FIELDWORK IN DERBYSHIRE BY TRENT & PEAK ARCHAEOLOGICAL UNIT IN 2004–2006

(TPAU, University Park, Nottingham NG7 2RD)

BELPER (SK 34784780)

J. Brown, B. Lewis and R. Sheppard

The textile manufacturer Jedediah Strutt built several cotton mills and laid out several streets for worker housing in Belper towards the end of the 18th century. The Belper and Milford Townscape Heritage Initiative (THI) Scheme, started in 2004 by Amber Valley Borough Council, seeks to enhance this built heritage and make environmental improvements. In response to a request from the Residents Association for this to include repairs and restoration of the historic road surfaces of several of Strutt's streets, Trent & Peak Archaeological Unit was commissioned to conduct an archaeological and historical survey of these surfaces, principally in Long Row, and William Street, George Street and Joseph Street (formerly known as the Clusters, after the style of the housing built there).

The survey started with documentary research into Strutt family papers held in Matlock and Manchester and a review of written sources about Belper and the history of road construction generally. This was followed by a field survey to record surviving areas of early road surface, gullies and kerbs, and to identify suitable areas for long-term preservation. Finally, excavations in three locations were conducted to determine how the non-paved road surfaces in the Clusters were built and when this occurred.

Records held in Manchester include team ledgers for building work and tollgate books for periods between 1787–1885. These include references to materials used in the building of the paved Causeway on Long Row in 1797–98. References to roadwork on the Clusters' streets are scant, apart from gravel being brought in from Markeaton for use there in 1860–61. Derbyshire Record Office has maps showing the streets from 1805 onwards.

The paving of the carriageway of Long Row follows a tradition of paving urban streets and footpaths in other English towns in the 18th century (Pl. 1). Although there is evident stone replacement, relaying due to services and some displacement due to traffic, the street remains in relatively good condition due to the original use of strong gritstone from local quarries. Relaying of the original pavers is evident where a railway cutting dissected the street and a bridge was built in 1839–40.

The other streets surveyed have a form of early macadam road surface, named after the early 19th century road engineer McAdam. This is now badly affected by vehicles, water and frost damage, service trenching and inappropriate patching. Excavations in three locations found evidence of quarry waste used as foundations below a stone surface composed of carboniferous limestone. Where the road carried over the railway bridge on Joseph Street there was evidence of an earlier rubble layer having been present. The existing road make-up is generally more in keeping with the ideas of McAdam's contemporary Thomas Telford and is therefore likely to date to the late 19th century when his ideas became more influential.

A full report has been deposited with the SMR.



Plate 1: Belper: section showing the make-up of the 19th century road surface in George Street. Photograph by D. Walker.

BOLSOVER CASTLE (SK 470707)

R. Sheppard

A recent research programme by English Heritage at Bolsover Castle has pondered the original use and status of the four lodges within the Inner Court of the Little Castle and the five rooms and three niches set within the garden wall surrounding the Fountain Garden (Fig. 1). Many of the garden rooms were heated and probably furnished and decorated to provide private comfort. The lodges may have been intended for a similar use, although by the mid 18th century they were being used for domestic functions, being referred to in documents as wash-houses / laundries. A principal part of the research project was concerned with recording and dating plaster surfaces, but other archaeological investigations were carried out in tandem by Trent & Peak Archaeological Unit to answer specific questions.

Test-pits in the most westerly room in the garden wall found that the present flagstone floor had replaced an earlier floor 25cm lower down, the same level found in two adjoining rooms. This room had originally been the main entranceway through into the garden but when a new entrance was created elsewhere through the garden wall, the west doorway was blocked up first, with the opening on the garden side infilled later and the floor raised. What the now unlit space was used for remains a mystery.

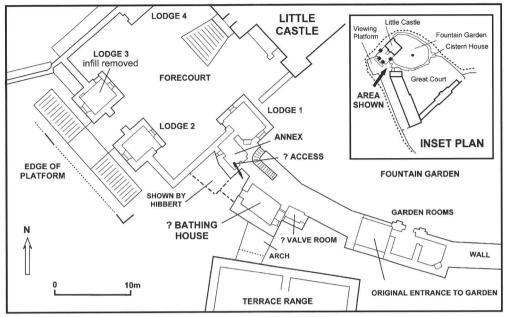


Fig. 1: Plan of part of Bolsover Castle.

There is similar uncertainty with the lodges to the Little Castle. These structures were generally lit by small windows set high up on two sides, with the two closest to the Little Castle having smaller versions of Smythson's decorative fireplaces found in the main building. Their internal walls were plastered, they had internal recesses or cupboards and the most westerly lodge has a niche where a statue may have stood. Overall, there is suggestion of some refined private function. In the 18th century they were replastered and altered, with larger windows added and fireplaces inserted in the lodges to either side of the main forecourt entrance. These two lodges also have blocked windows to an infilled former basement. In a book accredited to the Rev. J. Hamilton Gray (who, with his wife, occupied the Little Castle in the mid 19th century) it was stated that the lodges on each side of the entrance have '... three tiers of rooms below the surface ... The floors giving way, they were filled up with garden rubbish' (Gray 1894, 39). This was in a reprint of a paper of 1860 by Gray, and was probably one of the additions made by a certain T. Thornley who updated it. It was decided to remove the infill in the south-east lodge (Lodge 2) to determine the depth and nature of the basement rooms.

A thick plaster floor was found to cover an infill of loose ash and sandy soil with fragments of building rubble, plaster and coal. This fill was removed by contractors from both basement and sub-basement levels down to natural clay at a depth of over 5m. Lines of joist holes in the side walls showed the positions of former floors. The lowest floor was unlit and must have been reached by ladder; what use it served can only be imagined. The fill contained a range of artifacts: bottles, leather, ironwork, pottery, tiles, gas fittings and even a small slab of the black marble used to decorate the 17th century fireplaces. The pottery included a wide range of tablewares, cooking wares

and horticultural wares which, on examination by Chris Cumberpatch, was found to contain a substantial late 18th to early 19th century component, in addition to later material. As mentioned above, the Victorian pottery was dumped when the basements were filled in, probably not long after Mrs Hamilton Gray (who outlived her husband) had left the Castle in 1882; this is also suggested by dated graffiti on the lodge walls. However, the earlier pottery is not so easily explained. It may have been left in the Little Castle for use during the occasional visits from Welbeck by the Portland family and their guests, or it may have come with the Grays when they arrived in 1827.

East of the Little Castle forecourt there is a projecting structure adjacent to the connecting archway between the garden wall and the Terrace Range (Pls 2 and 3). The entrance to this has been blocked off, although a plan by Gregory of c. 1903 shows the irregular outline of an inner room. It was decided to remove the blocking from the doorway and this revealed a room with a high arched roof, plastered walls, a continuous recess around all four internal walls at a level close to the threshold level of the entrance (this is now nearly 1m above the outside ground surface), and an infilled window and a narrow slot near the base of the rear wall. This slot was recognized as similar to ones in the garden wall through which lead pipes had brought water from



Plate 2: Bolsover Castle: stones removed from the blocked entry into the valve room situated to the rear of the probable 17th century bath house.

Photograph by R. Sheppard.



Plate 3: Bolsover Castle: survey in progress of the probable bath house, its doorway unblocked, and, to left, the irregular-shaped annex which may have served as a changing room.

Photograph by R. Sheppard.

the Cistern House to the Venus Fountain. Behind this slot there is another extension, whose blocked entrance was also removed to reveal a narrow cubicle, and evidence that pipe-work had once come through here from the Terrace Range.

The larger room is now thought to be the previously unidentified 'bathinge howse' referred to in documents dating to c. 1665 (Nottingham University Manuscripts Dept ref. MS PW1 669). No evidence remained of either pipe-work or a possible lead-lined tank that the room may have once contained. The lowering of the doorway entrance may have occurred when any lead was removed to Welbeck, which is known to have been the fate of the feed-tank above the Cistern House and one in its water source, the so-called Cundy House (see DAJ 2005, 73–75). The cubicle to the rear was probably used as a valve room to control water input / output to the tank beyond. If indeed this is the missing bath house, there remains a problem with access as there is no evident connection between it and the best candidate for a changing room, the annex added to the east lodge (Lodge 1), which has no obvious outer doorway. A view by Hibbert from the 1820s shows additional single-storey walling in the angle between the two rooms but surviving stonework in this enclave provides little clear evidence for this.

The presence of a bathing house at Bolsover is of some historical importance as there are few other known examples dating to the 17th century in England, or earlier examples outside royal circles. The Castle owners, William and Margaret Cavendish, may have experienced the healing benefits of heated (and cold) water whilst in exile abroad during the Civil War. It has been suggested that it was recommended for women with child-bearing problems, but equally it would have helped anyone with arthritic conditions.

This part of the castle between the Terrace Range and the Little Castle appears to have been the focus of some structural alterations, as comparison with the so-called *Renishaw Drawings*, believed to date from the 1620s, seems to support. The 'bathinge howse' is recorded as being finished, along with the arch between the wall-walk and the Terrace Range, in c. 1665 (MS PW1 669 as above). A number of previously unknown features were recorded in front of the Little Castle forecourt during service trenching for floodlighting (Sheppard unpublished). The staircase leading up to the entrance into the forecourt was found to be set on a platform extending about 2m further on three sides; probing showed that its south-west side dropped at least 2m. This suggested that this area had been dramatically reconfigured and that the viewing platform that extends out onto the Castle slope was a later addition. This platform is prominently shown on Knyff's depiction of the Castle dated to c. 1698, but was clearly missing when the so-called *Renishaw Drawings* were made in the 1620s.

The drop in front of the platform and the depth to which the front lodges were built suggests possible reuse of an existing depression, perhaps best explained by a defensive ditch protecting the inner bailey of the earlier medieval castle. Part of the course of the curtain wall has been traced beneath the flagstones of the Little Castle forecourt and the presence of a wide ditch was recorded in the Great Court in 1977 (Pratt and Akister unpublished). The main part of the medieval castle was positioned at the north end of a promontory, and a ditch would have protected the vulnerable southern approach. This ditch may well have been wider and deeper as it reached the edges of the promontory as these were weak points — the Cistern House is situated in a similar position at the eastern extent of the castle ditch and was built to a comparable depth as the front lodges. An existing 'castle ditch' was exploited for building stone during the castle construction in 1613 (Knoop and Jones 1936, 29).

Any buildings on the edge of this supposed old ditch, especially if subsequent land-scaping had smoothed out the slopes, would have been vulnerable during the siege of the Castle by Parliamentary forces during the Civil War. The blocking up of the lower doorway and windows of the Cistern House and the lower out-facing windows of the lodges may originate from this time. The north and north-east sides of the castle could have been defended from the garden wall walk, but on the west side the slope is less pronounced and steep, and more distant from the garden wall. Records from after the Civil War mention 'outworks abroad' that needed to be demolished (*Calendar of State Papers, Domestic, 217/1649*, quoted in Downman 1895, 40); what such measures entailed and whether carried out are unresolved questions. The later viewing platform may have started out as a defensive outwork for protecting the terrace slope and the rear of the Little Castle with cannon. This would explain why such a major addition was not mentioned in later documentation of building works. When seen in plan the Bolsover viewing platform breaks the overall symmetry of the almost triangular shape

of the Castle as perhaps originally envisaged. There is a good case for it originating during the Civil War.

A full report has been deposited with the SMR. A separate paper on the bathing house is in progress.

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CLOWNE CROSS (SK 49157543)

R. Sheppard

Trent & Peak Archaeological Unit was commissioned by Bolsover District Council to provide a monument record of Clowne Standing Cross, which is both a Grade II* listed structure and a Scheduled Monument. The structure has been dismantled and repaired following vehicle impact. A detailed record of the structure was needed for a permanent record before the dismantling and to assist the rebuilding process.

The date of origin of the cross is unknown. It is situated at the juxtaposition of three of the principal streets in the town and its base is thought to be of medieval date. It is unlikely to be a market cross as no market is recorded in Clowne before 1516. The parish was part of a single township with Bolsover until at least the 17th century, and Bolsover had a market from 1334. At some point in the post-medieval period the cross likely to have been at the top of the structure was damaged and replaced by a sundial stone, crowned by a sphere (Pl. 4). The weathered condition and loss of the projecting dials of the sundial stone suggests that it is of some age — one expert has suggested a 17th century date, when many early sundials were added to damaged or so-called 'stumped crosses.' The column and socket stone are both thought to be of 18th century date. The cross was probably rebuilt in the 19th century when the steps were reset, and again repaired in the 1970s when the sphere was in danger of toppling off its support stone.

The monument was drawn and recorded in both plan and east elevation, and the faces of the sundial drawn from rectified photographs. A series of digital photos were taken of the individual stepping stones, some of which had become seriously displaced by the vehicular impact, with the severest movement showing in the north-west corner where rubble core material was exposed (Pl. 5). The south-east pyramidal face of the socket stone took the main impact and was left scarred. Structural parts above the socket stone were undamaged. The socket stone was found to contain a lead lining to the upper recess into which the column was seated. The stone has since been repaired.

The octagonal stepped base of the cross had previously been reset with thick joints of concrete which had effectively both extended the base and raised the level of the steps; concrete had also been added to heighten the socket stone. This work can be seen on



Plate 4: Clowne Cross: the damaged south side of the cross's steps after vehicle impact.

Photograph by R. Sheppard.

photographs dating from at least 1900. On the recent dismantling of the steps the interior was found to contain rubble that included tile and Welsh slate, and nothing of earlier date. The initial report (since updated with observations from the dismantling) includes reconstructions of the base from just before the accident and another of how it may have been before the 19th century. There is a high possibility that the cross is not in its original location. The cross has now been reassembled and new measures taken to protect it from further damage.

An updated full report has been deposited with the SMR.

CRESWELL CRAGS, B6042 CRAGS ROAD DIVERSION SCHEME (SK 533743)

B. Lewis

This is an interim summary of an archaeological watching brief, carried out between July and September 2005, for the diversion of a portion of the B6042 which formerly



Plate 5: Clowne Cross: the cross showing, to left, the displacement of its stepping stones after vehicle impact.

Photograph by R. Sheppard.

ran through the Crags gorge to a new line to the north of it. Highlighted for its archaeological, palaeontological and geological potential, the 1.2km road-line was deemed sensitive enough for a continuous watching brief during all groundworks (Collcutt 2005; Jones 2005). This watching brief was commissioned by Derbyshire County Council, with specialist consulting advice provided by Oxford Archaeological Associates (OAA), who supplied geoarchaeological and palaeontological input to the project with Trent & Peak Archaeological Unit doing the day-to-day fieldwork. The new road line ran through a recent plantation, within 200m of the north side of the Creswell Crags gorge, which itself is a Scheduled Ancient Monument, a SSSI and Conservation Area (Collcutt and Johnson 1999; Colcutt 2002). Nationally important for its Pleistocene palaeontology and archaeology as well as its Magnesian Limestone geology, Creswell Crags is internationally significant for recent rock-art discoveries made in Church Hole Cave and Robin Hood's Cave (Bahn et al. 2003, 227–31).

A number of debris-choked fissures, fissure caves and gulls (slabs of rock that over time slowly peel away into the western vale) were discovered and recorded (Collcutt and Johnson 1999; Aitkenhead 2002). One of the fissure caves contained rounded erratic pebbles, which were presumably glacially or periglacially derived. These are

significant because they show that the cave had at some time, probably during a Cold Stage in the Middle Pleistocene era, communicated with the outside. A debris-choked phreatic tube (a natural tunnel or tube exploited and widened by water) was also recorded in the road cutting; this had a diameter of c. Im and plunged through the rock at a fairly acute angle of about 40 degrees. These features indicate that, as suspected, the Magnesian Limestone is riddled with caves and tubes with the potential to contain Pleistocene palaeontological or archaeological material. However, in this instance none was found.

Relatively few discoveries were made during this work. These included a small post-medieval barn or similar structure recorded during enabling works c. 50m to the east of Bank House Farm. The lower courses of the exposed stone walls were covered on their north and east sides by colluvial material that had washed downslope.

Earlier finds included a small collection of flint and chert artefacts scattered along the 1.2km road line. These included Bronze Age and Neolithic material (including an intact small leaf shaped arrowhead) and two Mesolithic geometric microliths (J. Brown pers. comm.). A single broken flake or blade, which had a striped yellow patina of a type found only on Lower or Middle Palaeolithic pieces, was positively identified as belonging to the Pleistocene (Dr. R. Jacobi pers. comm.). A crested blade was recovered, with cortication that might date to the Late Upper Palaeolithic, but it is equally likely to date from the Neolithic period (ibid.).

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DERBY, BROOK STREET (SK 346366)

R. Sheppard

An archaeological evaluation was carried out by Trent & Peak Archaeological Unit at a site south of the junction of Brook Street and Bridge Street in Derby on behalf of Highgrange Homes, ahead of redevelopment. The site lies within the so-called *West End* of Derby and had recently been occupied by a garage and a small industrial works. Maps of the area indicated that post-medieval buildings started to be built and gardens

laid out within the site somewhere between 1791–1806. Four trenches were excavated by machine and a fifth area was largely cleaned by hand. Intended positions close to Bridge Street were abandoned because of deep cellars and a large petrol storage tank.

Two trenches were positioned to investigate the possible former course of the Markeaton Brook, which according to Chatterton and Stanwick's map of 1819 had once meandered through the area. The trench nearest the centre of the site found evidence for its former presence, showing as a dip in the natural gravels and thin layers of gray organic silt, extending about 1.2m in width up to a deep brick foundation. Soils above containing ash, clay, mortar, clay and charcoal indicated a deliberate building up of the ground level. The second trench to the south found evidence of former buildings and industrial storage tanks. The west side of this trench followed the rear wall of a former terrace on Little Brook Street, dating from the early 19th century (Pl. 6). An extension found an internal cross-wall and the terrace's west frontage. The east wall survived to a depth of at least 1.2m, and consisted of six brick courses above four courses of rubble gritstone blocks. Behind the building there was an irregular-shaped brick surface, perhaps the base of timber sheds or tanks used for storage or some unknown industrial purpose. All finds recovered, with the exception of one stray medieval green-glazed sherd, were no earlier than 19th century in date.

A third trench excavated nearby within the area of the terrace's front gardens found that the ground had been built-up nearly 2m with post-medieval layers above natural sands and gravels. The fourth trench excavated was sited in the yard behind a former building on Brook Street. This revealed a series of brick-lined drains, a small rectangular feature and a circular well, features possibly related to brewing activity for a neighbouring public house.

The final area examined, near the south-east boundary wall, was hand-cleaned when a large scatter of pipe-clay debris was found in the cleared surface soil. This included pipe stems and bowls, kiln furniture and slag, some of which encased pipe fragments, all indicative of clay-pipe manufacture in the close vicinity. Although more ground was subsequently cleared, by both machine and by hand, the kiln site was not located. The debris was found spread within the site of a former building which contained two small brick-lined fireplaces and an adjacent coal store. This building first appeared on a map of 1852 but its purpose remains unclear. The pipe wasters included three distinct bowl shapes and designs, together with fragments of bowl from which the name CLEEVER was recoverable. William Cleever was a pipe-maker on nearby Willow Row in 1850 (Slater's Directory of Derbyshire). The debris, probably deposited in the 1840s after one or more firings nearby (Peter Hammond *pers. comm.*) may have been dumped on open ground before buildings were erected on this part of the site, and disturbed when the buildings were eventually taken down.

A full report has been deposited with the SMR.

DERBY, EAGLE CENTRE (SK 356359)

B. Lewis

Trent & Peak Archaeological Unit was commissioned by Westfield Shoppingtowns Ltd to undertake excavations and a watching brief during the construction of a new extension to the Eagle Centre in 2005 and 2006. The site lies to the south-east of the



Plate 6: Brook Street, Derby: excavations behind the rear wall of early 19th century terraced housing of Little Brook Street.

Photograph by R. Sheppard.

Eagle Centre and is bounded by Traffic Street and London Road. Earlier test-pitting (Areas 1–8) indicated a sequence of post-medieval layers overlying an 18th/early 19th century buried soil horizon and undisturbed sands and gravels (Kinsley 2004; see *DAJ* 2005, 82). The new development sits at a height of around 50m OD upon glacio-fluvial and river terrace sands and gravels, within 0.5km of the River Derwent (Aitkenhead *et al.* 2002).

A number of trenches (9–13) were located to search for evidence of the castle and any associated earthworks in the northernmost corner of the development area. A single larger trench (Area 14) was located in the south-eastern corner of the development site, along London Road, to investigate the possible survival of the medieval street frontage properties and their rear plots.

An archaeological desktop assessment had identified two areas of archaeological potential (Challis 2002, 29):

- 1) the purported site of a medieval castle in the vicinity of the Cockpit/Playhouse, possibly extending into the development area.
- 2) the medieval street frontage on London Road.

At the south end of the development area, medieval buildings were swept away during the Victorian era and replaced by a lace mill, terraces, pubs and a new street layout that included Eagle Street and Traffic Street. In 1958 and into the 1960s the Castlefields Lace Mill and the surrounding streets were demolished to build the Eagle and Castlefields shopping centres. Map evidence showing the Castlefields Lace Mill indicates the position of what may be condensation tanks or pools for the steam engines. One earlier OS map showed these as 'reservoirs', which were then infilled by 1947.

Area 9

Excavation revealed part of a large clay and concrete lined tank interpreted as one of the condensation ponds or tanks identified on the earlier maps. A jetty built of reused stone divided this into two halves.

This tank was infilled c. 1890 to 1920 with ash, cinders, brick, stone, tile and mortar in a compact, clayey soil and with a deposit of collapsed stonework, perhaps from the jetty. These deposits showed as a series of distinct dumping episodes, spread over a short space of time.

The pool was cut into a sequence of earlier 19th century layers interpreted as site levelling. A buried subsoil of dark grey silty clay c. 0.20m thick, with an indistinct and fading boundary with the underlying yellowish-red gravelly-clay natural, lay under this sequence. This soil was found in areas 10–13 as well.

Areas 10 to 13

Areas 10 and 11 were covered by recent demolition rubble above layers of 19th and 20th century date incorporating brick and pottery, and by levelling layers up to 1m thick above an 18th or 19th century buried soil. At the northern edge of Area 11 a subcircular broad, shallow pit 2.10m wide and 0.48m deep was discovered cutting the gravel terrace. The pit was filled with a hard homogenous reddish-grey sandy clay, but contained no finds.

A similar sequence of 19th century levelling was noted in Areas 12 and 13, but these were later cut by 19th century wall foundations which were overlain by granite sett yard surfaces subsequently cut by 20th century foundations. In the north end of Area 12 a single circular, shallow, possible post hole 0.13m deep with a diameter of 0.26m was found. It contained a loose, light grey-brown clayey soil with a few rounded pebbles, but yielded no evidence of its date. The shallow earlier features cutting the gravels in areas 11 and 12 indicate that the site was, contrary to the results of an earlier and much smaller investigation (Kinsley 2004; 2005, 82), likely to have been truncated in recent centuries.

Area 14

Area 14 was c. 130m further to the south of the previously described trenches. During excavation it became apparent that the level of truncation, due to the construction of this part of the Eagle Centre in 1972, was more extensive than first realised. The foundations and cellars of the 19th and earlier 20th century buildings had been removed entirely and the area had been filled in with limestone hardcore and fly-ash to a depth of c. 2.5m in places.

Only three features were identified and investigated. All were pits of 19th/early 20th century date and were heavily truncated by later demolition and the construction of the Eagle Centre.

Watching Brief

The watching brief phase of the works comprised a series of intermittent visits during groundworks that might have disturbed medieval or earlier archaeology. No remains of features predating the rubble of Victorian period houses and the later Castlefields shopping centre were discovered.

The final report is in progress.

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DERBY, FORD STREET (SK 34803644)

B. Lewis and R. Sheppard

An archaeological evaluation involving three small trial trenches was carried out by Trent & Peak Archaeological Unit on the south-east corner of the junction of Cavendish Street and Ford Street in Derby. This was on behalf of Derby City Council before a proposed development of the site of a children's nursery. The site was identified as being within an area of some archaeological potential, being close to St. Werburgh's Church, Friar Gate, and Markeaton Brook. An earlier desk-based assessment of an adjoining site found evidence that the area has been in use since the early post-medieval period.

Speed's map of Derby in 1610 shows a property boundary on the eastern edge of the site which still forms the boundary today. A later map of 1767 shows an orchard which continued largely unchanged until 1806, after which the site was part orchard and partly within an ornamental garden laid out to the rear of Chesshyre's House on Friar Gate, a stylish town-house built in 1708 and demolished when the road junction with Ford Street was widened in 1938. This part has survived, at least in part, as the rear gardens of the nursery school. By 1826 buildings were appearing on the Ford Street frontage and Cavendish Street had been set-out, and by 1852 most of the site was covered intensely by houses, workshops and outbuildings.

The evaluation trenches were limited to the space around the nursery building and had to be positioned to avoid live services. In one trench evidence was uncovered of post-medieval alluvial deposits probably belonging to a former watercourse first shown on Cole's map of Derby of 1806 but which had disappeared by the time of Nichol's map of 1838. Most maps of this period showed the area to the north with Markeaton Brook following different channels around a large former mill-dam. By 1806 an associated mill had appeared south-west of St. Mary's Gate, which may have been Old Bell Mill on Bold Street, situated where a multi-storey carpark now stands. For a short

period a southerly channel of the Brook had evidently flowed in a north-westerly direction through the site, and confirmation of its presence and subsequent silting was found.

The other two trenches found mainly demolition rubble, some brick walling and flooring, a brick-lined box drain and a shallow east-west ditch of unknown date. A buried soil layer with two post-holes may have been from the earlier garden. In a trench near the eastern boundary several waste pieces of mechanically-cut gypsum were found, perhaps originating from a nearby workshop. Apart from a residual medieval pot sherd and another of Cistercian ware, no early finds were made on the site.

A full report has been deposited with the SMR.

DERBY, St ALKMUND'S WAY (SK 3513236710)

G. Kinsley

Monitoring of ground investigations was carried out, on behalf of Derby City Council, at St Alkmund's Way, Derby in September 2005, in connection with proposed construction of a footbridge over the road. The works were monitored by R. Sheppard of Trent & Peak Archaeological Unit.

The site lies immediately within and south of the original site of St Alkmund's church, where excavations in the 1970s produced extensive remains of the Anglo-Saxon and medieval churches which stood until their complete destruction in the roadworks. St. Alkmund's was an important pre-Conquest religious centre.

At the point of investigation, the road lies in a deep cutting, but a borehole to the south found a brick wall at 1.65m depth. This may be the remains of buildings which stood until the construction of the road in the 1960s, and its presence, together with comparison of existing levels with those on pre-road Ordnance Survey maps suggests that archaeological remains in that area may also have survived the construction of St. Alkmund's Way. Given the significance of the location, such remains would potentially be of great archaeological importance but further investigation is clearly required to fully establish the archaeological potential of the area. Survival of any archaeological remains in the carriageway is highly unlikely.

DERBY, St HELEN'S STREET (SK 349367)

R. Sheppard

A desk-based assessment was carried out by Trent & Peak Archaeological Unit of a development site at the north-east end of St. Helen's Street in Derby. This was on behalf of Metropolitan Housing Trust which was proposing to build new residential units and create a car parking area near the planned King Street link road. The site was found probably to lie close to the lost Anglo-Saxon church of St. Helen's, and perhaps retain traces of the town's northern defences which may have extended across the ridge from Bridge Gate. It is also immediately west of the site of the medieval hospital of St. Helen's, parts of which were apparently reused in *old* St. Helen's House, a hall probably built in the 17th century on the same site. The latter was later replaced by a spar works. The development site itself was once part of Goodwin's Orchard and was not built on until the early 19th century, when both small industrial structures and several middle class residences were built there. One of the latter was also called St. Helen's House and was demolished in the early 20th century (neither this or the earlier

house had any association with Pickford's fine building on the east side of King Street which still bears the title). The site has since been largely used for commercial buildings. Because of the site's proximity to known historical buildings and a probable medieval cemetery a field evaluation was recommended.

In May 2006 five trenches were cut by machine on that part of the site clear of standing buildings. A trench in the east part of the site uncovered a large lime kiln, its north-west side cut by a 19th century ditch. Another trench close to St. Helen's Street found a large disturbance about 4m across. Initially suspected as being a ditch, further investigation found that it had a flattish base, and that its north side had cut through post-medieval rubble material. It was possibly the sunken basement area of a small building known to have been in this location. The rubble layer itself had cut through a possible ditch from which medieval pottery was recovered. The latter may be a north-south boundary shown on Speed's 17th century map of Derby. It had also been cut by a brick-built lime kiln of probable late 18th/early 19th century date.

Two trenches in the north-west part of the site found a build-up of about 1m of rubble, overlaying a concrete slab which continued across the west part of the site. Beneath this was a shallow silty clay overlying the natural. The only features found were a field drain and an undated pit. In contrast, a fifth trench close to the north-east corner of the site found a large build-up of soil below the tarmac, containing several post-medieval industrial features and a few sherds of residual medieval pottery. With the exception of this trench, most of the site that was tested had evidence for the ground surface having been truncated down to the natural clay.

An historic building survey was also carried out for Metropolitan Housing Trust of the existing buildings between the main evaluation site and King Street. These are 10–14 St. Helen's Street, along with various buildings to their rear, most of which are to be adapted for new housing; the terrace 2–10 lies within the route of the new King Street link road and is to be demolished. Once partly the site of *old* St. Helen's, it was acquired by Richard Brown and his son, manufacturers of spar products, in 1802 or thereabouts. They established a new factory and installed a steam engine. The surviving early factory workshop at the north end of the site may have been a reused (and largely rebuilt) 18th century building, as its footprint matches that of a structure formerly extending from the back of *old* St. Helen's House. The factory was expanded into an E-shaped complex facing St. Helen's Street, certainly by about 1819, although there is evidence linking the west wing's construction to the earlier work after 1802. The east wing may also have reused part of the earlier house. The early 19th century date makes these buildings some of the earliest industrial buildings still left in Derby, despite having been much altered since.

In the 1830s the site was divided between William Haslam, a whitesmith, who acquired the west wing, and Joseph Hall who bought or leased the remaining buildings to carry on spar production. The Haslams rebuilt most of the west wing and built two new buildings to the west (14 and 16 St. Helen's Street; the latter became a pub and has since been demolished). Hall built a new house (10 St. Helen's Street) and made changes to the spar works. Most of the present structures (including raised floors) had appeared by the end of the 19th century, leaving only a small open yard near the centre of the complex.

Full reports of the desk-based assessment, field evaluation and the building survey have been deposited with the SMR.

DERBY, 27–28 QUEEN STREET (SK 35103662)

G. Kinsley

An archaeological desk-based assessment, evaluation and full excavation were carried out on behalf of Wilfred Young Homes Ltd, in connection with the redevelopment of a site at 27–28 Queen Street, Derby. The work was carried out by Gavin Kinsley and Steve Baker of Trent & Peak Archaeological Unit, between August 2003–November 2004. The site contains a listed building at the frontage, but this was not studied as it is due to be retained in the new scheme.

The development site lies on the west side of Queen Street, which forms part of the main north/south central road in the historic core of the town, and for which a late Saxon origin is suspected. Although the frontage of the site had been lost to road widening in the 1920s, damage elsewhere from post-medieval buildings was slight and a significant area had not been built on after the medieval period.

Although structural remains were found, the majority of the features excavated were pits and ditches, indicating extensive, but not intensive, occupation. A period of widespread cultivation followed, after which substantial dumping of deposits and construction of some outbuildings in the post-medieval period brought the site to its pre-redevelopment form.

Pottery from the features, identified by Chris Cumberpatch, dates chiefly from the late-Anglo-Saxon period to the 16th century, although a small quantity of sherds points to Roman activity in the vicinity. Future analysis of environmental samples and animal bone should provide further useful information. At the request of the developer, further work on the archaeological report and archive has been halted pending commencement of the redevelopment.

ECKINGTON, 68 HIGH STREET (SK 42677926)

R. Sheppard

An archaeological evaluation was carried out by Trent & Peak Archaeological Unit on a development site in the west part of Eckington on behalf of Jaguar Retirement Homes Ltd. The site, on sloping ground on the north side of High Street, lies within Lower Eckington, whilst the oldest part of the village situated around the church is the higher ground of so-called Upper Eckington. Initial trenching for geological data found Coal Measures sandstone outcropping at a depth of only 700mm in the northern half of the site, with a deep clay close to the street frontage.

Three trenches were excavated by machine and then hand-cleaned. A trench in the north-east part of the site found no archaeology or evidence for previous use. Two trenches closer to the High Street uncovered evidence of walling, a floor level and demolition rubble. The first trench had unmortared stone footings of a probable back wall of the building running parallel to High Street which, according to Sanderson's map, had already gone by 1835. A heavily mortared wall found in the second trench was probably an internal wall of a later post-medieval building removed in the mid 20th century. Some stone slab flooring was found still in place at a depth of c. 1m.

The evaluation was followed by a watching brief during the construction stage, when four trenches at the south end of the site were monitored. Two of these lacked

archaeological remains, whilst the other two each featured a north-south running stone-built wall, and one had a stone-lined drain. The first trench had an unmortared wall of a similar nature to that previously found, providing further proof of a former building in the south-east corner of the plot before 1835. In the other trench a wall of well-mortared sandstone blocks with a brick offset foundation proved to be a continuation of the mortared wall previously found. Parts of the east side of this former building were uncovered alongside the east boundary wall during site clearance. A deeper soil profile was found in the south-west part of the site but the reasons for this remain unclear

Full reports of the evaluation and the watching brief have been deposited with the SMR

LITTLE EATON, ELMS FARM (SK 36124125)

R. Sheppard

A combined desk-based assessment and historic building survey was carried out of Elms Farm by Trent & Peak Archaeological Unit on behalf of owners Mr and Mrs Salt. The farm, situated alongside Duffield Road in Little Eaton near Derby, consists of three ranges of gritstone-built agricultural buildings set around a central yard, with the former farmhouse at the north end. The redundant farm buildings are to be sympathetically converted for new residential and commercial units. All the buildings are listed and the house, which was not included in the survey, contains a door lintel with the date 1704 and initials J. H. The latter may be those of John Heiron, grandson of the famed nonconformist preacher of the same name who is known to have moved to Little Eaton shortly after 1662. The grandson may have had the present house built in 1704, although the house was probably remodelled and enlarged by Francis Radford in about 1780.

Not much is known about the early history of Little Eaton, and it did not become a parish until the 1860s, before which it formed part of St Alkmund's parish in Derby. The area known as The Town, immediately north of the farm, may be the historic heart of the village. Despite remaining a small settlement, Little Eaton was a centre for quarrying and several small industrial activities, in part stimulated by the arrival of a canal link and the so-called Gangway in the 1790s, followed by the Midland Railway in the 1840s. The farm, which probably dates from the time of the house, remained in the ownership of the Heiron-Radford family up until about 1850 when it was obtained by the Strutt family of Belper. The farm was tenanted to the Tatam family and then the Salt family, who purchased it in 1935.

The buildings include a 7-bay barn of probable mid 18th century date which has an unusually large number of ventilation slits (Pl. 7). Additional floors were added to either side of the threshing floor and a stable had been added to the south end by the time of the Enclosure Award map of 1793. The L-shaped west range was built in two stages and includes a long cartshed with granary over, and a later cowhouse. Both parts had been built by the time of an estate plan of 1821.

The south range, now divided between the farm and a private business, was built as a malthouse by Francis Radford in 1780 (according to an inscription over a door). Now with only two floors it has window evidence of having had an intermediate third malting floor, since removed. It was extended westwards (the part now owned by the

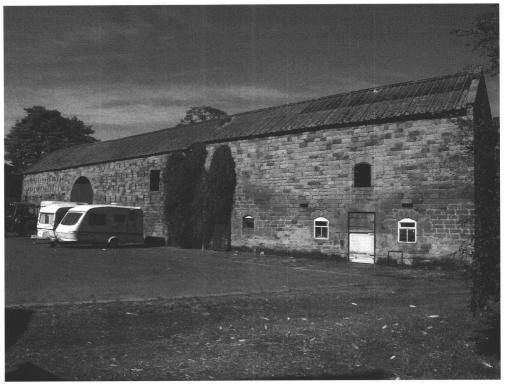


Plate 7: Elms Farm, Little Eaton: west frontage of the barn range, with the barn to left and the added stable to right.

Photograph by R. Sheppard.

farm) and a kiln added on the north side (since altered into a tractor shed), somewhere between 1793–1821. The east part was acquired by a brewery, but is now used for light industry. The buildings at Elms Farm represent a farm fully-formed by the early 19th century, which may be due in part to its long association with malting, and it is of some rarity value and local historic interest.

A full report has been deposited with the SMR.

NORTH LEES HALL, HATHERSAGE (SK 235834)

R. Sheppard

A watching brief was carried out by Trent & Peak Archaeological Unit during roof replacement carried out for the Vivat Trust at North Lees Hall, the late 16th century building which they lease from the Peak District National Park Authority. The Grade II* listed building consists of a rectangular tower, three storeys tall, with a partly projecting staircase turret that gives access to a flat roof on the tower (Pl. 8). An attached two-storey east wing appears to be mainly of a later date.

The tower's roof was replaced in the 1960s with a concrete roof slab under an asphalt cover and it needed to be replaced again, this time in a manner more sympathetic to the

original fabric. An archaeological watching brief was requested to look for and record any surviving evidence for the original roofing, including timber voids, leading etc. From the outset it was unclear whether the original roofing was flat or whether it had been of low pitch construction. Once the concrete was removed, it was found that the tops of the outer walling had been cut back to take metal joists, and courses of brickwork and concrete had been inserted to hold them in place. This had left no evidence of original seating for roof timbers.

Towards the base of the parapet walling two lines of former leadwork could be discerned. The upper line was probably where lead flashing, rising from a lower roof level, had been tucked into the nearest jointing. The lower level of grooving in the stonework showed particularly well in the south wall, with two stepped rises of about 10cm evident at either end. The first rise was vertical, the second angled, the overall effect being to drain water towards the west and east sides of the building where the drainage holes were situated. The grooving pattern was slightly different in the north parapet wall, suggesting that the roof structure may have differed slightly to either side of an internal cross wall showing beneath the joists. However, the overall design appeared to be of a flattish, slightly stepped leaded roof over the main roof area. The



Plate 8: North Lees Hall: the 16th century hall, its later wing and, in the foreground, the grassed area where geophysical survey has revealed the outline of another structure.

Photograph by R. Sheppard.

underlying roof timberwork could have consisted of overlapping horizontal timber joists.

The tower part of North Lees Hall has been likened to the design of so-called 'high houses' or 'tower houses' in the North Midlands, including Buxton Old Hall built in 1572–73 and Queen Mary's Tower at Sheffield Manor, dating to 1574. Comparisons between such buildings has tended to be based on size, height, internal design and the presence of crenellation or balustrades. Whilst perhaps intended to look like a medieval keep, they served differing purposes, such as residence and lodgings, or as retreats and hunting lodges. Early depictions of such buildings generally fail to show details of the roof behind the crenellation and roof designs are often overlooked in building descriptions. Nevertheless, with stair turrets often providing access, the roofs of tower houses were clearly intended as viewing platforms in scenic areas or in hunting country and a flat surface would have been most practicable and safe.

Whilst the building of North Lees Hall is not recorded, some decorative plasterwork bears the date 1594. It also bears the crest and motto of the Jessop family who owned the property from c. 1580. Leased to Richard Fenton up until 1591, the present building either replaced an existing building or its decoration was finished in 1594. As well as its date of origin, the structural development of the Hall is not fully understood. Stonework to the left of the tower's principal doorway indicates that a contemporary east extension once existed and that this was replaced not much later, probably by the present lower east service wing which has been dated to c. 1646. The extent of the original extension and why it was replaced remain unclear. Following the watching brief permission was granted to carry out a private geophysical survey in the grassed area east of the Hall to see if any associated structures had existed there. The survey, carried out by Alan and Celia Morris at the behest of the author, provided clear evidence for a previously unrecorded structure about 8m by 10m in size immediately to the south-east of the existing buildings.

The author is indebted to Alan and Celia Morris for their help and to Peak District National Park Authority for granting permission to carry out the survey. A full report of the watching brief has been deposited with the SMR.

SINFIN MUNICIPAL GOLF COURSE (SK 353320)

H. Jones and G. Kinsley

Trent & Peak Archaeological Unit was contracted by Severn Trent Water Ltd to undertake a watching brief during improvements to the sewage infrastructure at Sinfin Municipal Golf Course, between November 2004 and April 2005. The scheme comprised three main elements, a pipeline and associated easement, a pumping station and combined sewer overflow. A desk-based assessment had identified that the former brick farmhouse (now a golfshop) and yard of Cotton Farm may have occupied the site of the Domesday manor of *Codetune* (Kinsley 2004). Beyond this area, the proposed works pass through what were formerly the lands of the manor. Extensive ridge and furrow earthworks preserved across the golf course form part of a well preserved ancient landscape. A detailed topographic survey of areas of ridge and furrow threatened by the topsoil stripping of the easement was completed in advance of the ground-

works. This was made available to the construction contractor, enabling reinstatement of the original profile after completion of the ground works. An intermittent watching brief was maintained throughout the pipeline easement whereas the works within the historical perimeter of Cotton Farm, judged the most likely to encounter buried archaeological remains, was subject to continuous watching brief. Archaeological discoveries were limited to the areas of ridge and furrow. Monitoring of the stripping of topsoil from the easement together with the pipe trench and occasional hand and machine dug cuttings across selected furrow bases provided opportunities to recover dating evidence and identify buried archaeological features and horizons. Finds were limited to a substantial amount of post-medieval — modern material. A machine cut box through the ridge and furrow on the west edge of the golf course revealed evidence of a possible remnant of buried soil protected by the later ridge, containing a heat shattered pebble and a flint flake. The same cutting also yielded potsherds of 18th / 19th century date from the soils forming the body of a ridge and infill of a furrow. The desk-based assessment was undertaken by Gavin Kinsley, fieldwork by Howard Jones. Pete Inker and Alastair MacIntosh, and the topographic survey by Doug Gilbert. A copy of the full report has been deposited with Derbyshire County Council.

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SWARKESTONE QUARRY, BARROW-UPON-TRENT (SK 34652780; SK 34302750) D. Knight, S. Baker, M. Keech, B. Lewis, A. MacIntosh, L. Platt and G. Richards

Watching briefs were conducted by Trent & Peak Archaeological Unit on behalf of Lafarge Aggregates Ltd during overburden stripping at Swarkestone Quarry between 2001 and 2006. Investigations focused upon two main areas. The first was located on a low, elongated sand and gravel terrace extending eastwards from a linear belt of woodland identified on the Barrow-upon-Trent Enclosure Map of 1788 as Captain's Pingle (centred at SK 34652780). The second coincided with the broad alluvial floodplain that extends southwards from Captain's Pingle towards the River Trent (centred at SK 34302750), and correlates broadly with an area referred to in the 1788 Enclosure Award as High Meadow. The study area lies immediately south of a cluster of sites investigated during earlier phases of gravel extraction, including a Neolithic and earlier Bronze Age ring ditch with associated cremations (Knight and Morris 1998), two settlements which between them spanned the Iron Age and Romano-British periods (Knight and Southgate 2001) and several later prehistoric pit alignments (*ibid.* 201; Knight and Richards 2004).

Stripping of overburden from the Trent floodplain revealed variable thicknesses of alluvial clays and silts, up to c. 2m thick, stratified above sands and gravels. Several west-east meandering palaeochannels of variable depth and width were observed during the stripping of floodplain deposits, some with dark organic basal fills. In addi-

tion, subsoil stripping of the river terrace flanking the northern edge of the floodplain revealed a wide but fairly shallow channel within which had been set the timber foundations of a V-shaped medieval fishweir. This channel continues eastwards the alignment of a wide and very shallow linear depression occupied by the mixed woodland of Captain's Pingle, suggesting that the latter perpetuates one of the medieval courses of the River Trent. Many of the other channels observed during stripping probably relate to medieval courses of the Trent, but further work is required to clarify the chronology of these.

Stripping of topsoil and plough-disturbed subsoil deposits from the sand and gravel terrace immediately east of Captain's Pingle revealed scattered pits that by analogy with sites elsewhere in the quarry may represent relics of unenclosed later prehistoric settlement. Traces were also recorded in this area of a row of five pits forming part of a pit alignment running southwards from a Late Iron Age and Romano-British settlement excavated in 1999 to the east of Captain's Pingle (Knight and Southgate 2001). This pit alignment appears to have formed part of an extensive but fragmentary system of land boundaries, arranged in rectilinear fashion across the valley floor, that may date from the later first millennium BC.

The most significant discovery was the medieval fish weir recorded in the channel extending eastwards from the linear woodland belt of Captain's Pingle (Fig. 2). Archaeological excavations unearthed a V-shaped arrangement of oak posts, associated with sandstone blocks and wattle panels, which compares closely with medieval fish weirs found several kilometres downstream at Hemington Quarry (Cooper 2003, 32–8) and in old channels of the Trent on the eastern outskirts of Nottingham (Losco-Bradley and Salisbury 1979; Salisbury 1981).

Each arm of this well-preserved V-shaped structure comprised a double row of closely spaced oak posts associated with linear spreads of local sandstone blocks. These arms were set approximately 13m apart at the upstream end of the structure, and converged towards an open apex some 12m downstream. The apex was crowded with a jumble of fragmentary wattle hurdles formed from interwoven hazel rods, other wood fragments and sandstone rubble, redeposited by river action. The post alignments forming each arm of the V-shaped structure were positioned about 0.5m apart. They comprised rows of closely spaced sharpened piles, many preserving tool marks consistent with those produced by an iron axe. The posts survived to a maximum length of almost 2m and had been driven at least 0.7m into the bed of the river. Many of the timber piles showed severe surface abrasion, reflecting their location in a dynamic river environment with significant reworking of the floodplain sands and gravels. This is also indicated by the uprooting of some major structural timbers and the piling up of these and fragmentary wattle hurdles in the congested apex of the fish weir. Unfortunately, none of the timbers preserved enough rings to permit tree-ring dating, but samples have been taken of timber piles and hurdle rods for radiocarbon dating. Further analyses of selected roundwood samples are in progress, with the aim of elucidating patterns of selection, woodland management and woodworking technology.

One of the closest parallels for this structure is provided by an Anglo-Saxon fish weir at Colwick near Nottingham (Salisbury 1981), and as at that site the vertically set posts forming each arm of the structure may have supported wattle hurdles, perhaps with

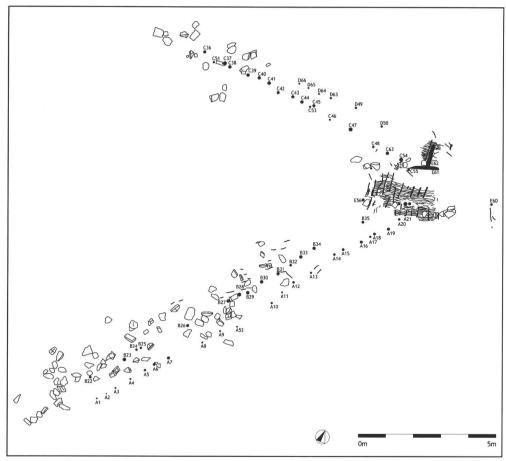


Fig. 2: Plan of medieval fish weir, showing V-shaped arrangement of wooden posts (rows A-D), associated sandstone blocks and wattlework panels at the open apex.

brushwood bundles along the base to prevent fish escaping and to provide attractive environments for fish to hide. Substantial portions of several wattle hurdles were recorded at various levels in the channel fill near the open apex of the structure, in some cases overlying one another. It seems likely that these had been redeposited by river action, and had become trapped in an area where channel flow had been impeded. The linear spreads of sandstone rubble that were associated with the timber rows may have been piled up along the base of the wattlework structure as a foundation support, as suggested at Colwick. Immense pressure would have been placed on the wattle hurdles, especially when river levels were high, and the downstream side of the structure may have been strengthened by angled bracing timbers. A basket or net could have been placed across the apex of the structure to catch the fish, but no traces of these or of associated structures such as platforms for the tending of nets survived.

Radiocarbon dating should clarify the dating of this structure, which on the basis of the evidence presented above may be expected to fall within an Anglo-Saxon to later medieval timeframe. The Trent during that period would have borne little resemblance to the modern navigable river. As elsewhere along the middle reaches of the river, the valley floor near Barrow may have been characterised then by multiple shallow channels that in the dry season could have been crossed by wading. This would have made it easy to drive posts into the bed of the river and to construct and maintain the impressive timber structure that is indicated by the surviving archaeological remains. The Trent and its tributaries would have provided refuge for a flourishing and varied fish population, including eels, lampreys, salmon, and sturgeon. The importance of fishing is emphasised by the frequent references to fisheries in parishes adjoining the Trent in the eleventh century Domesday Survey, although the several entries for Barrow are frustratingly silent on this point, and fishing, particularly for eels, would have played a significant role in the medieval food-producing economy.

Thanks are extended to Lafarge Aggregates Ltd for funding work at Swarkestone Quarry, Dr Dave Barrett (Derbyshire County Council) for his advice during the course of archaeological investigations, Steven Allen (York Archaeological Trust) for his work on the waterlogged wood and Alison Arnold and Robert Howard (Nottingham Tree-Ring Dating Laboratory) for dendrochronological assessment. Fig. 2 was prepared by David Walker.

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The Society gratefully acknowledges the financial support of various sponsors of Trent & Peak Archaeological Unit in the publication of this paper.