WYAS Archaeological Services

9 King Street

York

North Yorkshire

Archaeological Watching Brief

Report no. 3497
November 2020

Client: Samuel Guilfoyle

9 King Street
York
North Yorkshire

Archaeological Watching Brief

Summary

Archaeological Services WYAS carried out an archaeological watching brief at 9 King Street, York during ground-reducing works for the restructuring of the building. The work was undertaken between the 2nd and 18th of September 2020. During the monitoring of the excavation, four 17th-century foundation walls and an 18th/19th-century well were encountered. The walls, associated with outbuildings, and the well confirmed the documentary evidence regarding a courtyard at the rear of the original building.

There was no evidence of medieval or early post-medieval activity within the extant building

WYAS
Archaeological
Services

Report Information

Client:	Samuel Guilfoyle
Address:	Flat 22 Merchants Exchange, 2 Bridge Street, YO1 6LT
Report Type:	Archaeological Watching Brief
Location:	York
County:	Yorkshire
Grid Reference:	SE 60185 51660
Period(s) of activity represented:	Post-medieval/Modern
Report Number:	3497
Project Number:	X598
Site Code:	KSY20
Planning Application No.:	19/02742/FUL
Museum Accession No.:	TBC
Date of fieldwork:	2-18 September 2020
Date of report:	November 2020
Project Management:	Debora Moretti
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Document Issue Record

Ver.	Author(s)	Reviewer	Approver	Date
1.0	DM	JR	JR	Nov 20
2.0	DM	JR	CMR	Nov 20

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Acknowledgements

ASWYAS are grateful to Paul Smith for his assistance during the archaeological fieldwork, and to Claire MacRae for her support and advice during the project.

1 Introduction

Archaeological Services WYAS (ASWYAS) were commissioned by Paul Smith of PSC Surveying, on behalf of Samuel Guilfoyle, to undertake the archaeological monitoring of groundworks at 9 King Street, York. The work was carried out between the 2nd and 18th of September 2020. The watching brief was undertaken in accordance with the National Planning Policy Framework (NFFP) and a Written Scheme of Investigation (WSI) produced by ASWYAS and approved by the City of York Archaeologist (Appendix 1).

Site location, topography and land use

The site is located on King Street which runs from the King's Staith along the banks of the Ouse towards Coppergate. The site lies within York city centre on the eastern side of the river Ouse (Fig. 1). The ground within the site is generally flat at *c*.12m AOD. No 9, King Street is currently a two storey building with a flat roof which dates from the 20th century, which occupies an area of approximately 63m^2 at ground level. It is centred on National Grid Reference SE 60185 51660 (Fig. 2).

Soils and geology

The underlying bedrock comprises Sherwood Sandstone, a sedimentary bedrock formed approximately 237 to 272 million years ago in the Triassic and Permian Periods, when the local environment was dominated by rivers. It is overlain by superficial deposits of clays, sands and graves of the York Moraine Member (BGS 2020). The overlying soil is within an area of unrecorded urban deposits (SSEW 1983).

2 Archaeological and Historical Background

A brief historical background of the site was provided in the Written Scheme of Investigation (Appendix 1) and has been included below.

Prehistoric activity has been identified in the wider vicinity of York, but evidence from within the city itself is extremely limited and there are no records of any prehistoric finds or features within the immediate vicinity of the development site.

During the Roman period, the rivers Ouse and Foss were wider than they are currently, extending beyond the current banks of the rivers and encroaching onto the development site. This is confirmed by the results of a series of boreholes dug in the 1990s at St Georges Field where alluvial deposits dated to the Roman period were recorded, along with timber piles, possibly of similar date. The ground between the Roman fortress and the rivers was occupied by settlement activity; evidence of this was recorded at King Street and Cumberland Street, in the northern part of the site, where a limestone and cobble wall as well as waterlogged Roman deposits were uncovered at around 2m below ground level (BGL) (YAT 1988.1032 & YAT 1990.7). Further evidence of occupation has been uncovered at Coppergate and the Piccadilly/Castlegate area where ditches and timber and stone buildings were recorded in the 1970s and 1980s. At the periphery of this settlement activity, Castlegate follows the route of a

Roman road and Roman burials have been recorded at York Castle in 1835 and in 1956, and in the Castlegate area, around 120m to the northeast of the Tower Gardens.

There is little evidence of settlement activity within the site itself and its immediate surroundings until the Anglo-Scandinavian period when the land between the former Roman fortress and the rivers Foss and Ouse became intensively occupied. Excavations at Coppergate shopping centre, to the east of the site unearthed an area of dense settlement comprising narrow timber buildings fronting onto Coppergate with narrow backyards. Within the immediate vicinity, a layer of organic deposits were recorded at 12 King Street/2 Cumberland Street measuring 1m thick, whilst a 1.16m thick deposit recorded at 5–13 Clifford Street contained evidence of antler working. Further along Clifford Street at No. 17, a pit containing organic material was also recorded. Anglo-Scandinavian occupation deposits were revealed at 2 Clifford Street immediately below 19th-century cellars and overlying Roman deposits. The deposits were composed of partially preserved wattle fencing aligned parallel and perpendicular to King Street, which was sealed by a series of dumped, slightly organic deposits, which in turn were cut by another set of wattle fencing. The latest phase of Anglo-Scandinavian activity comprised dumped domestic refuse. The dumped organic deposits contained refuse such as fragments of leather shoes, a stone disc, iron slag, sheet lead and antler, some of which was worked. Pottery suggest a late 9th century to early 10th-century date.

Around 1230 AD, a Franciscan Friary was founded just to the north of Clifford's Tower, between Castlegate and the River Ouse. There is a suggestion that the city wall at Tower Place formed the southern side of the precinct wall. Excavations at 23 Clifford Street uncovered deposits relating to the Friary at 7.70m AOD, and in particular evidence of the apparent demolition of a building and an inhumation burial which were interpreted as part of a clearance event prior to the Friary being built followed by Friary-related mortuary practice. Later medieval deposits dating to between the 13th and 16th centuries were also recorded around 8.45m AOD. Final demolition layers were recorded at 9m AOD, and contained architectural fragments, bricks, painted plaster and leaded window glass, pointing to its high status origins. The medieval deposits were sealed by post-medieval garden soils, as indicated on the 1852 OS map.

A borehole survey at the former fire station on Clifford Street carried out in 2017 encountered medieval build-up deposits comprising reworked clayey material and sandy silts between 3m and 4m below ground level. The deposits contained frequent flecks and small fragments of limestone, and probably relate to land reclamation associated with the Friary. Mortared limestone walls were also encountered in two of the boreholes at similar depths as the deposits and were perhaps part of the friary buildings. During the same survey, clayey natural material and silty alluvial deposits were encountered between 4.5m and 6.5m BGL; the deposits became more organic from around 5m BGL and below, with finds of charcoal and animal bone fragments suggesting human activity was occurring close by during earlier periods.

The King's Staith was constructed in 1366 and was used for landing traded goods until the early 20th century. Evidence of the medieval waterfront was found in 1974 during works at the New Police Headquarters on Cumberland Street where medieval timbers and a lava quern were seen in a contractor's trench. A borehole survey undertaken in 1999 at 1–1a Low Ousegate recorded well-preserved, water-logged organic deposits dating from the Roman to the post-medieval period, with late-medieval deposits appearing at 2m BGL. Natural boulder clay was encountered between 8.5m and 10m BGL.

King's Street, Cumberland Street and Lower Friargate were 'water lanes' leading down to the river waterfront. Land to the south of the medieval city walls was mainly agricultural until the 18th to 19th century. St George's Field in this period was meadowland on which, in the 12th century, a chapel was built to serve the Norman motte and bailey castle to the north.

Archaeological monitoring during the York Flood Alleviation Scheme carried out in March/April 2018 identified south of the site evidence of prolonged land build-up during the medieval period beginning prior to the Franciscan Friary's construction. The lack of material culture prevented exact dating.

To the north of the site there was a period of improvement in the 19th century; former slums around the Castlegate area were cleared to create Clifford Street in 1881, and Piccadilly was extended to Pavement in 1902 via a new bridge and raised roadway. Tower Gardens was separated from St George's Field in 1881, at the same time as the construction of Skeldergate Bridge, and became York's first public park garden.

Post-medieval build-up deposits have been recorded in 2017 at Clifford Street and on land between King Street and Cumberland Street, up to 1.5m thick. A borehole recorded on St George's Field, close to St George's Chapel, also found deposits comprising organic sandy silt clays dating to this period which contained fragments of bone, brick and timber at a depth of between 5.85m to 2.00m AOD. The deposits were thought to be the infill of a post-medieval basin.

A watching brief was carried out at 9 King Street in 2017 to observe geotechnical drilling operations. It identified natural alluvial deposits 4.6m below ground surface and later build up deposits between 3.20m and 0.50m below ground level containing occasional crushed ceramic building material and flecks of grey mortar. These deposits where sealed by modern overburden.

Listed buildings of potential relevance in the immediate area are:

- The Grand Opera House (Grade II)
- The Kings Arms Public House (Grade II)
- No's 7, 9, 11 and 13 Low Ousegate (all Grade II)

3 Map Regression

No 9 is located in the west half of King Street on the north side, situated six buildings in from King's Straith. The street has changed name several times since the medieval period. It is first recorded as Cargate or Kergate in the *c.* 1200, in the 16th century the name Hatter Lane was associated with the street, and it was then known as First Water Lane in the post-medieval period. At this time, the street was part of an area of the city known as the Water Lanes, the lanes comprised three streets (First Water Lane, Middle Water Lane and Far Water Lane) which ran from Castlegate, near St Mary's Church, to the west towards the river Ouse. In the 18th and 19th century, the lanes had the highest rates of poverty and crime in the city. Early to mid-19th-century artists depict First Water Lane as a narrow street lined by jettied buildings, similar in appearance to The Shambles.

First Water Lane is illustrated on John Speed's 1610 Plan of York, as well as Captain James Archer's 1682 Plan and Jacob Richards' 1685 Survey. No detail or distinct form is given to the buildings on the street, but it is shown to have been lined by an unbroken line of buildings on the north and south side.

The first available map to show the street in any detail is the 1852 Ordnance Survey (OS) map of York. The northeast to southwest aligned street is annotated as *First Water Lane*. The buildings fronting the street are northwest to southeast aligned and appear to follow earlier burgage plot alignments. Notably Far Water Lane is now named as *Friargate*. Flanking First Water Lane at the west end is *The Kings Arms* on the north side, and *The Ship* on the south. The site of No 9 is located eight buildings in from *King's Straith*. The building on the plot is shown to be square in plan with a small extension on the east side boundary of the plot abutting the building's north side. A small courtyard is shown to the rear of the building, with a further small square outbuilding against the south boundary of the plot. The small square outbuilding was likely a toilet, one of very few depicted for the houses along the street. The north side of the courtyard is bounded by a building, presumably another dwelling. It is positioned against the west side boundary of the plot and is abutted by the aforementioned square outbuilding on its south side at the west end. To the east side of the secondary dwelling there is a narrow open passage which extends to the north and opens out into another small courtyard area. There is a small built shed centrally located in the courtyard, and there is an extension against the west side boundary which joins a long building which fronts *Low Ousegate* to the north. The secondary courtyard and the buildings north of this lie beyond the extant site boundary.

Attempts were made over many decades to look at either improving or demolishing the Water Lanes. In February 1830, the City Commissioners looked seriously at the '*plan of the projected New Street from Low Ousegate, across the Water Lanes, and to the present entrance to the Castle*.' Although it obtained support, no firm action was decided for the area (Yorkshire History 2020). In 1852 the Corporation of York took the decision to clear the water lanes in a bid to wipe out the unsanitary conditions and unsavoury nature of the area. This process took over twenty years, but it appears not all of the building along the streets

were actually demolished during this time. By the 1880s the new street, named Clifford Street, was constructed and municipal buildings were established on the Water Lanes, including a Magistrates Court, the Liberal Club and the site of York's first library. Space was also left for a new police station and a fire station.

The first map to show these extensive changes to the Water Lanes is the first edition 25-inch OS map of 1892. The Water Lanes still follow their earlier northeast to southwest alignment, but the east ends of the streets have been truncated by the north to south aligned *Clifford Street*. The former First Water Lane, now named *King Street*, appears to have been truncated by the new road the least, with many of the buildings fronting the street appearing to remain in situ, altough alterations are evident, and presumably the street frontage for many of these buildings was re-built in the second half of the 19th century. The most notable change to the street is the construction of the large *Corn Exchange* building on the south side of the street, and the amalgamation of several buildings enveloping The King's Arms on its north and east side to form a single large unit. The extensive size of the building and its riverside location perhaps indicates warehouse use.

The modern street view of this large single unit indicates that it was not a new single build development but rather a building which incorporated earlier buildings as well as new elements. The Flemish bond brickwork of the building immediately to the east of The King's Arms appears to be of probable 18th-century origin with later alterations evident and the very tall three storey building adjoining this to the east appears to have been constructed in the late 19th century.

At the east side of this large unit of amalgamated buildings, a ginnel is depicted on the 1892 OS map, and to the east of this, stepped slightly back is another three storey building. The modern street view of this building indicates that it was also constructed in the second half of the 19th century. The bricks are contemporary to those used for the adjoining building to the west, and the treatment of the street façade appears relatively harmonious, albeit not identical to the building to its west. The ground and first floor façade of this building was remodelled at a later time.

No 9 is next in sequence to the buildings discussed above, and the 1892 map shows the plot to have altered in plan. The alignment of the west side boundary of the plot has been altered and now appears as a dogleg, narrowing the frontage of the building. It is possible that the building was demolished and rebuilt in the second half of the 19th century but this is not clear. It may instead have only undergone an episode of remodelling, with an extension constructed over the former courtyard joining the building identified as a secondary dwelling to its north. The narrow passage along the east side boundary remains in situ. Markedly the building is shown to now adjoin the building fronting Low Ousegate to the north, forming a single unit. The buildings to the north of this appear largely unchanged in plan form, with extensions to their rear sides visible.

The south side of Middle Water Lane appears to have been fully demolished, with only some of the buildings in the west third of the street appearing to remain. The central third of the street appears to have been rebuilt and the east third removed for Clifford Street. The street is now named as *Cumberland Street*. Both sides of Friargate appear to have been fully demolished, with the street then being shortened, positioned further to the south and named *Lower Friargate.*

Very few alterations to the King Street are identifiable by the time of the 1909 25-inch OS map. The building at the east end of the north side of the street has been demolished and the Corn Exchange is now annotated as *Empire*, presumably now a theatre. The modern streetscape view of King Street shows that many of the shop fronts were probably Victorian in origin, particularly those along the south side of the street at the west end, and these were likely in place by the time of the 1909 OS map.

By the time of the 1962 OS map the east side open passage of No 9 is now shown to be covered over. The buildings to the west side of the gunnel are now annotated as Warehouses as are opposing buildings on the south side of the street. The theatre is now named Hall with a building towards the east end of the street, on the north side, now demolished.

Later mapping indicates no further changes to the building plot of no 9, and although not shown on any mapping, the building was presumably demolished in the 1990s and a smaller modern two storey glazed fronted building was built in its place. Roofline scaring on the east gable end of the building to the west indicates that the building at No 9 was formerly three-storey in height, but not as tall as the former warehouse buildings to the west.

The current streetscape of King Street exhibits its haphazard development, as demonstrated by its alignment appearing to follow medieval burgage plots, its residual elements of 17th-century structures such as The King's Arms, and traces of its residential past evident between later municipal and commercial use. The use of variable brick types and bonding styles such as Flemish and Common bond with handmade and machine made bricks, and the inconstant treatment of the building façades all testify to the piecemeal development of King Street.

4 Aims and Objectives

The overall aim of the archaeological watching brief was to provide information on the presence or absence and the extent, character, chronology, depth of burial and degree of archaeological survival across the site. The site is located within an area where heritage assets of archaeological significance from all periods, in particular the Roman, early medieval and medieval periods, are to be anticipated. The research aims of the investigation were to enhance our understanding of the nature of human activity, landscape morphology and the interaction between humans and the environment throughout these periods.

This work was intended to mitigate the destruction of any buried archaeological remains that may be revealed/disturbed through 'preservation by record'.

The objective of the work was to monitor the reduction of the ground floor and assess the resultant areas for their archaeological potential. Any remains were then subject to archaeological excavation. Recovered artefacts were subject to analysis and environmental data were sampled.

5 Methodology

The work involved the monitoring of the hand-excavation of the modern ground floor. The floor was reduced to a maximum depth of 0.50m across the footprint of the current building. The archaeological watching brief was carried out by an appropriately qualified and experienced archaeologist who was present during all ground works.

All work was undertaken in accordance with accepted professional standards and guidelines (Historic England 2008; CIfA 2014, 2020a and 2020b), in accordance with the ASWYAS site recording manual (ASWYAS 2020) and in compliance with the WSI (Appendix 1).

All excavations of archaeological deposits were undertaken manually with the stripped surface being cleaned and investigated for archaeological remains.

A soil sampling programme was undertaken consisting of bulk soil samples for the identification of plant macro-fossils, small animal bones and other small artefacts. All samples were taken from appropriate archaeological deposits, in accordance with the WSI and Historic England guidelines.

All works were accurately recorded, a site plan was produced at a scale of 1:100 and 1:50. The elevations were drawn at a scale of 1:20. All plans and sections include spot heights that relate to Ordnance Datum in metres.

A full written, drawn and photographic record was made of all archaeological work undertaken. An inventory of the primary archive is presented in Appendix 2 and a context concordance is provided in Appendix 3. ASWYAS currently hold the site archive in a stable and secure location.

6 Results

The ground-reducing works were mainly carried out at the rear of the existing building (Fig. 3, Plates 1 and 2). The modern wooden floorboards, linoleum and kingspan were removed and modern concrete deposits and rubble levelling layers were reduced by 0.50m. Four foundation walls associated with possible outbuildings were identified immediately below the levelling layers. Wall 10 comprised a single skin of red bricks laid as a single course of stretchers and bonded by greyish-white lime mortar with charcoal flecking (Figs 3 and 4; Plate 3). It was identified in the north-western corner of the building. The length of the wall surviving was 0.60m, and its width was 0.34m. Wall 11 comprised a double skin of red bricks surviving as two courses of stretchers, bonded by greyish-white lime mortar characterised by

large pieces of lime inclusions and occasional charcoal flecking (Figs 3 and 4; Plate 4 and 5). This wall was also identified in the north-western corner of the building. Wall 12, the southern return of Wall 11, presented the same characteristics as Wall 11. Together they presumably formed part of a small sub-rectangular outbuilding. Wall 13, of which only nine red bricks with greyish-white lime mortar survived, was situated in the north-eastern side of the building (Figs 3 and 4; Plate 6).

To the south-east of Walls 10, 11, 12 and 13, a well was identified immediately below the levelling layers and sand deposit 20. Well 17 (Figs 3, 5, 6 and 7; Plates 7 and 8) contained multiple deposits (only two fully visible) enclosed by a single skin of red bricks laid as a course of headers, and bonded by pale brown-grey lime mortar. Its diameter was 1m across. Its western side was disturbed by a later drain. As the well was left in *situ* and was not further disturbed during the ground works, only the two upper fills were investigated. Deposit 21, a mid-reddish brown sandy silt, represented the final backfilling of Well 17. Below deposit 21, was a dark greyish brown sandy silt (22), from which three metal object were found (see Section 7 below).

Walls 10, 11, 12, 13 and Well 17 seem to confirm that the rear of the existing building was previously a small courtyard as indicated by the documentary evidence detailed above.

7 Artefact Record

Metalwork by Gail Drinkall and Paul G Johnson

The following report has been prepared in line with CIfA standards and guidance (CIfA 2014).

Object 1 (Plate 9) appears to be the internal elements of a positive displacement (or ‘lift’) pump used for raising water from a well. Such a pump comprised a piston and cylinder arranged vertically in the well, and a number of valves to control the flow of water. The piston would have been connected to the operating handle of the pump by a connecting rod. When the piston within the cylinder was raised by depressing the handle, water flowed under atmospheric pressure into the cylinder beneath the piston. Once this had occurred, a valve (standing valve) at the bottom of the cylinder would have closed preventing that water from flowing back from whence it came. When the piston was lowered again, the water trapped in the cylinder would have flowed past the piston by means of a further valve (travelling valve), into the pipe above the piston. Further action on the operating handle would have caused more and more water to enter the pipe until it overflowed into a spout located at the well-head.

In such a pump the cylinder, piston and valves could be located within the well-head pumping apparatus, or down, at or near, the bottom the well-shaft itself.

Whilst it is difficult to be definitive about the item, it would seem likely that this represents the remains of a bucket piston, lower valve and part of a connecting rod from a cylinder that

was once located at the bottom of a well (although one of the ‘cups’ seems to be upside-down on the shaft). This pump mechanism is difficult to date, however cast iron pump mechanisms only became commonplace from the middle of the 19th century onwards. Prior to this period, the pump cylinders, pipework and the well-head mechanisms were usually made of wood, often elm. Where ironwork was used in such pumps, it would have been wrought iron used sparingly, perhaps only for the bucket pistons, valve cups and connecting rod.

Object 2 (Plate 10) could be part of a knife-edge pivot bearing or a tool of some description. If it is the former, it could have had some function as part of a well-head pumping mechanism.

Object 3 (Plate 11) is a bung auger used for boring holes in casks or barrels to insert spiles (to control the flow of gas in or out of the cask), or taps (to draw off liquid). Such items have been used since the invention of the staved cask, and are still in use today.

The objects will be retained as part of the site archive but no further work is required.

Brick by Liz Govier

Six brick samples were retrieved from the site, all of which are handmade common burnt clay brick types. The bricks were recovered from four wall foundations and a well. The brick assemblage comprises:

- Wall 10 - Two fragmented brick samples were presented for analysis from wall 10. One brick measures 120mm wide by 60mm thick, its full length is unknown. The second brick has a thickness of 45mm, its full length and width are unknown. The composition of the bricks appear alike and both have identical residual greyish-white lime mortar with charcoal flecking adhered to the faces. The bricks have a probable 17th-century date.
- Wall 11 - The fragmented brick sample from wall 11 measures 110mm wide by 68mm thick, its full length is unknown. The brick has an indentation on its bed face from the tool used to remove the brick from its mould. Adhered to its faces was a residual greyish-white lime mortar, the mortar has large pieces of lime inclusions and occasional charcoal flecking. The brick type is the same as the sample from wall 012. The brick has a probable 17th-century date.
- Wall 12 - The brick sample from wall 12 measures 235m long by 120mm wide, it has a variable thickness of 55mm to 60mm. The brick was of identical composition to the brick sample from wall 12, and also has an indentation tool mark on its bed face. The brick has a probable 17th-century date.
- Wall 13 - The brick sample from wall 13 measures 220m long by 110mm wide and has a variable thickness of 50mm to 60mm. The brick was heavily covered on all faces by a greyish-white lime mortar with lime inclusions and charcoal flecking. The brick has a probable 17th-century date.

- Well 17 - The brick sample retrieved from well 17 measures 230mm long by 120mm wide and has a uniform thickness of 50mm. The brick has patches of residual pale brown-grey lime mortar. One of the header faces has a residual staining from organic material, which presumably relates to its use as a well. The brick has a probable 18th-century date.

8 Environmental Record

Carbonised plant remains and charcoal by Diane Alldritt

Three environmental sample flots were examined for carbonised plant macrofossils and charcoal. No carbonised material was present in the retent portions of the samples.

Bulk environmental samples were processed by ASWYAS using a Siraf style water flotation system (French 1971). The flot was dried before examination under a low power binocular microscope typically at x10 magnification. All identified remains were removed and bagged separately by type.

Wood charcoal was examined using a high powered Vickers M10 metallurgical microscope at magnifications up to x200. The reference photographs of Schweingruber (1990) were consulted for charcoal identification. Plant nomenclature utilised in the text follows Stace (1997) for all vascular plants apart from cereals, which follow Zohary and Hopf (2000).

The environmental sample collected from rubble levelling layer 03 contained a few trace fragments of crushed charred detritus, probably general background material in amongst clinker fragments and attributable to post-medieval levelling activity (Table 1).

Two samples collected from brick well 17 provided to be sterile of carbonised remains. Backfill layers 21 and 22 both contained clinker, probably general levelling material from demolition and re-building activity. No evidence for waterlogged preservation was apparent from the samples.

Table 1. Results from the environmental sampling

	Sample	1	2	3
	Context	03	21	22
	Feature	rubble levelling layer	2nd backfill well 17	3rd backfill well 17
	Sample volume (l)	5	3	2
	Total CV	<2.5ml	0	0
	Modern	<2.5ml	<2.5ml	<2.5ml
Clinker		20+	10+	20+

9 Discussion and Conclusions

During the monitoring of ground-reducing works carried out at No 9 King Street, four walls and a well were encountered. It was established from documentary evidence that the walls recorded correlated to outbuildings depicted on the 1852 edition OS map of York. Here, a small courtyard was shown to the rear of the original building. The existence of a courtyard was corroborated by the presence of a well.

The iron objects recovered from the top fills of the well seem to corroborate a mid-19th century date for its final phases and backfilling.

The walls, possibly dating to the 17th century and the well, dating to the 18th/19th century, were very likely demolished during the remodelling of the building in the second half of the 19th century.

No evidence of earlier structures or features was identified.

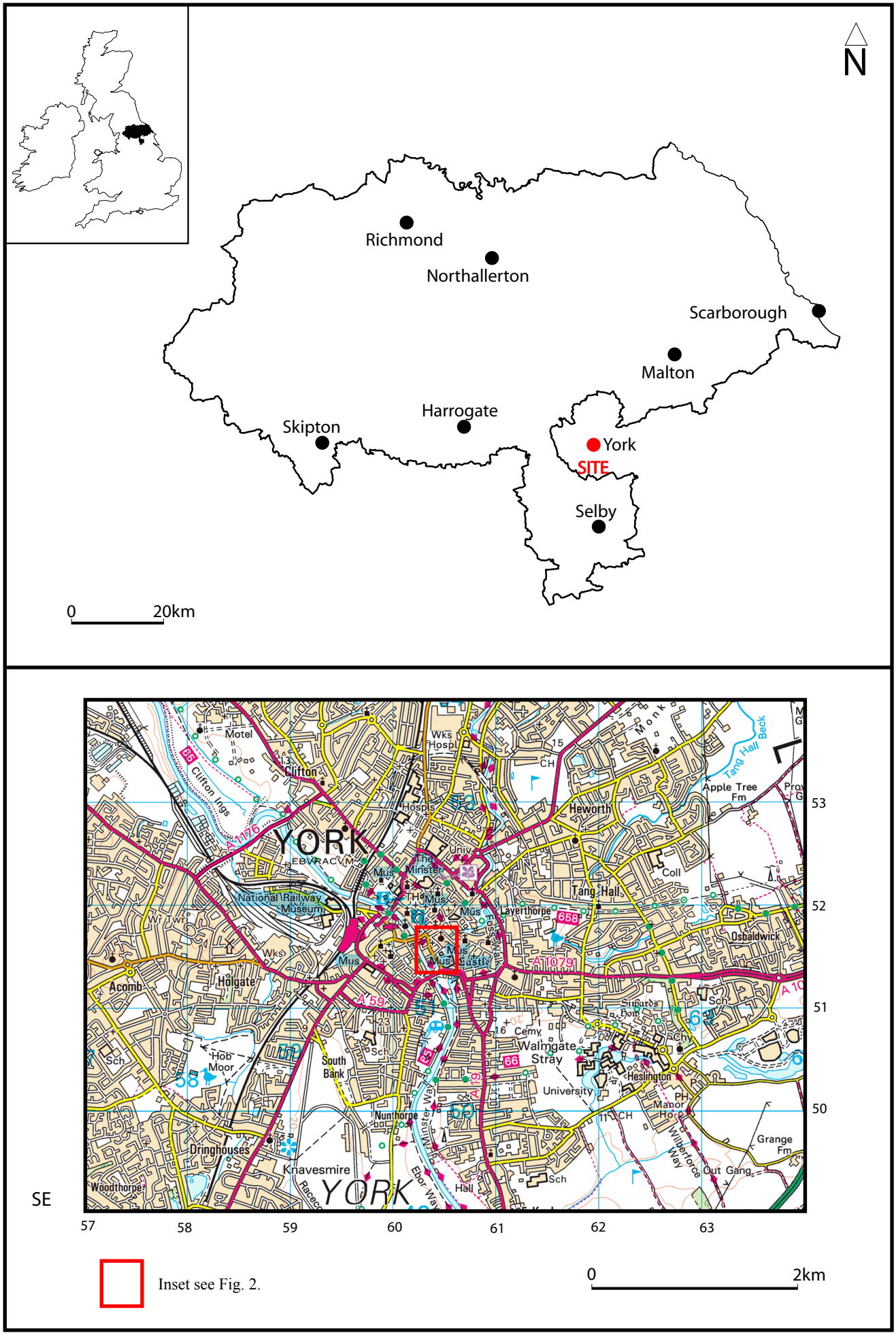

Fig. 1. Site location

Fig. 2. Site location and proposed development area (1:1000 @ A4)

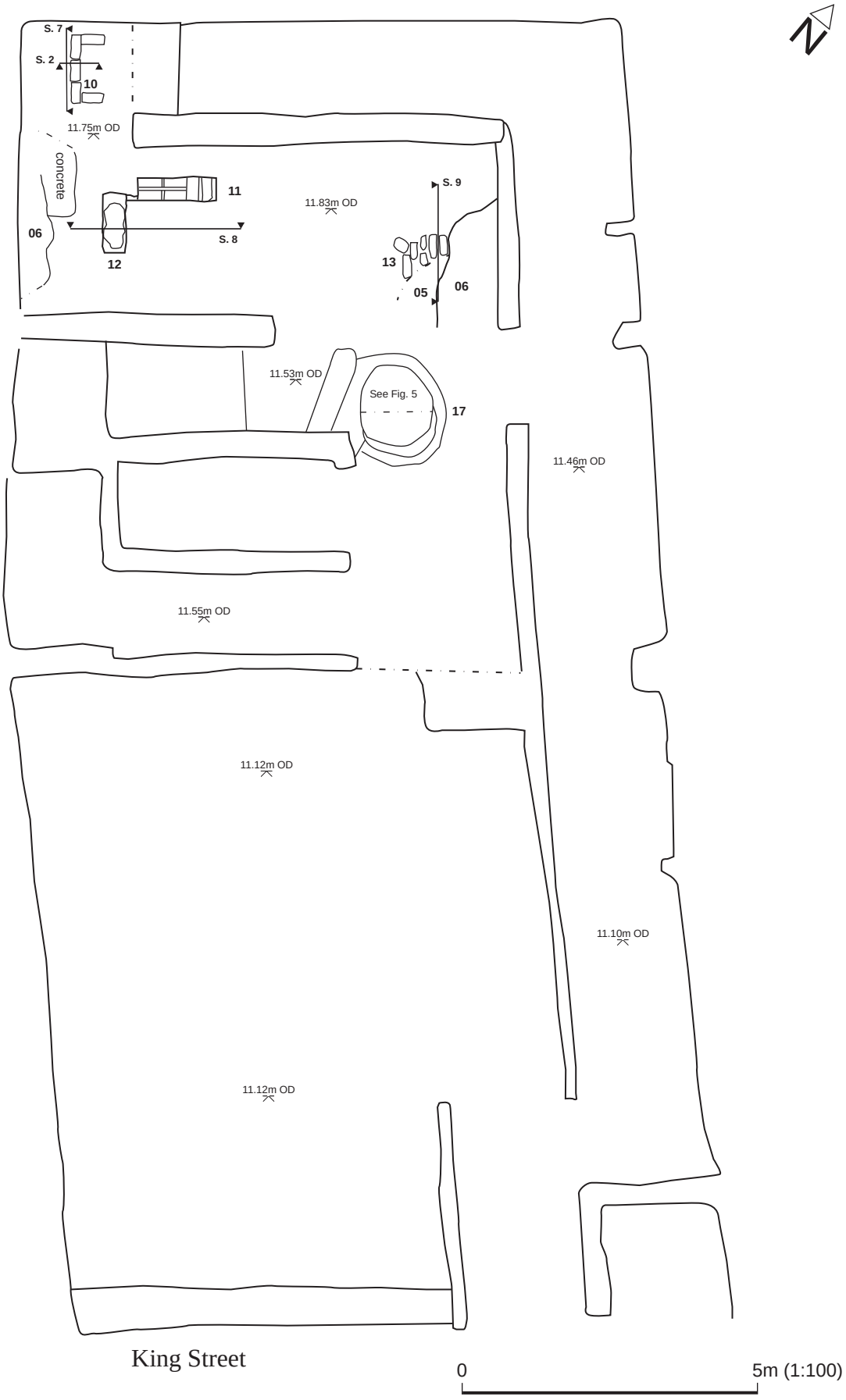

Fig. 3. Plan of the ground floor (1:100 @A4)

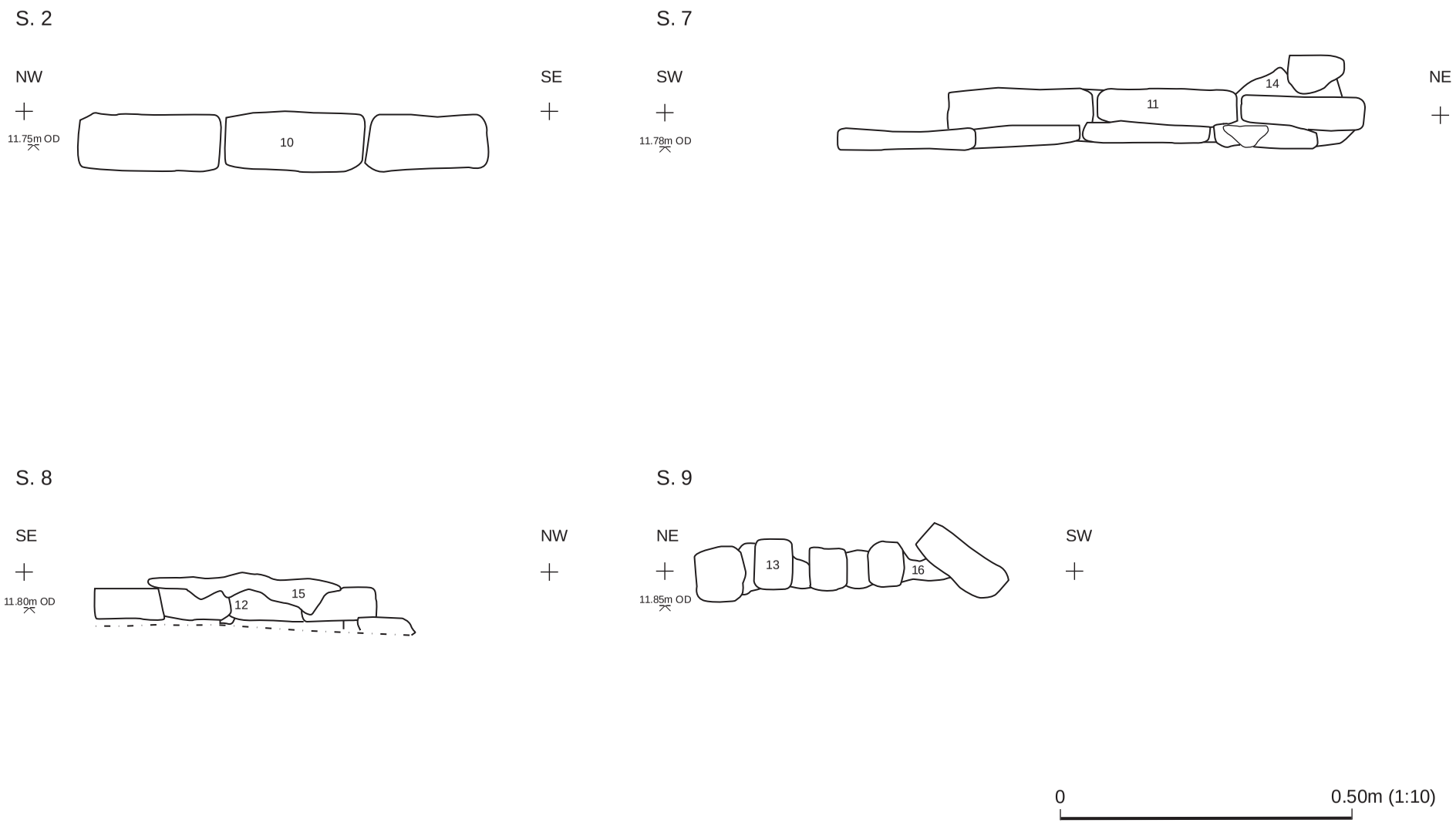

Fig. 4. Elevations of walls 10, 11, 12 and 13

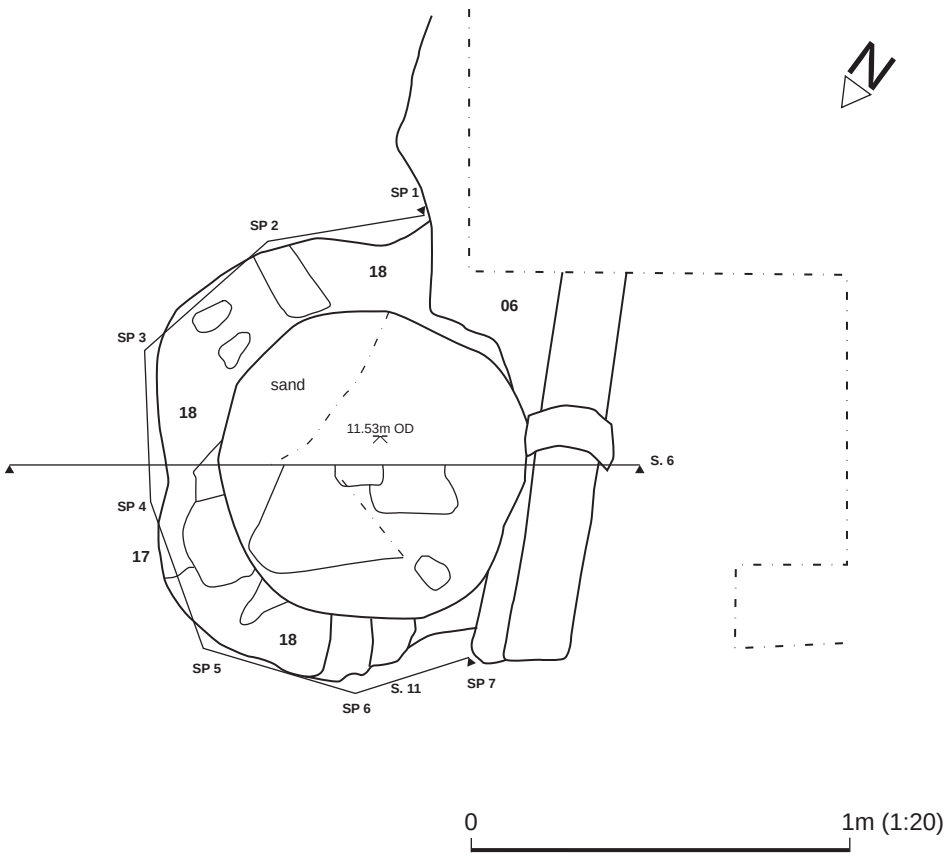

Fig. 5. Plan of well 17

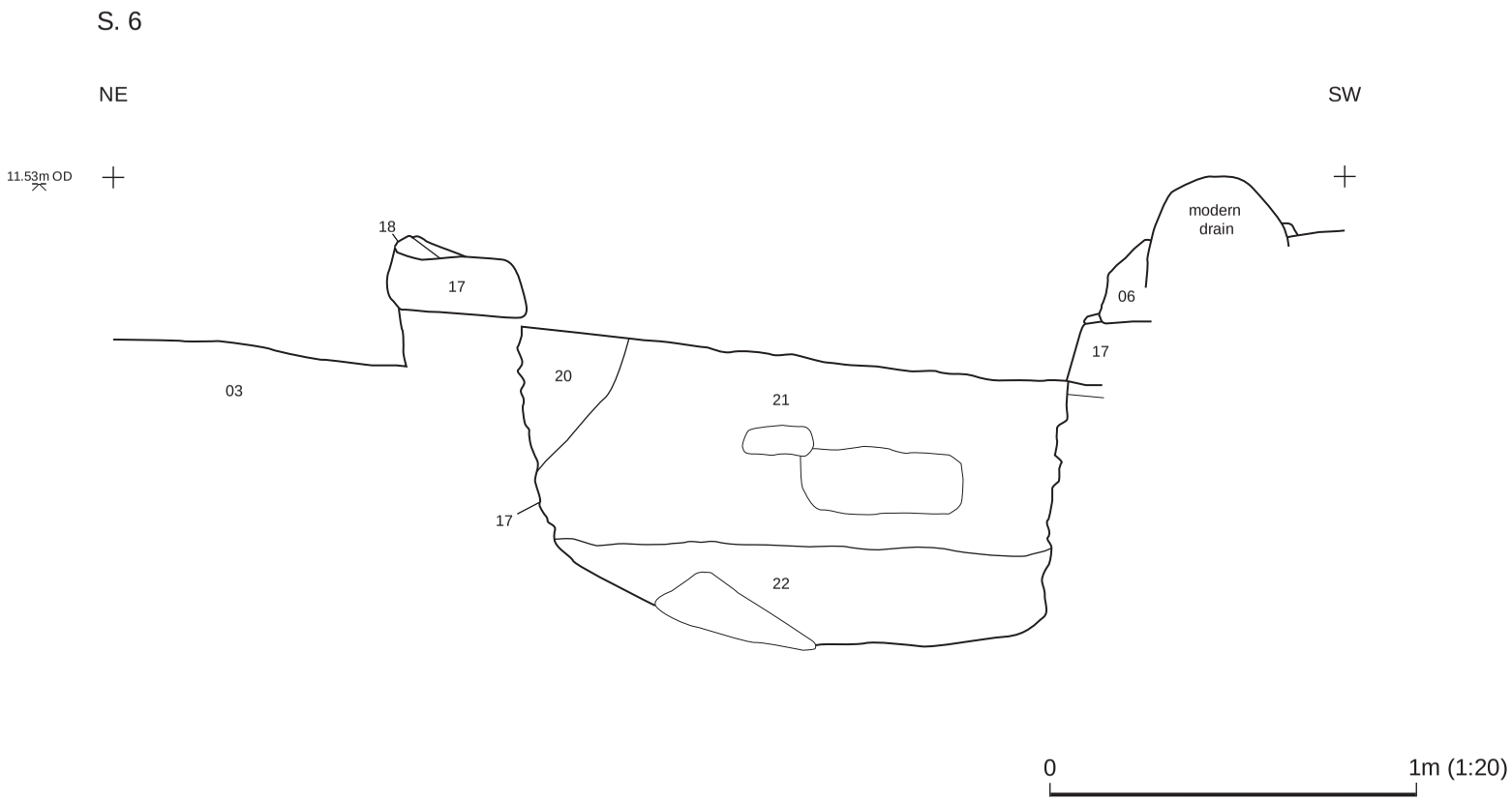

Fig. 6. Section of well 17

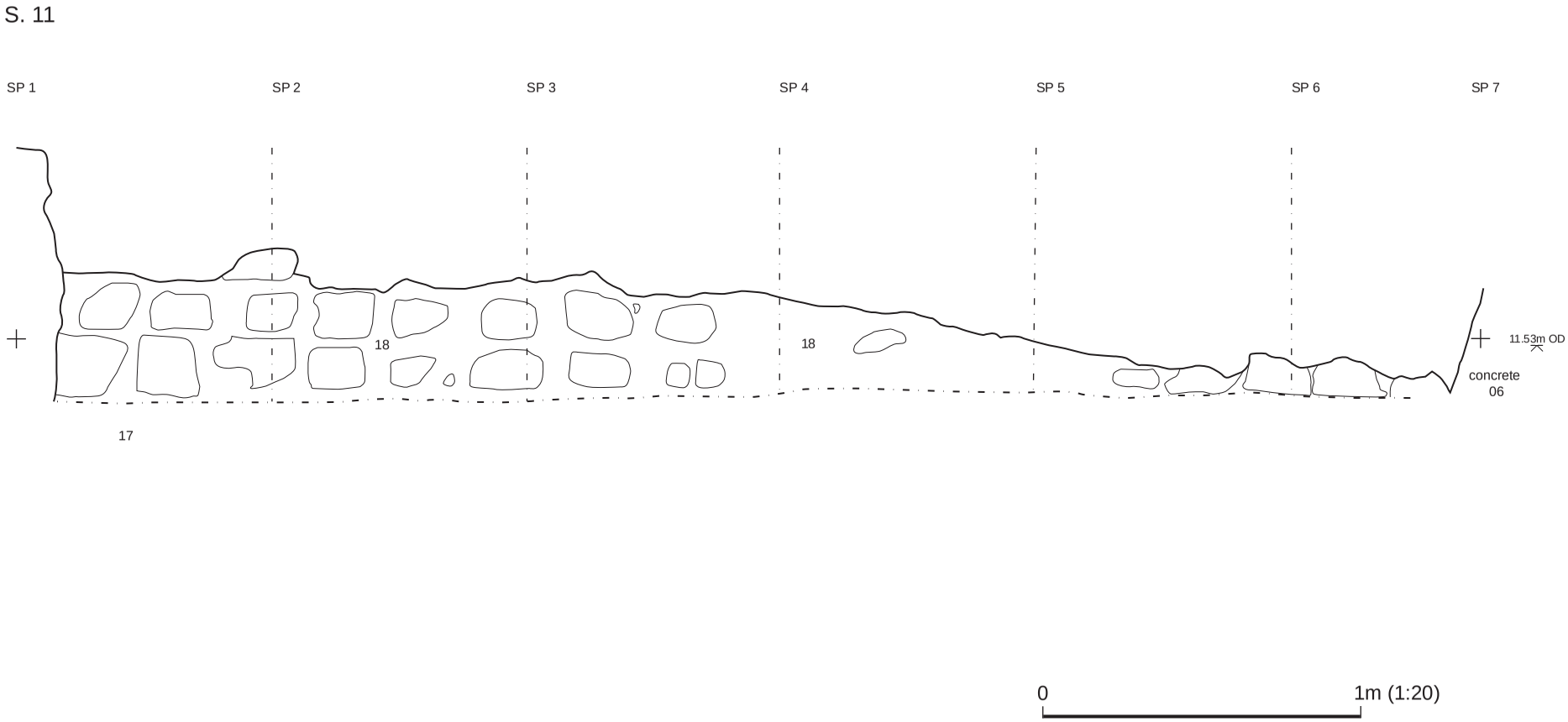

Fig. 7. Elevation around well 17

Plate 1. No 9, King Street, looking south-west

Plate 2. Inside the building, looking north-west

Plate 3.Wall 10, looking south-west

Plate 4. Wall 11, looking north-west

Plate 5. Wall 12, looking south-west

Plate 6. Wall 13, looking north-west

Plate 7. Well 17, looking south-east

Plate 8.Well 17, looking south-east

Plate 9. Object 1, pump

Plate 10. Object 2, knife edge pivot

Plate 11.Object3, bung borer

Appendix 1: Written Scheme of Investigation

9 King Street

York

West Yorkshire

Written Scheme of Investigation for an Archaeological Watching Brief and Excavation

Prepared by: Archaeological Services WYAS
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Document Issue Record

Ver	Status	Author(s)	Reviewer	Approver	Date
1.0	Draft	DM	JR	JR	June 20
1.1	Final	DM	CMR	CMR	June 20

June 2020

Written Scheme of Investigation for an Archaeological Watching Brief and Excavation at 9 King Street, York

1. Introduction

1.1 This Written Scheme of Investigation (WSI) has been prepared by Archaeological Services WYAS (ASWYAS) on behalf of PSC Surveying Limited for an archaeological watching brief and excavation at 9 King Street in relation to planning consent 19/02742/FUL. The archaeological work will comply with the relevant standard of the Chartered Institute for Archaeologists (2014, 2020a-b), Historic England's best practice documents (1991, 2006, 2008) and the "Regional statement of good practice for archaeology in the development process, Yorkshire, the Humber & the north east".

1.2 The scheme of work will be undertaken in accordance with the requirements of Section 16 of NPPF and City of York Historic Environment Policy HE10, as follows:

1.3 Planning applications for development that involves disturbance of existing ground levels on sites within York City Centre Area of Archaeological Importance will be granted provided:

a) applicants permit a field excavation, approved by the Council, to assess the extent and importance of any archaeological remains; and

b) applicants can demonstrate that less than 5% of any archaeological deposits will be disturbed or destroyed;

1.4 Outside York City Centre Area of Archaeological Importance, archaeological deposits of national importance must be preserved in situ. Where physical preservation of the deposits in situ is not possible, applicants must make provision for the professional excavation and recording of the archaeology, in accordance with a detailed scheme approved prior to development commencing.

1.5 Therefore in considering the heritage implications of any planning application for development, the local planning authority will be guided by the policy framework set by government policy and by the saved Local Plan Policy HE10.

2. Site location, topography and land-use

2.1 The site is located at 9 King Street King Street which runs from the King's Staith along the banks of the Ouse towards Coppergate. The site lies within York city centre on the eastern side of the river Ouse. The ground within the site is generally flat at *c*.14m AOD. No 9, approximately 63m^2 at ground level, is currently occupied by a two storey building with a flat roof which dates from the 20th century, and is centred on National Grid Reference SE 60185 51660.

3. Geology and soils

3.1 The underlying bedrock comprises Sherwood Sandstone, sedimentary bedrock formed approximately 237 to 272 million years ago in the Triassic and Permian Periods, when the local environment was dominated by rivers. It is overlain by superficial deposits of clays, sands and graves of the York Moraine Member (BGS 2020). The overlying soil is within an area of unrecorded urban deposits (SSEW 1983).

4. Archaeological background

4.1 The following historical background was taken from YAT Report 2018/80 (Jackson 2018)

Prehistoric

4.2 Prehistoric activity has been identified in the wider vicinity of York, but evidence from within the city itself is extremely limited and there are no records of any prehistoric finds or features from the immediate vicinity of the development site. The development site is considered to have a very low potential to contain significant evidence of prehistoric activity.

Roman

4.3 During the Roman period, the rivers Ouse and Foss were wider than they are currently, extending beyond the current banks of the rivers and encroaching onto the development site. This is confirmed by the results of a series of boreholes dug in the 1990s at St Georges Field where alluvial deposits dated to the Roman period were recorded, along with timber piles, possibly of similar date. The ground between the Roman fortress and the rivers was occupied by settlement activity; evidence of this was recorded at King Street and Cumberland Street, in the northern part of the site, where a limestone and cobble wall as well as waterlogged Roman deposits were uncovered at around 2m below ground level (BGL) (YAT 1988.1032 & YAT 1990.7). Further evidence of occupation has been uncovered at Coppergate and the Piccadilly/Castlegate area where ditches and timber and stone buildings were recorded in the 1970s and 1980s. At the periphery of this settlement activity, Castlegate follows the route of a Roman road and Roman burials have been recorded at York Castle in 1835 and in 1956, and in the Castlegate area, around 120m to the northeast of the Tower Gardens.

Anglo-Scandinavian

4.4 There is little evidence of settlement activity within the site and its immediate surroundings until the Anglo-Scandinavian period when the land between the former Roman fortress and the rivers Foss and Ouse became intensively occupied. Excavations at Coppergate shopping centre, to the east of the site unearthed an area of dense settlement comprising narrow timber buildings

fronting onto Coppergate with narrow backyards. Within the immediate vicinity, a layer of organic deposits were recorded at 12 King Street/2 Cumberland Street (YAT 1990.7) measuring 1m thick, whilst a 1.16m thick deposit recorded at 5–13 Clifford Street contained evidence of antler working. Further along Clifford Street at No. 17, a pit containing organic material was also recorded. Anglo-Scandinavian occupation deposits were revealed at 2 Clifford Street immediately below 19th-century cellars and overlying Roman deposits. The deposits were composed of partially preserved wattle fencing aligned parallel and perpendicular to King Street, which was sealed by a series of dumped, slightly organic deposits, which in turn were cut by another set of wattle fencing. The latest phase of Anglo-Scandinavian activity comprised dumped domestic refuse. The dumped organic deposits contained refuse such as fragments of leather shoes, a stone disc, iron slag, sheet lead and antler, some of which was worked. Pottery recovered suggested a late 9th century to early 10th-century date.

Medieval

4.5 Around 1230 AD a Franciscan Friary was founded just to the north of Clifford's Tower, between Castlegate and the River Ouse. There is a suggestion that the city wall at Tower Place formed the southern side of the precinct wall. Excavations at 23 Clifford Street uncovered deposits relating to the Friary at 7.70m AOD, and in particular evidence of the apparent demolition of a building and an inhumation burial which were interpreted as part of a clearance event prior to the Friary being built followed by Friary-related mortuary practice. Later medieval deposits dating to between the 13th and 16th centuries were also recorded around 8.45m AOD. Final demolition layers were recorded at 9m AOD, and contained architectural fragments, bricks, painted plaster and leaded window glass, pointing to its high status origins. The medieval deposits were sealed by post-medieval garden soils, as indicated on the 1852 OS map.

4.6 A borehole survey at the former fire station on Clifford Street carried out in 2017 encountered medieval build-up deposits comprising reworked clayey material and sandy silts between 3m and 4m below ground level. The deposits contained frequent flecks and small fragments of limestone, and probably relate to land reclamation associated with the Friary. Mortared limestone walls were also encountered in two of the boreholes at similar depths as the deposits and were perhaps part of the friary buildings. During the same survey, clayey natural material and silty alluvial deposits were encountered between 4.5m and 6.5m BGL; the deposits became more organic from around 5m BGL and below, with finds of charcoal and animal bone fragments suggesting human activity was occurring close by during earlier periods.

4.7 The King's Staith was constructed in 1366 and was used for landing traded goods until the early 20th century. Evidence of the medieval waterfront was found in 1974 during works at the New Police Headquarters on Cumberland Street where medieval timbers and a lava quern were seen in a contractor's

trench. A borehole survey undertaken in 1999 at 1–1a Low Ousegate recorded well-preserved, water-logged organic deposits dating from the Roman to the post-medieval period, with late-medieval deposits appearing at 2m BGL. Natural boulder clay was encountered between 8.5m and 10m BGL.

4.8 King's Street, Cumberland Street and Lower Friargate were 'water lanes' leading down to the river waterfront. Land to the south of the medieval city walls was mainly agricultural until the 18th to 19th century. St George's Field in this period was meadowland on which, in the 12th century, a chapel was built to serve the Norman motte and bailey castle to the north.

4.9 Archaeological monitoring during the York Flood Alleviation Scheme carried out in March/April 2018 by YAT (Jackson 2018) identified south of the site evidence of prolonged land build-up during the medieval period beginning prior to the Franciscan Friary's construction. The lack of material culture prevented exact dating.

Post-medieval

4.10 To the north of the site there was a period of improvement in the 19th century; former slums around the Castlegate area were cleared to create Clifford Street in 1881, and Piccadilly was extended to Pavement in 1902 via a new bridge and raised roadway. Tower Gardens was separated from St George's Field in 1881, at the same time as the construction of Skeldergate Bridge, and became York's first public park garden.

4.11 Post-medieval build-up deposits have been recorded in 2017 at Clifford Street and on land between King Street and Cumberland Street, up to 1.5m thick. A borehole recorded on St George's Field, close to St George's Chapel, also found deposits comprising organic sandy silt clays dating to this period which contained fragments of bone, brick and timber at a depth of between 5.85m to 2.00m AOD. The deposits were thought to be the infill of a post-medieval basin.

4.12 A watching brief carried out at 9 King Street by YAT (Loffman 2017) to observe geotechnical drilling operations. It identified natural alluvial deposits 4.6m below ground surface and later build up deposits between 3.20m and 0.50m below ground level containing occasional crushed ceramic building material and flecks of grey mortar. These deposits where sealed by modern overburden.

4.13 Listed buildings of potential relevance to this application are:

- The Grand Opera House (Grade II)
- The Kings Arms Public House (Grade II)
- No's 7, 9, 11 and 13 Low Ousegate (all Grade II)

5. Aims and Objectives

5.1 The overall aim of the archaeological watching brief is to provide information on the presence or absence and the extent, character, chronology, depth of burial and degree of archaeological survival across the site. Should further archaeological investigation be required as mitigation by the planning authority, this will be specified in a separate written scheme of investigation to be agreed with The City of York Archaeologist.

5.2 The site is located within an area where heritage assets of archaeological significance from all periods, in particular the Roman, early medieval and medieval periods, are to be anticipated. The research aims of the investigation are to enhance our understanding of the nature of human activity, landscape morphology and the interaction between humans and the environment throughout these periods.

5.4 The archaeologists carrying out the monitoring will familiarise themselves with the results of previous archaeological investigations carried out on the site and its immediate surroundings. The archaeological investigations carried out in accordance with this Written Scheme of Investigation will focus on enhancing the existing knowledge on the site rather than duplicating existing datasets and will consider the general priorities of the regional research agenda (Roskams and Whyman 2007).

6. Methodology

6.1 All work will be undertaken in accordance with the relevant standards (CIfA 2014 and 2020a and b; Historic England 1991, 2006, 2008). The archaeological watching brief and exavation will be conducted by an appropriately qualified and experienced archaeologist who will be present during all ground works.

6.2 The intention of the archaeological watching brief is not to unduly delay the work of other contractors on site, however, a degree of flexibility is also expected of the developer in order that the archaeologist can fulfil the terms of this specification. An archaeologist should be present on site during any excavation. The archaeologist should view the area as it is being dug and any trench sections after excavation has been completed. Where archaeology is judged to be present, the excavated area should be rapidly cleaned and the need for further work assessed. Where appropriate, any features and finds should then be quickly hand excavated, sampled if appropriate, and recorded.

6.3 The excavation will be carried out whenever significant archaeological layers are encountered.

6.2 The controlled stripping of topsoil, to the archaeologically required level, shall be carried out horizon in successive level spits of a maximum 0.2m thickness using a mechanical excavator equipped with a toothless ditching bucket and

under archaeological supervision. Stripping will take place in level spits to the top of the first archaeological horizon or undisturbed natural. Where archaeological remains require clarification, the relevant area will be cleaned by hand. Under no circumstances will the machine be used to cut arbitrary trenches down to natural deposits, nor shall plant run upon the stripped area unless it is agreed with the supervising archaeologist.

6.3 Any archaeological features/deposits will be manually excavated in an archaeologically controlled and stratigraphic manner, in order to meet the aims and objectives outlined above.

6.4 No archaeological deposits will be entirely removed unless this is unavoidable in achieving the objectives of the watching brief and excavation, although all features identified are expected to be half-sectioned and the full depth of archaeological deposits assessed.

6.5 Features will be sample excavated employing the following strategy:

- Linear features: sufficient excavation will be carried out to investigate the depth, profile and fills of a ditch or gully and to recover dating and environmental evidence from its fills. Normally this will involve a minimum of 20% sample dispersed along the length of the feature (each sample section to be not less than 1m), With respect to trial trenches, one 1m section will be located and recorded adjacent to the trench edge. Feature intersections will always be excavated in such a way to determine a stratigraphic relationship.

- Discrete features: pits, post-holes and other discrete features will normally be half-sectioned to determine and record their form with a minimum sample of 50% of discrete features in each area, before excavating in their entirety.

6.6 A full written, drawn and photographic record of all material revealed during the course of the work shall be made. The excavation limits will be surveyed using electronic survey equipment with larger scale hand drawn plans of features, at 1:20 or 1:50, being created as appropriate. Sections of linear and discrete features will be drawn at 1:10 or 1:20. All sections, plans and elevations will include spot-heights related to Ordnance Datum in metres as correct to two decimal places. Tie-in information will be undertaken during the course of the excavation and will be fixed in relation to nearby permanent structures and roads and to the National Grid. The photographic archive will comprise monochrome negative photographs at a minimum format of 35mm, augmented by 35mm colour slides. Digital photographs, taken using cameras with a resolution of at least 10 megapixels, will be used to supplement the photographic record. Digital photographs will not form any part of the primary archive.

6.7 All excavated archaeological contexts shall be fully recorded by written records, giving details of location, composition, shape, dimensions, relationships, finds, samples, and cross-references to other elements of the record and other

relevant contexts, in accordance with best practice and with methods previously approved by The City of York Archaeologist. All contexts, and any small finds and samples from them will be given unique numbers. Bulk finds will be collected by context.

6.8 All artefacts will be removed from the site for assessment and analysis, and where it is appropriate, their find spots shall, if appropriate, be recorded three dimensionally. Non-modern artefacts from the excavated topsoil and subsoil will be collected. Finds material will be stored in controlled environments, where appropriate. All artefacts recovered will be retained, cleaned, labelled and stored as detailed in the guidelines laid out in the CIfA (20014b). Any necessary conservation work will be undertaken by approved conservators working to UKIC guidelines.

6.9 A soil-sampling programme shall be undertaken during the course of the investigation for the identification and recovery of carbonised and waterlogged remains, vertebrate remains, molluscs and small artefactual material. This will comprise the removal of a bulk sample from every securely sealed and hand-excavated context, excepting those with excessive levels of residuality or those with minimal 'soil' content. Bulk samples will comprise representative 40 litre samples. Where a context does not yield 40 litres of material, smaller samples will be taken. The post-excavation processing of all palaeoenvironmental samples will be undertaken in line with Historic England's Environmental Archaeology: A guide to the theory and practice of methods from sampling and recovery to post-excavation (2011).

6.10 In the event of human remains being discovered they will, in the first instance, be left *in situ*, covered and protected. The removal of human remains will only take place in compliance with either a faculty issued by the Chancellor of the Diocese, or the Burial Act 1857. In the case of the latter (i.e. in the absence of a faculty) an exhumation licence must be obtained from the Ministry of Justice prior to the removal of the remains. Provision will be made for the specialist reporting of the remains by a recognised osteoarchaeologist. In addition the archaeologist must alert the Coroner and the City of York Archaeologist and City of York Environmental Health Department. The archaeologist must identify the full extent of the deposit and excavate and remove the inhumations or cremations for analysis. The issue of whether the human remains will be retained in the Yorkshire Museum or reburied in an appropriate location must be discussed and where possible agreed in advance with the relevant authorities (the Ministry of Justice, the City of York Council, and the Yorkshire Museum).

6.11 If two or more pieces of prehistoric metalwork, two or more gold and silver coins over 300 years old and/or ten or more copper alloy coins found in association with each other are recovered, they and all associated objects shall be reported to HM Coroner according to the procedures relating to the Treasure Act (1996) and the Treasure (Designation) Order (2002).

6.12 Appropriate specialists will visit the site to advise on sampling strategies and their suggested strategies will then be implemented.

6.13 Provision will be made to recover material suitable for scientific dating. Contingency sums will be made available to undertake such dating.

6.14 Further contingency provision will be made for additional specialist advice, e.g. for finds analysis and conservation.

7. Analysis and Reporting

7.1 Following the conclusion of the fieldwork, a report shall be produced. For all categories of material recovered, including finds, palaeo-environmental, industrial and other specialist samples, an assessment by an appropriately experienced specialist will be undertaken. Samples must be processed and sorted, and any artefacts recovered provided to the appropriate specialist(s) to be considered alongside the hand-recovered material. Basic stratigraphic information will be supplied to the project specialists. All finds are to be treated in accordance with current best practice guidance. Finds are to be cleaned and marked, according to accepted principles and in line with appropriate period/material guidelines. For ceramic assemblages, recording shall be carried out in a manner compatible with existing typological series in local pottery reference collections, e.g. the South Yorkshire and North Derbyshire medieval ceramics reference collection. All ferrous objects and a selection of non-ferrous objects (including all coins), will be x-radiographed. Where material suitable for scientific dating was recovered, sufficient dating will be undertaken to meet the aims of the watching brief and excavation. Where further fieldwork is not to be undertaken and assessment has identified the need for further analysis, this will be completed drawing upon the contingency allowed.

7.2 The site archive will be assembled in line with the recommended composition provided in Historic England's PPN3 (2008) and UKIC's *Guidelines for the Preparation of Excavation Archives for Long-term Storage* (1990) and CIfA's *Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives* (2020b).

7.3 In addition to the site records, artefacts, ecofacts and other sample residues, the archive shall contain all the data collected during the fieldwork, including records, finds and environmental samples. It will be quantified, ordered, indexed and internally consistent. Archive consolidation will be undertaken immediately following the conclusion of fieldwork and will involve:

- the site record being checked, cross-referenced and indexed as necessary;
- retained finds being cleaned, stabilised, marked and packaged in accordance with the requirements of the recipient museum;

- retained finds being assessed and recorded using *pro forma* recording sheets, by suitably qualified and experienced staff. Initial artefact dating will be integrated within the site matrix; and

- environmental samples being processed by suitably experienced and qualified staff and recorded using pro forma recording sheets.

7.4 In addition to the site records, artefacts, ecofacts and other sample residues, the archive shall contain:

- a summary report synthesising the context record;

- a summary of the artefact record; and

- a summary of the environment record.

7.5 The integrity of the primary field record will be preserved. Security copies will be maintained where appropriate.

7.6 Provision (including the agreement of costs) will be made for the deposition of the archive, artefacts and environmental material in Yorkshire Museum subject to the permission of the landowner. The museum will be contacted prior to work commencing to discuss archiving requirements (e.g. marking and labelling requirements, accession number). The archive will be prepared following the 'Archaeological Archive Deposition Policy for Museums in Yorkshire and the Humber", produced by Renaissance Yorkshire. This requires the completion and submission of forms to the relevant museum service at the project initiation, mid-point review and completion stages. The archive will otherwise be prepared in accordance with the UKIC (1990), the Museums and Galleries Commission (1994) and CIfA (2014) guidelines. Provision will be made for the stable storage of paper records and their long-term storage.

7.7 Upon completion of the investigations, the artefacts, ecofacts and stratigraphic information shall be assessed to ascertain their potential and significance for further analysis.

7.8 An assessment report will be prepared within an agreed timescale following the completion of on-site archaeological investigations and include the following:

- a non-technical summary of the results of the work;

- a summary of the project's background;

- the dates the fieldwork took place;

- the site location, including National Grid Reference;

- an account of the method;

- the results of the excavation, including phasing and interpretation of the site sequence;
- conservation assessment;
- an assessment of the stratigraphic and other written, drawn and photographic records;
- a catalogue of the archaeological material recovered during the excavation;
- assessment reports for each material category of finds recovered, including their types, quantities and concentrations, illustrations and/or photographs as appropriate;
- a summary of the contents of the project archive and its location.

7.9 The report will be produced within an agreed time-scale. It will be supported by an overall plan of the site, accurately identifying the location of the watching brief, excavation and any findings.

7.10 The report will outline the archaeological significance of the deposits identified, and provide an interpretation of the results in relation to other sites in the vicinity.

7.11 Bound copies of the report will be supplied, if required, to the client and The City of York Archaeologist. A digital copy will also be supplied to The City of York Archaeologist.

7.12 Upon completion of the work, the archaeological contractor will make their work accessible to the wider research community by submitting digital data and copies of reports online to OASIS (http://ads.ahds.ac.uk/project/oasis/). Submission of data to OASIS does not discharge the planning requirements for the archaeological contractor to notify The City of York Archaeologist of the details of the work and to provide the Historic Environment Record (HER) with a report on the work.

7.13 It is possible that the excavation findings will warrant wider publication. This may be effected through publication with an appropriate archaeological journal. Public outreach may also be warranted during the excavations themselves if the results are significant.

7.14 ASWYAS is committed to ensuring that opportunities exist for public involvement and we recognise the valuable contribution of volunteers, but they must not be seen as a substitution for paid employment. The role of volunteers complements, but does not replace, the role of paid staff. ASWYAS will ensure that the use of volunteers is in line with the CIfA's Code of Conduct and published standards for archaeological work. Where possible, volunteers may

be able to gain excavation experience by shadowing paid staff on site, or by assisting with finds processing or other similar tasks.

7.15 A recommendation on whether further investigation or preservation is considered appropriate will first be discussed with The City of York Archaeologist and then be clearly expressed in the report.

7.16 The report will include a detailed context index and an index to the archive.

8. Copyright, Confidentiality and Publicity

8.1 Copyright in the documentation prepared by ASWYAS and specialist sub-contractors should be the subject of additional licences in favour of the repository accepting the archive and the archaeological advisory service to the City of York Archaeologist to use such documentation for their statutory educational and museum service functions, and to provide copies to third parties as an incidental to such functions.

8.2 Under the Environmental Information Regulations 2005 (EIR), information submitted to the HER becomes publicly accessible, except where disclosure might lead to environmental damage, and reports cannot be embargoed as 'confidential' or 'commercially sensitive'.

8.3 Requests for sensitive information are subject to a public interest test, and if this is met, then the information has to be disclosed. ASWYAS will inform the client of EIR requirements, and ensure that any information disclosure issues are resolved before completion of the work. Intellectual property rights are not affected by the EIR.

8.4 Unless the client commissioning the project wishes to state otherwise, the copyright of any written, graphic or photographic record and reports will rest with the originating body (Archaeological Services WYAS).

9. Health and Safety

9.1 ASWYAS has its own Health and Safety policy which has been compiled using national guidelines. These guidelines conform to all relevant Health and Safety legislation.

9.2 In addition each project undergoes a 'Risk Assessment' which sets project specific Health and Safety requirements to which all members of staff are made aware of prior to on-site work commencing. Health and Safety will take priority over archaeological matters. Necessary precautions will be taken over underground services and overhead lines at the outset of the project.

9.3 In addition to the project-specific Risk Assessment and Method Statement, a covid-19 Risk Assessment will be compiled. This will review all site related COVID-19 safety measures prior to site attendance and ensure suitable hygiene, task equipment and PPE is available. It will assess whether

arrangements for pre-agreed meeting points and times are needed, and whether some content of the site visit can be presented/completed by virtual meeting/briefing and do so wherever possible.

10. Insurance

10.1 ASWYAS is covered by the insurance and indemnities of the West Yorkshire Joint Services Committee. Insurance has been effected with: Zurich Municipal, Zurich House, 2 Gladiator Way, Farnborough, Hampshire, GU14 6GB (policy number QLA-03R896-0013). Any further enquiries should be directed to: Head of Finance, Wakefield Council, Wakefield One, PO Box 700, Wakefield, WF1 2EB.

11. Monitoring

11.1 Access to the site will be arranged through PSC Surveying Limited.

11.2 The project will be monitored by The City of York Archaeologist to whom written notification before the start of the work confirming:

- the date of commencement,
- the names and the site supervisor and any sub-contracted finds specialists, once known;
- to obtain a City of York HER Event Number;
- notification to the proposed archive repository of the nature of the works
- and opportunity to monitor the works.

11.3 If appropriate, the advice of the Regional Advisor for Archaeological Science (Yorkshire and the Humber Region) at Historic England will be called upon.

11.4 ASWYAS will ensure that any significant results are brought to the attention of the client as soon as is practically possible.

11.5 Site inspections will be arranged so that the general site stratigraphy can be assessed in the initial stage of trial trenching and/or so that the site can be inspected when fieldwork is near to completion but before any trenches have been backfilled.

12. Resourcing

12.1 Key project personnel:

Project Management:	Debora Moretti PhD CIfA
Project Supervisor:	Angus Sales

12.2 Post-excavation specialists:

Prehistoric pottery:	Dr Chris Cumberpatch
Roman pottery:	Dr Ruth Leary or Ian Rowlandson
Medieval pottery:	Dr Chris Cumberpatch
Ceramic building material	Dr Phil Mills
Flint specialist:	Dr Ian P Brooks
Environmental:	Dr Diane Alldritt
Faunal analyst:	Dr Jane Richardson
Human bone:	Malin Holst MA
Metalwork:	Gail Hama
Artefact conservation:	Ian Panter

12.3 The list of Archaeological Services WYAS project personnel may be subject to change depending on workload and availability.

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Nepshaw Lane South, Morley, Leeds LS27 7JQ

Appendix 2: Inventory of primary archive

Phase	File/Box No	Description	Quantity
Evaluation	File no.1	Context register sheets	1
		Drawing register sheets	1
		Sample register sheets	1
		Finds register sheets	1
		Photo register sheets	3
		Film ID sheet	1
		B&W Photographic register	1
		RAMS	1
		WSI	1
Excavation	File no. 3	Context sheets (nos. 01-23)	22

Appendix 3: Concordance of contexts

Context	Description	Artefacts and environmental samples
01	Modern floorboard	
02	Concrete floor	
03	Rubble levelling layer	GBA 1
04	Kingspan insulation	
05	Concrete floor	
06	Modern concrete floor	
07	Linoleum/taram	
08	Modern concrete rubble	
09	Rubble levelling layer	
10	Red brick wall	
11	Red brick wall	
12	Red brick wall	
13	Red brick wall	
14	Ash mortar from wall 11	
15	Ash mortar from wall 12	
16	Ash mortar for wall 13	
17	Red brick well	
18	Ash mortar from well 17	
19	Modern concrete floor	
20	Final backfill deposit of well 17	
21	Second backfill 17	GBA 2
22	Third backfill of well 17	GBA 3; Fe objects
23	Ash mortar from wall 10	

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