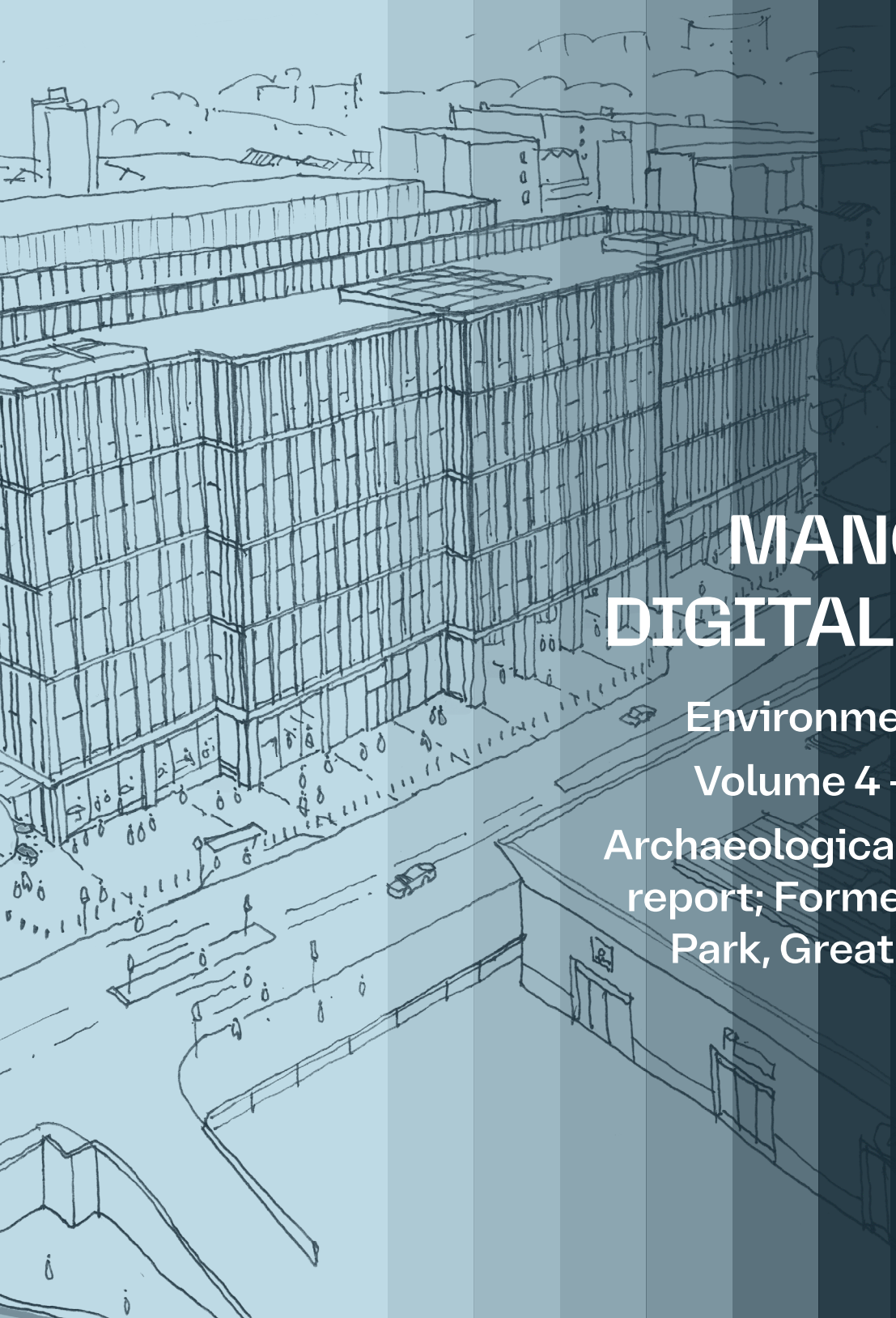
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Environmental Statement

Volume 4 - Appendix 13.4:

Archaeological watching brief report; Former Central Retail Park, Great Ancoats Street Manchester

NOVEMBER 2024

Former Central Retail Park

Great Ancoats Street, Manchester

Archaeological Watching Brief Report

August 2023

Client: Atkins

Issue No: V. 1
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Former Central Retail Park, Great Ancoats Street, Manchester

Archaeological Watching Brief Repot

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Illustrations by Mark Tidmarsh

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SUMMARY

Oxford Archaeology carried out an archaeological watching brief at the site of the former Central Retail Park, Great Ancoats Street, Manchester (NGR: SJ 85111 98403), in April 2023. The work was commissioned by Atkins and involved the monitoring of Phase 1 ground investigation works required as part of the pre-planning application process.

The watching brief monitored the machine-excavation of a series of trial pits and boreholes across the north-western half of the proposed development site. The work revealed stratigraphic sequences that typically comprised the modern ground surface of hardstanding or sett paving (with associated bedding layers of sand) overlying overburden and made-ground deposits. The natural geology was encountered in the majority of trial pits, between 0.3-2.2m below ground level.

Evidence of organic waterlogged deposits recorded in the northern corner of the site likely related to pond-like features illustrated on Green's map of 1794. A small assemblage of later post-medieval finds recovered from the deposits is suggestive of waste deposition. Remnants of brick wall foundations and a stone/brick surface were also identified and most likely related to housing (probably cellaring) and industrial buildings that once occupied the site during the nineteenth century. Associated demolition deposits and overlying made ground and overburden are indicative of later twentieth-century clearance of the site prior to the construction of the Central Retail Park.

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Oxford Archaeology would like to thank Samuel Dollman and Sandra Honeywell of Atkins for commissioning this project. Thanks are also extended to Ian Miller, Heritage Management Director for Greater Manchester Archaeological Advisory Service (GMAAS), who monitored the work on behalf of Manchester City Council.

The project was managed for Oxford Archaeology (OA) by Paul Dunn. The fieldwork was undertaken by Becky Wegiel and Robert Leedham, whilst this report was produced by Robert Leedham and Charlotte Howsam. The figures were produced by Mark Tidmarsh.

1 INTRODUCTION

1.1 Project details

1.1.1 Oxford Archaeology (OA) was commissioned by Atkins to undertake a watching brief at the site of the former Central Retail Park, Great Ancoats Street, Manchester (NGR: SJ 85111 98403; Fig 1). The fieldwork was undertaken in April 2023 and monitored the excavation of trial pits and boreholes as part of Phase 1 ground investigations being carried out in advance of proposed redevelopment of the site for mixed use.

1.1.2 The work was undertaken to inform the Planning Authority in advance of submission of a Planning Application. The Heritage Management Director for Greater Manchester Archaeological Advisory Service (GMASS) required an archaeological watching brief be undertaken during ground investigation works. A brief detailing the scope of the works was set by Atkins, as archaeological consultant for the project, and a written scheme of investigation (WSI) was produced by OA (*Appendix A*), detailing the specified requirements for the work necessary to inform the planning process and how they would be implemented.

1.2 Location, topography, and geology

1.2.1 The site is located in the inner suburb of Ancoats in the city centre of Manchester (NGR SJ 85111 98403; Fig. 1). It lies directly to the north-east of Great Ancoats Street, which forms part of the city's inner ring road. The site is bounded by Old Mill Street to the south-east, the Rochdale Canal to the north-west, and Hugh Oldham Way to the north-east.

1.2.2 The Phase 1 area of proposed development consists of a *c* 2.05ha area of hard standing/sett paving. The wider development site was formerly occupied by the Central Retail Park and associated car parking. The north-west of the site lies at *c* 54m above Ordnance Datum (aOD) and slopes downwards towards the south-east to *c* 50m aOD (Topographic Map *nd*).

1.2.3 The geology of the area is mapped as sandstone of the Chester Formation, a sedimentary bedrock formed between 250 and 247.1 million years ago during the Triassic period (BGS 2023). The overlying superficial deposits are mapped as Devensian Diamicton Till, a sedimentary deposit formed between 11,600 and 11,800 years ago during the Quaternary period (*ibid*).

1.3 Archaeological and historical background

1.3.1 The archaeological and historical background of the site has been described in detail in an archaeological and heritage desk-based assessment (DBA) (Mott MacDonald 2018) produced for the site. An outline of the salient background information from the DBA was given in the WSI (*Appendix A*) and is summarised below.

1.3.2 *Prehistoric*: there are no known prehistoric assets recorded on the Historic Environment Record within 250m of the site.

1.3.3 *Roman*: a Roman fort at Castlefield, constructed at the end of first century AD, is recorded to have been located approximately 2km west of the site. In

addition, a road linking the forts at Manchester and Castleshaw, Saddleworth, is believed to have passed through the Ancoats area (MRP306), along Old Mill Street (immediately adjacent to the south-eastern site boundary). However, an archaeological evaluation carried out at the former Coal Wharf site to investigate the projected line of this putative Roman road failed to reveal any evidence (MRP236 and 237).

1.3.4 *Medieval*: there is no archaeological evidence of early or later medieval activity recorded within the vicinity of the site, probably due to its destruction by subsequent industrial development in the area. Documentary evidence, however, includes land grants from the thirteenth century onwards referencing *Annecotes* and/or *Antecotes*, meaning an area of enclosure fields (*cotes*) or cottages near water (*am*) or cottages (*cote*) of a Saxon named Anna. This suggests that the area comprised open land occupied by scattered farms and cottages.

1.3.5 *Post-medieval*: there is a record of Ancoats Hall, located at the east end of the district, being purchased from the Bryrom family in 1596 by Oswald Mosley. For the next two centuries Ancoats Hall was the seat of the Mosleys, lords of the Manor of Manchester. The Mosleys vacated the area in the 1780s and the Hall was purchased by mill owner George Murray.

1.3.6 *Industrial*: Laurent's plan of 1793 shows the area divided in a gridiron pattern with small pockets of industrial development along the line of Shooter's Brook, which ran through the central area of the site. Green's plan of 1794 also shows that the south-east of the site was occupied by manufacturers, including a pottery kiln and iron works.

1.3.7 There is a record of a water-powered cotton spinning mill, Salvin's Factory (MRP206), 120m north of the site. The subsequent development of the steam engine and the construction of the canals in the area meant that Ancoats became an attractive location for mill and dwelling builders.

1.3.8 The construction of the Ashton Canal (MRP307; 131m from the south-eastern site boundary) was approved by an Act of Parliament in 1792. It was completed by 1799 and entered Manchester at Piccadilly, with cuts and basins situated along the western side of Ancoats Lane and across Pollard Street. The canal was built primarily to carry coal from Ashton-under-Lyme. By 1800 the Rochdale Canal (MRP311; bordering the north-west of the site) had been constructed, linking the town of Rochdale with the city of Manchester. Between the production of Laurent's map of 1793 and Johnson's map of 1819, the construction of the canals in Ancoats had resulted in the area becoming the focus of mill construction. This included the culverting of Shooter's Brook within the area of the site boundary.

1.3.9 In 1798 a large mill, later known as Murray's Complex, was constructed on Union Street (MRP103), within 100m of the north-eastern site boundary. The mill was expanded in 1801 and 1804, with the addition of new wings and warehouses.

1.3.10 Ancoats was the first industrial district in the world based on steam power. Between 1801 and 1851 the population had multiplied by at least four times, as a result industrial development in the area. This had a direct effect on the increase in need for workers' dwellings, which had sprung up in the small

areas around the factories. Excavations along Loom Street, carried out by the University of Manchester Archaeological Unit (UMAU 2007), revealed dwellings that were arranged in back-to-back rows around narrow courts that provided communal yard space and latrines. Houses sometimes had cellars with thin party walls and excavations revealed domestic workshops as well (*ibid*).

1.3.11 Cartographic evidence, including Adshead's map of 1851, shows that back-to-back workers' dwellings occupied the central area of the site, lined along Allum Street, Little Newton Street, Fawcett Street, and John Street, which formed a regular grid layout with smaller streets including Henry Street, Back Cottage, and Thomas Street. This map also shows a cotton mill and adjacent timber yard at the corner of Canal Street and Wharf Street, just to the south-east of the Phase 1 site. Also depicted is a branch of the Ashton Canal, which runs through the eastern corner of the site. The 25-inch Ordnance Survey (OS) map published in 1922 (surveyed 1888-9, revised 1915; Fig 7) illustrates the demolition of some of the housing within the area and their replacement with commercial and public properties.

1.3.12 During the First World War, mills in Ancoats were tasked with producing war materials. However, by 1950 the cotton spinning industry of Ancoats had virtually ceased. A compulsory purchase order was issued to demolish houses and abandoned derelict mills in the 1960s. The Central Retail Park was constructed on site sometime during the 1980s and was first depicted on the 1993 OS map.

2 PROJECT AIMS

2.1 Aims

2.1.1 The general aims and objectives of the project, as stated in the WSI (*Appendix A*), were as follows:

i. to inform the scope for further archaeological investigation of the site;

ii. to identify, investigate, and record any potential archaeological deposits or features;

iii. to recover, sample, and analyse any artefactual evidence or environmental remains that might help create a better understanding of the site's past use;

iv. to establish the level of preservation of any buried remains and provide a chronology of archaeological phasing sufficient enough to identify significance and inform mitigation;

v. to disseminate the results through reporting to a level appropriate of their significance; and

vi. to compile a stable, organised, and accessible archive.

2.1.2 The site-specific aims and objectives of the watching brief were:

i. to determine or confirm the general nature of any remains present;

ii. to determine or confirm the approximate date or date range of any remains, by means of artefactual or other evidence;

iii. to monitor the machine and hand dug test pits, and to record any deposits or features that may be exposed by these works; and

iv. to assist in informing the scope of works for any further archaeological works on the site.

2.2 Methodology

2.2.1 The methodology specified for the archaeological works can be found in full in the WSI (*Appendix A*) and is summarised below. All work was carried out in accordance with the Chartered Institute for Archaeologists (CIfA) *Code of Conduct* (CIfA 2022) and *Standard and Guidance for an Archaeological Watching Brief* (CIfA 2020a).

2.2.2 The watching brief comprised a programme of archaeological monitoring carried out during ground investigation works required as part of the pre-planning application process for the redevelopment of the site. The works involved the monitoring of the excavation of a total of 11 trial pits (TP1-TP11) and 12 boreholes (BH1-BH12), all excavated by machine (Fig. 2). Of these, Trial Pit 11 was an additional trial pit, as the initial investigation of Borehole 8 revealed archaeological remains. The monitored trial pits and boreholes were distributed across the north-western half of the proposed development site (Phase 1), with the remaining area of the development site to be investigated at a later date (Phase 2. The trial pits typically measured *c* 1.5-3.3m long by *c* 0.75-1.00m wide. Most excavations were greater than 1.2m deep and so

detailed recording was not possible; the maximum depth reached was *c* 5.1m below ground level (BGL). Where the water table was reached, further excavation was prevented.

2.2.3 Where exposed, archaeological remains were investigated to establish their character and date where possible. Standard OA recording methodologies were employed throughout, with any exposed archaeological deposits issued with unique context numbers and recorded on *pro forma* context sheets. Spoil arising from the excavations was scanned for finds. Finds, where present, were retrieved and collated by context. A full digital photographic record was compiled comprising general views of the monitored areas.

2.2.4 A full professional archive was compiled in accordance with the WSI (*Appendix A*) and in accordance with current professional guidelines (CIfA 2020b; Historic England 2015). The archive will be deposited with the Greater Manchester Historic Record Office and the Archaeology Data Service (ADS). An online access to index of archaeological investigations (OASIS) form will also be uploaded, along with a digital copy of this report.

3 RESULTS

3.1 Introduction and presentation of results

3.1.1 The results of the watching brief are presented below and include a stratigraphic description of the trial pits and boreholes that contained archaeological remains. The full details of all monitored pits/boreholes with dimensions and depths of all deposits can be found in *Appendix B*.

3.2 General soils and ground conditions

3.2.1 The soil sequence was fairly uniform. Within the trial pits the natural clay geology was typically overlain by made ground or overburden deposits. These deposits were generally overlain by a bedding layer of sand and the modern ground surface of either sett paving or concrete hardstanding. Slight variations in this stratigraphic sequence were seen in several of the investigated pits, including Trial Pits 1 and 2, which revealed a waterlogged deposit overlying the natural geology and underlying made ground deposits. Investigation of the boreholes typically revealed overburden deposits underlying the modern surface.

3.2.2 Ground conditions throughout the watching brief were generally good, and bouts of rain had no significant impact on the monitoring. Archaeological features, where present, were easy to identify against overburden deposits and the underlying natural geology.

3.3 General distribution of archaeological deposits

3.3.1 Archaeological features and deposits were present in six of the 11 investigated trial pits and one of the 12 boreholes (Fig. 2). They comprised the remains of probable wall foundations, associated demolition deposits, and a brick/stone surface, as well as organic waterlogged deposits containing waste material, all generally later post-medieval in date and related to the industrial occupation of the area.

3.4 Trial Pits 1 and 2 (Fig. 3)

3.4.1 The excavation of Trial Pits 1 and 2 in the northern corner of the site revealed similar stratigraphic sequences of sett paving (*100*) or hardstanding (*200*) overlying sand and overburden deposits (*101*, *102*, *201*). In Trial Pit 1 these deposits overlaid a clay made ground deposit (*103*) that appears to have capped an organic waterlogged deposit (*104*), encountered 1.9m BGL (Plate 1). In Trial Pit 2 the interface between the clay made ground and organic waterlogged deposit was less clear and so were recorded together as layer *202*, 0.8-1.0m BGL. Finds recovered from deposits *104*/*202* include fragments of pottery, animal bone, and a leather shoe. The underlying natural geology (*105*, *203*) was encountered *c* 2.0-2.2m BGL.



Plate 1: Trial Pit 1, looking west (1m scale)

3.5 Trial Pit 4 (Fig. 4)

3.5.1 Located towards the north-western end of the site was Trial Pit 4. Underlying the modern hardstanding (*400*) and mixed overburden/sand layer (*401*) was a poorly preserved line of bricks (*402*), consisting of few hand-made bricks, suggestive of a robbed-out wall foundation roughly aligned north/south (Plate 2). A mixed made ground/clay deposit (*403*) was identified underlying brick structure *402* and overlying the natural geology (*404*).



*Plate 2: Possible wall foundation **402** in Trial Pit 4, looking west (2m scale)*

3.6 Trial Pit 5 (Fig. 4)

3.6.1 Trial Pit 5 was positioned adjacent to the north-western site boundary and revealed the typical sequence of sett paving (***500***), sand bedding layer (***501***), and overburden deposit (***502***) seen elsewhere on site. Underling the latter was a 0.4m-thick deposit of demolition rubble (***503***), below which was a surface (***504***) of stone flags and hand-made bricks, encountered 1.2m BGL (Plate 3). A made ground deposit (***505***) was revealed below brick/stone surface ***504*** and continued beyond the depth of investigation. The natural geology was not exposed, as the water table (reached at a depth of 1.8m BGL) prevented further excavation.



*Plate 3: Stone flag/brick surface **504** in Trial Pit 5, looking south (0.5m scale)*

3.7 Trial Pit 10 (Fig. 5)

3.7.1 The monitoring of the excavation of Trial Pit 10, located in the southern corner of the Phase 1 site, identified demolition deposits (*1003*, *1005*) and the remains of a wall foundation (*1004*) underling the sequence of sett paving (*1000*), sand bedding layer (*1001*), and overburden deposit (*1002*). The remains of the wall foundation (*1004*), consisting of hand-made bricks bonded with Portland cement, approximately one brick wide and surviving to a height of five courses, were seen crossing the trial pit on a roughly north-east/south-west alignment and appear to have turned towards the south-east (Plate 4). A demolition deposit was identified to the north (*1003*) and south (*1005*) of the wall. A complete ceramic jar and glass bottle were collected from deposit *1005* alongside further fragments of glass. The natural geology (*1006*) was encountered beneath the wall foundation and demolition deposits, at 1.35m BGL.



*Plate 4: Brick wall foundation **1004** and associated demolition deposits **1003** and **1005** in Trial Pit 10, looking west (partial 2m scale)*

3.8 Trial Pit 11/Borehole 8 (Fig. 5)

3.8.1 Initial investigation of Borehole 8, located towards the centre of the Phase 1 site, revealed the remains of a wall underlying overburden deposits. It was agreed between Atkins and the ground investigation contractor that an additional trial pit, Trial Pit 11, would be excavated in order to further investigate the exposed remains (Plate 5). In the north-west-facing section of the trial pit, the stratigraphic sequence comprised concrete hardstanding (*1100*) overlying a 0.7m-thick overburden deposit (*1101*), which in turn overlaid a demolition deposit (*1105*), *c* 0.4m thick. However, the stratigraphic sequence seen in the north-east-facing section varied. Underlying overburden deposit 1101, which was 0.4m think here, were the remains of an east/west-aligned concrete block wall (*1103*), three courses high. To the south of the wall was sandy deposit *1102*, *c* 0.9m thick. To the north was a series of mixed overburden, demolition, and clay deposits (*1104*) from which a small assemblage of pottery, glass, and stone was retrieved. A concentration of bricks within this deposit suggests there may have been another wall at this location. The natural clay geology (*1106*) was revealed 1.5-1.7m BGL.



Plate 5: Trial Pit 11, looking north-east (0.5m scale)

3.9 Finds summary

3.9.1 A small assemblage of finds of limited significance was recovered during the monitoring works, 11 fragments of ceramics, one complete stoneware jar, one leather shoe, two fragments of animal bone, one fragment of glass and three complete bottles. The assemblage predominantly dates to the late nineteenth to early twentieth century (including a complete stoneware jar inscribed with 'W P Hartley Aintree' and the companies lighthouse logo on its base, dating to the late nineteenth – early twentieth century (YMT 2023); Plate 6). The leather and a small of amount of other material were recovered from the waterlogged deposits in Trial Pits 1 and 2, leading to the suggestion the ponds depicted on historic mapping were used as rubbish dumps. Whilst the bulk of the material was recovered from demolition deposits, with the date of the material corresponding to the date of the demolition of the buildings 1960s.



*Plate 6: Ceramic jar from demolition deposit **1005** in Trial Pit 10 (no scale)*

4 DISCUSSION

4.1 Reliability of field investigation

4.1.1 The results of the watching brief are considered to be a reliable indication of the deposits exposed by the ground investigation works carried out as part of the pre-planning application process for the proposed redevelopment of the site. The weather was largely favourable throughout the monitoring and bouts of rain had no significant impact on the works.

4.2 Watching brief objectives and results

4.2.1 The overall aims and objectives of the watching brief were to identify, record, and establish the character of any archaeological remains exposed during the ground investigation works in order to inform on the scope of any further archaeological investigation that may be required on site prior to proposed redevelopment. The watching brief is considered to have achieved its general and site-specific aims and objectives (*Section 2.1*).

4.2.2 The fieldwork recorded the stratigraphic sequences exposed within the monitored trial pits and boreholes, which was fairly consistent across the Phase 1 site. The natural geology was exposed in most of the excavated trial pits and was largely overlain by made ground and/or overburden deposits. These were then typically sealed by a bedding layer of sand and the extant ground surface of either sett paving or concrete hardstanding.

4.2.3 Limited archaeological remains of pre-modern date were revealed during the Phase 1 watching brief, generally comprising probable brick wall foundations, associated demolition deposits, and a brick/stone surface, as well as organic waterlogged deposits containing waste material. A small assemblage of late post-medieval pottery, glass, and stone was recovered, much of which is likely to have been residual in later demolition and overburden deposits. The character of the archaeological remains identified within the Phase 1 site reflect the industrial and modern use of the site; no evidence of activity predating the later post-medieval period was identified.

4.3 Interpretation

4.3.1 Monitoring of the Phase 1 ground investigation works required as part of the pre-planning application process confirmed the presence of a low density of archaeological features and deposits within the trial pits and boreholes. The results correlate with the industrial character of the Ancoats area from the late eighteenth century onwards. Analysis of historic mapping indicates that much of the site was occupied by industrial buildings and associated housing by the end of the eighteenth century (Fig. 6). Green's map of 1794 also shows two pond-like features that extended into the northern corner of the site. It is probable that the organic waterlogged deposits encountered in Trial Pits 1 and 2 were associated with the two landscapes features. The mixed finds collected from the waterlogged deposits, albeit in small quantities, suggest the ponds were used for waste disposal.

4.3.2 The brick wall foundations seen in Trial Pits 4, 10, and 11 and the stone/brick surface seen Trial Pit 5 most likely comprised remnants of late eighteenth- to

twentieth-century terraced housing (probably relating to cellaring) and industrial buildings situated along Henry Street, Eagle Street, John Street, and Newton (Figs 6-7). Green's map of 1794 and the 1922 OS map demonstrate the extent of industrialisation and development in the area of the site during the nineteenth century. The area remained much the same until the mid-twentieth century when there was a rapid decline in the cotton industry and the merger of companies following the Second World War (*Section 1.3.12*). Subsequent OS and National Grid maps (not illustrated) indicate the demolition of domestic, industrial, and public buildings in the second half of the twentieth century. The various demolition deposits encountered in Trial Pits 5, 10, and 11 are indicative of such activity, while the overlying made ground and overburden deposits seen in all investigated trial pits were presumably related to the levelling of the area prior to subsequent redevelopment. The modern surface of concrete hardstanding and sett paving related to the site's occupation by the Central Retail Park.

4.4 Significance

4.4.1 Perhaps the earliest archaeological remains identified by the watching brief comprised waterlogged deposits relating to ponds shown on the 1794 map of the area. The monitoring works also revealed limited remnants of brick wall foundations and a stone/brick surface related to housing/industrial buildings that once occupied the Phase 1 site during the nineteenth century. A small assemblage of finds provides some evidence of occupation, though much of the material was most likely residual in later deposits. Associated demolition deposits were also identified and related to twentieth-century demolition activity. The watching brief predominantly revealed evidence of modern overburden and made-ground deposits that had accumulated following the clearance of housing and industrial buildings, prior to its redevelopment and the construction of the Central Retail Park in the later twentieth century.

4.4.2 No archaeological remains predating the later post-medieval were identified by the watching brief. Given the degree of truncation from industrial-period and modern development, it is unlikely that earlier remains will be uncovered on site. Nevertheless, the results of the watching brief demonstrate that deposits and structural remains, albeit limited, relating to the housing and industrial buildings that occupied the site from at least the late eighteenth century survive on site and were not completely removed by twentieth-century demolition activity and redevelopment.

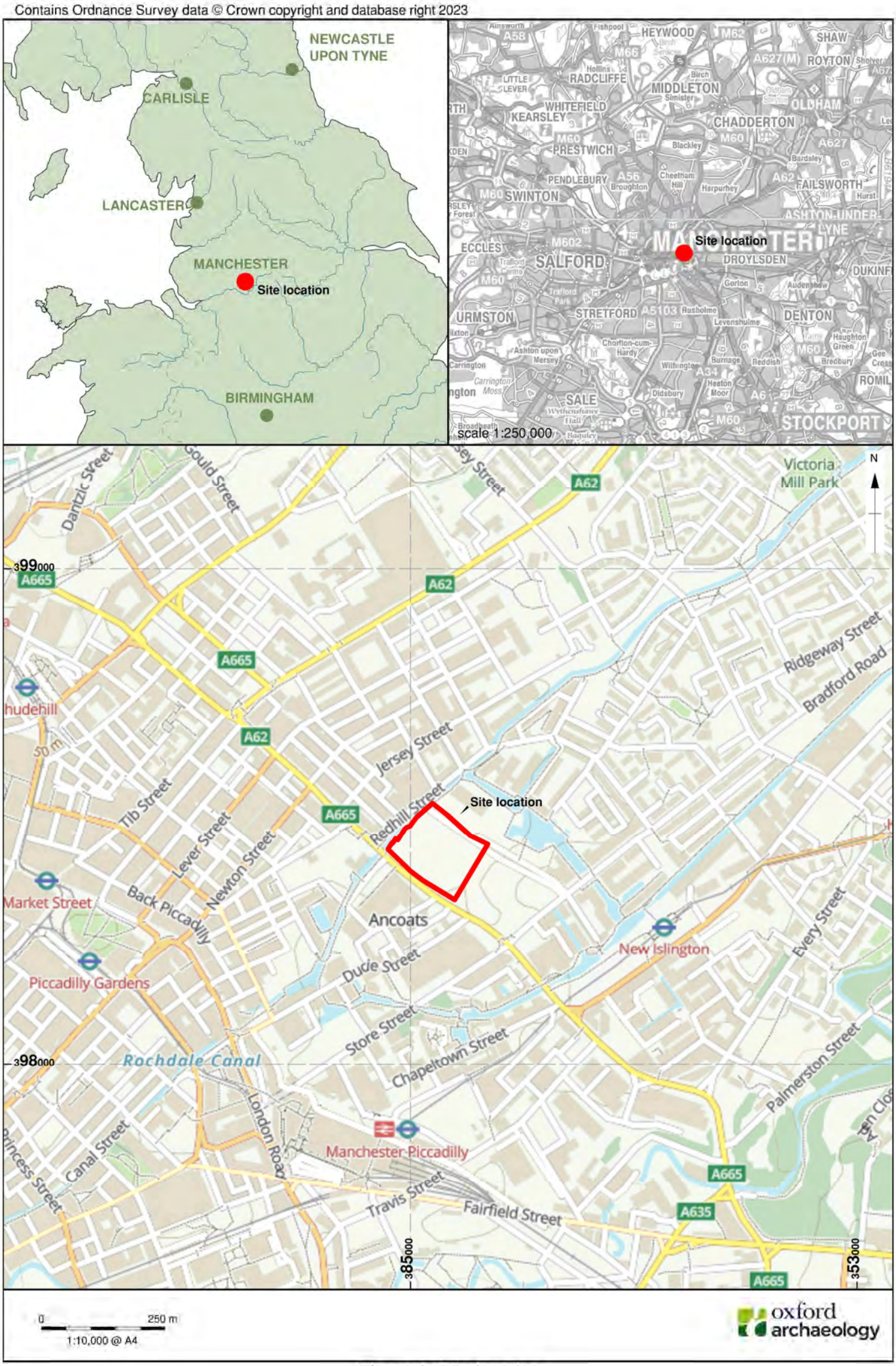


Figure 1: Site location

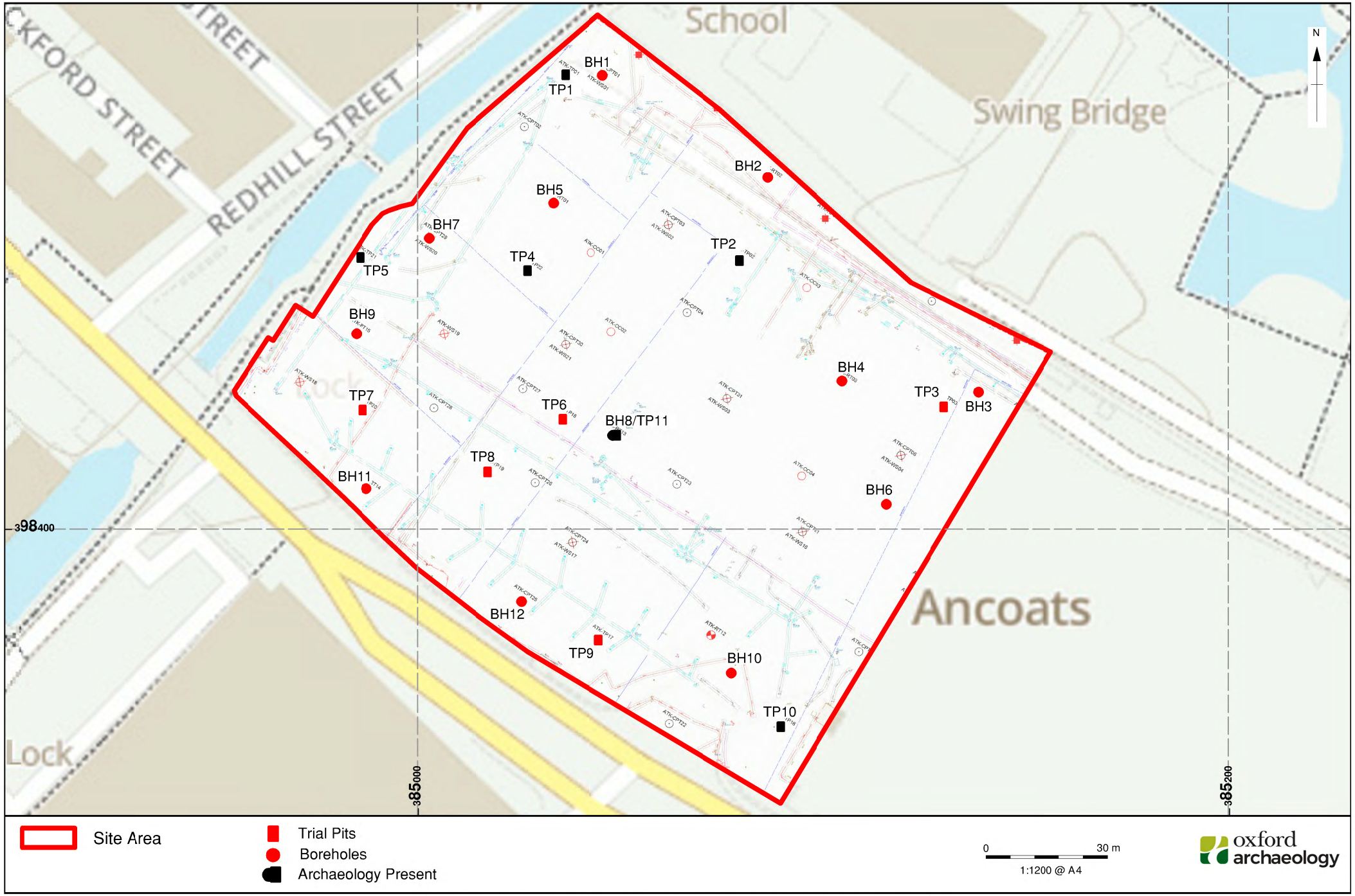
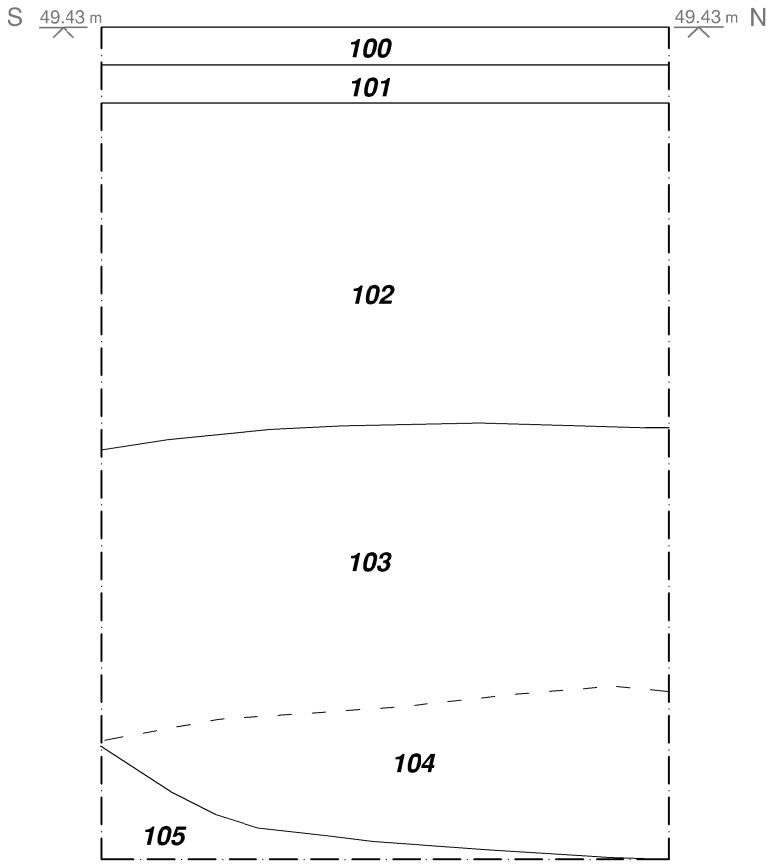
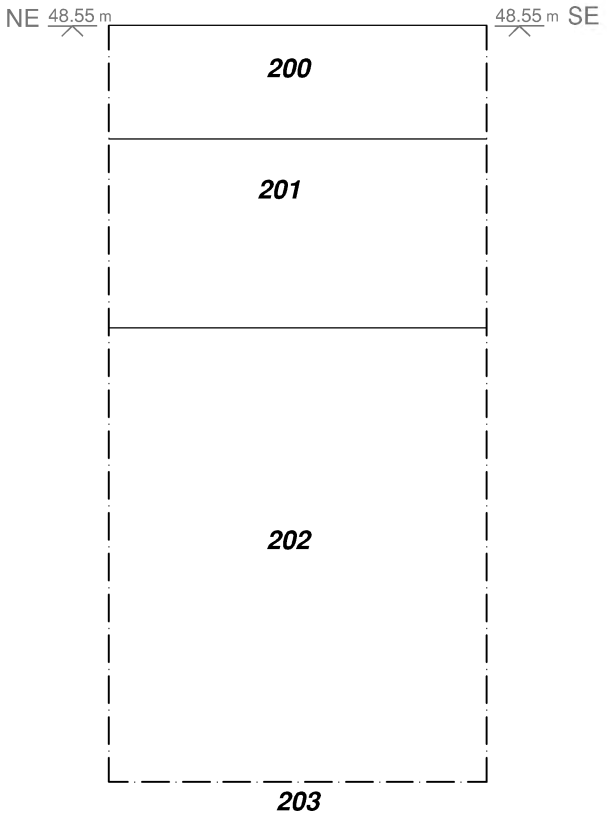


Figure 2: Location plan of monitored ground investigation works



East-facing section of TP1



South-west facing section of TP2

Limit of excavation

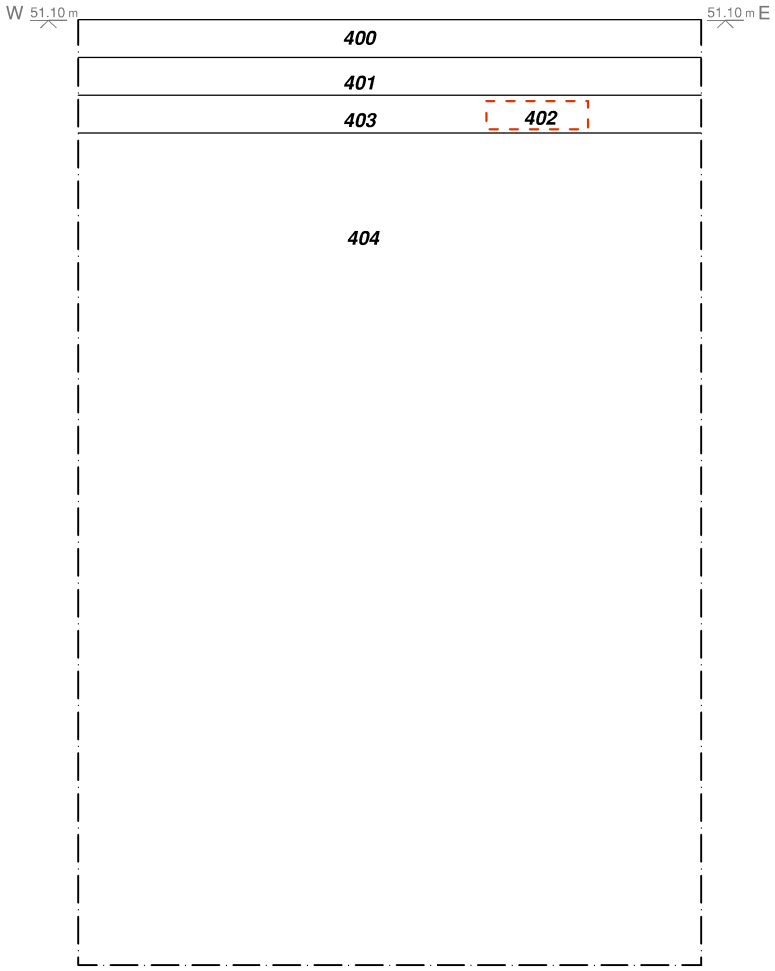
Layer/Deposit

0 0.5 m

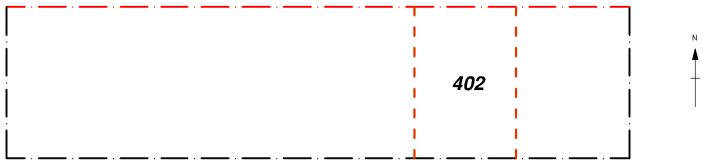
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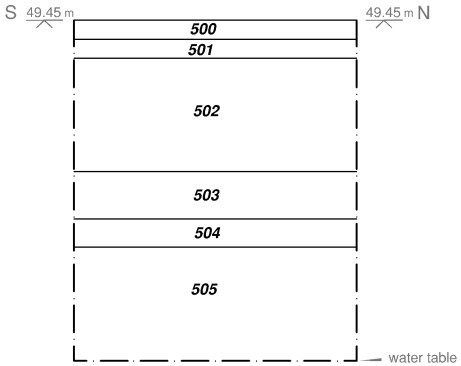
Figure 3: Trial Pits 1 and 2: representative sections



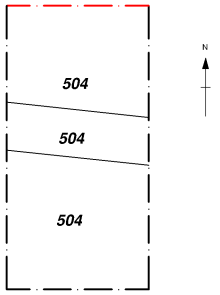
South-facing section of TP4



Plan of TP4



South-facing section of TP5



Plan of TP5

Limit of excavation

Layer/Deposit

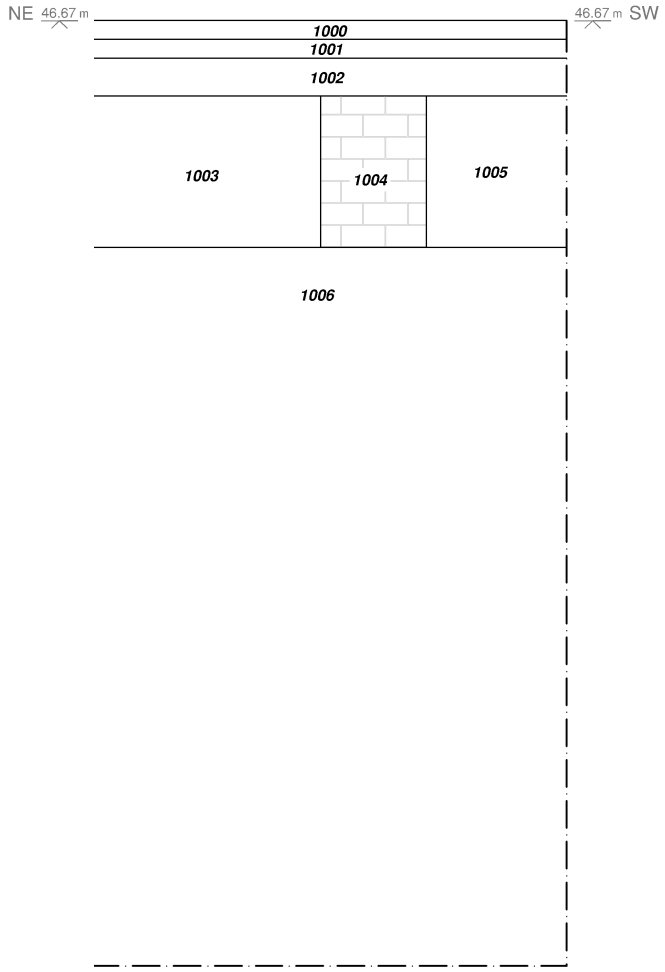
Section location

0 1 m

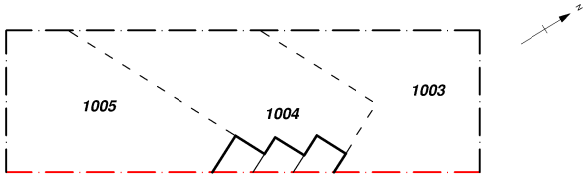
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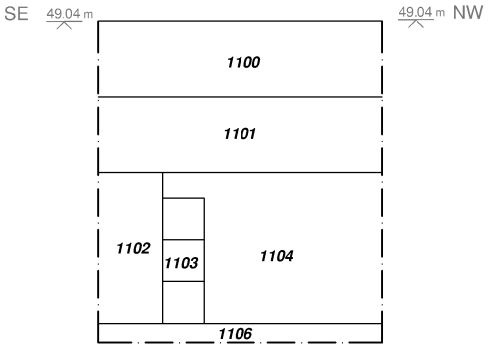
Figure 4: Trial Pits 4 and 5: representative plans and sections



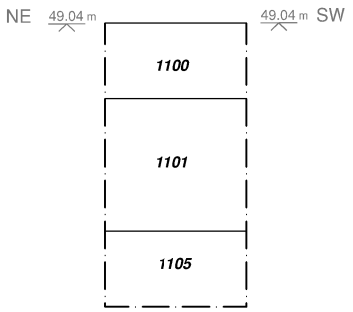
North-west facing section of TP10



Plan of TP10



North-East facing section of TP11



North-west facing section of TP11

Limit of excavation

Layer/Deposit

Section location

0 1 m

1:40 @ A4

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Figure 5: Trial Pits 10 and 11: representative plans and sections



Figure 6: Plan of monitored works superimposed on Green's map of 1794

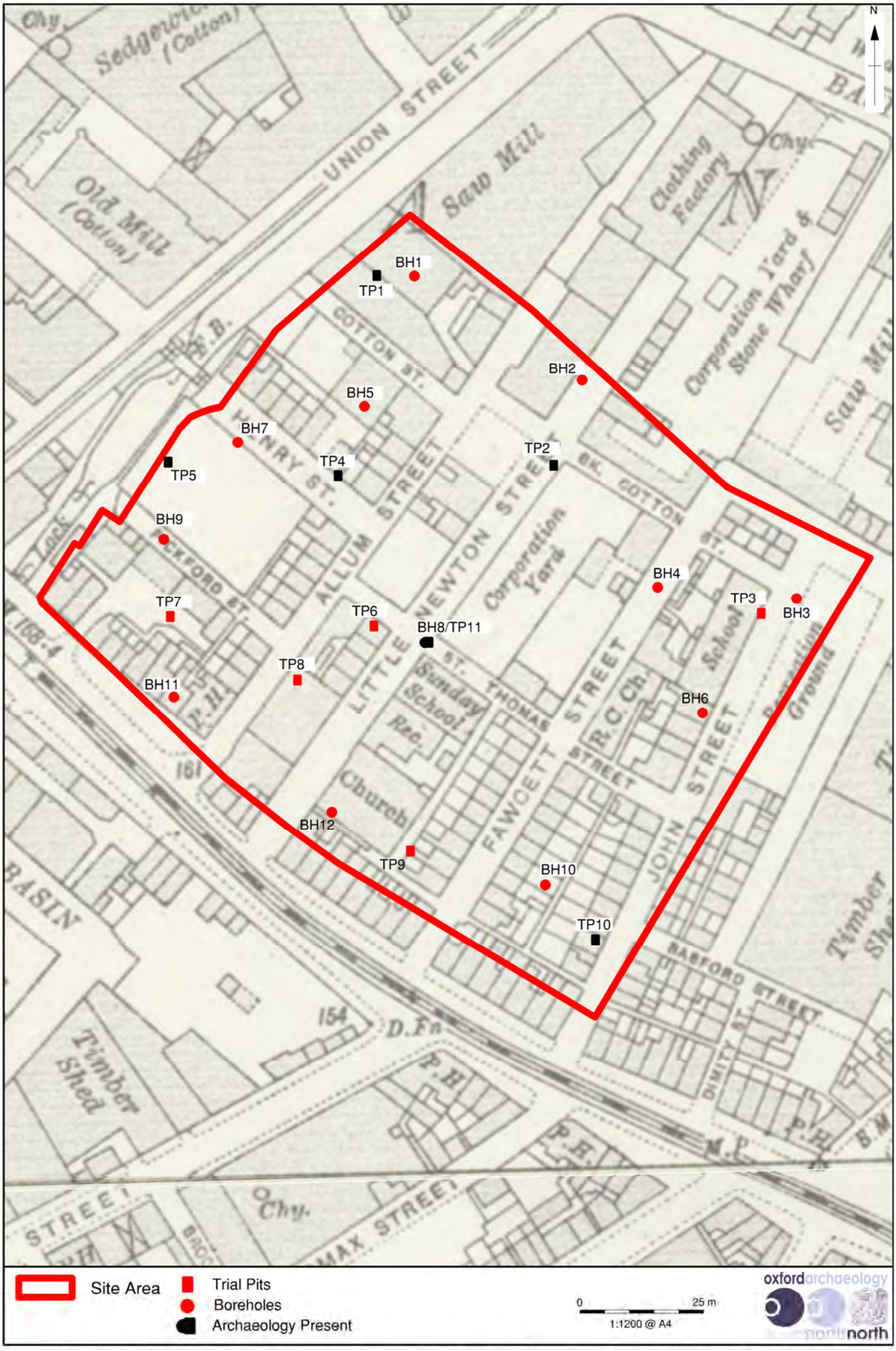


Figure 7: Plan of monitored works superimposed on the Ordnance Survey 25":1 mile map of 1922

APPENDIX A WRITTEN SCHEME OF INVESTIGATION



Former Central Retail Park, Great Ancoats Street, Manchester

Written Scheme of Investigation
Watching Brief

March 2023

Client: Atkins

Issue No: V.3
OA Reference No: L11482
NGR: SJ85125 98409.

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Former Central Retail Park, Great Ancoats Street, Manchester

Written Scheme of Investigation for a Watching Brief

Centred on SJ 85125 98409

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1 INTRODUCTION

1.1 Project details

1.1.1 Oxford Archaeology (OA) North has been commissioned by Atkins to undertake a watching brief during ground investigation works on the site of a proposed mixed-use area on the Former Central Retail Park, Great Ancoats Street, Manchester (NGR: SJ 85111 98403; Fig 1).

1.1.2 The work is being undertaken to inform the Planning Authority in advance of submission of a Planning Application and an archaeological watching brief was required during ground investigation (GI) works by the Heritage Management Director for Greater Manchester Archaeological Advisory Service (GMAAS). A brief has been provided by Atkins, as the archaeological consultant for the project, the original scope of the GI works was reduced to the western half of the originally proposed area in March 2023. OA North were subsequently commissioned to produce this written scheme of investigation and undertake the necessary fieldwork; this document outlines how OA will implement those requirements.

1.1.3 All communications with GMASS regarding the work outlined in this WSI will be conveyed through Atkins.

1.1.4 All work will be undertaken in accordance with the Chartered Institute for Archaeologists (CIfA) *Code of Conduct* (CIfA 2022) and relevant *Standards and Guidance* (CIfA 2020a and 2020b), and local and national planning policies (Historic England 2015).

1.2 Location, topography and geology

1.2.1 The site lies to the north-east of Great Ancoats Street, to the north-west of Old Mill Street and the south-east of the Rochdale Canal (NGR: SJ 85111 98403; Fig 1). The area of proposed development consists of an area of hard standing.

1.2.2 The geology of the area is mapped as Chester Formation Sandstone, a sedimentary bedrock formed between 250 and 247.1 million years ago, during the Triassic period. The superficial deposits are mapped as Devensian Diamicton Till, a sedimentary superficial deposit which formed between 11,600 and 11,800 years ago, during the Quaternary period (BGS 2022).

2 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND AND POTENTIAL

2.1 Archaeological and historical background

2.1.1 The archaeological and historical background of the site has been described in detail in Burn (2018), and will not be reproduced here. A brief outline of the archaeological background, based on Burn (2018) is given below.

2.2 Potential

2.2.1 ***Prehistory***: There are no known prehistoric assets recorded on the HER within 250m of the site.

2.2.2 ***Romano British***: There is a record of a Roman fort at Castlefield, approximately 2km to the west of the site, which was constructed at the end of 1st century AD. In addition, road linking the forts at Manchester and Castleshaw is believed to have passed through the Ancoats area (MRP306), along Old Mill Street (immediately adjacent to the eastern boundary of the site). However, an evaluation at the former Coal Wharf site, excavated across the projected line of this putative roman road, failed to reveal any evidence of this (MRP236 and 237).

2.2.3 ***Medieval***: There is no archaeological evidence of medieval activity within the vicinity of the site, probably due to its destruction by industrial development in the area.

2.2.4 Documentary evidence records Land grants from the 13th century onwards which mention Annecotes and/or Antecotes, meaning an area of enclosure fields (cotes) or cottages near water (am) or to cottages (cote) of a Saxon named Anna. This suggests that the area was a piece of open land with scattered farms and cottages.

2.2.5 There is a record of Ancoats Hall, at the eastern end of the district, being purchased from the Bryrom family in 1596 by Oswald Mosley. For the next two centuries this became the seat of the Mosley's, lords of the Manor of Manchester. The Mosley's vacated the area in 1780s and the Hall was purchased by mill owner George Murray.

2.2.6 ***Industrial***: Laurent's Plan of 1793 shows the area divided up on a gridiron pattern with small pockets of industrial development along the line of Shooter's Brook, which ran through the central area of the site. Green's plan of 1794 (Fig 3) also shows that the south-east of the site is occupied by manufacturers including a pottery kiln and iron works.

2.2.7 There is a record of a water-powered cotton spinning mill at like Salvin's Factory (MRP206), 120m north of the site. The subsequent development of the steam engine and the construction of the canals in the area meant Ancoats became an attractive location for mill and dwelling builders.

2.2.8 The Ashton Canal (MRP307; 131m from the eastern boundary of the site) was approved by an Act of Parliament in 1792, completed by 1799 and entered Manchester at Piccadilly with cuts and basins along the western side of Ancoats Lane and across Pollard Street. This canal was built primarily to carry coal from Ashton-under-Lyme. By 1800 the Rochdale Canal (MRP311; directly adjacent to the western boundary of the site) had been constructed from the town to Ancoats Lane where it terminated. Between Laurent's map of 1793 and Johnson's map of 1819 the

construction of the canals had now become the focus for mill construction resulting in the culverting of Shooter's Brook within the central retail park boundary.

2.2.9 In 1798 a large mill was constructed on Union Street, later known as Murray's Complex (MRP103); within 100m of the eastern boundary of the site. This mill was expanded in 1801 and 1804, with the addition of new wings and warehouses.

2.2.10 Ancoats was the first industrial district in the world based on steam power. Between 1801 and 1851 the population had multiplied by at least four times in size as a result of factories being developed. This had a direct effect on the increase in need for workers dwellings which sprung up in these small spaces. Excavations along Loom Street by the University of Manchester Archaeological Unit have revealed dwellings that were arranged in back-to-back rows around narrow courts which provided communal yard space and latrines. Houses sometimes had cellars with thin party walls and excavations revealed domestic workshops as well.

2.2.11 Cartographic evidence, in the form of the 1851 OS Map, shows that back-to-back workers dwellings occupied the central area of the site, lined along Allum Street, Little Newton Street, Fawcett Street and John Street; which form regular grids with smaller streets including Henry Street, Back Cottage and Thomas Street. This map also shows that there is a saw mill positioned at the eastern end of the site, adjacent to Redhill Street and associated Timber Yard. Also depicted is an arm of the Ashton Canal which runs through the north-eastern corner of the site. The 1922 Edition OS Map illustrates the eradication of houses within the area and their replacement by commercial properties (Fig. 4).

2.2.12 During the First World War, mills in Ancoats were tasked with producing war materials. However, by 1950 the cotton spinning industry of Ancoats had virtually ceased. A compulsory purchase order was issued to demolish houses and abandoned derelict mills in the 1960s.

2.3 Potential

2.3.1 There is limited potential for encountering remains earlier than the industrial period. As such the main potential for the site lies with the industrial period structures depicted on historic mapping (Figs 3 and 4). These principally being industrial period terraced housing, in the form of nineteenth century back-to-back housing, to be encountered, principally in the form of former cellaring depicted on Green's Map of 1794 and the OS map of 1922. The Iron Works and Pottery depicted on Green's Map of 1794 now lie to the east of the currently proposed site.

3 PROJECT AIMS AND OBJECTIVES

3.1 General

3.1.1 The general objectives of the watching brief are:

i. To inform the scope for further archaeological investigation of the site.
ii. To identify, investigate and record any potential archaeological deposits or features.
iii. To recover, sample, and analyse any artefactual evidence or environmental remains that might help create a better understanding of the site's past use;
iv. To establish the level of preservation of any buried remains and provide a chronology of archaeological phasing sufficient enough to identify significance and inform mitigation;
v. To disseminate the results through reporting to a level appropriate of their significance, and;
vi. To compile a stable, organised and accessible archive.

3.2 Specific aims and objectives

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

i. to determine or confirm the general nature of any remains present;
ii. to determine or confirm the approximate date or date range of any remains, by means of artefactual or other evidence;
iii. to monitor the machine and hand dug test pits, and to record any deposits or features that may be exposed by these works; and
iv. to assist in informing the scope of works for any further archaeological works on the site.

4 PROJECT SPECIFIC EXCAVATION AND RECORDING METHODOLOGY

4.1 Scope of works

4.1.1 The watching brief will comprise the archaeological monitoring of machine and hand dug trial pits, and recording of any archaeological remains encountered during the groundworks associated with the proposed development. The groundworks will be undertaken by either a mechanical excavator fitted with a toothless ditching bucket or by hand, under direct supervision by a suitably qualified and experienced archaeologist at all times. Any spoil arisings will be checked, and any finds will be retained.

4.1.2 The attending archaeologist will be afforded the opportunity to investigate, clean and record any archaeological features identified. Where archaeological features are identified they may be subject to sample excavation to develop an understanding of their nature and recover appropriate samples and finds. If potentially significant archaeological remains are identified, the archaeologist will inform the client, as soon as practicable, who will then liaise with the Heritage Management Director for GMAAS.

4.2 Programme

4.2.1 It is anticipated that the fieldwork will take up to four weeks to complete, by a team consisting of a Project Archaeologist, Harlie Mason, under the management of Paul Dunn, Senior Project Manager.

4.2.2 ***Harlie Mason, Assistant Supervisor***: has extensive experience of a variety of archaeological sites, ranging in period and size. She has worked on large-scale open excavations, as well as on smaller urban sites in Chester, Liverpool and Formby. Harlie has also taken part in a workplace placement programme specifically on geoarchaeology, leading her to work on large geoarchaeological evaluations on Lower Thames Crossing and Newark South, as well as working on a range of borehole surveys.

4.2.3 ***Paul Dunn, Senior Project Manager***: has worked for OA North for over ten years and as a senior project manager since 2018. Paul has experience of working on a large number of archaeological sites of all sizes and has also gained a large amount of experience of working on and managing industrial period sites across the north-west of England.

4.2.4 All fieldwork undertaken by OA North is overseen by the Operations Manager, Alan Lupton MCIfA.

4.3 Site specific methodology

4.3.1 A summary of OA's general approach to excavation and recording can be found in *Appendix A*. Standard methodologies for Geomatics and Survey, Environmental evidence, Artefactual evidence and Burials can also be found below (*Appendices B*, *C*, *D* and *E* respectively).

4.3.2 Site specific methodologies will be as follows:

i. the Project Archaeologist will maintain a watching brief during all below ground excavations required by the development (*Appendix A1.2*);
ii. the Project Archaeologist will be afforded the opportunity to clean, investigate, record, and sample all archaeological remains to an appropriate degree. The hand excavation and recording methodology which will be implemented can be found in *Appendix A*, with any survey following the methodology in *Appendix B*;
iii. if potentially significant remains are identified, the Project Archaeologist will stop excavation works. They will inform the client, as soon as practicable, who will then consult with the Heritage Management Director for GMAAS, work will only continue with their approval;
iv. although unlikely, if human remains are encountered during the works, the client will be informed as soon as practicable, and they will consult with the Heritage Management Director for GMAAS. OA's standard methodologies will be applied, as per *Appendix E*, however, the intention would be to cease works in that area, record the remains and leave them *in situ*;
v. a photographic and textual record will be made of the stratigraphy and archaeological features encountered (*Appendices A1.12* and *A1.18*);
vi. spoil arising from the excavations will be scanned for finds (*Appendices A1.5 and D*) and palaeoenvironmental evidence (*Appendices A1.8* and *C*), which will be collected if deemed significant;
vii. at all times, the Project Archaeologist will work under the health and Safety directions of the site contractor.

5 PROJECT SPECIFIC REPORTING AND ARCHIVE METHODOLOGY

5.1 Programme

5.1.1 The final report will be completed within six weeks of completion of the fieldwork. A copy of the report in Adobe Acrobat (.pdf) format will be provided to the client. Once approved the client will then forward a copy to the Heritage Management Director for GMAAS for comment prior to final issue. Paper copies can also be provided on request.

5.1.2 The content of this report will be as defined in *Appendix F*.

5.2 Specialist input

5.2.1 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 *Appendix G*; in the event that additional input should be required, an updated list of specialists can be supplied.

5.3 Archive

5.3.1 The site archive will be deposited with Greater Manchester County Record Office following completion of the project. If no finds are made, the archive will be deposited online via the Archaeology Data Service (ADS). An Online Access to Index of Archaeological Investigations (OASIS) record will be established at the beginning of the project and finalised upon completion of the project, with a digital copy of the final report being uploaded.

5.3.2 A summary of OA's general approach to documentary archiving can be found in *Appendix H*.

6 HEALTH AND SAFETY

6.1 Roles and responsibilities

6.1.1 The Senior 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 Archaeologist, Harlie Mason, who implements these on a day to day basis. Paul Dunn and the Project Archaeologist are supported by OA North's Health and Safety Advisor, Fraser Brown.

6.1.2 The Director with responsibility for Health and Safety at OA is Dan Poore Tech IOSH (Chief Business Officer).

6.2 Method statement and risk assessment

6.2.1 A summary of OA's general approach to health and safety can be found in *Appendix I*. A risk assessment has also been undertaken and approved and will be kept on site, along with OA's standard Health and Safety file, which will contain all relevant health and safety documentation.

6.2.2 The Health and Safety file will be available to view at any time.

6.3 Monitoring of works

6.3.1 Archaeological investigations will be monitored, where appropriate, by Ian Miller, Heritage Management Director, Greater Manchester Archaeological Advisory Service. Any required visits will be carried out under the auspices of the Main Contractors Health and Safety Plan, and visitors will wear appropriate PPE and be accompanied at all times.

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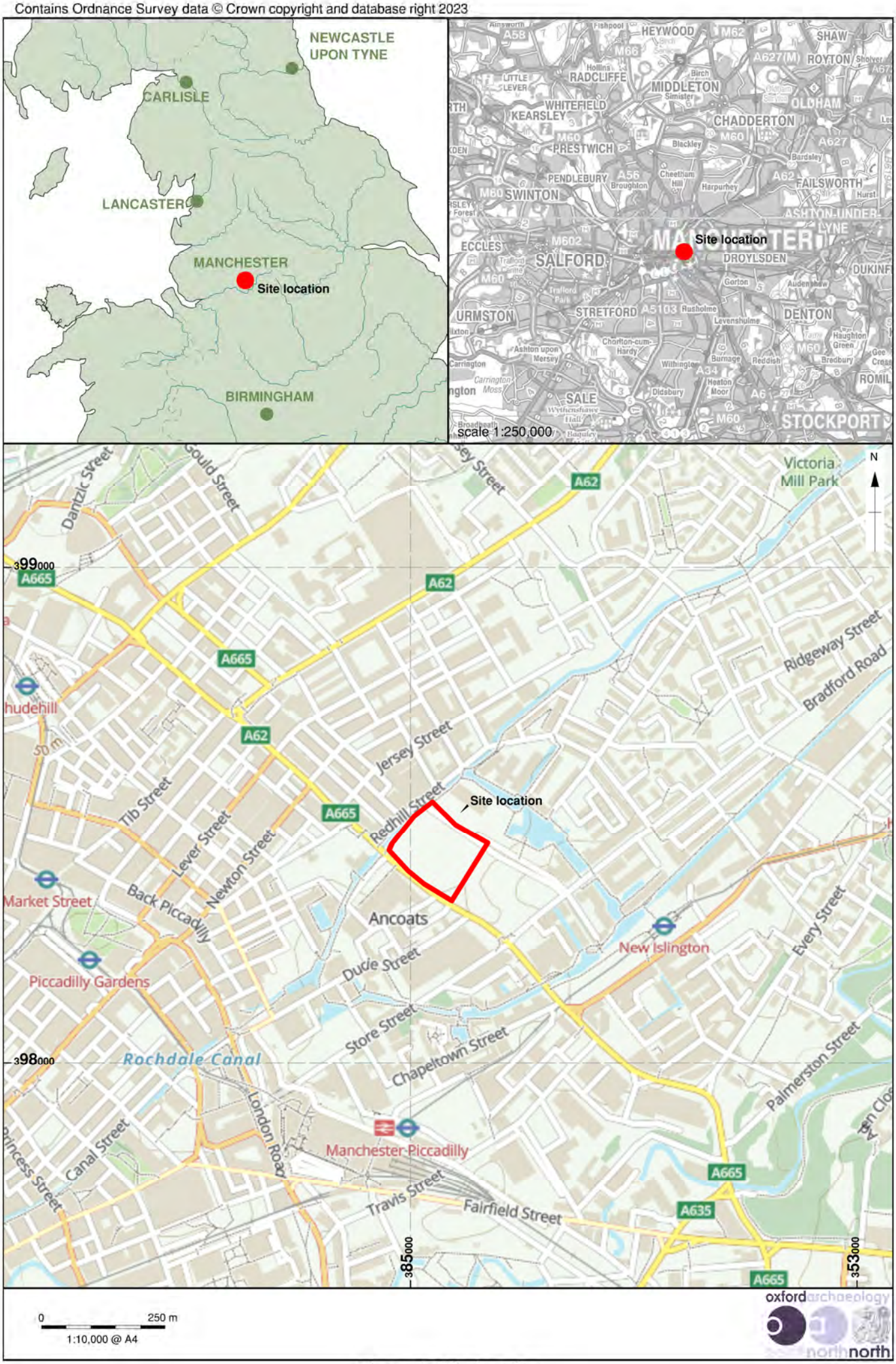


Figure 1: Site location

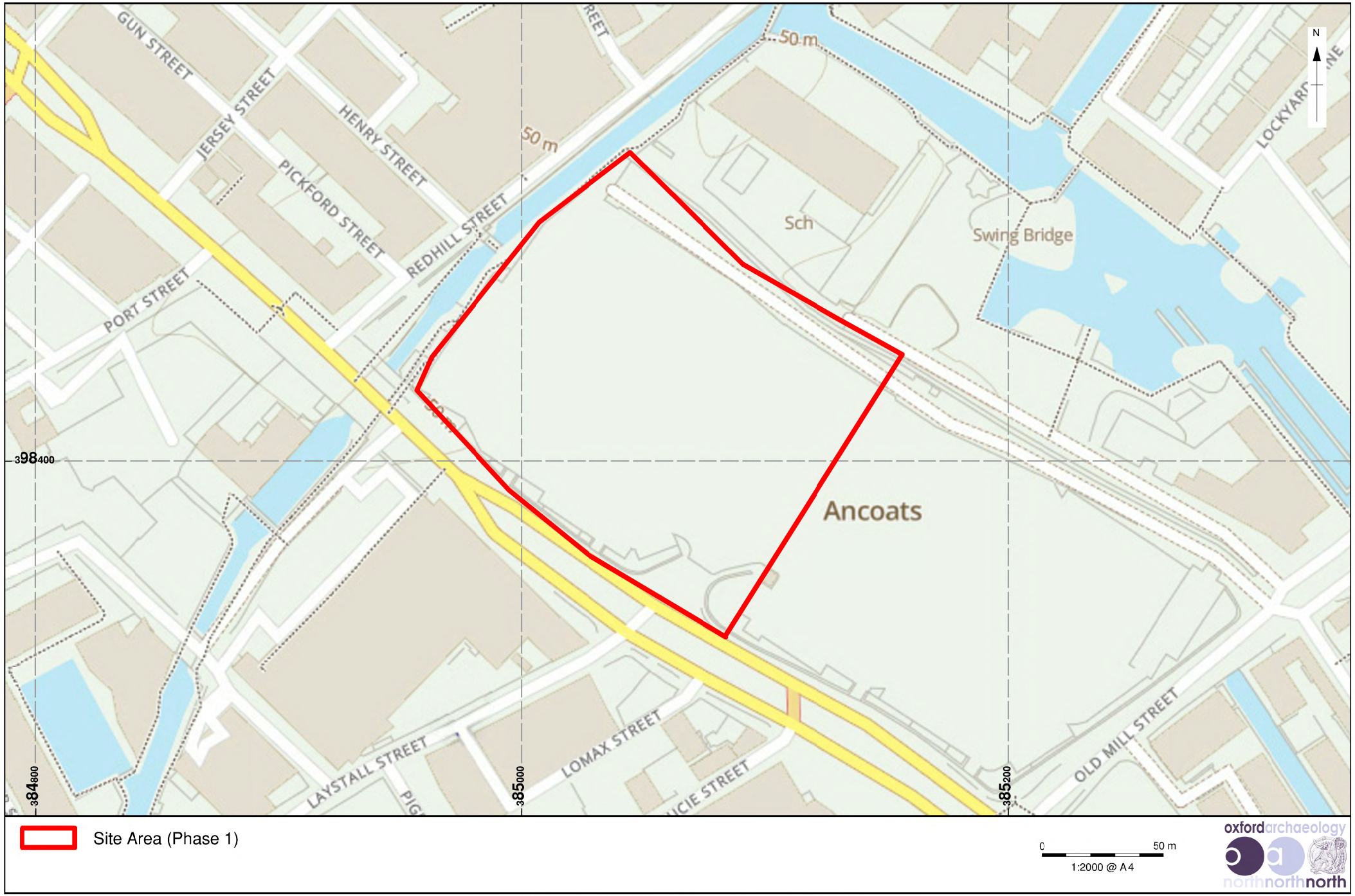


Figure 2: Phase 1 area to be monitored



Figure 3: Site area superimposed on Green's Map map of 1794



Figure 4: Site area superimposed on the Ordnance Survey 25":1 mile map of 1922

OA STANDARD FIELDWORK METHODOLOGY APPENDICES

The following methods and terms will apply, where appropriate, to all OA fieldwork unless varied by the accompanying detailed Written Scheme of Investigation.
Copies of all OA internal standards and guidelines referred to below are available on request.

APPENDIX A GENERAL EXCAVATION AND RECORDING METHODOLOGY

A.1 Standard methodology – summary

Mechanical excavation

A.1.1 An appropriate mechanical excavator will be used for machine excavation. This will normally be a JCB or 360° tracked excavator with a 1.5 m to 2 m wide toothless ditching bucket. For work with restricted access or working room a mini excavator may be used.

A.1.2 All mechanical excavation will be undertaken under direct archaeological supervision.

A.1.3 All undifferentiated topsoil or overburden of recent origin will be removed down to the first significant archaeological horizon, in successive, level spits.

A.1.4 Following mechanical excavation, all areas that require examination or recording will be cleaned using appropriate hand tools.

A.1.5 Spoil heaps will be monitored in order to recover artefacts to assist in the analysis of the spatial distribution of artefacts. Artefacts dating to after 1960 will be noted but not retained.

A.1.6 After recording, evaluation trenches and test pits will usually be backfilled with excavated material in reverse order of excavation, and compacted as far as is practicable with the mechanical excavator. Area excavations will not normally be backfilled.

Hand excavation

A.1.7 All investigation of archaeological levels will usually be by hand, with cleaning, examination and recording both in plan and section.

A.1.8 Within significant archaeological levels the minimum number and proportion of features required to meet the aims of the excavation will be hand excavated. Pits and postholes will usually be subject to a 50% sample by volume. Linear features will be sectioned as appropriate. More complex features such as those associated with funerary activity will usually be subject to 100% hand excavation.

A.1.9 In the case of evaluations, it is not necessarily the intention that all trial trenches will be fully excavated to natural stratigraphy, but the depth of archaeological deposits across the site will be assessed. The stratigraphy of a representative sample of the evaluation trenches will be recorded even where no archaeological deposits have been identified. Any excavation, both by machine and by hand, will be undertaken

with a view to avoiding damage to any archaeological features or deposits, which appear to be worthy of preservation in situ.

Recording

A.1.10 Written descriptions will be recorded on proforma sheets comprising factual data and interpretative elements.

A.1.11 Where stratified deposits are encountered a Harris matrix will be compiled during the course of the excavation.

A.1.12 Plans will normally be drawn at 1:100, but on urban or deeply stratified sites a scale of 1:50 or 1:20 will be used. Detailed plans will be at an appropriate scale. Burials will be drawn at scale 1:10 or recorded using geo-referenced digital photography.

A.1.13 The site grid will be accurately tied into the National Grid and located on the 1:2500 or 1:1250 map of the area.

A.1.14 A register of plans will be kept.

A.1.15 Long sections of showing layers will be drawn at 1:50. Sections of features or short lengths of trenches will be drawn at 1:20.

A.1.16 A register of sections will be kept.

A.1.17 Generally, all sections will be tied in to Ordnance Datum.

A.1.18 A full photographic record, illustrating in both detail and general context the principal features and finds discovered will be maintained. The photographic record will also include working shots to illustrate more generally the nature of the archaeological work.

A.1.19 Photographs will be recorded on OA Photographic Record Sheets.

A.2 Relevant industry standards and guidelines

A.2.1 The Chartered Institute for Archaeologists (ClfA) Standard and Guidance notes relevant to fieldwork are:

- Standard and guidance for archaeological field evaluation, 2014 (updated 2020)
- Standard and guidance for archaeological excavation, 2014 (updated 2020)
- Standard and guidance for an archaeological watching brief, 2014 (update 2020)

A.2.2 These will be adhered to at all times.

A.3 Relevant OA manual and other supporting documentation

A.3.1 All fieldwork will be undertaken in accordance with the requirements of the OA Field Manual (ed. D Wilkinson 1992), and the revised OA fieldwork manual (publication forthcoming).

A.3.2 Further guidance is provided to all excavators in the form of the OA 'Fieldwork Crib Sheets - a companion guide to the Fieldwork Manual'. These have been issued ahead of formal publication of the revised Fieldwork Manual.

APPENDIX B GEOMATICS AND SURVEY

B.1 Standard methodology - summary

B.1.1 The aim of OA methodology is to provide comprehensive survey cover of all investigation areas. Additionally, it is designed to provide coverage for any areas, beyond the original scope of the project, which arise as a result of further work. It provides digital plans of all required elements of the project and locates them within an overall grid.

B.1.2 It also maintains all necessary survey data and ensures that the relevant information is copied into the primary record, in order to ensure the integrity of the project archive. Furthermore, it ensures that all core data is securely stored and backed up. It establishes accurate project reference systems utilising a series of control stations and permanent base lines.

B.1.3 The survey will be conducted using a combination of GPS/GNSS (Global Positioning System/Global Navigation Satellite System), hand-measured elements, Total Station Theodolite (TST) survey utilising Reflectorless Electronic Distance Measurement (REDM), or photogrammetry where appropriate.

B.1.4 Before the main work commences, a network of control stations will be laid out encompassing the area as necessary. Control stations will be tied in to known points or existing features using rigorous metric observation. The control network will be set in using a TST to complete a traverse or using techniques as appropriate to ensure sufficient accuracy. A GNSS, or other appropriate method, will be used to orientate the control network to National Grid or other recognised coordinate system.

B.1.5 Control stations will be checked by closed traverse and/or GNSS, as appropriate. The accuracy of these control stations will be accessed on a regular basis and re-established accordingly. Control stations will be recorded on Survey Control Station sheets.

B.1.6 Each control station will be marked with a PGM (Permanent Ground Marker). Witness diagrams will include the full 3-D co-ordinates generated, a sketch diagram and measurements to at least three fixed details, written description of the mark and a photograph of the control point in its environs.

B.1.7 Prior to entry into the field all equipment will be checked, and all pre-survey information will be uploaded onto survey equipment as appropriate. Prior to conducting the survey, the site will be reconnoitred for locations for a viable control network and check the line of sight and any possible hindrance to survey. Daily record sheets will be kept recording daily tasks and conditions as appropriate.

B.1.8 All spatial data will be periodically downloaded uploaded and backed up to our central servers via ftp. It will be cleaned, validated and inspected.

B.1.9 All survey data will be documented on daily survey record sheets as necessary. Information entered on these sheets includes key set up information (Instrument height etc.) as well as daily variables and errors/comments. All survey data will be digitally recorded in a raw format and translated during the download process this

shall allow for any errors to be cross referenced with the daily survey record and corrected accordingly.

B.1.10 A summary of survey work will be produced as needed to access development and highlight problems. Technical support for the survey equipment and download software shall be available at all times. In those instances, where sites are remotely operated, all digital data will be backed up regularly via ftp to Oxford on a regular basis.

B.1.11 A site plan will initially be created by a rapid survey of relevant archaeological features by mapping their extent using a combination of TST and GNSS. This will form the basis for deciding excavation strategy and will be updated as the excavation clarifies the extent of, and relationships between, archaeological features.

B.1.12 Areas of complex stratigraphy will be hand drawn or recorded by photogrammetry as appropriate. Where hand drawn, at least two Drawing Points (DPs) will be set in as a baseline and measurements taken off this by tape and offset. The hand drawn plans will be referenced to the digitally captured pre-site plan by measuring in the DPs with a TST or GNSS. These hand drawn elements will then be scanned in, geo-referenced using the DPs as reference points and digitised following OA's digitising protocols. For further details on hand planning procedure please refer to the fieldwork guidelines.

B.1.13 Photogrammetry may also be used to record standing structures or burials. This will be carried out in line with Standard OA procedures for photogrammetry.

B.1.14 Survey data recorded in the field will be downloaded using appropriate downloading software, and saved as an AutoCAD Map DWG file, or an ESRI Shapefile. These files will be regularly updated and backed up with originals being stored on an OA server in Oxford.

B.1.15 All drawings will be composed of closed polygons, polylines or points in accordance with the requirements of GIS construction and OA Geomatics protocols. Once created, additional GIS/CAD work will normally be carried out at the local OA central office or at on-site remote locations when appropriate. Support for all GIS/CAD work will be available from OA’s Oxford Office during normal office hours. The aim of the GIS/CAD work is to produce workable draft plans, which can be produced as stand-alone products, or can be readily converted to GIS format. Any hand-drawn plans will be scanned and digitised on site in the first instance. Subsequent plans will be added to the main drawing as it develops.

B.1.16 All plan scans will be numbered according to their plan site number. Digital plans will be given a standard new plan number taken out from the site plan index.

B.1.17 Information (metadata) on all other digital files will be created and stored as appropriate. At the end of the survey all data recorded will be made available for archiving purposes.

B.2 Relevant industry standards and guidelines

B.2.1 Historic England, 2017 Understanding the Archaeology of Landscapes A Guide to Good Recording Practice

B.2.2 Historic England, 2015 Metric Survey Specifications for Cultural Heritage (3rd edn)

B.2.3 Historic England, 2016 Understanding Historic Buildings: A Guide to Good Recording Practice

B.2.4 Historic England, 2017 Photogrammetric Applications for Cultural Heritage: Guidance for Good Practice

B.3 Relevant OA manual and other supporting documentation

B.3.1 OA South Metric Survey, Data Capture and Download Procedures

B.3.2 OA South Digitising Protocols

B.3.3 OA South GIS Protocols

B.3.4 These will be superseded by the OA South Geomatics Manual (in progress).

APPENDIX C ENVIRONMENTAL EVIDENCE

C.1 Standard methodology – summary

C.1.1 Different environmental and geoarchaeological sampling strategies may be employed according to established research targets and the perceived importance of the strata under investigation. Where possible an environmental specialist(s) will visit the site to advise on sampling strategies. Sampling methods will follow guidelines produced by Historic England and Oxford Archaeology. A register of samples will be kept. Specialists will be consulted where non-standard sampling is required (e.g. TL, OSL or archaeomagnetic dating) and if appropriate will be invited to visit the site and take the samples.

C.1.2 Geoarchaeological sampling methods are site specific, and methodologies will be designed in consultation with the geoarchaeological manager on a site by site basis.

C.1.3 Bulk soil samples, where possible of 40 litres or 100% of a deposit if less is available, will be taken from potentially datable features and layers for flotation for charred plant remains and for the recovery of small bones and artefacts. Larger soil samples (up to 100L) may be taken for the complete recovery of animal bones, marine shell and small artefacts from appropriate contexts. Smaller bulk samples (general biological samples) of 10-20 litres will be taken from any waterlogged deposits present for the recovery of macroscopic plant remains and insects. Series of incremental 2L samples may be taken through buried soils and deep feature fills for the recovery of snails and/or waterlogged plant remains, depending on the nature of the stratigraphy and of the soils and sediments. Columns will be taken from buried soils, peats and waterlogged feature fills for pollen and/or phytoliths, diatoms, ostracods and foraminifera if appropriate. Soil samples will be taken for soil investigations (particle size, organic matter, bulk chemistry, soil micromorphology etc.) and possibly for metallurgical analysis in consultation with the appropriate specialists.

C.1.4 Bulk samples from dry deposits will be processed by standard water flotation using a modified Siraf-style machine and meshes of 0.25mm (flot) and 0.5 or 1mm depending on sediment type and like modes of preservation (residue). Heavy residues will be wet sieved, air dried and sorted. Samples taken exclusively for the recovery of bones, marine shell or artefacts will be wet sieved to 2mm. Waterlogged samples (1L sub-sample) and snail samples (2L) will be processed by hand flotation with flots and residues collected to 0.25mm (waterlogged plants) and 0.5mm (snails) respectively; these flots and residues will be sorted by the specialist. Samples specifically taken for insects, pollen, other microflora and microfauna, metallurgy and soil analysis will be submitted as whole earth to the appropriate specialists or processed following their instructions.

C.2 Relevant industry standards and guidelines

C.2.1 Historic England, 2010 Waterlogged Wood: Guidelines on the recording, sampling, conservation and curation of waterlogged wood.

C.2.2 Historic England, 2018 Waterlogged Organic Artefacts: Guidelines on their Recovery, Analysis and Conservation.

C.2.3 Historic England, 2011 Environmental Archaeology. A guide to the theory and practice of methods, from sampling and recovery to post excavation, (2nd ed)

C.2.4 Historic England, 2004 Dendrochronology: Guidelines on Producing and Interpreting Dendrochronological Dates (revision due 2020).

C.2.5 University of Bradford, 2019 Archaeomagnetism: Magnetic Moments in the Past https://www.brad.ac.uk/archaeomagnetism/

C.2.6 Historic England, 2008 Luminescence Dating. Guidelines on Using Luminescence Dating in Archaeology (revision due 2020).

C.2.7 Historic England, 2008 Guidelines for the Curation of Waterlogged Macroscopic Plant and Invertebrate Remains (currently being revised).

C.2.8 Historic England, 2015 Archaeometallurgy. Guidelines for Best Practice.

C.2.9 Historic England, 2015 Geoarchaeology. Using Earth Sciences to Understand the Archaeological Record.

C.2.10 Historic England, 2017 Organic Residue Analysis and Archaeology.

C.2.11 Baker, P and Worley, F, 2019 Animal Bones and Archaeology: Recovery to archive. Historic England

C.3 Relevant OA manual and other supporting documentation

C.3.1 Oxford Archaeology 2017. Environmental Sampling Guidelines, 4th ed.

APPENDIX D ARTEFACTUAL EVIDENCE

D.1 Standard methodology - summary

D.1.1 Before a site begins arrangements concerning the finds will be discussed with the Finds Team Leader. Information will be provided by the project manager about the nature of the site, the expected size and make-up of the finds assemblage and any site specific finds retrieval strategies. On-site requirements will be discussed and a conservator appointed who can be called on to make site visits if required. Special requirements regarding particular categories of material will be raised at this early stage for instance the likelihood of recovering assemblages of waterlogged material, large timbers, quantities of structural stone or ceramic building material. Specialists may be required to visit sites to discuss retrieval strategies.

D.1.2 The project manager will supply the Finds Team Leader with contact details of the landowner of the site so that consent to deposit any finds resulting from the investigation can be sought.

D.1.3 The on-site retrieval, lifting and short term packaging of bulk and small finds will follow the detailed guidelines set out in the OA Finds Manual (sections 2 and 3), First Aid for Finds and the UKIC conservation guidelines No.2.

D.1.4 All finds recovered from site will be transported to an OA regional office for processing; local sites will return finds at the end of each day, away based sites at the end of each week. Special arrangements can be discussed for certain sites with the Team Leader before the start of a project. Larger long running sites may in some instances set up on-site processing units to deal with the material from a particular site.

D.1.5 All finds qualifying as Treasure will be removed to a safe place and reported to the local Coroner according to the procedures relating to the Treasure Act (1996), and the Treasure (Designation) Order 2002. Where removal cannot be effected on the same working day as the discovery, suitable security measures will be taken to protect the finds from theft.

D.1.6 Each box of finds will be accompanied by a finds context checklist itemising the finds within each box. The number of bags of finds from each context and individual small find from each context will be recorded. A member of the processing team will check the list when it arrives in the department. There are separate forms for finds recovered from fieldwalking.

D.1.7 The processing programme is reviewed on a weekly basis and priorities are worked out after discussions with the Fieldwork Team Leader and the Post-excavation Team Leader. Project managers will keep the Finds Team Leader informed of any pressing deadlines that they are aware of. All finds from evaluations are dealt with as a matter of priority.

D.1.8 All bulk finds are washed (where appropriate), marked, bagged and boxed by the processing team according to the guidelines set out in section 4 and 5 of the OA Finds Manual, First-aid for finds and the UKIC guidelines No.2. They must also take into

account the requirements of the receiving museum. Primary data recording count and weight of fragments by material from each context is recorded on the site database.

D.1.9 Unstable and sensitive objects are recorded onto the database and then packaged and stored in controlled environments according to their individual requirements. The advice of a conservator will be sought for sensitive objects in need of urgent conservation. All metalwork will be x-rayed prior to assessment (and to meet the requirements of most receiving museums).

D.1.10 Finds recovered from the environmental sample processing will be incorporated into the main assemblage and added to the database.

D.1.11 On completion of the processing and data entry a finds file for each archaeological investigation will be produced, a summary of which is available for the project manager. The assemblage is allocated an OA number for storage purposes. Bulk finds are stored on a roller racking system, metals in a secure controlled storage and organic finds are refrigerated where possible.

D.1.12 The movement of finds in and out of the storage areas is strictly monitored and recorded. Carbon copy transit forms exist to record this information. Finds will not be removed from storage without the prior knowledge of the Finds Team Leader.

D.1.13 Finds information summarised in the finds compendium is used to assess the finds requirements for the post excavation stages of the project. The Team Leader holds a list of all specialists used by OA (see below) both internal and external.

D.1.14 On completion of the post excavation stage of the project the team prepares the finds assemblage for deposition with the receiving museum. Discussions will be held with the museum, the excavator and the Finds Team Leader to finalise any selection, retention or discard policy. Most museums issue strict guidelines for the preparation of archives for deposition with their individual labelling, packaging and recording requirements.

D.2 Relevant industry standards and guidelines

D.2.1 CIfA, 2014 (updated 2020) Standard and guidance for the collection, documentation, conservation and research of archaeological materials

D.2.2 Society of Museum Archaeologists, 1993 Selection, retention and dispersal of Archaeological Collections. Download available via http://www.socmusarch.org.uk/publica.htm)

D.2.3 UKIC, 1983 Packaging and Storage of Freshly-Excavated Artefacts from Archaeological Sites. Conservation Guidelines No.2. Archaeology Section, United Kingdom Institute for Conservation.

D.2.4 UKIC, 1988 Excavated Artefacts and Conservation: UK sites Revised Edition. Conservation Guidelines No.1. Archaeology Section, United Kingdom Institute for Conservation.

D.2.5 Watkinson, D E & Neal, V, 1998 First Aid for Finds (3rd edition). RESCUE & UKIC

D.3 Relevant OA manual and other supporting documentation

D.3.1 Allen, L, and Cropper, C (internal publication only) Oxford Archaeology Finds Manual.

APPENDIX E HUMAN REMAINS

E.1 Standard methodology - summary

E.1.1 Human remains will not be excavated without a relevant licence/faculty and, where applicable (for example, a post medieval cemetery), a risk assessment from the local environmental officer.

E.1.2 All human remains will be treated with due care and regard to the sensitivities involved, and will be screened from the public throughout the course of the works.

E.1.3 Excavation will be undertaken in accordance with CIfA (Roberts and McKinley 1993), Historic England (2018), the Advisory Panel on the Archaeology of Burials in England (APABE, 2015, 2017) and British Association of Biological Anthropology and Osteoarchaeology Code of Practice (2019) and Code of Ethics (2019). For crypts and post-medieval burials, the recommendations set out by the CIfA (Cox 2001) and by the Association of Diocesan and Cathedral Archaeologists and APABE (2010) are also relevant.

E.1.4 In accordance with recommendations set out in the Historic England and Church of England (2005) and updated by the Advisory Panel on the Archaeology of Burials in England (2017), skeletons will not be excavated beyond the limits of the trench, unless they are deemed osteologically or archaeologically important.

E.1.5 Where any soft tissue survives and/or materials (for example, inner coffins, mattresses and other paddings) soaked in body liquor, no excavation or handling of the remains will take place until an appropriate risk assessment has been undertaken. Relevant protocols (i.e. Cox 2001) for their excavation, recording and removal will be adhered to.

E.1.6 OA does not excavate or remove modern burials (those less than 100 years old) and does not remove or open sealed lead coffins. Appropriate PPE (e.g. chemical suit, latex gloves) will be worn by all staff when working with lead coffins.

E.1.7 Graves and their contents will be hand excavated in plan. Each component (for example, skeleton, grave cut, coffin (or remains of), grave fill) will be assigned a unique context number from a running sequence. A group number will also be assigned to all of these, and small finds numbers to features such as coffin nails, hobnails and other grave goods (as appropriate).

E.1.8 Soil samples will be normally taken during the excavation of inhumations, usually from the region of the skull, chest, right hand, left hand, abdomen and pelvis, right foot and left foot. Infants (circa. less than 5 years) will normally be recovered as bulk samples. Soil samples will also be taken from graves that appear to contain no human bone.

E.1.9 Burials (including the skeleton, cremation, coffin fittings, coffin, urn, grave goods / other) will be recorded by photographic and written record using specialised pro forma context sheets, although these records may only include schematic representations of the location and position of the skeletons, depending on the nature and circumstances of the burial.

E.1.10 Where digital imaging is used it will be done in accordance with the British Association of Biological Anthropology and Osteoarchaeology Recommendations on the Ethical Issues Surrounding 2D and 3D Digital Images of Human Remains (2019).

E.1.11 Where necessary, hand drawn plans (usually at 1:10, sometimes 1:5) will be made, especially of contexts where required details cannot be adequately seen using photography (for example, urned cremations; undisturbed hob nails).

E.1.12 Levels will be taken. For inhumations this will be on the skull, pelvis and feet as a minimum.

E.1.13 Human remains that are exhumed will be bagged and labelled according to skeletal region and carefully packed into suitable containers (for example, acid free cardboard boxes) and transported to a suitable storage location. Any associated coffins and coffin fittings will be contained with the human remains wherever possible.

E.1.14 Unurned cremations will not usually be half sectioned, but excavated in spits and/or quadrants (i.e. large deposits or spreads), or recovered as a bulk sample.

E.1.15 Wherever possible, urned cremations will be carefully bandaged, recovered whole and will be excavated in spits in the laboratory, as per the recommendations of McKinley (2004, 2017).

E.1.16 Unless deemed osteologically or archaeologically important disarticuled bone / charnel will be collected and reserved for re-burial if immediate re-internment as close to its original position is not practicable. In some instances, a rapid scan of this material may be undertaken by a qualified osteologist, if deemed relevant.

E.1.17 If undisturbed, pyre sites will normally be excavated in quadrants, at the very least in 0.5 m blocks of 0.5 m spits.

E.1.18 Pyre debris dumps will be half sectioned or quadranted and will be subject to 100% sampling.

E.1.19 Wooden and lead coffins and any associated fittings, including fixing nails will be recorded on a pro forma coffin recording sheet. All surviving coffin fittings will be recorded by reference to Reeve and Adams (1993) and the unpublished master catalogue that is being compiled by OA. Where individual types cannot be paralleled, they will be drawn and/ or photographed and assigned a style number. Biographical details obtained from legible departum plate inscriptions will be recorded and further documentary research will be made.

E.1.20 Funerary structures, such as brick shaft graves and/or vaults will be recorded by photogrammetry or hand-drawn at a scale of 1:10 or 1:20, as appropriate. Location, dimensions and method of construction will be noted, and the structure added to the overall trench plan.

E.1.21 Memorials, including headstones, revealed within the areas of development will be recorded irrespective of whether they are believed to be in situ.

E.1.22 Where required, memorials will be accorded an individual context number and will also be included as part of the grave group, if the association with a burial is clear.

E.1.23 Memorials will be recorded on pro-forma context sheets, based on and following the guidelines set out by Mytum (2002), and will include details of:

- Shape
- Dimensions
- Type of stone used
- Condition, completeness and fragmentation of stones, no longer in original positions
- Iconography (an illustration may best describe these features)
- Inscription (verbatum record of inscription; font of the lettering)
- Stylistic type

E.2 Relevant industry standards and guidelines

E.2.1 Advisory Panel on the Archaeology of Burials in England, 2013 Science and the Dead. A guideline for the destructive sampling of archaeological human remains for scientific analysis. English Heritage Publishing.

E.2.2 Advisory Panel on the Archaeology of Burials in England, 2017 Guidance for Best Practice for the Treatment of Human Remains Excavated from Christian Burial Grounds in England

E.2.3 Advisory Panel on the Archaeology of Burials in England, 2015 Large Burial Grounds. Guidance on sampling in archaeological fieldwork projects

E.2.4 Association of Diocesan and Cathedral Archaeologists and APABE, 2010 Archaeology and Burial Vaults. A guidance note for churches. Guidance Note 2

E.2.5 British Association of Biological Anthropology and Osteoarchaeology. 2019a Code of Practice (http://www.babao.org.uk/index/ethics-and-standards)

E.2.6 British Association of Biological Anthropology and Osteoarchaeology. 2019b Code of Ethics (http://www.babao.org.uk/index/ethics-and-standards)

E.2.7 British Association of Biological Anthropology and Osteoarchaeology, 2019c Recommendations on the Ethical Issues Surrounding 2D and 3D Digital Images of Human Remains (http://www.babao.org.uk/index/ethics-and-standards)

E.2.8 Cox, M, 2001 Crypt archaeology. An approach. CIfA Paper No. 3

E.2.9 English Heritage, 2002 Human Bones from Archaeological Sites. Guidelines for producing assessment documents and analytical reports

E.2.10 Historic England, 2018 The Role of the Human Osteologist in an Archaeological Fieldwork Project. Swindon, Historic England

E.2.11 McKinley, J, and Roberts, C, 1993 Excavation and post-excavation treatment of cremated and inhumed human remains, CIfA Technical Paper No. 13

E.2.12 McKinley, J, 2004 Compiling a skeletal inventory: cremated human bone. In Brickley, M, and McKinley, J (eds) Guidelines to the Standards for Recording Human Remains, CIfA Technical Paper No. 7. 9-13

E.2.13 McKinley, J, 2017 Compiling a skeletal inventory: cremated human bone. In Mitchell P, and Brickley, M (eds) Updated Guidelines to the Standards for Recording Human Remains, CIfA 14-19

E.2.14 Mitchell P, and Brickley, M (eds) Updated Guidelines to the Standards for Recording Human Remains, CIfA 2017

E.2.15 Mytum, H, 2000 Recording and Analysing Graveyards. CBA Handbook No. 15

E.2.16 Reeve, J, and Adams, M, 1993 The Spitalfields Project. Volume I – The Archaeology Across the Styx. CBA Research Report No. 85

E.2.17 The Human Tissue Act 2004

E.3 Relevant OA manual and other supporting documentation

E.3.1 Loe, L, 2008 The Treatment of Human Remains in the Care of Oxford Archaeology. Oxford Archaeology internal policy document

E.3.2 Oxford Archaeology 2018 *Fieldwork Manual Human Remains* unpublished

APPENDIX F REPORTING

F.1 Standard methodology - summary

F.1.1 For Watching Briefs and Evaluations, the style and format of the report will be determined by OA, but will include as a minimum the following:

- A location plan of trenches and/or other fieldwork in relation to the proposed development.
- Plans and sections of features located at an appropriate scale.
- A section drawing showing depth of deposits including present ground level with Ordnance Datum, vertical and horizontal scale.
- A summary statement of the results.
- A table summarising the features, classes and numbers of artefacts contained within, spot dating of significant finds and an interpretation.
- A reconsideration of the methodology used, and a confidence rating for the results.
- An interpretation of the archaeological findings both within the site and within their wider landscape/townscape setting.

F.1.2 For Excavations, a Post-Excavation Assessment and Project Design will generally be prepared, as prescribed by Historic England Management of Research Projects in the Historic Environment (MoRPHE) 2015, Section 2.3. This will include a Project Description containing:

- A summary description and background of the project.
- A summary of the quantities and assessment of potential for analysis of the information recovered for each category of site, finds, dating and environmental data. Detailed assessment reports will be contained within appendices.
- An explicit statement of the scope of the project design and how the project relates to any other projects or work preceding, concurrent with or following on from it.
- A statement of the research aims of the fieldwork and an illustrated summary of results to date indicating to what extent the aims were fulfilled.
- A list of the project aims as revised in the light of the results of fieldwork and the current post-excavation assessment process.

F.1.3 A section on Resources and Programming will also be produced, containing:

- A list of the personnel involved indicating their qualifications for the tasks undertaken, along with an explanation of how the project team will communicate, both internally and externally.
- A list of the methods which will be used to achieve the revised research aims.

- A list of all the tasks involved in using the stated methods to achieve the aims and produce a report and research archive in the stated format, indicating the personnel and time in days involved in each task. Allowance should be made for general project-related tasks such as monitoring, management and project meetings, editorial and revision time.
- A cascade or Gantt chart indicating tasks in the sequence and relationships required to complete the project. Due allowance will be made for leave and public holidays. Time will also be allowed for the report to be read by a named academic referee as agreed with the County Archaeological Officer, and by the County Archaeological Officer.
- A report synopsis indicating publisher and report format, broken down into chapters, section headings and subheadings, with approximate word lengths and numbers and titles of illustrations per chapter. The structure of the report synopsis should explicitly reflect the research aims of the project.

F.1.4 The Project Design will be submitted to the County Archaeological Officer or equivalent for agreement.

F.1.5 Under certain circumstances (e.g. with very small mitigations), and as agreed with the County Archaeological Officer or equivalent, a formal Assessment and Project Design may not be required and either the project will continue straight to full analysis, or a simple Project Proposal (MoRPHE 2015 Section 2.1) will be produced prior to full analysis. This proposal may include:

- A summary of the background to the project
- Research aims and objectives
- Methods statement outlining how the aims and objectives will be achieved
- An outline of the stages, products and tasks
- Proposed project team
- Estimated overall timetable and budget if appropriate.

F.1.6 Once the post-excavation Project Design or Project Proposal has been accepted, the County Archaeological Officer or their appointed deputy will monitor the progress of the post-excavation project at agreed points. Any significant variation in the project design will be agreed with the County Archaeological Officer.

F.1.7 The results of the project will be published in an appropriate archaeological journal or monograph. The appropriate level of publication will be dependent on the significance of the fieldwork results and will be agreed with the County Archaeological Officer. An OASIS (Online Access to the Index of Archaeological Investigations) form will be completed for each project as per Historic England guidelines.

F.2 Relevant industry standards and guidelines

F.2.1 Oxford Archaeology (OA) adheres to the national standards in post-excavation procedure as outlined in Historic England's Management of Research Projects in the Historic Environment (MoRPHE; HE 2015). Furthermore, all post-excavation projects

take into account the appropriate regional research frameworks as well as national research agendas such as the Framework for Historic Environment Activities & Programmes in Historic England (SHAPE; EH 2008).

APPENDIX G LIST OF SPECIALISTS REGULARLY USED BY OA

G.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
John Cotter	Medieval and Post Medieval pottery, Clay Pipe and CBM	BA (Hons), MCIfA
Dr Alex Davies	Prehistoric Pottery	BA (Hons), MA, PhD, ACIfA
Edward Biddulph	Roman Pottery	BA (Hons), MA, MCIfA
Kate Brady	Roman Pottery	BA, ACIfA
Cynthia Poole	CBM and Fired Clay	BA (Hons), MSc
Leigh Allen	Metalwork and worked bone	BA (Hons), PGDip
Anni Byard	Metalwork, coins and glass	MSx, MCIfA
Dr Ruth Shaffrey	Worked stone artefacts	BA, PhD, MCIfA
Dr Rebecca Nicholson	Fish and Bird Bone	BA (Hons), MA, D.Phil, MCIfA, FSA Scot
Dr Mairead Rutherford	Pollen	BSc, MSc
Ian Smith	Animal Bone	BA (Hons), MSc, PCIfA
Dr Martyn Allen	Animal Bone	BA (Hons), MA, PhD
Adrienne Powell	Animal Bone	BA (Hons), MA
Dr Denise Druce	Charred plant remains, charcoal and pollen	BA (Hons), PhD, MCIfA
Sharon Cook	Charred plant remains	BSc, MSc, ACIfA
Elizabeth Stafford	Geoarchaeology and land snails	BA (Hons), MSc
Carl Champness	Geoarchaeology	BA (Hons), MSc, ACIfA
Nicola Scott	Archaeological archive deposition	BA (Hons Dunelm)
Mike Donnelly	Flint	BSc, MCIfA
Dr Louise Loe	Human Bone	BA PhD, MCIfA, BABAO
Helen Webb	Human Bone	BSc, MSc, MCIfA, BABAO
Mark Gibson	Human Bone	BA, MSc, ACIfA, BABAO
Dr Lauren McIntyre	Human Bone	BSc, MSc, PhD, MCIfA, BABAO
Zoe Ui Choileain	Human Bone	Pg Dip, MA, Msc, BABAO
Natasha Dodwell	Human Bone	BA, MSc, BABAO

External archaeological specialists regularly used by OA

Specialist	Specialism	Qualifications
Lynne Keys	Slag	BA (Hons)
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 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
Dr David Dungworth	Archaeometallurgy and Glassworking	BA (Hons), PhD

APPENDIX H DOCUMENTARY ARCHIVING

Standard methodology – summary

H.1.1 The documentary archive constitutes all the written, drawn, photographic and digital records relating to the set-up, fieldwork and post-excavation phases of the project. This documentary archive, together with the artefactual and environmental ecofact archive collectively forms the record of the site. The report is part of the documentary archive, and the archive must provide the evidence that supports the conclusions of the report, but the archive may also include data which exceeds the limitations of research parameters set down for the report and which could be of significant value to future researchers.

H.1.2 At the outset of the project OA Archive manager will contact the relevant local receiving museum or archive repository to notify them of the imminent start of a new fieldwork project in their collecting area. Relevant local archiving guidelines will be observed and site codes, which integrate with the receiving repository, will be agreed for labelling of archives and finds.

H.1.3 Where there is currently no receiving museum for the project archive, although responsibility for the archive ultimately lies with the client, OA will hold the archive on their behalf for a period of up to 3 years after completion of the report, after which time (in the event that a suitable depository has not been secured) provision for further storage of the archive will be made in agreement with Oxford Archaeology, the client and the relevant planning archaeologist.

H.1.4 During the course of the project the Archive team will assist the Project Manager in the management of the archive including the cataloguing and development technique suitable for photographic archive requirements.

H.1.5 The hard copy site archive will be security copied by scanning to PdFA and a copy of this will be housed on the OA Archive Server. A full digital copy of the archive, including scanned hard copy and born digital data, will be deposited with and made publicly available on-line through the ADS. A further copy will be maintained on the OA server and if requested a copy on disk will also be sent to the receiving museum with the hard copy. This will act as a safeguard against the accidental loss and the long-term degeneration of paper records and photographs.

H.1.6 Born digital data will only be printed to hard copy for the receiving museum where practical. Archive elements that need maintaining in digital form will be sent to ADS in accordance with Arches Standard and ADS guidelines. A copy will be sent to the receiving museum by CD and back-up copies will be stored on the OA digital network. In most cases a digital copy of the report will be included in the OASIS project library hosted by ADS.

H.1.7 Prior to deposition the Archive team will contact the museum regarding the size and content of the archive and discuss any retention and dispersal policies which may be applicable in line with local and SMA Guidelines ' Selection, Retention & Dispersal of Archaeological Collections' 1993.

H.1.8 The site archive will then be deposited with the relevant receiving museum or repository at the earliest opportunity unless further archaeological work on the site is expected. The documentary archive will include correspondence detailing landowner consent to deposit the artefacts and any copyright licences in accordance with the receiving museum guidelines. Deposition charges will be required from the client as part of the project costs, but the level of the fee is set by the receiving body and may be subject to change during the lifespan of the project. Changes to archiving charges beyond OA's control will be passed across to the client.

H.1.9 Oxford Archaeology will retain full copyright of any commissioned reports, tender documents, or other project documents, under the Copyright, Designs and Patents Act 1988 with all rights reserved; excepting that it will provide the receiving repository or museum for the archive with a full licence for use to the client in all matters directly relating to the project as described in the Written Scheme of Investigation, and in line with the relevant receiving body guidelines.

H.1.10 OA will advise the receiving repository or museum for the archive of 3rd party materials supplied in the course of projects which are not OA's copyright.

H.1.11 OA undertakes to respect all requirements for confidentiality about the client's proposals provided that these are clearly stated. It is expected that such conditions shall not unreasonably impede the satisfactory performance of the services required. Archaeological findings and conclusions can be kept confidential for a limited period but will be made publicly available in line with the above procedure either after a specified time period agreed with the client at the outset of the project, or where no such period is agreed, after a reasonable period of time. It is expected that clients respect OA's general ethical obligations not to suppress significant archaeological data for an unreasonable period.

H.2 Relevant industry standards and guidelines

H.2.1 At the end of the project the site archive will be ordered, catalogued, labelled and conserved and stored according to the following national guidelines:

H.2.2 EAC, 2014 A Standard and Guide to Best Practice for Archaeological Archiving in Europe (EAC Guidelines 1)

H.2.3 CIfA, 2014 (Updated 2020) Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives

H.2.4 Brown, D, 2011 Archaeological Archives A Guide to Best Practice in Creation, Compilation, Transfer and Curation. AAF

H.2.5 UKIC, 1990 Guidelines for the preparation of excavation archives for long-term storage

H.2.6 SMA, 2020 Standards and Guidance in the Care of Archaeological Collections

H.2.7 Local museum guidelines such as Museum of London Guidelines: (http://www.museumoflondonarchaeology.org.uk/English/ArchiveResearch/DeposResource) will be adopted where appropriate to the archive collecting area.

H.2.8 The site archive will be prepared to at least the minimum acceptable standard defined in Management of Archaeological Projects 2, Historic England 1991.

H.3 Relevant OA manual and other supporting documentation

H.3.1 The OA Archives Policy.

APPENDIX I HEALTH AND SAFETY

I.1 Standard Methodology - summary

I.1.1 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.

I.1.2 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).

I.2 Relevant industry standards and guidelines

I.2.1 All work will be carried out according to the requirements of all relevant legislation and guidance, including, but not exclusively:

I.2.2 The Health and Safety at Work Act (1974).

I.2.3 Management of Health and Safety at Work Regulations (1999).

I.2.4 Manual Handling Operations Regulations 1992 (as amended).

I.2.5 The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (2013).

I.2.6 The Construction (Design and Management) Regulations (2015).

I.2.7 Relevant OA manual and other supporting documentation

I.2.8 The OA Health and Safety Policy.

I.2.9 The OA Site Safety Procedures Manual.

I.2.10 The OA Risk Assessment templates.

I.2.11 The OA Method Statement template.

I.2.12 The OA Construction Phase Plan template.

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APPENDIX B TRIAL PIT DESCRIPTIONS AND CONTEXT INVENTORY

Trial Pit 1						
General description					Orientation	N/S
Trial pit revealed a waterlogged deposit containing waste material. Natural geology encountered 2.2m BGL.					Length (m)	1.5
					Width (m)	0.75
					Avg. depth (m)	2.2
Context No.	Type	Width (m)	Depth (m)	Description	Finds	Date
100	Layer		0.1	Sett paving		
101	Layer		0.1	Sand		
102	Layer		0.9	Overburden, encountered 0.2m BGL		
103	Layer		0.8	Made ground/clay capping layer, encountered 1.1m BGL		
104	Layer			Organic waterlogged deposit, encountered 1.9m BGL	Pottery, animal bone, leather shoe	
105	Layer		-	Natural		

Trial Pit 2						
General description					Orientation	NE/SW
Devoid of archaeology. Natural geology encountered 2m BGL.					Length (m)	3
					Width (m)	1
					Avg. depth (m)	4.6
Context No.	Type	Width (m)	Depth (m)	Description	Finds	Date
200	Layer		0.3	Concrete hardstanding		
201	Layer		0.5	Overburden of sand and gravel		
202	Layer		1	Made ground/ organic waterlogged deposit, diffuse interface between the two deposits, encountered 0.8-1.0m BGL	Pottery	
203	Layer		-	Natural		

Trial Pit 4						
General description					Orientation	ENE/WSW
Trial pit revealed poorly preserved line of bricks relating to possible robbed-out wall foundation. Natural geology encountered 0.6-0.7 BGL.					Length (m)	3.3
					Width (m)	0.8
					Avg. depth (m)	5
Context No.	Type	Width (m)	Depth (m)	Description	Finds	Date
400	Layer		0.2	Concrete hardstanding		
401	Layer		0.2	Mixed overburden/sand		
402	Structure		-	Possible brick wall foundation, aligned roughly N/S		
403	Layer		0.2	Mixed made ground/clay		
404	Layer		-	Natural		

Trial Pit 5						
General description					Orientation	N/S
Trial pit revealed a brick/stone surface and overlying demolition deposit. Natural geology not encountered, as water table was reached at 1.8m BGL, which prevented further excavation.					Length (m)	1.5
					Width (m)	0.75
					Avg. depth (m)	1.8
Context No.	Type	Width (m)	Depth (m)	Description	Finds	Date
500	Layer		0.1	Sett paving		
501	Layer		0.1	Sand		
502	Layer		0.6	Overburden		
503	Layer		0.4	Demolition rubble		
504	Layer			Brick/stone surface, encountered 1.2m BGL		
505	Layer			Made ground		

Trial Pit 6						
General description					Orientation	NW/SE
Devoid of archaeology. Waterlogging prevented the trial pit to be excavated to its proposed depth.					Length (m)	3
					Width (m)	0.75
					Avg. depth (m)	0.3
Context No.	Type	Width (m)	Depth (m)	Description	Finds	Date
600	Layer			Concrete		
601	Layer			Overburden (waterlogged)		

Trial Pit 7						
General description					Orientation	
Devoid of archaeology. Natural geology encountered 0.3m BGL.					Length (m)	1.5
					Width (m)	0.75
					Avg. depth (m)	0.3
Context No.	Type	Width (m)	Depth (m)	Description	Finds	Date
700	Layer		0.1	Sett paving		
701	Layer		0.1	Sand		
702	Layer		0.1	Overburden		
703	Layer		-	Natural		

Trial Pit 8						
General description					Orientation	NW/SE
Devoid of archaeology. Natural geology encountered 0.5-0.7m BGL.					Length (m)	1.5
					Width (m)	0.75
					Avg. depth (m)	0.7
Context No.	Type	Width (m)	Depth (m)	Description	Finds	Date
800	Layer			Sett paving		
801	Layer			Sand		
802	Layer			Overburden		
803	Layer		0.1-0.3	Made ground, encountered 0.4m BGL		
804	Layer		-	Natural		

Trial Pit 9						
General description					Orientation	NE/SW
Devoid of archaeology. Natural clay geology encountered 0.4m BGL.					Length (m)	2.5
					Width (m)	0.75
					Avg. depth (m)	5.1
Context No.	Type	Width (m)	Depth (m)	Description	Finds	Date
900	Layer		0.1	Sett paving		
901	Layer		0.2	Overburden		
902	Layer		0.1	Made ground		
903	Layer		-	Natural		

Trial Pit 10						
General description					Orientation	NE/SW
Trial pit revealed wall foundation and associated demolition deposit. Natural geology encountered 1.35m BGL.					Length (m)	2.5
					Width (m)	0.75
					Avg. depth (m)	5
Context No.	Type	Width (m)	Depth (m)	Description	Finds	Date
1000	Layer		0.05	Sett paving		
1001	Layer		0.1	Sand		
1002	Layer		0.2	Overburden		
1003	Layer		0.8	Demolition deposit, south of wall		
1004	Structure		0.8	Wall foundation, aligned E/W		
1005	Layer		0.8	Demolition deposit, north of wall	Pottery, glass	
1006	Layer		-	Natural		

Trial Pit 11/Borehole 8						
General description					Orientation	NW/SE
Trial pit excavated in location of Borehole 8. It revealed a concrete block wall and remains of a possible brick wall/demolition rubble. Natural clay geology encountered 1.5-1.7m BGL.					Length (m)	1.5
					Width (m)	0.75
					Avg. depth (m)	1.7
Context No.	Type	Width (m)	Depth (m)	Description	Finds	Date
1100	Layer		0.4	Concrete hardstanding		
1101	Layer		0.4-0.7	Overburden		
1102	Layer		0.9	Sand		
1103	Structure			Concrete block wall		
1104	Layer		0.6	Demolition, encountered 0.9m BGL	Pottery, glass	
1105	Layer		0.4	Demolition, encountered 1.1m BGL		
1106	Layer		-	Natural		

APPENDIX C BIBLIOGRAPHY

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APPENDIX D SITE SUMMARY DETAILS

Site name:	Former Central Retail Park, Great Ancoats Street, Manchester
Site code:	CRPAM22
Grid Reference	SJ 85111 98403
Type:	Watching Brief
Date and duration:	April 2023
Area of Site	c 2.05ha
Location of archive:	The archive is currently held at OA, Mill 3, Moor Lane Mills, Moor Lane, Lancaster, LA1 1QD, and will be deposited with Greater Manchester Record Office and Archaeological Data Service in due course.
Summary of Results:	An archaeological watching brief was undertaken at the site of the former Central Retail Park, Great Ancoats Street, Manchester, monitoring Phase 1 ground investigation works in the north-west of the proposed redevelopment site. The watching brief monitored the machine-excavation of a series of trial pits and boreholes and recorded stratigraphic sequences typically comprising the modern ground surface of hardstanding or sett paving (with associated bedding layers of sand) overlying overburden and made ground deposits. The natural geology was encountered in the majority of trial pits, 0.3-2.2m below ground level. Evidence of organic waterlogged deposits in the northern corner of the site were probably related to ponds illustrated on historic mapping. A small assemblage of later post-medieval finds is suggestive of waste deposition. Remnants of brick wall foundations and a stone/brick surface were also identified and most likely related to housing (probably cellaring) and industrial buildings on site during the nineteenth century. Associated demolition deposits and overlying made ground and overburden are indicative of later twentieth-century clearance of the site prior to the construction of the Central Retail Park.

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