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**Assessment of biological remains from  
excavations at the Beetham Hilton Hotel,  
Deansgate, Manchester (site code: DGM04)**

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by

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**Summary**

*A series of sediment samples recovered from deposits encountered during excavations at the Beetham Hilton Hotel, Deansgate, Manchester, were submitted for an assessment of their bioarchaeological potential. The material was mostly recovered from features of Roman date associated with gravel quarrying.*

*Ancient biological remains recovered from the processed subsamples were largely restricted to charred plant remains. Even the remains from the more productive deposits were limited to wood charcoal usually with small to modest-sized concentrations of remains of cereals, both grain and chaff. The largest concentration of grain and chaff came from the one pit fill (Context 11) examined from Phase 5 (?2<sup>nd</sup> century AD), where a very typical Roman assemblage was present.*

*Very small quantities of tiny fragments of burnt bone were recovered from ten of the samples but, with the exception of a possible pig metapodial from Context 224 (Phase 4), none could be identified.*

*The samples examined here indicate that the deposits at this site have some potential for investigating the use and disposal of cereals, though the concentrations are (with the exception of Context 11) rather small. Our knowledge of Roman activity and environment in Manchester is minimal and it may be worth examining other deposits where concentrations of charred material are prominent to check for other interpretatively useful assemblages.*

**KEYWORDS:** BEETHAM HILTON HOTEL; DEANSGATE; MANCHESTER; ROMAN; POST-ROMAN; PLANT REMAINS; CHARRED PLANT REMAINS; CHARRED GRAIN; VERTEBRATE REMAINS

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## Assessment of biological remains from excavations at the Beetham Hilton Hotel, Deansgate, Manchester (site code: DGM04)

### Introduction

Excavations were carried out at the proposed site of the Beetham Hilton Hotel, Deansgate, Manchester, by Pre-Construct Archaeology Ltd (Northern Office) between the 8<sup>th</sup> of March and the 8<sup>th</sup> of April 2004. The excavation revealed evidence of primarily Roman activity in two areas (A and B) and was centred upon NGR SJ 8346 9765.

Area A comprised natural gravel, partially overlain by natural yellow sand. The gravel having been quarried in the Roman period and the quarry pits since backfilled and the area levelled. There was evidence for a clay and timber building having been constructed over the gravel pits, levelled and followed by another clay and timber building. This was then sealed by a layer of Roman build-up material. Two east-west aligned ditches and a number of gravel quarry pits were also recorded.

In Area B, a sequence of clay and timber buildings was recorded, along with another group of gravel pits. There was no evidence for occupation of the site after the Roman period, until the construction of terraced housing in the 19<sup>th</sup> century. A large railway viaduct was built in the late 1890's, which along with the cellars of the terraced housing, has resulted in heavy truncation of the site.

The identified phases for the site were as follows:

- Phase 1: natural sand and gravel
- Phase 1.1 : possible palaeosol
- Phase 2: early Roman quarrying
- Phase 3: early Roman buildings and associated activity
- Phase 4: ground consolidation
- Phase 5: ?2<sup>nd</sup> century buildings
- Phase 6: Roman developed soil

Phase 7: post-Roman

### Methods

Thirty-nine bulk sediment samples ('GBA'/'BS' *sensu* Dobney *et al.* 1992) were submitted to PRS for an assessment of their bioarchaeological potential.

The sediment samples were inspected in the laboratory and their lithologies recorded using a standard *pro forma*. Subsamples from thirty-one were processed, broadly following the procedures of Kenward *et al.* (1980), for recovery of plant and invertebrate macrofossils.

Plant remains (and the general nature of the residues, flots and washovers) were recorded briefly by 'scanning', identifiable plant taxa and other components being listed directly to a PC using *Paradox* software. Notes on the quantity and quality of preservation were made for each fraction. (No ancient invertebrate remains were recovered.)

The residues were examined for larger plant macrofossils and other biological and artefactual remains.

### Results

The results of the investigation are presented below in context number order by Phase. Archaeological information, provided by the excavator, is given in square brackets. A brief summary of the processing method and an estimate of the remaining volume of unprocessed sediment follows (in round brackets) after the sample numbers.

PHASE 2 – EARLY ROMAN QUARRYING

**Context 158** [black charcoal layer – Phase 2]

Sample 22/T (3 kg sieved to 300 microns with washover; approximately 5 litres of unprocessed sediment remain)

Just moist, light to mid grey brown (abundant charcoal darkening the matrix), brittle to crumbly (working soft), clay silt, with sandy clay silt patches. Stones (2 to 6 mm) modern root traces and ash were all present and charcoal was abundant.

The rather large washover (400 ml) was of fine wood charcoal (with some larger fragments to 10 mm and very occasionally to 15 mm) and a little sand.

The small residue (of approximately 0.33 kg) consisted mainly of sand with a few stones. Poor quality pottery or burnt clay and three tiny fragments (to 3 mm) of unidentified burnt bone were also present.

PHASE 3 – EARLY ROMAN BUILDINGS AND ASSOCIATED ACTIVITY

**Context 1** [charcoal fill of Roman firepit – Phase 3]

Sample 1/T (3 kg sieved to 300 microns with washover; approximately 5 litres of unprocessed sediment remain)

Just moist, light brown to mid to dark grey-brown (greyness from charred material), unconsolidated to crumbly (working soft), slightly sandy slightly clay silt. Stones (2 to 60 mm) were present, and charcoal (to 20 mm) and very dark grey/black ash were abundant.

There was a large washover of about 450 ml of angular charcoal (to 40 mm in maximum dimension), amongst which both birch (*Betula*) and willow/aspens/poplar (*Salix/Populus*) were noted.

The rather small residue (of approximately 0.65 kg) was composed of sand with a few stones.

**Context 46** [sandstone rubble layer – Phase 3]

Sample 7/T (3 kg sieved to 300 microns with washover; approximately 5 litres of unprocessed sediment remain)

Just moist, varicoloured (very light grey-brown to mid to dark grey, in shades of brown, grey-brown and orange), gleyed in appearance, stiff to brittle (working plastic), clay. Stones (2 to 6 mm), pottery (to 5 mm), black ash and root traces were present.

The small washover (10 ml) was mostly fine charcoal and coal (to 5 mm), with a little cinder and some sand grains.

The very small residue (of approximately 0.26 kg) consisted entirely of sand.

**Context 47** [charcoal rich dump layer – Phase 3]

Sample 11/T (3 kg sieved to 300 microns with washover; approximately 5 litres of unprocessed sediment remain)

Just moist, mid to dark grey-brown, with patches of mid reddish-brown and lighter and darker patches. Stiff to brittle (working crumbly and more or less plastic), stony, silty clay (more clay in places). Stones (2 to 60+ mm) and charcoal were present.

This subsample yielded a small washover of about 35 ml of charcoal (to 15 mm, including oak, *Quercus*, and *Salix/Populus*) and some charred cereal grain. The latter was very eroded and 'silted', but apparently mainly wheat (*Triticum*) with a trace of spelt wheat (*Triticum spelta* L.) chaff (glume-bases) and traces of barley (*Hordeum*) grains. There were a few charred weed seeds likely to have arrived with a cereal crop.

The medium-sized residue (of approximately 0.86 kg) consisted mainly of sand with some stones. Pottery and metal were also present.

**Context 66** [charcoal lens within layer – Phase 3]

Sample 10/T (3 kg sieved to 300 microns with washover; approximately 6 litres of unprocessed sediment remain)

Just moist, mid to dark grey-brown to dark grey (from charred material), crumbly to unconsolidated (working soft), very ashy, sandy clay silt. There was a minor sediment component of small lumps of mid red-brown indurated clay (to 10 mm). Very fine charcoal and ash were abundant.

The small washover (of about 100 ml) comprised very clean, black, angular charcoal, with a few weed seeds and some small (<5 mm) clasts of amorphous organic material which might be charred peat or perhaps just aggregations of soot. There were traces of barley (including at least one whole spikelet) and of wheat grains and spelt glume-bases. All the charcoal examined closely proved to be oak.

The small residue (of approximately 0.56 kg) consisted almost entirely of sand. A small amount of poor quality pottery or burnt clay, a little burnt bone (~15 fragments to 6 mm, all unidentified) and some charcoal were also noted.

**Context 84** [charcoal layer – Phase 3]

Sample 15/T (3 kg sieved to 300 microns with washover; approximately 6 litres of unprocessed sediment remain)

Just moist, light brown to mid grey-brown (in shades of brown and grey-brown), stiff to crumbly (working plastic), slightly silty clay. Stones (2 to 6 mm and 60+ mm) were present and charcoal was abundant.

There was a small washover of about 60 ml of angular, slightly 'silted' charcoal (to 25 mm, including oak). The small component of grain consisted of specimens that were mostly rather poorly preserved, being eroded, sometimes 'dimpled' (perhaps through being already partly wasted when charred). The grain included barley and wheat and there was a trace of spelt glume-bases. Traces of hazel (*Corylus avellana* L.) nutshell and a single charred hawthorn (*Crataegus monogyna* Jacq.) pyrene were also present, together with a few arable weed seeds.

The medium-sized residue (of approximately 0.91 kg) was largely of sand and stones. Some burnt clay and metal fragments were also recorded.

**Context 107** [fill of beamslot 108 – Phase 3]

Sample 17/T (1.4 kg sieved to 300 microns with washover; no unprocessed sediment remains)

Just moist, light to mid orange-brown to mid to dark grey-brown (matrix darkened by abundant charred material), brittle to unconsolidated (working more or less plastic), clay. Charcoal and ash were abundant.

This smaller (1.4 kg) subsample produced a large washover of about 160 ml of angular clean charcoal (to 25 mm), with some grain mainly hexaploid wheat, probably spelt, and a little brome (*Bromus*). The charcoal was probably all oak.

The small residue (of approximately 0.20 kg) consisted of sand, with a few stones, glass, charcoal and an iron object.

**Context 120** [make-up layer for sandstone wall 101 – Phase 3]

Sample 21/T (3 kg sieved to 300 microns with washover; approximately 5 litres of unprocessed sediment remain)

Just moist, light to mid grey-brown to mid grey-brown with lumps being mid reddish-brown internally, brittle to crumbly (working soft and then sticky), slightly silty clay. Flecks of charcoal and root traces were present.

The very small washover (10 ml) was mostly fine wood charcoal (to 3 mm), with a few sand grains, a little coal (to 5 mm), an unidentified charred seed and a single charred ?wheat grain.

The medium-sized residue (of approximately 0.80 kg) consisted mainly of sand, with some stones and fragments

of burnt clay and bone (~16 fragments to 14 mm and unidentified).

**Context 239** [fill of Roman ditch 240 – Phase 3]

Sample 37/T (3 kg sieved to 300 microns with washover; approximately 6 litres of unprocessed sediment remain)

Just moist, mid brown to mid grey-brown, crumbly to unconsolidated (working soft), slightly sandy, clay silt, with stones (2 to 20 mm) and traces of charcoal present.

The small washover (15 ml) was approximately half of fine wood charcoal (to 3 mm, occasionally to 12 mm) and half of sand. A single unidentified charred seed was also recorded.

The medium-sized residue (of approximately 0.87 kg) was mostly of sand, with a few stones.

**Context 267** [fill of pit 259 – Phase 3]

Sample 43/T (3 kg sieved to 300 microns with washover; approximately 1 litre of unprocessed sediment remains)

Just moist, mid grey-brown, unconsolidated to crumbly (working soft and slightly plastic), slightly sandy clay silt, with some small lumps (to 8 mm) of light brown indurated clay. Stones (2 to 60 mm) were common, and ash and traces of rotted ?charcoal were present.

The rather small washover (40 ml) was of fine wood charcoal (to 3 mm).

The large residue (of approximately 1.6 kg) was mainly of stones and sand, with some pottery fragments.

**Context 307** [fill of posthole 306 – Phase 3]

Sample 51/T (3 kg sieved to 300 microns with washover; approximately 6 litres of unprocessed sediment remain)

Moist, light to mid grey-brown, crumbly to unconsolidated (working soft), stony (stones 2 to 20 mm were common and of 60+ mm present), slightly clay silty sand. Charcoal was also present in the sample.

The washover was small (15 ml) and of fine charcoal (to 6 mm) and coal (to 10 mm), with a little cinder (to 15 mm) and sand.

The small residue (of approximately 0.67 kg) was composed almost entirely of sand, with two unidentified fragments of burnt bone (to 12 mm).

**Context 316** [fill of posthole 317 – Phase 3]

Sample 55/T (3 kg sieved to 300 microns with washover; approximately 7 litres of unprocessed sediment remain)

Moist, mid grey-brown (mottled lighter on a mm-scale), unconsolidated and sticky (working soft), sandy clay silt, with some stones (2 to 20 mm common, 20 to 60+ mm) present.

There was a very small washover (5 ml) of sand and fine charcoal (to 4 mm), with an occasional fragment of cinder and coal (both to 6 mm).

The large residue (of approximately 1.8 kg) consisted of stones, with some sand.

**Context 334** [fill of posthole 335 – Phase 3]

Sample 59/T (3 kg sieved to 300 microns with washover; approximately 5 litres of unprocessed sediment remain)

Moist, light to mid grey-brown (lighter in places), stiff (working soft and slightly sticky), slightly sandy clay silt. Stones (2 to 20 mm) and charcoal were present.

The small washover of about 50 ml comprised somewhat ‘silted’ and iron-varnished angular charcoal to 25 mm, mainly oak. There was otherwise only a single charred weed seed.

The medium-sized residue (of approximately 0.86 kg) was of sand and some stones. Iron nails were also present.

PHASE 4 – GROUND CONSOLIDATION

**Context 36** [decayed wood/possible box in pit – Phase 4]

Sample 8/T (3 kg sieved to 300 microns with washover; approximately 6 litres of unprocessed sediment remain)

Just moist, mid to dark grey-brown to light to mid grey-brown (fine charcoal/?ash darkening the matrix), unconsolidated to crumbly (working soft), very ashy, sandy clay silt. Stones (2 to 60 mm) were present, ?ash lumps and charcoal were abundant.

There was a rather large washover (around 450 ml) almost all of fine charcoal, with some larger fragments (to 12 mm), a very few charred seeds, a little coal (to 5 mm) and an occasional fragment of cinder (to 6 mm).

The medium-sized residue (of approximately 1.1 kg) consisted almost entirely of sand, with a few stones.

**Context 61** [fill of square beamslot – Phase 4]

Sample 18/T (3 kg sieved to 300 microns with washover; approximately 5 litres of unprocessed sediment remain)

Just moist, light to mid grey brown (charcoal makes it appear darker), unconsolidated (working soft), slightly sandy, ashy, clay silt. Stones (2 to 20 mm), slag, very rotted mortar/plaster, ?brick/tile, pottery (to 50 mm) and ash were all present and charcoal was abundant.

There was a medium-sized washover (300 ml) of roughly equal parts fine charcoal, cinder and coal, with some larger pieces of each (cinder quite frequently to 20 mm, charcoal to 10 mm and coal to 40 mm), a very few charred seeds, a few fragments of charred ?hazel nutshell, one or two tiny (2-3 mm) fragments of burnt bone and a single charred ?spikelet base.

The medium-sized residue (of approximately 0.90 kg) consisted mainly of sand, with some stones. Burnt clay, metal slag, coal/charcoal, and a little additional charred ?hazel nutshell and burnt bone (three unidentified fragments to 12 mm) were also present.

**Context 62** [‘clayey’ charcoal layer – Phase 4]

Sample 19/T (3 kg sieved to 300 microns with washover; approximately 5 litres of unprocessed sediment remain)

Just moist, light to mid brown to mid grey-brown, crumbly to unconsolidated (working soft and slightly sticky), sandy clay silt. Stones (2 to 20 mm) and brick/tile were present and charcoal was common.

The smallish washover (80 ml) was mostly of fine wood charcoal (occasionally as larger fragments to 10 mm), cinder/lumps of ash (to 15 mm), a little sand and coal (mostly to 5 mm, but occasionally to 15 mm).

The reasonably large residue (of approximately 1.6 kg) consisted of sand and some stones. Poor quality pottery or burnt clay, metal slag, charcoal and an iron nail were also noted.

**Context 123** [fill of Roman pit 124 – Phase 4]

Sample 20/T (3 kg sieved to 300 microns with washover; approximately 6 litres of unprocessed sediment remain)

Just moist, mid grey-brown, unconsolidated to crumbly (working soft and somewhat plastic) sandy, clay silt to silty clay. Stones (2 to 60 mm) were common and ?brick/tile and ?pottery present.

There was a small washover (20 ml) of roughly equal thirds cinder (to 4 mm), charcoal (to 3 mm) and sand grains, with some largeish (to 25 mm) lumps of fused (?silicified) black ash.

The large residue (of approximately 1.2 kg) consisted mainly of stones, with some sand, burnt clay and bone

(the latter to 10 mm and unidentified) and ?metal fragments present.

**Context 189** [fill of Roman waste pit 190 – Phase 4]  
Sample 23/T (3 kg sieved to 300 microns with washover; approximately 6 litres of unprocessed sediment remain)

Just moist, mid grey-brown (flecked lighter on a mm-scale), crumbly to unconsolidated (working soft), slightly sandy clay silt. Stones (2 to 20 mm common, 20 to 60 + mm present), ?ash (to 5 mm) and ?rotted charcoal were all noted.

The small washover (40 ml) comprised roughly equal thirds of cinder (to 15 mm), coal (to 8 mm) and fine charcoal (to 4 mm), with a little sand and an occasional modern plant fragment.

The large residue (of approximately 1 kg) was mainly sand, with a few stones, three unidentified fragments of burnt bone (to 10 mm), pieces of pottery or burnt clay, metal slag and an iron object.

**Context 194** [fill of pit 199 – Phase 4]  
Sample 25/T (3 kg sieved to 300 microns with washover; approximately 7 litres of unprocessed sediment remain)

Just moist, varicoloured (very light grey-brown to mid to dark grey in shades of brown, grey-brown, grey and orange), stiff to brittle (working plastic), clay. Stones (2 to 20 mm) and black ash were present.

There was a very small washover (20 ml) of fine wood charcoal (to 3 mm), with some larger pieces (to 8 mm and a few to 15 mm), and a little sand.

The small residue (of approximately 0.45 kg) consisted mainly of sand, with some stones and a small amount of brick/tile.

**Context 198** [dumped burnt layer – Phase 4]  
Sample 26/T (3 kg sieved to 300 microns with washover; approximately 6 litres of unprocessed sediment remain)

Just moist, mid grey-brown (flecked lighter and darker), crumbly to unconsolidated (working soft), slightly sandy, clay silt. Stones (2 to 6 mm present and 6 to 20 mm common), ?ash and ?rotted charcoal, were all present. The small washover (50 ml) was mostly fine wood charcoal (to 3 mm), with some larger fragments (to 20 mm), and a little sand.

The medium-sized residue (of approximately 0.74 kg) was almost entirely of sand, with a little burnt clay, charcoal and an iron nail.

**Context 201** [clay fill of possible pudding pit 202 – Phase 4]

Sample 6/T (3 kg sieved to 300 microns with washover; approximately 8 litres of unprocessed sediment remain)

Moist, light to mid grey-brown to light to mid orange-brown (lighter and more brown and grey locally), stiff (working plastic), clay. Stones (2 to 6 mm), charcoal and modern root traces present.

The very small washover (10 ml) was approximately half fine charcoal (to 3 mm, with 1 or 2 larger fragments to 8 mm) and half sand grains.

The small residue (of approximately 0.34 kg) consisted mainly of sand, with a few stones.

**Context 208** [primary fill of pit 202 – Phase 4]  
Sample 31/T (3 kg sieved to 300 microns with washover; approximately 3 litres of unprocessed sediment remain)

Moist, light to mid grey-brown, crumbly to unconsolidated (working soft) stony, slightly clay silty sand. Stones (2 to 20 mm) were common and charcoal present.

The very small washover (5 ml) was mostly sand grains, with a little undisaggregated sediment and a trace of fine charcoal (to 2 mm).

The large residue (of approximately 1.5 kg) was mainly stones, with some sand.

**Context 212** [Roman build-up layer – Phase 4]  
Sample 33/T (3 kg sieved to 300 microns with washover; approximately 6 litres of unprocessed sediment remain)

Just moist, mid brown to mid grey-brown, crumbly to unconsolidated (working soft), slightly sandy, clay silt. Stones (2 to 60 mm) and charcoal traces were present.

There was a small washover (20 ml) most of which was of fine wood charcoal (to 4 mm, with occasional larger fragments to 12 mm). There was also a little sand and a few fragments of cinder and coal (both to 5 mm).

The medium-sized residue (of approximately 0.92 kg) consisted mainly of sand with a few stones. Charcoal and an iron nail were also noted.

**Context 218** [fill of pit 219 – Phase 4]  
Sample 29/T (3 kg sieved to 300 microns with washover; approximately 5 litres of unprocessed remain)

Just moist, mid grey-brown (with lighter grey-brown patches), crumbly to unconsolidated (working soft), ashy, clay silt. Rotted brick/tile was present and very rotted charcoal abundant.

There was a modest residue (80 ml) of fine wood charcoal (occasionally to 8 mm) and sand.

The medium-sized residue (of approximately 0.90 kg) consisted mainly of sand with some stones. Pottery or burnt clay, an iron object, charcoal and two small fragments of unidentified burnt bone (to 5 mm) were also noted.

**Context 224** [fill of gravel extraction pit – Phase 4]

Sample 34/T (3 kg sieved to 300 microns with washover; approximately 5 litres of unprocessed sediment remain)

Moist, varicoloured (light to mid brown to mid to dark grey-brown plus shades in between), brittle to crumbly (working soft and slightly sticky), clay silt. Stones (2 to 60 mm), very rotted brick/tile and burnt bone were present, and very rotted charcoal was abundant.

There was a quite large washover (200 ml) of fine charcoal (to 32 mm), with some larger charcoal pieces (to 12 mm), occasional fragments of coal and cinder (both to 8 mm), a little sand, a single very poorly preserved charred wheat grain and a few fragments of burnt bone (mostly unidentified but including one pig metapodial).

The medium-sized residue (1.1 kg) consisted mainly of sand, with some stones. Pottery or burnt clay, iron nails and charcoal were also present.

**Context 245** [fill of pit 246 – Phase 4]

Sample 38/T (3 kg sieved to 300 microns with washover; approximately 5 litres of unprocessed sediment remain)

Moist, mottled (lighter and darker on a mm-scale), mid grey-brown (with occasional light brown patches), slightly sticky (working soft and somewhat plastic), clay silt to silty clay. Charcoal was present.

There was a small washover (30 ml) of fine wood charcoal (some larger fragments to 10 mm) and sand, with a few fragments of coal (to 4 mm).

The medium-sized residue (of approximately 1 kg) consisted of sand, with a few stones, three small fragments of unidentified burnt bone (to 8 mm) and a few iron nails.

**Context 256** [fill of Roman cess pit 257 – Phase 4]

Sample 40/T (3 kg sieved to 300 microns with washover; approximately 7 litres of unprocessed sediment remain)

Moist, light to mid brown to light to mid grey-brown, brittle to crumbly (working soft), slightly sandy clay silt. Stones (2 to 20 mm common and 20 to 60 mm present) and charcoal were present.

The small washover (15 ml) was mostly fine charcoal and sand, with an occasional larger charcoal fragment (to 15 mm).

The medium-sized residue (of approximately 1.1 kg) consisted primarily of sand and stones. Pottery and charcoal were also recorded.

**Context 277** [fill of pit 274 – Phase 4]

Sample 45/T (3 kg sieved to 300 microns with washover; approximately 7 litres of unprocessed sediment remain)

Moist, light orange-brown to mid orange to light to mid grey-brown, stiff and slightly sticky (working soft and more or less plastic), slightly silty clay. Stones (2 to 60 mm), concretions, fine charcoal and root traces were present.

There was a small washover (10 ml) of fine wood charcoal (to 5 mm) and sand grains.

The medium-sized residue (of approximately 0.77 kg) comprised sand, stones and brick/tile or burnt clay. Charcoal fragments were also present.

**Context 282** [fill of shallow linear drainage gully 283 – Phase 4]

Sample 48/T (3 kg sieved to 300 microns with washover; approximately 4 litres of unprocessed sediment remain)

Moist, light brown to light to mid grey-brown, plus patches of light grey, stiff and sticky to crumbly (working soft and sticky), clay silt to silty clay. Stones (2 to 20 mm) and brick/tile fragments were common; ash and charcoal were present.

The small washover (20 ml) was mostly fine charcoal (to 2 mm), with an occasional larger fragment (to 10 mm) and a little sand. A single modern egg capsule/cyst containing a live 'larval' earthworm/soil nematode was also noted.

The medium-sized residue (of approximately 0.85 kg) consisted of sand, with some stones. Pieces of pottery or burnt clay and charcoal were also recorded.

PHASE 5 – 2<sup>ND</sup> CENTURY BUILDINGS



**Context 11** [organic burnt fill of pit – Phase 5]  
Sample 2/T (3 kg sieved to 300 microns with washover; approximately 6 litres of unprocessed sediment remain)

Just moist, varicoloured (very light grey-brown to mid to dark grey, in shades of brown, grey-brown and grey, also some orange-brown areas), stiff to brittle (working soft and somewhat plastic), clay silt. Stones (2 to 20 mm), black ash, ?very rotted charcoal and modern root traces were present.

Though small, the washover (of about 100 ml) included, amongst a component of charcoal (to 10 mm, including *Quercus* and *Salix/Populus*), some hexaploid wheat grains, and rather large amounts of cereal chaff. The latter was mainly spelt, in the form of glume-bases, but there were also some barley rachis fragments. One whole 2-grained spelt spikelet with glumes and trace of rachis attached was also present. There were some clasts of what appeared to be concreted fine charred material, perhaps largely chaff, containing spelt glume-bases and barley rachis internodes. The finer fractions were mostly spelt chaff and wheat grains, with a trace of barley. At least one wheat grain showed some evidence of having sprouted. Preservation of grain and chaff was only moderately good, with some 'silting' and the grains/chaff sometimes rather distorted, typically very eroded or with sunken areas. There were also a few fragments which appeared to be uncharred cereal 'bran' perhaps from grains that had not been completely charred. Weed seeds were moderately frequent but confined to the finest fraction.

The very small residue (of approximately 0.40 kg) comprised mainly of sand with some stones and fragments of burnt clay.

**Context 34** [clay floor layer – Phase 5]  
Sample 3/T (3 kg sieved to 300 microns with washover; approximately 7 litres of unprocessed sediment remain)

Just moist, mid orange to light to mid brown, stiff to crumbly (working plastic), clay. Stones (2 to 60 mm), rotted brick tile, ?ash traces, ?charcoal flecks and root traces were all present.

The small washover (~5 ml) was mostly fine charcoal (to 1 mm), with some larger fragments (to 8 mm). There were also some small lumps of ?baked undisaggregated sediment.

The small residue (of approximately 0.48 kg) consisted mainly of fragments of burnt clay or poor quality pottery with some sand and stones.

## Discussion and statement of potential

Ancient biological remains recovered from the samples were largely restricted to charred plant remains. Even the remains from the more productive deposits were limited to wood charcoal usually with small to modest-sized concentrations of remains of cereals, both grain and chaff. The largest concentration of grain and chaff came from the one sample examined from Phase 5 (from pit fill Context 11), where a very typical Roman assemblage was present. Much the same kinds of cereals were seen in the Phase 3 deposits examined, however. Much of the charcoal was too fine, or too poorly preserved, for identification. Where identifications could be made wood species represented included oak, birch and willow/aspens/poplar. The Phase 4 deposits were generally rather less productive though most gave at least a little charcoal and some at least might repay some further investigation via the processing of larger subsamples (e.g. Context 224).

Very small quantities of tiny fragments of burnt bone were recovered from ten of the samples but, with the exception of a possible pig metapodial from Context 224 (Phase 4), none could be identified.

## Recommendations

The samples examined here indicate that the deposits at this site have some potential for investigating the use and disposal of cereals, though the concentrations are (with the exception of Context 11) rather small. Our knowledge of Roman activity and environment in Manchester is minimal, the only published account of plant remains apparently being that by Roeder (1900).

It may thus be worth examining other deposits where concentrations of charred material are prominent to check for other interpretatively useful assemblages. If no other material is sampled and investigated, a proper record of the material from Context 11 is worthwhile, using a second, larger subsample, and keeping

the resultant washover wet in order to check the quantities of uncharred 'bran'.

## Retention and disposal

All of the remaining sediment samples should be retained for the present, together with the biological remains recovered from the processed subsamples.

## Archive

All material is currently stored by Palaeoecology Research Services (Unit 8, Dabble Duck Industrial Estate, Shildon, County Durham), along with paper and electronic records pertaining to the work described here.

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