



ROYAL ARSENAL RIVERSIDE
THE ROPEYARDS
PLOTS D & K

HERITAGE STATEMENT

To Support a Reserved Matters
Application

MARCH 2024

Royal Arsenal Riverside
The Ropewalks
Plots D and K

Heritage Statement

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Report

Heritage Statement
(to accompany Reserved Matters Application)

Site

Royal Arsenal Riverside
The Ropewalks
Plots D and K
London SE18 6NP

Client

Berkeley Homes (East Thames) Ltd

Date

March 2024

Planning Authority

Royal Borough of Greenwich

Grid Reference

TQ 43657 79105 (at approx. centre of study site)

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Report Status

FINAL

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PN3811 HS4

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1.0 Introduction

- 1.1 This Heritage Statement considers The Ropewalks at Royal Arsenal Riverside Plots D and K (Figure 1). The site (hereinafter referred to as the 'study site') is located at National Grid Reference TQ 43657 79105. It is produced to accompany an application to agree the Reserved Matters for the approved scheme.
- 1.2 In accordance with the *National Planning Policy Framework* (NPPF 2023) and the requirement for applicants to describe the significance of heritage assets, including contribution to setting, the report draws together available information on designated and non-designated heritage assets.
- 1.3 The assessment includes the results of a site survey, an examination of published and unpublished records, charts historic land-use through a map regression exercise and considers relevant local and national policy and guidance.
- 1.4 Heritage assets which have the potential to be impacted are not selected by a search radius but by site inspection and analysis. The assets in whose setting the study site is not located by virtue of lack of intervisibility, or other connections, are not considered.
- 1.5 Outline Planning Permission was granted for the Waterfront Masterplan in which included The Ropewalks, Plots D and K. This was amended in 2017, via a Section 73 (S.73) planning permission (Reference: 16/3025/MA). This Heritage Statement was produced to address the associated Reserve Matters.
- 1.6 In addition, various factors since that date have required the Masterplan for this area to be revisited to ensure it complies with revised legislation and guidelines. During this review and necessary updating, opportunity has been taken to consider revisions to the scheme which will enhance its relationship with heritage assets in proximity.
- 1.7 These included the removal of Building K1 which had the potential to impact several assets in proximity. Opportunity was also taken to create a break through Plot D to create a view to The Pavilions and their courtyard.
- 1.8 This report considers these revisions in addition to the development of the proposals. To facilitate these revisions, a relatively small increase to the height of other buildings in Plot K was required. These revisions are the subject of a separate Section 96a Application.
- 1.9 The Historic England Schedule of Listed Buildings has been consulted (online), together with the council's schedule of Locally Listed Buildings and Conservations Areas.

- 1.10** Other studies, including the 1994 '*Royal Commission on the Historical Monuments of England*' (RCHME) survey, have informed the conclusions reached. The relevant designated and non-designated heritage assets located in the immediate vicinity are identified in Figure 2.
- 1.11** A site visit was undertaken when conditions were fine, and visibility was good. The report enables relevant parties to assess the significance of designated and non-designated heritage assets within and in the vicinity of the site, thus enabling potential impacts on these assets to be identified along with the need for design solutions.
- 1.12** It ought to be read in conjunction with other documentation submitted with this application, particularly the architects' drawings, reports, Design and Access Statement, and the Planning Statement. It does not cover archaeology which is the subject of a separate report.

Location and Description

- 1.13** The subject site is located immediately north of Beresford Street and south of the River Thames at Woolwich. It is the westernmost section of the Royal Arsenal Riverside, which has been developed over recent years to provide homes and associated amenities.
- 1.14** The proposals are for a residential scheme which both reflects the Arsenal and provides an interface with Woolwich centre to the southeast.
- 1.15** Earlier redevelopment at Royal Arsenal Riverside included refurbishment of the many Listed Buildings on the overall site. Although none are located on the study site, those heritage assets in proximity, in particular the Grade I Listed Royal Brass Foundry, have the potential for their significance to be impacted by development in their setting.
- 1.16** The Statement of Significance, upon which this Heritage Statement is based, identified areas of vulnerability which have informed the development of this scheme. In particular, the decision was made to omit the proposed Building K1 closest to the Royal Brass Foundry to avoid impact upon its significance. Impact upon other heritage assets in the wider proximity is also considered.
- 1.17** The Royal Arsenal Woolwich Conservation Area is adjacent to the eastern boundary of the study site. The impact of the development of the design is considered upon the character of the Conservation Area.
- 1.18** Woolwich Conservation Area is set beyond built screening to the southwest with limited visual interface but the impact of the design development on the wider setting of this Conservation Area will be assessed.
- 1.19** Since the demolition of the Royal Ropeyards in the early 19th century, the study site has been beyond the formal western boundary of the Arsenal.

- 1.20** Originally part of the Royal Ropeyards established in the 16th century to support the Royal Dockyards, the site has more recently been the location of dwellings and associated community buildings. It has more recently been the location of larger industrial, educational and commercial structures.

2.0 Planning Background and Development Plan Framework

Planning (Listed Building and Conservation Areas) Act 1990

2.1 The *Planning (Listed Building and Conservation Areas) Act 1990* sets out broad policies and obligations relevant to the protection of Listed Buildings and Conservation Areas and their settings.

2.2 Section 66(1) states:

In considering whether to grant planning permission for development which affects a listed building or its setting, the local planning authority or, as the case may be, the Secretary of State shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses.

2.3 Section 69 of the Act requires local authorities to define as conservation areas any *areas of special architectural or historic interest the character or appearance of which it is desirable to preserve or enhance* and Section 72 gives local authorities a general duty to pay special attention *to the desirability of preserving or enhancing the character or appearance of that area* in exercising their planning functions. These duties are taken to apply only within a Conservation Area. The Act does not make specific provision with regard to the setting of a Conservation Area, that is provided by the policy framework outlined below.

National Planning Policy Framework (NPPF) and National Planning Practice Guidance (NPPG)

2.4 Government policy in relation to the historic environment is outlined in Section 16 of the *National Planning Policy Framework 2023* (NPPF), entitled *Conserving and Enhancing the Historic Environment*. This provides guidance for planning authorities, property owners, developers and others on the conservation and investigation of heritage assets. Overall, the objectives of Section 16 of the NPPF can be summarised as seeking the:

- Delivery of sustainable development;
- understanding the wider social, cultural, economic and environmental benefits brought by the conservation of the historic environment;
- conservation of England's heritage assets in a manner appropriate to their significance; and
- recognition of the contribution that heritage assets make to our knowledge and understanding of the past.

2.5 Section 16 of the NPPF recognises that intelligently managed change may sometimes be necessary if heritage assets are to be maintained for the long term.

- 2.6 Paragraph 194 states that planning decisions should be based on the significance of the heritage asset, and that the level of detail supplied by an applicant should be proportionate to the importance of the asset and should be no more than sufficient to understand the potential impact of the proposal upon the significance of that asset.
- 2.7 *Heritage Assets* are defined in Annex 2 as a building, monument, site, place, area or landscape identified as having a degree of significance meriting consideration in planning decisions, because of its heritage interest. Heritage assets include designated heritage assets and assets identified by the local planning authority (including local listing).
- 2.8 *Designated Heritage Assets* comprise: World Heritage Sites, Scheduled Monuments, Listed Buildings, Protected Wreck Sites, Registered Parks and Gardens, Registered Battlefields and Conservation Areas.
- 2.9 *Significance* is defined as: the value of a heritage asset to this and future generations because of its heritage interest. This interest may be archaeological, architectural, artistic or historic. Significance derives not only from a heritage asset's physical presence, but also from its setting.
- 2.10 *Setting* is defined as: the surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of a setting may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance or may be neutral.
- 2.11 The NPPF is supported by the *National Planning Policy Guidance* (NPPG). In relation to the historic environment, paragraph 18a-001 states that:
- Protecting and enhancing the historic environment is an important component of the National Planning Policy Framework's drive to achieve sustainable development (as defined in Paragraphs 6-10). The appropriate conservation of heritage assets forms one of the 'Core Planning Principles'.*
- 2.12 Paragraph 18a-002 makes a clear statement that any decisions relating to Listed Buildings and their settings and Conservation Areas must address the statutory considerations of the *Planning (Listed Buildings and Conservation Areas) Act 1990*, as well as satisfying the relevant policies within the National Planning Policy Framework and the Local Plan.
- 2.13 Paragraph 18a-013 outlines that the assessment of the impact of a proposed development on the setting of a heritage asset needs to take into account and be proportionate to the significance of the asset being considered, and the degree to which the proposed development enhances or detracts from the significance of the asset and the ability to appreciate the significance.

2.14 The NPPG outlines that although the extent and importance of setting is often expressed in visual terms, it can also be influenced by other factors such as noise, dust and vibration. Historic relationships between places can also be an important factor stressing ties between places that may have limited or no intervisibility with each other. This may be historic as well as aesthetic connections that contribute or enhance the significance of one or more of the heritage assets.

2.15 Paragraph 18a-013 concludes:

The contribution that setting makes to the significance of the heritage asset does not depend on there being public rights or an ability to access or experience that setting. The contribution may vary over time.

When assessing any application which may affect the setting of a heritage asset, local planning authorities may need to consider the implications of cumulative change. They may also need to consider the fact that developments which materially detract from the asset's significance may also damage its economic viability now, or in the future, thereby threatening its ongoing conservation.

2.16 The key test in NPPF paragraphs 199-202 is whether a proposed development will result in substantial harm or less than substantial harm. However, substantial harm is not defined in the NPPF. Paragraph 18a-017 of the NPPG provides additional guidance on substantial harm. It states:

What matters in assessing if a proposal causes substantial harm is the impact on the significance of the heritage asset. As the National Planning Policy Framework makes clear, significance derives not only from a heritage asset's physical presence, but also from its setting. Whether a proposal causes substantial harm will be a judgment for the decision taker, having regard to the circumstances of the case and the policy in the National Planning Policy Framework. In general terms, substantial harm is a high test, so it may not arise in many cases. For example, in determining whether works to a listed building constitute substantial harm, an important consideration would be whether the adverse impact seriously affects a key element of its special architectural or historic interest. It is the degree of harm to the asset's significance rather than the scale of the development that is to be assessed.

2.17 Paragraph 202 of the NPPF outlines that where a proposed development results in less than substantial harm to the significance of a heritage asset, the harm arising should be weighed against the public benefits accruing from the proposed development. Paragraph 18a-020 of the NPPG outlines what is meant by public benefits:

Public benefits may follow from many developments and could be anything that delivers economic, social or environmental progress as described in the National Planning Policy Framework (Paragraph 7). Public benefits should flow from the proposed development. They should be of a nature or scale to be of benefit to the public at large and should not just be a private benefit. However, benefits do not always have to be visible or accessible to the public in order to be genuine public benefits.

2.18 Paragraph 203 states:

the effect of an application on the significance of a non-designated heritage asset should be taken into account in determining the application. In weighing applications that affect directly or indirectly non-designated heritage assets, a balanced judgement will be required having regard to the scale of any harm or loss and the significance of the heritage asset.

2.19 In considering any planning application for development, the planning authority will be mindful of the framework set by government policy, in this instance the NPPF, by current Development Plan Policy and by other material considerations.

Local Planning Policy

2.20 The 'Royal Borough of Greenwich Local Plan – Core Strategy' 2014 is the relevant development plan. Consultation has just completed upon the New Local Plan 2021 – 2036 which will eventually replace the above. The Core Strategy contains the following relevant policies including advice concerning the extensive wealth of heritage assets in the Borough.

2.21 It notes that '*Greenwich's rich historic heritage ranging from the well-known Maritime Greenwich World Heritage Site to the 20 diverse conservation areas will have been protected and enhanced. New development within Greenwich will have provided high quality architecture and urban design to achieve increased levels of safety and create an enhanced and more sustainable urban environment*'.

2.22 It furthermore notes that '*Development along and near the Thames frontage should have a design that is mindful of the maritime coastal nature of the river in Royal Greenwich, which differs significantly from its character in other parts of London. Development along and near the Thames frontage, where considered appropriate, also can and should pay homage to the heritage of industrial development*'.

2.23 '*The Greenwich Strategy recognises how the role of a high-quality environment contributes to the health, safety and wellbeing of all communities and aims to make the most of Royal Greenwich's historic heritage*'.

Policy DH1 Design

All developments are required to be of a high quality of design and to demonstrate that they positively contribute to the improvement of both the built and natural environments. To achieve a high quality of design, all developments are expected to:

- i. provide a positive relationship between the proposed and existing urban context by taking account of:

 - *topography, landscape setting, ridges and natural features;*
 - *existing townscapes, local landmarks, views and skylines;*
 - *the architecture of surrounding buildings;*
 - *the need to retain trees in line with Policy OS(f) and Policy OS(g);*
 - *the quality and nature of materials, both traditional and modern;*
 - *established layout and spatial character; the scale, height, bulk and massing of the adjacent townscape;*
 - *architectural, historical and archaeological features and their settings;*
 - *the effective use of land; the potential for a mix of uses;*
 - *patterns of activity, movement and circulation particularly for pedestrians and cyclists;*
 - *the cultural diversity of the area;*
 - *and acceptable noise insulation and attenuation;**
- ii. promote local distinctiveness by providing a site-specific design solution;*
- iii. demonstrate that the development contributes to a safe and secure environment for users and the public (See Policy CH1);*
- iv. achieve accessible and inclusive environments for all, including disabled people;*
- v. create attractive, manageable well-functioning spaces within the site;*
- vi. maximise energy conservation, through effective layout, orientation, use of appropriate materials, detailing and landscape design (also see Policy E1);*
- vii. benefit Royal Greenwich by helping mitigate and adapt to climate change;*
- viii. enhance biodiversity consistent with the Greenwich Biodiversity Action Plan;*
- ix. incorporate living roofs and/or walls in line with Policy E(f);*
- x. demonstrate on-site waste management including evidence of waste reduction, use of recycled materials and dedicated recyclable waste storage space;*
- xi. Demonstrate water efficiency and demand management measures; xii. wherever possible, ensure building materials are responsibly sourced and minimise environmental impact;*
- xii. demonstrate measures that reduce surface water flood risk and landscape the environment in a way that provides for permeable surfaces;*
- xiii. meet the requirements of Policy H5 for residential schemes;*

- xiv. *integrate with existing path and circulation networks and patterns of activity particularly for pedestrians and cyclists; and*
- xv. *for non-residential buildings in major developments, achieve a BREEAM rating of 'Excellent.'*

Supplementary Planning Guidance

- 2.25** The *Greenwich Urban Design Guide October 2023* sets out the importance of the borough's heritage assets and suggests approaches to their enhancement in Section B7.
- 2.26** Paragraph B46 notes that '*A wide variety of listed buildings exist across the borough, with concentrations at Greenwich town and Woolwich. Grade I listed buildings include the Royal Brass Foundry at Woolwich, The Royal Naval College at Greenwich and The Great Hall of Eltham Palace. Other key listed buildings include the Grade II* listed Royal Artillery Barracks, Royal Military Academy and Woolwich Town Hall.*
- 2.27** Paragraph B48 continues '*Development should respond positively to the significance and sensitivity of heritage assets, including those within a wider setting. Where appropriate and providing harm to the significance of heritage assets and their setting is avoided, they should be carefully integrated into development proposals as they help to reinforce a sense of place and local identity. The best designs are rooted to a place and make reference to the unique history and heritage of an area or region in a way that grounds the design without being a pastiche replica of a historic style.*
- 2.28** Principle B7 advises '*Development should understand the heritage context and set out a positive strategy to sensitively respond to, enhance and avoid harm to the significance of local history, heritage assets, and archeology within the site and its surrounding. The impact of development on the setting of heritage assets should also be considered. Heritage and archeology can positively contribute to a stronger sense of place and development should seek to strengthen rather than detract from this character.*'

The London Plan

- 2.29** *The London Plan 2021* is also relevant. It includes the following policies:
- 2.30** ***Policy HC1 Heritage conservation and growth***
 - A. *Boroughs should, in consultation with Historic England, local communities and other statutory and relevant organisations, develop evidence that demonstrates a clear understanding of London's historic environment. This evidence should be used for identifying, understanding, conserving, and enhancing the historic environment*

and heritage assets, and improving access to, and interpretation of, the heritage assets, landscapes and archaeology within their area.

B. Development Plans and strategies should demonstrate a clear understanding of the historic environment and the heritage values of sites or areas and their relationship with their surroundings. This knowledge should be used to inform the effective integration of London's heritage in regenerative change by:

- 1) setting out a clear vision that recognises and embeds the role of heritage in place-making*
- 2) utilising the heritage significance of a site or area in the planning and design process*
- 3) integrating the conservation and enhancement of heritage assets and their settings with innovative and creative contextual architectural responses that contribute to their significance and sense of place*
- 4) delivering positive benefits that conserve and enhance the historic environment, as well as contributing to the economic viability, accessibility and environmental quality of a place, and to social wellbeing.*

C. Development proposals affecting heritage assets, and their settings, should conserve their significance, by being sympathetic to the assets' significance and appreciation within their surroundings. The cumulative impacts of incremental change from development on heritage assets and their settings should also be actively managed. Development proposals should avoid harm and identify enhancement opportunities by integrating heritage considerations early on in the design process.

Other Guidance

Historic Environment Good Practice Advice In Planning Note 2: Managing Significance in Decision-Taking in the Historic Environment (Historic England 2015)

2.31 The purpose of this document is to provide information to assist local authorities, planning and other consultants, owners, applicants and other interested parties in implementing historic environment policy in the NPPF and NPPG. It outlines a six-stage process to the assembly and analysis of relevant information relating to heritage assets potentially affected by a proposed development:

- Understand the significance of the affected assets;
- Understand the impact of the proposal on that significance;
- Avoid, minimise and mitigate impact in a way that meets the objectives of the NPPF;

- Look for opportunities to better reveal or enhance significance;
- Justify any harmful impacts in terms of the sustainable development objective of conserving significance and the need for change; and
- Offset negative impacts on aspects of significance by enhancing others through recording, disseminating and archiving archaeological and historical interest of the important elements of the heritage assets affected.

Historic Environment Good Practice Advice In Planning Note 3: The Setting of Heritage Assets (Historic England 2017)

2.32 *Historic England's Historic Environment Good Practice Advice in Planning Note 3* provides guidance on the management of change within the setting of heritage assets.

2.33 The document restates the definition of setting as outlined in Annex 2 of the NPPF. Setting is also described as being a separate term to curtilage, character and context; while it is largely a visual term, setting, and thus the way in which an asset is experienced, can also be affected by noise, vibration, odour and other factors. The document makes it clear that setting is not a heritage asset, nor is it a heritage designation, though land within a setting may itself be designated. Its importance lies in what the setting contributes to the significance of a heritage asset.

2.34 The Good Practice Advice Note sets out a five-stage process for assessing the implications of proposed developments on setting:

1. Identification of heritage assets which are likely to be affected by proposals;
2. Assessment of whether and what contribution the setting makes to the significance of a heritage asset;
3. Assessing the effects of proposed development on the significance of a heritage asset;
4. Maximising enhancement and reduction of harm on the setting of heritage assets; and
5. Making and documenting the decision and monitoring outcomes

2.35 The guidance reiterates the NPPF in stating that where developments affecting the setting of heritage assets results in a level of harm to significance, this harm, whether substantial or less than substantial, should be weighed against the public benefits of the scheme.

Overview

2.36 The revisions and additional legislation, policy and guidelines since the approvals were given do not change the principles on which the proposals were based. Thus, the design development scheme follows these principles,

3.0 Historical Context and Impact upon Heritage Assets

Introduction

- 3.1** The following section presents a historical development of the site and wider area through the results of a map regression exercise and review of relevant background documentation.
- 3.2** The location of designated and non-designated heritage assets within and surrounding the site are also discussed below; these are shown on Figure 2. Their significance is then assessed, together with the impact the design evolution may have as a result of development in their setting.

Historical Background

Woolwich

- 3.3** It is evident that there has been settlement in Woolwich since the Iron Age, as traces of structures from this period were found during excavations at the Riverside Park near to the Royal Arsenal. The remains of a Roman fort were also located on this site, which would have been attractive due to its naturally higher dry land, set between Plumstead and Greenwich marshes.
- 3.4** The Anglo-Saxon place name '*Woolwich*' refers to a trading settlement or port used for wool, which may have come from sheep raised on the marshes of Plumstead. This also suggests that the area has been settled since early times. A free ferry service linked the area to north Woolwich on the opposite side of the river. The earliest reference to this service occurs in the 14th century but it may have existed prior to this.
- 3.5** It is evident that Woolwich possessed small industrial facilities, including the first known kiln for saltwater ware in England in the 17th century, remnants of which still survive. Woolwich was thus an established settlement comprising field and buildings along the High Street (Figure 3), but it is the siting of the military facility which raised its profile and prosperity.

Royal Woolwich Arsenal

- 3.6** In 1512, Henry VIII chose Woolwich for the construction of his flagship '*Henri Grace a Dieu*', establishing a royal dockyard. This brought additional naval and military requirements, such as rope-making facility (located on the southwest of the study site) together with a Royal Laboratory where explosives and other gunpowder-based products were produced. Eventually, the facility grew to become the centre of national munitions production.
- 3.7** Gradually storage of ordnance, carriages, stores, saltpetre and other facilities built up, the site being known as '*The Warren*'. It was of such strategic

importance that in 1667, an earthwork fort was built to protect the site against anticipated Dutch raids (Figure 3). The Crown bought the site in 1671, its eminence being enhanced in 1694 by the transfer of the Royal Laboratories. Buildings 15 and 16 are the surviving remnants of the Laboratories and the oldest structures in the Royal Arsenal.

- 3.8 Additional facilities such as barracks, a military academy together with the establishment of the Royal Brass Foundry (Plate 2) in 1717, enhanced its prominence which increased over the 18th century until the early 19th century and the Napoleonic Wars. This necessitated the enlargement of most facilities together with the construction of new facilities. These included a wharf, boundary wall and canal, together with additional storage buildings.
- 3.9 There followed a routine whereby the Royal Arsenal flourished during times of war, which were then followed by fallow periods, with the exception of the years following the Crimean War. Then, it had been realised that military knowledge had advanced and by the mid-19th century it was again at the forefront of armament development.
- 3.10 The impact upon Woolwich was that it evolved into a prosperous town. By 1870, the Ordnance Survey Map (Figure 6) suggests that the area surrounding the Royal Arsenal was already built-up, including many supporting facilities for the military establishment. It also illustrates that the facilities for training had spread beyond the original boundaries.
- 3.11 Although some areas were described as being run-down, the intermittent prosperity was witnessed by the fine civic and commercial buildings in the *Woolwich Conservation Area* (Figure 2). The designers included many eminent architects, as the Conservation Area appraisal notes.
- 3.12 Following the First World War, employment in the Royal Arsenal reduced from 80,000 to 10,000 and attempts were made to diversify production. The decline was partially reversed during the Second World War, but the Arsenal did not regain its previous prominence as manufacture of armaments were dispersed for strategic reasons. Employment in Woolwich suffered but it remained a busy hub (Figure 9).
- 3.13 Following the Second World War, attempts were again made to revive the site by manufacturing civilian requirements such as railway wagons and knitting machines, bolstered by resumption of armament production in 1950.
- 3.14 This did not prevent the decline of the site, with the Royal Ordnance Factory at Woolwich closing in 1967. Some buildings were retained by the Ministry of Defence for storage and testing, but the site was eventually closed down. A survey of the buildings was undertaken by the *Royal Commission on the Historical Monuments of England* (RCHME, formerly *English Heritage*, now *Historic England*), in 1994.

This identified the parlous condition of many of the buildings. The site was sold to *English Partnerships* in 1994. Since the beginning of the 21st century, it has been gradually developed for primarily residential use, with ancillary facilities. This has included new buildings, with existing structures being refurbished where possible. The proposals discussed in this report are part of those developments, which complete the successful regeneration of the Royal Arsenal, Woolwich.

The Study Site and The Royal Ropeyard

- 3.15** Around 1573, the Crown established a naval Ropeyard in Woolwich. At the time, Woolwich was one of the largest Dockyards in the world and the Ropeyard changed hands several times, at one point being in the ownership of the East India Company.
- 3.16** The study site includes part of this Ropeyard, which was essential as each ship was estimated to require 30 – 40 miles of rope which had to be renewed every 2 - 3 years. Initially a process dependant on little machinery, it involved much manual labour, but developments over the next few hundred years required the facility to be refurbished and extended to accommodate new technology.
- 3.17** The nature of ropemaking determined that the process required too long a continuous space to be enclosed within the Dockyard boundary. This also occurred in smaller dockyards such as Liverpool. Initially the fields, and then the large, barn-like structures in which the ropes were made, ran along the line of what is currently Beresford Street. The location is identified on John Roque's Map of 1746 (Figure 3)
- 3.18** It comprised a 600 foot long '*cable house*', this length being the standard for rope manufacturing. Associated were several sheds which housed associated functions. However, such was its success, the Ropeyard was substantially reconstructed between 1695 and 1697. Supervised by an Edmund Dummer, by the beginning of the 18th century, it had expanded to include a double-ropewalk which was 1061 ft long. Adjacent was a parallel single-ropewalk of similar length.
- 3.19** Several associated buildings were constructed including a brick storehouse with a clock tower, houses for senior staff and several additional buildings. As a result of extensive robberies of goods due to the high cost of rope and its components, they were enclosed by a perimeter wall including watchtowers. These are illustrated in a contemporary drawing in Plate 8.
- 3.20** Plate 12 is a painting, on display in the London Docklands Museum, of the Royal Arsenal Woolwich viewed from the river. Its description notes that it was;

'Unlike the East and West India Docks, which were privately financed and controlled, the Royal Woolwich Dockyard was founded by Henry VIII to build naval ships, and continued to serve the Royal Navy until it closed in 1869. The painting shows a ship under construction surrounded by scaffold and bearing the Royal Standard. It also records improvements to the dockyard undertaken in the 1780s, including the new dock entrance to the left, the Clock House (built 1783-4) at the right and the new dock offices on the waterfront.'

- 3.21** Fires were a notable associated hazard of ropemaking, often caused by boiling tar pots and heat-sealing of rope ends. Fires in 1759, and again in 1813, together with technical developments, required substantial and regular reconstruction of the facilities.
- 3.22** During the early 19th century, ropeyards in other Royal Dockyards, having expended considerable resources on the latest techniques, were able to supply Woolwich's requirements and the site closed down in 1832, being sold in 1833. Its buildings were demolished soon afterwards, in 1835. Some of the materials were thought to have been reused for dwellings on Rope Yard Rails, described as being immediately adjacent to the Ropeyard (Plate 7).
- 3.23** The boundary of the military Arsenal appears to have contracted to the east as the site of the Ropeyards is now beyond the boundary wall (Figure 7), which is immediately adjacent to the east boundary of the study site. Rope Yard Rails is evident on the Ordnance Survey Maps up to 1969 (Figure 10) and appears to be small-scale terraced housing which would accord with contemporary descriptions.
- 3.24** However, after 1975 (Figure 11), the Ordnance Survey Map suggests that the dwellings have been demolished and larger new structures are evident, similar to those seen to the south of the study site. This can be seen in the OS Map of 1989 (Figure 12).

Design development response to the study site context

- 3.25** The following provides an overview of the design development in response to the historic context of the Royal Arsenal Woolwich. The range of materials, scale and detail of the buildings within proximity of the study site have been considered carefully. The proposals respond in a contemporary manner, without pastiche which would undermine the existing historic building fabric.
- 3.26** The impact of this design development is then considered on the individual and grouped heritage assets considered to have the potential to be impacted by the development. The historic building fabric of the Royal Woolwich Arsenal expresses the very particular quality of naval and military buildings to successfully combine both the industrial and the ceremonial. The detail, scale and materials also provide a cohesion within a wide range of dates of buildings.

- 3.27** The architects' '*Design and Access Statement*' (*PRP Architects 2024*) sets out in detail how they have responded to the historic context and the wider urban grain to the southwest. This has been at both detail and Masterplan level, and their approach varies in order to respond to the particular location within the study site and its context whilst maintaining a cohesive identity within the study site.
- 3.28** As noted previously, opportunity has been taken of reviewing the approved scheme in order to comply with recent guidelines, to remove Building K1, with a small increase in height to other buildings in Plot K. This provides a very considerable reduction of impact upon heritage assets in proximity.
- 3.29** Each heritage asset has its individual features. To respond to this variation, the buildings comprise different design detail to reflect the historic buildings in proximity. However, there are several threads running through this variety of detail which assist in reinforcing the cohesive nature of the arsenal.
- 3.30** The common characteristics of the historic building stock include;
- brickwork with finely crafted detail including flat arches (Plates 4 and 5) and banding (Plate 3).
 - lighter brickwork to reflect stone (Plate 9),
 - frequent use of grey metalwork or brickwork (Plates 2 and 1) contributing definition and responding to the industrial heritage,
 - windows set into reveals related by brick banding (Plate 4),
 - corner detail (Plate 2) strengthens silhouettes and
 - dentil courses emphasise upper levels (Plate 4)

These features are reflected in the development of the design, in a manner which implies connection without undermining the original detail.

Heritage Assets

Listed Buildings (full Listing descriptions are included in Appendix A)

- 3.31** There are several Listed Buildings in proximity to the study site. Whilst they are individually of significance, their inclusion within the Arsenal and relationship to each other, elevates these individual value levels. As no work is proposed to be carried out directly to these assets, their significance is not directly harmed.
- 3.32** However, there is potential for them to be harmed by development in their setting. This Heritage Statement considers how detailed design development of the approved Outline Design impacts the designated heritage assets in proximity. It considers whether any aspects of this design development are not within the design parameters of the approved scheme.

- 3.33** Both closest to the study site and of the highest significance is the *Royal Arsenal Royal Brass Foundry*, Listed Grade I and List Entry Number 1078956 (Plate 2). The building is thought to have been designed by Sir John Vanbrugh, for the Board of Ordnance. Constructed of dark red brick with red rubbed brick and stone dressings and slate, originally tile, hipped roofs it has a symmetrical plan of a central founding range with lower side aisles, and a north entrance tower with flanking blocks.
- 3.34** Along with Dial Square (Plate 5) and the Board Room (Plate 6), this building was part of the initial expansion of the Arsenal after the Board of Ordnance set up the foundry at Woolwich. It was built to cast brass cannon and laid out on an axis facing the river. Altered in 1771-1774 by Jan Verbruggen, Master Founder, further extensive repairs were carried out in the 1970s.
- 3.35** Its *artistic and architectural value* is as a result of possibly being part of the work of Vanbrugh, one of this period's most eminent architects. He was associated with the Royal Arsenal during the 18th century. Despite many alterations to ensure it retained a beneficial purpose, it remains a coherent work of architecture, encompassing both a heavily industrial process within a considered and detailed design (Plate 3). Its architectural value, witnessed by it attaining the highest level of Listing, is high.
- 3.36** The *historic value* resides in its position as a building related to advances in engineering and ordnance, set in a nationally and globally significant context. Its citation by Historic England notes that it is '*Of considerable historic significance as a rare, early and little-altered example of a purpose-built foundry and workshop, reworked at the start of the industrial revolution*'. As a result of this, its historic value is also high.
- 3.37** The primary benefit of the design development to the approved outline scheme is the omission of the originally included Building K1, closest in proximity to the Royal Brass Foundry. This proximity originally suggested that harm might be caused to the architectural value of the heritage asset as a result of development in its setting.
- 3.38** As noted earlier, opportunity was taken to remove the proposed Building K1 closest to the Royal Brass Foundry. Heights of other buildings in the development are increased marginally to compensate for this loss. However, this small increase at high level will be barely perceptible from ground level and negligible in more distant views. It causes far less impact to the heritage asset than would Building K1, which has been removed.
- 3.39** Although the front (north) elevation does not directly face the development, it will be visible beyond planting to its west. As the materials proposed respond to those of the Royal Brass Foundry, whilst clearly used on contemporary buildings, the Plots D and K will not appear alien despite their larger scale.

- 3.40 Selection of detail and materials in those buildings in closest proximity to the asset responds without overwhelming the Listed Building. Facade detailing will respond to the material of the heritage asset. This includes industrial detail to balconies and windows which respond to its leadwork and historic industrial function.
- 3.41 Whilst the development is still within proximity of the heritage asset, the level of impact is now reduced to a lower level, of less than substantial harm to its architectural value as a result of the removal of Building K1 and the careful consideration of material and detail. Its historic value is not harmed.
- 3.42 In next closest proximity is the **Royal Arsenal Main Guardroom**, Listed Grade II and List Entry Number 1210926 (Plate 9), although intervisibility is less obvious. The Guard Room, was built in 1788 by Isaac Ashton, possibly to designs of James Wyatt. Constructed of yellow and red stock brick with limestone ashlar, it has ridge stacks and hipped slate roof. Single-depth plan, it has a central entrance.
- 3.43 Its *artistic and architectural value* is as a result of its contribution to the stock of military buildings which both performed a functional task but were designed to high standards. As such, this value is assessed as medium to high. Described in its Historic England Listing as an '*Important part of the 18th century Arsenal*', its individual contribution to the Arsenal results in its *historic value* being also medium to high.
- 3.44 In a similar effect as upon the Royal Brass Foundry, the removal of Building K1 has reduced the level of impact of the development to its architectural value. Although its main (east) elevation faces away from the development, the removal of Building K1 from its wider setting limits views of the development to small parts of the upper level when standing on the grass to the east of the Guard House.
- 3.45 This reduces impact to a lower level of less than substantial harm than it would have been on the approved Masterplan. The detail and materials, which reflect the historic context, assist in minimising impact upon its architectural value. Its historic value is not harmed.
- 3.46 **Royal Arsenal Verbruggens House**, Listed Grade II, List Entry Number 1078957 (Plate 4) was designed as the house, and later the office for, Jan Verbruggen, the Master Founder brought over from the Low Countries, and his son Pieter. It was built by James Morris in 1772-73 of red Flemish bond brick with a slate mansard roof. With a double-depth plan, it is two storeys with a cellar and an attic. As an example of an 18th century dwelling, its *artistic and architectural value* is medium.
- 3.47 Jan Verbruggen was Master Founder from 1770, and responsible for the reorganisation and extension of the nearby Royal Brass Foundry. The house

was constructed for his personal use, being a rare example of an individual residential dwelling in an essentially industrial site. It was later used to house the Ordnance Committee and Ordnance Board. By virtue of its location within the Arsenal and being the residence of a Master Founder who transformed the facility to reach the highest standards of production at that time, its *historic significance* is medium.

- 3.48** The location of Verbruggen's House is set further away beyond built and planted screening. This location would result in negligible visibility. As the nearest Building K1, to the eastern boundary of the study site, has been removed and the increase in height at upper level almost imperceptible from this asset, impact to its architectural value as a result of development in its setting, is negligible. Any limited glimpses of the upper levels will be minimised by use of appropriate materials and detailing.
- 3.49** ***Royal Arsenal, Royal Laboratory West Pavilion***, Listed Grade II, List Entry Number 1245208 is the oldest part of the Arsenal, and possibly part of the oldest Ordnance buildings in the country. It is one of a pair of pavilions, the other being to the east. They are the only surviving part of a larger building, to which the Royal Laboratory for the manufacture of fireworks and gunpowder transferred when it moved from Greenwich in 1695.
- 3.50** The courtyard between the two pavilions was covered in 1854, and contained the largest milling machinery space in the world when it was completed. This was demolished mid-1950s. Its companion building which shares its historic values is:
- 3.51** ***Royal Arsenal Royal Laboratory East Pavilion***, Listed Grade II, List Entry Number 1211082, was also part of the Royal Laboratory of 1694-96. It was extended and altered in 1855 and partly demolished in the 1950s. Constructed of brick with stone dressings, the roof is not visible. It has a single-depth plan. Consisting of two stories, the symmetrical front has a projecting centre.
- 3.52** In common with the West Pavilion, it is the oldest part of the Arsenal. Considering both Pavilion's architectural value, because of their early example as military structures which were of considered design, their *artistic and architectural value* is assessed as medium to high. As an early element of the Arsenal, combined with being potentially the oldest remaining Ordnance structures in the country, their *historic value* is elevated to the level of medium to high.
- 3.53** Both buildings are set to the north of the study site. Their primary elevations face each other on an east-west axis. Thus, the only visual impact from the development is from the side elevation. As a result, impact upon their setting would be at a level of less than substantial harm.

- 3.54 However, a gap is introduced between the proposed Buildings D1 and D5, in closest proximity, thus facilitating views from the study site towards the location of the Pavilions and in the opposite direction. Corners to the proposed Plot D buildings are slightly chamfered to enhance the flow of space around the individual buildings so that the view is led between and around structures. Materials sympathetic to the heritage assets will further reduce impact of the development.
- 3.55 Similarly, the fragmentation of the proposed Buildings D1 and D5 into two parts, is less impactful on the view towards the study site from the heritage asset. As a result, the level of harm caused by development in the setting of the asset is reduced to a lower level of less than substantial harm to its architectural value than the approved scheme, with no harm caused to its historic value.
- 3.56 **Royal Arsenal Dial Square Entrance Range**, Listed Grade II*, List Entry Number 1211005 (Plate 5) was, with the Royal Brass Foundry and the Board Room, part of the expansion of the Arsenal when the Board of Ordnance moved gun-founding to Woolwich. It was known as the Great Pile and originally fronted a double courtyard range of buildings.
- 3.57 The inner Grand Square was for turning, washing, engraving and smitheries, the rear Basin Square comprising armourers' shops and accommodation. It contained horse-powered cannon-boring equipment, to which cannons cast at the nearby Royal Foundry were sent. Constructed between 1717 - 1720, it has been variously attributed both to John Vanbrugh and to Nicholas Hawksmoor. Built of red brick with rubbed brick headers it has a hipped slate roof.
- 3.58 As the front range to the former quadrangle, its archway led to a foundry, gun boring works and smithery, and later provided facilities for ordnance works. By 1896 it became the cartridge factory. Its *artistic and architectural value* is medium to high as a result of its attribution to two eminent architects, and its considered detail and scale despite the industrial process carried on within it. Historic England note that it is '*Graded for its significance in marking an important phase in the development of the C 18 and C19 factory*' thus its *historic value* is also medium to high.
- 3.59 The main entrance (Plate 5) faces south, with the development to its east. Thus, any views either towards the study site, or of the asset from the southeast with the study site in the background, are oblique. Some of the upper levels of the proposed buildings will be visible when viewed from the open area in front of the arched entrance, but these are seen above built and planted screening with other tall buildings also visible. Impact is substantially reduced further by the removal of the easternmost block from the development.

- 3.60 The use of sympathetic materials and facades fragmented with windows and balconies, further limits the visual impact of the development. As a result, impact upon the asset's *artistic and architectural value*, by development in its setting, is reduced to negligible. There is no harm caused to its historic value.
- 3.61 ***The Officers Block (Building Eleven) Royal Arsenal***, Listed Grade II, List Entry Number 1289024 was originally an ordnance building. Built from 1717-20 it was by Henry Lidgebird who constructed several buildings at the Royal Arsenal. Built from Flemish bond stock brick with a stone-coped slate mansard roof it has brick stacks.
- 3.62 There are similar materials to the rear. It is one of the structures in the Arsenal in which the interior is noted as having '*early C18 joinery, enriched marble fireplaces and staircase to right with fine wrought-iron balustrade*'. Its *artistic and architectural value* is at the upper level of medium, as is its *historical value*. Intervisibility between the study site and the heritage asset is blocked by intervening built form, as a result of which, impact upon the significance of the heritage asset is negligible.
- 3.63 The ***Main Entrance to Royal Arsenal***, Listed Grade II, List Entry Number 1079080 is a remnant of when parts of the Arsenal extended across the Plumstead Road, evident on 19th century Ordnance Survey Maps (Figures 6 and 7)
- 3.64 Although it is dated 1829, upper parts late 19th century. Two stories high, with three carriage entrances at ground floor level, the centre one is taller emphasising what would have been a main entrance. Constructed of a yellow brick ground floor, it has stone arches with keystones. With a red brick upper level, the buttresses are the full height of the centre section (Plate 10).
- 3.65 A clock defines the central section, with plaques, inserted in the buttresses, inscribed '1829 B'. Below the side windows is inscribed 'G.R. IV' including a shield with three guns (Plate 11). Its ceremonial and armorial features and carefully scaled detail, define its *artistic and architectural value* as the upper level of medium.
- 3.66 As the early Victorian entrance to the expanded Arsenal, being the public face of what was generally a restricted area, therefore recognised as a landmark entrance related to the Arsenal, its historic value is at the upper level of medium. As a result of its distance beyond a busy road and erosion of functional connections there are this asset is considered not to be impacted by the development. Design development of the approved scheme does not alter this assessment.
- 3.67 The ***Royal Arsenal - The Board Room***, Listed Grade II*, List Entry Number 1359015 (Plate 6) was the Board Room for Officers of the Ordnance Board and Cadets' Training Academy. Constructed in 1718-20, it was attributed to both

Sir John Vanbrugh and Nicholas Hawksmoor, for the Board of Ordnance. It was later extended around 1741. Built of red brick, it had rear lateral stacks and a slate hipped roof. A rear stair tower is enclosed by an extension of 1741. The symmetrical front has cornice and parapet with a central pedimented entrance bay set forward with a ground-floor porch.

- 3.68** Built on the site of Tower Place, the original residence of the Lieutenant General of Ordnance, it was bought by the Crown in 1671. It was then used as the office of the Board of Ordnance with one room being used by the Royal Military Academy until it relocated in 1806. It was later the location of a model or pattern room for foundry patterns.
- 3.69** It is noted in its Historic England description as a '*A robust and strongly articulated building, characteristic of the early C18 Baroque manner of the Ordnance Board associated with Vanbrugh and Hawksmoor*'. As a result, its *artistic and architectural value* is considered to be medium to high.
- 3.70** Historic England note that it is '*of considerable historic significance for its connection with both the Board and the early RMC*'. It further states that '*Vanbrugh is associated with the early expansion of the Arsenal after the Board of Ordnance moved gun founding to the site in 1716*'. Its connection with an eminent architect together with its integral role in the early founding of the site, identify its *historic value* as medium to high.
- 3.71** However, despite its relative proximity to the study site, it is somewhat isolated beyond screening. As a result, it is considered to have limited intervisibility and its only functional connections are historic and eroded by distance and time.
- 3.72** It was considered that a low level of less than substantial harm was caused by development in its setting. The design development is within the design intentions set out in the approved scheme, thus no additional harm is caused.

Conclusion

- 3.73** **In conclusion**, the assessment of levels of harm, for the approved scheme of 2013, are not changed by the revisions to the proposed development. Several of the heritage assets are, in fact impacted less as a result of the revisions. This improvement does not equate to a lower category of harm but does suggest a reduced level of harm within the categories assessed in relation to the 2023 approved scheme.

Non-Designated Heritage Assets

- 3.74** There are several assets included on the '*Royal Borough of Greenwich Local Heritage List*' 2022 which are in the wider proximity of the development. They fall into several groups. There are several structures within the **Royal**

Dockyard Conservation Area which are not statutorily Listed but are added to the Local List. These include:

- the *Former Royal Dockyard Apprentice School*, the *Royal Dockyard Gates and Wall*,
- the *Royal Dockyard River Wall including Trinity Stairs*,
- the *Royal Dockyard Shipbuilding Slips No. 5 and 6, Mast Quay*
- the *Royal Dockyard Railway Tunnel under Woolwich Church Street* and
- **Block 1, the Royal Dockyard Woolwich Store Warehouse**

3.75 These are all centred on the riverfront or at such distance to limit intervisibility. As a result, they are addressed in this report, not individually, but within the wider context of the Conservation Area. Since the 2013 report, an additional Locally Listed asset has been identified as the '*Former Carriage Completing Workshop*'. The '*Royal Borough of Greenwich Local Heritage List 2022*' notes its significance is as follows:

- *Age and History; Surviving element of large complex of carriage-completing workshops begun in 1860 and connected to New Carriage Store. A 'great smithery' and one of the most complete smiths' shops in the world. Gunnery House was a turnery block of 1883-6 overseen by Col. H. D. Crozier.*
- *Significance; Handsome example of 19C industrial architecture from the Royal Arsenal, historic association with neighbouring Grade II New Carriage Store. Qualifying criteria: Historical Interest; Architectural Interest: i) sole-surviving example. Environmental Significance: i) characterful, locally valued feature iii) group value with New Carriage Store, Building 10.*

3.76 However, it is located some distance to the east on the opposite side of the wider Royal Arsenal Woolwich site, set beyond extensive historic and recent built form. There is neither invisibility nor other specific connection to suggest that the study site is within its setting. It is therefore concluded that neither the approved scheme nor the revisions to the 2013 proposals and later design development, cause no harm to its significance.

3.77 **Woolwich Conservation Area** includes many Locally Listed Buildings within the commercial core, particularly along Powys Street. They include **William Shakespeare's Public House**, the **National Westminster Bank** and the **Former Electric House**.

3.78 There are also several non-designated on Beresford Square, both early 19th century remnants of the earlier square. As a result of lack of intervisibility and other connections, it is assessed that they are not impacted by the development.

- 3.79** Several further Locally Listed buildings are in the much wider area, including those on Woolwich High Street but they have neither intervisibility nor other connections which might indicate that the development is within their setting. The design development does not alter this assessment, therefore they are included no further in this report.

Conservation Areas

- 3.80** The study site is immediately adjacent to the west of the **Royal Arsenal West Conservation Area** (RAWCA and Figure 2), slightly overlapping at its northernmost point. There is currently no Conservation Area Appraisal logged on to the Royal Borough of Greenwich website, possibly because the Royal Arsenal is already well-documented in numerous other reports and schedules (noted in 'Sources' at the end of this report).
- 3.81** The RAWCA covers the majority of the Royal Arsenal historic site including its main heritage assets. It includes many Grade II and II* Listed Buildings with a Grade I Building, many of which are now in residential use having been refurbished and repaired.
- 3.82** The numerous heritage assets within the RAWCA elevates the significance of its character and also elevates the importance of each individual asset. Whilst they are not formally group listed, their common location and historic function, within the umbrella of the Royal Arsenal Woolwich, defines the character of the Conservation Area.
- 3.83** However, following periods of near dereliction of several buildings towards the end of the 20th century, as a result of the lack of beneficial purpose as the function of the site became obsolete, it lay unused until it found a new role as a residential location. This change commenced towards the end of the 20th century and development has included and incorporated the refurbishment of the heritage assets on the site.
- 3.84** The study site was removed from the main military Arsenal boundaries following the demise of the Ropeyards and has been the location of several incarnations of development, recent ones of which have not been particularly sympathetic to the significance of the heritage assets and RAWCA.
- 3.85** The development discussed in this report pays closer attention to the RAWCA adjacent. The removal of Building K1, together with revisions as a result of changes to legislation, has required adjustments to the heights of several blocks.
- 3.86** Whilst there is a small increase in height, the percentage raise is small and will be barely perceptible, set against other taller structures in proximity. As a result of additional mitigation in the considered design, detail and materials

used, the overall impact of the revised scheme is less impactful. It is therefore assessed that the revisions to the approved scheme of 2013 and the design development in relation to the reserved matters, have the potential to impact the character of the Conservation Area by virtue of proximity.

3.87 However, the overall impact upon the character of the RAWCA is low, further reduced by improvements to the layout and considered design detail. Neither alter the assessments made in relation to the assessment of the Masterplan in the approved scheme.

3.88 The **Woolwich Conservation Area** (WCA and Figure 2) was designated in 2019, thus was not assessed within the application of 2013. The Woolwich Conservation Area Appraisal provides a Summary of Significance, the main points of which are:

- *The London Plan 2021 defines Woolwich as one of eleven former medieval market towns. Part of a significant group of historic Thameside towns including Greenwich, Deptford and Chatham which developed to serve royal, naval and military ambitions but retain strong individual characters. It covers the central zone of Woolwich including its main commercial and entertainment areas.*
- *It comprises principal public square, historic marketplace, 18C parish church and gardens, Victorian High Street, Catholic church complex, 1930s entertainment hub and late 19C-early 20C civic quarter. Key landmark buildings have relatively tall vertical towers, which make an important contribution to Woolwich's skyline and aid wayfinding. Includes 59 local heritage assets and 18 listed buildings including three at Grade II*. Consistent building heights predominantly 2-3 storeys, with several landmark buildings of 4-5 storeys.*
- *Historic Interest: Influential in growth of national co-operative movements, the birthplace of one of Britain's foremost cooperative societies and one of its most successful building societies; associated with General William Carr, Governor General of the Royal Military Academy and Tom Cribb, world champion bareknuckle boxer. River Thames is important to the area's historic development and distinctive identity.*
- *Architectural interest: includes fine examples of the work of leading Victorian, Edwardian and inter-war architects including: A.W.N. Pugin & Sir Alfred Brunwell Thomas; Met Police architect John Dixon Butler; cinema architects George Coles, Cecil Masey & Reginald Uren; modernist architects Hector O'Hamilton & Robert Lutyens.*

3.89 The WCA covers the later development of the town centre of Woolwich, including a wide diversity of commercial buildings which primarily face

inwards, with the exception of some low-rise shops on the busy main road which separates the town from the study site. There will be some limited intervisibility and a perception of the development being in the wider setting of the WCA. The impact will, as the development is more considered than more recent developments on the study site, be negligible.

- 3.90** In common with the impact of the proposals upon the Royal Arsenal Woolwich Conservation Area, whilst its impact is neutral, it might well be considered as an enhancement within the environs of the Conservation Area. The design development in relation to the Reserved Matters for the approved scheme, does not alter this assessment.

4.0 Summary and Conclusions

Purpose and context of this Heritage Statement

- 4.1** The subject site is located northeast of Beresford Street and south of the River Thames at Woolwich. It is the westernmost section of the Royal Arsenal, Woolwich, the historic naval yard which has been developed over recent years to provide dwellings and associated amenities.
- 4.2** This development has included the refurbishment of heritage assets and the careful integration of new buildings into their setting which respond sensitively to the historic context.
- 4.3** Although numerous Listed Buildings are on the wider Royal Arsenal Woolwich site, but none are located on the study site. However, those heritage assets in proximity, in particular the Grade I Listed Royal Brass Foundry, have the potential for their significance to be impacted by development in their setting.
- 4.4** The study site is within the wider vicinity of Locally Listed Buildings. It is also immediately adjacent, with slight overlap, to one Conservation Area, and in the wider setting of another.
- 4.5** The proposals are for a residential scheme which both reflects the historic context of the Arsenal and provides an interface with Woolwich to the southeast.
- 4.6** Outline Planning Permission was granted for the Waterfront Masterplan in 2013 including the proposals for the study site. Various factors since that date, have required the masterplan for Plots D and K to be revisited to ensure it complies with revised legislation and guidelines.
- 4.7** Opportunity has been taken during this exercise to review the relationship of the proposals to the heritage assets. As a result of this, several revisions have been carried out to further minimise the impact of the proposals on the assets. These include removal of Building K1 and an opening through the easternmost building of Plot D.
- 4.8** In addition, detail design development has been carried out in order to submit information to satisfy the Reserved Matters associated with the earlier approvals. This is set out in detail in the architects' *'Design and Access Statement'* (PRP Architects, 2024) submitted with this application.
- 4.9** This development has included decisions being made upon façade design, detail and materials to be used. The detail and associated materials have been selected to reflect the historic context without pastiche.

- 4.10** This enables the proposed buildings to be clearly identifiable as a new phase in the evolution of Royal Arsenal Woolwich, whilst sitting comfortably with the numerous heritage assets on the study site.
- 4.11** This report is provided to assess whether or not the development of the design in relation to the Reserved Matters remains within the concept of the Masterplan. It considers whether or not it accurately follows through the design intentions set out in the approved scheme. It also considers opportunities taken to improve the layout in addition to the development of the detail proposals.

Historic Overview

- 4.12** In 1512, Henry VIII established a Royal Dockyard in this location. The military requirements included the rope-making facility originally located in fields to the southwest, spreading northeast and further onto the study site.
- 4.13** There is no specific map which identifies the precise location of the associated buildings constructed later and shown in 18th century drawings in Plate 8, and in a painting of 1788 (Plate 12). However, it is recorded that they were demolished in 1835 following the closure and sale of the Ropeyard.
- 4.14** The southwest section of the Ropeyard was lost beneath the construction of Beresford Street. The buildings within the study site were erased and the resulting redevelopment included the terraced houses of Rope Yard Rails, which gave way to larger commercial buildings.

Summary of impact of the design development

- 4.15** Design development has been based upon contemporary interpretations of the materials and detail of the heritage assets in proximity to the proposed development. Colours, materials, detailing and industrial influenced balconies and panels, are included within the design development set out in the Design and Access report which accompanies this application.
- 4.16** In addition to this, alterations, necessitated by revisions to bring the scheme in line with current guidelines, are proposed to the layout of the scheme. The increase in height necessitated by these alterations to Plot K will be hardly perceptible both from ground level and at a distance. It is substantially compensated by the reduced impact as a result of the removal of Building K1.
- 4.17** There are numerous heritage assets in both close and the wider proximity of the study site, seen on Figure 2. Some are excluded as a result of there remaining no intervisibility and erosion of historic and functional connections.
- 4.18** Those which are considered to be impacted are the:

- **Royal Arsenal Royal Brass Foundry**, Listed Grade I and List Entry Number 1078956.
- **Royal Arsenal Main Guardroom**, Listed Grade II and List Entry Number 1210926
- **Royal Arsenal, Royal Laboratory West Pavilion**, Listed Grade II, List Entry Number 1245208 together with
- **Royal Arsenal Royal Laboratory East Pavilion**, Listed Grade II, List Entry Number 1211082 which was also part of the Royal Laboratory of 1694-96.
- **Royal Arsenal Dial Square Entrance Range**, Listed Grade II*, List Entry Number 1211005

4.19 All have been assessed in Section 3 and it is considered that both the alterations to the layouts and the design development in relation to the Reserved Matters, are either within, or an enhancement of the approved scheme.

Sources

Archive

National Archive Kew

Cartographic

Figure 1 Site Location

Figure 2 Heritage assets in proximity

Figure 3 Map of 1746 by John Roque

Figure 4 Map of 1769 by Drury and Herbert

Figure 5 Map of 1799 Ordnance Survey Drawing

Figure 6 Ordnance Survey Map 1870

Figure 7 Map of 1877

Figure 8 Ordnance Survey Map of 1896

Figure 9 Ordnance Survey Map of 1950

Figure 10 Ordnance Survey Map of 1969

Figure 11 Ordnance Survey Map of 1975

Figure 12 Ordnance Survey Map of 1989

Websites

Heritage Gateway - www.heritagegateway.org.uk

Historic England - The National Heritage List for England -
historicengland.org.uk/listing/the list

Bibliographic

Pevsner N and Cherry B, *The Buildings of England: London South, London*, 1983

Hogg O F G, *The Royal Arsenal*, Oxford, 1963

RCHME '*Historic Buildings Report'- The Royal Arsenal Woolwich*'; (1994)

Wesley, H, '*The Royal Arsenal: A Brief History*', (1987)

'*Woolwich Centre Conservation Area Appraisal*'

'*Royal Borough of Greenwich Local Heritage List*' 2022

***Royal Arsenal Royal Brass Foundry,
Listed Grade I and List Entry Number 1078956***

Brass cannon foundry, now bookstore. 1716-17, possibly by Sir John Vanbrugh, for the Board of Ordnance; extended and altered 1771-1774 by Jan Verbruggen, Master Founder, extensively repaired 1970s, book store since then. Dark red brick with red rubbed brick and stone dressings and slate, originally tile, hipped roofs. PLAN: Symmetrical plan of a central founding range with lower side aisles, and N entrance tower with flanking blocks.

EXTERIOR: 2 storeys and attic; 3-bay central tower with flanking single-storey; 2-bay range wings. Central tower has clasping pilasters on stone plinths, a fine entrance with pilasters of alternate rubbed brick and stone to a cornice set forward over the jambs, rusticated voussoirs to a round-arched doorway with the Duke of Marlborough's Arms to the key, radial fanlight and double doors with 10 raised panels; rubbed brick round arches with keys and imposts to C19 casements each side, segmental-arched blind panels above, and round-arched first-floor windows, flanking a wide 3-centre arched panel above the doorway with a fine coat of arms of George I. 3-bay sides with round-arched first-floor windows.

Pyramidal roof with 2 pedimented dormers to the front, and a round lead-clad cupola, added 1722, with architraves to small-paned windows, angle buttresses and a dome with a finial. Single-storey side 'aisles' have round-arched windows linked by impost band and 3-centre-arched doorway, originally a central porch; the rear section is a 2-storey, 3-window former furnace block possibly raised 1770s, with contrasting paler brick clasping pilasters and window surrounds, round-arched ground-floor and segmental-arched first-floor windows. W side has a matching 2-storey rear block, but rebuilt c1878 to the N as a single-storey block with blind windows. S end has a 2-storey block with chamfered corners and parapet, possibly of 1803. Founding range has continuous clerestory windows beneath the eaves and louvred ridge vents.

INTERIOR: an entrance hall with cast-iron plates to the inner wall, the top one inscribed TRANSFERRED TO ROYAL LABORATORY 1878, and a round-arched one over the doorway inscribed 177?/ VERBRUGGEN/J KING/H KING/1771 SCHALCH/KING/NORTH/ECCLES/1855; a C19 iron winder stair leads up to the tower, which has a heavy timber roof, and the flanking ground-floor bays have round arches to the S walls with imposts. The central founding range behind has a 9-bay king post roof with butt purlins, ridge vents, the 2 N trusses closed off, with mid-late C19 metal-trussed roof to the S end, and blind round arches to the sides. The E aisle has a steep roof with collar trusses with tie beams, butt purlins and a ridge board, with a cast-iron beam bolted to the W wall plate. HISTORY: Part of the initial expansion of the Arsenal after the Board of Ordnance set up its own foundry at Woolwich, with Dial Square and the Board Room (qqv). The foundry was built to cast brass cannon and laid out on an axis facing the river.

The furnaces were in the 2-storey ranges at the rear, with casting pits between and a gallery and windlass above, model and pattern-making to the north, with a large balance inside the main entrance, and had open arcades along the sides of the founding range, now blocked; the heavy roof, much of it original, was used for lifting, and there may have been a vertical cannon-boring machine in the tower. Verbruggen altered and extended it 1771-74 to accommodate a third foundry, although at this time advances in casting and boring iron were making brass cannon obsolete. In 1827 and 42, steam boring equipment replaced horse-powered mills of 1773/76. Of considerable historic significance as a rare, early and little-altered example of a purpose-built foundry and workshop, reworked at the start of the industrial revolution.

***Royal Arsenal Main Guardroom,
Listed Grade II and List Entry Number 1210926***

Guard house, disused. 1788, built by Isaac Ashton, possibly to designs of James Wyatt. Yellow and red stock brick with limestone ashlar, ridge stacks and hipped slate roof. Single-depth plan with central archway. 2 storeys; 3-bay range. A tetrastyle Doric portico 1 bay deep with a modillion cornice, to a similarly-sized flagged recess, a central doorway with double 6-light doors with raised panels, and smaller ones to the guard houses each side. Segmental-arched ground-floor tripartite 6/6-pane sashes, and gauged brick flat heads to first-floor 6/6-pane sashes with ashlar cill band. Rear has projecting wings each side of the central entrance.

INTERIOR: has cast-iron posts. HISTORY: Used by the Army when it provided guards for the site, and an important part of the C18 Arsenal.

***Royal Arsenal Verbruggens House,
Listed Grade II, List Entry Number 1078957***

House, later office. 1772-73, for Jan Verbruggen, Master Founder and his son Pieter, built by James Morris. Red Flemish bond brick with a slate mansard roof. Double-depth plan. 2 storeys, cellar and attic; 4-window range. Entrance in the S end has a coped, truncated gable, ground-floor arcade of round arches linked by impost band, and a modillion cornice; rubbed brick flat arches to 6/6-pane sashes, a half-glazed door, and 3 attic windows, the middle one blind. Matching parapetted 4-bay left-hand return has 4 flat-headed 3/3-pane dormers, and window-less right-hand return.

INTERIOR: without plaster and most fittings at time of inspection (March 1994), has a full-width entrance room with fixings for panelling set in the walls, a rear right-hand open dogleg stair with column-on-vase balusters, columns newel and ramped rail; rear ground-floor plain stone mantle piece with a late C19 cast-iron fireplace. HISTORY: Verbruggen was Master Founder from 1770, and responsible for the reorganisation and extension of the nearby Royal Brass Foundry 1771. Later used to house the Ordnance Committee and Ordnance Board.

Royal Arsenal, Royal Laboratory West Pavilion
Listed Grade II, List Entry Number: 1245208

GV II Gunpowder works, west pavilion, now disused. Part of the Royal Laboratory 1694-1696, extended and altered 1802, partly demolished. Flemish bond brick with stone dressings and slate hipped roof. Single-depth plan. Two storeys; five-window range. A symmetrical front has a pedimented entrance bay set forward, with rusticated voussoirs, plinth and plat band; the doorway has a good surround with eared architrave and a console cornice, set below first-floor architrave with foliate brackets to an eared architrave with a lion key. The pediment contains a cartouche with the arms of William III. Rubbed brick flat arches with keys to altered or blocked sashes.

INTERIOR: not inspected but noted as having no internal division or flooring and a C19 iron roof.

HISTORICAL NOTE: the oldest part of the Arsenal, and possibly the oldest Ordnance buildings in the country: one of a pair of pavilions with that to the east (qv) which are the only surviving part of a larger building, to which the Royal Laboratory for the manufacture of fireworks and gunpowder transferred when it moved from Greenwich in 1695. It had cross windows, lower buildings each side, and the yard was closed to the north and south with gate piers from which came the lion and unicorn finials now on the Board Room (qv). The courtyard between the two pavilions was covered in 1854, and contained the largest milling machinery space in the world when it was completed. This was demolished mid 1950s.

Royal Arsenal Royal Laboratory East Pavilion
Listed Grade II, List Entry Number: 1211082

Gunpowder factory, disused. Part of the Royal Laboratory of 1694-96, extended and altered 1855, partly demolished 1950s. Brick with stone dressings, roof not visible. Single-depth plan. 2 storeys; 5-window range. A symmetrical front has projecting centre with rusticated voussoirs, plinth plat band and coping. Doorway with eared architrave and console cornice, with window above has an architrave with foliate brackets and lion-head key. Rubbed brick keyed flat arches to altered windows. INTERIOR not inspected: it may contain features of interest but is noted as having been remodelled internally in C20, with a central concrete dogleg stair.

HISTORY: The oldest part of the Arsenal, and possibly the oldest Ordnance buildings in the country: one of a pair of pavilions with that to the W (qv), which are the only surviving part of a larger building to which the Royal Laboratory for the manufacture of fireworks and gunpowder transferred when it moved from Greenwich in 1695. Originally with cross windows and a steep hipped roof, lower buildings each side, the courtyard between the two pavilions was closed to the N and S by walls with gateways, the lion and unicorn finials from which are now on the Board Room (qv). The yard was roofed over in 1855, and contained the largest milling machinery space in the world when it was completed.

Royal Arsenal Dial Square Entrance Range
Listed Grade II*, List Entry Number 1211005

Archway and front range to foundry , gun boring works and smithery, later ordnance works. 1717- 20, attributed both to Sir J Vanbrugh and to Nicholas Hawksmoor; 1896 cartridge factory. Red brick with rubbed brick headers hipped slate roof Single-depth plan front range to former quadrangle. Single storey with attics to end blocks; 9-bay range. Symmetrical with central gateway and gabled ends set forward, articulated by shallow buttresses which rise through the eaves with plain caps. Gateway has large square battered piers with moulded caps and pyramids of cannon balls on top, a gabled round-arched gauged brick gateway with blocked voussoirs and a sundial dated 1764.

At the back of the archway a 3-centre arched cast-iron beam, dated 1780 at one end and inscribed with the names of former Inspectors of Artillery and of the Royal Brass Foundry between 1797 and 1855. Linking 3-bay sections have 2 segmental-arched sashes with thin glazing bars, the inner bays have an inner doorway and overlight, the outer ones with a central round-arched window and flanking flat-headed 6/6-pane sashes. End gabled bays have 2 sashes and a round-arched frieze beneath the gable and a smaller segmental-arched attic window. Rubbed brick heads to 6/6-pane C19 sashes. Rear altered, the 3 E bays open with late C19 cast-iron columns.

INTERIOR: altered with the removal of most original features.

HISTORY: With the Royal Brass Foundry and the Board Room (qqv), part of the expansion of the Arsenal when the Board of Ordnance moved gun founding to Woolwich, and known as the Great Pile. Originally fronted a double courtyard range of buildings, the inner Grand Square was for turning, washing, engraving and smitheries, the rear Basin Square having armourers' shops and accommodation. It contained horse-powered cannon-boring equipment, to which cannon cast at the nearby Royal Foundry (qv) were sent. Graded for its significance in marking an important phase in the development of the C 18 and C19 factory.

The Officers Block (Building Eleven) Royal Arsenal
Listed Grade II, List Entry Number: 1289024

Ordnance building. 1717-20, by Henry Lidgebird. Flemish bond stock brick; stone-coped slate mansard roof; brick stacks. Double-depth plan. 3-storeys; symmetrical 11-window range. Panelled doors set in early C18 porch to right and similar porch of C1870 to left. Gauged brick segmental arches over 4-pane sashes and over smaller C20 two-light casements to second floor with moulded brick string courses to cill level and beneath parapet, which is raised over central bay. Early C19 wing of similar materials to rear. Interior noted as having early C18 joinery, enriched marble fireplaces and staircase to right with fine wrought-iron balustrade. One of several buildings constructed by Lidgebird between 1717 and 1720 at the Royal Arsenal, Woolwich.

Main Entrance to Royal Arsenal
Listed Grade II, List Entry Number 1079080

Royal Arsenal is listed under Plumstead Road. Dated 1829 but upper parts late C19. 2 storey, 3 windows, with blank side abutments. 3 carriage entrances on ground floor, the centre one taller. Yellow brick ground floor has stone arches with keystones supporting stone 1st floor band of taller centre section. This becomes cill band of side sections. Red brick upper part, with stone dressings. Buttresses full height of centre section, 1/3rd height of side sections. Parapet resting on stone and brick corbel table. Clock in centre. Central 3-light and side 2-light mullioned and transomed windows with sashes below transom and margin lights to heads. Plaques, inserted in buttresses, inscribed "1829 B;" and below side windows inscribed "G.R. IV" and bearing shield with 3 guns. On parapets of side abutments are mounted mortars with the Royal Cipher of George IV.

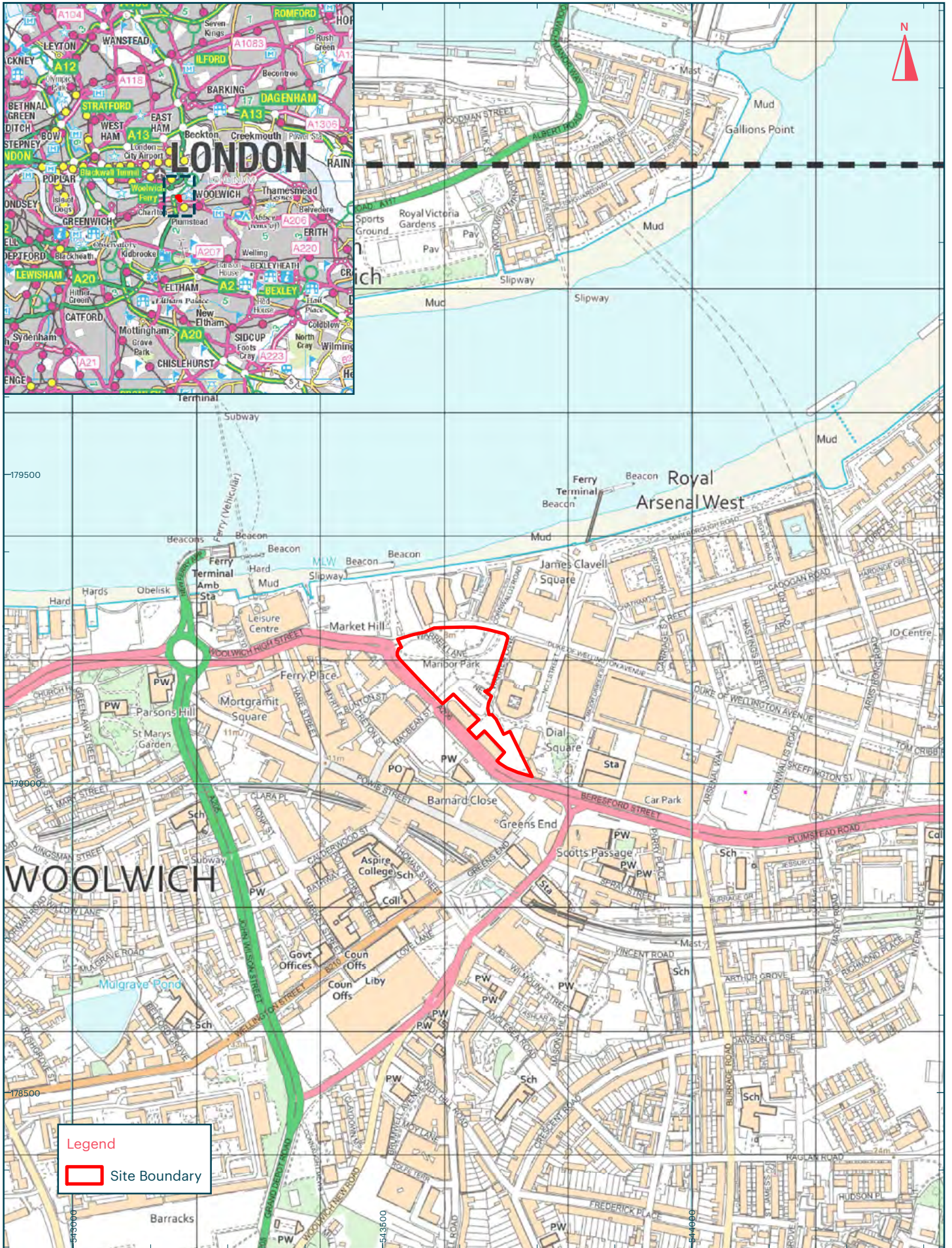
Royal Arsenal The Board Room
Listed Grade II*, List Entry Number: 1359015

Board Room for Officers of the Ordnance Board and Cadets' Training Academy, later pattern room, Royal Military Academy, and officers' mess. 1718-20, attributed to both Sir John Vanbrugh and Nicholas Hawksmoor, for the Board of Ordnance, extended c1741. Red brick with rear lateral stacks and slate hipped roof. PLAN: Single-depth plan with N Board Room and S Academy, rear stair tower, enclosed by c1741 extension.

EXTERIOR: 2 storeys; 7-window range, with 3-storey and attic; 6-window rear wing. A symmetrical front has a cornice and parapet, central pedimented entrance bay set forward with a ground-floor porch with banded jambs, shallow-arched lintel and deeply-set doorway and C20 door, and flanking deeply-set narrow windows; above, a tall round arch with plain balcony, flanking round plinths with lion and unicorn figures, a recessed round-arched window beneath a clock, narrow flanking windows, and above the impost band small oculi either side of a wind dial, with an iron weather vane on the pediment. Outer sections have tall round-arched 6/6-pane sashes and oculi above.

Left-hand end has a single ground-floor window and 2 oculi, with a raised central parapet section. Right-hand end has a full-height header bond bow with raised parapet, 3 round-arched windows and flat-headed raised panels above each. Rear 6-window extension has segmental-arched windows, gables and parapet. Interior contains an entrance hall with stone and slate floor, round-arched doors each side with 8 raised panels and a panelled fanlight and panelled reveals, to a rear dogleg stair with stick balusters, uncut string and moulded rail; right-hand full-height former Academy Room with oak panelling and moulded skirting, flagged floor, good stone fireplace with architrave, consoles and cornice set forward to the sides, left-hand Board Room with an inserted floor across a C18 grisaille wall painting of trophies, and matching fireplace.

HISTORICAL NOTE: Built on the site of Tower Place, the original residence of the Lieutenant General of Ordnance bought by the Crown in 1671 and used as the office of the Board of Ordnance. The left-hand room was used from its foundation in 1741 by the Royal Military Academy until it moved to Woolwich Common in 1806, and later as a model or pattern room for foundry patterns. The lion and unicorn probably those formerly on the gateway into the Royal Laboratory yard. A robust and strongly-articulated building, characteristic of the early C18 Baroque manner of the Ordnance Board associated with Vanbrugh and Hawksmoor, and of considerable historic significance for its connection with both the Board and the early RMC. Vanbrugh is associated with the early expansion of the Arsenal after the Board of Ordnance moved gun founding to the site in 1716.



Title:
Figure 1: Site Location

Address:
The Ropewalks, Royal Arsenal Woolwich – Plots D and K

Scale at A4: 1:8,000





Title:
Figure 2: Heritage assets in proximity

Address:
The Ropewalks, Royal Arsenal Woolwich – Plots D and K


Scale at A3: 1:5,000

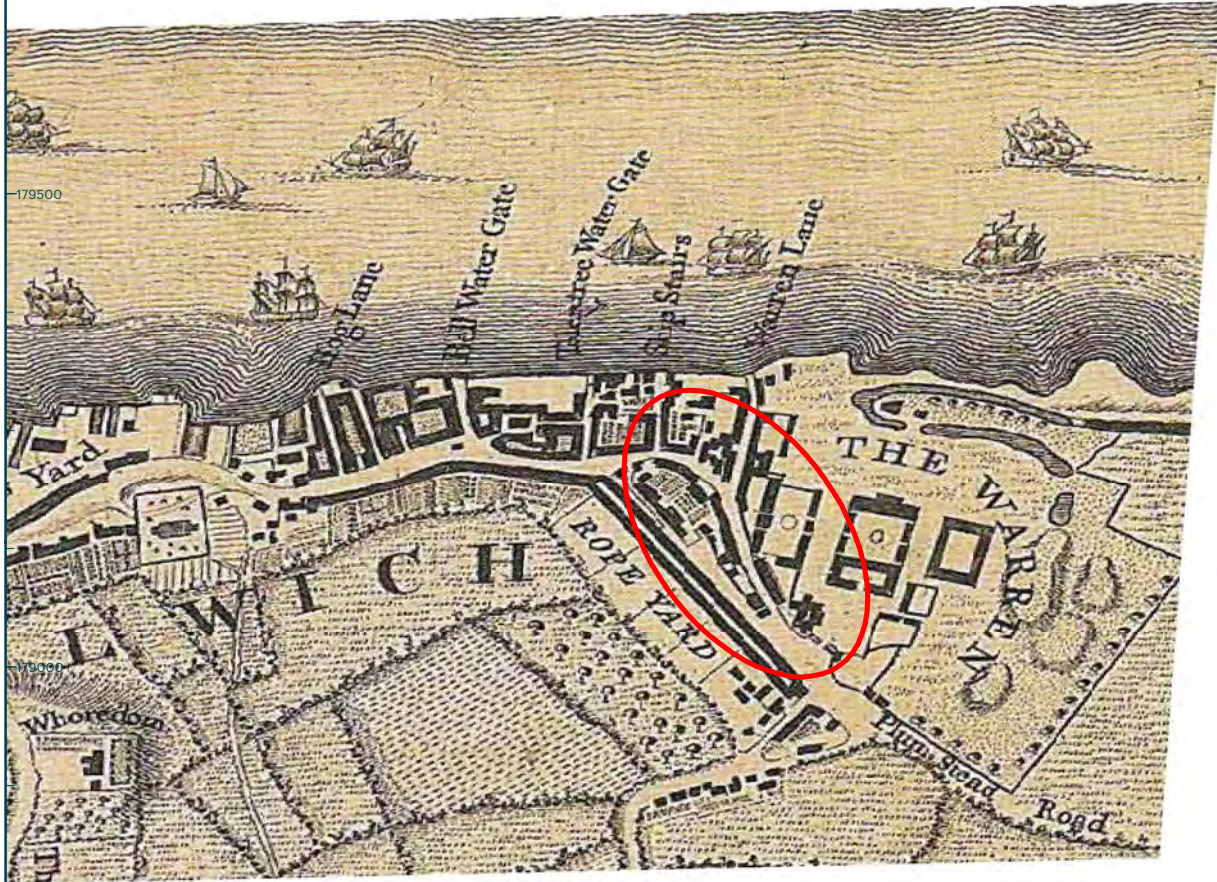


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Legend

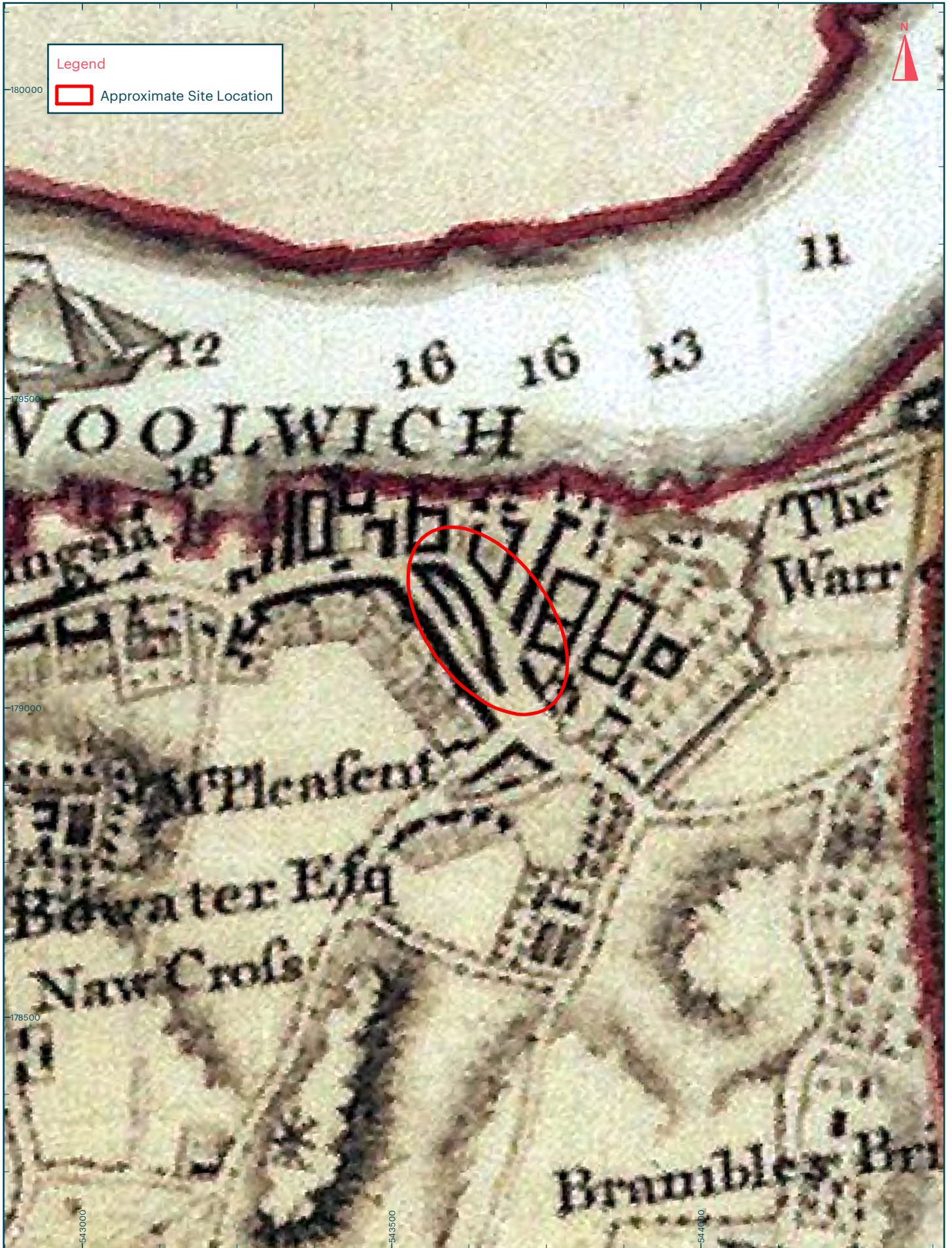
 Approximate Site Location



Title:
Figure 3: Map of 1746 by John Rocque
Address:
The Ropewalks, Royal Arsenal Woolwich – Plots D and K

Scale at A4: 1:8,000
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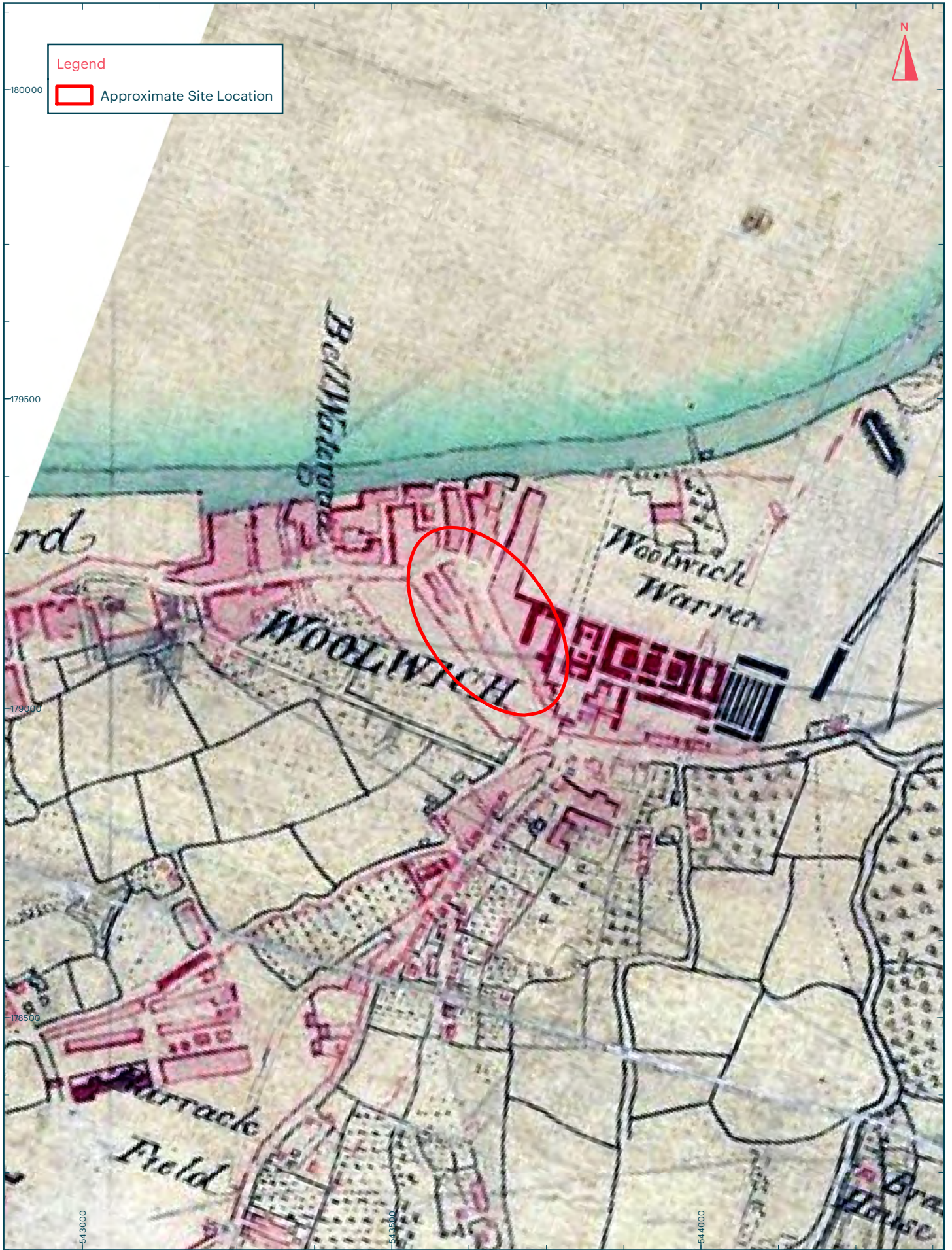


Title:
 Figure 4: Map of 1769 by Drury and Herbert
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 The Ropewalks, Royal Arsenal Woolwich – Plots D and K

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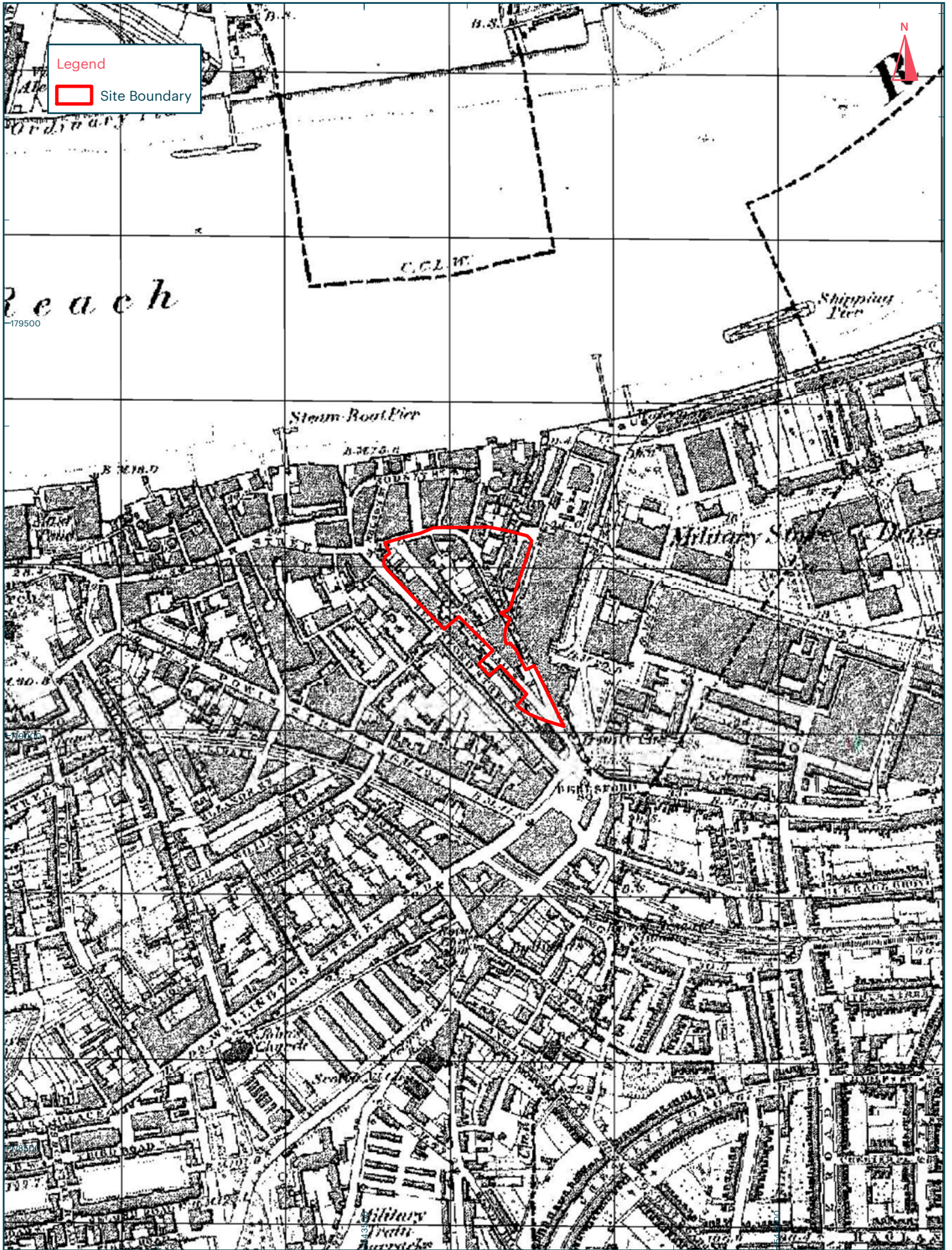




Title:
Figure 5: 1799 Ordnance Survey Drawing
Address:
The Ropewalks, Royal Arsenal Woolwich – Plots D and K

Scale at A4: 1:8,000
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Title:
Figure 6: Ordnance Survey Map 1870
Address:
The Ropewalks, Royal Arsenal Woolwich – Plots D and K





Legend

Site Boundary

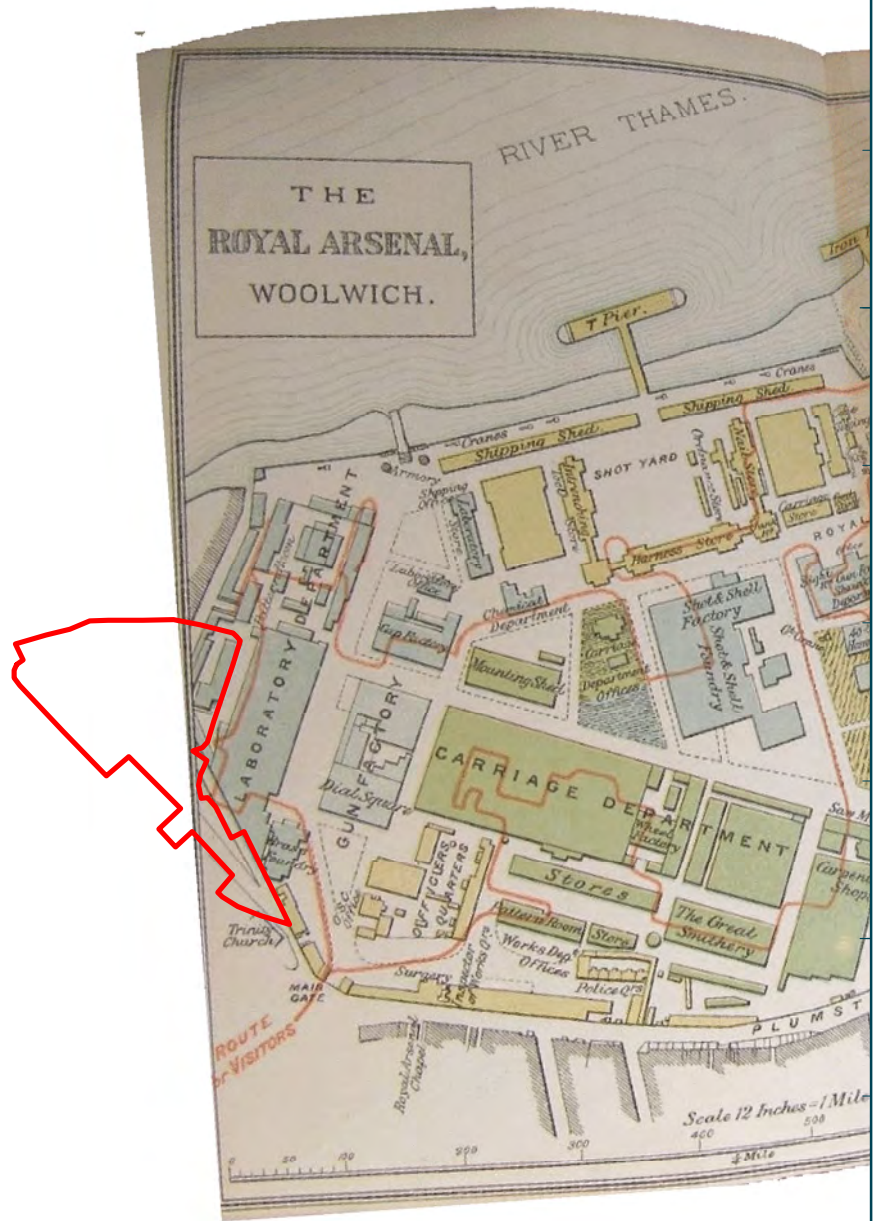
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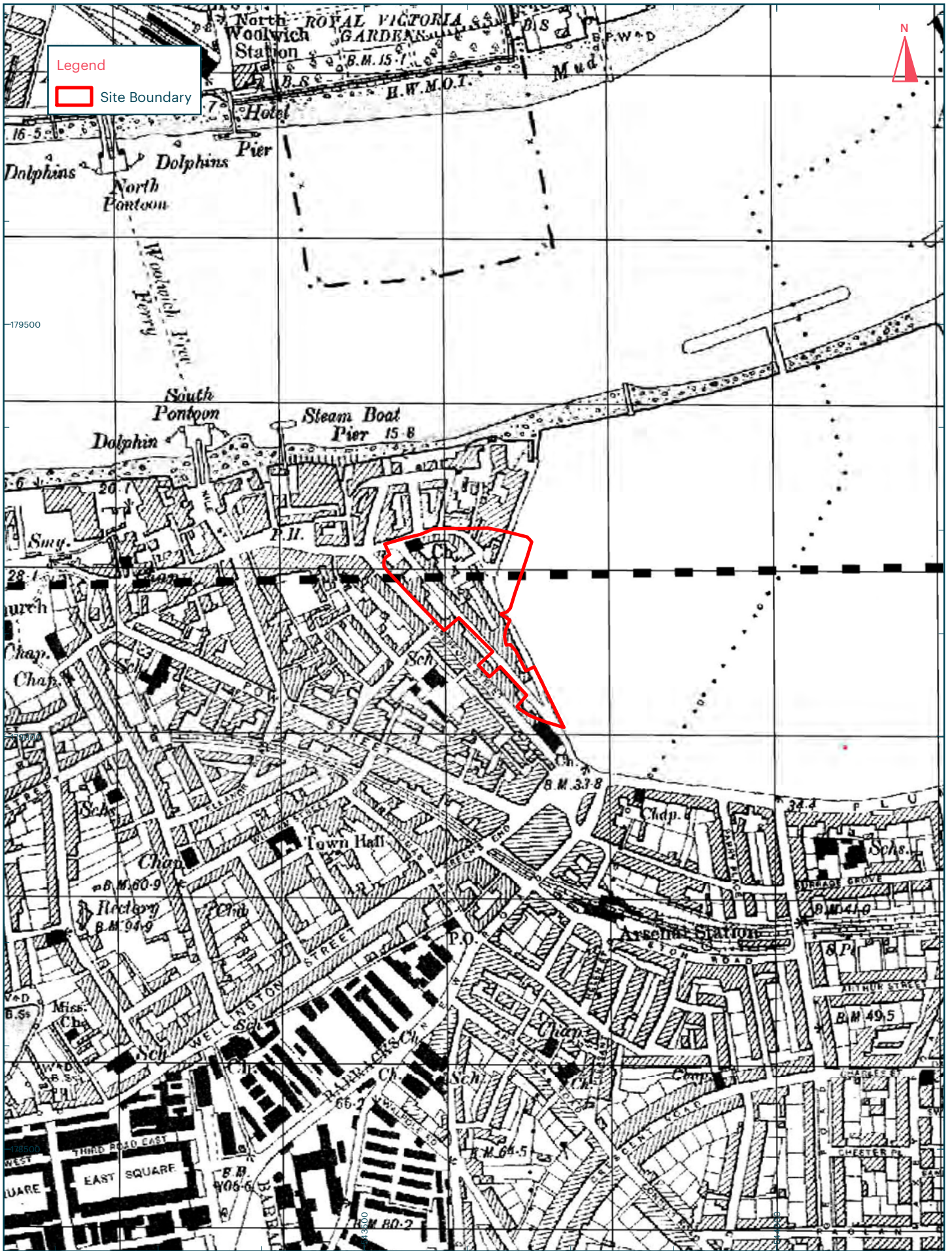


Title:
Figure 7: Map of 1877

Address:
The Ropewalks, Royal Arsenal Woolwich – Plots D and K

Scale at A4: 1:6,000



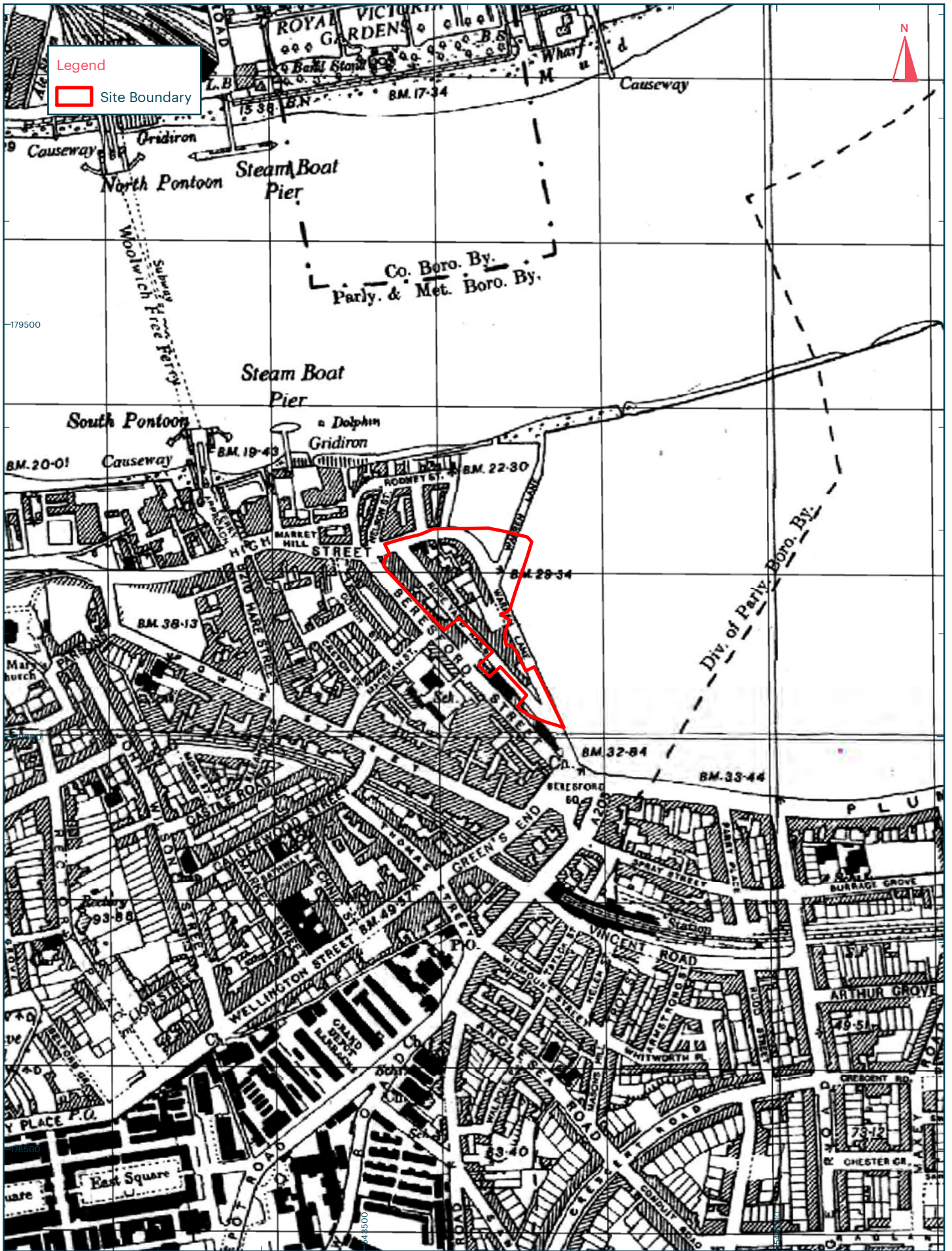


Title:
Figure 8: Ordnance Survey Map of 1896

Address:
The Ropewalks, Royal Arsenal Woolwich – Plots D and K

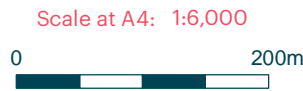
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Title:
Figure 9: Ordnance Survey Map of 1950

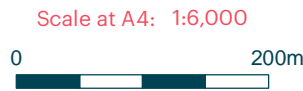
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The Ropewalks, Royal Arsenal Woolwich – Plots D and K

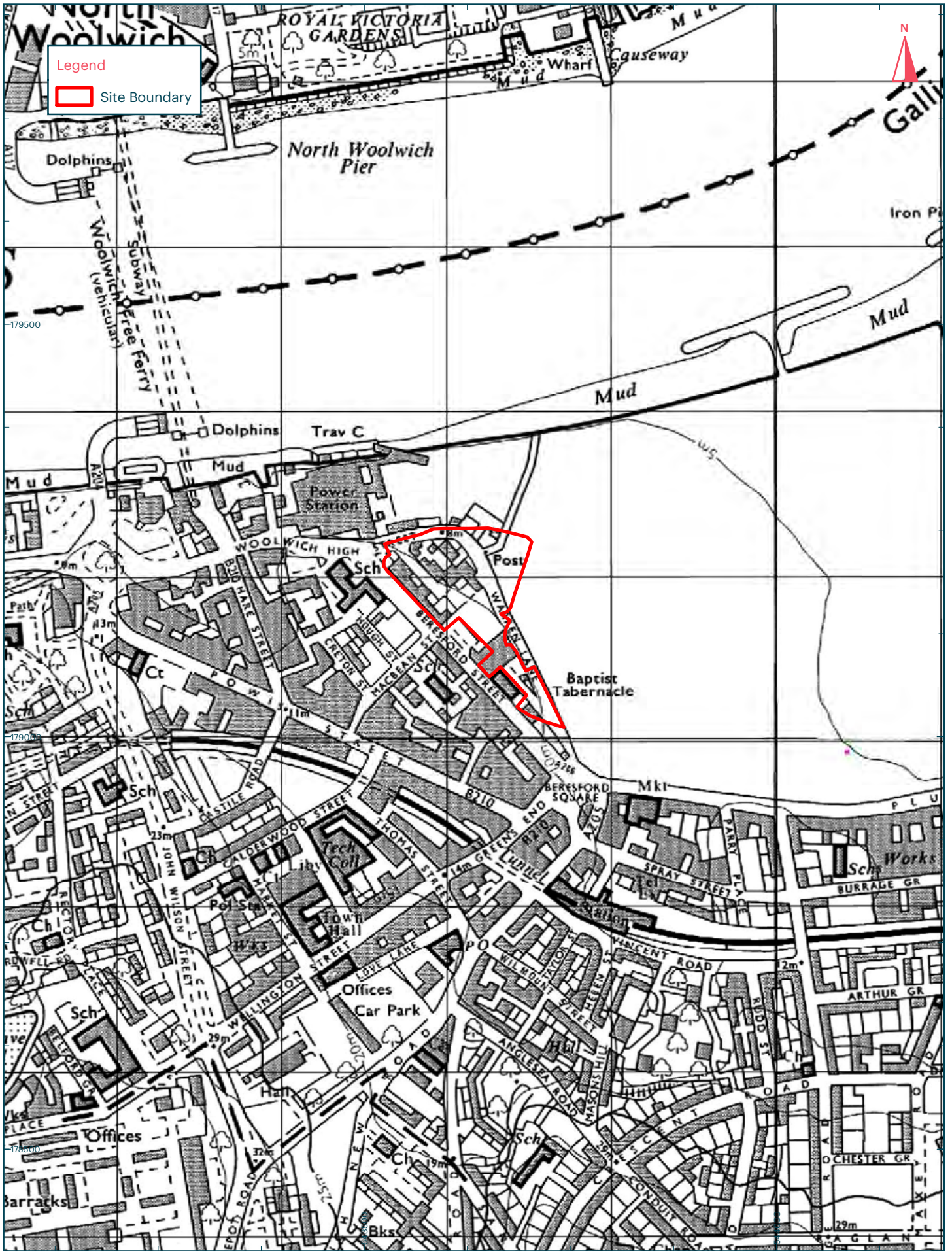




Title:
Figure 10: Ordnance Survey Map of 1969

Address:
The Ropewalks, Royal Arsenal Woolwich – Plots D and K

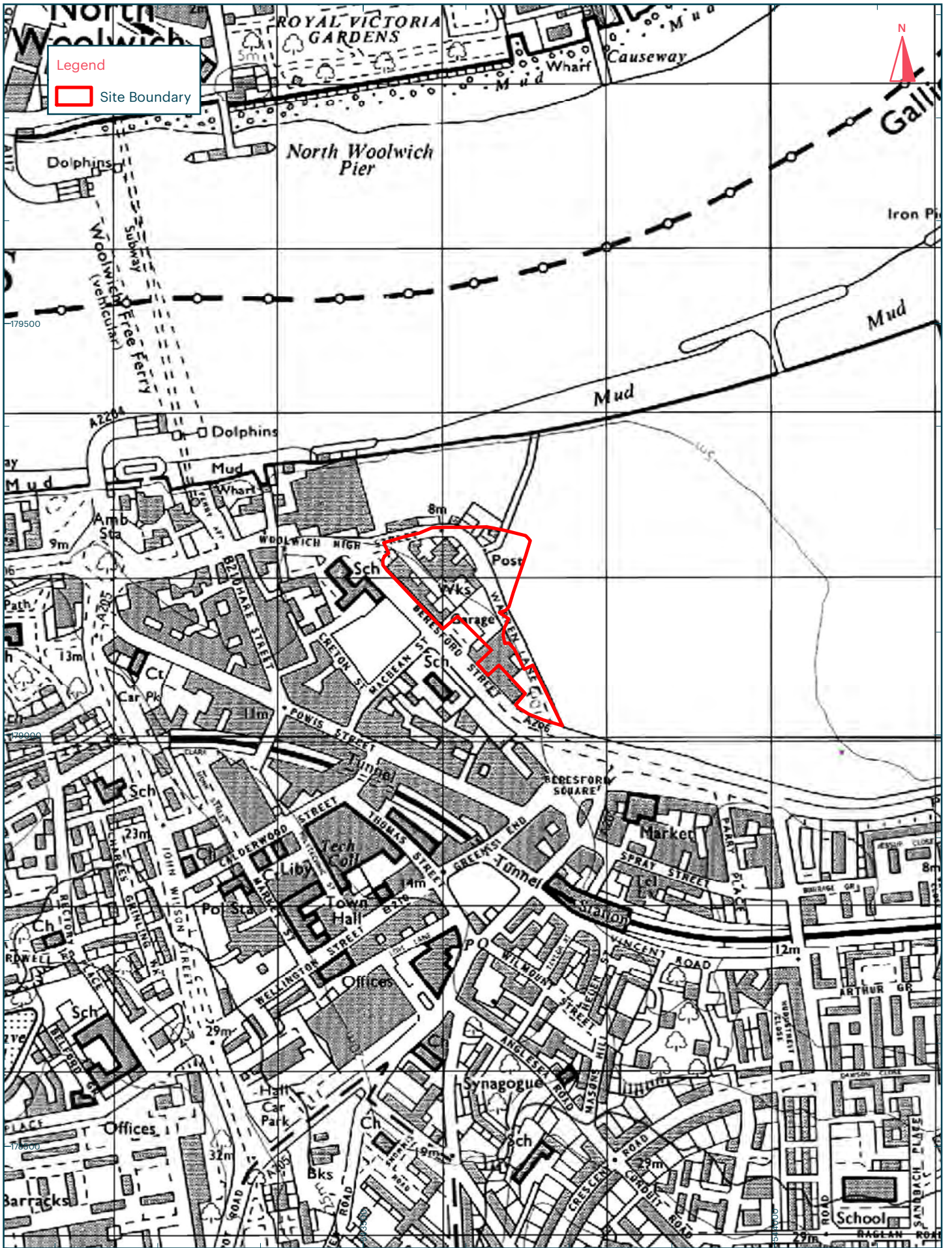




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Figure 11: Ordnance Survey Map of 1975
Address:
The Ropewalks, Royal Arsenal Woolwich – Plots D and K

Scale at A4: 1:6,000





Title:
Figure 12: Ordnance Survey Map of 1989
Address:
The Ropewalks, Royal Arsenal Woolwich – Plots D and K

Scale at A4: 1:6,000



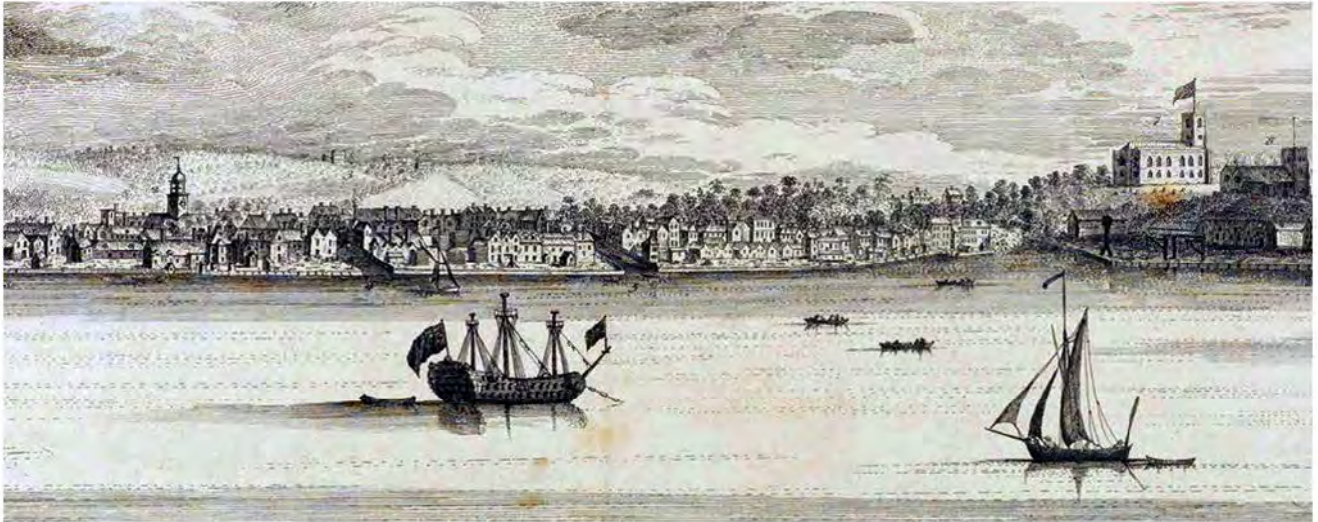


Plate 1: Royal Woolwich Arsenal viewed from the River (north)



Plate 2: Main Elevation of the Royal Brass Foundry

Address:
The Ropewalks, Royal Arsenal Woolwich – Plots D and K

Not to Scale:
Illustrative Only





Plate 3: Detail of Royal Brass Foundry



Plate 4: Main elevation of Verbruggen's House

Address:
The Ropewalks, Royal Arsenal Woolwich – Plots D and K

Not to Scale:
Illustrative Only





Plate 5: Detail of Dial to Dial Arch



Plate 6: Elevation of the Boardroom

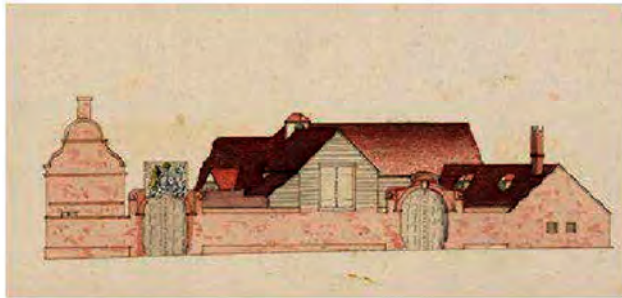
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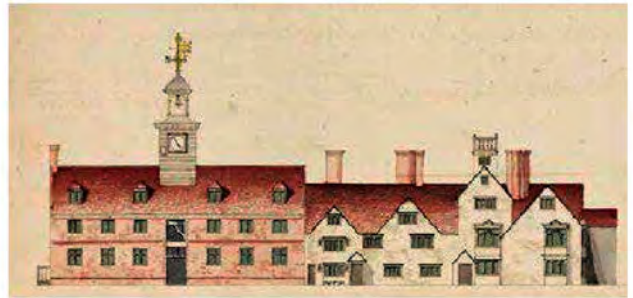




Plate 7: Ropeyard Rails photographed c.1958 just prior to demolition



a



b



Plate 8: Contemporary Illustrations of the buildings of the Ropeyard

Address:
The Ropewalks, Royal Arsenal Woolwich – Plots D and K

Not to Scale:
Illustrative Only





Plate 9: The Guardhouse in 1953



Plate 10: Detail to Main Entrance Gates

Address:
The Ropewalks, Royal Arsenal Woolwich – Plots D and K

Not to Scale:
Illustrative Only





Plate 11: George IV cipher at Main Entrance Gates



Plate 12: 'The Royal Arsenal at Woolwich in 1788' by Robert Dodd. Courtesy of London Docklands Museum

Address:
The Ropewalks, Royal Arsenal Woolwich – Plots D and K

Not to Scale:
Illustrative Only

