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Northgate Redevelopment Phase 1, Chester

Archaeological Watching Brief Report

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Summary

Oxford Archaeology (OA) North was commissioned by Cheshire West and Chester Council (CWaC) to undertake an archaeological watching brief during the excavation of several test-pits at the site of a proposed multi-use development, Chester Northgate Redevelopment Phase 1 (SJ 40312 66457). A Written Scheme of Investigation (WSI) was produced by OA North following commissioning by CWaC, which detailed the requirements for the necessary work. It was proposed that 23 test-pits should be excavated, seven on Hunter Street, seven on St Martin's Way and nine on Princess Street, although in the event it was only necessary to excavate 17. The principal aim of the works was for the client to identify and locate services around the perimeter of the Phase 1 stage of the development, during which an archaeological watching brief would be maintained to record any archaeological features identified during the works. The archaeological fieldwork was undertaken between 31st September and 9th October 2019.

Services were found to have extensively truncated the archaeological remains, with potentially significant archaeology identified in nine of the seventeen excavated test-pits (Test-pits 3, 5, 6, 14, 15, 16, 17, 21 and 22). The archaeological remains in three of the test-pits (Test-pits 3, 5 and 15) was identified as putative walls, all east/west-aligned and less than 0.3m below the ground level, potentially relating to barrack-blocks within the Roman legionary fortress. Test-pit 14 also contained sandstone rubble, probably tumble that may have originated from the western rampart of the Roman legionary fortress.

The remaining test-pits (Test-pits 6, 16, 17, 21 and 22) contained relict soil horizons or levelling deposits, which may seal significant archaeological remains at a greater depth than that excavated in the test-pits. It is equally possible that archaeological remains survive between these test-pits. Test-pit 21 also contained a possible compacted clay floor, which was overlain by a relict soil horizon.

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The project was managed for OA North by Paul Dunn, with the fieldwork being directed by Ian Smith and Bryan Antoni. Illustrations were produced by Mark Tidmarsh. The report was written by Ian Smith, with contributions from Chris Howard-Davis. The report was edited by Rachel Newman.

1 INTRODUCTION

1.1 Scope of work

1.1.1 Oxford Archaeology (OA) North was commissioned by Cheshire West and Chester Council (CWaC) to undertake an archaeological watching brief at the site of a proposed multi-use development, Chester Northgate Redevelopment Phase 1 (SJ 40312 66457; Fig 1). A Written Scheme of Investigation (WSI; *Appendix A*) was produced by OA North, in response to a request from CWaC, which detailed the requirements for the necessary work. Initially, 23 test-pits (TP 1-23; Fig 2) were scheduled to be excavated along Hunter Street, St Martin's Way and Princess Street, although in the event only 17 proved necessary. The principal aim of the works was to maintain an archaeological watching brief during the excavation of the test-pits, which were being dug to locate and identify modern services around the Phase 1 area. The archaeological fieldwork was undertaken between 30th September and 9th October 2019.

1.2 Location, topography and geology

1.2.1 The proposed development area (PDA) forms part of the north-west corner of the historic core of the city of Chester, roughly centred at SJ 4039 6638 (Fig 1). It takes in an area bracketed by Hunter Street to the north, St Martin's Way to the west, Northgate Street to the east, and Watergate Street to the south. For programming purposes, the proposed development scheme was divided into two phases, with Phase 1 being in the northern part of the development, between Princess Street and Hunter Street (Fig 2), and Phase 2 covering the area south of Princess Street to Watergate Street. The test-pits were dug along Hunter Street, St Martin's Way and Princess Street (Fig 2).

1.2.2 The Northgate site lies wholly within Chester's Area of Archaeological Importance (AAI), as designated under the terms of the Ancient Monuments and Archaeological Areas Act (1979), and is also within the city's zone of Primary Archaeological Character (considered to have the highest potential for significant heritage assets and the highest sensitivity to change), as defined in the Chester Archaeological Plan (Beckley and Campbell 2014). The latter was endorsed by the Cheshire West and Chester Local Development Framework Panel as a Key Evidence Base Document supporting the preparation of the Local Plan (M Leah *pers comm*).

1.2.3 The solid geology of the immediate area is characterised as Triassic sandstone and conglomerate sedimentary bedrock. The overlying drift geology is alluvium, comprising a mix of clay, silt and sand (BGS 2019), which form soils that are classified as slightly acidic loamy clayey soils (Cranfield University 2019).

1.3 Archaeological and historical background

1.3.1 The archaeological and historical background of the site is discussed in detail in the desk-based assessment for the whole development (OA North 2016). The area lies within the north-western quadrant of the Roman legionary fortress, the largest in Britain, and has also provided evidence of early medieval activity, around Princess Street. Whilst the northern part of the site was largely open until the nineteenth

century, forming gardens, the southern area was quite densely occupied, with medieval burgage plots running back from both Northgate Street and Watergate Street (*ibid*).

2 WATCHING BRIEF AIMS AND METHODOLOGY

2.1 Aims

2.1.1 The project aims and objectives were:

- i. to adhere to and fulfil the agreed programme of works associated with the archaeological potential of the site;
- ii. to determine or confirm the general nature of any remains present;
- iii. to determine or confirm the approximate date or date range of any remains, by means of artefactual or other evidence;
- iv. to quantify the level of disturbance which has been caused by modern services;
- v. to provide sufficient information that a fully and accurately costed subsequent mitigation scheme can be developed, should such remains be identified;
- vi. to compile a professional archival record of any archaeological remains within the site.

2.2 Methodology

- 2.2.1 The project methodology, set out in the WSI (*Appendix A*), was adhered to in full, and was fully compliant with current guidelines and industry best practice (CifA 2014a: 2014b: 2014c: Historic England 2015). The positions of the test-pits were surveyed by the client and all service checks were undertaken by Dunkils prior to the commencement of excavation. The overburden was excavated by hand to a safe working depth of 1m below ground level, or, where significant archaeological deposits were encountered at a shallower depth, to the top of these remains. The work was supervised by a suitably experienced archaeologist at all times, and cleaning and investigation of any potential archaeological deposits was undertaken manually.
- 2.2.2 All information identified during the site works was recorded stratigraphically, using a system adapted from that used by the former English Heritage Centre for Archaeology, with an accompanying pictorial record (plans, sections, and digital photographs). Primary records were available for inspection at all times.
- 2.2.3 Results of all field investigations were recorded on *pro forma* context sheets. The site archive includes a photographic record, and accurate large-scale plans and sections at appropriate scales (1:50, 1:20, 1:10).
- 2.2.4 A full professional archive was compiled in accordance with the WSI, and with current professional guidelines (CifA 2014c; Historic England 2015). The archive will be deposited with the Grosvenor Museum, Chester.

3 RESULTS

3.1 Introduction and presentation of results

3.1.1 The significant results of the watching brief are presented below, and include a stratigraphic description of the test-pits that contained archaeological remains. Test-pits 3, 5, 6, 14, 15, 16, 17, 21 and 22 contained archaeological remains, Test-pits 1, 7, 8, 9, 11, 12, 13 and 18 only contained modern services and levelling and are not discussed further below, whilst Test-pits 2, 4, 10, 19, 20 and 23 were deemed not necessary to be excavated. The full details of all excavated test-pits, with dimensions and depths of all deposits, can be found in *Appendix B*. Finds data and spot dates are tabulated in *Appendices C* and *D*.

3.2 Test-pit 3

3.2.1 Test-pit 3 was situated on the northern side of Hunter Street, towards the western end (Fig 2) and was excavated to a maximum depth of 1.1m. The earliest deposit, identified along the northern edge of the test-pit, was levelling layer **302**, consisting of dark grey-brown firm silty sand, with regular inclusions of red sandstone. This appears to have been deposited prior to the construction of a seemingly east/west-aligned feature composed of sandstone blocks and fragments (**301**; Fig 3; Pl 1), perhaps the remains of a Roman wall (though it remains undated), the top of which lay at an approximate depth of 0.25m. The likely continuation of **301** was identified in the northern section of Test-pit 5 (**501**; *Section 3.3.1*). Possible wall **301** was cut to the south by modern service trenches extending east to west, which were subsequently overlain by the modern Hunter Street road surface.



Plate 1: Test-pit 3, looking north, showing possible sandstone wall 301 (scale 1m)

3.3 Test-pit 5

3.3.1 Test-pit 5 was opened on the northern side of Hunter Street, to the west of Test-pit 3 (Fig 2), and was excavated to a maximum depth of 1.05m. The earliest deposit identified along the northern edge of the test-pit was levelling layer **502**, consisting of dark grey-brown firm silty sand, with regular inclusions of red sandstone. This appears to have been deposited prior to the construction of a seemingly east/west-aligned feature composed of sandstone blocks and fragments (**501**; Fig 4; Pl 2), perhaps the remains of a Roman wall (though it remains undated), the top of which lay at an approximate depth of 0.24m. The likely continuation of **501** was identified in the northern section of Test-pit 3 (**301**; Section 3.2.1). Possible wall **501** was cut to the south by modern service trenches extending east to west, which were subsequently overlain by the modern Hunter Street road surface.



Plate 2: Test-pit 5, looking north, showing possible sandstone wall **501** (scale 1m)

3.4 Test-pit 6

3.4.1 Test-pit 6 was opened on the southern side of Hunter Street, to the south of Test-pit 5 (Fig 2), and was excavated to a maximum depth of 0.69m. The earliest deposit identified, in the centre of the test-pit, was levelling layer **603** (Pl 3), consisting of dark grey-brown firm silty sand, with regular inclusions of red sandstone. Layer **603** was consistent with the levelling layers identified in Test-pit 3 (**302**; Section 3.2.1) and Test-pit 5 (**502**; Section 3.3.1). The top of this deposit was identified at a depth of 0.22m, but was cut by a modern intervention, **602**, in the north-eastern corner of the test-pit, and further truncated to the south by modern service trenches extending east to west,

which were subsequently overlain by the modern footpath along the southern side of Hunter Street.



Plate 3: West-facing section of Test-pit 6, showing levelling deposit 603 (scale 1m)

3.5 Test-pit 14

3.5.1 Test-pit 14 was opened midway along the eastern footpath of St Martin's Way (Fig 2) and was excavated to a maximum depth of 0.85m (PI 4). The earliest deposit identified was **1412**, consisting of mid-grey-brown silty clay, containing yellow and white flecks. Deposit **1412** was overlain by **1411** (Fig 5), which was identified as a concentration of sandstone rubble within mid-grey-brown silty clay, containing yellow and white flecks (PI 5). The sandstone rubble within **1411** appeared to have been disturbed by modern services, suggesting that it may have been tumble from nearby structures. These deposits were identified at a depth of 0.2m and were truncated by modern service trenches extending north to south, which were subsequently overlain by the modern footpath of St Martin's Way.



Plate 4: Test-pit 14, looking west, showing deposits **1411** and **1412** (scales 0.5m and 1m)



Plate 5: West-facing section of Test-pit 14, showing deposits **1411** and **1412** (scale 0.5m)

3.6 Test-pit 15

3.6.1 Test-pit 15 was situated towards the western end of Princess Street on its northern footpath (Fig 2) and was excavated to a maximum depth of 0.93m. The earliest surviving deposit was **1517** (Fig 6; Pl 6), identified as a levelling layer, consisting of dark grey-brown firm silty sand, with regular inclusions of red sandstone, similar to levelling deposits **302**, **502** and **603**, identified in the test-pits on Hunter Street. This layer appears to have been deposited prior to the construction of a seemingly east/west-aligned feature composed of sandstone blocks and fragments (**1514**), perhaps the remains of a Roman wall (though it remains undated), the top of which lay at an approximate depth of 0.37m. Possible wall **1514** was cut to the south by modern service trenches extending east to west, which were subsequently overlain by the modern Princess Street footpath.



*Plate 6: West-facing section of Test-pit 15, showing possible sandstone wall **1514** (scale 1m)*

3.6.2 During an archaeological evaluation undertaken in 2017, Borehole 101 and its extension trench were excavated approximately 15m to the west of Test-pit 15 on the southern side of Princess Street. The borehole only contained evidence of a dark soil, possibly of quite recent date, which was at least 0.44m thick. The top of this deposit was 0.5m below the present ground surface. The extension trench contained a thick deposit of coarse sandstone and brick rubble at least 0.75m thick, some 0.48m below the surface (OA North 2018a). During a further evaluation in 2018, a trench was excavated approximately 3m to the east of Test-pit 15, in which a possible layer of Roman demolition was identified at a depth of 0.6m, below the carriageway of Princess Street. This may relate to levelling layer **1517** (OA North 2018b). Interestingly, there was no evidence of any post-medieval cellars, thought to be present in terraced houses fronting Princess Street.

3.7 Test-pit 16

3.7.1 Test-pit 16 was placed to the east of Test-pit 15, on the southern pavement of Princess Street (Fig 2), and was excavated to a maximum depth of 0.85m. The earliest surviving deposit identified was **1611** (PI 7), consisting of dark grey silty sand with regular red sandstone inclusions, which was probably a relict soil horizon. Deposit **1611** contained fragments of Roman tile, amongst other ceramic building material, suggesting that this may be the top of significant archaeological remains. This was identified at a depth of 0.5m, but had been removed to the south by modern service trenches extending east to west, which were subsequently overlain by the modern Princess Street pavement. A trench excavated during the 2018 archaeological evaluation (OA North 2018b), west of Test-pit 16, contained evidence of Roman demolition at a depth of 0.6m, which may relate to relict soil **1611**.



*Plate 7: Test-pit 16, looking south, showing relict soil horizon **1611** in the base of the test-pit (scales 0.5m and 1m)*

3.8 Test-pit 17

3.8.1 Test-pit 17 was directly to the east of Test-pit 16, on the southern pavement of Princess Street (Fig 2), and was excavated to a maximum depth of 0.62m. The earliest surviving deposit identified was **1709** (PI 8), consisting of dark grey silty sand with regular red sandstone inclusions, which was probably a relict soil horizon. Deposit **1709** contained fragments of Roman tile and samian pottery, suggesting that it may be the top of the significant archaeological remains. This was identified at a depth of 0.5m, but had been destroyed to the south by modern service trenches extending east to west, which were subsequently overlain by the modern Princess Street pavement.



*Plate 8: Test-pit 17, looking north, showing relict soil horizon **1709** in the base of the test-pit (scales 0.5m and 1m)*

3.8.2 During the archaeological evaluation undertaken in 2018, a trench (1) was excavated to the east of Test-pit 17. Natural geology was recorded at a depth of 1.1m at the extreme western end of the trench, beneath the Princess Street carriageway. A linear feature and charcoal-rich layer were identified above this, and whilst these produced a few post-medieval artefacts, it is possible that these had been trampled into existing

deposits that were, in fact, earlier. The remains of a probably nineteenth-century cellar were found beneath the south carriageway of Princess Street, suggesting that the line of the street had changed (OA North 2018b). There was also evidence of a cellar wall cut by the construction overcut of the Market Hall retaining wall.

3.9 Test-pit 21

3.9.1 Test-pit 21 was opened towards the eastern end of Princess Street on its northern pavement, immediately to the south of the Coach House Inn (Fig 2), and was excavated to a maximum depth of 1.05m. The earliest deposit identified was compacted clay **2114** (Fig 7; Pl 9), comprising a light reddish-yellow-brown hard clay, identified at a depth of 0.9m, which was potentially a floor. Potential floor **2114** was overlain by relict soil horizon **2112**, comprising mid- to dark grey silty clay, up to 0.6m thick.



*Plate 9: Test-pit 21, looking north, showing possible floor **2114** and relict soil **2112** (scales 0.5m and 1m)*

3.9.2 The significant archaeological remains had been truncated in the north of the test-pit by the red sandstone foundations of the Coach House Inn (**2113**). Throughout the

southern extent of the test-pit, several service trenches also truncated significant archaeology. These were, in turn, overlain by the modern pavement of Princess Street.

3.10 Test-pit 22

3.10.1 Test-pit 22 was placed at the eastern end of Princess Street, east of Test-pit 21, again on the northern pavement, immediately to the south of the Coach House Inn (Fig 2), and was excavated to a maximum depth of 1.09m. The earliest deposit identified was relict soil horizon **2213** (Pl 10), comprising mid- to dark grey silty clay, up to 0.6m thick.



Plate 10: Test-pit 22, looking west (scales 0.5m and 1m)

3.10.2 The relict soil had been truncated by the foundations for the Coach House Inn to the north, and by several modern services to the south. The modern services were subsequently overlain by the modern pavement of Princess Street.

3.11 Environmental and Finds summary

3.11.1 No environmental samples were taken during the fieldwork as there were no suitable deposits. However, several finds were recovered from the trenches, which are discussed in detail in *Appendices C and D*.

4 DISCUSSION

4.1 Reliability of field investigation

4.1.1 In general, the reliability of the archaeological watching brief was good, with archaeological deposits being clearly visible. The weather was variable, with strong sunlight and heavy rain interspersed throughout the duration of the watching brief.

4.2 Results and Interpretation

4.2.1 The archaeological watching brief undertaken on Hunter Street, St Martin's Way and Princess Street achieved the principal objectives by providing important new information on the extent of modern disturbance below the roads and pavements, and by determining the state of preservation and the level, below the modern surface, of archaeologically significant deposits. These were identified in nine of the proposed 23 test-pits (Test-pits 3, 5, 6, 14, 15, 16, 17, 21 and 22). The remainder of the test-pits excavated only contained modern services.

4.2.2 The remains of possible red sandstone foundations were identified in three of the test-pits (Test-pits 3 (**301**), 5 (**501**) and 15 (**1514**)), all aligned east/west. While these features are undated, their form and location suggest they may have been part of barrack-blocks within the Roman legionary fortress. It was of particular note that the top of the putative wall foundations lay at less than 0.3m below the modern ground surface, which may suggest that these walls are potentially later in date. There was also a deposit of sandstone rubble at the eastern end of Test-pit 14, **1411**, which may relate to tumble from a wall, although this was not as well defined as in the other three test-pits. The location of this test-pit, on St Martin's Way, could suggest that this tumble may have originated from the western rampart of the Roman legionary fortress, although again there was no dating evidence to confirm this suggestion.

4.2.3 In the remainder of the test-pits containing significant archaeological deposits, these consisted of either relict soil horizons or levelling layers. There is also a possibility that these layers may seal significant archaeological remains at a greater depth than that excavated in the test-pits or that archaeological remains may exist between the test-pits. Again, it is of particular note that the relict soil horizons survive to a relatively shallow depth as narrow 'islands' of archaeology truncated by the modern services.

4.2.4 During the 2017 and 2018 archaeological evaluations, trenches were opened up along Princess Street, close to Test-pits 15, 16 and 17. Borehole 101 and its associated extension trench (OA North 2018a) and Trenches 1 and 2 (OA North 2018b) identified similar archaeological remains to the present watching brief. Potential Roman archaeology was identified in Trench 2 as possible demolition material at a depth of 0.6m, similar to levelling layer **1517**, and it is possible that Roman remains survived at the base of Trench 1, albeit containing later material, possibly intrusive (OA North 2018b). Otherwise post-medieval deposits and structures were identified, Trench 1 containing the remains of nineteenth-century cellars, both to the north and south of Princess Street, although one was identified beneath the modern road surface of Princess Street, suggesting that the line of Princess Street had been altered.

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APPENDIX A WRITTEN SCHEME OF INVESTIGATION



Northgate Redevelopment Phase 1, Chester

Written Scheme of Investigation Archaeological Watching Brief

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Northgate Redevelopment Phase 1, Chester

Written Scheme of Investigation for an Archaeological Watching Brief

Centred on SJ 40312 66457

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1 INTRODUCTION

1.1 Project details

- 1.1.1 Oxford Archaeology (OA) North has been commissioned by Cheshire West and Chester (CWaC) Council to undertake an archaeological watching brief during the excavation of 23 test pits on Hunter Street, St Martin's Way and Princess Street, as part of the site of a proposed multi-use development, Chester Northgate Redevelopment Phase 1 (NGR: SJ 40312 66457; Fig 1).
- 1.1.2 The city of Chester is renowned as a place of immense historical significance, in recognition of which the buried archaeological remains across much of the historic city centre are afforded statutory protection as an Area of Archaeological Importance (AAI) under the terms of the Ancient Monuments and Archaeological Areas Act (1979). Within the AAI, where all archaeological remains are considered in the same way as scheduled monuments, a planning application has been submitted for the redevelopment of the Northgate area, which lies in the heart of the historic city centre, west of Northgate Street and north of Watergate Street (SJ 4039 6638). The Chester Northgate Project comprises a mix of retail, residential and leisure development extending over an area in excess of 5ha. It is proposed that construction will be undertaken in three phases (Phases 0, 1, 2), with work commencing on the northern part of the site (Phases 0 and 1), between Hunter Street and Princess Street. A detailed planning application in respect of Phases 0 and 1 was submitted to CWaC in June 2016.
- 1.1.3 In addition to being located within Chester's AAI (*Section 1.1.1*), the Northgate site encompasses all or part of seven of the city's primary Archaeological Character Areas, as defined in the Chester Archaeological Plan (Beckley and Campbell 2014). The Plan, funded by English Heritage (now Historic England) as part of the Chester Urban Archaeological Database (UAD) Project, was endorsed by the Cheshire West and Chester Local Development Framework Panel as a key Evidence Base Document supporting the preparation of the Chester District Local Plan (M Leah *pers comm*).
- 1.1.4 Within the Northgate site, the character, significance and preservation of buried archaeological remains is generally well understood, since the area has, over the past 25 years, been subject to a range of archaeological investigations, including evaluation trenching, borehole observations and archaeological audits, in respect of earlier proposals (not subsequently progressed) for the redevelopment of the area. At the request of the Development Management Archaeologist for the Cheshire Archaeological Planning Advisory Service (CAPAS), two phases of evaluation trenching were also carried out by Oxford Archaeology North (OA North) in respect of the present scheme (OA North 2015; 2016a), and OA North has also prepared three desk-based assessments (DBAs) for differing aspects of the project. The first of these (OA North 2016b), which collated the results of earlier archaeological interventions in the area, assessed the potential of the surviving archaeology within the site, and presented estimates for the predicted impact of the Northgate scheme on significant archaeological remains, was presented as a technical appendix to the planning application for Phases 0 and 1 (*Section 1.1.1*). The other two DBAs were prepared to inform proposals for the construction of a new surface-water drain linking the

development site with the River Dee (OA North 2016c) and for the construction of an electricity substation to serve the new development (OA North 2016d).

- 1.1.5 In 1997, a Brief and Specification for archaeological mitigation works within the Northgate site was prepared by the former Chester City Archaeologist in respect of an earlier development proposal (Morris 1997). A substantially revised version of this document, presented as an annex to the development brief for the present Northgate project, identified four zones of differing archaeological potential (Zones 1-4), in terms of the likelihood (or otherwise) for the survival of significant below-ground archaeological remains. Within the zones of greatest archaeological significance (Zones 1 and 2), the brief stipulates that there should be a presumption in favour of *in situ* preservation of archaeological deposits, with an intrusive impact of no more than 3% where damage or destruction of archaeological remains is unavoidable. No such constraints apply to Zone 3 (archaeological potential uncertain) or Zone 4 (archaeological remains believed to be wholly or largely destroyed), but an appropriate level of archaeological mitigation is required where archaeological deposits requiring 'preservation by record', but not of sufficient significance to be preserved *in situ*, are found to exist.
- 1.1.6 Consequently, the Development Management Archaeologist at CAPAS requested that Written Schemes of Investigation (WSIs) should be prepared, detailing the proposed methodologies for each of the archaeological mitigation strategies (namely *in situ* preservation, excavation, strip-and-record and watching brief) that are to be adopted in respect of Phases 0 and 1 of the Chester Northgate scheme. The present document represents the WSI for archaeological watching brief; this document outlines how OA will implement those requirements.
- 1.1.7 All work will be undertaken in accordance with local and national planning policies referenced within this document.

1.2 Oxford Archaeology

- 1.2.1 OA North, based in Lancaster, is the northern office of Oxford Archaeology (Chartered Institute for Archaeologists' (CIfA) registered organisation no 17), the leading archaeological and heritage practice in the country, employing in excess of 250 professionals across three regional offices. OA North is itself the largest archaeological contractor in north-west England. As a registered educational charity, OA is dedicated to maintaining and promoting the highest professional, academic, commercial and ethical standards and to the provision of access to archaeology for all. It has both an established reputation and a philosophical imperative in the pursuit of efficient and cost-effective fieldwork, post-excavation excellence, and high-quality publication and outreach. We pride ourselves on our delivery of accessible outreach, including open days, lectures, information panels, leaflets, etc.
- 1.2.2 With over 40 years of experience in commercial archaeology, OA has undertaken tens of thousands of archaeological investigations of all types, scales and periods, from desk-based assessments to major open-area excavations. OA has particular experience of working closely with principal contractors, consultants, and curators to undertake

high-quality archaeological works within the tight timetables and high-pressure environments of major projects.

2 AIMS AND OBJECTIVES

2.1 Academic Aims

2.1.1 The main aim of this archaeological watching brief of Phase 1 of the Northgate scheme, is to provide a permanent archaeological presence during the hand excavation of 23 test pits along Hunter Street, St Martin's Way and Princess Street (Fig 2). For the most part, these areas correspond with Zones 1, 2 and 3 (*Section 1.1.4*). The main objective of the watching brief should be to identify, expose, and record, any archaeological remains which are encountered during the test pitting, furthering understanding of the level of preservation of archaeological remains in these locations and assisting with providing further information so that a subsequent mitigation strategy can be developed.

2.1.2 All archaeological work will be carried out in accordance with best practice guidelines, including the following:

- Historic England's Management of research projects in the historic environment, or MoRPHE (2015), with specific reference to the tenets of MoRPHE's Project Planning Note 3: archaeological excavation;
- the second edition of English Heritage's (now Historic England's) Management of archaeological projects, or MAP 2 (English Heritage 1991);
- the European Association of Archaeologist's (EAA's) Principles of conduct for archaeologists involved in contract archaeological works (EAA 1998);
- the ClfA's Code of conduct (2014a); Code of approved practice for the regulation of contractual arrangements in field archaeology (2014b); and Standard and guidance for an archaeological watching brief (2014c);
- the National Planning Policy Framework (NPPF; DCLG 2012).

2.2 Specific aims and objectives

2.2.1 The specific aims and objectives of the watching brief are:

- i. to adhere to and fulfil the agreed programme of works associated with the archaeological potential of the site;
- ii. to determine or confirm the general nature of any remains present;
- iii. to determine or confirm the approximate date or date range of any remains, by means of artefactual or other evidence;
- iv. to quantify the amount of disturbance which has been caused by modern services;
- v. provide sufficient information that a fully and accurately costed subsequent mitigation scheme can be developed, should such remains be identified;
- vi. to compile a professional archival record of any archaeological remains within the site.

3 PROJECT SPECIFIC EXCAVATION AND RECORDING METHODOLOGY

3.1 Scope of works

3.1.1 The works will involve the hand excavation, by the Principal Contractor, of 23 test pits of varying size, on Hunter Street, St Martin's Way and Princess Street (Fig 2). The test pits will be excavated to the top of the services they are targeting or to the top of the archaeological horizon, if encountered first. The main aim of the watching brief being to monitor the works being undertaken by the Principal Contractor and to identify and record any archaeological remains encountered. Once the test pits have been excavated, they will be hand cleaned and recorded by the archaeologist. Once they have been fully recorded, they will be backfilled by the Principal Contractor.

3.2 Programme

3.2.1 It is anticipated that the fieldwork will take up to 15 days to complete, by a project officer, Ian Smith, under the management of Paul Dunn, Project Manager.

3.2.2 All fieldwork undertaken by OA North is overseen by the Operations Manager, Alan Lupton MCIFA.

3.3 Site specific methodology

3.3.1 **Watching Brief:** the 23 test pits will be hand dug by operatives provided by Principal Contractor, under constant monitoring of the OA North archaeologist. The hand excavation will proceed to the first significant archaeological horizon or the targeted services, whichever is encountered first.

3.3.2 Once the test pits have been fully excavated, they will be cleaned by hand sufficiently to enhance any features or stratigraphy. All information identified in the course of the site works will be recorded stratigraphically, using a system adapted from that used by the Centre for Archaeology Service of English Heritage. Results of the watching brief will be recorded on *pro-forma* context sheets and will be accompanied with sufficient pictorial records (plans, sections and digital photographs) to identify and illustrate individual features. The site archive will include plans and sections at appropriate scales (plans 1:20 and sections 1:10).

3.3.3 A full and detailed photographic record of individual contexts will be maintained and similarly general views from standard viewpoints of the overall site at all stages of the evaluation will be generated. Photography will be undertaken using 16 or 18 mega-pixel digital SLR or hybrid compact digital cameras, and all frames will include a graduated metric scale (Historic England 2015b). The images will be taken in JPEG and RAW formats. Photograph records will be maintained on special photographic *pro-forma* sheets.

3.3.4 **Human remains:** are not expected to be present, but if they are found relevant Home Office permission will be sought, and the removal of such remains will be carried out with due care and sensitivity as required by the Burials Act 1857 and industry best practice.

- 3.3.5 **Treasure:** any gold and silver artefacts recovered during the course of the works will be removed to a safe place and reported to the local Coroner according to the procedures relating to the Treasure Act 1996.
- 3.3.6 **Finds Policy:** finds recovery and sampling programmes will be in accordance with best practice (following current Chartered Institute for Archaeologists guidelines) and subject to expert advice in order to minimise deterioration. Finds will be recorded and reported on by appropriately qualified staff.
- 3.3.7 **Environmental Policy:** the strategy for palaeo-environmental and other specialist sampling will be developed on site, in consultation with appropriate specialists, as necessary. The environmental sampling strategy will therefore evolve from discussion between those specialists and the field team and will be in accordance with current best practice. In broad terms, however, the sampling strategy will be aimed at recovering palaeobotanical, palaeo-zoological and pedological evidence, from appropriately stratified contexts, should any such features be identified during the course of the excavation.
- 3.3.8 **Backfilling:** the test pits will be backfilled once they have been fully recorded by the OA North archaeologist.

4 PROJECT SPECIFIC REPORTING AND ARCHIVE METHODOLOGY

4.1 Programme

4.1.1 A copy of the report in Adobe Acrobat (.pdf) format will be provided to the client and the CAPAS archaeologist for review and approval. A digital copy of the report will also be made available through OASIS.

4.2 Report Content

4.2.1 A draft copy of a written synthetic post-excavation assessment report will be submitted to the client for comment within six weeks of completion of the fieldwork, although the time frame for production of the report can be tailored to the client's requirements upon prior agreement. The report will include a copy of this WSI, and indications of any agreed departure from that design. It will present, summarise, and interpret the results of the programme detailed above and present an assessment of the history of the site. The report will include the following:

- A title page detailing site address, NGR, author/originating body, client's name and address;
- Full content's listing;
- A non-technical summary of the findings of the fieldwork;
- A description of the archaeological background;
- A detailed account of the historical development of the site, as appropriate;
- A description of the topography and geology of the site;
- A description of the methodologies used during the fieldwork;
- A description of the findings of the fieldwork;
- Detailed plans of the watching brief and evaluation trenches, showing the archaeological features exposed. The site location will be plotted with at least 4 12-figure national grid references on the site plan at a scale of 1:2500;
- Interpretation of the archaeological features exposed and their context within the surrounding landscape;
- Specialist analysis reports on the artefactual/ecofactual/industrial remains from the site;
- Appropriate photographs of specific archaeological features. Appropriate photographs of specific finds of interest will also be included, if needed;
- A consideration of the importance of the archaeological remains present on the site in local, regional and national terms;
- A complete bibliography of sources consulted;
- Illustrative material will include a location map, site map, site plans and pertinent photographs.

4.3 Specialist input

- 4.3.1 OA has a large pool of internal specialists, as well as a network of external specialists with whom OA have well established working relationships. A general list of these specialists is presented in *Section 8*; in the event that additional input should be required, an updated list of specialists can be supplied.

4.4 Archive

- 4.4.1 The results of all archaeological work carried out will form the basis for a full archive to professional standards, in accordance with current Historic England guidelines (2015a), and in accordance with the Guidelines for the Preparation of Excavation Archives for Long-Term Storage (UKIC 1990). The project archive represents the collation and indexing of all the data and material gathered during the course of the project. This archive will be provided in the English Heritage Centre for Archaeology format
- 4.4.2 The site archive will be deposited with the Grosvenor Museum, Chester following the completion of the project. This will follow appropriate industry guidelines (CifA 2014c). The Arts and Humanities Data Service (AHDS) online database project Online Access to index of Archaeological Investigations (OASIS) will be completed as part of the archiving phase of the project.

5 HEALTH AND SAFETY

5.1 General

- 5.1.1 The Project Manager, Paul Dunn, has responsibility for ensuring that safe systems of work are adhered to on site. Elements of this responsibility will be delegated to the Project Officer, Ian Smith, who implements these on a day to day basis. Paul Dunn and Ian Smith are supported by OA North's Health and Safety Advisor, Fraser Brown.
- 5.1.2 The Director with responsibility for Health and Safety at OA is Dan Poore Tech IOSH (Chief Business Officer).

5.2 Method statement and risk assessment

- 5.2.1 All work will be undertaken in accordance with the current OA Health and Safety Policy, the OA Site Safety Procedures Manual, a site-specific Risk Assessment and, if required, Safety Plan or Method Statement. Copies of the site-specific documents will be submitted to the client or their representative for approvals prior to mobilisation, and all relevant H and S documentation will be available on site at all times. The Health and Safety documentation will be read in conjunction with the project WSI.
- 5.2.2 Where a project falls under the Construction (Design and Management) Regulations (2015), all work will be carried out in accordance with the Principal Contractor's Construction Phase Plan (CPP).
- 5.2.3 The archaeological contractor should be fully familiar and will comply with all current and relevant legislation, including, but not limited to:
- The Health and Safety at Work Act (1974);
 - Management of Health and Safety at Work Regulations (1999);
 - Manual Handling Operations Regulations 1992 (as amended in 2002);
 - The Construction (Design and Management) Regulations (2015);
 - The Control of Asbestos Regulations (Revised 2012);
 - Confined Spaces Regulations (1997);
 - The Workplace (Health, Safety and Welfare) Regulations (1992);
 - Construction (Health, Safety and Welfare) Regulations (1996);
 - The Work at Height Regulations (2005);
 - The Control of Substances Hazardous to Health Regulations (2002);
 - The Health and Safety (First Aid) Regulations (1981);
 - The Regulatory Reform (Fire Safety) Order (2005);
 - The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (1995);
 - The Provision and Use of Work Equipment Regulations (1998);
 - Lifting Operations and Lifting Equipment Regulations (1998).

5.3 Services and Other Constraints

- 5.3.1 Service plans will be provided by the client or Principal Contractor and will be available on site. However, the identification and marking of any services will be the responsibility of the principal contractor. The OA North archaeologist will be made aware of any services encountered.

5.4 Contamination

- 5.4.1 Any known contamination issues or specific health and safety requirements on site will be made known by the Principal Contractor to ensure all procedures can be met, and that the risk is dealt with appropriately. Should any presently unknown contamination be discovered during the works, it may be necessary to halt the works and reassess the risk assessment.

5.5 Ground Conditions

- 5.5.1 Areas of unstable and infilled ground may be encountered during the evaluation, for example within, or in the vicinity of, infilled cellars/basements or large, deep service runs. This may limit access to some areas, and/or require the use of shoring or similar, particularly if limited archaeological remains are exposed at the base of deep cellars or basements (eg the truncated remains of deep pits, wells or ditches). The stability of the ground should be constantly monitored during the works and should it be deemed that work be halted for health and safety reasons, the Client, CAPAS and Historic England should be informed immediately.
- 5.5.2 Archaeological personnel should not enter individual features that are more than 1.2m deep (or shallower features that are narrow and/or potentially unstable), but if access to such a feature proves necessary, the sides should first be appropriately shored, and a safe means of access and egress (eg a properly secured ladder) should be provided.

5.6 Staff Issues

- 5.6.1 All staff will be provided with appropriate Personal Protective Equipment (PPE), including steel toe and mid-soled boots, high-visibility vest, and a hard hat. All staff will be CSCS qualified, proof of which will be provided in the form of their CSCS card.
- 5.6.2 Welfare facilities, including a toilet and hand-washing facilities, will be provided by the Principal Contractor.
- 5.6.3 The Northgate area is located in the centre of Chester, and it is assumed that the site will be appropriately secured by the Principal Contractor.

5.7 Monitoring of works

- 5.7.1 At least 10 days' notice of the commencement of the archaeological watching brief will be given to Mark Leah and Kirsty Lloyd, Planning Archaeologists for Cheshire Archaeology Planning Advisory Service (CAPAS).
- 5.7.2 CAPAS will have free access to the site (subject to Health and Safety considerations) and all records to ensure the works are being carried out in accordance with this WSI and all other relevant standards.

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7 FIGURES

8 LIST OF SPECIALISTS REGULARLY USED BY OA

8.1.1 Below are two tables, one containing 'in-house' OA specialists, and the other containing a list of external specialists who are regularly used by OA.

Internal archaeological specialists used by OA

Specialist	Specialism	Qualifications
Lisa Brown	Early Prehistoric pottery	BA, PGDip, MLitt, MCIfA
Paul Booth	Iron Age and Roman pottery	BA, FSA, MCIfA
John Cotter	Medieval and Post Medieval pottery, Clay Pipe and CBM	BA (Hons), MCIfA
Cynthia Poole	CBM and Fired Clay	BA (Hons), MSc
Edward Biddulph	Roman Pottery	BA (Hons), MA, MCIfA
Ian Scott	Metalwork and Glass	BA (Hons)
Leigh Allen	Metalwork and worked bone	BA (Hons), PGDip
Dr Ruth Shaffrey	Worked stone artefacts	BA, PhD, MCIfA
Julian Munby	Architectural Stone	BA, FSA
Dr Rebecca Nicholson	Fish and Bird Bone	BA (Hons), MA, D.Phil, MCIfA, FSA Scot
Dr Mairead Rutherford	Pollen	BSc, MSc
Lee Broderick	Animal bone	BA (hons), MA, MSc, FZG, SAC Dip (ecology)
Julia Meen	Charred and waterlogged plant remains and charcoal	BSc (Hons), MA
Dr Denise Druce	Charred plant remains, charcoal and pollen	BA (Hons), PhD, MCIfA
Elizabeth Stafford	Geoarchaeology and land snails	BA (Hons), MSc
Carl Champness	Geoarchaeology	BA (Hons), MSc, ACIfA
Dr Ian Smith	Animal Bone	BSc, PhD
Nicola Scott	Archaeological archive deposition	BA (Hons Dunelm)
Mike Donnelly	Flint	BSc, MCIfA
Dr Louise Loe	Human Bone	D.Phil, BA, MCIfA
Helen Webb	Human Bone	MSc, BSc
Mark Gibson	Human Bone	MSc, BA
Dr Lauren McIntyre	Human Bone	D.Phil, MSc, BSc

External archaeological specialists regularly used by OA

Specialist	Specialism	Qualifications
Lynne Keys	Slag	BA (Hons)

Specialist	Specialism	Qualifications
Quita Mould	Leather	BA, MA
Penelope Walton Rogers, The Anglo Saxon Laboratory	Identification of Medieval Textiles	FSA, Dip.Acc
Dana Goodburn-Brown	Conservation	BSc (Hons), BA, MSc
Steve Allen, York Archaeological Trust	Conservation	BA, MA, MAAIS
Dr Richard Macphail	Soils, especially Micromorphology	BA (Hons), MSc, PhD
Dana Challinor	Charcoal	MA, MSc
Dr Nigel Cameron	Diatoms	BSc, MSc, PhD
Dr David Smith	Insects	BA (Hons), MA, PhD
Professor Adrian Parker	Phytoliths and pollen	BSc (Hons), D.Phil
Dr David Starley	Metalworking Slag	BSc (Hons), PhD
Wendy Carruthers	Charred and waterlogged plant remains	BA (Hons)
Dr Sylvia Peglar	Pollen	PhD
Dr John Whittaker	Ostracods and Foraminifera	BA (Hons), PhD
Dr John Crowther	Soil Chemistry	MA, PhD
Dr Martin Bates	Geoarchaeology	BSc, PhD
Dr Dan Miles	Dendrochronology	D.Phil, FSA
Dr Jean-Luc Schwenninger	Optically Stimulated Luminescence Dating	PhD
Dr David Higgins	Clay Pipe	BA, PhD, MCifA
Dr Hugo Anderson- Wymark	Flint	BSc, PhD, FSA Scot, MCifA
Dr Damian Goodburn- Brown	Ancient Woodwork	BA, PhD



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APPENDIX B DESCRIPTIONS AND CONTEXT INVENTORY

Note: Test-pits 2, 4, 10, 19, 20 and 23 not excavated.

Test-pit 1						
General description					Orientation	E-W
Test-pit devoid of undisturbed archaeology. Consists of topsoil and layers of redeposited soils used to landscape the former bowling green area.					Length (m)	1.4
					Width (m)	0.4
					Avg depth (m)	0.7
Context No	Type	Width (m)	Depth (m)	Description	Finds	Date
100	Layer	-	0.13	Topsoil	None	Modern
101	Layer	-	0.13 to 0.48	Loose, soft, mid-brown sand	None	Modern
102	Deposit	-	0.48 to 0.56	Mid blue-grey angular gravel	None	Modern
103	Deposit	-	0.56 to 0.8	Pale, light grey angular gravel	None	Modern
104	Layer	-	0.08 to 0.42	Loose, soft, mid-brown sand	None	Modern
105	Layer	-	0.42 to 0.7	Loose, sand, greyish-brown, includes modern concrete lumps and blocks	None	Modern

Test-pit 3						
General description					Orientation	N-S
Test-pit containing east-to-west-oriented sandstone wall.					Length (m)	0.93
					Width (m)	0.93
					Avg depth (m)	(max) 1.1
Context No	Type	Width (m)	Depth (m)	Description	Finds	Date
300	Layer	-	0.37	Fine-grained, loose red sand; occasional small sandstone fragments, sparse medium sandstone fragments	None	Modern

Context No	Type	Width (m)	Depth (m)	Description	Finds	Date
301	Structure	-	0.13 to 0.48	East-to-west-aligned wall comprising random pitched red sandstone, with minimal shaping evident. Block size varies between 160 x 111mm and 230 x 90mm	None	Possibly Roman or medieval
302	Deposit	-	0.7 to 1.1m	Pre-construction levelling for wall 301 – friable, slightly plastic, dark grey-brown clay-silty-sand. Moderate small to medium decayed red sandstone with occasional charcoal and mortar flecks, red sand spotting and small pebbles	Ceramic and CBM	Roman
303	Deposit	-	-	Coarse-grained, loose pale grey-brown sand (duct cover)	None	Modern
304	Deposit	-	1.1	Coarse-grained pale greenish-brown sand (water main cover)	None	Modern
305	Service	-	0.57	12-inch iron water main	None	Modern
306	Service	-	0.7	Plastic telecom duct, green 120mm in diameter	None	Modern
307	Service	-	-	Same as 306	None	Modern

Test-pit 5						
General description				Orientation	N-S	
Test-pit containing east-to-west-oriented sandstone wall.				Length (m)	1.10	
				Width (m)	0.72	
				Avg depth (m)	(max) 1.05	
Context No	Type	Width (m)	Depth (m)	Description	Finds	Date
501	Structure	-	0.25 to 0.38	Wall, pitched red sandstone, roughly worked, random coursing	None	Possibly Roman or medieval
502	Layer	-	0.54 plus	Pre-construction levelling for wall 501 (same as 302) – friable, slightly plastic, dark grey-brown clay-silty-sand. Moderate small to medium decayed red sandstone	Ceramic	Roman?

Context No	Type	Width (m)	Depth (m)	Description	Finds	Date
503	Service cable	-	0.54	Green plastic, Telecom, 120mm in diameter (same as 307)	None	Modern
504	Service cable	-	0.54	Green plastic, Telecom, 120mm in diameter	None	Modern
505	Service	-	1	12-inch iron water main	None	Modern
506	Deposit	-	0.57	Coarse-grained pale greenish-brown sand (water-main cover) (same as 304)	None	Modern
507	Deposit	-	-	Coarse-grained, loose pale grey-brown sand (duct cover)	None	Modern
508	Cut	-	-	Cut for services 503 , 504 , 507 , and 512	None	Modern
509	Deposit	-	-	Loose, mixed red sandstone rubble in red sand matrix, occasional grey hardcore within cut 511	None	Modern
510	Deposit	-	-	White hardcore within cut 511	None	Modern
511	Cut	-	0.45	Cut for water main 505	None	Modern

Test-pit 6						
General description					Orientation	N-S
Test-pit bisected by several service trenches.					Length (m)	1.20
					Width (m)	0.55
					Avg depth (m)	(max) 0.69
Context No	Type	Width (m)	Depth (m)	Description	Finds	Date
600	Structure	-	0.15	Reinforced concrete footpath	None	Modern
601	Structure	-	-	Concrete rubble and CBM in a loose gritty, coarse dark-brown silty-sand matrix	None	-
602	Cut	-	0.15 to 0.4 plus	Cut of unknown feature lying outside the east edge of test-pit. Only extended for 0.10m in south-facing section	None	-

Context No	Type	Width (m)	Depth (m)	Description	Finds	Date
603	Deposit	-	0.22 to 0.49	Levelling, compacted, friable dark brown-grey clay-silty-sand. Occasional small and medium decayed red sandstone. Inclusions increase in frequency with depth	None	-
604	Deposit	-	-	Compacted, loose fine-grained sandy silt, frequent small to medium decayed red sandstone, occasional small to medium pale brown sand spotting and charcoal flecks	None	Modern
605	Service	-	0.56	Red ceramic electric indicator cover 235 x 111 x 40mm	None	Modern
606	Cut	-	0.22 to 0.62	Cable trench cut	None	Modern
607	Service	-	0.7	Lead water pipe, no discernable cut, presumably truncated by 603 and subsequently by 606	None	Modern

Test-pit 7						
General description				Orientation	E-W	
Test-pit containing east-to-west-oriented sandstone wall.				Length (m)	0.76	
				Width (m)	0.68	
				Avg depth (m)	(max) 0.62	
Context No	Type	Width (m)	Depth (m)	Description	Finds	Date
700	Structure	-	0.1 to 0.16	Concrete footpath	None	Modern
701	Service	-	0.18	Stop tap, water	None	Modern
702	Deposit	-	0.62	Compacted, loose, medium-grained red sand, occasional large pebbles, pipe-trench backfill	None	Modern
703	Service	-	0.4	Copper water pipe (yellow plastic-coated) 25mm in diameter	None	Modern

Context No	Type	Width (m)	Depth (m)	Description	Finds	Date
704	Deposit	-	0.45 to 0.62	Levelling, compacted loose dark brown clay-silty-sand, occasional decayed red sandstone 'lumps', small to medium charcoal flecks and small sub-rounded stone fragments	None	Modern
705	Cut	-	0.45 to 0.62	Service trench cut contains 702 and 703 , Extended beyond limits of excavation, cut into the top of 704	None	Modern

Test-pit 8						
General description				Orientation	N-S	
Test-pit devoid of archaeology. Consists of paving and associated bedding and service trench. The majority is hardcore 'make up', which immediately post-dates the destruction of the former subway under St Martin's Way.				Length (m)	2.45	
				Width (m)	1.85	
				Avg depth (m)	0.30	
Context No	Type	Width (m)	Depth (m)	Description	Finds	Date
800	Structure	-	0.06	Modern paving slabs, the surface of St Martin's Way pavement	None	Modern
801	Layer	-	0.18	Bedding sand associated with modern pavement	None	Modern
802	Layer	-	1.0	Hardcore, pale 'type 1', very firm/hard (lean mix)	None	Modern
803	Deposit	-	0.69	Hardcore, dark fill of gas-pipe trench	None	Modern
804	Structure	1.07	0.3 plus	Concrete, modern, (probably associated with former subway) revealed at a depth of 0.7m	None	Modern

Test-pit 9						
General description					Orientation	E-W
Test-pit devoid of archaeology. Consists of layers associated with modern paving, multiple shallow service trenches, and a reinforced concrete structure associated with the former subway under St Martin's Way.					Length (m)	4.24
					Width (m)	1.25
					Avg depth (m)	0.7 east end 0.27 west end
Context No	Type	Width (m)	Depth (m)	Description	Finds	Date
900	Structure	-	0.06	Modern paving slabs, the surface of St Martin's Way pavement	None	Modern
901	Layer	-	0.08	Bedding sand for modern pavement	None	Modern
902	Deposit	-	0.7	Dark hardcore associated with gas-pipe backfill (same as 803)	None	Modern
903	Cut	-	0.7	Steep cut for modern gas-pipe trench	None	Modern
904	Layer	-	0.7	Hardcore, pale 'type 1', very firm/hard (lean mix)	None	Modern
905	Layer	-	0.7	Red sand 'make-up	None	Modern
906	Layer	-	0.7	Cut for red sand (905)	None	Modern

Test-pit 11						
General description					Orientation	N-S
Test-pit devoid of archaeology. Consists of modern paving and its bedding, a layer of modern hardcore and a concrete wall, the line of which is still visible at ground level.					Length (m)	0.62
					Width (m)	0.58
					Avg depth (m)	1.1
Context No	Type	Width (m)	Depth (m)	Description	Finds	Date
1100	Structure	-	1.1	Modern paving slabs, the surface of St Martin's Way pavement	None	Modern
1101	Layer	-	0.08	Bedding sand for modern pavement	None	Modern
1102	Layer	-	1.02	Hardcore, pale 'type 1', very firm/hard (lean mix)	None	Modern
1103	Structure	0.2 to 0.25	1.1 plus	Concrete wall, the line of which is still visible at ground level (borders the pavement on the east side of St Martin's Way)	None	Modern

Test-pit 12						
General description					Orientation	E-W
Test-pit devoid of archaeology. Consists of modern paving and its bedding, a layer of modern hardcore and a concrete wall, the line of which is still visible at ground level.					Length (m)	5.56
					Width (m)	0.63
					Avg depth (m)	0.6 to 0.85
Context No	Type	Width (m)	Depth (m)	Description	Finds	Date
1201	Structure		0.06	Modern paving slabs, the surface of the St Martin's Way pavement	None	Modern
1202	Layer		0.08	Bedding sand for modern pavement	None	Modern
1203	Structure	0.25	1.1 plus	Concrete wall, probably the westernmost of those bordering access to the former subway under St Martin's Way	None	Modern
1204	Layer		-	Hardcore above multiple cables on west side of test-pit	None	Modern
1205	Structure		-	Haunching associated with kerb on west side of test-pit	None	Modern
1206	Kerb		-	Kerb on west side of test-pit	None	Modern
1207	Layer		-	Modern sand layer containing post-medieval brick and recent concrete	None	Modern
1208	Structure	-	-	Concrete wall, the line of which is still visible at ground level (borders the pavement on the east side of St Martin's Way)	none	None

Test-pit 13						
General description					Orientation	E-W
Test-pit devoid of archaeology. Consists of modern paving and its bedding, a layer of modern hardcore and a concrete wall, the line of which is still visible at ground level.					Length (m)	0.6
					Width (m)	0.43
					Avg depth (m)	1.05
Context No	Type	Width (m)	Depth (m)	Description	Finds	Date
1301	Structure	-	0.06	Modern paving slabs, the surface of the St Martin's Way pavement	None	Modern

Context No	Type	Width (m)	Depth (m)	Description	Finds	Date
1302	Structure	0.27m	1.05 plus	Concrete wall, the line of which is still visible at ground level (borders the pavement on the east side of St Martin's Way)	None	Modern
1303	Layer	-	0.04 to 0.08	Bedding sand for modern pavement	None	Modern
1304	Layer	-	1.05	Hardcore, pale 'type 1', very firm/hard (lean mix)	None	Modern

Test-pit 14						
General description				Orientation	E-W	
Test-pit with a small possible undisturbed island (or redeposited block?) of archaeology (1412) at its south-east corner, adjacent to a possible disturbed sandstone structure at the north-east corner. The majority of the test-pit consists of modern paving and its bedding, a layer of modern hardcore and a concrete wall, the line of which is still visible at ground level.				Length (m)	5.56	
				Width (m)	0.63	
				Avg depth (m)	0.6 to 0.85	
Context No	Type	Width (m)	Depth (m)	Description	Finds	Date
1401	Structure	-	0.06	Modern paving slabs, the surface of the St Martins Way pavement	None	Modern
1402	Layer	-	0.08	Bedding sand for modern pavement	None	Modern
1403	Deposit	-	-	Hardcore above multiple Vodaphone cables on west side of test-pit	None	Modern
1404	Deposit	-	-	Mid-yellowish-brown sand associated with Vodaphone cables	None	Modern
1405	Deposit	-	-	Pea-sized and smaller gravel associated with and to the west of Vodaphone cables	None	Modern
1406	Layer	-	-	Modern bedding sand layer adjacent to ceramic pipe	None	Modern
1407	Layer	-	-	Bedding sand over black electric cable	None	Modern
1408	Layer	-	-	Hardcore spreads below 1406	None	Modern
1409	Cut	-	-	Cut for ceramic pipe	None	Post-medieval

Context No	Type	Width (m)	Depth (m)	Description	Finds	Date
1410	Deposit	-	-	Fill of ceramic pipe 1409	Clay pipe and glass, slipware, iron, sheep/goat metapodial shaft fragment	Post-medieval
1411	Deposit	-	-	Sandstone-rich deposit at north-east corner of test-pit. Possibly disturbed by the cut for a ceramic pipe, a section of which survives to the west	None	-
1412	Deposit	-	-	Context at south-east corner of trench, some plasticity, feels gritty, barely forms thread, mottled mid-greyish-brown with yellow and white flecks, cf burnt bone in very poor state, small flecks charcoal, clay flecks, cereal grain noted on site	CBM	-
1413	Deposit	-	-	Mid-grey silty loam revealed in the area of/below the paper-lead-lined electric cables. Located 1.10-1.80m from the kerb edge at a depth of 0.7m	None	-
1414	Deposit	-	-	Mid- to dark grey silty loam. Occurred at same level as 1413	-	-

Test-pit 15						
General description				Orientation	N-S	
Test-pit on Princess Street, containing east-to-west sandstone wall.				Length (m)	1.83	
				Width (m)	0.76	
				Avg depth (m)	0.93	
Context No	Type	Width (m)	Depth (m)	Description	Finds	Date
1500	Structure	-	0.05	Tarmac repair	None	Modern
1501	Structure	-	0.05	Paving, concrete slabs	None	Modern
1502	Deposit	-	0.07	Bedding sand for modern pavement	None	Modern

Context No	Type	Width (m)	Depth (m)	Description	Finds	Date
1503	Deposit	-	0.05 to 0.69	Service-trench backfill	None	Modern
1504	Service	-	0.47	Electric cables	None	Modern
1505	Service	-	0.38 to 0.45	Electricity cable and earth strap	None	Modern
1506	Service	-	0.57	Ceramic electric duct or drain	None	Modern
1507	Cut	-	0.69	Service-trench cut	None	Modern
1508	Deposit	-	0.55	Fine limestone hardcore, make-up for road	None	Modern
1509	Deposit	-	0.93	Service-trench backfill, compacted loose dark brown-grey slightly clayey coarse-grained silty sand. Frequent streaks /small fragments decayed red sandstone, large machine-made brick, occasional plastic and mortar flecks (small fragments)	None	Modern
1510	Service	-	0.58	Armoured electric cable	None	Modern
1511	Service	-	0.8	Iron water main	None	Modern
1512	Service	-	0.87	Yellow plastic gas pipe	None	Modern
1513	Cut	-	0.93	Service-trench cut	None	Modern
1514	Structure	-	0.37	Sandstone foundation, truncated, heavily disturbed, possible return on corner of building or cross-section through east-to-west-aligned structural element, date unknown, possible medieval or earlier	None	Possibly medieval or Roman
1515	Deposit	-	0.16	Service trench backfill, mixed loose mid-brown sands/gravels in medium-grained loose silty sand, occasional plastic fragments and reinforced concrete (small)	None	Modern

Context No	Type	Width (m)	Depth (m)	Description	Finds	Date
1516	Cut	-	0.78 plus	Service-trench cut (leads to demolished inspection chamber)	None	Modern
1517	Deposit	-	0.78	Levelling, compacted, friable dark brown-grey clay-silty-sand. Occasional small and medium decayed red sandstone 'lumps', small angular stone fragments, small pebbles and sparse (x1 or 2) charcoal flecks. Inclusions increase in frequency with depth	None	Possibly medieval or Roman

Test-pit 16						
General description					Orientation	N-S
Test-pit on Princess Street, 3.59m north of market hall wall (extends to the kerb), 8.4m east of kerb at entrance for cars to multi-storey car park. Traversed by multiple service trenches. Possible top of significant archaeology revealed (1611).					Length (m)	2.43
					Width (m)	0.6
					Avg depth (m)	0.6 to 0.85
Context No	Type	Width (m)	Depth (m)	Description	Finds	Date
1601	Structure	-	0.06	Modern paving slabs	None	Modern
1602	Layer	-	0.08	Bedding sand for modern pavement	None	Modern
1603	Layer	-	c 0.1	Hardcore layer below bedding sand	None	Modern
1604	Structure	-	c 0.3	Haunching associated with kerb on north side of test-pit	None	Modern
1605	Kerb	-	-	Kerb on north side of test-pit	None	Modern
1606	Layer	-	c 0.2	Hardcore deposit overlying/associated with two black plastic ducts	None	Modern
1607	Deposit	-	c. 0.5	Backfill of ceramic pipe trench	None	Modern
1608	Deposit	-	c 0.2 to 0.7	Smooth rounded or sub-rounded pebble- and cobble-dominated context over/associated with the backfill of electricity tiles/cables trench on south side of test-pit	None	Modern

Context No	Type	Width (m)	Depth (m)	Description	Finds	Date
1609	Deposit	-	c 0.1	Sand associated with thin black cable at south end of test-pit	None	Modern
1610	Deposit	-	c 0.2	Below 1609 , associated with thicker black cable at south end of test-pit	None	Modern
1611	Deposit	-	c 0.5	Dark grey silty loam at north end of trench, with black and white flecking	Roman CBM/tile (not retained)	Roman

Test-pit 17						
General description				Orientation	E-W	
Test-pit crossed by several service trenches, including a gas pipe running north to south and vodaphone cables running east to west. All appears to be disturbed down to c 0.65m bgl.				Length (m)	c 2.5	
				Width (m)	0.6	
				Avg depth (m)	0.65	
Context No	Type	Width (m)	Depth (m)	Description	Finds	Date
1700	Structure	-	c 0.06	Modern paving slabs, the surface of the Princess Street pavement	None	Modern
1701	Layer	-	c 0.08	Bedding sand for modern pavement	None	Modern
1702	Structure	-	0.1 to 0.2	Hardcore associated with modern pavement	None	Modern
1703	Layer	-	c 0.45	Black tarmac	None	Modern
1704	Cut	-	0.47	Cut for live cable at south end of test-pit	None	Modern
1705	Deposit	-	-	Fill associated with live cable, sandstone-rich sandy loam	Struck, worked relatively good-quality flint, Roman tile, iron	Modern
1706	Cut	-	-	Cut for two Vodaphone ducts	None	Modern
1707	Deposit	-	-	Fill associated with Vodaphone ducts	None	Modern
1708	Structure	-	-	Lean mix around and under Vodaphone ducts	None	Modern

Context No	Type	Width (m)	Depth (m)	Description	Finds	Date
1709	Deposit	-	c 0.5	Sandstone-rich context near to the kerb/ at the north end of the test pit. (Disturbed/chronologically mixed context, potentially overlies significant archaeology)	Samian ware (two sherds), Roman tile, cf medieval pottery sherd, clay pipe, post-medieval pottery, cattle tooth	Roman?

Test-pit 18						
General description					Orientation	N-S
Test-pit crossed by multiple service trenches.					Length (m)	2.7
					Width (m)	0.6
					Avg depth (m)	(max) 0.77
Context No	Type	Width (m)	Depth (m)	Description	Finds	Date
1801	Service	-	0.39	Plastic BT duct, 100mm in diameter	None	Modern
1802	Service	-	0.34	Plastic BT duct, 0.55mm in diameter	None	Modern
1803	Service	-	0.28	Plastic BT duct 100mm in diameter	None	Modern
1804	Service	-	0.23	Plastic BT duct, 100mm in diameter	None	Modern
1805	Service	-	0.36 to 0.4	Ceramic duct, 16mm in diameter, houses armoured electric cable	None	Modern
1806	Service	-	0.55	Double ceramic duct 0.23m wide	None	Modern
1807	Service	-	0.62	Yellow plastic gas pipe, 65mm in diameter	None	Modern
1808	Structure	-	0.06	Paving	None	Modern
1809	Structure	-	-	Concrete	None	Modern
1810	Deposit	-	-	Levelling, comprised plastic, moist, gritty, dark grey-brown clay-silty-sand. Moderate decayed, small to medium red sandstone 'lumps', occasional charcoal flecks, mortar flecks and small pebbles	None	Modern

Context No	Type	Width (m)	Depth (m)	Description	Finds	Date
1811	Deposit	-	0.65 to 0.75	Friable, slightly plastic, mid-grey-brown clay-sandy-silt, occasional medium decayed red sandstone 'lumps', frequent pale brown sand mottling and sparse charcoal flecks	None	Modern
1812	Deposit	-	0.04 to 0.5	Small and large concrete fragments in gritty coarse dark brown silty-sand matrix. Very mixed, no discernible cut	None	Modern
1813	Cut	-	0.51	Clearance cut for multiple ceramic ducts/ and possibly levelling at the same time	None	Modern
1814	Deposit	-	0.51 to 0.75 plus	Pale brown marbled red sand (loose)	None	Modern
1815	Cut	-	0.75	Service-trench cut	None	Modern
1816	Deposit	-	-	Levelling (same as 1810)	None	Modern
1817	Cut	0.24 to 0.4	-	Services cut	None	Modern
1818	Deposit	0.26	0.48	Hardcore and concrete rubble in pale brown sand matrix	None	Modern
1819	Deposit	-	c 0.2 to 0.65	Loose white limestone hardcore	None	Modern
1820	Cut	0.2	c 0.2 to 0.37	Cut on north side of trench, 0.2m wide and 0.37m deep	None	Modern

Test-pit 21		
General description	Orientation	N-S
Test-pit across the Princess Street (north side) pavement from the Coach House Inn wall to the haunching and kerb on the south side. Bisected by multiple service trenches but a strip of archaeology was found to be protected by a sandstone block, which forms part of the foundations for the Coach House Inn. This significant material comprises the sandstone block, overlying a dark earth, which in turn overlies a compact hard clay (the latter possibly part of a floor or its make-up).	Length (m)	1.7
	Width (m)	0.6
	Avg depth (m)	1.05 north end to 0.8 (south)

Context No	Type	Width (m)	Depth (m)	Description	Finds	Date
2100	Structure		0.06	Modern paving slabs, the surface of the Princess Street pavement	None	Modern
2101	Kerb	-	-	Kerb at south end of test-pit	None	Modern
2102	Layer	-	-	Bedding sand associated with modern pavement	None	Modern
2103	Layer	-	-	Concrete associated with modern pavement	None	Modern
2104	Structure	-	0.09 to 0.23	Haunching associated with kerb on south side of test-pit	None	Modern
2105	Deposit	-	-	Fill of sandy-clay-loam, some gritty inclusions, associated with black cable	None	Modern
2106	Deposit	-	0.6	Fill of sandy-clay-loam, some gritty inclusions, associated with Vodaphone cable	None	Modern
2107	Deposit	-	0.69	Fill above electric cable, coarse, gritty, loose	CBM	Modern
2108	Deposit	-	0.85	Sand associated with water pipe (fill of 2109)	None	Modern
2109	Cut	0.3	0.85	Cut for water pipe, approximately vertical	None	Modern
2110	Deposit	-	to 0.92	Gritty clay-loam associated with gas main backfill	None	Modern
2111	Cut	-	-	Cut for yellow plastic gas main which enters trench from east side and turns 90° south	None	Modern

Context No	Type	Width (m)	Depth (m)	Description	Finds	Date
2112	Layer	-	-	Dark earth, forms a thread, cannot be formed into a 'U', feels silty/soapy, with very occasional gritty inclusions	None	-
2113	Structure	-	-	Sandstone block, forms (probably opportunistic) part of foundations for Coach House Inn	None	-
2114	Possible structure/surface	-	-	Hard level clay, difficult to crush between fingers, light reddish-yellow-brown, forms thin thread, which forms a ring	None	-

Test-pit 22

General description				Orientation	N-S	
Test-pit bisected by electricity, water and gas cables and a surface drain. On the north side, a very thin strip of archaeology (undisturbed stratigraphy) survived between the cut for the Coach House Inn and (to the south) the cuts for water and gas.				Length (m)	1.7	
				Width (m)	c. 0.6	
				Avg depth (m)	0.6 at south, 1.09 at north	
Context No	Type	Width (m)	Depth (m)	Description	Finds	Date
2200	Structure	-	0.06	Modern paving slabs, the surface of the Princess Street pavement	None	Modern
2202	Layer	-	0.08	Bedding sand for modern pavement	None	Modern
2203	Layer	-	-	Layer of concrete associated with modern pavement	None	Modern
2204	Structure	0.42 N-S	-	Haunching associated with kerb on south side of test-pit	None	Modern
2205	Deposit	-	-	Backfill above gas pipe	CBM	Modern
2206	Cut	-	0.56 to 0.6	Cut for the gas pipe, oriented with Princess Street	None	Modern

Context No	Type	Width (m)	Depth (m)	Description	Findings	Date
2208	Cut	-	0.92 to 1.07	Cut for large cast-iron pipe	None	Modern
2209	Deposit	-	c 0.95	Light brown-yellow sand above cast-iron pipe	None	Modern
2210	Cut	-	0.5	Cut for electric cables/tiles	None	Modern
2211	Deposit	-	0.5	Fill associated with electric cables/tiles. Silty-clay with pea-grit-sized hardcore/whitish inclusions c 5-10%	None	Modern
2212	Cut		c. 1.0	Cut for Coach House Inn wall, near vertical	None	Post-medieval
2213	Layer		1.09	Dark earth, mid- to dark grey silty clay	Roman tile Roman pottery	Roman
2214	Deposit		c 1.0	Fill of cut for Coach House Inn wall, rich in plaster. Sandy loam, plaster c 5 -10%	Mortar	Post-medieval

APPENDIX C FINDS REPORTS

C.1 Ceramic

By Chris Howard-Davis

C.1.1 All of the pottery has been examined and recorded following the basic guidelines laid down in *A Standard for Pottery Studies in Archaeology* (MPRG *et al* 2016), with the data being recorded in an Excel Spreadsheet. Diagnostic sherds (rims and bases) were too infrequent to justify the calculation of EVEs.

C.1.2 **Romano-British Pottery:** there are, in total, seven fragments of Romano-British pottery, together weighting 73.2g. The overall average sherd weight is 10.45g, which gives some idea of its fragmentary condition. Despite this, the sherds are not heavily abraded. The proportion of ware-types represented (Table 1), and their distribution between test-pits (Table 2), has been calculated.

	No Frags	Weight (g)	Av weight (g)	Percentage total by count	Percentage total by weight
Severn Valley ware	2	30	15	28.57	40.98
Orange oxidised wares	3	31.2	10.4	42.86	42.62
Samian	2	12	6	28.57	16.40
Complete assemblage	7	73.2	10.45		

Table 1: Romano-British ware-types represented

	Severn Valley ware	Orange oxidised wares	Samian	Totals
Test-pit 5		2		2
Test-pit 17	1		2	3
Test-pit 22	1	1		2
Totals	2	3	2	7

Table 2: Distribution of Romano-British ware-types between test-pits

C.1.3 Two sherds have been identified as Severn Valley ware; they come from Test-pit 17 (**1709**) and Test-pit 22 (**2213**). Severn Valley ware seems to have arrived in Chester by the late first century AD, becoming relatively common in the second and early third centuries and continuing in more restricted use into the fourth century (Tyers 1996, 197)). Other oxidised fabrics form the largest group, but none of the fragments are particularly diagnostic, again only suggesting a broad second- to early third-century date.

C.1.4 There are, in addition, two fragments of samian ware, representing two undecorated vessels, from Test-pit 17, layer **1709**. They appear to be South Gaulish in origin, but their precise source has not been determined. One sherd is from Dr 27, a campanulate

cup in production until the mid-second century (Webster 1996), but the fragment is too small for certain identification of its form.

C.1.5 Considered together, the Romano-British pottery might suggest a very general mid- to late first- to fourth-century AD date.

C.1.6 **Medieval pottery:** in total, two fragments of medieval pottery were found, together weighing 40g, and giving an overall average sherd weight of 20g. This also gives some idea of its quite fragmentary condition. The sherds came from Test-pit 14 (**1410**) and Test-pit 17 (**1709**). Both sherds are sandy, oxidised orange fabrics with a patchy green glaze, most likely to be of mid-twelfth- to mid-fourteenth-century date (McCarthy and Brooks 1988).

C.1.7 **Post-medieval and more recent pottery:** there are, in total, three fragments of post-medieval and more recent pottery, together weighing 449.2g, giving an overall average sherd weight of 14.4g, although this varies appreciably between ware groups, with the black-glazed redwares, characteristically appearing as kitchen wares and storage vessels, having, predictably, a heavier average sherd weight, at 32.1g (Table 3). The distribution of wares between trenches is shown in Table 4.

	No frags	Weight (g)	Av weight (g)	Percentage total by count	Percentage total by weight
Slightly sandy redware, slip-decorated	1	78	78	33.34	78.62
Refined white earthenware	2	21.2	10.6	66.66	21.38
	3	99.2	33.06		

Table 3: Post-medieval and more recent ware-types

	Slightly sandy redware, slip-decorated	Refined white earthenware	Totals
Test-pit 14	1		1
Test-pit 17		2	2
Totals	1	2	3

Table 4: Distribution of post-medieval and more recent ware-types between test-pits

C.1.8 There is nothing exceptional in the assemblage of post-medieval and more recent pottery. Little in the group need date before the middle of the eighteenth century, with the refined white earthenware being of nineteenth-century date or more recent.

C.2 Ceramic Building Material

By Chris Howard-Davis

C.2.1 In total, 36 fragments of ceramic building material were recovered, weighing a total 2.025kg. For the most part, the material is very fragmentary and on occasion quite worn. A large proportion of the tile was relatively thin (c 20mm), suggesting it to be

roof tile, and most fragments were sand-cast. It retains few diagnostic features that might enable it to be dated, but there is some evidence to suggest the presence of Roman roof tiles, in the form of tegulae (Table 5).

	Undiagnostic	Tegula	Modern
Test-pit 3	*		
Test-pit 5	*		
Test-pit 14	*		
Test-pit 17	*	*	
Test-pit 21	*		*
Test-pit 22	*	*	

Table 5: Distribution of ceramic building material between test-pits

C.3 Metal

By Chris Howard-Davis

C.3.1 Metalwork was sparse in all trenches. There were three nail fragments, all in poor condition and obscured by corrosion products. A single fragment of probable hand-forged nail came from Test-pit 17 (demolition deposit **1709**), with two fragments of what seem to be drawn wire nails, and therefore of nineteenth-century or more recent date (Jenkins 1936), were from Test-pit 14 (fill **1410**).

C.4 Glass

By Chris Howard-Davis

C.4.1 A single fragment of glass was recovered from Test-pit 14 (fill **1410**). This appeared to be a worn, but well-preserved, base of a typically late seventeenth-century 'onion' type bottle.

C.5 Clay Tobacco-pipe

By Chris Howard-Davis

C.5.1 In total, six fragments of clay tobacco-pipe were recovered, all in relatively good condition, with surfaces well-enough preserved to distinguish burnishing. A spurred variant of a single heeled bowl (Rutter and Davey 1980) type 72) came from Test-pit 14 (fill **1410**), dated to 1690-1715. The remainder of the fragments were small, undiagnostic stem fragments from Test-pit 14 (fill **1410**) and Test-pit 17 (demolition deposit **1709**).

APPENDIX D ENVIRONMENTAL REPORTS

D.1 Animal Bone

By Ian Smith

D.1.1 A small number of animal bones and teeth (seven specimens) were recovered, from Test-pits 14 and 17. Identifications were made of species and anatomical element and diagnostic zones were recorded following Serjeantson (1996), one wear stage being recorded following Grant (1982). Terminology regarding a premaxilla follows Sisson and Grossman (1938).

D.1.2 The remains are from cattle, sheep/goat and pig (Table 6). The bones from fill **1410**, since they are from a service trench, are of unknown date. Similarly, the bones and cattle teeth from demolition deposit **1709** are from a context which produced finds spanning a range of dates and are thus not closely phased. Thus, since they are from disturbed deposits, there is no real potential for work on this particular group to contribute to an understanding of the test-pit results. Clear potential for bone-assembly recovery in this part of Chester has, however, been demonstrated.

Context	Species	Element	Side	Butchery	Preservation	Serjeantson Zones
1410	Sheep/goat	metatarsal	Indeterminate		recent damage, post-depositional and recent fractures, shaft cylinder	5, 6
1410	Cattle-sized mammal	Indeterminate	indeterminate		fragment of large mammal bone	none
1709	Cattle	mandibular molar <i>cf</i> M1	right		wear stage visible (k of Grant 1982) but splitting, fine fractures through crown enamel and dentine	none
1709	Cattle	mandibular molar <i>cf</i> M1	indeterminate		accurate wear stage not possible to record, dentine and enamel damaged, dentine much eroded	none

Context	Species	Element	Side	Butchery	Preservation	Serjeantson Zones
1709	Pig	metapodial	indeterminate		shaft of metapodial, probable post-depositional and recent damage at proximal and distal ends	3, 4, 5, 6
1709	Sheep/goat	radius	right		shaft cylinder, poor condition, eroded, battered appearance to surfaces	5
1709	Sheep/goat	premaxilla	right	fine cut marks across the lateral side of the body of the premaxilla (cut through)	good to moderate condition, some fine surface splitting, but cut marks clearly visible	none

Table 6: Faunal remains

APPENDIX E SITE SUMMARY DETAILS

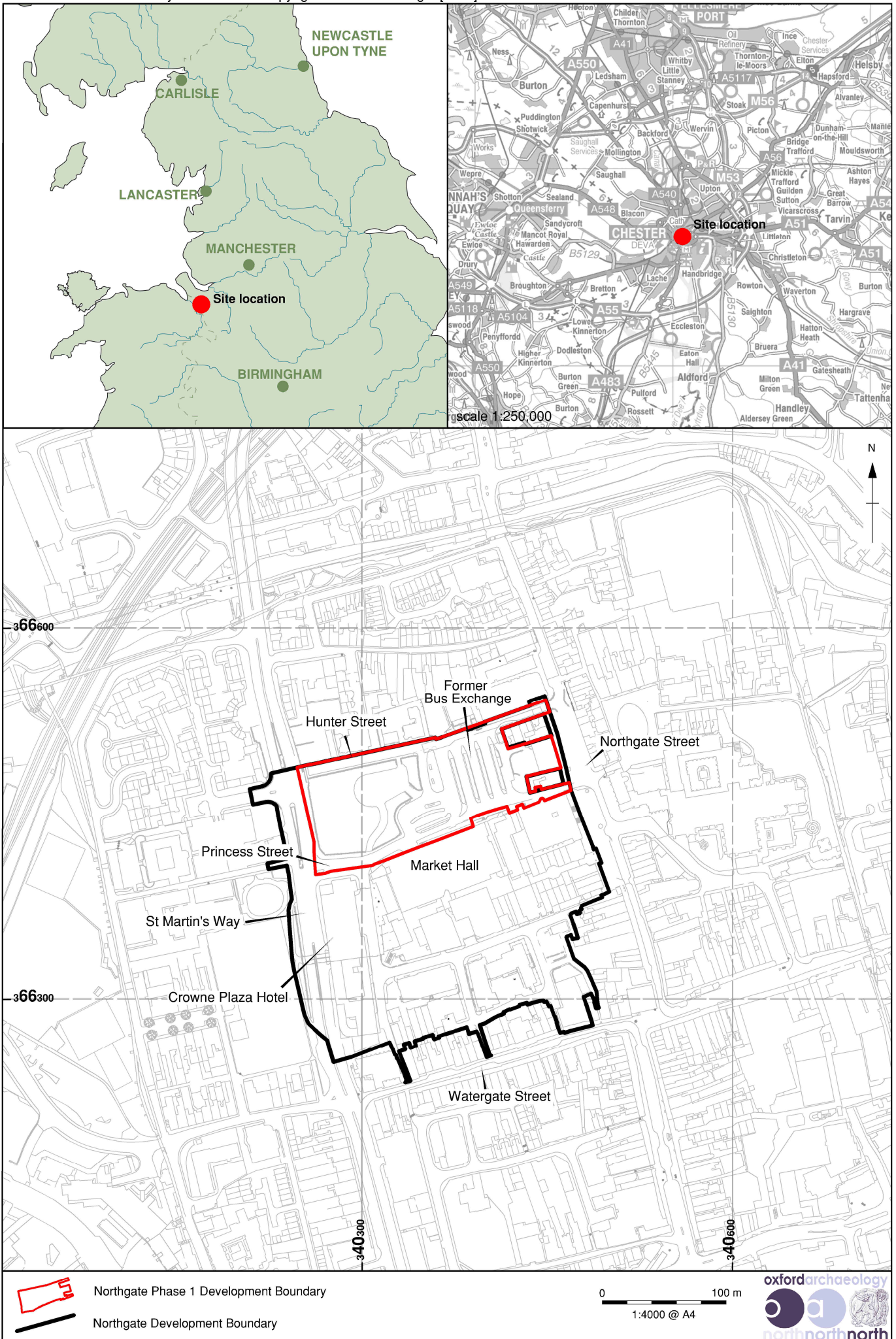
Site name:	Chester Northgate Redevelopment Phase 1
Site code:	CNGPD19
Grid Reference	SJ 40312 66457
Type:	Watching Brief
Date and duration:	31 st September – 9 th October 2019; 8 days
Location of archive:	The archive is currently held at OA North, Mill 3, Moor Lane, Lancaster, LA1 1QD, and will be deposited with the Grosvenor Museum in due course.

Summary of Results: Seventeen of the planned twenty-three test-pits were excavated around the perimeter of the Phase 1 development area, five along Hunter Street, six along St Martin's Way and six along Princess Street. The test-pits were all excavated to a variety of sizes. Services were found to have extensively truncated the archaeological remains, although potentially significant archaeology was identified in nine of the seventeen excavated test-pits, Test-pits 3, 5, 6, 14, 15, 16, 17, 21 and 22. The archaeological remains in three of the test-pits (Test-pits 3, 5 and 15) were identified as putative walls, all east/west-aligned and less than 0.3m below ground level, potentially relating to barrack-blocks within the Roman legionary fortress. Test-pit 14 also contained sandstone rubble, probably tumble, and may have originated from the western rampart of the Roman legionary fortress.

The remaining test-pits (Test-pits 6, 16, 17, 21 and 22) contained relict soil horizons or levelling deposits. These deposits may seal significant archaeological remains at a greater depth than that excavated in the test-pits, and it is equally possible that significant archaeological remains exist between the test-pits. Test-pit 21 contained a possible compacted clay floor, which was overlain by a relict soil horizon.

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Northgate Phase 1 Development Boundary
Northgate Development Boundary

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Figure 1: Chester Northgate development location

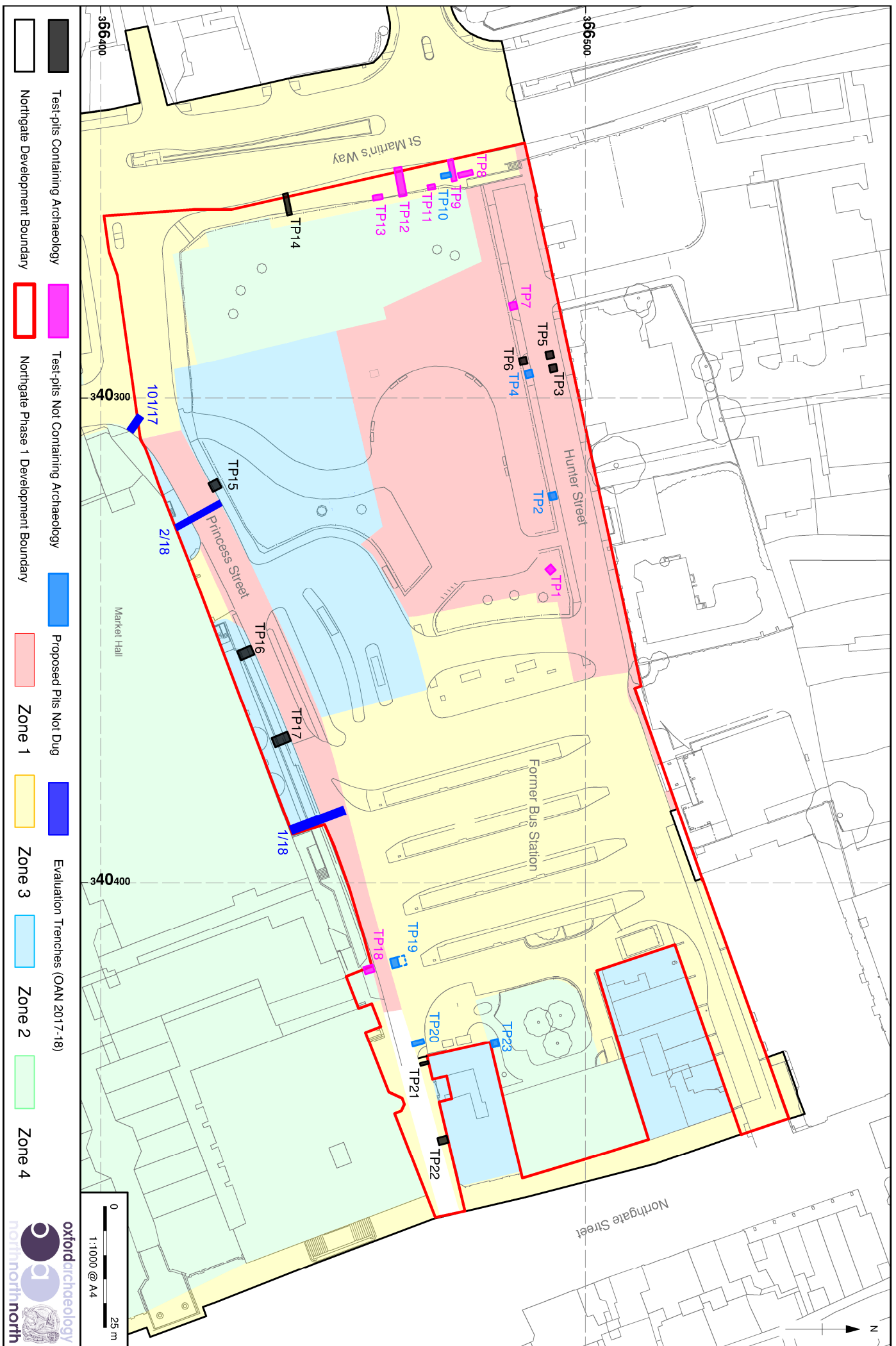
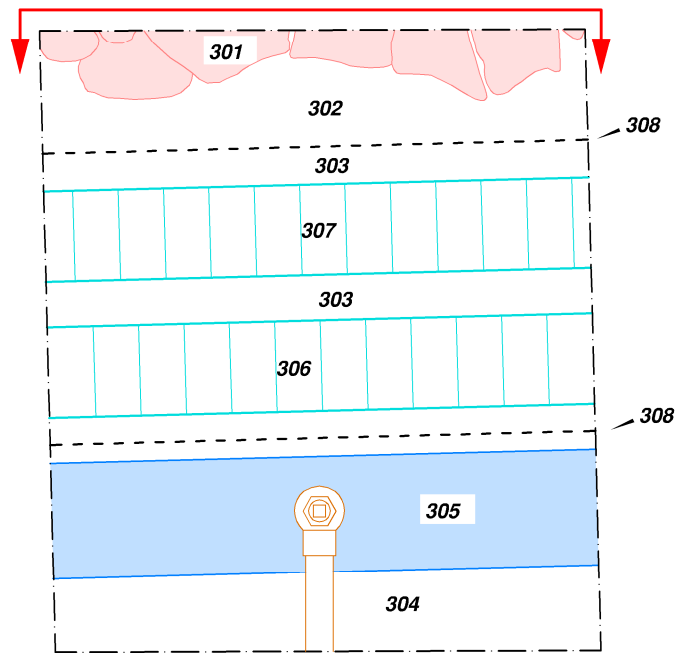
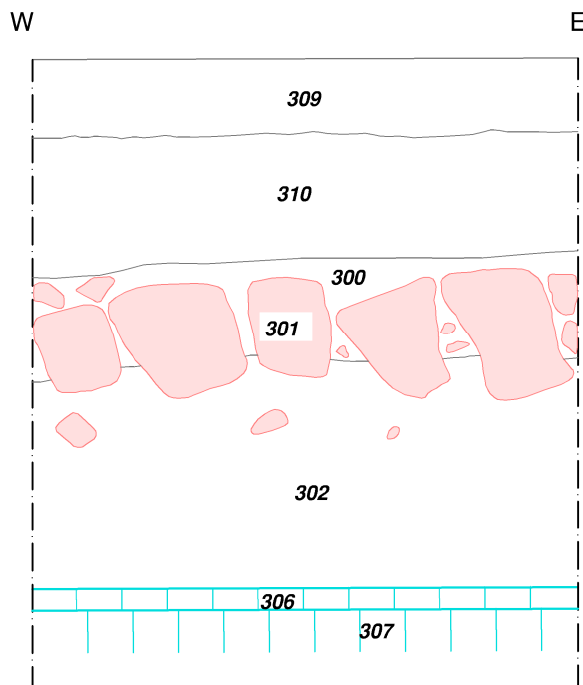








Figure 2: location of Test-pits



Plan of Test-pit 3



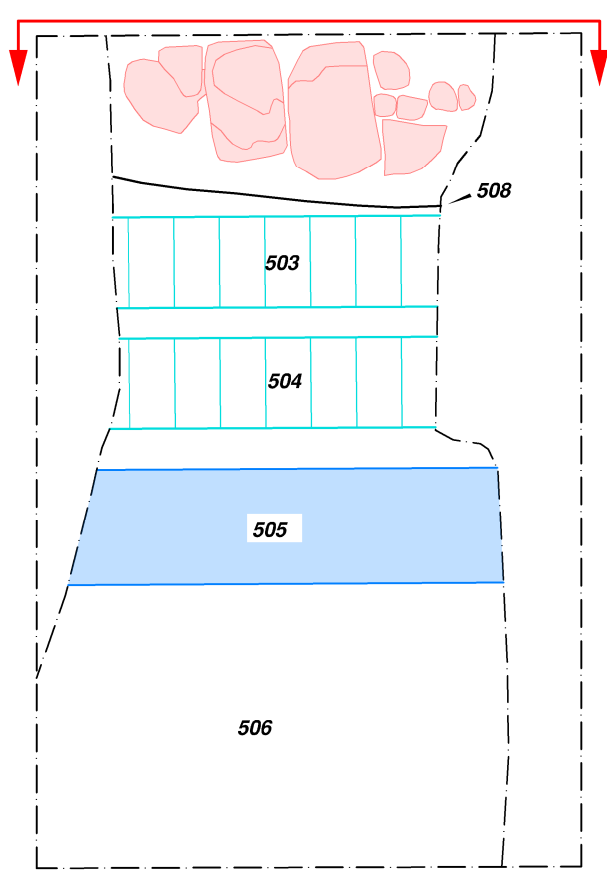
South-facing cross-section of Test-pit 3

-  Limit of excavation
-  Vodafone
-  Water
-  Cut
-  Layer/Deposit
-  Sandstone

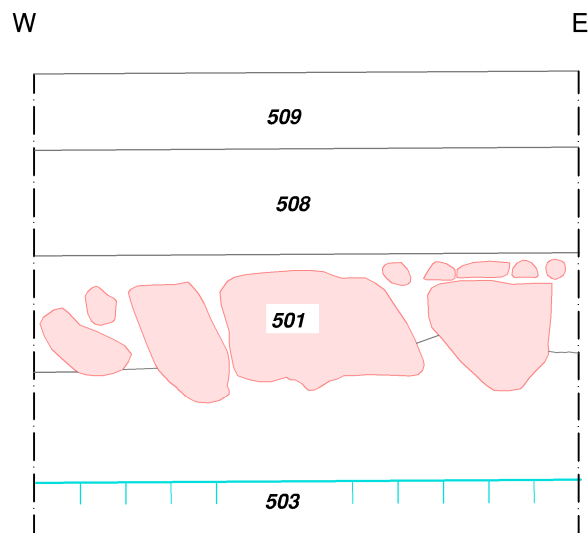
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Figure 3: Plan and cross-section of Test-pit 3



Plan of Test-pit 5



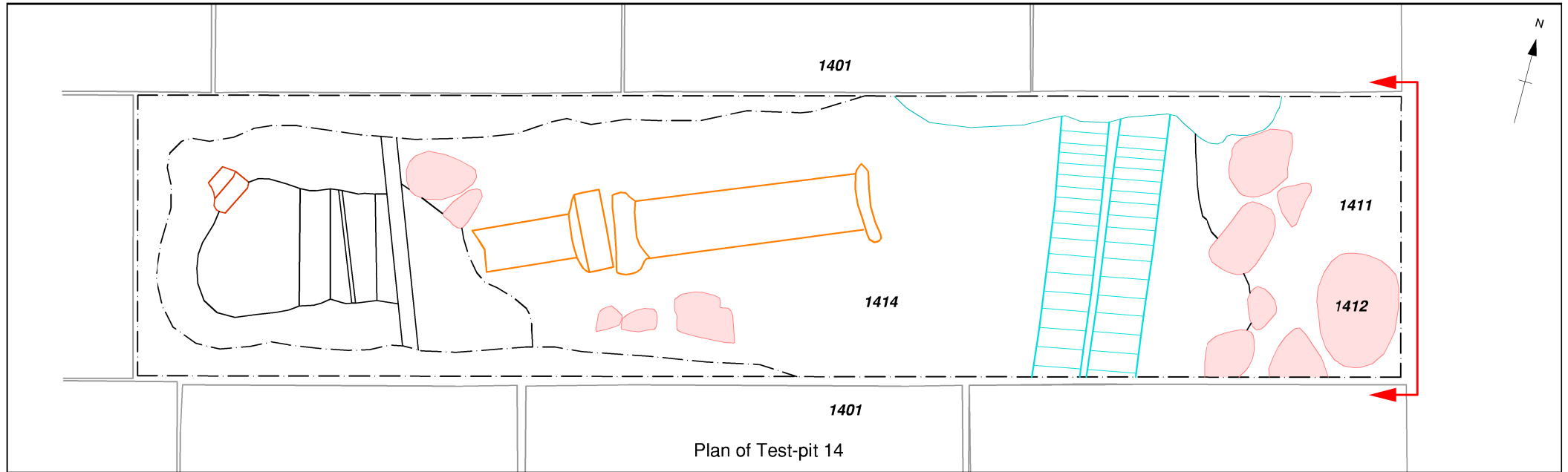
South-facing cross-section of Test-pit 5

- Limit of excavation
- Cut
- Layer/Deposit
- Sandstone
- Vodaphone
- Water

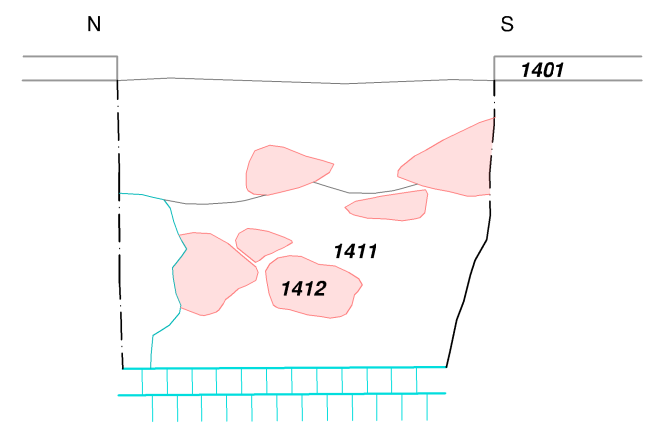
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Figure 4: Plan and cross-section of Test-pit 5



Plan of Test-pit 14



West-facing cross-section of Test-pit 14

- Limit of excavation
- Cut
- Layer/Deposit
- Sandstone
- Vodafone
- Ceramic Drain/Duct

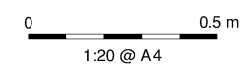
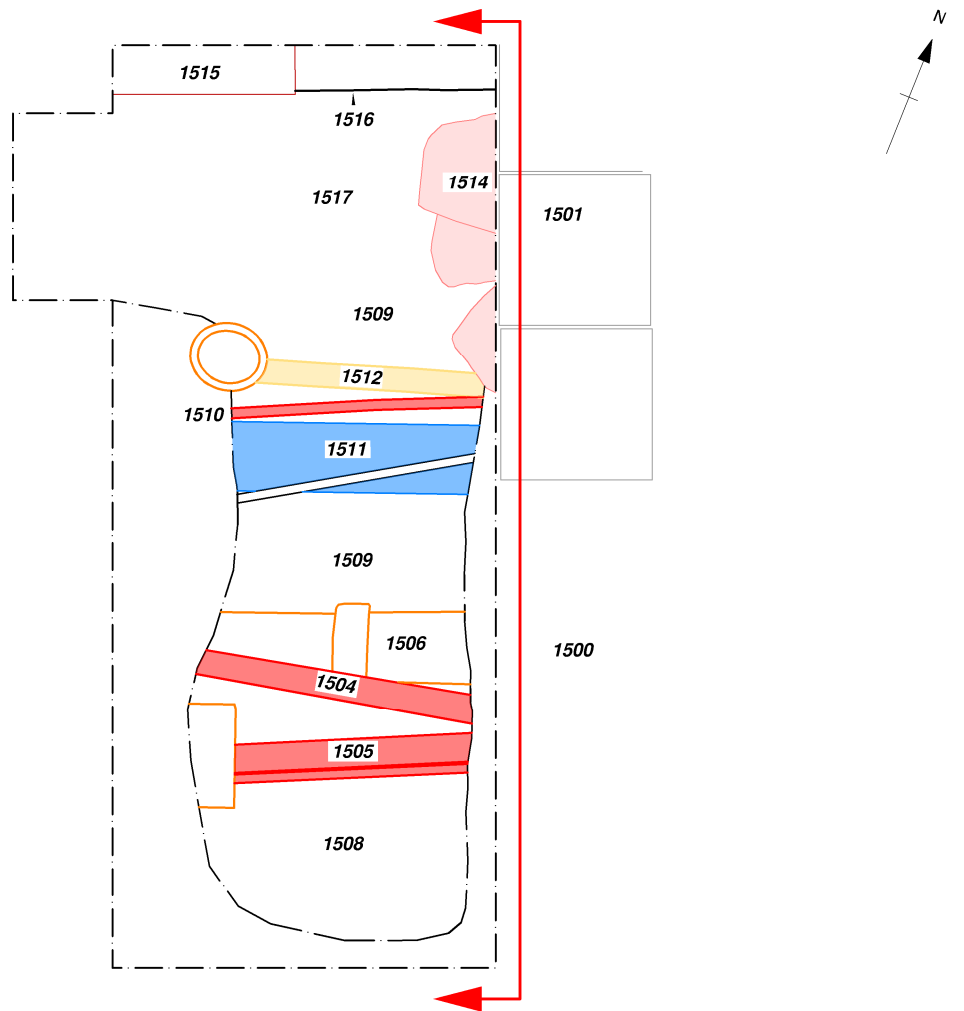
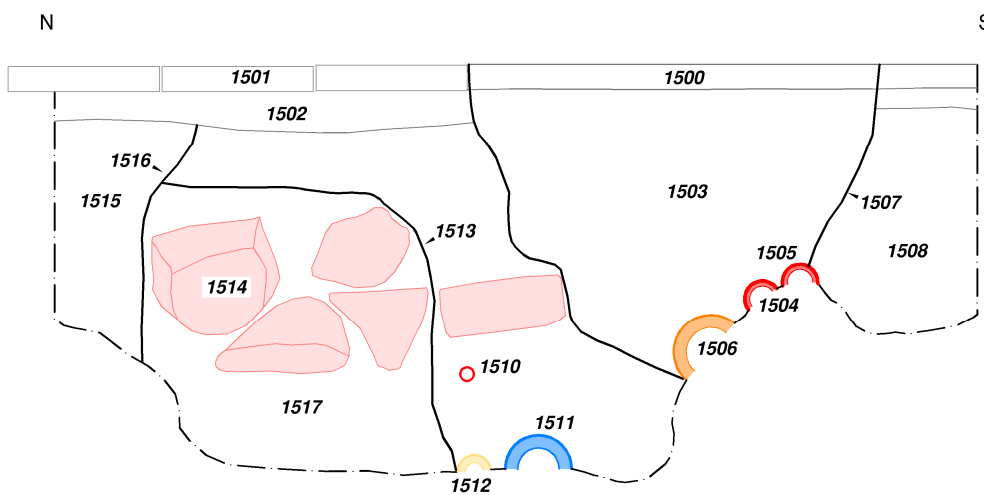


Figure 5: Plan and cross-section of Test-pit 14



Plan of Test-pit 15

0 0.3 m
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West-facing cross-section of Test-pit 15

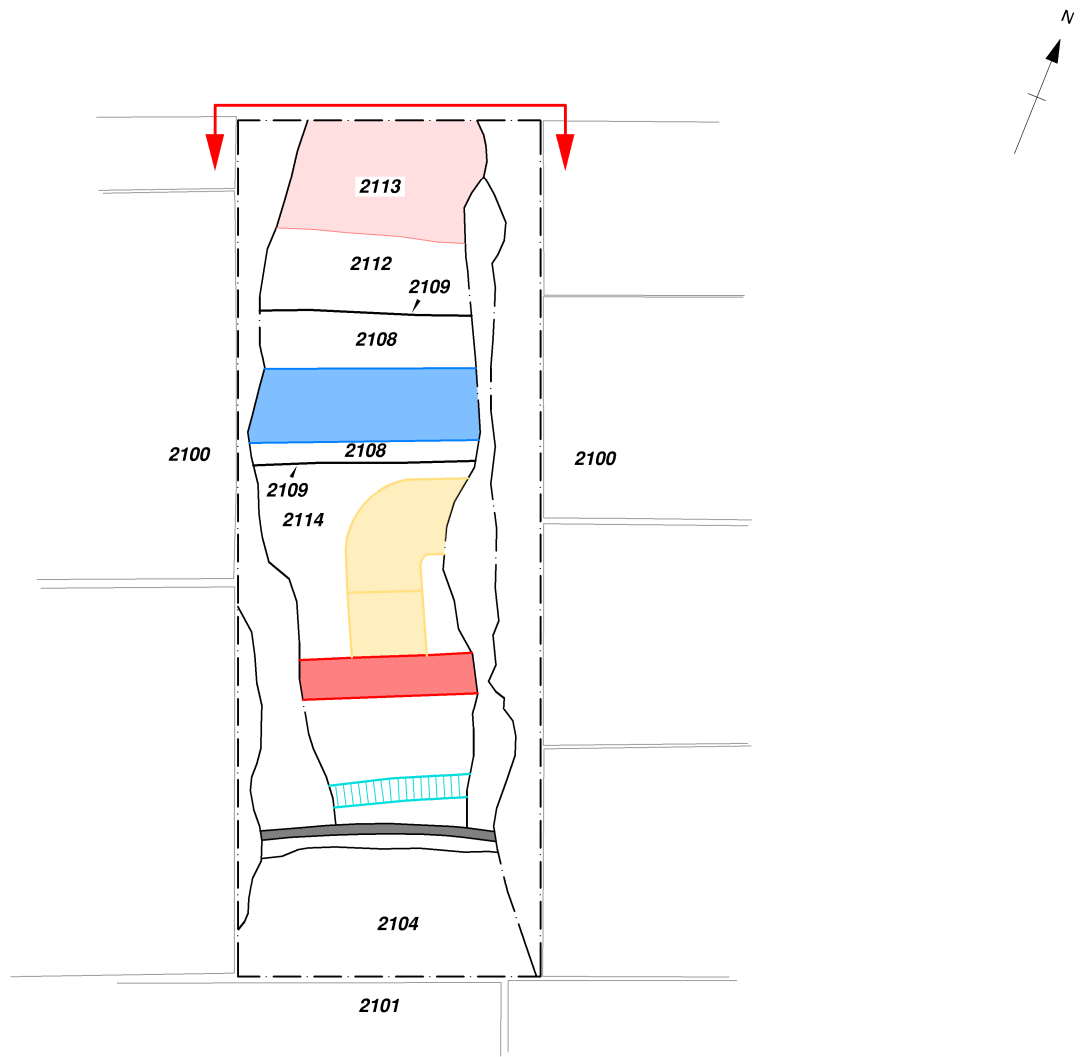
0 0.3 m
1:15 @ A4

- | | | | |
|---------------------|--------------------|---------------|-----------|
| Limit of excavation | Cut | Layer/Deposit | Sandstone |
| Gas | Ceramic Drain/Duct | Water | Electric |

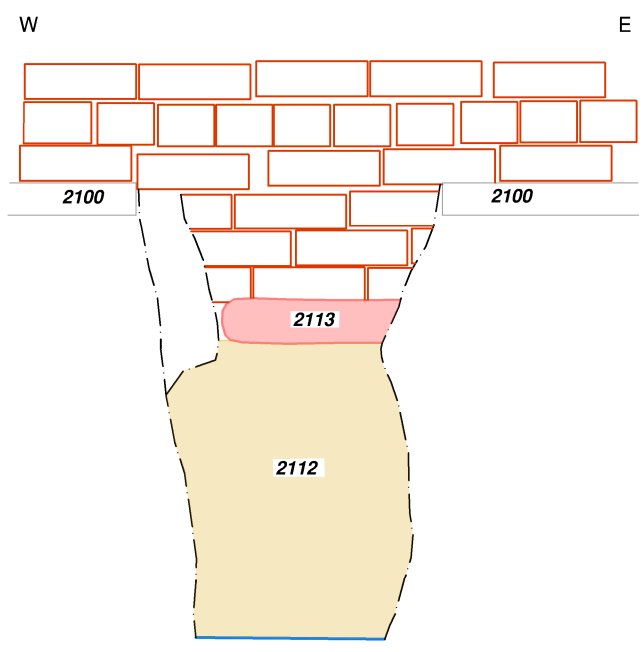
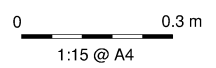


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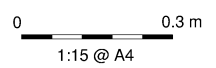
Figure 6: Plan and cross-section of Test-pit 15



Plan of Test-pit 21



South-facing cross-section of Test-pit 21



- Limit of excavation

 Cut

 Layer/Deposit

 Sandstone
- Gas

 Ceramic Drain/Duct

 Water

 Electric



Figure 7: Plan and cross-section of Test-pit 21

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