Building recording at Webster/Hemmings Brickworks, Paragon Park, Foleshill Road, Coventry, Warwickshire







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Building recording at Webster/Hemmings Brickworks, Paragon Park, Foleshill Road, Coventry, Warwickshire

Tim Cornah

Summary

Building recording was required to meet a planning condition relating to the redevelopment of Webster's/Hemming's Brickworks, at Paragon Park, Foleshill Road, Coventry.

The planning condition specified that the buildings should be recorded to English Heritage specified standards. This required photographing the exterior and interior of the buildings, annotating existing survey drawings and creating phase plans. This produced an archive of the brick works before any changes were made to the buildings.

An element of historical research and synthesis was also a condition planning approval. The studied records relating to Webster/Hemmings Brickworks consisted of digitised historic mapping, aerial photographs and other online sources.

Analysis of the buildings was based upon the recorded fabric and documentary research. The development of the buildings were reconstructed and illustrated on phased ground plans and elevations. These have been reproduced at the end of the report along with relevant photographs.

Whilst a brickworks is likely to have been present on the site from at least 1870 and developed by 1886, it was not until Webster joined with Wilkins in around 1888 that some of the extant buildings were built. One of these took the form of a Hoffman kiln, a type of structure that first developed in the 1850s. This structure was likely to have been that built by Bradley and Craven of Wakefield and was one of three kilns on site in 1896. A further extant brick tower is likely to have marked the position of one of the other kilns.

Four further structures were built after Webster alone took over the brickworks in 1896, as partially dated by their bricks. At least one of these was for the processing of raw clay, as seen by extant elements of machinery. This interpretation was further supported by the map evidence showing rail links from clay extraction pits into this area of the buildings. Probably towards the end of the phase of Webster's ownership a drying kiln of at least 24 chambers was constructed.

The brickworks passed into the ownership of Hemmings in 1938, and the buildings were substantially reorganised at this time, with extra structures added. The first was a brick moulding room that linked onto the earlier drying kiln with a rail system that allowed efficient loading and unloading. The roof that covered the brick moulding room was also extended over the drying kiln, enclosing its chimneys. The trusses that made up this roof were of a distinctive and rare Belfast type, typical of First World War structures. A further warehouse structure by Stoney Stanton Road was built with this type of roof truss, and dated to after 1938.

It is likely to have been at this time that at least two of the earlier kiln structures were demolished, with only the Hoffman kiln retained. A number of further ancillary structures were added throughout Hemming's ownership, with some changes made to the earlier structures. Most notably, the Hoffman kiln was rebuilt in 1950 and likely to have been retrofitted to be heated by oil. Further structures related to late 20th century use, while the site became derelict in the 1990s.

Webster/Hemmings Brickworks, Paragon Park, Foleshill Road, Coventry, Warwickshire					

Report

1 Background

1.1 Reasons for the project

Recording of a historic building was undertaken at Webster/Hemmings Brickworks, Paragon Park, Foleshill Road, Coventry, Warwickshire (NGR SP 341 807). It was commissioned by Wardell Armstrong, on behalf of their client Persimmon Homes South Midlands Ltd, who intends to undertake residential led mixed use development of the site. A planning application will be submitted to Coventry City Council.

The building is an undesignated heritage asset within the terms used by the *National Planning Policy Framework*. The building is also registered with the Coventry City Historic Environment Record (HER ref. MCT 523, 2202, 2203).

No brief has been prepared by Coventry City Conservation and Archaeology Officer, but this project aims to conform to the generality of briefs and for which a project proposal (including detailed specification) was produced (WA 2015).

The project also conforms to the Standard and guidance for the archaeological investigation and recording of standing buildings or structures (CIfA 2014).

2 Aims

The Chartered Institute for Archaeologists defines the aims of building recording as 'a programme of work intended to establish the character, history, dating, form and archaeological development of a specified building' (ClfA 2014).

The aims and scope of the project are to complete a programme of building recording of the Webster's/Hemming's brickworks, to Level 3 as defined by English Heritage (2006).

3 Methods

3.1 Personnel

The project was undertaken by Timothy Cornah (BA (hons.), MSc), who joined Worcestershire Archaeology in 2006 and has been practicing archaeology since 2003. The project manager responsible for the quality of the project was Tom Vaughan, (BA (hons.); MA; ACIfA). Illustrations were prepared by Carolyn Hunt (BSc (hons.); PG Cert; MCIfA).

3.2 Documentary research

The context and background to the site was outlined within an Environmental Statement (Pegasus Planning 2014), and the relevant areas are briefly summarised below.

3.3 List of sources consulted

Cartographic sources

- 1st edition 1887 Ordnance Survey Map 1:10,560, Figure 2
- 1904 Ordnance Survey Map 1:10,560, Figure 3
- 1912 Ordnance Survey Map 1:10,560
- 1923 Ordnance Survey Map 1:10,560
- 1938 Ordnance Survey Map 1:10,560, Figure 4
- 1959 Ordnance Survey Map 1:63,360

Aerial photographs

• Courtaulds Artificial Silk Works and environs, Great Heath, 1951, EAW037884

- The New Meteor Motor Car Works, Webster's Brick Works Clay Pit and the surrounding residential area, Coventry, 1936 EPW050291
- Undated aerial photograph, probably 1970s (Historic Coventry Forum 2016), Plate 3

Documentary sources

Published and grey literature sources are listed in the bibliography.

3.4 Fieldwork strategy

A detailed specification has been prepared by Worcestershire Archaeology (WA 2015).

Fieldwork was undertaken between 7 and 11 December 2015.

Building recording consisted of a photographic survey of the interior and exterior of the buildings, analysis of their development, annotation of existing survey drawings and measured survey. All photographs were taken with photographic scales visible in each shot. The photographic survey was carried out with a Sony $\alpha 350$ digital SLR camera. All photographs were recorded on a proforma Photographic Record Sheet. Annotation of existing ground plans and elevations, and completion of pro-forma Building Record and Building Phase sheets, complemented the photographic record along with measured drawings completed to scale on drawing film at 1:200 scale.

The project conformed to the specification for a level 3 survey as defined by English Heritage (2006). This level of survey is described as 'an analytical record' comprising of 'an introductory description followed by a systematic account of the buildings origins, development and use' (EH 2006). This required the following elements of survey.

Survey and drawings

- Plans of all main floors and elevations.
- Measured drawings showing the form of any architectural or functional detail not more readily captured by photography.

Photography

- Overall appearance of rooms and circulation areas.
- Detailed coverage of the building's external appearance.
- Any detail, structural or decorative, relevant to the building's design, development and use, which does not show on general photographs.

3.5 Building analysis

Analysis of the building was based on the study of the photographic record, building recording forms and measured drawings. It was also informed by the documentary sources listed above. This allowed plans to be drawn up showing the structural development of the building.

The building as recorded is depicted in Plate 4 to Plate 81 and Figures 5 to 8. Ground plans and phase plans have been reproduced as Figure 9.

3.6 Statement of confidence in the methods and results

Having undertaken the project the following comments may be made with regard to the methods adopted. A degree of tree and shrub cover did not allow all of the buildings to be visible, although the fieldwork was postponed until the winter when a minimum of foliage remained. A high degree of confidence can be assigned to the general phasing and dating of the buildings recorded though some elements could not be recorded photographically.

Some areas of the buildings were also not accessed due to safety concerns as to the stability of the structures. This was the case with the tunnels of the Hoffman kiln which was close to collapse in many places.

4 Context

The following is taken from the Environment Statement (Pegasus Planning 2014 Chapter 7), unless stated otherwise.

The bedrock geology of the site is the Keresley Member (299 – 309 million years ago) consisting of argillaceous rocks and interbedded sandstone and conglomerate. Superficial deposits are not recorded within the site footprint but Holocene alluvium associated with the Springfield Brook (also called the Arnhale Brook) is mapped to the west whilst to the north and east, diamicton of the Thrussington Till Member, deposited during the Anglian Glaciation is recorded. There were clearly significant Keuper marl deposits on site as they were excavated for the brickworks from the 1870s. The site slopes gently towards Webster-Hemmings brick works at the south, finishing at a height of about *c*93 to 94m.

The area of Coventry in which the brickworks were located is suggested to have been outside of the city throughout the medieval era, being common or pastoral land. This changed with the construction of the canal in 1768 that ran around the southern and western boundaries of the site. In 1775 there was a reference to a brick kiln in Foleshill, though the location of this is unknown. It may have been to the north-west of the extant brick works where field names such as Little Brick Kiln Close and Great Brick Kiln Close were recorded.

Throughout the later 19th and 20th centuries, the area became increasingly urban, with numerous manufacturing industries established along Foleshill and Stoney Stanton roads along with associated housing. The industrial sites predominantly consisted of motor and cycle works, for which Coventry became famous.

5 The building

5.1 Historical information

The development of the site had clearly started to a significant degree by the time of the 1st edition Ordnance Survey map of 1887 (Fig 2). The location of the present brickworks is labelled and drawn with two kilns. This area is labelled as the Midland Lime and Brick Works. The map shows the site being accessed from the east off Stoney Stanton Road with further lime kilns in this area close to the canal. To the west of the kilns was an area that appears to have been for extraction. This is confirmed by the fact that Keuper Marl is known to have been extracted for brick making from 1870 (WIAS 1999). Two further kilns are shown on the map to the north-west of extant brickworks, though they appear to have been on a different site at this time.

By the time of the 1904 OS map (Fig 3), the site had undergone a significant transformation, with none of the buildings shown in 1887 clearly remaining. Firstly, the extraction areas shown to the north and west of the extant buildings had increased significantly and the site included the area with the former brick kilns to the north-west. The brickworks were also served by a railway, marked as a mineral railway, that ran from an ordnance works in the south-east to the Nuneaton to Coventry railway in the north-west along the route of the canal. The extent to which this railway was used by the brickworks is indicated by its connection to the Coventry to Nuneaton railway being labelled as Websters sidings. Two further small tracks are shown serving the western side of the brickworks, having started within the extraction areas.

Whilst the buildings shown on the 1904 OS map show some outward similarity to the extant brickworks, there are only two elements that are clearly identifiable. These structures, as discussed in detail below, are Structure 1 and Structure 18. Structure 1 is a Hoffman kiln that is visible on the eastern side of the structures illustrated in 1904, aligned north to south. One problem with this is that Structure 2, its associated chimney, is not illustrated on this or subsequent maps. Structure 18 appears on the map to be associated with a structure aligned east to west that is likely to have

been a further kiln. It is possible that a further north–south aligned structure running parallel to Structure 1 on its western side was a further kiln, potentially making three in total. The layout of the remainder of the buildings lacks detail so this is unclear.

The increase in productivity shown on these maps is likely to be attributable to changing ownership. B Wilkins and Son probably owned the company at the point of first extraction known in 1870 and were joined by Webster in about 1888 (Historic Coventry Forum 2016). Previous owners included J Priestly, J Snow and then Snow and Wilkins (WIAS1999). The company was known as Wilkins and Webster until Webster took full ownership in 1896. At this time there were 3 large down draft ovens and 3 more being constructed. One kiln was a Hoffman kiln erected by Bradley and Craven of Wakefield, capable of firing 100,000 bricks per week (Historic Coventry Forum 2016). The site was photographed at this time (Plate 1).

Webster carried on in ownership until 1938 when Hemming's took over. The map evidence shows that the buildings themselves remained largely unchanged in outline at least until the 1938 OS map (Fig 4). The evidence outlined below suggests there was a major rebuild after Hemmings took over, most notably the Hoffman kiln itself in 1950. Two photographs show the site in the latter half of the 20th century (Plate 2 and Plate 3). The 1959 and later OS maps show insufficient detail to highlight phasing. The process of brick production at the site was briefly outlined within the late 20th century, shortly before its closure (WIAS 1999).

5.2 Building development

5.2.1 Phase 1: Wilkins and Webster 1887-1896

Only one structure can be clearly dated to this phase, chimney Structure 18 (Plate 6). This is due to it having been constructed with bricks that were stamped with the initials "W &W", presumably standing for Wilkins and Webster. The function of this structure cannot be clearly stated due to a lack of contemporary buildings, though it is possible it was part of a removed kiln similar to the kiln discussed below, Structures 1 and 2.

Two of the dominant structures likely to date to this phase were a Hoffman Kiln Structure 1 and an associated chimney Structure 2. Structure 1 was 53m in length and 15.80 in width and comprised of two tunnels each 5m in width and running parallel. These were accessed by 9 doors on each side with 7 small vents doors next to these doors (Plate 7 and Figure 5). The remaining structure was open at each end (Plate 8 to Plate 11) but it is likely that these ends were originally blocked as there is some evidence of the ends having been rebuilt. Openings to allow hot air between the two tunnels existed only at the ends, further indicating that the ends were formerly blocked.

Whilst the technological aspect of Hoffman kilns has been covered in depth elsewhere and will not be fully repeated here (Low Tech Magazine 2016 and Searle 1914), a degree of explanation is useful in highlighting their form and date.

These kilns were first invented by Frederick Hoffman in 1858 and started initially as a ring design with a continuous tunnel and chimney in the centre to allow for the draw of air. The circular design was quickly adapted into a rectangular shape though many kept a semi-circular element of the tunnel at each end. They were designed to be used continually, replacing periodic kilns which required slow firing and cooling periods as well as being inefficient in terms of heat loss (Low Tech Magazine 2016).

The basic principle of a Hoffman Kiln was that up to three areas could be cut off separately by either metal dampers, raised or lowered from outside, or sheets of paper or fabric which were torn apart by the approaching hot air. These chambers were manipulated and moved in order to create air movement in a single direction. Fuel in the area where the firing was taking place was fed through holes in the roof by stokers. The hot air from the kiln area passed into the next chamber to pre-heat the "green" unfired bricks to a temperature of 120° centigrade. This preheating was often undertaken from a separate heat source as hot air direct from the kiln area caused scumming on the brick surfaces. After the firing had taken place, cool air was fed over the bricks and they were then taken out through the side doors and the kiln re-loaded with "green" bricks (Plate 12). This

process allowed for the slow heating and cooling of the bricks and proved to have a far greater efficiency than previous kiln types (Low Tech Magazine 2016).

Elements of the extant structure highlighted its former use. Its eastern elevation (Figure 5) showed a number of pillars around its side on top of the wall. It is possible that these formerly supported a roof as many other such kilns had this feature. Whilst it was not possible to closely inspect them, the interior of the tunnels had numerous rebuilds throughout and rarely more than several metres in length (Plate 13). These patch repairs highlight the continuous use of the kiln, as does that fact that the original arch formers for the tunnels and vent had been retained (Plate 14 to Plate 16). Very few holes in the roof were visible for the addition of fuel, suggesting that these rebuilds dated to a later phase, as discussed below. The roof of this structure was also overgrown, further reducing visibility. A late 20th century photograph (Plate 3) shows the kiln roof as if split into individual chambers. How this was laid out internally is unclear.

Whilst the earliest Hoffman kilns had a chimney at their centre, later such kilns had a chimney set to one side as is the case with Structure 2 here (Plate 17). Air was drawn through into the chimney from a system of underground vents below the kiln (Plate 18). This chimney stood to a height of about 52m and was 3.70m square at its base. It formerly had an access door at its base and had moulded string course above (Plate 19). The metal strapping was a later addition.

5.2.2 Phase 2 Websters 1896-1938

The earliest elements of this phase were Structures 9, 11, 12. The bricks of these structures were stamped with "Websters of Coventry".

Structure 9 (Plate 20 and Plate 21) was constructed next to Structure 18, possibly replacing an earlier kiln. This consisted of two walls running north to south, spanned by six softwood timber trusses that had raking collars and an iron tie rod instead of a king post. Whilst these may have been original, they are more likely to be replacements dating to a later phase when the building was converted into a warehouse. They maybe contemporary with the gable end walls which are later insertions. The original use of this structure is suggested by two areas of heat affected brickwork internally at the northern ends (Plate 22 and Plate 23). These extended to a height of 1.90m and a length of 9m. It is likely that these represent a kiln, though their general form was unclear.

Structures 11 and 12 (Plate 24, Plate 25 and Plate 28) were the same structure linked at first floor level by what is likely to have been a gable end. This had arch headed windows, though two were later blocked and the third had been converted into a door. The configuration of this building at both ground and first floor level is unclear due to it having been truncated on its southern end and eastern side. It does appear to have had a first floor as a platform runs along the interior wall at an appropriate level for joists though this was largely obscured by vegetation. Its function remained unclear.

Structure 13 had "Websters brick work co Coventry" brick stamps so is also attributed to this phase. This consisted of a single wall that made up the northern side of a building (Plate 26 and Plate 27), as shown by the contemporary roof trusses which joined onto the earlier Structure 12 (Plate 29). These were softwood queen post trusses made of imported timber, as shown by the marks on their face that are commonly thought to have been made at Baltic ports (Plate 30). Only one window was seen within the remaining wall (Plate 27). The structure had a first floor, as shown by a ledge for joists.

The function of this building was highlighted by a series of fly wheels, all attached to one axle over about a third of the width of the room (Plate 31) as well as the later use of this area. The housing supports for the axle was built into Structure 13 and cut into Structure 12 on the other side of the room, confirming the axle formerly ran across the whole room and the relationship of these structures. How this axle was driven was not clear but it is possible that it was internally driven from within Structure 11/12.

The mounds of clay in this room (Plate 32) and the storage of barium carbonate in the Phase 3 Structure 16, suggests that this room was used for the mixing of clay. Barium carbonate was an additive added to raw clay as a dissolvent of salts that cause efflorescence in the finished brick. This area where additives were mixed in was described in a late 20th century visit as the "pug mill" (WIAS 1999). The 1912 to 1938 OS maps show a railway line running to roughly this area of the buildings from probable extraction pits to the north and west.

Structure 3 was a rectangular building with a flat concrete steel rod reinforced roof, split into 24 chambers (Plate 33 to Plate 35; Fig 6). This structure finished at the northern wall as it existed (Plate 36), but originally continued further south, as was shown by the brick ledges on this wall (Plate 37). These were seen within each individual chamber and are likely to have been used for stacking bricks.

The function of this structure was a drying kiln that appeared to use many of the principles of the Hoffman kiln. Below ground venting structures allowed the movement of air under each chamber, with gaps between the concrete floor slabs. Presumably air flow could be manipulated by chamber appropriate to each phase of heating and cooling, though how this was achieved was unclear. Each bay had wooden doors attached (Plate 38) and would have been loaded and unloaded from either end. No contemporary buildings were seen adjoining this structure so it is likely to have been free standing. The original heat source for this kiln also appears to have been removed. These structures did have some lightweight wooden venting chimneys protruding through the later roof (Plate 39) and originally extended higher (Plate 2). Within the late 20th century, this drying kiln was fuelled by paraffin (WIAS 1999).

Structure 10 was also added within this phase (Plate 40, Plate 26, Plate 41 and Plate 42), creating a room to its east (Plate 43 to Plate 47) and extending as far as the fly wheels. The wall next to the fly wheel originally had gaps to allow the passage of belts which drove machinery within the extra room, as shown by machine bases in this area (Plate 48). At least one of these machines was likely to have been used for tool sharpening, as some grinding stones remained in the room. This room also had a first floor which also contained machinery based upon axles, as seen by their housing visible in the walls (Plate 26). It is likely that was during this phase that the door through into the first floor of Structure 11/12 was added into the former window, suggesting that this structure remained extant at this time.

Structure 14 was a rebuild of the probable gable end of Structure 13 (Plate 44 and Plate 45). It could belong to this or the preceding phase.

5.2.3 Phase 3 Webster Hemming 1938-1990s

Structures 4, 5 and 8 (Plate 49 to Plate 51) were contemporary in construction, as demonstrated by the wide, shallow arched roof trusses which spanned them. These lightweight roof trusses are known as Belfast trusses, first used in the shipyards of Belfast from the 1860s. Whilst most such trusses date to between the 1860s and the First World War, they continued in construction throughout the 1930s, also being recommended for some military buildings within the Second World War (Gould 2001). They are suggested to date to within the early years of Hemmings take over of the site due to the company name "Hemmings and Sons Ltd" painted onto the gable of Structure 8 (Plate 53 and Plate 2) and the map evidence for Structure 22, as discussed below.

Structures 4 and 5 enclosed Structure 3, the Phase 2 drying kiln, allowing it to be loaded and unloaded within a covered area. Probably at this time, a rail track was added in front of the Structure 3 doors on both ends. On the southern side, these tracks ran through into the later Structure 7, whilst at the northern end they ran into Structure 8 (Plate 54).

Structure 8 (Plate 55) consisted of a broadly rectangular room without a first floor, abutting Structures 10 and 11. It appears to have a had a wide entrance in its south-east corner with additional entrances being cut through Structures 10 and 11 at ground floor level (Plate 56). It was lit by a large metal framed window in its eastern side (Plate 57). A number of machines were shown remaining within the sunken area of this room after its abandonment in 2012 (Jones 2016)

that are likely to have been for the pressing of clay into moulds. An extruder previously existed close to the new opening through Structure 10. These machines no longer remained at the time of recording. A number of the moulds did remain in this room (Plate 58), one showing a Hemmings stamp.

Structures 15, 16 and 17, whilst not closely dateable, are likely to be broadly contemporary to Structures 4, 5 and 8. Structure 15 was a rebuild of the probable gable end of Structure 13 (Plate 59) and had a wide entrance that probably allowed the passage of clay loads. Structure 16 was added later and stored barium carbonate, as previously discussed (Plate 60 and Plate 61). An additional door was cut through Structure 13. Structure 17 was further added (Plate 62) and built originally with a first floor as shown by holes for joists in the brickwork. It contained a wide door on its eastern side, allowing the access of bulk materials. Two wooden sheds were later built in this area (Plate 63).

Structure 6 comprised three small single storey structures. One contained a fan which is likely to have fed into the adjacent drying kiln, Structure 3 (Plate 64), whilst a further structure was a storeroom (Plate 65). A small lean-to structure contained a brick structure with a chimney attached that is likely to have been a heat source for Structure 3 (Plate 66).

These elements of this phase are significant in that together they were relatively complete and demonstrated the full process of brick production. The 1904, 1912, 1923 and 1938 OS maps show extraction pits to the north and west of these buildings, with a train track running into the western side of these structures. The raw clay is likely to have been admitted through Structure 17, mixed in Structure 13 and then moulded in Structure 8. They would then have been put back onto rail cart and loaded into Structure 3, dried and then moved to Structure 1 to be fired. This process was clearly described during the site visit in the late 20 th century (WIAS 1999). A number of rail sidings are shown to the south-east of the buildings, so it is likely that the finished bricks were taken to this point for removal from site.

This is confirmed by Structure 22 which was close to Foley Road which appears to have been a warehouse (Plate 67 to Plate 69). It was rectangular in plan and built with the same Belfast trusses as Structures 4, 5 and 8 so is likely to be relatively early in this phase. The structure was accessed primarily by a wide doorway on its northern side.

Whilst the Belfast trusses within Structures 4, 5 and 8 have previously suggested to date to before the 1920s (WIAS 1999), these structures are not easy to identify individually on the historic maps. Structure 22 is clearly not present on the 1938 OS map (Fig 4). A small building is shown in about the location of this structure, but it appears to be too small and the wrong shape so this is likely to date from after Hemmings took over in 1938. This structure was adapted later in the 20th century to incorporate a workshop on its western side, and further adapted in the late 20th century to include the offices of a garage (Plate 70).

Structure 23, located in the vicinity of the former rail heads, was probably added in the middle of the 20th century (Plate 71). The plaque on the door (Plate 72) shows that it was an office building. This structure was not accessed.

To the west of Structure 5, Structure 20 was added, probably within the middle of the 20th century (Plate 73 to Plate 75). This was partially a workshop and is likely to have included an office element in the south-west corner. Structure 19 was also added to the south of chimney Structure 18 (Plate 76) and was a toilet and washing block. This building was not accessed.

One significant further change is likely to have been in the 1950s and is represented by the addition of Structure 21. This was a simple steel framed building covered with corrugated steel, on the northern side of Structure 3 (Plate 77) that contained a fan (Plate 78 and Plate 79) with a substantial pipe that formerly led into the roof of Structure 1. To the north of Structure 21 were a series of large metal tanks, suitable for holding oil or gas. Many Hoffman kilns were retrofitted to burn oil or gas and it is known that this kiln was at least partially rebuilt in the 1950s. It is likely that was the point from which many of the short length internal rebuilds date and when the stoke holes

in the roof were removed. The date at which the end walls of Structure 1 were removed is unclear, but it is likely to have been within the later 20th century. By the late 20th century, Structure 1 was being heated by oil (WIAS1999).

Structure 7 appears to have been the last significant addition to the brickworks. It consisted of two steel framed structures, both covered by corrugated iron sheeting (Plate 80 and Plate 81). Within these, three individual crate sized kilns were added. These were presumably fired by either gas or oil.

6 Discussion

Whilst a brickworks is likely to have been present on the site from at least 1870 and developed by 1886, it was not from until Webster joined with Wilkins in around 1888 that some of the extant buildings were built. One of these took the form of a Hoffman kiln, a type of structure that first developed in the 1850s. This structure was likely to have been that built by Bradley and Craven of Wakefield and was one of three kilns on site in 1896. A further extant brick tower is likely to have marked the position of one of the other kilns.

Four further structures were built after Webster took over the brickworks in 1896, as partially dated by their bricks. At least one of these was for the processing of raw clay, as seen by extant elements of machinery. This interpretation was further supported by the map evidence showing rail links from the clay extraction pits into this area of the buildings. Probably towards the end of the phase of Webster's ownership, a drying kiln of at least 24 chambers was constructed.

The brickworks passed into the ownership of Hemmings in 1938, and the buildings were substantially reorganised at this time with extra structures added. The first was a brick moulding room that linked onto the earlier drying kiln with a rail system that allowed efficient loading and unloading. The roof that covered the brick moulding room was also extended over the drying kiln, enclosing its chimneys. The trusses that made up this roof were of a distinctive and rare Belfast type, typical of First World War structures. A further warehouse structure by Stoney Stanton Road was built with this type of roof truss, and dated to after 1938.

It is likely to have been at this time that at least two of the earlier kiln structures were demolished, with only the Hoffman kiln retained. A number of further ancillary structures were added throughout Hemming's ownership, with some changes being made to the earlier structures. Most notably, the Hoffman kiln was rebuilt in 1950 and likely to have been retrofitted to be heated by oil. Further structures related to late 20th century use, while the site became derelict in the 1990s.

6.1 Research frameworks

Whilst the technological aspect of industrial sites such as this are recognised as being important, the need for an increased understanding of the social aspect of the workplace is required. Building recordings such as this highlight such workplaces and, to some extent, conditions. It is also increasingly recognised that the interactions between different such sites in the landscape are important (Belford 2011) and such building recording projects can feed into this.

7 Publication summary

Worcestershire Archaeology has a professional obligation to publish the results of archaeological projects within a reasonable period of time. To this end, Worcestershire Archaeology 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.

Recording of historic buildings was undertaken at Webster/Hemmings Brickworks, Paragon Park, Foleshill Road, Coventry, Warwickshire (NGR SP 341 807).

Whilst a brickworks is likely to have been present on the site from at least 1870 and developed by 1886, it was not until Webster joined with Wilkins in around 1888 that some of the extant buildings were built. One of these took the form of a Hoffman kiln, a type of structure that first developed in

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Four further structures were built after Webster alone took over the brickworks in 1896, as partially dated by their bricks. At least one of these was for the processing of raw clay, as seen by extant elements of machinery. This interpretation was further supported by the map evidence showing rail links from clay extraction pits into this area of the buildings. Probably towards the end of the phase of Webster's ownership a drying kiln of at least 24 chambers was constructed.

The brickworks passed into the ownership of Hemmings in 1938, and the buildings were substantially reorganised at this time, with extra structures added. The first was a brick moulding room that linked onto the earlier drying kiln with a rail system that allowed efficient loading and unloading. The roof that covered the brick moulding room was also extended over the drying kiln, enclosing its chimneys. The trusses that made up this roof were of a distinctive and rare Belfast type, typical of First World War structures. A further warehouse structure by Stoney Stanton Road was built with this type of roof truss, and dated to after 1938.

It is likely to have been at this time that at least two of the earlier kiln structures were demolished, with only the Hoffman kiln retained. A number of further ancillary structures were added throughout Hemming's ownership, with some changes made to the earlier structures. Most notably, the Hoffman kiln was rebuilt in 1950 and likely to have been retrofitted to be heated by oil. Further structures related to late 20th century use, while the site became derelict in the 1990s.

8 Acknowledgements

Worcestershire Archaeology would like to thank the following for their kind assistance in the successful conclusion of this project, Nick Daffern (Wardell Armstrong), Adam Stamford (Aerial Cam) and Chris Patrick (Coventry City Conservation and Archaeology Officer).

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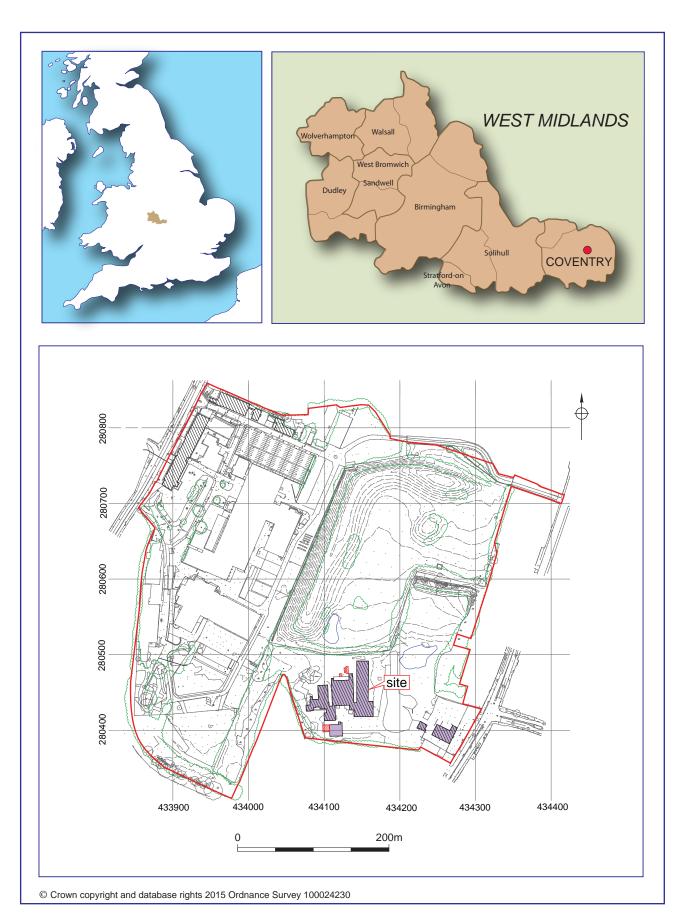
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Worcestershire Archaeology	Worcestershire County Council

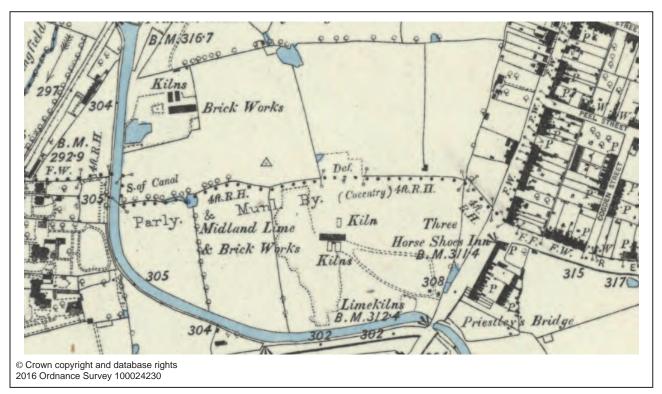
Figures			
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Webster/Hemmings Brickworks, Paragon Park, Foleshill Road, Coventry, Warwickshire



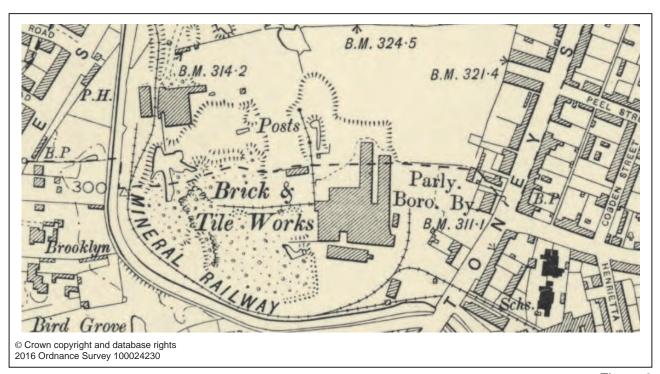
Location of the site

Figure 1



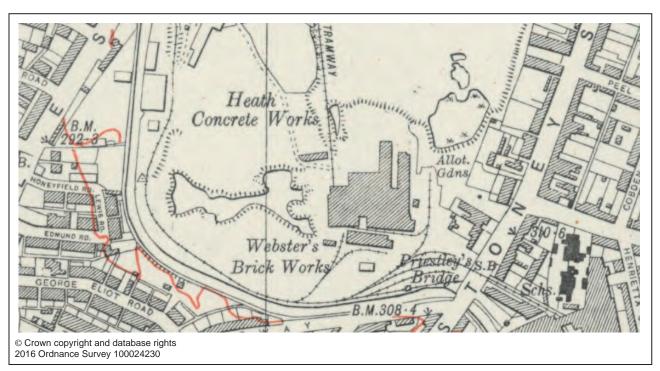
Extract of the 1887 Ordnance Survey Map

Figure 2



Extract of the 1904 Ordnance Survey Map

Figure 3



Extract of the 1938 Ordnance Survey Map

Figure 4



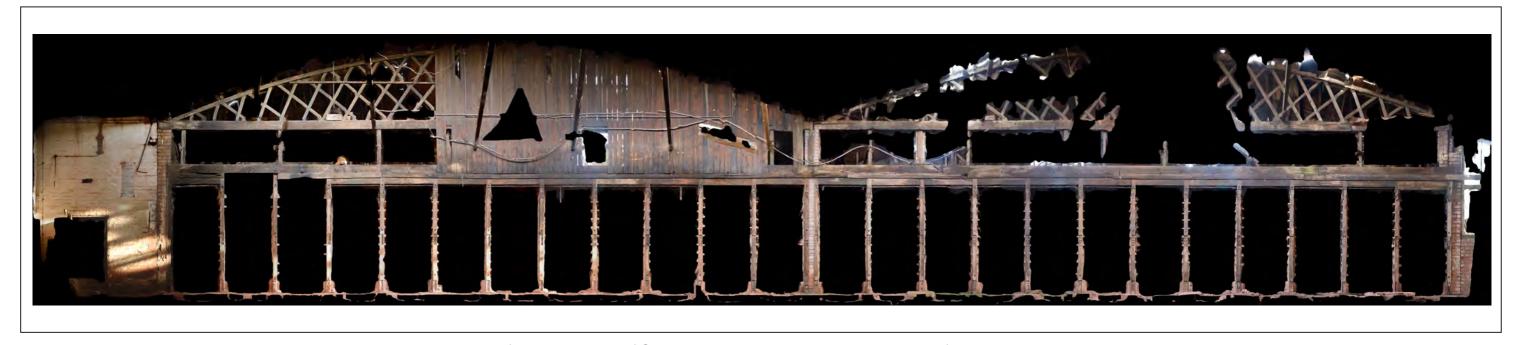
Structure 1 eastern elevation



Structure 1 western elevation

Rectified photograph of Structure 1 elevations





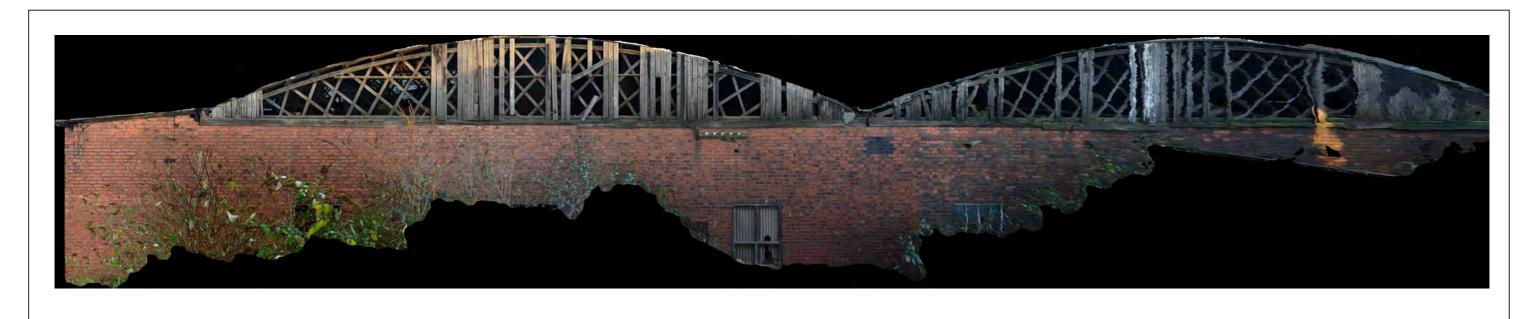
Rectified photogrpah of Structure 3 western elevation with later Belfast trusses above

Figure 6



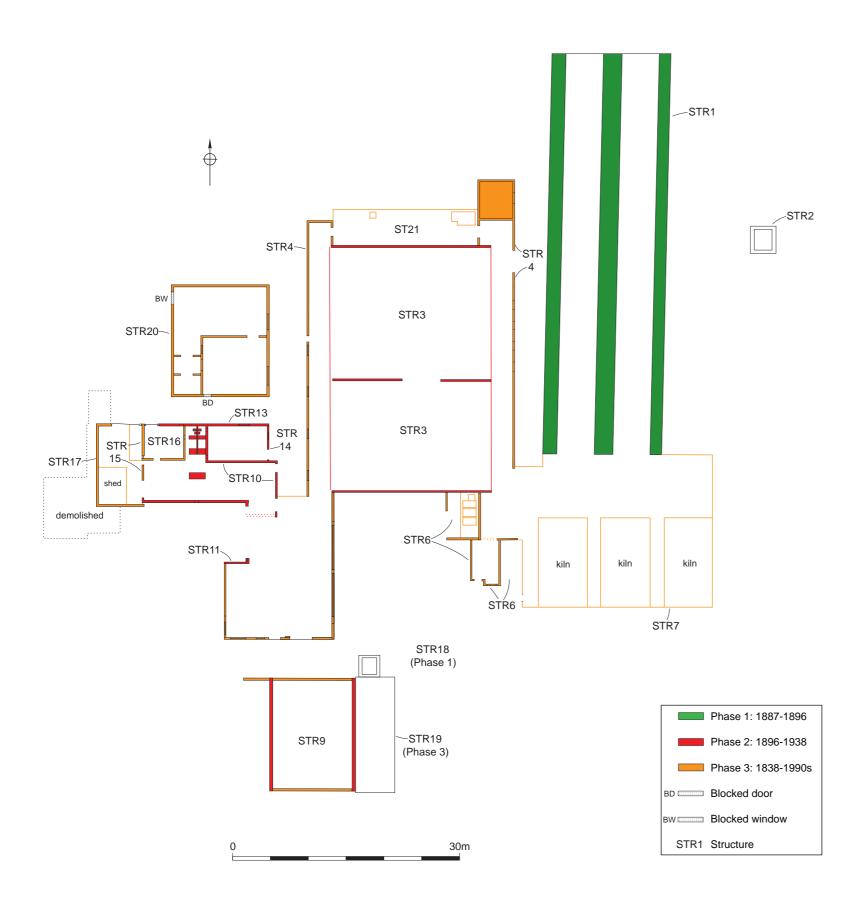
Rectified photograph of Structure 4 exterior elevation

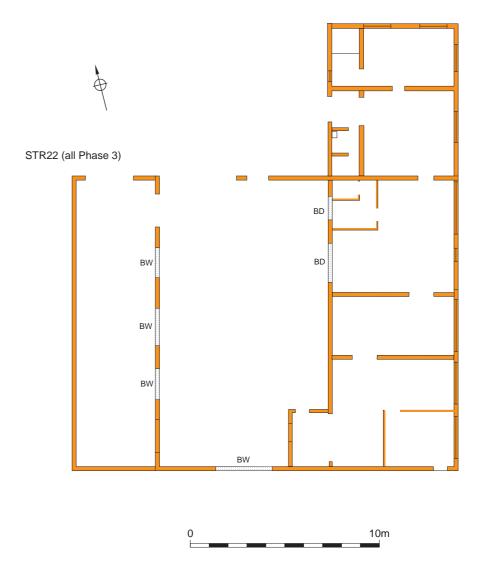
Figure 7



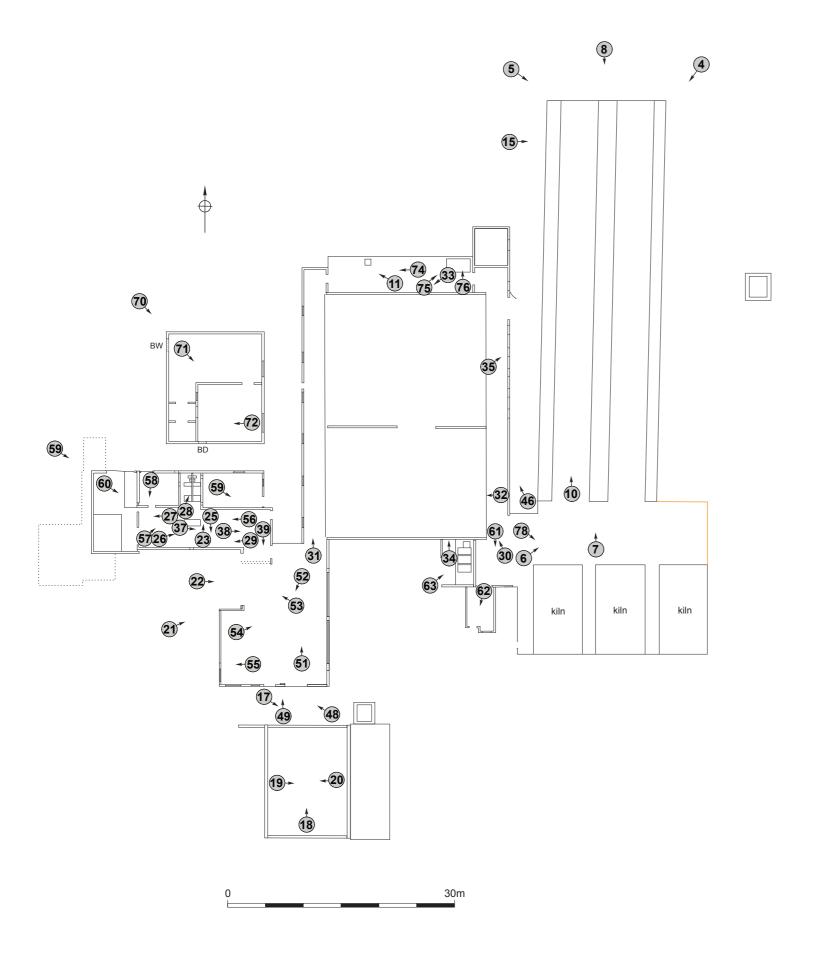
Rectified photograph of Structure 5 exterior elevation

Figure 8





Phase plans Figure 9



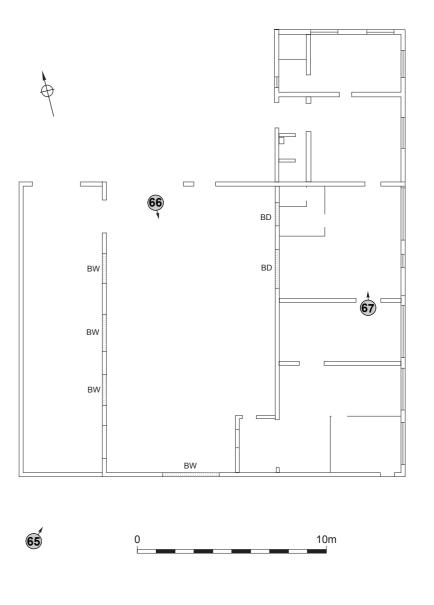


Photo locations Figure 10

Plates

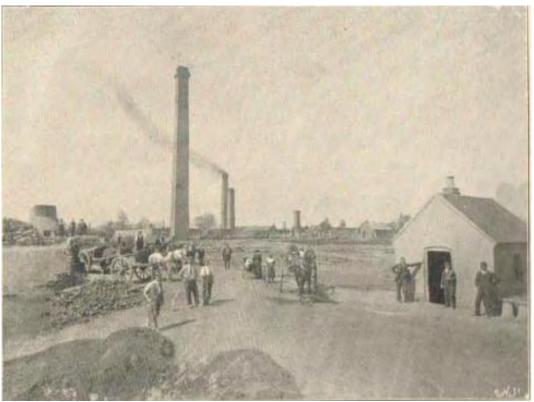


Plate 1 1896 photograph of Wilkins and Webster's Brickworks, probably looking south- west with Structure 1 shown prominently (Historic Coventry Forum 2016)

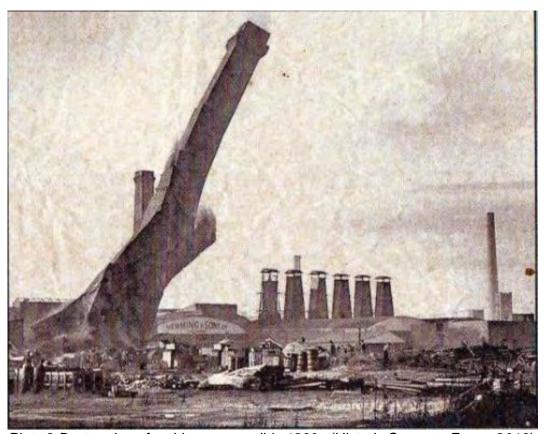


Plate 2 Destruction of a chimney, possibly 1960s (Historic Coventry Forum 2016)



Plate 3 Undated aerial photograph, probably 1970s (Historic Coventry Forum 2016)



Plate 4 General view of the brickworks, looking north-west



Plate 5 Vertical rectified photograph of the brickworks



Plate 6 Structures 18 and 9, looking south



Plate 7 Structure 1, looking south-west



Plate 8 Structure 1, looking south-east



Plate 9 Structure 1, looking north-east



Plate 10 Structure 1, looking north



Plate 11 Structure 1, looking south

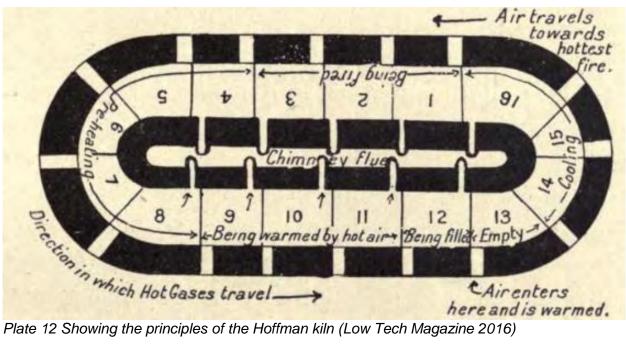


Plate 12 Showing the principles of the Hoffman kiln (Low Tech Magazine 2016)



Plate 13 Structure 1, looking north



Plate 14 Structure 1 arch former, looking north-west



Plate 15 Structure 1 arch former



Plate 16 Structure 1 arch former



Plate 17 Structure 2, looking north-west



Plate 18 Structure 1, looking east



Plate 19 Structure 2, looking north



Plate 20 Structure 9, looking north-west



Plate 21 Structure 9, looking north



Plate 22 Structure 9, looking east



Plate 23 Structure 9, looking west



Plate 24 Structure 11/12, looking north-east



Plate 25 Structure 11/12, looking east



Plate 26 Structure 13 and 10, looking north



Plate 27 Structure 13, looking north

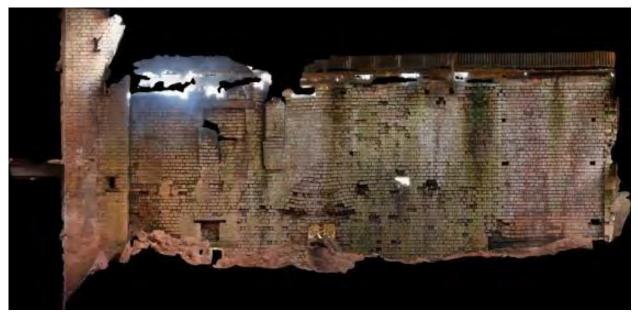


Plate 28 Structure 12, looking south



Plate 29 Structure 13, looking north-east



Plate 30 Structure 13, looking west



Plate 31 Structure 13, looking north-east



Plate 32 Structure 13, looking west

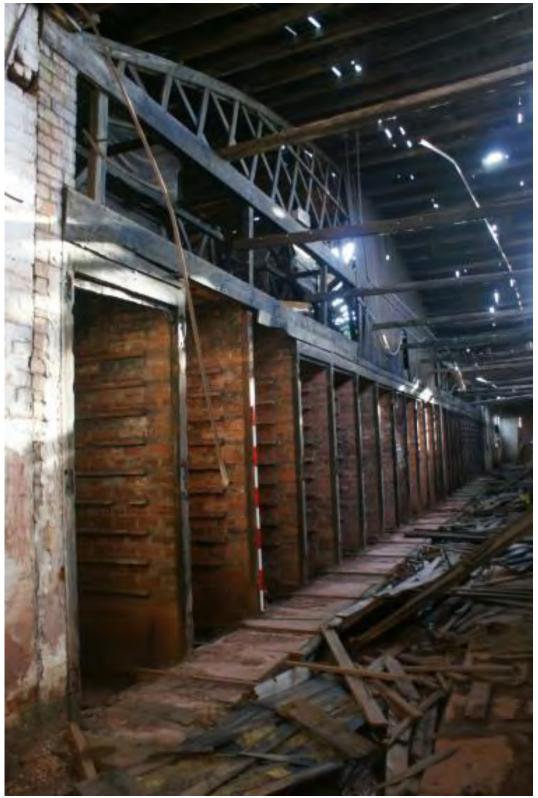


Plate 33 Structure 3, looking north-west



Plate 34 Structure 3, looking north



Plate 35 Structure 3, looking west



Plate 36 Structure 3, looking south-west



Plate 37 Structure 3, looking north



Plate 38 Structure 3, looking north-east



Plate 39 Structure 3 chimneys, looking west



Plate 40 Structure 10, looking east

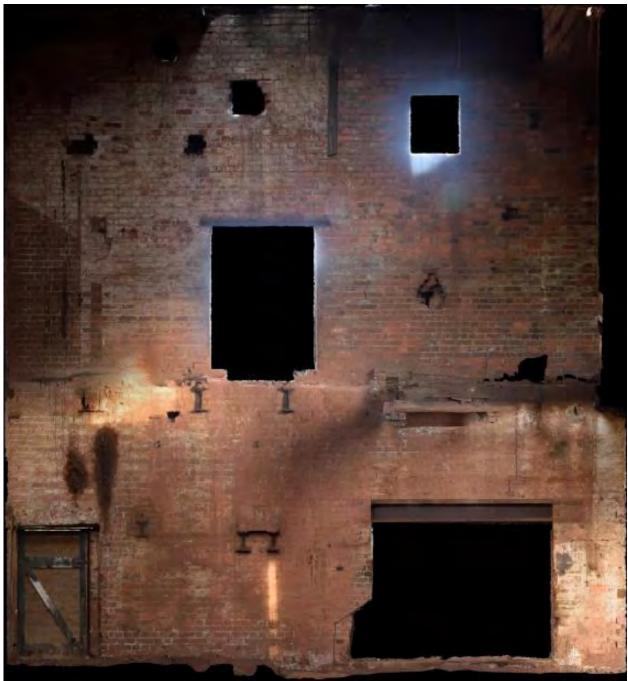


Plate 41 Structure 10, looking east



Plate 42 Structure 10, looking south

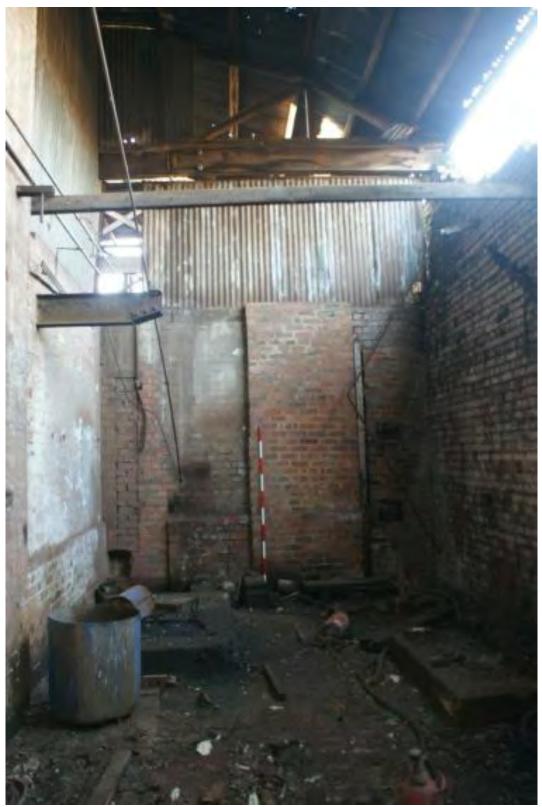


Plate 43 Structure 10, looking west



Plate 44 Structure 10 and 14, looking east

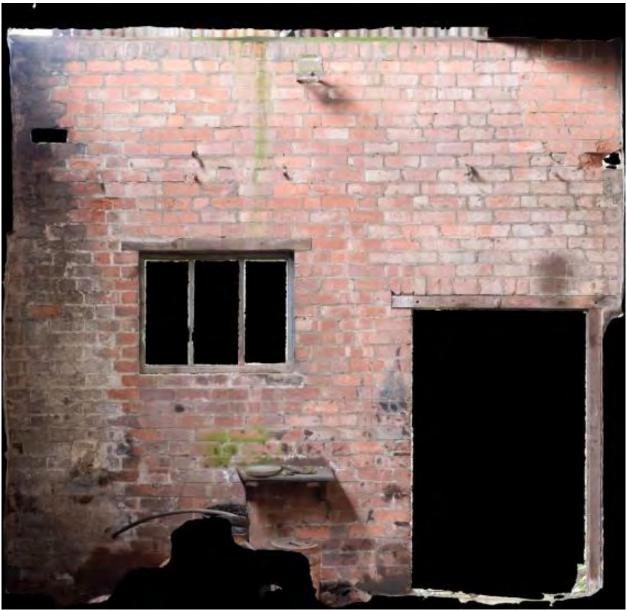


Plate 45 Structure 14, looking east

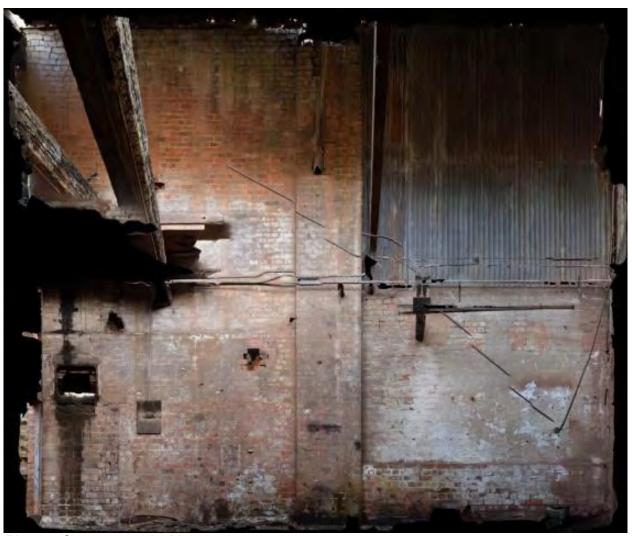


Plate 46 Structure 10, looking north



Plate 47 Structure 10, looking west



Plate 48 Structure 10, looking south



Plate 49 Structure 4, looking north-west



Plate 50 Structure 5, looking north-west



Plate 51 Structure 8, looking north-west



Plate 52 Structure 8, looking north



Plate 53 Structure 8, looking north-west



Plate 54 Structure 8, looking north



Plate 55 Structure 8, looking south-west



Plate 56 Structure 8, looking west



Plate 57 Structure 8, looking north-east



Plate 58 Structure 8, brick moulds



Plate 59 Structure 15, looking west



Plate 60 Structure 16, looking north-east



Plate 61 Structure 16, looking south



Plate 62 Structure 17, looking south-east



Plate 63 Structure 17, looking south-east



Plate 64 Structure 6, looking south-west



Plate 65 Structure 6, looking south



Plate 66 Structure 6, looking north-east



Plate 67 Structure 22, looking south



Plate 68 Structure 22, looking north-east



Plate 69 Structure 22, looking south



Plate 70 Structure 22, looking east



Plate 71 Structure 23, looking north-west



Plate 72 Structure 23, looking west



Plate 73 Structure 5, looking south-east



Plate 74 Structure 5, looking south-east



Plate 75 Structure 5, looking west



Plate 76 Structure 18, looking north-west



Plate 77 Structure 21, looking west



Plate 78 Structure 21, looking north-east



Plate 79 Structure 21, looking north



Plate 80 Structure 7, looking north-west



Plate 81 Structure 7, looking south-east

Appendix 2 Technical information

The archive

The archive consists of:

- 1 Field progress reports AS2
- 8 Photographic records AS3
- 1,391 Digital photographs
- 1 Drawing number catalogues AS4
- 3 Scale drawings
- 1 CD-Rom/DVDs
- 1 Copy of this report (bound hard copy)

The project archive is intended to be placed at:

Herbert Art Gallery and Museum

Jordan Well

Coventry

CV1 5QP

Tel. Coventry (024) 7683 2310 / 7683 2386