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WATKIN JONES GROUP

HUNTER STREET, CHESTER

ARCHAEOLOGICAL MITIGATION REPORT

MAY 2019

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DATE ISSUED:	**MAY 2019**
JOB NUMBER:	**ST15779**
SITE CODE:	**HUN-B**
OASIS REFERENCE:	**Wardella2-312099**
PLANNING APPLICATION REF:	**17/02397/NMA**
REPORT NUMBER:	**005**
REPORT VERSION:	**V1.0**
REPORT STATUS:	**FINAL**

WATKIN JONES GROUP

HUNTER STREET, CHESTER

ARCHAEOLOGICAL MITIGATION REPORT

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DESK BASED ASSESSMENTS
ARCHAEOLOGICAL EVALUATION
ARCHAEOLOGICAL EXCAVATION
GEOPHYSICAL SURVEY
TOPOGRAPHIC AND LANDSCAPE SURVEY
HISTORIC BUILDING RECORDING
EIA AND HERITAGE CONSULTANCY

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EXECUTIVE SUMMARY

Wardell Armstrong LLP were commissioned by Watkin Jones Group to undertake a scheme of archaeological mitigation at Hunter Street, Chester. The investigations were required to mitigate the impact upon the known archaeological remains ahead of a new development comprising student accommodation with associated services, vehicular access and landscaping for which planning permission has been received from Cheshire West and Chester Council.

The archaeological mitigation comprised a Watching Brief during initial ground reduction and all excavations for gas, electrical and drainage services; and three areas were mitigated by archaeological Excavation.

The combination of archaeological Watching Brief and Excavation was implemented to uphold a preservation in-situ strategy during groundworks and construction and to maintain a minimum loss of the archaeological resource from the Site.

The archaeological works have recorded the demolition remains from a potential interval tower within the Roman fort wall, sections through the associated rampart, features of the intervallum area including the road surface of the *Via Sagularis* and a large associated sewer.

An assemblage of artefacts and palaeoenvironmental material, predominantly dating from the 2nd to 3rd centuries AD, was recovered from across the Site, demarcating a period of increased and substantial activity. A further small assemblage of Medieval artefacts was recovered from upper rampart deposits across the Site, indicative of the re-working or refurbishment of the rampart in that period.

The archaeological works also recorded the extent of truncation associated with the archaeological works undertaken in the 1980s, during the expansion of St. Martin's Way and the construction of the western boundary wall. Although previous archaeological works had identified partial truncation within the Site boundary, its extent wasn't fully characterised or known.

1 INTRODUCTION

Circumstances of the Project

1.1.1 Wardell Armstrong LLP (WA) were commissioned by the Watkin Jones Group (hereafter referred to as 'the Client') to undertake archaeological works for the development of the former Hunter Street Car Park, Chester (hereafter referred to as 'the Site'). The Site is centred on National Grid Reference SJ 40255 66505 (Drawing ST15779-001).

1.1.2 The development comprises the construction of student accommodation with associated services, vehicular access and landscaping for which planning permission has been granted by the Local Planning Authority, Cheshire West and Chester Council (CWACC) (Planning Reference: 17/02397/NMA).

1.1.3 The Site lies within the 'Area of Archaeological Importance' and 'Archaeological Character Zone 4 – St Martin's Field', the 'Inner Area – A8 Markets' and the walls of the former Roman legionary fortress, in an archaeologically sensitive location. Previous archaeological works within the Site boundary recorded significant Roman remains. Due to the known archaeological resource and the equated impact by re-development of the Site, CWACC assigned Condition 3 to the planning permission which states that:

> *"No development shall commence on site, until the applicant, or their agents or successors in title, has secured the implementation of a programme of archaeological work, in accordance with a written scheme of investigation to be submitted to and approved in writing by the local planning authority. The work shall be carried out strictly in accordance with the approved scheme."*

1.1.4 CWACC and the Client agreed to implement a programme of monitored works in the form of a Watching Brief and targeted Excavation to implement a preservation in-situ strategy to comply with Condition No. 3 of the permission.

1.1.5 Historic England (HE 2016) and NPPF (DCLG, 2012) policies ensure that sustainable development includes archaeologists and planners work on projects with the intention to retain and protect archaeological sites beneath or within a development, alternative land-use or site management work. The emphasis throughout works is on the benefits gained, both to sustainable development and the archaeological resource

from understanding the significance and current state of preservation of the archaeological material; the potential development impacts of the proposed scheme and how the significance of archaeological remains can be sustained and managed through retention within a development, the process colloquially termed *preservation in-situ*.

1.1.6 Given the known resource of significant archaeology within the Site, the impact of the development was calculated in terms of the percentage of ground disturbance, minus known truncation. Where possible the construction design was modelled to minimise the ground impact and the monitoring of the works was designed to enable the construction plan. On site this became a dynamic process as challenges were met and dealt with in accordance with discussions between WA, the Client and CWACC.

1.1.7 An Archaeological Watching Brief is defined as 'a programme of monitoring and investigation carried out during a non-archaeological activity within a specified area of land or development where construction operations may disturb or destroy archaeological remains' (CIFA 2014a).

1.1.8 An archaeological Excavation is defined as 'a programme of controlled, intrusive fieldwork with defined research objectives which examines, records and interprets archaeological deposits, features and structures and, as appropriate, retrieves artefacts, ecofacts and other remains within a specified area. The records made, and objects gathered during the fieldwork are studied and the results of that study published in detail appropriate to the project design' (CIFA 2014b).

1.1.9 The methodology for the programme of archaeological work was presented in the Written Scheme of Investigation (WSI) (WA 2017a) and was developed in consultation with Mark Leah of Cheshire Archaeological Planning Advisory Service (CAPAS) on behalf of CWACC. In addition, this WSI conforms to the guidelines and standards laid down in the following documents:

- *An Archaeological Research Framework for Chester*, Cheshire Archaeology Planning Advisory Service (CAPAS 2013a);
- *Chester Archaeological Plan*, Cheshire Archaeology Planning Advisory Service (CAPAS 2014);
- *Guidance and general conditions for archaeological contractors and consultants in Cheshire (*Cheshire County Council 2003);

- *Environmental archaeology: a guide to the theory and practice of methods, from sampling and recovery to post-excavation* (English Heritage 2011).
- *Standard and Guidance for an Archaeological Watching Brief,* Chartered Institute for Archaeologists: Reading (CIFA 2014a);
- *Standard and Guidance for an Archaeological Excavation,* Chartered Institute for Archaeologists: Reading (CIFA 2014b);
- *Code of Approved Conduct for the Regulation of Arrangements in Field Archaeology,* Chartered Institute for Archaeologists: Reading (CIFA 2014c);
- *Standards and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials,* Chartered Institute for Archaeologists: Reading (CIFA 2014d);
- *Management of Archaeological Research Projects in the Historic Environment (MoRPHE),* Historic England: London (HE 2015a);
- *WA Archaeology Technical Manual 1: Fieldwork Recording; Wardell Armstrong (West Midlands),* Wardell Armstrong: Birmingham (WA 2017b);
- *WA Archaeology Technical Manual 2: The Taking and Recording of Environmental and Other Samples from Archaeological Sites; Wardell Armstrong (West Midlands),* Wardell Armstrong: Birmingham (WA 2017c);
- *WA Archaeology Technical Manual 3: Treatment of Finds; Wardell Armstrong (West Midlands), Wardell Armstrong: Birmingham (WA 2017d); and*
- *WA Archaeology Technical Manual 5: Site Survey, Techniques and Methodologies; Wardell Armstrong (West Midlands),* Wardell Armstrong: Birmingham (WA 2017e).

2 BACKGROUND

Location and Geological Context

2.1.1 The Site is situated at the western end and to the north of Hunter Street in the centre of the city of Chester. It is bound to the north and east by domestic properties and their associated parking/vehicle access, to the south by Hunter Street and by St Martin's Way to the west.

2.1.2 The Site is rectangular in plan, approximately 850m^2 and at commencement of the project was utilised as a car park (Plate 1) (Drawing ST15779-001).

2.1.3 The Site lies on a shallow southwest-facing incline with the Site ranging from c.24.60m Above Ordnance Datum (AOD) at its northeast tip declining to c.23.20m AOD in the southwest corner.

2.1.4 The underlying solid geology is mapped as pebbly/gravelly sandstone of the Chester Pebble Beds Formation. No superficial deposits are mapped within the Site although Devensian till is mapped within the immediate vicinity (BGS 2019).

2.1.5 Site works recorded a natural compacted mid-brownish-red coarse sand, degraded from the underlying sandstone, overlain by a firm, light to mid yellow, fine sandy clay superficial deposit of varying depths.

Archaeological and Historical Background

2.1.6 An archaeological Desk-Based Assessment (WA 2015a) on the archaeological and historical background of the Site and its immediate vicinity was undertaken to assess the potential for heritage assets. It is not intended to repeat the same information here and what follows is a brief overview of that document.

2.1.7 The Site lies within the 'Area of Archaeological Importance' and 'Archaeological Character Zone 4 – St Martin's Field'. It is described as 'a key area within the Area of Archaeological Importance and planning and development here should be approached with particular sensitivity to the high potential for significant archaeological remains of at least a national level' (CAPAS 2013b).

2.1.8 The Site is located within 'Inner Area – A8 Markets' as identified in the Chester Characterisation Study whose character is described as 'Almost entirely post-war area containing some empty sites and The Forum development which includes the covered market' (Young 2011, 61). The Site is also located within the wider Chester City Centre Conservation Area.

2.1.9 The Site lies within the walls of the former Roman legionary fortress, in an archaeologically sensitive location. It is known that this area was occupied by military barracks, which took the form of linear buildings aligned north to south. Behind the defences - between the Roman defences which essentially follow the line of the east side of St. Martin's Way, and the eastern edge of the barracks – lay the intervallum, a wide strip of ground that ran around the perimeter of the interior of the fortress. Occupying the inner third of the intervallum lay the *Via Sagularis*, a road which also ran around the entire perimeter of the fortress' interior; a large sewer ran around the inner edge of the road. The intervallum zone was also occupied by the cookhouses and bread-ovens.

2.1.10 Previous excavations within the Site boundary are unfortunately poorly recorded with little or no archive available. The exact location of the earlier investigations is also unclear, with the area merely being described as 'derelict land on the north side of Hunter Street, at its western end' (CAB 8, 1982: 38). These seasonal works occurred between 1982 and 1984 / 5 and identified a sewer bounding the eastern side of the *Via Sagularis*, which was later rediscovered during investigation in 2005 (Earthworks Archaeology, 2010).

2.1.11 The 1980s excavations also identified a multi-phase Roman granary on the site with at least one earlier timber phase followed by a stone-built granary which 'cannot have been constructed before c.AD150' (CAB 9, 1983: 53) incorporating re-used column bases and capitals from a possible barrack veranda in its northern wall. This building survived substantially intact into the early medieval period when it was robbed of its masonry (CAB 9, 1983: 53).

2.1.12 In 1987, a new brick boundary wall was constructed along the western edge of the Site, as a result a 39.70m stretch of the Roman turf rampart was recorded during a Watching Brief. The Watching Brief recorded a 2m stratigraphic sequence of the rampart with the remains of a likely interval tower, described as "immediately north of Hunter Street" (LeQuense 1999: 67).

2.1.13 A Watching Brief and Excavation were undertaken immediately to the north of the Site during drainage works (Earthworks Archaeology, 2010) which identified multi-phased activity of Roman, and possibly sub-Roman date. The aforementioned *Via Sagularis* and associated roadside sewer were identified. The top of significant archaeology was encountered at 1.70m below ground level (bgl) in Trench 1, approximately 0.90m bgl in Trench 2 and approximately 1.80m bgl in Trench 3.

2.1.14 An Evaluation and Deposit Modelling exercise were undertaken by WA (2015b) to inform the planning application, which identified that the archaeology within the Site was highly truncated by modern activity. Trenches 3, 4, 5 and 6 were truncated to approximately 1.80-1.90m bgl with the remaining archaeology, where present, being heavily disturbed or truncated. These extensive truncations are likely due to previous poorly recorded archaeological excavations, conducted during the early 1980s and during the widening of St. Martin's Way in 1985.

2.1.15 Trenches 1, 2, 7 and 8 contained significant archaeology at approximately 1.00m bgl; with Trenches 1 and 2 containing remnants of the Roman rampart; Trench 7 possibly containing the remains of the *Via Sagularis* and a truncated wall foundation; and Trench 8 containing a relatively well-preserved surface, made from re-used roof tiles, possibly associated with an intervallum building.

3 AIMS AND OBJECTIVES

3.1.1 The objective of this programme of archaeological investigations were to:

- Limit the loss of archaeological remains within the Site above and beyond the agreed impact of development (see below);
- Ensure the adequate recording of any archaeological remains revealed during ground works associated with the proposed development;
- Identify and understand, as far as reasonably possible, the nature, depth, extent, date, character and relationship of each of the features encountered across the Site;
- Secure the analysis, conservation and long-term storage of any artefactual/ecofactual material recovered from the Site;
- Integrate the results of the works with the previous archaeological fieldwork undertaken and to address the *Archaeological Research Framework for Chester* (CAPAS 2013a) where applicable; and
- Ensure that an accurate and comprehensive record and report of any archaeological deposits found during works is produced and disseminated to the appropriate organisations.

4 METHODOLOGY

Scope of Work

4.1.1 The archaeological Evaluation and Deposit Modelling identified that a significant amount of truncation and disturbance had occurred during the aforementioned works of the 1980s.

4.1.2 With an archaeological preservation strategy designed, the archaeological mitigation was to monitor all intrusive works undertaken during the installation of the ground beams and pile caps, the excavation of the lift pit, service runs and attenuation tank and removal of underground obstructions during the probing for piles.

4.1.3 Initially three discrete locations were identified for full archaeological excavation and recording (Drawing ST15779-002); these areas comprised:

- the northern stairwell;
- the stairwell in the St Martin's Way frontage; and
- the location of the attenuation tank in the east of the Site.

4.1.4 Across the remainder of the Site, where a preservation in-situ strategy was adopted, appropriate archaeological methodologies were undertaken as part of a wider holistic programme. The scheme was designed to monitor all intrusive works associated with the development and, where archaeological remains were present, to investigate, characterise and interpret them.

4.1.5 In instances where preservation in-situ was no longer achievable, or the existing methodology was not sufficient to deal with the potential archaeological resource, discussions were held between WA, Mark Leah of CWACC and the Client and the methodology was altered accordingly and in direct response to archaeology exposed.

Designed Impact of Development

4.1.6 The site's significance was considered within its local, regional, national and international framework, and calculated to the acceptable loss of various aspects of its composition. With this consideration, as part of the brief provided by Mark Leah (CAPAS), an acceptable percentage of loss for this Site was originally calculated at less than 5% ground impact. As per the WSI and based upon a Site area of c.850m^2 the following calculations were agreed as part of the design:

- the sinking of 105 CFA piles of 300mmØ, was estimated to result in a loss of approximately 7.455m^2 or 0.88%;
- the staircase midway down the western side of the Site was estimated to result in a 12.00m^2 or 1.41% of the Site area based upon a 4 metre by 3 metre area of impact;
- the northern staircase was reduced from the previously consented scheme and measured c.6.50m^2.

4.1.7 Pre-commencement of the Site works, the combined figure for the estimated total area lost associated with the CFA piles and the staircases was approximately 25.955m^2 of 850m² or 3.05%.

Changes to Scope of Work and Methodology

4.1.8 On site conditions, mis-scheduling of construction elements and changes to the size of the pile rig resulted in some minor changes to the proposed design, agreed scheme of work and final impact.

Crane Base Excavation

4.1.9 Prior to commencement of the agreed further archaeological works, as identified in the WSI (WA 2017a), the excavation of the crane base was undertaken and consisted of an area of 25.7m². Of this figure, after excluding those areas previously truncated, the impact on significant archaeology was 4.06m² on the north to south aligned intramural Roman drain, equating to a calculated loss of 0.47%.

4.1.10 Due to the circumstances of excavation, consultation was held between Mark Leah and Mike Allard of CWACC and the Client and a scheme of clean, characterise and record was agreed upon and undertaken for this area. A recommendation for an archaeological presence to be maintained until completion of all ground works was also made.

4.1.11 To mitigate the increased impact from a crane base excavation, the Client relocated the agreed attenuation tank which reduced the need for any further ground works and allowed preservation of the Roman drain, in its greater extent, across the remainder of the Site.

Pile Caps and Foundation Beams

4.1.12 The pile mat was originally designed to be constructed up to 800mm thick, meaning that all intrusive works for the installation of the foundation beams and pile caps, the excavation of the lift pit, service runs, and attenuation tank were due to be contained within the pile mat.

4.1.13 Ground conditions and the size of piling rig employed on Site, minimised the depth of the pile mat to 550-600mm in depth and as such all works undertaken during the installation of the foundation beams and pile caps extended beyond the limits of the original Watching Brief, incorporated additional depth to allow for concrete blinding and intruded into the below deposits.

4.1.14 On examination of the depth of the foundation beam excavations and the exposure of further significant archaeological remains comprising areas of the *Via Sagularis*; consultation was held between WA, the Client and the Client's engineers to mitigate any further increase beyond the agreed limits of impact. On-site design changes included:

- Reduction in the scope of excavation of the northern stairwell, removing the need for full Excavation in this area and allowance for shallower excavations undertaken via Watching Brief – removing the calculated impact on archaeological remains for this;
- The redesign of 4 pile caps, decreasing their depth by 200-300mm and raising them above the line of the *Via Sagularis* allowing the preservation of remains; additional protection was afforded by covering exposed archaeological remains with geotextile prior to backfilling; and
- Removal of the need for concrete blinding therefore decreasing the depth of excavations and ensuring the depths of excavation for the pile caps and foundation beams were rectified and calculated to lie above the line of significant archaeology.

4.1.15 After redesign, three pile caps remained which had an impact on the archaeological resource, full excavation and recording was implemented in these areas. The remaining pile cap locations equating to 3.87m² or 0.45% of impact.

Western Stairwell Excavation

4.1.16 The depth of the excavations required to construct the western stairwell, compounded by unstable ground conditions and inclement weather necessitated an expansion of the scope of these works to allow for increased stepping on all sides.

4.1.17 The excavations equated to full impact within 24m² or 2.82% and limited impact of less than 0.60m in depth of 21.2m² or 2.49%.

Western Stepped Foundations

4.1.18 The ground conditions exposed within the western stairwell excavation also necessitated the redesign of foundations adjacent to the western boundary wall of the Site. As the excavations were located predominantly within the known 1985 truncation, the impact on archaeological deposits was not increased by these works.

Southern Stairwell Excavation

4.1.19 The staircase located on the southern boundary of the Site was initially set to have no impact on the archaeological resource. This was due to design of the stairwell to meet the elevation of Hunter Street and as such no ground excavations or minimal ground reduction within the pile mat should have been required.

4.1.20 On-site redesign meant that ground excavation was required for the construction of the southern stairwell to a depth of 1.10 - 1.20m bgl, extending 0.70m below the pile mat.

4.1.21 This excavation equated to an impact of 18.24m² or 2.14%. This calculation represents the maximum possible impact and excludes the known truncation within 1.00m of the southern boundary of the Site and the known intrusions from the Evaluation trench of the, as of yet, unreported 1980s archaeological works.

Services

4.1.22 Ground excavations for services predominantly lay within the pile mat or were undertaken during the original ground reductions works, including those for the electrical substation and parts of the drainage.

4.1.23 As part of the re-design of the works, in order to reduce the square meterage of ground impact, designed intrusions for services were recalculated:

- In terms of the manholes required, MH S1 was omitted and changed to a roddable gully, raising the level of the pipe run to MH S2 and raising the invert level;
- With the depth of the pipes to be installed being raised they were incorporated within pile mat level directly below the finished slab level and had no further impact on the archaeological resource.

4.1.24 The total area of impact from the two manholes, which were excavated up to 3m in depth, was calculated to 2.41m² or 0.03%.

Conclusion

4.1.25 The full archaeological strategy was implemented during foundation beam, pile cap, service works, western stairwell and foundations; however, the crane base and southern stairwell were mitigated by a clean, characterise and record methodology.

4.1.26 The total known and ratified impact on the archaeological resource by the re-development equates to 6.79% of the Site.

Fieldwork Strategy

4.1.27 In accordance with discussions held between WA and Mark Leah (CAPAS), a scheme for an archaeological programme of investigation was designed to satisfy the stated objectives of the project as set out under Section 3.

4.1.28 The archaeological works were undertaken in accordance with the WSI (WA 2017a). The fieldwork was undertaken between the 14th of February and 12th of July 2018, with all excavations monitored by suitably experienced archaeologists.

4.1.29 In advance of the fieldwork WA corresponded with the Client to ensure that all reasonable measures were taken to identify any constraints and had obtained information from the Client on the presence of services, any ecological constraints, the presence of Public Rights of Way, the presence of contaminated land or any other risks to health and safety.

4.1.30 The excavations were completed using a 360° tracked excavator, utilising a toothless ditching bucket to maximise the potential for identification of archaeological deposits and features.

4.1.31 Once areas were opened, all plan and section surfaces were inspected for potential archaeological deposits and features. All deposits and features were recorded

according to accepted professional standards (CIfA 2014d) and to those set out in the WA Field Manuals (2017b-e) with sufficient data recorded for the production of this report.

4.1.32 Each deposit or feature was assigned a unique identifier (context number) and were recorded and numbered individually on WA pro-forma context sheets (Appendix 2). A general record of the work, comprising a description and discussion of the archaeology was maintained as appropriate. Context sheets were filled in by the archaeologist excavating the feature or deposit.

4.1.33 Sections of deposits or features were drawn at an appropriate scale (typically 1:10 or 1:20). Significant archaeological features were drawn in plan at an appropriate scale (typically 1:20 or 1:50). All detailed plans and sections have been related to the National Grid.

4.1.34 A full digital photographic record of the work was kept, including general working shots to illustrate Site progress and more detailed shots of the ground works and archaeological features and deposits.

Artefact Recording Methodology

4.1.35 All stratified artefacts were retained on Site and returned to the office where they were identified, quantified and dated to period. On completion of the fieldwork, finds were cleaned and packaged according to national guidelines (CIFA 2014c).

4.1.36 Please note, the following categories of materials will be discarded after a period of six months following the submission of this report, unless there is a specific request to retain them (and subject to the collection policy of the relevant depository):

- where unstratified;
- modern pottery;
- assessed material having no obvious grounds for retention.

The Archive

4.1.37 A full professional archive has been compiled in accordance with *Guidelines for the Preparation of Excavation Archives for Long Term Storage* (Brown 2011; UKIC 1990) and *Standard Guide to Best Practice for Archaeological Archiving in Europe* (Perrin *et al* 2014). Digital data (photographic as well as reports, graphic data etc.) will be

securely stored in an appropriate format and media which can be maintained in perpetuity in their original form and in line with current best practice (Brown 2011).

4.1.38 The archive will be deposited with the Cheshire West and Chester Museum Service and all document associated with the project will be marked with a HER reference, with copies of the report sent to the HER and Museum. The original archive will be accessible using a unique project identifier (accession number) that will be issued by the Cheshire West and Chester Museum Service in due course.

4.1.39 In addition, WA has used an internal Site code during the archaeological investigations which was placed on all documents, artefacts and any other items associated with the project. The internal Site code is **HUN-B**.

4.1.40 WA supports the **O**nline **A**cces**S** to the **I**ndex of Archaeological Investigation**S** (**OASIS**) project. This project aims to provide an online index and access to the extensive and expanding body of grey literature, created from developer-funded archaeological work. As a result, details on the findings of this project will be made available by WA as part of this national project. The project can be accessed under the unique project identifier **Wardella2-335504**.

5 MITIGATION RESULTS

5.1.1 The archaeological mitigation was undertaken between the 14th of February and 12th of July 2018. The works were undertaken as specified in the Methodology (Section 4).

5.1.2 Given the disbursed recording of archaeological features and deposits across the Site the results are detailed below by feature. Deposit and group numbers are given in **(parenthesis)** and cut and structure numbers are given in **[square brackets]**. Not all context numbers are illustrated but all are contained within the archive (Appendix 2).

Geology

5.1.3 No excavations within the Site were undertaken to bedrock level but the overlying superficial deposits remained consistent across the Site.

5.1.4 The natural mid-brownish-red coarse sand **(100)** was excavated to 0.50-0.65m thick across two of the excavation areas. The natural sand, **(100)**, was overlain by a 0.62m thick (maximum), very firm, mid-yellowish-brown, sandy clay, **(101)**.

Roman Rampart

5.1.5 The rampart was identified through the western and southern stairwell excavations and the upper deposits were identified sporadically throughout the watching brief.

5.1.6 In the western extent of the stairwell excavation, extending beyond the limit of the Roman rampart, the natural sand was sealed by a 0.15 – 1.10m thick, firm, mid-reddish-yellow silty clay **(217)**, which appears to be a buried soil, containing fragments of animal bone and may be representative of erosion of the rampart and occupation deposits intermixed with the natural superficial clay (Drawing ST15779-010 and Plate 2).

5.1.7 During the excavation of the stairwell, deposit **(217)** became weathered and a small part of the section collapsed exposing four potential stake bases (Drawing ST15779-010 and Plate 3). The four potential stakes were sampled (Samples 1 to 4), three of which had completely degraded and all that remained were the sand casts of the degraded stakes. The fourth entirely comprised comminuted charcoal and could not be used for species identification or dating. The stakes are unlikely to continue beyond the western limit of excavation due to truncation, as such they are of limited interpretative value, but they would be positioned at the base of the west-facing bank of the rampart, facing away from the fort and could be structural or defensive in nature.

5.1.8 Within the sequence of the rampart deposits, the natural sand was predominantly sealed by a 0.10m thick, firm, mid-yellow sandy clay, very similar in colour and composition of the upper rampart deposit / levelling layer, but a "cleaner" more sterile version, **(201)**, (Drawing ST15779-009) this is interpreted as a natural superficial deposit and one that was likely extracted from other areas around the rampart to be used within its construction.

5.1.9 The Roman rampart **(Group No. 307)** was constructed by importing material from environs of the fort, layered with turf revetments to create a defensive structure over 2m in height. Due to replicated recording of deposits, this section will focus on salient numbers and features and therefore not all rampart context numbers are listed or illustrated but all are contained within the archive (Appendix 2).

5.1.10 Within the limits of the western stairwell excavation, the base of the rampart was constructed on top of the firm, mid yellow sandy clay **(294)**, (Drawing ST15779-010) this was overlain by patches of mid- to dark grey silty clays, such as **(280)**, at an average of 0.10m thick. During the 1987 Watching Brief the lower dark silty deposits were interpreted as a buried soil onto which the rampart was built, or the basal turf revetment of the rampart (Plates 4 and 5).

5.1.11 Buried soil **(280)** was sealed by a mid-reddish-brown coarse sand **(279)**, which was overlain by a 90mm thick, very dark grey, charcoal rich silt, **(278)**, over which a sequence of pale yellow clays, such as **(277)**, were overlain by a series of sorted coarse and silty sand deposits such as **(297)** and **(274)**, which were then bolstered by further turf revetments **(Group 305)**. The sequential build-up of intermixed sands and silts continued until the construction of the rampart was completed (Drawing ST15779-010 and Plates 6 and 7).

5.1.12 The top of the Roman rampart was recorded at an average depth of 0.60m below the base of the pile mat, at an average height of 22.20m AOD.

5.1.13 In the southern and central areas of the Site, the excavations for the foundations were ceased at the top of deposits identified as Roman rampart material proper; these were

predominantly firm mid-reddish brown clayey coarse sand, interdigitised with organic rich lenses of clays and clayey silts.

5.1.14 In two pile caps (Drawing ST15779-002), the depth of excavation allowed further recording of the depositional sequence detailed above; indicative of importing material for the rampart construction and renovation/restoration.

5.1.15 The thickest deposit recorded was the basal layer of firm, mid-red coarse sand, a mixture of in-situ natural sand and imported material. The lower sand bank was overlain by a potential brickearth spread, to seal or re-enforce the basal sand deposit. The construction was continued with a sequence of sand layers very similar to the natural sand deposits below and indicative of extra material brought in, intermixed with clay deposits and dark greyish-brown to black, organic clay layers, representative of the turf revetments and turf used to seal the rampart. The upper turf deposit was sealed by further worked sands (Plate 11).

5.1.16 The stratigraphic sequence of the pile caps gave limited, heavily compressed sections through the rampart deposits, however a trend in composition is recorded with sands, overlain by clayey weathered deposits, built over with sand and organic deposits.

5.1.17 Preservation of material overall from the rampart sequence was quite good, with an iron nail recovered from lower sand deposit **(296)** and Cu alloy fragments recorded in the upper sand deposit **(264)**. The overall finds assemblage is of mixed date with Roman Ceramic Building Material (CBM) recovered from **(250)**, medieval pottery sherds dating to the 13th to 14th centuries from **(244)** and early modern sherds dating to the 15th to 17th centuries from **(277)**.

5.1.18 From those deposits isolated to within 0.60m below pile mat level and identifiable as upper rampart deposits a chronology emerges. From deposit **(056)** a small assemblage of mixed finds was recovered, including animal bone, Roman and late medieval CBM, medieval pottery sherds dating to the 12th to 14th century and sherds of Roman Black Burnished Ware. From deposit **(055)** a sherd of 1st to early 2nd century AD legionary ware pottery was recovered and from **(053)** a sherd of Medieval pottery, dating to the 12th to 14th centuries was recovered. The sequence of the upper deposits and finds recovered from them is likely indicative of the re-working of the rampart from the

medieval period onwards. Evidence of re-working was also recorded within the southern stairwell excavation.

5.1.19 The earliest rampart deposit recorded within the southern stairwell excavation was a firm, mixed yellow-brown sandy clay, **(424)** excavated to 0.30m thick, similar in colour and composition to the natural superficial clay, likely re-deposited as part of the rampart construction.

5.1.20 This was overlain by a sequence of thin lenses (Drawing ST15779-012), likely indicative of 'tipping' during construction. The sequence includes a 0.13m thick, firm, light grey clayey silt deposit, **(423)**, overlain by a 0.15m thick, moderately loose, mid-pinkish-red sandstone crush, **(422)**, which was sealed by a 0.10m thick, firm, mixed light grey, sandy silt, **(421)**, which was overlain by a moderately loose light to mid-brownish-red silty sand **(419)** (same as **(408)** and **(452)**) which was an average of 0.13m thick. From this deposit, (No. **(408)**) fragments of late 1st to early 3rd century AD cooking jars were recovered.

5.1.21 Rampart deposit **(408)** and feature **[417]**, were sealed, if no longer by physical relationship but by date, by a further sequence of thin lenses of dark organic sandy silts **(432)**, likely further turf layers, overlain by 'tipped' layers of sands, silts and clays, such as **(409)** and **(450)**, interlaced with bands of further dark organic sandy silts such as **(425)** (Plate 12). From layer **(425)**, sherds of 12th to 14th century pottery were retrieved. Given the definitive Roman date of rampart materials and the possible kiln, with the upper deposits containing later material, this further asserts the interpretation that there was re-working of the rampart from the medieval period onwards.

5.1.22 Within the upper rampart deposits, a spread or potential surface constructed of sandstone, **(401)**, was recorded in the eastern limit of excavation (Plate 13). Constructed of rough-faced sandstone, measuring 0.30m thick, with no obvious bonding material or coursing, it is of limited interpretative value. Given the consistency of thickness and size of materials it may be the remains of a Roman surface, however the kiln (discussed below), of definitive Roman date, is exposed at 22.37m AOD, 0.40m lower than the potential surface at 22.73m AOD. The potential surface also directly underlies material dating post-12th century, leading to the

interpretation that this is a spread rather than structural in nature and may be associated with re-working of the rampart in the Medieval period.

Discrete Features within the Rampart

5.1.23 Four discrete features were exposed and recorded within the western stairwell excavation, cutting rampart material, three of which were exposed cutting the lower rampart deposit **(294)** in the north-facing step of the excavation and the fourth recorded in the south-facing step (Drawing ST15779-003).

5.1.24 An isolated sub-circular posthole, **[207]**, measuring 0.25m in diameter and 0.28m deep was exposed in the southern limit of the stairwell excavation (Plate 8). Having sharp breaks of slope with a concave base **[207]** was 'U' shaped in profile, and contained a singular fill of firm, mid-greyish-brown, silty clay with small pebble inclusions, **(208)**. A sample was taken of **(208)** which comprised comminuted charcoal and did not yield any material suitable for species identification or dating.

5.1.25 At a distance of 0.60m east of posthole **[207]** a narrow (0.28m wide) linear ditch/beam slot, **[205]** was exposed extending 1.80m from the southern limit of the stairwell excavation (Plate 9). **[205]** had sharp breaks of slope with a flattish base and was 0.28m deep, it contained a singular fill of firm, mid-brownish-red silty fine-grained sand, **(206)**.

5.1.26 The linear feature was truncated on its eastern edge by a 0.60m wide, 1.10m long ovoid shaped pit **[226]**, which contained a firm, mid brown, clayey sand fill, **(227)**. The pit was truncated by a foundation pile, and due to further truncation being unnecessary this was left unexcavated.

5.1.27 Fills **(208)** and **(227)** were sealed by rampart deposit **(302)**.

5.1.28 In the northern extent of the stairwell excavation, cutting **(243)**, an isolated pit was recorded. Pit **[221]** (Drawing ST15779-009) was 0.70m in diameter, with a shallow 'U' shaped profile, having been truncated, the pit remained to 50mm in depth (Plate 10). The pit contained a singular fill of moderately loose, very dark greyish-brown silty clay,

(222). This feature was sampled and contained animal bone and 20% comminuted charcoal, which could not be used for species identification nor dating.

5.1.29 The relationship of pit **[221]** with the rampart is unclear due to the level of truncation, it cannot be determined when this pit was cut or from what height.

5.1.30 Two further discreet features were exposed during the Watching Brief and were cut through the upper rampart deposit (Drawings ST15779-003 & ST15779-009).

5.1.31 A posthole, **[059]** was recorded cutting upper rampart deposit **(052)**, exposed for 0.32m wide in section and 0.43m deep, it was filled by a singular deposit of moderately loose, dark greyish-brown, sandy silt with occasional charcoal inclusion, **(058)**, from which a single iron nail was recovered.

5.1.32 A single stakehole, **[061]**, measuring 90mm in diameter, 120mm deep, being 'U' shaped in profile at a 20˚ incline on axis, filled by a singular deposit of firm, very dark grey clayey silt **(060)**, was recorded 0.20m east of posthole **[059]**. From fill **(060)** a sherd of 2nd to 3rd century AD grey ware was recovered.

5.1.33 No further discreet or isolated features were recorded during the Excavation or Watching Brief.

Potential Kiln

5.1.34 Within the southern stairwell excavation rampart deposit **(408)** was cut for a 0.50m deep, 2.60m wide, 3.00m long ovoid shaped feature, **[417]**, which may be the remains of a kiln (Drawings ST15779-011 and 012).

5.1.35 As discussed, **[417]**, is ovoid shape in plan, with sharp breaks of slope at the top, moderating/shallow sides with a concave base, creating a wide 'U' shaped profile, containing five fills (Plate 14).

5.1.36 The basal fill is a 0.10m thick moderately loose, mid-greenish-grey, fine-grained sandy clay, **(435)**, lining the edge of the feature. This is overlain by a 0.20m thick deposit of loose, black, charcoal rich sand, **(433)** (Drawing ST15779-011), interpreted as the waste product from firing. This waste product was sampled and charcoal from *Sorbus sp*. was radiocarbon dated, resulting in a date range of 125 – 140 AD for when this feature was last in use.

5.1.37 The waste deposit **(433)** was sealed by a 0.16m thick, moderately loose, light greyish-brown sandy clay with frequent rough-dressed sandstone, **(459)** which has 'settled', this appears to be a deliberate backfill of the potential kiln with sliding of any former structure into the base. This was sealed by a 0.22m thick, firm, dark greyish-yellow sandy clay, **(458)**.

5.1.38 After disuse and backfill **[417]** was 'capped' by a 0.14m thick layer of firm, dark yellow and light brown mottle clay, **(457)**.

5.1.39 **(457)** appears to have settled and been overlaid by a moderately loose, light greyish-brown clayey sand, **(434)** from which 18th to 20th century plaster and 2nd to 3rd century AD CBM fragments were recovered. Given the frequency of shallow truncation throughout the stairwell excavation area, and the results of the 1980s Evaluation recording a possible kiln, it is likely that the current investigation has re-excavated, at least in part, that trench (Plate 15).

Possible Interval Tower

5.1.40 In the southwestern corner of the Site initial excavation for the gas works removed the overlying modern made-ground deposit, **(001)**, which was 2.16m in depth of loose, dark greyish-brown, sandy clay, containing rubble and modern waste deposits.

5.1.41 Removal of deposit **(001)** exposed deposit **(002)**, a loose, dark reddish-brown, silty sand matrix with large sandstone blocks and sandstone rubble, some mortar was present although the blocks formed no discernible courses making this deposit likely representative of a collapse or degrading of the main Roman fortifications (Plate 16). Deposit **(002)** sealed **(003)** which was a firm, light reddish-brown mottled with light yellowish-brown, silty clay with no inclusions, a deposit of possible Roman rampart material, but indiscernible in such a small area. The relationship between **(002)** and **(003)** was not 100% exposed and excavated but **(002)** sits stratigraphically above **(003)** as a possible collapse event.

5.1.42 All disturbance to the interval tower, as remained on site, was caused by previous the construction of the wall and access for the insertion of a gas pipe in the 1980s, deposit **(001)** is the backfill of these works. Given the depth at which **(002)** and **(003)** were exposed, no further truncation to the potential interval tower was caused by this development and the remains are preserved in-situ.

Roman Road

5.1.43 All excavations for foundation beams and pile caps were monitored and recorded during the Watching Brief. The stratigraphic sequence throughout the foundation works remained consistent, with the 0.65m thick pile mat **(035)**, overlying the post-medieval soil horizon, **(004)**.

5.1.44 Predominantly the excavation through **(004)** exposed the remains of the *Via Sagularis* **(Group No. 91)** across the Site (Drawings ST15779-004 & ST15779-013), aligned north to south, c.11.40m from the eastern boundary and 16.5m from the western boundary, remnants of the intervallum road were mapped for the 38m length of the Site with remains up to 4.50m wide.

5.1.45 The excavation and characterisation of these remains have recorded a series of construction and repair deposits, with an earlier road surface (**[032]** and **[045]**) comprising a metalled surface (Plate 17), approximately 0.10m thick, of small to medium coarse sandstone fragments and rounded / sub-rounded cobbles, overlying a very firm, mid-brownish-red, sandy silt matrix with sandstone crush, hardcore deposit **(016** and **021)** (Plate 18). The hardcore deposit had Roman CBM intermixed with it, being deliberately recycled.

5.1.46 The earlier surface of the road is overlain by an upper / repaired surface such as **[043]** (Drawing ST15779-006), constructed from large roughly-dressed sandstone blocks (Plates 19, 20 and 21), averaging 0.15m x 0.2m x 0.15m in size, edged by a single course of linear kerbing **[033]** (Drawing ST15779-006) constructed of fine-faced sandstone blocks, rectangular shaped in plan at an average size of 0.40m x 0.30m x 0.15m (Plates 22 and 23). Small areas of a thin, moderately firm, light to mid-brown silty sand bedding deposit were recorded for the road **(024)** and **(077)**, and kerbing **(023)**.

5.1.47 Sherds of Black Burnished Ware pottery were recovered from the earlier road surface. The upper road surface and kerbing contained 2nd century AD fragmented tegula and imbrex tiles as part of their fabric, this includes a tile stamped with 'LEG XX V' of 20th Legion (stationed in Chester): LEGION 20 VICTRIX (Deva Leg XX Vict) (Plate 24). From

the upper road surface, a small assemblage of finds was recovered, including fragments of Black Burnished Ware pottery, a fragment of lava quern and a single silver Antonine Denarius (Commodus).

5.1.48 The stratigraphic and physical relationships of the road surfaces and deposits leads to the interpretation that as the road was upgraded and edged with kerbing it was also narrowed. It could be assumed that the spread of earlier road surface deposits beyond the limits of the overlying road surface and kerbing could have occurred during use and spread beyond the roads original limits, creating the requirement for repair and kerbing, however the earlier surface is well metalled to its limits and did not show signs of spread/gradually diminishing.

5.1.49 Evidence of the use and wear of the road is recorded in the form of a wheel-rut, exposed in the northern extent of the Site, **[025]** (Plate 19) it was 0.10m deep, up to 0.30m wide and exposed for 0.70m in length (the limits of the foundation beam). The rut was filled by firm, mid-greyish-brown clayey silt **(026)**, from which five fragments of tegula and imbrex tile, dating to the 2nd to 3rd centuries AD and fragments of Black Burnished Ware pottery, were recovered.

5.1.50 The upper road surface was sealed by the remnants of occupation / abandonment deposits, **(030)**, **(034)**, **(048)** and **(076)**. These were predominantly firm, mid-greyish-brown sandy clayey silts which contained frequent CBM and sandstone fragments from road use. In one area, a deposit of firm, very dark grey, charcoal rich, sandy silt with CBM fragments and potential lime plaster, **(044)**, was recorded overlying the road surface, given the limited extent of this deposit exposed within the foundation excavations it is of limited interpretative value, however given the charcoal nature of the deposit, with inclusions of potential lime plaster – this may be the product of the previously recorded kiln on site.

Roman Drain

5.1.51 Sandstone surface **[102]** overlies the remains of the substantial Roman drain (Drawings ST15779-007 and Plate 25). The construction cut **[104]** for drain **[105]** was cut through the natural substrate **(100)**.

5.1.52 Drainage structure **[105]** was square in profile and was constructed to 0.70m high and 1.40m wide on a gradual south-facing incline, built of fine-faced square cut sandstone blocks, on average 0.30m³ in size with CBM included in the fabric. Construction cut **[104]** was filled by the structure and a silted deposit of firm mid greyish-brown silty clay, **(106)** and the drain silted with moderately firm mid greyish-brown sandy silt with sandstone fragments, **(107)** (Drawing ST15779-008).

Post-medieval Deposits and Features

5.1.53 The overall elevation of the Site needed to be reduced for the construction of the pile mat (Plate 26). This entailed the removal of the modern tarmac car park surface and excavation of up to 0.90m in depth of the underlying post-medieval soil and rubble deposits (Plate 27).

5.1.54 The post-medieval ground consisted of a firm, very dark brown silt with inclusions of CBM, fragments of concrete slab and bricks, **(004)**. From deposit **(004)** a small assemblage of finds, both contemporary and displaced, were recovered. The assemblage comprised fragments of animal bone, including one piece of butchered adult cow bone, three sherds of Buckley-type pottery dating to the 18th to 19th centuries and a small fragment of adult human left rib, likely disturbed from the archaeological deposits below during previous activity on Site.

5.1.55 Exposed on top of/within the post-medieval buried soil were the remnants of a several connecting walls. A north to south aligned brick wall, exposed for c.6m extending through the centre of the Site, an east to west aligned wall exposed along the northern limit of excavation for c.5m and remnants of a truncated north to south aligned wall extending from the north-eastern corner of the Site (Plates 28 and 29). All of the walls recorded remained to one course in depth, constructed to two courses wide and made of 120mm x 80mm x 220mm sized, highly fired, red, unfrogged bricks laid in a garden wall bond. As such they have been signed a group structure number, **[006]**, as they are all associated with the formerly extant building which is recorded on Site on the 1899-1945 OS maps and is visible on the 1945 aerial photo of the Site (GeoInformation Service).

5.1.56 Within the crane base excavation (Drawing ST15779-008) all archaeological deposits were sealed by the post-medieval dark soil, **(108)**, (Plate 30) up to 0.85m thick, which contained a small assemblage of mixed finds including fragments of animal bone, clay tobacco pipe, post-medieval pottery, a Cu alloy button, and disturbed Roman finds comprising 2nd to 3rd century AD tegula and imbrex tiles.

5.1.57 Within the trench the post-medieval soil was cut, **[110]** for the construction of an east to west aligned wall **[111]** which extended from the north-eastern corner of the crane base for 1.42m, remaining to 0.41m high and was made of highly fired red brick laid in a stretcher bond (Plate 31). This wall is likely associated with group **[006]** and the former building which was present on Site.

5.1.58 In the eastern section of the crane base, the upper Roman deposits were cut by a 0.82m wide pit, **[118]**, with sharp breaks of slope and a concave base creating a 'U' shaped profile, which was 0.51m deep (see Plate 30). The pit contained a 0.18m thick basal deposit of moderately loose, very dark yellowish-brown silty sand, **(119)**, from which animal bone and sherds of 12th to 14th century pottery were recovered. The basal fill was overlain by a 0.33m thick, firm, mid-brownish-yellow sandy clay, **(120)**, from which fragments of post-medieval plaster were recovered. The pit was only exposed in section and continued beyond the eastern limit of excavation. It is likely a late medieval waste pit (Drawing ST15779-008).

5.1.59 The post-medieval deposits had been truncated during the ground reduction works and were directly sealed by the pile mat, **(115)**.

Truncation

5.1.60 The western stairwell excavations recorded the extent of the truncation through the rampart and lower deposits, with the western c.4.80m, extending from the western boundary wall, being entirely truncated to an average of 2.50m below ground level. The majority of the truncation is associated with the expansion of St. Martin's Way in 1985 and the construction of the new boundary wall in 1987. However, post-medieval truncation for potential cellars and drainage were identified extending from the north-western corner of the stairwell, although these too were heavily truncated (Plate 32).

5.1.61 One of the 1980s Evaluation trenches may be discernible within the southern section of the western stairwell excavation, with a vertical eastern edge, although this too has been truncated by the cut for the western wall (Plates 33 and 34).

5.1.62 Excavations within the open green to the south of Hunter Street, for gas works, were undertaken for approximately 15m in length, leading east from the footpath, to 0.40m wide and to a depth of between 0.81 – 0.98m bgl (Plate 35).

5.1.63 The stratigraphic sequence of the open green comprises a 0.10 – 0.12m thick silty topsoil and turf, **(088)**, overlying a 0.22 – 0.25m thick sandy silt subsoil, **(089)**, which seals a deposit of moderately loose rubble with a mid-brown, sandy silt matrix, exposed to an average of 0.75m thick, **(090)**, (Drawing ST15779-005 and Plate 36) and is likely the backfill from the extension of St. Martin's Way.

5.1.64 A trench for electrical ducting was excavated through Hunter Street, on the eastern limit of the Site (Drawing ST17559-005). This was excavated to 0.70m wide and up to 0.95m deep.

5.1.65 The earliest deposit recorded in the service trench through Hunter Street was a redeposited layer of moderately loose, rough-cut sandstone blocks and bricks **(013)**, excavated to 0.55m thick, overlain by a 0.31m thick layer of moderately loose, mid-orangish-brown, clayey silt with red sandstone fragments and orange bricks, **(012)**, both of which are interpreted as the backfill of the main sewer which lies underneath Hunter Street. Two modern service cuts truncated these layers, service trenches **[008]** and **[010]** were both vertical sided and backfilled by **(009)** and **(011)** respectively, which were moderately loose mid grey small-medium sub-angular gravels (Drawing ST15779-005 and Plate 37). All of the deposits in the service trench were sealed by the tarmac road surface **(007)**, which is the same as **(1000)**.

5.1.66 The levels of truncation at the eastern end of Hunter street are mirrored to a deeper extent at the western end. A drainage trench was excavated to 2.83m bgl, and for 1.00-1.20m wide.

5.1.67 The western trench exposed layers relating to the rampart and re-deposition of rampart material. The earliest of the deposits exposed in this trench was **(1009)** a loose mid brown-red coarse sand, greater than 1.5m thickness and interpreted as the in-situ remains of the rampart at c.1.60m below road surface level.

5.1.68 Sealing the rampart deposits was a 0.75m thick, moderately firm, mid- to dark yellowish-grey-brown, sandy clay **(1010)**. Deposit **(1010)** is interpreted as possible up-cast/disturbance of the lower Roman rampart material; stratigraphically across the Site deposits similar to the **(1008)** material overlies the **(1009)** material without sandy deposits, such as **(1010)**, sealing the yellow clayey levelling layer. Given the "dirtier" composition, which is only associated with post-medieval deposits, it is possible **(1010)** was upcast during the 1980s works (Plate 38).

5.1.69 The in-situ rampart deposit and potential up-cast were sealed and truncated by a series of modern services and backfill deposits from earlier drainage works (Drawing ST15779-005 and Plates 37-39).

5.1.70 Within the western trench, a sandstone deposit, **(1005)** (Drawing ST15779-005), was investigated as potentially significant truncated Roman remains and machining was halted to excavate and record fully, it was a 0.39m thick deposit of loose brownish-red sand **(1005)** with large and small rough-cut, irregular sandstone fragments (Plate 39), exposed to 0.88m wide and for 1.20m in length. Once fully characterised it was determined that the sandstone blocks within **(1005)** were not bonded or coursed and only appeared to be in linear form due truncation by services. During removal of **(1005)** post-medieval CBM inclusions were recorded within **(1005)** and stratigraphically this deposit sits above the post-medieval soil horizon **(1006)** (Plates 37 to 39). It is likely the sandstone has been disturbed from Roman archaeological features below and has been backfilled during either the sewer works in the 19th century or after 20th century manhole / service works.

5.1.71 The remainder of the service works did not expose any archaeological features or deposits, further excavations within the western extent of Hunter Street and within the footpath of St. Martin's Way were undertaken to an average 0.30m below footpath level and on removal of the paving slabs exposed the backfill of the services, directly onto the gas and other service pipes (Plates 40 and 41).

6 FINDS

Introduction

6.1.1 A total of 370 artefacts and ecofacts, weighing 36,118g, were recovered during the archaeological investigation at Hunter Street, Chester, Cheshire West. These figures include three small finds.

6.1.2 All finds were dealt with according to the recommendations made by Watkinson & Neal (1998) and to the Chartered Institute for Archaeologists (CIfA) Standard & Guidance for the collection, documentation, conservation and research of archaeological materials (CIfA 2014b). All artefacts have been boxed according to material type and conforming to the deposition guidelines recommended by Brown (2011) and EAC (2014). The project has the unique archive identifier **WA18/ST15779/HUN-B**.

6.1.3 The material archive has been assessed for its local, regional and national potential; further work has been recommended on the potential for the material archive to contribute to the relevant research frameworks.

6.1.4 Quantification of finds and ecofacts is given in **Table 1**.

6.1.5 The artefactual assessment was compiled by Megan Stoakley with contributions from Sue Thompson and Frank Giecco.

Context	SF No	Material	Qty	Wgt (g)	MNI	Period	Refined Date	Fabric Code	Comments
4		Animal Bone	5	33	2	RB-Med	1st-14th C	-	2 x *Bos sp* (1 x adult, 1 x juvenile); cut-mark on adult cow bone
56		Animal Bone	3	16	3	RB-Med	1st-14th C	-	1 x wild boar(?) tusk; 1 x avian bone (tiny, adult), 1 x rib from medium-sized ungulate
108		Animal Bone	10	59	3	RB-Med	1st-14th C	-	1 x adult *Bos sp.,* 1 x avian sp., 1 x juvenile *Capreolus sp.* ?? (radius with butchery on prox end)
119		Animal Bone	2	18	1	RB-Med	1st-14th C	-	Rib fragments from *Bos sp.* (adult)
206		Animal Bone	4	112	1	RB-Med	1st-14th C	-	*Bos sp* (adult); distal radius portion, mandibular ramus, rib and limb bone frags
217		Animal Bone	4	369	1	RB-Med	1st-14th C	-	1 x adult *Bos sp.*
220		Animal Bone	13	283	2	RB-Med	1st-14th C	-	1 x adult *Bos sp.,* 1 x small-sized mammal (*Oryctolagus sp.* ??)
222		Animal Bone	20	136	3	RB-Med	1st-14th C	-	1 x adult *Canid sp.,* 1 x adult *Bos sp.,* 1 x young adult *Bos sp*??
223		Animal Bone	22	294	2	RB-Med	1st-14th C	-	1 x young adult *Bos sp.,* cut-marks on fib, metacarpal from small-medium sized mammal?
247		Animal Bone	1	70	1	RB-Med	1st-14th C	-	*Bos sp* (adult) partial mandible with molar
435		Animal Bone	29	1175	2	RB-Med	1st-14th C	-	1 x adult *Bos sp.,* 1 x adult *Ovid sp.*
1009		Animal Bone	1	31	1	RB-Med	1st-14th C	-	1 x juvenile *Bos sp.* - vertebrae (partial)
u/s		Animal Bone	1	59	1	RB-Med	1st-14th C	-	*Bos sp.* (adult) scap - 3 x butchery marks on glenoid fossa
43		CBM	1	68	-	PM	19th-20th C	-	Land drain fragment
56		CBM	4	78	-	PM	18th-20th C	-	Miscellaneous fragments - probably from tiles

Context	SF No	Material	Qty	Wgt (g)	MNI	Period	Refined Date	Fabric Code	Comments
223		CBM	6	141	-	PM	18th-19th C	-	Very abraded friable fragments
15	3	CBM	1	1045	-	RB	Late 2nd C	-	LEG XXV': 20th Legion (stationed in Chester): LEGION 20 VICTRIX (Deva Leg XX Vict)
16		CBM	1	96	-	RB	1st-4th C	-	Tegula frag
21		CBM	4	1065	-	RB	2nd-3rd C	-	Teg and imbrex frags
23		CBM	10	1189	-	RB	2nd-3rd C	-	Brick and tile frags
26		CBM	5	493	-	RB	2nd-3rd C	-	Teg & imbrex frags
29		CBM	2	692	-	RB	2nd-3rd C	-	Teg frag?
34		CBM	4	1477	-	RB	2nd-3rd C	-	Brick frags
43		CBM	34	7952	-	RB	2nd-3rd C	-	
56		CBM	2	408	-	RB	2nd-3rd C	-	Miscellaneous fragment; Teg frag
67		CBM	6	1609	-	RB	2nd-3rd C	-	Teg frags; brick frags
75		CBM	2	1093	-	RB	2nd-3rd C	-	Teg frags
104		CBM	7	2206	-	RB	2nd-3rd C	-	Teg frags; brick frags
108		CBM	12	1443	-	RB	2nd-3rd C	-	Bricks and tile frags, teg
121		CBM	10	3379	-	RB	2nd-3rd C	-	Teg & imbrex frags
223		CBM	3	813	-	RB	2nd-3rd C	-	Frag; teg frag
250		CBM	1	452	-	RB	2nd-3rd C	-	Teg frag
434		CBM	9	3524	-	RB	2nd-3rd C	-	Floor bricks; Brick frags, teg
u/s		CBM	1	749	-	RB	2nd-3rd C	-	Teg frag
277		Ceramic	1	31	-	Late med-E PM	15th-17th C	-	Body sherd, no decoration, burnt on exterior (?), type of flat vessel?
53		Ceramic	1	4	-	Med	12th -14th C	-	Body sherd, sooting on exterior, no decoration
56		Ceramic	9	179	-	Med	12th -14th C	-	Body sherd

Context	SF No	Material	Qty	Wgt (g)	MNI	Period	Refined Date	Fabric Code	Comments
67		Ceramic	1	18	-	Med	12th-14th C	-	Miscellaneous body sherd, splashed glaze on exterior surface
73		Ceramic	3	163	-	Med	12th -14th C	-	MNV 1; same vessel; oxidised fabric, wheelthrown
119		Ceramic	1	4	-	Med	12th -14th C	-	Miscellaneous shoulder sherd from small to medium-sized jar
220		Ceramic	1	18	-	Med	12th -14th C	-	Rim sherd of bowl?
223		Ceramic	1	8	-	Med	12th -14th C	-	Body sherd
244		Ceramic	1	13	-	Med	13th-14th C	-	Body sherd, splashes of dark green glaze, oxidised fabric
425		Ceramic	1	136	-	Med	12th -14th C	-	Large jug handle; oxidised fabric, incised vertical decoration on exterior
u/s		Ceramic	2	85	-	Med	13th-15th C	-	Dark green glaze on exterior, pinky-buff fabric, part of a cistern perhaps; sherd from a long-necked jar
4		Ceramic	3	102	-	PM	18th-19th C	-	Buckley-type CRE
108		Ceramic	5	258	-	PM	18th-19th C	-	Buckley-type CRE, Transfer Print, slipware, buff refined earthenware with brown glaze
220		Ceramic	2	76	-	PM	18th-20th C	-	Land-drain fragment; Buckley-type CRE - rim sherd
14		Ceramic	1	31	-	RB	2nd-3rd C	DOR BB1	Body sherd, lattice decoration
26		Ceramic	1	8	-	RB	2nd-3rd C	DOR BB1	Body sherd, faint banding evident
43		Ceramic	4	65	-	RB	2nd-3rd C	DOR BB1; CO OX	CO OX body sherd, micaceous, banding evident, from a flagon? Rim of flanged dog dish; base of cooking jar; miscellaneous oxidised body shed

Context	SF No	Material	Qty	Wgt (g)	MNI	Period	Refined Date	Fabric Code	Comments
55		Ceramic	16	160	-	RB	1st-E 2nd C	LEG (x 2); CO RE	Legionary ware - 1 vessel, CO RE 1 vessel
56		Ceramic	10	108	-	RB	2nd-3rd C	CO OX, CO RE, DOR BB1	
60		Ceramic	1	7	-	RB	2nd-3rd C	CO RE	Greyware body sherd
75		Ceramic	5	74	-	RB	1st-4th C	CO OX; CO OX WS	4 x sherds from a flagon
108		Ceramic	1	11	-	RB	2nd-3rd C	CO OX WS	Flagon body sherd
220		Ceramic	4	78	-	RB	Late 1st - E 3rd C	CO OX; LMV SA; DOR BB1; BAT AM 1/2	
223		Ceramic	9	219	-	RB	1st C	CO OX, LMV SA, CO RE; LEG	Base sherd of CO RE jar, Central Gaulish samian ware (bowl); Base sherd of CO OX jar; body sherd of rusticated greyware jar (legionary ware?) (Precious 2014, 100)

Context	SF No	Material	Qty	Wgt (g)	MNI	Period	Refined Date	Fabric Code	Comments
408		Ceramic	14	326	-	RB	Late 1st - E 3rd C	CO OX, LEG; LMV SA	Cooking jars; rims and bases
u/s		Ceramic	5	127	-	RB	2nd-3rd C	CO OX, LMV SA; BAT AM	Amphora rim/neck sherd, CO OX shoulder sherd, LMV SA rim
108		Clay Tobacco Pipe	2	7	-	PM	Mid - late 17th C	-	Partial bowl fragment, partial plain stem; 2.66mm internal stem diameter (1650-1680 AD)
108		Copper Alloy	1	6	-	PM-Mod	19th-20th C	-	Button
243		Copper Alloy	1	1	-	RB??	1st-4th C	-	Tiny scrap fragment
264		Copper Alloy	4	1	-	RB??	1st-4th C	-	Tiny scrap fragments, not diagnostic
4		Human Bone	1	6	1	RB-Med?	RB-Med?	-	Partial L rib; CuA staining; adult; good condition
55		Iron	2	125	-	RB-Med	1st-14th C	-	Nail; bracket fitting; heavily corroded
58		Iron	1	4	-	RB-Med	1st-14th C	-	Heavily corroded nail
223		Iron	4	345	-	RB-Med	1st-14th C	-	Heavily corroded; 1 x lump and nails
296		Iron	1	35	-	RB-Med	1st-14th C	-	Heavily corroded nail
29	2	Lead	1	162	-	Med-PM	12th-19th C	-	Circular weight
120		Plaster	1	3	-	PM?	18th-20th C	-	Small miscellaneous fragment

Context	SF No	Material	Qty	Wgt (g)	MNI	Period	Refined Date	Fabric Code	Comments
434		Plaster	5	38	-	PM?	18th-20th C	-	Very abraded fragments, tempered with flint, burnt flint and quite sandy
14		Pumice stone	2	446	-	RB	1st-4th C	-	Parts of lava quern - dressing / tool-marks evident (although worn)
20	1	Silver	1	3	-	RB	2nd C (177-192 AD)	-	Antonine denarius; 'PMT' (Commodus)
TOTAL			**370**	**36118**					

1: Archaeological finds table

Roman Ceramics

6.1.6 A total of 71 sherds of Roman pottery, weighing 1,214g, were recovered from 11 stratified deposits and as unstratified finds during the archaeological investigation at Hunter Street, Chester. The pottery is in good condition in the main, with fresh clean breaks to edges and surfaces displaying little evidence of post-depositional damage.

6.1.7 The pottery was examined and recorded according to guidelines published by the Medieval Pottery Research Group (PCRG, SGRP & MPRG 2016). Where possible, the sherds were assigned a mnemonic code to identify fabric type, distribution pattern and date (Tomber & Dore 1998).

6.1.8 Fabric types include Dorset Black-burnished ware (DOR BB1), locally produced reduced and oxidised tablewares (CO OX & CO RE respectively), early Roman legionary ware (LEG), Central Gaulish *Terra sigillata* (LMV SA), southern Spanish (Baetician) amphora (BAT AM 1 / 2) and white-slipped oxidised fabrics (CO OX WS).

6.1.9 Vessel types include small to medium-sized cooking jars and storage pots, beakers/mugs, flagons (for wine), bowls and dishes, platters, large storage vessels (use of amphorae for wine/oil/food consumables). The early Roman legionary ware (1st century AD) comprised small to medium-sized jars with rusticated decoration on the exterior of the vessel (Precious 2014, 100).

6.1.10 The Roman pottery assemblage spans the 1st to early 3rd century AD, although the bulk of the material sits comfortably in the 2nd to early 3rd century AD.

6.1.11 No further analysis is required at assessment stage. Should Hunter Street proceed to publication stage, further work is recommended on the Roman pottery, including detailed fabric analysis and R.EVE count. Diagnostic (rims, shoulders, bases) and decorated sherds (especially the Central Gaulish *Terra sigillata*) should be illustrated.

Medieval Ceramics

6.1.12 A total of 22 sherds of medieval pottery, weighing 659g, were recovered from ten stratified deposits and as unstratified (Table 1). The sherds are in moderate to good condition in the main; edges and surfaces of the sherds display some evidence of post-depositional damage.

6.1.13 The pottery was examined and recorded according to guidelines published by the Medieval Pottery Research Group (PCRG, SGRP & MPRG 2016).

6.1.14 A limited range of fabric types is present, and the bulk of the assemblage comprises types of locally produced oxidised and pinkish-buff fabrics with fine well-sorted sandy inclusions, some mica and quartz. All of the pottery is wheel-thrown and fairly hard-fired. Splashes of mid-green lead glaze are evident on some sherds, albeit faded; decoration (incised lines, thumb-strips or anthropomorphic/zoomorphic profiles) was limited to a single example from deposit (**425**) and none of the sherds are fully glazed. The later medieval partially and fully reduced fabrics are absent from the assemblage.

6.1.15 The tablewares include medium to large-sized jugs and jars, which may have been used for storage as well as cooking. Sooting and carbonised accretions were not observed on the sherds, although this does not mean that the pottery represented in this assemblage was not used in cooking. Bowls and cisterns are also present in this assemblage.

6.1.16 This small collection originates from plain coarse domestic tablewares which span the 12th to 17th centuries (high medieval to early post-medieval). The bulk of the pottery fits within the 12th to 14th century dating bracket. Kiln sites indicating the possible manufacturing site include Chester, Silverdale, Rhuddlan and Ashton (Davey 1975, 5).

6.1.17 No further analysis is required at assessment stage. Should Hunter Street proceed to publication stage, further work is recommended on the medieval pottery, including detailed fabric analysis and R.EVE count. Diagnostic sherds should be illustrated. Comparisons with other sites in Chester should also be used for further analysis (Davey 1975).

Post-medieval Ceramics

6.1.18 Ten sherds of post-medieval ceramics, weighing 436g, were recovered from three deposits (Table 1). The sherds are in good condition in the main and display little evidence of post-depositional damage.

6.1.19 Fabric types comprise slipware, Transfer Print, Buckley-type coarse red earthenware and a refined buff earthenware with a dull brown slip.

6.1.20 Vessel types represented in this small collection comprise large storage jars, plates and a fragment of land-drain.

6.1.21 A date of 18th to 19th century is suitable for this assemblage.

6.1.22 No further work is required at assessment stage, and no further work is required for publication stage.

Ceramic Building Material (CBM)

6.1.23 A total of 125 fragments of ceramic building material, weighing 29,972g, were recovered from 20 deposits and as unstratified (Table 1). The fragments are in good condition in the main and display minimal evidence of post-depositional damage.

6.1.24 A total of 114 fragments of Roman ceramic building material, weighing 29,685g, were recovered from 17 deposits and as unstratified.

6.1.25 The assemblage includes brick, tegula and imbrex fragments; the bulk of the material was recovered with Roman pottery of 2nd to early 3rd century date and a contemporary date for this CBM assemblage is likely.

6.1.26 Small Find **3** includes a tile with the stamp of the 20th Legion (*Valeria victrix*).

6.1.27 Fragments of post-medieval brick were recovered from deposits (**043**), (**056**) and (**223**), weighing 287g.

6.1.28 Further analysis is not required at assessment stage. Should Hunter Street proceed to publication, further work is warranted on the ceramic building material, including illustration of diagnostic pieces (including SF **3**).

Clay Tobacco Pipe

6.1.29 A total of two fragments of ceramic tobacco pipe, weighing 7g, were recovered from deposit (**108**) (Table 1). The fragments are in good condition and display minimal evidence of post-depositional damage.

6.1.30 The artefacts comprise a partial plain bowl fragment and a small plain stem fragment with the internal diameter measurement comprising 2.66mm. This potentially dates this fragment to the mid to late 17th century (Kipfer 2006, 8; Table 2).

6.1.31 A date of 17th to 19th century is suitable for these fragments.

6.1.32 Further analysis is not warranted at assessment stage, and further analysis is not warranted at publication stage.

Metal

6.1.33 A total of 16 metal artefacts, weighing 682g, were recovered from nine deposits during the archaeological investigation at Hunter Street, Chester (Table 1).

6.1.34 Six copper alloy artefacts, weighing 8g, comprise scraps of probable Roman date recovered from deposits (**243**) and (**264**); a button of post-medieval to modern date, weighing 6g, was recovered from deposit (**108**).

6.1.35 Eight iron artefacts, weighing 509g, were recovered from four deposits (Table 1). The artefacts are in very poor condition and have evidence of heavy rust corrosion across all surfaces. The artefacts comprise nails and fittings spanning the Roman to post-medieval periods.

6.1.36 A cast lead alloy weight (SF **2**), weighing 162g, was recovered from deposit (**029**) (Table 1). The artefact is in moderate to good condition. The artefact comprises a circular weight of probable medieval to post-medieval date.

6.1.37 A single silver denarius (SF **1**), weighing 3g, was recovered from deposit (**020**) (Table 1). The artefact is in moderate condition and displays some corrosion. It was minted during the reign of Commodus (177-192 AD) (*Pers. Comm.* Giecco 2018).

6.1.38 Further analysis is not warranted at assessment stage. Should Hunter Street proceed to publication stage, the small finds of Roman and medieval date should be analysed and discussed in conjunction with the other artefacts of contemporary date.

Pumice Stone

6.1.39 Two pieces of pumice stone, weighing 446g, were recovered from deposit (**014**) (Table 1). The pieces are in moderate condition and surfaces are worn.

6.1.40 The fragments are two pieces of one object and would have comprised part of a lava quern of probable Roman date; tool-marks are evident on the surfaces.

6.1.41 No further analysis is recommended at assessment stage. Should Hunter Street proceed to publication stage, the lava quern fragments should be analysed and discussed with the other artefacts of Roman date. The artefacts should be illustrated.

Plaster

6.1.42 Six fragments of plaster, weighing 41g, were recovered from two deposits (Table 1). The plaster is in poor condition in the main and are highly abraded.

6.1.43 The artefacts comprise miscellaneous fragments of probable post-medieval date.

6.1.44 No further analysis is warranted at assessment stage. No further analysis is warranted should Hunter Street proceed to publication stage.

Ecofacts: Zooarchaeological and Human Remains

6.1.45 A total of 115 animal bones, weighing 2,655g, were recovered from 12 deposits and as unstratified (Table 1). The animal bone is in good condition in the main.

6.1.46 A single partial adult human left rib, weighing 6g, was recovered from deposit (**004**) (Table 1). The bone is in good condition and a patch of copper alloy staining is evident on the rib.

6.1.47 The zooarchaeological remains were recorded according to Historic England's guidelines (Historic England 2014).

6.1.48 By context, a minimum number of 23 animals are represented in this assemblage. Adult animals make up the majority of the assemblage (91%). Species include cattle (60.8%), avian species and medium-sized ungulates (8.6% each) followed by wild boar (?), canid species, roe deer species, small mammal species and sheep (4.3% each).

6.1.49 Butchery marks were observed on cattle bones from deposit (**004**) and from an unstratified deposit (Table 1).

6.1.50 The assemblage most likely represents domestic food waste; the animal bones were recovered in conjunction with pottery of Roman and medieval date and the faunal assemblage is thus likely of contemporary date.

6.1.51 No further analysis is recommended at assessment stage. Should Hunter Street proceed to publication stage, further analysis is warranted on the faunal assemblage and should be discussed in conjunction with the artefacts of Roman and medieval date.

6.1.52 No further analysis on the human bone is recommended at assessment stage. The human bone should be mentioned in a discussion should Hunter Street proceed to publication.

Statement of Potential

6.1.53 The artefactual and ecofactual assemblage from Hunter Street is of significance on a local and regional level.

6.1.54 Should publication-stage work be commissioned, further analysis is warranted on the Roman and medieval pottery, the ceramic building material, the pumice-stone, the faunal assemblage and the small finds. Further analysis and publication of the findings will benefit and enhance research areas such as urban domestic and military settlement activity and subsistence strategies.

6.1.55 The artefacts and ecofacts will be retained with the archive.

7 PALAEOENVIRONMENTAL ASSESSMENT

Introduction

7.1.1 Nine bulk environmental samples were taken during the excavation at Hunter Street, Chester. The total weight processed was 33kg (25l).

7.1.2 This report presents the results of the assessment of the environmental samples, palaeobotanical and charcoal remains in accordance with Campbell et al. (2011) and English Heritage (2008).

7.1.3 The environmental assessment was undertaken by Freddie Sisson.

Methodology

7.1.4 The bulk environmental samples were processed by Wardell Armstrong LLP (WA). The colour, lithology, weight and volume of each sample was recorded using standard WA pro-forma recording sheets, the results of which are presented in Table 6.1. The samples were processed with 500-micron retention and flotation meshes using the Siraf method of flotation (Williams 1973). Once dried, the residues from the retention mesh were sieved to 4mm and the artefacts and ecofacts removed from the larger fraction and forwarded to the finds department. The smaller fraction was scanned with a magnet for industrial residues such as hammerscale and visually assessed for small artefacts such as beads.

7.1.5 The flot, plant macrofossils and charcoal were retained and scanned using a stereo microscope (up to x45 magnification). Any non-palaeobotanical finds were noted on the flot pro-forma.

7.1.6 The charcoal was identified to species as far as possible, using Hather (2000), Schweingruber (1982) and the author's reference collection. Nomenclature for plant taxa followed Stace (2010)

Results

7.1.7 The results of the assessment are presented in **Table 3**.

7.1.8 The sole sample to yield artefacts or ecofacts was **<9> (433)**, recovered from the potential kiln, this comprised charcoal, magnetic material and fired clay. The charcoal comprised <1g of the sample but identification of material for radiocarbon dating was attempted.

7.1.9 The charcoal from the flot was in too poor a condition to be identified but some of the charcoal from the residue was identifiable. Of the twenty-six total recovered fragments, fourteen were identifiable, comprising nine fragments of Rosaceae (*cf. Sorbus sp.*), three of oak (*Quercus sp.*) and one fragment each of willow/poplar (*Salix/Populus*) and elm (*Ulmus sp.*) with the remaining twelve fragments being unidentifiable due to poor preservation.

7.1.10 The magnetic matter retrieved from **<9>** was examined under a stereo microscope (x45) but this showed no evidence of industrial residues were present.

Discussion

7.1.11 Due to the lack of ecofactual remains the palaeoenvironmental evidence is limited and as such is of limited interpretative value; however, the ecofacts recovered from **<9>** provides a limited insight into the wood resources being exploited and potentially indicative of the woodland peripheral to the city.

Statement of potential and recommendations

7.1.12 The identification of charcoal fragments of short-lived species from Sample **<9>** means that Accelerator Mass Spectrometry (AMS) radiocarbon dating of this context was possible and undertaken (Appendix 1). The *Sorbus sp*. was processed, resulting in a date range of 125 – 140 AD for when the potential kiln feature was last in use.

7.1.13 No further work is required on the samples or residues from Hunter Street and it is recommended that they are discarded upon completion of the final report.

C	<>	TQ	CP	TP	MP	PW	PV	CS	Components	SW	SV
201	1	1	dark brown	plastic	silty clay	1	1	pale brown	stone>1cm 80%: stone<1cm 10%: sand 10%	34	30
201	2	1	dark brown	plastic	silty clay	1	1	pale reddish brown	stone>1cm 90%: stone<1cm 5%: sand 5%	68	50
201	3	1	dark brown	plastic	clay	1	1	pale yellowish grey	stone>1cm 90%: stone<1cm 5%: sand 5%	23	20
201	4	1	dark brown	plastic	clay	1	1	pale reddish brown	stone>1cm 90%: stone<1cm 5%: sand 5%	37	30
222	5	1	mid-dark brown	soft	silty clay	11	8	pale grey	stone>1cm 10%: stone<1cm 20%: sand 70%	622	300
208	6	1	dark brown	soft	silty clay	9	6	pale grey	stone>1cm 30%: stone<1cm 40%: sand 30%	608	300
319	7	1	very dark brown	loose	sandy silt	1	1	very dark grey	stone>1cm 10%: stone<1cm 40%: sand 50%	217	200
313	8	1	dark grey	sticky	silty clay	6	4	pale grey	stone>1cm 30%: stone<1cm 30%: sand 40%	185	100
433	9	1	Black	soft	silty clay	2	2	mid reddish grey	stone>1cm 30%: stone<1cm 30%: sand 40%	372	300

2: Table of Palaeoenvironmental Samples

Key: C=Context, <>=Sample number, TQ= Tub Quantity, CP= Colour Processing, TP= Texture Processing, MP= Matrix Processing, PW= Processing Weight, PV= Processing Volume, CS= Colour Sorting, Components= Components of sorted residues, SW= Sorted Weight, SV= Sorted Volume

C	<>	WF (g)	VF (ml)	Ch (g)	Components of Flot	Artefacts	Ecofacts
201	1	<1	<5	-	Sand 100%	-	-
201	2	<1	<5	-	Sand 100%	-	-
201	3	1	<5	-	Sand 100%	-	-
201	4	0.9	<5	-	Comminuted charcoal 100%	-	-
222	5	5.7	5	-	Sand 80%: comminuted charcoal 20%	-	-
208	6	2.5	<5	-	Comminuted charcoal 20%: sand 80%	-	-
319	7	<1	<5	-	Comminuted charcoal 90%: sand 10%	-	-
313	8	7.7	<5	-	Sand 20%: comminuted charcoal 80%	-	-
433	9	3.9	15	0.55	Comminuted charcoal 100%	Fired Clay and Magmatter	Charcoal (*Sorbus* n=9, *Quercus* n=3, *Salix/populus* n=1, *Ulmus* n=1, indet n=12)

3: Results of Palaeoenvironmental Assessment

Key: C=Context, <>=Sample Number, WF=Weight of flot, VF= Volume of flot, Ch=Charcoal Weight,

8 SYNTHESIS

8.1.1 Wardell Armstrong LLP were commissioned by Watkin Jones Group to undertake a scheme of archaeological mitigation at Hunter Street, Chester. The investigations were required to mitigate the impact on the known archaeological remains ahead of a new development comprising student accommodation with associated services, vehicular access and landscaping for which planning permission was received from Cheshire West and Chester Council.

8.1.2 The archaeological mitigation comprised a Watching Brief during initial ground reduction and all excavations for gas, electrical and drainage services.

8.1.3 Based on the foundation design of the development, three areas were identified for archaeological excavation. The combination of archaeological Watching Brief and Excavation was implemented with the intent to uphold a preservation in situ strategy during groundworks and construction.

8.1.4 The archaeological works have recorded a plethora of Romano-British features, including remains of a potential foundation for an interval tower of the Roman fort wall, the associated rampart, the intervallum road surface and a substantial Roman drain (Drawings ST15779-003 and 013).

8.1.5 The groundworks undertaken for this development, has allowed for recording of the nature, depth, extent, date, character and relationship of each of the features encountered across the Site and the overall phasing in relation to the development on this Site during the early to mid-Roman occupation of Chester.

8.1.6 The phasing, broadly, shows that the construction of the rampart was undertaken utilising local resources of sands and clays, likely supported by timbers and turf during construction and then completed with the large sandstone wall with interval towers, as can be seen encasing Chester. The interpretation of the demolition remains of the potential fortifications, as recorded in the southwestern corner of the Site have been informed by the 1987 archaeological works by Strickland, which records the likely remains of an interval tower immediately to the north of Hunter Street (LeQuense, 1999: 67).

8.1.7 Within the Roman fort we see development of the intervallum zone with increased urbanisation/occupation in the mid-2nd to early 3rd centuries, with the construction of the *Via Sagularis*, the associated drain and small-scale industrial activity with the potential kiln. Features recorded in previous archaeological works, such as a granary, were not identified during this mitigation, however the construction technique of re-use of column bases and capitals was identified within the large Roman drain.

8.1.8 Across the Site the construction and refurbishment of the rampart is well defined. Given that the materials used to construct the rampart are prone to weathering and erosion, as well as compaction, frequent re-construction would have been necessary, the most extensive period we have recorded for this activity is the late medieval period, with the upper c.1m thickness of the surviving rampart deposits containing material from the 12th to 14th centuries.

8.1.9 The archaeological works have also recorded the extent of truncation (Drawing ST15779-013) associated with the construction of St. Martin's Way and the construction of the western boundary wall; although previous archaeological works had identified truncation within the Site boundary, the extent was not fully characterised or known, further disturbance beyond that shown in LeQuense 1999, must have occurred after the archaeological recording, as the surviving rampart appears to have been battered back after recording.

8.1.10 These works have also characterised the extent and depth of some of the earlier excavations and has shown that those excavations had extensively disturbed some of the most significant features on the Site, such as the area of potential kilns and the Roman drain. Despite the level of truncation sections through the rampart and features were successfully recording prior to any consequent collapse of limits of excavation due to ground conditions and construction of the stairwells.

8.1.11 In relation to the main aims and objectives (Section 3) of this archaeological mitigation, the strategy implemented and recalculated during the fieldwork attempted to limit the loss of archaeological remains within the Site. On site conditions, mis-scheduling of construction elements and changes to the size of the pile rig resulted in some minor changes; however, the dynamic archaeological strategy undertaken in accordance with discussions with Mark Leah and Mike Allard of CWACC resulted in maintaining a loss of less than 7% of the overall Site area.

8.1.12 Given the level of truncation recorded across the Site and the works undertaken as part of this development, the preservation of the archaeological resource remains

good, with the greater part of robust features such as the rampart, road surface, drain and potential interval tower preserved in-situ.

8.1.13 No further intrusive works have been undertaken on this Site and this report represents the final statement of the archaeological results.

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APPENDICES

APPENDIX 1

Radiocarbon Dating Report

Scottish Universities Environmental Research Centre
Rankine Avenue, Scottish Enterprise Technology Park, East Kilbride, Glasgow G75 0QF, Scotland, UK
Director: Professor F M Stuart Tel: +44 (0)1355 223332 Fax: +44 (0)1355 229898 www.glasgow.ac.uk/suerc

RADIOCARBON DATING CERTIFICATE

05 March 2019

Laboratory Code	SUERC-84965 (GU50540)
Submitter	Freddie Sisson Wardell Armstrong LLP Marconi Road Burgh Road Industrial Estate Carlisle CA2 7NA
Site Reference	HUN-B
Context Reference	black layer
Sample Reference	(433) <9>
Material	Charcoal : Sorbus sp.
$\delta^{13}C$ relative to VPDB	-28.5 ‰
Radiocarbon Age BP	1906 ± 24

N.B. The above ^{14}C age is quoted in conventional years BP (before 1950 AD) and requires calibration to the calendar timescale. The error, expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.

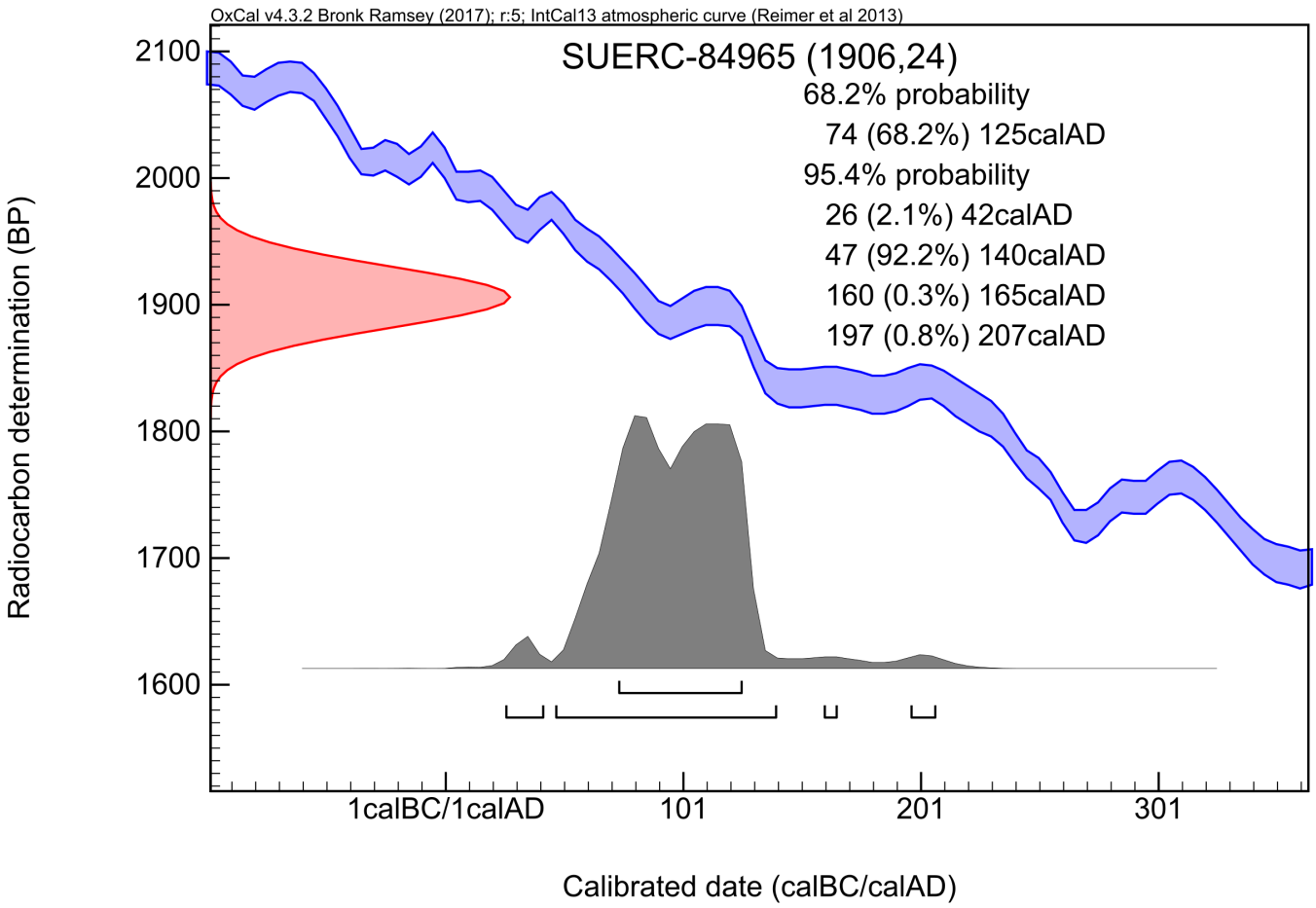
Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Laboratory and should be quoted as such in any reports within the scientific literature. The laboratory GU coding should also be given in parentheses after the SUERC code.

Detailed descriptions of the methods employed by the SUERC Radiocarbon Laboratory can be found in Dunbar et al. (2016) *Radiocarbon 58(1) pp.9-23.*

For any queries relating to this certificate, the laboratory can be contacted at suerc-c14lab@glasgow.ac.uk.

Conventional age and calibration age ranges calculated by : E. Dunbar

Checked and signed off by : P. Nayont



The radiocarbon age given overleaf is calibrated to the calendar timescale using the Oxford Radiocarbon Accelerator Unit calibration program OxCal 4.*

The above date ranges have been calibrated using the IntCal13 atmospheric calibration curve†

Please contact the laboratory if you wish to discuss this further.

* Bronk Ramsey (2009) *Radiocarbon 51(1) pp.337-60*

† Reimer et al. (2013) *Radiocarbon 55(4) pp.1869-87*

APPENDIX 2

Context Summary

CONTEXT SUMMARY

Context Number	Context Type	Description	Dimensions	Interpretation
		Watching brief		
001	Deposit	Loose dark greyish-brown sandy clay with frequent rubble; modern metalwork and refuse	2.16m deep, 1.50m+ wide and 3.30m+ long	Modern made ground consisting of rubble and waste from St. Martin's expansion, **same as (035)**
002	Deposit	Loose dark, reddish-brown silty sand matrix with large sandstone blocks and fragmented sandstone	1.65m+ wide; 1.70m+ long	Deposit including sandstone blocks and rubble. Likely related to the Roman fortifications of the city. Some mortar is present but there are no courses and the rubble seemed poorly sorted, potential demolition / truncated remains of interval tower
003	Deposit	Firm light reddish- and light yellowish-brown silty clay	Exposed for 0.18m in width; 0.74m in length; Not excavated	Re-deposited natural clay mixed with rampart material, overlain by a mix of (002) rubble and (001) modern deposit.
004	Deposit	Firm very dark brown silt with small to large fragments of CBM and modern construction material	>1.10m deep, >1.00m wide	Post-medieval deposit, **same as (039), (108), (230), (418) and (1006)**
005	Deposit	Firm, mid yellowish orange coarse grained silty sand	Excavated to 0.20m thick	Upper Roman rampart or levelling deposit, **same as (046), (101), (1005) and (1008)**
006	Structure Group	Three sections of wall, one aligned east to west along northern limit of excavation for c.5m, a section of north to south aligned wall extending for c.6m in the centre of the Site and remnants of wall extending north to south from the north-eastern corner of the Site Modular sized unfrogged highly fired orangey red bricks with soft gritty lime mortar	Bricks sizes: 120 x 80 x 220 mm. Structure dimensions: 0.30m wide, varying lengths	Post-medieval walls associated with formerly extant building on the Site, aligned with eastern elevations of buildings to north of Site
007	Deposit	Hard, very dark blueish to dark grey tarmac	0.10m thick	Road tarmac surface
008	Cut	E-W oriented Linear with vertical break of slope and vertical sides, bottom not excavated	0.50m wide, excavated to 0.90m deep	Cut for modern service
009	Fill	Loose small to medium sub angular mid grey gravel	0.36m wide x >0.83m thick	Backfill over modern service
010	Cut	Linear cut with vertical break of slope and vertical sides	1.80m wide x >0.90m deep	Cut for service repair on E-W running sewer
011	Fill	Loose mid grey small to medium sub angular gravel	>0.90m thick,	Backfill over modern service

Context Number	Context Type	Description	Dimensions	Interpretation
012	Fill	Loose mid orangey brown soil matrix and clayey silt soil matrix with red sandstone rubble and orange bricks	0.42m thick (at thickest), exposed for 3.48m into service trench	Backfilled disturbance from original sewer implementation
013	Deposit	Loose Layer consisting of medium sized fragmented and sub angular sandstone blocks and fragments of brick	>0.48m thick	Re-deposited layer of sandstone block mixed with post-medieval CBM, backfill layer of sewer
014	Structure	Firm sandstone blocks with CBM frags and *tegula* (>10%); bonding clay between blocks	Blocks size: up to 0.30m by length	Roman sandstone surface: **same as [102]**
015	Structure	Dressed sandstone blocks with single course of clay bonding and some pressed CBM fragments into the surface or included within the makeup of the kerb	Blocks dimensions; 0.40m x 0.30m x 0.20m Structure dimensions; 1.25m wide; 1.50m long	Kerb laid on the eastern side of the Roman road [020], possibly **same as [033]**
016	Deposit	Firm mid brown to red sandy silt with sandstone fragments, sandstone rubble and coarse CBM fragments	3.30m wide; 1.50m< long	Make up Layer of Roman road [020]
017	Structure	N-S oriented mixed coarse and dressed Sandstone blocks with some bonding clay.	Blocks sizes: 0.40m x 0.20m x 0.20m. Structure dimensions: 0.50m wide; 1.60m< long	Suspected derelict wall of Roman roadside drain
018	Cut	N-S oriented linear which was not excavated and only seen in plan	0.50m deep; 1.60m< long	Possible construction cut for potential edge of roadside drain
019	Deposit	Firm, mid yellowish-brown sandy clay. Inclusions: occasional charcoal; small rounded pebbles	/	Roman horizon: rampart deposit?
020	Structure	Single course and roughly dressed sandstone blocks and CBM	Block sizes: 0.15m x 0.10m x 0.10m. Structure dimensions: 1.50m< wide; 1.00m< long	Metalled surface of Roman road, running N-S intercepted in the Northern foundation trench, **same as [031] and [043]**
021	Deposit	Compact mid brownish red sandy silt and sandstone fragments with coarse CBM fragments	3.30m wide; 1.50m< long	Make up deposit of the Roman road [020]
022	Structure	Linear kerb roughly dressed two coursed sandstone blocks surface;	Blocks sizes: 0.40m x 0.20m x 0.15m<. Structure dimensions:	Kerb surface on eastern side of Roman road [020]

Context Number	Context Type	Description	Dimensions	Interpretation
			0.30m wide; 0.70m long	
023	Deposit	Firm mid brownish yellow silty sand with rare sandstone and CBM fragments	1.25m wide; 1.50m< long	Bedding Layer for [015]
024	Deposit	Firm light to mid brown silty sand with rare sandstone; CBM fragments.	0.30m wide; 0.70m long.	Bedding Layer for [022]
025	Cut	N-S oriented linear with severe breaks of slope top, side and base, and a roughly level base	0.10m deep; 0.30m wide; 0.70m < long	Possible wheel-rut
026	Fill	Firm mid to dark greyish brown clay silt with charcoal flecks and CBM	0.10m thick; 0.50m wide; 0.70m< long	Deposit filling [025]
027	Fill	Firm mid grey brown sandy clay silt with CBM fragments and sub-angular sandstone fragments	/	Possible fill of drain [017]
028		VOID		
029		VOID		
030	Deposit	Firm mid grey brown sandy clay silt with CBM fragments and sub-angular sandstone fragments	1.00m< wide; 1.00m< long	Roman deposit
031	Structure	Sub angular roughly shaped single coursed sandstone road surface	Blocks sizes: > 0.20m x 0.20m x 0.08m. Structure dimensions: 2.50m< wide; 2.50m< long.	Roman road surface: **same as [020] and [043]**
032	Structure	River rolled coarse sandstone fragments and river rolled cobbled road surface	Block sizes: >0.40m x 0.20m x 0.10m. Structure dimensions: 3.10m wide; 1.50m long.	Roman road surface: earlier phase of [031] and [033]
033	Structure	Linear dressed sandstone	Blocks sizes: 0.20m x 0.20m x 0.15m. Structure dimensions: 0.10m< thick; 0.30m< wide; 0.70m< long.	Possible eastern roadside kerb stone. Possibly **same as [015]**
034	Deposit	Firm light to mid greyish brown sandy clay with sandstone fragments and CBM	0.20m thick; 2.50m< wide; 2.50m< long	Abandonment deposit of Roman road [031]
035	Deposit	Loose light to mid grey rubble, sorted pebbles and ground concrete with 5% shattered modern CBM	0.60m-0.70m thick 2.0m< wide	Modern construction deposit. **Same as (001)**
036	Deposit	Firm mid brown to dark reddish mottled clay with irregular distributed sandstone (10%) fragments	0.20m thick; 0.50m< wide	Modern make up deposit: stabilisation purpose

Context Number	Context Type	Description	Dimensions	Interpretation
037	Deposit	Loose white and light brownish mottled debris, concrete and squared stones	0.25m thick; 1.40m< wide	Modern make up deposit: draining purpose
038	Deposit	Firm dark brown clay with rooting, pebbles (rounded, 5%, irregular distribution) and modern refusal	0.25m thick	Post-medieval deposit, made ground
039	Deposit	Loose to firm mid brown sandy clay with stones fragments (various dimensions and shapes, irregularly distribution), rubble and CBM fragments	0.50m-0.60m thick; 2.20m< wide	Post-medieval deposit, **same as (004), (108), (230), (418) and (1006)**
040	Deposit	Firm fine textured dark greyish brown silty sand with round pebbles (0.02 diameter round shaped, irregular distribution) and 5% charcoal.	0.40m-0.50m thick; 2.20m< wide	Medieval garden soil
041	Deposit	Firm fine textured mid brownish grey silty sand with sandstone fragments (2%, 0.05m diam., horizontally distributed)	0.30m thick; 2.20m< wide	Post-Roman abandonment layer
042	Deposit	Loose fine textured dark yellow to light greyish brown sandy clay with charcoal and oyster shells (2%)	0.20m thick; 0.90m wide	Upper Roman rampart deposit
043	Structure	Large sub-angular coarsely dressed sand stone blocked Roman road surface with abraded CBM fragments and some imbrex	0.22m thick; 10.6m< long	Second phase of Roman road surface: **same as [020] and [031]**
044	Deposit	Firm dark grey to black sandy silt with charcoal, plaster and CBM fragments	0.35m< wide; 0.75m< long	Interim Layer between road surfaces [043] and [045]
045	Structure	Small river rolled stoned/cobbled (diam. >60 mm) early Roman road surface with bonding of dark greyish brown silty sand	0.35m< wide; 0.75m< long	First phase of Roman road surface
046	Deposit	Soft to firm coarse textured light-yellow sandy clay	0.10m thick	Roman rampart deposit material: demolition/ levelling horizon, **same as (005), (101), (1005) and (1008)**
047	VOID			Cut of Geotech Pit
048	Deposit	Firm mid orangey brown silty sand with frequent charcoal flecks and small sub-angular CBM fragments	0.10m thick; 0.40m wide; >1.0m long	Occupation deposit silted between surface [043] and kerb
049	VOID			
050	VOID			
051	Deposit	Firm mid orangey brown sandy silt with occasional charcoal	>1.0m wide; 1.40m long	Roman material between rampart and road surface
052	Deposit	Soft mid yellowish brown to brownish black sand and charcoal with 10% CBM and sub-angular sandstone fragments	70mm thick; >7.0m long	Charcoal rich rampart Layer
053	Deposit	Firm light red orange brown silty sand with small stones, occasional sub angular sandstone fragments and regular charcoal flecks	0.17m thick; >7.50m long	Roman rampart deposit

Context Number	Context Type	Description	Dimensions	Interpretation
054	Deposit	Soft mid orangey grey to brown sandy silt with occasional charcoal flecks and small sub round pebbles	0.15m thick; >7.0m long	Roman rampart deposit
055	Deposit	Soft mid to dark brownish grey sandy silt with charcoal, bone fragments, sandstone fragments and small rounded pebbles.	0.20m thick; 1.28m wide	Deposit within the composition of the earthen rampart
056	Deposit	Firm mid light brownish orange sandy silt with occasional charcoal flecks, small sandstone fragments, CBM fragments and lenses of redeposited clay	80mm< thick; 1.25m< wide	Deposit within the composition of the earthen rampart
057	Deposit	Soft mid greyish brown silty sand with charcoal and very occasional sub-angular stones (up to 60 mm in length).	60mm thick; 0.45m < wide	Deposit within the composition of the earthen rampart
058	Deposit	Soft dark greyish black sandy silt with small CBM fragments and charcoal with a large lens of cinder	0.43m thick; 0.32m wide	Fill of [059]: decayed post
059	Cut	Severe break of slope (top) with steep sides, concave break of slope (base) and slightly rounded base	0.43m thick; 0.32m wide	Large pit/posthole
060	Deposit	Firm dark greyish black clay sandy silt with small sub angular stones and occasional ceramic sherds	120.0mm thick; 90.0mm wide	Decayed stake: fill of [061]
061	Cut	Moderate break of slope (top) with steep sides, moderate break of slope (base) and rounded v-shaped base	120.0mm thick; 90.0mm wide	Stakehole
062	VOID			Fill of Geotech pit
063	VOID			
064	VOID			
065	VOID			
066	VOID			
067	VOID			
068	Deposit	Firm coarse textured dark brown clay and silt with sand (10%), rare rounded pebbles and CBM fragments (5%)	0.45m thick	Post roman garden soil
069	Deposit	Friable to firm fine textured mid brown sandy clay with rare rounded pebbles horizontally distributed.	0.40m thick	Weathered accumulation Layer
070	Deposit	Loose fine textured dark brown and black lensed sandy clay	50mm thick	Turf line
071	Deposit	Loose to friable coarse textured light grey clay and sand with 2% charcoal (distributed along horizontal plains)	80mm thick	Accumulation/ occupation deposit within upper rampart
072	Deposit	Pliable fine textured pinkish red clay	60mm thick	Clay lens: brickearth demolition/spread Layer
073	Deposit	Loose coarse textured light pinkish brown silty clay with 5% rounded, irregular distributed stones/pebbles	0.10m thick (excavated)	Upper portion of rampart deposit
074	VOID			

Context Number	Context Type	Description	Dimensions	Interpretation
075	Structure	Square faced sandstone cobbles	Blocks sizes: 0.10m-0.40m by side. Structure dimensions: 0.30m thick	Roman cobble surface
076	Deposit	Loose to friable fine textured mid to dark brown silt, clay and sand with 2% rare irregularly distributed round shaped pebbles	0.10m thick	Abandonment/ garden soil Layer
077	Deposit	Loose coarse textured red sand and silt with occasional irregularly distributed rounded pebbles	Excavated to 0.15m thick	Build up deposit
078	Structure	Square shaped sandstone moulded sub cobbles	Block sizes: 0.10m to 0.50m by side. Structure dimensions: 0.20m thick	Roman cobble surface
079	Deposit	Firm fine textured light brown clay and sand with 5% irregularly distributed rare rounded pebbles	0.30m thick (excavated)	Roman rampart deposit
080	Deposit	Loose fine textured mid brown/black striped clay and sand with irregularly distributed 2% rare rounded pebbles	0.30m thick	Roman rampart deposit
081	Deposit	Loose coarse textured light reddish-brown clay and sand with irregularly distributed 2% rare rounded pebbles	0.35m thick	Roman rampart deposit
082	Deposit	Loose coarse textured light pinkish grey clay and sand with irregularly distributed 5% rare rounded pebbles and rare charcoal flecks	0.10m thick	Roman rampart deposit: occupation horizon
083	Deposit	Firm coarse textured dark greyish brown to black clay with rich organic material	50mm thick	Turf line
084	Deposit	Loose to friable coarse textured dark red sand	0.15m thick	Roman rampart deposit, re-deposited natural clay
085	Deposit	Loose fine textured light greyish-pink sand and clay with 10% occasional irregularly distributed little rounded pebbles,	0.20m thick	Roman rampart deposit: preparation of occupation Layer?
086	Deposit	Firm fine textured dark yellow clay	80mm thick	Clay lens: brickearth demolition/spread Layer
087	Deposit	Loose coarse textured dark red and dark yellow veined sand		Natural sand substrate, in-situ and imported, rampart material
088	Layer	Friable dark brown sandy silt with evidence of rooting	0.10m-0.12m thick	Topsoil – green south of Hunter Street
089	Layer	Friable reddish-brown sandy silt	0.22m-0.25m thick	Subsoil – green south of Hunter Street
090	Layer	Brown sandy silt Layer mixed with brick, sandstone, metal, plastic, and rubble	0.73m-0.76m thick	Rubble backfill

Context Number	Context Type	Description	Dimensions	Interpretation
091	Group	Roman Road structure group Made up of hardcore (016) and (021), earlier metalled surfaces [032] and [045], with later road surfaces [020], [031], [043], [075] and [078], edged with kerbing [015], [022] and [033] and overlain by occupation / abandonment deposit (030), (034), (044), (048) and (076)	Exposed in foundation sections, but road up to 4.50m wide and 38m long within Site	Remains of Via Sagularis, the Roman intervallum road
1000	Structure	Asphalt road surface	As excavated: 4.30m long, 0.88m wide, 10.0mm thick	Modern road surface
1001	Deposit	Loose mid brown sandstone and fragmented brick	<0.75m long, <0.88m wide, 0.50m thick	Modern backfill material. Visual assessment only, unsafe to enter trench
1002	Deposit	Loose Dark Brown fragmented and whole bricks with building rubble	0.35m long, >2.70m thick	Poorly sorted modern backfill of construction cut for manhole.
1003	Deposit	Loose pale grey/mid brown gravel	0.80m long, 0.88m wide, 0.70m thick	Backfill of services trench
1004	Cut	Linear cut running E-W with sharp break of slope top and vertical sides	0.88m long, 0.75m wide, 1.0m deep	Machine cut for service trench
1005	Deposit	Loose brownish red sand with large and small sandstone fragments	1.20m long, 0.88m wide 0.39m thick	Deposit of coarse and irregular sandstone pieces, initially looking structural but more likely just deposited, **same as (005), (046), (101) and (1008)**
1006	Deposit	Firm, dark blackish-grey sandy-silt deposit with small CBM and sandstone fragments	0.88m long, 3.30m wide 0.55m thick	Post-med deposit overlying yellow-brown deposit. No finds recovered, but small CBM and sandstone fragments observed, **same as (004), (039), (108) and (418)**
1007	Cut	Cut with sharp break of slope top with vertical sides	>2.70m deep	Machine cut for manhole.
1008	Deposit	Firm mid-pale brown yellow sandy clay	0.88m long, 3.30m wide 0.50m thick	Upper rampart deposit / levelling layer across Site, **same as (005), (046), (101) and (1005)**
1009	Deposit	Loose mid brown-red coarse sand	>1.50m thick	Roman rampart material - identified across the remainder of Site
1010	Deposit	Moderately firm, mid- to dark yellowish-grey-brown, sandy clay	c.3.0m long, 0.88m wide, 0.75m thick	Possible up-cast / disturbance of Roman rampart material from below / deeper truncations (stratigraphically across site

Context Number	Context Type	Description	Dimensions	Interpretation
				the (1008) material overlies the (1009) material without sandy deposits sealing the yellow clayey levelling Layer)
1011	Deposit	VOID		
1012	Cut	Linear cut running E-W with vertical sides	1.40m deep	Modern cut for services
1013	Deposit	Loose mixed pale yellow - mid brown with modern rubble re-deposited natural and other deposits	4.30m long, 0.88m wide, 2.10m thick	Modern backfill of service trench
1014	Cut	Modern vertical machine cut	2.25m deep	Machine cut of service trench
1015	Deposit	Firm mid yellow-orange brown with modern brick fragments	4.30m long, 0.88m wide, 0.50m thick	Poorly sorted backfill deposit containing modern CBM rubble
		Excavation		
100	Deposit	Solid to very firm, mid brownish red coarse sand	Excavated to a maximum of 0.65m thick	Natural sand substrate – degraded from sandstone bedrock. **Same as (200)**
101	Deposit	Very firm, mid yellowish-brown sandy clay. Inclusions: occasional charcoal; small sub-rounded pebbles	>0.62m thick; >7m wide; >10.5m long	Upper rampart / levelling layer, **same as (005), (046), (1005) and (1008)**
102	Structure	Sandstone and limestone sub-rounded blocks; evidence of working and reuse	>0.15m thick; 0.80m wide; 1m long	Truncated Roman cobbles surface, **same as [014]**
103	Deposit	Soft, light yellow clayish sand; Inclusions: rare sub-angular small pebbles	50-80mm thick; 2.50m wide; 10.5m long	Horizon between levelling and occupation?
104	Cut	N-S oriented linear; vertical sides and sharp break of slope at top	0.7m deep; 1.4m wide; >6.3m long	Cut for drain {105}
105	Structure	Sandstone dressed (square shapes) blocks; 3 courses high; linear form, N-S oriented	Block sizes: 0.35m x > 0.15-0.17m x 0.14 m. Structure dimensions: 0.7m thick; 1.4m wide; >6.3m long	Sandstone wall for Roman drain
106	Fill	Moderately compact, mid greyish-brown sandy silt. Inclusions: sub angular	>0.75m thick; 0.18m wide; >8m long	Backfill of [105]

Context Number	Context Type	Description	Dimensions	Interpretation
		sandstones fragments (on average 0.07 x 0.05 x 0.05 m)		
107	Deposit	Firmly compacted, mid greyish brown sandy silt; medium texture. Inclusions: occasional charcoal flecks	0.45m thick (excavated); 0.75m wide; >8m long	Silted fill of {105}
108	Deposit	Loose, dark greyish brown clay + silt. Inclusions: frequent pebbles (various shapes and dimensions); modern debris + demolition materials	up to 0.85m thick; >7m wide; 10.5m long	Post-medieval mixed deposit **same as (004), (039), (230), (418) and (1006)**
109	Fill	Firm, dark greyish brown, sand + silt + clay. Inclusions: pebbles + cobbles (various shapes and dimensions)	>0.2m thick; 2.67m wide; >1.32 m long	Backfill of evaluation trench
110	Cut		>1.42m long; >0.41m deep; unknown width due to presence in section	Construction cut for wall {111}
111	Structure	Hand-made red bricks with bonding mortar; four courses; linear form	Bricks sizes: 0.23m x 0.11m x 70mm. Structure dimensions exposed: 0.41m high, 1.42m long	Post medieval/ modern brick wall
112	Deposit/fill	Suspected fill: not visible in section due to truncation of wall {111}	/	Backfill of [110]
113	Deposit	Solid, pale grey concrete. Inclusions: modern CBM fragments	0.13m thick; 1.45 m long	Concrete foundation for {111}
114	Deposit	Moderately firm, mid orangey brown sand and silt. Inclusions: occasional sub-angular and rounded pebbles; charcoal flecks	0.16m thick; 2.8m wide	Possible garden soil
115	Deposit	Firm, mid whitish grey. Inclusions: very frequent angular and sub-angular pebbles in white sandy matrix	up to 0.50m thick; >7m wide; >10.5m long	Pile mat

Context Number	Context Type	Description	Dimensions	Interpretation
116	Deposit	Very firm, mid orangey red sand	Up to 0.38m thick; 8.75m wide	Potential occupation layer
117	Cut	Not definable in section	/	Possible terracing cut into rampart material
118	Cut	Sub rounded shape on plan; sharp break of slope at top; vertical sides; gentle break of slope at bottom; concave base	0.51m deep; 0.82m wide	Sub rounded pit
119	Fill	Soft, dark yellowish-brown silt + sand	0.18m thick; 0.58 m wide	Primary fill of [118]
120	Fill	Firm, mid brownish yellow sandy clay. Inclusions: occasional sub-angular small pebbles	0.33m thick; 0.82m wide	Upper slumped fill (from (101)) of [118]
121	Deposit	Compact, dark orangey brown, fine sandy silt. Inclusions: frequent CBM fragments (tile and bricks)	0.20m thick	Soil matrix and disturbed masonry from drain
122	Cut	N-S oriented linear; sharp break of slopes	>0.20m deep; 2.67m wide; >1.32m long	Evaluation trench
200	Layer	Compact mid-red coarse sand	0.65m thick	Natural sand substrate **Same as deposit (100)**
201	Layer	Hard mid yellow to mid yellowish-brown sandy clay with moderate rounded pebbles	0.10m thick	Lower Roman rampart deposit
202	Structure	Standard size red brick wall with stretcher bond and cement bonded; E-W linear	1.55m high; 0.40 m wide	Modern wall, **same as {228}**
203	Cut	Sharp breaks of slope at top and base with vertical sides	1.30m deep; >0.50m wide	Construction cut for {202}
204	Fill	Loose dark brown to greyish black silty sand with modern rubble and debris inclusions	0.60m thick; 1.50m wide	Back fill of [203], **same as (233)**
205	Cut	Linear shape on plan with sharp break of slope at top and base, vertical sides, and a flat base	0.40m deep; 0.40m wide; 1.80m long (excavated)	Gully cut into Roman rampart deposits
206	Fill	Firm mid brownish red, fine silty sand	0.40m thick; 0.40m wide; 1.80m long (excavated)	Top fill of [205]. Finds of bone.

Context Number	Context Type	Description	Dimensions	Interpretation
207	Cut	Sub-circular shape on plan with a sharp break of slope at top, steep sides, a gradual/curve break at base, and a U-shaped base	0.35m diameter	Pit cut into Roman deposits
208	Fill	Firm mid greyish silty sand with moderate small sub-angular pebble inclusions	0.35m diameter	Single fill of [207]. 100% excavated.
209	Cut	Rectangular shape on plan with a N-S orientation and a sharp/angular break of slope at top and base, vertical sides, and a flat base.	1.10m wide	Pit cut into (201)
210	Fill	Firm dark brownish grey, fine clayey silt	1.10m wide	Singular fill of [209]
211	Cut	Sub-circular shape on plan with a sharp break of slope at top, sub-vertical sides, a gradual/curve break of slope at base, and U-shaped at base	0.18m deep; 0.17m wide	Pit
212	Fill	Firm mid orangey brown sandy silt with moderate rounded small pebble inclusions	0.18m thick; 0.17m wide	Single fill of [211]
213	Cut	Sub-vertical sides and a flat base; corners, top and base break of slope not visible	0.30m deep; 2.00m wide	Modern construction cut
214	Structure	Red brick and concrete linear wall bonded by cement with 3 courses and stretcher bond	0.47m high 2.00m long	Modern brick wall
215	Fill	Loose dark grey to black sandy silt and debris with modern CBM fragments and detritus inclusions	0.60m thick; 1.35m wide	Back fill of [213]
216	VOID			
217	Layer	Firm mid reddish orange silty clay	0.15m-1.10m thick; exposed for 8.95m long	Potential buried soil, mixture of superficial clay and eroded rampart material? Possible posts in section
218	Cut	Unobserved shapes and unknown breaks of slope/corners/side. Flat base	0.60-0.95m deep; 13.0m long	Modern construction cut
219	Layer	Hard light grey concrete with brick fragment inclusions	0.60-0.95m thick; 13.0m long	Concrete base within [218]

Context Number	Context Type	Description	Dimensions	Interpretation
220	VOID			
221	Cut	Elliptical shape in plan with a shallow U-shaped profile, a flat base, and an E-W orientation. Breaks of slope at top and base not perceptible	50mm deep; 0.70m diameter	Bottom of pit cut into (225)
222	Fill	Loose dark greyish brown silty clay	50mm thick; 0.70m diameter	Singular fill of pit [221]
223	VOID			
224	Layer	Firm pale orangey yellow clay with moderate small stone inclusions	0.12m thick; 2.00m < wide	Roman rampart deposit
225	Layer	Firm mid greyish yellow/pinkish mottled sandy clay with moderate small rounded pebble inclusions	0.50m thick; > 1.50m wide	Roman rampart deposit
226	Cut	Sub-circular shape on plan with a sharp break of slope at top and an E-W orientation	0.60m wide; 1.10m long	Cut truncating [205]. Not excavated
227	Fill	Loose mid brown fine clayey sand	0.60m wide; 1.10m long	Single backfill of [226]
228	Structure	Standard size red brick wall with stretcher bond and cement bonded; E-W linear	1.55m high; 0.40m wide	Modern brick wall. **Same as {202}**
229	VOID			
230	Layer	Firm dark brown sandy silt with a coarse texture	0.35m thick; >8.00m wide; >8.00m long	Post-medieval mixed deposit: **same as (004), (039), (108), (418) and (1006)**
231	VOID			
232	VOID			
233	Fill	Loose mid greyish black sandy silt with moderate sub rounded pebble inclusions	1.15m thick; 0.78m wide	Backfill of [234]. **Same as (204)**
234	Cut	N-S oriented linear with a sharp break of slope at top and vertical sides	1.32m deep; 0.59m wide	Foundation cut for {288}
235	Group	Group number for turf revetment in the south facing section of trench # 2	1.08m thick; 0.90m wide	Group # for turf revetment in the south facing section of trench 2: (335), (336), (337)
236	VOID			
237	Cut	Sub-rounded shape on plan with a N-S orientation, a gradual and curving side,	1.00m deep; 2.04m wide	Modern drain

Context Number	Context Type	Description	Dimensions	Interpretation
		shallow break of slope at base, and a convex base		
238	Fill	Soft mid greyish brown sandy silt with CBM and concrete fragment inclusions	1.00m thick; 2.04m wide	Backfill of [237]. Salt glaze pipe found
239	VOID			
240	Fill	Soft dark orangey brown silty, sandy clay with rare sub-angular pebble inclusions	0.16m thick; 0.48m wide	Infill of depression part of rampart - group # 307
241	Fill	Loose light yellowish-brown sandy clay with common very small sub-angular pebble inclusion	0.20-0.40m thick	Roman rampart deposit - group # 307
242	Layer	Soft light greyish black sandy silt	0.08m thick; 1.08m wide	Turf line - group # 307. Possible lens within (244)
243	Layer	Very soft mid reddish-brown sandy clay with rare sub-rounded cobble inclusions	0.44m thick; 10.18m wide	Upper rampart deposit - group # 307
244	Layer	Very soft light yellowish brown sandy clay with common sub-rounded and sub-angular pebble inclusions	0.76m thick	Roman rampart deposit - group # 307. Roman pot fragment found
245	Layer	Firm mid yellowish-brown silty clay with very common angular and sub-angular pebble inclusions	0.18m thick; 1.00m long	Stony brash layer within Roman rampart deposit - group # 307
246	Layer	Very soft dark greyish brown silty clay	0.20m thick; 3.00m wide	Turf line lens - group # 307
247	Layer	Hard dark orangey brown silty sand with abundant angular/sub-angular pebble and cobble inclusions	0.27m thick; 1.90m wide	Roman rampart deposit - group # 307. Mandible of cattle found.
248	VOID			
249	Layer	Soft mid yellowish-brown sandy clay with common sub-rounded/sub-angular pebble inclusions	0.12m thick; 0.90m long	Roman rampart deposit - group # 307
250	Layer	Very firm dark orangey brown silty sand with abundant angular/sub-angular pebble and cobble inclusions	0.26m thick; 2.84m long	Roman rampart deposit - group # 307
251	Layer	Firm mid orangey brown sandy clay with common sub-angular pebble inclusions	0.24m thick; 0.84m wide	Roman rampart deposit - group # 307
252	Layer	Soft mid yellowish-brown silty clay with common sub-angular pebble inclusions	0.16m thick; 0.59m wide	Possible colluvial layer - group # 307
253	Layer	Firm light greyish brown sandy clay with moderate sandstone fragments and small pebble inclusions	0.21m thick; 0.75m wide	Roman rampart deposit - group # 307

Context Number	Context Type	Description	Dimensions	Interpretation
254	Layer	Loose brownish black sandy silt	0.16m thick; >3.06m wide	Roman rampart deposit - group # 307
255	Layer	Very firm light whiteish grey sandy clay	70mm thick; 0.60m wide	Roman rampart deposit - group # 307
256	Layer	Very firm and friable mid yellowish-brown sandy clay with abundant angular/sub-angular pebble inclusions	0.14m thick; 2.86m wide	Roman rampart deposit - group # 307
257	Layer	Very soft dark greyish brown sandy silt	0.10m thick; 1.48m wide	Possible turf line - group # 307
258	Layer	Very firm mid reddish-brown sand with very common angular/sub-angular pebble inclusions	60mm thick; 1.32m wide	Roman rampart deposit - group # 307
259	Layer	Loose to firm dark greyish brown clayish sand with common angular/sub-angular pebbles and mortar fragments	0.12m thick; 13.04m wide	Roman rampart deposit - group # 307
260	Layer	Loose to firm mid greyish brown sandy clay with common very small sub-angular pebble inclusions	>0.10m thick; >1.14m wide	Roman rampart deposit - group # 307
261	Cut	Sharp break of slope at top, sub-vertical sides, curved break of slope at base, and an unobserved base	0.34m deep; 0.40m wide	Modern intervention
262	Fill	Loose to firm black sandy clay with fragmented brick, CBM, and mortar	0.34m thick; 0.40m wide	Backfill over [261]
263	Layer	Firm mid yellowish-brown silty sand with moderate charcoal flecks and CBM fragments	40mm thick; 0.30m wide	Roman rampart deposit - group # 307
264	Layer	Loose to firm mid reddish-brown silty sand with moderate sandstone flecks and fragments	0.52m thick; 3.00m wide	Roman rampart deposit - group # 307
265	Layer	Loose to firm mid brownish yellow coarse silty sand with lime mortar inclusions	30mm thick; 0.45m wide	Roman rampart lenses - group # 307
266	Layer	Firm mid to dark bluey black silt and charcoal	40mm thick; 0.95m wide	Turf line - group # 307
267	Layer	Firm mid yellowish and greyish brown sandy silt with small sandstone, CBM fragments, and infrequent coarse sand	0.22m thick; 0.80m wide	Roman rampart deposit - group # 307
268	Layer	Firm mid reddish brown clayey, silty sand with moderate small degraded sandstone fragments and charcoal flecks	60mm thick; 0.90m wide	Roman rampart deposit - group # 307

Context Number	Context Type	Description	Dimensions	Interpretation
269	Layer	Hard light to mid yellow silty clay with CBM fragments and burnt clay	90mm thick; 0.43m wide	Roman rampart deposit - group # 307
270	Layer	Firm mid greyish brown silty sand with moderate small stones, charcoal, and sandstone fleck inclusions	0.25m thick; 2.75m wide	Roman rampart deposit - group # 307
271	Layer	Firm mid yellowish-brown fine clayey silt with moderate charcoal flecks and CBM fragments	70mm thick; 1.57m wide	Roman rampart deposit - group # 307
272	Layer	Loosely to firm mid brownish yellow silty sand with degraded sandstone fragments	90mm thick; 0.75m wide	Roman rampart deposit - group # 307
273	Layer	Firm mid to dark greyish and orangey-brown silty sand with common charcoal flecks, moderate rounded and sub-angular stones, and oyster shell flecks	80mm thick; 1.15m wide	Roman rampart deposit - group # 307
274	Layer	Firm mid orangey brown sandy silt with moderate stone and charcoal fleck inclusion	0.15m thick; 3.10m wide	Roman rampart deposit - group # 307
275	Layer	Firm light greyish brown silty sand with moderate degraded sandstone and charcoal fleck inclusions	0.11m thick; 1.45m wide	Roman rampart deposit - group # 307
276	Layer	Loose mid brownish and pinkish red sandstone and sand with rare degraded sandstone fragment and charcoal fleck inclusions	70mm-0.14m thick; 0.65m wide	Roman rampart deposit - group # 307
277	Layer	Hard pale greyish yellow clayey sand with degraded sandstone and charcoal fleck inclusions	0.25m thick; <3.55m wide	Roman rampart deposit - group # 307
278	Layer	Firm blueish greyish-black silty charcoal with moderate degraded CBM fleck inclusions	90mm thick; <3.85m wide	Roman rampart deposit - group # 307
279	Layer	Firm mid reddish brown coarse silty sand with moderate charcoal fleck inclusions	0.21m thick; <3.65m wide	Roman rampart deposit - group # 307
280	Layer	Firm dark blue-black silty charcoal with small CBM fragment inclusions	30mm thick; 1.20m wide;	Possible turf line – group # 307
281	Layer	Firm red sand	0.30m wide 30mm thick	Part of the composition of Roman earthen rampart GRP#307

Context Number	Context Type	Description	Dimensions	Interpretation
282	Layer	Firm pale red brown silty sand with moderate charcoal flecks	1.60m wide 0.17m thick	Part of the composition of the Roman rampart GRP#307
283	Layer	Firm light to mid brown red silty sand with very common charcoal and moderate small rounded stones	1.65m+ long, 1.55m+ wide, 0.31m thick	Deposit within the composition of the Roman rampart GRP#307
284	Cut	Full profile not known - not exposed in plan. Sharp break of slope top and bottom moderate to steep sides, roughly flat base, filled by (285)	1.55m wide 0.45m deep	Later cut through Roman rampart which then seems to be filled by later Roman deposits possibly to build up the rampart. Purpose of cut is unclear
285	Fill	Loose very dark grey with pale grey lenses silty sand/clay, abundant charcoal with degraded CBM and lenses of clay fill of [284]	1.60m wide 0.35m thick	Purposefully deposited to fill cut [284]
286	Layer	Firm mid brown red silty sand with very common small stones	1.05m wide 0.10m thick	Deposit within the formation deposits of the Roman rampart
287	Layer	Hard pale-yellow sandy clay	2.95m wide 70mm thick	Deposit within the Roman rampart make up
288	Layer	Firm mottled mid grey brown and pale orange mixed deposit of sandy clay and mottled clay with moderate charcoal and degraded sandstone	0.90m wide 0.11m thick	One of the uppermost deposits of the Roman rampart GRP#307
289	Layer	Firm mid grey brown sandy silt abundant charcoal	0.90m wide 60mm thick	Upper deposit of the Roman rampart composition
290	Layer	Firm mid to light orange brown sandy clay silt with common rounded sub angular stones	2.05m long 0.19m thick	Deposit within the rampart composition GRP#307
291	Layer	Loose dark grey-black charcoal and sandy silt abundant in charcoal	6.75m long 0.14m thick	Part of the material up-cast to create the Roman earthen rampart GRP#307
292	Layer	Friable silty light to mid brown red silty sand	5.75m+ long 0.16m thick	Part of the up-cast material that forms the core of the Roman earthen rampart GRP#307 up against the edge of the turf revetment GRP#305

Context Number	Context Type	Description	Dimensions	Interpretation
293	Layer	Soft/friable pink red silty sand	0.25m long 30mm thick	Discrete deposit within the composition of the Roman earthen rampart GRP#307
294	Layer	Firm pale-yellow silty sand	3.65m long 0.12m+ thick	Lower deposit of the Roman earthen rampart GRP#307
295	Layer	Firm pale orange brown sandy clay silt	3.10m wide 0.10m thick	Upper deposit within the composition of the roman rampart material GRP#307
296	Layer	Loose to firm compaction mid reddish-brown silty sand	3.70m wide 0.20m thick	Part of the composition of the rampart make up GRP#307
297	Layer	Firm mid orange grey brown silty sand with rounded/sub-rounded stones and very common charcoal flecks	4.55m wide 0.20m thick	Part of the composition of the Roman earthen rampart GRP#307 deposited up against the turf revetment GRP#305
298	Layer	Loose to firm compaction red silty sand with common sub-angular/rounded stones	3.70m wide	Part of the composition of earthen Roman rampart core GRP#307
299	Layer	Firm to hard light/pale grey yellow sandy clay	2.50m wide	Part of the composition of the Roman rampart core material GRP#307
300	Layer	Soft to loose pinkish grey sandy silt with charcoal flecks	4.10m wide 0.10m thick	Part of the Roman rampart core material GRP#307
301	Layer	Firm pale grey yellow clay sand	5.00m wide 0.16m thick	Part of the Roman rampart core material GRP#307
302	Layer	Firm to hard light to mid grey silty clay with common charcoal flecks	4.10m wide 80mm thick	Part of the Roman rampart core composition GRP#307
303	Layer	Loose red silty sand with moderate charcoal	0.68m wide 0.24m thick	Part of the composition of the Roman rampart core composition GRP#307
304	Layer	Loose to firm mid pink red silty sand	3.40m wide 60mm thick	Part of the composition of the core roman rampart material GRP#307
305	Group	Turf revetment in North facing section including (310) to (334) sequence of the turf layers and associated possible posthole. Subsequent material has then been up-cast/re-deposited up against the turf revetment to create the core		Earliest phase of the rampart

Context Number	Context Type	Description	Dimensions	Interpretation
		composition of the Roman earthen rampart GRP#307		
306	VOID			
307	Group	Deposits which together form the core of the Roman rampart material which is deposited up against the turf revetment GRP#305		
308	Cut	Gradual break of slope top and bottom steep sloping sides and roughly flat base filled by (309)	1.10m+ wide 1.15m deep	Modern intrusion, construction cut for modern wall
309	Fill	Firm dark grey/black mixed clay silt with CBM fragments, plastic and charcoal	1.10m+ wide 1.15m deep	Modern intrusion backfills
310	Layer	Firm mid to light orange brown very sandy clay with common charcoal flecks	0.75m wide 30mm thick	Lower deposit within the composition of the turf revetment GRP#305
311	Layer	Firm mottled dark orange grey slightly sandy clay with common charcoal flecks	1.00m wide 60mm thick	Deposit within the composition of the Roman turf revetment [305] for the Roman rampart [307] core to be upcast against
312	Layer	Firm pale-yellow grey with mottled white lenses silty clay	1.20m wide 40mm thick	Lower deposit within the composition of the Roman turf revetment [305]
313	Layer	Firm dark orange brown sandy silt with common charcoal flecks. Sample <8>	1.05m wide 0.32m thick	Part of the composition of the Roman earth revetment GRP#305
314	Layer	Firm dark grey brown clay silt with common charcoal	0.75m wide 80mm thick	Part of the composition of the turf revetment GRP#305
315	Layer	Firm very dark grey/black silt and turf	0.24m wide 20mm thick	Part of the composition of the Roman turf revetment GRP#305
316	Layer	Firm pale-yellow grey clay with very common charcoal flecks, truncated by machine	0.49m wide 0.12m thick	Rampart Deposit
317	Layer	Firm light grey clay with common charcoal flecks, truncated by machine	0.72m wide 70mm thick	Rampart Deposit
318	Layer	Hard light orange yellow mottled sandy clay truncated by machine and modern/post med construction cut	0.43m wide 50mm thick	Rampart Deposit

Context Number	Context Type	Description	Dimensions	Interpretation
319	Layer	Firm very dark grey/black clay silt with abundant charcoal flecks, truncated by machine. Sample <7>	0.72m wide 0.11m thick	Rampart Deposit
320	Layer	Loose/friable dark grey silt truncated by machine	0.92m wide 0.11m thick	Rampart Deposit
321	Layer	Firm pale grey clay with common charcoal flecks, truncated by machine and modern/post med construction cut [308]	0.42m wide 0.12m thick	Rampart Deposit
322	Layer	Firm mid grey clay with common charcoal flecks, truncated by machine	0.36m wide 60mm thick	Rampart Deposit
323	Layer	Firm pale grey clay, truncated by machine	0.40m wide 50mm thick	Rampart Deposit
324	Layer	Firm very dark grey silty clay, truncated by machine	0.20m wide 30mm thick	Rampart Deposit
325	Fill	Firm mid red brown sandy silty clay with common charcoal flecks, truncated by machine	0.54m wide 0.17m thick	Deposit within possible posthole cut, slumped onto revetment material
326	Layer	Firm mid brown grey silty clay with common charcoal and mortar flecks, truncated by machine	0.75m wide 70mm thick	Deposit slumped from [334]? Appears to be present in both [334] and with revetment material
327	Layer	Firm mid orange brown-mid grey brown sandy clay silt with common small angular stones and charcoal, truncated by machine	0.55m+ wide 0.12m thick	Mixed deposit within revetment GRP#305
328	Layer	Firm mid-light grey silty clay with common charcoal flecks, truncated by machine	0.50m+ wide 0.10m thick	Mixed deposit, part of revetment GRP#305
329	Layer	Firm mid-dark orange brown silty sand with abundant small sandstone fragments and charcoal flecks common small sub-angular stones	0.18m wide 0.27m thick	Deposit within revetment GRP#305.
330	Layer	Firm mid grey brown coarse sandy clay with abundant charcoal flecks, truncated by machine	0.12m+ wide 30mm thick	Deposit within revetment Group#305
331	Layer	Hard light brown grey clay with abundant charcoal flecks, truncated by machine	0.30m+ wide 0.20m thick	Deposit within revetment Group#305
332	Layer	Hard dark black grey clay with common charcoal, truncated by machine	0.15m wide 0.12m thick	Deposit within revetment Group#305

Context Number	Context Type	Description	Dimensions	Interpretation
333	Fill	Firm/friable mid orange brown sandy silt with common small sandstone fragments, sub angular stones and abundant charcoal, truncated by machine	0.17m wide 0.39m thick	Upper fill of posthole disturbed by slumping event
334	Cut	Sharp break of slope top, vertical sides, gradual break of slope bottom U-shaped base filled by (333) (326) (325)	0.17m wide 0.56m deep	Possible cut of posthole. Material within posthole appears to have slumped to the west perhaps due to material of rampart pushing against it, or the removal of post causing upper deposits to be mixed
335	Layer	Firm dark grey clay with common charcoal, truncated by machine, contains small lenses of pale grey clay	0.90m wide 0.15m thick	Deposit within turf revetment GRP#235
336	Layer	Firm very dark grey clay, truncated by machine, contains lenses of very pale firm clay	0.88m wide 0.30m thick	Deposit within revetment 285.
337	Layer	Firm dark grey clay, truncated by machine	0.86m+ wide 90mm thick	Purposeful deposit within turf revetment GRP#285
338	Layer	Loose to firm dark grey sandy silt, truncated by machine	0.90m wide 0.52m thick	Homogenous silt purposefully deposited within rampart
400	Group	Roman rampart and associated features (401) - (451)		
401	Structure	Surface comprised of crudely dressed sandstone blocks. No obvious bonding material, blocks measure up to 0.48mx0.18mx0.17m+. Single course, only visible in section, truncated by machine	2.40m wide 0.30m thick	Coarse sandstone block surface, direct relationship with [417] not possible however the extent of the surface seems to match the extent of [417]
402	Layer	Firm light mid orangey grey sandy silt with abundant charcoal flecks, common sub angular stones, abundant bioturbation	4.90m+ long 5.00m+ wide 0.20m thick	Deposit within the composition of the Roman rampart GRP#400
403	Layer	Firm mid-light grey orange sandy silt with lenses of marine silts and glacial clay, common charcoal and small sub-angular stones, abundant bioturbation	0.68m long 0.18m thick	Deposit within the composition of the Roman rampart GRP#400

Context Number	Context Type	Description	Dimensions	Interpretation
404	Layer	Firm light brown yellow slightly silty sand with common charcoal flecks and small rounded stones	0.62m long 0.14m thick	Part of the composition of the Roman rampart GRP#400
405	Layer	Loose mid brown orange sand	0.58m long 40mm thick	Part of the composition of the Roman rampart GRP#400
406	Layer	Hard light pinkish orange brown silty sand with abundant small lenses of grey clumps, sandstone and charcoal flecks, common medium angular stones, abundant bioturbation	4.08m long 0.18m thick	Part of the composition of the Roman rampart GRP#400
407	Layer	Firm mid orange brown clay silt sand with very common charcoal flecks	1.46m long 60mm thick	Part of the composition of the Roman rampart GRP#400
408	Layer	Loose mid brown red/pink silty sand abundant >50% small-medium angular sandstone inclusions, very common charcoal flecks	1.40m long 0.12m thick	Part of the composition of the Roman rampart GRP#400 **Same as (419) and (452)**
409	Layer	Loose mid pinkish brown silty sand with very common small pieces of charcoal, thin black band at the bottom between (409) and (408) could be buried turf layer, bioturbation		Part of the composition of the Roman rampart GRP#400
410	Layer	Firm mid orange brown sandy silt with abundant sandstone flecks, very common charcoal flecks, and one large sandstone fragment	0.92m long 60mm thick	Part of the composition of the Roman rampart GRP#400
411	Layer	Firm mid orangey brown sandy clayey silt with lenses of yellow sand and grey clay, moderate charcoal, and sparse bioturbation	0.96m long; 0.12m thick	Part of the composition of the roman rampart: GRP #400
412	Layer	Firm mid brownish pinkish orange silty sand with moderate charcoal flecks and bioturbation	0.64m long; 0.14m thick	Part of the composition of the roman rampart: GRP #400
413	Layer	Firm light-mid orangey grey brown sandy silt with common charcoal flecks, moderate sub-angular stones, and lenses of marine silts		Part of the composition of the roman rampart: GRP #400

Context Number	Context Type	Description	Dimensions	Interpretation
414	Layer	Firm mottled brownish yellow sandy silt with common charcoal flecks, moderate small sub-angular sandstone fragments, stones, and bioturbation	0.80m long; 5.00m+ wide	Part of the composition of the roman rampart: GRP #400
415	Layer	Firm light pinkish yellowish-brown silty sand with common small charcoal flecks, degraded sandstone flecks, moderate sub-rounded small-medium sandstone fragments, moderate lenses of yellow sand, and grey clay	0.84m long; 1.80m wide; 0.16m thick	Part of the composition of the roman rampart: GRP #400
416	Layer	Loose light to mid orangey brown marine sandy silts with moderate charcoal, angular sandstone fragments and small stones	0.80m long	Part of the composition of the roman rampart: GRP #400
417	Cut	Square shape in plan with round end to north, rounded corners, a sharp break of slope at top, a probable shallow U-shaped profile. Filled by 433, 434, 435, 457-459	3.00m long; 2.60m wide; 0.50m deep	Cut for Roman kiln/oven: machine intrusion. Probable original orientation E-W. Not entirely excavated and truncated at top, base not exposed.
418	Layer	Firm very dark brown silt with small to large fragments of CBM and modern construction material	>1.10m deep; >1.00m wide	Post-medieval soils. **Same as (004), (039), (108), (230), (418) and (1006)**
419	Layer	Soft light brownish red clayey sandy silt with moderate charcoal flecks and small sandstone fragments	1.00m+ long; 0.40m wide	Part of the composition of the Roman rampart: GRP#400 (within machine dug truncation) **Same as (408) and (452)**
420	Layer	Firm mid to dark mixed yellowish grey sandy silt with moderate charcoal flecks	1.00m+ long; 0.43m wide; 0.10m thick	Part of the composition of the Roman rampart: GRP #400 (within machine dug truncation)
421	Layer	Soft mixed light greyish sandy silt with charcoal and sandstone fragments	1.00m+ long; 0.84m wide; 0.10m thick	Part of the composition of the Roman rampart: GRP #400 (within machine dug truncation)
422	Layer	Soft pinkish red sandstone crush	0.44m wide; 0.15m thick	Part of the composition of the Roman rampart: GRP #400 (within machine dug truncation)

Context Number	Context Type	Description	Dimensions	Interpretation
423	Layer	Firm light grey clay silt	0.96m wide; 0.13m thick	Part of the composition of the Roman rampart: GRP #400 (within machine dug truncation)
424	Layer	Firm yellowish brown mixed sandy clay with sparse charcoal flecks	1.18m wide; 0.30m thick	Part of the composition of the Roman rampart: GRP #400
425	Layer	Firm dark yellowish-brown sandy silt with very common charcoal and small sub angular/rounded stone inclusions	5.00m+ long; 0.50m wide; 0.20m thick	Part of the composition of the Roman rampart: GRP #400
426	Layer	Firm pale orangey brown silty sand with moderate charcoal flecks and heavy bioturbation	1.60m wide; 80mm thick	Part of the composition of the Roman rampart: GRP #400
427	Layer	Firm light brownish pinkish yellow sandy silt with moderate small rounded sandstone fragments, small grey clay lumps, and sparse charcoal	0.94m wide; 60mm thick	Part of the composition of the Roman rampart: GRP #400
428	Layer	Firm pale brownish yellow clay silty sand with moderate dense patches of small sandstone fragments, moderate charcoal flecks, and moderate bioturbation	4.50m+ wide; 0.22m thick	Part of the composition of the Roman rampart: GRP #400
429	Layer	Firm light yellowish white silty sandy clay with sparse inclusions of sandstone	2.60m wide; 0.14m thick	Part of the composition of the Roman rampart: GRP #400
430	Layer	Firm mid yellowish greyish brown silty sand with common charcoal, moderate angular small sandstone fragments, sub-angular stones, and moderate bioturbation	2.50m long; 0.76m wide; 0.14m thick	Part of the composition of the Roman rampart: GRP #400
431	Layer	Hard mid to pale orangey yellow sandy silt with moderate charcoal flecks, common small fragments of degraded sandstone, moderate small pieces of CBM, small to medium sandstone fragments and lenses of grey clay	3.06m long; 1.96m wide; 0.18m thick	Part of the composition of the Roman rampart: GRP #400
432	Layer	Loose mid to dark blackish grey sandy silt with common charcoal, angular sandstones fragments, small sub-angular stones, moderate small CBM fragments, and inclusions of charcoal	5.22m long; 0.82m wide; 0.18m thick	Part of the composition of the Roman rampart: GRP #400

Context Number	Context Type	Description	Dimensions	Interpretation
433	Layer	Loose black sand and charcoal	2.00m long; 0.20m wide	Charcoal discharge layer: by-product of combustion within [417]. Exposed and sampled (#9), not excavated.
434	Fill	Loose light greyish brown coarse clayey sand with 10% pebble and cobble inclusions in squared shapes, distributed in a circle following the layer outline, and 5% burnt clay inclusions	0.70m long; 0.60m+ wide; 0.30m+ thick	Last fill of [417]: abandonment context. Truncated at top and not fully excavated
435	Fill	Loose mid greenish grey sandy clay with 10% charcoal and 55% organic matter inclusions	Up to 0.10m wide	Basal ring fill of [417]: organic matter due to air exposure. Exposed by machine and not excavated
436	Layer	Firm mid pinkish orangey brown sandy silt with moderate small sandstone flecks, charcoal, small sub rounded stones, lenses of yellow sand, and moderate bioturbation	2.68m long; 0.24m thick	Part of the composition of the Roman rampart: GRP #400
437	Layer	Firm light yellowish brown silty sand with sparse charcoal and sandstone flecks	0.70m long; 40mm thick	Part of the composition of the Roman rampart: GRP #400
438	Structure	Sandstone wall with thick sandy clay bonding material; 3 courses high, large squared/dressed sandstone		Later sandstone wall suspected to be post-medieval in date. Cuts the Roman rampart: GRP #400
439	Fill	Loose dark black silty sand with brick, sandstone fragments, and glass shards	0.92m wide; 0.74m thick	Post-medieval infill against 438
440	Layer	Firm dark blueish black sandy silt with abundant charcoal and moderate CBM fragment inclusions	1.76m+ long; 0.34m thick	Part of the composition of the Roman rampart: GRP #400
441	Layer	Firm mottled mid-orangey yellowish black sandy clay mixed with sandy silt, with small sandstone fragments	0.14m thick; 1.38m long	Part of the composition of the Roman rampart: GRP #400
442	Layer	Loose mid to light greyish yellowish-brown sandy silt with moderate small fragment and charcoal flecks	0.14m thick; 0.78m long	Part of the composition of the Roman rampart: GRP #400
443	Layer	Firm mid to dark greyish brown sandy clay with common charcoal and		Part of the composition of the Roman rampart: GRP #400

Context Number	Context Type	Description	Dimensions	Interpretation
		moderate small to medium rounded stones		
444	Layer	Firm light orangey yellow silty sand with sparse charcoal and moderate bioturbation	0.14m thick; 1.02m long	Part of the composition of the Roman rampart: GRP #400
445	Layer	Loose mid yellowish greyish brown silty sand with moderate charcoal flecks and small sandstone fragments	0.16m thick; 1.00m long	Part of the composition of the Roman rampart: GRP #400
446	Layer	Loose light yellowish brown silty sand with moderate small sub rounded stones, moderate charcoal flecks, and bioturbation	0.24m thick; 1.40m long	Part of the composition of the Roman rampart: GRP #400
447	Layer	Loose mid to light orangey brown silty sand with moderate charcoal flecks and small stones	0.14m thick; 1.10m long	Part of the composition of the Roman rampart: GRP #400
448	Layer	Firm light yellowish brown silty sand with moderate charcoal flecks and small stones	0.12m thick; 0.54m long	Part of the composition of the Roman rampart: GRP #400
449	Layer	Loose light yellowish brown sandy silt with moderate charcoal flecks, CBM, and stone fragments	0.16m thick; 1.90m long	Part of the composition of the Roman rampart: GRP #400
450	Layer	Firm light yellowish greyish brown sandy silt with sparse charcoal flecks and small sandstone fragments	0.14m thick; 2.34m long	Part of the composition of the Roman rampart: GRP #400
451	Layer	Firm mid brownish pinkish red silty sand with moderate charcoal flecks	0.10m thick; 1.60m long	Part of the composition of the Roman rampart: GRP #400
452	Layer	Loose light mottled brownish pink sandy clay	0.15m thick; 0.75m long	Rampart deposit cut by kiln [417] **Same as (408) and (419)**
453	Layer	Loose light grey fine silty sand with 5% charcoal inclusions	0.10m thick; 0.60m wide	Occupational/turf layer of Roman rampart. Not excavated
454	VOID			
455	Layer	Loose light mottled pinkish green coarse clayey sand	0.15m thick; 0.40m wide	Rampart deposit. Not excavated
456	VOID			
457	Fill	Loosely cemented mottled light to dark yellowish-brown fine clay with 2% burnt orange clay and 0.15m surrounding	0.10m thick; 0.70m wide; 2.00 long	Backfill (possible dump/post abandonment) of [417]

Context Number	Context Type	Description	Dimensions	Interpretation
		square stones distributed along context outline		
458	Fill	Loose to friable dark greyish yellow sandy clay with 2% charcoal, 5% burnt orange clay, and 5-10% stones including pebbles (rounded 0.05m), and squared cobbles (up to 0.15%), located side by side and distributed along context outline	0.50m thick; 0.40m wide; 2.00m long	Backfill/usage fill of [417]
459	Fill	Loose to friable light greyish brown coarse sandy clay with 10-15% square shaped stones up to 0.15m	0.50m thick; 2.50m wide; 3.00m long	Backfill of [417]

APPENDIX 3

Plates

Picture Taken:	Plate No. 1	Title: Pre-commencement shot of Site, looking northeast

Picture Taken:	Plate No. 2	Title: East-facing section of stairwell, with natural sand (200) overlain by (217), truncated by boundary wall, with 2 x 1m scales

wardell armstrong

Client: Watkin Jones Group

Project: Archaeological Mitigation: Hunter Street, Chester

Project Number: ST15779

Picture Taken:	Plate No. 3	Title: East-facing section of stairwell, with four potential stakes exposed in section (right hand side), with 1m scale

Picture Taken:	Plate No. 4	Title: South-facing section of stairwell excavation, with 3 x 1m scales

wardell armstrong

Client: Watkin Jones Group

Project: Archaeological Mitigation: Hunter Street, Chester

Project Number: ST15779

Picture Taken:	Plate No. 5	Title: North-facing section of stairwell excavation, with 2 x 1m scales

Picture Taken:	Plate No. 6	Title: South-facing representative section of rampart material, showing turf line, with 2 x 1m scales

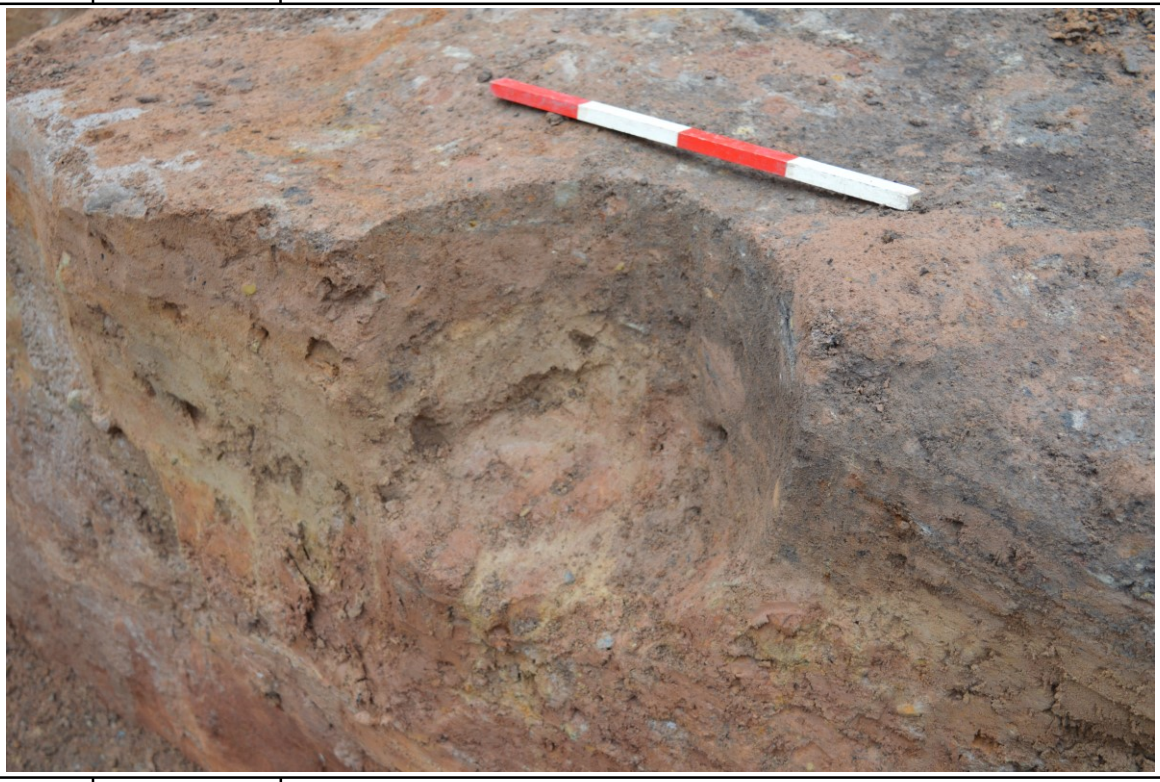
wardell armstrong

Client: Watkin Jones Group

Project: Archaeological Mitigation: Hunter Street, Chester

Project Number: ST15779

Picture Taken:	Plate No. 7	Title: Oblique working shot of north-facing representative section through rampart deposits, with 1m scale



Picture Taken:	Plate No. 8	Title: Oblique post-excavation shot of posthole [207] within the southern limit of excavation, with 0.40m scale

wardell armstrong

Client: Watkin Jones Group

Project: Archaeological Mitigation: Hunter Street, Chester

Project Number: ST15779

Picture Taken:	Plate No. 9	Title: North-facing section through ditch / beam slot [205], with 0.40m scale

Picture Taken:	Plate No. 10	Title: East-facing section through pit [221], with 0.40m scale

wardell armstrong

Client: Watkin Jones Group

Project: Archaeological Mitigation: Hunter Street, Chester

Project Number: ST15779

Picture Taken:	Plate No. 11	Title: North-facing representative section of pile cap, showing deposit (080) to (087), with 1m scale

Picture Taken:	Plate No. 12	Title: South-facing section of southern stairwell, with 0.50m scale

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Client: Watkin Jones Group

Project: Archaeological Mitigation: Hunter Street, Chester

Project Number: ST15779

Picture Taken:	Plate No. 13	Title: West-facing representative section of southern stairwell, with 0.50. scale

Picture Taken:	Plate No. 14	Title: Shot of remains of potential kiln [416], looking north with 0.50m scale

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Client: Watkin Jones Group

Project: Archaeological Mitigation: Hunter Street, Chester

Project Number: ST15779

Picture Taken:	Plate No. 15	Title: Post-excavation shot of southern stairwell excavation in plan, looking west with 2 x 1m scales

Picture Taken:	Plate No. 16	Title: Overview of deposit (002), with 1m scale (gas pipe aligned east to west)

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Client: Watkin Jones Group

Project: Archaeological Mitigation: Hunter Street, Chester

Project Number: ST15779

Picture Taken:	Plate No. 17	Title: Shot of road surface [031] overlying earlier metalled surface [032] constructed of smaller materials, looking west with 1m scale

Picture Taken:	Plate No. 18	Title: East-facing stepped section of earlier road surface [020] overlying hardcore (021), with 0.50m scale

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Client: Watkin Jones Group

Project: Archaeological Mitigation: Hunter Street, Chester

Project Number: ST15779

Picture Taken:	Plate No. 19	Title: Plan shot of road surface [202], with truncated remains of kerb [022] on west, facing north with 0.50m scale

Picture Taken:	Plate No. 20	Title: Shot of road surface [031], with truncated remains of kerb [033] on eastern extent, facing east with 1m scale

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Client: Watkin Jones Group

Project: Archaeological Mitigation: Hunter Street, Chester

Project Number: ST15779

Picture Taken:	Plate No. 21	Title: Shot of exposed road surface [043], looking north with 1m scale

Picture Taken:	Plate No. 22	Title: Overhead shot of road [043] with kerbing along western edge, facing east, no scale

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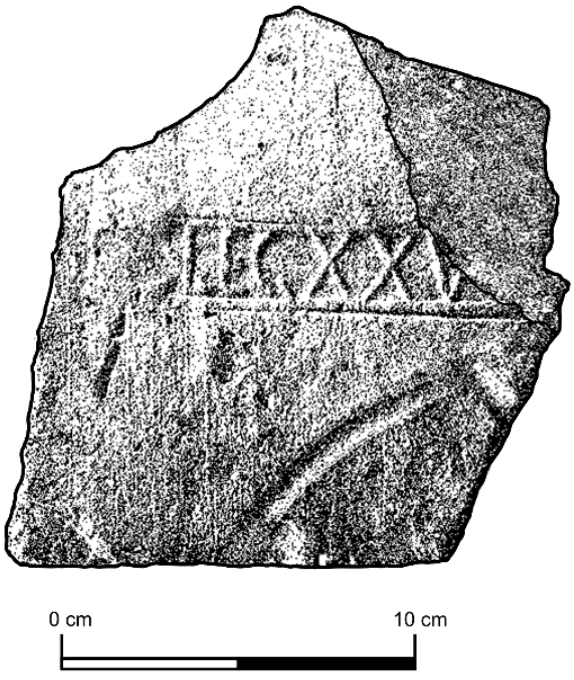
Client: Watkin Jones Group

Project: Archaeological Mitigation: Hunter Street, Chester

Project Number: ST15779

Picture Taken:	Plate No. 23	Title: Close up shot of kerbing [033], facing north with 0.50m scale



Picture Taken:	Plate No. 24	Title: Stippled illustration of stamped tile, with ‘Leg. XX V’

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Client: Watkin Jones Group

Project: Archaeological Mitigation: Hunter Street, Chester

Project Number: ST15779

Picture Taken:	Plate No. 25	Title: Post-excavation shot of crane base, showing surface [102] truncated by Evaluation trench, looking north with 2 x 1m scales

Picture Taken:	Plate No. 26	Title: Shot of Site-wide reduction, facing northwest

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Client: Watkin Jones Group

Project: Archaeological Mitigation: Hunter Street, Chester

Project Number: ST15779

Picture Taken:	Plate No. 27	Title: West-facing section of Site after ground level reduction, northeast corner of Site, with 1m scale

Picture Taken:	Plate No. 28	Title: West-facing section of ground reduction, exposing truncated wall remains [006] extending from north-eastern corner of the Site

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Client: Watkin Jones Group

Project: Archaeological Mitigation: Hunter Street, Chester

Project Number: ST15779

Picture Taken:	Plate No. 29	Title: South-facing section of Site, showing depth of post-medieval soils above east to west aligned wall of [006]

Picture Taken:	Plate No. 30	Title: East-facing section of crane base excavation, with 2 x 1m scales

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Client: Watkin Jones Group

Project: Archaeological Mitigation: Hunter Street, Chester

Project Number: ST15779

Picture Taken:	Plate No. 31	Title: South-facing section of crane base excavation, with 2 x 1m scales

Picture Taken:	Plate No. 32	Title: South-facing section of stairwell excavation, with western extent truncated, with 2=3 x 1m scales

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Client: Watkin Jones Group

Project: Archaeological Mitigation: Hunter Street, Chester

Project Number: ST15779

Picture Taken:	Plate No. 33	Title: North-facing section of truncation along western boundary of the Site, with 1m scale

Picture Taken:	Plate No. 34	Title: North-facing section of truncation along western boundary of the Site, potential trench location highlighted in red

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Client: Watkin Jones Group

Project: Archaeological Mitigation: Hunter Street, Chester

Project Number: ST15779

Picture Taken:	Plate No. 35	Title: Excavation for gas diversion through open green, looking east with 1m scale

Picture Taken:	Plate No. 36	Title: North-northwest facing section of gas diversion trench through open green, with 1m scale

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Client: Watkin Jones Group

Project: Archaeological Mitigation: Hunter Street, Chester

Project Number: ST15779

Picture Taken:	Plate No. 37	Title: East-facing section of electric service trench through Hunter Street, with 1m scale

Picture Taken:	Plate No. 38	Title: Working shot of east-facing section of drainage trench, showing (1009) overlain by (1008) and sealed by (1010), no scale

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Client: Watkin Jones Group

Project: Archaeological Mitigation: Hunter Street, Chester

Project Number: ST15779

Picture Taken:	Plate No. 39	Title: Shot of re-deposited sandstone blocks (1005), looking southwest with 1m scale

Picture Taken:	Plate No. 40	Title: Excavation for gas diversion in western extent of Hunter Street, looking east with 1m scale

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Client: Watkin Jones Group

Project: Archaeological Mitigation: Hunter Street, Chester

Project Number: ST15779

Picture Taken:	Plate No. 41	Title: Excavation for gas diversion within footpath bounding St. Martin's Way, looking north with 1m scale

Picture Taken:	Plate No.	Title:

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Client: Watkin Jones Group

Project: Archaeological Mitigation: Hunter Street, Chester

Project Number: ST15779

DRAWINGS

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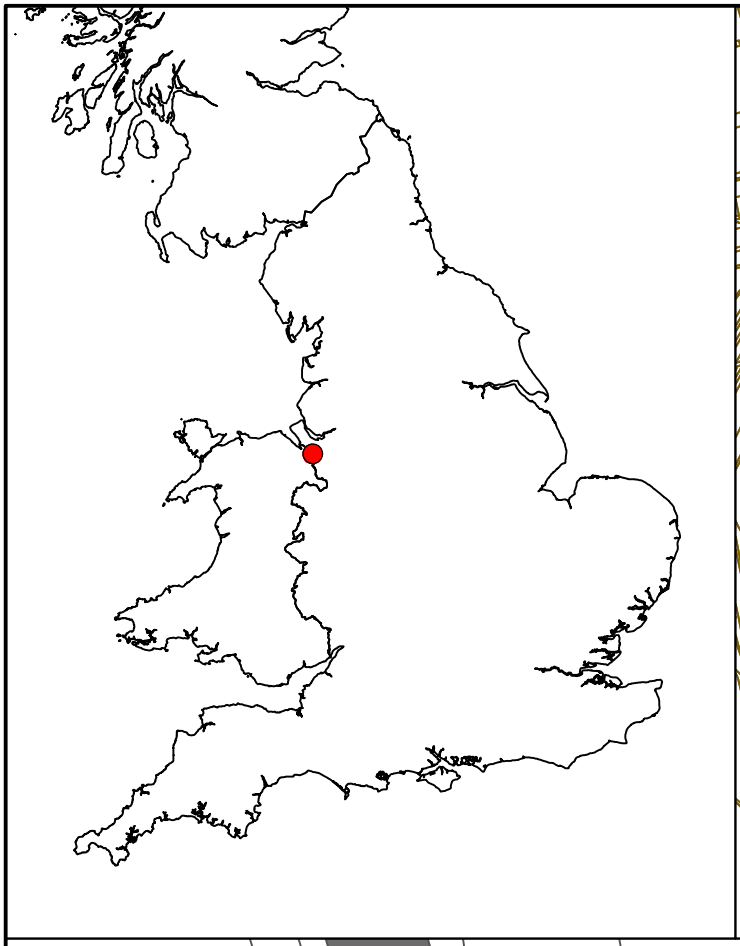

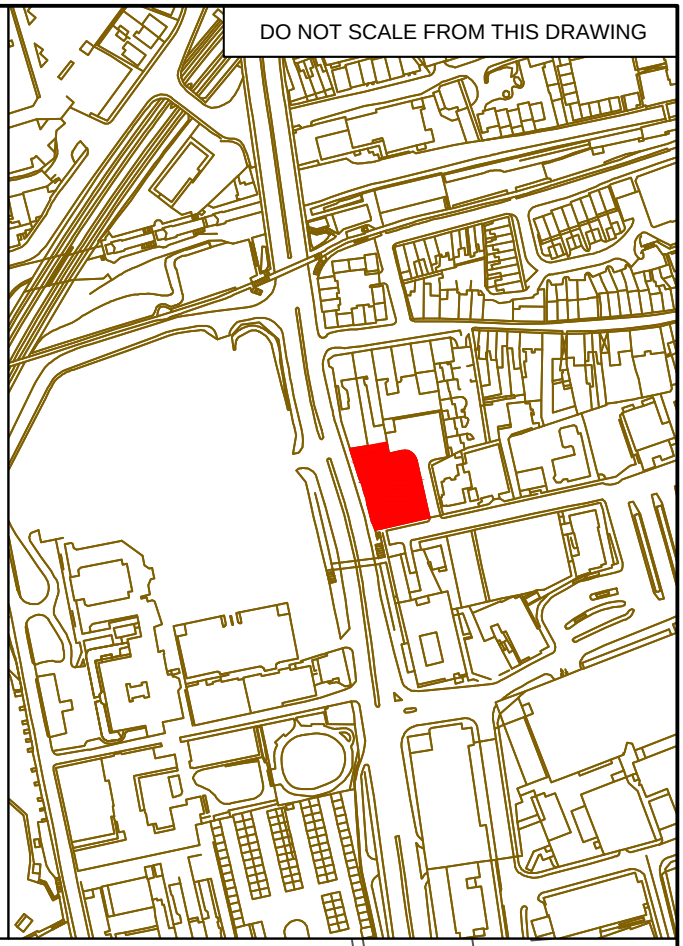

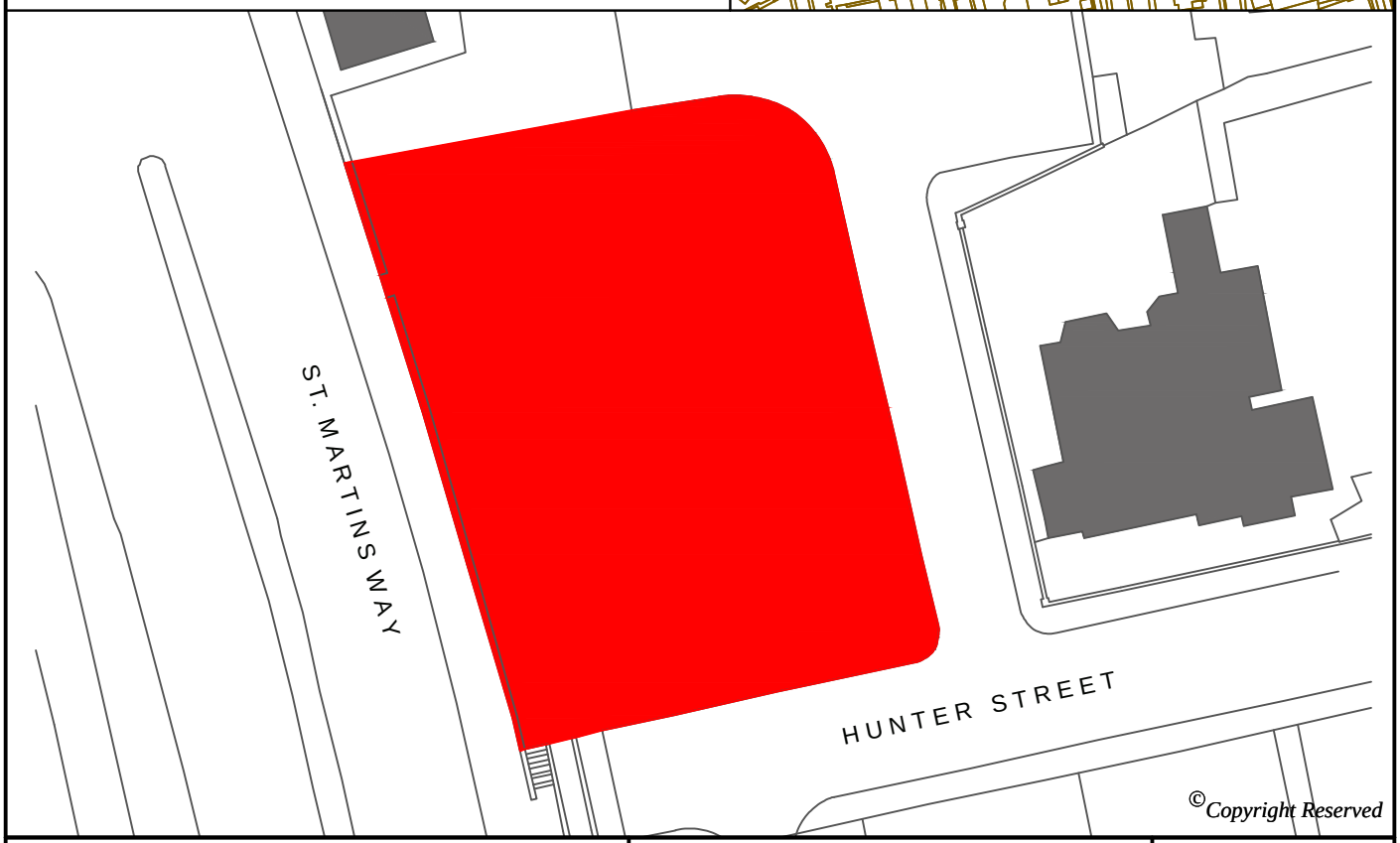

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PROJECT: LAND AT HUNTER STREET, CHESTER	SIZE: A4	SCALE: NA	DATE: 06/04/17
	DRAWN BY: JW	CHECKED BY: ND	APPROVED BY: ND
DRAWING TITLE: FIGURE 1: SITE LOCATION			

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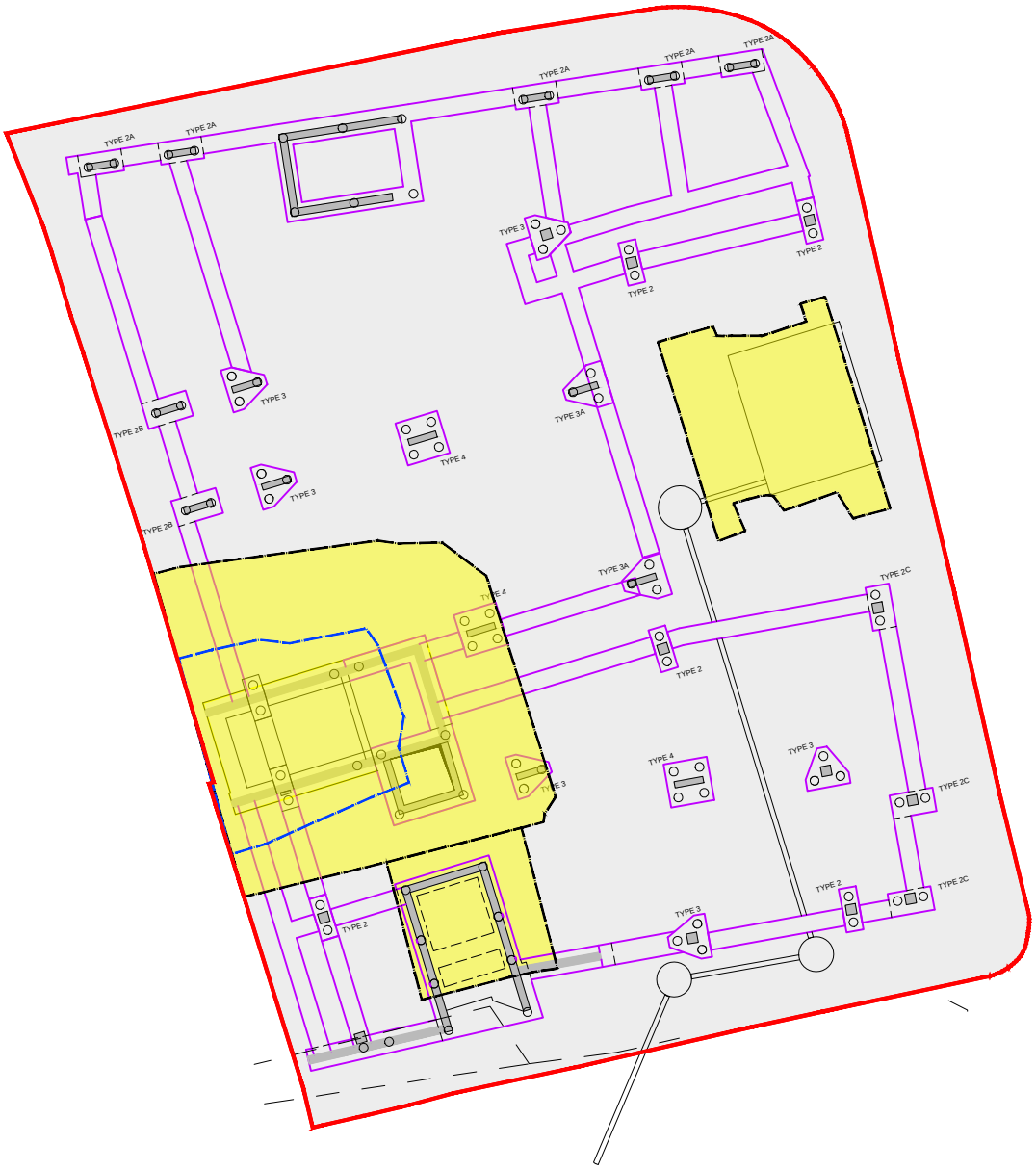
KEY:

- SITE BOUNDARY
- FOUNDATION ROUTE
- WATCHING BRIEF AREA
- TARGETED EXCAVATION AREAS
- STEPPED EXCAVATION



CLIENT: WATKIN JONES GROUP	DRG No.: ST15779-002		REV: B
PROJECT: LAND AT HUNTER STREET, CHESTER	SIZE: A4	SCALE: 1:250	DATE: 06/06/19
	DRAWN BY: EC	CHECKED BY: RJ	APPROVED BY: RJ
DRAWING TITLE: SCHEME OF ARCHAEOLOGICAL WORKS			

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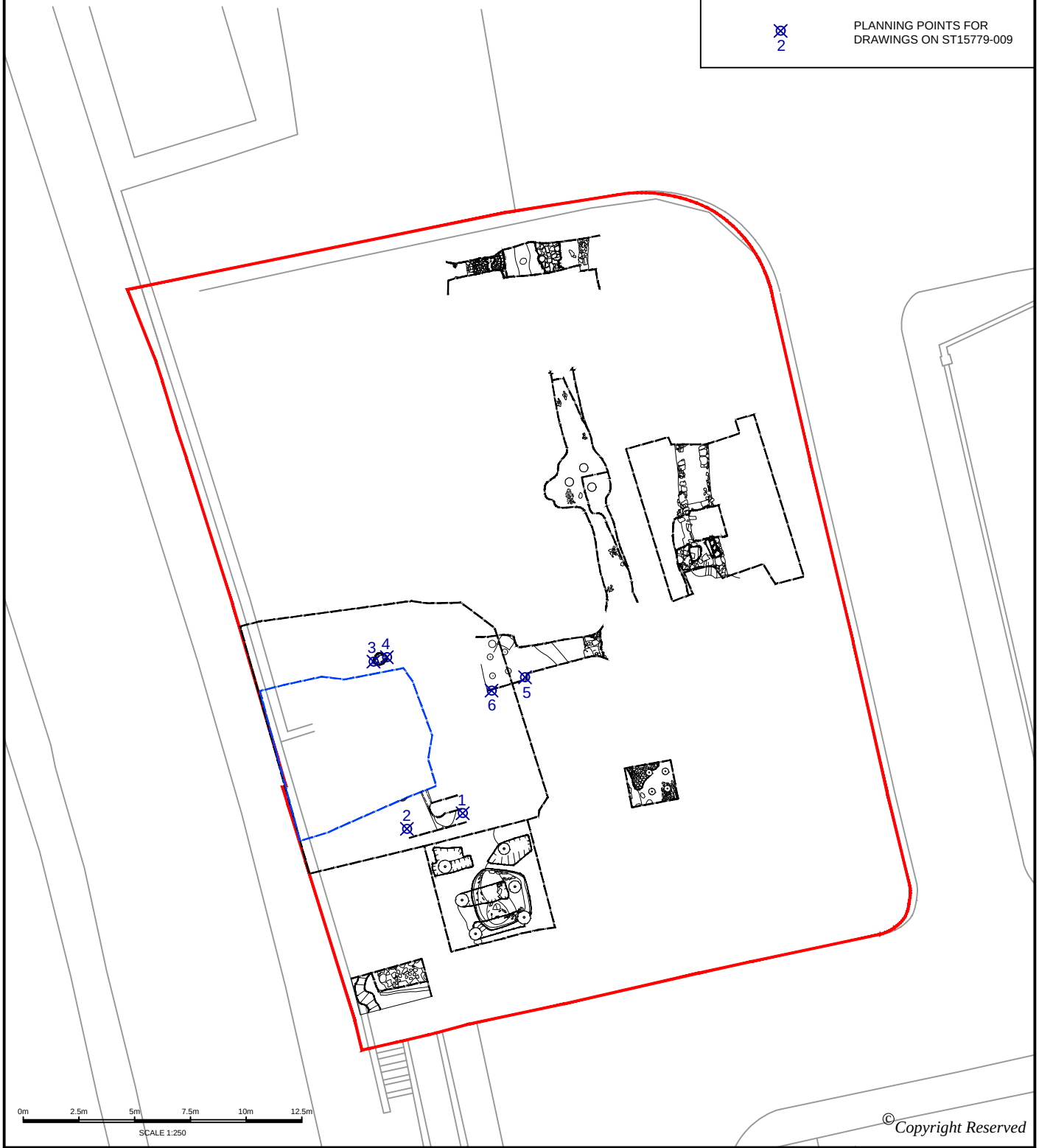
KEY

PROPOSED RED LINE BOUNDARY

STEPPED EXCAVATION

PLANNING POINTS FOR DRAWINGS ON ST15779-009



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PROJECT: LAND AT HUNTER STREET, CHESTER	SIZE: A4	SCALE: 1:250	DATE: 06/06/19
	DRAWN BY: EC	CHECKED BY: RJ	APPROVED BY: RJ
DRAWING TITLE: ARCHAEOLOGICAL RESULTS			

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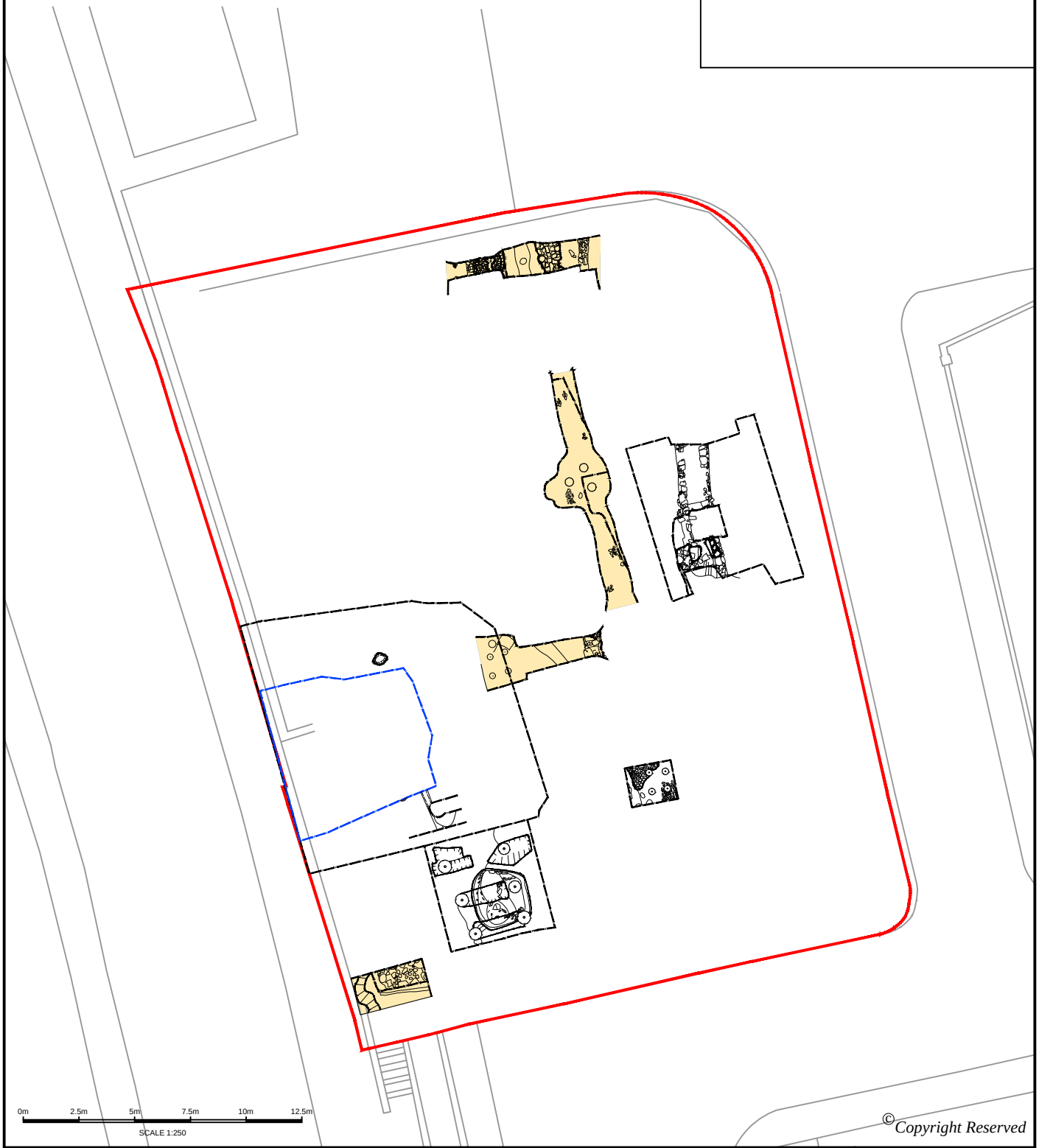
KEY

PROPOSED RED LINE BOUNDARY

STEPPED EXCAVATION



CLIENT: WATKIN JONES GROUP	DRG No.: ST15779-004		REV: A
PROJECT: LAND AT HUNTER STREET, CHESTER	SIZE: A4	SCALE: 1:250	DATE: 06/06/19
	DRAWN BY: EC	CHECKED BY: RJ	APPROVED BY: RJ
DRAWING TITLE: WATCHING BRIEF RESULTS			

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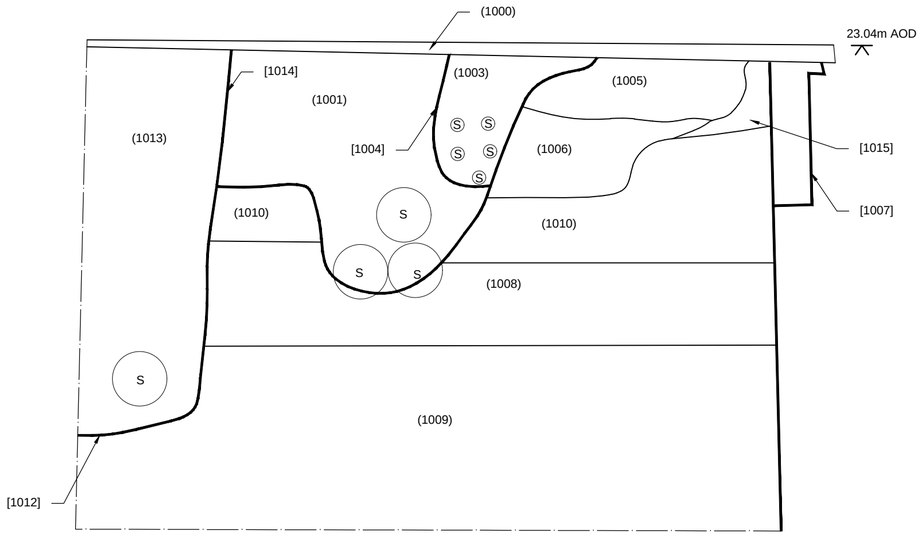
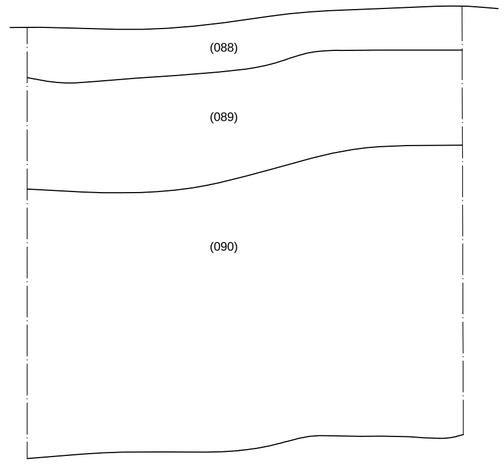
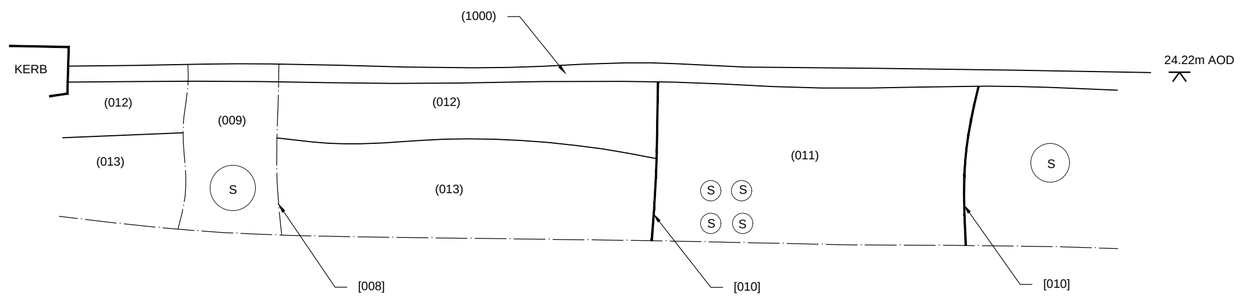
SOUTH WEST FACING SECTION OF DRAINAGE TRENCH THROUGH HUNTER STREET
SCALE 1:20



1m REPRESENTATIVE SECTION OF GAS PIPE TRENCH
SCALE 1:10



NORTH / NORTH EAST FACING SECTION OF TRENCH THROUGH HUNTER STREET
SCALE 1:20



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SCALE 1:20

0m 0.2m 0.4m 0.6m 0.8m 1.0m
SCALE 1:10

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A	First Issue	06/06/19	EC	RJ	RJ

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PROJECT
LAND AT HUNTER STREET, CHESTER

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KEY:

SANDSTONE

CBM

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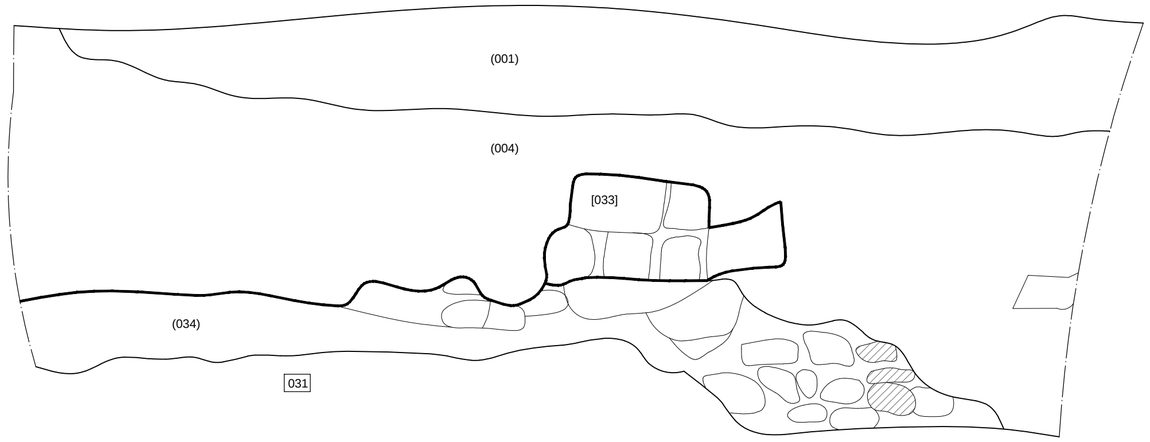
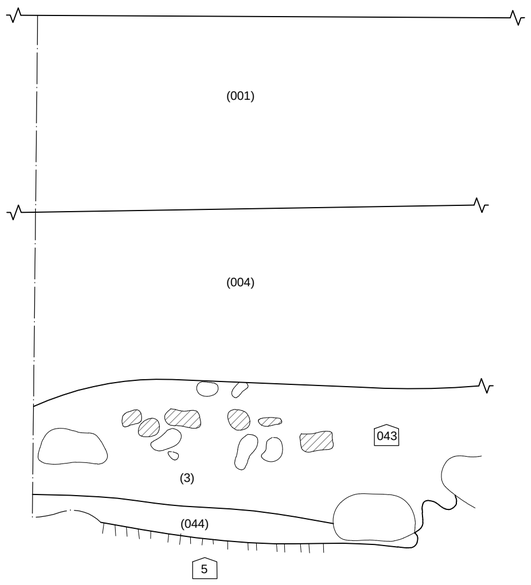
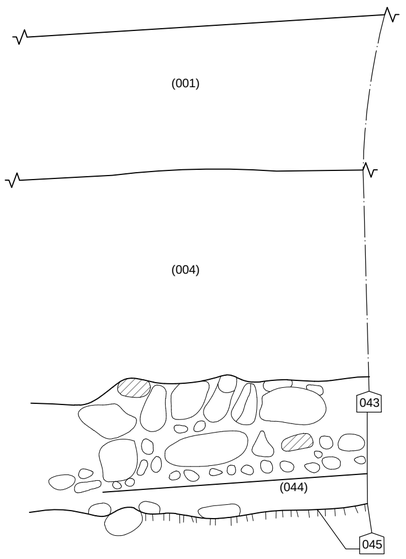
SOUTH FACING SECTION OF FOUNDATION TRENCH 031
SCALE 1:10



SAMPLE SECTION THROUGH FOUNDATIONS
SCALE 1:10



SAMPLE SECTION THROUGH FOUNDATIONS WITH 43 AND 045 ROMAN ROAD
SCALE 1:10



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SCALE 1:10

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A	First Issue	06/06/19	EC	RJ	RJ

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LAND AT HUNTER STREET, CHESTER

DRAWING TITLE

WATCHING BRIEF FOUNDATION SECTIONS

DRG No.		REV
ST15779-006		A
DRG SIZE	SCALE	DATE
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EC	RJ	RJ

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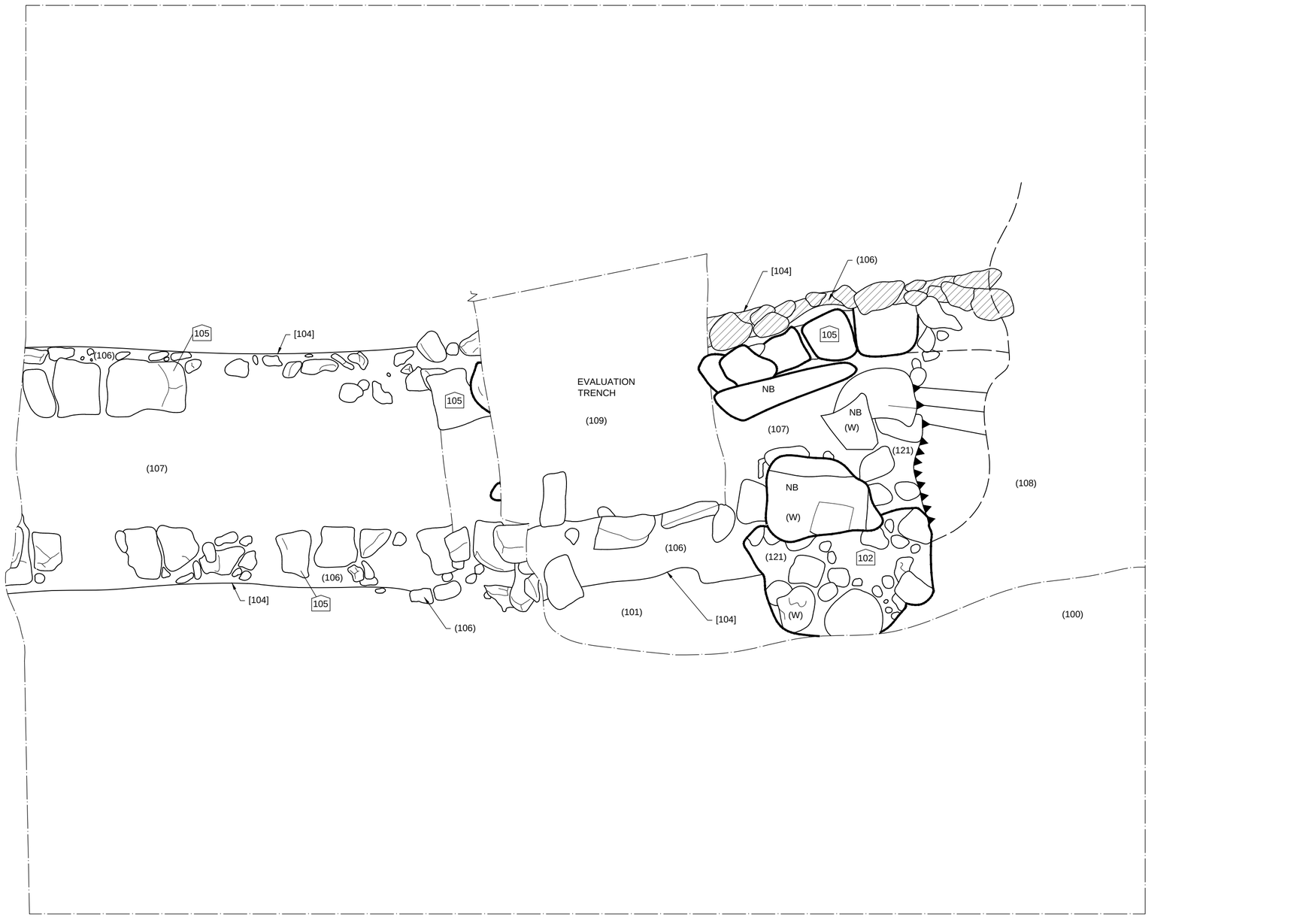
PLAN OF CRANE BASE EXCAVATION
SCALE 1:20



0m 0.4m 0.8m 1.2m 1.6m 2.0m
SCALE 1:20

KEY:

	STONE
W	WORKED
NB	LARGE WORKED STONE, TOP OF DRAIN, MOVED OR DISTURBED DURING POST MED

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A	First Issue	06/06/19	EC	RJ	RJ

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WAKTIN JONES GROUP

PROJECT
LAND AT HUNTER STREET, CHESTER

DRAWING TITLE
CRANE BASE PLAN

DRG No.	REV
ST15779-007	A

DRG SIZE	SCALE	DATE
A2	1:20	06/06/19

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EC	RJ	RJ

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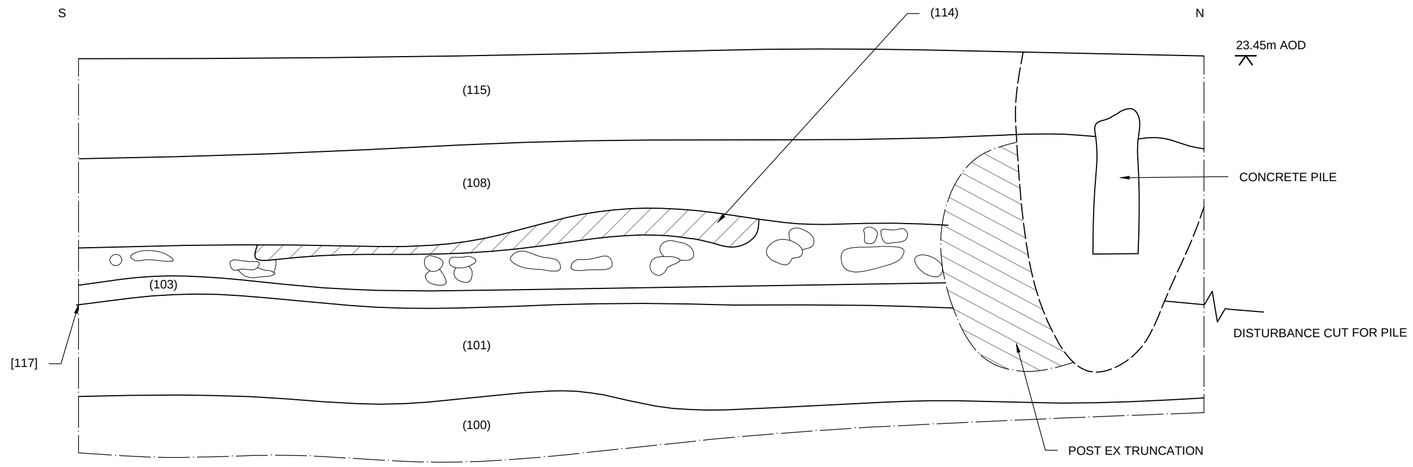
EAST FACING SECTION OF CRANE BASE EXCAVATION
SCALE 1:25



WEST FACING SECTION OF CRANE BASE EXCAVATION
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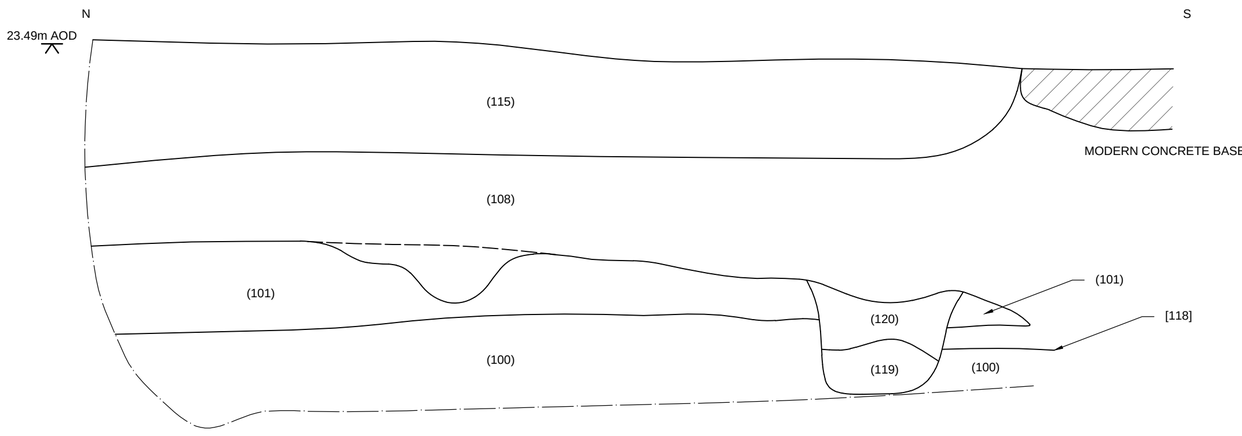
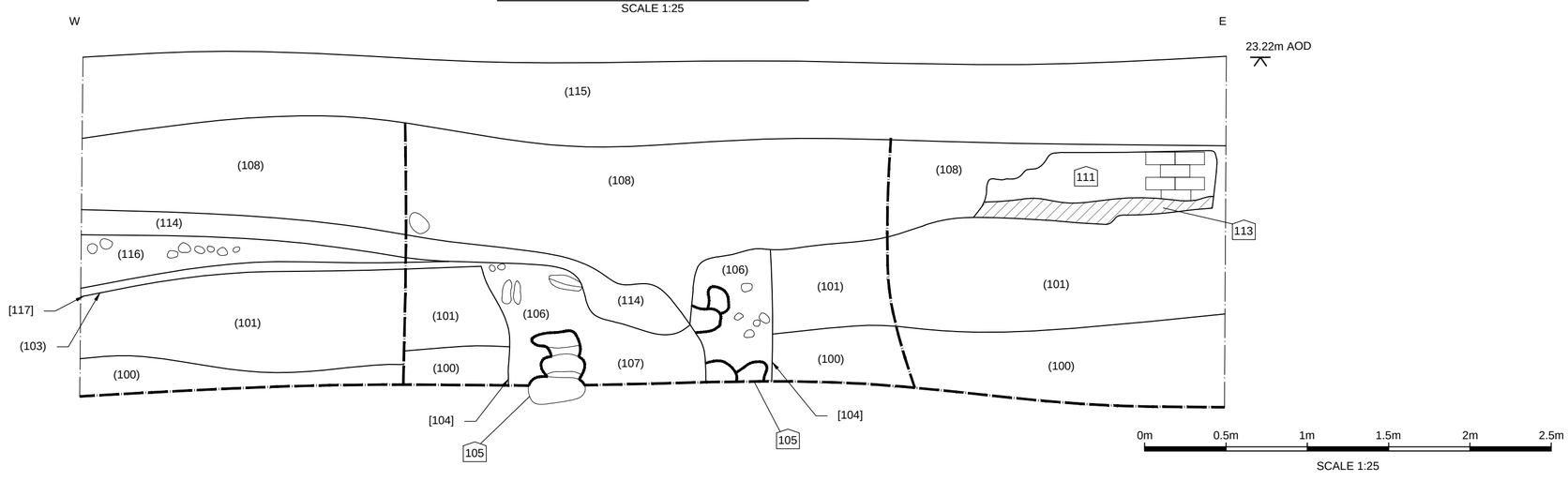


SOUTH FACING SECTION OF CRANE BASE EXCAVATION
SCALE 1:25



0m 0.5m 1m 1.5m 2m 2.5m
SCALE 1:25

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PROJECT
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DRAWING TITLE
CRANE BASE SECTIONS

DRG No.		REV
ST15779-008		A
DRG SIZE	SCALE	DATE
A2	1:25	06/06/19
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EC	RJ	RJ

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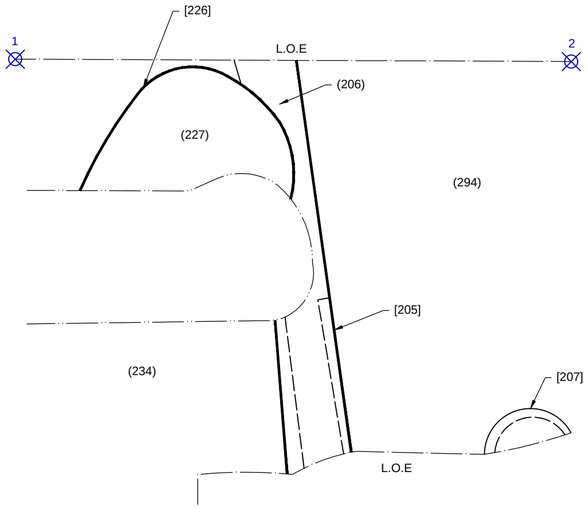
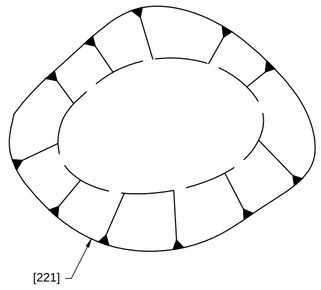
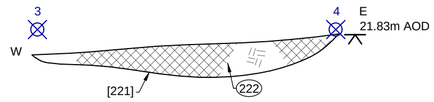
PLAN OF [226] + [205]
SCALE 1:20



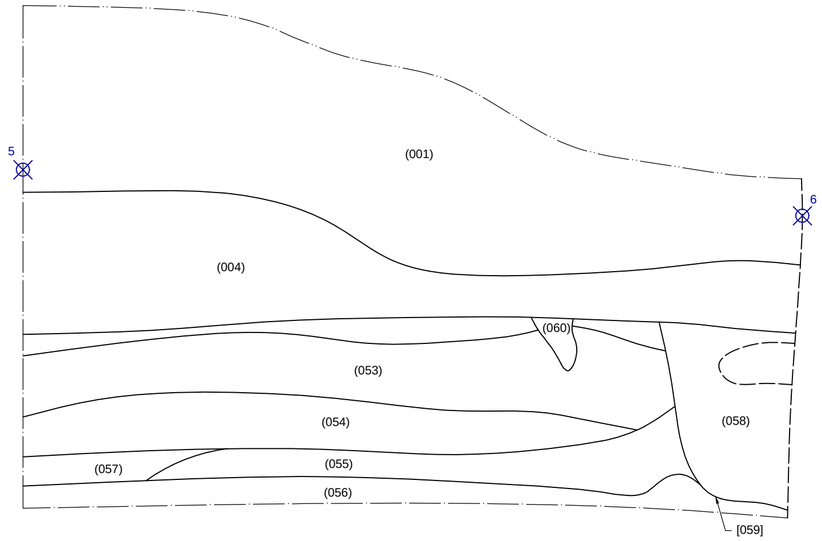
PLAN OF [221]
SCALE 1:10



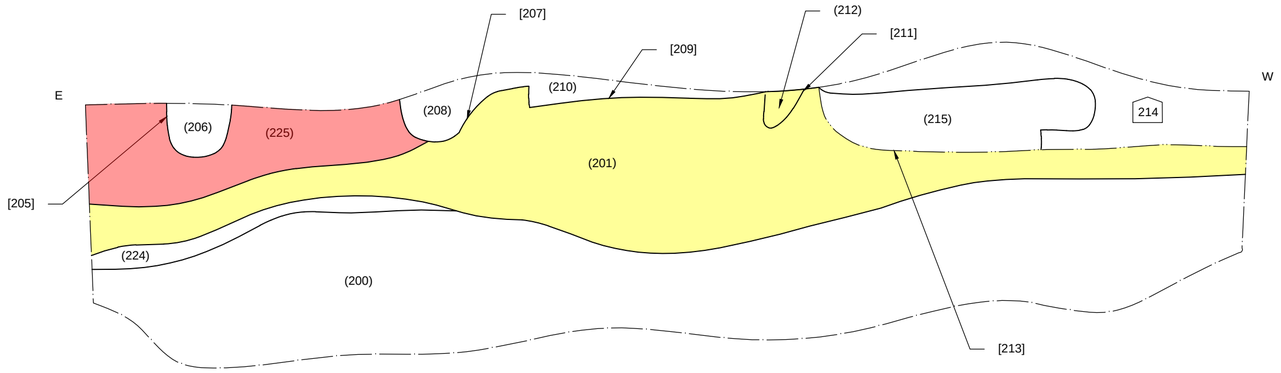
SOUTH FACING SECTION OF PIT REMNANT [221]
SCALE 1:10



NORTH FACING SECTION OF FOUNDATIONS
SCALE 1:10



NORTH FACING SECTION OF TRENCH 2
SCALE 1:20



KEY:

- SUPERFICIAL CLAY
- RAMPART CLAYS
- 2 PLANNING POINTS

NOTES:
1. DO NOT SCALE FROM THIS DRAWING
2. ALL UNITS ARE IN M UNLESS NOTES OTHERWISE

0m 0.4m 0.8m 1.2m 1.6m 2.0m
SCALE 1:20

0m 0.2m 0.4m 0.6m 0.8m 1.0m
SCALE 1:10

REVISION	DETAILS	DATE	DRAWN	CHK'D	APP'D
A	First Issue	06/06/19	EC	RJ	RJ

CLIENT
WAKTIN JONES GROUP

PROJECT
LAND AT HUNTER STREET, CHESTER

DRAWING TITLE
DISCREET FEATURE PLAN AND SECTIONS

DRG No.	REV
ST15779-009	A

DRG SIZE	SCALE	DATE
A2	AS	06/06/19

DRAWN BY	CHECKED BY	APPROVED BY
EC	RJ	RJ

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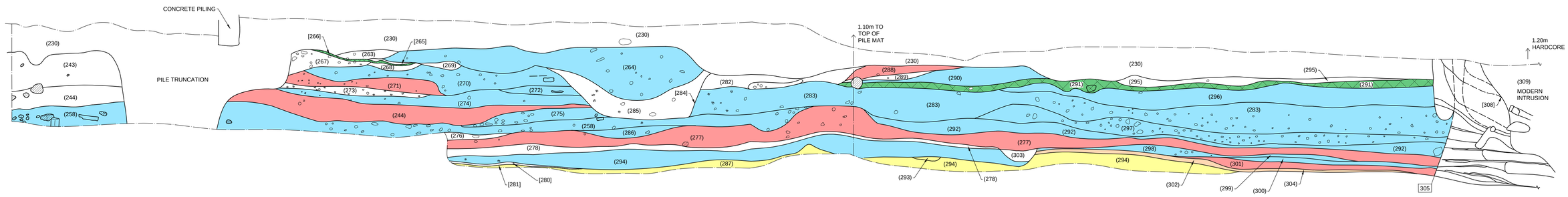
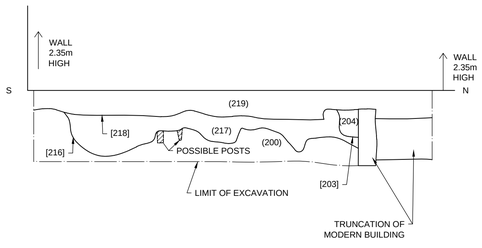
DO NOT SCALE FROM THIS DRAWING

WEST FACING SECTION + START OF NORTH FACING SECTION OF TRENCH 2
SCALE 1:20

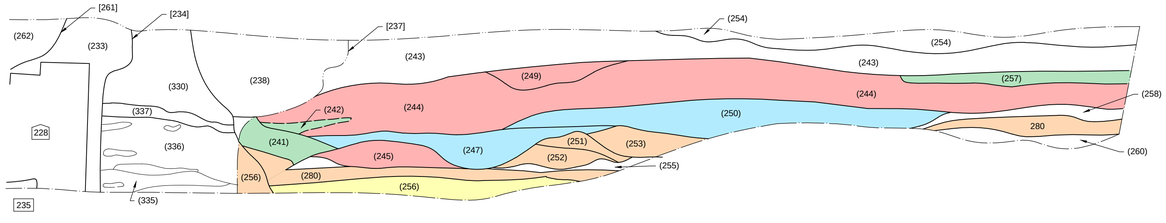


EAST FACING SECTION OF WESTERN STAIRWELL
SCALE 1:50



PLAN OF [226] + [205]

SOUTH FACING SECTION OF WESTERN STAIRWELL EXCAVATION
SCALE 1:20



KEY:

- CHARCOAL
- STONE
- SANDSTONE
- CHARCOAL RICH DEPOSIT
- SUPERFICIAL CLAY
- BURNED SOILS
- CLAYS
- SANDS
- TURF REVETMENT

NOTES:
1. DO NOT SCALE FROM THIS DRAWING
2. ALL UNITS ARE IN M UNLESS NOTES OTHERWISE

REVISION	DETAILS	DATE	DRAWN	CHK'D	APP'D
A	First Issue	06/06/19	EC	RJ	RJ

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PROJECT
LAND AT HUNTER STREET, CHESTER

DRAWING TITLE
STAIRWELL, RAMPART SECTIONS

DRG No.		REV
ST15779-010		A
DRG SIZE	SCALE	DATE
A1	AS	06/06/19
DRAWN BY	CHECKED BY	APPROVED BY
EC	RJ	RJ

0m 1m 2m 3m 4m 5m
SCALE 1:50

0m 0.4m 0.8m 1.2m 1.6m 2.0m
SCALE 1:20

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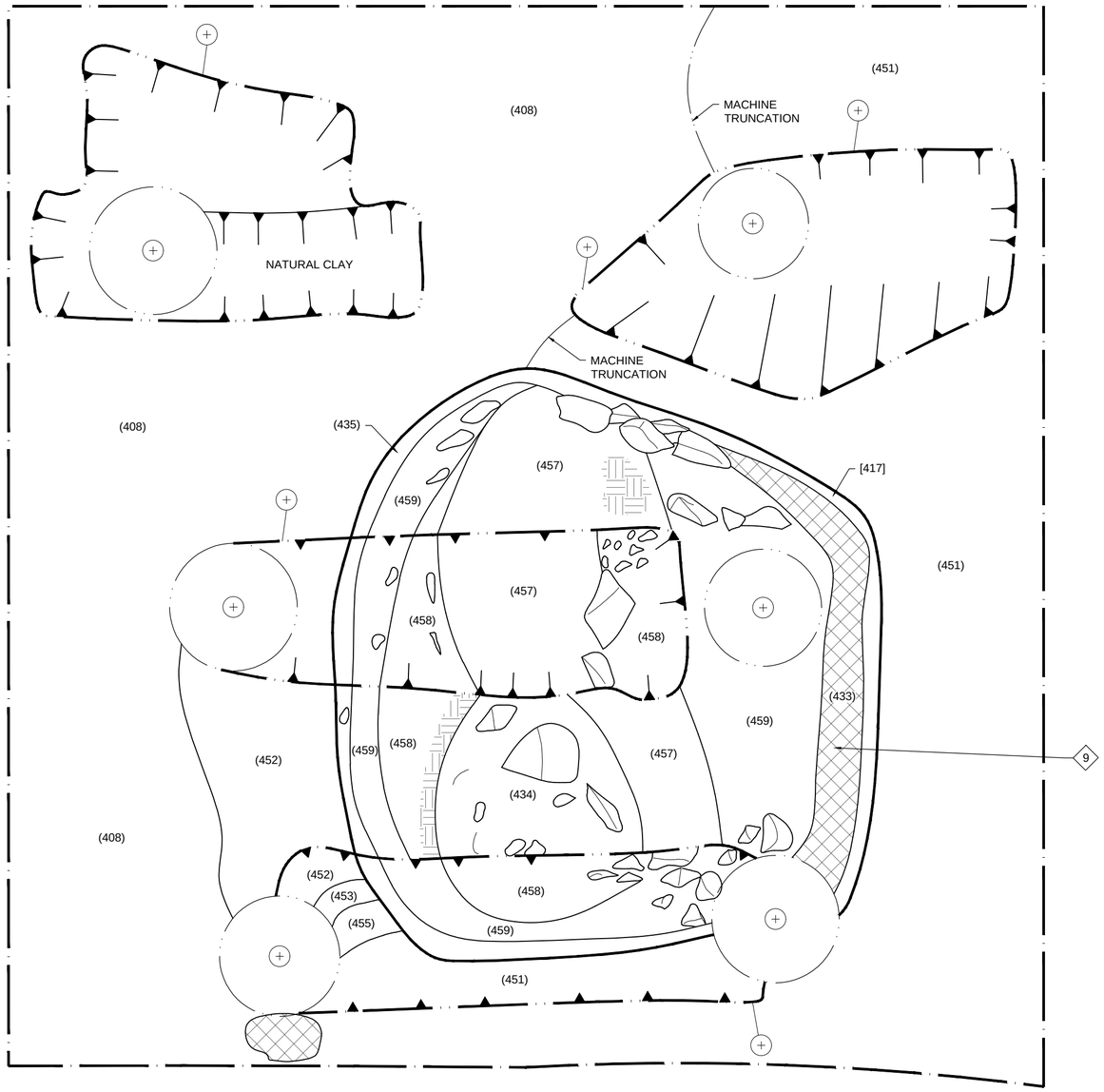
PLAN OF SOUTHERN STAIRWELL EXCAVATION
SCALE 1:20



0m 0.4m 0.8m 1.2m 1.6m 2.0m
SCALE 1:20

DO NOT SCALE FROM THIS DRAWING

KEY:

STONE

CHARCOAL RICH DEPOSIT

DARKER DEPOSIT

NOTES:
1. DO NOT SCALE FROM THIS DRAWING
2. ALL UNITS ARE IN M UNLESS NOTES OTHERWISE

REVISION	DETAILS	DATE	DRAWN	CHK'D	APP'D
A	First Issue	06/06/19	EC	RJ	RJ

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PROJECT
LAND AT HUNTER STREET, CHESTER

DRAWING TITLE
SOUTHERN STAIRWELL PLAN

DRG No.	REV
ST15779-011	A

DRG SIZE	SCALE	DATE
A2	1:20	06/06/19

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EC	RJ	RJ

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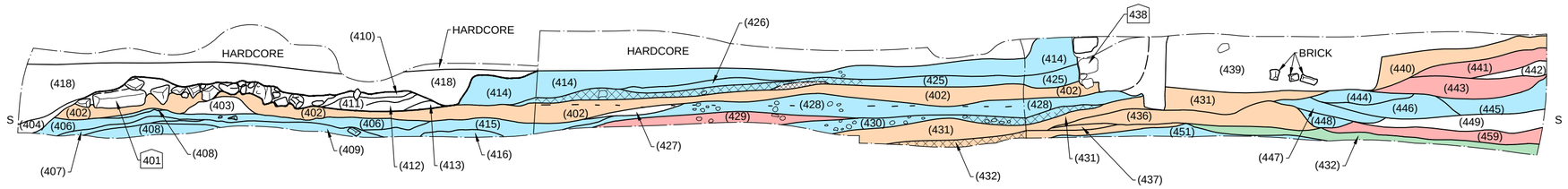
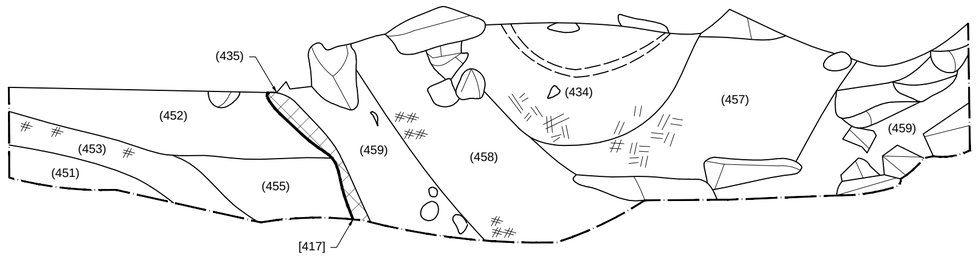
DO NOT SCALE FROM THIS DRAWING

EAST FACING SECTION OF SOUTHERN STAIRWELL EXCAVATION
SCALE 1:40



SOUTH FACING SECTION OF [417]
SCALE 1:10



KEY:

- STONE
- CHARCOAL RICH DEPOSIT
- DARKER DEPOSIT
- CHARCOAL
- BURNT ORANGE CLAY
- BURNED SOILS
- CLAYS
- SANDS
- TURFS

NOTES:
1. DO NOT SCALE FROM THIS DRAWING
2. ALL UNITS ARE IN M UNLESS NOTES OTHERWISE

0m 0.8m 1.6m 2.4m 3.2m 4.0m
SCALE 1:40

0m 0.2m 0.4m 0.6m 0.8m 1.0m
SCALE 1:10

REVISION	DETAILS	DATE	DRAWN	CHK'D	APP'D
A	First Issue	06/06/19	EC	RJ	RJ

CLIENT
WAKTIN JONES GROUP

PROJECT
LAND AT HUNTER STREET, CHESTER

DRAWING TITLE
SOUTHERN STAIRWELL SECTION

DRG No.	REV
ST15779-012	A

DRG SIZE	SCALE	DATE
A2	AS	06/06/19

DRAWN BY	CHECKED BY	APPROVED BY
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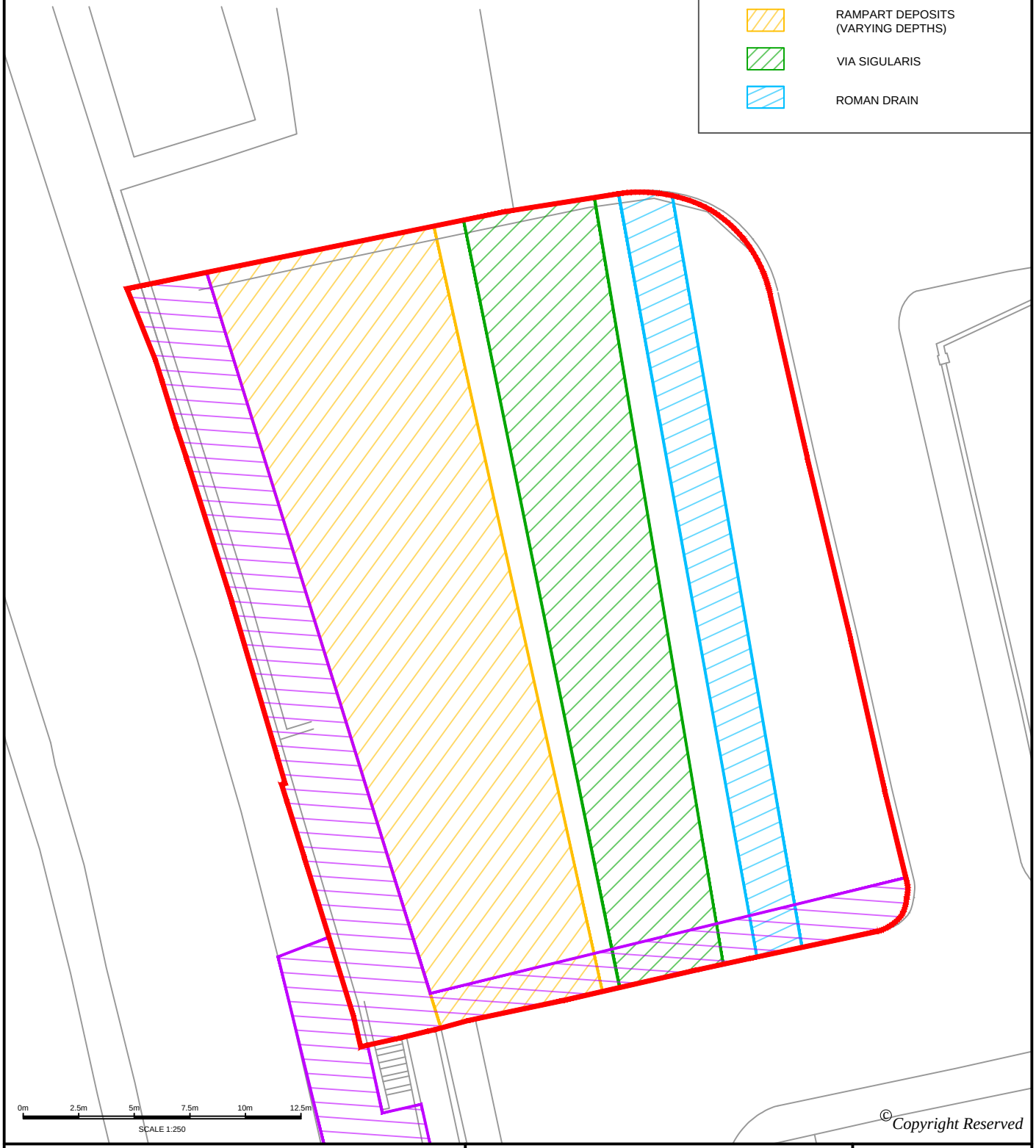
DO NOT SCALE FROM THIS DRAWING

KEY

- PROPOSED RED LINE BOUNDARY
- TRUNCATION
- RAMPART DEPOSITS (VARYING DEPTHS)
- VIA SIGULARIS
- ROMAN DRAIN



CLIENT: WATKIN JONES GROUP	DRG No.: ST15779-013		REV: A
PROJECT: LAND AT HUNTER STREET, CHESTER	SIZE: A4	SCALE: 1:250	DATE: 06/06/19
	DRAWN BY: EC	CHECKED BY: RJ	APPROVED BY: RJ
DRAWING TITLE: ARCHAEOLOGICAL RESULTS			

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