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**ROMAN MIDDLEWICH COMMUNITY DIG: INTERIM REPORT ON AN
ARCHAEOLOGICAL EVALUATION AT BUCKLEY'S FIELD, MIDDLEWICH AND
PROJECT DESIGN FOR FURTHER EXCAVATION**

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FIGURES

- Figure 1** **Site Location**
Figure 2 **Location of Evaluation Trenches and Major Archaeological Features**

APPENDICES

Appendix A Research Questions

1. INTRODUCTION

- 1.1 This interim report relates to a programme of archaeological evaluation at Buckley's Field, Middlewich, which has been carried out in advance of a community dig funded by a grant from the Local Heritage Initiative. This project is a development from the HLF-funded Roman Middlewich Project which has successfully sought to raise local awareness of the rich archaeological legacy in Middlewich.
- 1.2 This report summarises the results of the evaluation, and details the proposed methodology to be adopted during the main phase of excavation in order to address research issues identified before and during the evaluation (see appendix A).

2. LOCATION, GEOLOGY AND TOPOGRAPHY

- 2.1 The site, a rectangular field roughly 0.7ha in size and oriented northwest-southeast, is situated between King Street to the east and the canalised River Croco to the west, centred on NGR SJ 705 665 (Figure 1). The site is bounded to the north and east by modern housing, to the south by an overgrown hedgerow and weeds, and to the west by a high brick wall, beyond which lies Cheshire House and the canal. The site is approached via a single lane track which runs southwest from King Street, running along the north-western edge of the field. Adjacent to the southern edge of the track between King Street and the site there is a narrow verge of overgrown waste-ground.
- 2.2 The geology of the site comprises Triassic mudstone with overlying River Terrace Deposits and Alluvium.
- 2.3 The site is generally flat at around 33m AOD, but along the southwest edge of the site there is a distinct terrace which slopes down towards the River Croco. As the access track heads towards King Street to the northeast it passes over an obvious camber, which appears to be running parallel with King Street.

3. ARCHAEOLOGICAL BACKGROUND

- 3.1 The site lies within the general industrial area of Roman Middlewich, which developed along the fringes of King Street following the establishment of a military fort at Harbutt's Field c. 70 AD. The settlement exploited local brine springs for the production of salt, but also carried out metalworking, glass making and produced leather for which brine was also necessary.
- 3.2 Despite the fact that a significant amount of archaeological investigation has been carried out at sites along King Street since the 1960s, the potential of the current site remains largely unknown. John Bestwick excavated a number of small trenches in the northern corner of the field between 1972 and 1975 (Site J), but the results were never published. In the few interim reports that were produced he states that evidence for 2nd-3rd century iron-smithing was identified and that aisled, post-built structure associated with a 3rd-4th century potter was discovered. The exact location of these features is unknown as Bestwick left no

plans, but it is probable that such features were present in the area behind buildings fronting onto King Street, which would have formed a focus for industrial activity.

- 3.3 During excavations immediately to the northwest of the current site prior to residential development in 2002-3, a series of industrial features were also identified, including clay and wicker lined pits, ditches, kilns and fire pits, bisected by a substantial multiphase cobbled road which appeared to run in a westerly direction from King Street down towards the River Croco.
- 3.4 As part of the current evaluation the site was surveyed twice by Stratascan, the first using magnetometry and the second resistivity. The results of the magnetometer survey indicated that large areas of the site (particularly along the south-western edge of the field) had been affected by modern disturbance, though towards the centre of the field there were a number of linear and 'spike' anomalies. The most significant feature was a wide linear feature which crossed the eastern corner of the site on a north-south alignment, and was thought to be a ditch, possibly associated with the Roman road thought to run across this part of the site.
- 3.5 The results of the resistivity survey were inconclusive. Only one linear feature was visible, equating to a modern concrete-lined service pipe also seen during the magnetic survey.

4. AIMS AND OBJECTIVES

- 4.1 Prior to commencement of the evaluation a series of general research questions were outlined which represented the aims and objectives for the project as a whole. This has been reproduced in appendix A. In addition, the following aims and objectives have been identified;
 - To identify the location and nature/condition of any archaeological remains within Buckley's Field prior to excavating an open area trench during the community dig.
 - To assess the results of the geophysical survey through targeted trenching.
 - To instigate a programme of high artefact recovery, particularly in order to recover information from homogenised Roman soils where traces of archaeological features have been lost through processes of soil erosion.
 - To create full and proper records of all excavated material.

5. METHODOLOGY

- 5.1 A staged approach was adopted for the excavation of the evaluation trenches. In the first instance four trenches were excavated across the site in order to target linear features which had been recognised as a result of the Magnetometer survey (Trenches 2, 3, 8 and 10) and a further trench (11) was excavated on the slope along the south-western edge of the site in order to assess the original topography of the slope and the processes which may have formed it. These were opened up on the 14th July 2005 by mechanical excavator fitted with a toothless ditching bucket and under full archaeological supervision. The

modern topsoil and subsoil were removed until either archaeologically significant deposits or natural geology were encountered. In Trenches 2 and 3 a portion of the subsoil was left intact in order to investigate it more thoroughly by hand excavation.

- 5.2 A second phase of trenching was planned to coincide with the results of the resistivity survey which took place on the 20th July 2005. However, as the results of the survey were inconclusive it was decided to partially target some more of the features seen during the magnetic survey towards the centre of the site (Trenches 4 and 7), and to position the rest of the trenches (1, 5, 6 and 9) along the north eastern edge of the site and adjacent to the access track, where it was anticipated that linear features running westward from King Street would be located. These trenches were also opened by machine under supervision, and in all cases machining was stopped when archaeologically sensitive material was encountered. Trenches 4 and 7 were then excavated and recorded stratigraphically by hand. Trenches 1, 5, 6 and 9 were cleaned, photographed and planned but were not excavated as this will be left until the start of the community dig.
- 5.3 The location of all trenches and their internal features is indicated in figure 2.
- 5.4 The spoil heaps adjacent to each trench were flattened and scanned for artefacts by metal detectors, which were then also employed to scan and mark any metal artefacts within the trenches themselves. The spoil heaps were also routinely sieved and inspected for non-metallic artefacts by volunteers.
- 5.5 In all trenches (except 11) a plan was drawn at a scale of 1:20, and a sample of the trench edge drawn in section at a scale of 1:10. A photographic record was also maintained on 35mm monochrome print, colour slide and digital formats with a supporting index.
- 5.6 Archaeological deposits were excavated stratigraphically by hand, and recorded using the Gifford single context recording system based on that developed by English Heritage, Central Archaeology Service. Artefacts recovered were placed in bags and labelled with the context from which they were taken, or marked as unstratified if recovered from spoil. Delicate metal artefacts were wrapped in acid-free tissue paper and stored securely.
- 5.7 Samples taken from suitable contexts for environmental assessment in the post-excavation phase (e.g. those which appeared to have good organic preservation) were double-tagged, placed into 10 litre storage buckets and cross referenced with a supporting index and sample record form.
- 5.8 An array of survey stations tied into the Ordnance Survey National Grid was set up using a total station connected to a Penmap PC, allowing the location of each evaluation trench to be plotted onto an OS base map. These stations will be used during the community dig to establish a site grid.

6. RESULTS (SEE FIGURE 2 FOR TRENCH LOCATIONS)

6.1 Trench 1

- 6.1.1 This trench was excavated adjacent to the site access track and oriented northeast-southwest, measuring 20m x 1.6m. The trench was situated in order to investigate a camber seen running parallel with King Street across the access track, and also to inspect for any archaeological remains close to the King Street frontage.
- 6.1.2 Approximately 0.3m of modern topsoil and a further 0.3m of well developed brown, sandy silt were removed to expose two cobbled tracks, the latest features in the trench. The first of these was seen at the eastern end of the trench. This appeared to be aligned with the modern King Street, running in a north-westerly direction across the end of the trench. This was at least 1.2m wide and 0.25m thick, formed from compacted small-medium rounded pebbles c. 20-50mm in diameter.
- 6.1.3 The second track was located 5m to the southwest of the first and appeared to be running at right angles to it (i.e. parallel with the access track), continuing to the south-western end of the trench. Possible overburden on the northern side of the track may suggest a camber diving down along the north-western edge of the trench. This track is also formed from small-medium cobbles, but much more densely packed than the first.
- 6.1.4 The two tracks were divided by a hiatus; the grey-brown sandy silt that had overlain the tracks continued as a fill between them to a further depth of 0.2-0.3m before reaching an earlier phase of archaeology. In section however there was no visible cut to suggest that the tracks had been separated by a later feature.
- 6.1.5 Beneath both tracks and the overlying grey sandy silt were a series of earlier 'floor' surfaces. At the north-eastern end a floor of crushed pink briquetage respected a brown clay surface to the southwest, which also appeared to have a slot for a timber beam cutting northwest-southeast across it.
- 6.1.6 At the time of writing none of the features in Trench 1 had been manually excavated, and therefore full interpretation of the observed features is difficult. A possible alternative to the hypothesis presented above is that the hiatus between the two cobbled areas represents the eastern ditch of Roman King Street, with the cobbled area to the west being part of the Roman road and the area to the east being a pavement or track running parallel to the ditch. The 'floors' seen at the base of the trench may represent tip-lines within a number successive ditch fills. It is intended that these ideas will be tested during the main element of the community dig (see project design below).

6.2 Trench 2

- 6.2.1 Trench 2 was initially excavated during the first stage of trenching to investigate a number of linear positive magnetic anomalies picked up during the magnetic survey. The Trench was aligned northwest-southeast and measured 10m long x

1.6m wide. Natural sand was encountered at the north-western end of the trench at 32.39m AOD (0.7m below the current ground surface).

- 6.2.2 The modern topsoil (200) and silty subsoil (201) were present across the trench to a depth of around 0.5m at the southern end and 0.2m to the north. In the middle of the trench an area of backfill was noted, 1.2m in depth (context 207), with plastic sheeting at its base. This is assumed to be the backfill from one of John Bestwick's Site J trenches dating to the 1970s.
- 6.2.3 To the north of the 1970s backfill, and underlying (201), context 202 was a homogenous grey silty sand which appeared to have been cut through in the northern corner of the trench by a possibly rectilinear feature lined with orange clay. Too little of this feature was exposed to excavate, but it has been provisionally interpreted as the clay lining for a water tank.
- 6.2.4 The trench was extended a further 2.4m to the southeast during the second phase of machining to determine the extent of the 1970s trench. This was found c. 0.3m to the south of the previous limit of Trench 2. Beyond this there was a further 2.1m of intact stratigraphy. Here the natural alluvial sand was encountered at a depth of 32.2m AOD. This was overlain thin grey eluviated sandy soil (204) which was up to 0.15m deep, sealed by a thin lens of dark, organic rich material presumed to mark a buried turf line (context 203). Above this, silty sand 202 persisted to a depth of 0.25m. Within this layer, at a height of 32.47m AOD (0.6m below the current ground surface) a cremation urn of black-burnished ware pottery was encountered containing a high quantity of burnt bone (context 208). This was seen in the west facing section in the southeast corner of the trench, and was sampled whole (sample number 1) for further analysis. No cut for the cremation could be discerned.
- 6.2.5 The archaeological remains identified in Trench 2 have provided an insight into the difficulties posed by the erosion of archaeological features within layer 202 (which occurs across the eastern side of the site). Here a cremation and potential clay-lined tank appeared to 'float' within this uniform grey silty sand, and any associated features are lost.

6.3 Trench 3

- 6.3.1 Trench 3 was opened by machine during the first phase of trenching, and was, like Trench 2, located to target a series of linear features seen running northwest-southeast on the magnetic survey. The trench was 16m long, and was archaeologically sterile. The linear features seen on the geophysical survey were identified as shallow, modern land drains running parallel to one another. The topsoil (300) overlay a silty brown subsoil (301=302) which contained frequent small rounded pebbles, flecks of charcoal, and abraded Roman pottery. Through metal detection a single piece of lead casting waste was also obtained from this layer. Overall the depth of overburden above the natural sand totalled 0.6m.

6.4 Trench 4

- 6.4.1 This trench was opened during the second phase of machining, originally in order to investigate a series of large ferrous 'spikes' on the magnetometer survey. The trench was oriented northeast-southwest and measured 12m x 5m. The natural sand was encountered in the base of the trench at a depth of 32.15m AOD following the removal of 0.8m of overburden, consisting of 0.2m of topsoil, and 0.6m depth of homogenous grey silty sand which yielded no features.
- 6.4.2 In the base of the trench a number of significant features were identified cut into the underlying natural sand. The first of these was a shallow lozenge-shaped pit at the north-eastern end of the trench which was oriented northeast-southwest and measured 1.9m long x 0.8m wide. The cut (405) was 0.1m deep and contained a mid grey-brown silty sand with occasional small rounded pebbles. A quantity of charcoal and possibly burnt samian pottery recovered from the fill may suggest that the contents were burnt before deposition.
- 6.4.3 To the west of this, a second pit (cut 408, fill 407) was cut into the natural sand. This appeared to be vaguely sub-rectangular in plan, but excavation of the fill showed the base and sides of the feature to be fairly uneven. In plan it measured approximately 1.2m in each direction, but had been truncated on its south-western side by a cut for a modern field drain.
- 6.4.4 Pit 408 abutted the north-eastern end of a third, much larger feature. This was rectangular in plan, emerging from beneath the south-western and north-western sides of the trench, with a curved (almost semi-circular) northern terminus which had been partially bisected by the modern field drain cut. In plan the feature was at least 3m wide and 7m long. Initial excavation of the latest surviving fill (context 402) and subsequent lower fills has shown that the feature had finally been completely backfilled during the late 3rd-4th centuries AD on the basis of the ceramics obtained from the fill.
- 6.4.5 This feature had not been sample excavated to the base of the sequence by the end of the evaluation phase, and it is anticipated that much further evidence will be obtained during the main element of the community dig. It had already become apparent during the initial excavation of the upper fill that waterlogged material with a good potential for organic preservation was present, with numerous finds of animal teeth, bone and wood fragments. It is suspected that the feature may resolve into a timber or clay lined brine cistern or similar large feature, bearing similarities to others seen at excavations in Nantwich by UMAU at Kingsley Fields, and on a smaller scale at the adjacent Fairclough Homes development to the north of the current site.

6.5 Trench 5

- 6.5.1 This trench was excavated during the second phase of machining, and was oriented northwest-southeast directly to the southwest of Trench 1, and in line with the north-eastern boundary of the site. The trench measured 12.6m x 1.6m.
- 6.5.2 Natural sand was encountered at the north-western end of the trench at a depth of 32.5m AOD, 0.5-0.7m below the current ground level. At the south-eastern end of the trench a clay surface was encountered at a similar depth, and in the middle of the trench a rammed gravel/pebble trackway was seen, lying above the northern end of the clay surface. This was around 4m wide and had a distinct camber indicating that the track was running on a northeast-southwest alignment, in fact a continuation of the track seen in Trench 1. It is interesting to note that the trackway present in this trench does not appear in Trench 2, which is located some 7m to the southwest, directly in line with the track.
- 6.5.3 The features seen in the base of this trench were overlain by a homogenous grey brown silty sand which was present to a depth of around 0.5m. This is assumed to be the same material seen in Trench 2 (context 202), but which represents the highly disturbed remnants of archaeological features associated with track and surfaces, now unrecognisable. From this material a number of abraded sherds of Roman pottery were obtained, alongside a complete copper alloy cattle bell found through metal detecting.
- 6.5.4 The trench was sealed by a layer of dark grey-brown topsoil which varied in depth from 0.1m to 0.2m in depth.

6.6 Trench 6

- 6.6.1 Trench 6 was opened by machine approximately 9m to the southeast of Trench 5, on the same alignment adjacent to the northeast boundary of the site. It measured 14m in length and was at most 0.6m deep. At the north-western end there was a cobbled trackway which appears to have had some repair work carried out using crushed briquetage. This track was located approximately 15m to the southeast of the one seen in Trench 5, which equates to around 50 Roman feet- a standard distance used in town planning at that time. It is possible that these two tracks delineate a single plot which may have contained a strip building fronting onto King Street.
- 6.6.2 To the southeast of the track a series of red sandy gravels and cobbles may represent floor or yard surfaces, though their exact nature has yet to be established.
- 6.6.3 Above the features in the base of this trench was a layer of grey brown silty sand up to 0.4m thick which was sealed by 0.2m of modern topsoil.

6.7 Trench 7

- 6.7.1 Trench 7 was excavated to investigate a linear feature identified on the magnetometer survey. It was located to the southwest of Trench 4, aligned northwest-southeast, and measured 12m x 1.6m.
- 6.7.2 The natural sand was encountered at a depth of 31.82m AOD, 0.6m below the current ground surface. The trench contained no archaeology, except a single modern field drain which crosses the north-western corner of the trench. The overburden in the trench consisted of approximately 0.4m of mid brown silty sand overlain by 0.1m -0.2m of modern topsoil.

6.8 Trench 8

- 6.8.1 This trench was situated directly across a large north-south aligned linear feature identified during the magnetometer survey. Initial interpretation of the anomaly had suggested that it may be a cut feature associated with Roman King Street.
- 6.8.2 The trench measured 9.2m x 1.6m and was oriented east-west. The modern topsoil and subsoil (contexts 800 and 801 respectively) were removed onto an earlier, slightly clayey, silty sand (802) which appeared to fill an 8m wide shallow depression in the natural sand. This soil contained abraded fragments of Roman tile, pottery and one piece of Roman glass, but all artefacts appeared to have been reworked within the soil rather than appearing as an undisturbed deposit. Initial thoughts suggested that the feature might represent a trackway of some kind, responsible for the geophysical anomaly, but from the irregularity of the cut and nature of the fill it is apparent that the feature is a natural depression in the alluvial sand into which the overlying soil has sank.
- 6.8.3 The only other feature in this trench was a modern machine-cut field drain 0.87m deep, in the base of which sections of ceramic pipe had been laid.
- 6.8.4 Metal detection of the spoil in this trench produced a single Roman copper alloy coin which has yet to be identified, but which is in a good state of preservation, numerous ferrous objects including nails, and a quantity of lead casting waste.

6.9 Trench 9

- 6.9.1 Trench 9 was situated to the northeast of Trench 8, running parallel with the northeast boundary of the site some 20m to the southeast of Trench 6. This trench was opened during the second phase of machining and was located to catch any linear features which may run towards the River Croco from the main Roman road.
- 6.9.2 The trench measured 12.1m x 1.6m, with a 2.2m wide extension to the north-western corner. Across the trench there was a 0.5m depth of made ground consisting of two layers; an orange clay 0.2m in depth overlain by redeposited topsoil 0.3 in depth. Beneath these layers, the original topsoil was visible as a dark grey-brown loam 0.2 m in depth.

- 6.9.3 These deposits overlay a homogenous grey brown subsoil which contained large quantities of Roman pottery and varied in depth from 0.57m at the north-western end of the trench to 0.4m in the southeast. This layer sealed a crushed briquetage surface at the north-western end of the trench, directly above which large unabraded sherds of amphora were recovered. This surface was respected by a possible slot or ditch which was seen to have been cut through natural sand immediately to the southeast of the briquetage. These features were visible at a height of around 32.75m AOD, 1.27m below the current ground surface.
- 6.9.4 At the south-eastern end of the trench features were visible 0.9m below the current ground surface. These consisted of red and buff-coloured clay surfaces which may be consistent with strip-building floor surfaces. At the end of the trench the surface had been cut through by a modern iron pipe which had been identified during the magnetometer survey.
- 6.9.5 The deposits in this trench were cleaned and recorded in situ, and will not be excavated fully until the main excavation of the community dig. It is worth noting that sieving of the spoil in this trench has produced more finds than any other trench, including chunks of briquetage, amphora, samian and coarseware pottery, ferrous objects and glass.

6.10 Trench 10

- 6.10.1 Trench 10 was the most southerly of the evaluation trenches, and was located to target the southern limit of the large north-south aligned linear feature identified on the magnetic survey. Unlike Trench 8, no feature could be seen in the trench. Topsoil and subsoil totalling 0.8m in depth were removed onto natural sand which occurred at a height of around 32m AOD. Two field drains were seen cutting through the sand at the western end of the trench, but no archaeological features.
- 6.10.2 Metal detection of the spoil heap produced a significant quantity of lead casting waste which may suggest that this industrial activity was being carried out in the vicinity.

6.11 Trench 11

- 6.11.1 This final trench was excavated running upslope from the south-western boundary of the site to the top of the river terrace to investigate the deposits which formed the slope, and to establish a reason for lack of magnetometer results in this part of the site.
- 6.11.2 The trench was 17m long and 1.6m wide oriented southwest-northeast. In the base of the trench boulder clay was encountered at a depth of 0.4m below the current ground surface at the north-eastern end of the trench, and this sloped gradually down over a distance of around 4m before dropping steeply down to a lower level some 1.5m below the current ground surface. At the south-western end of the trench the clay was overlain with organic silty deposits up to 0.4m thick which may

represent river sediments from the River Croco before canalisation. This was overlain by a layer of redeposited clay 0.3m thick which was prevalent across the trench. It is believed that this clay may have been derived from the excavation of the canal.

6.11.3 At the south-western end of the trench the clay deposit was overlain by a 0.5m thick layer of dumped building rubble and land fill of late 19th-20th century date with further lenses of redeposited clay. This became thinner upslope and was not present at the north-eastern end of the trench. The topsoil sealing this layer was up to 0.3m thick.

6.11.4 Because of the depth of this trench and water collecting in its base, the trench was photographed and closed without excavating.

7. DISCUSSION

7.1 The results of the evaluation have helped to answer a number of the research questions posed at the outset of the project, and raised others which can now be addressed.

7.2 In terms of the geophysical surveys that were carried out prior to the excavation of the trenches, these have proven to be ineffective techniques for locating archaeological features. Trenching has shown that this can be attributed to a number of local factors. Principally, a large area of the southwest side of the study area which was marked as an area of magnetic debris associated with disturbance has been shown to coincide with large dumps of 19th century refuse and rubble along the slope of the river terrace. However there has also been a high incidence of heavily iron-panned natural sand, which may also have had an impact on the magnetometer results. The area of 19th century dumping also appears to have affected the resistivity readings along the ridge of the river terrace leading to inconclusive results.

7.3 In the body of the study area to the east of the river terrace, the depth of the overburden (on average around 0.5m-0.8m) may have had an impact on the results of both magnetometer and resistivity surveys, being deeper than the scanning depth of the instruments used during the surveys.

7.4 With the exception of modern field drains, all intact archaeological deposits appeared to date from the Roman period (2nd-4th centuries), with no evidence having been found for sub-Roman or medieval activity at the site. The post medieval period is represented by a scatter of artefacts within the topsoil indicative of manuring with household and some industrial waste. Interestingly a number of possibly worked flints have been recovered from spoil in Trenches 6, 8 and 10, suggesting that perhaps flint knapping was being carried out in the vicinity of the site in the prehistoric period. This is made more likely given the site's location on a raised sandy terrace adjacent to the river- a favoured location for such activities. No features associated with such activities were seen during the evaluation.

7.5 The evaluation has shown a distinct zoning of archaeological activity across the site. Linear features, floor surfaces and tracks are present along the north-eastern boundary of the site

in Trenches 1, 5, 6 and 9 representing the rear plots and spatial organisation of strip buildings fronting onto King Street, and in Trench 1 possibly King Street itself. Trenches 2 and 4 seem to represent an area beyond or at the extremity of the backplots of strip buildings in which archaeological features of possible industrial activity are present, but no boundaries or surfaces are associated with these. Trenches 3, 7, 8, 10 and 11 are located closer still to the river terrace and are archaeologically sterile, suggesting that the land was perhaps marginal, and unsuitable for habitation or industry.

- 7.6 The location of the cremation in Trench 2 may be significant if it dates from a period when King Street was occupied, as that would suggest that the southern end of Trench 2 lay outside the inhabited area, which would in turn suggest that between Trenches 2 and 5 there is a boundary marking the rear of the building plot, and further that there could be more burials in that location. However if the cremation belongs to the earlier military period then it is likely to have been buried on open ground adjacent to the Roman road leading to the fort, and may be a chance find. The latter hypothesis seems more likely as Bestwick makes no mention of cremations from site J, despite having trenches in that location.
- 7.7 There is slight evidence for zoning of industrial activity also. Trenches 2 and 4 have exposed traces of potential salt-working structures and high quantities of briquetage, while metal detecting in Trenches 8 and 10 produced quantities of lead casting waste, though this concentration may relate purely to the dumping of waste rather than to the location of working. Regardless, the evidence for individual strip-building plots c. 15m wide suggested by the parallel trackways in Trenches 5 and 6 is striking, and it may be possible that others are present along the eastern edge of the site.
- 7.8 Perhaps the most striking feature noted in virtually all the trenches excavated is the presence of a homogenous grey soil up to 0.5m thick which blankets the surviving archaeological features representing activity spanning at least the late Roman-medieval periods. It is clear that over time the interplay of erosional processes has removed traces of the less hard-wearing features in this soil such as pits, ditches and perishable structures, and any indication of the source material from which the soil has formed. Understanding and retrieving information from this soil will be key to understanding the late Roman and subsequent post Roman development and layout of the settlement.

8. PROJECT DESIGN

The areas subjected to detailed excavation during the main element of the community dig are as follows (locations shown in figure 3):

8.1 Trench 1

- 8.1.1 The deposits uncovered in Trench 1 during the evaluation are to be excavated stratigraphically by hand. This will entail running a section through the southern half of the exposed tracks/roads and ditch/floors, examining for tip lines of the successive phases of road resurfacing, allowing their direction of travel to be determined. This will also show whether surfaces seen between the two tracks are ditch fills or floors, and how they relate to one another.

8.1.2 It is anticipated that through a programme of sieving and metal detection of spoil it will be possible to increase the likelihood of dating the deposits and therefore tightly phasing the sequence. In addition, the spoil heap adjacent to the trench will be systematically sieved for artefacts, as limited space has prevented metal detection to the full depth of spoil.

8.2 Trench 4

8.2.1 Trench 4 will be expanded to the southwest and northwest in order to expose the full extent of the 'brine tank' in plan. Excavation will continue on a section through the north-eastern terminus of the feature with the aim of identifying its function and if possible to obtain a sample of waterlogged timber for dendrochronological analysis. Again, spoil will be sieved and scanned for metal objects to maximise artefact retrieval.

8.3 Trench 9

8.3.1 The features in Trench 9 will be excavated stratigraphically by hand in order to determine their function and date. This will be the most southerly trench excavated and may demonstrate differences in the activities carried out at different plots along King Street.

8.4 Trench 12

8.4.1 An open area trench will be excavated in the northern corner of the site, roughly rectangular in plan running from the north-eastern corner of Trench 5 to the south-western corner of Trench 2 (that is approximately 15m x 18m). In addition the trench will be extended from its south-eastern edge to connect with Trench 6, enabling a view of a full plot between the road surfaces in Trenches 5 and 6.

8.4.2 Initially the topsoil will be stripped from the whole area by machine, and then subsequent excavation through the underlying subsoil will be stepped in 0.2m deep spits, each a bucket-width wide, starting from the highest point along the north-western edge of the trench and diminishing in height towards the southeast. It is anticipated that at this point the backfill from Bestwick's 1970s trench will be completely removed from the trench revealing the original excavation area, and this will be plotted onto the excavation plan.

8.4.3 A site grid tied into the Ordnance Survey National Grid will be established using a total station and Penmap surveying software, and on this basis the trench will be subdivided into 1m squares. An initial sample of these squares (approximately 10) will be hand excavated as test-pits through the homogenous subsoil, retrieving artefacts through sieving and metal detection in 100mm spits in order to ascertain whether any spatial or temporal concentrations of material exist within the soil. Depending on the success of this technique, the sample will be expanded to

include more squares, or rejected, in which case the remainder of overburden will be removed by machine to expose the underlying archaeological remains.

- 8.4.4 In addition, monolith samples from a continuous section of the grey soil will be taken for analysis of its micromorphological character at the post excavation stage if excavation is insufficient to identify variations in its make-up.

9. EXCAVATION AND RECORDING

- 9.1 All undisturbed archaeological deposits will be excavated stratigraphically by hand and recorded using Gifford's single context recording system, to include levelled plans and sections at 1:20 and 1:10 respectively, photographic record and index and context records.
- 9.2 All cut features and structures will be excavated in section where appropriate to determine relationships, dates etc., though it is not anticipated that these will be completely excavated unless necessary or practical.

10. ARTEFACT RECOVERY AND PROCESSING

- 10.1 All spoil generated from the machining and hand excavation of the trenches will be manually scanned with metal detectors and sieved for finds. In addition exposed features and trench surfaces will be routinely scanned with metal detectors, and the location of any coherent signals labelled for reference during manual excavation.
- 10.2 Finds will be retained with record of their source context, unless obtained from spoil in which case they will be labelled as unstratified. All finds will be processed on site, to include washing, drying, weighing and creation of a bulk finds record with material separated into its individual categories. All delicate artefacts will be stored in suitable conditions. Any precious artefacts will be stored securely off-site.

11. PALAEOENVIRONMENTAL SAMPLING

- 11.1 Samples will be taken from sealed contexts that are waterlogged or have the potential to provide evidence of the environment in which they were deposited. These will be stored in 10 litre buckets under suitable conditions and supported with an index and individual sample record sheets.
- 11.2 A detailed sampling strategy has not been implemented at this time, but as the excavation progresses this may be undertaken in consultation with English Heritage's Regional Science Advisor.
- 11.3 It is anticipated that initial processing of the bulk samples will be undertaken on-site by volunteers.

12. RESOURCES

12.1 Excavation is to be carried out over a six week period by local volunteers, amateur and semi-professional archaeologists under the direction of Laurence Hayes. Tim Malim will be managing and overseeing the work, and will have input into the direction of the excavation at strategic points throughout the programme. Recent graduate students from Manchester University and experienced amateur archaeologists will also be available to provide supervisory support to the more inexperienced members of the team during the dig.

13. REPORT

A post-excavation assessment will be carried out upon completion of the on-site works, to include:

- An introduction and background to the project
- A statement of the aims and objectives of the project
- A summary of the results of the excavation with accompanying figures and plates, and preliminary phasing of the recorded archaeology
- An assessment of the archive, including all written, drawn and photographic records
- An assessment of all artefacts and ecofacts, to provide dating, social, economic and technological information
- An updated project design stating aims and objectives for further work on the archive
- Conclusions
- Appendices to include all specialist reports and finds records etc.

14. ARCHIVE

14.1 The excavation archive (including the evaluation archive) will be prepared, indexed and stored according to the requirements of the recipient museum. The recipient museum will be approached in advance of deposition, anticipated to be the Salt Museum in Northwich.

15. HEALTH AND SAFETY

15.1 Gifford operate in accordance with the health and safety procedures as set out in:

- The Health and Safety at Work Act (1974) and related legislation
- The Standing Conference of Archaeology Unit Managers Health and Safety Manual (2002)

- The Council for British Archaeology Handbook No. 6, Safety in Archaeological Fieldwork (1989)
- The Gifford Health and Safety Handbook. In accordance with the CDM regulations, Gifford will prepare a risk assessment in relation to the works prior to the commencement of the excavation.

All necessary personal protective equipment would be worn at the appropriate time by personnel working in the vicinity of heavy machinery (i.e. hard hat, hi-vis jacket, protective footwear).

A first aid kit and accident book will be kept on site during the works at all times.

FIGURES



Fig 1: Site Location

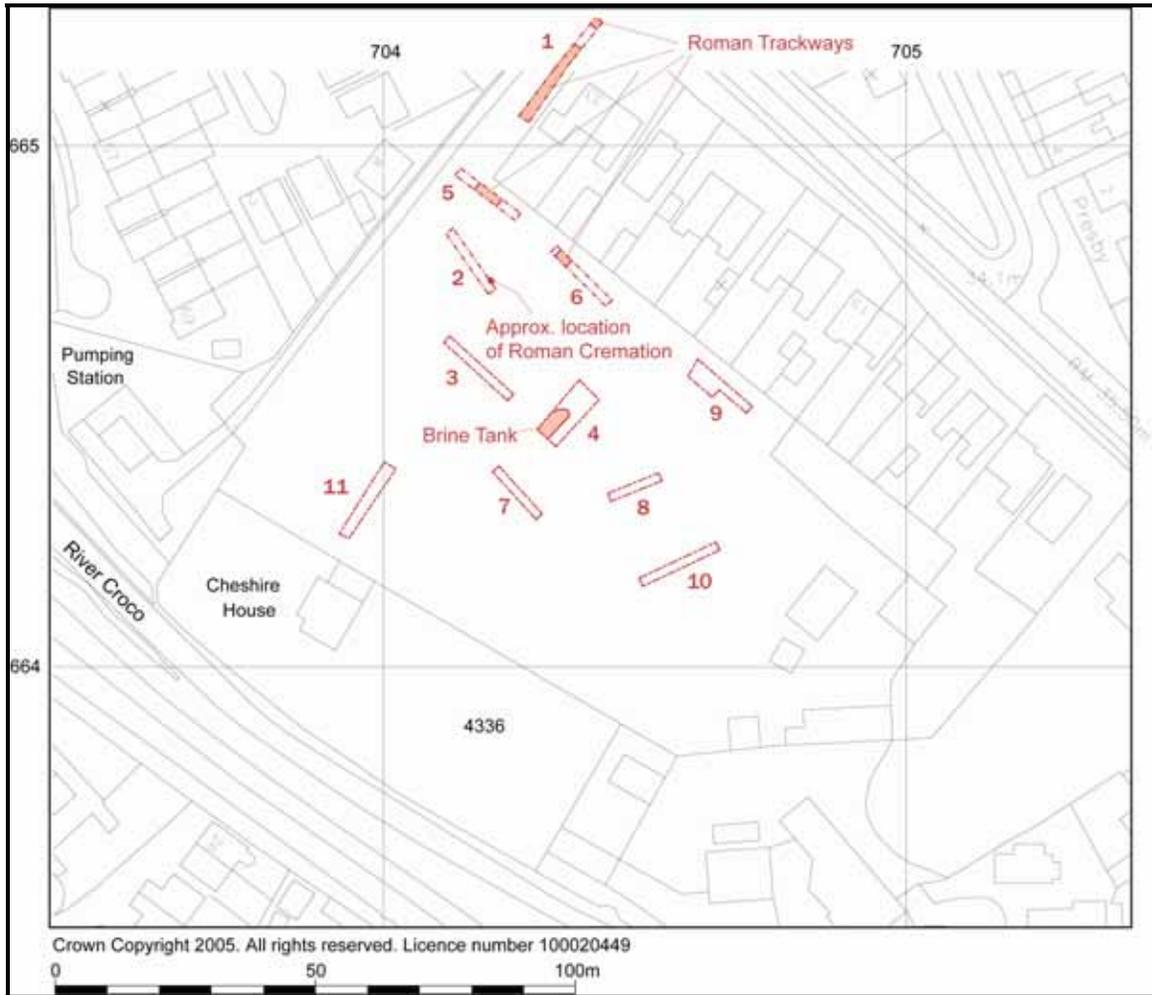


Fig 2: Location of Evaluation Trenches and Major Archaeological Features

APPENDICES

APPENDIX A
Research Questions

Middlewich Community Dig: Research Questions

1 Prehistoric Origins: can we find evidence for pre-Roman occupation/salt making?

Target: Drop-off to river and possible round houses

Technique: Resistivity survey and trenching/area excavation

2 Late Roman continuity (and sub-Roman): Can we find any evidence? Problems with 'litharge'

Target: Upper layers of stratigraphy and artefact retrieval

Technique: Metal detecting, test pits and sieving programme; can we devise a strategy for bringing out any 'ghosts'? e.g. closely gridded phosphate sampling.

3 Spatial organisation of backplot area

Target A: Road to identify nature and date of construction/s, alignment, relate to King Street

Technique: longitudinal and cross-section of road to find buried artefacts for dating purposes; excavate in two places at western and eastern ends; compare to other roads.

Target B: Ditched property boundaries, date and alignment; relate to road and other linears.

Technique: Resistivity survey, longitudinal and cross-section.

4 Industrial v Domestic use of area

Target A: Magnetometer anomalies to characterise metalworking and salt production

Technique: Area excavation; appropriate sampling strategies for metal debris

Target B: Building remains from Bestwick evidence and magnetometer survey

Technique: Trenching/area excavation

5 Civil v Military Status

Target: Artefact retrieval; spatial organisation and Roman surveying

Technique: Area excavation, metal detecting, alignment and interval plotting, coins and imports.

6 Palaeoenvironmental Studies

Target: General environmental background, site specific and feature specific activities

Technique: Soil sampling, flotation and sieving of buried soil beneath road pit and ditch fills

7 Location of Bestwick excavation and how this can add to our knowledge of previous results

Target: magnetometer anomalies and area of weak positive signal in centre of field

Technique: Trenching/area excavation

8 Geophysical effectiveness and soil chemistry

Target: Survey Buckley's field in general, then more detailed on key areas

Technique: compare results from different techniques; take soil samples (for soil chemistry) test against excavated results in due course.