ARCHAEOLOGICAL EVALUATION AT CHURCH ST, KIDDERMINSTER, WORCESTERSHIRE

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Archaeological Evaluation at Church St, Kidderminster, Worcestershire

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Part 1 Project summary

An archaeological evaluation was undertaken at Church St, Kidderminster, Worcestershire (NGR SO8302 7684). It was undertaken on behalf of Barnett Taylor Associates for their client Jordan House Investments (the Client). The Client intends to construct a mixed-use development, comprising office, bistro and 14 apartments with undercroft parking, for which a planning application has been submitted. The project aimed to determine if any significant archaeological site was present and if so to indicate what its location, date and nature were.

The site is located on a slope to the River Stour, and in the heart of the historic medieval core of Kidderminster. However, no medieval archaeological remains were identified. One post-medieval brick wall was uncovered, and its east-west alignment fits well with the conclusions from the Central Marches Historic Towns Survey for a tenement on the site in the post-medieval period, and a building illustrated on Doharty's 1753 plan of Kidderminster. On the eastern extent of the site, a late 18th century wall was identified that clearly belonged to a building, running parallel to the earlier wall, and could be a rebuild of the older building. This included a doorway with successive blocking in episodes, spanning the 18th and 19th centuries. This building may have originally been residential, but is considered to have been associated with the chemical works on the site in the 19th century. On the western edge of the site next to the river, cobble and brick surfaces were identified dating to the 19th century, and are interpreted as surfaces used to load and off-load materials from boats on the river.

Evidence for a considerable build-up of the ground surface was evident in the 18th to 19th centuries, with approximately 1m of made ground created per century. These deposits contained a large amount of industrial discard materials, such as pot sherds and kiln waste from the 18th century pottery works located immediately north of the site, and crucibles and slag materials from the 19th brass foundry that were located on the site's southern boundary.

The potential for the survival of post-medieval remains in the east extent of the site is good, and there is some potential for medieval remains also to have survived. This area is thus considered significant in its potential to provide physical remains related to post-medieval and possibly medieval Kidderminster, albeit in quite a small area.

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Part 2 Detailed report

1. Background

1.1 Reasons for the project

An archaeological evaluation was undertaken at Church St (NGR SO8302 7684), Kidderminster, Worcestershire (Fig 1), on behalf of Barnett Taylor Associates for their client Jordan House Investments (the Client). The Client intends to construct a mixed-use development, comprising office, bistro and 14 apartments with undercroft parking, and has submitted a planning application to Wyre Forest District Council (reference WF/06/0885), who consider that a site of archaeological interest may be affected (WSM 20742).

1.2 **Project parameters**

The project conforms to the *Standard and guidance for archaeological field evaluation* (IFA 1999). The project also conforms to a brief prepared by Worcestershire County Council Historic Environment and Archaeology Service (HEAS 2006) and for which a project proposal (including detailed specification) was produced (HEAS 2007).

1.3 Aims

The aims of the evaluation were to locate archaeological deposits and determine, if present, their extent, state of preservation, date, type, vulnerability and documentation. The purpose of this was to establish their significance, since this would make it possible to recommend an appropriate treatment which may then be integrated with the proposed development programme.

More specifically the following aims were identified.

 To assess significant deposits, defined as those likely to be of medieval and postmedieval date.

2. **Methods**

2.1 **Documentary search**

Prior to fieldwork commencing a search was made of the Historic Environment Record (HER) Sites and Monuments Record (SMR).

2.2 Fieldwork methodology

2.2.1 Fieldwork strategy

A detailed specification has been prepared by the Service (HEAS 2007). Fieldwork was undertaken between 18th and 27th June. The site reference number and site code is WSM 37306.

Three trenches, amounting to 75m² in area, were excavated over the site area (c. 840 m²), representing a sample of 9.5%. The location of the trenches is indicated in Figure 2.

Deposits considered not to be significant were removed using a JCB wheeled excavator, employing a toothless bucket and under archaeological supervision. Subsequent excavation

was undertaken by hand. Clean surfaces were inspected and selected deposits were excavated to retrieve artefactual material and environmental samples, as well as to determine their nature. Trench 2 was only partially excavated due to the presence of damaged asbestos sheeting which posed a health risk. Likewise, damaged asbestos sheeting was uncovered in the northern half of Trench 1. As such, only the southern half of this trench was excavated, and two sondages were placed in this area (2.25 x 2.4m, and 1 x 0.8m), oriented east-west. Two sondages were also excavated in Trench 3 and were oriented east-west, one in the northern half of the trench, the other in the southern half of the trench. In Trenches 1 and 3 excavation to the natural was not possible, and a hand augur was used to locate the depth of natural layers. Deposits were recorded according to standard Service practice (CAS 1995). On completion of excavation, trenches were reinstated by replacing the excavated material.

2.2.2 Structural analysis

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

2.3 Artefact methodology, by Angus Crawford

2.3.1 Artefact recovery policy

All artefacts from the area of evaluation were retrieved by hand and retained in accordance with the service manual (CAS 1995 as amended).

2.3.2 Method of analysis

All hand-retrieved finds were examined and a primary record was made on a Microsoft Access 2000 database. Artefacts were identified, quantified and dated and a *terminus post quem* date produced for each stratified context.

The pottery and ceramic building material was examined under x20 magnification and recorded by fabric type and form according to the fabric reference series maintained by the service (Hurst and Rees 1992; Hurst 1994).

2.4 Environmental archaeology

2.4.1 **Sampling policy**

The environmental sampling strategy conformed to standard Service practice (CAS 1995; appendix 4). However, it was concluded that environmental analysis would not inform on the site, and therefore detailed environmental analysis was not undertaken.

2.5 The methods in retrospect

The methods adopted allow a high degree of confidence that the aims of the project have been achieved.

3. Topographical and archaeological context

The site is located on the west side of Church Street in the centre of Kidderminster. It currently consists of a tarmac car park and covers and area of approximately 840m². The site is bounded by St Mary's Ringway to the north, the western boundary is the River Stour, and it backs on to an additional car park to the south. St Mary's Church is located adjacent to the site on the north side of the Ringway.

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The geology of the area consists of Devonian sandstone overlain by Bunter pebble beds, with the drift geology defined by deep alluvium. The soils consist of groundwater gleys of clay loam or silty clay loam texture which are poorly drained (Hollis and Hodgson 1974).

Kidderminster is considered to have been referred to by Ethelbald, King of Mercia, when he awarded a land grant to Cynibehrt for a monastery in 736 (VCH, 1913, 158). However, the first direct reference to the town is in the Doomsday Book, where it is named as *Chideminstre* (Thorn and Thorn 1982, 1-2). Kidderminster was clearly a town when it 1228 it was awarded a three days' fair (VCH, 1913 166), and it was during the medieval period that burgaging is also recorded which indicates a pre-existing system of land divisions (VCH, 1913 159). An early-nucleated settlement pattern is evident through the division of the parish into the town (borough) and outlying areas, since time immemorial.

The site lies within the historic medieval core of Kidderminster (WSM27848) and a Conservation Area (WSM 36350) based on the Central Marches Historic Town Survey (Buteux 1996). Evidence of Roman settlement is scarce with the closest evidence a collection of unstratified coins found at St Mary's Church (WSM07485 and WSM35913), and several coins and querns found on the High St in 1879 during building renovations (WSM20716).

The only possible evidence for Anglo Saxon activity is the speculative Minster detected by geophysical survey in St Mary's Church at the end of Church St (WSM35952). That the site is located in the area of the old medieval town (WSM15000) is attested to by archaeological remains in close proximity. To the immediate west of the site across the river in Callow Lane, remains were uncovered associated with at least one high status house, possibly a wealthy medieval burgess' property, and evidence for industry involving dyeing (WSM09814). Between Hall St and Church St a medieval wall was found which is posited to be part of the Blount Manor house formed in the 13th century (WSM19997), with the Biset Manor house also documented as being located next to the church (WSM20721). Several pot sherds recovered from cellars in Swan St also date to the 15th century (WSM20700). St Mary's Church is medieval, with documentary evidence for the church and vestry in 1290 (WSM01303) and the chantry chapel from the 14th century (WSM20705). The churchyard cross, of which only the base survives, is also early medieval in date (WSM07484).

Kidderminster was important in post-medieval times for its manufacture of textiles, with cloth known during this period as 'Kidderminster stuff (Gilbert 2004, 35). Located next to the river, the site may have played a role in this industry. Several cobble surfaces have been uncovered that may be related so such activities on either side of the river, one in Callow Lane (WSM09814) and the other immediately north of the site where the bypass in located (WSM20766). On Church St one timber framed building survives that dates to the 1600's (WSM16976), and a pound and school was recorded on the Doharty map (1753) to have existed on Church St from 1540 (now under the ring road) (WSM12919). The presence of Almshouses on Church St by 1670 (WSM12891) also indicates settlement in the area close by.

Church St is reported to have become a part the 'centre of gravity' of the town in the early 18th century, as it was here that the most important clothiers lived (along with Mill St and Bull Ring) (Gilbert 2004, 49). This is evident through the high number of Georgian dwellings on Church St at this time (e.g. WSM12875, 12885, 16969), indicating a settlement focus on the majority of the street rather than industrial buildings. However, Doharty's 1753 map illustrates a long building oriented roughly east-west on the site, along with garden area stretching behind the residential properties. His map also shows a bridge over the Stour on just north of the building (WSM20763). This would have linked the pottery works (WSM15271) which were located on the north extent of the site, to industries to the west of the river. By the mid-late 18th century the majority of industry focused on carpet manufacture, which had gradually overtaken the cloth industry. That the river system was important for transportation of goods is apparent with the opening of the Worcestershire-Staffordshire canal in 1772 to the north of the site (WSM12001), although it was in the 19th century that rapid development of economic prosperity is most evident as a result of increased traffic and trade.

The area encompassing and surrounding the site underwent modification during the 19th century. The 1st edition OS map indicates a chemical works on the site (WSM 36831), located off 'Wharf Hill', with a brass foundry to the immediate south (WSM36832), followed by a dye works (WSM36833). Adjacent to the latter industry across the river was a carpet factory (WSM19991), with another to the immediate northwest of the site (WSM19989). 'Wharf Hill' extended down to the canal where Kidderminster wharf was located (WSM32452). This evidence of industry is testimony to the significant growth of Kidderminster during this period, where it was noted that the "whole town seems to have been the work of the present century" (Noake 1851, 2).

4. Results

4.1 Structural analysis

The trenches and features recorded are shown in Fig 1-. The results of the structural analysis are presented in Appendix 1.

4.1.1 Phase 1 Natural deposits

Natural deposits were reached using a hand augur only, in Trenches 1 and 3. In the former trench, which was located at the top of the current slope down to the river (see Fig 2) the natural consisted of reddish orange degraded sandstone (1028), which is characteristic of the underlying geology of Devonian sandstone. This layer was at a significant depth, 3.72m below the current surface. In Trench 3, which was located 6m east of the river, a pale greyish-brown sandy silt layer was identified at 2.55m below the current surface (3036). The silt component is the result of these very small particles moving down through the sand caused by water movement (as the layer was below the water table).

4.1.2 Phase 2 Post-medieval: 17th century

There was no evidence of Roman, Anglo Saxon and Medieval deposits. The next recorded phase of human activity was in the post-medieval period.

Trench 1 (Fig 3 Plate 1)

A brick wall (1029) was revealed in the second sondage (1m x 0.8m) in Trench 1. The bricks are known to have been produced in the late medieval period through to 1650. The wall runs parallel to an 18th century wall (1025; see below), with the surviving top of wall 1029 level with base of 18th century wall 1025 (34.09 m OD). This indicates that the structure of which the wall was part of was still standing just prior to construction of wall 1025. The base of wall 1029 was not reached, however, as safety concerns lead to cessation of the sondage excavation at 33.14m OD.

While it is difficult to discern the age of layers identified through hand auguring (as any artefacts recovered may be intrusive from layers above), some stratigraphic interpretation can be made. Thus, layers 1036 and 1037 are considered to have formed during the post medieval period, although their exact relationship to wall 1029 cannot be established.

Trench 3

Stratigraphic interpretation suggests that layer 3035 (identified through auguring) is post-medieval in age, although no finds were recovered to confirm this. As this deposit is located immediately above the natural (3036), it is therefore the oldest deposit identified in Trench 3.

4.1.3 Phase 3 18th century

Trenches 1 and 2 (Figs. 3 and 4, Plate 2)

Several make-up deposits (1023, 1021, 1021, 1031, 1016, 1017, 1018) were formed in the mid 18th century, the majority of which abut the post-medieval wall 1029. Their purpose appears to have been to build up the ground surface, possibly due to episodes of flooding from the river (this explanation is explored further in Section Five), with the surface level reaching approx. 34m OD. The deposits contained a large amount of cream ware pottery that dates to the late 18th century, along with sagger and kiln waste. The origin of such materials points to the pottery works located to the immediate north of the site during this period.

In the late 18th century a building was constructed, represented by an east-west running wall, (1025 in Trench 1 and 2005 in Trench 2), the top of which was located just below the tarmac surface. The wall was placed within a shallow cut (1033), which, as discussed above, was at the same level as the top of the post-medieval wall (1029). Extending to a depth of 1.59m below the surface (34.09m OD), the presence of a doorway within wall 1025 indicates the depth of ground surface was also approx. 34m OD at this time. The doorway underwent several 'blocking-in' episodes, the first at the end of the 18th century (1027). Only half the doorway was blocked-in, suggesting that the feature still acted as an opening of some sort up to the end of the period. In addition, the presence of a brick drain (1028) (sloping towards the river) immediately outside the blocked-in doorway indicates drainage of some sort from the building.

Trench 3 (Fig 5 Plate 3)

Deposit 3030, located on the northern half of the trench only, and exposed within the northern sondage, was a thick, loose, mixed deposit. It contained a large number of pot sherds, glass, and similar debris, and has a *terminus post quem* of the 18th century. It is a dump of materials forming a make-up layer. Four deposits beneath 3030 (3031, 3032, 3033, 3034) are thus stratigaphically either the same age or possibly older (17th century). As these deposits are comprised of grey to brown sandy silts or silty sand, along with a small number cultural inclusions (such as small pieces of brick, charcoal, and coal) they are thought to have formed during flooding episodes, and consequently, are a mix of cultural materials and alluvium.

On the southern half of the trench a similar deposit to 3030 was identified (3062). Additional associated deposits are 3063 and 3064, which are dated stratigraphically to the 18th century. Deposit 3063 forms the base of the southern sondage.

4.1.4 Phase 4 19th century

Trench 1 (Fig 3 Plates 2 and 4)

The doorway in wall 1025 was blocked-in for a second time (1026) in the early 19th century. This phase of building alteration is consistent with the deposition of successive layers of make-up deposits at this time. The contents of these dumped deposits (1003-1015) included crucible fragments and slag materials, as well charcoal and cinder dumps, all of which are associated with the brass foundry located to the immediate south of the site during this period. The lack of 'natural' soil layers developing between these distinctive layers suggests quite a rapid, intentional build up. That these layers served to raise the ground surface is supported by the presence of brick steps (1024) placed within the topmost make-up deposits (1003 and 1004), indicating a doorway/s into the building.

Trench 3 (Figs 5 and 6, Plates 3, 5 and 6)

Like Trench 1, there is evidence for several depositional phases in the early 19th century in Trench 3. However, the deposits do not appear to have been placed in a formalised fashion to systematically raise the ground surface like those in Trench 1. Contexts placed in the early

19th century and observed in the northern sondage include three small sandy deposits (3027, 3028, 3029), which are small dumps of pot sherds, iron, coal and brick fragments. They are covered by a large deposit (3026) with a mix of sand and CBM fragments, pot sherds, rounded stones and glass shards. When this deposit is considered in conjunction with 3050, 3051 and 3052, all appear to be levelling layers with a slight slope westwards towards the river. In fact, the presence of a cobble surface (3065) set into the top of 3026 supports this supposition. The surface may have been used as a ramp for loading and off-loading goods from boats at the rivers edge.

Similar deposits were recorded in the southern sondage. Deposit 3061, a small building dump comprised of brick dust and mortar, and a black coal dust layer (3055) are associated with industry on the site. Above 3055 and the later 18th century deposit (3062) is an additional cobbled surface (3053), set within an orangey clay layer (3056). It has a brick facing (3054) and appears to be oriented towards the river. However, only a small portion of the surface was exposed. As the area between both sondages was not excavated it is possible that both cobbled surfaces (3053 and 3065) are the same feature. In any case, they are of a very similar age and highlight the placement of formal surfaces on the banks of the river. A brick structure (3045) located on the east extent of the sondage is contemporary with the cobbled surface. While it is not clear as to its function (as it extends beyond the trench edge), it appears to be a platform of some sort. A large brick drain with an iron grill was located on the western side of the platform, although it had been disturbed and only a robber cut and fill (3038 and 3039) survived as identification.

In the late 19th century, the ground surface was once again levelled and raised through the placement of deposits 3018 (3003), 3037, 3012, and 3047 (3017). At this point a brick surface resembling a slipway (3014) was set into the ground in the central half of the trench. It was faced with a timber edge on its southern extent (3020) and may have incorporated use of the platform 3045. This feature is contemporary with a brick and tile drain (3040) running east-west along the southern extent of the trench that contained four different fill deposits (3041-3045). A brick wall (3013) with timber inserts runs on the same alignment as the drain, and may also be contemporary. Another north-south oriented drain was placed, possibly at the end of the 19th century-early 20th century, on the west extent of the trench (3004). All of the drains identified fed into the river.

4.1.5 **Phase 5 Post -1900**

Trench 1

Within the larger sondage a lead water pipe was observed of which a large cut (1019 and 1020) truncated several deposits. The contaminated demolition deposit (asbestos) present in the northern half of the trench derives from the modern carpet warehouse that was previously on the site. On top of this was a silty deposit (1002) followed by the hardcore deposit (1001) forming the base layer of the tarmac surface (1000).

Trench 2

Like Trench 1, the contaminated demolition deposits (2003 and 2004) are testimony to the modern buildings previously on the site. The most modern features are also the hardcore and tarmac layers (2001 and 2002).

Trench 3

Numerous modern pits were present in this trench, including one (3021), which truncated the brick surface (3014), and another containing a ceramic pipe (3024, 3025). Multiple services running through the trench truncated deposits and made excavation difficult. One large (0.5m +) inactive storm drain with a cut ran east-west through the northern sondage, and another smaller pipe ran east-west, associated with cut 3049. Two lead water pipes located on the southern extent of the trench were also modern. Two small deposits were located beneath on

the northern extent of the trench (3015 and 3016) and these were covered by the hardcore layer for the tarmac surface (3002 and 3001).

4.2 Artefact analysis, by Angus Crawford

The artefactual assemblage recovered is summarised in Tables 1 and 2.

The pottery assemblage retrieved from the evaluated area consisted of 214 sherds of pottery weighing 2084g. In addition, fragments of tile, brick and clay pipe stems were recovered. The group came from 12 stratified contexts and could be dated to the post-medieval period (see Table 1). Level of preservation was generally good with the majority of sherds displaying only low levels of abrasion.

| Context | Material | Туре | Total | Weight (g) |
|---------|------------|-----------------------|-------|------------|
| 1003 | Crucible | Copper alloy smelting | 1 | 1770 |
| 1003 | Glass | Bottle | 1 | 312 |
| 1008 | Sandstone | Grindstone | 1 | 29000 |
| 1008 | Crucible | Copper alloy smelting | 1 | 2420 |
| 1021 | Bone | Animal | 4 | 192 |
| 1021 | Brick | Kiln? | 1 | 385 |
| 1021 | Claypipe | Stem | 1 | 2 |
| 1021 | Kiln | Furniture | 2 | 6 |
| 1021 | Kiln | Sagger | 1 | 125 |
| 1021 | Kiln | Furniture | 3 | 15 |
| 1021 | Pottery | Biscuit fired | 18 | 251 |
| 1021 | Pottery | Post-medieval | 135 | 905 |
| 1022 | Bone | Animal | 2 | 23 |
| 1022 | Brick | Post-medieval | 2 | 836 |
| 1022 | Glass | Bottle | 1 | 28 |
| 1022 | Kiln | Sagger | 5 | 667 |
| 1022 | Kiln brick | Brick | 1 | 765 |
| 1022 | Pottery | Biscuit fired | 7 | 173 |
| 1022 | Pottery | Post-medieval | 24 | 269 |
| 1022 | Roof | Tile | 3 | 1460 |
| 1023 | Kiln | Furniture | 1 | 12 |
| 1023 | Pottery | Post-medieval | 4 | 54 |
| 1024 | Brick | Modern | 1 | 4020 |
| 1025 | Brick | Post-medieval | 1 | 3470 |
| 1030 | Brick | Post-medieval | 1 | 2310 |
| 1035 | Pottery | Post-medieval | 1 | 0.5 |
| 3030 | Claypipe | Stem | 2 | 10 |
| 3030 | Coal | Fuel | 1 | 3 |
| 3030 | Glass | Bottle | 1 | 27 |
| 3030 | Pottery | Biscuit | 1 | 2 |
| 3030 | Pottery | Post-medieval | 12 | 104 |
| 3030 | Tile | Roof | 1 | 28 |
| 3038 | Claypipe | Stem | 1 | 5 |
| 3038 | Iron | Nails | 7 | 169 |
| 3038 | Pottery | Post-medieval | 3 | 104 |
| 3038 | Slate | Roofing | 1 | 11 |
| 3058 | Bone | Animal | 1 | 278 |
| 3058 | Glass | Bottle | 1 | 35 |
| 3058 | Kiln | Brick | 1 | 463 |
| 3058 | Pottery | Post-medieval | 9 | 221 |

Table 1: Quantification of the assemblage

4.2.1 **Discussion of the pottery**

All sherds have been grouped and quantified according to fabric type (see Table 2). All sherds were datable by fabric type to their general period or production span.

The discussion below is a summary of the finds and associated location or contexts by period. Where possible, *terminus post quem* dates have been allocated and the importance of individual finds commented upon as necessary.

| Context | Fabric name | Fabric number | Total | Weight (g) |
|---------|--------------------------------|---------------|-------|------------|
| 1021 | Post-medieval red sandy ware | 78 | 4 | 94 |
| 1021 | Creamware | 84 | 92 | 720 |
| 1021 | Creamware (biscuit fired only) | (84) | 18 | 251 |
| 1021 | Porcelain | 83 | 39 | 91 |
| 1022 | Post-medieval red sandy ware | 78 | 1 | 5 |
| 1022 | Creamware | 84 | 21 | 228 |
| 1022 | Creamware (biscuit fired only) | (84) | 9 | 209 |
| 1023 | Post-medieval red sandy ware | 78 | 2 | 32 |
| 1023 | Post-medieval buff wares | 91 | 2 | 22 |
| 1035 | Creamware (biscuit fired only) | (84) | 1 | 0.5 |
| 3030 | Post-medieval red sandy ware | 78 | 4 | 36 |
| 3030 | Creamware | 84 | 5 | 22 |
| 3030 | Creamware (biscuit fired only) | (84) | 1 | 2 |
| 3030 | Post-medieval buff wares | 91 | 3 | 46 |
| 3038 | Post-medieval red sandy ware | 78 | 3 | 104 |
| 3058 | Post-medieval red sandy ware | 78 | 7 | 194 |
| 3058 | Creamware | 84 | 1 | 18 |
| 3058 | Post-medieval buff wares | 91 | 1 | 9 |

Table 2: Quantification of the pottery by fabric

4.2.2 **Post-medieval period**

The dominant fabric within the assemblage was creamware (fabric 84) with 119 sherds accounting for 56% of the total pottery assemblage. The largest concentration of this fabric was from context 1021 with 81 sherds. A further 21 sherds were identified from context 1022 with a further five from context 3030 and a single sherd from context 3058. The presence of such a large quantity of this fabric type indicates a specific discarding practice that is discussed further below. Creamware had a limited production span and can be specifically dated from 1760 to 1790 when it was at its most desirable for domestic wares. Forms within the assemblage were consistent with known types produced in this fabric, generally tablewares, and included sherds from bowls and plates.

The second largest fabric type was porcelain (fabric 83) with 39 sherds from context 1021. While the sherd count was high the forms identified consisted of two small bowls featuring stylised oriental scenes on a pale blue background and could be dated to the late 18th century.

Of importance to the pottery assemblage was the identification of 28 sherds of biscuit fired pottery, identified as waste material from kiln production. Discarded due to firing defects identified prior to glazing, they are commonly associated with waste material from localised pottery works. In this instance, the large number of creamware sherds may indicate that the point of origin of the waste material is from a pottery works specialising in the production of creamware tablewares.

Eighteen sherds of post-medieval red sandy ware (fabric 78), finished with typical red slip and/or black glaze, were identified, with seven sherds from context 3058, four sherds from

context 1021 and likewise 3030, three sherds from context 3038, two sherds from context 1023 and a single sherd from context 1022. While this fabric type was produced throughout the 17th and 18th century, the sherds within this assemblage are most likely of 18th century date when compared with the assemblage as a whole.

The remaining fabric type was of post-medieval buff ware (fabric 91) with three sherds from context 3030, two sherds from context 1023 and a single sherd from context 3058. All sherds could be dated to the 18th century.

4.2.3 Other finds

A range of non-pottery kiln waste was further identified with fragments of kiln furniture, with five kiln spacers from context 1021 and one from 1023. Other identified kiln material included large fragments of saggers (used to contain and protect pottery during firing) with five from context 1022 and one from context 1021. Three fragments of brick of coarse fabric (contexts 1021, 1022 and 3058) exhibited damage consistent with having been exposed to prolonged periods of high temperature, and are probably kiln bricks dumped with the rest of the production waste.

Fragmentary crucibles were recovered from contexts 1003 and 1008. Both exhibited traces of copper alloy residue indicating use in a non-ferrous foundry. Dating was problematic due to limited diagnostic features but they are of probable 19th or early 20th century date.

A further artefact confirming the discard of industrial waste on site was that of a large cylindrical grindstone from context 1008. Made of sandstone, with a diameter of 310mm and a width of 203mm, it would have been used to sharpen industrial iron tools during the 19^{th} to early 20^{th} century.

Brick samples from the site produced a range of dates with one from context 1022 dated to the early to late 18th century, one from context 1024 dated to the mid 19th to early 20th century and one from context 1025 dated from the early to late 18th century. A further brick from context 1030 was not considered to have been produced much beyond 1650 due to its diagnostic 2'' thickness. While proportionally similar to bricks produced in the later medieval period, the lack of any further finds of medieval date would indicate that this brick is of early post-medieval date.

A small number of bottle glass shards were also identified with two of 19th century date, from contexts 1003 and 3030, and a further two shards of 18th century date from context 1022 and 3058.

Further finds included four clay tobacco pipe stems (two from context 3030 and one each from context 1021 and 3038), which could only be broadly dated to the 17th to 18th century.

5. **Synthesis**

5.1 Early Post-medieval

The majority of archaeological remains dating to this time were recovered from the west extent of the site, therefore near the top of the slope down to the river. Specifically, there was evidence for a structure represented by a brick wall running east-west. It is difficult to discern if the wall was part of a building, or whether it was a boundary wall based on the archaeological evidence alone. The bricks themselves are heavily degraded and in poor condition, and the wall is only two courses thick. As the base of the wall was not reached it is difficult to categorically identify exactly what this structure is.

As no medieval materials were recovered on the site specifically, the exact pattern of land division on the site is not known. However, the site has been designated as part of a medieval tenement plot (HWCM 20742) that likely represents later development connected with

Kidderminster's growth as an industrial and market centre from the 13th century (Buteux 1996, 6). The tenement plot continued to be used into the early post-medieval period, and the brick wall identified in this project could represent a tenement boundary or housing structure in use during the 17th century. However, there is a building on Doharty's 1753 plan of Kidderminster (Fig 7) that is of importance here. Oriented roughly east-west across the site area, the building is present in the 18th century, but it is possible that this 17th century wall was built upon and a part of the later building. This is supported by the archaeological evidence, which suggests the wall was in use until construction of the second building erected at the end of the 18th century (see next section).

An important outcome of the identification of this structure is that it illustrates that the ground surface in the 17th century was 2m+ below the current ground surface at 33.014m OD. When considered in concert with the post-medieval deposit in the western trench, at 1.83m below surface, 30.71m OD, we get an idea of the slope down from Church Street to the river during this time. As no structures were identified in the latter trench, and that the deposit appears to contain alluvial features, this area of the site is considered to have been the riverbank, devoid of settlement structures.

5.2 **18th century**

The site underwent change in the mid-18th century. By the end of the 17th century, Kidderminster was undergoing expansion as a mill town making carpets. By the mid 18th century, Lord Foley built 200 new houses in the town (Atkin, n.d., 3). This expansion is reflected on the site, initially through the deposition of multiple layers of levelling deposits to raise the ground surface. The deposits abut the post-medieval wall, although this does not mean that this feature fell into disuse. It was most likely part of the building identified on Doharty's 1753 plan as discussed above. The building itself may have changed over time, as it was common for ground plans to be subdivided and upper stories inserted to older buildings at this time (Atkin, n.d., 2).

The materials used to raise the ground surface derived mainly from the pottery works located immediately north west of the site, extending to the river. The large concentration of cream ware sherds, kiln furniture and saggers (c. 1760-1790) indicates the manufacture of this product in the near vicinity, and this portion of the site may potentially have been incorporated into the factory, although this requires further investigation.

Evidence of made-ground at this time is also seen on the west extent of the site, with several large deposits containing pot sherds and other debris dumped to raise the surface. What is also evident in this area are several deposits containing alluvium and very small, abraded cultural materials, which are indicative of deposition during flooding episodes. In fact, it is suggested that the site may have been prone to flooding episodes from the River Stour, and thus the ground surface was raised in order to combat this. That deliberate deposits were now being placed in this western area could also indicate a change in use of the riverbank, possibly in relation to a shift to industrial activities on the site.

By the late 18th century, a new building had been constructed, running parallel to the older wall, and offset by 0.2-0.3m. This alignment therefore appears to respect the older land boundary or division. The building was at least 15m long east west, extending to the west edge of Church Street. Of note here is that its orientation and size is very similar to the building identified on Doharty's 1753 plan (Fig 7). However, the archaeological evidence indicates that the building could not have been built until the late 18th century. There is also some doubt as to the accuracy of the 1753 plan (see Gilbert 2004, 62). Yet, as we have archaeological evidence for a structure on the site in the 17th century that follows the same alignment as Doharty's building, the 1753 plan is given credence, and the building did exist in the mid 18th century.

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By the late 18th century, the ground surface was now approximately 1m higher, at 34.04m OD east extent and 32.29m OD on the western boundary. The new building appears to have had one doorway (at least) opening on the south side. However, part of the doorway was blocked-in not long after construction, and a brick drain was placed outside the doorway running down the slope. The doorway must have changed function at this point, and may have had some sort of down pipe or other feature draining into it from the building. Another alternative is that flooding was still a considerable problem, and as such the building entrance had to be raised. It is not clear if this building was still residential, or whether it had become an industrial building. It is of interest here that Church St is lined with mid-late Georgian dwellings which are typical of those occupied by prosperous inhabitants of Kidderminster (Morriss 1996, 12). Certainly, by the early 19th century the site is characterised by industrial activities (see below), and as such if the building was used for residential purposes it may have been fairly short-lived.

5.3 **19th century**

By the 19th there is evidence for a chemical works on the site, and it is posited that the building discussed in the previous section was a part of it. As previously discussed, by the end of the 18th century, buildings were being expanded and built upon. Particularly, there is evidence of the insertion of upper stories to existing buildings. As the doorway in the building had already been blocked in once, the evidence for a second blocking-in in the 19th century could be related to placing further new floors, potentially ground floors/cellars as well as upper levels. At this time we have evidence for the existence industrial activity related to the brass foundry to the south of the site, illustrated by the crucibles and slag found in the numerous make-up layers deliberately placed and abutting the wall and blocked-in doorway of this building. On this part of the site the picture is of a fairly rapid placement of levelling layers, bringing the ground surface up to 35.04m OD by the late 19th century, over 1m higher that at the end of the 18th century.

On the west extent of the site there is evidence of levelling deposits overlain with cobbled surfaces in the early to mid 19th century. The location of these surfaces so close to the river is suggestive of formalised surfaces placed in order to facilitate the loading and off-loading of goods from the river. The Worcestershire-Staffordshire Canal was built just to the north of the site in 1772, and this increased trade and transportation in Kidderminster particularly in the 19th century. Therefore, movement of goods from the brass foundry, dye works (located further south) and the chemical works would have been in the form of both overland and water transportation. With the presence of a brick platform, a possible building, and a late 19th century brick slipway also uncovered in the western-most trench, the evidence points to intensive use of the River Stour by the industries located on this part of the river.

5.4 **Research frameworks**

The results discussed in the previous section fall well within the research frameworks developed from the Central Marches Historic Towns Survey (Buteux 1996). The site is located in an area indicated in the survey to have the potential for surviving deposits from the medieval and post-medieval periods, which are considered to be particularly important (Buteux 1996, 14). While evidence for the former was not recovered, archaeological remains from the post-medieval period were identified. As such, our knowledge and understanding of this small area Kidderminster at this time has been increased. Specifically, the presence of the post-medieval wall tallies with the conclusion from cartographic sources that tenements were in place during this period, and the wall also lines well with a building illustrated in Doharty's 1753 map of Kidderminster.

The presence of cream ware pot sherds, kiln furniture, and saggers, provides further evidence of a pottery kiln operating in the area, and more importantly, evidence to illustrate that 18th century wares were manufactured in other parts of the Midlands besides Staffordshire. With this in mind, the results support the supposition that the Kidderminster pottery works are

important for studying the role that the river Severn and associated canals played in the movement of clay materials, and finished goods, in the industrialisation of the pottery industry in the West Midlands (Hurst 1996, 15).

6. Significance

6.1 **Artefactual Significance**

While the assemblage is representative of dumped industrial material and general rubbish discard the finds assemblage is of some significance. The discard of specific industrial waste, in this instance pottery kiln waste, is a significant indicator of a local pottery manufacturer within Kidderminster producing cream wares, most likely within the period of 1760 to 1790.

6.2 **Archaeological**

In considering significance, the Secretary of State's criteria for the scheduling of ancient monuments (DoE 1990, annex 4), have been used as a guide.

These nationally accepted criteria are used to assess the importance of an ancient monument and considering whether scheduling is appropriate. Though scheduling is not being considered in this case they form an appropriate and consistent framework for the assessment of any archaeological site. The criteria should not, however, be regarded as definitive; rather they are indicators which contribute to a wider judgement based on the individual circumstances of a case.

The recovery of archaeological remains from the post-medieval period is significant in that it provides physical evidence for the presence of a brick structure on the site, which is considered to support the cartographic and documentary evidence for tenements during this period, and most likely was a part of the building indicated on Doharty's 1753 map. In addition, the results indicate a much lower ground surface (2m+) to the ground level today, although the presence of deposits at 2-3m was previously known from archaeological projects undertaken in the near vicinity (e.g. Mill St and Callow Lane). Therefore, the results here serve to support the results of previous investigations, in that deposits do survive at a significant depth in this area of Kidderminster.

The site varies from east to west archaeologically. The west extent of the site has been heavily disturbed through the placement of modern services, specifically storm drains, smaller drain pipes, and water pipes. The potential for the survival of structural remains from the medieval and post-medieval period is therefore low in this western area. In addition, the river edge would have extended at least 4-5m east of its current boundary, and the deposits containing alluvium identified in this project illustrate water movement during this period. As such, it is unlikely that residential or associated structures would have extended this far to the river edge.

The central area of the site could not be adequately assessed due to the presence of asbestos sheeting, leading to the abandonment of Trench 2. The east extent of the site poses a slightly different picture, however. While half of the area has also been contaminated with asbestos, the area excavated did illustrate structural remains recovered at over 2m below the current surface. Thus, the potential for the survival of associated materials is good in this area. Furthermore, there is also some potential for medieval remains to have survived in this part of the site. Therefore, this area is significant in its potential to provide physical remains related to post-medieval and medieval Kidderminster, albeit in quite a small area.

The 18th century cream ware recovered has the potential to be studied in its own right, in relation to the pottery industry in the West Midlands, such as tracing the movement of resources (clay) and the end products, throughout the region.

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7. **Publication summary**

The Service has a professional obligation to publish the results of archaeological projects within a reasonable period of time. To this end, the Service intends to use this summary as the basis for publication through local or regional journals. The client is requested to consider the content of this section as being acceptable for such publication.

An archaeological evaluation was undertaken at Church St (NGR SO8302 7684; WSM37306), Kidderminster, Worcestershire. It was undertaken on behalf of Barnett Taylor Associates for their client Jordan House Investments (the Client). The Client intends to construct a mixed-use development, comprising office, bistro and 14 apartments with undercroft parking, for which a planning application has been submitted. The project aimed to determine if any significant archaeological site was present and if so to indicate what its location, date and nature were.

The site is located in on a slope running into the River Stour, and in the heart of the historic medieval core of Kidderminster. However, no medieval archaeological remains were recovered. One post-medieval brick wall was uncovered, and its east-west alignment fits well with the conclusions from the Central Marches Historic Towns Survey for a tenement on the site in the post-medieval period, and aligns well with a building illustrate on Doharty's 1753 plan of Kidderminster. On the east extent of the site, a late 18th century wall was identified that clearly belonged to a building, running parallel to the earlier wall. As such, continuity in land boundaries/ divisions is evident from the 17th to 18th centuries. The 18th century wall included a doorway on its southern extent, with successive blocking in episodes spanning the 18th and 19th centuries. This building may have originally been residential, and the blocking-in episodes may be evidence of the creation of additional floors in the building. However, it is considered to have been associated with the chemical works on the site in the 19th century. On the west edge of the site next to the river, cobble and brick surfaces were identified dating to the 19th century, and are interpreted as being used to load and off-load materials from boats on the river.

Evidence for a considerable build-up of the ground surface was evident in the 18th to 19th centuries, with approximately 1m of made ground created per century. These deposits contained a large amount of industrial discard materials, such as pot sherds and kiln waste from the 18th century pottery works located immediately north of the site, and crucibles and slag materials from the 19th brass foundry that were located on the sites southern boundary. It is posited that the site may have been prone to flooding, leading to a need to raise the ground surface, and several layers containing mixed alluvium deposits appear to support

The potential for the survival of post-medieval remains in the east extent of the site is good, and there is some potential for medieval remains also to have survived. This area is thus considered significant in its potential to provide physical remains related to post-medieval and possibly medieval Kidderminster, albeit in quite a small area.

8. Acknowledgements

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9. **Personnel**

The fieldwork and report preparation was led by Sarah Phear. The project manager responsible for the quality of the project was Tom Rogers. Fieldwork was undertaken by

Angus Crawford, Tegan Cole, and Tim Cornah, finds analysis by Angus Crawford, and illustration by Carolyn Hunt.

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Plates



Plate 1 Post-medieval wall in Trench 1. Facing north.



Plate 2 Post-medieval wall (bottom left), 18^{th} century wall and drain with blocked in doorway, in Trench 1. Facing north.



Plate 3 Trench 3 North sondage, with the 18th century deposit 3030 in the centre of the section, and 19th century brick slipway. Facing south.



Plate 4 Successive 19th century levelling deposits in Trench 1. Facing south.



Plate 5 Trench 3 South sondage, illustrating 19^{th} features: brick slipway, platform, drain and cobble surface. Facing west.



Plate 6 19th century slipway in Trench 3, facing west.

Appendix 1 Trench descriptions

Trench 1

Site area: 25m²

Maximum dimensions: Length: 5.0m Width: 5.0m Depth: 0-2.52m, with augur to 4m

Main deposit description

| Context | Classification | Description | Depth below ground surface (b.g.s) – top and bottom of deposits |
|---------|----------------|---|---|
| 1000 | Layer | Tarmac surface for car park. | 0-0.05m |
| 1001 | Hardcore | Hardcore for tarmac surface, some stone and pieces of concrete. | 0.05-0.14m |
| 1002 | Layer | Black friable sandy silt, compact. Contaminated from ground surface. | 0.14-0.19m |
| 1003 | Layer | Mottled dark greyish-black ashy sandy silt, friable. Frequent lumps of charcoal (2-5mm) and contaminated industrial waste (fuel ash). | 0.16-0.26m |
| 1004 | Layer | Dark brown silty sand, friable. Rare small angular stones (3-10mm), some hydrocarbon contamination. | 0.26-0.34m |
| 1005 | Layer | Mid dark brown-black sand, friable. Frequent small gravels and charcoal fragments. Some hydrocarbon contamination from 1004. | 0.29-0.45m |
| 1006 | Layer | Blackish-grey sandy gravel, friable. Frequent mortar, oily feel. | 0.52-0.62m |
| 1007 | Layer | Dark black sandy-gravel, friable. Frequent small CBM and wood fragments. Occasional fragments of copper slag. | 0.57-0.71m |
| 1008 | Layer | Dark black sandy-gravel, friable. Occasional fragments of copper slag. | 0.75-0.88m |
| 1009 | Layer | Dark blackish-brown gravel-sand, friable. Frequent fragments of copper slag, rare CBM fragments. | 0.81-1.01m |
| 1010 | Layer | Mid greyish brown sandy-gravel, friable. Occasional CBM fragments. | 0.78-0.86m |
| 1011 | Layer | Dark blackish-brown clayey sandy-gravel, friable but moderately cohesive. Frequent charcoal flecks. | 0.86-0.90m |
| 1012 | Layer | Mid greyish brown sand, friable but slightly cohesive. | 0.9-1m |

| Context | Classification | Description | Depth below ground surface (b.g.s) – top and bottom of deposits |
|---------|----------------|--|---|
| | | Frequent CBM fragments. | |
| 1013 | Layer | Mid grey sand, friable but slightly cohesive. Frequent charcoal flecks. Occasional rounded pebbles. | 0.9-0.95m |
| 1014 | Layer | Mid dark brown sand, friable but slightly cohesive. Frequent CBM and mortar fragments. Occasional rounded pebbles. | 0.95-1.29m |
| 1015 | Layer | Mid blackish-grey gravels, friable. Frequent mortar fragments. | 0.99- 1.03m |
| 1016 | Layer | Dark black friable gravel. Frequent charcoal. | 1.03-1.06m |
| 1017 | Layer | Mid orangey-brown sand, friable. Frequent charcoal flecks. Occasional rounded pebbles. | 1.06-1.3m + |
| 1018 | Layer | Mid-dark greyish-black sand, friable. Frequent CBM and mortar fragments. Occasional rounded pebbles. | 1.3-1.62m |
| 1019 | Fill | Mid dark brown sandy-gravel, friable. Frequent charcoal flecks, and CBM rubble. Occasional sub-rounded pebbles. | 0.2-1.11m |
| 1020 | Cut | Steep near vertical sided cut, sharp BFS, sharp BTB. West side only visible. Filled by 1019. Modern pipe cut. | 0.2-1.11m |
| 1021 | Layer | Mid grey ash and charcoal, loose. Frequent cinders, potsherds, slag, and brick and tile building materials. Dump of industrial waste. | 1.62-2.02m |
| 1022 | Layer | Mixed reddish brown sandy silt, compact. Frequent white porcelain potsherds, lumps of sandy grey clay, charcoal fragments and small pieces, also small lumps of coal, and small CBM fragments. | 2.02-2.22m |
| 1023 | Layer | Mixed reddish brown sandy silt, compact. Frequent white porcelain potsherds, lumps of sandy grey clay, charcoal pieces. Occasional also small lumps of coal, and small CBM fragments. | 2.22-2.52m |
| 1024 | Structure | 19 th century steps outside of 18 th century building. Dark blue engineering brick 9inch x 4.5inch x 3inch. One course only. Sits above 1002. | 0.4-0.5m |
| 1025 | Structure | 18 th century wall. Runs east west across trench. Pale pink mortar, double thickness bricks 8 ¾ inch x 4 ¼ inch x 2 ¾ inch, 18 courses visible and set on a brick plinth. Has a blocked-in doorway in external side to south. | 0.06-1.59m |
| 1026 | Structure | 19 th century blocked-in door phase. Four courses of bricks form top half of blocked in doorway, 9inch x | 0.29-0.6m |

Context Classification Description Depth below ground surface (b.g.s) - top and bottom of deposits 4.5inch x 3inch bricks. Above 1025. 18th century blocked-in door phase. Seven courses of 1027 Structure 0.6 - 1.2 mbricks form the bottom half of the blocked-in doorway. 8 $\frac{3}{4}$ inch x 4 $\frac{1}{4}$ inch x 2 $\frac{3}{4}$ inch bricks. Below 1026. 18th century brick drain. At base of doorway, 8 ³/₄ inch x 4 1028 Structure 1.1-1.2m 1/4 inch x 2 3/4 inch bricks. Runs down towards the river (west). 1029 Structure Brick wall, late medieval – post-medieval. Eleven courses 1.59-2.2m +visible. Runs parallel to wall 1025 on southern side. Top part of the wall truncated when 1025 built. Extends beyond base of sondage. 1030 N/a Brownish-red sandy clay, loose. Frequent roof tile 1031 Layer 1.5-1.6m fragments, and occasional small white ceramic fragments. Lens of dumped materials. 1032 Mid brown sandy clay, moderately compact. Frequent 1.1m +Layer CBM fragments, small. Between wall 1025 and 1029. 1033 Cut Moderate BFS, steep sloping side. South side visible only 1.05-1.2m +in section. Filled by wall 1025 and 1034. 1034 Fill Reddish brown sand, loose. Frequent charcoal flecks, 1.05-1.2m +occasional small CBM fragments. Fill of 1033. 1035 Greyish-brown clayey-sand, compact. Occasional small 2.52-2.72m Layer CBM, mortar and charcoal fragments. Visible in augur only. 1036 Reddish-brown sandy silt, compact. Frequent small CBM 2.72-3.22m Layer fragments in top 0.05m, charcoal flecks, and very small coal fragments. Visible in augur only. 1037 Red with brown mottles, sand, loose to moderately Layer 3.22-3.72m compact. Fine pot sherds and CBM fragments, and frequent coal flecks. Occasional small rounded pebbles. Visible in augur only. 1038 3.72-4m +Layer Reddish-orange sand, loose to moderately compact. Very occasional charcoal flecks. Natural. Visible in augur only.

Trench 2

Site area: 25m²

Maximum dimensions: Length: 5.0m Width: 5.0m Depth: 0-0.11m

| Context | Classification | Description | Depth below ground surface (b.g.s) – top and bottom of deposits |
|---------|----------------|--|---|
| 2001 | Layer | Tarmac surface for car park. | 0-0.05m |
| 2002 | Layer | Hardcore for tarmac surface, some stone and pieces of concrete. | 0.05-0.11m |
| 2003 | Fill | Demolition debris – brick, rubble, asbestos sheeting, concrete. Not fully excavated due to asbestos. | 0.11m+ |
| 2004 | Fill | Demolition debris. Same as 2003. | 0.11m + |
| 2005 | Structure | Brick wall, running east-west. Continuation of 1025. Not excavated. | 0.11m+ |

Trench 3

Site area: 25m²

Maximum dimensions: Length: 5.0m Width: 5.0m Depth: 2.55m

| Context | Classification | Description | Depth below ground surface- top and bottom of deposits |
|---------|----------------|---|--|
| 3001 | Layer | Tarmac surface for car park | 0- 0.06m |
| 3002 | Layer | Hardcore for tarmac surface, some stone and pieces of concrete. | 0.06-0.13m |
| 3003 | Layer | Black ashy rubble levelling layer. | 0.24- 0.50m |
| 3004 | Structure | Brick drain, runs north-south. 19 th century. Fill of 3005. Not excavated. | 0.13m + |
| 3005 | Cut | Vertical sided cut for drain, only partially excavated. | 0.13m + |
| 3006 | Fill | Mid brown silty sand and rubble fill with ash and some brick and rounded stones. Fill of 3007. | 0.30m + |
| 3007 | Cut | Cut for pipe. Filled by 3006. Not excavated. | 0.30m + |
| 3010 | Fill | Dark blackish-brown silty sand. Frequent small pieces of ash, slag and brick. Fill around lead water pipe. Not excavated. | 0.38m + |
| 3011 | Cut | Runs north-west, south-east. Not excavated. | 0.38m + |
| 3012 | Layer | Grey sandy-mortar deposit, compact. Occasional brick fragments. Extends beyond south-west edge of trench. | 0.38m + |
| 3013 | Structure | Brick wall with wooden planks, brick dimensions 8 3/4 | 0.31m + |

inch x 4 ½ inch x 2 ¾ inch. Truncated by pipe cut 3011. No cut visible. Only partially exposed, not excavated. 3014 Structure 19th century brick surface. Roughly square, oriented east-0.06-0.12m west. One course only. Truncated on north extent by pit 3023. Possible slipway. Not excavated. Mid brown rubble and ash laver, loose. Frequent with 3015 Layer 0.12-0.18m brick and tile fragments. Extends beyond north-west edge of trench. 3016 Layer Black cinder layer, moderately compact. Extends beyond 0.18-0.24m north extent of trench. 3017 Light brown sand, loose. Frequent CBM fragments, iron Layer 0.20-0.58m coal and ash. Same as 3047. 3018 Greyish-black sandy clay. Frequent brick rubble and ash. Layer 0.24-0.50m Occasional angular and sub-angular stones. Extends over majority of trench. Same as 3003. 3019 White grey mixed layer with a lot of mortar and brick. In 0.28-0.36m Layer southwest section only. Timber edging of brick surface 3014. 19th century. 3020 Timber 0.06-0.12m 3021 Fill Mid brown silty sand, compact. Occasional coal 0.28-0.62m fragments, CBM and small rounded stones. Primary fill of 3023. 3022 Fill Black coal dust, moderately compact. Occasional small 0.05-0.28m rubble fragments. Sharp BFS, steep sloping sides, sharp BTB, flat base. 3023 Cut 0.05-0.62m East and west sides visible only. Filled by 3021 and 3022. 3024 Fill Mid brown silty sand, moderately compact. Frequent to 0.18-1.27m occasional brick, tile, pottery, rounded stones and coal fragments. Fill of 3025. 3025 Cut Sharp BFS, steep sloping sides, Sharp BTB, flattish base. 0.18-1.27m East and west walls only visible. Filled by 3024. 3026 Layer Light mid-brown sand, moderately compact. Frequent 0.62-0.98m CBM fragments, small to medium, and small coal and pot sherds, rounded stones and glass shards. 3027 Brown sand, compact. Frequent small to medium sized 0.67-0.83m Layer iron and brick fragments. 3028 Light mid-brown sand, moderately compact. Frequent 0.75-0.99m Layer CBM fragments, small to medium, and small coal and pot sherds, rounded stones and glass shards. 3029 Layer Light grey clay silt, moderately compact. Frequent ash. 0.81-1.11m Occasional brick and tile rubble and small rounded

| | | stones. | |
|------|------------|--|------------|
| 3030 | Layer | Light brown sand, loose. Frequent CBM fragments, rounded stones, and pot sherds. Occasional glass shards. | 0.77-1.41m |
| 3031 | Layer | Blackish-brown sandy silt, moderately compact. Frequent coal dust. Occasional burnt bone, brick and tile fragments. | 1.29-1.50m |
| 3032 | Layer | Mid brown silty sand, moderately compact. Frequent small coal and charcoal pieces. Occasional small brick fragments. | 1.37-1.59m |
| 3033 | Layer | Grey silty sand, compact. Occasional small coal and charcoal fragments. | 1.59-1.64m |
| 3034 | Layer | Mid brown silty sand, compact. Occasional small coal pieces, charcoal and clay pipe fragments. | 1.43-1.83m |
| 3035 | Layer | Mid brown sandy silt, moderately compact. Occasional charcoal flecks. Very wet due to water table. Recorded through augur only. | 1.83-2.33m |
| 3036 | Layer | Pale greyish-brown silty sand, moderately compact. Occasional fine charcoal flecks. Saturated due to water table. Recorded through augur only. Natural. | 2.55m+ |
| 3037 | Layer | Dark blackish-brown sand, loose. Frequent coal and brick inclusions. | 0.2-0.42m |
| 3038 | Fill | Mid brown sandy clay, loose. Frequent fragments of brick and cast iron drain grill. 19 th century. Fill of 3039. | 0.42-0.79m |
| 3039 | Robber cut | Cut to remove 19 th century drain. Irregular in shape. Filled by 3038. | 0.42-0.79m |
| 3040 | Drain | Brick drain, 3 inch bricks, likely 19 th century. Partially covered by roof tiles. Oriented east-west across the trench. Partially excavated. | 0.59m + |
| 3041 | Fill | Mix of brownish-grey clay silt and light brownish-grey ash, moderately compact. Top fill of 3040. | 0.59-0.61m |
| 3042 | Fill | Black organic silt. Fill of 3040. | 0.61-0.64m |
| 3043 | Fill | Yellowish orange decomposed sandstone. Fill of 3040. | 0.64-0.65m |
| 3044 | Fill | Greyish brown mortar and silt. Bottom fill of 3040. | 0.65-0.66m |
| 3045 | Structure | Brick step or platform. 3-inch bricks. 19 th century. Extends beyond southwest edge of trench. | 0.46-0.65m |
| 3046 | Layer | Mid-brown sandy clay, moderately compact. Frequent brick rubble. Levelling layer for tarmac. | 0.08-0.19m |
| 3047 | Layer | Light brown sand, loose. Frequent brick fragments, coal and iron. Has an ash lens running through it. Same as | 0.20-0.58m |

3017. 3048 Fill Mid brown silty sand, moderately compact. Frequent 0.40-0.60m brick and stone fragments, and coal. Fill of 3049. 3049 East side visible only, sharp BFS, steep sided. Filled by 0.40-0.60m Cut 3048 and ceramic drain pipe. 3050 Layer Light greyish-brown sand, moderately compact. Frequent 0.38-0.58m CBM fragments. Occasional small coal fragments. Grey sand, moderately compact. Occasional CBM 3051 0.58-0.85m Layer rubble, and small coal and charcoal fragments. 3052 Layer Yellowish-brown degraded sandstone, moderately 0.72-0.96m compact. Occasional brick rubble. Cobble surface. Small to large rounded cobbles. Set within $3056.\ 19^{th}$ century. Possibly truncated on east 3053 Structure 0.38-0.48m extent but not clear. Bordered by 3054. Brick edging of cobbled surface. 3-inch bricks. 19th 3054 Structure 0.38-0.50m century. Not excavated. 3055 Black sand and coal dust layer, compact. 0.40 - 0.62Layer 3056 Reddish-orange sandy clay, compact. Base layer into 0.7-0.82m Layer which cobbled surface 3053 is set. 3057 N/a 3058 Unstratified finds 3059 N/a 3060 N/a Brick dust and mortar layer, compact. Butts 3045. 3061 Laver 0.42-0.55 3062 Greyish-brown silty sand, loose. Layer Occasional brick 0.52 - 1.20rubble, rounded stones, coal and pot inclusions. Orange-brown sand, loose. Frequent brick fragments, 3063 0.94-1.22 Layer coal, pot, and tile inclusions. 3064 Greyish-black mortar and brick dust layer, compact. 0.84-0.94 Layer Frequent coal and charcoal fragments. Small to medium sized rounded cobbles, compact. Likely 3065 Layer 0.31-0.41m cobble surface. Similar to 3053. Truncated by 3023 and 3025.

Appendix 2 Technical information

The archive

The archive consists of:

| 33 | Context records AS1 |
|-----|----------------------------------|
| 9 | Fieldwork progress records AS2 |
| 2 | Photographic records AS3 |
| 141 | Digital photographs |
| 1 | Drawing number catalogues AS4 |
| 1 | Sample records AS17 |
| 2 | Levels record sheets AS19 |
| 33 | Abbreviated context records AS40 |
| 3 | Trench record sheets AS41 |
| 13 | Scale drawings |
| 3 | Box of finds |

The project archive is intended to be placed at:

Worcestershire County Museum

Hartlebury Castle

Hartlebury

Near Kidderminster

Worcestershire DY11 7XZ

Tel Hartlebury (01299) 250416

Summary of data for Worcestershire HER

| Context | Material | Туре | Total | Weight (g) |
|---------|------------|-----------------------|-------|------------|
| 1003 | Crucible | Copper alloy smelting | 1 | 1770 |
| 1003 | Glass | Bottle | 1 | 312 |
| 1008 | Sandstone | Grindstone | 1 | 29000 |
| 1008 | Crucible | Copper alloy smelting | 1 | 2420 |
| 1021 | Bone | Animal | 4 | 192 |
| 1021 | Brick | Kiln? | 1 | 385 |
| 1021 | Claypipe | Stem | 1 | 2 |
| 1021 | Kiln | Furniture | 2 | 6 |
| 1021 | Kiln | Sagger | 1 | 125 |
| 1021 | Kiln | Furniture | 3 | 15 |
| 1021 | Pottery | Biscuit fired | 18 | 251 |
| 1021 | Pottery | Post-medieval | 135 | 905 |
| 1022 | Bone | Animal | 2 | 23 |
| 1022 | Brick | Post-medieval | 2 | 836 |
| 1022 | Glass | Bottle | 1 | 28 |
| 1022 | Kiln | Sagger | 5 | 667 |
| 1022 | Kiln brick | Brick | 1 | 765 |
| 1022 | Pottery | Biscuit fired | 7 | 173 |
| 1022 | Pottery | Post-medieval | 24 | 269 |
| 1022 | Roof | Tile | 3 | 1460 |
| 1023 | Kiln | Furniture | 1 | 12 |
| 1023 | Pottery | Post-medieval | 4 | 54 |
| 1024 | Brick | Modern | 1 | 4020 |
| 1025 | Brick | Post-medieval | 1 | 3470 |
| 1030 | Brick | Post-medieval | 1 | 2310 |
| 1035 | Pottery | Post-medieval | 1 | 0.5 |
| 3030 | Claypipe | Stem | 2 | 10 |
| 3030 | Coal | Fuel | 1 | 3 |
| 3030 | Glass | Bottle | 1 | 27 |
| 3030 | Pottery | Biscuit | 1 | 2 |
| 3030 | Pottery | Post-medieval | 12 | 104 |
| 3030 | Tile | Roof | 1 | 28 |
| 3038 | Claypipe | Stem | 1 | 5 |
| 3038 | Iron | Nails | 7 | 169 |
| 3038 | Pottery | Post-medieval | 3 | 104 |
| 3038 | Slate | Roofing | 1 | 11 |
| 3058 | Bone | Animal | 1 | 278 |
| 3058 | Glass | Bottle | 1 | 35 |
| 3058 | Kiln | Brick | 1 | 463 |
| 3058 | Pottery | Post-medieval | 9 | 221 |

Table 1: Quantification of the assemblage

| Context | Fabric name | Fabric number | Total | Weight (g) |
|---------|--------------------------------|---------------|-------|------------|
| 1021 | Post-medieval red sandy ware | 78 | 4 | 94 |
| 1021 | Creamware | 84 | 92 | 720 |
| 1021 | Creamware (biscuit fired only) | (84) | 18 | 251 |
| 1021 | Porcelain | 83 | 39 | 91 |
| 1022 | Post-medieval red sandy ware | 78 | 1 | 5 |
| 1022 | Creamware | 84 | 21 | 228 |
| 1022 | Creamware (biscuit fired only) | (84) | 9 | 209 |
| 1023 | Post-medieval red sandy ware | 78 | 2 | 32 |
| 1023 | Post-medieval buff wares | 91 | 2 | 22 |
| 1035 | Creamware (biscuit fired only) | (84) | 1 | 0.5 |
| 3030 | Post-medieval red sandy ware | 78 | 4 | 36 |
| 3030 | Creamware | 84 | 5 | 22 |
| 3030 | Creamware (biscuit fired only) | (84) | 1 | 2 |
| 3030 | Post-medieval buff wares | 91 | 3 | 46 |
| 3038 | Post-medieval red sandy ware | 78 | 3 | 104 |
| 3058 | Post-medieval red sandy ware | 78 | 7 | 194 |
| 3058 | Creamware | 84 | 1 | 18 |
| 3058 | Post-medieval buff wares | 91 | 1 | 9 |

Table 2: Quantification of the pottery by fabric

| Date range | Material | Total | Weight (g) | Specialist report? | Important research assemblage? |
|-----------------|----------------|-------|------------|--------------------|--------------------------------|
| Undated | Bone | 7 | 493 | N | N |
| Undated | Coal | 1 | 3 | N | N |
| Undated | Iron | 7 | 169 | N | N |
| (?)1600-1650 | Brick | 1 | 2310 | Y | N |
| 13-18thC | Roof tile | 1 | 28 | N | N |
| 16-18thC | Roof tile | 3 | 1460 | N | N |
| (?)17-18thC | Pottery | 3 | 104 | N | N |
| 17-18thC | Claypipe stems | 4 | 17 | N | N |
| 17-18thC | Pottery | 4 | 36 | Y | N |
| 1760-90 | Pottery | 117 | 983 | Y | Y |
| 1800-1950 | Crucible | 2 | 4190 | N | N |
| 18th (Pre 1784) | Brick | 1 | 3470 | Y | N |
| 18thC | Glass | 1 | 35 | N | N |
| 18thC | Pottery | 21 | 409 | Y | Y |
| 18thC | Kiln brick | 4 | 1943 | Y | Y |
| 19-E20thC | Roof slate | 1 | 11 | N | N |
| 19thC | Bottle glass | 2 | 339 | N | N |
| E-L18thC | Brick | 1 | 506 | N | N |
| L18thC | Pottery | 50 | 300 | Y | Y |
| (?)L18thC | Kiln material | 9 | 810 | Y | Y |
| (?)L18thC | Kiln furniture | 3 | 15 | Y | Y |
| (?)L18thC | Pottery | 19 | 251.5 | Y | Y |
| M18-M19thC | Glass | 1 | 28 | N | N |
| M19-E20th | Brick | 1 | 4020 | N | N |

Table 3 Quantification of the assemblage by period