local Sites and Monuments Record, the Local Authority's archaeological service and the National Archaeological Record (one copy each).

If the project reveals that the quality and potential of the information resulting from the fieldwork is such that further analysis and/or formal publication is required the level of such work will be determined in discussions between the client, Marches Archaeology and the Local Planning Authority's Archaeological Advisor. Such works would be subject to a further Project Proposal which would be separately costed.

Management of the Project

Marches Archaeology recognises the Code of Conduct, Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology, By-Laws, Standards and other documents produced by the Institute of Field Archaeologists. The project will be managed by a Member of the Institute of Field Archaeologists.

The Safety Policy and General Risk Assessment operated by Marches Archaeology will be implemented. Copies of these documents are available on request. A risk assessment specific to this project will be carried out before commencement of fieldwork to identify any risks not noted in the General Risk Assessment. If another body is responsible for Health and Safety on the site Marches Archaeology will conform to any policy which may be in force. If costs accrue due to Health and Safety issues not made apparent to Marches Archaeology by the time of submission of this Project Proposal these costs will be additional to any costs identified in the estimate. The requirements of Health and Safety legislation are deemed to take precedence over archaeological requirements.

Appropriate insurance cover will be held throughout the project.

The Local Planning Authority's Archaeology Advisor shall at any reasonable time be granted access to the site, with prior notice, for the purpose of monitoring the fieldwork.

Timetable

This Proposal will be submitted for approval by the Local Planning Authority's Archaeology Advisor, who will be given at least one week's notice (or such shorter period as agreed between Marches Archaeology and the Local Planning Authority's Archaeology Advisor) of the commencement of the fieldwork. The report will be presented to the client within one month of completion of the fieldwork, unless otherwise agreed. The results will be reported to the Local Planning Authority's Archaeology Advisor and the local Sites and Monuments Record within one month of presentation, unless otherwise agreed. A summary report will be submitted for publication in an appropriate medium within one year of completion of all fieldwork.

Resources

The project will be managed by Richard Stone a Members of the Institute of Field Archaeologists with a registered Area of Competence in Archaeological Field Practice. Other field and post-excavation staff will be appropriately experienced. Where trainees are used they will be closely supervised by senior members of the project team. Normal working hours are Mon-Thurs 8.30-4.30 and Fri 8.30-4.00. Additional hours constitute overtime.

Specialist sub-contractors will be used as appropriate. Specialists will normally be people approved by English Heritage Ancient Monuments Laboratory. Those who might be expected to be called upon (dependent upon availability) include:

Jeremy Evans (Rátkai and Evans PX Partners) Stephanie Rátkai (Rátkai and Evans PX Partners)

David Barker (Stoke on Trent Museum)

Liz Pearson (Worcestershire Archaeological Service)

Ian Baxter (freelance)

Megan Brickley (Birmingham Univ. Field Archaeology Unit)

Roman ceramics medieval ceramics post-medieval ceramics environmental remains

animal bone human bone

7 January 2003