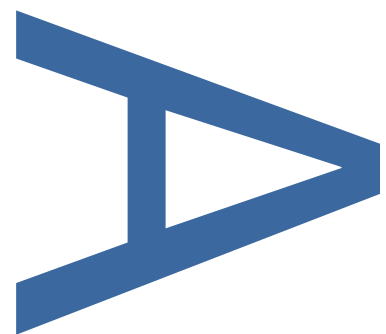
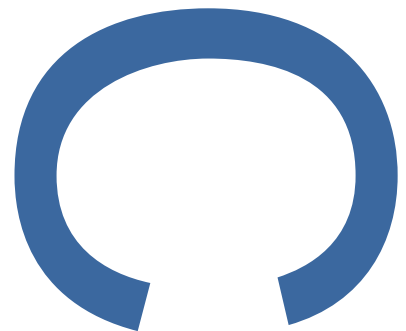


**THE TOWER OF LONDON: AN  
ARCHAEOLOGICAL WATCHING  
BRIEF OF THE MIDDLE TOWER  
COVERED ENTRY PROJECT**

**LOCAL PLANNING AUTHORITY: TOWER  
HAMLETS**

**SITE CODE: TOL174**

**AUGUST 2018**



**PRE-CONSTRUCT ARCHAEOLOGY**

## DOCUMENT VERIFICATION

### The Tower of London: Middle Tower Covered Entry Project

#### AN ARCHAEOLOGICAL WATCHING BRIEF

#### Quality Control

Pre-Construct Archaeology Limited Project Code		K5706	
		R13371	
	Name	Signature	Date
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Revision No.	Date	Checked	Approved

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# THE TOWER OF LONDON

## AN ARCHAEOLOGICAL WATCHING BRIEF OF THE MIDDLE TOWER COVERED ENTRY PROJECT

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**Site Code:** ToL174

**Central National Grid Reference:** TQ 33489 80508

**Written by:** Chloe Sinclair  
Pre-Construct Archaeology Limited, August 2018

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**Commissioning Client:** Historic Royal Palaces

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**August 2018**

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## **1 INTRODUCTION**

- 1.1.1 An archaeological watching brief was conducted by Pre-Construct Archaeology Ltd at the Tower of London, London Borough of Tower Hamlets (Figure 1). The watching brief monitored the excavation of a five test pits required for the installation of two new entrance kiosks and their counterweights, along the north and south edges of the middle tower entryway. The investigation aimed to locate the underlying 13th century defensive structure, and any other area of archaeological significance that may be disturbed by the proposed works.
- 1.1.2 The Tower of London is a World Heritage Site and a Scheduled Ancient Monument (Greater London No. 10).
- 1.1.3 The investigation was conducted between the 13th and 14th of August 2018, and was commissioned by Historic Royal Palaces. The watching brief was supervised by Chloe Sinclair, and managed by Chris Mayo, both of Pre-Construct Archaeology Limited. The archaeological works were inspected and monitored Jo Thwaites of Historic Royal Palaces, Jane Sidell, Inspector of Ancient Monuments for Historic England, and Agnieszka Sadraei, Historic Buildings Curator for the Tower of London.
- 1.1.4 The watching brief monitored the hand excavation of the trial pits down to a maximum depth of 0.55m below ground level.
- 1.1.5 No remains of the 13th century structure were revealed. A layer of silty hardcore believed to be directly overlying the latter was noted in Test Pit 2 however. Two pits (1 and 2) consisted almost entirely of a modern concrete slab, while the other three (3, 4, and 5) revealed upper and lower layers of made ground with the earliest datable artefact (a clay tobacco pipe bowl) recovered, dating from between 1680-1710.
- 1.1.6 The site is centred at National Grid Reference TQ33489 80508.
- 1.1.7 The site was allocated the unique site code TOL 174.
- 1.1.8 The completed archive comprising written and photographic records from the excavation will be deposited at the Historic Royal Palaces store at Hampton Court Palace.

## **2 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND**

- 2.1.1 The following summary was provided by Historic Royal Palaces in their Written Scheme of Investigation for the Middle Tower Covered Entry Project (Sadraei, 2018).
- 2.1.2 The Middle Tower is a thirteenth century construction, built in 1275 to 1281 as part of Edward I's extensive building works at the Tower. The cost of which amounted to approximately £21,000. Edward I's building works focused on the western defences of the Tower, not only constructing a western entrance, but also an outer ward and water-gate (better known as Traitors Gate).
- 2.1.3 The Middle Tower is the first of two great gatehouses that visitors pass on their way into the Tower of London, the second being the Byward Tower, located inside the moat on the line of the Outer Curtain Wall. Both Towers were constructed around the same time and are similar in appearance, though the latter is slightly larger in size. The purpose of the Middle Towers construction was to transform the 'metropolitan fortress into a concentric castle' and provide a much simpler land entrance. Before the construction of the Lion, Middle and Byward Towers, the main entrance into the Tower of London from the city may have been along Great Tower Street, which is aligned directly on the Beauchamp Tower. It is difficult to envisage where else the main gateway could have been at this time.
- 2.1.4 According to building accounts the Middle Tower did not receive many major works during the sixteenth century. Although a comprehensive survey of 1532, detailing all building works needed around the Tower of London does briefly reference the Middle Tower, stating that both the Middle and Bloody towers required new roofs. In addition two new bridges were needed under the Middle Tower coming into the Tower of London. However there is little evidence that suggests these works were carried out and the authorship of the survey is also unknown. Furthermore, very few accounts exist from Elizabeth I's reign (1558-1603) on the work conducted at the Middle Tower. However there is a reference that stated 'the poor repair of the leads over this gatehouse'. In addition the only building accounts for the Middle Tower during Elizabeth I's reign state that the windows in the lower room were bricked up. Therefore it can be assumed that no other major building works or alterations were done during this time.
- 2.1.5 Confusingly in the building accounts of the sixteenth century, the Middle Tower is referred to as 'St or Saint Martin's Tower', not be mistaken with the Martin Tower, located to the north-east corner of the Inner Curtain Wall. However surprisingly, on the 1597 Haiward and Gascoyne plan, the Middle Tower is described with its modern name.

- 2.1.6 The next set of extensive works took place in the early eighteenth century, mainly conducted by Robert Churchill. Due to the deteriorating condition of the Middle Tower in 1715, a number of faulty battlements were removed in an effort to stabilise the building and provide some level of safety. However this process did not improve the state of the Middle Tower in the long term, as two years later more serious measures were needed to restore the condition of the building. Between the years 1717 and 1719, a large amount of the structure was worked on. The entire medieval timber framing to the rear of the gate tower was taken out. In addition much of the outer façade is of the eighteenth century, with the exterior walls being partly refaced with Portland stone. Almost all the windows of the Middle Tower were replaced with large round-headed windows. Furthermore, the arms of George I, carved by Thomas Green and costing £36 were inserted over the gateway.
- 2.1.7 The exterior purpose of the Middle Tower was to fortify the Tower and provide an easier entrance. Evidence suggests that the interior rooms of the Middle Tower were being used as accommodation for the Usher of the Exchange in the early sixteenth century. Though later in the same century the building was being used to accommodate the Porter of the Mint. This was most likely due to his responsibilities to the Royal Mints incomings and outgoings. However by the early eighteenth century the Middle Tower was the official residence of the Ordnance Barrack Master. By the mid-nineteenth century it seems that the rooms in the Middle Tower were being used as accommodation for Warders, according to War Office correspondence from 1853. This suggests, the Barrack Master was in control of the officers guard room, and was able to permit the Warder in residence to use this room in an appropriate manner, so that the room could be easily reinstated as an officer's guard room, whenever needed. This clearly shows the Middle Tower has housed many different people, most of which with important roles and responsibilities.
- 2.1.8 The Middle Tower drawbridge forms a short section of the western entrance defences and although the Lion Tower area has been extensively researched and excavated, little attention has been paid to this structure.
- 2.1.9 We know that the drawbridge was constructed as part of Edward I's systems of defence and provided access from the Lion Tower, i.e. the large semi-circular barbican through the Middle Tower to the causeway and Byward Tower. It incorporated timber drawbridge whose stone chases for counterweights still survive in the pit.
- 2.1.10 Accounts of 1334-5 record purchase of new timber for rebuilding the bridges of the Lion Tower, Byward and Middle Towers rebuilt.
- 2.1.11 In 1532, under Thomas Cromwell, it was proposed that the towers and bridges at the Eastern and Western Approaches were renewed but in the end only cosmetic work was carried out to tidy up the entrance in preparation for the coronation of Anne Boleyn.
- 2.1.12 By 1570 the moat was accumulating earth, rubbish and ordure from various houses, garden plots etc situated close to its counterscarp and a 16th-century survey of the Tower and its environs reveals that the Moat and the Western Approach to the Tower were in a greatly neglected state.

- 2.1.13 In 1581-2 accounts from the period of the reign of Elizabeth I record payments 'for makinge two new bridges for Cairr by the Lyonns house and the Towre gate'.
- 2.1.14 Hayward & Gascoyne's survey plan of 1597 (copy of 1741, made for Society of Antiquaries) testifies to the continuous encroachment and proliferation of houses, sheds, gardens on Tower Hill, around the counterscarp of the moat and particularly at the western and eastern ends of the Tower Wharf.
- 2.1.15 In 1666 the encroaching structures were summarily demolished in order to protect the Tower during the Great Fire.

### **3 SUMMARY OF RESULTS**

#### **Test Pit 1**

- 3.1.1 Test Pit 1 was located approximately 1.00m to the west of the northern kiosk of the middle tower entry area, measuring 0.70m north-south, and 1.10m east-west (Figures 2 and 3).
- 3.1.2 Upon removal of the paving stones, a 0.10m layer of fine yellow bedding sand was seen to overly a concrete slab.
- 3.1.3 After the removal of 0.05m of the slab, the trench was abandoned in favour of a location to the east with a higher potential for locating the 13th century drawbridge structure.

#### **Test Pit 2**

- 3.1.4 Test Pit 2 was located directly abutting the entrance to the northern kiosk of the middle tower entry measuring 1.10m north-south, and 0.90m east-west (Figures 2 and 3).
- 3.1.5 After removal of the paving stones a thin layer of fine yellow bedding sand was seen to overlay a concrete slab.
- 3.1.6 The pit was excavated to a depth of 4.26m OD, with two small sondages broken out to depths of 4.19m OD in the south and 4.07m OD in the north.
- 3.1.7 The sondages measured 0.20m x 0.16m in the south-east corner, and 0.30m x 0.30m along the northern edge and were investigated in an attempt to locate the underlying structure within the time constraints of visitor hours.
- 3.1.8 The sondage along the northern edge revealed a silty layer of hardcore at 4.07m OD, believed to be the bedding layer for the current slab, and likely overlying the 13th century wall.
- 3.1.9 Although the 13th century structure was not recorded, the maximum depth for the proposed works had been reached; as such no further excavation was conducted in this trench.





*Plate 1: Test pit 2, looking north.*

### **Test Pit 3**

- 3.1.10 Test Pit 3 was located approximately 1.20m east of the southern kiosk along the middle tower entry measuring 0.80m north-south, and 0.60m east-west, excavated to a depth of 3.76m OD.
- 3.1.11 Two layers of made ground were encountered; a mid brown sandy silt with lenses of yellow sand [2] to a depth of 4.21m OD and a dark brown sandy silt [3] excavated to a depth of 3.76m OD.
- 3.1.12 A fragment of clay tobacco pipe dating from 1680-1710 (pers.comm. Chris Jarret), a piece of burnt slate dating from 1700-1900 (pers.comm. Amparo Valcarcel), and a cattle scapula fragment (pers.comm. Karen Deighton) were recovered from the lower layer of made ground [3].
- 3.1.13 Having not located the defensive structure, the pit was extended to the north requiring the removal of the coble setts [7].
- 3.1.14 The northern extension involved the further removal of the layers of made ground ([2] and [3]) until the concrete base of the modern entryway paving was reached, 0.20m to the north of the pit edge, beneath the in situ curb stone. No earlier deposits were observed.



*Plate 2: Test Pit 3, looking north.*

#### **Test Pit 4**

- 3.1.15 Test Pit 4 was located to the west of the southern kiosk along the middle tower entry, measuring 0.88m north-south and 0.68m east west, excavated to a depth of 3.91m OD.
- 3.1.16 Two layers of made ground comparable to those in pit 3 were encountered; a mid brown sandy silt to a depth of 4.19m OD [4], and a dark brown sandy silt with lenses of fine yellow sand excavated to a depth of 3.91m OD [5].
- 3.1.17 A post-medieval peg tile dating from 1800-1900 was recovered from the lower layer of made ground [5].
- 3.1.18 A manhole cover and its concrete foundation, believed to be related to the modern drainage system, was uncovered in the eastern portion of the pit at a height of 4.19m OD and 4.07m OD respectively.
- 3.1.19 Three cattle long bone and scapula fragments, as well as one sheep scapula fragment was recovered from the lower layer of made ground [5].
- 3.1.20 A half penny dating to 1922 (George V) was also retained from layer [5] (pers.comm. Mairit Gaimster).
- 3.1.21 The pit was extended to the north requiring the removal of the cobble setts [6] and excavated a further 0.15m to the north beneath the in situ curb stone, revealing the concrete foundation for the modern paving.



*Plate 3: Test Pit 4, looking north.*

#### **Test Pit 5**

- 3.1.22 Test Pit 5 was located directly to the east of the southern kiosk along the middle tower entry measuring 0.42m north-south and 0.52m east-west, excavated to a maximum depth of 3.89m OD.
- 3.1.23 A mid brown sandy silt layer of made ground [8] was excavated to a depth of 4.31m OD. This overlay a dark brown sandy silt layer of made ground [9] which continued beyond the lower limit of excavation.
- 3.1.24 No finds were recovered from pit five.
- 3.1.25 A 0.04m wide modern service cable was uncovered running east-west across the upper portion of the pit and was not disturbed.



*Plate 5: Test Pit 5, Looking west.*



## **4 CONCLUSIONS**

- 4.1.1 The watching brief revealed two layers of post-medieval made ground abutting modern concrete foundations in the southern three trial pits (TPs 3, 4 and 5), and a modern concrete slab in the northern trial pits (TPs 1 and 2).
- 4.1.2 In none of the pits was the 13th century defensive structure directly observed, although it was likely present just beneath the hardcore found at the base of pit two. The earliest date for any of the deposits recorded was 17th to 18th century. This date is approximate and likely more recent as it is based on the recovery of a single clay tobacco pipe, which may have been residual.



*Plate 6: Overview of site, looking to east*

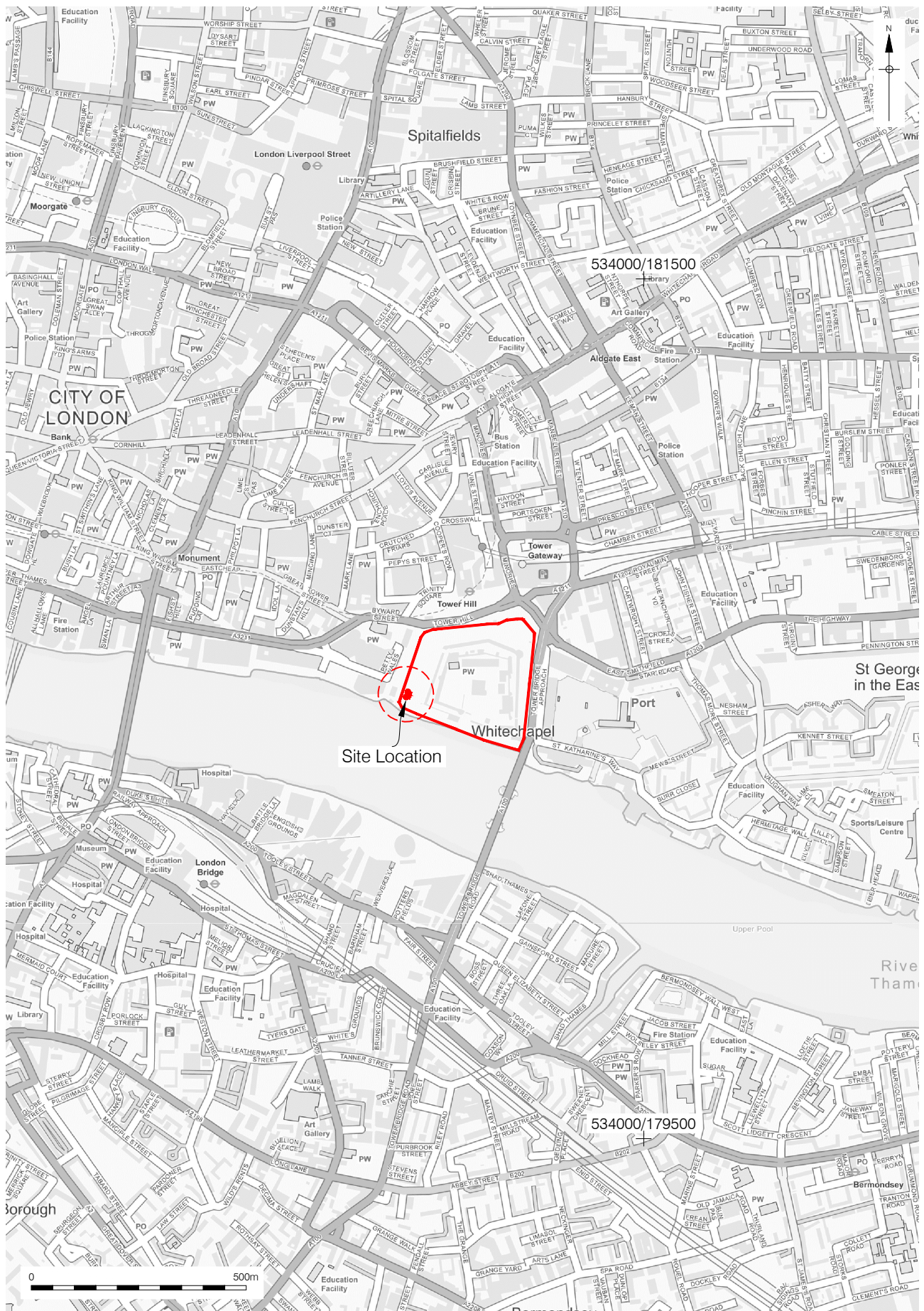
## **5 ACKNOWLEDGMENTS**

- 5.1.1 Pre-Construct Archaeology Ltd would like to thank Agnieszka Sadraei of Historic Royal Palaces for commissioning this project and both Jo Thwaites of Historic Royal Palaces, and Jane Sidell, Inspector of Ancient Monuments for Historic England for monitoring it. The author would like to thank Chris Mayo for his project management and editing and Mick Steel for the illustrations.

## **6 BIBLIOGRAPHY**

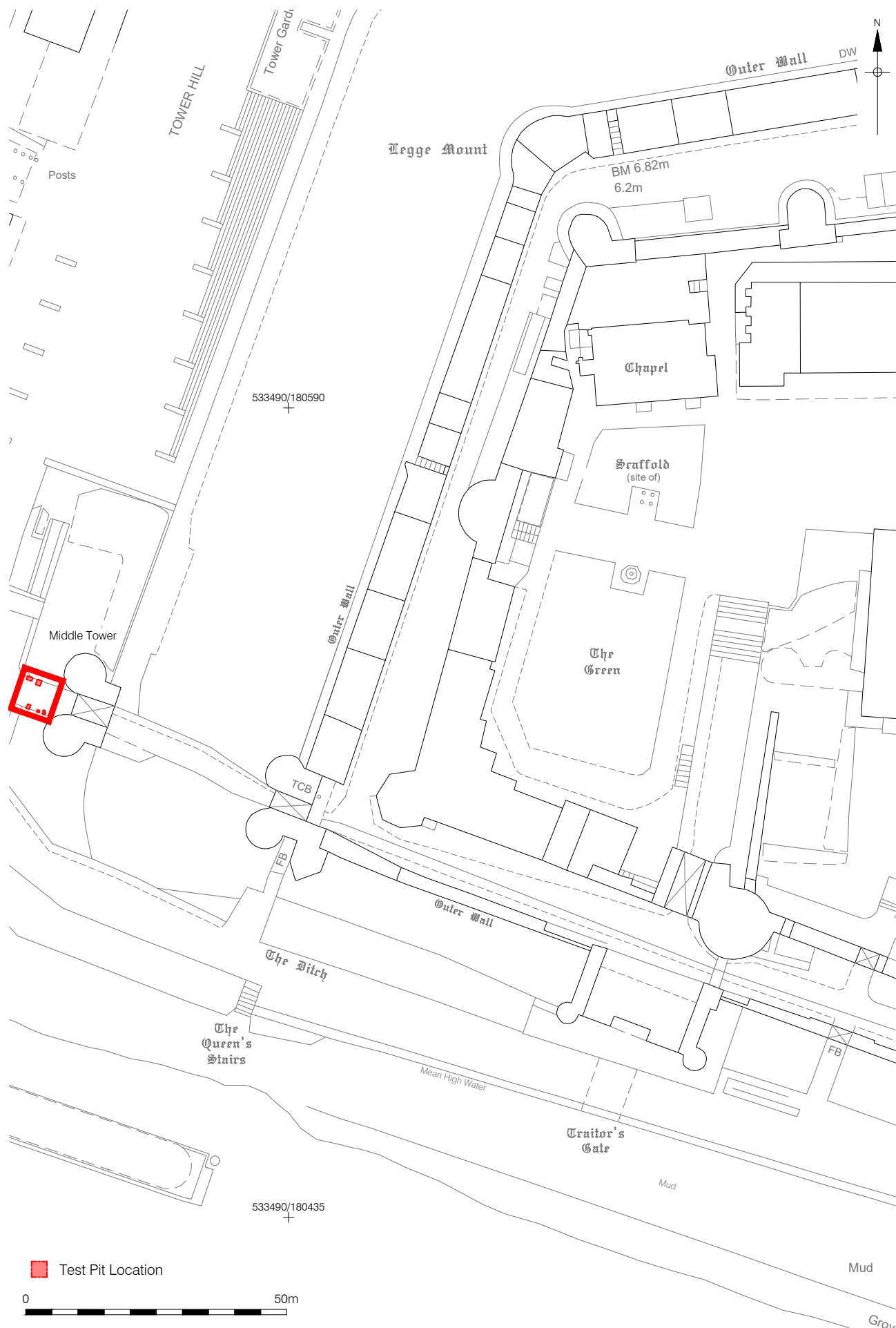
Sadraei, A. 2018 'The Middle Tower Covered Entry Project' *Written Scheme of Investigation*.





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Figure 1  
 Site Location  
 1:12,500 at A4

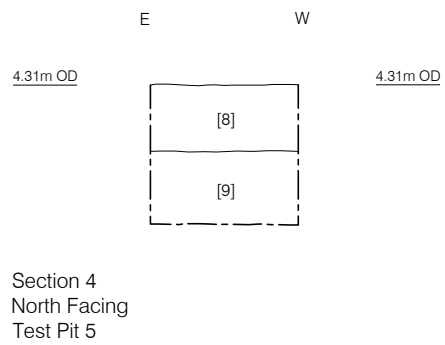
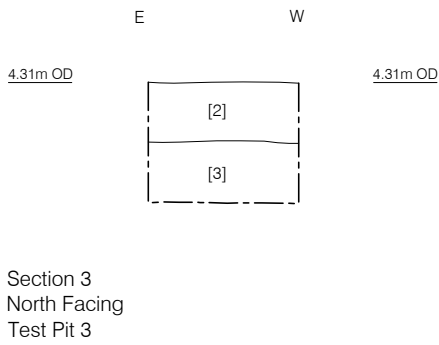
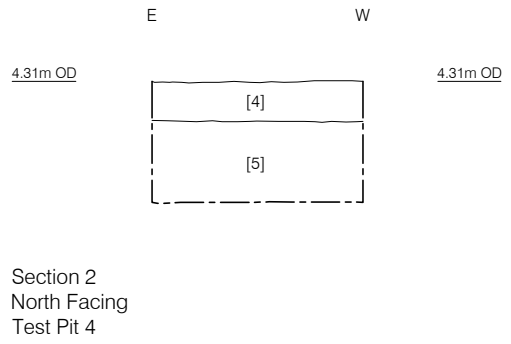
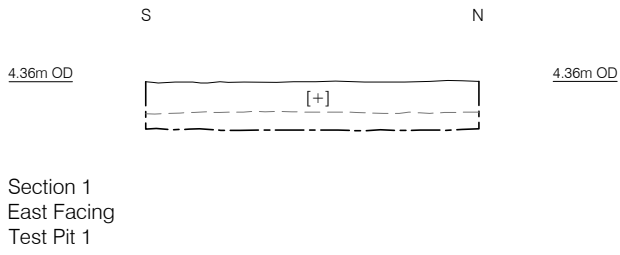






Background mapping supplied by Glanville for HRP © Nov 2012  
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Figure 3  
 Trench Plan  
 1:40 at A4



## APPENDIX 1: CONTEXT INDEX

Context	Type	Pit	Interpretation	Thickness (M)	Highest Level (M OD)	Lowest Level (M OD)
1	Layer	1	Levelling layer	0.1	4.36	4.26
2	Layer	3	Made ground	0.2	4.31	4.11
3	Layer	3	Made ground		4.11	NFE
4	Layer	4	made ground	0.13	4.31	4.18
5	Layer	4	Made ground	0.32	4.18	NFE
6	Masonry	4	Cobbled walkway		4.33	NFE
7	Masonry	4	Cobbled walkway, same as [6]		4.33	NFE
8	Layer	5	Made ground	0.22	4.31	4.09
9	Layer	5	Made ground		4.09	NFE

## **APPENDIX 2: SPECIALIST REPORT**

### **Spot dates Building Material, Tower of London Middle Tower, Tower Hamlets (TOL174)**

*Amparo Valcarcel, August 2018*

<b>Context</b>	<b>Fabric</b>	<b>Form</b>	<b>Size</b>	<b>Date range of material</b>		<b>Latest dated material</b>		<b>Spot date</b>	<b>Spot date with mortar</b>
3	2276;3115	Post-medieval peg tiles; burnt slate	3	300	1950	300	1950	1700-1900	No mortar
5	2276;2581	Post-medieval peg tile; drains	3	1480	1950	1700	1950	1800-1900	No mortar

## APPENDIX 3: OASIS REPORT FORM

OASIS ID: preconst1-326037

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### Project details

Project name	Middle Tower Entry Project
Short description of the project	An archaeological watching brief was conducted by Pre-Construct Archaeology Ltd at the Tower of London, London Borough of Tower Hamlets. The watching brief monitored the excavation of a five test pits required for the installation of two new entrance kiosks and their counterweights, along the north and south edges of the middle tower entryway. The investigation aimed to locate the underlying 13th century defensive structure, and any other area of archaeological significance that may be disturbed by the proposed works. The watching brief revealed two layers of post-medieval made ground abutting modern concrete foundation in the southern three test pits, and a modern concrete slab in the northern two. In none of the pits was the 13th century defensive structure directly observed, though it was likely present just beneath the hard core found at the base of pit two. The earliest date for any of the deposits recorded was 17th to 18th century. This date is approximate and likely more recent as it is based on the recovery of a single clay tobacco pipe, which may have been residual.
Project dates	Start: 13-08-2018 End: 14-08-2018
Previous/future work	Yes / Not known
Any associated project reference codes	TOL174 - Sitecode
Type of project	Recording project
Site status	Area of Archaeological Importance (AAI)
Current Land use	Other 15 - Other
Monument type	LAYER Post Medieval
Monument type	LAYER Post Medieval
Monument type	MASONRY Post Medieval
Significant Finds	CLAY TOBACCO PIPE Post Medieval
Significant Finds	CERAMIC Post Medieval
Significant Finds	COIN Post Medieval

---

### Project location

Country	England
Site location	GREATER LONDON TOWER HAMLETS TOWER HAMLETS Middle Tower Entry Project
Postcode	EC3N 4AB

Study area 0 Square metres  
Site coordinates TQ 33489 80508 51.507215878875 -0.076309663399 51 30 25 N 000 04 34 W Point  
Lat/Long Datum Unknown  
Height OD / Depth Min: 3.76m Max: 4.31m

---

#### **Project creators**

Name of Historic Royal Palaces  
Organisation

Project brief Historic Royal Palaces  
originator

Project design Historic Royal Palaces  
originator

Project Chris Mayo  
director/manager

Project supervisor Chloe Sinclair

Type of Historic Royal Palaces  
sponsor/funding  
body

---

#### **Project archives**

Physical Archive Historic Royal Palaces  
recipient

Physical Contents "Animal Bones","other"

Digital Archive PCA  
recipient

Digital Media "Database","Images raster / digital photography","Text"  
available

Paper Archive PCA  
recipient

Paper Media "Context sheet","Drawing","Photograph","Plan","Unpublished Text","Notebook - Excavation',' Research','  
available General Notes"

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#### **Project**

##### **bibliography 1**

Grey literature (unpublished document/manuscript)

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Author(s)/Editor(s) Sinclair, C.

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