

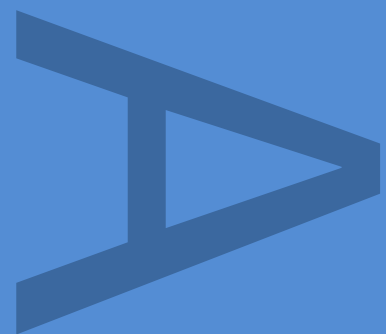
**THE MIDDLE DRAWBRIDGE,
TOWER OF LONDON**

**AN ARCHAEOLOGICAL
INVESTIGATION**

PCA REPORT NO: 11339

SITE CODE: ToL125

DECEMBER 2012





PRE-CONSTRUCT ARCHAEOLOGY

THE MIDDLE DRAWBRIDGE, TOWER OF LONDON
 AN ARCHAEOLOGICAL INVESTIGATION

Quality Control

Pre-Construct Archaeology Ltd	
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**THE MIDDLE DRAWBRIDGE, TOWER OF LONDON
AN ARCHAEOLOGICAL INVESTIGATION**

Site Code: ToL125

Central National Grid Reference: TQ33578048

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Pre-Construct Archaeology Limited, December 2012

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December 2012

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PCA Report No: R11339

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1 ABSTRACT

- 1.1 This report details the results of an archaeological investigation at the Tower of London by Pre-Construct Archaeology Ltd. The work was conducted in two phases: the first on the 21st and 22nd of June 2012 and the second on the 17th and 18th of July 2012.
- 1.2 The work was commissioned by Historic Royal Palaces and comprised the excavation and monitoring of test pits to inform on ground conditions in advance of the Middle Drawbridge Project.
- 1.3 The Middle Drawbridge Project is designed to enable the replacement of the Middle Drawbridge at the Tower of London, and re-establish a working drawbridge in its place. The first phase of the watching brief monitored and recorded the excavation of three foundation test pits by a ground crew. In the second phase a slot trench which connected test pits 2 and 3 was excavated and recorded by archaeologists from Pre-Construct Archaeology Ltd.
- 1.4 The earliest deposits identified were made ground / levelling material which dates from the 19th century, which was below a brick-built foundation considered to relate to the 1856-build of the drawbridge. Further made ground levelling material sealed the foundation.
- 1.5 Next in the sequence were three mass concrete foundations for the masonry and timber piers of the current Middle Drawbridge, which was built in 1915. These were found beneath further made ground and topsoil horizons.
- 1.6 In all interventions the groundworks did not extend deep enough to threaten any significant archaeological deposits or features. All masonry remains were recorded and left in situ. Natural strata was not observed in any test pit.

2 INTRODUCTION

- 2.1 An archaeological investigation was conducted by Pre-Construct Archaeology Ltd at the Tower of London, London Borough of Tower Hamlets (Figure 1) during investigations associated with the Middle Drawbridge Project. A first phase watching brief monitored the excavation of three test pits to examine the foundations of the existing drawbridge, whilst the second phase saw archaeologists from PCA excavate a connecting trench between two test-pits to inform on ground conditions (Figure 2).
- 2.2 The first phase of work was undertaken on the 21st and 22nd June 2012 and the second phase was on the 17th and 18th of July 2012. The work followed a 'Brief' prepared by the Curator of the Tower of London, Jane Spooner of Historic Royal Palaces (2012b). The principle objectives of the work, as defined in that document, were to:
- Possible traces of previous foundations, truncated walls, early paving and earlier features, in situ or visible within the trenches or excavated foundation test pits
 - The remains of pottery and other finds deposited in the trenches.
- 2.3 The site comprises an area in the southern moat, to the west of the Middle Drawbridge, situated on relatively level ground, lying at a height of 1.94m AOD. The central National Grid Reference of the site is TQ33578048.
- 2.4 The first phase watching brief was supervised by Sarah Barrowman, the second phase watching brief was supervised by Guy Seddon, and both were managed by Chris Mayo, of Pre-Construct Archaeology Limited. The archaeological works were inspected and monitored by Jane Spooner.
- 2.5 The Tower of London is a World Heritage Site and a Scheduled Ancient Monument (Greater London No. 10). Scheduled Monument Consent for the investigative work was obtained by Historic Royal Palaces.
- 2.6 The site was given the unique site code ToL125 by the Curator of the Tower of London, and all site archive material was labelled with that code. The completed archive comprising written and photographic records from the excavation will be deposited at the Historic Royal Palaces store at the Tower of London.

3 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

3.1 Roman

3.1.1 During the Early Middle Roman Period (c.200 AD) *Londinium* was protected by a defensive wall, and the site of the future Tower of London lay within the southeast corner of the Roman city defences (Parnell. 1993, 13-16).

3.2 Medieval

3.2.1 With the arrival of the Normans, William The Conqueror (1066-1087) consolidated his authority over Saxon London by establishing a motte and bailey castle utilising the surviving Roman city walls to the south and east and adding defensive ditches to the north and west. During the last decade of William's rule, the building that was to form the core of the Tower of London, the White Tower, was constructed (Parnell. 1993, 17-22).

3.2.2 The first significant expansion of the defences of the Tower dates to the end of the 12th century, in the reign of Richard I (1157-1199). During this period the fortifications extended west to encompass the positions later occupied by the Bell and Beauchamp Towers (12th and 13th centuries respectively).

3.2.3 During the reign of Henry III (1216-1272), the Tower of London underwent extensive alterations and expansions (Parnell. 1979, 322).

3.3 Post-Medieval

3.3.1 In the post-medieval period, specifically the late 17th century, the Tower began to be used as an armoury, and as a result underwent numerous alterations to adapt it from its medieval form. By the 19th century, as architectural trends reverted back towards those of the medieval period, many of the post-medieval constructions were removed to reinstate the earlier vistas.

3.3.2 The Tower suffered damage during World War II which necessitated its restoration. It is currently one of the most popular tourist attractions in the country.

3.4 Site Specific

3.4.1 The Brief prepared by the Curator to the Tower of London for the archaeological work (Spooner 2012b) included the following statement regarding the Middle Drawbridge:

- *The Middle Drawbridge entry was created in 1834 to allow munitions to be brought into the basement of the White Tower from the wharf, along a buried tramway (Parnell, 2009, 53). A plan and section drawing of 1834 of the ammunition tunnel and the route of the tram rails demonstrates the original drawbridge design. The bridge spans the moat supported by a single large column, with a raising drawbridge, or platform, at its northern end. It had crossed timber balustrades protecting the sides of the immovable portion of the bridge. A historic photograph from the 1880's demonstrates that the balustrades of the Middle Drawbridge were of the same design as those built later on the Eastern drawbridge, which was re-built after 1856. The three arched brick supports for the Eastern Drawbridge differ from the single stone pier supporting the original middle bridge. The battlemented high gateway was rebuilt*

in the 1870's by surveyor John Taylor, who also crenellated most of the Tower curtain walls. The dressing of the gateway appear to be in Portland stone, which differs from the stone used elsewhere in the outer curtain wall for crenellation copings and quoins.

- The present bridge was finally built in 1915, to a design in an undated Ministry of Works proposal drawing (Historic Royal Palaces Plan Archive drawing: TOL 1932). This drawing shows that this early twentieth century bridge was also originally a rising drawbridge, and the 19th century counterweight pits it used still survive underneath, recessed in the outer curtain wall. In 1978 the rising drawbridge element was again found troublesome, removed and a permanently fixed series of joints and planking was installed, as well as extended handrails to match the 1915 work. Pre-cast and pre-stressed concrete bridge beams were installed in 1978 to remove the structural loading from the timber elements of the bridge (PSA drawing XB1/1 dated June 1977repr. in Philipou and Dixon, 1986). In 1986, the timber arches, trestles, beams and parapets of the bridge were recommended for preservative treatment, which was presumably carried out (Philipou and Dixon, 1986, Summary). All timber used in the construction of the bridge is of oak, which is painted black. The present Middle Drawbridge was constructed long after the Duke of Wellington had drained the moat in 1843. The current moat surface is post 1843 backfill.
- Between 1995-7, Oxford Archaeology excavated selected locations in Tower Moat, which included the bases of the moat revetment walls, and the foundations of the Middle Drawbridge. Two pits (t43 and t44) were dug in 1996 against the east side of the Middle drawbridge to look at its foundations. Trench 43 was dug directly to the east of the current bridges stone pier....A concrete base approximately 1m deep was observed, which extended c 0.2-0.3m east from the stone pier. Trench 44 was dug to the south east, adjacent to a timber pier of the current bridge....and the brick and mortar foundation for the previous bridge on the site was observed, beneath the concrete foundation for the current bridge.

4 METHODOLOGY

- 4.1 During the initial phase of the Watching Brief three test pits were excavated at the western base of the drawbridge supports (Figure 2). These extended to a depth of 1.20m and were labelled TP1, TP2a and TP3a.
- 4.2 The test pits were excavated by hand by contractors appointed by HRP, and were monitored closely by the attending archaeologist. Within each location spoil was kept separate to allow correlation of artefacts to spits.
- 4.3 The second phase consisted of the excavation of a slot trench TP4 which linked TP2a and TP3a. This was undertaken by hand by archaeologists from PCA, and was dug to a depth of 1.20m.
- 4.4 Following all excavations relevant faces of each trench were cleaned using appropriate hand tools, and were recorded both in plan (at 1:20) and in section (at 1:10). Descriptions of all deposits were recorded on pro-forma sheets. Photographs were taken as appropriate. The trenches were located by measuring to nearby fixed points which could be correlated to OS map detail.
- 4.5 Heights above Ordnance Datum used in this report were calculated from an OS benchmark (value 5.34m OD) at NGR 533664,180459. A temporary benchmark was established near to the Middle Drawbridge with value 2.04m OD.

5 ARCHAEOLOGICAL PHASE DISCUSSION

5.1 Phase 1: Backfill of Pre-1856 Moat

- 5.1.1 The earliest deposit encountered during the excavations was layer [18] in TP4. It was mid-reddish brown sandy clay with occasional inclusions of small sub-rounded and sub-angular stones, encountered at 1.30m AOD with a thickness of over 0.47m. It was overlain by layer [17], mid-greyish brown sandy clay which was 0.14m thick, and was in turn sealed by layer [16], dark greyish brown sandy clay with a thickness of 0.20m. Layers [17] and [16] were also seen in TP1, where they were numbered as contexts [5] and [4] respectively. Both layers in TP1 produced pottery and clay tobacco pipe (CTP) dating from the 19th century.
- 5.1.2 These layers are considered to represent the in-filling and levelling-off of the moat in this location at some point before the rebuild of the Middle Drawbridge in 1856 (Figure 4; Plates 3 and 5).

5.2 Phase 2: 1856 Bridge

- 5.2.1 Brickwork [12] was seen in TPs 3A and 4 (Figures 3 and 4; Plates 3-5). It measured 1.32m north-south at base and stepped up in a ziggurat fashion so that the upper surface of the pier was 0.80m north-south. It was at least 0.58m high at an upper elevation of 1.41m OD; its width was unseen. It was constructed from frogged red bricks laid in header bond.
- 5.2.2 The masonry is considered to be the remains of the southernmost foundation constructed to support the 1856 bridge pier. The proposed drawing for the bridge (Spooner 2012a) shows that the structure was supported on 3 piers or pairs of piers aligned north-south, evenly spaced across the moat. Foundation [12] is centred at approximately 3.2m from the outer face of the moat; the 1856 plan would suggest it should be centred at approximately 3.8m from the bank. Permitting slight inaccuracies in the proposed plan or changes in the dimensions of the moat since the 1800s, these dimensions are considered to be close enough to be the same feature.
- 5.2.3 That no corresponding central pier foundation for the 1856 bridge was found either in TPs 2A or 4 might be due to its removal by necessity for the construction of the 1915 bridge. It is considered that pier foundation [12] escaped demolition owing to it being slightly away from the position of the southernmost pier foundation for the 1925 bridge (seen in TPs 3A and 4, and discussed under Phase 4 below).

5.3 Phase 3: Levelling of 1856 Moat

- 5.3.1 Sealing pier foundation [12] in TPs 3A and 4 was a layer of mid yellowish brown sandy gravel, recorded as contexts [7] and [10]. It was 0.90m thick and was recorded at an upper height of 1.55m OD. It yielded pottery, CTP and glass which date its deposition to the late 19th century.
- 5.3.2 The layer was sealed by another of firmly compacted dark greyish brown sandy silt, recorded as contexts [6] and [9], which contained 19th century pottery, glass and CTP. Layer [6] also contained 2 cattle-sized vertebrae; the fragment of a young cow or veal skull,

and a large cattle distal radius. The layer was recorded at an upper height of 1.89m OD.

- 5.3.3 It is considered that these deposits represent the in-filling and levelling-off of the moat in this location at some point after the 1856 construction and before the building of the current Middle Drawbridge in 1915 (Figure 4).

5.4 Phase 4: 1915 Bridge

- 5.4.1 Cut into layer [6/9] were two construction cuts [14] and [15] containing mass concrete foundations [8] and [11] respectively in TPs 2A, 3A and 4. In TP1 a third cut [13] contained a third concrete foundation [3], truncating layer [4] below.

- 5.4.2 The remains represent the poured concrete foundations for the piers of the current 1915 bridge (Figure 4; Plates 1, 2 4, 5 & 6). The surfaces of the three foundations were recorded at heights 1.75m OD and 1.88m OD. Of only two of the three foundations were full north-south dimensions seen, ranging from 1.25m to 1.3m.

- 5.4.3 The central and southernmost foundations [8] and [11] were similar in terms of their massing, but pier foundation [3] showed differences in its alignment (it sat to the west of the projected line of [8] and [11]) and in that it appeared to be only 0.4m deep, whereas [8] and [11] were excess of 1.2m deep. It is considered that the variation arises from the differing construction of the northernmost pier (being a stone masonry build) from the central and southern piers (which are built of timber).

5.5 Phase 5: Levelling of Moat

- 5.5.1 In TP1 and sealing concrete foundation [3] was a layer [2] of dark grey-brown sandy-silt representing a deposit of made ground / levelling material. It was 0.27m thick and recorded at an upper elevation of 1.75m OD. It contained 19th century glass and CTP.

- 5.5.2 Layer [2] and foundations [8] and [11] in all TPs were sealed by topsoil / turf deposit [1], which was up to 0.3m thick and at surface heights between 1.88m OD and 1.97m OD (Figure 4). The layer yielded pottery, glass, CTP and CBM dating from the late 19th century at the latest, along with a fragment of Portland Stone and some fragmentary faunal remains.

6 INTERPRETATIONS AND CONCLUSIONS

- 6.1 The principle objectives of the archaeological Watching Brief as stipulated in the brief (Spooner 2012b) were to consider:
- Possible traces of previous foundations, truncated walls, early paving and earlier features, in situ or visible within the trenches or excavated foundation test pits
 - The remains of pottery and other finds deposited in the trenches.
- 6.2 The initial project design also proposed to observe and record the removal of one cast iron bearing block and a granite corbel from the drawbridge mechanism at the northern end of the Drawbridge to inform upon its construction and potential reuse, and ensure that it was completed delicately. However, this proposed work was not undertaken.
- 6.3 In no intervention was natural geological strata reached.
- 6.4 The earliest archaeological remains recorded were interpreted as backfill and levelling from the pre-1856 drawbridge structure, observed in TP1 by the northern internal bank of the moat.
- 6.5 A brick-built foundation was seen and left in situ which is considered to represent the southernmost pier foundation for the 1856 bridge. That no corresponding central pier foundation for that bridge was found might be due to its removal by necessity for the construction of the 1915 bridge.
- 6.6 Further made ground and fill material was seen above the brick foundation, which is considered to represent levelling of the moat in the late 19th and early 20th centuries. This material had been truncated for the construction of the poured concrete foundations for the 1915 bridge. A variation was seen between the central / southernmost foundations and the northernmost, in the sense that the former were mass concrete pads extending beyond 1.3m BGL, whilst the latter was shallower (apparently ceasing at approximately 0.62m BGL, approximately 1.36m OD. The variation is surprising given that the pier on that foundation was of solid masonry, compared to timber piers on the other two. Perhaps ground conditions warranted the differing types, or perhaps the load of the masonry pier was considered to be better spread than the timber pier, needing only a shallow foundation. That the foundations of the 1915 bridge were different between the piers is suggested by the Office of Works plan of the structure (Spooner 2012a, page 6).
- 6.7 The above sequence was sealed by further made ground and topsoil.
- 6.8 Artefactual evidence from the interventions was all of post-medieval date, and comprised pottery, glass, CTP and CBM with some faunal material. The finds indicate a deposition date range between the 19th and early 20th centuries (see Appendix 1).
- 6.9 The archive from the site work, comprising written, drawn, photographic and artefactual evidence all identified with unique site code ToL125, will eventually be transferred to the Historic Royal Palaces repository at the Tower of London.

7 ACKNOWLEDGMENTS

- 7.1 Pre-Construct Archaeology Ltd would like to thank Matthew Stafford and Alexandra Attelsey, Conservation Building Surveyors for Historic Royal Palaces at the Tower of London, for commissioning this project and Jane Spooner, also of Historic Royal Palaces, for monitoring it.
- 7.2 The author would like to thank Sarah Barrowman for supervising the first phase of the watching brief, Ireneo Grosso for his help with excavation and recording during the second phase of the watching brief, Chris Mayo for his project management and editing, and Josephine Brown for the illustrations.

8 BIBLIOGRAPHY

Keevill, G. 2004, *The Tower of London Moat*. Historic Royal Palaces, London

Parnell, G. 1993, *The Tower of London*. English Heritage. London.

Spooner, J. 2012a 'Tower of London: Restoration of the Middle Drawbridge: Statement of Significance', HRP unpublished document

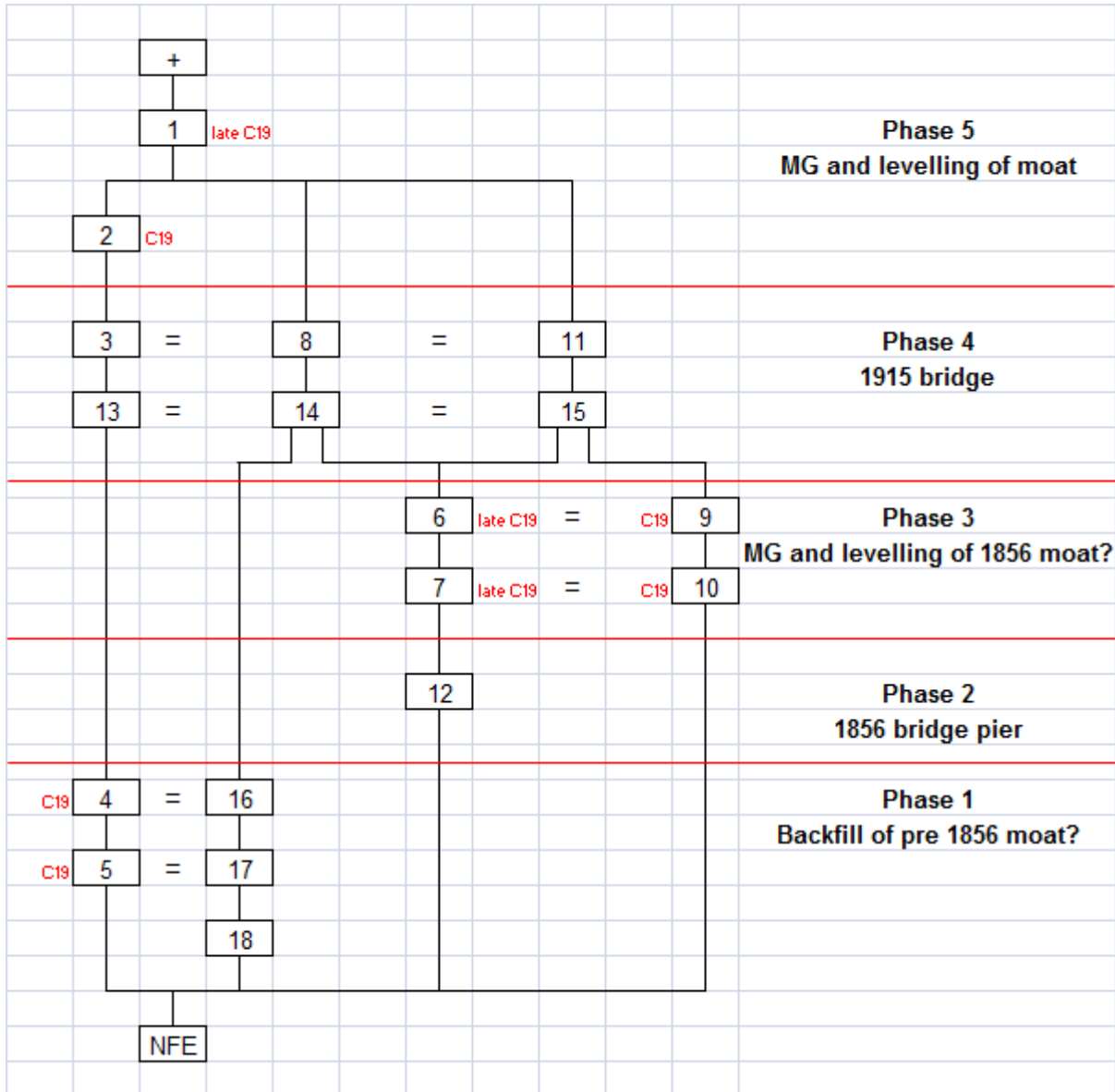
Spooner, J. 2012b 'Tower of London: Middle Drawbridge Investigative Work: Brief For Archaeological Observation And Recording', HRP unpublished document

9 APPENDIX 1: ToL125 CONTEXT INDEX AND SPOT-DATING OF FINDS

Context No.	Trench	Plan	Section / Elevation	Type	Description	Low level	High level	Pottery	CTP	Glass	CBM	Stone	Context Date	Animal Bone	Phase
1	TP 1		1, 2	Deposit	Existing topsoil & turf	1.89m	1.97m	Late C 19th	1730-1780	C19th	Pantiles 1480-1900 (Fabric 2276) & 1630-1800 (Fabric 2586)	Portland stone fragment 1664-1900	Late C 19th	young cow or veal skull fragment; sheep or goat rib, humerus and tibia; cattle longbone pieces	5
2	TP 1	TP 1	1, 2	Deposit	Made Ground/Moat Fill	1.73m	1.75m		1580-1910	1820 +			C19th		5
3	TP 1		1	Masonry	Concrete Foundation for Drawbridge	c.1.75m	c. 1.76m								4
4	TP 1	TP 1	1,2	Deposit	Made Ground/Moat Fill	c. 1.67m	c. 1.67m	1805-1900	1580-1910				C19th		1
5	TP 1	TP 2A	1,2	Deposit	Moat Backfill	c. 1.52m	c. 1.52m	1760-1830	C19th				C19th		1
6	TP 2A	TP 2A	4	Deposit	Made Ground/Moat Fill	c. 1.87m	c. 1.89m	1805-1900 (Late C 19th)	1580-1910 & 1770-1845	C19th			Late C 19th	cattle-sized vertebrae x 2; young cow or veal skull fragment; large cattle distal radius	3
7	TP 2A		3, 4	Deposit	Backfill from drawbridge Construction	1.53m	1.55m	1820-1900 & Late C 19th	1660-1680 & 1820-1860	Late C 18th			Late C 19th	Sheep or goat tibia	3
8	TP 2A		3, 4	Masonry	Concrete Foundation for Drawbridge	1.71m	1.77m								4
9	TP 3A	TP 3A	6	Deposit	Made Ground/Moat Fill	1.73m	1.74m	1805-1900	1770-1845	C19th			C19th		3
10	TP 3A	TP 3A	6	Deposit	Made Ground/Redeposited Clay	1.47m	1.48m		1730-1780	C19th			C19th		3

Context No.	Trench	Plan	Section / Elevation	Type	Description	Low level	High level	Pottery	CTP	Glass	CBM	Stone	Context Date	Animal Bone	Phase
11	TP 3A		5	Masonry	Concrete Foundation for Drawbridge	1.86m	1.88m								4
12	TP 3A & 4	TP 3A and 4	5	Masonry	Stepped Brickwork	1.41m	1.41m								2
13	TP 1	TP 1	1	Cut	Construction Cut for Footing		c. 1.74m								4
14	TP 2A			Cut	Construction Cut for Drawbridge Pier		1.74m								4
15	TP 3A			Cut	Construction Cut for Drawbridge Pier		1.88m								4
16	TP 4		7	Deposit	Moat Backfill	1.65m	1.65m								1
17	TP 4		7	Deposit	Moat Backfill	1.45m	1.45m								1
18	TP 4		7	Deposit	Moat Backfill	1.28m	1.30m								1

10 APPENDIX 2: PHASED SITE MATRIX



11 APPENDIX 3: OASIS REPORT FORM

OASIS ID: preconst1-138602

Project details

Project name	The Middle Drawbridge, Tower of London: An Archaeological Investigation
Short description of the project	The work comprised the excavation and monitoring of test pits to inform on ground conditions in advance of the Middle Drawbridge Project. The Middle Drawbridge Project is designed to enable the replacement of the Middle Drawbridge at the Tower of London, and re-establish a working drawbridge in its place. The first phase of the watching brief monitored and recorded the excavation of three foundation test pits by a ground crew. In the second phase a slot trench which connected test pits 2 and 3 was excavated and recorded by archaeologists from Pre-Construct Archaeology Ltd. The earliest deposits identified were made ground / levelling material which dates from the 19th century, which was below a brick-built foundation considered to relate to the 1856-build of the drawbridge. Further made ground levelling material sealed the foundation. Next in the sequence were three mass concrete foundations for the masonry and timber piers of the current Middle Drawbridge, which was built in 1915. These were found beneath further made ground and topsoil horizons. In all interventions the groundworks did not extend deep enough to threaten any significant archaeological deposits or features. All masonry remains were recorded and left in situ. Natural strata was not observed in any test pit.
Project dates	Start: 21-06-2012 End: 18-07-2012
Previous/future work	Yes / Not known
Any associated project reference codes	ToL125 - Sitecode
Type of project	Recording project
Site status	Scheduled Monument (SM)
Site status	World Heritage Site
Current Land use	Other 8 - Land dedicated to the display of a monument
Monument type	FOUNDATION Post Medieval
Significant Finds	POTTERY Post Medieval
Significant Finds	CTP Post Medieval
Significant Finds	CBM Post Medieval
Significant Finds	GLASS Post Medieval
Significant Finds	ANIMAL BONE Post Medieval
Investigation type	"Test-Pit Survey", "Watching Brief"
Prompt	Scheduled Monument Consent

Project location

Country	England
Site location	GREATER LONDON TOWER HAMLETS TOWER HAMLETS THE MIDDLE DRAWBRIDGE, TOWER OF LONDON
Postcode	EC3N 4AB
Study area	20.00 Square metres
Site coordinates	TQ 3357 8048 51 0 51 30 25 N 000 04 30 W Point
Lat/Long Datum	Unknown

Project creators

Name of Organisation	Pre-Construct Archaeology Limited
Project brief originator	Self (i.e. landowner, developer, etc.)
Project design originator	Historic Royal Palaces
Project director/manager	Chris Mayo
Project supervisor	Sarah Barrowman
Project supervisor	Guy Seddon
Type of sponsor/funding body	Landowner
Name of sponsor/funding body	Historic Royal Palaces

Project archives

Physical Archive recipient	Historic Royal Palaces
Physical Contents	"Animal Bones", "Ceramics", "Glass", "Worked stone/lithics"
Digital Archive recipient	Historic Royal Palaces
Digital Contents	"Stratigraphic"
Digital Media available	"Images raster / digital photography", "Images vector", "Spreadsheets", "Text"
Paper Archive recipient	Historic Royal Palaces
Paper Contents	"Stratigraphic"
Paper Media available	"Context sheet", "Matrices", "Miscellaneous Material", "Plan", "Section", "Unpublished Text"

Project bibliography 1

Publication type	Grey literature (unpublished document/manuscript)
Title	The Middle Drawbridge, Tower of London: An Archaeological Investigation
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Entered on	4 December 2012

12 APPENDIX 4: SITE PHOTOGRAPHS

Plate 1: Test Pit 1, view south, showing concrete foundation [3]. Scale = 0.5m.



Plate 2: Test Pit 2A, view east, showing concrete foundation [8]. Scale = 0.5m.



Plate 3: Test Pit 3A, view north, showing brick foundation [12]. Scale = 0.5m.



Plate 4: Test Pit 4, view north showing brick foundation [12].
Scales = 2.0m and 1.0m.



Plate 5: Test Pit 4, view southeast, showing brick foundation [12] and concrete foundations [8] & [11]. Scale = 2.0m.



Plate 6: View east of Middle Drawbridge, built in 1915.





533590/180470

The Ditch

TP1

TP2a

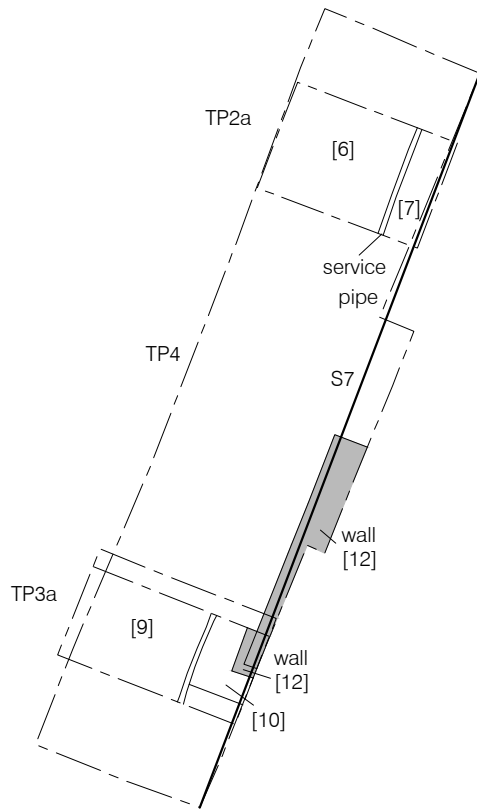
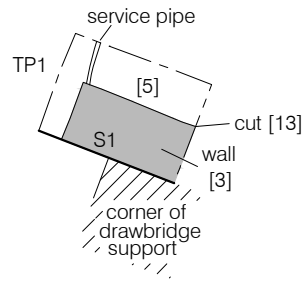
TP4

TP3a

footbridge

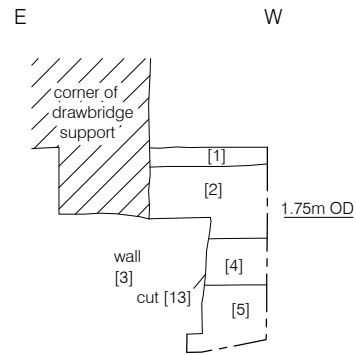
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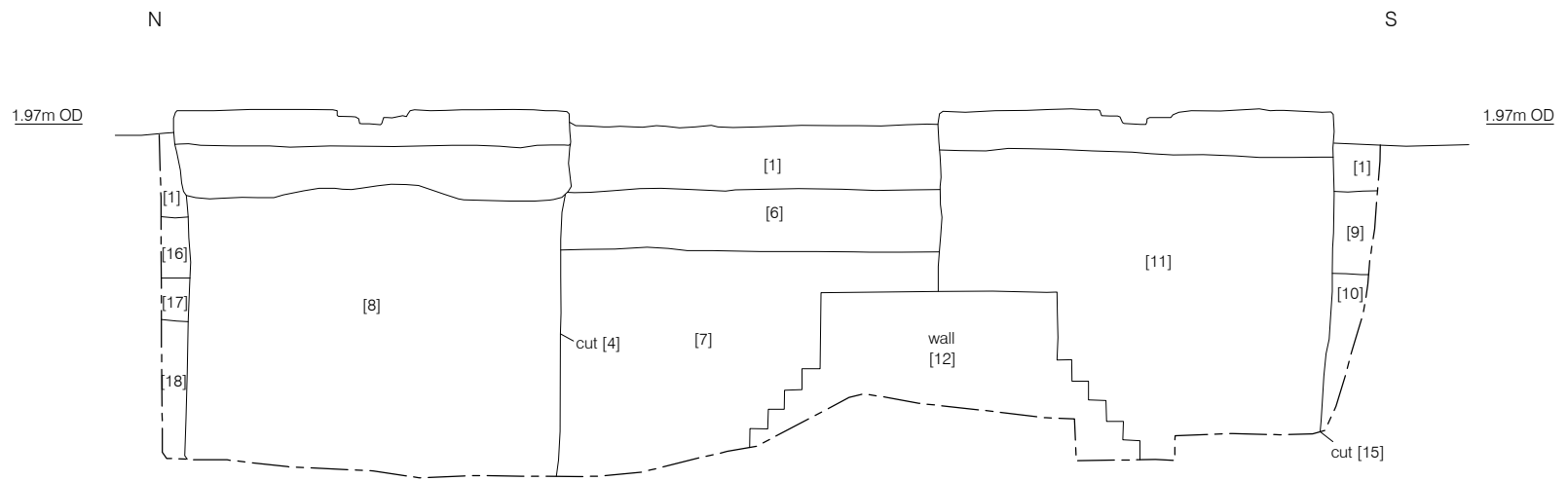


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03/12/12 JB

Figure 3
Plan of Test Pits and features
1:40 at A4



Section 1
North facing, Test Pit 1



Section 7
West facing, Test Pit 4

PCA

PCA SOUTH

UNIT 54
BROCKLEY CROSS BUSINESS CENTRE
96 ENDWELL ROAD
BROCKLEY
LONDON SE4 2PD
TEL: 020 7732 3925 / 020 7639 9091
FAX: 020 7639 9588
EMAIL: info@pre-construct.com

PCA NORTH

UNIT 19A
TURSDALE BUSINESS PARK
DURHAM DH6 5PG
TEL: 0191 377 1111
FAX: 0191 377 0101
EMAIL: info.north@pre-construct.com

PCA CENTRAL

7 GRANTA TERRACE
STAPLEFORD
CAMBRIDGESHIRE CB22 5DL
TEL: 01223 845 522
FAX: 01223 845 522
EMAIL: info.central@pre-construct.com

PCA WEST

BLOCK 4
CHILCOMB HOUSE
CHILCOMB LANE
WINCHESTER
HAMPSHIRE SO23 8RB
TEL: 01962 849 549
EMAIL: info.west@pre-construct.com

PCA MIDLANDS

17-19 KETTERING RD
LITTLE BOWDEN
MARKET HARBOROUGH
LEICESTERSHIRE LE16 8AN
TEL: 01858 468 333
EMAIL: info.midlands@pre-construct.com

