



ARCHAEOLOGICAL EVALUATION
FINAL REPORT

THE SANDS AND
DURHAM SIXTH FORM CENTRE
CAR PARKS,
WALKERGATE,
DURHAM CITY

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Summary

This document presents a report of the results of an archaeological evaluation at The Sands, Durham (NZ 27406 42926) and to the north of Durham Sixth Form College (NZ 27557 42950). The work was undertaken by Northern Archaeological Associates Ltd (NAA) for Kier Construction between May and June 2018 in support a planning application for commercial development.

The proposed works had the potential to impact upon a 17th century mill leat at The Sands and medieval deposits in the Durham College Sixth Form car park. Seven trenches were excavated to evaluate the archaeological potential of the two areas. Extensive made ground deposits of likely 19th century or later origin were found in all trenches. As the made ground deposits extended below the maximum safe working depth for excavation, the evaluation was unable to ascertain the presence or absence of pre-19th century deposits in the evaluation area.

1.0 INTRODUCTION

1.1 This document presents a report of archaeological investigations at The Sands, Walkergate, Durham City (NGR NZ 27406, 42926), and to the north of Durham Sixth Form College (NGR NZ 27557, 42950) (fig 1). The work was undertaken by Northern Archaeological Associates Ltd (NAA) for Kier Construction Ltd on behalf of Durham County Council (DCC) between 29th May and 6th June 2018. The work was required to inform a planning application for the construction of a new headquarters building for Durham County Council and an associated multi-storey car park.

1.2 All archaeological works were undertaken in accordance with a separate Written Scheme of Investigation (NAA 2018), which had been agreed in writing with DCC.

2.0 LOCATION, TOPOGRAPHY AND GEOLOGY

Location

2.1 The Site is located on the north side of the Durham Peninsula, on the east bank of the River Wear. The Sands car park site (Archaeological Study Area 1; hereafter 'ASA 1') covers an area of approximately 1 hectare immediately north of the Penny Ferry footbridge. It is bounded on the west side by the river, to the north by The Sands Recreation Area, to the east by Freeman's Place and to the south by the new Passport Office development.

2.2 The Durham Sixth Form Centre car park site (Archaeological Study Area 2; hereafter 'ASA 2') is a roughly triangular 0.4 hectare plot of land located approximately 50m north-east of ASA 1 and immediately north of the Durham Sixth Form Centre buildings. It is bounded to the south by the college grounds and on the other two sides by the curve of the road where Freeman's Place meets Providence Row.

2.3

Geology and soils

2.4 The solid geology of the area consists of Coal Measures, with the Hutton coal seam outcropping nearby both to the north and south. Within the Site, the bedrock is overlain by river terrace deposits or alluvium, with glacial sand and gravel recorded to the east of the area.

Topography and land-use

- 2.5 Both sites lie on the level floodplain of the River Wear with the modern ground surface lying typically at a height of between 30m and 32m above Ordnance Datum (aOD).
- 2.6 The Sands (ASA 1) is a public car park run by DCC and is in regular use. It comprises a well-maintained tarmac surface divided by a series of grass verges and soft landscaping.
- 2.7 Until fairly recently, the Sixth Form Centre car park (ASA 2) was occupied by an old laundry building, which was demolished c.2002. Today, the eastern half of the site is used as a car park, operated by the Sixth Form Centre, and the west side is waste ground used for storage.

3.0 SUMMARY ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

- 3.1 The archaeological and historical background to the site has been discussed at length in the desk-based assessment. A summary of the information relevant to both sites is presented here. For full details and references, please refer to the desk-based assessment (NAA 2018).
- 3.2 The riverside area to the north of Durham's peninsula has been the focus of considerable development over the last 20 years including The Gala Theatre and Millennium Place development (also referred to as Walkergate), the Passport Office, Freeman's Quay Leisure Centre, and more recently the Cidon Claypath development (ongoing). As such, a considerable amount of archaeological research and investigation has already been undertaken within the vicinity of ASA 1 and 2.

Prehistoric and Roman

- 3.3 There is little direct evidence of prehistoric or Roman occupation in Durham City, represented by scattered finds of worked flints and Roman pottery, and the potential for the presence of any remains relating to this period within the development site is considered to be low. Worked flint and sherds of Roman pottery were recovered during excavations in the southern part of the Walkergate car park, to the south of the Site, as part of the Walkergate Millennium Project.
- 3.4 A palaeochannel was also identified by the Walkergate excavation, the location of which appeared to correspond to the line of a curving escarpment shown on the First

Edition Ordnance Survey (OS) map of the area, which had been levelled by the time of the Second Edition OS map. This feature was originally thought to pre-date the medieval period, but excavations at Freeman's Place, in the grounds of the Sixth Form Centre, suggested it was probably a flood episode dating to the 13th century.

Medieval

- 3.5 Prior to the 11th century, settlement in Durham had been predominately focused on the peninsula, though there are likely to have been small farming settlements occupying the surrounding hinterland. There is little surviving archaeological evidence of early medieval activity in the city except around the cathedral. Excavations at the former Framwellgate car park (now part of the Riverwalk development), the former Claypath car park (now part of the Cidon Claypath development) and Walkergate car park (now Millennium Place) have all demonstrated occupation from the 11th or 12th century. Notably, however, material of 11th–12th-century date was not identified during excavations at Freeman's Place where the earliest occupation evidence was 13th century, nor at the Passport Office Building, suggesting that settlement probably radiated out gradually from the peninsula over a period of 300 years.
- 3.6 By the 12th century, the area of the Site formed part of the Borough of Durham, which included the parish of St Nicholas and part of Framwellgate. It has been suggested that the Borough was founded by Bishop Flambard in the early 12th century as part of a phase of redevelopment that included the clearance of the population from Palace Green into the area of the current Market Place, the construction of Framwellgate Bridge and allocation of the Borough pastures on the opposite side of the river, and the foundation of Kepier Hospital.
- 3.7 Several archaeological investigations close to the Site have identified evidence for medieval activity, with recorded archaeological deposits surviving at depths up to 3.9m below modern ground surface. In the grounds of the Sixth Form Centre, to the south of ASA 2, at least two phases of medieval activity were identified by excavations in 2006, consisting of a series of boundary ditches or drainage channels thought to demarcate the settlement on Claypath to the east from the pasture fields to the west.
- 3.8 The lower peninsula was walled in around 1315 and both the wall and 'Walker-gate' are clearly depicted on Christoph Schweitzer's 1595 plan of Durham. The gate

provided access from the city to Kepier hospital (built in 1112) and followed the line of the modern Walkergate and Freeman's Place.

- 3.9 Just outside the gate, a mill is shown. This was probably the Bishop's Mill, which was one of eight medieval mills on the River Wear at Durham. The building is first referenced in the Boldon Book (1183), but surveys in 1543 recorded the property as being in very poor repair and it may have been replaced by the time of the publication of Schweitzer's plan. The mill was later rebuilt 180m to the south of the original site in c.1630 and again in 1754.
- 3.10 A second building outside the wall is shown on Schweitzer's plan, just to the north of St Nicholas Church. This was probably Shacklock Hall, shown on later maps and identified from archaeological evidence. This was located some distance south of the Site. Crook Hall, a 13th-century Grade I listed medieval hall, is depicted on the north bank of the river, approximately 0.25km north-east of ASA 1.

Post-medieval

- 3.11 In the later 16th century, the area to the north of the city became closely associated with the cloth industry. In 1614, the Corporation applied part of their charitable funds to establish the Company of Clothworkers at New Place, the former town house of the Nevilles in the north-west corner of the walled city. This was the first of several relatively short-lived cloth-making and weaving enterprises associated with this part of the city, which continued into the early 19th century.
- 3.12 In 1814, all premises were sold outright to Gilbert Henderson, who relocated his weaving business from Kirk Merrington to Durham to establish a new carpet manufactory.
- 3.13 Armstrong's Plan of 1768, records the 18th-century mill and associated mill race that extends north through ASA 1. This mill building stood on the site until it was demolished in advance of the construction of the new Passport Office. It is first shown on Thomas Forster's plan of Durham of 1754, where it is marked 'Mills and Dams of Thomas Leven Esq'. No evidence of any material pre-dating the 18th century was identified during building recording and excavation of the Passport Office site in 2012.
- 3.14 The mill race was unusually long, extending north to discharge back into the river at a point just beyond the north boundary of ASA 1, almost opposite Crook Hall. The race

does not appear on earlier depictions of the site and the length and extent of the feature suggests that it formed part of the construction of the 18th-century mill, although it may have in part utilised an existing leat or natural channel.

- 3.15 By the mid-18th century, the area adjacent to the mill was known as Mill Close (or Milne Close). This was in the possession of Thomas Lewin, who retained the property until the early 19th century when it was sold to Henry Ibbetson. In 1848, Ibbetson sold the land and associated Shacklock Hall to William Henderson, owner of the carpet manufactory following the death of Gilbert Henderson in 1829.
- 3.16 Shacklock Hall appears on Armstrong's map as a U-shaped building opposite the mill, on the site of Millennium Place. Soon after purchasing the building, Henderson demolished it as part of expansion of the carpet manufactory. The new development included the construction of large weaving sheds for both hand and power looms.
- 3.17 The extent of the carpet manufactory redevelopment is shown on the First Edition 6-inch OS map, located to the east of the old corn mill. A row of cottages known as 'Freeman's Place' was constructed in the area now occupied by the Passport Office. The cottages were built to house the increasing number of textile workers moving into the Walkergate area. Evidence of the 19th-century cottages was found in excavations in 2012.
- 3.18 The course of the mill race is shown in detail for the first time on the 1857 map, running along what is now the east boundary of The Sands car park and turning north-west at the bend in the road to run back down to the river. The race is widest at the point it re-enters the river, opposite Crook Hall. A comparison of the First Edition map with the later OS editions also provides some indication of the degree of land reclamation and revetment along the river bank in the late 19th through to the mid-20th century.
- 3.19 Within the boundary of ASA 1, two linear features, presumably paths, are shown on the map leading north from the Freeman's Place cottages. These converge at the discharge of the mill race, where a ford crossing is marked on the Second Edition OS map, published in 1895.
- 3.20 On the east side of Freeman's Place, a 'rope walk', which is generally associated with the production of rope and cordage, runs north from the carpet manufactory, following the curve of the west boundary of ASA 2. The escarpment marking the line

of the palaeochannel is also shown crossing the area. The distinctive shape of this plot of land is first shown on Armstrong's map of 1768 and clearly relates to convergence of the two key medieval routes, namely Freeman's Place (Walkergate) leading to Kepier from the city, and Providence Row, an old back lane running up through the medieval tenements along Claypath to provide access to the plough lands. A second, smaller rope walk is shown crossing The Sands Recreation Area to the north of ASA 1.

- 3.21 The Second Edition 25-inch OS map, published in 1895, shows the area in greater detail than the earlier 6-inch map, although the basic layout of the Site remained unchanged. A small footbridge is shown crossing the mill race about halfway along, associated with a footpath leading to the rear of the Freeman's Place cottages. At the north end of the path is a ferry crossing, just south of where the mill race joins the river. This was probably a chain ferry and likely to leave very little in terms of archaeological evidence. The introduction of mechanised winding would see both rope walks disappear by this period.
- 3.22 To the south of the area, the Henderson carpet manufactory continued to expand during the late 19th century but was forced to close in 1903. Shortly after the closure, a former employee, Hugh MacKay, took over the works and began trading once again. The MacKay factory continued to flourish until 1980, when the works was badly damaged in a fire and the decision was made to move production to the Dragonville Industrial Estate.
- 3.1 The Third Edition 25-inch OS, published in 1919, shows little change within ASA 1, apart from the addition of a series of linear enclosures on the south side of the site, possibly allotments associated with the Freeman's Place cottages. There was, however, considerable change on the east side of Freeman's Place road in the early part of the 20th century.
- 3.2 A laundry was constructed within ASA 2, creating a new property plot at the north end of the former pasture field, which remains in situ today.
- 3.3 The Durham Girls' County School was constructed in 1913 to designs by W. Rushworth. Known locally as the 'School on the Sands', it initially accommodated 248 girls and was officially opened on 21st January 1914 by Dr Hensley Henson, the Dean, and later Bishop of Durham. In 1969, the school became co-educational and, in 1984, a sixth form school.

- 3.4 The main building was constructed on the east side of the field to the south of ASA 2. It was a double-facade building, facing east onto Providence Row, but with the main entrance from Freeman's Place to the west; this was marked by a small lodge building, which remains extant today.
- 3.5 The creation of the school further sub-divided the old pasture field: the north plot occupied by the school and its associated grounds and the south plot by the MacKay carpet manufactory.
- 3.6 By the time of the publication on the Fourth Edition 25-inch OS in 1939 (Fig. 8), the mill race had been partially infilled and the Freeman's Place cottages demolished. An incinerator (with associated chimney) is shown in the south-west corner of ASA 1, located just south-east of the Penny Ferry Bridge anchorage. Access in and out of the incinerator plant was via the footbridge over the mill race first depicted on the 1895 OS map.
- 3.7 During the early 20th century, there appears to have been a significant period of riverside consolidation and revetment, particularly along the north-west edge of the site, blocking off the partially silted mill race discharge. Both the ferry and ford had ceased to operate by this time.
- 3.8 Within ASA 2, two new buildings were added to the laundry between 1919 and 1939, facing north onto Providence Row. Otherwise, there appear to have been few visible changes in the layout of the complex. To the south, the school continued to expand with the addition of new structures immediately south of the main building, as well as the laying out of a tennis court in the space between the lodge building and the southern boundary; this remains extant.
- 3.9 A post-war aerial photograph of the site, dated December 1945, shows the incinerator in ASA 1 still standing. A dark linear feature visible immediately east of the building represents the remains of the partly back-filled mill race. Other than these elements, the area seems void of features, although the quality of the photograph is quite poor.
- 3.10 Within ASA 2, the photograph provides an indication of the considerable size of the laundry complex. This was clearly an industrial enterprise and almost certainly a steam laundry, although a chimney is not immediately visible. Historic Google Earth imagery shows a large complex with what would appear to be a double-gabled main building with a series of sheds to the rear, and a linear ancillary range (probably

including stables) along the south-east boundary. The complex was expanded between the 1945 and 2001 to include further sheds to the west and east of the main building.

- 3.11 The laundry was demolished c.2002 and the site cleared. Today parts of the ancillary range still survive in situ and may require further assessment and recording prior to demolition, subject to an appropriate risk assessment.
- 3.12 The Sands car park (ASA 1) is first marked on the 1970 edition of the OS map. It served the Durham Ice Rink, located immediately to the south, which was built in 1947. This replaced an earlier canvas covered rink, built in 1940, which was destroyed by fire in 1944. The post-war structure remained in use until 1996 when the rink closed and re-opened as a bowling alley and health and fitness centre. It was demolished in 2012 in advance of the construction of the Passport Office.

Previous archaeological investigation and boreholes

- 3.13 There has been a considerable number of previous archaeological investigations in the vicinity of the Site in recent years. These events include small-scale trial trenching within The Sands car park.

The Sands Car Park (ASA 1)

- 3.14 In 1998, NAA excavated two trial trenches in The Sands car park as part of preliminary work associated with the Walkergate Millennium development. The trenches were located primarily to assess the presence, nature and condition of the former mill-race. These identified modern dump deposits, with no structural evidence of the mill-race observed.

Borehole data

- 3.15 In addition to the two trial trenches, a number of geotechnical boreholes have been excavated across ASA 1. Between 1977 and 1979, Durham University excavated six boreholes in the vicinity of the former ice rink (HER E15345: Boreholes 1–4 dug in 1977; E15344: Boreholes A–B dug in 1979). The boreholes were dug from a ground surface level of between 30.80m and 32.24m OD. Beneath the car park surface, 'made-ground' deposits measured 0.37–4.30m deep, and comprised ash, sand, rubble, building material and clay.

Archaeological investigation in the surrounding area

The Sands Recreation Area

- 3.16 In 2004, geophysical survey and evaluation trenching was carried out on The Sands Recreation Area, immediately to the north of ASA 1, in advance of creation of a temporary car park (HER E62076 and E62079). Three trenches were excavated to investigate two anomalies on the geophysical survey. In the two southern trenches adjacent to the north end of ASA 1, the remains of a small building were recorded, probably associated with the ferry crossing shown on historic OS maps. A third trench identified the remains of a cinder path. All three were covered by a sequence of tipping and levelling deposits.
- 3.17 Three machine-dug geotechnical pits were also monitored as part of the ASUD investigations. In all three, the topsoil varied in thickness from 0.15m to 0.30m. Below the topsoil there was a sequence of levelling deposits comprising brick fragments, stone rubble and clinker, within a matrix of silty sand. These deposits contained sherds of 19th- and 20th-century pottery. Apparently undisturbed light brown silty sand was recorded between 0.7m in TP1 and 0.45m OD in TP2 and 3.

The Former Ice Rink (Passport Office)

- 3.18 In 2012, eight trial trenches and seven test pits were excavated in advance of the construction of construction of the new Passport Office (HER E43069). Structural remains dating from the mid-18th to the late 20th century were identified, including the remains of the 19th-century cottages at Freeman's Place and the post-War ice rink.
- 3.19 Two trenches were excavated immediately south of ASA 1. Both comprised successive layers of made-ground, rubble and hardcore crush. No archaeological features were observed in either trench and no structural evidence associated with the mill race was found. However, levels taken at the head race suggest deposits may survive to a depth of 0.7m below the excavated trench depth.

Area North of the Sixth Form Centre (ASA 2)

- 3.20 No previous archaeological evaluation has taken place within ASA 2. Four boreholes were drilled near to the ASA in 1969, but these cannot be accurately located. A depth of 1.7–3.6m of made ground was recorded in the boreholes, comprising 'dirty' sand, coal and mortar overlying alluvial sands and gravels and glacial drift deposits.

Freeman's Place

- 3.21 Following evaluation trenching, an excavation was carried out to the south of ASA 2 in 2006 in advance of the construction of the Freeman's Quay Leisure Centre (HER 9745).
- 3.22 At least two phases of medieval activity were identified. The earliest phase comprised a boundary/drainage ditch with associated features, all of which were sealed by the primary alluvial fill of a palaeochannel. This contained a quantity of abraded pottery sherds dating to the 13th century.
- 3.23 The channel was potentially the result of a single flood event similar to that witnessed in the fields around Shincliffe in 2009. It ran south-west to north-east at the foot of the escarpment leading from Claypath, and was approximately 38m wide, although the eastern edge of the feature extended beyond the excavation area. Where observed, it had a maximum depth of 1.14m below the modern ground level. Based on both the projected course of the feature and the evidence of the First Edition OS map, the channel should continue north into ASA 2, bisecting the area from east to west.
- 3.24 Following the deposition of the primary alluvial fill, a second ditch was cut through the deposit on the same alignment as the earlier phase. The fill of this feature was found to contain pottery dating from the 13th to 15th centuries. Palaeoenvironmental evidence indicated a wet environment within the feature with hedgerows close-by and disturbed waste ground forming part of the wider landscape with evidence for grazing animals. This suggested that the ditch (and probably its earlier manifestation) was functioning as a boundary and/or drainage ditch, demarcating the pasturelands to the north and west from the main settlement to the east.
- 3.25 The results of the excavation suggest that ASA 2, and probably ASA 1, formed part of the parish grazing land from the 13th into the 15th century. Sandstone architectural fragments and roof tile, together with glazed ceramic roof and floor tile were also recovered from the ditch fill at Freeman's Place, suggesting a medieval building of some form in the vicinity. The location of such a building remains unknown, as all of the material was redeposited.

4.0 AIMS AND OBJECTIVES

- 4.1 The principal objectives of the archaeological evaluation were:

- to establish the presence, nature, extent, preservation and significance of any archaeological remains within each site;
- to provide a record of any such archaeological remains;
- to recover and assess any associated structural, artefactual and environmental evidence;
- to evaluate the potential for further unrecorded significant archaeological remains to be present within the site;
- to determine whether any area within the footprint of the proposed scheme requires archaeological mitigation in advance of, or during, construction works;
- to prepare an illustrated report on the results of the evaluation to be deposited with DCC HER.

5.0 METHODOLOGY

- 5.1 Trenches 1, 3, 4, 5, 6 and, 7 were excavated using a 6-tonne tracked excavator. Trench 9 was excavated using a JCB type excavator. A toothless ditching bucket was used on both machines to remove the modern deposits relating to the existing ground surface and the made ground beneath. Excavation was generally limited to a maximum depth of 1.2m below the modern ground surface, partly on safety grounds and also because working room was restricted within the car park within ASA 1.
- 5.2 Sections of the trench were cleaned by hand and all identified layers were photographed in section.
- 5.3 Written descriptions of all archaeological deposits were recorded on pro forma sheets using the NAA context recording system.
- 5.4 Drawn records of all archaeological features were produced at a scale of 1:10 for sections and elevations and 1:20 for plans. A planning grid was surveyed in to the Ordnance Survey National Grid. Information was transferred to AutoCAD software and reproduced for incorporation within this report. All levels were tied in to Ordnance Datum.
- 5.5 Digital images were also taken using a digital SLR camera at a resolution of 10 megapixels.
- 5.6 Pottery, animal bone and other categories of artefacts were collected as bulk samples. Finds were appropriately recorded and processed using the NAA system.

5.7 All recovered finds were appropriately packaged and stored under optimum conditions. Finds recovery and storage strategies were in accordance with published guidelines (English Heritage 1995; Watkinson and Neal 2001).

6.0 RESULTS

Evaluation

6.1 In the description below, all levels are given as depth below the existing modern ground surface (bgl) and, where relevant, as a height above Ordnance Datum (aOD).

6.2 The works were carried out in accordance with a written scheme of investigation (WSI) prepared by NAA (2018). Modifications to the proposed trench layout and sizes were made to avoid buried services and allow for spoil storage within the confined work areas (Fig. 2).

6.3 In ASA 1, a total of six trenches were excavated. Trench 2 was not excavated due to proximity to multiple public rights of way and buried services. Trench 8, which was located just outside ASA 1, was not excavated due to access issues. As a result, the proposed scheme of environmental sampling within ASA 1 was also not carried out due to the same access issues.

6.4 In ASA 2, Trench 9 was moved to better target the line of a possible palaeochannel and avoid the structural remains of the laundry building.

6.5 The site code used was TSD18 and a total of 41 contexts were recorded (Appendix A), which were allocated numbers running from 1 to 41.

ASA 1

6.6 Trench 1 (not illustrated) was the southern most of the excavated trenches in ASA 1. It measured 2m by 2m and was excavated up to a depth of 1m. The upper deposits (**10**, **11**, **13** and **15**) related to the existing car park, its construction and landscaping and extended to 0.5m bgl. Beneath these deposits was a compacted black gravel and tar deposit (**16**) which extended across the trench and measured up to 0.15m thick. This was seen in all of the trenches excavated in ASA 1. This is likely to be a bedding layer for the construction of the existing car park. Sealed by this layer and extending to the base of the trench (up to 0.35m thick) was a loose deposit (**17**) formed of gravel, clinker and small fragments of metal slag. This was consistent with 19th or 20th

century dumping on waste or unused ground and contained glass bottles, pottery, and general waste. This layer was also seen in Trenches 3, 4 and 5. A similar layer, but not necessarily continuous, was also seen in Trench 9 within ASA 2.

- 6.7 Trench 3 (Fig. 3) was located in the central part of ASA 1, to the north of Trench 1. A buried service (a ceramic surface water drain) was encountered in the northern end of the trench at 0.7m bgl. As such, it was only possible to achieve the maximum working depth of 1.2m in the southern part of the trench. The fully excavated part of the trench was 2.5m long and 2.0m wide, though the overall length of the trench was 5.0m. The sequence of deposits was very similar to that seen in Trench 1. Deposits **18** and **19**, related to landscaping of the car park, while deposit **20** represented the compact gravel and tar bedding layer. Combined, these extended to a depth of 0.55m bgl. The gravel and clinker layer (**21**) extended beneath **20** and beyond the base of the mechanically excavated trench at 1.2m bgl. A small, hand-dug sondage was excavated into the base of the trench to ascertain the depth of deposit **21**. This was excavated a further 0.4m before a safe working limit was reached. The base of the deposit was not seen, indicating that deposit **21** extended at least 1.6m bgl in this trench and was greater than 1.0m thick.
- 6.8 Trench 4 (not illustrated) was located 8m north of Trench 3, also in the central part of the site. Again, a buried service (a ceramic surface water drain) was encountered in the northern end of the trench at 0.7m bgl. Therefore, it was only possible to achieve the maximum working depth of 1.2m in the southern part of the trench. The fully excavated part of the trench was 3.5m long and 2.0m wide, although the overall length was 6.6m. The stratigraphy was very similar to Trench 3. Deposits **22**, **23** and **24** all related to landscaping of the car park, with deposit **25** representing the compact gravel and tar bedding layer. The combined depth of both was 0.6m bgl. The gravel and clinker layer (**26**) extended beneath deposit **25** beyond the base of the excavated trench at 1.2m bgl. As a result, deposit **26** was greater than 0.6m thick.
- 6.9 Trench 5 (Fig. 3) was the northern most trench excavated within ASA 1. It was 4.6m long and 2.0m wide. Due to the proximity of several buried services, the trench was slightly shorter than proposed in the WSI, and its orientation changed. In addition, because of the slightly different nature of the lower deposits, a narrow machine excavated sondage was excavated into the base of the trench from 1.2m bgl, the depth of which was 0.4m. The upper layers were the same as those seen in the other trenches, with **28** and **29** being car park landscaping, and **30** being the compact

gravel and tar bedding layer. Combined, these extended to 0.5m bgl. Beneath these, the gravel and clinker layer (31) was observed, but was less substantial than previously observed, being only 0.46m thick. Beneath this layer, a further deposit of demolition rubble (32) was observed in a light greyish brown sandy silt matrix, with lenses of gravel and clinker, which was recorded up to a depth of 0.6m within the sondage. Demolition rubble (32) overlay a homogenous band of silty clay (33) up to 0.2m thick. The base of this deposit was reached and the top of the next deposit (34) was exposed. This consisted of gravel and metallic slag, several large fragments of which were recovered as a sample. No further excavation was possible due to the depth of the trench and deposit 34 was recorded and left in situ.

- 6.10 Trenches 6 and 7 (not illustrated) lay at the western extent of ASA 1 close to the existing river terrace. Trench 6 was 4m long and 2m wide. The car park landscaping deposits in Trench 6 (39, 40 and 41) extended to 0.8m bgl, before exposing the top of the compact gravel and tar layer (42). No further excavation took place in Trench 6.
- 6.11 Trench 7 was 10m to the north of Trench 6. It was 5m long, 2m wide and excavated to a depth of 1m. The landscaping deposits and gravel and tar bedding layer (35, 36 and 37) extended to 0.76m bgl. These sat directly on top of a large modern dump of stone sets (38), which extended to the base of the trench. No further excavation took place in Trench 7. In both Trench 6 and 7 only modern deposits were encountered, indicating terracing activity when the car park was constructed.

ASA 2

- 6.12 Trench 9 (Fig. 3) lay in ASA 2, to the north of the sixth form centre. It was oriented north-west to south-east, and was 19.4m long and 2.0m wide. It was moved 3.4m to the south from the location proposed in the WSI to avoid an area of reinforced concrete. The trench was excavated to a depth of 1.2m bgl. At this depth an extensive dumping deposit (8) was exposed across the full extent of the trench, which comprised clinker and gravel with frequent domestic waste inclusions. A 1m deep sondage was excavated into this deposit in the western end of the trench, extending for 3.0m in length and 1.0m in width. This sondage was only visually inspected due to the depth of the trench, but the deposit within it appeared the same as deposit 8. However, for clarity a separate context number (9) was allocated to the material excavated from the sondage

6.13 Sealing deposit **8** was a 0.4m thick levelling layer (**7**) comprised of a firm light brownish yellow silty sand. Overlying this layer was a thin (0.15m thick) dark brownish grey sandy clay (**2**). This may have been the ground surface related to the laundry building to the east. At the eastern end of the trench, two features cut this horizon. Feature **4** was greater than 2.0m long, 1.8m wide and 0.82 deep. It was filled with building rubble (**3**), predominately brick and mortar in a sandy matrix. Feature **6** was of an unknown length, 5.6m wide and 0.9m deep and located at the eastern end of the trench, it too was filled with building rubble (**5**) and mortar in a sandy matrix. The fills of both of these cuts contained modern brick. It is likely that these cuts relate to the demolition of the 20th century laundry buildings to the east. The existing ground surface (**1**) is comprised of black gravel.

6.14 No environmental deposits were taken during the course of the works.

7.0 DISCUSSION

ASA 1

7.1 Within the trenches excavated in ASA 1, no structural features and no deposits predating the 19th century were observed. Trenches 6 and 7 encountered only modern layers relating to the car park and its terracing. With the exception of Trenches 6 and 7, the layers relating to the car park typically extended to around 0.55m to 0.6m bgl. Below this, an extensive deposit of gravel and clinker, with considerable amounts of domestic waste, was observed across the whole area. The only place where the deposits underneath the widespread clinker layer were investigated was Trench 5. Within this trench, a sequence of large dumps underlay the clinker. These layers represent individual dumps of waste material in the area. It may be that these larger, more substantial dumps (as opposed to continuous small scale dumping episodes represented by deposit **31**) indicate a deliberate attempt to level the area around the mill race to the east. This compares well with cartographic evidence from the Ordnance Survey maps, with the 1895 OS map showing the water course still active, while the 1939 OS map indicates the race as a partially surviving earthwork.

ASA 2

7.2 Trench 9 was the only trench excavated within ASA 2. The depositional sequence within this trench seems to indicate that the area was waste ground in the 19th century and used for dumping material in a similar way to that seen in ASA 1. Then the area appeared to be levelled (with deposit **7**), possibly prior to the construction of

the laundry in the 20th century. Evidence of the demolition of the laundry is also present in the form of two modern cuts (4 and 6).

7.3 The machine excavated sondage at the western end of Trench 9 extended the trench to a depth of 2.0m bgl. Here, the character of the material had not changed, with dumped material present at the base of the sondage. As such, there is no evidence to suggest that deposits earlier than the 19th century were observed within Trench 9. Therefore, these works were unable to evaluate the medieval deposits or the palaeochannel, which were encountered in the Freemans Place excavation to the south of ASA 2 (NAA 2007). It is possible that the deeper element of the waste dumps (9) in Trench 9 lie within an unseen cut feature, which may explain the depth of this deposit. However, deposit 8 is consistent across the entirety of the trench, indicating at the very least that 19th to 20th century made ground deposits extend to 1.2m bgl.

7.4 Despite the lack of evidence for medieval archaeology, the potential for surviving medieval deposits beneath the made ground layers still exists and groundworks that extend below these may still have an impact that requires archaeological mitigation.

8.0 ARCHIVE DEPOSITION

8.1 The full archive from the archaeological investigations, including paperwork, drawings, photographs, digital data and the finds assemblage, is to be deposited with Durham University Museums.

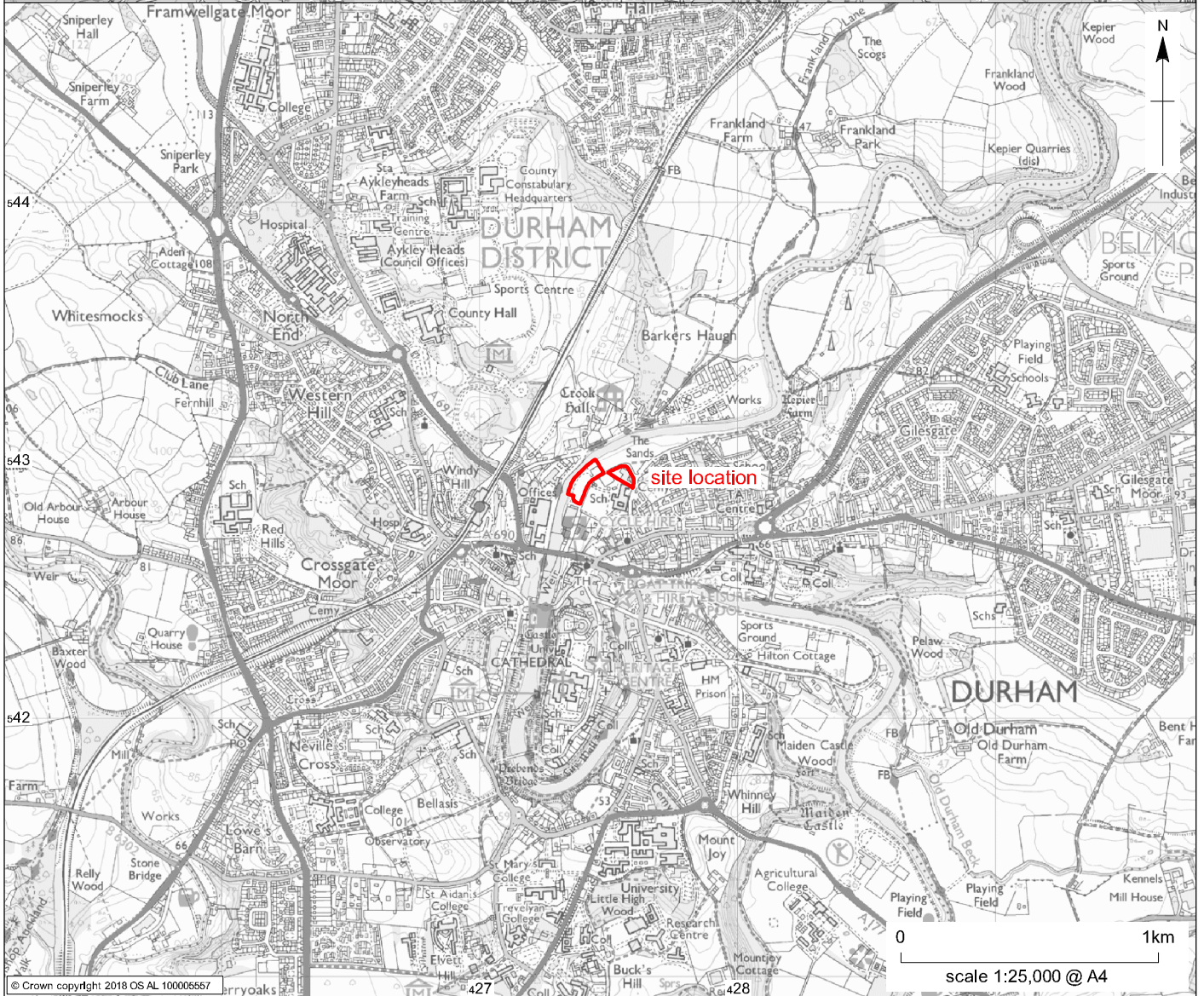
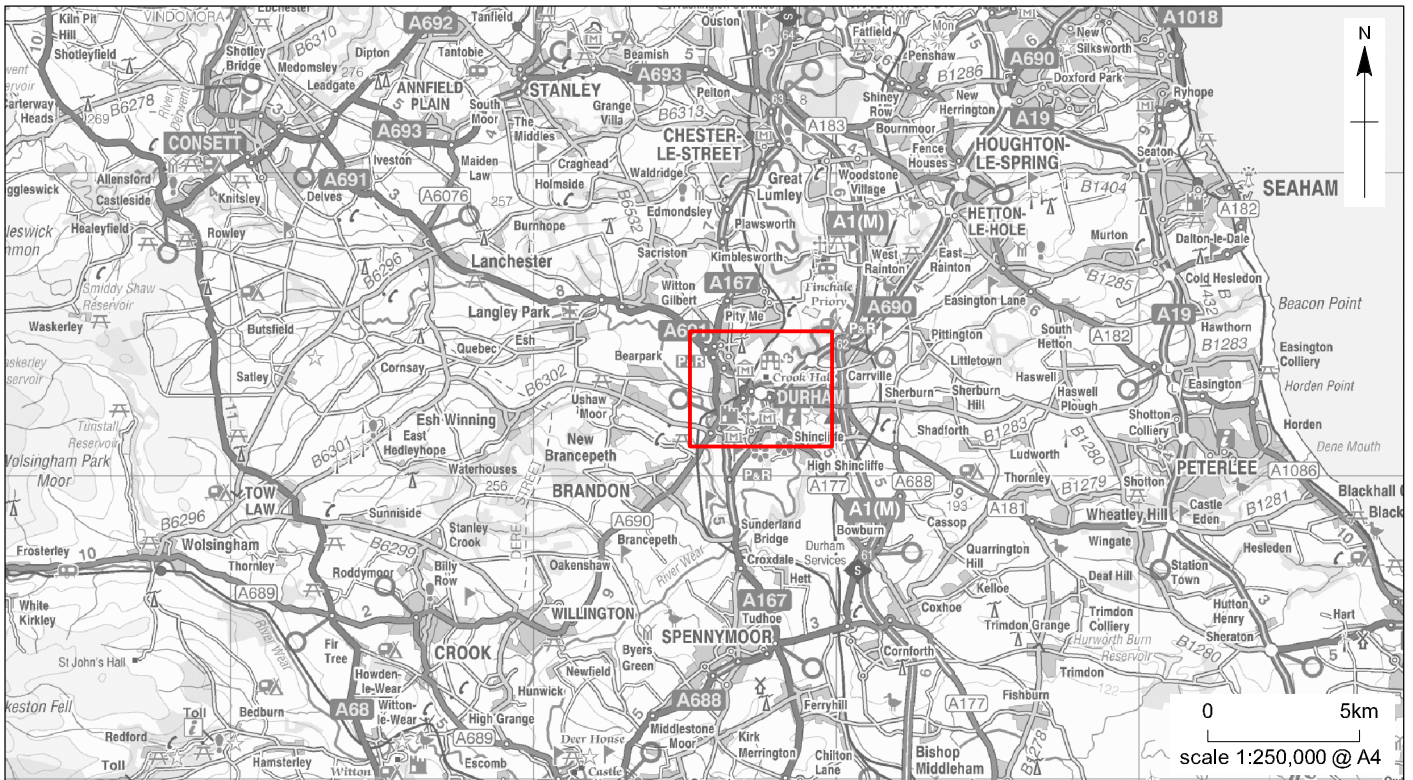
8.2 An OASIS form will be completed on the results of the evaluation within three months of the completion of the work. This will be subsequently validated by DCC's Principal Archaeologist after which it becomes a public document for submission or incorporation into the HER.

REFERENCES

- English Heritage (1995) *A Strategy for the Care and Investigation of Finds*. Swindon: English Heritage
- NAA (2007) *Freeman's Place, Durham City Archaeological Post-Excavation Assessment Report*. Northern Archaeological Associates Report **07/36**.
- NAA (2018) *The Sands and Durham Sixth Form Centre Car Parks, Walkergate, Durham City: Desk-Based Assessment and Written Scheme of Investigation for Archaeological Evaluation*. Northern Archaeological Associates Report No. **18/38**.
- Watkinson, D. and Neal, V. (2001) *First Aid for Finds*. Third edition. RESCUE/UKICAS.

APPENDIX A
CONTEXT CATALOGUE

Context	Trench	Interpretative description
1	9	Existing ground surface
2	9	Compressed soil horizon
3	9	Fill of modern cut 4
4	9	Modern cut
5	9	Fill of demolition cut 6
6	9	Demolition cut
7	9	Sandy silt levelling layer
8	9	19th-century dumping deposit
9	9	19th-century dumping deposit, in machine sondage
10	1	Topsoil
11	1	Light grey gravel
12	-	VOID
13	1	Brownish yellow gravel
14	-	VOID
15	1	Reddish sandy gravel, frequent brick inclusions
16	1	Black gravel dump
17	1	19th-century dumping deposit
18	3	Topsoil
19	3	Crushed grey stone
20	3	Mixed soil layer
21	3	19th-century dumping deposit
22	4	Topsoil
23	4	Dark grey sandy soil deposit
24	4	Construction layer for car park
25	4	Levelling layer for car park
26	4	19th-century made ground
27	4	Ceramic drain
28	5	Topsoil
29	5	Car park construction layer
30	5	Car park levelling layer
31	5	19th-century dumping deposit
32	5	Rubble dump deposit
33	5	Firm clay silt layer
34	5	Slag and clinker layer
35	7	Topsoil
36	7	Modern crushed dolomite
37	7	Car park levelling layer
38	7	Modern terracing deposit
39	6	Topsoil
40	6	Modern crushed dolomite
41	6	Mixed terracing deposit
42	6	Car park levelling layer

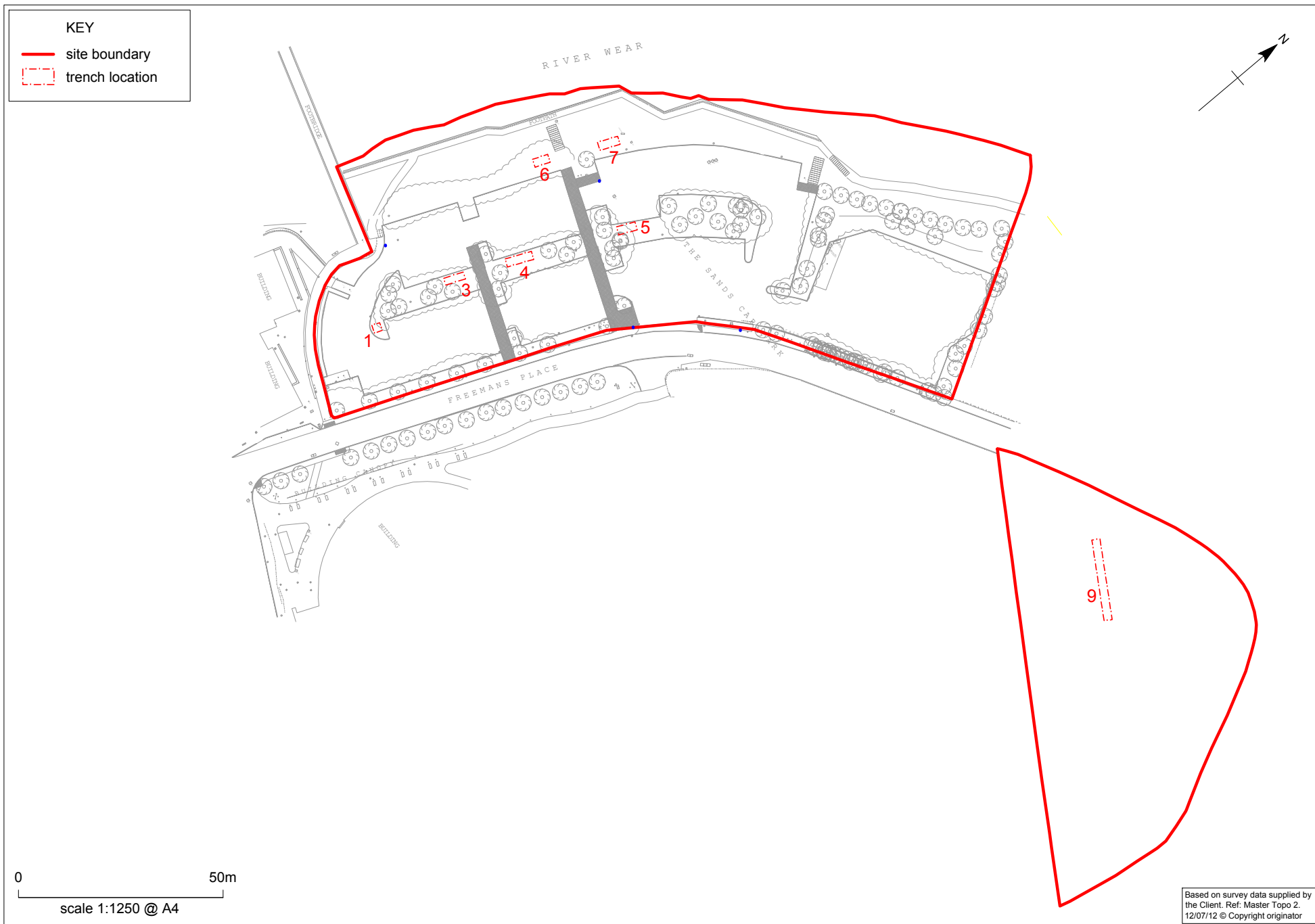


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The Sands, Durham: site location

Figure 1



The Sands, Durham: location of trial trenches

Figure 2