# THE PARADE GROUND / JEWEL HOUSE PROJECT, TOWER OF LONDON

AN ARCHAEOLOGICAL WATCHING BRIEF

PCA REPORT NO: 11197

SITE CODE: TOL121

**MARCH 2012** 

PRE-CONSTRUCT ARCHAEOLOGY







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# AN ARCHAEOLOGICAL WATCHING BRIEF

**Quality Control** 

Pre-Construct Archaeology Ltd	
Project Number	K2695
Report Number	R11197

	Name & Title	Signature	Date
Text Prepared by:	Guy Seddon		March 2012
Graphics	Jennifer		March 2012
Prepared by:	Simonson		
Graphics	Josephine Brown	( Josephine Grann	March 2012
Checked by:		Output gover	
Project Manager	Chris Mayo	-1	March 2012
Sign-off:		$\mathcal{O} = \mathcal{O}$	
		/	

Revision No.	Date	Checked	Approved

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

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### AN ARCHAEOLOGICAL WATCHING BRIEF

Site Code:	TOL121
Central National Grid Reference:	TQ33628059
Written by:	Guy Seddon Pre-Construct Archaeology Limited, March 2012
Project Manager:	Chris Mayo (MIfA)
Commissioning Client:	Historic Royal Palaces

Contractor:	Pre-Construct Archaeology Limited
	Unit 54, Brockley Cross Business Centre
	96 Endwell Road
	Brockley
	London SE4 2PD
Tel:	020 7732 3925
Fax:	020 7732 7896
E-mail:	cmayo@pre-construct.com
Web:	www.pre-construct.com

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# March 2012

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#### 1 ABSTRACT

- 1.1 This report details the results of an archaeological watching brief undertaken at The Tower of London by Pre-Construct Archaeology Ltd between the 13th January and 13th February 2012. The work was commissioned by Historic Royal Palaces to monitor groundworks necessitated by the Parade Ground and Jewel House Project.
- 1.2 The Parade Ground and Jewel House Project is designed to erect a new queuing system for access to the Jewel House within the northern section of the Tower of London and also to facilitate floodlighting for the Waterloo Barracks. Both work items required the excavation of numerous interventions, all of which were monitored as a watching brief by the attendant archaeologist.
- 1.3 In all interventions the groundworks did not extend deep enough to threaten any significant archaeological deposits or features. In a number of places previous hard surfaces of 19th century cobbles and a Yorkstone pavement were located, but revealed only at the base of the trenches, and therefore were left in situ.

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#### 2 INTRODUCTION

- 2.1 An archaeological watching brief was conducted by Pre-Construct Archaeology Ltd at the Tower of London, London Borough of Tower Hamlets (Figure 1) during groundworks associated with the Parade Ground and Jewel House Project. The watching brief monitored excavations necessary for the installation of a queuing system for the Jewel House and for floodlighting around the Waterloo Barracks, both work areas being located within the Parade Ground. The work was undertaken in order to observe and record anything of archaeological significance.
- 2.2 The work was undertaken between the 13th January and the 13th February 2012 following a 'Brief' document prepared by the Curator of the Tower of London, Jane Spooner of Historic Royal Palaces (2012). The principle objectives of the work, as defined in that document, were to:
  - Identify, characterise and record any traces of truncated walls, early paving and earlier features, in situ or visible within the trenches or excavated barrier post holes.
  - Identify and record the remains of pottery and other finds deposited in the trenches.
- 2.3 The site comprises an open courtyard area between The White Tower and The Waterloo Barracks and was situated on relatively level ground, lying at a height of 11.50m AOD. The central National Grid Reference of the site is TQ 3365 8058.
- 2.4 The watching brief was supervised by Guy Seddon and Ian Cipin, and was managed by Chris Mayo, all 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).
- 2.6 The site was given the unique site code TOL121 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 Hampton Court Palace.

# 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 date 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 included the following statement regarding the Parade Ground:

The Parade Ground south of the barracks is traditionally where the soldiers of the Tower are on parade. Historic photographs show various regiments doing just that. Occasional parades are still held here. The floor surface is mostly made of a modern mixture of gravel and tarmac, with many patch repairs in it. This surface replaced a Victorian 'hoggin' – a rolled and bound coarse stone / gravel matrix, illustrated in 19th century photographs . The tarmac today is crossed and bordered by stone pavements bordered with cobbles. Manhole covers and areas of disturbance to the tarmac surface show where a number of mains services run across this area . The area to the south-west of

the current Jewel House entrance was excavated in 1963-4 in preparation for the installation of the Regalia in the Waterloo Barracks' basement later in that decade . The eastern area in front of the Barracks has not been excavated except in small areas for the electricity inner ring main, a flagpole and signage installation. There is therefore some archaeological risk in this area. (Spooner 2012, p1-2)

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#### 4 METHODOLOGY

- 4.1 A total of 81 posthole trenches were excavated for the installation of the queuing system outside of the Jewel House (Figure 2, Plates 1, 2 and 3). These all measured approximately 300mm by 300mm and were excavated to a depth of 300mm. They were labelled as Postholes 1 to 81 (Figure 2).
- 4.2 For the floodlighting scheme outside the Waterloo Barracks, a wide area of existing pavement was lifted and then trenches as necessary were excavated within the area for the floodlights and their cabling (Figure 2, Plate 6). These trenches varied in dimension but were not in excess of 300mm in depth.
- 4.3 Three days after the commencement of works it became apparent that some locations as marked out required revision. The excavated trenches were then backfilled and their correct positions ascertained.
- 4.4 During excavations for the posthole trenches a layer of cobbles [2] was uncovered along the northern edge of the area. This historic surface was deemed worthy of preservation in situ, and thus eight Investigative Trenches were excavated to the level of the cobbles in order to assess how far they projected in to the area (Figure 2, Plates 4 and 5). Based on this, Postholes 9, 16, 27, 38, 49, 60 and 71 were re-positioned 0.40m to the south of their intended positions. The previously excavated trenches were backfilled.
- 4.5 Investigative Trench 2 was excavated in order to ascertain the possible depth that could be reached in the area of the floodlights.
- 4.6 All excavations were conducted by hand, either with hand-held breakers or hand tools. All of the works were monitored by the attending archaeologist. Within each location spoil was kept separate to allow correlation of artefacts to spits.
- 4.7 Following excavation, the relevant faces of each trench that required examination or recording were cleaned using appropriate hand tools, with recording both in plan and in section of all deposits on pro-forma sheets.

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Plate 1: Overview of Postholes, view SE



Plate 2: Overview of postholes, view W



#### Plate 3: Posthole 3 before enlargement, view S



Plate 4: Investigative Trench1 showing Victorian cobbles, view W



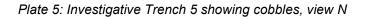




Plate 6: Area of Floodlights and Yorkstone slabs, view E



## 5 ARCHAEOLOGICAL PHASE DISCUSSION

#### 5.1 Phase 1: 19th Century

- 5.1.1 The earliest deposit encountered during the excavation of the postholes for the queuing system was 19th century made ground [3], as denoted by the presence of fragmentary ceramic building material from the layer. The layer itself was a greyish dark brown slightly clayey sandy-silt, containing frequent gravel with occasional chalk fragments and charcoal, and was encountered at 0.15m below the current ground surface. Its thickness was unseen. Stratigraphically above the made ground was a course of Victorian granite cobbles [2], the surface of which was also 0.15m below the current ground surface. They were seen in every posthole excavated along the northern boundary of the Parade Ground. The cobbles varied slightly in size, but on average were approximately 180mm by 100mm by 150mm (Figures 4 and 5). They quite clearly formed an earlier surface to the Parade Ground. The cobbles had been set into the made ground, as seen from the section (Figure 3).
- 5.1.2 The earliest context recorded during the excavation of the floodlight trench was a series of Yorkstone slabs [6] forming a surface, at a depth of 0.20m below current ground level. The slabs were only observed in a limited investigative trench that was undertaken in order to assess the depth to which the lights could be excavated, and therefore the full dimensions of the slabs were not revealed. It is possible that these slabs represent the ground surface contemporary to the construction of the Waterloo Barracks in the 19th century.

#### 5.2 Phase 2: 20th Century and Modern

- 5.2.1 Overlying the cobbles in the postholes for the queuing system was the present day asphalt surface [1] with its associated make-up, measuring 0.15m thick across the area.
- 5.2.2 Overlying the Yorkstone slabs in the floodlight trench was a layer of modern concrete [5],0.13m thick, which was used as bedding for the present day stone slab surface [4], which was 70mm thick (Figure 6).

# 6 INTERPRETATIONS AND CONCLUSIONS

- 6.1 The principle objectives of the archaeological Watching Brief were to:
  - Identify, characterise and record any traces of truncated walls, early paving and earlier features, in situ or visible within the trenches or excavated barrier post holes.
  - Identify and record the remains of pottery and other finds deposited in the trenches.

These objectives were achieved and the results are summarised below:

- 6.2 The watching brief revealed the existence of two historical surfaces within the area of the study site: the cobbles [2] in the area of the queuing system and the Yorkstone slabs [6] that underlay the present day surface in the area of the floodlights.
- 6.3 The cobbles ran along the northern edge of the area of the queuing system, a length of 35m, and projected into the area by 0.40m, seeming to respect the current kerbstones. It is possible that these could have edged the hoggin surface which pre-dated the existing ground surface and which had been photographed in the 1860s (Keevil 2006). They were not impacted by the current installation works and have been left in situ.
- 6.4 The Yorkstone slabs located in the area of the floodlights are considered to date to the construction of the Waterloo Barracks in the 19th century. They were not impacted by the current installation works and have been left in situ.

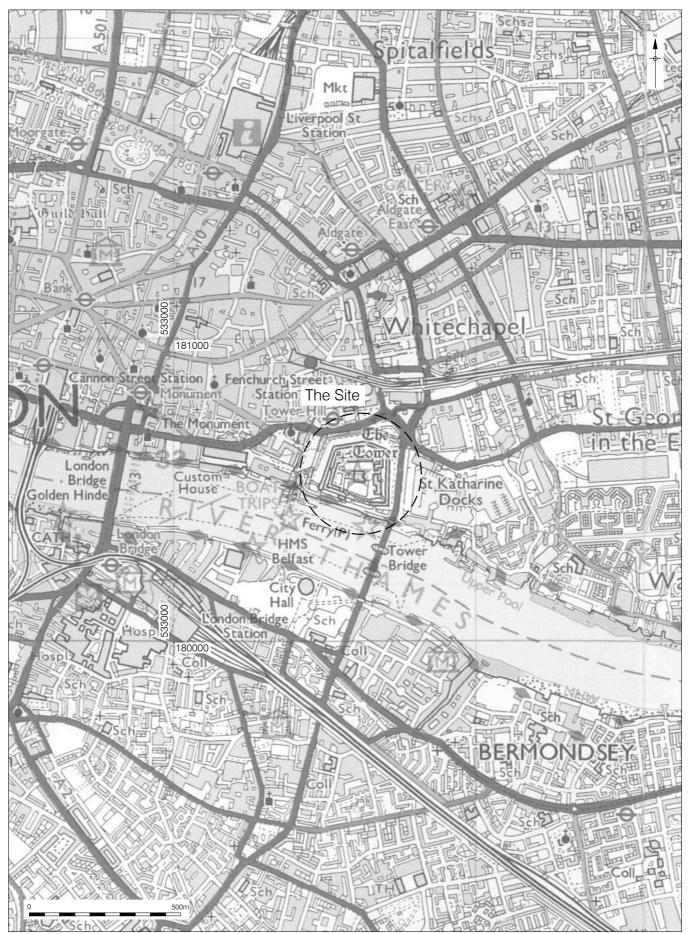
# 7 ACKNOWLEDGMENTS

- 7.1 Pre-Construct Archaeology Ltd would like to thank Alexandra Attelsey, Conservation Building Surveyor 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 Ian Cipin for supervising a section of the watching brief, Chris Mayo for his project management and editing, and Jennifer Simonson for the illustrations.

#### 8 **BIBLIOGRAPHY**

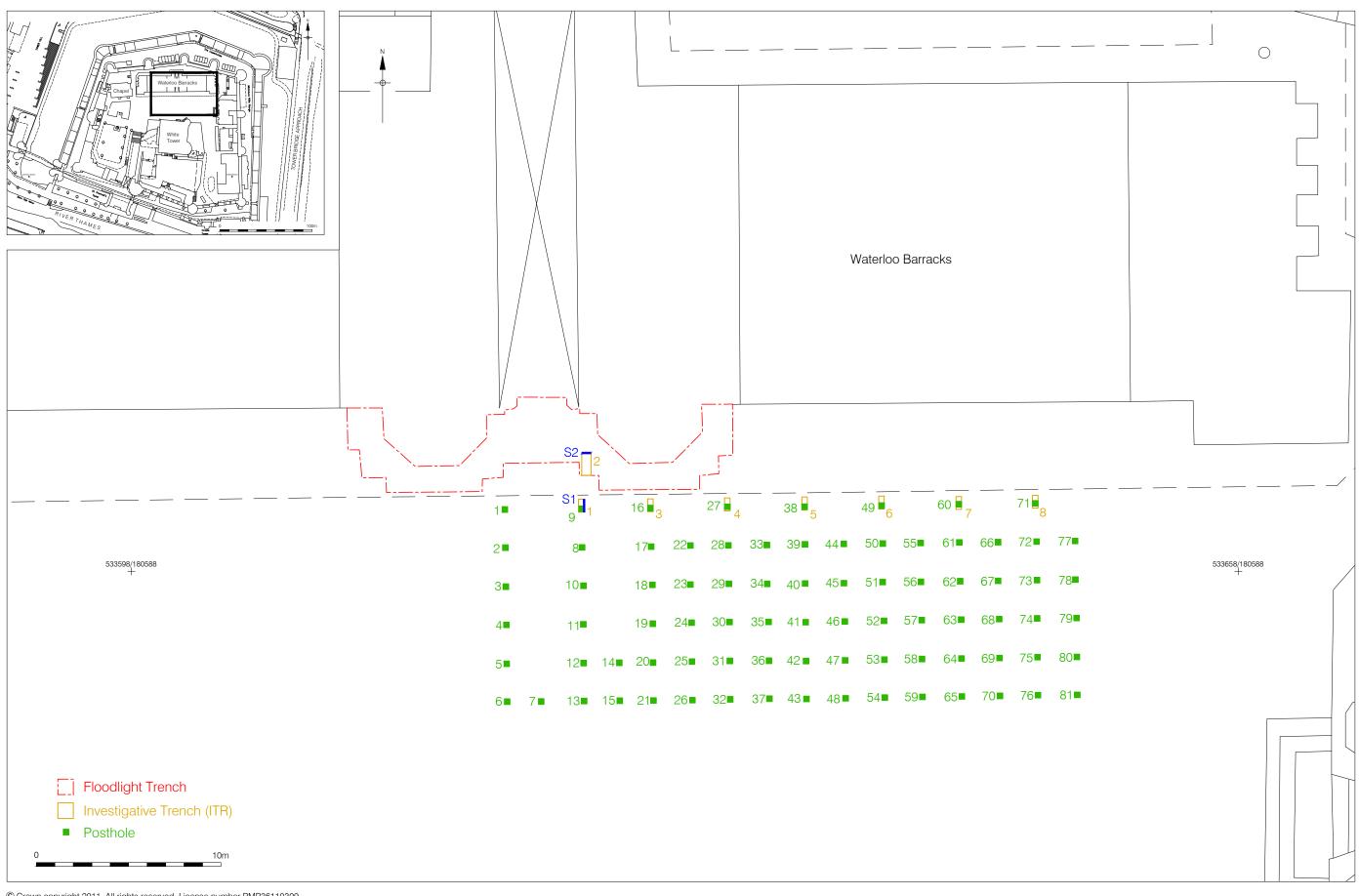
- Haslam R, 2011, 'Tower Gardens and Tower Wharf, An Archaeological Watching Brief Monitoring the Removal and Planting of Trees', Unpublished PCA Report No: 11033
- Keevill, G. 2004, The Tower of London Moat. Historic Royal Palaces, London
- Keevill, G. 2006, 'The Tower of London. Analysis of Historic Surfaces', Keevill Heritage Consultancy, unpublished report.
- Spooner, J. 2012, 'Tower of London: Parade Ground / Jewel House Project: Brief For Archaeological Observation and Recording', HRP unpublished document

Parnell, G. 1993, The Tower of London. B.T. Batsford / English Heritage. London.



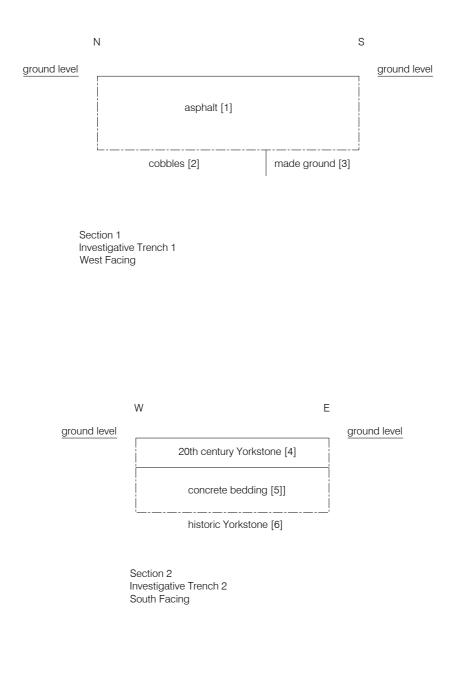
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Figure 1 Site Location 1:12,500 at A4



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Figure 2 Location of Archaeological Interventions 1:4,000 and 1:200 at A3



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# **APPENDIX 1: CONTEXT INDEX**

Site Code	Context No.	Trench	Section / Elevation	Туре	Description	Date	Phase
TOL		Queuing			Current Asphalt		
121	1	System	1, 3, 4	Layer	Surface	20thC	2
TOL		Queuing					
121	2	System	1, 3, 4	Masonry	Victorian Cobbles	19thC	1
TOL		Queuing					
121	3	System	1, 3, 4	Layer	Made Ground	19thC	1
TOL							
121	4	Floodlights	2	Masonry	Current Stone Paving	20thC	2
TOL					Concrete Bedding for		
121	5	Floodlights	2	Layer	[4]	20thC	2
TOL							
121	6	Floodlights	2	Masonry	19thC Stone Paving	19thC	1

# **APPENDIX 2: MATRIX**

		+
Phase 2	1	4
20thC		
		5
Phase 1	2	6
19thC		
	3	
	1	NFE

# **APPENDIX 3: OASIS REPORT FORM**

#### OASIS ID: preconst1-120098

Project details	
Project name	The Parade Ground / Jewel House Project, Tower of London: An Archaeological Watching Brief
Short description of the project	A watching brief monitoring the excavation of postholes and trenching associated with the installation of a queuing system to the Jewel House and floodlighting to the entrance of the Waterloo Barracks revealed a course of C19 Victorian cobbles and a C19 Yorkstone surface. All features were left in situ.
Project dates	Start: 13-01-2012 End: 13-02-2012
Previous/future work	No / No
Any associated project reference codes	TOL121 - Sitecode
Type of project	Recording project
Site status	World Heritage Site
Site status	Scheduled Monument (SM)
Current Land use	Other 8 - Land dedicated to the display of a monument
Monument type	COBBLED SURFACE Post Medieval
Monument type	YORKSTONE SURFACE Post Medieval
Significant Finds	NONE None
Investigation type	'Watching Brief'
Prompt	Direct instruction from client
Project location	
Country	England
Site location	GREATER LONDON TOWER HAMLETS TOWER HAMLETS Tower of London
Postcode	EC3N 4AB
Study area	454.00 Square metres
Site coordinates	TQ 3362 8059 51.5079218153 -0.07439190979710 51 30 28 N 000 04 27 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 brief originator Project design originator	Self (i.e. landowner, developer, etc.) Historic Royal Palaces

Project supervisor	Guy Seddon
Project supervisor	Ian Cipin
Type of sponsor/funding body	Public body
Name of sponsor/funding body	Historic Royal Palaces
Ducie of eachings	
Project archives	
Physical Archive Exists?	No
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','Miscellaneous Material','Plan','Section','Unpublished Text'
Project bibliography 1	
Publication type	Grey literature (unpublished document/manuscript)
Title	The Parade Ground / Jewel House Project, Tower of London: An Archaeological Watching Brief
Author(s)/Editor(s)	Seddon, G.
Date	2012
Issuer or publisher	Pre-Construct Archaeology Limited
Place of issue or publication	London
Description	A4 client document with blue covers
Entered by	Chris Mayo (cmayo@pre-construct.com)
Entered on	2 April 2012

# PCA

#### **PCA SOUTHERN**

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 NORTHERN**

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 WESTERN**

6 KING ALFRED PLACE WINCHESTER HAMPSHIRE SO23 7DF TEL: 07714 134099 EMAIL: info.west@pre-construct.com

