



UNIVERSITY OF
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Archaeological Services

**Skills Hub/College, Narrow Marsh,
Nottingham**

NGR 5649 4149

Tim Higgins



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Archaeological Monitoring and Recording
During Groundworks at
Skills Hub/College, Narrow Marsh, Nottingham

NGR: SK 5649 4149

Tim Higgins

For: Nottingham College

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Archaeological Monitoring and Recording During Groundworks at Skills Hub/College, Narrow Marsh, Nottingham NGR: SK 5649 4149.

Tim Higgins

Summary

University of Leicester Archaeological Services (ULAS) carried out archaeological monitoring of groundworks on land at Cliff Road/Canal Street (Narrow Marsh), Nottingham, (SK 5649 4149) from the 19th June to 18th September 2018. The programme of ground works included the excavation of ground investigation test pits and ground remediation works which included the stripping of overburden and removal of railway viaduct foundations in preparation for construction.

The attendance during the excavation of Trial Pits confirmed the presence of possible buried medieval and post-medieval deposits close to the water table. The potential medieval deposits were reached in Trial Pits at depths of between 2.5m and 3m. Similar deposits were recorded in previous archaeological trial trenching. Archaeological monitoring of overall ground reduction of 2m revealed very deep post-medieval garden soils and overlying was a substantial modern overburden which included 19th-century cellars, wells and culverts. The removal of substantial railway viaduct foundations excavated to a depth of 5m revealed the underlying geology that comprised alluvium overlying Castle Sandstone.

The site archive will be held by Nottingham City Museums and Galleries under accession number NCMG 2018-54.

Introduction

In accordance with National Planning Policy Framework (NPPF) Section 12 *Conserving and Enhancing the Historic Environment* this document forms the report that presents the results of an extended archaeological watching brief during ground works on land at Cliff Road/Canal Street (Narrow Marsh), Nottingham, (SK 5649 4149). The groundworks involved the remediation of the site to remove below-ground obstructions and redundant services and to form a construction piling mat to allow unobstructed piling (c.550 CFA piles) to take place as a following activity down to bedrock, at a depth of c.15m below ground level. Significant obstructions included old brick and concrete viaduct foundations, which were broken out to a depth of between 5-6m below ground level.

All archaeological work adhered to the Chartered Institute for Archaeologist's (CIfA) *Code of Conduct and Standard and Guidance for Archaeological Watching Briefs*.



Figure 1: Site location

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Site description, topography and geology

The site consists of a broadly rectangular area, of around 0.87ha, orientated north to south at the southern edge of the city centre of Nottingham (Figure 1). The site is bordered by Cliff Road (formerly Narrow Marsh) to the north, Canal Street to the south and by the Nottingham NEC tram bridge to the west.

Formerly, Popham Street bisected the site from north to south, creating two areas, whilst another former road, Malt Mill Lane, had run part way into the western part of the site from the north (Figure 2). Both the streets are now closed and have been replaced by a new road, Rancliffe Street, located on eastern side of the site running north to south (Figure 4).

At the time of the first visit, the site was covered in demolition rubble and areas of hard standing. The eastern part of the site contained the new road.

To the north of the site is an outcrop of Castle Sandstone and to the south the land lies within the flood plain of the River Leen. Therefore the underlying geology is likely to be alluvium overlying Castle Sandstone.

The land lies on broadly flat land at a height of around 25m aOD.



Figure 2 Location of the development area (Plan provided by the developer). Scale Approx. 1:1250

The Archaeological and Historical Background

The site lies immediately south of the cliff edge that once defined the southern defence of the pre-Conquest Borough (Saxon Borough; Young 1986; Figure 3). The early name of Cliff Road was Narrow Marsh and this ran along the bottom of the southern edge of the cliff, with access from the area to High Pavement via rock cut steps leading up into the town.

The site lies outside the pre-Conquest town boundaries on the area occupied by the Broad Marsh, part of the floodplain of the River Leen, which lay directly to the south of the present

site and was culverted to run under Canal Street in 1863. Despite the name ‘Broad Marsh’, there is no evidence to suggest that the area itself was a marsh and it certainly seems to have been solid enough to support buildings. In addition, early maps show agriculture was practised here and there are references to a farmhouse in the area in the 15th century (Hunt 2014).

It is unclear at what stage the area around Narrow Marsh became settled, but by the 13th century an extensive tanning industry had developed in the Broadmarsh area between the sandstone cliffs and the River Leen. In 1385 tanners from Littlemarsh (Narrow Marsh) area were presented before the Micklethorn jury for blocking the Leen with the waste products from their industry (RBN I). There are records of men such as Watkyn Smyht owning pig folds cut into the rock in 1435 (RBN II). Tenements, pinfolds and stairs leading down from High Pavement are recorded in the Borough Records at Narrow Marsh from the 16th century (RBN III & IV). There were problems with latrines emptying into the Leen from the Narrow Marsh area throughout the 17th century onwards (RBN V) and by the mid-19th century, steps were taken to remove some of the buildings here, including those at ‘Tanner’s Hall’ in 1838 (RBN IX). From here on an attempt was made to clean up the area, which was recorded in September 1875 as having some of the filthiest courts and yards in the whole town (RBN IX). Some of the tanning pits in the Broad Marsh area to the west were preserved and are on display as part of the Caves of Nottingham visitor attraction within the Broadmarsh Centre (Scheduled Monument 157) (Hunt 2014).

By 1820 the area was covered in small streets and yards with the still extant Malt Mill Lane first appearing on the 1820 map and Popham Street on the first edition OS map of 1881 (Figure 10). The Great Central and the Great Northern Railway later passed through the site with both lines elevated onto viaducts. The present NEC tram system currently uses the line of the former north-south orientated Great Central Railway. The north-west to south-east orientated Great Northern Railway viaduct was recently demolished. A field evaluation was carried out by Northamptonshire Archaeology in 2006 as part of a proposed extension to the Broadmarsh shopping centre. The evaluation included the present assessment area, where two trenches (1 and 4) and half of another (3) were excavated, whilst a fourth (2) was located just outside the boundary to the south (Figure 4). Those within the present assessment area measure about 87 sq m and therefore provide just under a 1% sample (Brown 2006).

Modern garden soils and demolition layers overlay earlier soils, some cut by red-brick cellars and latrines (Trenches 1 and 3), which overlay post-medieval soils and then medieval layers at between 2m depth or less. Trench 4 mainly revealed disturbance from the aforementioned viaduct. A large amount of animal bone, possibly tanning waste, was discovered along with 13th- to 14th-century pottery in Trench 2. Water ingress was a problem during the evaluation and it was not possible to enter the trenches or excavate features due to the trench depth. A probable circular tanning pit was identified in Trench 3 before the trench became flooded (Brown 2006).

A second archaeological evaluation was undertaken on land at Cliff Road/Canal Street by University of Leicester Archaeological Services (ULAS). Trenches were excavated to evaluate an area for the proposed construction of a new Skills/College Hub on derelict land (Figure 4; Higgins 2017). This evaluation confirmed the presence of possible buried medieval and post-medieval deposits close to the water table in most of the trenches established in the previous evaluation. The deposits consisted of more clay-lined pits and layers that contained cattle horn cores, which were thought to be associated with tanneries. Other trenches revealed early post-medieval deposits that may have been related to backyard activities associated with properties

that once fronted on to Cliff Road. All these horizons were sealed under deep post-medieval garden soils and modern overburden which included 19th-century cellars, wells and culverts.

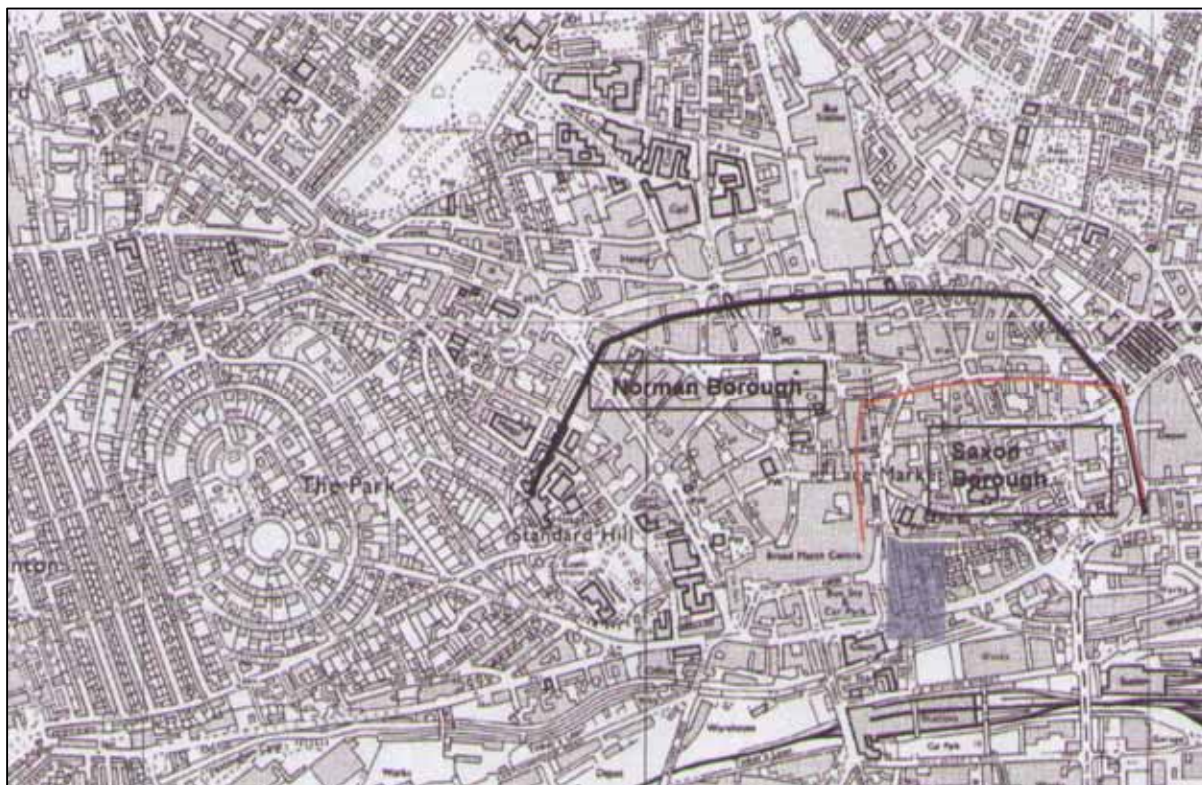


Figure 3 Defences of Saxon and Norman Nottingham, based on excavations and observations since 1969. Site in blue. After Young

Aims and Objectives

The main objectives of the archaeological work were:

To identify the presence/absence of any archaeological deposits

To establish the character, extent and date range for any archaeological deposits to be affected by the proposed ground works.

To record any archaeological deposits to be affected by the ground works.

To establish the relationship of any remains found to the surrounding contemporary landscape and to advance understanding of the heritage assets.

To recover artefacts and eco-facts to compare with other assemblages and results.

To produce an archive and report of any results.

Within the stated project aims, the principal objective of the recording is to establish the nature, extent, date, depth, and significance of the heritage assets within their local and regional context

While the nature, extent and quality of archaeological remains within the area of investigation for the project remain unknown until archaeological work is undertaken, it is possible to determine some initial objectives derived from *East Midlands Heritage: An Updated Research Agenda and Strategy for the Historic Environment of the East Midlands* (Knight et al. 2012) and *The Archaeology of the East Midlands: An Archaeological Resource Assessment and Research Agenda* (Cooper 2006).

The archaeological watching brief had the potential to contribute to the following research aims

The Medieval period (Lewis 2006, Knight et al 2012; English Heritage 2012)

The watching brief may contribute towards research into the origins and development of medieval settlement, landscape and society. Environmental evidence could provide information on local environmental conditions as well as settlement activity, craft, industry and land use. Artefacts can assist in the development of a type series within the region and provide evidence for evidence for craft, industry and exchange across broad landscape areas.

The watching brief did have the potential to contribute to Research Agenda topics

What roles may rivers have played as corridors for the movement of goods and people, and how might these have varied over time?

Can we elucidate the pattern of early medieval settlement north and west of the Trent?

Can we define more closely the industrial and trading activities associated with towns and the nature and extent of urban influence upon the countryside?

How can we improve our understanding of the form, evolution and functions of buildings within rural settlements and establish the extent of surviving medieval fabrics?

Can we identify, investigate and date sites associated with the region's key extractive industries (especially iron, coal, lead and alabaster), the production and distribution of cloth and leather-work, and freshwater or marine fishing?

Can we develop a typological classification of buildings associated with medieval industrial and commercial activities and can we identify sub-regional and chronological patterning?

These research aims have been identified based on the current state of knowledge within the application site of the development. The research aims will be re-assessed and updated during the course of the fieldwork.

Methodology

General

All work followed the Chartered Institute for Archaeologists (CifA) Code of Conduct (2014) and adhered to their *Standard and Guidance for Archaeological Watching Briefs* (2014). The methodology was set out in the approved Written Scheme of Investigation which also incorporated a health and safety plan and risk assessment.

An accession number was drawn from Nottingham City Museum service at the beginning of the fieldwork and used to identify all records and artefacts (NCMG 2018-54).

The project involved attendance to monitor any ground-works which had the potential to damage buried archaeological remains.

The ground reduction and removal of overburden to a depth of 2m were the responsibility of the landscape contractor. Any ground ground-works below this point were the under the supervision of the archaeologists, who had full access to the site at points and times agreed with the landscape contractors, in order to excavate (if necessary), any archaeological features affected by the works.

Any artefacts were recovered and the stratigraphy identified was recorded by sketch or drawn sections (as appropriate), photography and written description.

Archaeological deposits were excavated and recorded using standard ULAS procedures.

Spoil was monitored for artefacts.

Results

Trial pits

Prior to the removal of surfaces and the initial ground reduction, seventeen environmental assessment Trial Pits were excavated by machine within the footprint of the proposed new building to establish the extent of any potential ground contamination (shown red on Figure Figure 4: 1-11, 11a, 11b and 11c; 12-14).. Pits 1-14 were arranged in an approximate 15m x 15m grid and measured about 3.00m long by 0.60m wide and were excavated in shallow layers to a depth of 3.00m to 4.00m. Three further three Trial Pits (11a, 11b, and 11c) was excavated towards the northern half of the development area and centred around the original Trial Pit 11. All three measured 2.00m long and 0.90m wide and were excavated by machine to a depth of 2.00m.

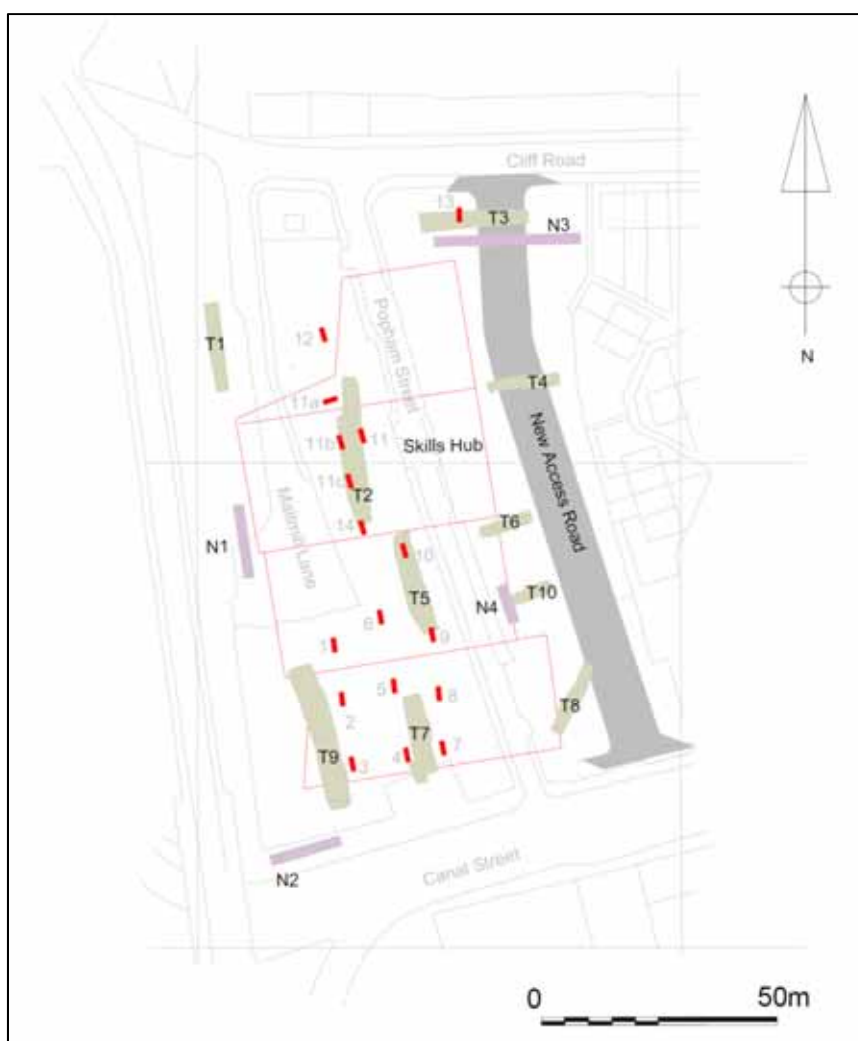


Figure 4 Location of trial trenches N1 to N4 (Northamptonshire Archaeology 2006), trial trenches T1 to T10 (ULAS 2017) and ground remediation Trial Pits 1-11; 11a-11c; 12-14 in red (ULAS watching brief 2018)

Trial Pits 1, 2, 3, 5 and 6

These five Trial Pits were located towards the south-west corner of the development area (Figure 4). All five revealed a sandy alluvial deposit at a depth of between 3.00m to 3.20m below the modern ground surface. The alluvial deposits were overlain by homogeneous garden soil measuring 1.00m in depth that contained frequent charcoal and burning distributed unevenly across the entire Trial Pit. No division into layers was visible from the side of the trench and no finds were retrieved from this deposit. However, previous archaeological evaluations have established that the deposit was likely to be post-medieval garden soil accumulating up to 200 years prior to 19th century.

The post-medieval soil horizon was sealed by a late 19th- to early 20th-century formation layer composed largely of brick, mixed aggregates and demolition material measuring 2.00m in depth. Cut into this deposit were features of red-brick construction, which are thought to be disused cellars of cellars of the 19th – 20th century that once fronted on to Maltmill Lane. The

fills of these cellars comprised dark bluish-black silty loam with frequent chunks of fragmented brick tile and builders rubble.

Overlying the top of the 19th- – 20th-century brick cellars was a modern levelling layer 0.40m thick which was capped with stone gravel

Trial Pits 4, 7 and 8

A group of Trial Pits located towards the south-east corner of the development encountered a sandy alluvial deposit at a depth of between 3.00m to 3.20m (Figure 4). Overlying the surface of the alluvium in Trial Pit 4 was a light to mid-greyish-black clay layer (400) which contained medieval pottery that (retrieved from the machine bucket) dated to the 13th - 14th centuries. In Trial Pits 7 and 8, the basal deposit comprised waterlogged dark blackish-grey sandy-silt contexts (701) and (800) which also contained pottery sherds dating to the 13th – 14th centuries along with a medieval ridge tile. Within these same deposits (701) and (800), a small quantity of well-preserved animal bone comprising cattle horn cores was also retrieved. Such remains were common waste products of the tanning industry and are thought to be dated to the 13th - 14th centuries, given the presence of medieval pottery in the same layer.

These potential medieval deposits were overlain by homogenous garden soil that varied in thickness from 1.20m to 1.70m. No division into the layers was visible from the side of the trench but they are likely to be a similar post medieval garden soil observed in Trial Pits.

The post medieval soil horizon was sealed by a late 19th- to early 20th-century formation layer which largely comprised demolition material up to 1.30m deep. Cut into this deposit were features of redbrick construction believed to be more disused cellars of properties that once fronted on to Popham Street. The fills of these features were comparable with fills of cellars seen in the other Trial Pits.

Overlying the brick cellars was a modern levelling layer of demolition, which was capped with stone gravel and had a combined depth of 0.40m deep.



Figure 5 Trial Pit 4



Figure 6 Trial Pit 7 Looking North (Arrow pointing south)



Figure 7 Trial Pit 8

Trial Pit 9

This Trial Pit was also located towards the south-east corner of the development but the pit appeared to be different in character when compared with the other neighbouring Trial Pits (Figure 4). An uneven sandy alluvial deposit was encountered at a depth of 2.50m below and excavated to depth of 3.00m. Overlying was a homogeneous post medieval garden soil measuring 1.50m deep, which was then sealed by a late 19th to early 20th century formation layer that comprised demolition material measuring 0.70m deep. However the disused cellars seen in the neighbouring Trial Pits were absent and formation layer was capped by modern stone gravel 0.30m thick.

Trial Pits 10 and 14

Both these Trial Pits were located towards the centre of the development and display different characteristics when compared with the Trial Pits to the south (Figure 4). In both Trial Pits, sandy alluvium was encountered as an uneven deposit at a depth of 3.00m below present. Overlying was a homogeneous post-medieval garden soil measuring between 0.60m and 0.80m deep. The brick cellars were absent in these pits and only a modern formation layer of demolition material measuring 0.70m deep sealed the garden soil below. Trial pit 14 did contain a reinforced concrete foundation measuring 1.00m deep (probably a ground beam for a modern industrial building) overlain by stone gravel.

Test Pit 11 and Additional Test Pits 11a, 11b and 11c

Trial Pit 11 was excavated towards the central northern half of the development area and targeted the brick foundations which supported the arches on the former 19th-century railway viaduct that crossed the site. Additional Trial Pits 11a, 11b and 11c were centred around Trial Pit 11 and were excavated to help determine the extent of the foundation (Figure 4).

At the base of Trial Pit 11, a compacted redeposited sandy deposit was reached at a depth of 2.50m and was excavated to depth of 3.00m below ground level. At this point no substantial foundation was encountered. Overlying the compacted sand was a formation layer which largely comprised brick and demolition rubble material measuring 0.60m in depth. Sealing the deposits below was a compacted layer of redeposited garden soil measuring 1.50m in thickness. This sequence of modern overburden deposits is thought to be a formation layer compacted around the foundation bases for the viaduct arches. The Trial Pit was capped by a layer of modern gravel measuring 0.40m deep.

Additional Trial pits 11a and 11b were excavated to the north and west but encountered similar overburden deposits to those that were found in Trial Pit 11. The last additional Trial Pit 11c found a substantial brick and concrete foundation. The foundation was excavated to a depth of 2.5m at which point it became clear that it was so substantial that its base was probably far deeper than machine excavation would reach. This was likely to be a brick and concrete foundation which supported one of the arches for the railway viaduct. A layer of mixed hardcore and aggregate measuring 1.70m deep sealed the top of the foundation and was overlain by a layer of modern stone gravel measuring 0.40m deep.



Figure 8 Trial Pit 11 looking North

Trial Pits 12 and 13

Both these trial pits were excavated towards the northern end of the development site close to Cliff Road (Figure 4). In Trial Pit 12 a sandy alluvial deposit was found at a depth of 3.00m, overlying was a homogeneous garden soil measuring 1.80m deep, probably the same soil that was visible in most of the other trial pits. The post medieval soil horizon was sealed by a modern formation layer 0.90m deep which largely comprised mixed aggregates and demolition material. The pit was sealed with a modern gravel deposit measuring 0.30m deep.

The last Trial Pit 13 was located very close to Cliff Road and a substantial modern concrete footing was encountered at northern end of the pit. The trial pit was extended to the south and continued to be excavated down the side of the footing to a depth of 2.30m. At this point natural red clay was reached and this was excavated to a basal depth of 3.10m. A mixed redeposited post-medieval garden soil measuring 0.70m deep was found overlying natural. Sealing the garden soil a modern formation layer that comprised demolition material which measured 1.00m deep. A layer of redeposited garden soil mixed with demolition material 0.60m thick sealed the pit.

Ground Remediation (Groundworks)

As noted in the introduction, ground remediation involved excavation to remove below-ground obstructions and redundant services before forming a piling mat to allow unobstructed installation of about 550 piles. The overall ground reduction was undertaken to a depth of 2m whilst the removal of brick and concrete viaduct foundations reached a depth of 5m.

The development area was subdivided into four zones as part of the phase of remediation (Figure 9). Within each zone the various hardstanding surfaces, underlying layers of made ground and any obstructions encountered, including modern brick cellars, service lines, storm drains and reinforced concrete ground beams would be removed. All this material would be stored within one of the other zones and then would be eventually crushed and sorted into re-engineered material. The re-engineered material would then be placed back into the excavated

zone in layers creating a formation level for the new building. This process was then repeated for each zone.

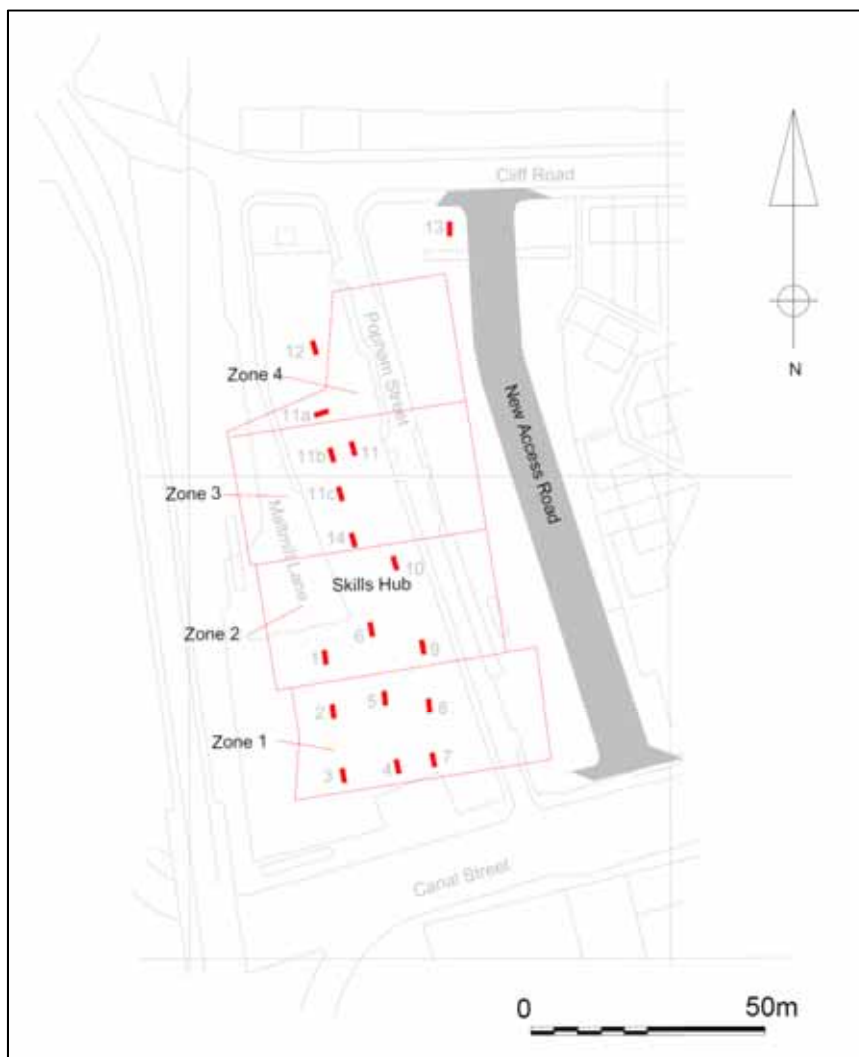


Figure 9 Ground remediation zones

Ground Remediation Zone 1

The ground within this zone was excavated to a depth of between 1.50m and 2.00m. A homogeneous garden soil was encountered at a depth of 1.5m and contained frequent charcoal flecks and demolition material distributed unevenly across the entire stripped zone. In places it was partly truncated by cellars and the occasional brick-lined well. A heavily mixed 19th-century demolition layer overlay the whole zone and the material was heavily cut in places by brick cellars and by disused sewer pipes. The cellars belonged to late 19th - 20th century properties that once fronted on to Maltmill Lane and Popham Street. Substantial concrete ground beam foundations and modern overburden deposits were also removed were likely to be associated with 20th century industrial buildings.

On the eastern side of Zone 1, brick and concrete pier foundations for railway viaduct arches were exposed at depths of between of 1.00m and 3.00m below the current ground level. Additionally, deposits of mixed aggregates and sand were found compacted around each viaduct pier foundation.

The garden soils reached at the base of this stripped zone were subsequently reburied and sealed under a layer of re-engineered material that was placed back into the excavated zone.



Figure 10 Ground reduction Zone 1 remnants of brick cellars



Figure 11 Ground reduction Zone 1 looking north

Ground Remediation Zone 2

Excavations continued into Zone 2 and the overburden strip measured between 1.50m and 2.00m in depth. A homogeneous garden soil deposit continued to be found and was truncated in places by cellars. Overlying was a mixed 19th-century demolition layer that was heavily cut in places by brick cellars and by a disused service trenches. On the western side of the zone, modern overburden was compacted around substantial concrete foundations. During the removal of the concrete foundation a concrete basement or sump was revealed which measured at least 1.5m deep. Removal of the overburden deposits continued across the whole zone exposing more viaduct pier foundations on the eastern side. After overburden was removed the remaining garden soil deposits were reburied and sealed under a layer of re-engineered material that was placed back within the zone.



Figure 12 Ground reduction Zone 2 remnants of cellar foundations looking south

Ground Remediation Zone 3

At depths of between 1.50m to 2.00m below ground level, post-medieval garden soils continued to be encountered at the base of the excavations in Zone 3. These deposits were revealed after removal of deposits of 19th-century demolition material which had been truncated in places by the 19th-20th century cellars. Towards the centre of the zone more viaduct pier foundations were uncovered. The cellars and viaduct foundations were sealed under a modern overburden that comprised demolition material and substantial concrete foundations associated with industrial buildings.

On the east side of the Zone 3 a group of circular post-medieval pits were partially exposed at the base of the excavations. The circular pits measured 1.5m in diameter and were lined with a combination of brick, clay and timber planks bonded with mortar and quick lime. The function of these pits was uncertain but they are perhaps associated with tanneries. The pits were found to be cutting the post-medieval garden soils and sealed under 19th-century demolition layers. These pits and the garden soil were subsequently reburied by re-engineered material that was placed back to help level the ground for the new building.



Figure 13 Clay lined pits in Zone 3

Ground Remediation Zone 4

The final zone of excavations only reached the post-medieval garden soil after 1.50m of overburden was removed. The viaduct foundations appeared at a depth of 1.00m below the surface on the west side of the zone. Overlying was a predominately 19th-century demolition layer, which was subsequently sealed under modern overburden that contained concrete foundations associated with industrial buildings. The underlying garden soil was resealed by re-engineered material.

Railway Viaduct Foundation

A major obstruction to be removed during this phase ground works were the pier foundations associated with railway viaduct running northwest to southeast across the site (Figure 14).

The top of these pier foundations were revealed during the remediation work in each zone (Figure 15). It was thought likely that these deep viaduct pier foundations had severely damaged or removed any potential archaeological deposits, but that they might leave islands of better-preserved deposits between them.

Once remediation ground work was complete in each zone, the top of the substantial brick and concrete pier foundations were exposed at depths of between of 1.00m and 3.00m below the ground level. These excavations had also revealed mixed overburden found compacted around each pier foundation base.

Excavations then continued remove the compacted overburden and foundation down to their base. The base of the foundations was reached at a combined depth of 5m below ground level and the footings resting on the natural sandstone. The excavations indicated that each individual pier foundation base was constructed in two parts. The first consisted of an foundation measuring 3.00m deep, but the foundations all rested on a second additional underpinning concrete foundation slab that was up to 2.00m thick. This underpinning foundation slab was found running the entire length of the viaduct trench linking each pier foundation and placed on the underlying sandstone geology.

The removal of the viaduct pier foundations and underpinning concrete foundation revealed a construction trench running the entire length and width of the viaduct. The trench measured 5.00m deep and had removed any potential preserved archaeological deposits.



Figure 14 Railway viaduct foundations



Figure 15 Top of viaduct brick and concrete foundations Zone 1 looking north-west



Figure 16 Removal of viaduct concrete foundations Zone 2



Figure 17 Ground reduction Zone 3

The Finds

The Post Roman Ceramic Finds - Deborah Sawday

The Finds

The assemblage was made up of three sherds of medieval, post medieval and modern pottery, weighing 209g and representing a maximum count of three vessels, with a vessel rim equivalent of 0.585, (calculated by adding together the circumference of the surviving rim sherds, where one vessel equals 1.00). The medieval and post medieval finds accounted for a total of two vessels, weighing 153 g and an Eve's of 0.425. One fragment of medieval ridge tile, weighing 70 grams was also recorded

Condition

The condition of the pottery and the ridge tile was good with relatively little abrasion and an average sherd weight of approximately 70 grams for the former and 70 grams for the latter also.

Methodology

The pottery was examined under an x20 binocular microscope and catalogued with reference to current guidelines (MPRG 1998, MPRG 2016) and the Nottingham fabric series (Nailor and Young 2001). The results are shown below (table 1).

Discussion

The medieval finds from contexts 701 and 800 ranged in date from the late 13th to the 14th or 15th centuries, whilst the post medieval vessel in context 400 is in a fabric dated generally from the mid to late 15th to the 17th century. The modern sherd occurred in context 700.

Conclusion

The medieval and early post-medieval pottery fabrics are typical of the region. The finds are evidence of extra mural activity in the vicinity from the 13th or 14th centuries, perhaps associated with the tanning industry (Higgins 2018).

Table 1. The medieval and later pottery and tile by fabric, number and weight (grams) by context

Context	Fabric/Ware	No	Gr	Comments
POTTERY				
400	PMX – Coarse ware	1	105	Externally thickened hollow ware jar rim and body, glazed internally, with inscribed horizontal lines on exterior wall, reduced dark buff body, rare marl and fe inclusions. Rim diameter 230mm, 0.175 EVEs mid/late 15th – 17th C.
700	PMX – Fine White Earthenware/China	1	56	Bowl rim, white bodied and glazed with horizontal blue striped decoration on exterior. Modern. Rim diameter 140mm, EVEs 0.16,
800	NCSW – Nottingham Coarse Sandy ware	1	48	Everted jar rim in a pink/buff sparse sandy fabric with traces of greenish yellow glaze on rim. Similar at Nottingham dated from the late 13 th to the mid-14 th C (Coppack 1980, fig.78.171, fig. 83.217-225). Rim diameter 150mm, 0.25 EVEs.
CERAMIC BUILDING MATERIAL				
701	Coarse sandy ware	1	70	Hand-made – moulded, dark buff coarse sandy fabric with Fe inclusions. Hard fired, greenish brown glaze on upper surface, probably 14 th or 15 th century in date. Thickness of wall, c.18mm, suggest that this is a fragment of ridge tile.

The Animal Bone - William Johnson

Introduction

A very small assemblage of animal bone was recovered during the excavation of Trial Pits carried out ahead of proposed groundwork. The bone derived from two contexts, (701) and (800) from Trial Pits seven and eight respectively.

Method

The fragments were identified through comparison with reference material held at the University of Leicester and recorded in a catalogue (Table 1). Condition was scored using Harland *et al.*'s (2003) scale. Measurements were taken following the guidelines in Sykes and Symmons (2007) and are recorded in table 2.

Results

The bones were well preserved with all being described as 'good' save for one specimen from (800) that was described as 'fair'. All of the elements were identified as cattle horncores and were represented by single fragments. Two specimens from (701) and three specimens from (800) had included areas of the frontal. Measurements were taken on all specimens except where damage prevented their observation. A range of horncore sizes were recorded including one very small core from (800), likely to be from a subadult animal as the entire bone surface is spongy and the frontal/parietal suture is not fully fused (Luff 1994: 176). One core from (800) had a circular patch of copper staining on the anterior surface located right at the base.

Discussion

The two contexts probably represent the waste of the tanning process. Tanning was well established in the area by the post-medieval period and the remains are consistent with the larger assemblage recovered during earlier excavations in the area (Banfield 2017: 25). The measurements taken have the potential to contribute to wider studies.

The Small Finds - Nicholas J. Cooper

A complete paint or pastry brush was recovered from (700), dated by pottery to the Modern period, probably 19th or 20th century. The brush has a tapering wooden handle (length 114mm) of circular section (max width 23mm, the narrowing terminal of which is slightly damaged). The wide end has a thick brush of fine (<0.1mm) bristles extending from it (length 45mm) of a light sandy colour probably of plant rather than animal origin. The base of the bristles is caked with a white powdery deposit which could be paint. The form is similar to a modern pastry brush.

Discussion

The archaeological attendance during programme of remediation ground works comprised three constituent parts, the excavation environmental assessment trial pits, the stripping of overburden and the removal of railway viaduct foundations.

Over all the results of the trial pits displayed similar sequences of substantial overburden material found in the earlier evaluations carried out by Northamptonshire Archaeology in 2006 (Brown 2006) and ULAS in 2017 (Higgins 2017). The excavation of trial pits reaffirmed potential medieval to early post-medieval horizon deposits survive on the site buried beneath a substantial sequence later material. Some these medieval deposits were found within Trial Pits 4, 7 and 8 were spot-dated using pottery found within the soils and retrieved from the machine bucket. It was clear that a late medieval to early post medieval ground surface was closely associated with the top of alluvial deposits from the River Leen allowing for a potentially high level of organic preservation under anaerobic conditions.

The trial pits had also reaffirmed the presence of potential tanneries previously found in both evaluations. A small quantity of horn cores found in test pits 7 and 8 within the 13th-17th century deposits was a strong indicator to corroborate the presence of tanning waste and the likely continuity of the extra mural industry into the early post-medieval period.

During overburden stripping in Zones 1 to 4 down to a depth of 2.00m, only garden soils were encountered. The previous evaluation results at Narrow Marsh had provided evidence for extensive stratified garden soils that had formed between the 13th – 18th centuries, one on top of another (Higgins 2017). A group of post-medieval pits were partially exposed in Zone 3 but overall no medieval features or deposits were reached during the overburden strip. Another observation from the overburden strip was that potential medieval or early post medieval deposits appear not to have been disturbed by 19th - 20th century cellars or footings. Only the occasional modern brick lined well appeared to be excavated to a depth beyond 2.00m.

The overburden that was stripped displayed 19th - 20th century garden soils and demolition layers overlay earlier soils, some of which were cut by red-brick cellars and latrines measuring approximately 2m deep. Overall these observations suggest that much of the ground between Cliff Road and Canal Street would seem to have been largely undeveloped as late as the 18th century.

The potential islands of better-preserved archaeological deposits between viaduct pier foundations did not materialise during the removal of the viaduct foundations. After the removal of all the brick and concrete foundations along with compacted overburden, a very large construction trench was revealed. This construction trench ran the entire length and width of the viaduct and had been excavated to a depth of 5.00m down to the underlying geology. Thereby removing any potential overlying archaeological horizons within the viaduct foundation.

Bibliography

Banfield, E., 2017. 'The animal bone', in T. Higgins (ed), *An archaeological evaluation on land at Cliff Road (Narrow Marsh) Nottingham*, pp. 24-27. ULAS Report No 2017-059.

- Brown, J., 2006 *Archaeological trial trench evaluation at Broadmarsh, Nottingham* Northampton Archaeology Report 06/056
- Brown, D. 2008. *Standard and guidance for the preparation of Archaeological Archives* (Institute for Archaeologists).
- Chartered Institute for Archaeologists 2008. *Codes of Conduct and Standards and Guidance for Archaeological Field Evaluation*.
- Cherry, J. 1991. Leather. In J. Blair and N. Ramsay (eds.), *English Medieval Industries: Craftsmen, techniques, Products*, pg. 295 - 318. London: Hambledon and London.
- Cooper, N.J. 2006. *The Archaeology of the East Midlands*. Leicester Archaeology Monograph **13**.
- Coppack, G., 1980 *The Medieval Pottery of Lincoln, Nottingham & Derby*. Unpub. PhD thesis, University of Nottingham
- Driesch, A. von den. 1976. *A Guide to the Measurement of Animal Bones from Archaeological Sites*. Peabody Museum Bulletin 1. Cambridge, Massachusetts: Harvard
- English Heritage 1997. *Draft Research Agenda*.
- English Heritage 2010. *English Heritage Thematic Research Strategies. Research Strategy for Prehistory*. Consultation Draft June 2010.
- Harland, J. F., Barrett, J. H., Carrott, J., Dodney, K. and Jacques, D., 2003. The York System: an integrated zooarchaeological database for research and teaching. http://intarch.ac.uk/journal/issue13/harland_index.html (10 January 2019)
- Higgins, T, 2017 *An Archaeological Evaluation on land at Cliff Road/Canal Street (Narrow Marsh, Nottingham)* ULAS Report No. 2017-59
- Historic England 2015. *Historic England Piling and Archaeology Guidelines and Best Practice* <https://content.historicengland.org.uk/images-books/publications/piling-and-archaeology/heag031-piling-and-archaeology.pdf>
- Hunt, L., 2014 *An Archaeological Desk-Based Assessment for land at Cliff Road (Narrow Marsh), Nottingham (SK5649 4149)* ULAS Report No. 2014-212
- Knight, D., Blaise, V. and Allen C. 2012. *East Midlands Heritage. An Updated Research Agenda and Strategy for the Historic Environment of the East Midlands*.
- LaCombe, C., 2018 *Design Specification for archaeological Attendance and recording during groundworks (watching brief)* Skills Hub/College, Narrow Marsh, Nottingham (SK 5649 4149) ULAS Ref: 18-099
- Lewis, C., 2006. 'The Medieval Period'. In N.J. Cooper (Ed) 2006, 185 -21.

Serjeantson, D. 1989. 'Animal remains and the tanning trade'. in D. Serjeantson & T. Waldron (eds.), *Diet and crafts in towns: the evidence of animal remains from the Roman to the Post-Medieval Periods*. Oxford: British Archaeological Reports. British series 199, 129-46

Luff, R., 1994. 'The conundrum of castration in the archaeological record: an interpretation of Roman cattle horn-cores from Chelmsford, Essex', *International Journal of Osteoarchaeology* **4**: 171-192.

MPRG, 1998 *A Guide to the Classification of Medieval Ceramic Forms*. Medieval Pottery Research Group, London.

MPRG *et al*, 2016 *A Standard for Pottery Studies in Archaeology* Medieval Pottery Research Group Occasional Paper, London.

Nailor, V., and Young, J., 2001 'A Preliminary Type Series of Post Roman Pottery in Nottingham (5th to 16th centuries)'. Unpublished Nottingham Castle Museum.

Sykes, N. and Symmons, R., 2007 'Sexing cattle horn-cores: problems and progress', *International Journal of Osteoarchaeology* **17**: 514-523.

Young, C.S.B., 1986 Archaeology in Nottingham: the pre-Conquest Borough. In *History in the Making: Recent Research in Nottingham and Nottinghamshire, 1985*. 1-4.

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14/01/2019

The Archive

The site archive will be held by Nottingham City Museums Galleries, *under accession no NCMG 2018-54*.

The site archive consists of:

- 1 Unbound A4 copy of this report
- 23 A4 Trench recording sheets
- Site Indices
- A4 Photo record sheets
- A4 Colour digital contact print 1 CD of digital photos

Oasis

Since 2004 ULAS has reported the results of all archaeological work to the *Online Access to the Index of Archaeological Investigations* (OASIS) database held by the Archaeological Data Service at the University of York (Appendix 1). A summary of the work will also be submitted for publication in the local archaeological journal, The Thoroton Society of Nottinghamshire, in due course

Appendix 1 Oasis

PROJECT DETAILS	Oasis No	universi1-337434		
	Project Name	City Hub Project / Nottingham College, Narrow Marsh, Nottingham		
	Start/end dates of field work	19-06-2018 - 18-09-2018		
	Previous/Future Work	Yes / Not known		
	Project Type	Watching Brief		
	Site Status	None		
	Current Land Use	Car Park		
	Monument Type/Period	Former ground surface/medieval		
	Significant Finds/Period	Pottery / Roman Pottery / PM		
	Development Type	College Hub		
	Reason for Investigation	NPPF		
	Position in the Planning Process	Planning condition		
	Planning Ref.	17/02664/PFUL3 (PP-06538161)		
PROJECT LOCATION	Site Address/Postcode	Cliff Road/Canal Street Nottingham		
	Study Area	0.87 ha		
	Site Coordinates	SK 5649 4149		
	Height OD	24m to 25m AOD		
PROJECT CREATORS	Organisation	ULAS		
	Project Brief Originator	Local Planning Authority (NCC)		
	Project Design Originator	ULAS		
	Project Manager	Dr Richard Buckley		
	Project Director/Supervisor	Tim Higgins		
	Sponsor/Funding Body	Developer / Wilson Bowden		
PROJECT ARCHIVE		Physical	Digital	Paper
	Recipient	NCC Mus Service	NCC Mus Service	NCC Mus Service
	ID (Acc. No.)	NCMG 2018-54	NCMG 2018-54	NCMG 2018-54
	Contents	Pottery Animal Bone	Photos Survey data	WB Field Notes
PROJECT BIBLIOGRAPHY	Type	Grey Literature (unpublished)		
	Title	An Archaeological Attendance and recording during groundworks Skills Hub/College, Narrow Marsh, Nottingham		
	Author	Higgins, T.		
	Other bibliographic details	ULAS Report No		
	Date	19/06/2018 to 18/09/2018		
	Publisher/Place	University of Leicester Archaeological Services / University of Leicester		
	Description	Developer Report A4 pdf		

Appendix 2

Trial Pit 1

Length	Width	Depth
1.90m	0.90m	3.40m
	Description	Depth/Thick
Modern Overburden	Hard core stone rubble	0.40m
Layer 1	Brick cellar rubble	1.60m
Layer 2	Dark grey silt	1.00m
Layer 3	Light Grey silty clay	0.40m minimum

Trial Pit 2

Length	Width	Depth
1.90m	0.90m	3.20m
	Description	Depth/Thick
Modern Overburden	Hard core stone rubble. Concrete Foundation	0.50m
Layer 1	Brick cellar rubble	2.00m
Layer 2	Garden soil	0.50m
Layer 3	Grey silty clay	0.20m minimum

Trial Pit 3

Length	Width	Depth
2.00m	0.90m	3.40m
Layers	Description	Depth/Thick
Modern Overburden	Hard core stone rubble	0.40m
Layer 1	Brick foundations	0.60m
Layer 2	Garden soil	1.20m
Layer 3	Grey silty clay	1.20m minimum

Trial Pit 4

Length	Width	Depth
2.10m	1.20m	3.20m
	Description	Depth/Thick
Modern Overburden	Hard core stone rubble	0.40m
Layer 1	Brick foundations	0.80m
Layer 2	Garden soil	0.80m
Layer 3	Grey silty clay Alluvial	1.20m minimum

Trial Pit 5

Length	Width	Depth
2.10m	0.90m	3.20m
	Description	Depth/Thick
Modern Overburden	Hard core stone rubble	0.40m
Layer 1	Brick rubble Cellars	1.70m
Layer 2	Mixed Garden soil	1.10m minimum
Layer 3		

Trial Pit 6

Length	Width	Depth
2.60m	0.90m	3.60m
	Description	Depth/Thick
Modern Overburden	Hard core stone rubble	0.40m
Layer 1	Brick cellar foundations	1.50m
Layer 2	Garden soil	0.70m
Layer 3	Grey silty clay alluvial deposit	1.00m minimum

Trial Pit 7

Length	Width	Depth
4.00m	0.90m	3.40m
	Description	Depth/Thick
Modern Overburden	Hard core stone rubble	0.60m
Layer 1	Brick foundation cellars	1.90m
Layer 2	Mixed garden soil alluvial clay deposits	1.30m
Layer 3	Natural clay	0.20m

Trial Pit 8

Length	Width	Depth
3.50m	0.90m	3.20m
	Description	Depth/Thick
Modern Overburden	Hard core stone rubble	0.30m
Layer 1	Modern concrete foundations	1.00m
Layer 2	Garden soil	1.70m
Layer 3	Alluvial clay silt	0.20m

Trial Pit 9

Length	Width	Depth
3.00m	0.90m	3.00m
	Description	Depth/Thick
Modern Overburden	Hard core stone rubble	0.30m
Layer 1	Made ground	0.70m
Layer 2	Garden soil	1.20m
Layer 3	Alluvial deposit	0.50m minimum

Trial Pit 10

Length	Width	Depth
2.60m	0.90m	3.00m
	Description	Depth/Thick
Modern Overburden	Hard core stone rubble	0.50m
Layer 1	Brick foundation	0.70m
Layer 2	Garden soil	1.00m
Layer 3	Alluvial silty clay	0.80m

Trial Pit 11

Length	Width	Depth
1.80m	0.90m	3.00m
	Description	Depth/Thick
Modern Overburden	Hard core stone rubble	0.40m
Layer 1	Redeposited garden soil	1.50m
Layer 2	Mixed brick concrete Rubble	0.60m
Layer 3	Sandy silt	3.00m

Trial Pit 11 (a)

Length	Width	Depth
2.00m	0.90m	2.00m
	Description	Depth/Thick
Modern Overburden	Hard core stone rubble	0.40m
Layer 1	Brick cellar rubble	0.80m
Layer 2	Mixed redeposited garden soil	0.80m minimum
Layer 3		

Trial Pit 11 (b)

Length	Width	Depth
2.00m	0.90m	3.00m
	Description	Depth/Thick
Modern Overburden	Hard core stone rubble	0.40m
Layer 1	Mixed brick concrete Rubble	1.60m
Layer 2		
Layer 3		

Trial Pit 11 (c)

Length	Width	Depth
2.00m	0.90m	2.50m
	Description	Depth/Thick
Modern Overburden	Hard core stone rubble	0.40m
Layer 1	Brick wall foundations	1.30m
Layer 2	Sand made ground	0.80m
Layer 3		

Trial Pit 12

Length	Width	Depth
3.00m	0.90m	3.20m
	Description	Depth/Thick
Modern Overburden	Hard core stone rubble	0.30m
Layer 1	Made ground	0.90m
Layer 2	Garden soil	1.80m
Layer 3	Silty clay alluvial	0.30m

Trial Pit 13

Length	Width	Depth
4.50m	0.90m	3.10m
	Description	Depth/Thick
Modern Overburden	Modern overburden	0.60m
Layer 1	Made ground	1.00m
Layer 2	Mixed layers sand	0.70m
Layer 3	Red clay natural	0.80m

Trial Pit 14

Length	Width	Depth
2.70m	0.90m	3.00m
	Description	Depth/Thick
Modern Overburden	Hard core stone rubble	0.30m
Layer 1	Made ground rubble soil	0.70m
Layer 2	Garden soil	1.40m
Layer 3	Clay silt alluvial	0.60m



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