The Custard Factory, Phase Two, Digbeth, Birmingham

Archaeological Excavation 2000 Post-Excavation Assessment and Research Design

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1.0 Summary

An archaeological excavation at The Custard Factory, Gibb Street, Digbeth, Birmingham (centred on NGR SP 0798 8637) identified four phases of activity. The earliest, Phase 1, dated to the 13th-14th century when a number of occupation layers built up and ten postholes and one gully were cut in the eastern half of the site. Pottery recovered from the occupation layers was similar in date and fabric to an assemblage of Deritend ware recovered from excavations at the Old Crown in 1994 (Litherland *et al.* 1994). Phase 2 was characterised by the cutting of six substantial pits in the southern one-third of the site during the late 17th-mid 18th century. The pits represent quarrying for clay which was probably used for brick manufacture. This demand for building material corresponded with the expansion of Birmingham in the post-medieval period. Phase 3 is dated to the 18th century and is represented by five tanning pits, three wells and two small pits belonging to a documented tannery and associated bark mill. There may have been a partial overlap between Phases 2 and 3, with the Phase 2 clay pits still being backfilled whilst the Phase 3 tannery was in operation. The final phase of activity, Phase 4, is characterised by 19th-century artisan housing.

A small, but important, assemblage of pottery, which included Deritend ware, was complemented by a well-preserved finds and animal bone assemblage. The majority of the latter was represented by cattle horncores relating to the Phase 3 tannery.

2.0 Introduction (Figures 1 and 2)

2.1 Background to the Project

The site (centred on NGR SP 0798 8637) is set back from the Digbeth/Deritend High Street. Prior to excavation, it was used as a carpark, with a partly-tarmaced and partly-concreted surface. The site is bounded to the west by Gibb Street, to the east by Heath Mill Lane, to the south by standing buildings which form Gibb Terrace, and to the north by buildings under a railway viaduct. The ground level slopes gently from east to west.

2.2 Archaeological Background (Maps 1 and 2)

A desk-based assessment of part of the Digbeth Economic Regeneration Area and the Cheapside Industrial Area included The Custard Factory site (Litherland 1995). The assessment emphasised the importance of a medieval market in Deritend, which is thought to have been held on the High Street, close to the Old Crown Public House. The proximity of this putative market place to the Custard Factory site highlighted the potential for survival of associated medieval deposits and features on the eastern bank of the River Rea. It was thought that features relating to pottery manufacture and tanning could also have survived.

More recent documentary research on the Custard Factory Phase Two site itself – carried out by George Demidowicz prior to the present excavation - identified part of a 17th-century tannery and bark mill. Whilst excavation at the Old Crown, immediately to the east of the Custard Factory Phase Two site, found 14th-century pottery wasters (Litherland *et al.* 1994).

Excavations elsewhere in the city centre (Mould forthcoming) have identified tanneries at Edgbaston Street dating to the 13th-14th century and to the 17th-18th century. These small industrial 'units' are similar to one excavated at The Green, Northampton (Shaw 1996).

An evaluation trial-trench in 1996 identified an 18th-century pit or ditch in the northern part of the site (Palmer 1996). The subsoil was recorded at a depth of 0.7-1.2m and was overlain by 19th-century brick surfaces, demolition debris and mixed levelling deposits. Geotechnical bore-hole data highlighted the depth of made-ground across the site (DTA Consultants Limited).

The results of the evaluation and geotechnical investigation suggested the potential for survival of archaeological deposits elsewhere within the site. An excavation and subsequent watching brief was undertaken by Birmingham University Field Archaeology Unit in January and February 2000 on behalf of the client, Bennie Gray.

The excavation was carried out in accordance with the guidelines set down in Planning Policy Guidance Note 16 (Department of the Environment 1990).

2.3 Aims

The aims of the archaeological excavation were to preserve any surviving medieval and post-medieval features *by record* and to:

- contribute towards an understanding of the early development of Digbeth and Deritend.
- define the morphology of the archaeological remains, and determine their character, development and chronology.
- examine the pottery chronology.
- contribute to the understanding of domestic and industrial activity within medieval and post-medieval Birmingham, with particular reference to other sites of similar date recently investigated within the city.

2.4 Method

The overburden was removed by a JCB excavator, with a toothless bucket, under archaeological supervision. Spoil was removed from site. The exposed surface was manually cleaned and a plan of all identified features was prepared. The excavation and sampling strategy was decided following a meeting with the Planning Archaeologist and the client's representative. Excavation was undertaken over a ten-day period.

Sampling by hand excavation comprised not less than 50% of discrete features. A higher percentage of discrete features was excavated where more information was required to achieve a full understanding of the date, character and function of an individual feature or group of features. Linear features not associated with settlement were sampled to determine their form, function, date, and to determine the stratigraphic sequence.

Excavation of linear features associated with settlement comprised a minimum of 25%. All datable features were sampled for environmental analysis.

Recording was by means of pre-printed pro-formas for contexts and features, supplemented by plans (at 1:20 and 1:50), sections (at 1:10 and 1:20), monochrome print and colour slide photography. Subject to the permission of the landowner, it is intended to deposit the paper and finds archive in an archive store approved by the Planning Archaeologist for Birmingham City Council.

3.0 Results (Figure 3, Plates 1-4)

3.1 Phasing

The results of the excavation can be placed into four phases of activity on the basis of the date of pottery and the principles of archaeological stratigraphy.

Phase 1: Medieval (13th-14th century)

Phase 2: Post-medieval (late 17th-mid 18th century)

Phase 3: Post-medieval (18th century) Phase 4: Post-medieval (19th century)

Phase 1: Medieval (13th-14th century)

Phase 1 is represented by nine occupation layers (1016, 1019, 1020, 1021, 1022, 1055, 1056, 1061 and 1062) in the eastern half of the site. Pottery recovered from the occupation layers was similar in date and fabric to an assemblage of Deritend ware recovered from excavations at the Old Crown in 1994 (Litherland *et al.* 1994). A further eleven features, ten post-holes (F105-F108, F110 and F142-F146) and a gully (F109) may also be dated as medieval on the grounds of their stratigraphic relationships.

Phase 2: Post-medieval (late 17th-mid 18th century)

Six substantial features in the southern one-third of the site represent cuts for clay 'quarrying' (F103, F104, F119, F120, F121 and F122). Medieval pottery production is known to have been carried out in this area (Litherland *et al.*). The absence of any pottery which can be dated to the later 14th-16th century may suggest that the site was industrial, rather than domestic, in character and that the clay pits may date to this period. However, the vast size of the features and consequent quantity of clay recovered from them – along with excavated evidence of similar clay quarrying for bricks at High Street, Bordesley dating to the 17th century, suggests a link to the 17th-century brick-making industry. This demand for bricks corresponds with the expansion of Birmingham in the early post-medieval period.

Some slumping of the yellow sand-gravel subsoil into the pit cuts suggests that they were left open for a short period before backfilling began. There also appears to be a partial overlap between Phases 2 and 3, with the Phase 2 clay pits still being backfilled whilst the Phase 3 tannery was in operation in the 18th century.

Phase 3: Post-medieval (18th century)

Phase 3 is dated to the 18th century and is represented by five tanning pits (F102, F111, F112, F116 and F118), three wells (F101, F113 and F147) and two small pits (F114 and F123). These features correlate with the tannery and bark mill which are known from documentary sources to have existed on the site and which continued to the west underneath the present-day Custard Factory building. A large quantity of cattle horncores was recovered. These represent one of the waste products of preparing animal hides for tanning.

Phase 4: Post-medieval (19th century)

The final phase of activity is characterised by a small pit (F100) and by 19th-century brick walls, yard surfaces and service pipes representing artisan housing. These features can be matched with structures mapped by the Ordnance Survey from the late 19th century onwards.

3.2 Discussion

No prehistoric, Roman or Saxon features were identified and no artefacts dating to these periods were recovered.

A sequence of activity from the 13th-14th century through to the 20th century was recorded at The Custard Factory, Gibb Street. The excavated evidence suggests that activity in the 13th-14th century was linked with that at the Old Crown, on the eastern side of Heath Mill Lane. Similar pottery waster sherds of Deritend ware were recovered, strengthening the case for the location of a kiln and pottery production within the immediate vicinity.

The lack of any later 14th-16th-cenury pottery suggests the site may have been industrial rather than domestic in character – challenging previous research which suggested the largely domestic nature of plots extending back from the Deritend High Street and from the putative market place.

The cutting of a series of pits for the recovery of clay in Phase 2 is likely to be related to an increased demand for bricks during the expansion of Birmingham in the late 17th — early 18th century. This series includes the large pit (pit/ditch 8) identified by the evaluation (Palmer 1996) in the northern half of the site. It is now clear that two boreholes which formed part of the ground investigation works prior to the archaeological evaluation also cut through two of the clay quarry pits. A similar site has been identified at High Street, Bordesley.

The recovery of leather fragments from the fill of one of the Custard Factory site pits (F103) suggests that the pits were still being backfilled when the site was turned over to another industry in the early-mid 18th century, that of tanning. The identification of these tanning pits verifies the accuracy of the documentary record which details a tannery, bark mill and associated buildings within and around the Custard Factory site (research by George Demidowicz). Elsewhere in the city centre and on the Digbeth High Street excavations have demonstrated the importance of this industry to Birmingham. Parallels

are known at Pershore (Baker pers. comm.) and in Northampton (Shaw 1996). At present, the Custard Factory site represents the southernmost excavated site in the city for this industry.

As already outlined, the industrial, rather than domestic, nature of the site is suggested by the lack of pottery dating to the later 14th-16th century and the small amount of pottery dating to the 17th century. The presence of slag and charcoal is another indication of industrial activity. The scale of industrial activity identified by the archaeological excavation is not recorded by Leland in his observations of the town, or on the available historic maps. The site is not shown on Westley's map of 1731. Bradford, in 1750, shows a series of buildings fronting onto High Street and Coopers Mill Lane with open areas to the rear. Hanson shows a simplified version of this in 1781. In contrast to the known post-medieval tanning site at Edgbaston Street (Mould forthcoming), there are no elongated 'hide-washing platforms' along the bank of the River Rea and there are no buildings which can be readily identified as being industrial in nature. The proposed model for small-scale industrial practices being carried out in domestic backplots may have to be revised for this area of Digbeth and Deritend.

The 19th-century artisan houses, including the locksmiths recorded during the evaluation, represent a formalisation of the site's lengthy but episodic use for industry.

4.0 Assessment

4.1 Stratigraphic data

As described above, the features and deposits recorded on-site can be divided into four phases, dating from the 13th-14th century through to the 19th century. The majority of these features and deposits have been dated, either by chronologically diagnostic artefacts recovered from their fills or by their archaeological stratigraphic relationship. Further analysis and definition of the stratigraphic sequence will contribute to the research aims stated in Section 2.2 and revised in Section 5.2 below.

4.2 Artefactual data

4.2.1 Medieval and Post-Medieval Pottery by Stephanie Ratkai

A total of 356 sherds was recovered, of which 82 sherds were unstratified. The pottery was quickly scanned and the range of fabrics (but not the relative quantity of each fabric) noted for each context. Each context was spot dated.

The medieval fabrics could be divided into four main fabric groups; oxidized cooking pots, grey sandy wares, Deritend ware and other glazed wares. These groups are the same as those found at Hartwell Garage, Digbeth (Ratkai 2000) and the fabrics can also be paralleled at Edgbaston Street, Birmingham (Ratkai forthcoming (c) where the pottery was divided into less broad groups for assessment).

The two main groups of Phase 1 medieval material came from layers 1016 and 1020, both isolated contexts within an otherwise disturbed site. The pottery from these layers was

made up of very small, often very soft, abraded sherds. As such they were not typical of normal domestic waste. They do, however, closely resemble pottery recovered from pits located behind the Old Crown (Litherland *et al.* 1994, Ratkai 1994c) which is located on the eastern side of Heath Mill Lane. The contents of these pits were associated with pottery production and it seems likely that the pottery detritus from this industry was spread over a large area of Digbeth.

Another layer (1056) contained a much smaller amount of medieval pottery. Only medieval pottery came from fill 1002 of tanning pit F102, although the presence of brick and tile fragments in the same fill suggests that the pottery is residual.

Like the Hartwell Garage site there is no pottery which can be dated to the later 14th-16th centuries and very little pottery which could be confidently ascribed to the 17th century. Likewise, the area behind the Old Crown was lacking pottery of this period. At this stage it is difficult to interpret this apparent hiatus. However, it is not uncommon for truncation to occur in the early post-medieval period and this may have happened here. Alternatively the late medieval period may have witnessed an abandonment of this area of Digbeth, although on historical grounds this ought to be the time of increasing activity in Birmingham. Other possibilities are that methods of rubbish disposal changed in this period, it being carted out of the area rather than deposited in the backplots, or that the area may have been mainly industrial with very limited (or no) domestic occupation.

From the ceramic evidence the next period of activity seems to start in the later 17th or early 18th centuries. The backfills of clay pits F103 and F119 contain pottery of this date. As it is unlikely that these pits were open for very long periods, this would suggest that brick-making, if that was the purpose of the clay extraction, had ended by the early 18th century. Given their size, perhaps the most surprising fact is the small amount of pottery (10 sherds) recovered from the fill of these pits. The pottery is domestic in nature and consists of blackware, ?feathered slipware and a blackware/fine coarseware with a cream fabric. Two residual medieval sherds occurred in the fill of F103.

The fills of the Phase 3 tanning pit F111 contained pottery which was very similar to that from the Phase 2 clay pits i.e. blackware, blackware/fine coarseware with a cream fabric and red and orange coarsewares. Some of the blackware and coarseware looked more certainly 18th century, and hence the fills have been given a broad 18th century date in the spot dating. There were also four residual medieval sherds.

Layer 1001 belongs to the late 18th century, containing as it does similar pottery to the tanning pit fill. Pit F114 contains blackware and creamware sherds and thus dates to the late 18th century. The fill of well F113 contained another mix of 18th century pottery (43 sherds in total, the second largest stratified group from the site), comprising coarseware, stoneware, white salt glaze ware, scratch blue ware, tin glazed earthenware, multi-coloured and feathered slipware and creamware. This suggests that the fill is unlikely to be later than the late 18th century. The pottery represents fairly typical 18th-century domestic rubbish from a household of moderate status.

The presence of utilitarian whiteware and industrial slipware in layer 1015 suggests that it was open in the 19th century and belongs to Phase 4. Pit F100 contained mainly 18th-

century pottery of the type found in Phase 2, but also contained a utilitarian whiteware sherd and a blue transfer printed sherd of 19th-century date.

The unstratified pottery contains a mixture of 18th and 19th century sherds as might be expected. However, the 19th century pottery has a strong component from the poorer end of the market e.g. industrial slipwares and utilitarian whitewares and may indicate a change in status from the 18th to the 19th centuries.

Statement of Potential

The medieval pottery (c.140 sherds) should be examined under x20 magnification and assigned to fabric type with any diagnostic details being noted, the resultant data to be entered on a database. This will form an essential section of the corpus of pottery retrieved from Birmingham excavations e.g. Hartwell Garage (Ratkai 2000), Edgbaston Street (Ratkai forthcoming (c)) and current work on Moor Street/Park Street. It will help in the understanding and interpretation of early Birmingham in terms of industry, trading patterns and land use.

At present, the pottery industry at Deritend is improperly understood. The presence of wasters found behind the Old Crown and by Sherlock (1957) shows that there was indeed an industry located in this area but, as yet, no kilns or associated structures have been found. Deritend ware had a wide currency in the West Midlands, being found at Warwick (Ratkai 1987-8, Ratkai 1992a), Alcester (1994b, 1996), Stratford (Ratkai 1992b, Ratkai 1994a) and Burton Dassett (Ratkai forthcoming (a)) in Warwickshire, Kings Norton (Ratkai forthcoming (b)), Dudley (Ratkai 1985) and Weoley Castle (Oswald 1962) in the West Midlands, Worcester (V. Buteux pers. comm.) and Droitwich (Hurst 1992) in Worcestershire and Stafford Castle (Ratkai in prep) in Staffordshire. This list is by no means exhaustive. There are marked similarities between Deritend ware and Mill Green ware (Pearce et al. 1985), which was made in Essex, not only in terms of vessel form and decoration but also in terms of the fine red micaceous fabric used in both wares. These similarities could be coincidental, but it is important that the clay samples from the Custard Factory clay pits are analysed to see if the Rea Valley clays were used for pottery production and to see how much clay preparation would be necessary to produce the fine red Deritend fabric. If an inordinate amount of preparation were necessary, then that could be construed as evidence for the Deritend potters actively seeking to imitate Mill Green ware. This in turn would have important consequences in the understanding the beginnings of the Deritend industry and by inference the transfer of technological skills in the medieval period.

It is not recommended that any further work should be undertaken on the post-medieval pottery.

4.2.2 Other Finds by Lynne Bevan

In addition to the pottery assemblage, one box of miscellaneous finds from the site was recovered and is considered here as 'other finds'. These finds are summarised and discussed below by material. This is followed by summary sections on other materials for which no further work is recommended. Where possible, items have been listed by feature, rather

than context, number. Recommendations for further research, personnel and time required are given in Section 7.0.

Finds for Which Further Research is Recommended

Worked Shell

Four fragments from shells were recovered (unstratified), all of which showed evidence, in the form of cut-out circular and semi-circular holes, of having been used for the production of shell discs, perhaps buttons or motifs for inlay in trays or furniture. Although shells were used to produce buttons and other ornaments during the 18th to earlier 20th centuries, when mother-of-pearl jewellery and inlay was popular, the debris from the craft has neither been widely researched nor published and these finds are of interest in view of Birmingham's industrial heritage. Identification of the shells and the compilation of a short report is recommended.

Worked Bone

Two items of worked bone were found, comprising a small perforated disc and a broken comb, both of which were unstratified. The one-sided comb probably dates to the 18th - 19th century. The disc might have been a base for a shell button or stud, especially since its size is identical to the holes drilled in one of the shell offcuts. Similar bone waste pieces were recovered from the Soho Manufactory. The disc is worthy of further research.

Clay Pipes

One almost complete clay pipe (F112) and fragments from 13 others were recovered. While there are no stamps on any of the fragments, an impression of dating can be gained from further study of the most complete of the pipes, two complete bowls and two bowl fragments (F113, F123 and unstratified). Several broken stems were also recovered (F100, F103, F113, F114) for which a summary listing will be required. A comparison of stem and bowl measurements might also provide some general dating information. The stratified bowls are worthy of illustration.

Worked Stone

A potential whetstone (F113) - which would have been used to sharpen tools used in the tanning process - was recovered. Further research and illustration will be required.

Brick and Tile

The brick-making industry appears to have played an important role in this part of the city and there is potential for this assemblage to include examples of wasters – similar to one recovered during work at Blakesley Hall (M. Hodder *pers. comm.*) – which will provide information on manufacturing techniques. Further analysis will be required.

Eight brick fragments and 31 tile fragments were recovered from the following features (or contexts):

Brick: F102 x 3, F103 x 1, F119 x 4,

Tile: F102 x 5, F103 x 1, F111 x 2, F113 x 6, F114 x 6, contexts 1015 x 5, 1016 x 1, 1022 x 1, 1020 x 2, unstratified x 2.

Finds for which no further action is recommended

Bottle Glass

Four fragments of green bottle glass were recovered (F103, F111, F113 and context 1001), all of which were undiagnostic fragments from wine bottles dating from the 18th-20th centuries.

Iron Objects

Three nails (F113) and a length of ?wire (unstratified) were recovered.

Mortar

A fragment of mortar was recovered from F102. Further mortar was noted adhering to two of the large roof tile fragments from F113.

Slag

Four fragments of ?smithing slag were recovered (F100 x 3, unstratified x 1).

Statement of Potential

The finds assemblage included some items which are worthy of further research and full publication. Debris from shell working, possibly for button manufacture or for making inlay for trays or furniture, is of interest within an urban crafts context. Similar debris has recently been recovered from the Bull Ring excavations (Mould forthcoming) and from Bilston, Wolverhampton (Jones 1993). Such small-scale craft industries made an important contribution to the West Midlands economy as a whole. Further historic work would be beneficial.

A worked bone disc might have had some connection with the shell assemblage and, on a more personal level, a comb, whetstone and clay pipes (the latter having some dating potential) offer an insight into the material culture of a group of Birmingham artisans working here during the 18th-19th centuries.

4.2.3 Animal Bone by Emily Murray

Quantity & Methods of Retrieval

Approximately 32 kg of hand-collected animal bone was retrieved from excavations at the Custard Factory site. This is stored in ten boxes (45 x 20 x 26 cm), five of which contain bone (cattle horncores) from a single context (1073, F119). Table 1 details the distribution of the animal bone from the site by weight according to phase. This clearly demonstrates that the bulk of the material comes from Phases 2 (59% by weight) and 3 (35% by weight) and that Phases 1 and 4 are of limited potential.

Phase	Date	No. of contexts	weight (g)	%
1	13th - 14th century	1	6	< 1%
2	late 17th - mid 18th century	4	19025	59%
3	18th century	5	11238	35%
4	19th century	3	1648	5%

Table 1 The Custard Factory, Digbeth: distribution of hand-collected bone by weight according to phase. All of the material was examined in the assessment.

Six twenty-litre bulk samples were taken during the course of excavation. Three of these were sub-sampled and processed by Marina Ciaraldi. None of these contained animal bone.

Contexts, Residuality & Contamination

The animal bone assigned to Phase 2 derived from clay pits, Phase 3 from tanning pits and a well and Phase 4 from layers and a pit. The pottery assessment by Stephanie Ratkai (See Section 4.2.1 above) refers to the occurrence of medieval pottery retrieved from tanning pits (F102 & F111) along with brick and tile. This evidence, and the potential overlap identified between Phases 2 and 3, would suggest that a certain degree of residuality/contamination is likely on the site. Before the final analysis of the animal bone assemblage is begun, it must be established whether any of the relevant contexts are likely to be affected by either.

Assessment of Faunal Remains

Methods of Assessment

The faunal samples were recorded using a modified version of a system devised by Davis (Davis 1992, Albarella & Davis 1994). This system considers a selection of anatomical elements as 'countable', while the presence of non-countable specimens of interest, such as horncores, which are of particular relevance to this site, is also noted. The measurements referred to vary according to element and species but the majority of these follow von den Dreisch (1976). No attempt was made to differentiate sheep and goat at this stage. All of the hand-collected faunal material was assessed.

Preservation

The preservation of the animal bone and horncores was excellent, with the exception of one context (1025) from F111 (tanning pit). This produced one countable element, a cattle metatarsal, whose cortical surface was extensively eroded; it had a 'woody' texture and was discoloured. The overall appearance suggested that it had been altered by some process prior to deposition, perhaps related to tanning, given its provenance, and that the degradation is not taphonomic in origin.

Range & Variety

Cattle, sheep/goat, dog and cat were the species represented at the site (Table 2). The assemblage was dominated by cattle horncores of the long-horned type, the majority of which were attached to skull fragments. A small number of these displayed cut and/or chop marks and all of the measurable cattle bones listed in Table 2 (86 in total) refer to cattle

horncores. The sheep/goat bones all came from Phase 3 and were large specimens, probably from improved breeds. A distal sheep/goat radius from context 1001 displayed evidence of gnawing and a sheep horncore from context 1057 had very pronounced 'thumbprints' (see Albarella 1995). No ageable mandibles from either of these species, cattle or sheep/goat, were present. A number of elements of a large dog, including the skull, pelvis and both femurs, was retrieved from a Phase 2 clay pit (1007 F103) and three cat bones were recorded from the Phase 3 well (1032 F113).

Phase	Countable elements			Measurable elements			
	cattle	sheep/goat	other	cattle	sheep/goat	other	Total
2	1	-	8 (dog)	57	-	8	74
3	1	9	3 (cat)	26	3	3	45
4	1	-	-	3	-	-	4
Total		9	11	86	3	II	123

Table 2 The Custard Factory, Digbeth: number of countable elements (after Davis 1992) and measurable bones.

Statement of Potential

The Custard Factory assemblage is relatively small and the limited budget will preclude a comprehensive study. However, the morphological and metrical data on the cattle horncores could provide some insight into the cattle population being exploited by the tanning industry in the city of Birmingham. It will be of interest to compare the assemblage from the Custard Factory with other contemporary local sites, including the material from the Bull Ring excavations. It will also be important to make reference and comparison with other post-medieval urban/industrial sites at which animal bone assemblages have been interpreted as deriving from leather working (see Albarella forthcoming). These could include The Green, Northamptonshire (Shaw 1996), Oxford Road Watermill, Aylesbury (Baxter 1999) and Hertford Castle, Hertford (Armitage 1978).

4.2.4 Biological Remains by Marina Ciaraldi

The archaeological investigation uncovered medieval and post-medieval contexts and features that were systematically sampled to assess the quantity and the quality of preservation of biological remains.

Sampling and processing

Samples were collected at the excavator's discretion and following the indications outlined in the BUFAU on-site sampling guide. Three samples were selected for this assessment: F103/1005 and F103/1025, both of which were waterlogged, and sample 1016.

A one-litre sub-sample was taken from each of the three contexts. These were processed following the procedure outlined in Kenward et al. (1980).

Sample F103/1005 had a clayey matrix and had to be pre-processed by soaking in warm water and sodium carbonate. The different fractions of the soil were collected on a set of sieves with the following mesh sizes: $300 \mu m$, $500 \mu m$, 1mm and 2mm. For sample 1016

the 300 μm sieve was not used. The different fractions of the sub-samples were analysed under a low power stereomicroscope.

Discussion

Sample 1 (F103/1005)

This sample was collected from a Phase 2 clay quarry pit. The clayey/sandy matrix of the sample accounts for the preservation by waterlogging of the biological remains.

The presence of organic remains was scarce, except for two pieces of decomposed leather. Small fragments of decomposed leather were present in all the fractions. Other biological remains observed in the sample included a fragment of insect elitra, few seeds of *Atriplex* sp. and three chickweed seeds (*Stellaria media* Crantz.). Tiny fragments of coal and two small pieces of slag were also noted.

Sample 4 (F111/1025)

This sample was collected from a Phase 3 tanning pit. The sample was waterlogged and was formed of highly concentrated organic matter. It had a dark-brown colour and fragments of vegetative material were clearly visible by naked eye. Microscopic analysis revealed the presence of compacted lumps of decomposed bark and some pieces of wood. No other organic material was observed.

Some of the bark fragments were well-preserved and could be identified. The nature of the organic deposit is consistent with the interpretation of the feature as a tanning pit.

Sample 5 (1016)

This was the only Phase 1 medieval sample analysed. The sample was taken from an occupation layer which was dated to the 13th–14th century. The sample was not waterlogged. The soil consisted of a sandy/silty matrix with numerous pebbles. No biological remains were observed apart from some coal fragments. A few small rounded pieces of slag were also observed and collected. The presence of slag and charcoal (even if in such a fragmentary condition) seems to suggest that this area could have been associated with some industrial rather than domestic activity.

Statement of Potential

Considering the scarcity of biological remains from the three samples, no further analysis is recommended for the recovery of charred plant remains or small bones. However, it is recommended that the fragments of bark from Sample 4 (F111/1025) are identified in order to establish the species used in the tanning process. This will enable the site to be placed within its local and regional context and will help to further the understanding of the tanning process employed in the 18th century.

5.0 Updated Project Design

5.1 Introduction

The excavated evidence has demonstrated the survival of a sequence of industrial activity at The Custard Factory dating from the 13th-14th century through to the 20th century. The absence of domestic pottery dating to the later 14th-16th century and the small quantity dating to the 17th century suggests that, up to the 18th century, the site was specifically used for industry and that it was not a domestic backplot with a secondary use for industrial activity. This contrasts with other known spatial arrangements further west along the Digbeth/Deritend High Street and within the city centre (Litherland *et al.* 1995, Litherland and Mould 1995a and 1995b, Mould 1997, Mould 1999) and may require a reconsideration of the role of industry in the town.

5.2 Updated Research Aims

This site offers a rare opportunity to study a sequence of industrial activity from the 13th-14th century through to the 20th century. The site contrasts with other known spatial arrangements in Digbeth and Deritend and the city centre in that, up to the 18th century, it appears to have been devoted purely to industrial activity rather than being mixed with domestic occupation. This unique arrangement heightens the importance of the site in understanding Digbeth, Deritend and Birmingham's archaeological and historic development.

It should be possible - by means of comparison with published and unpublished sites within the immediate locality and within the broader regional sphere - to place the site within its overall geographical, archaeological, historical, economical and political context. The quality of the data is such that it should also allow a contribution to be made to the ongoing reinterpretation of earlier archaeological data and the refinement of research designs for the period and region (Litherland 1995).

It is possible to restate, enhance and refocus the research aims as being to:

- complete the characterisation of the site dating and function.
- relate the site data to the early development of Digbeth and Deritend.
- determine the character, development and chronology of the archaeological remains.
- carry out analysis of clay samples to determine the role of the Deritend pottery industry in local, regional and national terms.
- place evidence of tanning and craft-working within its local and regional context.
- contribute to the understanding of industrial activity within medieval and postmedieval Birmingham, with particular reference to other sites of similar date recently investigated within the city.
- reconsider the role of individual industries in the city, in both the medieval and postmedieval periods.

6.0 Publication Synopsis

The report has, in principle, been accepted for publication in the *Transactions of the Birmingham and Warwickshire Archaeological Society*, entitled Archaeological Excavation at The Custard Factory, Digbeth, Birmingham 2000. However, another journal, such as BAR, may be approached if the *Transactions* are unable to publish the report within a reasonable period of time. The provisional lengths of the individual contributions are given below.

Archaeological Excavation at The Custard Factory, Digbeth, Birmingham 2000

By Gary Coates and Catharine Mould

With contributions by Lynne Bevan, Marina Ciaraldi, Rowena Gale, Robert Ixer, Emily Murray, Stephanie Ratkai and Alan Vince

Illustrations by Nigel Dodds

Text

Summary (250 words)

Introduction by Catharine Mould (500 words). 1 figure.

Aims and Method. The site and its context. (500 words). 1 plate.

Results by Catharine Mould (1,500-2,000 words). 5 figures, 1 table.

Description and interpretation of the evidence by phase.

Finds

Pottery by Stephanie Ratkai and clay analysis by Alan Vince (2,000-3,000 words). 1 figure, 1 table.

Other Finds by Lynne Bevan (1,000-2,000 words). 1 figure.

Environmental Material

Animal Bone by Emily Murray (1,000-2,000 words). 2 tables.

Charred Plant and Bark Remains by Marina Ciaraldi and Rowena Gale (1,000-2,000 words). 1 table.

Discussion and Conclusions by Catharine Mould 3,000-4,000 words).

Figures

- 1 Location plan
- 2 Phase 1 plan
- 3 Phase 2 plan
- 4 Phase 3 plan
- 5 Phase 4 plan
- 6 Feature profiles
- 7 Pottery
- 8 Other Finds

TOTAL 10,750-16,250 words; 5 tables, 8 figures and 1 plate.

7.0 Task List

The task numbers below give the names of the individuals responsible for the completion of the task, and the number of days allocated.

1) Stratigraphic Analysis

The site records will be analysed to refine and revise the sequence of activity on the site.

(C. Mould 1 day)

2) Pottery

<u>Task</u>	Number of Days
Examination and identification of medieval pottery	1
Entry onto database	0.5
Chemical and petrological analysis of clay pit sample	1.5
and Deritend ware sherds	
Total	3
(Stephanie Ratkai, Dr Alan Vince)	

3) Other Finds

Task	Number of Days
Identification of shells	0.25
Historical research and the compilation of report	2
Illustration of 3 items	0.5
Total	2.75
(Lynne Bevan and Emily Murray)	

4) Animal Bone

<u>Task</u>	Number of Days
Bone recording & data entry	2
Historical research and compilation of report	2
Total	4

5) Biological Remains

<u>Task</u>	Number of Days
Examination and identification of bark	0.5
Compilation of report	0.5
Total	1
(Rowena Gale)	

- 6) Preparation of drawing roughs (C. Mould 1 day).
- 7) Preparation of illustrations (N. Dodds 1 day).

8) Preparation of first draft of introduction and results (C. Mould 1 day).

MONITORING POINT (1) January 20001

Preparation of results text and first draft of specialist reports (C. Mould 0.5 day).

- 9) Editing/correction to specialist reports (C. Mould 0.5 day).
- 10) Preparation of first draft of discussion. (C. Mould 1 day).
- 11) Editing of first draft (BUFAU) (I. Ferris 0.25 day).
- 12) Corrections to first draft (C. Mould 0.5 day).
- 13) Corrections to illustrations (N. Dodds 0.5 day).

MONITORING POINT (2) July 2001

Completion of first draft (edited by BUFAU)

- 14) Submission of text for external refereeing (I. Ferris 0.25 day).
- 15) Preparation of excavation and research archives (C. Mould 0.5 day).
- 16) Final corrections to text/illustrations (C. Mould 0.5 day).
- 17) Submission of text to TBWAS (I. Ferris 0.25 day).
- 18) Corrections to text/proofs (C. Mould 0.5 day).
- 19) Deposition of archive (C. Mould 0.25 day).

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9.0 Acknowledgements

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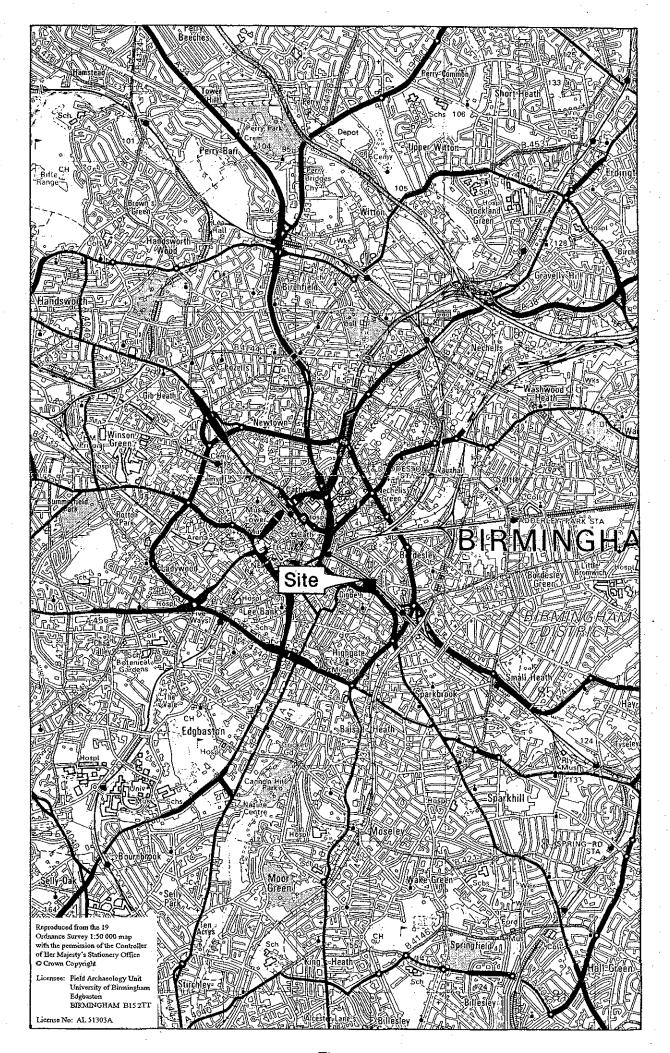


Fig.1

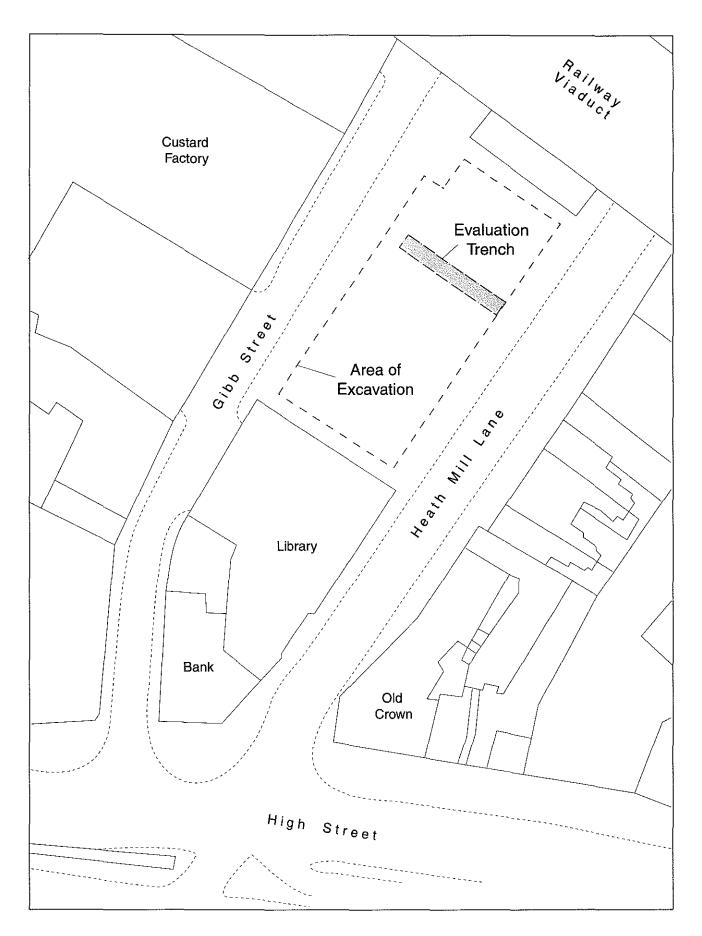


Fig.2

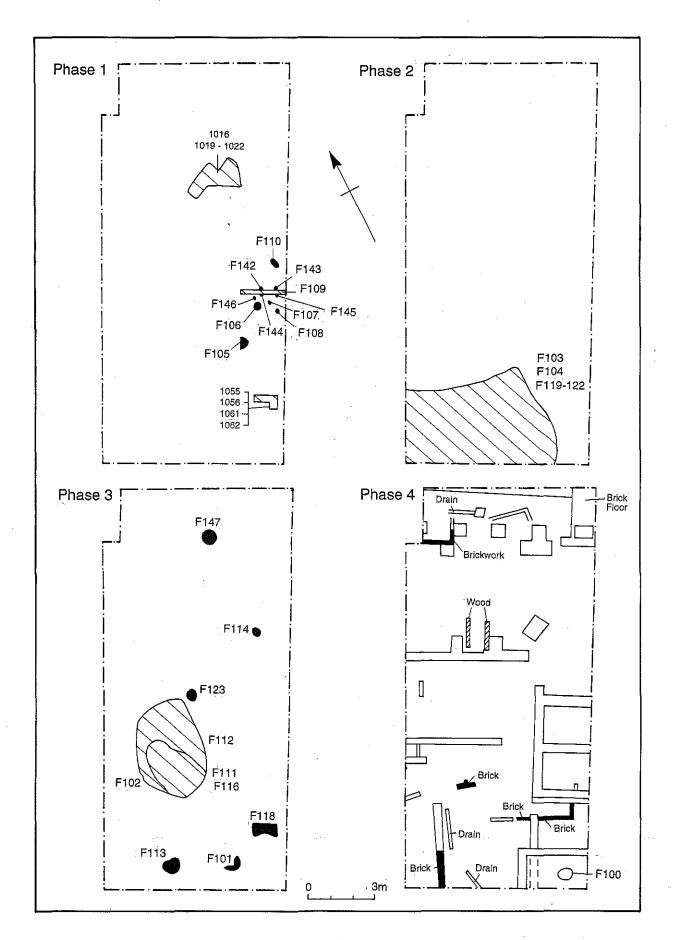
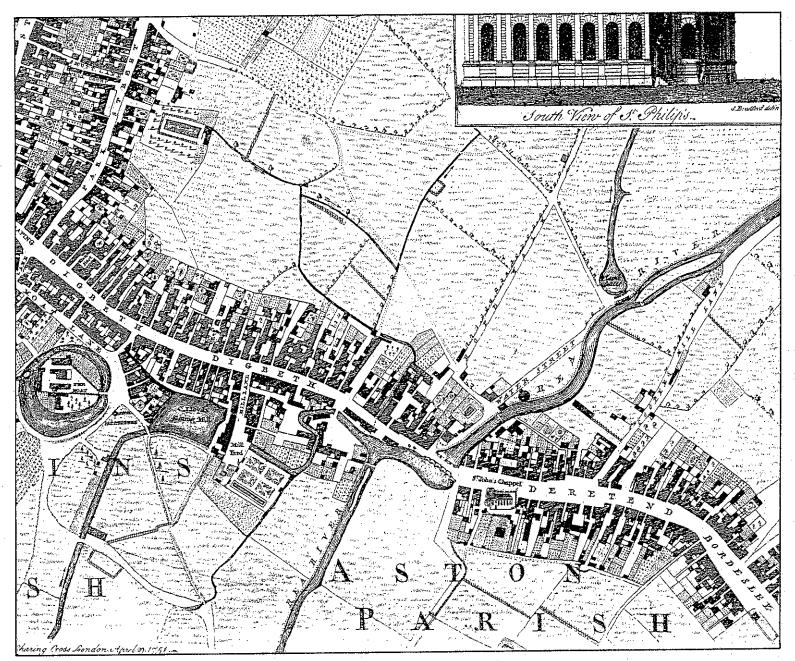
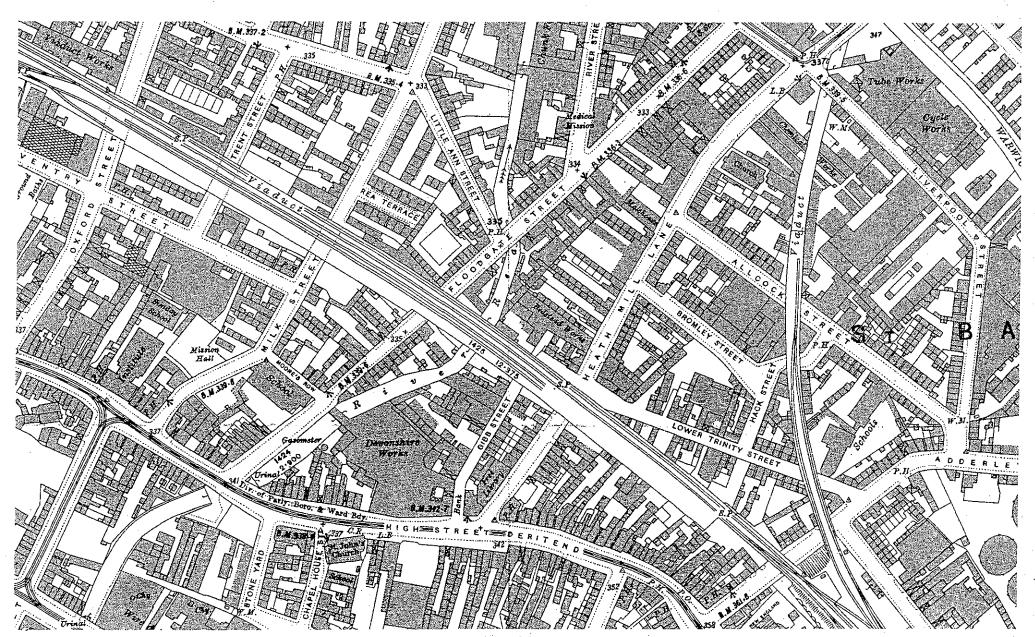


Fig.3



Map 1



Map 2



Plate 1

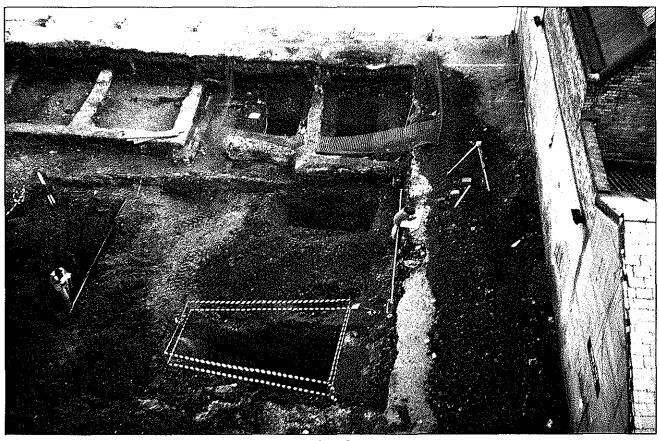


Plate 2

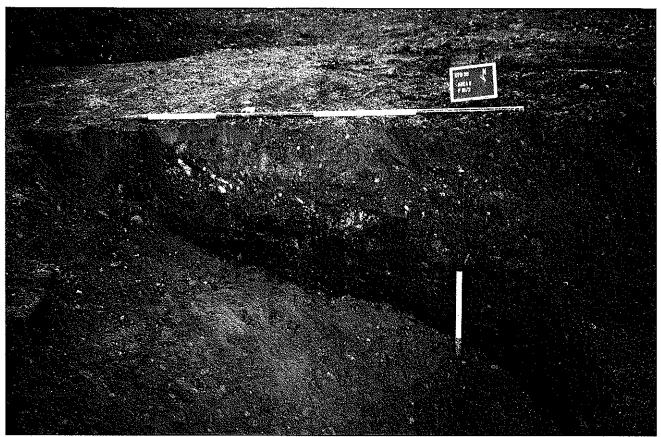


Plate 3



Plate 4