

**THAMES WATER UTILITIES LTD**

**WATER MAINS REPLACEMENT WORKS**

**THE HIGHWAY, PENNINGTON STREET & WAPPING LANE  
AREA, E1**

**LONDON BOROUGH OF TOWER HAMLETS**

**AN ARCHAEOLOGICAL WATCHING BRIEF**

**January 2008**



**COMPASS**



**ARCHAEOLOGY**

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AN ARCHAEOLOGICAL WATCHING BRIEF

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## ***Abstract***

*An archaeological watching brief was undertaken between August 2006 and October 2007. This was on water mains replacement works carried out by Thames Water Utilities Ltd. within the area of Shadwell. Works comprised a mixture of open cut trenches and pits linked by pipe insertion or drilling. The watching brief required monitoring over the area approximately between Cable Street and Asher Way (north to south) and Garnett Street and Crowder Street (east to west). No important significant archaeological finds or features were observed during the course of the watching brief, despite covering an area that had previously produced significant Roman remains<sup>1</sup>. This is probably due to the much greater depth of ancient deposits, particularly in the area to the south of The Highway. Remains of a 'wooden pipe' were recorded, but even this was considered to be a localised post-medieval feature with its exact provenance and date remaining unknown.*

*Exposed deposits consisted largely of modern road-make-up layers, service backfills, made-ground, and in-filled cellars. Earlier post-medieval activity was observed in the form of made ground and dumped silt deposits, with pottery inclusions dating to the 18<sup>th</sup> century. These most likely represent 18<sup>th</sup> century ground levelling where the natural terrace gravels drop steeply away to the south of what is now The Highway. The silt deposits presumably originate from the 18<sup>th</sup> century (and onwards) dredging and creation of the docks on the northern bank of the Thames. Natural deposits were not encountered at any point during the course of this watching brief.*

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<sup>1</sup> Pre-Construct Archaeology Site Code: HGA02 and Johnson 1975

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## 1. Introduction and Acknowledgments

- 1.1 This report describes the results of an archaeological watching brief undertaken in the area of the Shadwell, London Borough of Tower Hamlets during water mains replacement works by Thames Water.
- 1.2 The area affected by groundworks forms a group of selected roads within the area defined by Thames Water Utilities Ltd (Finsbury Park 22). David Divers at English Heritage proposed the monitoring of the western part of the site (see Figure 1) as this was considered to be the area most likely to impact on any archaeological remains. This area was approximately bounded by Cable Street and Asher Way (north to south), and Garnet Street and Crowder Street (east to west). This area was specified due to previous important archaeology having been found within this area (see section 3).
- 1.3 Archaeological observations were carried out during contractor's groundworks within the highlighted area, coverage being determined by the nature and extent of the exposed deposits. Potential remains were investigated by hand, with recording and recovery of dating evidence as appropriate.



Fig. 1 The monitored study area, reproduced from plans provided by Thames Water Utilities Ltd, and based on the Ordnance Survey digital map

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- 1.4 The archaeological watching brief was commissioned by Arabella Bramley, Ecology and Conservation, Thames Water Utilities Ltd. The onsite works were undertaken by Clancy Docwra.

## 2. Site Location and Geology

- 2.1 The archaeological fieldwork covered an area with overall dimensions of some 450m north-south by 200-350m east-west (Figure 1; approx. centred at NGR TQ 349 807). The land here slopes to the south and towards the Thames, The Highway itself being at a level of about 8.5m to 9.5m OD.
- 2.2 The British Geological Survey (1993, *North London. Sheet 256*) indicates that in this area The Highway follows the southern edge of a Gravel River Terrace overlooking the Thames (Kempton Park Terrace). On lower ground just to the south this is replaced by more recent floodplain alluvium: previous archaeological investigations in the latter area have also shown past terracing and considerable deposits of made ground.

## 3. Archaeological and Historical Background

- 3.1 Significant Roman remains have been found just to the south of The Highway, on either side of Wapping Lane. Excavations just to the east in 1974 revealed a substantial freestanding masonry structure, some 8m square and with walls *c* 2m thick. This has been interpreted as a signal or watch tower (Johnson A, 1975 *LAMAS Trans.* 26, 278-80), and latterly as a possible mausoleum. Other broadly contemporary features – later 3<sup>rd</sup> to mid 4<sup>th</sup> century – in the vicinity included postholes, ditches and clay and timber buildings.

More recently a part of a substantial complex of later 2<sup>nd</sup> to 4<sup>th</sup> century Roman buildings has been recorded near the tower site (Pre-Construct Archaeology: HGA02). These included a masonry bathhouse with a series of heated rooms, as well as an open yard to the north and further timber buildings. Other remains are noted in the area to the west of Wapping Lane, including evidence for water management, field boundaries, terracing and more timber buildings.

It has been suggested that these various developments reflect of a growth of harbour and associated commercial facilities in the Shadwell area, perhaps as docks within the City were rendered inoperative in the 3<sup>rd</sup> century by falling river levels and/or the construction of the defensive City Wall.

The Highway itself may well follow the line of an earlier Roman road, and there is some evidence for probable 2<sup>nd</sup> century activity including brickearth and gravel quarrying and a cemetery.

- 3.2 In the post-Roman period there is little evidence for occupation, although land in the vicinity of the Highway may well have been under cultivation whilst lower-lying areas to the south reverted to periodically flooded marshland.
- 3.3 The area appears to have been more intensively developed from the 17<sup>th</sup> century, initially on The Highway frontages and to a lesser extent to the south along Wapping (formerly *New Gravel*) Lane. A further impetus to development was

given by the opening of the London Dock (to the south of Pennington Street) in 1805. These changes are clearly illustrated by Rocque's survey of 1746 and on Faden's plan of 1813.

3.4 Although the principal roads were developed by the mid 18<sup>th</sup> century some routes have been substantially widened. A notable example is seen on the northern side of The Highway, where the pre-war building line extends over the present pavement and well into the road, this can be seen in Figure 2 below:



Fig. 2 Extract from the 1921 Ordnance Survey map, with the monitored study area in green and the present street line of The Highway (based on the modern OS map) marked in red, the earlier road line named St. George Street in 1921

#### 4. Archaeological Research Questions

This fieldwork presented an opportunity to address several research questions:

- Can natural deposits relating to the higher Gravel Terrace be defined within the northern part of the site, and at what level?
- Is there any evidence for Roman activity, either *in situ* features or residual finds? How do these relate to previous discoveries?



- Is there any evidence for post-Roman to earlier post-medieval activity. What is the nature of this, and does it include evidence for agricultural land use?
- What evidence is there post-medieval development, and how does this relate to the 18<sup>th</sup> century and later map evidence?

## **5. The Archaeological Programme**

### **5.1 Standards**

The field and post-excavation work was carried out in accordance with English Heritage guidelines (in particular, *Standards and Practices in Archaeological Fieldwork, Guidance Paper 3*). Works also conformed to the standards of the Institute of Field Archaeologists (*Standard and Guidance for Archaeological Watching Briefs*). Overall management of the project was undertaken by a full Member of the Institute.

The recording system followed the procedures set out in the Museum of London recording manual. By agreement the recording and drawing sheets used were directly compatible with those developed by the Museum.

### **5.2 Fieldwork**

#### **5.2.1 Attendance**

The archaeological watching brief took place during contractors' groundworks, and involved one archaeologist on site as required to monitor works and to investigate and record any archaeological remains. Liaison was maintained with the groundworks team to ensure a presence on site as and when necessary.

Where archaeological remains were exposed, adequate time was allowed for investigation and recording, although every effort was made not to disrupt the contractor's programme.

The Client and English Heritage were kept advised of the progress of the fieldwork.

#### **5.2.2 Methodology**

Archaeological deposits and features were investigated and recorded in stratigraphic sequence, and where appropriate finds dating evidence recovered.

Archaeological deposits and features were recorded as appropriate on *pro-forma* context or trench sheets, and/or drawn in plan or section generally at scales of 1:10 or 1:20. The investigations were recorded on a general site plan and related to the Ordnance Survey grid. The fieldwork record was supplemented as appropriate by photography.

## **6. Post-Excavation Work**

The fieldwork was followed by off-site assessment and compilation of this report, and will be concluded by ordering and deposition of the site archive.

### **6.1 Finds and samples**

Finds were treated in accordance with the appropriate guidelines, including the Museum of London's *'Standards for the Preparation of Finds to be permanently retained by the Museum of London'*. Finds and artefacts were retained and bagged with unique numbers related to the context record. Assessment was undertaken by appropriately qualified staff.

### **6.2 Report procedure**

Copies of this report will be supplied to the Client, English Heritage, and the local studies library.

The level of reporting was determined by the results of the fieldwork. A short summary of the fieldwork is appended using the OASIS Data Collection Form, and in paragraph form suitable for publication within the 'excavation round-up' of the *London Archaeologist*.

### **6.3 The site archive**

The records from the archaeological project will be ordered in line with Museum of London *Guidelines for the Preparation of Archaeological Archives* and will be deposited in the Museum of London Archaeological Archive.

## **7. The Archaeological Watching Brief**

Archaeological monitoring in the area bounded by Cable Street and Asher Way (north to south), and Garnet Street and Crowder Street (east to west) consisted of regular visits by one or more archaeologists to observe and record open groundworks. The level of recording was determined by the nature of the exposed ground, and as the majority of trenches were negative for archaeological material, a simplified recording method was employed. Every isolated excavation was recorded under a set of required elements on a 'Trench Record Sheet' and supplemented with sketch location plans and photography. The standard recorded elements constituted length, width and depth of excavations (in metres), location, orientation, brief description and dimensions of exposed deposits, and methods/conditions. All photographs were taken with an appropriately sized scale, and in general covered a section shot, overall trench shot and where possible a wider location shot.

A single site code SDL 06 was used to cover all archaeological monitoring within the designated area (as defined in Figure 1 above).

## 7.1 Streets within the monitored study area

No significant archaeological finds or features were observed during the course of the watching brief. Due to the nature of archaeological monitoring and recording, the results will be presented as a brief summary of specific areas (defined by individual roads within the study area as shown in Figure 1). The specific streets/roads to be discussed are as follows:

Street Name	Location/Orientation	Approx. Linear Distance of Trenching
Bewley Street	North-south road, northern ends connects to Cable Street, runs south to junction with Lowood Street.	30m
Cable Street	Major east-west street, forms the northern most boundary of the watching brief study area.	100m
Garnet Street	North-south road, observed as from The Highway south to the Benson Quay junction. Forms the eastern boundary of the study area.	160m
King David's Lane	North-south road, connects to Cable Street and The Highway. Immediately east of the study area, but still monitored.	5m
Lowood Street	East-west street, approximately mid way between Cable Street and The Highway	30m
Pennington Street	East-west street, observed from the junction with Wapping Lane to the west	15m
Rum Close	East-west street, just south of West Gardens, with north south section at the southern end.	30m
The Highway	Major east-west street, observed for stretch between Garnet Street in east, to Crowder Street in the west.	15m
Wapping Lane	North-south road, observed from The Highway south to Discovery Lane.	200m
West Gardens	East-west street, just south of The Highway.	35m

### 7.1.1 Bewley Street

Six open cut trenches were observed in Bewley Street over a seven month period. The first, and largest, of these was located at the northern end of the street, adjacent to the western kerb line. The trench measured *c* 9m (north to south) by 0.45m (east to west) with a depth varying between 1.40m and 1.55m. Modern tarmac road surface overlaid granite setts set in a concrete base. Below this, compacted brick and other building rubble continued to the base of the trench (see Figure 3). On the same monitoring visit, a second trench was observed that was much smaller than the first, and a short distance to the south. This measured *c* 1m square and exposed

a section of east-west red brick wall base. This was on the same alignment as the building frontage to the west.



Fig. 3 The rubble at the base of the largest Bewley Street trench

Works continued at the southern end of Bewley Street, at the junction with Lowood Street. A trench, adjacent to the western kerb line, measured 3.2m (north to south) and 0.9m (east to west). The trench, at this stage of observation, revealed only a former cobble surface beneath the modern tarmac road surface.

The last trench monitored in Bewley Street was located near the northern end, at the junction with Cable Street, again adjacent to the western kerb line. The trench was 8.3m long (north to south) by a 3m wide (maximum east to west) and a depth of 1.1m was reached. Once again, old cobbles were set in approximately 400mm of concrete, immediately below the modern tarmac road surface. Beneath this was series of mixed service backfills and road make up deposits, with fragments of red and yellow stock bricks visible in the east facing section. A disused stock brick built drain casing was observed in the north east corner of the trench.

### 7.1.2 Cable Street

Trenching was observed on the north side of Cable Street, initially running east from approximately 50m east of the junction with King David's Lane, inside the cycle lane. The trench measured 30m (east to west) by a width of 0.7m (north to south) and a depth of 1.3m was recorded. The trench revealed a simple sequence of concrete base below the modern tarmac cycle lane surface, with service backfills and made ground extending to the base of the trench, see Figure 4 below for a representative section from this trench in Cable Street.



Fig. 4 Representative section from open cut trenching in Cable Street

Technically this area of trenching lay outside and just to the east of the study area. However, during the initial groundworks in Cable Street, Clancy Docwra staff discovered a large ‘wooden pipe’ in the base of the trench in the lowest made ground deposit. This was removed and transported for safe keeping while Compass Archaeology Ltd. were notified. Once informed of the situation, an archaeologist visited the Clancy Lea Bridge Road depot in Hackney where the pipe was being stored, to record the pipe. It is regrettable that the exact provenance of the pipe is not known, as this would significantly aid interpretation (i.e. whether it represented an *in situ* feature, or whether deposited here at a later date). However, thanks are offered to Clancy Docwra staff who notified Compass Archaeology Ltd. at the earliest opportunity and for providing photographs of their excavation (see Figure 5 below).

The site was visited shortly after the excavation of the pipe, but there was no sign of further pipes within the still exposed sections of the trench.

The ‘pipe’ itself was made of elm wood, with all parts present (bark, sapwood and heartwood). The centre of the pipe had been hollowed out; this gave rise to the ‘pipe’ name by which it referenced here for simplicity rather than as a definite interpretation. The pipe was in two parts, on site Clancy Docwra staff explained that these appeared to be slotted together while the pipe was still *in situ*. By the time of examination there appeared to be no obvious evidence for the connection of the two pipe sections. However the larger and better preserved of these was clearly splayed out at one end and reduced in diameter at the other end, so it is assumed that one section simply dovetailed into the next (i.e. a taper and socket joint).

The larger of the two parts measured 2.1m in length. The internal diameter of the hollowed out section measured between 200mm and 320mm, while the surrounding wood had a thickness of between 60mm and 120mm. For clarity, the positioning of these measurements is illustrated schematically below in Figure 6.

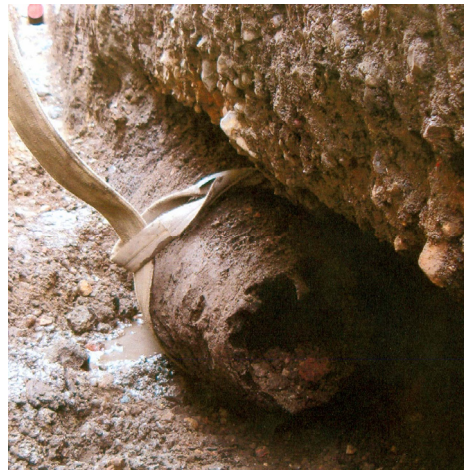


Fig. 5 Views of the 'wooden pipe' found in Cable Street. Top Left: General view of pipe. Top right upper: the pipe very close to the place and position to where it was originally uncovered, being removed by hoist by Clancy Docwra staff (photo supplied by Clancy Docwra). Top right lower: transverse view of the pipe showing the internal cavity. Bottom: tangential/radial view of the length of the pipe sections.

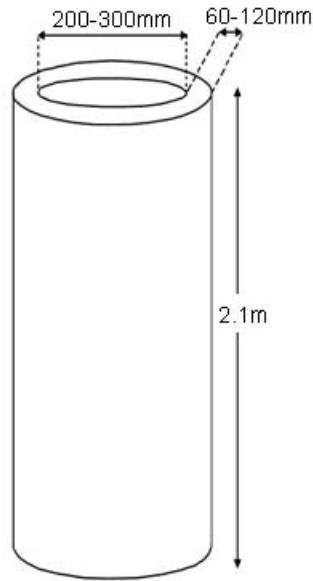


Fig.6 Schematic diagram of the larger section of pipe to show which parts the measurements refer to

Further trenching in Cable Street was located on the south side of the street, on the pavement on the south east corner of the junction with King David's Lane. This trench measured 5m north to south, by 4m wide east to west and the depth varied between 1.5m to 1.7m. Concrete road make up was observed below the paved surface, below which were various inter-cutting services and backfill layers.



Fig. 7 Trenching in Cable Street, looking west

### 7.1.3 Garnet Street

Works on a single open cut trenching were observed on the northern part of Garnet Street. The principle recorded section ran north to south for c 30m, along the western side of the road, just south of the junction with West Gardens. The trench was c 0.65 to 1.20m wide and 1.15m to 1.60m deep. Deposits were heavily disturbed by modern services, including a large east to west pipe crossing the base of the trench. Below road make-up, the upper 600mm comprised entirely made/redeposited ground; this overlaid a fairly solid grey to mid-brownish grey silty deposit with scattered flints, some CBM fragments (including yellow stock and other quite recent material) and occasional oyster shell, although no closely dateable pottery. The deposit continued beyond the limit of excavation.



Fig. 8 Monitoring ground works in Garnet Street





Fig. 9 East facing section in Garnet Street showing the disturbed silty deposit (Scale: 0.5m)

Similar deposits were also observed in two streets (West Gardens and Rum Close) adjoined to Garnet Street, although the observed pits and trenches in these areas were generally shallower and they exposed proportionately more recent disturbed material.

#### **7.1.4 King David's Lane**

Trenching in King David's was positioned just at the boundary of the groundworks monitoring study area. Located on the east side of the carriageway, at the southern end of the street, two small trial pits were observed. The first was just south of the junction with the Glamis Estate, and measured 2m (east to west) by 0.6m (north to south) and had a depth of just 0.6m. Concrete hardcore was observed beneath the tarmac road surface. The second trial hole was slightly larger and orientated north to south having dimensions of 3m by 1.5m by a depth of 1.3m. The sequence of deposits consisted of thick layers of concrete hardcore beneath tarmac, or paving and bedding in the west facing section. Beneath this was a mid brown soil with occasional pebbles and CBM (ceramic building material) flecks, this was considered to be the backfill of the earlier water main rather than an archaeological deposit.



Fig. 10 The west facing section of King David's Lane, beneath the eastern kerb line (Scale: 1m)

### 7.1.5 Lowood Street

A number of fairly small trenches were observed northern side of Lowood Street, both east and west of the Bewley Street junction. These were generally 400 to 500mm wide (occasionally up to 800mm) and 115 to 140mm deep. The sequence was quite simple, consisting of modern tarmac surfacing (<100mm) over granite setts (140-180mm), then concrete base (350-400mm) and compacted building rubble (see Figure 11 below). The similarities to previous observations at the north end of Bewley Street were noted.

A later monitoring visit concerned a trench located at the western end of the road, at the junction with Dellow Street, adjacent to the northern kerb. This trench had the dimensions 2m x 2m x 2m and revealed a sequence of tarmac over cobbles set in concrete (overall thickness of 0.5-0.6m). This overlaid a mid brown silty soil matrix that had relatively frequent brick and tile inclusions of recent date. Ground works monitoring and the backfill layers can be seen in Figure 12 below.

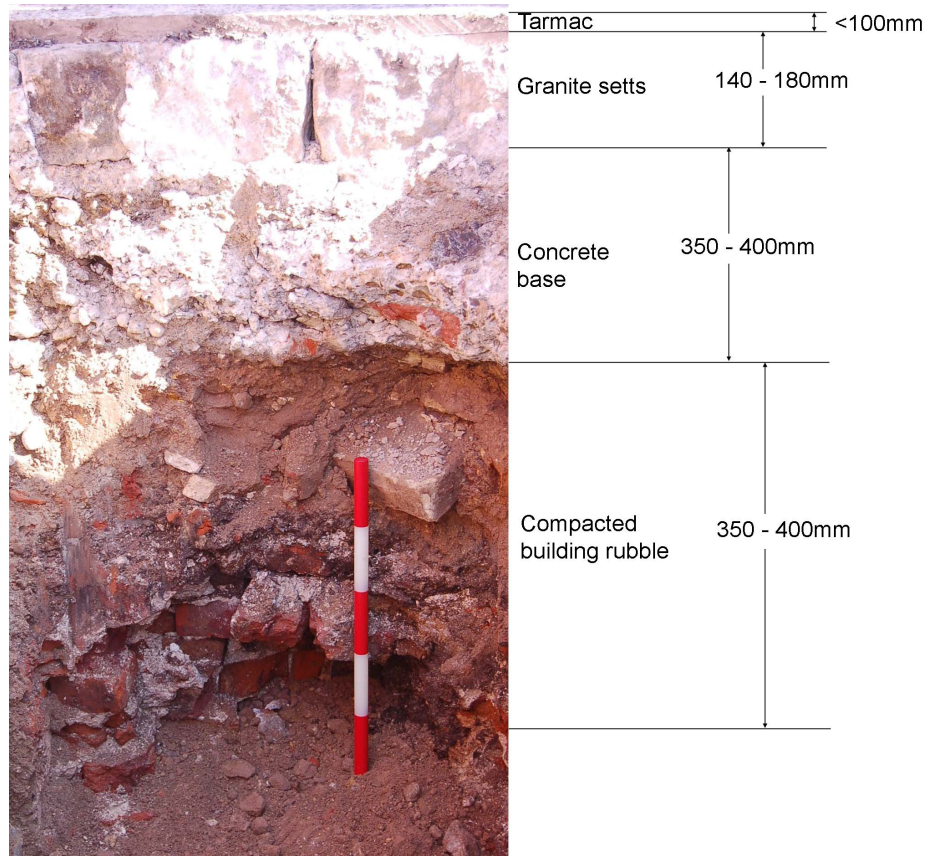


Fig.11 The section of compacted brick rubble near the east end of Lowood Street (Scale: 0.5m)

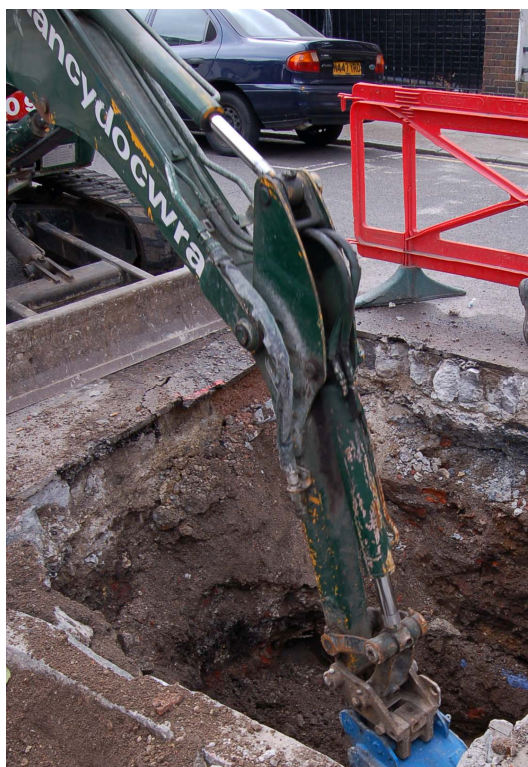


Fig. 12 Monitoring ground works in Lowood Street, with backfill deposits visible in the exposed section

### 7.1.6 Pennington Street

Trenching in Pennington Street was observed running west from the junction with Wapping Lane. The trench was approximately 20m in length, following the east to west alignment of the street. The trench was between 0.9m and 1.55m out from the kerb, varying at different points along its length. The width also varied, at the western limit of excavation this was 0.55m wide, at the centre point 0.3-0.35m wide and was between 0.5 and 0.6m wide at the eastern junction with Wapping Lane. Depth increased from 850-900mm at the western limit to approximately 1.4m deep at the eastern end. As can be seen in Figure 13 below, the sequence was of cobbles set in a concrete base that overlaid a mixed dirty backfill/made ground of dark sandy silt. This layer included a selection of post-medieval finds: frequent CBM fragments, crushed mortar, a large granite block, and occasional pot and very occasional clay tobacco pipe stem. A representative pot sample and clay pipe stem was taken for analysis; see section 7.2 below for the results.

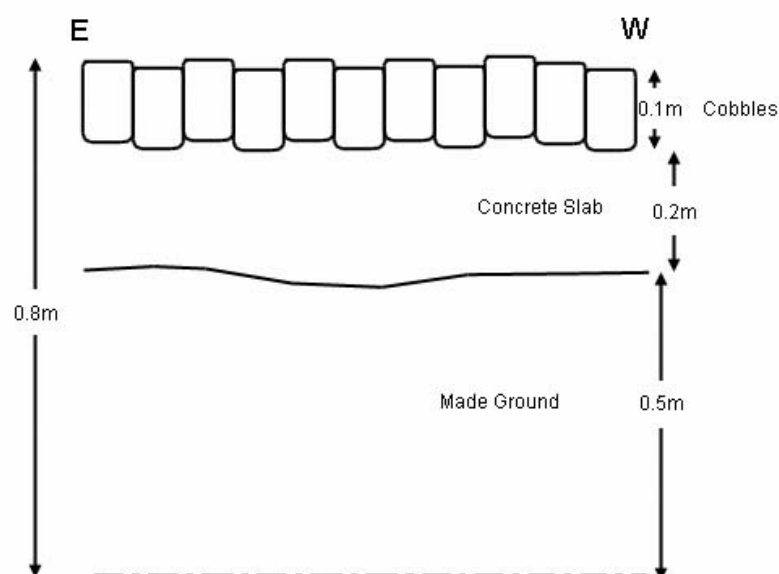


Fig. 13 The north facing sketch section at the eastern end of Pennington Street (Scale: 0.6m)

### 7.1.7 The Highway

Several trial pits and a longer trench were observed along the northern pavement of The Highway. The pits generally measured 1.5m by 1m by 0.9m deep and contained a sandy silt backfill layer with occasional rubble (broken CBM) inclusions. Existing services were exposed. At some points the northern pavement has been raised significantly above the level of the carriageway further limiting the potential for discovery of archaeological features.



Fig. 14 South facing section on the northern side of The Highway (Scale: 0.5m)

### 7.1.8 Wapping Lane

Trenching in Wapping Lane was observed closely due to the near proximity to previous ground works that produced significant archaeological remains (as discussed in section 3).

The first trench was located in the carriageway running south from the junction with Pennington Street. This trench extended north to south for 10m and was up to 1m wide, a depth of 1.2m was reached. The section (as recorded in Figure 15 below) revealed a simple sequence of modern road surface tarmac overlying disused cobbles with a concrete base of varying thickness below. At the base of the trench a made ground deposit of mid grey-brown silty soil was observed. This deposit had frequent flint pebble inclusions with some small CBM fragments.

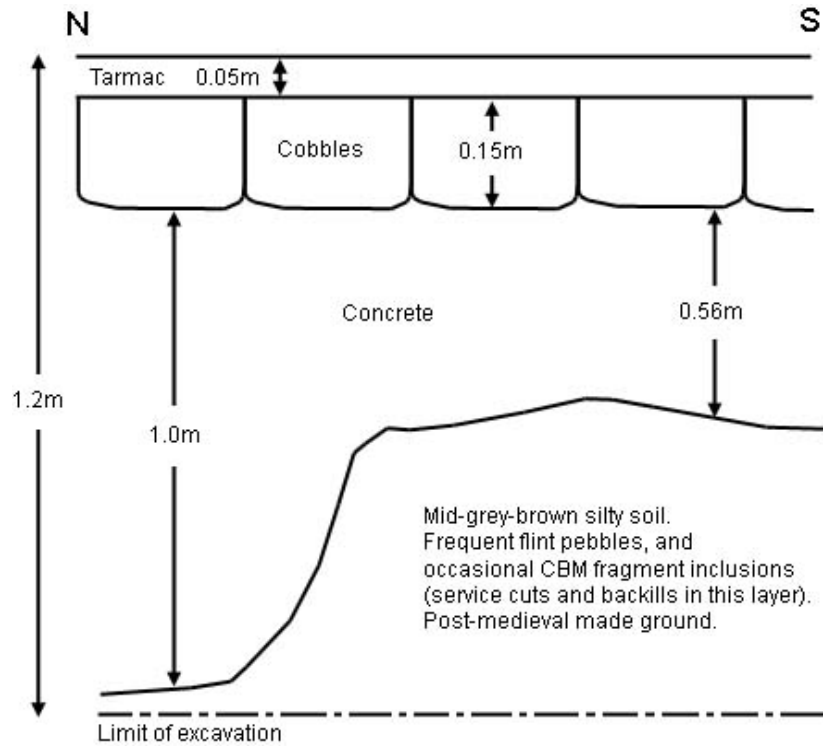


Fig. 15 The west facing sketch section on Wapping Lane, just south of the junction with Pennington Street



Fig. 16 View of trenching in Wapping Lane. Left: looking south, right: looking north

Further extension of this trench saw its connection to the trench on Pennington Street junction as previously discussed. It continued further to the north for a total length of 25m at this stage of monitoring. The greatest recorded depth at this section of open cut was 1.2m, although a depth of 0.8-0.9m was more common. The east facing section for this area is shown in Figure 17 below.



Fig. 17 The east facing section of the section of the Wapping Lane trench just north of the junction with Pennington Street (Scale: 0.8m)

This trench was also extended to the north, towards the junction with The Highway, following the reinstatement of the previous sections. New trenching to the north of the Pennington Street section had a length of 24.5m by a width of approximately 1.1m with the depth varying between 1.15m and 1.4m. This area of the trench revealed a section of tarmac overlying a previous, although still recent, surface of granite cobbles set on top of a thick concrete base. A made ground deposit was observed at the base of the trench as being a mixed dark grey brown silty sand. This deposit had occasional post-medieval CBM and pot fragments (with the latter being retained for analysis- see section 7.2). Frequent fine-medium pebbles and occasional larger river cobbles ( $\leq 160\text{mm}$ ) were also found in this deposit in addition to occasional concrete fragments.



Fig. 18 West facing section in the area of the Wapping Lane trench mid way between The Highway and Pennington Street (Scale: 1m)

The last monitoring visit saw the trench's final northward extension right up to the junction with The Highway. This new section of trench measured 9m (north to south) by a maximum width of 3m and a depth of 1.4m. The section, very similar to previous sections, revealed tarmac overlying a former cobbled surface. Again these were set on a concrete hardcore to an average depth of 0.5m-0.6m. Below was a series of service backfills, and made ground layers extending to base of the trench.





Fig. 19 The west facing section at the very northern end of Wapping Lane

## 7.2 Results of pottery analysis by Paul Blinkhorn

### 7.2.1 Introduction

The pottery assemblage was collected from the lower made ground deposit exposed along Wapping Lane, in the vicinity of its junction with Pennington Street and just to the north.

The pottery assemblage comprised 13 sherds with a total weight of 252g. It was all post-medieval, and dating to the 18<sup>th</sup> century.

### 7.2.2 Fabrics

Where appropriate, the Museum of London fabric codes have been used (eg. Vince 1985, 38).

PMR: Post-medieval redware, 1580 – 1900. 9 sherds, 213g.

ENGS: English stoneware, 1700-1900. 2 sherds, 29g.

SWSG: Staffordshire white salt-glazed stoneware, 1720-1780. 1 sherd, 2g.

CREA: Creamware, 1740-1880. 1 sherd, 8g.

The pottery occurrence by number and weight of sherds per context by fabric type is shown in Table 1. Each date should be regarded as a *terminus post quem*. All the pottery types are well-known in London and its environs.

Table 1: Pottery occurrence by number and weight (in g) of sherds per context by fabric type

Context	PMR		ENGS		SWSG		CREA		Date
	No	Wt	No	Wt	No	Wt	No	Wt	
1	4	158	1	11	1	2			E18thC
2	5	55	1	18			1	8	M18thC
Total	9	213	2	29	1	2	1	8	

### 7.3 Discussion

The ‘pipe’ found in Cable Street by Clancy Docwra on site staff was the only potentially significant find to be recovered in the course of this watching brief. This elm pipe and its construction technique conform to other similar recorded wooden water pipes used in London from as early as the 13<sup>th</sup> century. It is also known that all the old London water companies that appeared between the 16<sup>th</sup> and 18<sup>th</sup> century used bored elm pipes for distributing water<sup>2</sup>. However, this function seems unlikely, given that this pipe was the only one found in the course of this eleven month watching brief and was not connected to other similar lengths of pipe. Also, the internal bore is larger than that generally found in pipes supplying water over a distance, to one large household or a number of dwellings. It seems more likely that this pipe might originate from a more localised feature carrying out a specific function. However, analysis of historical maps (including Rocque’s map of the 1740s, and Horwood’s of the 1790s) showed no sign of a suitable related industry or water feature, such as a mill or well *etc.* although in broad terms an 18<sup>th</sup> century date is suggested by the contemporary development of this part of Shadwell. Given that the exact provenance of the pipe was not determined, it remains possible that this wood originated from a feature some distance from the place it was found by the Clancy Docwra staff. It could then have been redeposited in Cable Street when the surrounding made ground deposits were laid.

The lower made ground deposits seen in the majority of trenches, especially south of The Highway, most likely represent post-medieval activity in the 18<sup>th</sup> century, when the nearby docks were created and the surrounding area developed. The pot report confirms this 18<sup>th</sup> century origin of the made ground at the junction of Wapping Lane and Pennington Street. This would have necessitated the levelling of the naturally sloping topography by dumping material, where the natural terrace gravels drop south of what is now The Highway. Made ground north of this street line probably represents more recent activity associated with more general development of the area. The silty deposits (notably those in Garnet Street and Wapping Lane) most likely represent dumped silt deposits from the dredging process involved in creating the docks.

<sup>2</sup> Extracted from [www.sewerhistory.org](http://www.sewerhistory.org), originally from a display in Abbey Mills pumping station

The backfill and rubble deposits observed in The Highway, mostly probably represent the infilling of former buildings' cellars after the Second World War, when the street line was significantly widened. This can be seen in Figure 2 above.

Where recent cobbles were set in concrete (both those observed below tarmac and those still used as the ground surface), these are considered to be of fairly recent origin. For this reason, the rubble deposits and brick footings seen in Bewley Street and Lowood Street, which lay immediately below this concrete, could also be of recent origin, perhaps related to bomb damage after the Second World War.

It is significant that no Roman finds or features were observed in Wapping Lane, given their proximity to areas that have previously produced a wealth of Roman archaeology (see section 3). The pottery from here is clearly of post-medieval date, and no *in situ* or residual Roman finds were recovered.

No natural deposits were encountered during the course of this watching brief and no significant finds or features were found. Primarily this can be attributed to the relatively shallow depth of the service trenches and the development of this area from the later post-medieval period right up to the present day.

#### **7.4 Assessment of the results of the watching brief**

The archaeological evaluation has provided an opportunity to address the site-specific objectives that were defined within the preliminary Written Scheme of Investigation (WSI). The responses to these are outlined below:

- *Can natural deposits relating to the higher Gravel Terrace be defined within the northern part of the site, and at what level?*

No natural deposits were encountered in the course of this watching brief.

- *Is there any evidence for Roman activity, either in situ features or residual finds? How do this relate to previous discoveries?*

There was no evidence for Roman activity, either in situ features or residual finds.

- *Is there any evidence for post-Roman to earlier post-medieval activity? What is the nature of this, and does it include evidence for agricultural land use?*

There was no evidence for post-Roman to earlier post-medieval activity.

- *What evidence is there post-medieval development, and how does this relate to the 18<sup>th</sup> century and later map evidence?*

Made ground and dumped silt deposits relate to the general 18<sup>th</sup> century and later development of the Shadwell docks and general study area. These deposits do contribute any new information to existing map and written records for the area. The wooden pipe recovered from Cable Street may also be of 18<sup>th</sup> century date, but cannot be conclusively dated or related to any recorded activity.

## **8 Summary and Conclusions**

No important significant archaeological finds or features were observed during the course of the archaeological watching brief in the area of Shadwell Basin, London Borough of Tower Hamlets. Trenching on a number of roads within the defined study area generally exposed modern road make up layers, overlying service backfills and made-ground deposits, dating from the 18<sup>th</sup> century onwards. A wooden pipe like structure was excavated by Clancy Docwra, and was later examined by Compass Archaeology Ltd. It is thought that this 'pipe' represents a section of water piping that originated for a specific function elsewhere before re-deposition in the made ground deposit observed in Cable Street.

## **Bibliography/Sources Consulted**

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[www.sewerhistory.org](http://www.sewerhistory.org)

<http://www.pre-construct.com/Sites/Summary02/HGA02.htm>

## Appendix I: OASIS Data Collection Form

**OASIS ID: compass1-36951**

### Project details

Project name	Thames Water Utilities Ltd Water Mains Replacement Works: The Highway, Pennington Street and Wapping Lane Area, Shadwell
Short description of the project	Archaeological watching brief on water mains replacement works within the area of The Highway, Pennington Street and Wapping Lane area of Shadwell in the London Borough of Tower Hamlets. No important significant archaeological finds or features were observed during the course of the watching brief. Works exposed modern road make up layers, overlying service backfills and made-ground deposits, dating from the 18th century onwards. A section of wooden pipe was recovered from Cable Street, this may also be of 18th century date, but cannot be conclusively dated or related to any recorded activity.
Project dates	Start: 14-08-2006 End: 31-10-2007
Previous/future work	No / No
Any associated project reference codes	SDL 06 - Sitecode
Type of project	Recording project
Current Land use	Transport and Utilities 1 - Highways and road transport
Significant Finds	POTTERY Post Medieval
Investigation type	'Watching Brief'
Prompt	Water Act 1989 and subsequent code of practice

### Project location

Country	England
Site location	GREATER LONDON TOWER HAMLETS TOWER HAMLETS Shadwell Basin
Postcode	E1
Study area	15.75 Hectares
Site coordinates	TQ 3495 8067 51.5083240244 -0.05520636239140 51 30 29 N 000 03 18 W Point

### Project creators

Name of Organisation	Compass Archaeology
Project brief originator	English Heritage/Department of Environment
Project design originator	Compass Archaeology
Project director/manager	Geoff Potter
Project supervisor	Compass Archaeology

Type of sponsor/funding body	Thames Water Utilities
Name of sponsor/funding body	Thames Water Utilities

**Project archives**

Physical Archive recipient	Museum of London archaeological archive
Physical Archive ID	SDL 06
Physical Contents	'Ceramics'
Digital Archive recipient	Museum of London archive
Digital Archive ID	SDL 06
Digital Contents	'other'
Digital Media available	'Images raster / digital photography'
Paper Archive recipient	Museum of London Archive
Paper Archive ID	SDL 06
Paper Contents	'Ceramics'
Paper Media available	'Context sheet', 'Photograph', 'Report'

**Project bibliography 1**

Publication type	Grey literature (unpublished document/manuscript)
Title	Thames Water Utilities Ltd Water Mains Replacement Works: The Highway, Pennington Street and Wapping Lane Area, E1. London Borough of Tower Hamlets. An Archaeological Watching Brief
Author(s)/Editor(s)	Johnson, K.
Date	2008
Issuer or publisher	Compass Archaeology Ltd.
Place of issue or publication	Compass Archaeology Ltd. 5-7 Southwark Street, London
Description	Spiral bound report
Entered by	Katie Johnson (mail@compassarchaeology.com)
Entered on	29 January 2008

## **Appendix II: London Archaeologist Summary**

Site Address: The Highway, Pennington Street and Wapping Lane area,  
London Borough of Tower Hamlets. E1

Project type: Watching brief.

Dates of Fieldwork: August 2006 to October 2007

Site Code: SDL 06

Supervisor: Geoff Potter

NGR: TQ 3493 8070

Funding Body: Thames Water Utilities Ltd

This involved archaeological watching brief works on Thames Water Victorian Mains Replacement Works within several streets in the London Borough of Tower Hamlets. No important significant archaeological finds or features were observed. Trenching on a number of roads within the defined study area generally exposed modern road make up layers, overlying service backfills and made-ground deposits. Sherds from the made ground deposit at the base of a trench at the Wapping Lane and Pennington Street junction dated this deposit to the 18<sup>th</sup> century. Two sections of hollowed out tree trunk remodelled to form a crude wooden water pipe was excavated by Clancy Docwra, and was later examined by Compass Archaeology Ltd. It is thought that this 'pipe' represents a section of perhaps reused wooden water piping that originated for a specific function elsewhere before redeposition in the made ground deposit observed in Cable Street.