



YORK ARCHAEOLOGICAL TRUST



Archaeological Desk-based Study York Castle Museum

By J.M. McComish, M.A. Slater and B. Savine

YAT Desk-based Assessment Report 2018/166 November 2018





YORK ARCHAEOLOGICAL TRUST



York Archaeological Trust undertakes a wide range of urban and rural archaeological consultancies, surveys, evaluations, assessments and excavations for commercial, academic and charitable clients. We manage projects, provide professional advice and fieldwork to ensure a high quality, cost effective archaeological and heritage service. Our staff have a considerable depth and variety of professional experience and an international reputation for research, development and maximising the public, educational and commercial benefits of archaeology. Based in York, Sheffield, Nottingham and Glasgow the Trust's services are available throughout Britain and beyond.

York Archaeological Trust, Cuthbert Morrell House, 47 Aldwark, York YO1 7BX

Phone: +44 (0)1904 663000 Fax: +44 (0)1904 663024

Email: archaeology@yorkat.co.uk Website: <http://www.yorkarchaeology.co.uk>

© 2018 York Archaeological Trust for Excavation and Research Limited
Registered Office: 47 Aldwark, York YO1 7BX
A Company Limited by Guarantee. Registered in England No. 1430801
A registered Charity in England & Wales (No. 509060) and Scotland (No. SC042846)

CONTENTS

NON-TECHNICAL SUMMARY	V
KEY PROJECT INFORMATION	V
1 INTRODUCTION	1
2 METHODOLOGY	1
3 LOCATION, GEOLOGY & TOPOGRAPHY	2
4 LEGISLATION & GUIDANCE	2
4.1 National Planning Policy Framework	2
4.2 Local Planning Policy	2
4.3 Castle Gateway Masterplan	3
5 DESIGNATIONS & CONSTRAINTS	3
5.1 Archaeology & Heritage Designations	3
5.2 Conservation Areas	3
5.3 Scheduled Monuments	3
5.4 Listed Buildings	3
5.5 Local Listings	3
5.6 Battlefield Sites, Historic Parks & Gardens.....	3
6 HISTORICAL BACKGROUND	4
7 HISTORIC MAP REGRESSION	6
8 WALK OVER SURVEY.....	7
9 PREVIOUS ARCHAEOLOGICAL INTERVENTIONS	8
10 POTENTIAL DEPOSIT SEQUENCE BY PERIOD.....	16
10.1 Natural (Figures 4-6)	17
10.2 Alluvium and deposits of uncertain date (Fig. 7)	18
10.3 Prehistoric (Fig. 8)	18
10.4 Deposits post-dating the prehistoric of uncertain date (Fig. 9)	18
10.5 Roman (Fig. 10)	18
10.6 Anglian and Anglo-Scandinavian (Fig. 11)	19
10.7 Later medieval mid-11 th to 16 th century (Fig. 12).....	19
10.8 Post-Medieval 16 th -19 th century (Fig. 13).....	20
10.9 Modern mid-19 th century onwards (Fig. 14)	20
11 POTENTIAL ARCHAEOLOGICAL IMPACT ACROSS THE DEVELOPMENT SITE	21
11.1 Glacial and post-glacial deposits	21

11.2	Prehistoric	23
11.3	Roman	23
11.4	Anglian and Anglo-Scandinavian	24
11.5	Later Medieval	25
11.6	Post-Medieval	26
11.7	Modern	26
12	DEPOSIT MODEL TRANSECTS A AND B.....	27
12.1	Transect A (Fig.16).....	27
12.2	Transect B (Fig. 17).....	28
13	CONCLUSIONS AND RECOMMENDATIONS	29
13.1	The area to the north-west of the Former Female Prison	29
13.2	The area of the museum foyer.....	30
13.3	The yard to the rear of the museum and garden by the Castle Mill	30
	LIST OF SOURCES	31
	WEB-BASED REFEREFNCES.....	31
	YAT ARCHIVES	32
	ACKNOWLEDGEMENTS.....	33
	APPENDIX 1 – GAZETTEER OF MONUMENTS WITHIN THE STUDY AREA	34
	APPENDIX 2 – GAZETTEER OF ARCHAEOLOGICAL INTERVENTIONS WITHIN THE STUDY AREA	36
	PLATES.....	40
	FIGURES.....	60

Plates

Cover: View of site

Plate 1	Speed's map of 1610.....	40
Plate 2	Richards' map of 1685	41
Plate 3	Todd's map of 1811	42
Plate 4	Baines' map of 1822.....	43
Plate 5	1852 OS map showing the castle area	44
Plate 6	1892 OS map showing Piccadilly and the castle area	45
Plate 7	1931 OS map centred on the castle.....	46
Plate 8	1962 OS map showing Piccadilly and the castle area	47
Plate 9	1987 OS map showing Piccadilly and the castle area	48
Plate 10	The north-western wall of the Female Prison	49
Plate 11	The car park surface to the immediate north-west of the Female Prison.....	49
Plate 12	The yard to the immediate north-west of the Female Prison	50
Plate 13	The railings of the yard to the north-west of the Female Prison.....	50
Plate 14	The former Female Prison.....	51

Plate 15 The former Debtors' Prison.....	51
Plate 16 The north-eastern end of the Castle Museum foyer	52
Plate 17 The Castle Museum foyer	52
Plate 18 York paving stone slabs by the Castle Museum foyer	53
Plate 19 The retail area of the foyer	53
Plate 20 The north-eastern end of the yard to the rear of the Castle Museum.....	54
Plate 21 Drainage within the yard to the rear of the Castle Museum	54
Plate 22 The southern wall of the Castle Museum	55
Plate 23 The path around the southern side of the Castle Museum wall	55
Plate 24 Stone coffins and a manhole cover to the south of the Castle Museum	56
Plate 25 The Castle Mill facing south-west	56
Plate 26 Stone coffins in the vicinity of the Castle Mill.....	57
Plate 27 Millstones adjacent to the Castle Mill	57
Plate 28 Millstones at the rear entrance to the Castle Mill.....	58
Plate 29 The riverside terrace facing north	58
Plate 30 The riverside terrace facing south	59

Tables

Table 1 Gazetteer of monuments, documentary HER events and HER deposit monitoring events within the study area	34
Table 2 Gazetteer of archaeological interventions in the study area.....	36

Figures

Fig. 1 The location of the study area.....	60
Fig. 2 The study area (blue) and the site development area (red)	61
Fig. 3 The location of the sites in the study (the numbers used are those in Appendix 1)	62
Fig. 4 Deposit model; Natural bedrock	63
Fig. 5 Deposit model; Natural glacial moraine.....	64
Fig. 6 Deposit model; Natural alluvial deposits.....	65
Fig. 7 Deposit model; Alluvium deposits of uncertain date.....	66
Fig. 8 Deposit model; Prehistoric	67
Fig. 9 Deposit model; Deposits post-dating the prehistoric of uncertain date.....	68
Fig. 10 Deposit model; Roman	69
Fig. 11 Deposit model; Anglian and Anglo-Scandinavian.....	70
Fig. 12 Deposit model; Later medieval (mid-11 th to mid-16 th century)	71
Fig. 13 Deposit model; Post-medieval (mid-16 th to 19 th century).....	72
Fig. 14 Deposit model; Modern deposits (19 th century onwards)	73
Fig. 15 The location of the modelled transects.....	74
Fig. 16 Transect A	75
Fig. 17 Transect B	76

Abbreviations

ADS	Archaeological Data Service
AOD	Above Ordnance Datum
BGL	Below Ground Level
BH	Borehole
HER	Historic Environment Record
HTA	Historic Towns Atlas
NAA	Northern Archaeological Associates
OS	Ordnance Survey
OSA	On Site Archaeology
T	Trench
YAT	York Archaeological Trust
YMT	York Museums Trust
RCHM	Royal Commission for Historic Monuments
VCHY	Victoria County History York

NON-TECHNICAL SUMMARY

York Archaeological Trust was commissioned by the York Museums Trust to undertake a desk-based assessment of the below-ground archaeology for the area delineated in red on Fig. 2. The report aimed to provide a deposit model enabling an assessment of the impact of any development on archaeological deposits in the area.

The work has shown that the development area offers the potential to yield evidence for the former course of the River Foss, Roman settlement and possibly burials, Anglo-Scandinavian settlement and burials, buildings relating to the later medieval castle bailey and burials relating to the Former Female Prison.

KEY PROJECT INFORMATION

Project Name	York Castle Museum
YAT Project No.	6093
Document Number	e.g. 2018/166
Type of Project	DBA
Client	York Museums Trust
Planning Application No.	NA
NGR	SE 60573 51419
Museum Accession No.	NA
OASIS Identifier	NA

REPORT INFORMATION

Version	Produced by		Edited by		Approved by	
	Initials	Date	Initials	Date	Initials	Date
1	JMcC	29/11/18	IDM	29/11/18	BR	30/11/18
2	JMcC	6/12/18	BR	6/12/18	BR	6/12/18

Copyright Declaration:

York Archaeological Trust give permission for the material presented within this report to be used by the archives/repository with which it is deposited, in perpetuity, although York Archaeological Trust retains the right to be identified as the author of all project documentation and reports, as specified in the Copyright, Designs and Patents Act 1988 (chapter IV, section 79). The permission will allow the repository to reproduce material, including for use by third parties, with the copyright owner suitably acknowledged.

Disclaimer:

This document has been prepared for the commissioning body and titled project (or named part thereof) and should not be relied upon or used for any other project without an independent check being carried out as to its suitability and prior written authority of the author being obtained. York Archaeological Trust accepts no responsibility or liability for the consequences of this document being used for a purpose other than that for which it was commissioned.

1 INTRODUCTION

YAT was commissioned by the YMT to undertake a desk-based assessment of the potential impact of proposed redevelopment works on the underlying archaeological deposits at the site of York Castle Museum (Figures 1-2). The work was undertaken in November 2018. The proposed development area is of high archaeological importance with regards to understanding changes to the location and nature of the channel of the River Foss prior to its canalisation in the 18th century. In addition, the site is of interest for the potential to uncover evidence of settlement-derived deposits of all periods from Roman times onwards, including those relating to the medieval castle and former Female Prison.

2 METHODOLOGY

The report format deviates from other YAT desk-based assessments in that it is limited to the below-ground archaeology for the proposed development area. Discussion of the above-ground historic environment lies beyond the scope of the present report, and this will be covered in documentation relating to the proposed redevelopment to be prepared by the YMT. A brief summary of the history of the castle is however given in section 6, together with an historic map regression in section 7, to provide an historical context for the present work. A walkover survey of the site was carried out on the 28 November 2018 (section 8).

The study area for this desk-based assessment was agreed to by YAT and the YMT. It is focused on the medieval castle, which is of obvious importance for any redevelopment in the area. In addition, the channel of the River Foss adjacent to the castle and the confluence of the Rivers Foss and Ouse were included within the study area so as to assess the changing nature of the river channels over time. The study area as defined is illustrated on Fig. 3, which also shows the below-ground archaeological interventions and spot finds from the area.

The bulk of the data was collated using the York Historic Environment Record (HER), the YAT site gazetteer (Finlayson 1997) and the York Royal Commission on Historic Monuments Survey (RCHM 1962; RCHM 1972).

The HER search yielded a total of 43 non-archaeological items which are listed in Appendix 1. In addition, there were 63 archaeological interventions within the study area, which are listed in Appendix 2. The reference numbers given in Appendix 2 include the HER reference number and either the museum accession code (in the form YORYM: *** or YORAT: ***), or in some cases the YAT project code. Following submission of the draft report to the YMT for comment two further sites were added (nos. 64-5) which were not listed in the HER. Details of these sites were supplied by A. Woods of the YMT. Artefact reference numbers are also given for a number of artefacts within the collections of the YMT. Where reports were obtained from the ADS the relevant reference is given. The various archaeological interventions are briefly described in section 9, though it should be noted that for some early excavations there are few surviving records, so little can be said.

Section 10 lists all the data points used in the preparation of the deposit model. Figures were prepared showing the mean heights for the uppermost deposit at each site for each of the following periods: natural; undated alluvium; prehistoric; alluvium post-dating the prehistoric; Roman; Anglian to Anglo-Scandinavian; later medieval; post-medieval and modern (Fig. 4-14).

In addition, two transects across the northern portion of the study area were prepared (Figures 15-16). These transects were at right angles to one another on a north-west/south-east and north-east/south-west alignment respectively. The preparation of Transect 1 proved problematic as there was very little difference between the heights AOD of the Roman, Anglo-Scandinavian and medieval deposits in some parts of this area, these are somewhat difficult to see at the scale given. The interpretation of the model is given in section 11, with recommendations in section 12.

3 LOCATION, GEOLOGY & TOPOGRAPHY

The site lies on the west side of the River Foss, approximately 400m from its confluence with the River Ouse. The underlying geology is 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 (British Geological Survey). The bedrock is overlain by superficial deposits of Vale of York Formation, namely clay, sands and gravels, which were formed up to 2 million years ago in the Quaternary Period (British Geological Survey).

The proposed development site has been affected by human activity since the Roman period, the ground level having been built-up by up to 3.5m from that of the underlying glacial moraine in the area to the north of the Female Prison. Present ground level is at around 11.6m AOD at the north-eastern side of the castle car park, to approximately 11.8m AOD just to the north of the former Female Prison.

4 LEGISLATION & GUIDANCE

4.1 National Planning Policy Framework

In March 2012 the Government published the National Planning Policy Framework (NPPF) in an effort to make the overall planning system less complex and more accessible. In this document Chapter 12 titled "Conserving and enhancing the historic environment" deals with archaeological and historical issues. This section supersedes the previous planning legislation, Planning Policy Statement 5: "Planning for the Historic Environment" (PPS5). However, in a revision note published by English Heritage in June 2012 it is stated that "the PPS5 Practice Guide remains a valid and Government endorsed document pending the results of a review of guidance supporting national planning policy". It also states that "the policies in the NPPF are very similar and the intent is the same, so the Practice Guide remains almost entirely relevant and useful in the application of the NPPF".

The relevant paragraphs of NPPF Chapter 12 are 126-141.

4.2 Local Planning Policy

The Local Plan

The 'Local Plan' for York sets strategic priorities for the whole of the city and forms the basis for planning decisions. It sets out the opportunities and policies on what will (or will not) be permitted and where, including new homes and businesses. In 2005 a draft Local Plan document was approved for development management purposes to inform planning decisions. City of York Council have since submitted a new City of York Local Plan to the Secretary of State for Housing Communities and Local Government on 25th May 2018. The new Local Plan will be fully

compliant with the NPPF and other relevant statutes and once adopted, will determine how the city develops over the next 15 years.

4.3 Castle Gateway Masterplan

In January 2017 a high-level vision for major developments in the Castle Gateway area of York was approved by the City of York Council. The aim is to unlock the current Castle Car Park and improve the Eye of York and Clifford's Tower. York Castle Museum falls within the boundaries of this plan, which states that the street will "become a new vibrant city-living neighbourhood, based around a new pedestrian friendly street; a hub for independent traders with apartments above".

5 DESIGNATIONS & CONSTRAINTS

5.1 Archaeology & Heritage Designations

York is one of five cities that has been designated an Area of Archaeological Importance (AAI) under Part 2 of the 1979 Ancient Monuments and Archaeological Areas Act. The entire study area lies within York's (AAI) City Centre Area.

An operations notice must be completed and returned to the Design, Conservation and Sustainable Development Team before any work can start in an Area of Archaeological Importance, including: disturbance of ground; tipping on the ground; and flooding of the ground.

It is an offence to carry out work in an AAI without an operations notice or within 6 weeks of submitting the notice.

It is an offence to use a metal detector within an AAI without the appropriate consent.

5.2 Conservation Areas

The York Central Historic Core Conservation Area is one of the largest and most complex in England, with 24 character areas forming the whole of the conservation area. Each one is considered in a separate character statement. The study area lies within Character Area 13: The Castle.

5.3 Scheduled Monuments

There are two scheduled monument listings for the Castle Museum, the Female Prison (1259324) and the Debtors' Prison (1259360). Also, within the site boundary is part of the curtain wall to the castle bailey (1259329). York Castle Museum lies within the York Castle listing (1011799), which also includes Clifford's Tower (1259325) and the Crown Court (1259328).

5.4 Listed Buildings

Both the Female Prison and the Debtors' Prison are Grade I listed buildings (DYO1326 and DYO1355). The castle bailey curtain wall, Clifford's Tower and the Crown Court are also Grade I listed (DYO1329, DYO1327 and DYO1328).

5.5 Local Listings

There are no local listings within the site boundary.

5.6 Battlefield Sites, Historic Parks & Gardens

There are no listed battlefield sites, historic parks or gardens within the site boundary.

6 HISTORICAL BACKGROUND

The following summary of the history of York Castle is taken from Reeves (2017, 3-4) and Rimmer (2016, 12) to provide a context for the archaeological information in sections 9-10.

The earliest documentary reference to activity on the site concerns the first castle, which was destroyed by the Danes in 1069 and rebuilt in the same year. In the following year an extension of the castle caused the destruction of a house.

The 1086 Domesday Book states that one of the seven shires of York was laid waste to build the new motte and bailey castle. By 1086 the River Foss had been dammed below the castle to produce an artificial moat around the motte. Damming the river also had the effect of creating a large body of water to the east of the castle which became known as the King's Fishpool. This caused the loss of two new mills and about 150 acres (a carucate) of arable land, meadows and garden.

The initial timber castle on the motte was burned in 1190 in an anti-Jewish riot. There is a reference to the destruction of the castle gate in 1228 by high winds, which may indicate that it was made of wood; this gate was rebuilt in stone after 1244. Unfortunately, there is confusion as to which of the two castle gates this incident refers to. In 1244 Henry III decided to rebuild the castle in stone, replacing the earlier wooden structures. The walls, towers, two halls, a chapel, a kitchen and a prison were either rebuilt or newly constructed. Clifford's Tower, on top of the motte, was probably added in the 1290s. The northern gateway was first definitely mentioned in the 1320's and it was probably the "great gate" of the castle. During the 12th and 13th centuries various buildings are mentioned as part of the castle, including palisades, gatehouses, houses, stables and stone bridges.

The purpose of the castle was primarily defensive, but throughout its history it performed a variety of other functions, particularly that of a gaol. Throughout the medieval period York Castle was under the control of the Crown. It was the base for the Sheriff of York, the place from which royal revenue was collected and from which royal justice administered. In 1298 Edward I used York as a base from which to wage war on Scotland, moving the government of England to the City. Between 1298 and 1335 fifteen parliaments were summoned to York. The king stayed at the castle in 1311, as did Queen Philippa and her children in 1333. A mint was housed in the castle from at least 1353 until 1546.

The only buildings from the medieval castle to survive above ground are the motte, Clifford's Tower and a portion of the bailey curtain wall. The northern gatehouse was flanked by two semi-circular towers and was approached by a stone bridge from Castlegate. This gateway is consistently shown on maps until the redevelopment of the site in the 1820s. In 1736 Drake stated that the gateway "a year ago [was] rebuilt in handsome manner, and it is at present the only entrance to the Castle except a small postern near the milne ...". The gateway appears on a drawing of Clifford's Tower and the bailey in 1820. The drawing is too small to show any architectural features, although it does show the sequence of walls and general land use in the area between Castlegate and Clifford's Tower. A wall divided the ornamental gardens near Clifford's Tower and the unbuilt-up approach to Castlegate.

There is very little evidence concerning the drawbridges. A document of 1325 from the king to the Archbishop of York described the ruinous condition of drawbridge and castle. "We have

heard that the drawbridge and another bridge adjacent to the same, and also the bridge between the Castle and the tower there, and also the bretasche between the said Castle and tower are ruinous and rotten and are in need of great repair". (A bretasche was a gatehouse tower on a bridge, from which the drawbridge could be worked which was usually made of wood.) The document indicates that there were several bridges in the area and their rotten state probably implies that they were wooden. A picture of a wooden drawbridge to Clifford's Tower exists from the 1640's. A drawbridge connected with the castle is mentioned in 1710 and in 1736 Drake states that the castle had two drawbridges, "The larger of these lead to the ancient great gate the piles and foundations of which I lately saw dug up."

The surrounding medieval curtain wall of the bailey acted as a defence both from attack and from flooding of the King's Fishpool. The wall may have been damaged or undermined in 1315 when a severe flood washed away the dam further downstream. By 1326 the south-west wall of the bailey required fourteen buttresses to support it. Later, 17th century, maps by Speed, Archer and Richards, show the curtain wall with four semi-circular towers on the east. They were probably started around 1250, but in 1365/6 one of the towers was described as "new" or "unfinished". Between the wall and the King's Fishpool was a steep slope which Richards described as the "Glacis of ye castle" in 1685.

Little is known of most of the other buildings within the bailey as there are few documentary references. A medieval reference exists from 1333 when the king ordered that an old and ruinous house on the south side should be pulled down and the timber reused to build a house on the northern side for use by Queen Philippa. The exact location is unknown. In 1484 Richard III partly dismantled the castle in order to rebuild it. Nothing appears to have come of the scheme and in the 16th century Leland described the castle as being in a ruinous condition.

Further damage to the castle was caused in 1596 by the gaoler, who demolished various portions of the castle, including part of Clifford's Tower, a wall and the bridge to the motte. It is perhaps hardly surprising that in 1610 Speed only shows one building within the bailey, at the southern end of the site, and no buildings backing onto the eastern bailey walls. However, just to the south of the excavations lay the Common Hall, which was rebuilt in 1674. It has been suggested that this renovation may have been of a dilapidated medieval building, as the original hall pre-dated 1451 when it was overhauled and thoroughly repaired.

During the 18th and 19th centuries these buildings were replaced by larger and grander buildings. The Debtors' Prison was built between 1701-5, most probably by William Wakefield, the architect of Duncombe Park, Helmsley, North Yorkshire. Originally the County Gaol, it housed prisoners from throughout Yorkshire. The Assize Courts (now the Crown Court) was built between 1773 and 1777 by John Carr, to a neo-classical design. The Crown Court building comprises two courts arranged either side of an entrance hall with offices ranging alongside the west side. The Female Prison was constructed between 1780 and 1783 to a design by Thomas Wilkinson and John Price, under the supervision of John Carr. It was modified in 1802. Between 1825 and 1835 a new Felons' Prison was built at the castle to house an increasing number of prisoners. The buildings, in the shape of a half-wheel, had at the hub the governor's house, with four radiating prison blocks extending towards the Foss within a semi-circular enclosure. In 1900 the castle became a military, rather than civil, prison and continued to be so until 1929. In 1934 the City of York bought the prison buildings for £8,000 and demolished all the buildings

constructed after 1824. York City Council planned to build a new municipal headquarters on the site of the former Felons' Prison. Work on the Civic Centre began in 1939 with the construction of a large stepped basement which was up to 4.2m deep BGL, though the majority of the basement was between 0.75m to 1.8m deep. The area of the basement was extensively piled, with approximately 435 reinforced concrete piles in clusters of 2-24 piles. In addition, the foundations of the Felons' Prison were reused in places. Work on the basement was halted by the outbreak of World War II and the basement was used for civil defence. After the war the basement was infilled. The County Court is still operational, the Female Prison became a museum in 1938 and former Debtors' Prison became a museum in c.1950.

7 HISTORIC MAP REGRESSION

Analysis of historic maps of the area enables the history of the site to be traced from the early 17th century onwards. The earliest map is that of John Speed of 1610 (Plate 1). This shows the castle, the bailey walls and a range of gabled-buildings along the southern side of the bailey. The castle moat is not depicted. The area to the north and west is little developed, apart from housing along the north-eastern side of Castlegate. The land to the south is also largely devoid of buildings, with just three structures shown two of which are probably mills as they straddle water-courses. The land along the eastern side of the River Foss is shown as open ground.

Richard's map of 1685 (Plate 2) shows the moat of the castle and a greater number of buildings arranged around the walls of the bailey. The land to the north of the castle and east of the Foss is shown divided into fields for horticulture. Houses are still present on the north-eastern side of Castlegate. Two buildings are shown on Tower Street to the immediate south-west of the castle walls. The triangular plot of land between the rivers Ouse and Foss is shown as open land.

Todd's map of 1811 (Plate 3) shows that major changes had taken place within the castle bailey, the earlier buildings having been replaced by three major new structures. The moat had been drained by this stage. The principal change to the wider landscape was the canalisation of the River Foss, dramatically reducing its width. Housing was still present along the north-eastern side of Castlegate, but this had extended south-wards to encompass the area to the immediate east of Clifford's Tower. Additional buildings had also been constructed on the eastern side of Tower Street close to motte. The area to the immediate north of the castle and the eastern bank of the Foss is still depicted as either open ground or fields for horticulture, and the triangular plot of land between the rivers Ouse and Foss is shown as open land.

Baines' map of 1822 (Plate 4) is broadly similar in layout to Todd's map, though there were clearly additional buildings to the rear of the properties fronting onto Walmgate. The buildings to the immediate west of the motte had been demolished. The road to the immediate west of the castle bailey had been widened into an esplanade and the New Walk had been constructed to provide a pathway along the river which was bordered by trees.

The first OS map of the area dating to 1852 (Plate 5) shows that considerable changes had taken place in the area. The county prison at York Castle is shown with the Assize Courts, the Debtors' Prison, the Female Prison, and the newly-erected Felons' Prison built on a radial plan. A curtain wall had also been erected around the Felons' Prison complex, accessed from a gatehouse on Tower Street. The castle mills are shown. Buildings had been constructed along the south-western side of Tower Street opposite the motte, and the area to the north-west of the castle

had begun to infill with buildings. The southern portion of the new street of Piccadilly had been constructed parallel to the River Foss. There were buildings on the western side of this street at the southern and on the eastern side of the northern end of the street. The street extended towards Church Lane. The area to the west of Piccadilly had been divided into a series of large plots, and though some were unoccupied one contained a timber yard.

The 1892 OS map (Plate 6) does not show the Felons Prison or its' surrounding wall in detail. Piccadilly had been extended slightly further northwards to the widened street of St Denys Road (formerly Church Lane). The southern end of Piccadilly had become more built-up, and the area was attracting industrial premises with both a timber yard and crane being present in the plots adjacent to the River Foss. Terraced housing had also been constructed in the area between Piccadilly and Walmgate and to the west of the motte.

In 1912, Piccadilly was extended northwards to meet the south-east side of Pavement. This extension, together with a new bridge over the River Foss is depicted on the 1931 OS map (Plate 7). Merchantgate was also built to link Piccadilly and Walmgate. The plots along the western side of Piccadilly were built-up with industrial and commercial properties including an Iron Works, a Brass and Iron Works and a warehouse. A Bus and Trolley Bus shed, which was built in 1921 is shown to the east side of Piccadilly, between Merchantgate and Dennis Street. The 1931 map also indicates that part of the Felons' prison had been demolished.

The 1962 OS map (Plate 8) shows that the Felons' Prison and associated curtain wall and gatehouse had been demolished (this happened in 1935). The outline of the basement of the Civic Centre is shown on the map to the north-east of motte. The Castle Museum is clearly labelled. A large garage, known as Castle garage had been built to the north of Tower Street, immediately opposite the motte. The western side of Piccadilly remained largely commercial, housing four garages, a warehouse, builder's yard, coal yard and works. The Employment Exchange (later the Tax Office) was constructed to the north of St Denys' Road in 1939. The section of Piccadilly that linked with Walmgate had been renamed Merchantgate.

The 1987 OS map (Plate 9) shows that the Civic Centre to the east of the motte had been demolished and replaced with a car park. Two new government buildings were present on Piccadilly (the Ryedale Building and United House) which were constructed in 1972 and the late 1960s/early 1970s respectively. Piccadilly remained largely commercial, with three garages a warehouse and a builder's yard being depicted along the western street frontage.

8 WALK OVER SURVEY

A walkover survey was undertaken on 28th November 2018 to assess the site development area (as shown in red on Fig. 2).

The area to the north-west of the former Female Prison (Plate 10) is divided from the adjacent car park by a metal fence and line of trees/shrubs (Plates 11-12). The car park surface is of uneven tarmac.

There is a small yard surrounded by iron railings to the immediate north-west of the former Female Prison building (Plates 12-3). Within this yard there is a flagstone path adjacent to the former prison wall, with tarmac elsewhere. In places the tarmac is covered in moss. A metal manhole cover indicates that the yard is traversed by at least one service trench.

Fronting onto the Eye of York are the former Female Prison (Plate 14) and the Debtors' Prison (Plate 15) both of which are in the classical style. At the south-eastern end of the former Female Prison there is a windowless rectangular building with a central door (Plate 16). The 20th century museum foyer building (Plate 17) provides the link between the two former prisons. The area in front of all of these buildings is a pavement of York Stone flags (Plate 18), which is clearly traversed by services as manhole covers are visible. For example, there is a manhole cover located immediately outside the exit door of the museum.

The area within the foyer is arranged with a ticket desk on the north-eastern side and a café on the north-western side, with the remainder of the space being used for retail (Plate 19). Access into the former Debtors' Prison is via a doorway and stairs to the south-east of the foyer. This doorway also gives access to the museum toilets.

The enclosed yard to the rear of the museum is bordered by the Debtors' Prison and a high stone wall (Plate 20). The modern foyer building is not visible from within this yard. The yard is paved with York Stone flags (Plate 21), and again is clearly traversed by drains, downpipes from the buildings and man-hole covers being clearly visible.

The area to the south of the former castle is a garden. This is accessed via a gate in the base of a circular tower within the curtain wall of the Castle Museum. Immediately outside the access gate is masonry associated with the drawbridge for the southern gateway of the castle (Plate 22; RCHM 1972, 76-7). Adjacent to the curtain wall there is a sinuous path with seating for visitors (Plate 23). Following this path around the wall leads to a group of stone coffins (Plate 24). A man-hole cover for drainage is located adjacent to the coffins (Plate 24). Access to the area between the former Female Prison and the River Foss is barred by a metal gate.

There is a second path forming a loop around the Castle Mill (the left-hand path in Plate 25). Additional stone coffins are stored next to this path (Plate 26). Two sets of steps are located to either side of the Castle Mill, providing access around the building. A number of millstones have been laid adjacent to either side of this path in the area to the immediate south of the Castle Mill (Plates 27-8). Further steps lead down to a riverside terrace located immediately adjacent to the River Foss (Plates 29-30). This terrace is surrounded by an iron railing and seating for visitors is provided.

The ground level in the garden between the museum and the river is highly variable dropping sharply to the immediate south of the curtain wall (Plate 22) and again to the riverside terrace. Elsewhere within this garden the ground level is very uneven.

9 PREVIOUS ARCHAEOLOGICAL INTERVENTIONS

A number of excavations have been carried out both within the medieval castle and in the immediate vicinity (Fig. 3), which have revealed evidence of occupation dating from Roman times onwards. The various archaeological interventions are listed in chronological order below and the numbers allocated are those listed in Appendix 2.

Unless otherwise stated 20th century archaeological excavation works were undertaken by YAT.

1 - Excavations on the motte of York Castle (HER EYO2840)

Excavations were undertaken on the motte in 1824. The mound was seen to contain earth with frequent redeposited human bone which covered timberwork.

2 - Find of Hanging bowl 1829

In 1829 a chance discovery was made in the Castle Yard of a 6th-century hanging bowl, possibly indicating funerary activity in the area (Lilley 1991, 8; YMT reference number YORYM : 1929.13.2).

3 – Roman burials (HER EYO768)

A Roman stone coffin was discovered at the castle in 1835 (YMT ref no YORYM : 2007.6119).

4 – Clifford's Tower excavations (HER EYO2840)

In 1902 excavations by Benson and Platnauer proved that the mound beneath Clifford's Tower is of man-made, rather than natural, origin (Lilley 1991, 8). This work also uncovered a crouched burial laid beneath stones which was interpreted as being of Roman or prehistoric date (HER MY04060).

5 – Excavations on the Castle south gate (HER EYO2864)

Excavations in 1924 by the Office of Works uncovered the south gate of the castle and included finds of timbers.

6 – Excavations at York Castle (HER EYO2840)

Three trenches were excavated in 1935 by O'Neill, in an attempt to locate the position of the northern castle gate (ibid., 8). Two of the trenches contained a sandy bank cut by post holes which lay directly above the natural soil. This was interpreted as the remains of the bank and palisade of the original castle built in 1068-9, which seemed to have been subsequently modified in places during the medieval period. The third trench revealed a sandy slope down to the river Foss, but no traces of castle walls were identified.

7 – Excavations in the Castle yard (HER EYO2765-8)

Excavations relating to the cutting of a deep drain were undertaken in 1956 by Ramm, close to the motte of the castle. This revealed four Roman burials (RCHM 1962,67) including one in a stone coffin (YMT ref no YORYM : 2007.6117), one in a lead coffin (YMT ref no YORYM : 2010.1199), one in a plank lined grave and a one in a wooden coffin. Various artefacts were associated with these burials including ceramic, a bone bracelet, two bronze bracelets and an environmental sample (YMT ref nos. YORYM : 1956.3, YORYM : 1956.3.3, YORYM : 1956.3.3.1, YORYM : 1956.3.3.2, YORYM : 1956.3.9).

8 - Eye of York watching brief (YORKYM: 1981.1033)

A pit for planting a tree to mark ten years of Alex Lyon as MP for York was observed. Only garden soil was disturbed (YAT Gazetteer site no. 244).

9/10 - Foss Bridge, Piccadilly Service Station (YORYM:1983.34 and 1983.1034)

A contractor's trench for a small petrol tank was observed. Large worked timbers were recorded at the base of the trench, approximately 3m below ground surface which were interpreted as probably medieval. Deposits interpreted as medieval levelling were seen, as was a 19th century brick feature of unknown industrial function (YAT Gazetteer site no. 622).

11 - Assize Courts watching brief (YORYM:1983.1042)

Post-medieval and modern stratification was seen in a contractor's trench (YAT Gazetteer site no. 792).

12 - Castle Museum Yard watching brief (YORYM: 1984.10)

Part of the foundation of the castle was observed, together with an 18th century levelling deposit (YAT Gazetteer site no. 96).

13 - St George's Field Car Park watching brief of a borehole (YORYM:1984.15)

Roman pottery was recovered from a borehole core at a depth of 8.2-9m BGL and medieval pottery at a depth of 7m BGL (YAT Gazetteer site no. 696).

14 - St George's Field Car Park excavation (YORYM:1986.11)

The first phase was a series of boreholes by Geotechnical Engineering Ltd and the second phase was an excavation by YAT. Organic silts were located 4.90m below ground surface which were interpreted as having been deposited as a result of the canalisation of the River Foss. Below this was a series of silt deposits interpreted as being of medieval date (YAT Gazetteer site no. 697).

15 - Tower Street watching brief (YORYM: 1986.1001)

A limestone wall which may have been associated with the prison defences and a sequence of road surfaces were observed in a contractor's trench (YAT Gazetteer site no. 785).

16 - 2 Tower Place watching brief (YORYM: 1986.1020)

A stone wall was observed beneath the floor boards of the standing Victorian building (YAT Gazetteer site no. 782).

17 - South Esplanade watching brief and borehole (YORYM: 1988.12)

Part of wall, possibly the medieval Franciscan friary precinct wall, was observed. A post-medieval phase of re-building was also noted (YAT Gazetteer site no. 670).

18 - Eye of York watching brief (YORYM 1988.1004)

A section of a contractor's trench was recorded showing undated limestone and brick rubble at a depth of 1m BGL (YAT Gazetteer site no. 243).

19 - 4 Tower Place watching brief (YORYM 1988.1010)

No record of this watching brief survives (YAT Gazetteer site no. 781).

20 - South Esplanade boreholes (YORYM 1988.1029)

No record of this work survives (YAT Gazetteer site no. 671).

21 - 8-10 Tower Street watching brief (YORYM 1988.1033)

Modern build-up deposits were observed in foundation trenches 0.50m deep (YAT Gazetteer site no. 783).

22 - Ryedale Building, 58 Piccadilly, watching brief (YORYM: 1988.1042)

No record of this work survives (YAT Gazetteer site no. 615).

23 - Crown Court excavation (YORYM 1989.7)

Excavation was undertaken in advance of underpinning the north-east wall of the Crown Court. Medieval dumps were present together with fragmentary remains of post-medieval buildings that may represent the Grand Jury House, the 17th century predecessor to the Crown Court building (YAT Gazetteer site no. 792).

24 - St George's Field Car Park Phases 1 and 2 excavations (YORYM: 1990.17)

Excavations uncovered medieval alluvium and the remains of a medieval chapel building, together with an 18th century building, possibly a high-status residence fronting on to post-medieval Tower Street. This building appeared to have been used for industrial activities in the early 19th century (YAT Gazetteer site no. 699).

25 - Crown Court watching brief (YORYM: 1990.1001)

20th century landscaping deposits were observed in an area located above the castle moat (YAT Gazetteer site no. 790).

26 - Fiat Garage, 84 Piccadilly evaluation (YORYM 1991.16)

Alluvial deposits of Anglian date were present at c. 2.90m AOD. In addition, there was an Anglo-Scandinavian rubbish dump. The site appears to have been flooded by the damming of the River Foss to supply water to the castle moat in 1069 resulting in medieval alluvium followed by land-reclamation of 14th and 15th century date. Post-medieval land reclamation deposits relating to the canalisation of the Foss in 1793 were present. A modern drain and warehouse were also present (YAT Gazetteer site no. 618).

27 - CCTV test pit watching brief (YORYM: 1991.1020)

Modern material was observed in contractor's trenches dug to a maximum depth of 1.50m BGL (YAT Gazetteer site no. 791).

28 - Castle Car Park evaluation (1991 HER EYO440)

According to the HER an evaluation was carried out by YAT in 1991 on the Castle Car Park, but there is no record of any work in this area in the YAT project codes list. It is possible that the HER entry should in fact refer to works undertaken at the Castle Car Park site in 1992 (see no. 30 below).

29 - Simpson's Yard, 38 Piccadilly, evaluation (YORYM: 1992.4)

A 3 x 3m trench yielded remains of Roman and later date including Roman alluvium and a cobble surface, Anglo-Scandinavian build-up and dumps, medieval alluvial and land-reclamation deposits, a post-medieval dump and modern features including a drainage ditch, drain, yard and building (YAT Gazetteer site no. 613).

30 - Castle Car Park excavation (YORYM: 1992.5)

Six archaeological evaluation trenches were excavated in the north-eastern portion of the Castle Car Park (YAT Gazetteer site no. 788). The earliest activity identified on the site was three Anglo-Scandinavian pits cut into the natural. Deposits which were interpreted as part of the bailey bank of the castle, and a post-hole which may have held a timber upright associated with the palisade, were the only elements of the castle identified. A brick wall and brick terraces were thought to have been part of an ornamental garden feature of 16th century date. Parts of the

Felons' Prison of 1826 and the basement foundation for the 1939 Civic Centre were present which had caused extensive damage to the earlier features at the site.

31 - Excavations at 50 Piccadilly evaluation (YORYM: 1992.10)

Natural clay was present at 2.6m AOD. This was beneath a sequence of deposits which comprised a Roman ditch, timber post, dump, cobble surface and build-up, Anglo-Scandinavian build-ups and dumps, medieval rubbish dumps and a river bank revetment and post medieval agricultural soils and dumping. Organic preservation at this site was excellent. (YAT gazetteer site no. 614).

32 - St George's Field watching brief (YORYM: 1992-3.14)

Pre-historic timber and alluvium were present, with a sequence of alluvial deposits of Roman date, a cobble surface of Roman or Anglo-Scandinavian date, Anglo-Scandinavian alluvial and a timber pile, a medieval pit and part of a medieval chapel, a 19th century brick structure, and modern deposits relating to the car park surface (YAT Gazetteer site no. 698).

33 - Eye of York Gas pipe watching brief (YORYM 1992.170)

Post-medieval buildings relating to the prison and modern deposits were observed in a contractor's trench (YAT Gazetteer site no. 246).

34 - Clifford's Tower water and drainage trench watching brief (YORYM: 1992.173)

Observations in contractor's trenches largely relate to the Prison and modern landscaping of the area (YAT Gazetteer site no. 787).

35 - Tower Street sewer repair watching brief (YORYM: 1992.1017)

Natural was encountered 4m below ground surface, above which was a deposit of modern rubble (YAT Gazetteer site no. 786).

36 - Castle Car Park Boreholes (YORYM: 1993.6)

Eight boreholes were investigated which were designed to provide three transects across the present car park one aligned north-east /south-west and two aligned roughly north-west/south-east (Lilley 1993, Fig. 3). Natural deposits were present in all of the boreholes. The natural was sealed by deposits of silty clay and silty-sandy clay. The presence of a large fragment of brick 6.7m below the present car part surface in Borehole 2 was interpreted as post-medieval or later infilling of the castle ditch. The uppermost deposits comprised mixed deposits of modern date which incorporated building rubble sealed by the present-day car park surface. The results confirmed the pattern seen in the 1992 trial trenches (YAT Gazetteer site no. 788).

37 - Eye of York watching brief (YORYM: 1993.1012)

Tarmac and modern surface make-up deposits were observed in contractor's trenches (YAT Gazetteer site no. 245).

38 - 2 Peckitt Street watching brief (YORYM: 1993.1016)

Modern or post-medieval disturbance was observed to a depth of 0.70-1m BGL in contractor's trenches (YAT Gazetteer site no. 605).

39 - Castle Car Park excavation (YORYM: 1995.58)

Two 20m long trenches at 90 degrees to one another were excavated. Natural was identified at around 8.57m AOD in Trench 1 and at between 9.42 and 9.82m AOD in Trench 2. A Roman pit was present within in Trench 2 at a depth of 10.38m AOD (Clarke 1995, 7, 35). A single rubbish pit in Trench 2 was interpreted as Anglo-Scandinavian. Above this was a disturbed hearth. A limestone feature in Trench 2 may be attributable to the medieval period. All the remaining deposits related either to the 19th century brick prison or the civic centre built in 1939, which had caused considerable damage to the underlying deposits (YAT Gazetteer site no. 789).

40 - 38 Piccadilly watching brief of a borehole (YORYM: 1997.4)

Deposits for a borehole core were recorded. Natural was encountered at approximately 9m below ground surface. The deposits above natural were interpreted as alluvial and dumping in the area of the King's Fishpool. They were sealed with post-medieval and modern rubble, representing land reclamation (YAT Gazetteer site no. 613).

41 - Castle Car Park Boreholes (YORYM: 1997.106)

A survey of 7 boreholes identified undated organic silts and layered clays of alluvial origin some of which may have related to the medieval castle ditch. In addition, there were structural remains relating to the prison and the modern car park surface (YAT gazetteer http://www.iadb.co.uk/gaz/gaz_details.php?SiteID=995)

42 - City walls chainage 3416-3479 (YORYM:1998.17) grid ref 6039/5140

A watching brief was undertaken on the city walls to repair loose stones.

43 - Castle Car Park excavation (YORYM: 1998.32)

In 1998 a trench was excavated parallel to and immediately north-west of the former Female Prison (Evans and Brinklow 1998). Re-deposited Roman pottery and 3 sherds of Anglian pottery were present. Two Anglo-Scandinavian burials were present suggestive of a cemetery. A thick deposit of clay of 11th century date delineated by post-holes was interpreted as the remains of a rampart and palisade from the Norman castle. Medieval pottery was indicative of activity within the castle. A thick deposit of mortar related to the construction of the first prison was present. Five 19th century burials of female prisoners were present (YAT online gazetteer http://www.iadb.co.uk/gaz/gaz_details.php?SiteID=1059).

44 - 90 Piccadilly borehole survey (HER EYO107)

6 Boreholes were observed by OSA in 1998. They revealed a sequence 3-6m thick of well-preserved waterlogged medieval deposits beneath 3-4m of early modern deposits.

45 - 58-60 Piccadilly and 84-86 Piccadilly watching brief and borehole (YORYM: 1998.691)

Approximately 10m of archaeological deposits were recorded above natural. These comprised alluvial sandy silts, which could be dated to the pre-Conquest period in one borehole. Above these were clayey organic silts which were interpreted as having formed within the King's Fishpool and dated to the 14-15th century. Further organic silts accumulated in the 18-19th century which were sealed by c. 1.5-3m of modern rubble and a concrete surface (YAT online gazetteer http://www.iadb.co.uk/gaz/gaz_details.php?SiteID=1081).

46 - 90 Piccadilly watching brief (YORYM: 1999.945)

Observations were made of 12 pile trenches drilled to a maximum of 16m below ground level. A sequence of natural sands beneath clean clay with organic waterlain sandy silts above was recorded. It was not possible to date the alluvial material (YAT online gazetteer http://www.iadb.co.uk/gaz/gaz_details.php?SiteID=1159).

47 - Ryedale Building, 58-60 Piccadilly, borehole survey (YORYM: 2000.252)

Borehole evidence indicated the presence of medieval alluvial material and suggested that the site lay within the King's Fishpool. Deposits relating to land-reclamation of later medieval, post-medieval and modern date were present. Organic preservation was excellent (Online gazetteer http://www.iadb.co.uk/gaz/gaz_list.php)

48 - Clifford's Tower lighting utility trench watching brief (YORAT: 2005.36 YAT project 1317)

A cable trench for new floodlighting was dug around the base of the Clifford's Tower connected to a junction box on the north eastern side of the motte. Only turf and silt were observed.

49 - Castlegate/Tower Street utility trench watching brief (2006 YAT project 5041)

The earliest observed deposit contained undated butchery waste. All other deposits were of modern date (Milsted 2007, 204).

50 - Tower Place Watching Brief (2006 HER EYO770)

A watching brief undertaken in 2006 by NAA. No archaeological finds or features were encountered.

(archaeologydataservice.ac.uk/library/browse/issue.xhtml?recordId=1069575&recordType=GreyLit)

51 - Tower Gardens Watching Brief (2006 HER EYO794)

A watching brief undertaken in 2006 by NAA. No archaeological finds or features were encountered.

(<http://archaeologydataservice.ac.uk/library/browse/issue.xhtml?recordId=1031588&recordType=GreyLit>)

52 - Utility Trench Peckitt Street watching brief (2009 YAT project no 5275)

The majority of deposits seen in the contractor's trenches were modern, though the date of deposits at the base of Trenches 2, 4, 5, 11 and 13 was uncertain (Marwood 2009, 6).

53 - Castle Mills Wharf, Tower Street, boreholes and test pits (2010 YAT project no 5456)

Three boreholes and three test pits were excavated, but only the lower portion of one borehole was observed. Sandstone bedrock was reported -3 to -4m AOD beneath a clayey silty fill. In BH3 bone, leather and Roman pottery of 1st to late 3rd century AD was encountered at between -1.7 to -2.4m AOD (Milsted 2010, 1).

54 - Tower Street York watching brief (2010 HER EYO4324)

A watching brief undertaken in 2010 by NAA on a collapsed sewer. Natural subsoil truncated by a modern sewer was present.

55 -York Castle Museum Concourse (2010 HER EYP4323)

Works were undertaken by OSA. A limestone wall pre-dating the Debtors' prison was seen.

56 -York Castle Museum Exercise Yard (2011 HER EYO6054)

Works were undertaken by OSA. Deposits and walling pre-dating the present Castle Museum buildings were observed.

57 - Tower Gardens Sewer Repair Watching brief (2011 YAT Project 5488)

Recording of a brick vaulted sewer. No archaeological deposits of significance were recorded.

58 - 5 Tower Place watching brief (YORYM:2012.5 YAT project 5622)

A watching brief revealed an undated wall and deposits of modern date.

59 - Foss Barrier, St George's Field, SI monitoring (2016 YAT project no 5924)

A borehole survey identified up to c.1.5m of post-medieval and modern deposits above a further 3.5-6m of landscaping/land reclamation and alluviation of medieval and post-medieval date. Across the northwest/southeast transect, below the alluvium, there was up to 2.2m of medieval deposits containing large quantities of domestic refuse and building debris. In places below these, up to a further 1.5m of banded alluvial silts and sands were identified which could date from the Roman period onwards (Savine 2016, iii).

60 - Foss Barrier Borehole evaluation (2017 YAT project 5970)

Six boreholes were observed which yielded a sequence of alluvial deposits the upper surface of which was at 0.7-0.3m AOD. These were sealed by medieval dumps and levelling deposits medieval or post-medieval alluvial deposits, post-medieval dumping to raise the ground level and the surfaces of the present car park (Millward 2017, 4-10).

61 - 47-50 Piccadilly borehole evaluation (2017 YAT project no 5973)

Natural deposits were identified at 2.11m AOD above which was a sequence of deposits interpreted as being of Roman, medieval, post-medieval and modern date (Reeves 2017, 12-3)

62 – Debtors' Prison watching brief (2017 HER EYO6397)

An archaeological watching brief by OSA relating to underpinning works on the Debtors' Prison indicated that medieval levelling and pits were present, the upper surfaces of which were 0.6m below the modern surfaces, and the deposits were 0.6m thick. Timber posts of uncertain date were also seen, as were 18-19th century deposits.

63 - 46-50 Piccadilly borehole evaluation (2018 YAT project no 6056)

Natural deposits were identified at 7-8.5m below the present ground level, above which was a sequence of deposits interpreted as being of Roman, medieval, post-medieval and modern date (Savine 2018, 16-7).

64 – York Castle Museum Exercise Yard Watching Brief (YMT 2014)

A watching brief was undertaken on the construction of a wooden hoarding erected for the 'Changing Spaces Project' in the York Castle Museum. Observations of 21 small trenches up to 650mm x 350mm in size and up to 750mm deep were undertaken by YMT staff. Part of an undated red brick wall was seen.

65 – York Castle Museum Lift Shaft Watching Brief (YMT 2014)

A watching brief was undertaken on the construction of a lift shaft erected for the 'Changing Spaces Project' in the York Castle Museum. This was within a single room which was originally a cell in the Debtors' Prison that had been converted to use as a toilet within the museum. The works indicated that the cell floor had been raised at some stage.

10 POTENTIAL DEPOSIT SEQUENCE BY PERIOD

While there have been a number of archaeological interventions within the study area since the 1980s which provide a significant amount of information from which to extrapolate the proposed deposit model, some caveats should be noted.

Firstly, many of the excavations were of a very small scale, often comprising trenches 3x3m in area. Trenches of such limited size can create a misleading picture as to the nature of deposits in an area.

Secondly, it should be noted that a great number of the archaeological sites within the study area were watching briefs which were of insufficient depth to penetrate medieval or earlier archaeological deposits, thereby contributing nothing to the below ground model (Sites 8, 11, 21, 25, 27, 33-5, 37-8, 45, 50-2, 54 and 57-8).

A further issue is that many smaller watching briefs were recorded with heights in relation to the ground level at the time the works were undertaken, rather than as heights AOD, rendering the records of little use (Sites 9-10, 12-3, 15-17, 23, 41, 46, 49, 54-6, 62 and 64-5).

Fourthly, it should be noted that the interpretation of BH data is problematic; relatively few datable artefacts are recovered from boreholes (as compared with the numbers of artefacts from archaeological excavations) making it difficult to assess the date of the recorded deposits. This problem is particularly acute in the case of the numerous alluvial deposits recorded in this area, as it is often unclear whether these relate to post-glacial river channels (pre-dating any human activity in the area), or to periods of human activity, and if so which period they relate to. Inter-observer differences have compounded this problem. Even where artefacts are recovered from BHs there is the problem of residuality; the presence of a sherd of Roman pottery does not prove a deposit is Roman, merely that it is of Roman or later in date. It should also be noted that individual artefacts can be forced downwards by borehole drilling rigs, seemingly appearing at a far lower level AOD than they were actually deposited. The results of boreholes, therefore, have to be treated with some caution.

Finally, a number of the sites had little to contribute to the model for a variety of reasons. The records for the various 19th and early 20th century excavations available on the HER did not contain details of specific heights AOD (sites 1-7). One site (site 42) has nothing to contribute to the below ground model, being repairs to the city wall. No records survive for Sites 18-20 and 22. Site 28 seems to be a recording error and probably relates to 30. Site 48 only comprised turf and topsoil at the top of the castle motte and again has little to contribute to the below ground model.

This leaves Sites 14, 24, 26, 29-32, 36, 39-40, 43-4, 47, 53, 59-61 and 63 as being of use for the deposit model. Even among these sites there are some problems with the original data. For Site 14 there is no accurate plan showing the location of the 3.2x3.2m² excavation trench and the

location from the HER record had to be used. In the case of Site 36 the original borehole logs have been lost and the heights had to be calculated from a section drawing in the original site report (Lilley 1993, Fig. 3); the scale of this illustration is such that the measurements taken will be slightly inaccurate.

There is a significant 'gap' in terms of the distribution of the useable sites, namely the area of the castle motte, the Eye of York, directly beneath the Crown Courts and the Castle Museum buildings, in the small walled yard to the immediate south of the museum buildings, and in the area between the Castle Museum and the River Foss. This makes extrapolation of the earlier levels difficult in these areas problematic.

The following text details the known remains on a period-by-period basis. In each case the relevant sites are listed and the uppermost height AOD of the deposits in question is given.

10.1 Natural (Figures 4-6)

Relatively few archaeological excavations in the study area have penetrated natural deposits, and the information relating to the height of natural is largely derived from borehole work across the study area, in particular along Piccadilly and in the triangular shaped spit of land between the rivers Ouse and Foss. Natural deposits can be subdivided into three parts, the underlying sandstone bedrock (which is rarely seen as few boreholes are of sufficient depth to penetrate the rock), clay deposits relating to the glacial moraine and alluvium which accumulated in the former channels of the rivers Ouse and Foss.

Sandstone bedrock was seen at

- Site 14 at -7.17m AOD in BH103, -7.85m AOD in BH106, -9.37m AOD in BH107. -5.99m in BH108 and -5.97m AOD in BH110. Directly above this bedrock there was weathered bedrock to heights of -5.67m AOD in BH103, -5.3m AOD in BH104, -4.45m AOD in BH106, -5.47m AOD in BH107, -4.99m AOD in BH08, -2.47m AOD in BH110 and 4.06m AOD in BH111.
- Site 26 in BH7 at -7.4m AOD.
- Site 53 at -4m AOD.

Boulder clay from the glacial moraine was observed at the following sites

- Site 26 at 2.3-2.4m AOD with the exception of BH7 where it was at 0.5m AOD. This difference in height was attributed to the presence of a natural slope, possibly an earlier river bank of the Foss located between BHs 5 and 7.
- Site 30 at between 8.05m AOD in T1, 8.8m AOD in T4, 8.7m AOD in T5 and 9.65m AOD in T6. In addition, at 9.0m AOD in T1 there were deposits interpreted as being of natural origin lying above the moraine.
- Site 36 natural clay at 8.2m AOD in BH1, 3.2m AOD in BH2, 7.4m AOD in BH3, 5.2m AOD in BH4, 9.1m AOD in BH5, 6.2m AOD in BH6, 10.5m AOD in BH7 and 4.8m AOD in BH8. The differences in height are because boreholes 2/4/6 were located within the castle moat.
- Site 39 in 8.57m AOD in T1 and 9.42m AOD in T2. Within T2 this resembles glacial till.
- Site 44 in BH1 at -0.5m AOD, in BH2 at -0.3m AOD in BH3 at 2.3m AOD and in BH4 at -0.05m AOD.

- Site 63 BH202 at 2.84m AOD and BH202 at 1.05m AOD. In addition, in BH202 there was silty clay to a height of 2.05m AOD which was interpreted as possibly natural.

Alluvial deposits consisting of sands and gravels from river beds (which accumulated above the bedrock) was seen at the following sites.

- Site 24 in BH1 3.7m AOD.
- Site 26 at 2.9m AOD.
- Site 29 alluvial site at 1.55m AOD.
- Site 32 at 2m AOD.
- Site 40 at 0.15m AOD (the precise nature of this deposit is unclear from the description, but it is not described as boulder clay and therefore probably represents alluvium).
- Site 44 in BH2 at -0.15m AOD.
- Site 59 ranging from 0.4m to -1.7m AOD.
- Site 61 BH1 at 2.11m AOD. This was a tentative identification.

10.2 Alluvium and deposits of uncertain date (Fig. 7)

Undated alluvial deposits were seen in a number of boreholes. These deposits could be of any date from prehistoric onwards.

- Site 14 the sands, gravels and alluvial deposits at this site formed a continuous sequence above bedrock and below modern made ground. The upper surfaces were at 5.85m AOD in BH103, 5.6m AOD in BH104, 7.25m AOD in BH106, 6.53m AOD in BH107, 7.51m AOD in BH108 5.83m AOD in BH110 and 7.02m AOD in BH111.
- Site 44 deposits preceding those of the King's Fishpool were visible in BH2. These contained timber fragments. They could be of any date up to the Anglo-Scandinavian period. The upper surface was at 1.4m AOD in BH2.
- Site 59 clean sand at 0.8m AOD.
- Site 60 coarse sands and sandy-clay at 0.7m AOD.

10.3 Prehistoric (Fig. 8)

- Site 24 BH1 contained organic sands and timber pile at 4m AOD interpreted as possibly prehistoric.

10.4 Deposits post-dating the prehistoric of uncertain date (Fig. 9)

- Site 24 had deposits containing brick tile and clinker to 5.5m AOD in BH1, sealed by clay to 6m AOD, and in BH2-3 silty clay to 6.8m AOD. The date of these deposits is unknown, but the presence of brick implies that they are Roman and later in date.

10.5 Roman (Fig. 10)

- Site 29 a well-worn 3rd century cobble surface at 1.65m AOD together with unabraded pottery. Clearly the site was dry land at this stage.
- Site 31 a variety of Roman features and deposits at 4.42m AOD.
- Site 32 a cobble surface at 3m AOD was interpreted as possibly Roman.
- Site 39 Roman surface, pit, gully and artefacts suggestive of industrial activity nearby at 10.32m AOD.

- Site 40 has undated cobbles at 1.55m AOD. This can be interpreted as Roman on the basis of its' proximity to a dated Roman cobble surface at a similar height AOD in Site 29.
- Site 43 although no Roman deposits were present there was residual Roman pottery at the site indicative of Roman land use in the vicinity.
- Site 53 pottery of 1-3rd century date was recovered from BHs at between -1.7 to -2.04m AOD.
- Site 59 in BH3 there seems to be a feature containing 2-3rd century pottery cutting into the underlying sands and gravels. The top of this was at 0m AOD and it continued to a depth of -1.7m AOD.
- Site 61 in BH1 at 3.91m AOD. There was no dating evidence but the deposits were of a different nature than those interpreted as being of medieval date above.
- Site 63 in BH201 at 4.84m AOD. There was no dating evidence but the deposits were of a different character to those interpreted as medieval above.

10.6 Anglian and Anglo-Scandinavian (Fig. 11)

- Site 26 in the BHs there was a 0.5m thick band of clay-silt with traces of elm the upper surface of which was at 2.9m AOD. This was interpreted as a buried occupation surface possibly of Anglo-Scandinavian date given that it preceded King's Fishpool deposits. In T8 a humic silty-clay of 11th century date was present at 2.74m AOD.
- Site 30 three pits cut into natural clay with upper edges at 9.60m AOD in T4.
- Site 31 humic clay and cobbles of 10-11th century date at 4.92m AOD.
- Site 32 a 2m thickness of deposits in BHs with the upper surface at 6m AOD, which including a surface at 4.3m AOD, were interpreted as being of this date.
- Site 39 a pit truncating Roman upper surface at 10.36m AOD.
- Site 43 burials were present at approximately 10.8m AOD. In addition, there was residual pottery of this date indicative land use in the vicinity.

10.7 Later medieval mid-11th to 16th century (Fig. 12)

- Site 24 deposits at 7.1m AOD in T1, at 7.7m AOD in T2 and 7.27m in T3.
- Site 26 14-15th century deposits from the infilling of the King's Fishpool at 4.74m AOD T8 and 4.7m AOD in the BHs.
- Site 29 14-15th century silts from within the King's Fishpool at 4.33m AOD and attempts at reclamations with timber revetments at 4.88m AOD.
- Site 30 possible bank and post hole from Norman timber castle at 9.72m AOD in T4.
- Site 31 organic build ups and revetments at 6.92m AOD.
- Site 32 a wall from St George's chapel and an earlier pillar were at 7m AOD.
- Site 36 in the case of BH2/4/6 there were deposits of silty clay above natural which must have accumulated within the castle moat, though there were no artefacts to confirm this; similar deposits in the remaining bore holes are therefore tentatively assigned to the medieval period. These were at 8.2m AOD in BH1, 5m AOD in BH2, 9.36m AOD in BH3, 5.4m AOD in BH4, 9.8m AOD in BH5, 8.2m AOD in BH6 and 8.8m AOD in BH8.
- Site 39 deposits including a hearth and a cut and foundation at 10.63m AOD.
- Site 40 had clayey silts at 4.07m AOD interpreted as possibly relating to the King's Fishpool though they were undated.

- Site 43 a clay bank and associated post holes interpreted as part of the Norman castle were present at 10.9m AOD.
- Site 44 King's Fishpool infill deposits were present at 5m AOD in BH1, 3.6m in BH2, 5.35m AOD in BH3 and 6m AOD in BH4.
- Site 47 silty clays with charcoal of 16th century date at 6.27 in T1.
- Site 59 medieval refuse dumping and alluvial deposits at 6.6m AOD. These continued for a considerable depth, to -0.5m AOD.
- Site 60 deposits interpreted as levelling and dumping including a single sherd of abraded medieval pottery, the upper surface ranging from 1.6m to 2.04m AOD.
- Site 61 deposits of this date were at 6.11m AOD in BH1, 6.84m AOD in BH4, 6.65m AOD in BH6, 7.25m AOD in BH7, 7.25m AOD in BH8. There was no dating evidence but the deposits were wetter and more organic than those interpreted as being of post-medieval date.
- Site 63 dark organic silts and clays, which were often waterlogged, were at 7.57m AOD in WS202, 6.05m AOD in WS203, 6.87m AOD in WS204, 5.37m AOD in MP01, 5.79m AOD in MP02, 7.75m AOD in MP03, 7.55m AOD in MP04, 5.55m in BH201 and 7.94m AOD in BH202.

10.8 Post-Medieval 16th-19th century (Fig. 13)

- Site 24 dumps, demolition dumps and foundations at 8.35m AOD in T1.
- Site 26 mixed dumps and 18-19th century reclamation deposits at 8.05m AOD in T8.
- Site 29 dumps, a pit with mortar fill, a ditch and a brick drain; the upper surface at 7.74m AOD.
- Site 30 a 16th century garden feature at 9.55m AOD in T2.
- Site 31 horticultural soils at 7.65m AOD.
- Site 43 mortar deposit at 10.95m AOD in the central portion of the trench.
- Site 44 organic silts with brick rubble at 6.7m AOD in BH1, 7.9 in BH2 and 6.9m AOD in BHs 3-4.
- Site 47 land reclamation deposits at 8.05m AOD at the southern end of T1, 7.8m AOD at the northern end of T1 and 6.6m AOD in T2.
- Site 59 alluvial deposits at 6.5m AOD.
- Site 60 alluvial deposits with no datable finds upper surface ranging from 6.6m to 7.01m AOD.
- Site 60 landscaping to raise the ground level upper surface ranging from 7.3m to 8m AOD.
- Site 61 deposits of this date were at 7.91m AOD in BH1, 7.64m AOD in BH4, 8.3m AOD in BH6, 7.65m AOD in BH7, 8.65m AOD in BH8.
- Site 63 deposits of a horticultural nature, a brick wall and levelling aimed at raising the ground level were present. The upper surfaces of which were at 8.63m AOD in WS201, 8.57m AOD in WS202, 7.85m AOD in WS203, 7.87m AOD in WS204, 8.32m AOD in MP01, 9.24m AOD in MP02, 9.45 in MP03. 9.25m AOD in MP04, 8.54m in BH201 and 9.24m AOD in BH202.

10.9 Modern mid-19th century onwards (Fig. 14)

- Site 14 made ground and hard-core at 7.83m AOD in BH03, 7.7m AOD in BH104, 7.75m AOD in BH106, 8.53m AOD in BH107, 8.51m AOD in BH108, 8.03m AOD in BH110 and 9.10m AOD in BH111.
- Site 24 modern gravel surfaces and car park at 9.20m AOD in T1 and 8.95m AOD in T3.
- Site 26 extensive ash and cider dumps and modern warehouse at 9.48m AOD.
- Site 29 infill of ditch, dumps and cobble yard at 9.45m AOD.
- Site 30 extensive deposits relating to the 19th century prison and 20th century civic centre at 11.6m AOD at T1, 11.47m AOD in T2, 11.22m AOD in T3, 11.37m AOD at the western end of T4, 11.17m AOD at the western end of T4, 11.51 at T5 and 11.52m AOD at T6.
- Site 31 dumps from St Denys' churchyard and modern structures at 10.05m AOD.
- Site 39 extensive deposits relating to the 19th century prison and 20th century civic centre at 11.97m AOD in T1 and 11.87m AOD in T2.
- Site 40 mixed rubble at 8.83m AOD.
- Site 43 four burials presumed to be of executed criminals sealed by various modern deposits and a brick wall at 11.35m AOD at the eastern end of the trench and 11.62 at the western end of the trench. The burials were at approximately 11.2m AOD.
- Site 44 brick walls and modern concrete surface at 9.47m AOD in BH1, 9.39m AOD in BH2, 9.39m in BH3 and 9.42m in BH4.
- Site 47 various features at 9.4m AOD in T1 and 9.3m AOD in T2.
- Site 53 modern surface at 7.3m AOD.
- Site 59 car park surfaces ranging from 8.5m AOD in BH4 to 8.79m AOD in BH7.
- Site 60 car park surface and associated levelling at between 8.62 to 8.39m AOD.
- Site 61 modern structures and surfaces were at 9.91m AOD in BH1, 9.88m in BH2, 9.8m AOD in BH3, 9.84m AOD in BH4, 9.87m AOD in BH5, 9.9m AOD in BH6, 9.85m AOD in BH7, 9.8m AOD in BH8.
- Site 63 modern car park surface and associated levelling was at 9.73m AOD in WS201, 9.57m AOD in WS202, 9.75m AOD in WS203, 9.87m AOD in WS204, 9.54m AOD in WS205, 9.74m AOD in MP01, 9.39m AOD in MP02, 9.75m in MP03, 9.55m AOD in MP04, 9.24m in BH201 and 9.55m AOD in BH202.

11 POTENTIAL ARCHAEOLOGICAL IMPACT ACROSS THE DEVELOPMENT SITE

The construction of the Debtors' Prison, the Female Prison and the 20th century museum foyer building will have undoubtedly truncated many of the underlying deposits in the proposed development area. That said it is clear from Sites 55-6 and 62 that medieval and earlier deposits do survive beneath these buildings. There is clearly the potential to uncover archaeological deposits of some significance within the area of the proposed development. Taking each period in turn:

11.1 Glacial and post-glacial deposits

As noted above in section 10, the naturally occurring deposits can be divided into three, firstly the underlying Bunter Sandstone (Fig. 4), secondly, deposits from the glacial moraine (Fig. 5) and thirdly alluvial deposits accumulating within early river channels (Fig. 6).

The underlying sandstone has been seen in just four sites within the study, and in all cases lies beneath the present day sea-level. None of the boreholes in question are located within the proposed development area, and the depth of the bedrock in this area is therefore unknown.

Deposits of the glacial moraine have been located at six sites, three located within the Castle Car Park area and three in the area between the present eastern bank of the River Foss and Piccadilly. The height of the upper surface of the surviving moraine deposits clearly varies, being highest in the area of the Castle Car Park where it is typically at between 8.05-9.65m AOD. There are some variations in the height of natural within the area of the car park, however, the upper surfaces of the moraine in BH 2/4/6 of Site 36 being at a much lower level, having been truncated by the castle moat. The moraine to the east of the Foss seems to have been subjected to riverine erosion, being at a lower level overall than that seen in the Castle Car Park, though again there is some variation, with the upper surface of the surviving moraine being located at just below present sea level in Site 44, but at between 1.05m to 2.3m AOD in sites 26 and 63. All three sites were presumably within an earlier, wider, channel of the River Foss in the post-glacial period.

Naturally occurring alluvium clearly accumulated within the channels of the earliest versions of the Rivers Ouse and Foss. The post-glacial channels of both rivers would have been broader and shallower than at the present time. Within BH4 of Site 36, which was located immediately adjacent to the present western bank of the River Foss, there was a deposit of silty clay and pebbles the upper surface of which was at about 5.4m AOD, which may represent a buried alluvium. Deposits from the glacial moraine were, however, present in T4 of Site 30 located approximately 6m to the south-west of the bore-hole. This suggests that the channel of the post-glacial river was up to 5m wider on the western bank than at the present time. This western bank may have been steep, it was recorded as such as late as the 17th century (see p5 above) and there was a possible steep river channel edge seen in T4 of Site 30.

The area between the present-day eastern bank of the River Foss and Piccadilly lay within the post-glacial river channel, with accumulations of alluvium being seen at Sites 26, 29, 40, 44 and 61. The channel of the Ouse was also wider with alluvial deposits being observed in BHs at Sites 32 and 59. In the case of Sites 44 and 59 the upper surface of this alluvium was recorded as being below present sea level while at the remaining sites it was at anything from 0.15m to 2.9m AOD.

Accumulations of undated alluvium were observed at several sites (Fig. 7). It is impossible to determine if these accumulated before humans migrated into the area or not. In the case of Site 44, this alluvium preceded the development of the King's Fishpool, and must therefore be of Anglo-Scandinavian date at the latest. Without any clearer idea of the date of these deposits they are of little use for interpreting the development of the river channels.

The proposed development has the potential to uncover the height of the underlying bedrock (should any bore-holes be undertaken to considerable depth), to uncover remains of the glacial moraine (though this may be severely truncated), and for the recovery of buried alluvial deposits in the area immediately adjacent to the River Foss. The alluvial deposits would be of significance for better understanding the earlier course of the River Foss, and if they could be environmentally sampled, for understanding the nature of the post-glacial environment.

11.2 Prehistoric

Evidence of prehistoric settlement within the urban area of York is sparse, usually consisting of stray finds of artefacts, the majority of which are residually occurring flints. Within the study area the only direct evidence for prehistoric activity was a timber pile from within a BH at Site 24. There was little direct evidence of prehistoric settlement within the study area; small numbers of residually occurring flint scrapers and cores were recovered from excavations in the area of the former castle (four from Site 30 and five from Site 39). In addition, Site 4 (a crouched burial in a stone cist found beneath the castle motte in 1902) has been interpreted as either prehistoric or Roman in date.

The location of the proposed development area on the higher land of a glacial moraine adjacent to the confluence of two rivers represents an ideal location for prehistoric settlement. Given that stray finds of prehistoric date are present from sites within the castle area there is clearly the possibility of recovering further evidence of prehistoric activity within the proposed development area, though this may take the form of residual artefacts rather than cut features or occupation derived deposits.

11.3 Roman

The Eye of York lawn in front of the Castle Museum lying roughly at the centre of the study area is approximately 430m south-south-east of the southern corner of the Roman fortress founded in AD 71. Roman Roads 1 and 2 (leading to Pool Bridge and Brough-on-Humber respectively) converged to the east of the Foss before crossing the river and running on a north-west to south-east alignment immediately adjacent to the south-western side of the legionary fortress. Part of this road is conjectured to traverse the study area in the vicinity of the Castle Car Park (Ottaway 1993, Fig. 1).

Evidence for Roman use of the River Foss for navigation and commerce is known, though clearly the course of the River was very different to that of the present time. Excavations undertaken in 1951–52 prior to the construction of the Telephone Exchange building in Garden Place, Hungate, uncovered walls and piles interpreted as a Roman wharf and the buried former course of the river (RCHM 1962, 64), while a line of stone pillars beneath the Tax Offices on Piccadilly was interpreted as possible evidence for a Roman riverside jetty (Ottaway 1993, 69). Roman occupation was clearly present to the east of the River Foss in the Dixon Lane area including evidence of terracing, timber buildings and pits (McComish 2007, 11-15).

Within the castle area the only direct evidence of Roman occupation was a pit at Site 39 (the upper edge of which was at 10.32m AOD). The fill of the pit was suggestive of the dumping of material derived from industrial processes, though whether this represented activity in the immediate vicinity or represented the dumping of material from the fortress is unclear. Site 43 within the castle area also yielded residual Roman pottery indicative of Roman land use in the vicinity.

The study area to the east of the present River Foss produced further evidence of Roman settlement with a number of features including cobble surfaces and cut features present at Sites 29, 31 and 40 (at heights of 1.65m AOD, 4.42m AOD and 1.55m AOD respectively). In addition, BHs at sites 61 and 62 produced deposits (the upper surfaces of which were at 3.91m AOD and 4.84m AOD respectively) which interpreted as being of possible Roman date (these were of a different character to organic deposits of medieval date above).

Roman activity in the form of a cobble surface, pottery and a feature cut into natural were present in the area between the confluence of the two rivers at Sites 32, 53 and 59 (at heights of 3m AOD, -1.7 to -2.04m AOD and 0m AOD respectively). The considerable differences in the heights of the various Roman features adjacent to the rivers and that of the castle area, is simply a reflection of the fact that the castle area was the highest point of the moraine.

Roman roads outside settled areas usually acted as a focus for burials and this was clearly true in the case of the present study area. Roman burials, including examples in stone coffins, a lead coffin, a plank lined grave and a wooden coffin are known from the area of the present castle (Sites 3-4 and 7) while bones incorporated randomly within the motte (Site 1) probably originated from this cemetery being disturbed and redeposited during the construction of the motte. Human remains from this cemetery within the YMT collections are stored under accession number YORYM : 1947.9. Roman burials were also present in the area to the east of the Foss in the area of Dixon Lane (McComish 2007). Slightly further afield, a Roman altar dedicated to the native god Arciaco was found at St Denys Church on Walmgate and two other coffined Roman burials were found nearby (RCHM 1962, 69–70, 118; HTAY 2015, Sheet F).

Clearly the present development site has the potential to yield deposits of Roman date, including burials, though any such remains may well prove to be severely truncated by later activity.

11.4 Anglian and Anglo-Scandinavian

Evidence for the Anglian period elsewhere in York suggests that settlement was poly-focal interspersed with areas devoid of settlement (Kemp 1996, 298). Important evidence for Anglian settlement exists just beyond the north-east limits of the study area at Dixon Lane (McComish 2007), just beyond the south-eastern limit of the study area at 46-54 Fishergate (Kemp 1996) and at Blue Bridge lane (Evans 1994; Spall and Toop 2011, 7), while to the immediate north of the study a spectacular Anglian helmet was recovered from the site at 16-22 Coppergate (Tweddle, 1992). Of these, the 7-9th century trading settlement at 46-54 Fishergate represents the largest single area of Anglian remains uncovered in archaeological excavations in the city. Additional Anglian sites just beyond the limits of the study area include 22 Piccadilly where pottery of early-mid 9th century date and a wicker fence were recovered from excavations (Finlayson 1997), while at 17–21 Piccadilly a 9th century relief-band amphora fragment was recovered from around 5m below the modern street level at around 5.7m AOD (Tweddle et al. 1999, 196–197).

While no direct evidence of settlement (in terms of cut features or deposits) is known from within the proposed development area the discovery of an Anglian hanging bowl in the area of the castle (Site 2) is clearly indicative of activity in the area. There is therefore the possibility that remains or stray finds of this date may be uncovered within the proposed development area.

Remains of Anglo-Scandinavian date are more numerous across York than those of the Anglian period, particularly in the area to the south of the former Roman fortress. The present study area lies 300m to the south of the nationally important site of 16-22 Coppergate, famed for its Viking deposits. In addition, the documentary evidence discussed above, indicates that the area of the later medieval castle area was occupied at this time. Walmgate seems to have developed as a major routeway in the 9th and 10th-century and a substantial suburb developed in relation

to this road (as seen in YAT excavations at 118–126, 76–82 and 104–112 Walmgate). This suburb extended into the area of Dixon Lane (McComish 2007, 23-30). The church of St Denys, Walmgate, is thought to have pre-Conquest origins (Wilson and Mee 1998, 73). In addition, pre-Conquest burials are known from Dixon Lane (McComish 2007, 51-56).

Anglo-Scandinavian features are clearly present in the study area. On the eastern bank of the River Foss Site 31 produced humic clay and cobbles dated as 10-11th century at 4.82m AOD, while Site 26 yielded deposits of clayey-silt traces of elm that were interpreted as being of probable Anglo-Scandinavian date, as did Site 32 closer to the Ouse (the deposits in question preceded, and were of a different character, to deposits interpreted as relating to the later medieval King's Fishpool).

Within the area of the Castle Car Park there is evidence of both Anglo-Scandinavian settlement and burial. In terms of settlement Site 30 yielded three pits of this date 9.60m AOD in T4, a further pit was present at 10.36m AOD at Site 39, while Site 43 produced residual pottery of this date indicative of settlement in the vicinity. Site 43 also yielded a small number of burials of this date, at a height of approximately 10.8m AOD. This is of great significance indicating the location of a previously unknown burial ground. As this site lies immediately adjacent to the north-western wall of the Former Female Prison there is clearly very strong possibility that further burials from this cemetery will be uncovered, together with evidence for settlement activity of this date. Such burials offer potential for osteo-archaeological research.

11.5 Later Medieval

The topography of the area in the later medieval period underwent considerable changes, largely as a result of the construction of the Norman castle and the damming of the river Foss by William the Conqueror to feed the moat of the Norman castle (VCHY 1961, 509–510). The dam of the Foss probably provided a causeway across the Foss at the site of the modern Castle Mills Bridge. Damming the river had the effect of creating a large area of water known as both the *Stagnum Regis* and King's Fishpool, which flooded the area on the eastern banks of the River Foss within the study area. This remained flooded until the 14th century, after which time it was gradually reclaimed. The castle remained in use throughout the medieval period, and the Walmgate suburb continued to develop, being enclosed with defences in the late 12th century (RCHM 1972, 11; HTAY 2015, 31). Fishergate Postern was built sometime in the 14th century. The area to the south of the castle was less intensively developed as its name implies (St George's Field), though mills and St George's Chapel were present in this area. There was a bridge at Castle Mills, though the first documentary evidence for is not until 1585 (VCHY 1966, 519–520).

The later medieval deposits in the study area can be divided into three groups, firstly those relating to the construction of the castle, the castle moat and the damming of the River Foss to create the King's Fishpool and moat, secondly those deposits on the eastern side of the River Foss relating to the infilling and reclamation of the King's Fishpool which took place from the 14th century onwards, and thirdly those located in the triangle of land between the confluence of the Rivers Foss and Ouse.

Remains interpreted as relating to an early bank of the castle were present at Site 30 and 43, at 9.72m AOD and 10.9m AOD respectively. Features from within the bailey including a stone wall and hearth were present at Site 39 at 10.63m AOD. Deposits relating to silting of the Fishpool

or moat were present at Sites 29, 31, 36, 40, 47, 61, 63, while deposits of 14-15th century date relating to the deliberate reclamation of the Fishpool were present to the east of the Rover Foss at Sites 26, 29 and 44.

The only medieval building uncovered archaeologically in the triangle of land between the Rivers Ouse and Foss is that of St George's Chapel in Site 32. The other sites in this area (Sites 24 and 59-60) produced evidence for a build-up of alluvial deposits with some dumping, which was of considerable depth.

The proposed development area clearly has the potential for uncovering remains associated with the castle. In particular, there is the strong possibility that the remains of a clay bank of the Norman castle will be uncovered in the area to the immediate north of the former Female Prison. It is clear from Sites 5, 7 and 55-6 that remains associated with the bailey survive in the area of the modern museum foyer and the yard to the rear of the Debtors' Prison. There is clearly therefore the potential to uncover buildings from within the bailey, about which little is known. Any such remains are to be considered of high importance as they are likely to hold valuable information about the castle morphology. The proposed development area does not seem to impinge on the moat of the castle, but should any such remains be disturbed they would be of interest from an environmental point of view.

11.6 Post-Medieval

The area underwent considerable alterations in the post-medieval period, with the eastern side of the Fishpool being gradually reclaimed and developed. The bridge at Castle Mills was destroyed during the Siege of 1644 (VCHY 1966, 519–520). Changes accelerated from the late 18th century with the canalisation of the River Foss and the insertion of the new road of Piccadilly which encouraged the development of industrial premises in the area. Artefacts of this date from the study area include a post-medieval finger ring depicting a pelican and initials 'RW' and the possible initial 'H' or 'N' where loop meets bezel was found at St George's Fields (YMT ref no YORYM : 1978.30) and a post-medieval iron handcuff from Clifford's Tower (YMT ref no YORYM : 2014.281).

Very few remains of this date are known from within the area of the Castle Car Park, having been largely truncated by modern buildings in this area. There was a 16th century garden feature at Site 30, while a mortar deposit associated with the construction of the Female Prison was present at Site 43 at 10.95m AOD.

Deposits relating to the reclamation of the Fishpool together with the footings of post-medieval buildings associated with the development of the Piccadilly area were present at Sites 26, 29, 31, 44, 47 and 63.

In the area between the Rivers Ouse and Foss there were a mixture of alluvial deposits and dumps to reclaim land at sites 24 and 59-60.

Within the proposed development area there is the potential to uncover the remains relating to the construction of both the Female and Debtors' prisons. Given that level of building activity at the site in the 18th century remains of this date would undoubtedly be uncovered in the proposed development works.

11.7 Modern

All of the sites in the study area produced modern deposits ranging from the remains of the Felons' Prison, the 1939 civic centre, dumps to raise the ground level, car park surfaces, and the remains of industrial premises.

The most notable discovery was that of a Felons' cemetery in Site 43, located immediately adjacent to north-western wall of the former Female Prison. This is critically important as it lies directly within the proposed development area. There is the very strong probability that further burials relating to the prison will be uncovered during the proposed development works. Such remains offer potential for both osteo-archaeological research and enhanced understanding of penal practice in York.

12 DEPOSIT MODEL TRANSECTS A AND B

The transects were based on the observed deposits from excavations within a band 15m wide to either side of the transect-locations depicted on Fig. 15. The period numbers are shown in white on the transect, with a key for the various periods below.

12.1 Transect A (Fig.16)

Transect A is 120m long and lies on a north-east to south-west alignment running from Piccadilly, which crosses the River Foss and terminates slightly to the north of the former Female Prison. Looking at the transect it is clear that the results to either side of the River Foss are very different, and these two areas are therefore considered separately below.

Taking the area to the west of the River Foss first, i.e. the area of the castle: there were problems with this model for the area 17m-35m from the south-western end of the transect with regard to the Anglo-Scandinavian and medieval deposits. In the case of both T4 of Site 30 and T9 of Site 43, Anglo-Scandinavian cut features were present and sealed by a medieval bank interpreted as being of the Norman castle. Lying between these two trenches was BH3 of Site 36; the deposits within this BH did not contain any dating evidence and were interpreted as probably medieval. In terms of the model it was unclear precisely how extensive the Anglo-Scandinavian remains were; whether they occurred in two isolated pockets to either side of the bore hole, or were simply not recognised in the borehole (which is highly likely given that no dating evidence was recovered from the BH with which to accurately interpret the observed deposits). Due to the ambiguity of the results the upper surface of the Anglo-Scandinavian remains is shown as a dashed line on the transect.

A further problem with this model for the area 17m-35m from the south-western end of the transect is that while the height of the underlying natural in this area is known from T5 of Site 36, BH3 of Site 36 and T4 of Site 30, it was not reached in the excavation of T9 in Site 43. The difference in height between known Anglo-Scandinavian features in T9 in Site 43 and the height of natural in nearby BH3 of Site 36 created the impression of a massively thick build-up of Anglo-Scandinavian features which is almost certainly misleading. The reasons for this are unclear, but one possibility is that BH3 of Site 36 may lie directly within a deep intrusive feature that had truncated the upper surface of the natural (such as a deep pit or well) creating a misleading picture of the original height of the natural. While the results of Transect A in the area of the castle should be treated with some caution, it is clear that archaeological deposits survive across this area.

There is a significant difference in the height of the underlying glacial moraine to either side of the river, it being far higher in the area of the castle (Period 2). The underlying natural clearly drops away sharply to the east of T4 of Site 30, representing one side of a deeply cut river channel.

Although no Roman remains (Period 7) were present within this transect it should be noted that features of this date exist slightly to the north at Site 39. As noted above Anglo-Scandinavian remains (Period 8) were present at two different points on this transect, though the extent of such deposits in the surrounding area is unclear. Medieval deposits (Period 9) comprised a bank for the early castle which was clearly seen in both T9 of Site 43 and T4 of Site 30, though at slightly differing heights. The width of this bank is unknown, as its south-western side lay beyond the limit of excavation at both site 30 and 43.

Post-medieval deposits (Period 10) in this area were almost non-existent. The considerable thickness of modern deposits (Period 11) immediately adjacent to the river relate to the deliberate infilling of this area at the time of the canalisation of the river in the late 18th century. In addition, the modern deposits include levelling for and the surface of the modern car park.

The area to the east of the Foss in Transect A is clearly very different to that west of the river. Virtually all the data from this area was recovered from BHs, and there are problems with regards to the lack of clear dating evidence for the observed deposits. The results given below should therefore be treated with some caution.

The underlying moraine (Period 2) is at a far lower level than on the opposing western bank of the river. This area clearly lay within the channel of a post-glacial river which had scoured away the moraine in this area.

Roman remains (Period 7) were only present in BH201 of Site 63, but they are known from other sites in the immediate vicinity. While no specifically Anglo-Scandinavian deposits (Period 8) were present on the transect these are known from nearby excavations; deposits of this date undoubtedly exist in the area of the transect, but they could not be recognised within the BH data. The medieval deposits (Period 9) are of considerable depth representing the build-up of silts within the King's Fishpool, and the reclamation of this pool from the 14th century onwards.

The process of land reclamation continued into the post-medieval era (Period 10), with later post-medieval buildings being present at all sites on the transect, sometimes to considerable depth. The remains of modern buildings and surfaces were also present across the entire area (Period 11).

12.2 Transect B (Fig. 17)

Transect B is 90m in length and lies on a north-west to south-east alignment crossing the Castle Car Park and terminating close to the former Female Prison. The Roman, Anglo-Scandinavian and medieval deposits 50m from the north-western end of the transect were difficult to represent as their upper surfaces were at very similar heights.

The earliest deposits (Period 2) comprised natural deposits relating to the moraine. These had clearly been heavily truncated by the castle moat in the area between 25-45m from the north-western end of the transect.

The only surviving Roman feature (Period 7) was a deposit located 50m from the north-western end of the transect, having been truncated elsewhere. Anglo-Scandinavian remains (Period 8) were also heavily truncated only been present at 50m from the north-western end of the transect (a pit) and at the south-westernmost end (where burials were present).

The dominant later medieval feature (Period 9) is the castle moat which can be clearly seen approximately 25-45m from the north-western end of the transect. The moat is clearly of considerable depth. At the north-westernmost end of the transect there is a build-up of sandy-silty clay interpreted as possibly medieval in date. Similar deposits of sandy-silty clay interpreted as possibly medieval in date also occurred between 50-65m from the north-western end of the transect. These deposits were only observed in BHs and their precise date and derivation is uncertain. They could represent deposits associated with the construction or use of the castle, or possibly be of an earlier date.

Post-medieval deposits only survived in the south-easternmost 40m of the transect, having been truncated by modern activity elsewhere. It is clear that there is a considerable build-up of modern deposits (Period 11) across the north-western most 50m of this area, due to the presence of the 19th century prison buildings and the 1939 Civic Centre. The modern deposits in the south-easternmost 40m of the transect comprised burials from a Felons' prison together with the levelling deposits of the present car park surface.

13 CONCLUSIONS AND RECOMMENDATIONS

13.1 The area to the north-west of the Former Female Prison

The present deposit model indicates that this area contains archaeological deposits of some importance. The archaeological deposits in this area are in excess of 1.3m in thickness and they are located as little as 0.6m below the present ground surface in places (Site 43; Evans 1998, Fig. 2).

Firstly, there is the potential to uncover Roman remains, relating to both settlement activity (seen at Site 39) and burial (in the area of Clifford's Tower). Although no deposits of Anglian date are known it is possible that such remains are present, as evidenced by the discovery of a 6th century hanging bowl in the vicinity during the 19th century. Anglo-Scandinavian remains will almost certainly be present in the form of burials (seen at Site 43) and settlement activity (seen at Site 30). Remains of the Norman castle bank will also be present in this area (as seen in Sites 30 and 43). There is the possibility of uncovering post-medieval deposits relating to the construction of the prison in the 18th century (as seen at Site 43). Burials relating to the prison will probably also be present (as seen in Site 43). All of these remains are significant in terms of understanding the history of land use in this part of York.

The presence of burials within this area must be carefully considered; the archaeological recovery of skeletal remains is covered by specific legislation (the Disused Burial Grounds Act 1981). It is an expensive undertaking due both to the time required for careful excavation and the cost of osteo-archaeological research. There are also time constraints on the reburial of excavated remains, which must be borne in mind. Research into skeletal remains is, however, usually immensely popular with the public, and the results of any such excavation and research could form the basis of an interesting exhibition within the museum.

No recommendations for further evaluation are proposed in this areas as there is sufficient existing data to adequately characterise the deposits present.

13.2 The area of the museum foyer

The nature of the archaeological deposits in the area of the Castle Museum Foyer was more difficult to assess, as there were no recently excavated sites in this area for which levels AOD were available. The sites in this area could not therefore be included in the deposit model.

There are, however, two recent archaeological interventions which are of relevance for this area. The first of these was a watching brief on a hand-excavated services trench located within the toilet block of the Castle Museum Concourse (Site 55). This showed that archaeological features were present, just 0.6m below the present floor level. These included various undated occupation deposits and a wall foundation aligned north-south, which probably pre-dated the 18th century Debtors' Prison (OSA 2010, 1 and 7-8). The services trench was only 0.9m deep, so the thickness of these archaeological deposits is unknown.

The second site was an evaluation in the Castle Museum Exercise Yard (Site 56) which showed that a complex sequence of archaeological deposits was sealed by just 0.2m of modern deposits. The excavated features included occupation deposits, walling and a robber trench (OSA 2011, 1-3). While the precise date of these deposits was unclear it was thought that they may have pre-dated the 18th century prison buildings. The presence of both Roman and medieval pottery at this site is of significance, as it suggests that deposits of these periods were present in the vicinity (OSA 2011, 1).

It is clear from these two interventions that archaeological deposits survive in this area very close to the present ground level. Given the shallowness of the modern deposits in this area it would be all but impossible to avoid damaging the underlying archaeological deposits with any form of redevelopment.

The precise date, nature and in particular the thickness of the surviving archaeological deposits is, however, uncertain. It may be thought prudent to undertake further archaeological investigations, probably in the form of trial trenches, as close to the foyer as possible to determine the precise nature and depth of the surviving deposits in the area.

13.3 The yard to the rear of the museum and garden by the Castle Mill

This area was also difficult to assess for the deposit model, again due to a lack of recently excavated sites with appropriate AOD levels. As with the area of the museum foyer, further archaeological work would be required to understand the nature, depth BGL and the thickness of surviving archaeological deposits in these areas.

A programme of window-less sleeved boreholes is recommended as the most practical and least disruptive means of achieving this.

LIST OF SOURCES

Finlayson, R., 1997. *YAT Archive Gazetteer*. YAT report.

Kemp, R. L., 1996. *Anglian Settlement at 46-54 Fishergate*, The Archaeology of York **7/1** (York)

OSA, 2010. *York Castle Museum Concourse Report on an Archaeological Watching Brief*, OSA Report no OSA10WB02

OSA, 2011. *York Castle Exercise Yard Interim Statement on and Archaeological Evaluation*, OSA Report no OSA11EV08

Ottaway, P. J., 1993. *Roman York* (London)

Parker, A., 2014. *Report on an Archaeological Watching Brief: York Castle Museum Exercise Yard*, YMT report January 2014

Parker, A., 2014. *Report on an Archaeological Watching Brief: York Castle Museum Lift Shaft Watching Brief*, YMT report January 2014

RCHM, 1962. *An Inventory of the Historical Monuments in the City of York, Volume, 1 Ebwracvm* (Leicester)

RCHM 1972. *An Inventory of the Historical Monuments in the City of York, Volume 2, The Defences* (London)

Tweddle, D., 1992. *The Anglian Helmet from 16-22 Coppergate*, The Archaeology of York **17/8** (London)

Tweddle, D., Moulden, J. and Logan, E., 1999. *Anglian York: A Survey of the Evidence*, The Archaeology of York **7/2** (York)

Historic Town Atlas, vol 5. 2015. *York* (Oxford)

VCHY, Tillot, P. M., (ed). 1966. *Victoria County History of Yorkshire: A History of Yorkshire, The City of York* (London)

Wilson, B. and Mee, F., 1998. *The Medieval Parish Churches of York: the Pictorial Evidence*, The Archaeology of York supplementary series 1/1

WEB-BASED REFERENCES

British Geological Survey, <http://mapapps.bgs.ac.uk/geologyofbritain/home.html> accessed on 7/11/2018 (accessed 26/11/2018)

McComish, J. M., 2007. 'Roman, Anglian and Anglo-Scandinavian Activity and a medieval Cemetery on Land at the Junction of Dixon Lane and George Street', *The Archaeology of York Web Publication* **9**
<https://www.yorkarchaeology.co.uk/wp-content/uploads/2015/05/AYW9-Dixon-Lane-and-George-Street1.pdf> (accessed 26/11/2018)

Spall, C. A. and Toop, N. J., 2011. *The Critical Angle –Reflections on Anglian York in the 21st Century*. Proceedings of the World Class Heritage Conference, 2011. York Archaeological Forum.

<http://www.pjoarchaeology.co.uk/docs/29/spall-and-toop-reflections-on-anglian-york.pdf>
(accessed 26/11/2018)

YAT ARCHIVES

The site archives were consulted for site codes 1981.1033, 1983.34, 1983.1034, 1983.1042, 1984.10, 1986.11 1986.1001, 1986.1020, 1989.7 1992-3.14, 1993.1012, 1997.4, 1997.106, 1998.691 and 1999.945.

Although not cited directly above the following YAT grey literature reports were also used for the research

Clarke, A., 1995. *An Archaeological Evaluation at York Castle Car Park*. YAT Report 1995/3

Evans, D., and Brinklow, D., 1998. *Former Female Prison, Castle Yard, York: Interim Report on an Archaeological Evaluation*. YAT Report 1998/23

Evans, D., 1994. *Blue Bridge Lane, York. Concise Report on and Archaeological excavation*, YAT Report 1994/43

Evans, D., 1998. *Former Female Prison, Castle Yard, York: Report on an Archaeological Evaluation*. YAT Report 1998/26

Finlayson, R., 1992a. *Report on an Archaeological Evaluation at 84 Piccadilly, York*. YAT report 1992

Finlayson, R., 1992b. *50 Piccadilly, York. A Report on an Archaeological Evaluation*. YAT Report 1992/14.

Finlayson, R., 1992c. *Simpson's Yard 38 Piccadilly, York. A Report on an Archaeological Evaluation*. YAT Report 1992/14.

Hunter-Mann, K., 1000. *The Ryedale Building, 58-60 Piccadilly, York Report on and Archaeological Evaluation*. YAT report 2000/11

Lilley, J. M., 1992. *York Castle Car Park. A concise Report on an Archaeological Evaluation*. YAT Report 1992

Lilley, J. M., 1993. *York Castle Car Park. A concise Report on Borehole Analysis*. YAT Report 1993/6

McComish, J. M., Marwood, R. and Macnab, N., 1999. *90 Piccadilly Report on an Archaeological Watching Brief*. YAT report 2000/55

Marwood, R., 1997. *38 Piccadilly, York*. YAT watching brief report 1997

Marwood, R., 1998. *Ryedale Building, 58-60, 84 and 86 Piccadilly, York*. YAT watching brief report 1998

Marwood, R., 2009. *Utility Trench, Tower Street to Peckitt Street, York*. YAT report no 2005/56

Millward, G., 2017. *Archaeological Evaluation at Foss Barrier, St George's Field*. YAT report 2017/47

Milsted, I. D., 2007. *Utility Trench in Castlegate/Tower Street, York*. YAT report 2007/07

- Milsted, I. D., 2010. *Castle Mills Wharf, York*. YAT report 2010/122
- Milsted, I. D., 2010. *Castle Mills Wharf, Tower Street, York*. YAT report 2010/122
- Reeves, B., 2016. *46–50 Piccadilly, York: Desk Based Assessment Report*. YAT Report 2016/85
- Reeves, B., 2017. *The Castle Area: An overview of the Archaeological evidence*. YAT Report Number 2017/56
- Reeves, B., 2017. *Archaeological Borehole Investigations at 47-50 Piccadilly, York*. YAT report 2017/89
- Savine, B., 2016. *Archaeological Investigations at Foss Barrier, St George's Field, SI monitoring*. YAT report 2016/64
- Savine, B. and Milsted, I., 2017. *Archaeological investigations at the former fire station Clifford Street*. YAT report 2017/28
- Savine, B., 2018. *Archaeological Borehole Investigation at 46-50 Piccadilly, York, Phase 2*. YAT report 2018.73
- Spall, C., 2011. *23 Clifford Street, York, Archaeological Excavation*. FAS report Sept 2011
- Rimmer, J., 2016. *46-50 Piccadilly, York Conservation Area Appraisal of Castle/Piccadilly Areas*. YAT Report 2016/93

ACKNOWLEDGEMENTS

M-A. Slater prepared section 3-5 of the text while the remainder of the text was by J. M. McComish. The figures were prepared by B. Savine.

APPENDIX 1 – GAZETTEER OF MONUMENTS WITHIN THE STUDY AREA

Table 1 Gazetteer of monuments, documentary HER events and HER deposit monitoring events within the study area

Number	Site Name	Date	Reference
1	Castle Mills Wharf		HER MYO298
2	Castle Mills Weir		HER MYO301
3	Castle Mills Sluice		HER MYO302
4	Castle Mills Bridge	1956	HER MYO303
5	Prison	1826	HER MYO304
6	Foss Navigation canal		HER MYO305
7	6-7 Tower Street housing	Early to Mid-19 th century	HER MYO700
8	8-10, 10a-b Tower street	Mid-19 th century	HER MYO701
9	Tower Street building	Late 18 th century and later	HER MYO702
10	6-8 Tower Place railings and gate posts	19 th -early 20 th century	HER MYO716
11	City Walls Davy Tower	Medieval and later	HER MYO717
12	1-7 Tower Street housing	Mid-19 th century	HER MYO988
13	Skeldergate Bridge	Late 19 th century	HER MYO841
14	1-3 Friars Terrace railings and gates	Medieval wall and steps, 19 th century railings	HER MYO844
15	York City walls	Medieval	HER MYO1714
16	Female Prison	Late 18 th century	HER MYO1747
17	Clifford's Tower	Medieval	HER MYO1748
18	Crown court and railings	18-19 th century	HER MYO1749
19	Curtain wall	Medieval	HER MYO1750
20	Debtors' Prison	18 th century	HER MYO1776
21	St George's Chapel	medieval	HER MYO2031
22	Oak tree art work	2010	HER MYO2229
23	Dam of King's Fishpool	Medieval to modern	HER MYO2426
24	War Memorial	20 th century	HER MYO3768
25	York Castle	Medieval	HER MYO4058

Number	Site Name	Date	Reference
26	York Motte	Medieval	HER MYO4059
27	Crouched burial below York motte	Bronze Age to Roman	HER MYO4060
28	Castle south angle tower	Medieval	HER EYO2865
29	Castle south-east angle tower	Medieval	HER EYO2866
30	Castle Mills Car Park	Photographic survey	HER EYO6437
31	Aerial photographs	Photographic survey	HER EYEYO1135, EYO1158 and EYO1172
32	46-50 Piccadilly	DBA	HER EYO6286
33	Castle Mills Piccadilly	Deposit monitoring	HER EYO6451
34	St George's Field Car Park	Deposit monitoring	HER EYO6452
35	Piccadilly	Groundwater monitoring	HER EYO4063
36	53 Piccadilly	Photographic survey	HER EYO419
37	The Lodge Peckitt Street	Building Survey	HER EYO6245
38	Clifford's Tower	DBA	HER EYO6272
39	1 Peckitt Street	DBA	HER EYO6382
40	46-40 Piccadilly DBA	DBA	HER EYO6286
41	Clifford's Tower	Medieval	HER EYO2841-63
42	36-44 Piccadilly	DBA	HER EYO5481
43	Depth of natural in York	BA Dissertation	HER EYO2491-4

APPENDIX 2 – GAZETTEER OF ARCHAEOLOGICAL INTERVENTIONS WITHIN THE STUDY AREA

Table 2 Gazetteer of archaeological interventions in the study area

The precise locations of those marked with a * are unclear and they are not shown on Fig. 2. They were all located within the area of the castle.

Number	Site Name	Date	Reference
1	York Castle motte excavation	1824	HER EYO2840
2 *	Chance find of 6th-century hanging bowl	1829	Lilley 1992,8
3 *	Roman coffin	1835	HER EYO2768
4	Clifford's Tower excavation	1902	HER MY04060 EYO2840
5	Castle south gate excavation	1924	HER EYO2864
6 *	Castle yard excavation by O'Niell	1935	HER EYO2840
7	Castle yard excavation by Ramm Burials recovered	1957	HER EYO2765-8
8	Eye of York watching brief	1981	YORKYM:1981.1033 HER EYO3677
9	Foss Bridge, Piccadilly Service Station Watching brief	1983	YORYM:1983.34
10	Piccadilly Service Station	1983	YORYM:1983.1034 HER EYO3516-7
11	Assize Courts watching brief	1983	YORYM:1983.1042 HER EYO3493
12	Castle Museum Yard watching brief	1984	YORYM: 1984.10
13	St George's Field Car Park watching brief and borehole survey	1984	YORYM:1984.15 Geotechnical Engineering Ltd HER EYO6051
14	St George's Field Car Park boreholes and excavation	1986	YORYM:1986.11 HER EYO2958-60, EYO6051
15	Tower Street watching brief	1986	YORYM: 1986.1001 HER2953-4 and EYO3511-2
16	2 Tower Place watching brief	1986	YORYM: 1986.1020 HER EYO3490

Number	Site Name	Date	Reference
17	South Esplanade watching brief and borehole	1988	YORYM: 1988.12 HER EYO3369-73
18	Eye of York watching brief	1988	YORYM 1988.1004
19	4 Tower Place watching brief	1988	YORYM 1988.1010
20	South Esplanade boreholes	1988	YORYM 1988.1029
21	8-10 Tower Street	1988	YORYM 1988.1033 HER EYO3465
22	Ryedale Building, 58 Piccadilly	1988	YORYM: 1988.1042 HER3493
23	Crown Court excavation	1989	YORYM 1989.7 HER EYO2887, EYO3064 and EYO3066-8
24	St George's Field Car Park Phases 1 and 2	1990	YORYM: 1990.17 HER EYO3943-52 and EYO3-4
25	Crown Court watching brief	1990	YORYM: 1990.1001 HER EYO3332
26	Fiat Garage, 84 Piccadilly evaluation	1991	YORYM 1991.16 HER EYO3051 and EYO20
27	CCTV test pit watching brief	1991	YORYM: 1991.1020 HER EYO3268
28	Castle Car Park Car evaluation	1991	HER EYO440
29	Simpson's Yard, 38 Piccadilly	1992	YORYM: 1992.4 HER EYO33
30	Castle Car Park excavation	1992	YORYM: 1992.5 HER EYO29
31	Excavations at 50 Piccadilly	1992	YORYM: 1992.10 HER EYO34
32	St George's Field watching brief	1992-3	YORYM: 1992-3.14 HER EYO6452
33	Eye of York Gas pipe watching brief	1992	YORYM 1992.170 HER EYO3926-42 and EYO3340

Number	Site Name	Date	Reference
34	Clifford's Tower water and drainage trench watching brief	1992	YORYM: 1992.173 HER EYO3306-7
35	Tower Street sewer repair watching brief	1992	YORYM: 1992.1017 HER EYO3288-99 and EYO685
36	Castle Car Park Boreholes	1993	YORYM: 1993.6 HER EYO42
37	Eye of York watching brief	1993	YORYM: 1993.1012 HER EYO686
38	2 Peckitt Street watching brief	1993	YORYM: 1993.1016
39	Castle Car Park Excavation	1995	YORYM: 1995.58 HER EYO57
40	38 Piccadilly watching brief	1997	YORYM: 1997.4
41	Castle Car Park Boreholes	1997	YORYM: 1997.106
42	City Walls chainage 3416-3479	1988	YORYM:1998.17 HER EYO147
43	Castle Car Park excavation	1998	YORYM: 1998.32 HER EYO132
44	58-60 Piccadilly and 84-86 Piccadilly watching brief and borehole	1998	YORYM: 1998.691
45	90 Piccadilly watching brief	1998	OSA HER EYO107
46	90 Piccadilly watching brief	1999	YORYM: 1999.945 HER EYO471
47	Ryedale Building, 58-60 Piccadilly	2000	YORYM: 2000.252
48	Clifford's Tower lighting cable trench watching brief	2005	YORAT2005.36 HER EYO765
49	Castlegate/Tower Street utility trench watching brief	2006	YAT project 5041
50	Tower Place watching brief	2006	NAA HER EYO770
51	Tower Gardens watching brief	2006	NAA

Number	Site Name	Date	Reference
			HER EYO794
52	Utility Trench Peckitt Street watching brief	2009	YAT project no 5275
53	Castle Mills Wharf, Tower Street, boreholes and test pits	2010	YAT project no 5456
54	Tower Street York watching brief	2010	NAA HER EYO4324
55	York Castle Museum Concourse	2010	OSA 110WBO2 HER EYP4323
56	York Castle Exercise Yard evaluation	2011	OSA HER EYO6054
57	Tower Gardens Sewer Repair Watching brief	2011	YAT Project 5488 HER EYO4501
58	5 Tower Place watching brief	2012	YORYM:2012.5 HER EYO4630
59	Foss Barrier, St George's Field, SI monitoring	2016	YAT project no 5924 HER EYO6295
60	Foss Barrier Borehole evaluation	2017	YAT project 5970 HER EYO6352
61	47-50 Piccadilly borehole evaluation	2017	YAT project no 5973
62	Debtors' Prison watching brief	2017	OSA HER EYO6397
63	46-50 Piccadilly borehole evaluation	2018	YAT project no 6056
64	York Castle Museum Exercise Yard watching brief	2014	Parker 2014
65	York Castle Museum Lift Shaft watching brief	2014	Parker 2014

PLATES

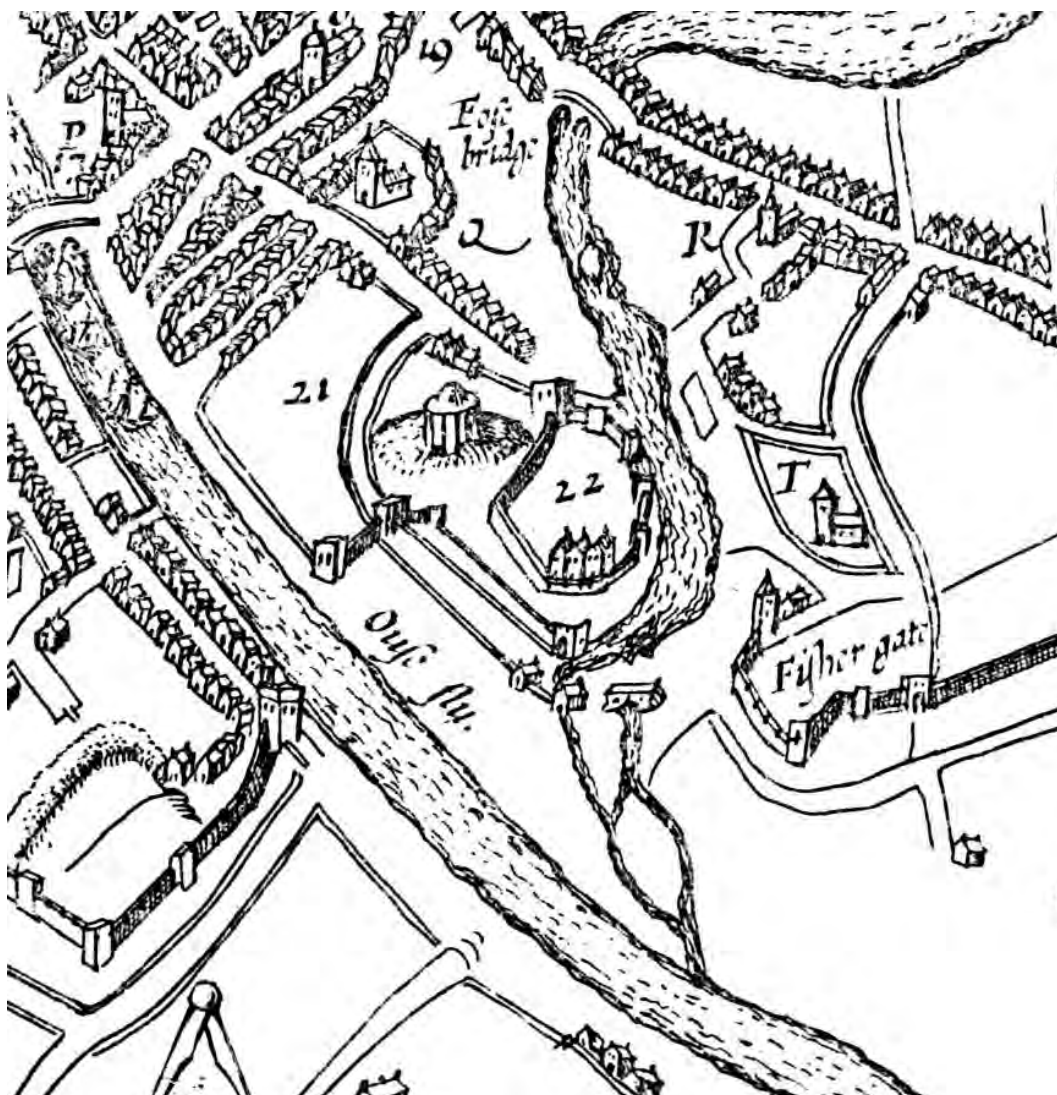


Plate 1 Speed's map of 1610

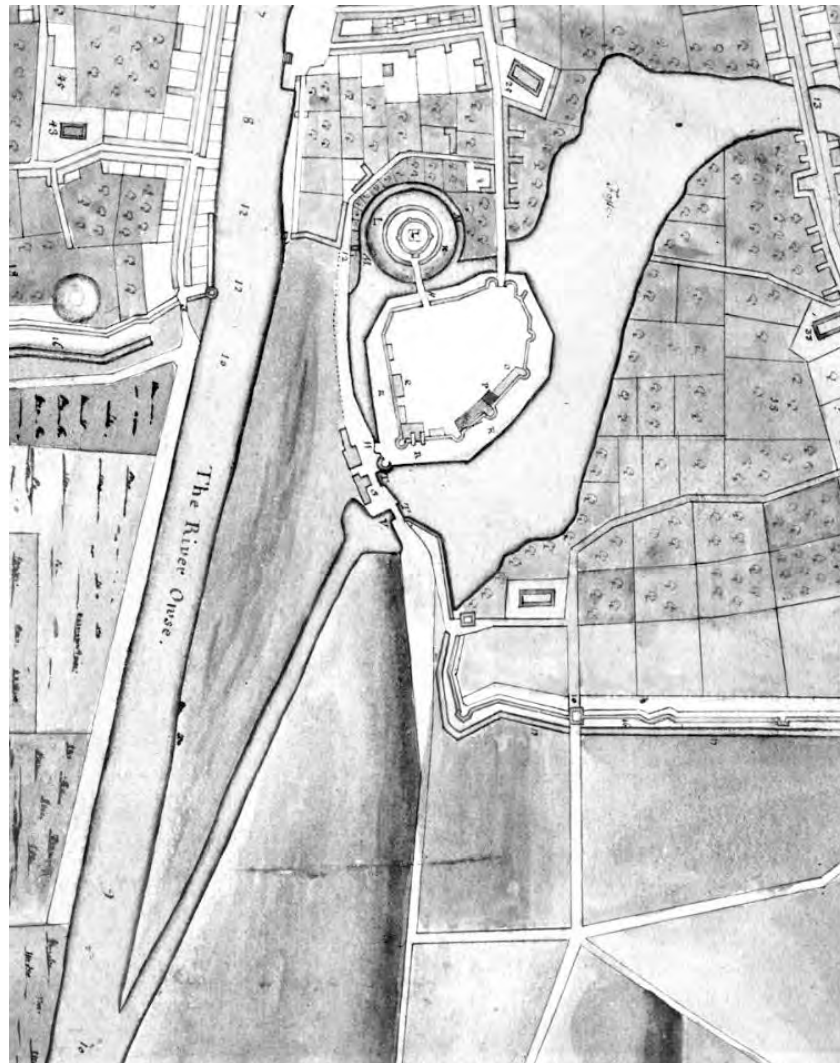


Plate 2 Richards' map of 1685

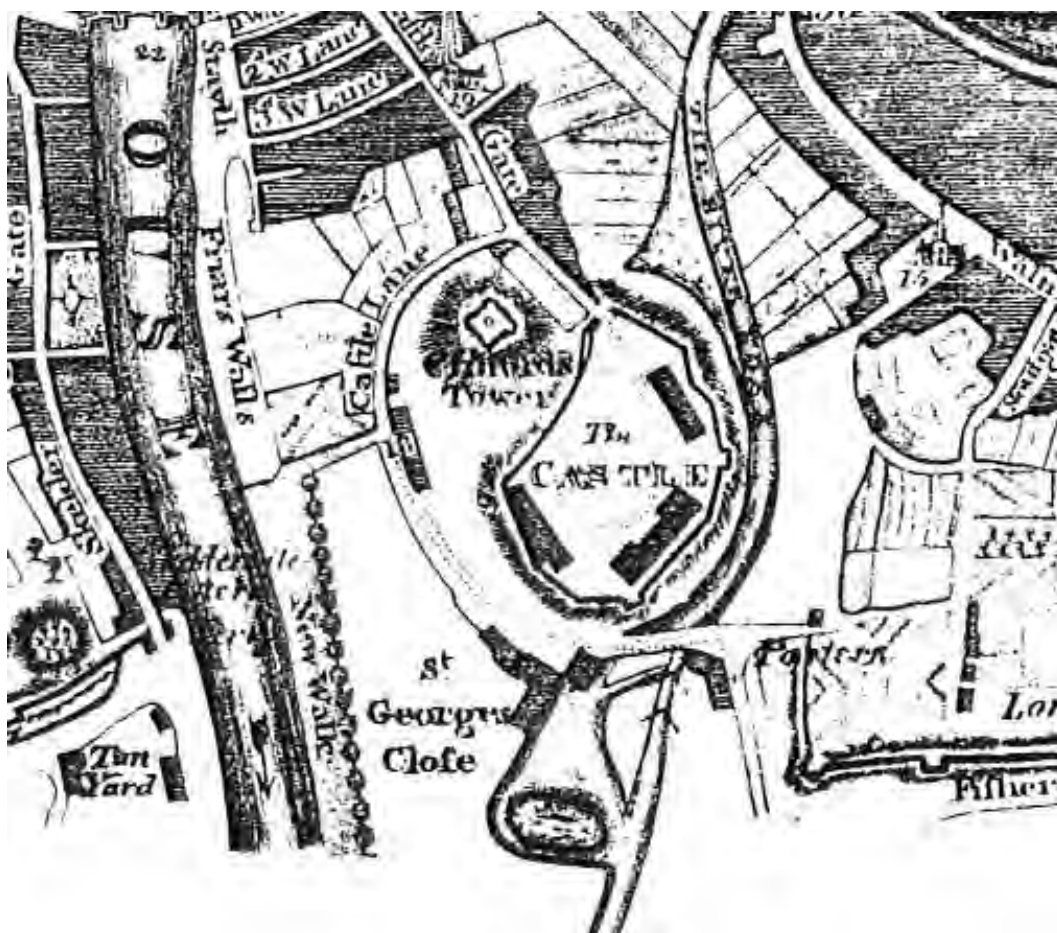


Plate 3 Todd's map of 1811

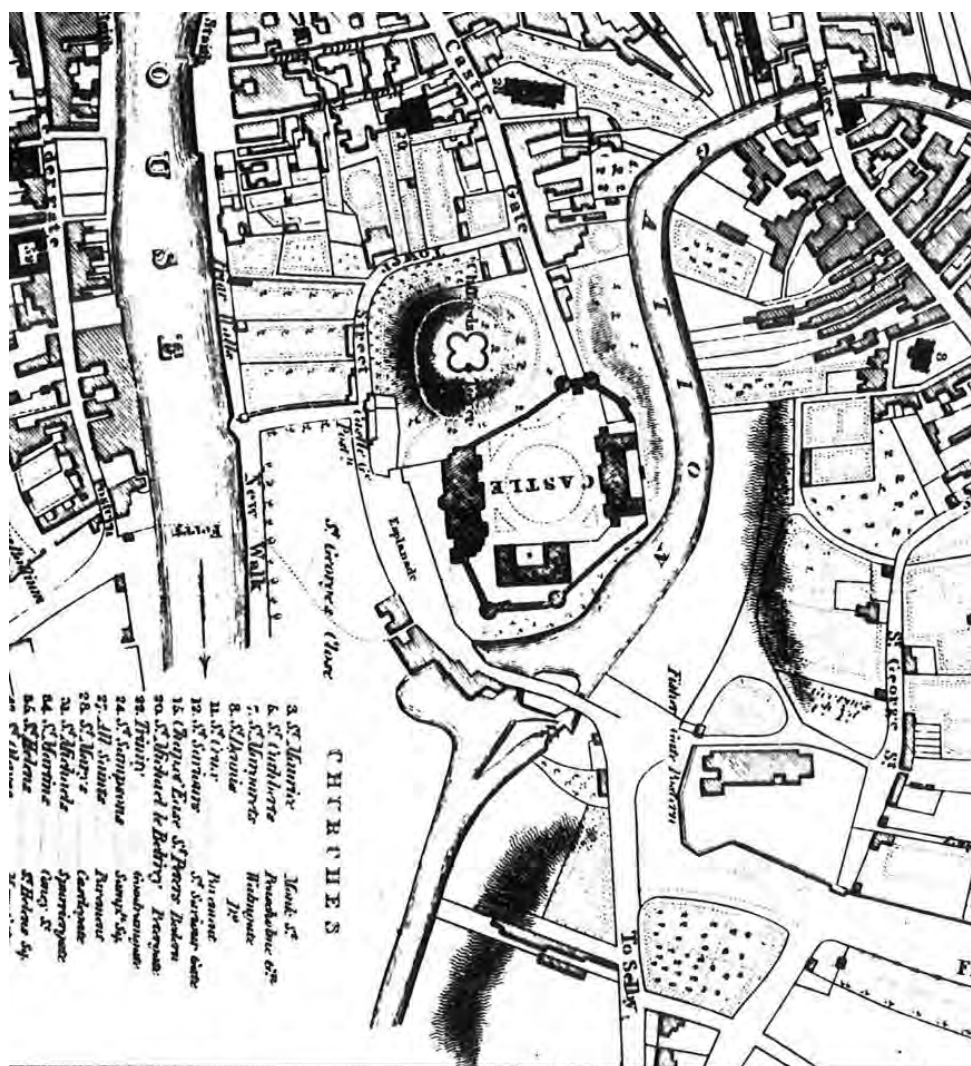


Plate 4 Baines' map of 1822



Plate 6 1892 OS map showing Piccadilly and the castle area



Plate 7 1931 OS map centred on the castle

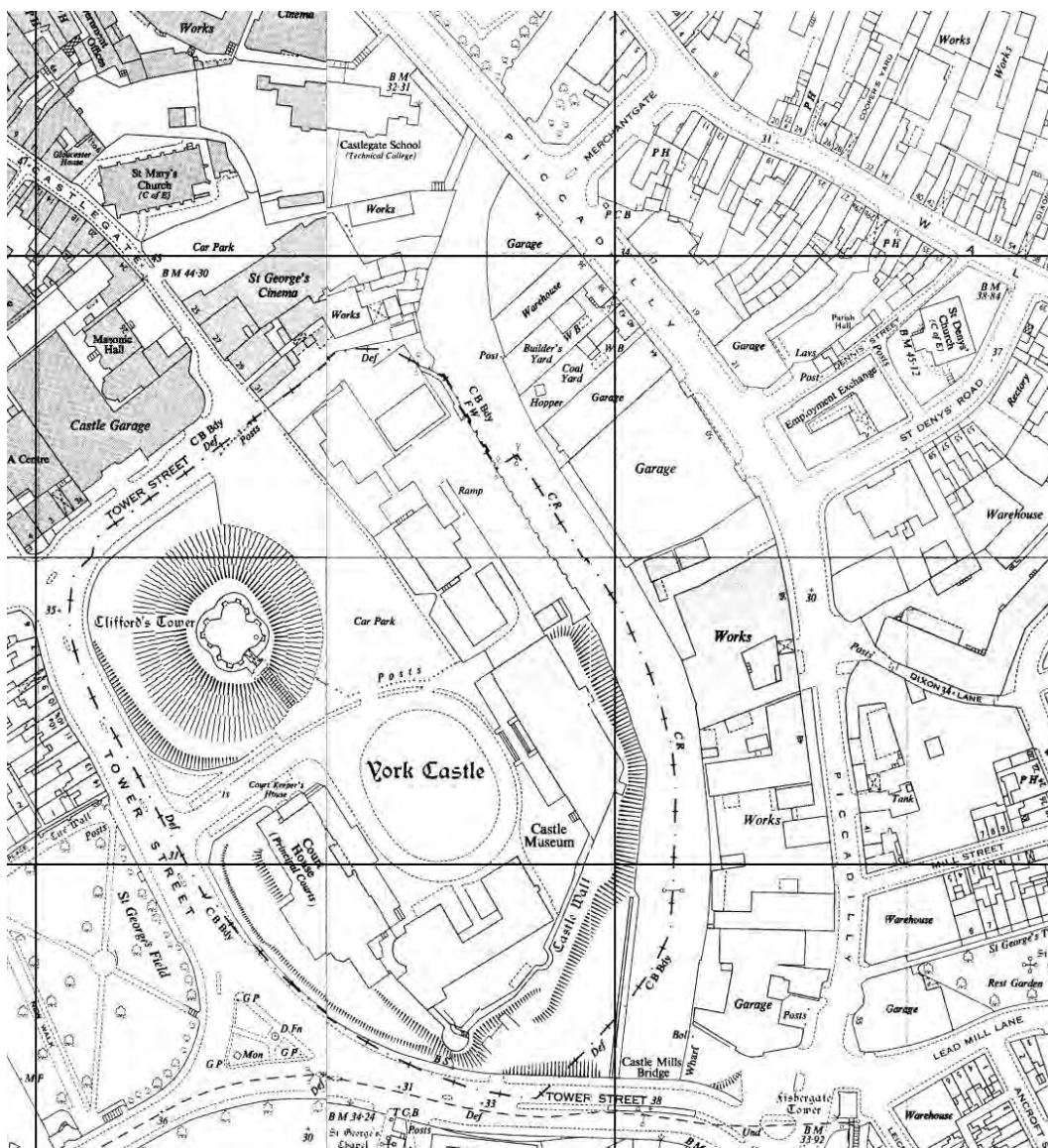


Plate 8 1962 OS map showing Piccadilly and the castle area

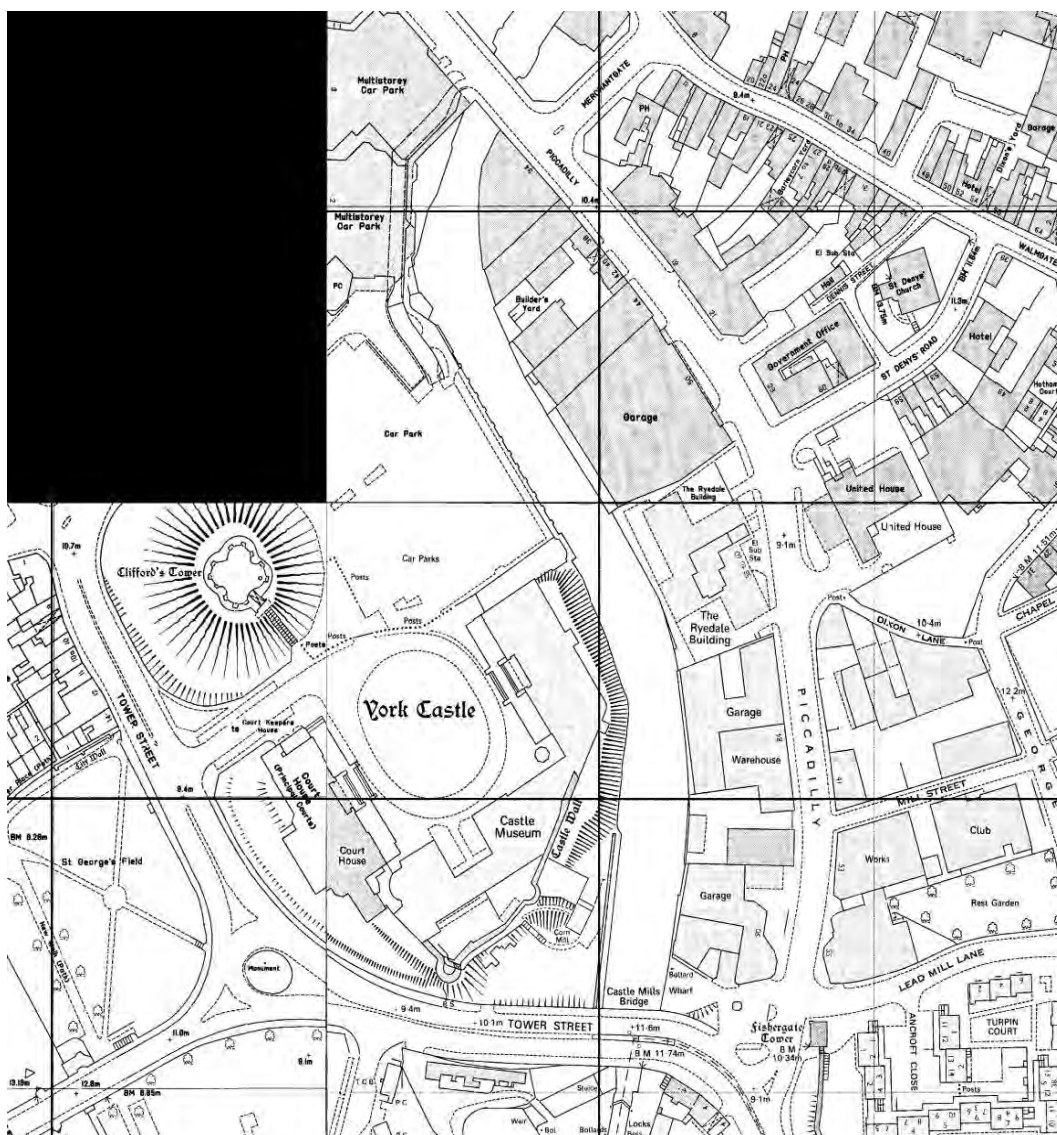


Plate 9 1987 OS map showing Piccadilly and the castle area



Plate 10 The north-western wall of the Female Prison



Plate 11 The car park surface to the immediate north-west of the Female Prison



Plate 12 The yard to the immediate north-west of the Female Prison



Plate 13 The railings of the yard to the north-west of the Female Prison



Plate 14 The former Female Prison



Plate 15 The former Debtors' Prison



Plate 16 The north-eastern end of the Castle Museum foyer



Plate 17 The Castle Museum foyer



Plate 18 York paving stone slabs by the Castle Museum foyer



Plate 19 The retail area of the foyer



Plate 20 The north-eastern end of the yard to the rear of the Castle Museum

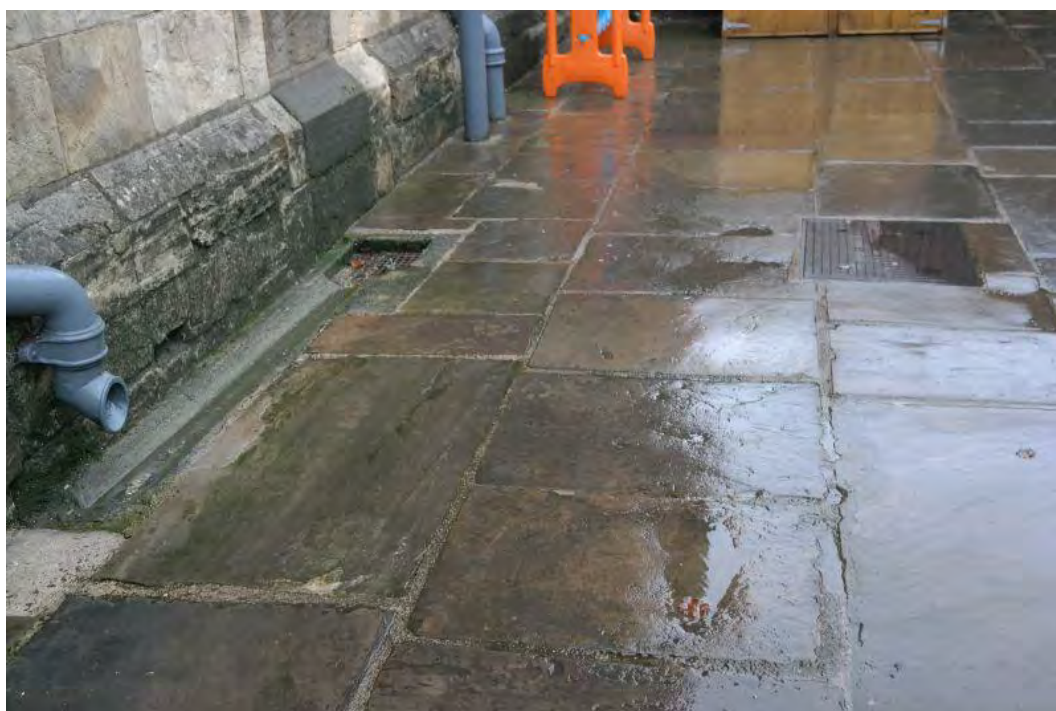


Plate 21 Drainage within the yard to the rear of the Castle Museum



Plate 22 The southern wall of the Castle Museum



Plate 23 The path around the southern side of the Castle Museum wall



Plate 24 Stone coffins and a manhole cover to the south of the Castle Museum



Plate 25 The Castle Mill facing south-west



Plate 26 Stone coffins in the vicinity of the Castle Mill



Plate 27 Millstones adjacent to the Castle Mill



Plate 28 Millstones at the rear entrance to the Castle Mill



Plate 29 The riverside terrace facing north



Plate 30 The riverside terrace facing south

FIGURES

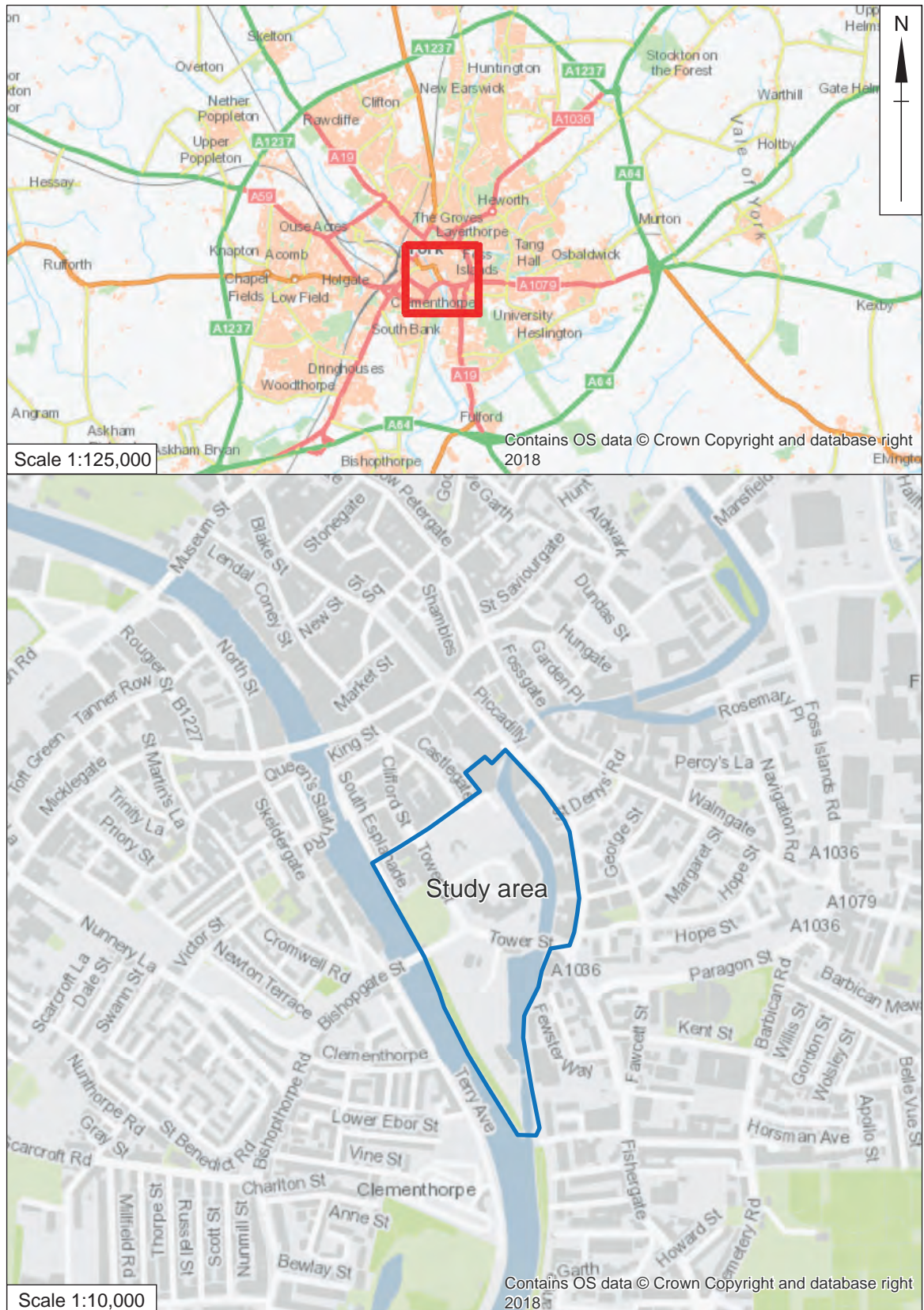


Fig. 1 The location of the study area

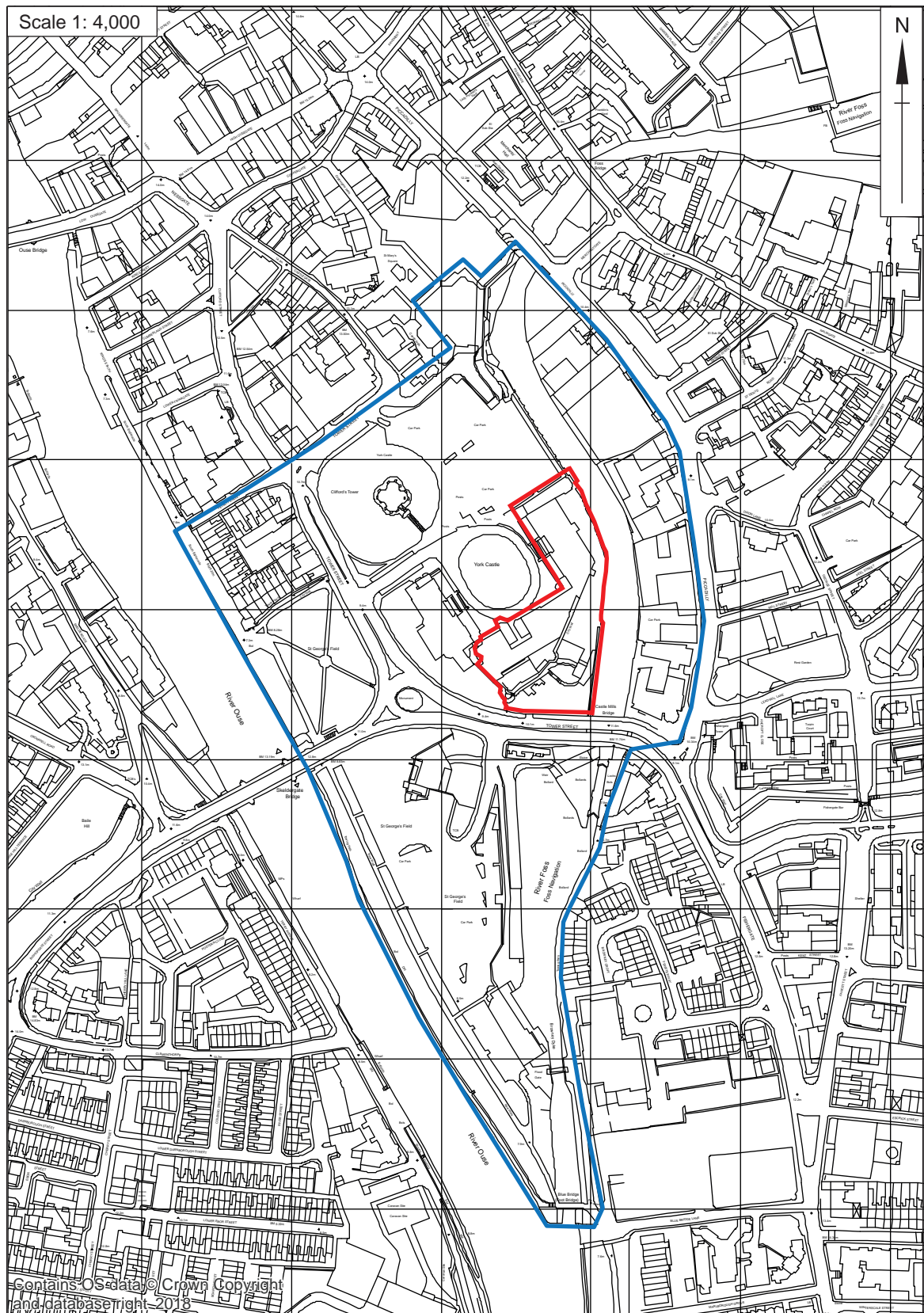


Fig. 2 The study area (blue) and the site development area (red)

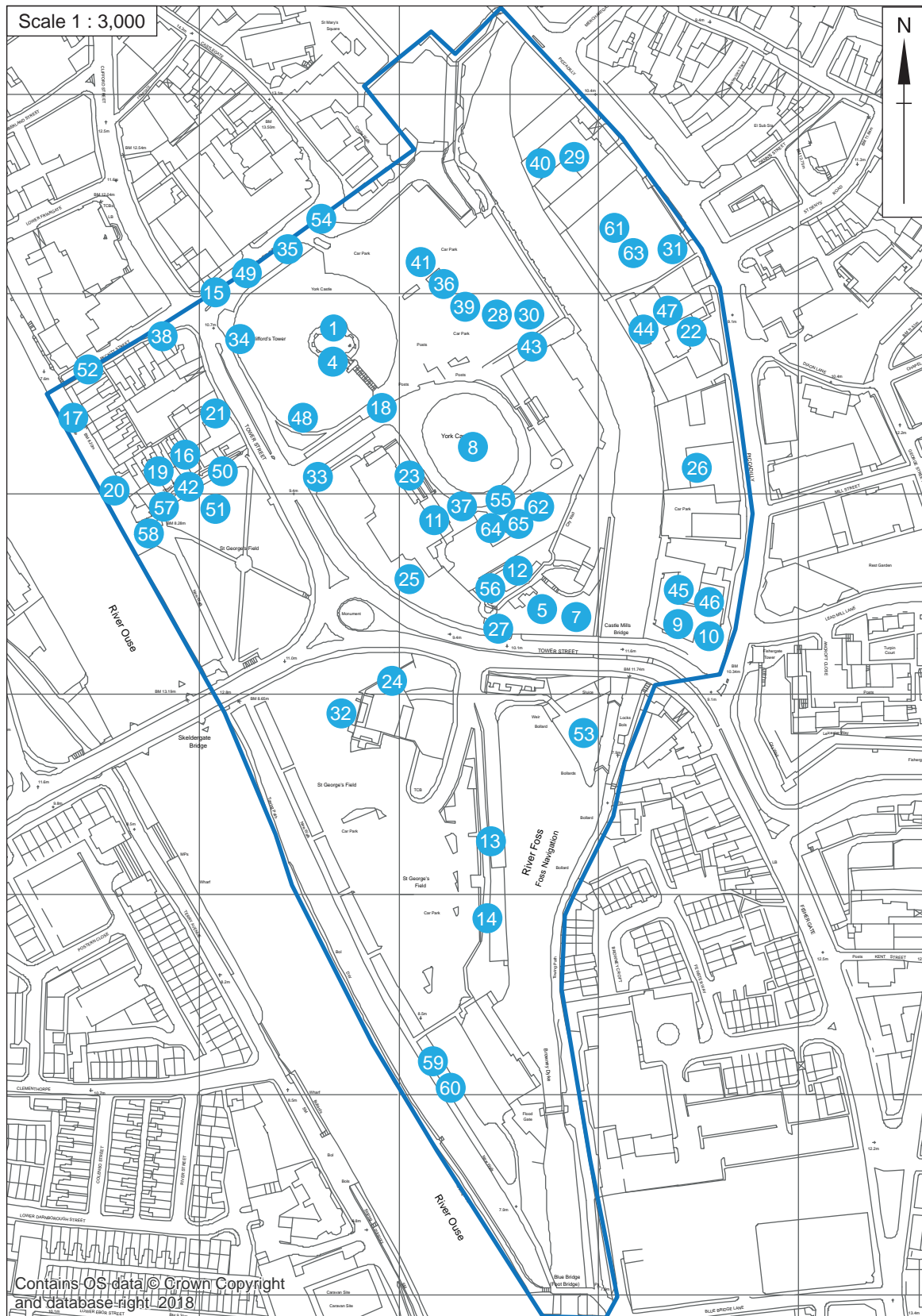


Fig. 3 The locations of the sites in the study (the numbers area those in Appendix 1)

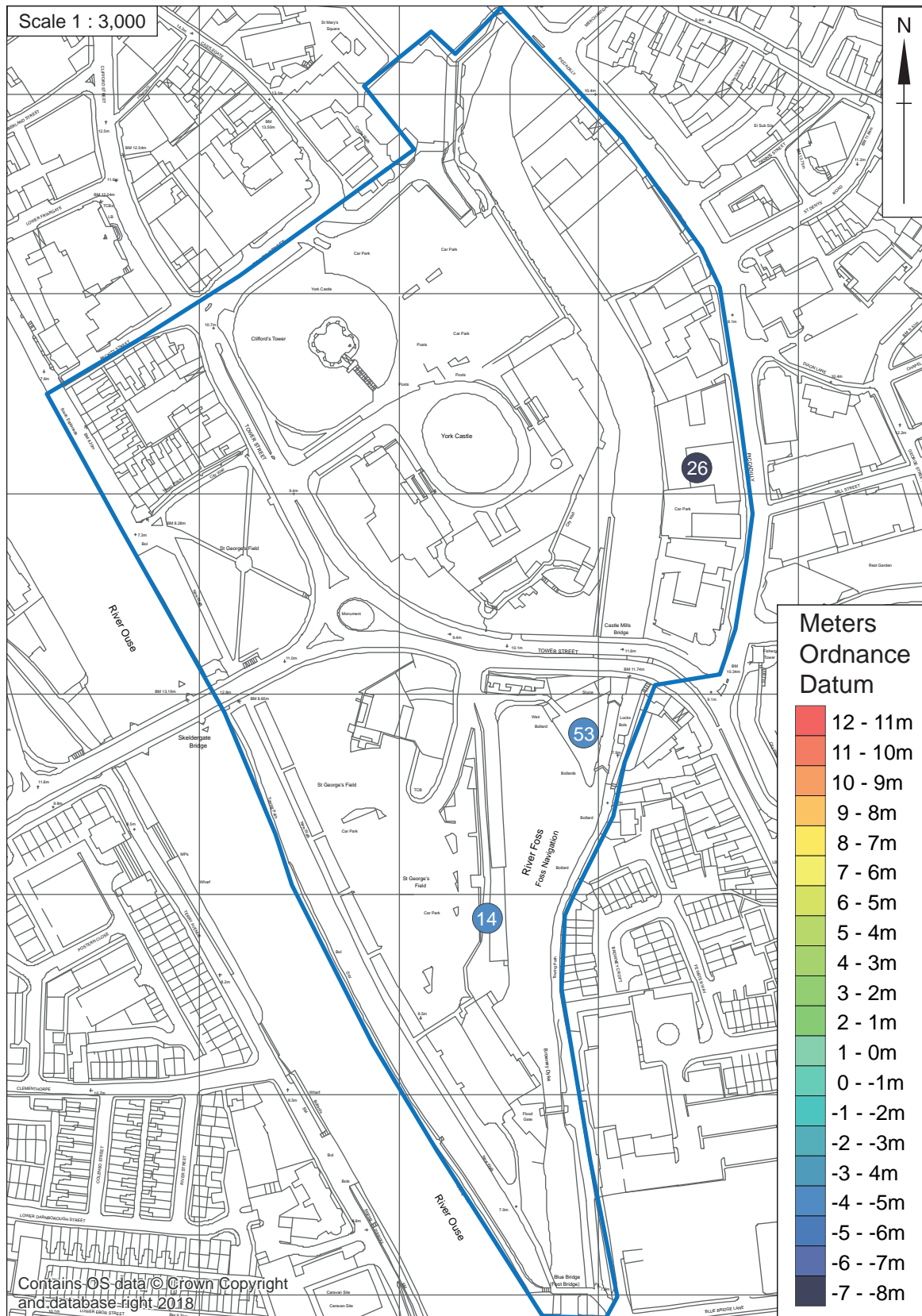


Fig. 4 Deposit model; Natural bedrock (1)

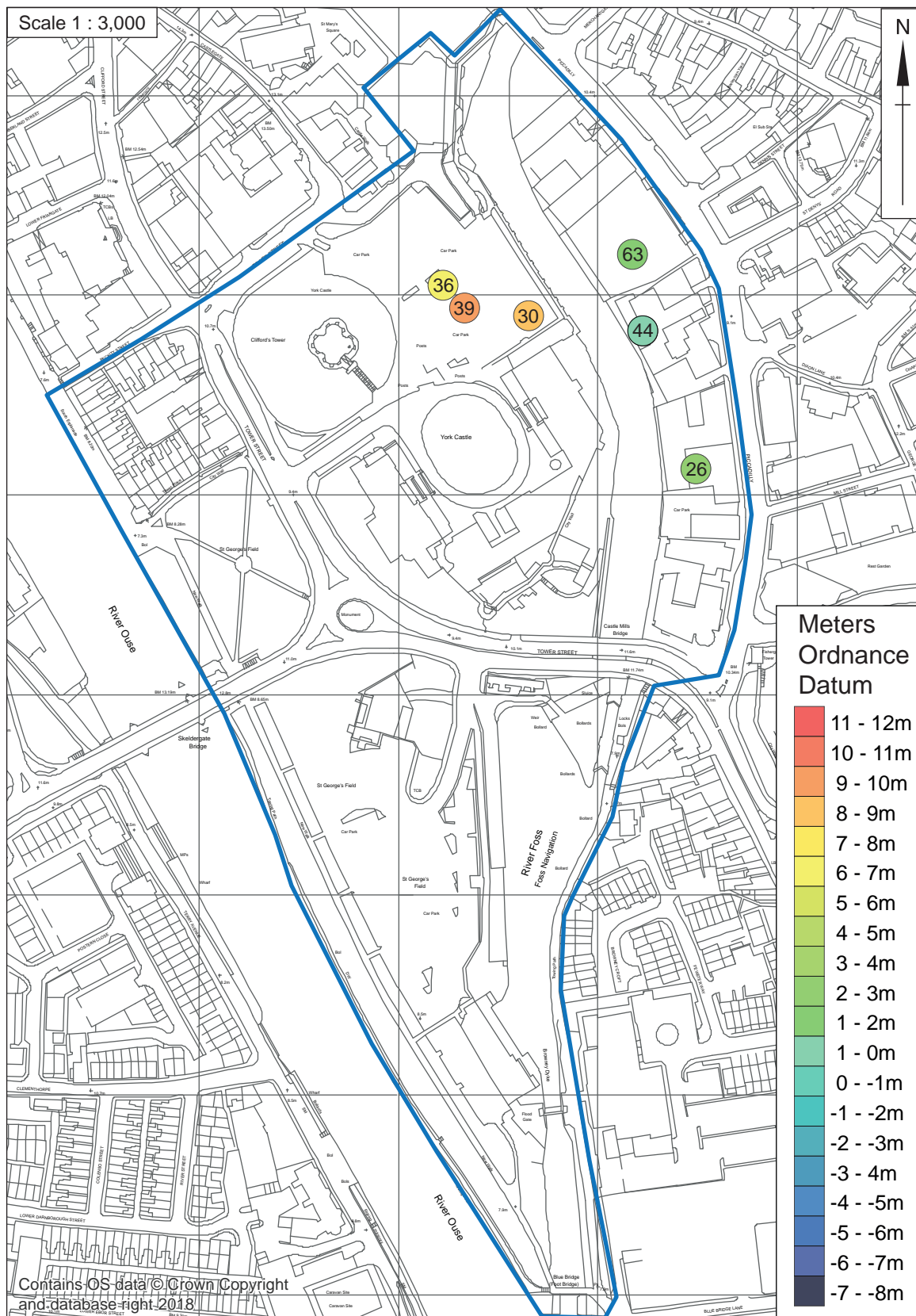


Fig. 5 Deposit model; Natural glacial moraine (2)

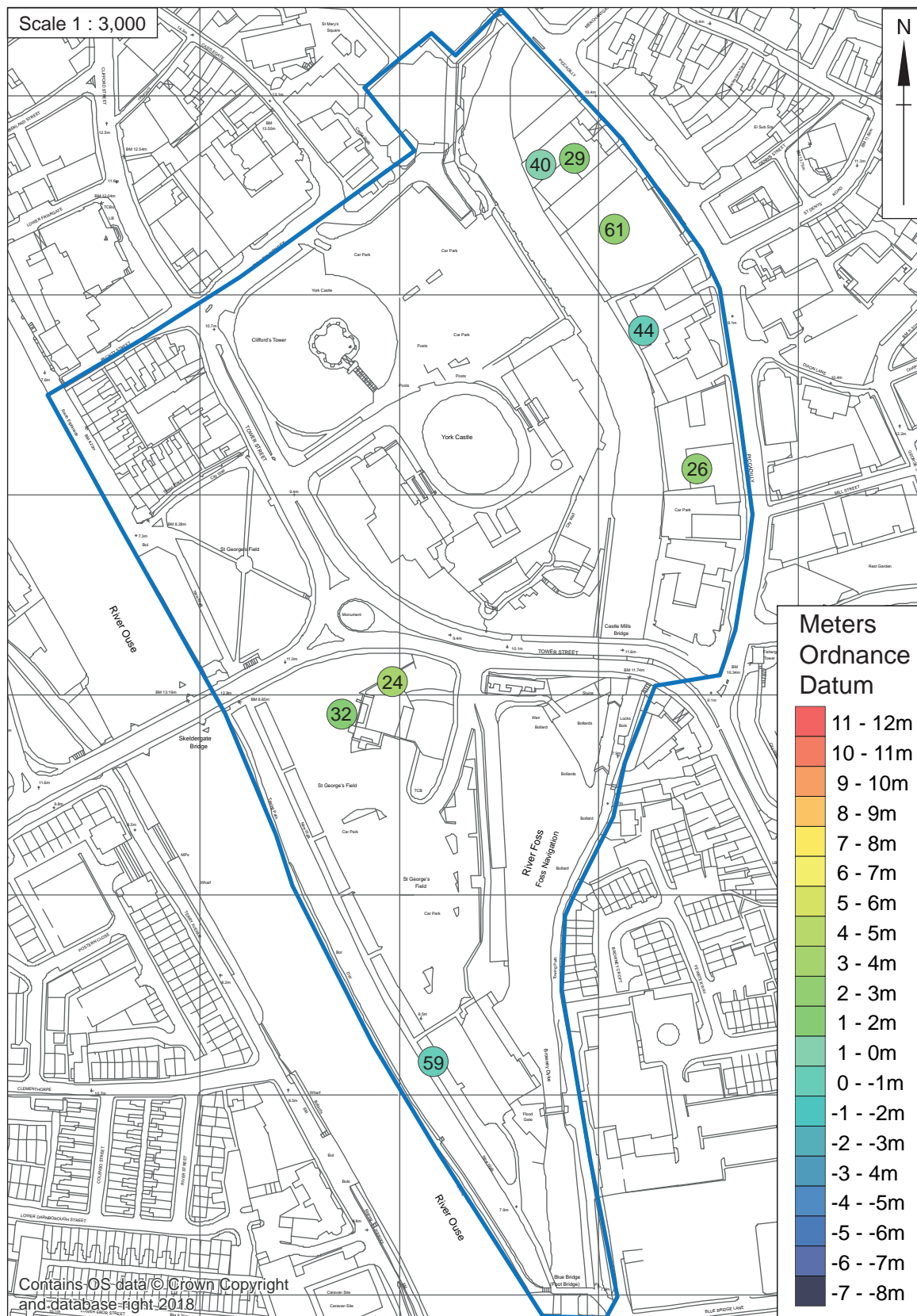


Fig. 6 Deposit model; Natural alluvial deposits (3)

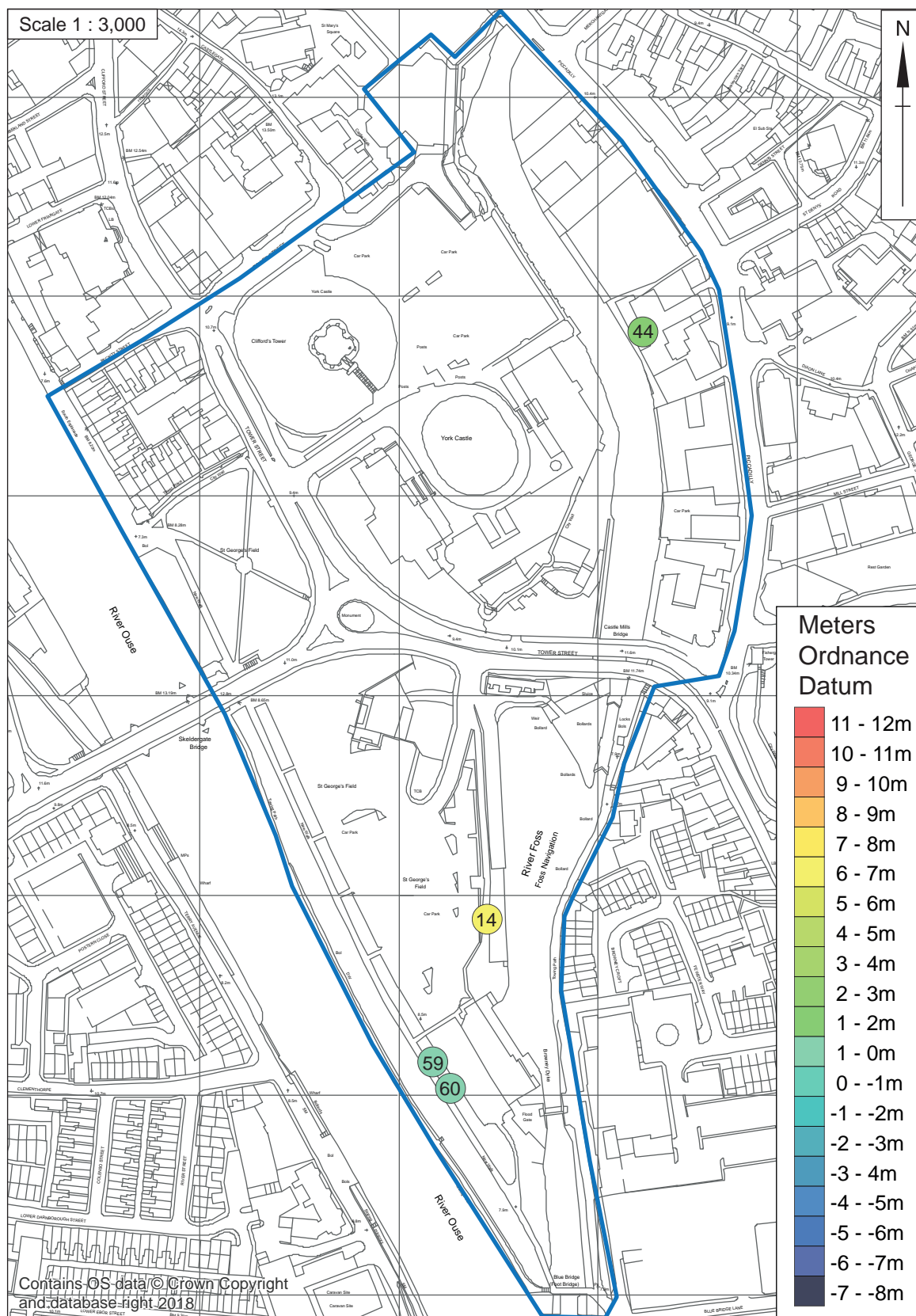


Fig. 7 Deposit model; Alluvium deposits of uncertain date (4)

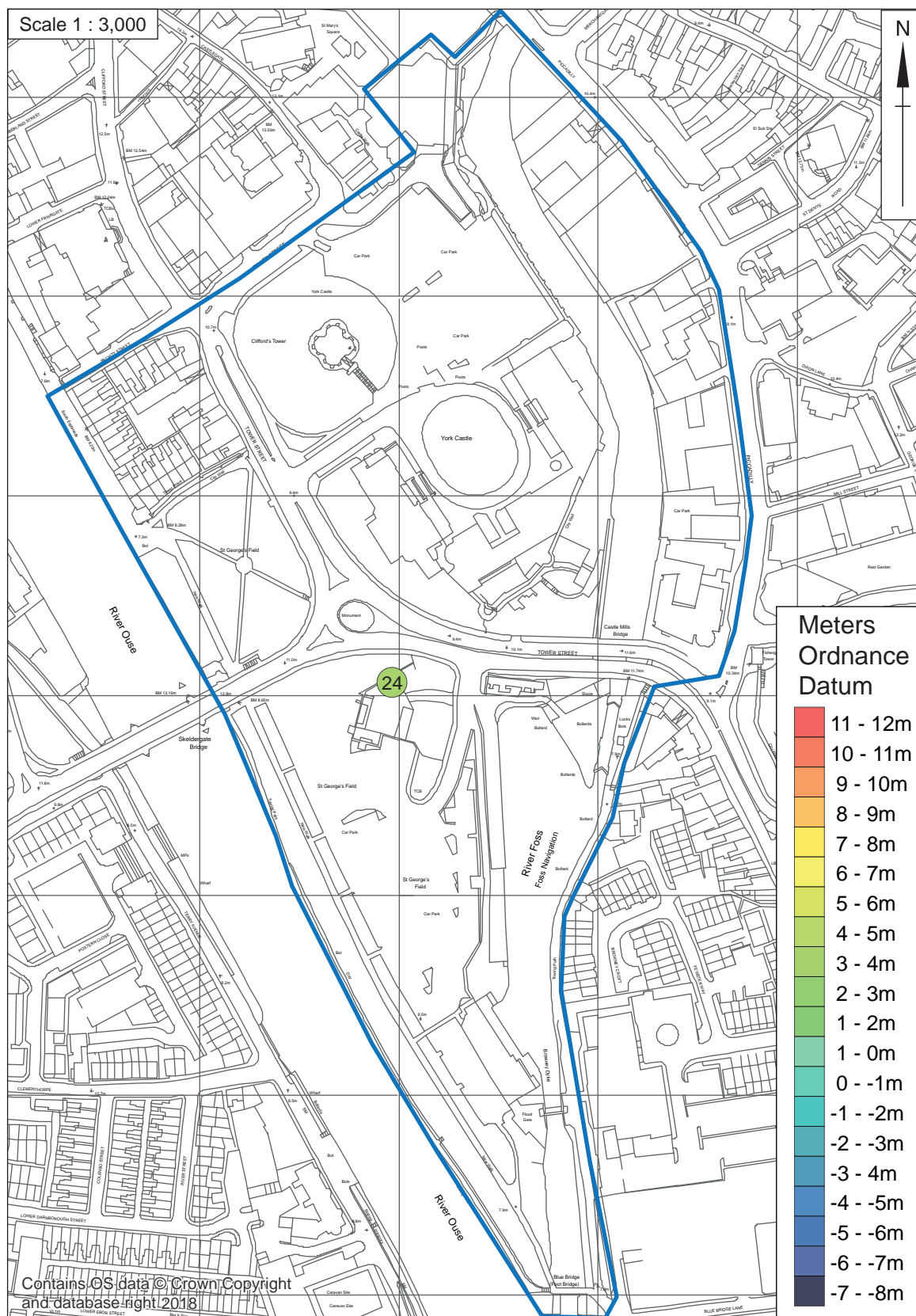


Fig. 8 Deposit model; Prehistoric (5)

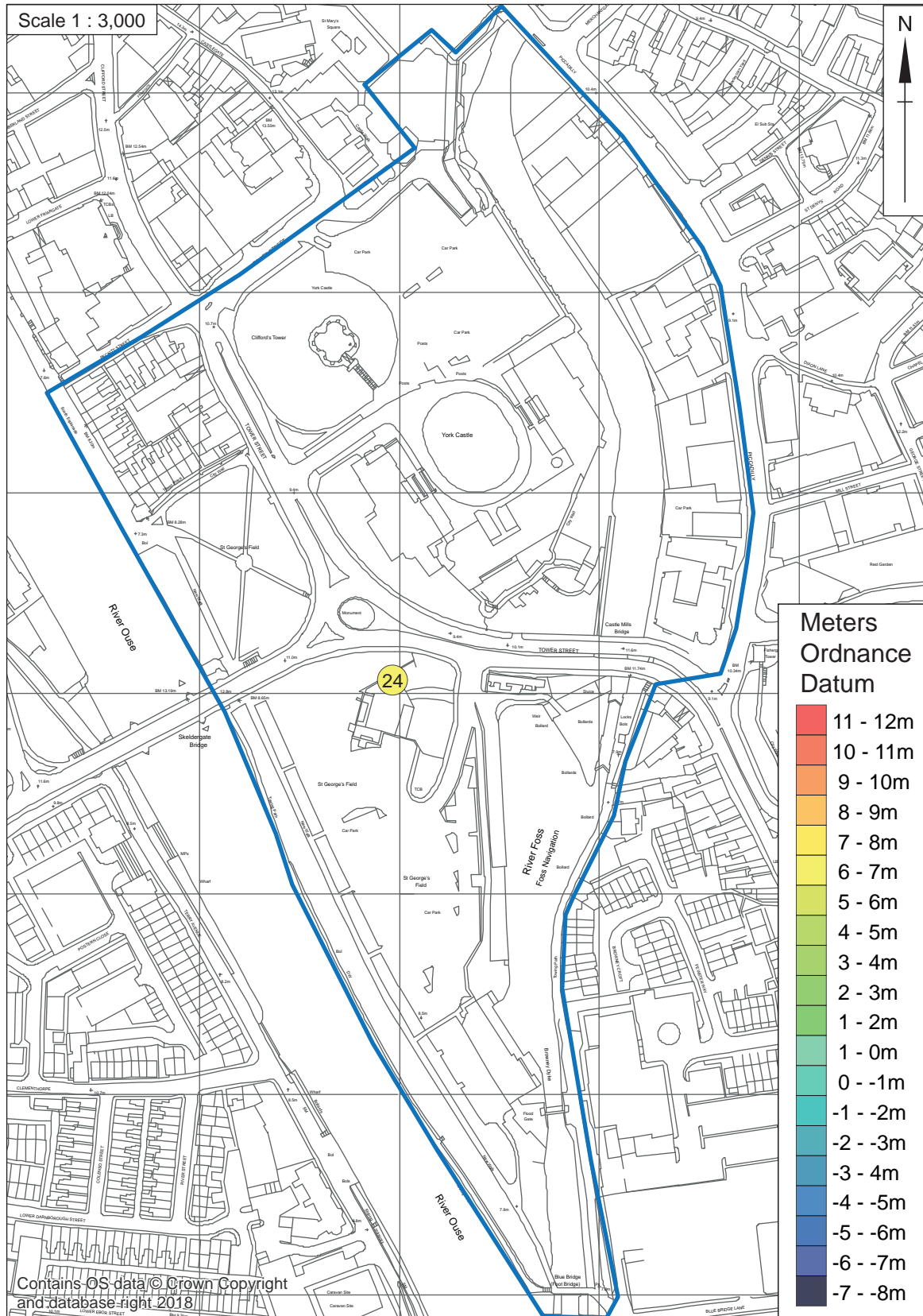


Fig. 9 Deposit model; Deposits post-dating the prehistoric of uncertain date (6)

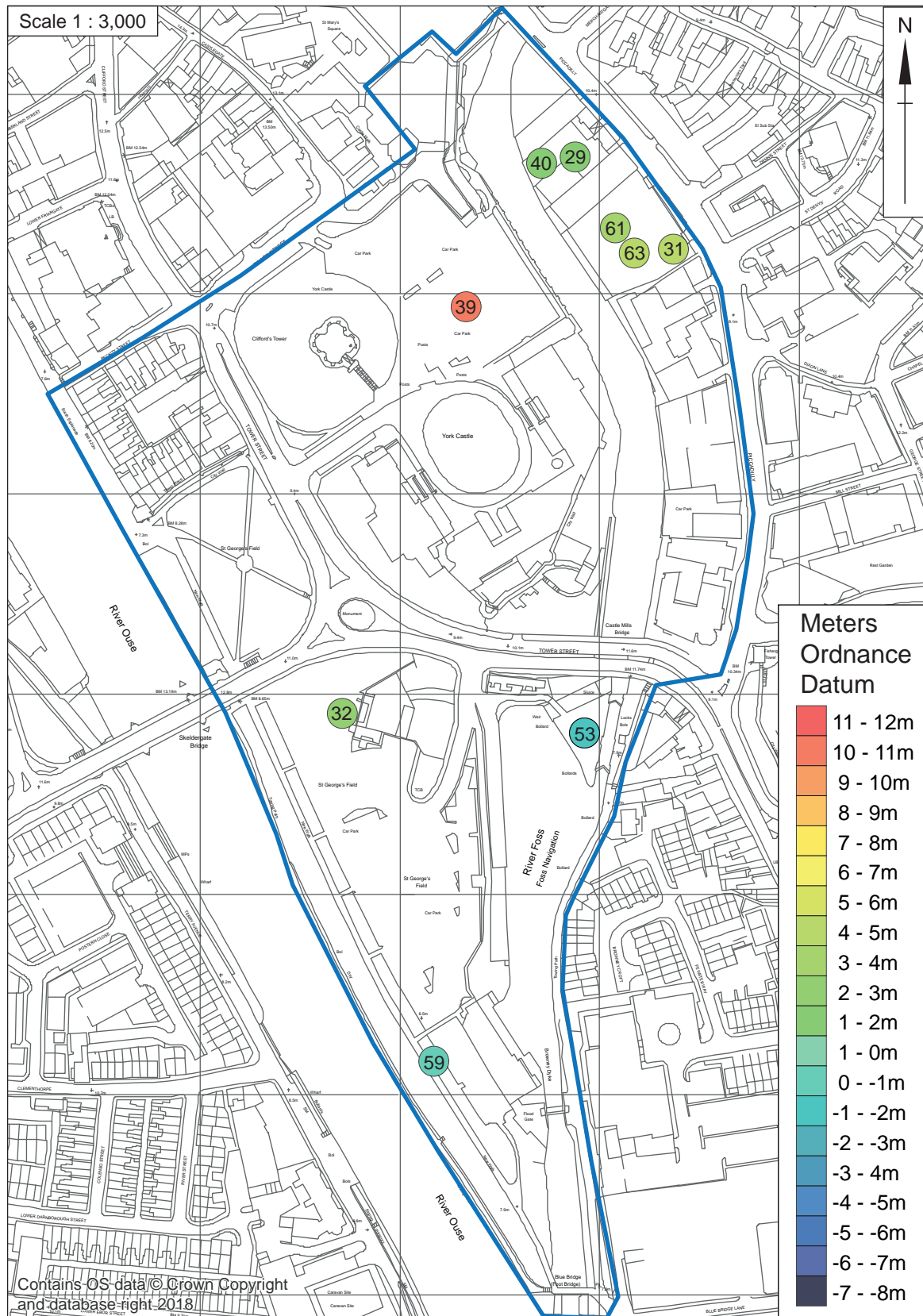


Fig. 10 Deposit model; Roman (7)

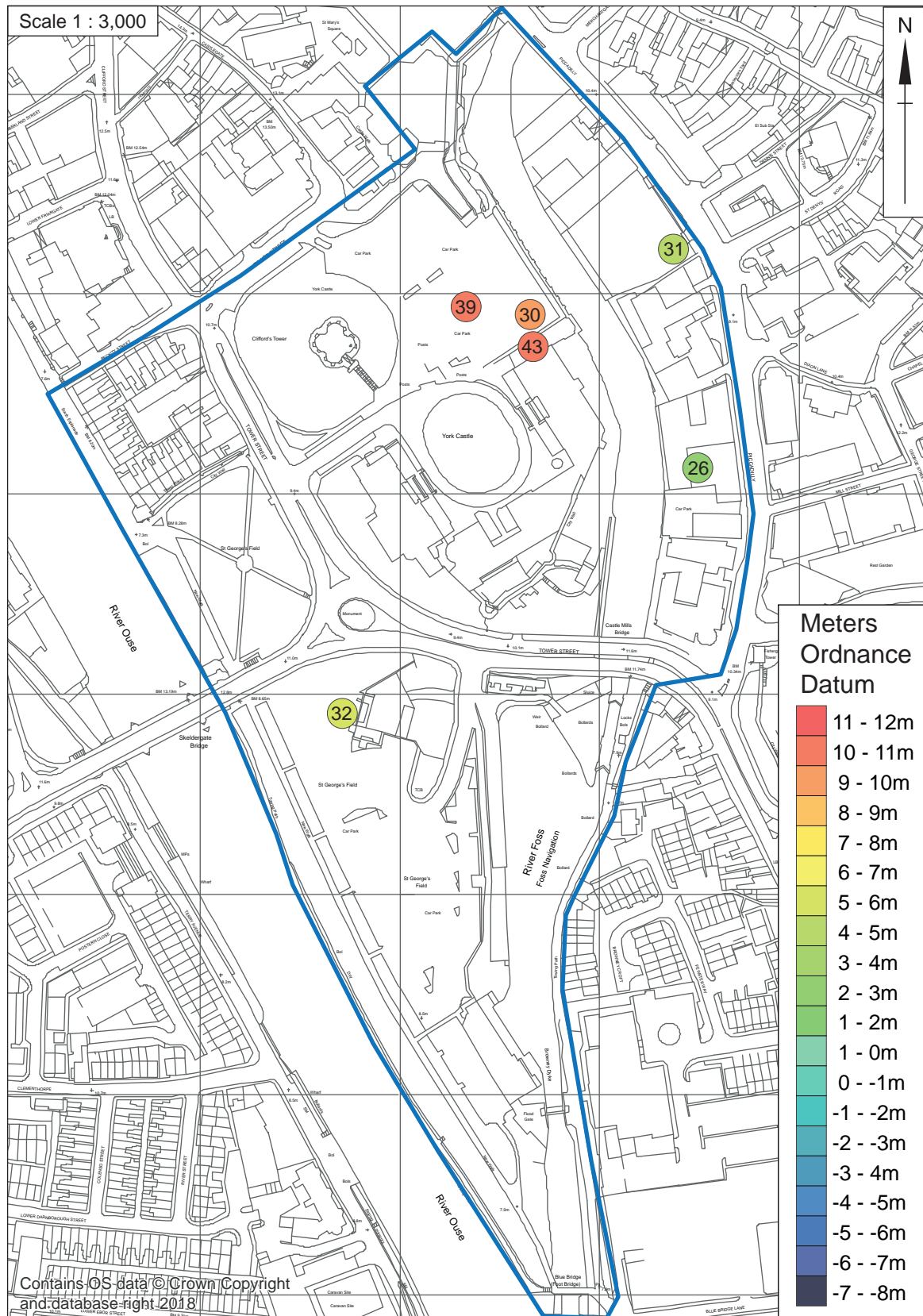


Fig. 11 Deposit model; Anglian and Anglo-Scandinavian (8)

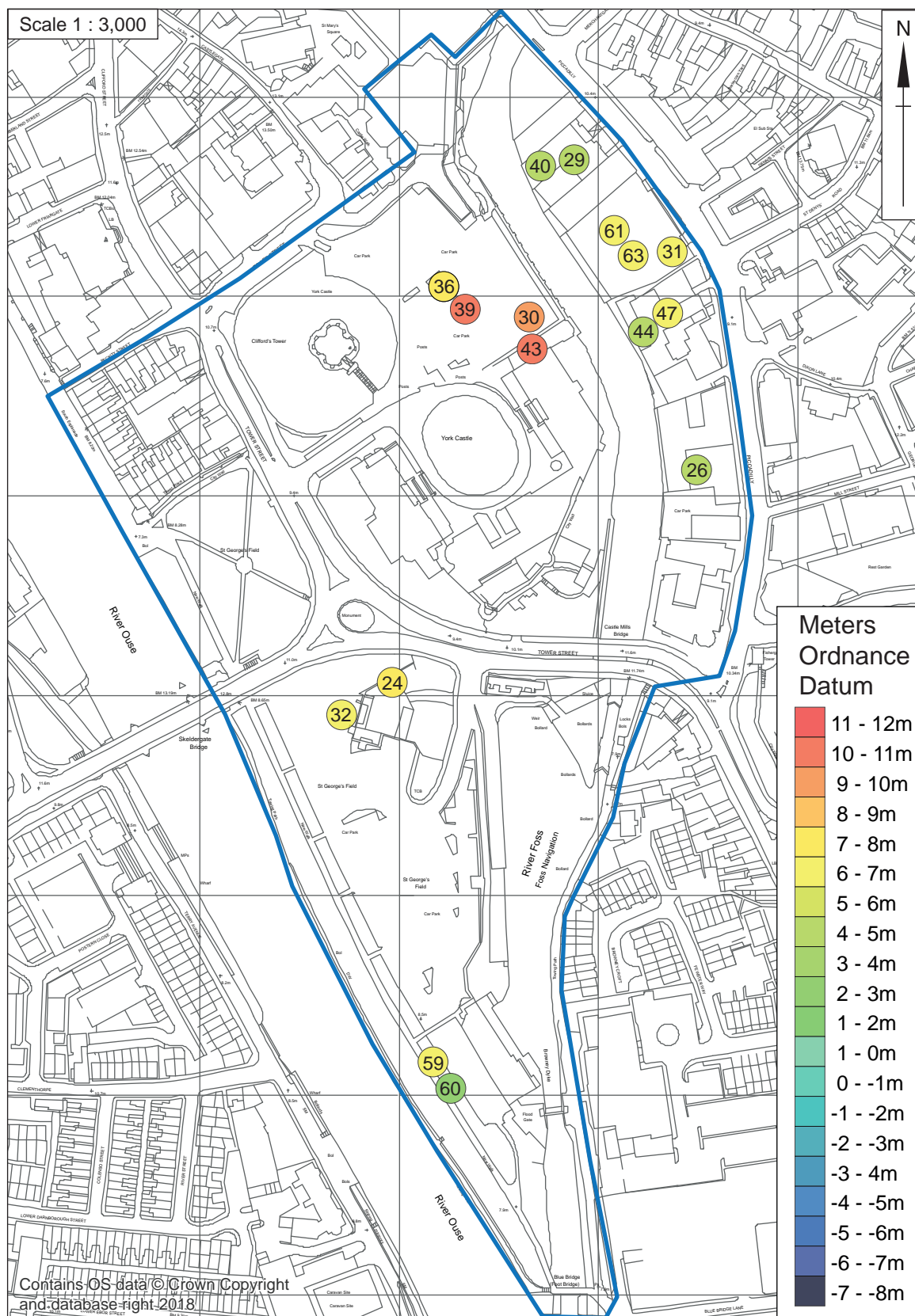


Fig. 12 Deposit model; Later medieval (11th-16th century) (9)

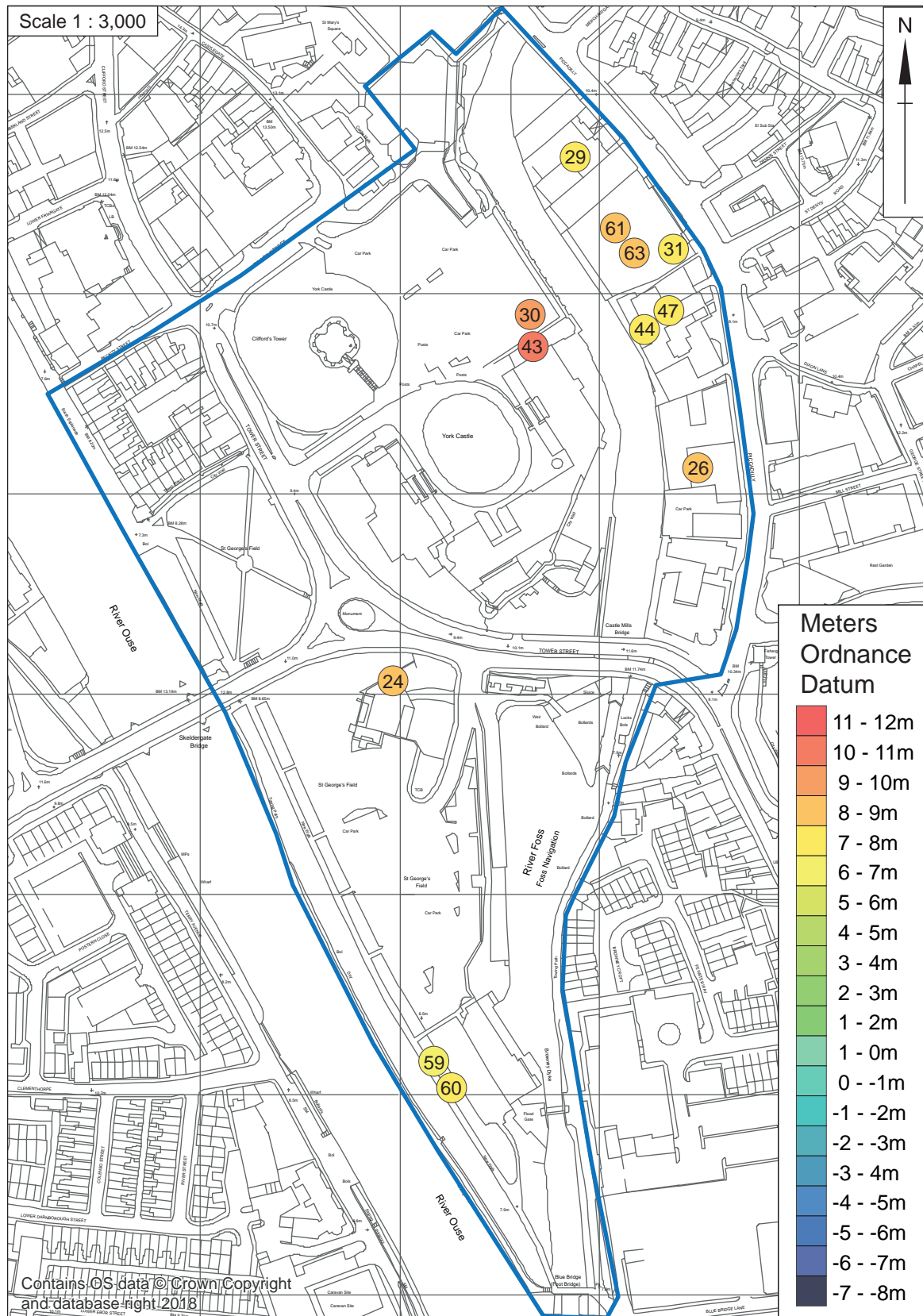


Fig. 13 Deposit model; Post-medieval (16th-19th century) (10)

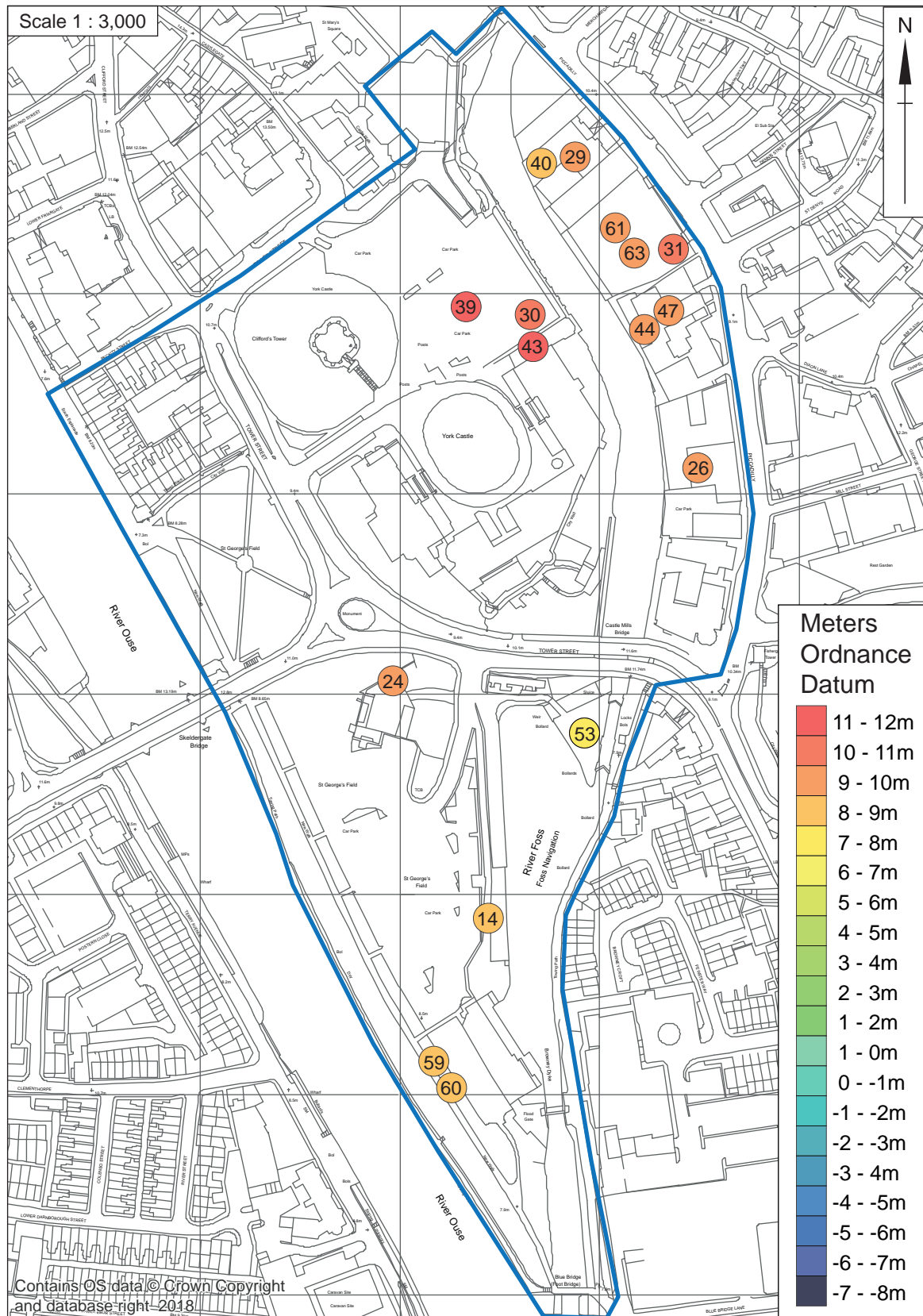


Fig. 14 Deposit model; Modern (19th century onwards) (11)

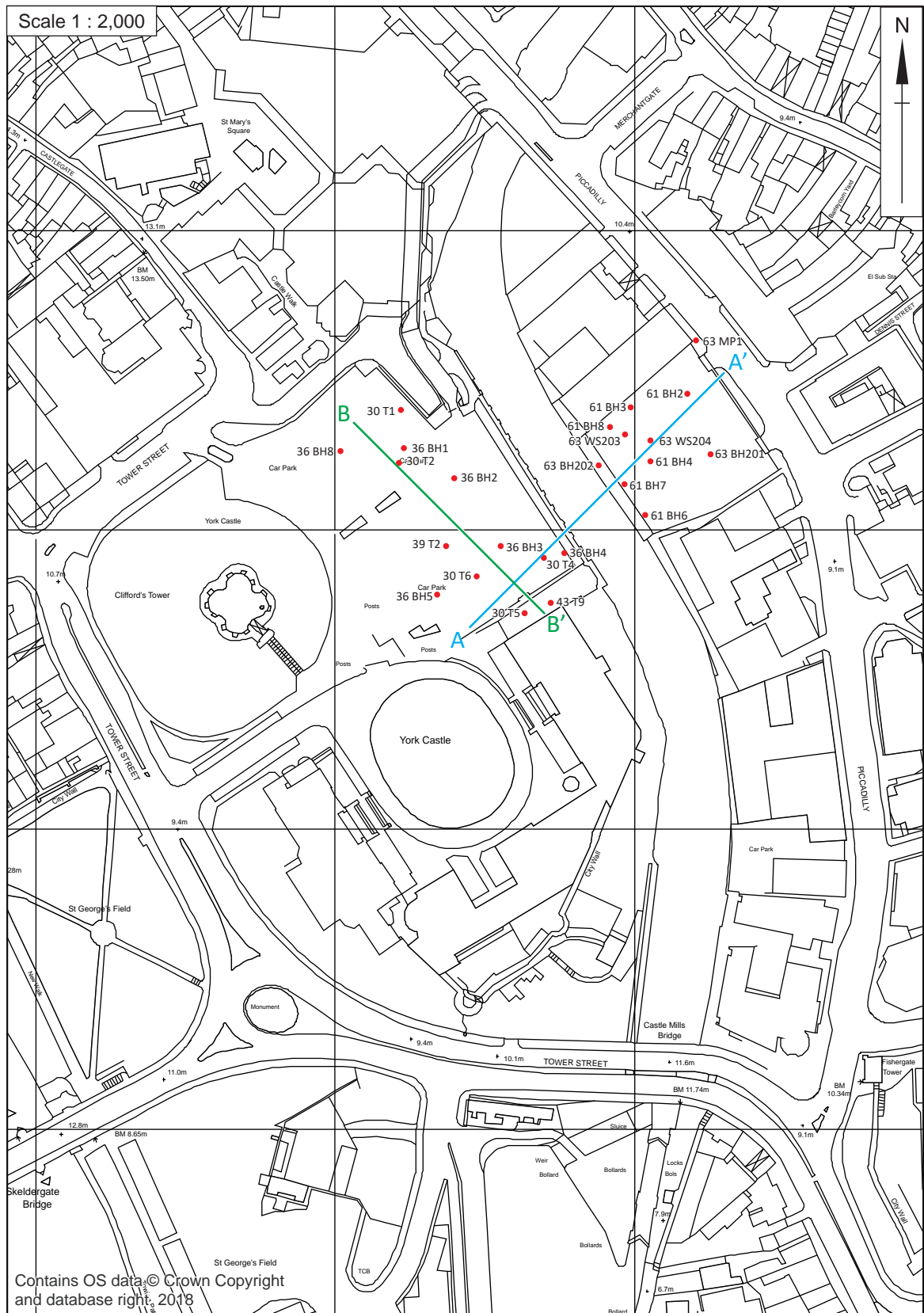
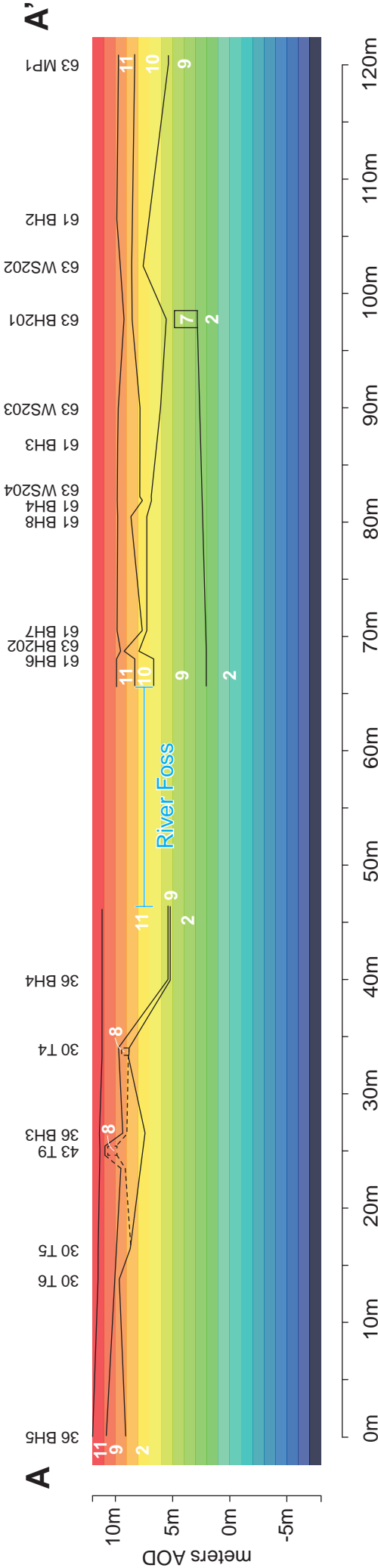


Fig. 15 The location of the modelled transects



KEY

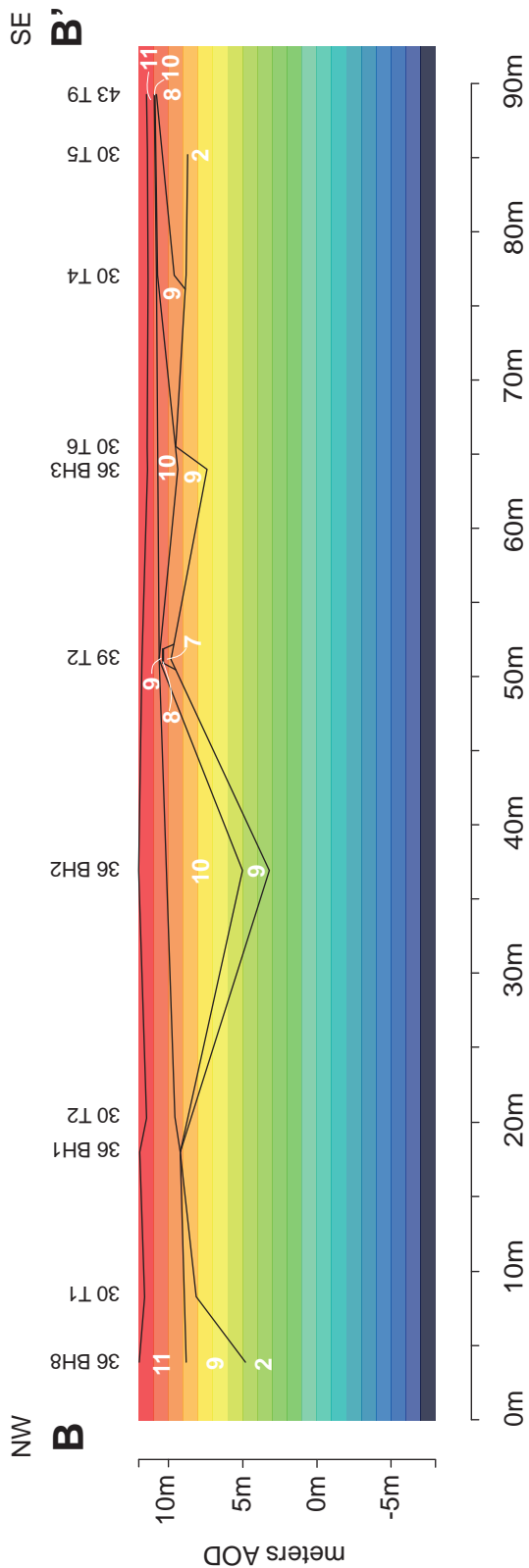
36 BH8 Gazetteer site reference number (plus intervention identifier)

7 Period reference

Periods

- | | | | |
|---|--|----|---|
| 1 | Natural bedrock | 7 | Roman |
| 2 | Natural glacial moraine | 8 | Anglian and Anglo-Scandinavian |
| 3 | Natural alluvial deposits | 9 | Later medieval (mid-11th to 16th century) |
| 4 | Alluvium and deposits of uncertain date | 10 | Post-medieval (16th-19th century) |
| 5 | Prehistoric | 11 | Modern (19th century onwards) |
| 6 | Deposits post-dating the prehistoric of uncertain date | | |

Fig. 16 Transect A



KEY

36 BH8 Gazetteer site reference number (plus intervention identifier)

7 Period reference

Periods

- | | | | |
|---|--|----|---|
| 1 | Natural bedrock | 7 | Roman |
| 2 | Natural glacial moraine | 8 | Anglian and Anglo-Scandinavian |
| 3 | Natural alluvial deposits | 9 | Later medieval (mid-11th to 16th century) |
| 4 | Alluvium and deposits of uncertain date | 10 | Post-medieval (16th-19th century) |
| 5 | Prehistoric | 11 | Modern (19th century onwards) |
| 6 | Deposits post-dating the prehistoric but of uncertain date | | |

Fig. 17 Transect B



YORK ARCHAEOLOGICAL TRUST

York Archaeological Trust undertakes a wide range of urban and rural archaeological consultancies, surveys, evaluations, assessments and excavations for commercial, academic and charitable clients. We manage projects, provide professional advice and fieldwork to ensure a high quality, cost effective archaeological and heritage service. Our staff have a considerable depth and variety of professional experience and an international reputation for research, development and maximising the public, educational and commercial benefits of archaeology. Based in York, Sheffield, Nottingham and Glasgow the Trust's services are available throughout Britain and beyond.



© York Archaeological Trust

York Archaeological Trust, Cuthbert Morrell House, 47 Aldwark, York YO1 7BX

Phone: +44 (0)1904 663000 Fax: +44 (0)1904 663024

Email: archaeology@yorkat.co.uk

Website: <http://www.yorkarchaeology.co.uk>

© 2018 York Archaeological Trust for Excavation and Research Limited
Registered Office: 47 Aldwark, York YO1 7BX
A Company Limited by Guarantee. Registered in England No. 1430801
A registered Charity in England & Wales (No. 509060) and Scotland (No. SC042846)