LAND AT
UNITY SQUARE,
SHERRIFFS WAY,
NOTTINGHAM

REPORT ON AN
ARCHAEOLOGICAL
OBSERVATION

Planning Authority:
Nottingham City Council

Planning Reference: 18/02277/POUT

PCA Report Number: R13828

September 2019

PRE-CONSTRUCT ARCHAEOLOGY LTD

DOCUMENT VERIFICATION

LAND AT UNITY SQUARE, SHERRIFFS WAY, NOTTINGHAM:

REPORT ON AN ARCHAEOLOGICAL OBSERVATION

Quality Control

Pre-Construct Archaeology Ltd	
Project Number	K5968
Report Number	R13828

	Name & Title	Date
Text Prepared by:	Andrew Failes	16/09/2019
Graphics Prepared by:	Ray Murphy	10/09/2019
Graphics Checked by:	Mark Roughley	11/09/2019
Project Manager Sign-off:	Gary Taylor	17/09/2019

Revision No.	Date	Checked	Approved

Pre-Construct Archaeology Limited
Unit 54
Brockley Cross Business Centre
96 Endwell Road
London
SE4 2PD

Land at Unity Square, Sheriffs Way, Nottingham:
Report on an Archaeological Observation

Site Code:	**QBRN19**
Local Planning Authority:	**Nottingham City Council**
Museum Accession Number:	**NCMG 2019-13**
Planning Application:	**18/02277/POUT**
Central National Grid Reference:	**SK 5734 3911**

Written and Researched by:	**Andrew Failes**
Project Manager:	**Gary Taylor**
Commissioning Client:	**Peveril Securities Ltd**
Contractor:	**Pre-Construct Archaeology Ltd** **Newark Office** **Office 8** **Roewood Courtyard** **Winkburn** **Newark** **Nottinghamshire** **NG22 8PG**
Telephone:	**01636 817642 / 07825 338927**
Email:	**gtaylor@pre-construct.com**
Web:	**www.pre-construct.com**

September 2019

PCA Report Number: R13828

CONTENTS

List of Figures

List of Appendices

SUMMARY

This report describes the results of an archaeological observation carried out by Pre-Construct Archaeology Ltd, on land at Unity Square, Sheriffs Way in Nottingham. The work was commissioned by Peveril Securities Ltd.

The archaeological observation took place on 28th February – 6th March 2019 and monitored the excavation of a c. 2100 square metre area in advance of the construction of a large government building. The site lies in an area of archaeological potential, to the south of the historic town of Nottingham in an area known as 'The Meadows'. Hoopers Sconce (a small fort built in 1644 to protect dams in the Meadows from Royalist attack) is thought to have been located close to the development site. The aim of the work was to monitor the development groundwork, investigate and record any archaeological deposits or features revealed during the works.

The observation identified a Middle Bronze Age deposit, possibly representing a former land surface, which extended throughout the base of the excavation area. This was overlain by a sequence of Late Post-Medieval deposits associated with the 19th century build up of this area and expansion of the city into the Meadows. These were overlain by Modern remains associated with the former building at the site.

1 INTRODUCTION

1.1 General Background

1.1.1 Pre-Construct Archaeology Ltd was appointed by Peveril Securities Ltd to undertake a programme of archaeological observation (an archaeological watching brief) during development at Unity Square, Sheriffs Way, Nottingham.

1.1.2 The site is in the southern part of Nottingham City centre, immediately southwest of the railway station, alongside Queen's Bridge Road. It lies on the northwest side of Sheriffs Way, immediately west of its junction with Carrington Street, centered on National Grid Reference SK 5734 3911 (Figs 1 & 2).

1.1.3 The work was carried out between 28th February and 11th March 2019 in accordance with a Written Scheme of Investigation (WSI) produced by Gary Taylor (PCA 2019) and approved by the Nottingham City Archaeologist.

1.1.4 The aim of the observation was to identify and record any surviving archaeological remains and/or deposits that may be impacted upon during the proposed development.

1.1.5 The archaeological works sought to determine the location, date, extent, character, condition, and quality of any archaeological remains on the site, to assess the significance of any such remains in a local, regional, or national context, as appropriate, and to assess the potential impact of the development proposals on the site's archaeology.

1.1.6 This report describes the results of the archaeological works. The site archive will be deposited with Nottingham City Museum under archive/accession code NCMG 2019-13.

1.2 Planning Background

1.2.1 National Planning Policy on archaeology and built heritage is set out in National Planning Policy Framework (NPPF).

1.2.2 Revised in February 2019, National Planning Framework: Planning for the Historic Environment (NPPF) provides guidance for planning authorities, property owners, developers and others on the investigation and preservation of archaeological remains.

1.2.3 In considering any planning application for development, the local planning authority will be guided by the policy framework set by government guidance, in this instance NPPF, by Local policy and by other material considerations.

1.2.4 Outline Planning Permission (18/02277/POUT) with conditions for archaeological work was granted by Nottingham City Council for a hybrid application for office development comprising two buildings together with access and public realm improvements.

1.2.5 The condition for archaeological work required that a WSI for an archaeological watching brief be submitted and approved by the Local Planning Authority and that the WSI be implemented in accordance with the approved details.

1.2.6 This was in order to ensure that any archaeological remains of significance be safeguarded in accordance with Policy 11 of the Aligned Core Strategy and Policy BE17 of the Nottingham Local Plan.

1.2.7 The investigation comprised an archaeological watching brief during the development groundworks, specifically, the stripping of deposits to lower the area for a basement carpark (approximately 3m below present ground surface).

1.3 Geology and Topography

1.3.1 Solid geology at the site is Chester formation sandstone of the Triassic period. This is overlain by superficial deposits of alluvium formed up to 2 million years ago in the Quaternary Period when the local environment was dominated by rivers (British Geological Survey Viewer www.bgs.ac.uk).

1.3.2 The site is located on fairly level ground at approximately 26m OD. Immediately north of the site is Tinker's Leen (a watercourse), while the Nottingham Canal is about 150m to the north. To the southeast, the River Trent approaches to about 1km from the site.

1.4 Archaeological and Historical Background

1.4.1 The Nottingham Historic Environment Record (HER) show that the application site lies within an area of archaeological potential. The site is also the subject of a previous desk-based assessment (Sutherland 2016).

1.4.2 There is no evidence of prehistoric or Roman remains or activity within half a kilometre of the site. Similarly, there is no evidence of Saxon activity nearby, though the place-name of Nottingham suggests the settlement is of Saxon origin and the Domesday Book of 1086 refers to several areas within Nottingham city, indicating they were in existence in the Late Saxon period.

1.4.3 Nottingham developed considerably following the Norman Conquest. The historic core lies to the north. Most of the evidence for medieval activity previously has been found in the historic core, at least 250m north of the site. These medieval remains include the castle, town defences, caves, and a church.

1.4.4 In the post-medieval period, during the 16th century, Nottingham began to develop as industrial town and the 17th and 18th centuries saw hosiery production booming in settlement.

1.4.5 Hooper's Sconce is thought to have been located close to the development site, c.90m west-southwest. The sconce is a small fort that was built in March 1644 under the order of Colonel Hutchinson and was designed to protect the dams in the Meadows area from Royalist attack during the Civil War. The location is inferred through a combination of documentary evidence and the observation of an area of raised land in the vicinity.

1.4.6 Industrial growth during this post-medieval period continued into the 19th century. The 20th century saw continued expansion and development of the city with the establishment of several public areas but a diminishing of past industries.

1.4.7 The development site lies to the south of the historic town of Nottingham in an area known as the Meadows. The Meadows was considerably built up during the 19th century due to the area being prone to flooding and the area has undergone considerable development since.

2 AIMS AND OBJECTIVES

2.1 Project aims

2.1.1 The project was 'threat-led' with potential to disturb or destroy important sub-surface archaeological remains, if present. The primary aims of the investigation were:

- to record the nature, extent, date, character, quality, significance and state of preservation of any archaeological remains affected by the development
- to assess where appropriate any ecofactual and palaeo-environmental potential of archaeological deposits and features from within the site

2.1.2 Additional aims of the investigation were:

- to analyse and interpret the site archive and to disseminate the results to promote local and national research objectives
- to deposit the site archive with Nottingham City Museum for long-term storage and conservation

2.2 Research Objectives

2.2.1 The on-line East Midlands Historic Environment Research Framework, Interactive Digital Resource was referenced for specific research criteria, along with, The Archaeology of the East Midlands, An Archaeological Resource Assessment and Research Agenda, Leicester Archaeology Monograph **13**, ed. N Cooper (2006), along with the East Midlands Heritage: An Updated Research Agenda and Strategy for the Historic Environment of the East Midlands, ed. D. Knight, B. Vyner & C. Allen (2012).

2.2.2 The archaeological investigation addressed the following objectives:

- to set the site and any archaeological remains into the context of the wider landscape

- to identify any archaeological or palaeo-environmental evidence for prehistoric and/or Roman and/or Saxon evidence

- to confirm the presence or absence of any medieval activity that may relate to settlement or industrial activity at Nottingham

- to confirm the presence or absence of any post-medieval activity, in particular, any evidence of Hooper's Sconce

3 METHODOLOGY

3.1 Fieldwork Methodology

3.1.1 Fieldwork was undertaken in accordance with the WSI (PCA 2019) and the Chartered Institute for Archaeologists document *Standards and Guidance for Archaeological Watching Briefs* (CIfA 2014a). PCA is a CIfA registered organisation (number 23) and operates within the Institute's 'Code of Conduct' (CIfA 2014b).

3.1.2 Relatively recent made-ground occurs extensively at the site and after discussion with the City Archaeologist it was agreed that the top 1.5m of made ground deposits could be removed without archaeological supervision.

3.1.3 The watching brief monitored site-stripping (below 1.5m beneath ground level) in the area of the basement carpark, undertaken by mechanical excavator using a toothless ditching bucket taken down in approximately 30cm spits.

3.1.4 All exposed deposits/layers were cleaned using hand tools and recorded as set out in the PCA fieldwork manual (Taylor and Brown 2009). Contexts were recorded according to PCA's fieldwork manual approved for use in Nottinghamshire, including written, photographic and drawn records.

3.2 Recording Methodology

3.2.1 The limits of excavations, heights above Ordnance Datum (m OD) and any archaeological features (if present) were recorded using a Leica 1200 GPS rover unit with RTK differential correction, giving three-dimensional accuracy of 20mm or better.

3.2.2 Manual plans and section drawings of archaeological features and deposits were drawn at an appropriate scale (1:10, 1:20 or 1:50).

3.2.3 Deposits or the removal of deposits judged by the excavating archaeologist to constitute individual events were each assigned a unique record number (often referred to within British archaeology as 'context numbers') and recorded utilising PCAs printed pro forma sheets.

3.2.4 High-resolution digital photographs were taken at all stages of the investigation. Digital photographs were taken of all archaeological features and deposits.

3.2.5 All finds encountered were collected by hand and assigned to the record number of the deposit from which they were retrieved, receiving appropriate care prior to removal from the site.

3.3 Post-Fieldwork Methodology

3.3.1 Historic England's Management of Research Projects in the Historic Environment: The MoRPHE Project Managers Guide (HE 2015) was used as the framework for post-excavation work.

3.3.2 The stratigraphic data for the project comprises written, drawn and photographic records. A total of 19 archaeological contexts were recorded in the area under investigation. Post-excavation work involved checking and collating site records and phasing the stratigraphic data (Appendix 2). A written summary of the archaeological contexts was then compiled, as described in Section 4, with discussion and chronological sequencing of the site appearing in Section 5.

3.3.3 Artefactual material recovered during the watching brief consisted of pottery, ceramic building material (CBM), glass, stone and clay tobacco pipe. Animal bones and mollusk shells were also retrieved. Specialist examination of the finds was undertaken and relevant comments integrated into Section 4, with a report in Appendix 3. Finds determined to be of archaeological significance or of further research potential will be retained.

3.3.4 Bulk environmental samples consisting of approximately 20L were recovered from the earliest deposit encountered at the site. Processing took place at PCA London and the sample was assessed there.

3.3.5 No other categories of organic or inorganic artefactual material were represented. None of the material recovered during the evaluation required specialist stabilisation or an assessment of its potential for conservation research.

3.3.6 The complete site archive will be packaged for long-term curation. In preparing the site archive for deposition, all relevant standards and guidelines documents referenced in the Archaeological Archives Forum guidelines document (Brown 2007), the United Kingdom Institute for Conservation (UKIC) document (Walker 1990), and the relevant CIfA publication (CIfA 2014c) will be adhered to. The depositional requirements of the body to which the site archive will be ultimately transferred will be met in full.

4 RESULTS

4.1 Phase 1: Bronze Age deposits

4.1.1 The earliest deposit encountered during the investigation comprised firm, mid reddish brown to mid greyish brown sandy silty clay with occasional patches of gravel (017). This was thought to represent the alluvial drift geology which overlies the natural bedrock in this area. At the request of the City Archaeologist, an environmental sample was taken of this deposit in order to obtain a radiocarbon date and was tested for the presence/absence of Diatoms. The sample produced a suitable fragment of charred wood which provided a radiocarbon date of 3489 ± 25 BP, dating this deposit to the middle of the Bronze Age. However, a sub-sample of this deposit revealed a complete lack of diatoms, which suggests the deposit is not alluvial in origin.

4.2 Phase 2: Late Post-Medieval to Modern deposits

4.2.1 A number of layers of made ground were recorded overlying deposit (017). The earliest of which was a 0.22m thick deposit of firm, dark brownish grey, slightly sandy clay (014), containing frequent flecks and fragments of charcoal. A single sherd of 18th century pottery was recovered from this deposit along with two fragments of animal bone.

4.2.2 Deposit (014) was overlain by an up to 0.31m thick layer of firm, mid pink to pinkish red clay and stone rubble (013), containing occasional fragments of ceramic building material (CBM).

4.2.3 Layer (013) was overlain by deposits (012), (016) and (018) which were all dumped levelling deposits. Layer (012) comprised firm to friable, dark greyish brown to black sandy clay and demolition debris (including brick and tile fragments), 0.74m thick, with frequent charcoal. A fragment of mid 19th to early 20th century brick and two sherds of 19th century pottery were recovered from this layer. Deposit (016) was composed of light yellowish brown sand with clay patches mixed with demolition debris, up to 0.47m thick. A sherd of 19th century pottery and piece of mid 19th century to early 20th century brick were recovered from this deposit. Levelling deposit (018) represents a 1.14m thick amalgamation of a number of modern dumped levelling deposits of various colour and composition, containing modern demolition debris.

4.2.4 In Section 2, deposit (016) was overlain by a 0.1m thick dump of dark grey to black ash and clinker (015) from which two sherds of 19th century pottery were retrieved.

4.2.5 Deposit (015) and (012) were sealed by various modern dumped levelling deposits containing stone and brick rubble along with ash, clinker, oyster shells and gravel. These were assigned context number (011). Deposits (001), (002), (003), (006), (007) and (008) are grouped together for convenience as part of (018). A total of thirteen sherds of 19th century pottery were retrieved from this deposit, along with single fragments of roofing tile, brick, glass wine bottle and clay pipe dating from the mid 19th century. A number of oyster shell fragments were also retained.

4.2.6 During the investigation two modern linear features associated with the former building at the site [004], [009] were observed truncating deposit (011).

4.2.7 In Section 3, dumped deposit (018) was overlain by a 0.25m thick layer of concrete (019) forming the former modern ground surface in this area.

4.2.8 The concrete was overlain by 0.71m of soil and gravel (020) associated with levelling for the current groundworks.

5 DISCUSSION

5.1 Natural sub-stratum

5.1.1 Natural geological deposits were not identified at the site, as a radiocarbon date of the earliest deposit, which was identified at the base of the excavation, produced a Middle Bronze Age date.

5.2 Phase 1: Bronze Age deposits

5.2.1 This was thought to be a layer of alluvium. However, a sub-sample from this deposit was completely devoid of diatoms, which would be expected in an alluvial deposit. With the site being located on the Trent floodplain, on alluvial deposits associated with the river, the lack of diatoms is of note. While an alluvial origin seems likely, notwithstanding the absence of diatoms, it is possible that the deposit is a naturally-formed soil layer.

5.3 Phase 2: Late Post-medieval to Modern deposits

5.3.1 The Middle Bronze Age deposit was overlain by a layer that produced a single sherd of 18th century pottery. This was overlain by a series of dumped levelling deposits, all containing pottery and other finds of 19th century date. Many of these deposits contained an abundance of oyster shell. This is typical, as oysters were a cheap food resource in this period. Analysis of the different pottery types and other finds, suggests a mid 19th century date for these deposits. The site lies in an area known as 'The Meadows' which historically, was prone to flooding. As a result, it was built up considerably during the 19th century. These levelling deposits are probably associated with that 19th century build-up of the area and represent a period of expansion of the city into The Meadows.

5.3.2 The latest mid 19th century deposits in the sequence were truncated by two modern linear features associated with the recently demolished building at the site and were overlain by a modern concrete surface in the areas outside of the building's footprint.

6 CONCLUSIONS

6.1 Summary of project data

6.1.1 The investigation revealed a deposit containing charcoal of Middle Bronze Age date that extended throughout the base of the excavation, although with areas of Late Post-Medieval to Modern Disturbance. This was sealed by Late Post-Medieval levelling deposits of Mid 19th century date. Modern remains associated with the former building overlay the Late Post-Medieval deposits.

6.2 Significance and potential for further analysis

6.2.1 The aims and research objectives of the investigation were largely fulfilled in that the nature date and extent of archaeological remains were recorded across the site. Also, palaeo-environmental evidence of prehistoric date was identified and assessed. The absence of any evidence of Hoopers Sconce was also confirmed.

6.2.2 The dating of the basal deposit in the sequence to the Middle Bronze Age is interesting, and it could represent a potential land surface of this date. The charcoal in the sample/deposit may be derived from brush fires, or could be anthropogenic in origin. If so, this suggests the possibility of human activity of the period in the area. This is particularly significant as no prehistoric remains have been identified previously within 500m of the site. Further work in the surrounding area may have the potential to confirm the presence or absence of activity of this period.

6.2.3 The site lies in an area known as 'The Meadows' which was built up considerably in the 19th century due to its tendency to flood. The Mid 19th century levelling deposits at the site are significant in that they are representative of this activity and of expansion of the city during this period.

7 ACKNOWLEDGEMENTS

Pre-Construct Archaeology Ltd would like to thank Peveril Securities Ltd for commissioning the work. Thanks also go to Rachel Wood at Sladen Estates and Peter Hobson, Site Manager at B and K Property Services.

8 BIBLIOGRAPHY

8.1 Written sources

CIfA, 2014a *Standards and guidance for an archaeological watching brief*, Chartered Institute for Archaeologists, Reading

CIfA, 2014b *Code of Conduct*, Chartered Institute for Archaeologists, Reading

CIfA, 2014c *Standard and Guidance for the collection, documentation, conservation and research of archaeological materials,* Chartered Institute for Archaeologists, Reading

Cooper, N (ed.), 2006 *The Archaeology of the East Midlands: an Archaeological Resource Assessment and Research Agenda for the East Midlands*. Leicester Archaeology Monograph No. 13. University of Leicester

Historic England, 2015 *Management of Research Projects in the Historic Environment. The MoRPHE Project Managers' Guide*

Knight, D, Vyner, B & Allen, C, 2012 *East Midlands Heritage. An Updated Research Agenda and Strategy for the Historic Environment of the East Midlands*. University of Nottingham & York Archaeological Trust

PCA, 2019 *Unity Square, Sheriffs Way, Nottingham NG2 2GD, Written Scheme of Investigation for an Archaeological Watching Brief* Unpublished

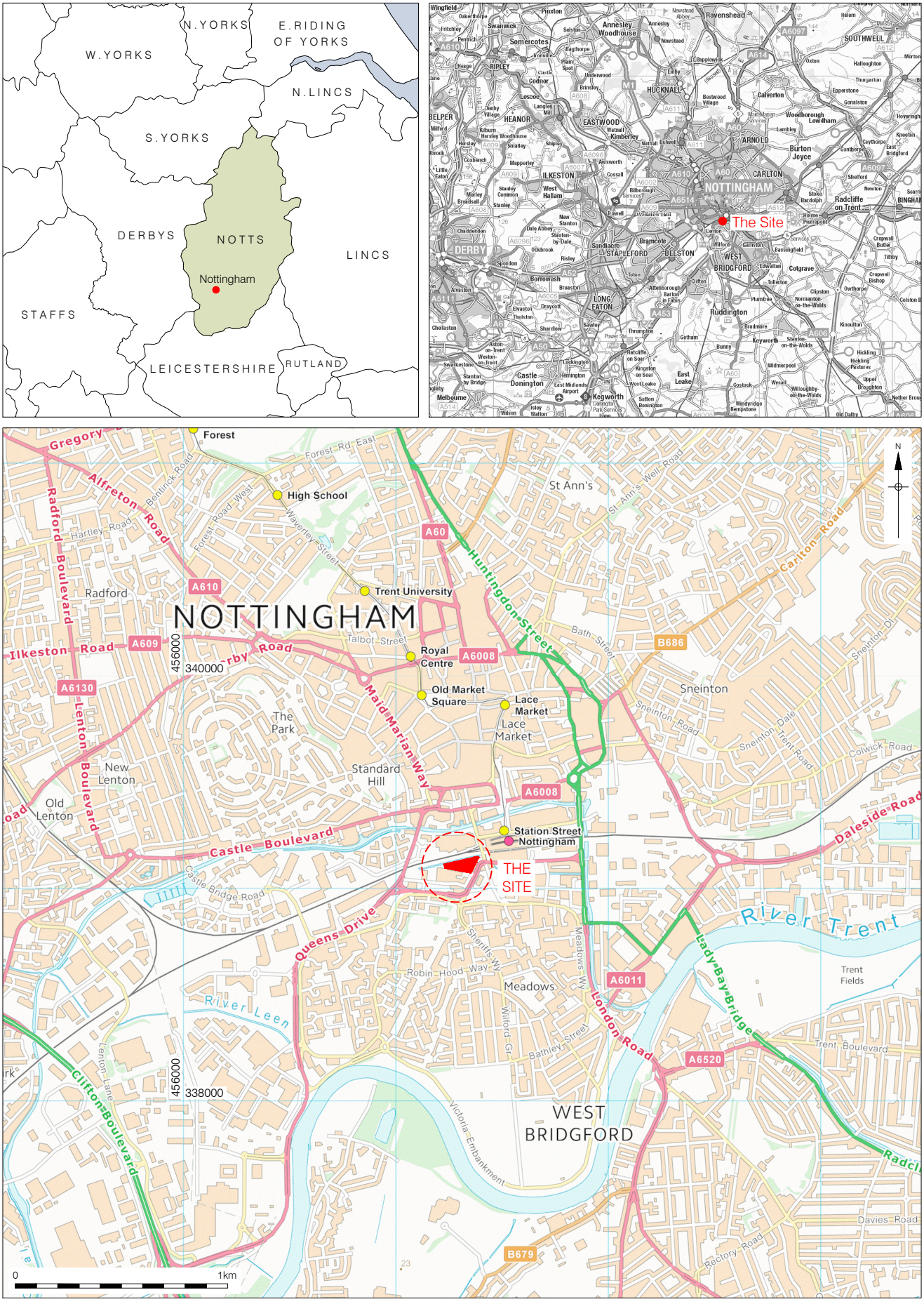
Sutherland, D., 2016 *Unity Square, Burnham Way, Nottingham An Archaeological Desk-Based Assessment*, PCA Report R12464

Taylor, J. & Brown, G., 2009 *PCA Fieldwork Induction Manual Operations Manual 1*

8.2 Websites

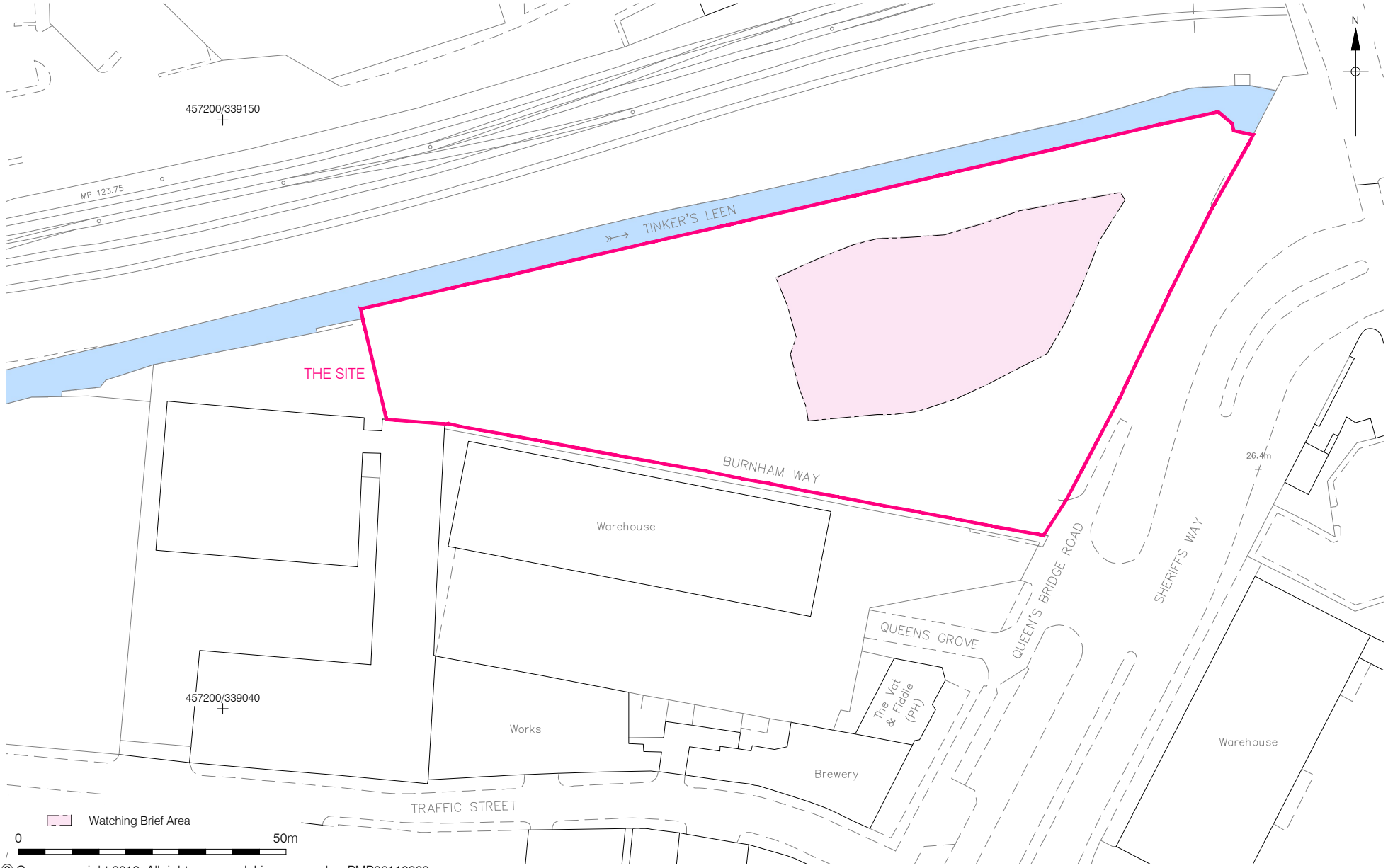
The British Geological Survey (BGS) website: http://mapapps.bgs.ac.uk/geologyofbritain/home.html Accessed 08/03/2019

East Midlands Historic Environment Research Framework Interactive Digital Resource https://www2.le.ac.uk/services/ulas/discoveries/publications/the-east-midlands-archaeological-research-framework Accessed 08/03/2019



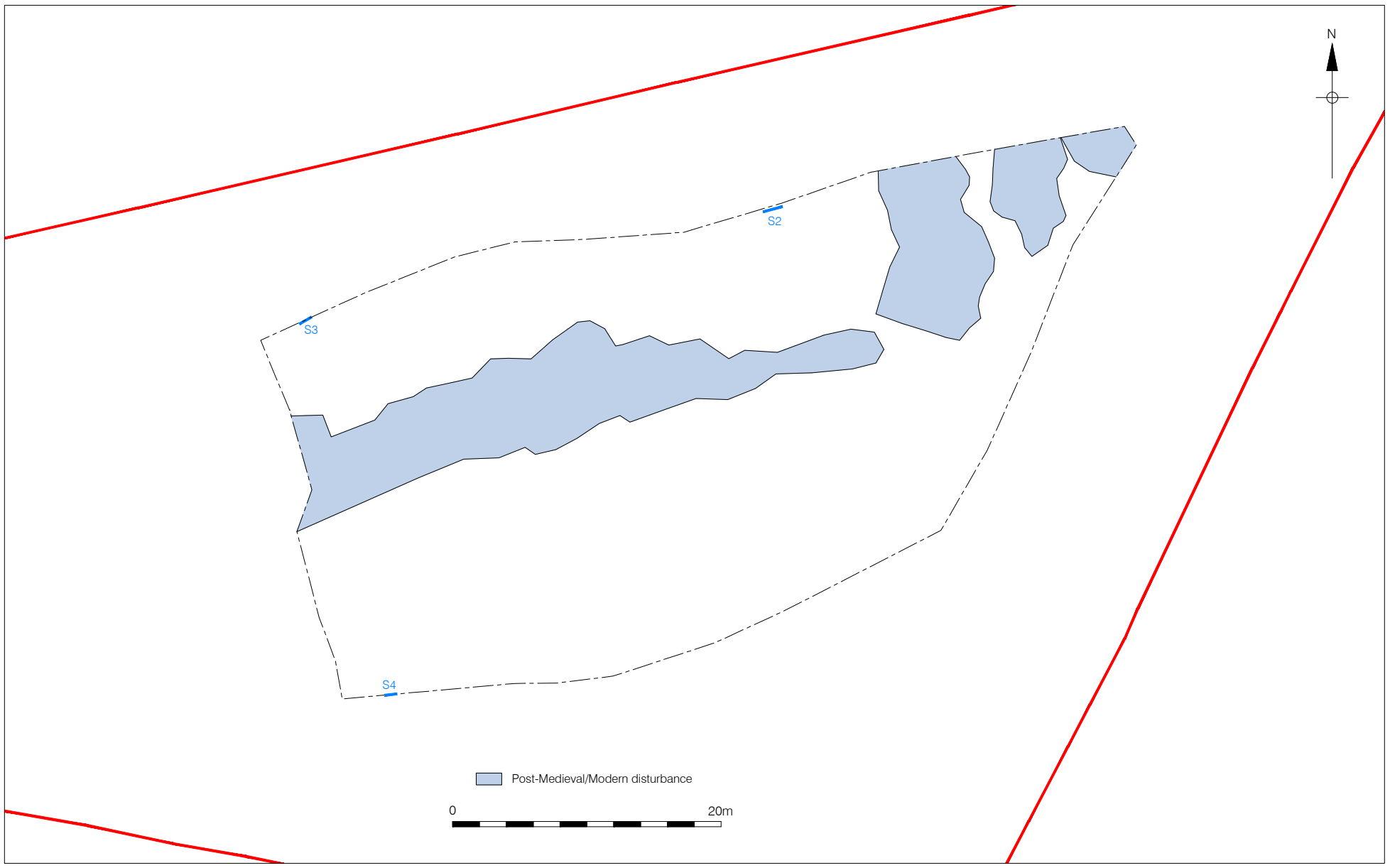
10/09/19 RM

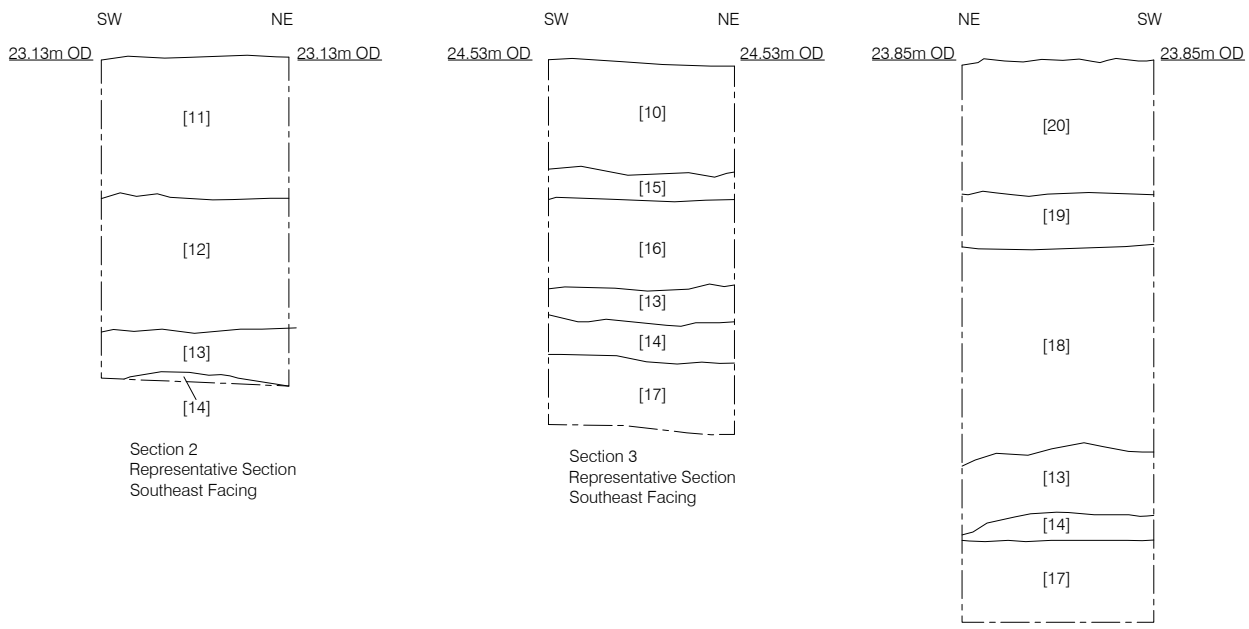
Figure 1
Site Location
1:2,000,000; 400,000 & 25,000 at A4



10/09/19 RM

Figure 2
Detailed Site Location
1:1,000 at A4





10/09/19 RM

Figure 3
Plan and Sections
Plan 1:400 and Sections 1:40 at A3

APPENDIX 1: Site Photographs

Plate 1: Working shot, looking west

Plate 2: Section 2, looking north

Plate 3: Section 3

Plate 4: Northern half of monitored area looking east, excavated to maximum depth, brown deposit at base is (017), radiocarbon dated to the Middle Bronze-Age

Plate 5: Section 4, looking south

Plate 6: Base of excavation at southern end of area, looking east

APPENDIX 2: Context Summary

Description									
Context	**Category**	**Cut Number**	**Colour**	**Texture and Composition**	**Inclusions**	**Interpretation**	**Dimensions**	**Above**	**Below**
001	Deposit		Black	Firm silty sand	Frequent charcoal	Demolition debris		003	002
002	Deposit		Dark brown	Loose sandy silt	Frequent brick, stones, occasional slate, charcoal and shell	Demolition debris		001	
003	Deposit		light orangey brown	Firm clayey sand		Layer			
004	Cut	004	Linear cut, oriented NE-SW			Modern linear cut	>5m long x 0.4m wide		005
005	Fill	004	Light brown	Firm clayey sand	Frequent brick,	Fill of 004		004	

					pottery, stone and occasional shell				
006	Deposit		Dark brown to black	Loose sandy silt	Abundant oyster shell	Dumped deposit			
007	Deposit		Dark brown to black	Loose sandy silt	Abundant oyster shell	Dumped deposit			
008	Deposit		Mid brown	Firm sandy silt	Frequent shell, brick, slate and modern pottery	Dumped deposit			
009	Cut	009	East to West aligned linear cut, associated with former building at the site			Cut associated with former building			
010	Fill	009	Dark brown to black	Firm sandy silt		Fill 0f 009		009	

011	Deposit		Various	Stoney rubble and brick rubble	Frequent ash, oyster shell, gravel, occasional clinker	Dumped levelling deposits of modern demolition debris	0.76m thick	012, 015	
012	Deposit		Dark greyish brown to black	Firm to friable sandy clay and demolition debris (Brick fragments)	Frequent charcoal	Dumped levelling deposit of made ground	0.74m thick	013	012
013	Deposit		Mid pink to inkish red	Firm to hard clay and stone rubble	Occasional CBM fragments	Dumped levelling deposit	0.31m thick	014	012,016
014	Deposit		Dark brownish grey	Firm slightly sandy clay	Frequent charcoal flecks and fragments	Dumped deposit?	0.22m thick	017	013

015	Deposit		Dark grey to black with white speckles	Friable ash and clinker		Dumped levelling deposit	0.1m thick	016	011
016	Deposit		Light yellowish brown	Loose sand with clay patches	Occasional demolition debris	Dumped levelling deposit	0.47m thick	013	015
017	Deposit		Mid reddish brown to mid greyish brown	Firm sandy silty clay	Occasional gravel and charcoal	Deposit dated (C14) to the Bronze Age, thought to be alluvium but contained no diatoms?	>0.37m thick		014
018	Deposit		Various	Various modern backfill, demolition debris		Dumped levelling deposit	1.14m thick	013	019

019	Deposit		Indurated	Modern concrete		Modern concrete surface	0.25m thick	018	020

APPENDIX 3: The Finds

Items recovered during investigations at Unity Square, Nottingham, Nottinghamshire are reported, below. The finds were examined and reported in accordance with CIfA guidelines (2014).

The Post Roman Pottery

By Alex Beeby

Introduction

The material was recorded at archive level in accordance with the guidelines laid out in Slowikowski *et al.* (2001) using the system, codes and period nomenclature devised for the City of Lincoln Archaeological Unit (Young *et al.* 2005). The material was recorded in September 2019. A total of 19 sherds from 19 vessels were recovered.

Methodology

The material was laid out and weighed. The pottery was then examined visually. This information was then added to an Access database. An archive list of the pottery is included in Table 1 below. The pottery dates to the early modern period.

Condition

The pottery is in a mixed condition with large fresh sherds and smaller fragments recorded. The material is unabraded and shows little sign of obvious redeposition. A single vessel is complete.

Results

Table 1, the Pottery Archive

Cxt	Cname	Form	Decoration	Part	Comment	Date	NoS	NoV	W(g)
002	NOTS	Bowl		Base	Small corroded Iron Object adhered internally	18th-19th	1	1	58
002	PEARL	Plate	Blue transfer print - Willow Pattern	Base		19th	1	1	15
002	PEARL	Closed	Blue transfer print - Willow Pattern	BS		19th	1	1	5
002	ENGS	Straight sided bottle		Complete	Burnt/partially vitrified rim; pale internal residue	19th	1	1	737
002	BL	Jar or Bowl		Base angle		M18th-E19th	1	1	14
002	PEARL	Bowl	Blue transfer print - Chinoiserie	BS		19th	1	1	4
005	PEARL	Hollow		Base			1	1	9
005	WHITE	Straight-sided jar	Transfer print – "MAR[MALADE]"	BS	Keiller Marmalade Jar; post 1828	19th	1	1	6
008	PEARL	Plate	Black/indigo transfer print - floral design	Profile		19th	1	1	57

Cxt	Cname	Form	Decoration	Part	Comment	Date	NoS	NoV	W(g)
008	PEARL	Dish	Blue transfer print - Willow Pattern	Rim		19th	1	1	30
008	PEARL	Chamber	Moulded decoration	Handle		19th	1	1	85
011	PEARL	Hollow	Blue transfer print - Chinoiserie	BS		19th	1	1	9
011	PEARL	Bowl	Dipped blue underglaze - striped?	Rim		19th	1	1	2
012	NOTS	Hollow	Engine turned	BS		19th	1	1	57
012	PEARL	?	Blue transfer print - Willow Pattern	BS		19th	1	1	1
014	STSG	Bowl?		Base		18th	1	1	5
015	NOTS	Large jar or bowl		Base	Thick foot ring	18th-19th	1	1	132
015	NOTS	Jar or bowl	Engine turned	BS		19th	1	1	26
016	PEARL	Hollow			Base	19th	1	1	68
						Total	**19**	**19**	**1320**

Provenance

Post Roman pottery was recovered from demolition debris layer (002) and dumped deposit layers (008), (011), (014), (015) and (016). Two pieces also from came fill (005) within linear cut feature [004].

Range

There is a range of 19th century domestic pottery types, including Nottingham stoneware (NOTS), English Stoneware (ENGS), Pearlware (PEARL) and Modern Whiteware (WHITE). The types represented are quite typical of 19th century household waste assemblages across the Midlands. A notable general absence of modern Whiteware (WHITE) and a preponderance of Pearlware (PEARL) suggests an early to mid 19th century bias within the assemblage, although most of the pottery cannot be closely dated. An exception to this is a fragment of Marmalade jar in WHITE, from (005), which post-dates 1828. In addition to the 19th century material, a single sherd of Staffordshire Salt Glazed Earthenware (STSG) from (014) is of 18th century date.

Potential

The pottery is of no further potential. The material is not worthy of retention and can be discarded.

The Ceramic Building Material

By Alex Beeby

Introduction

The material was recorded at archive level in accordance with the guidelines laid out by the Archaeological Ceramic Building Materials Group (2002), using the codes and system devised for the

City of Lincoln Archaeological unit (unpublished). The material was recorded in September 2019. A total of four fragments weighing 1766 grams were recovered.

Methodology

The ceramic building material was examined visually and then weighed. This information was then added to an Access database. An archive list of the ceramic building material is included in Table 2 below.

Condition

There are four fragments, most of which are relatively large and unabraded. Two bricks have mortar adhered, indicating these pieces have been used within a structure.

Results

Table 2, the Ceramic Building Material

Cxt	Cname	Full Name	Comment	Condition	Date	NoF	W(g)
011	MODBRK	Modern Brick		Mortar adhered	M19th-E20th	1	252
012	MODBRK	Modern Brick	Arch brick; no signs of use		M19th-E20th	1	946
012	MODTIL	Modern Tile	Flat roofer?		19th	1	158
016	MODBRK	Modern Brick		Mortar adhered	M19th-E20th	1	410
					Total	**4**	**1766**

Range

There are four fragments of modern ceramic building material, including brick and tile. Two pieces show signs of use, with these pieces, at least, likely to be demolition waste.

Potential

There is no potential for further work. The ceramic building material can be discarded.

The Glass

By Gary Taylor

Introduction

A single piece of glass weighing 184g was recovered.

Condition

Although naturally fragile, the glass is in good condition and quite substantial.

Results

Table 3, the Glass

Context	Description	No.	Wt(g)	Context date
008	Dark olive-green bottle, shallow kick-up, base marked: '…RICKE…', early to mid 19th century	1	184	*c*. 1821-1850

Provenance

The glass was recovered from a dumped deposit (008).

Discussion

A probable wine bottle was retrieved. This has a basal mark reading 'RICKE…', likely to be 'Ricketts', a Bristol-based manufacturer. Henry Ricketts patented a new method of bottle moulding in 1821 (Van den Bossche 2001, 59). This particular example is likely to date from about the 2nd quarter of the 19th century, perhaps *c*. 1821-50.

Potential and Recommendations

The glass provides dating evidence, and indication of refuse disposal, but is otherwise of limited potential. The material can be discarded.

Other Finds

By Gary Taylor

Introduction

A single other find weighing 14g was recovered.

Results

Table 4, the other finds

Context	Material	Description	No.	Wt(g)	Context date
002	stone	Roofing slate, Welsh	1	14	Mid-19th-20th century

Provenance

The item was recovered from demolition debris (002). It is imported Welsh stone.

Discussion

A piece of roofing slate, made of welsh stone, was recovered. Welsh slate began to be traded and used widely with the development of rail transport systems in the mid-19th century.

Potential and Recommendations

Perhaps indicating the presence of early modern buildings, the slate is otherwise of limited potential and can be discarded.

Clay Tobacco Pipe

By Gary Taylor

Introduction and Methodology

The clay pipe was analysed in accordance with guidelines prepared by Davey (1981) and reporting was undertaken in accordance with CIfA guidelines (2014). A single fragment of clay pipe weighing 1g was retrieved.

Condition

The clay pipe is in good condition.

Results

Table 5 below shows a full summary of the results.

Cxt	Bore diameters, /64"						Total	Wt(g)	Comments	Context date
	9	8	7	6	5	4				
002						1	1	1	stem	19th century

Provenance

The clay pipe was recovered from demolition debris (002). It is likely to be a fairly local product, probably made in Nottingham itself.

Discussion

A clay tobacco pipe stem fragment of probable 19th century date was recovered.

Potential and Recommendations

Slight dating evidence, and indications of smoking at the site, are provided by the clay tobacco pipe. No further work is required, and the material could be discarded.

Animal Bone

By Gary Taylor, with identifications by James Rackham

Animal bones recovered during investigations at Unity Square, Queens Bridge Road, Nottingham, are reported, below.

The finds were examined and reported in accordance with CIfA guidelines (2014).

Introduction

Two items were recovered.

Results

Table 6, The Animal Bone

Context	Species	Description	No.
014	Sheep/goat	Metatarsus, proximal end and shaft	1
	Sheep/goat	Metacarpus, proximal end, left side	1

Provenance

The items were recovered from a possible dumped deposit (014).

Discussion

A couple of animal bones were retrieved. They are probably food waste and may derive from a single animal.

Potential and Recommendations

The animal bones are probably food waste and are otherwise of limited potential and significance and can be discarded.

Mollusc shells

By Gary Taylor

Mollusc shells recovered during investigations at Unity Square, Queens Bridge Road, Nottingham, are reported, below.
The finds were examined and reported in accordance with CIfA guidelines (2014).

Introduction

Eighteen items weighing a total of 418g were recovered.

Results

Table 7, the mollusc shell

Context	Species	Description	No.	Wt(g)
002	oyster	Oyster, 1 bottom, 2 top shells	3	136
008	oyster	Oyster, 6 bottom, 4 top shells	10	212
011	oyster	Oyster, 1 bottom, 2 top shells	3	35
016	oyster	Oyster, 2 top shells, 1 with shucking notch	2	35
		TOTALS	18	418

Provenance

The items were recovered from a demolition debris (002), dumped deposit (008), and dumped levelling deposits (011, 016).

Discussion

A quantity of oyster shell fragments was retrieved. They are probably food waste. Oysters were a cheap food resource in the late post-medieval to early modern period.

Potential and Recommendations

The mollusc shells indicate the consumption of these shellfish but are otherwise of limited potential and significance and can be discarded.

Context Date Summary

The dating in the following table is based on the evidence provided by the finds detailed above.

Table 8, Spot dates

Context	Date (Century)	Comments
2	Mid 19th to late 19th	
8	*c*. 1821-1850	
11	Mid 19th to late 19th	
12	Mid 19th to early 20th	
14	18th	
15	19th	
16	Mid 19th to late 19th	

References

~ 2002, *Minimum Standards for the Recovery, Analysis and Publication of Ceramic Building Material*, version 3.2 [internet]. Available at <http://www.tegula.freeserve.co.uk/acbmg/CBMGDE3.htm>

CIfA, 2014 *Standard and Guidance for the collection, documentation, conservation and research of archaeological materials*

Davey, P., 1981 Guidelines for the processing and publication of clay pipes from excavations. *Medieval and Later Pottery in Wales* **4**, 65-88

Slowikowski, A. M., Nenk, B., and Pearce, J., 2001, *Minimum Standards for the Processing, Recording, Analysis and Publication of Post-Roman Ceramics*, Medieval Pottery Research Group Occasional Paper 2

Van den Bossche, W., 2001 *Antique Glass Bottles Their History and Evolution (1500-1850)*, Antique Collectors' Club

Young, J., Vince, A.G. and Nailor, V., 2005, *A Corpus of Saxon and Medieval Pottery from Lincoln* (Oxford)

Abbreviations

CIfA	Chartered Institute for Archaeologists
Cxt	Context
NoF	Number of fragments
NoS	Number of sherds
NoV	Number of vessels
Tr	Trench
W(g)	Weight (grams)

APPENDIX 4: Environmental Archaeological Assessment Report

Kate Turner, Andrew Haggart & Phil Austin

Introduction

A single bulk soil sample was taken during an archaeological watching brief at Unity Square, Sheriff's Way, Nottingham. This sample was collected from a sandy-silty-clay layer, (17), situated at the bottom of a sequence of made ground. Along with standard flotation for ecofacts, a small sub-sample of this deposit was assessed to determine the potential for diatom recovery (A. Haggart 2019, *pers. comm.*), and several fragments of wood charcoal were submitted for species identification, to establish the viability for radiocarbon dating (appendix 2).

The aim of this assessment is to:

1. Give an overview of the contents of the assessed sample;
2. Determine the environmental potential of this sample;
3. Establish whether any further analysis is necessary.

Methodology

Floatation

One environmental bulk sample, of eighteen litres in volume, was processed using the flotation method; material was collected using a 300 µm mesh for the light fraction and a 1 mm mesh for the heavy residue. The heavy residue was then dried, sieved at 1, 2 and 4 mm and sorted to extract artefacts and ecofacts. The abundance of each category of material was recorded using a non-linear scale where '1' indicates occasional occurrence (1-10 items), '2' indicates occurrence is fairly frequent (11-30 items), '3' indicates presence is frequent (31-100 items) and '4' indicates an abundance of material (>100 items).

The flot (>300 µm), once dried, was scanned under a low-power binocular microscope at 10x magnification, to quantify the level of environmental material, such as seeds, chaff, charred grains, molluscs and charcoal. Abundance was recorded as above. A note was also made of any other significant inclusions, for example roots and modern plant material. A full account of the sample contents is given in appendix 1.

Diatom Assessment

About 20 ml Hydrogen peroxide (30%) was added to 1cm3 of fresh sediment in a polypropylene centrifuge tube and left in a fume cupboard at room temperature, topped up with Hydrogen peroxide if necessary, until the all organic material had been oxidised (~1 week). The samples were then centrifuged at 2500 rpm for 3 minutes, the supernatant liquid decanted, and the sample pellet resuspended with fresh distilled water. This washing process was repeated three times. A random

sample was transferred using a pipette to a coverslip and allowed to settle and dry at room temperature overnight. The coverslip was then fixed onto a microscope slide using Naphrax diatom mountant. The slide was scanned using an Olympus BX40 microscope under oil immersion at a magnification of 1000x.

Radiocarbon dating

One sub-sample of carbonised *Prunus* wood was submitted for radiocarbon dating to BRAMS Radiocarbon Laboratory, University of Bristol. The results have been calibrated using OxCal v4.3.2 (Ramsey, 2009) and the IntCal13 atmospheric curve (Reimer *et al.*, 2013). The results are displayed in appendix 3.

Results

Preservation

Archaeobotanical remains were preserved in this sample by carbonisation. Recovery of ecofacts was poor, with only a small assemblage of fragmented charcoal recognised.

Sample <1>: Context (17)

A bulk sample of eighteen litres was taken from a silty-clay layer, (17), for the purpose of recovering material suitable for dating this deposit, and, using diatom analysis, to establish if the layer is alluvial in nature. Preservation of ecofacts was poor; wood charcoal was observed in abundance; however, the bulk of the remains were in the lowest sieved fraction, <2mm, and only a small number of specimens were deemed to be of viable size for species to be determined (>4mm in length/width). Several of the larger fragments were selected for identification (Appendix 2) and, based on this assessment, a single specimen of *Prunus* cf. *Spinosa* (Blackthorn) was submitted for AMS dating, returning a date of 1887-1744 calBC, which equates to the middle Bronze Age.

With the exception of a small number of seeds, the condition of which would suggest are intrusive, no other plant material was reported in this sample. Cultural artefacts were also absent, however a moderate concentration of heavily fragmented coal and a low frequency of iron prills were noted.

The sub-sample assessed for presence/absence for diatoms returned a negative result; no diatoms, or fragments of diatoms, were observed (A. Haggart 2019, *pers. comm.*).

Conclusions and Recommendations for Further Work on the Environmental Assemblage

An assessment of the single bulk sample from Unity Square has shown that preservation of environmental remains was poor. Wood charcoal was reported in abundance, however due to the small size of the assemblage it is of limited value in terms of environmental reconstruction and cannot be considered of diagnostic importance. As a result of the paucity of remains, no additional work is suggested on this sample, however a summary of this report should be included in any future publications.

Recommendations for future excavations

Carbonised archaeobotanical material has the potential to be preserved on this site; should future interventions be undertaken, the potential for recovery of such remains should be reflected in the environmental sampling strategy, and samples should, where possible, be collected from well-sealed deposits, with little evidence for disturbance.

References

Ramsey, C. B. (2009) 'Bayesian analysis of radiocarbon dates', *Radiocarbon*. Cambridge University Press, 51(1), pp. 337–360.

Reimer, P. J. *et al.* (2013) 'IntCal13 and Marine13 Radiocarbon Age Calibration Curves 0–50,000 Years cal BP', *Radiocarbon*, 55(4), pp. 1869–1887. doi: 10.2458/azu_js_rc.55.16947.

Appendix 1: Assessment of environmental samples, Unity Square (QBRN19)

Sample No.	**1**
Context No.	**17**
Feature Type	Alluvial Layer
Date	1887-1744 calBC
Period	Bronze Age
Volume of bulk (litres)	18
Volume of flot (millilitres)	15
Method of processing	F
RETENT	
Charcoal	
Charcoal >4 mm	1
Charcoal 2 - 4 mm	1
Charcoal <2 mm	1
Other Finds	
Coal	1
FLOT	
Charcoal	
Charcoal >4 mm	1
Charcoal 2 - 4 mm	2
Charcoal <2 mm	4
Frags. of ID size	X
Other plant macrofossils	
Intrusive seeds	1
Modern plant material	1
Biological remains	
Insect remains	1
Insect eggs/worm cases	1
Other remains	
Hammer-scale	1
Coal	3
Black vitrified residue	3

Key: 1- Occasional, 2- fairly frequent, 3- frequent, 4- abundant.

Appendix 2: Wood Charcoal Identifications For C14 Dating

P. Austin

Site Code: QBRN19. Unity Square, Nottingham.

Context (17). Sample <1>.

Taxon	No. frags.	Comments
Quercus sp.	7	Mature wood. Not recommended for 14C
Prunus sp. (*cf. P. spinosa* type)	3	Suitable for C14
Indeterminate	10	Inc. possible bark & non-woody material. Not recommended for C14

APPENDIX 5: Report on Radiocarbon Age Determination

University of BRISTOL

brams
Bristol Radiocarbon Accelerator Mass Spectrometer
43 Woodland Road,
BRISTOL, BS8 1UU,
UK

Tuesday, 23 July 2019

Report on Radiocarbon Age Determination for BRAMS-2981

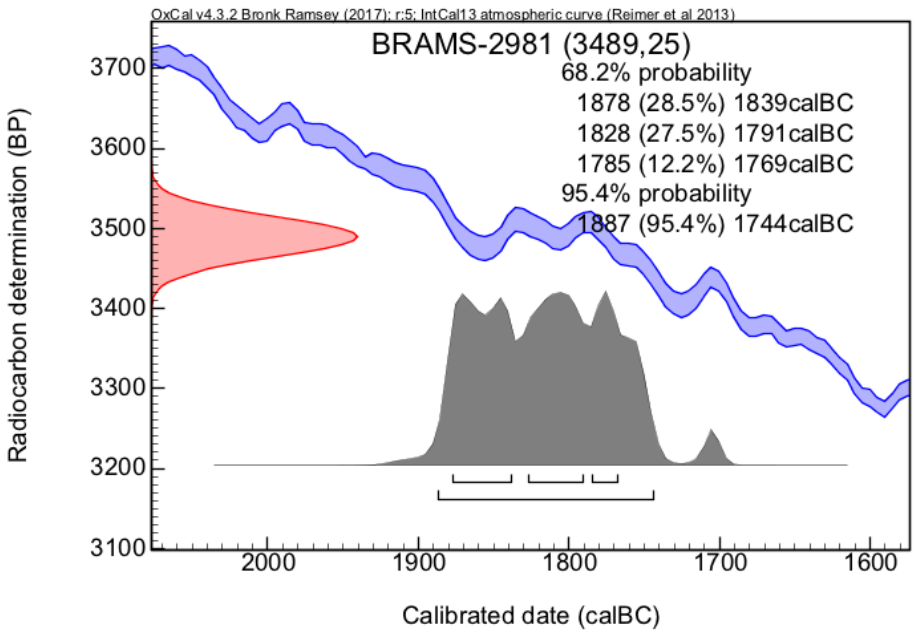
Submitter:	Alex Beeby
Submitter's Code:	QBRN19
Project:	Queen's Bridge Rd
Sample material:	Charcoal
Pretreatment Code:	ABA

$F^{14}C$	**0.65 ± 0.2 %**
Result	**3489 ± 25 BP**
Indicative $\delta^{13}C$	**-24.5 ‰**

The result is given in uncalibrated radiocarbon years Before Present (BP). Data given are corrected for isotopic fractionation using the $^{13}C/^{12}C$ ratio measured on the AMS. The $\delta^{13}C$ value was measured on the AMS and may have been subject to additional isotopic fractionation. The error associated with this value is typically ±1‰.

Calibration Plot

Calibration was performed using OxCal software v4.3.2 and the IntCal13 atmosphric calibration curve



Dr. Timothy Knowles
BRAMS Manager

Notes:

Pretreatment methods employed and their respective pretreatment codes are described in Knowles et al., 2019 along with details regarding graphitization, AMS measurement and data reduction.

Knowles, T.D.J., Monaghan, P.S., Evershed, R.P., 2019. Radiocarbon Sample Preparation Procedures and the First Status Report from the Bristol Radiocarbon AMS (BRAMS) Facility. *Radiocarbon* 1–10, doi:10.1017/RDC.2019.28.

Bronk Ramsey, C., 2009. Bayesian Analysis of Radiocarbon Dates. *Radiocarbon* 51, 337–360.

Reimer, P.J., Bard, E., Bayliss, A., Beck, J.W., Blackwell, P.G., Ramsey, C.B., Buck, C.E., Cheng, H., Edwards, R.L., Friedrich, M., Grootes, P.M., Guilderson, T.P., Haflidason, H., Hajdas, I., Hatté, C., Heaton, T.J., Hoffmann, D.L., Hogg, A.G., Hughen, K.A., Kaiser, K.F., Kromer, B., Manning, S.W., Niu, M., Reimer, R.W., Richards, D.A., Scott, E.M., Southon, J.R., Staff, R.A., Turney, C.S.M., van der Plicht, J., 2013. IntCal13 and Marine13 Radiocarbon Age Calibration Curves 0–50,000 Years cal BP. *Radiocarbon* 55, 1869–1887.

APPENDIX 6: OASIS Form

OASIS DATA COLLECTION FORM: England

OASIS ID: preconst1-366659

Project details

Project name	Unity Square, Nottingham
Short description of the project	Archaeological watching brief on groundworks associated with the development of a large government building. The site lies south of the historic town of Nottingham in an area known as 'the Meadows', Hoopers Sconce (a fort built in 1644) is thought to lie close to the site. The investigation revealed a possible Bronze Age land surface and a sequence of Late Post-Medieval to modern levelling deposits. These represent expansion of the city of Nottingham into 'the Meadows' which was built up considerably in the 19th century as it was prone to flooding.
Project dates	Start: 28-02-2019 End: 06-03-2019
Previous/future work	Yes / No
Any associated project reference codes	QBRN19 - Sitecode
Any associated project reference codes	NCMG 2019-13 - Museum accession ID
Any associated project reference codes	366659 - OASIS form ID
Type of project	Recording project
Site status	None
Current Land use	Vacant Land 1 - Vacant land previously developed
Monument type	NONE None
Significant Finds	POTTERY Post Medieval
Significant Finds	CBM Post Medieval
Investigation type	'"Watching Brief"'
Prompt	Planning condition

Project location

Country	England
Site location	NOTTINGHAMSHIRE NOTTINGHAM NOTTINGHAM Unity Square, Sheriffs Way, Nottingham
Postcode	NG2 2GD
Study area	2100 Square metres
Site coordinates	SK 5734 3911 52.945993384234 -1.146560204433 52 56 45 N 001 08 47 W Point

Project creators

Name of Organisation	PCA Newark
Project brief originator	Pre-Construct Archaeology Ltd
Project design originator	Gary Taylor
Project director/manager	Gary Taylor
Project supervisor	Andy Failes
Type of sponsor/funding body	Developer

Project archives

Physical Archive recipient	Notthingham museums service
Physical Archive ID	NCMG 2019-13
Physical Contents	"Animal Bones","Ceramics","Environmental","Glass"
Digital Archive recipient	Nottinghamshire Museums Service
Digital Archive ID	NCMG 2019-13
Digital Contents	"Animal Bones","Ceramics","Environmental","Glass"
Digital Media available	"Images raster / digital photography","Spreadsheets","Survey","Text"
Paper Archive recipient	Nottingham museums service
Paper Archive ID	NCMG 2019-13
Paper Contents	"Animal Bones","Ceramics","Environmental","Glass"
Paper Media available	"Context sheet","Correspondence","Diary","Drawing","Map","Photograph","Report","Section","Survey","Unpublished Text"

Project bibliography 1

Publication type	Grey literature (unpublished document/manuscript)

Title	Archaeological Observation on land at Unity Square, Sheriffs Way, Nottingham
Author(s)/Editor(s)	Failes, A.
Other bibliographic details	R13828
Date	2019
Issuer or publisher	Pre-Construct Archaeology
Place of issue or publication	Office 8, Roewood Courtyard, Winkburn
Description	A4 book, comb bound
Entered by	Gary Taylor (gtaylor@pre-construct.com)
Entered on	28 February 2020

OASIS:

P C A

PCA CAMBRIDGE
THE GRANARY, RECTORY FARM
BREWERY ROAD, PAMPISFORD
CAMBRIDGESHIRE CB22 3EN
t: 01223 845 522
e: cambridge@pre-construct.com

PCA DURHAM
THE ROPE WORKS
BROADWOOD VIEW
CHESTER-LE-STREET
DURHAM DH3 3AF
t: 0191 377 1111
e: durham@pre-construct.com

PCA LONDON
UNIT 54, BROCKLEY CROSS BUSINESS CENTRE
96 ENDWELL ROAD, BROCKLEY
LONDON SE4 2PD
t: 020 7732 3925
e: london@pre-construct.com

PCA NEWARK
OFFICE 8, ROEWOOD COURTYARD
WINKBURN, NEWARK
NOTTINGHAMSHIRE NG22 8PG
t: 01636 370410
e: newark@pre-construct.com

PCA NORWICH
QUARRY WORKS, DEREHAM ROAD
HONINGHAM
NORWICH NR9 5AP
T: 01223 845522
e: cambridge@pre-construct.com

PCA WARWICK
2 PLEISTOWES BARN
HEREWAY LANE
BARFORD, WARWICK
WARWICKSHIRE CV35 8DD **t:**
01926 485490
e: warwick@pre-construct.com

PCA WINCHESTER
5 RED DEER COURT, ELM ROAD
WINCHESTER
HAMPSHIRE SO22 5LX
t: 01962 849 549
e: winchester@pre-construct.com