

Archaeological Watching Brief Report

**KING'S DOCK,
LIVERPOOL, MERSEYSIDE**

For Willmott Dixon Construction Ltd

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L~P:ARCHÆOLOGY

Archaeological Watching Brief Report

KING'S DOCK, LIVERPOOL, MERSEYSIDE

Client: Willmott Dixon Construction Ltd

Local Authority: Liverpool City Council

NGR: 334336 389160

Planning App: 18F/1697

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Abstract

An archaeological watching brief was carried out during groundworks at King's Dock, Liverpool, Merseyside. The Watching Brief was implemented because of the potential for archaeological remains on the site. The work was carried out by L - P : Archaeology. This report has been prepared by Sarah Cowell of L - P : Archaeology on behalf of Willmott Dixon Construction Ltd.

The site is within the Liverpool – Maritime Mercantile City World Heritage site Buffer Zone (DME3089). Liverpool's docks began construction in 1731 when the world's first wet dock was completed. Since then, the docks expanded and became globally important. King's Dock was built in 1788, with later expansions and warehouses added to the site.

The objectives of the Watching Brief were to locate and record any archaeological remains and to ensure (where possible) the preservation in situ of any surviving remains of the late 18th century King's Dock wall.

The watching brief recorded the in situ remains of the northern face to the 19th century Queen's Basin/Half Tide Dock wall, but did not locate the southern face to the 19th century King's Dock wall. The northern dock wall ran east to west and was damaged in part by previous works on the site. Contemporary 19th century dockside structures were evidenced by the brick and sandstone footings of the 'North Shed' shown on the 1893 OS map and the in situ remains of three possible crane bases.

During the groundworks the in situ remains of the northern face to the early 20th century Queen's Branch Dock wall were located, as shown on the 1908 OS map. To the north of this wall the remains of a contemporary dockside warehouse were also recorded.

No in situ remains of the late 18th century King's Dock wall were encountered during the groundworks.

1. Introduction

- 1.1. This report refers to the approved development (18F/1697) of Land at King's Dock, Liverpool, Merseyside, L3 4DQ (FIGURES 1 & 2). The approved development involved the erection of a purpose built multi-storey car park (MSCP).
- 1.2. This report details the results of an archaeological Watching Brief carried out at King's Dock for Willmott Dixon Construction Ltd. The local authority is Liverpool City Council.
- 1.3. The fieldwork was carried out by Pascal Elroy of L – P : Archaeology between 28th January and 5th March 2019. This report was written by Sarah Cowell of L - P : Archaeology.
- 1.4. The site is located in at King's Dock, Liverpool, Merseyside (FIGURE 1). The NGR is 334336 389160.
- 1.5. The site code allocated by L – P : Archaeology is LP2803C.
- 1.6. The work was carried out in accordance with the Written Scheme of Investigation (WSI) prepared by Dan Garner of L – P : Archaeology and adhered to the Cifa Standards and Guidance for an Archaeological Watching Brief (2014B).

2. Site Background

2.1.PLANNING

- 2.1.1. Planning consent has been granted for the erection of a purpose built multi-storey car park (MSCP) containing 1,646 car parking spaces, 15 motorcycle spaces, and 50 cycle spaces over 9 floors with access, ancillary staff office accommodation, covered walkway, associated landscaping and highway works. The application reference is 18F/1697.
- 2.1.2. In February 2019 the Ministry for Housing Communities and Local Government (HCLG) issued the Revised National Planning Policy Framework (NPPF) (HCLG 2018). Chapter 16 of this document sets out policies for the conservation and enhancement of the historic environment.
- 2.1.3. The site is within the Liverpool – Maritime Mercantile City World Heritage site Buffer Zone (DME3089). It does not fall within any Areas of Archaeological Importance. There are no Scheduled Monuments, Listed Buildings, Locally Listed Buildings, Registered Battlefields or Parks and Gardens on the site.
- 2.1.4. The local planning authority is Liverpool City Council who are advised by Merseyside Environmental Advisory Service (MEAS) and the relevant archaeological advisor, Doug Moir.
- 2.1.5. When considering an application, Liverpool City Council is bound by local policy HD17 within its Unitary Development Plan (UDP), regarding archaeology and planning (LIVERPOOL CITY COUNCIL, 2002, UDP, CHAPTER 7, P121). As such, the following condition was attached to the development:

Condition 4: No development comprising below ground works shall take place on the site until the applicant has submitted a written scheme of investigation for archaeological work for approval in writing by the local planning authority. The work shall be carried out strictly in accordance with the approved scheme.

Reason: In order to ensure that any archaeological information revealed by the development of the site is properly recorded in accordance with Policy HD17 of the Liverpool Unitary Development Plan.

- 2.1.6. Willmott Dixon Construction Ltd and Liverpool City Council have agreed the methodology for these works in a Written Scheme of Investigation (GARNER, D 2019).
- 2.1.7. This document seeks to satisfy the condition by describing the results of the watching brief and clarifying the status and location of the project archive.
- 2.1.8. An archaeological evaluation was carried out on the site by L – P : Archaeology between 3rd to 18th of September 2018; consisting of four evaluation trenches, located to target the 18th to 20th century King’s Dock walls. The results of the evaluation were circulated in a grey literature report issued by L – P : Archaeology in November 2018 (MATTHEWS R, 2018B).

2.2.GEOLOGY

- 2.2.1. The British Geological Survey GeoIndex for the site records the superficial (drift) deposits as tidal flat sand, and the solid deposits as Chester Formation sandstone and pebbly gravels (BRITISH GEOLOGICAL SURVEY 2017). This data is at relatively low resolution and does not give site specific data.
- 2.2.2. Natural geology was not encountered during the fieldwork.

2.3.TOPOGRAPHY

- 2.3.1. The site is roughly rectangular in shape, within a brownfield site located within Liverpool Docks.
- 2.3.2. The site is surrounded by the docklands, Museums and Commercial buildings, with the River Mersey to the west and the centre of Liverpool further east. To the immediate west is Exhibition Centre Liverpool, with the Wapping and Queens docks to the northeast and south.
- 2.3.3. The topography of the area is flat, with an average height of 6m OD.
- 2.3.4. The site has previously been developed and was still in use as car parking associated with the Exhibition Centre Liverpool. Virtually the entire site was occupied by modern hardstanding in the form of service roads, car parks and loading bay areas.

2.4.ARCHAEOLOGY AND HISTORY

- 2.4.1. The following summary has been extracted from a Desk Based Assessment undertaken by L – P : Archaeology in March 2018 (LP2803C-DBA-V1.2) (MATTHEWS R 2018A).
- 2.4.2. It is very unlikely that Prehistoric archaeology would be found on the site due to land reclamation and the development of the waterfront. However, evidence of Palaeolithic and Mesolithic activity has been discovered both on the Sefton Coast and the Wirral Peninsula (COWELL 1999). Neolithic activity has been recorded at Formby Beach with footprints in the sand at low tide, and a funerary monument in Calderstones Park (COWELL 2010). Bronze Age enclosures have been discovered in south Liverpool (COWELL 1999).
- 2.4.3. During the 1st century AD Roman activity was centred around Chester Roman Fort (*Deva*) with connections to the port at Meols on the north Wirral coast. A network of roads linked the region, joining forts, towns and industrial settlements such as Wilderspool (Warrington) and Wigan. Several late Prehistoric farmsteads continued in use throughout the Roman period (COWELL 1999).
- 2.4.4. Evidence of Saxon and later Scandinavian settlers is seen through local place-names such as Huyton, Denton, Kirkby and West Derby. Later, townships appeared in the 10th century (COWELL 1999).
- 2.4.5. The settlement of Liverpool does not appear in the Domesday book, as this area was thought to fall within the entry for the manor of West Derby (MORRIS 1979). A small settlement is referred to in a document dated c1190, which is believed to refer to Liverpool (KENNERLY 2010).
- 2.4.6. It is thought there was a settlement at the mouth of the Mersey prior to the 13th century, King John's charter of 1207 established Liverpool as a borough. The king collected lands around the pool in order to establish a port for moving troops between England and Ireland (HOLLINSHEAD 2007). The Kings investment in the town, along with its new charter attracted new inhabitants and Liverpool experienced a period of prosperity and economic freedom (FARRER & BROWNBILL 1911) (GREGORY R A & ET AL 2014).

2.4.7. The Medieval layout of the town was an H-shaped street plan, located to the north of a castle overlooking 'the pool', an inlet of the Mersey. In 1296 there were 168 families recorded in Liverpool (HOLLINSHEAD 2007). At this time the Mersey would have been shallow and silty, causing problems for ships which were forced to beach in order to load and unload cargo (GREGORY R A & ET AL 2014).

2.4.8. The start of the Post Medieval period saw little change in the development of Liverpool, a map dated 1539 and a plan of Liverpool at high water dated 1600 show the township remaining as a small settlement around the original H-shaped layout and castle; the surrounding area is shown as agricultural fields.

2.4.9. In 1650, the harbour was improved (BROWN A M 1843). In 1708, the first Dock's Act was passed and the world's first wet dock was completed by 1731. This led to land reclamation in order to create more docks. The King's Dock was built in 1788, covering a 14 acre area (PAUL D 2016). The Tobacco Warehouse (MME13930) was built on the site in 1785 (RICHIE-NOAKES, N 1984). In the early 19th century, the docks were expanded and a new King's Dock Tobacco Warehouse (MME15713) was built in 1811. In 1895, the Docklands Railway was opened. The King's Dock was rebuilt due to the Mersey Docks Act 1898 (PAUL D 2016). The mid 20th century saw the decline of the Liverpool docklands and by the 1980s, the King's Dock was infilled (MATTHEWS R 2018A).

2.4.10. For a more detailed summary of the archaeology and history please refer to the Desk Based Assessment produced about the site by L – P : Archaeology (MATTHEWS R 2018A)

3. Aims and Objectives

3.1. The general aims of the archaeological watching brief were:

- To determine the presence or absence of archaeological deposits or remains.
- To record the form, character, date, location and preservation of any archaeological remains on the site.
- To record the nature and extent of any previous damage to archaeological remains on the site.
- To ensure (where possible) the preservation *in situ* of any surviving remains of the late 18th century King's Dock wall as encountered and characterised during the evaluation work (MATTHEWS R 2018B).

4. Methodology

- 4.1. For a full description of the archaeological methodology please refer to section 5 of the Written Scheme of Investigation for the site (GARNER, D 2019).
- 4.2. All works were carried out in accordance with the 'Code of Conduct' as set out by the Chartered Institute for Archaeologists (CHARTERED INSTITUTE FOR ARCHAEOLOGISTS 2014A). Accordingly the project team will abide by the Cifa's 'Standard and guidance for an archaeological watching brief' (CIFA 2014B).
- 4.3. A large area corresponding to the footprint of the new MSCP building (FIGURE 2 & 3) was reduced to a depth of approximately 2 meters below existing ground level in order to remove hard obstructions and create a formation level for a piling mat. The foundations of the new MSCP were then formed on a series of piles supporting an arrangement of pile caps and ground beams above this formation level.
- 4.4. The ground reduction works were undertaken using 360° tracked excavators equipped with both toothed buckets and concrete breakers. Health and safety requirements on site prevented an archaeological presence within the excavation area whilst machines were operating owing to the size of the operating plant and the scale of the excavations. Therefore most of the monitoring was conducted from the sides of the excavation area and records consisted largely of photographs and written records.

5. Results

5.1. Results are given below and divided into four areas of the site. Not all context numbers referred to in the text are illustrated, but all are in the archive. Deposit numbers are given in (parentheses) and structure numbers are given in [square brackets].

5.2. In this section the results are presented under four sub-divided areas: the south, west, east and north. This is in order to reflect how the groundworks were conducted/monitored and the sequence in which the various archaeological remains were recorded. The main archaeological features described in this section are located on FIGURE 3.

5.3. The upper deposit of the entire site consisted of concrete surfaces and areas of modern build up/rubble and deposits from previous works (503). As such the upper 1m was extremely disturbed.



Plate 1- The southern face of the early 20th century Queen's Branch Dock wall [500] with granite coping blocks. Looking north, 2m scale.

THE SOUTH

5.3.1. The monitoring commenced at the southern end of the site, in the location of the northern face to the early 20th century Queen's Branch Dock wall [500], as shown on the 1908 OS 25 inch map (Lancashire sheet CVI.14) (FIGURE 6). The

southern face of this wall was seen to have a course of granite coping blocks set on top of a concrete wall (PLATE 1) with concrete buttress supports [501] to the rear on the northern side of the structure.

5.3.2. To the north of wall [500] was an area of large red sandstone fragments (502) (presumed to be quarry waste), used as hardcore backfill between the northern side of the early 20th century Queen's Branch Dock wall [500] and the southern face of the 19th century Queen's Basin/Half Tide Dock wall (504) (PLATE 2) (FIGURE 5). The full depth of deposit (502) was not established as excavation did not exceed 2m in depth. Set within backfill deposit (502) were two rows of large square concrete blocks (PLATE 3 & 4), interpreted as supporting blocks for a large structure. This is presumably the warehouse shown on the 1908 OS 25 inch map (FIGURE 6).



Plate 2- Concrete buttress supports [501] and red sandstone backfill deposit (502). Looking southwest.



Plate 3- Concrete foundation support within backfill (502).



Plate 4- Concrete foundation supports after removal from (502).

5.3.3. To the south of wall [500] the modern overburden and build up (503) exceeded the depth of the trench (PLATE 1).

THE WEST

5.3.4. Along the entire western edge of the site a 2m wide x 2m deep trench was excavated and sections shored for safety. This trench illustrated how much modern intervention had occurred over the site area, with numerous layers of back fill, concrete surfaces and service cuts evident.

5.3.5. To the north of the southern face to the 19th century Queen's Basin/Half Tide Dock wall [504], a layer of stone sets (505) (PLATE 5) were overlying a concrete surface (506). Below this was a back fill deposit composed of a black burnt sandy material (507), which had the appearance of industrial waste. Within fill (507) a brick structure were identified forming a small tunnel [508], which ran east to west (PLATE 6). This feature could be seen in both the east and west facing sections of the trench.



Plate 5- Cobble sets (505) and industrial fill (507).

5.3.6. To the south of tunnel [508], a brick footing with mid bluish grey mortar [509] was identified (PLATE 6). This was interpreted as the footing of a dockside building which is marked as 'North Shed' on the 1893 OS 25 inch map (Lancashire sheet CVI.14) (FIGURE 5). Brick footing [509] was thought to be contemporary with the southern face to the 19th century Queen's Basin/Half Tide Dock wall [504] and brick tunnel [508], as similar materials were used in their construction. The tunnel [508] would have been situated within the dockside building and may have been a service/access tunnel for the underside of heavy machinery or a culvert/drain. This footing [509] was removed with a concrete breaker and the area subsequently back filled.



Plate 6- East facing section of brick footing [509] and associated brick tunnel [508]. Probably the remains of a dockside building which is marked as 'North Shed' on the 1893 OS map. Looking southwest.

- 5.3.7. The southern face to the 19th century Queen's Basin/Half Tide Dock wall [504] was exposed using a large toothed bucket and the upper 1m was removed with a concrete breaker to the new construction formation level. Elements of the fabric to wall [504] were visible including a mix of brick fragments, red sandstone and some yellow sandstone fragments, bonded with a mid bluish grey mortar (PLATE 7).
- 5.3.8. In the resulting west facing section through the 19th century Queen's Basin/Half Tide Dock wall [504], a further brick structure [510] was seen to be built into dock wall [504] (PLATE 8). Structure [510] formed a brick housing for a series of cast iron pipes, thought to be components of a hydraulic system which was used to power cranes and other dock machinery.
- 5.3.9. The upper part of the 19th century Queen's Basin/Half Tide Dock wall [504] was exposed from west to east across the site, revealing the surviving top of the wall and the upper 1m of the southern face elevation. The surface of the wall appeared truncated, with the height varying suggestive of previous interventions for modern services etc (PLATE 9).



Plate 7- Section through the top of the 19th century Queen's Basin/Half Tide Dock wall [504]. Looking west, 2m scale.



Plate 8- Brick structure [510] embedded into Dock wall [504]. Looking east, 2m scale.



Plate 9- The top of the 19th century Queen's Basin/Half Tide Dock wall [504]. Looking northwest, 1m scale.



Plate 10 - Brick structure [513], possible hydraulics housing



Plate 11- Sandstone and Brick footing [515] north of dock wall [504]. Looking north, 1m scale.

5.3.10. A small segment of a brick structure [513] was identified in section above the 19th century Queen's Basin/Half Tide Dock wall [504] (PLATE 10). This appeared to be the same as brick housing [510], recorded in the west facing section through the dock wall [504], at the far western side of the site. Further excavation revealed additional segments of the brick structure [513] with cast iron pipes still *in situ*.

5.3.11. Towards the northern end of the western area, a sandstone and brick mortared footing was revealed [515] (PLATE 11). The large sandstone blocks forming this structure are thought to indicate a load bearing function; and [515] was interpreted as the possible foundation of the northern side to the dockside building which is marked as 'North Shed' on the 1893 OS 25 map (FIGURE 5).

5.3.12. A concrete footing [511] was identified which was thought to be associated with the southern side of a warehouse contemporary with the early 20th century Queen's Branch Dock wall (shown on the 1908 OS 25 inch map) (FIGURE 6). This footing [511] extended east to west and was removed during the construction works.

5.3.13. At the western end of the exposed 19th century Queen's Basin/Half Tide Dock wall [504], a mooring loop was identified fixed into the southern face. It

consisted of a long pin with a loop at one end and a large bolt at the other and was secured to the wall by a large rectangular plate, through which the pin was located.

5.4. THE NORTH

5.4.1. At the northern end of the site there was a continuation of the sequence seen to the south with concrete layers overlying red sandstone backfill deposit (502) (PLATE 12), to the north of the 19th century Queen's Basin/Half Tide Dock wall [504] (FIGURE 5).



Plate 12- Red sandstone backfill deposit (502) at the northwest corner of the site. Looking northwest.

5.4.2. Further segments of the concrete footings to a warehouse shown at the southern side of King's Dock on the 1908 OS 25 inch map (Lancashire sheet CVI.14) were identified [516] (FIGURE 6). Immediately north of these footings was a large circular pad made of bricks and sandstone fragments bonded with a bluish grey mortar (PLATE 13). It contained a central cast iron fixture probably designed to support a small crane, which was likely to have been operated by hand (PLATE 17); similar cranes are still *in situ* along the side of the neighbouring Wapping Dock (PLATE 18).

5.4.3. The deposits in this area were mixed and patchy; composed of sands, silts, gravels and industrial waste (512). The sections revealed multiple layers of silts

and concrete surfaces, with a spread of cobbles seen below the concrete surfaces during mechanical excavation.



Plate 13- A possible northern Crane base after removal. Facing South.

5.5. THE EAST

- 5.5.1. The centre of the eastern area revealed the same mixed and patchy deposits (512) as in the northern area, with concrete and cobble layers similar to those seen to the west (PLATE 14).
- 5.5.2. To the north of deposit (512) was another segment of concrete footing [511] thought to be associated with the southern side of a warehouse contemporary with the early 20th century King's Dock wall (shown on the 1908 OS 25 inch map) (PLATE 15) (FIGURE 6). To the north of footing [511] was a brick structure [514] bonded with bluish grey mortar. Structure [514] was interpreted as a second crane base, identical in construction to the one found in the northwest area. The location of this second possible crane base may correspond with a dockside feature shown on the 1882 6 inch Ordnance Survey (OS) map (FIGURE 4).
- 5.5.3. A third possible crane base was located to the west of [514] (PLATE 16) but this appeared to be built to support a larger machine, with larger components still

attached. The evidence suggests that during the 19th century there had been a row of three cranes positioned close to the northern side of the King's Dock wall; however, these are not shown on the 1893 OS 25 inch map (Lancashire sheet CVI.14) (FIGURE 5).

- 5.5.4. The northern elevation of 19th century King's Dock wall wall was not identified during the ground works but was thought to be near the position of the crane bases. The line of this wall had been truncated for a large service pipe along its whole length and the 2m depth of the required excavation was not sufficient to encounter any undisturbed remains of it.



Plate 14- Mixed deposit (512) in the eastern area. Looking west.



Plate 15- Concrete footing [511] in the eastern area of the site. Looking southwest.



Plate 16- The third possible crane base. Facing northeast, 2m scale.



Plate 17- Cast iron fixture set within possible crane base [514], 2m scale.



Plate 18- Example of an in situ cast iron crane set on the edge of the neighbouring Wapping Dock wall

6. Finds

6.1.No finds were identified on, or retained from, the site.

7. Discussion and Conclusions

- 7.1. An archaeological watching brief was carried out during groundworks at King's Dock, Liverpool, Merseyside. This work was carried out by L – P : Archaeology as part of a planning condition (18F/1697) on behalf of Willmott Dixon Construction Ltd.
- 7.2. The site lies within the Liverpool – Maritime Mercantile City World Heritage site Buffer Zone (DME3089). There are no Scheduled Monuments, Listed Buildings, Locally Listed Buildings, Registered Battlefields or Parks and Gardens on the site.
- 7.3. No evidence of Prehistoric, Roman or Medieval activity were identified within the site during the Watching Brief.
- 7.4. The upper deposits of the site were heavily truncated from recent investigations and past works, which had created areas of disturbance exceeding the 2m depth required for construction of the new MSCP.
- 7.5. During the groundworks the *in situ* remains of the northern face to the early 20th century Queen's Branch Dock wall were located, as shown on the 1908 OS 25 inch map (Lancashire sheet CVI.14) (FIGURE 3 & 6). To the north of this wall the remains of a contemporary dockside warehouse were also recorded.
- 7.6. Further north the groundworks encountered the *in situ* remains of the southern face to the 19th century Queen's Basin/Half Tide Dock wall with evidence of later alteration and modern disturbance being noted (FIGURE 4). Contemporary 19th century dockside structures were evidenced by the brick and sandstone footings of the 'North Shed' shown on the 1893 OS 25 inch map (Lancashire sheet CVI.14) and the *in situ* remains of three possible crane bases (FIGURE 3 & 5). Within the footprint of the 'North Shed' a brick structure housing cast iron pipes was thought to be part of a hydraulic system designed to power lifting machinery. All of these structural elements were considered to be broadly contemporary with each other as they were constructed of similar bricks and bonded with a similar grey-blue mortar.
- 7.7. The southern face to the 19th century King's Dock wall was not located during the works due to the later installation of substantial modern services at the northern end of the site. It remains possible that structural remains survive in this area at a greater

depth than the 2m required by the groundworks.

7.8.No *in situ* remains of the late 18th century King's Dock wall were encountered during the groundworks. This wall was encountered during the evaluation work and characterised as being constructed from distinctive yellow sandstone blocks. As such, the structure is considered to have been preserved *in situ* beneath the formation level of the new MSCP.

8. Archive

8.1. The paper archive consists of:

- ◆ 13 x Photographic Register sheets
- ◆ 94 x Colour digital photographs
- ◆ 1 x Context Register sheet

8.2. No finds were collected from the site.

8.3. The archive is to be deposited at the Liverpool Museum Service.

SOURCES CONSULTED

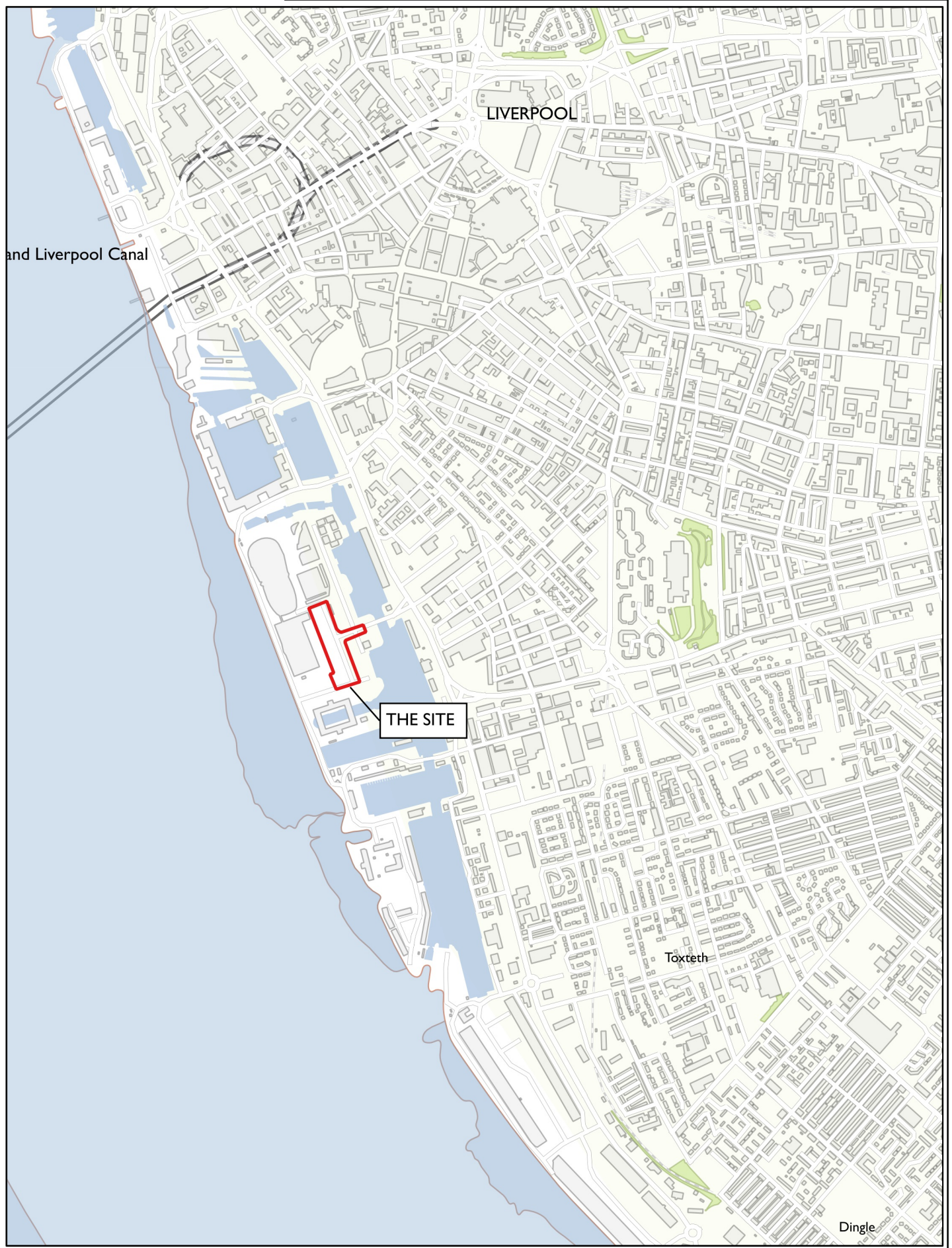
BIBLIOGRAPHIC

- ALLEN, M., 2008. *Intelligent Environmental Sampling Policy*. L - P: Archaeology and Allen Environmental Archaeology.
- BRITISH GEOLOGICAL SURVEY, 2017. 'British Geological Survey GeoIndex'. Available at: <http://www.bgs.ac.uk/geoindex>.
- BROWN A M, 1843. *Smith's Strangers' Guide to Liverpool, Benjamin Smith: Liverpool*.
- CAMPBELL, G., MOFFETT, L. & STRAKER, V., 2011. *Environmental Archaeology. A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post Excavation*. English Heritage.
- CHARTERED INSTITUTE FOR ARCHAEOLOGISTS, 2014a. 'Code of Conduct'.
- CHARTERED INSTITUTE FOR ARCHAEOLOGISTS, 2014b. "Standard and guidance for an archaeological watching brief".
- CHARTERED INSTITUTE FOR ARCHAEOLOGISTS, 2014c. 'Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives.'.
- COWELL, R.W., 2010. 'Excavations at Sothworth Hall Farm, near Winwick, North Cheshire and the Neolithic and Bronze Age Regional Background'. *Journal of the Merseyside Archaeological Society*, **13**, pp.7–50.
- COWELL, R.W., 1999. The Human Influence to the Norman Conquest. In *Ecology and Landscape Development: A History of the Mersey Basin*. Liverpool: Liverpool University Press, pp. 33–42.
- DCLG, 2012. 'National Planning Policy Framework: Planning for the Historic Environment'.
- ENGLISH HERITAGE, 2002. *Environmental Archaeology: A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation*. English Heritage.
- ENGLISH HERITAGE, 2014. *Greater London Archaeology Advisory Service: Standards for Archaeological Work (Revised 2014)*.
- ENGLISH HERITAGE, 2009. 'Management of Research Projects in the Historic Environment: The MoRPHE Project Managers' Guide'.
- FARRER, W. & BROWNBILL, J., 1911. *A History of the County of Lancaster: Volume 5*.
- GREGORY R A & ET AL, 2014. *Archaeology at the Waterfront 1: Investigating Liverpool's Historic Docks*. Oxford Archaeology.
- HCLG, 2019. 'National Planning Policy Framework (Revised): Chapter 16 – Conserving and enhancing the historic environment'.
- HISTORIC ENGLAND, 2015a. 'Digital Image Capture and File Storage: Guidelines for Best Practice'. Available at: <https://content.historicengland.org.uk/images-books/publications/digital-image-capture-and-file-storage/heag059-digital-images.pdf/>.
- HISTORIC ENGLAND, 2015b. 'Management of Research Projects in the Historic Environment: The MoRPHE Project Managers' Guide'. Available at: <https://historicengland.org.uk/images-books/publications/morphe-project-managers-guide/>.

- HOLLINSHEAD, J., 2007. *Liverpool in the sixteenth century*. Lancaster: Carnegie Publishing Ltd.
- KENNERLY, P., 2010. *Liverpool. The making of the city on the Mersey*. Lancaster: Palatine Books.
- LEIGH, D., 1998. *First Aid for Finds: Practical Guide for Archaeologists* D. Watkinson & V. Neal, eds. United Kingdom Institute for Conservation of Historic & Artistic Works, Archaeology Section.
- MATTHEWS R, 2018A. *Archaeological desk based assessment Kings Dock, Liverpool, Merseyside*. Chester: L - P: Archaeology.
- MATTHEWS R, 2018B. *Archaeological evaluation report Kings Dock, Liverpool, Merseyside*. Chester: L - P: Archaeology.
- McKINLEY, J.I. & ROBERTS, C.A., 1993. *Excavation and Post-excavation Treatment of Cremated and Inhumed Human Remains*. Institute of Field Archaeologists, University of Birmingham.
- MORRIS, J, 1978. *Domesday Book Cheshire*. Chichester: Phillimore.
- MITCHELL, P & BRICKLEY, M, 2017. 'Updated Guidelines to the Standards for Recording Human Remains'. Available at: https://www.archaeologists.net/sites/default/files/14_Updated%20Guidelines%20to%20the%20Standards%20for%20Recording%20Human%20Remains%20digital.pdf.
- MUSEUMS AND GALLERIES COMMISSION, 1992. 'Standards in the Museum Care of Archaeological Collections' C. Paine, ed.
- PAUL D, 2016. *Liverpool Docks: A short history*. Stroud: Fonthill Media.
- RICHIE-NOAKES, N, 1984. *Liverpool's Historic Waterfront: The World's First Mercantile Dock System*. London.
- SOCIETY OF MUSEUM ARCHAEOLOGISTS, 1993. *Selection, Retention and Dispersal of Archaeological Collections: Guidelines for Use in England, Wales and Northern Ireland*. Society of Museum Archaeologists.
- SPENCE, C. ED., 1994. *Archaeological Site Manual*. London: Museum of London Archaeological Service.
- UNITED KINGDOM INSTITUTE FOR CONSERVATION, 1983. 'Conservation Guidelines No. 2: Packaging and Storage of Freshly Excavated Artifacts from Archaeological Sites'.
- WALKER, K., 1990. *Guidelines for the Preparation of Excavation Archives for Long-term Storage*. UKIC Archaeology Section.

FIGURES

FIGURE 1 // Site Location - General



PROJECT // 2803C - Kingsdock, Liverpool, Merseyside

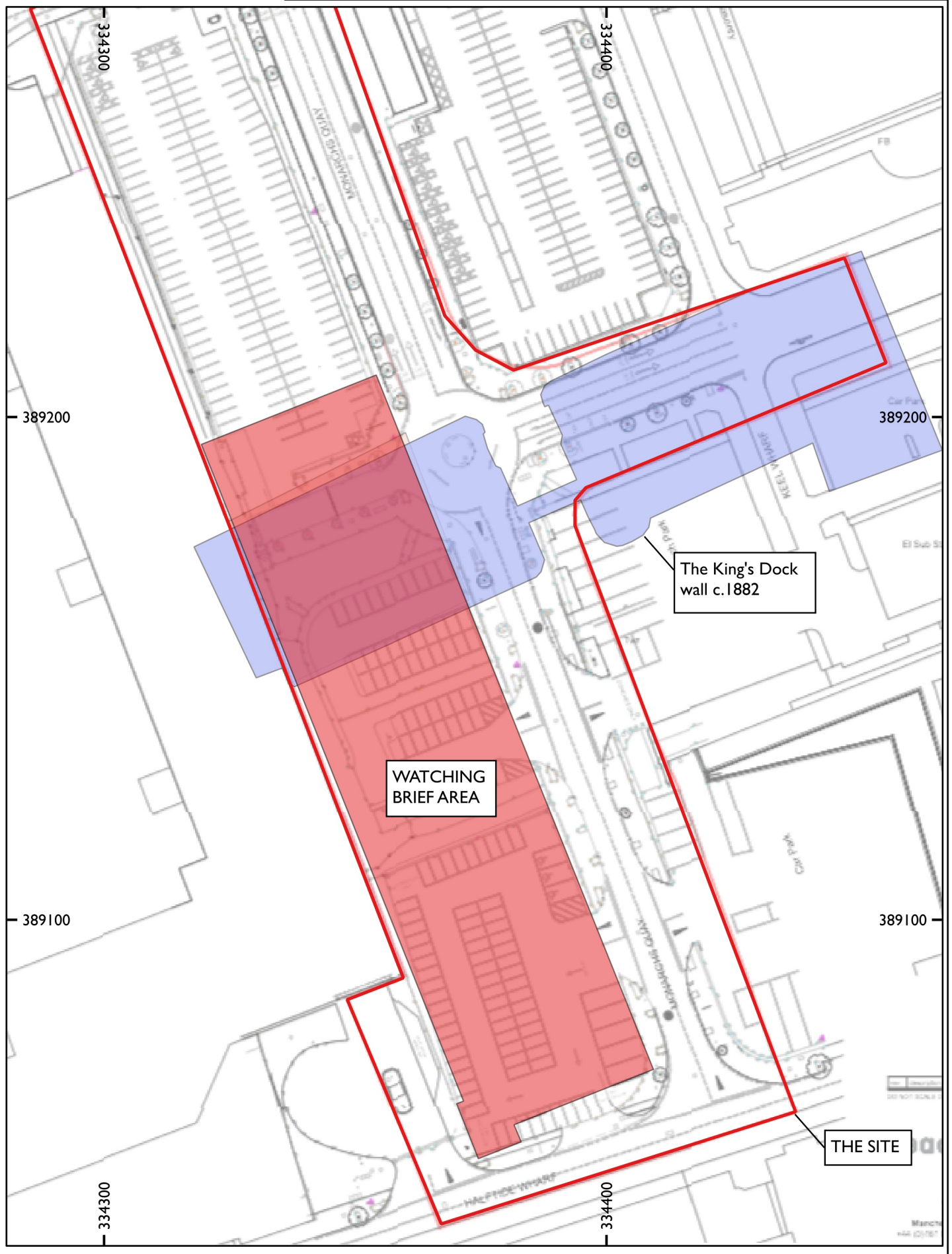
DESCRIPTION // Site Location - General

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FIGURE 2 // Site Location - Detail



The King's Dock wall c.1882

WATCHING BRIEF AREA

THE SITE



PROJECT // 2803C - Kingsdock, Liverpool, Merseyside

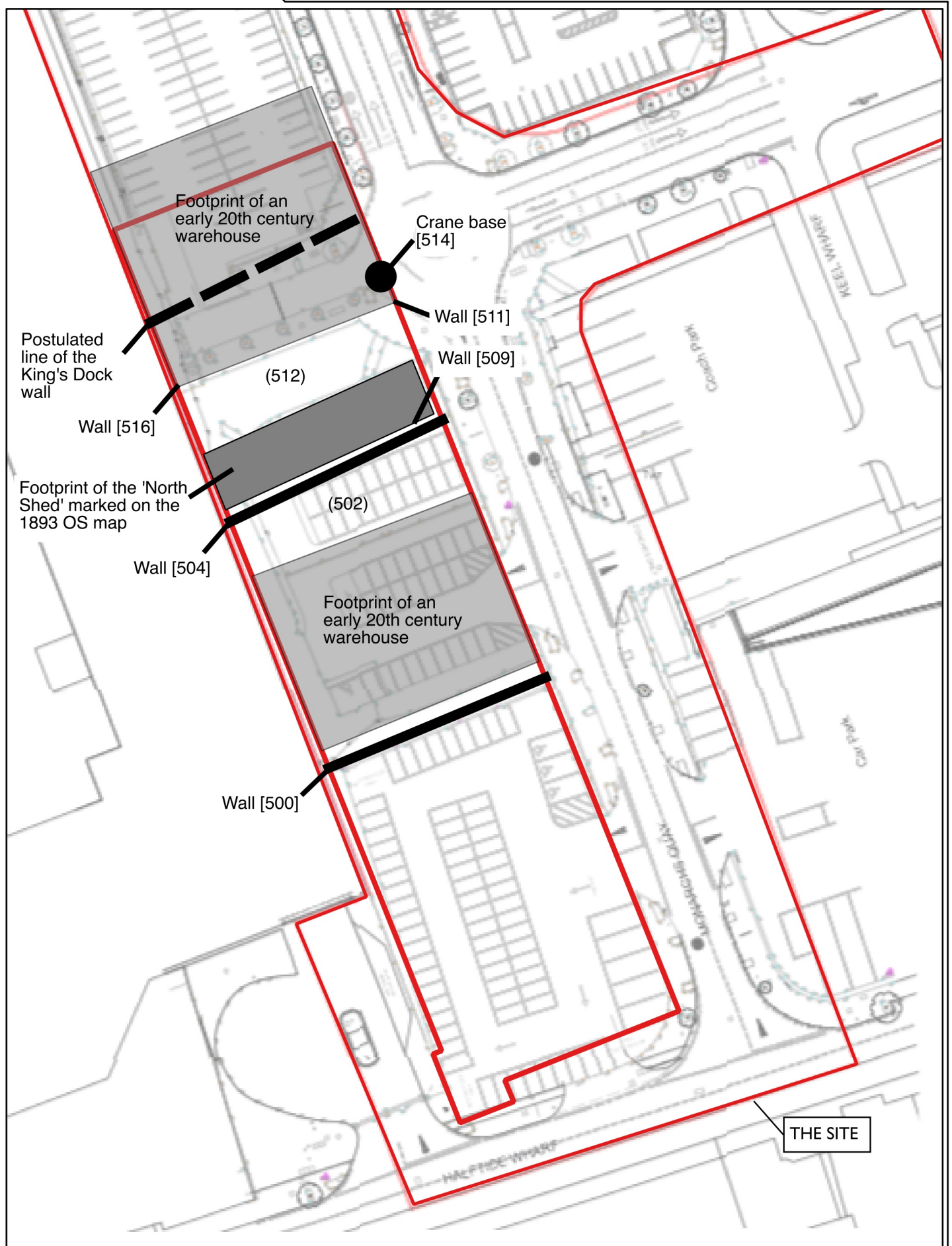
DESCRIPTION // Location of Watching Brief

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FIGURE 3 // Location - Archaeology



0 50 m



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DESCRIPTION // Location of the main archaeological features

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FIGURE 4 // 1882 OS map



0 50 m



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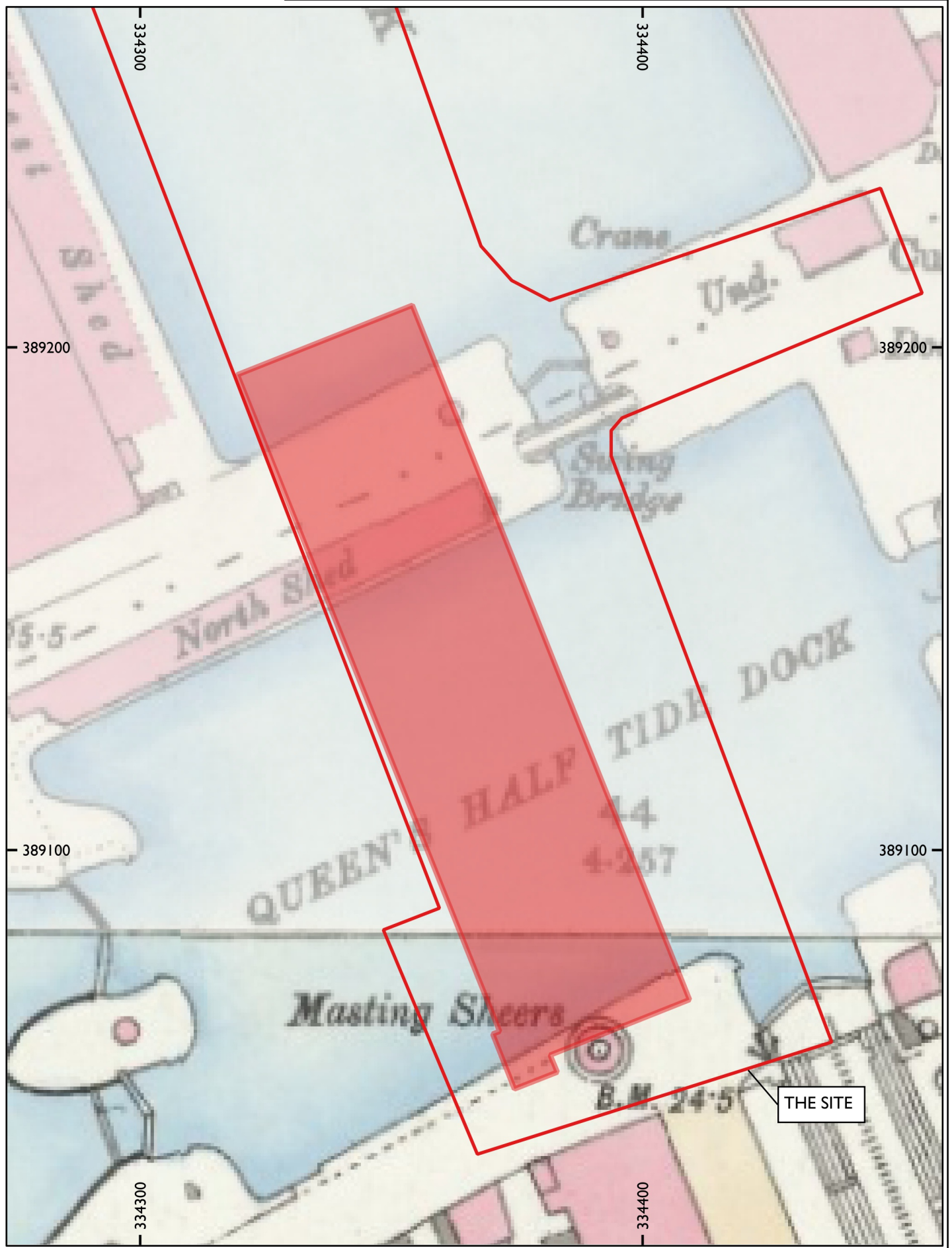
DESCRIPTION // Extract from the 6 inch OS map 1882 (Cheshire Sheet XIII)

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FIGURE 5 // 1893 OS map



0 50 m



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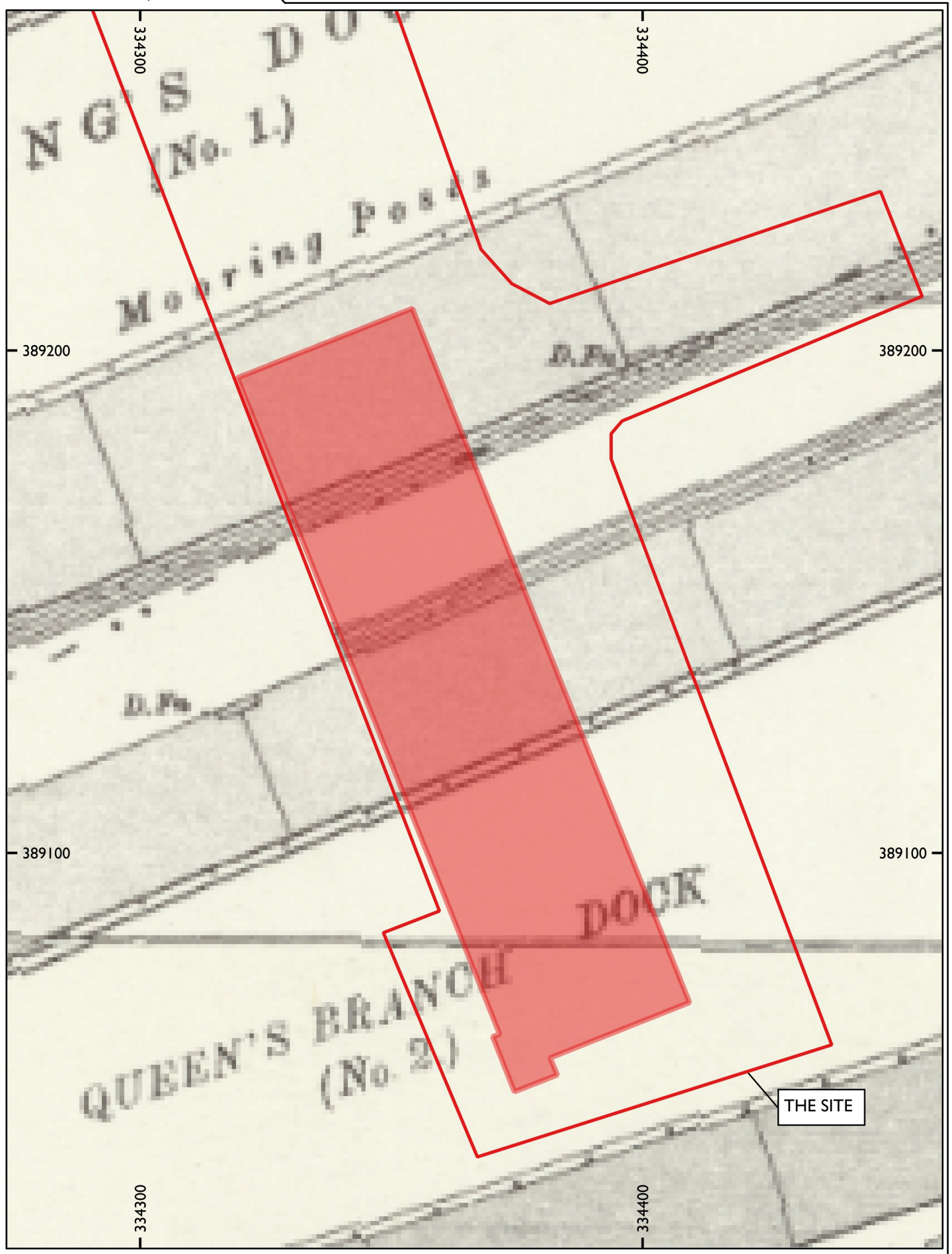
DESCRIPTION // Extract from the 25 inch OS map 1893 (Lancashire Sheet CVI.14)

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FIGURE 6 // 1908 OS map



0 50 m



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DESCRIPTION // Extract from the 25 inch OS map 1908 (Lancashire Sheet CVI.14)

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OASIS FORM

APPENDIX I

OASIS DATA COLLECTION FORM: England

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OASIS ID: Iparchae1-375560

Project details

Project name	King's Dock, Liverpool
Short description of the project	Archaeological watching brief at King's Dock, Liverpool.
Project dates	Start: 28-01-2018 End: 29-11-2019
Previous/future work	Yes / No
Any associated project reference codes	LP2803C - Sitecode
Type of project	Recording project
Site status	World Heritage Site
Current Land use	Industry and Commerce 2 - Offices
Monument type	DOCK Post Medieval
Significant Finds	NONE None
Investigation type	"Watching Brief"
Prompt	National Planning Policy Framework - NPPF

Project location

Country	England
Site location	MERSEYSIDE LIVERPOOL LIVERPOOL King's Dock
Postcode	L3 4DQ
Study area	1.83 Hectares
Site coordinates	SJ 334336 389160 52.94318368707 -2.990703439126 52 56 35 N 002 59 26 W Point
Height OD / Depth	Min: 4m Max: 6m

Project creators

Name of Organisation	L - P : Archaeology
Project brief originator	Local Authority Archaeologist and/or Planning Authority/advisory body
Project design originator	L - P : Archaeology
Project director/manager	Dan Garner
Project supervisor	Rachael Matthews
Type of sponsor/funding body	Client
Name of sponsor/funding body	Willmott Dixon Construction Ltd

Project archives

Physical Archive Exists?	No
Digital Archive recipient	Liverpool Museums
Digital Archive ID	LP2803C
Digital Contents	"none"
Digital Media available	"Images raster / digital photography","Text"
Paper Archive recipient	Liverpool Museums
Paper Archive ID	LP2803C
Paper Contents	"none"
Paper Media available	"Context sheet","Drawing","Report"

Project bibliography 1

Publication type	Grey literature (unpublished document/manuscript)
Title	Archaeological Watching Brief Report. King's Dock, Liverpool, Merseyside
Author(s)/Editor(s)	Cowell, S.
Author(s)/Editor(s)	Matthews, R.
Other bibliographic details	LP2803C-WBR-v1.2
Date	2019
Issuer or publisher	L - P : Archaeology
Place of issue or publication	Chester
Description	Report on the results of the archaeological watching brief carried out at King's Dock. Liverpool
Entered by	D. Garner (chester@lparchaeology.com)
Entered on	29 November 2019

OASIS:

Please e-mail [Historic England](#) for OASIS help and advice

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