



**ROAD BRIDGES IN THE LOWER LEA VALLEY:
Eastway Road Bridge, Bridgewater Road Concrete Bridge,
Waterden Road Bridge, White Post Lane Bridge,
Temple Mill Lane Bridge
and Angel Lane Bridge**

London Boroughs of Hackney, Newham, Tower Hamlets and Waltham Forest



MUSEUM OF LONDON

**Archaeology
Service**

PRE-CONSTRUCT ARCHAEOLOGY

**ROAD BRIDGES IN THE LOWER LEA VALLEY:
Eastway Road Bridge, Bridgewater Road Concrete Bridge,
Waterden Road Bridge, White Post Lane Bridge,
Temple Mill Lane Bridge
and Angel Lane Bridge**

London Boroughs of Hackney, Newham, Tower Hamlets and Waltham Forest

Site Codes: OL-05107, OL-05707, OL-05907, OL-07007, OL-07507, & OL-07607

Project Manager	Gary Brown
Author	Emma Dwyer
	David Sorapure
Graphics	Judit Peresztegi
	Sandra Rowntree

Museum of London Archaeology Service

© Museum of London 2008

Mortimer Wheeler House, 46 Eagle Wharf Road, London N1 7ED

tel 020 7410 2200 fax 020 7410 2201

email molas@molas.org.uk

web www.molas.org.uk

PCA

Unit 54, Brockley Cross Business Centre, 96 Endwell Road, Brockley, London SE4 2PD

tel 020 7732 3925 fax 020 7732 7896

© MoLAS-Pre-Construct Archaeology Limited 2008

SUMMARY (non technical)

The Museum of London Archaeology Service and Pre-Construct Archaeology (MoLAS-PCA) were commissioned by the Olympic Delivery Authority to analyse and record six road bridges which spanned waterways and railways in the Lower Lea Valley. The bridges were to be demolished and rebuilt, and the archaeological investigation and a subsequent report were required as a condition of planning consent for the redevelopment. The investigation took place in September–November 2007, and comprised measured survey and photography of structures and their setting.

The six bridges that were recorded were as follows: Eastway Road Bridge carries the Eastway over the Hackney Cut of the Lea Navigation; Bridgewater Road Concrete Bridge spans the Waterworks River and connects a trading estate with Warton Road; Waterden Road Bridge spans the railway line between Hackney and Stratford; White Post Lane Bridge carries a road that dates back to at least the mid-18th century over the Hackney Cut of the Lea Navigation; Temple Mill Lane Bridge crosses the railway line from Cambridge to Stratford; and Angel Lane Bridge carries an early street, one of the main routes into Stratford from the north, over a railway line.

CONTENTS

1	Introduction	1
1.1	Site background	1
1.1.1	<i>OL-05107: Eastway Road Bridge over the Lea Navigation</i>	1
1.1.2	<i>OL-05707: Bridgewater Road Concrete Bridge</i>	1
1.1.3	<i>OL-05907: Waterden Road Bridge</i>	1
1.1.4	<i>OL-07007: White Post Lane Bridge</i>	2
1.1.5	<i>OL-07507: Temple Mill Lane Bridge</i>	2
1.1.6	<i>OL-07607: Angel Lane Bridge</i>	2
1.2	Planning and legislative framework	2
1.3	Planning background	3
1.3.1	<i>Planning Delivery Zones 4, 5, 6 and 8</i>	3
1.3.2	<i>Planning Delivery Zone 11</i>	3
1.4	Origin and scope of this report	4
1.5	Research aims and method of work	4
1.6	Organisation of this report and conventions used	4
2	Topographical and historical background	13
2.1	OL-05107: Eastway Road Bridge over Lea Navigation	13
2.1.1	<i>Geology and natural topography</i>	<i>13</i>
2.1.2	<i>Early history of the site</i>	<i>13</i>
2.1.3	<i>Development and function of the standing structure</i>	<i>15</i>
2.2	OL-05707: Bridgewater Road Concrete Bridge	17
2.2.1	<i>Geology and natural topography</i>	<i>17</i>
2.2.2	<i>Early history of the site</i>	<i>17</i>
2.2.3	<i>Development and function of the standing structures</i>	<i>17</i>
2.3	OL-05907: Waterden Road Bridge	20

2.3.1	<i>Geology and natural topography</i>	20
2.3.2	<i>Early history of the site</i>	20
2.3.3	<i>Development and function of the standing structures</i>	20
2.4	OL-07007: White Post Lane Bridge	23
2.4.1	<i>Geology and natural topography</i>	23
2.4.2	<i>Early history of the site</i>	23
2.4.3	<i>Development and function of the standing structures</i>	23
2.5	OL-07507: Temple Mill Lane Bridge	26
2.5.1	<i>Geology and natural topography</i>	26
2.5.2	<i>Early history of the site</i>	26
2.5.3	<i>Development and function of the standing structures</i>	26
2.6	OL-07607: Angel Lane Bridge	29
2.6.1	<i>Geology and natural topography</i>	29
2.6.2	<i>Early history of the site</i>	29
2.6.3	<i>Development and function of the standing structures</i>	29
3	The standing structure survey	32
3.1	Methodology	32
3.2	Descriptions of the standing structures	32
3.2.1	<i>OL-05107: Eastway Road Bridge over the Lea Navigation</i>	32
3.2.2	<i>OL-05707: Bridgewater Road Concrete Bridge</i>	37
3.2.3	<i>OL-05907: Waterden Road Bridge</i>	39
3.2.4	<i>OL-07007: White Post Lane Bridge</i>	43
3.2.5	<i>OL-07507: Temple Mill Lane Bridge</i>	48
3.2.6	<i>OL-07607: Angel Lane Bridge</i>	52
3.3	Discussion and conclusion	55
4	Potential of the archaeology	56
4.1	Original research aims	56

4.2	New research aims	56
4.3	Significance of the data	56
4.4	Salvaged fixtures, fittings and materials	56
5	Publication and archiving	57
6	Acknowledgements	58
7	Bibliography and references	59
8	Appendix 1: NMR OASIS archaeological report form	61
9	Appendix 2: list of archaeological photographs	65
9.1	OL-05107 Eastway Road Bridge over Lea Navigation	65
9.2	OL-05707 Bridgewater Road Concrete Bridge	65
9.3	OL-05907 Waterden Road Bridge	66
9.4	OL-07007 White Post Lane Bridge	66
9.5	OL-07507 Temple Mill Lane Bridge	67
9.6	OL-07607 Angel Lane Bridge	67
10	Appendix 3: list of working drawings made on site	68
10.1	OL-05107 Eastway Road Bridge over Lea Navigation	68
10.2	OL-05707 Bridgewater Road Concrete Bridge	68
10.3	OL-05907 Waterden Road Bridge	68
10.4	OL-07007 White Post Lane Bridge	68
10.5	OL-07507 Temple Mill Lane Bridge	68
10.6	OL-07607 Angel Lane Bridge	68

LIST OF FIGURES

Cover: The northern side of White Post Lane bridge, looking south (40707019)

Fig 1 Location plan	6
Fig 2 Site location plan for Eastway Road Bridge (OL-05107)	7
Fig 3 Site location plan for Bridgewater Road Concrete Bridge (OL-05707)	8
Fig 4 Site location plan for Waterden Road Bridge (OL-05907)	9
Fig 5 Site location plan for White Post Lane Bridge (OL-07007)	10
Fig 6 Site location plan for Temple Mill Lane Bridge (OL-07507)	11
Fig 7 Site location plan for Angel Lane Bridge (OL-07607)	12
Fig 8 The site of Eastway Road Bridge on Rocque's map of 1746	14
Fig 9 The site of Eastway Road Bridge on Stanford's map of 1862	14
Fig 10 The site of Eastway Road Bridge on the 3rd edition OS map of 1913	16
Fig 11 The site of Bridgewater Road Bridge on Rocque's map of 1746	18
Fig 12 The site of Bridgewater Road Bridge on the 2nd edition OS map of 1893	18
Fig 13 Bridgewater Road Bridge on the OS map of 1955	19
Fig 14 The site of Waterden Road Bridge on Greenwood's map of 1824-6	21
Fig 15 The site of Waterden Road Bridge on Stanford's map of 1862	21
Fig 16 Waterden Road Bridge on the 3rd edition OS map of 1914	22
Fig 17 The site of White Post Lane Bridge on Rocque's map of 1746	24
Fig 18 White Post Lane Bridge on Stanford's map of 1862	24
Fig 19 White Post Lane Bridge on the 1st edition OS maps of 1867-70	25
Fig 20 White Post Lane Bridge on the 3rd edition OS maps of 1913-14	25
Fig 21 The site of Temple Mill Lane Bridge on Rocque's map of 1746	27
Fig 22 Temple Mill Lane Bridge on the 1st edition OS map of 1867	27
Fig 23 Temple Mill Lane Bridge on the 3rd edition OS map of 1916	28
Fig 24 The site of Angel Lane Bridge on Rocque's map of 1746	30
Fig 25 Angel Lane Bridge on Stanford's map of 1862	30
Fig 26 Angel Lane Bridge on the 1st edition OS map of 1867	31
Fig 27 Angel Lane Bridge on the 2nd edition OS map of 1894	31
Fig 28 East-facing sectional elevation through Eastway Road Bridge	36
Fig 29 West-facing sectional elevation through White Post Lane Bridge	46
Fig 30 Schematic plan of the bridge deck, White Post Lane Bridge	47
Fig 31 Plan of Temple Mill Lane Bridge	51
Fig 32 East-facing elevation and section through Angel Lane Bridge	54

LIST OF PLATES

Plate 1 The south side of the Eastway Bridge seen from Meadow Close, looking north (39507013)	32
Plate 2 Riveted steel plate girders and brick jack arches of the Eastway Bridge, forming the bridge deck, looking west (39507016)	33
Plate 3 Detail of a repair to the north parapet wall of the Eastway Bridge, looking north-west (39507008)	34
Plate 4 The western approach to the Eastway Bridge, looking east (39507004)	35
Plate 5 North side of The Bridgewater Road Bridge, and the Waterworks River, looking south (34707006)	37
Plate 6 Eastern approach to Bridgewater Road Bridge, looking north-east (34707003)	37
Plate 7 Disused footings of The Bridgewater Road Bridge in the Waterworks River (34707009)	38
Plate 8 Damaged plaque on the north parapet wall of The Bridgewater Road Bridge, looking south (34707010)	39
Plate 9 The northern approach to The Waterden Road Bridge, looking south (34607001)	39
Plate 10 The railway line beneath The Waterden Road Bridge, looking east (34607013)	40
Plate 11 The south-eastern bridge pier of The Waterden Road Bridge, looking east (34607002)	41
Plate 12 The east parapet wall and the altered bridge pier of The Waterden Road Bridge, looking south (34607010)	42
Plate 13 Detail of a gas lamp on the south-eastern bridge pier in Waterden Road, looking south-east (34607005)	43
Plate 14 The northern side of White Post Lane Bridge, looking south (40707014)	44
Plate 15 The underside of White Post Lane Bridge, looking south (40707016)	44
Plate 16 The north-west bridge pier, White Post lane, looking north (40707009)	45
Plate 17 The eastern approach to Temple Mill Lane Bridge, looking west (43707001)	48
Plate 18 The eastern approach road to Temple Mill Lane Bridge, looking west (43707009)	49
Plate 19 The southern parapet wall of Temple Mill Lane Bridge, looking east (43707003)	50
Plate 20 The east parapet wall of Angel Lane Bridge, looking south-east (45407001)	52
Plate 21 The southern approach to Angel Lane Bridge, looking north (45407006)	52
Plate 22 Part of the riveted east parapet wall, looking east (45407004)	53

LIST OF TABLES

Table 1 Abbreviations used in this report	5
---	---

1 Introduction

1.1 Site background

The structures surveyed were six bridges, carrying roads over the watercourses and railways in the Lower Lea Valley (Fig 1). The structures were located within the areas designated as Planning Delivery Zones 4, 5, 8 and 11 (PDZ4, PDZ5, PDZ8 & PDZ11) of the Olympic and Paralympic Games and Legacy Facilities planning applications, in the London Boroughs of Hackney, Newham, Tower Hamlets and Waltham Forest. See Fig 1 for site locations and the limits of Planning Delivery Zones 4, 5, 8 and 11 (in red).

A number of desk-top *Archaeological and Built Heritage impact assessments* were previously prepared by MoLAS-PCA, which cover the whole area of the six sites on a PDZ by PDZ basis: Planning Delivery Zones 4, 5, 6, 8 and 11 (MoLAS-PCA 2007a, 2007b, 2007c, 2007d, 2007e & 2007f).

These documents should be referred to for information on the natural geology, archaeological and historical background of the sites, and the initial assessment of their archaeological potential.

No previous description or investigation of the six road bridges is known, with the exception of information contained within the documents noted above.

The location, OS grid references and site codes for each structure are as follows:

1.1.1 *OL-05107: Eastway Road Bridge over the Lea Navigation*

The Eastway Road Bridge carries the A106 over the Lea Navigation and is located in the north-west corner of Planning Delivery Zone 5, in the London Borough of Hackney (Fig 2). The OS national grid reference to the approximate centre of the site is 536931 185088. Modern ground level in Arena Field, to the east of the site, is at *c* 5m OD. The Museum of London site code, by which the records are indexed and archived, is OL-05107. For reference, this structure is known within the project as BH63.

1.1.2 *OL-05707: Bridgewater Road Concrete Bridge*

This bridge carries Bridgewater Road over the Waterworks River and is located along the eastern edge of Planning Delivery Zone 8, in the London Borough of Newham (Fig 3).

The OS national grid reference to the approximate centre of the site is 538247 183791. Modern ground level in Bridgewater Road, to the east of the site, is at *c* 4m OD. The Museum of London site code, by which the records are indexed and archived, is OL-05707. For reference, this structure is known within the project as BH99.

1.1.3 *OL-05907: Waterden Road Bridge*

This bridge carries Waterden Road over the railway line from Richmond and Hackney Wick to Stratford, and is located at the boundary of Planning Delivery Zone 4, in the London Borough of Tower Hamlets, and Planning Delivery Zone 5, which is located in the London Borough of Hackney (Fig 4).

The OS national grid reference to the approximate centre of the site is 537528 184604. Modern ground level in Waterden Road, adjacent to the site, is at *c* 6m OD. The Museum of

London site code, by which the records are indexed and archived, is OL-05907. For reference, this structure is known within the project as BH135.

1.1.4 OL-07007: White Post Lane Bridge

This bridge carries White Post Lane over the Lea Navigation and is located in the north-west corner of Planning Delivery Zone 4, in the London Borough of Tower Hamlets (Fig 5).

The OS national grid reference to the approximate centre of the site is 537281 184510. Modern ground level on the towpath to the north of the site is at *c* 6m OD. The Museum of London site code, by which the records are indexed and archived, is OL-07007.

1.1.5 OL-07507: Temple Mill Lane Bridge

This bridge carries Temple Mill Lane over the former Eastern Counties Railway line to Cambridge and is located at the north end of Planning Delivery Zone 11, in the London Borough of Newham (Fig 6), on the boundary with Planning Delivery Zone 6, which lies partly within the London Borough of Waltham Forest.

The OS national grid reference to the approximate centre of the site is 538348 185393. Modern ground level in Temple Mill Lane, adjacent to the site, is at *c* 8m OD. The Museum of London site code, by which the records are indexed and archived, is OL-07507. For reference, this structure is known within the project as BH107.

1.1.6 OL-07607: Angel Lane Bridge

This bridge carries Angel Lane over the railway line from Romford to Stratford and is located in the south-east corner of Planning Delivery Zone 11, in the London Borough of Newham (Fig 7). The OS national grid reference to the approximate centre of the site is 538797 184702. Modern ground level in Angel Lane is at *c* 7m OD. The Museum of London site code, by which the records are indexed and archived, is OL-07607. For reference, this structure is known within the project as BH141.

Under the Copyright, Designs and Patents Act 1988 MoLAS-PCA retains the copyright to this document.

Note: within the limitations imposed by dealing with historical material and maps, the information in this document is, to the best knowledge of the author and MoLAS-PCA, correct at the time of writing.

1.2 Planning and legislative framework

The legislative and planning framework in which the archaeological exercise took place was summarised in the *Archaeological and Built Heritage impact assessments*, previously prepared by MoLAS-PCA, which cover the whole area of the sites (MoLAS-PCA, 2007a, 2007b, 2007c, 2007d & 2007e) and the *Written Schemes of Investigation* (MoLAS-PCA 2007f, 2007g, 2007h, 2007i, 2007j & 2007k), which formed the project designs for the survey.

These documents should be referred to for information on the natural geology, archaeological and historical background of the sites, and the initial assessment of their archaeological potential.

None of the structures are Scheduled Monuments, nor are they listed as buildings of special architectural or historic interest. Of the six sites in this report, only White Post Lane Bridge is located in an Area of Archaeological Interest.

1.3 Planning background

1.3.1 Planning Delivery Zones 4, 5, 6 and 8

In accordance with local and national policies, archaeological evaluation and built heritage survey of the areas of PDZ4, 5, 6 & 8 to be impacted upon in advance of its redevelopment was required as part of the planning process. Evaluation is intended to define the archaeological potential and significance of any deposits present on the site, so that the local authority can formulate responses appropriate to any identified archaeological resource.

The recording of the subject site in PDZ8 will be undertaken in support of a condition required by English Heritage and attached to the consent granted by the Olympic Delivery Authority Planning Decisions Team with respect to Olympic, Paralympic and Legacy Transformation Planning Application Reference 07/90010/OUMODA and Site Preparation Planning Application Reference 07/90011/FUMODA. Condition SP.0.39 of planning permission 07/90011/FUMODA states:

Demolition of any historic building specified for recording in the submitted Built Heritage Written Schemes of Investigation shall not take place until the recording set out in the relevant Written Scheme of Investigation has been undertaken and written confirmation received from English Heritage that the recording is satisfactory and that the building can be demolished. A report detailing the recording shall be submitted to the Local Planning Authority within six months of the written confirmation received from English Heritage.

Reason: To ensure that buildings with an identified historic interest are recorded.

1.3.2 Planning Delivery Zone 11

In accordance with local and national policies, archaeological evaluation and built heritage survey of the areas of PDZ11 to be impacted upon in advance of its redevelopment was required as part of the planning process. Evaluation is intended to define the archaeological potential and significance of any structures present on the site, so that the local authority can formulate responses appropriate to any identified archaeological resource.

The recording of the subject site in PDZ11 will be undertaken in support of a condition required by English Heritage and attached to the consent granted by the Olympic Delivery Authority Planning Decisions Team with respect to Olympic, Paralympic and Legacy Transformation Planning Application Reference 07/90010/OUMODA. Condition OD.11.2 of planning permission 07/90010/OUMODA states:

Demolition of any historic building specified for recording in the submitted Built Heritage Written Schemes of Investigation shall not take place until the recording set out in the relevant Written Scheme of Investigation has been undertaken and written confirmation received from English Heritage that the recording is satisfactory and that the building can be demolished. A report detailing the recording shall be submitted to the Local Planning Authority within six months of the written confirmation received from English Heritage.

Reason: To ensure that buildings with an identified historic interest are recorded.

1.4 Origin and scope of this report

The archaeological work of analysis and recording, and the production of this report, were commissioned from the Museum of London Archaeology Service and Pre-Construct Archaeology (MoLAS-PCA) by the Olympic Delivery Authority. The work was carried out in accordance with the *Written Schemes of Investigation* (MoLAS-PCA, 2007f, 2007g, 2007h, 2007i, 2007j, 2007k).

The report has been prepared within the terms of the relevant standards specified by the Institute of Field Archaeologists (IFA 2001) and corresponds approximately to the form of record and reporting at 'Level 1', in the specifications *Understanding Historic Buildings: A guide to good recording practice*, recommended by English Heritage (2006).

This report presents the results of an analytical survey carried out on the site for an aggregate total of 12 days in October and November 2007, combined with the results of documentary research.

1.5 Research aims and method of work

The research aims of this archaeological work were defined in the *Written Schemes of Investigation* (MoLAS-PCA, 2007f, 2007g, 2007h, 2007i, 2007j, 2007k) in conformity with applicable planning policies and English Heritage guidelines (Archaeological Guidance Paper No. 3, revised June 1998).

The overall aim of the programme of work was to secure 'preservation by record' of those aspects of the standing structures and the sites that were of architectural, archaeological and historical interest. The scope of the work as defined in the *Written Schemes of Investigation* was as follows:

'The structure will be viewed, described and photographed. Drawings in the form of sketches may be undertaken if required. The structure's type/purpose, the materials used in its construction and its possible date of construction will be summarised' (MoLAS-PCA 2007f, 3.3).

The investigation satisfied the research aims, and it was determined that it would not be necessary to investigate the structures further during demolition.

1.6 Organisation of this report and conventions used

Each structure will be reported on separately, with a thematic summary at the end of 3.3.

All dimensions are given in metres or millimetres and in feet and inches where appropriate. Heights are given where appropriate in metres above Ordnance Datum (mean sea level), abbreviated 'm OD'.

BGS	British Geological Survey
DCMS	Department of Culture, Media and Sport
DoE	Department of the Environment
EH	English Heritage
GLAAS	Greater London Archaeological Advisory Service
MoLAS	Museum of London Archaeology Service
OD	Ordnance Datum (mean sea level at Newlyn, Cornwall)
OS	Ordnance Survey
PDZ	Planning Delivery Zone
RCHME	Royal Commission on Historical Monuments, England
RSJ	Rolled steel joist
VCH	Victoria County History

Table 1 Abbreviations used in this report

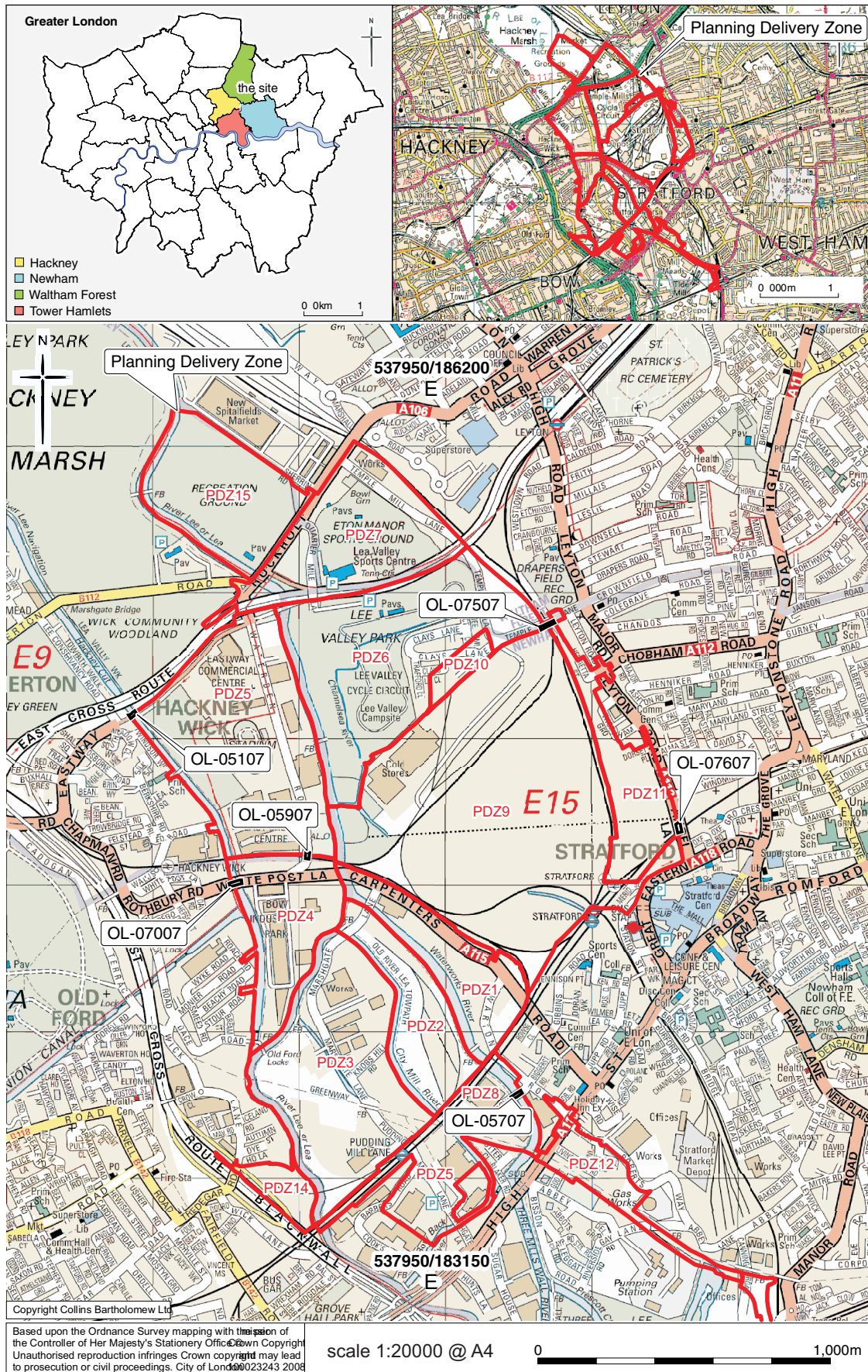


Fig 1 Location plan

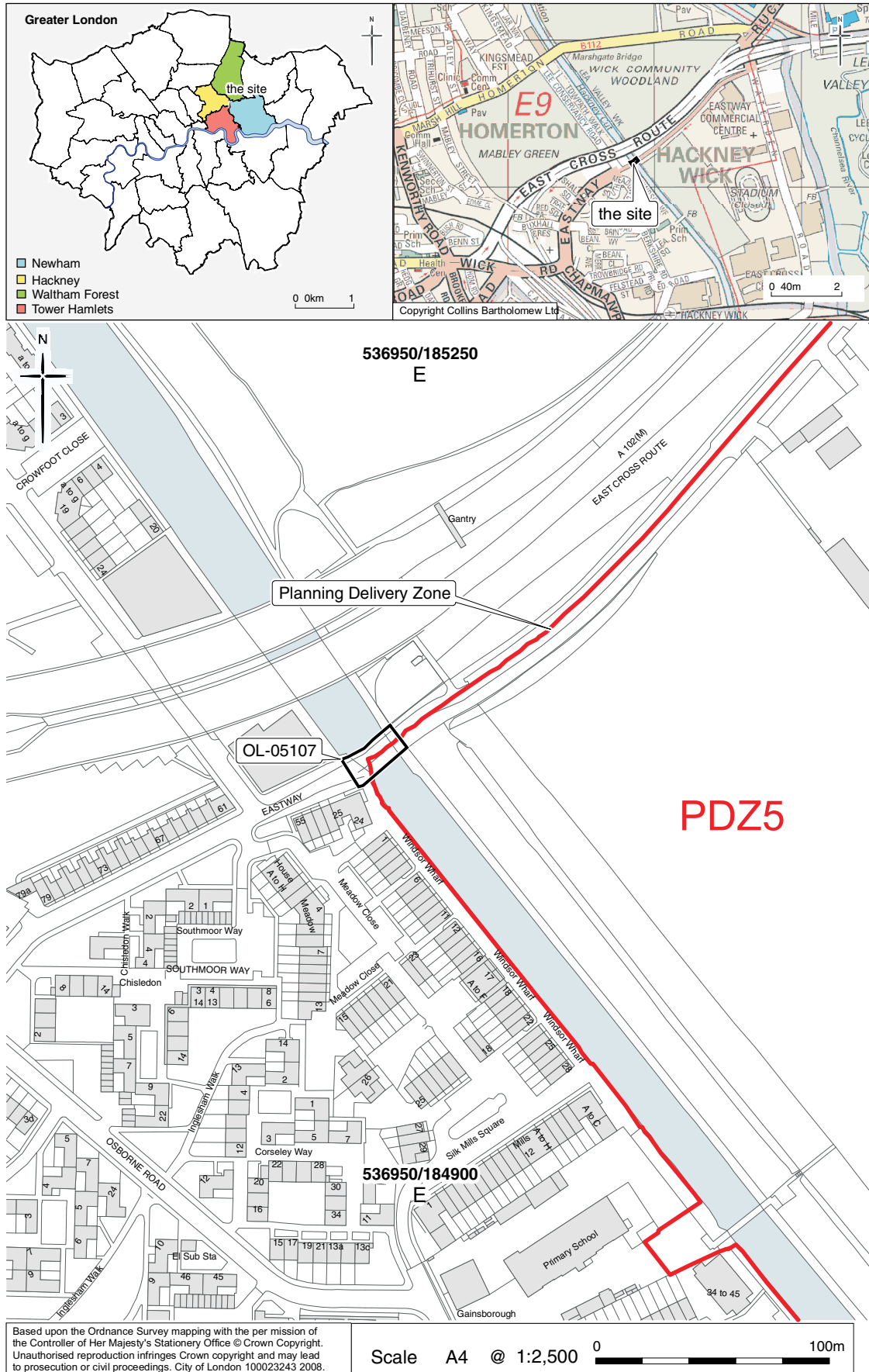


Fig 2 Site location plan for the Eastway Road Bridge (OL-05107)

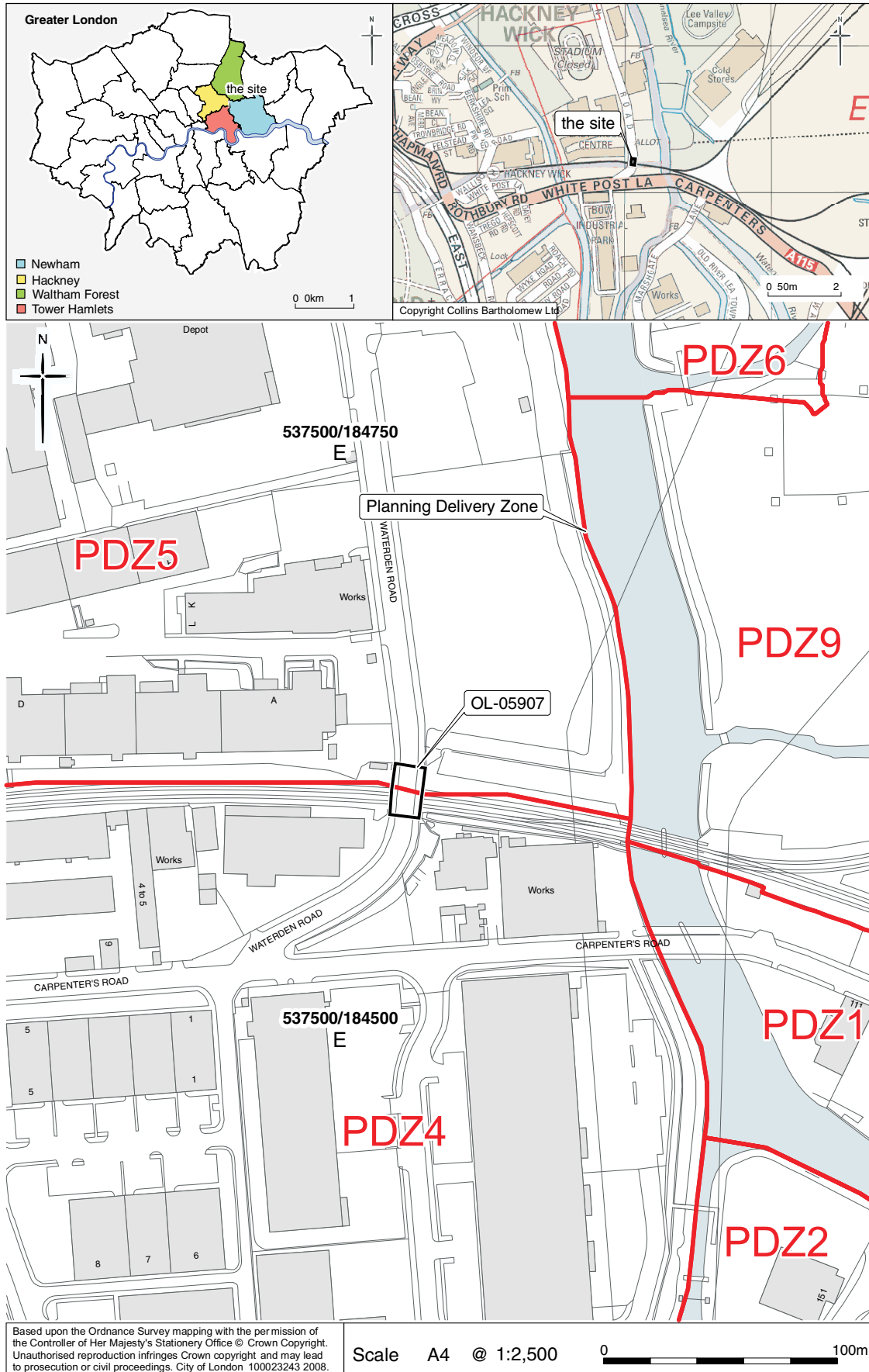


Fig 4 Site location plan for Waterden Road Bridge (OL-05907)

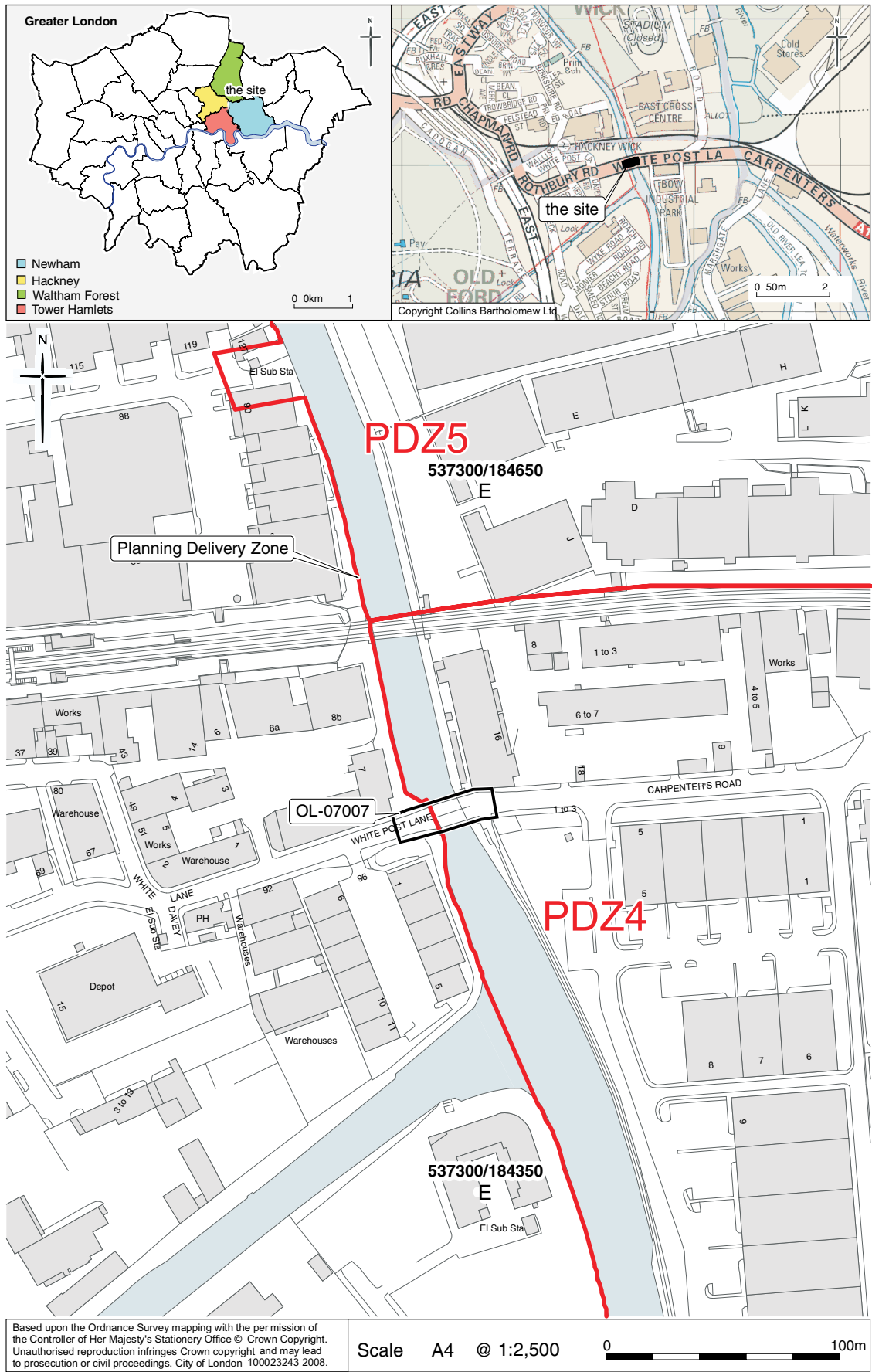


Fig 5 Site location plan for White Post Lane Bridge (OL-07007)

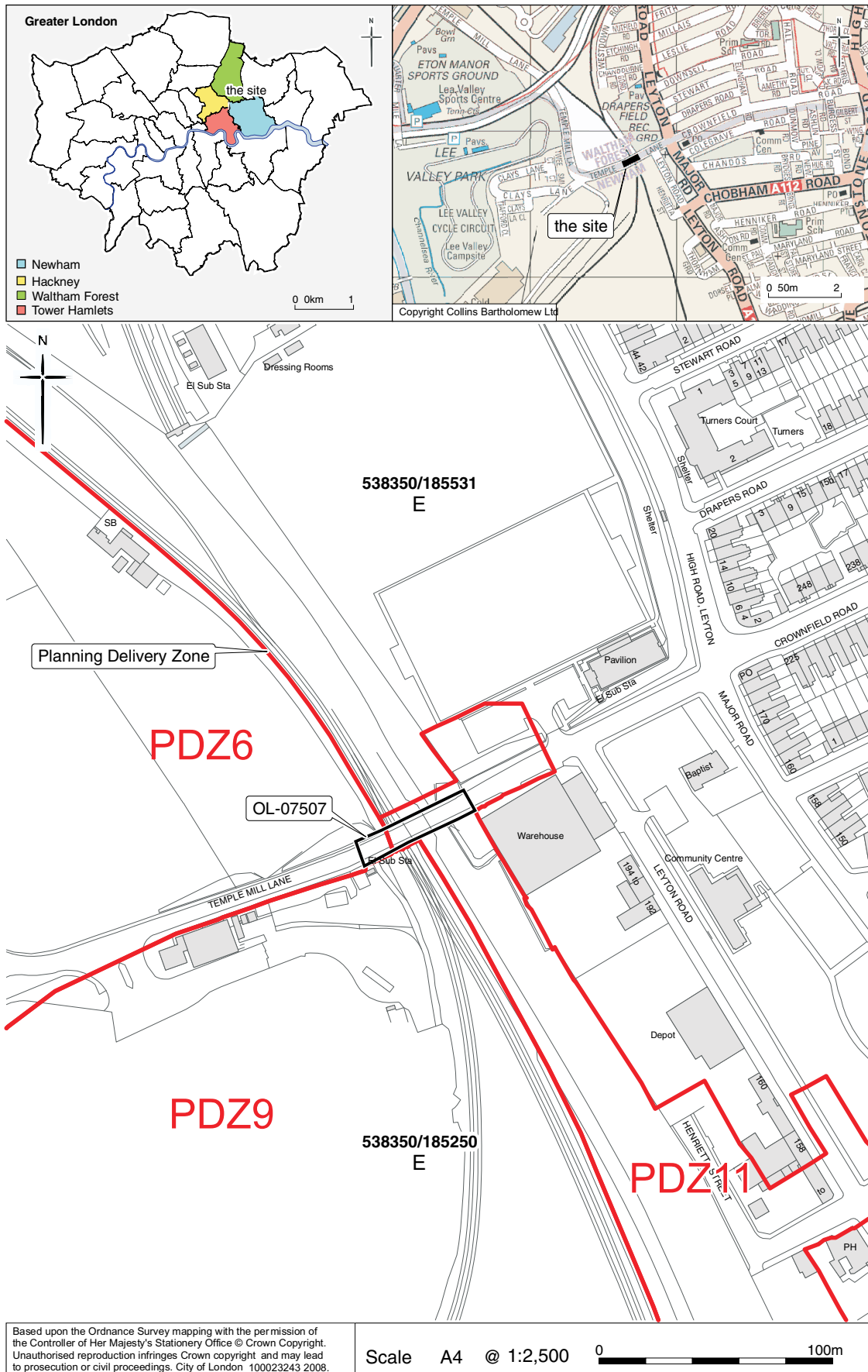


Fig 6 Site location plan for Temple Mills Lane Bridge (OL-07507)

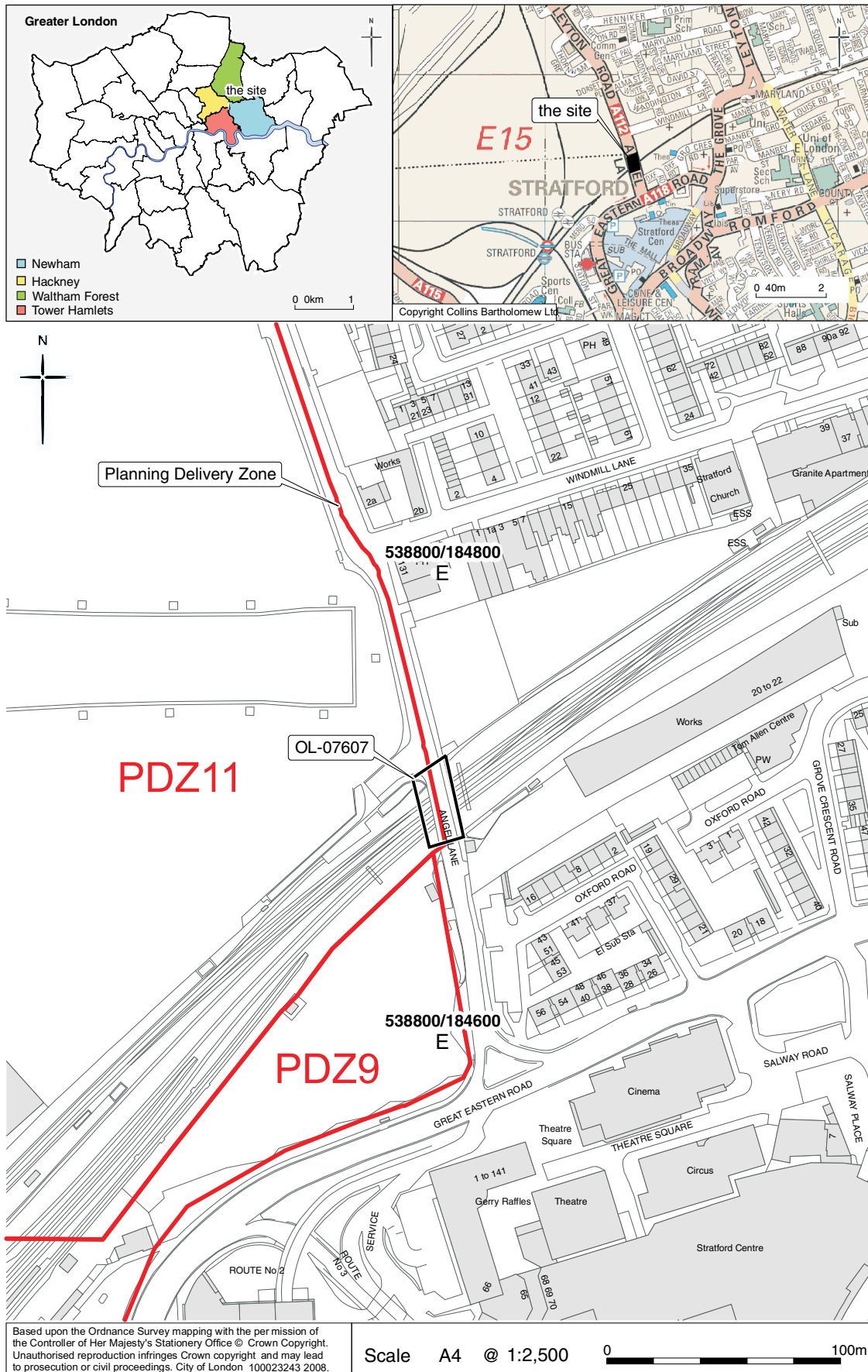


Fig 7 Site location plan for Angel Lane Bridge (OL-07607)

2 Topographical and historical background

A detailed description of the geology, archaeology and history of the sites was outlined in the earlier *Archaeological and Built Heritage assessments* (MoLAS-PCA, 2007a, 2007b, 2007c, 2007d, 2007e). A brief, contextualising, summary for each site is provided below.

2.1 OL-05107: Eastway Road Bridge over Lea Navigation

2.1.1 Geology and natural topography

The site area is located in the River Lea floodplain. BGS Sheet 256 (North London) shows the site lying on alluvium, underlain by Lea Valley Gravels, deposited following the scouring-out of the valley floor during the Pleistocene. The landscape of today bears little resemblance to its topography in the prehistoric and later periods. Most of the site area formed an area of slightly higher ground, with the River Lea located to the east of the site.

Modern ground level on the Eastway, to the west of the site, is *c* 6m OD.

2.1.2 Early history of the site

Rocque's map of 1746 shows the site of the Eastway Road Bridge as being on the southern edge of Hackney Marshes (Fig 8). Fields are located to the south of the site, with Wick House situated to the south-west. The Lea River is shown on its original course to the east of the site. A bridge over the Lea is also visible on Rocque's map, lying to the north-east of the site on a route that led to Temple Mills.

The Ordnance Surveyors' drawings of London in 1799 are the earliest maps to show the Hackney Cut of the Lea Navigation, which was constructed in 1769 to by-pass the old river between Lea Bridge and Old Ford. A bridge is shown crossing the Lea Navigation on the site of the present Eastway Road Bridge. The bridge connects a road, later named Wick Lane on Stanford's map of 1862, running from the site of Wick House to a footpath on the east side of Hackney Cut. This footpath then crosses the original course of the River Lea and heads towards Temple Mills. At this time the area around Hackney Marshes was still undeveloped, with little change to the appearance of the area. The regular annual flooding of the Marshes prevented extensive use of the land for residential and commercial development, but the nutritious pasture and common grazing rights allowed land owners to graze animals from 1st of August each year (Baker, 1995).

Later mapping from the early 19th century shows little change in the area of Hackney, and only negligible development of nearby areas such as 'Hummerton' (Homerton). Milne's colour-coded land use map of 1800 shows the site still situated in pasture land. Stanford's map of 1862 (Fig 9) has the site named as Wick's Lane Bridge, still within an open pastoral landscape. By the time of Stanford's map the footpath leading east from Wick's Lane Bridge is called Temple Mill Road, but it is still depicted as a less substantial track-way or footpath.

By 1834 a channel had been dug by the East London Waterworks Co along the eastern side of the Hackney Cut, from Lea Bridge to Old Ford; this resulted in the extension of the Wick's Lane and White Post Lane bridges. The channel fed two reservoirs which were located on the northern side of the Eastern Counties Railway line.

Further developments which occurred at this time were the appearance of the Hertford Union Canal, constructed by Sir George Duckett in 1830, which led south-west from Hackney Cut and joined the Regent's Canal to the west; the spreading residential development of Old Ford and Bow; and the ribbon development along Stratford Road (now Stratford High Street). Victoria Park and Hackney Wick Station were built in 1856, and also appear on Stanford's map (Baker 1995, 51–59).

The 1st edition OS map of 1870 shows encroaching urbanisation of Hackney Wick, with terraced housing and chemical works appearing to the south of the bridge, although the immediate area is still occupied by drained marsh and pasture. Temple Mill Road is shown as a metalled road, rather than the track indicated on previous mapping, but the bridge itself has not changed, and still carries Wick Lane over the Hackney Cut and East London Waterworks Co. channel.

The 2nd edition OS map of 1893 shows that the northern end of Wick Lane had been renamed Gainsborough Road, and the area to the south is filled with terraced houses, dye and oil works. Industry is shown spreading north, too, with colour works and the Lea Telegraph works located on the western bank of the Hackney Cut. The name 'Wicklane Bridge' still persists, however. The waterworks channel was going out of use by this date, but remained as an earthwork. The main East London Waterworks reservoir to the south of the Victoria Park railway line had reverted to marsh, and was the site of the Victoria Park Steam Bone Works.

As the pressure on London's available space grew, fallow and pasture land such as Hackney Marshes became more valuable as a potential area for building development. The value of Hackney Marshes as an area for public recreation was recognised in 1893, however, with the LCC undertaking flood prevention works and opening the marshes to the public (Baker, 1995, 108–115). The 3rd edition OS map of 1913 (Fig 10) indicates that Temple Mill Road has become a tree-lined avenue, and the marshes a recreation ground. The site is by now called 'Gainsborough Road Bridge' but has the same form as the structure shown on previous maps.

2.1.3 Development and function of the standing structure

Between 1920 and 1924 plans for a new, wider bridge were drawn up (LMA: ACC/2423/P/1943); the previous bridge was narrow, and only allowed light traffic. A new bridge would allow traffic to pass in both directions; Gainsborough Road and Temple Mill Lane now formed a major route for traffic going from Hackney Wick to Leyton, which had grown exponentially in the 1890s and 1900s and was now a local centre. The bridge was constructed in 1926, and is first shown on the OS map of 1938 as Gainsborough Road Bridge. Orders made by the London County Council in 1931 and 1936 changed the names of the southern end of Temple Mill Lane and Gainsborough Road to 'Eastway' (LCC 1955, 257). The construction of the East Cross Route A102(M) during the 1970s alleviated much of the traffic that was using the bridge, leaving it for local use.

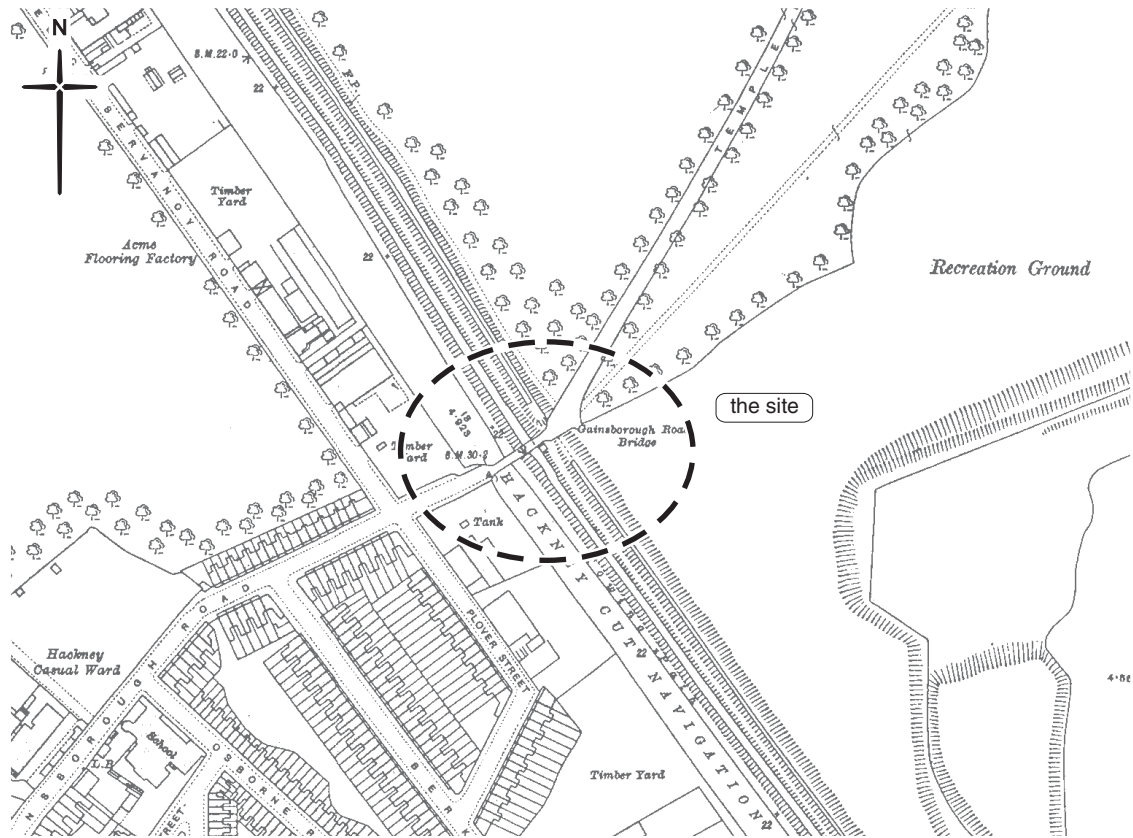


Fig 10 The site of Eastway Road Bridge on the 3rd edition Ordnance Survey map of 1913

2.2 OL-05707: Bridgewater Road Concrete Bridge

2.2.1 *Geology and natural topography*

The site area is located in the middle of the valley floor of the River Lea, c 3km to the north of its confluence with the River Thames. BGS Sheet 256 (North London) shows the site lying on alluvium, underlain by the Lea Valley Gravels, deposited following the scouring-out of the valley floor during the Pleistocene. Most of the site would have been a low-lying wetland area for most of the prehistoric and later periods.

Modern ground level in Bridgewater Road, adjacent to the site, is c 4m OD.

2.2.2 *Early history of the site*

Bridgewater Road concrete bridge is a very late addition to the landscape of the Lower Lea Valley. Rocque's map of 1746 shows the site located within marshland to the north-west of the Stratford Turnpike (Fig 11). To the west of the site flows one of the many channels of the River Lea, which were collectively called the Stratford Back Rivers (Powell 1973, 57–61). The present Waterworks River, which Bridgewater Road concrete bridge spans, has been altered a great deal from its natural appearance. As one of the Stratford Back Rivers in 1602, the Waterworks River was known as the Shire Stream (Powell, 174–184). The many channels of the Lea were important as storm drains to the area, but by 1931 they were neglected and choked with rubbish. An Act of Parliament in 1830 allowed the Lea Conservancy Board and West Ham Borough Council to carry out large-scale improvements to the Stratford Back Rivers; rivers were widened and dredged, some streams diverted or filled in, and new bridges and locks were constructed. The Waterworks River was kept as a drainage river and widened (Powell 1973, 57–61).

The 2nd edition OS map of 1893 (Fig 12) shows the Waterworks River emanating from the River Lea, from where it flows south-east, the channel narrower than the present day, but approximately on the same course, until it reaches the present-day location of Bridgewater Road concrete bridge. Here in the late 19th century, the Waterworks River was not only narrower than its modern form, but slightly to the east of its present position, with a sharper bend towards the south-west. The 1893 OS map shows a footbridge and a flood gate downstream to the south-west of the site. To the west of the site the area is open, with railway lines to the north. On the eastern side of the Waterworks River the map shows urban housing, along with a school and an industrial development in the form of the London Spinning Mills.

2.2.3 *Development and function of the standing structures*

The area around Stratford, West Ham and Hackney Marshes saw increasing industrial development during the late 19th to the early 20th centuries. Industrialists were encouraged by the few legal restrictions and by-laws, and took advantage of the area's extensive waterways for transport and water supply. Cheap land and a convenient local labour force also attracted businesses, unemployment being high in West Ham at this time (Powell 1973, 76–89). The industrial development of the area continued well into the 20th century, in particular the construction of chemical works. The 1955 OS map (Fig 13) shows the formerly empty area to the west of the site now occupied by industrial buildings, linked to the eastern side of the Waterworks River by the Bridgewater Road concrete bridge. This is the first appearance of the bridge on a map, and there is no evidence to suggest that it existed before this date.



Fig 11 The site of Bridgewater Road Bridge on Rocque's map of 1746

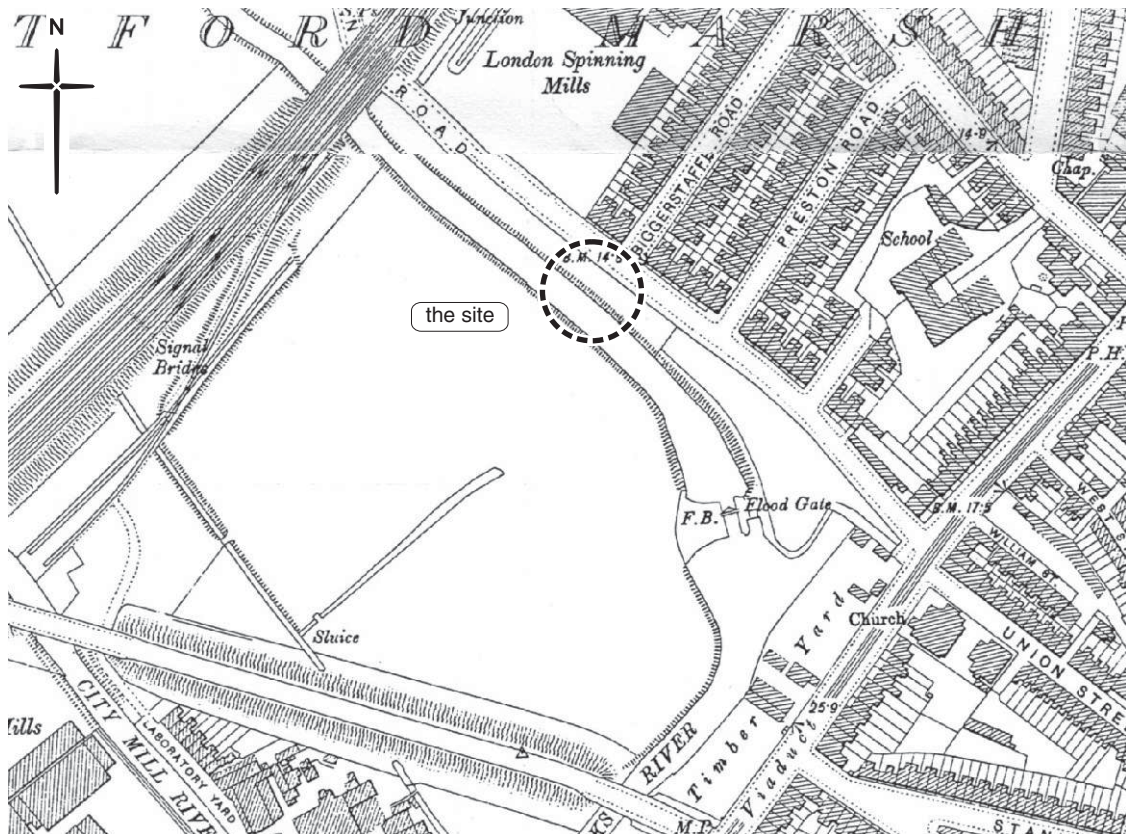


Fig 12 The site of Bridgewater Road Bridge on the 2nd edition OS map of 1893



Fig 13 Bridgewater Road Bridge on the Ordnance Survey map of 1955

2.3 OL-05907: Waterden Road Bridge

2.3.1 *Geology and natural topography*

The site area is located in the River Lea floodplain. BGS Sheet 256 (North London) shows the site lying on alluvium, underlain by Lea Valley Gravels, deposited following the scouring-out of the valley floor during the Pleistocene. The landscape of today bears little resemblance to its topography in the prehistoric and later periods. Most of the site area formed an area of slightly higher ground, with the present course of the River Lea located to the east of the site.

Modern ground level in Waterden Road, adjacent to the site, is *c* 6m OD.

2.3.2 *Early history of the site*

Waterden Road Bridge is located between the River Lea, which lies to the east, and the Hackney Cut of the River Lea Navigation, which is situated to the west. It carries Waterden Road, which is aligned north–south, over a railway line that runs from west to east, connecting Hackney and Victoria Park to Stratford. Early maps of the area, such as Rocque’s map of 1746, show the site was located within meadows. These meadows are still extant on Greenwood’s map of 1824–6 (Fig 14), which also shows the Hackney Cut of the Lea Navigation. This was dug in 1769 as a part of the system of canals and waterways begun in 1767, and was intended to provide a navigable and straight channel of water running across the marshes to Hackney Wick (Powell 1973, 57–61). To the north of the site, Bully Point connects the River Lea with the Lead Mill Stream. To the west of the site, White Post Lane Bridge crosses the Hackney Cut.

2.3.3 *Development and function of the standing structures*

Stanford’s map of 1862 (Fig 15) shows both Bully Point and White Post Lane Bridge, with a footpath between them which runs close to the north-western side of the site of Waterden Road Bridge. The East London Waterworks Reservoir is shown to the south of the site, connected to the River Lea on its eastern edge, and the Eastern Counties Railway line runs from west to east across the site. At this time, however, the site of Waterden Road was still open ground bisected by the railway.

Subsequent Ordnance Survey mapping of the area shows the gradual increase in industrial and residential developments at the west of Hackney until, by the 3rd edition 1914 OS map (Fig 16), Waterden Road Bridge first appears passing over the railway. The area to the north of the site remained open, while to the west the Clarnico confectionary factory appeared (www.brickfields.org.uk/text/victorian-work). First established to the north of Hackney Wick in 1872 by Clarke, Nicholls and Coombs, the factory of the Clarnico Company provided workers with an early profit sharing scheme, as well as housing, a fire service and a hospital. Their factory first appears on the 1914 OS map (Fig 16), with the Victoria Park Branch of the Great Eastern Railway bisecting the large factory site, and it is still visible by the time of the 1951 OS map.

Modern OS mapping shows the area directly to the north-east of Waterden Road Bridge as allotment gardens, with the bridge itself having remained unchanged in size. On stylistic grounds and based on documentary evidence, the present Waterden Road Bridge is the original structure, and dates from the early 20th century.



Fig 14 The site of Waterden Road Bridge on Greenwood's map of 1824-6



Fig 15 The site of Waterden Road Bridge on Stanford's map of 1862

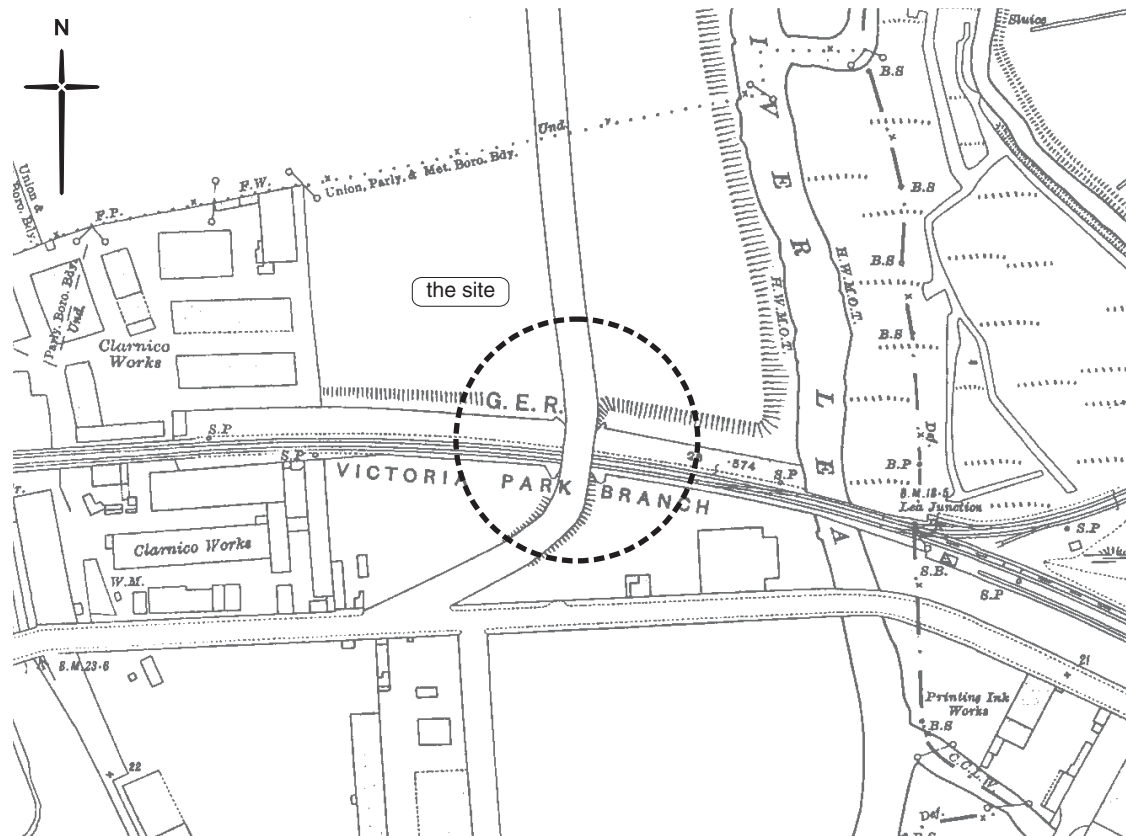


Fig 16 Waterden Road Bridge on the 3rd edition OS map of 1914

2.4 OL-07007: White Post Lane Bridge

2.4.1 *Geology and natural topography*

The site area is located in the River Lea floodplain. BGS Sheet 256 (North London) shows the site lying on alluvium, underlain by Lea Valley Gravels, deposited following the scouring-out of the valley floor during the Pleistocene. The landscape of today bears little resemblance to its topography in the prehistoric and later periods. Most of the site area formed an area of slightly higher ground, with the River Lea located to the east of the site.

Modern ground level on the towpath to the north of the site is *c* 6m OD.

2.4.2 *Early history of the site*

White Post Lane is depicted on some of the earliest maps of the Lower Lea Valley; Rocque's map of 1746 (Fig 17) shows a lane on a similar alignment to the present street, which takes an easterly course across the fields from Wick Lane. Stanford's map of 1862 (Fig 18) shows how Hackney Wick, to the west of the bridge across the Hackney Cut, had become a local industrial centre. The eastern end of White Post Lane and the eastern side of the Hackney Cut had not been settled, but a channel had been dug by 1834 along the eastern side of the Hackney Cut to feed the East London Waterworks Company reservoir, which was located south-east of the bridge. The excavation of this channel would have involved the extension or reconstruction of the first White Post Lane Bridge. The 1st edition OS map of 1867 (Fig 19) shows in some detail how White Post Lane crossed both the Hackney Cut and the East London Waterworks Company Channel before turning south to become a footpath along the northern side of the reservoir.

2.4.3 *Development and function of the standing structures*

The present bridge is shown on the 3rd edition OS map of 1913–14 (Fig 20). By this time the reservoir to the south-east of the bridge, and its associated feeder channel along the eastern side of the Hackney Cut, had gone out of use, and the land on the northern side of White Post Lane, around the railway line and the canal, had become industrialised. The Clarnico Chocolate Factory occupied a large area on the eastern side of the Hackney Cut, spanning both sides of the Great Eastern Railway line. The bridge had been rebuilt to allow for the increase in road traffic, which supplied the new factories in Hackney Wick, and also connected White Post Lane with the northern extension of Carpenter's Road.



Fig 17 The site of White Post Lane Bridge on Rocque’s map of 1746



Fig 18 White Post Lane Bridge on Stanford’s map of 1862

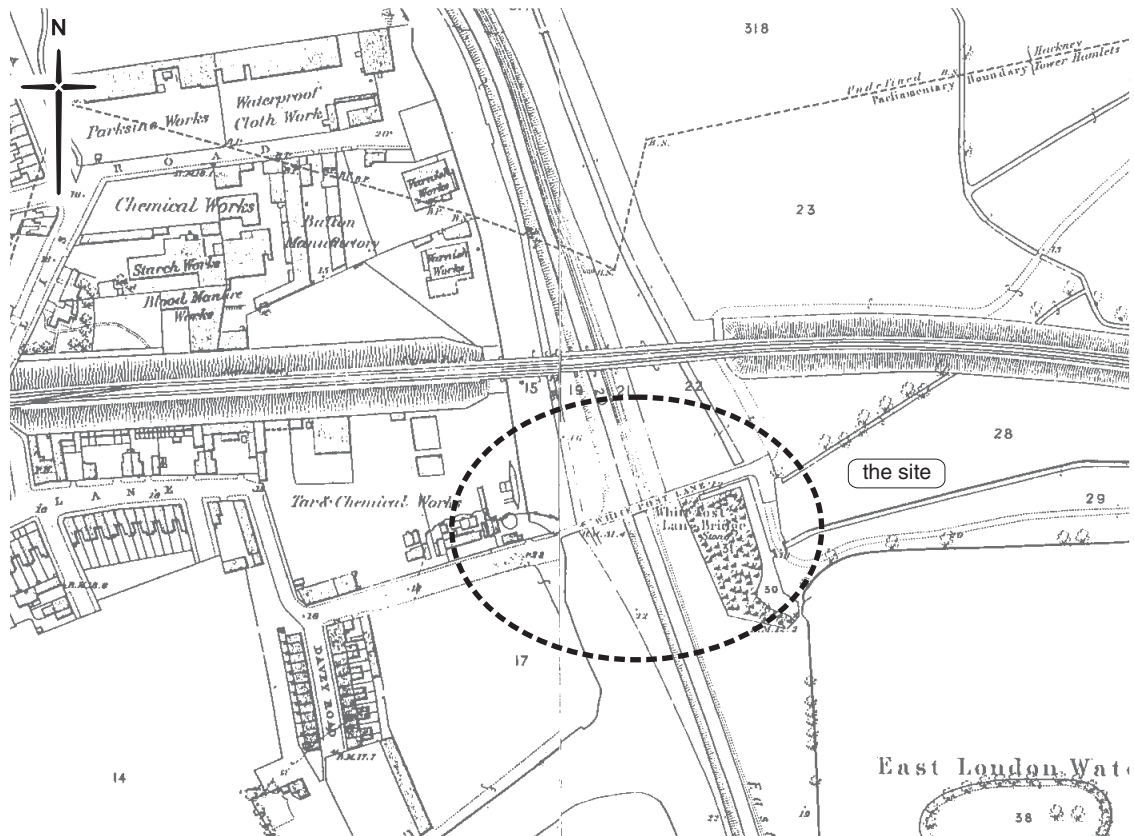


Fig 19 White Post Lane Bridge on the 1st edition OS maps of 1867-70



Fig 20 White Post Lane Bridge on the 3rd edition OS maps of 1913-14

2.5 OL-07507: Temple Mill Lane Bridge

2.5.1 *Geology and natural topography*

The site area is located on the eastern edge of the valley of the River Lea, *c* 3km north of its confluence with the River Thames. BGS Sheet 256 (North London) shows the site lying on alluvium, adjacent to the present course of the River Lea, underlain by Lea Valley Gravels, deposited following the scouring-out of the valley floor during the Pleistocene. The underlying topography will have influenced the environments on the site for much of the prehistoric and early historic period, until it became obscured by the build-up of alluvium. As the river level rose during the historic period, previously dry land would have been more regularly subject to seasonal overbank flooding.

Modern ground level in Temple Mill Lane, adjacent to the site, is *c* 8m OD.

2.5.2 *Early history of the site*

Temple Mill Lane Bridge spans what was the Great Eastern Railway line to Cambridge. Temple Mill Lane runs east from the site of Temple Mills and is visible on Rocque's map of 1746 (Fig 21), intersecting with Angel Lane (the northern part of which is now the High Road Leyton A112) and heading east towards Wanstead. The route of Temple Mill Lane could possibly date from the foundation of the Knights Templar Mill, although the name "Temple Mill" remained in use after the era of the Templars, 1185–1278, mills still being located there in the 18th century.

2.5.3 *Development and function of the standing structures*

In 1847 the Great Eastern Railway constructed a junction between its two mainline routes to Cambridge and Colchester, along with its chief depot for repairs to carriages and rolling stock (Walford 1878, 570-576). Named Loughton Junction, this depot is visible on the 1867 OS map, situated directly south of the site (Fig 22). The junction in the railway line was to the north of the site, where the Cambridge line led towards the north-west and the line towards Epping and Ongar branched off to the north-east. It was at this time that a bridge was constructed to carry Temple Mill Lane over the railway line. The Great Eastern Railway's depot at Loughton employed hundreds of workers (Walford 1878, 570–576) and as other industries grew in the area during the late 19th century, Stratford New Town sprung up to the south of the site.

On the 3rd edition OS map of 1916 (Fig 23) the railway network had expanded both to the north and south of the Temple Mill Lane Bridge. Temple Mill Lane still existed to the west of the bridge, as it does today, but to the east its name had changed to Leyton Road. This road is noticeably wider than Temple Mill Lane and the bridge, suggesting that at this time the bridge was perhaps a footbridge, or used only for single lane traffic. This narrow bridge is still visible on the 1951 OS map, which suggests that the present, wider bridge is likely to be a fairly modern replacement.



Fig 21 The site of Temple Mills Lane Bridge on Rocque's map of 1746

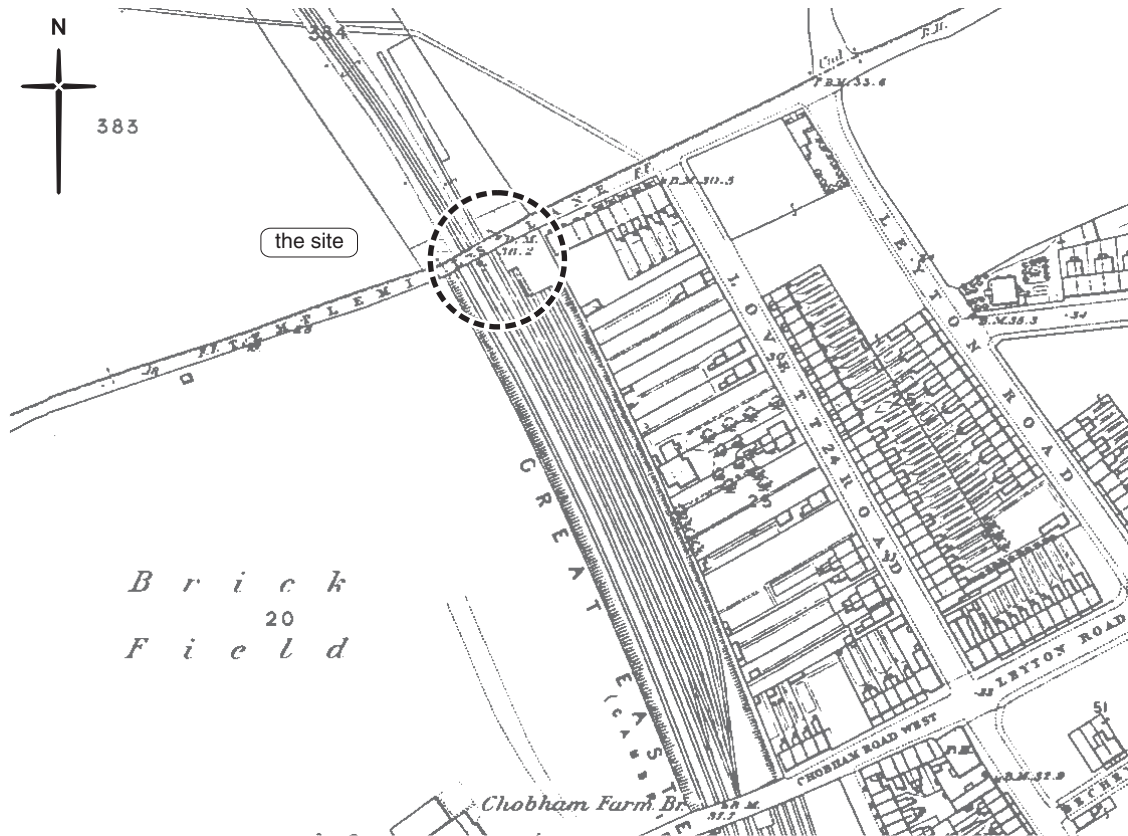


Fig 22 Temple Mills Lane Bridge on the 1st edition OS map of 1867



Fig 23 Temple Mills Lane Bridge on the 3rd edition OS map of 1916

2.6 OL-07607: Angel Lane Bridge

2.6.1 *Geology and natural topography*

The site area is located on the eastern edge of the valley of the River Lea, *c* 3km north of its confluence with the River Thames. BGS Sheet 256 (North London) shows the site lying on alluvium, adjacent to the present course of the River Lea, underlain by Lea Valley Gravels, deposited following the scouring-out of the valley floor during the Pleistocene. The underlying topography will have influenced the environments on the site for much of the prehistoric and early historic period, until it became obscured by the build-up of alluvium. As the river level rose during the historic period, previously dry land would have been more regularly subject to seasonal overbank flooding.

Modern ground level in Angel Lane, adjacent to the site, is *c* 7m OD.

2.6.2 *Early history of the site*

Angel Lane Bridge carries Angel Lane over the railway line that runs east from Stratford Station. The road continues north as Angel Lane for 120m and then changes, after a slight kink at the intersection of Windmill Lane, into Leyton Road.

Rocque's map of 1746 (Fig 24) shows Angel Lane running from north to south. To the east of the lane the ground was cultivated with orchards and gardens, and to the west were meadows, part of which was labelled as a Hop Ground, suggesting further cultivation. To the north Angel Lane intersected with an unnamed road that follows the same line as the present Windmill Lane. Angel Lane then continued north along the line of the present day Leyton Road, intersecting with Temple Mill Lane and ending at a place Rocque called the Green Man, presumably an inn, which is approximately where Leyton Station now stands.

Subsequent mapping through the 18th and early 19th centuries shows little change to Angel Lane until Stanford's map of 1862 (Fig 25), when the Eastern Counties Railway was depicted. The Stratford engine works had been established on the western side of the Cambridge line, and Stratford New Town, which housed railway workers and their families, was located on the eastern side of Angel Lane. This is the earliest map that shows a bridge carrying Angel Lane over the Great Eastern Railway line, and the bridge depicted must have been built at around the same time as the railway, which opened as the Eastern Counties Railway in 1839. The 1st edition OS map of 1867 (Fig 26) shows the bridge in more detail, and shows two railway lines passing underneath. The expansion of the railways at this time was such that during the 28 years since the construction of the railway line, the number of tracks leading into Stratford Station from the east had trebled, and six sets of tracks had to merge into two before passing under the narrow Angel Lane Bridge.

2.6.3 *Development and function of the standing structures*

The present bridge in Angel Lane is first depicted on the 2nd edition OS map of 1894 (Fig 27). The bridge deck is wider than that of the first bridge, allowing increased traffic flow along the road, and the bridge span is greater, allowing at least five train tracks to pass under the bridge and enter the approach to Stratford Station.



Fig 24 The site of Angel Lane Bridge on Rocque's map of 1746

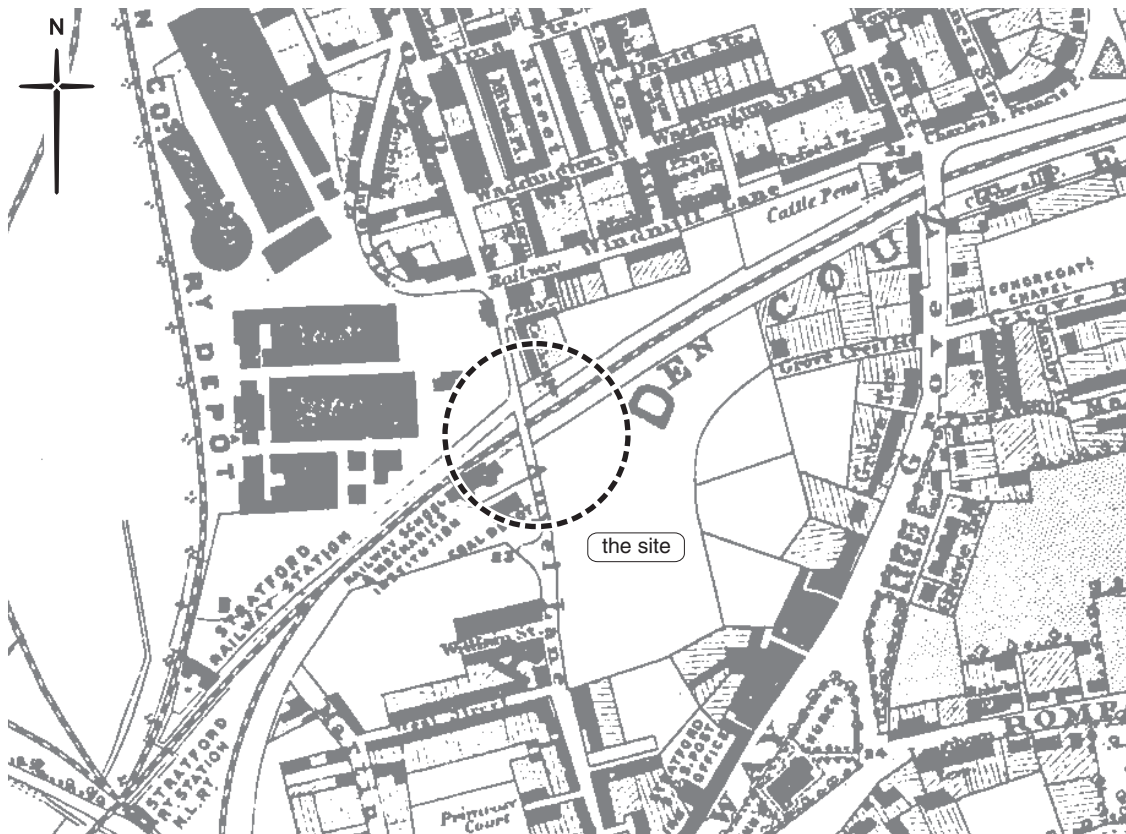


Fig 25 Angel Lane Bridge on Stanford's map of 1862

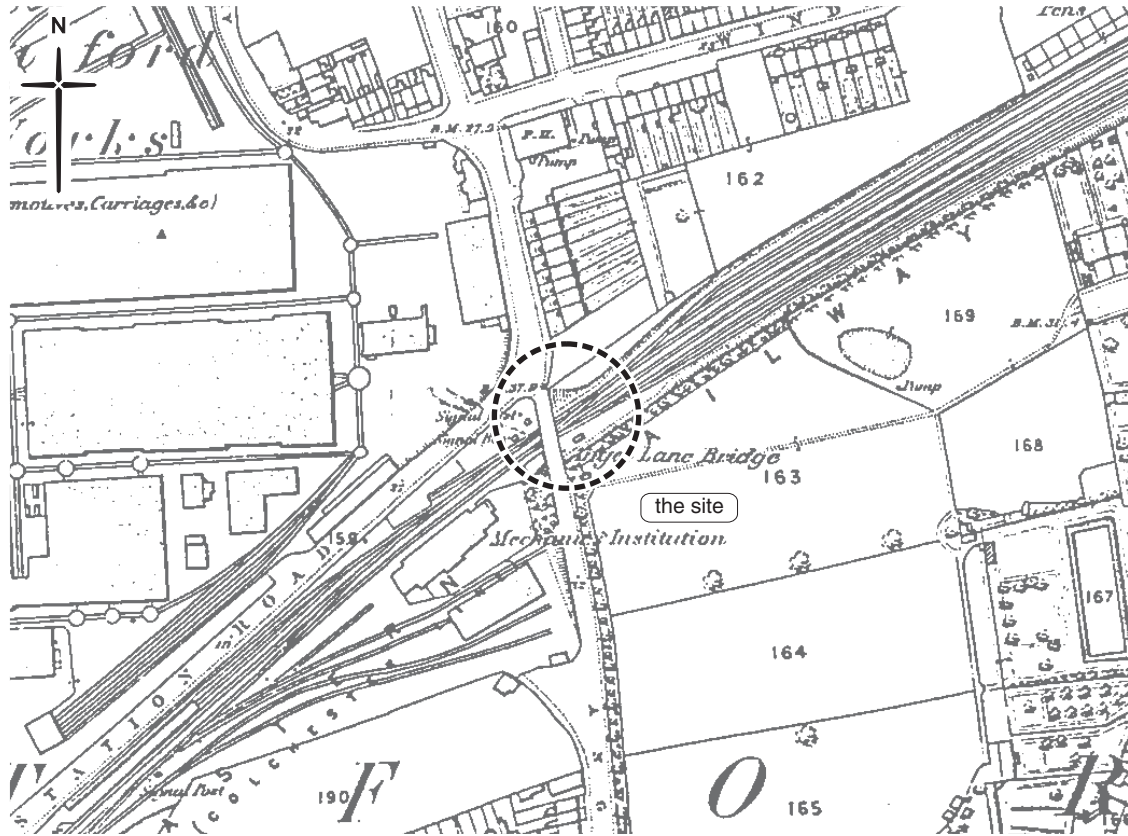


Fig 26 Angel Lane Bridge on the 1st edition OS map of 1867

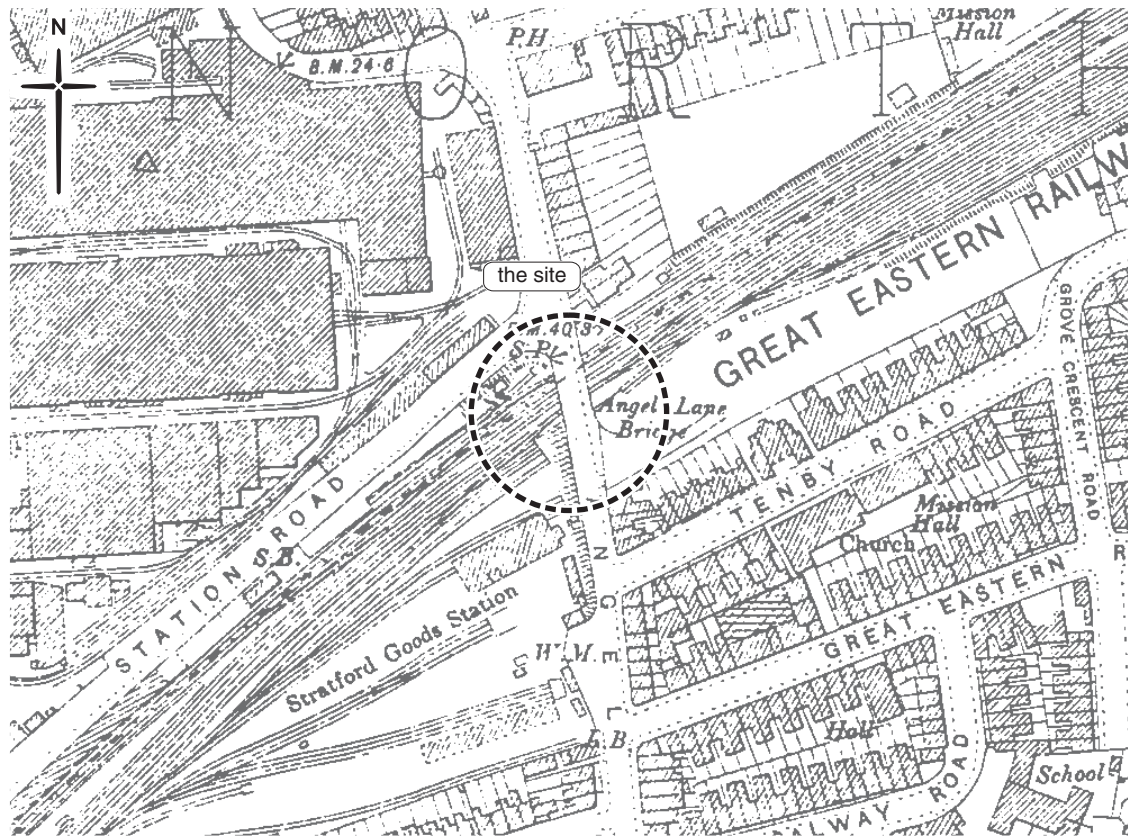


Fig 27 Angel Lane Bridge on the 2nd edition OS map of 1894

3 The standing structure survey

3.1 Methodology

All archaeological analysis and recording during the investigation on the six sites was carried out in accordance with the appropriate *Written Schemes of Investigation* (MoLAS-PCA, 2007f, 2007g, 2007h, 2007i, 2007j, 2007k), the *Museum of London Archaeological Site Manual* (1994) and MoLAS *health and safety policy* (2008).

The locations of the structures were determined in outline on the modern Ordnance Survey plan. Plans, elevations and sectional elevations drawn from measured survey where appropriate and accessible. Details of the construction, development and function of the internal and external elements of the structures were noted.

The site records comprise a total of 88 digital colour photographic images, 20 site drawings, site notes and notes on the documentary evidence. No objects or samples were collected. The site records will be deposited and indexed in due course in the Museum of London archaeological archive under the site codes OL-05107, OL-05707, OL-05907, OL-07007, OL-07507 and OL-07607.

3.2 Descriptions of the standing structures

3.2.1 OL-05107: Eastway Road Bridge over the Lea Navigation

This description should be read in conjunction with selected photographs taken in October 2007 (Plate 1 to Plate 4) and a sectional elevation (Fig 28).



Plate 1 The south side of the Eastway Bridge seen from Meadow Close, looking north (39507013)



Plate 2 Riveted steel plate girders and brick jack arches of the Eastway Bridge, forming the bridge deck, looking west (39507016)

The bridge carries the Eastway over the Hackney Cut of the Lea Navigation, and was constructed in 1926, when the road was still called Gainsborough Road (Plate 1). The bridge deck is constructed on composite riveted steel girders and brick jack arches, resting on sandstone pads (Plate 2). The pads are accommodated in abutments constructed of dark blue-grey engineering bricks laid in English bond, with panelled piers which project from the northern and southern faces of the bridge, and panelled parapets in dark red-purple bricks capped by light grey moulded sandstone copings. A stone impost course is visible below the brick parapet, and the upper halves of the piers and parts of the parapets have been rebuilt in dark blue engineering bricks. The new bricks are smaller than the older fabric, and were bedded on larger cement joints to compensate.



Plate 3 Detail of a repair to the north parapet wall of the Eastway Bridge, looking north-west (39507008)

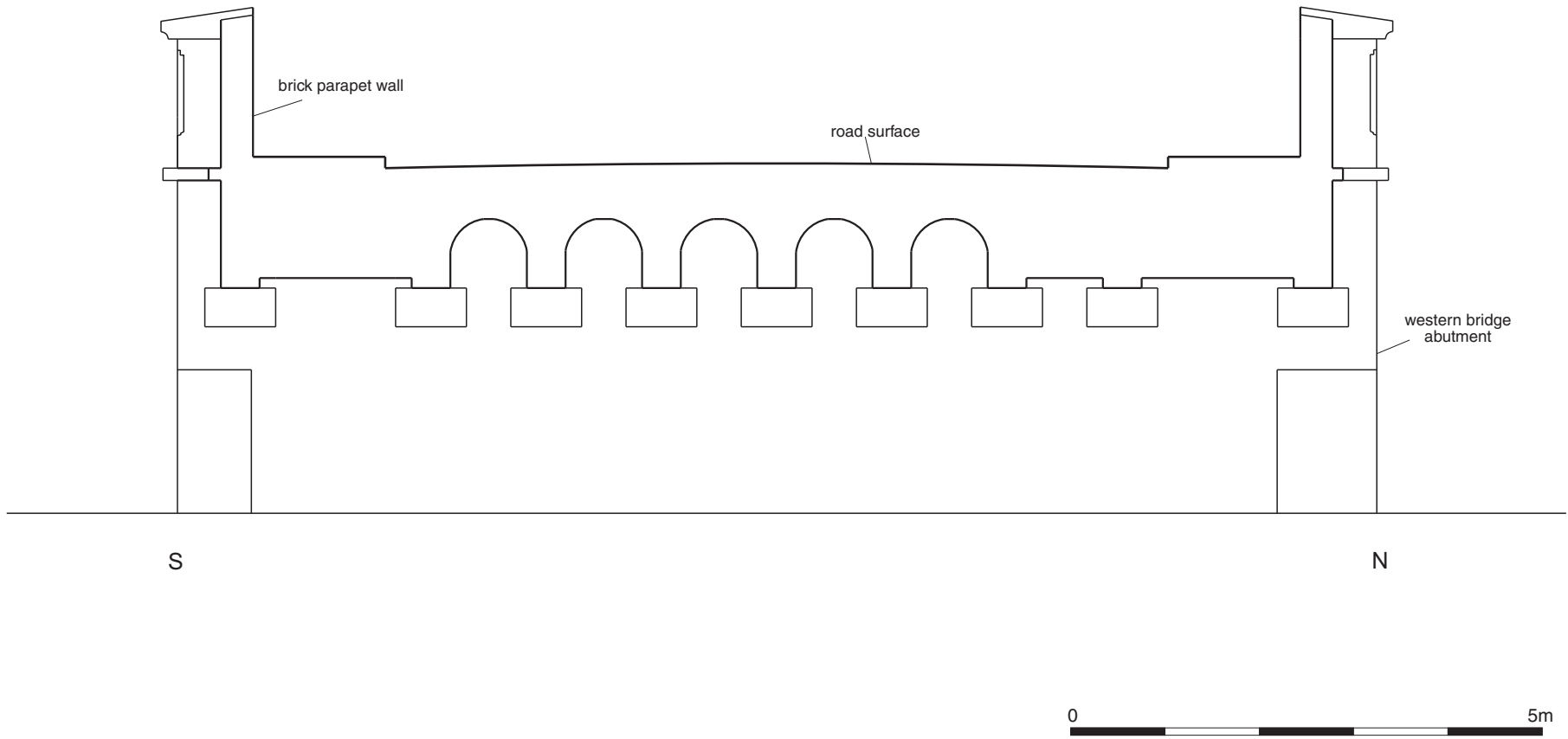
The internal faces of the piers and the parapet of the bridge are completely flush and plain. This is probably to maximise the width of the roadway; the bridge was originally constructed to carry traffic in both directions. In recent years a traffic light system has been installed to control traffic, restricting flow to one direction at a time, and a segregated cycle lane constructed on the southern side of the bridge.

The towpath along the Hackney Cut of the Lea Navigation is located on the eastern bank. For much of its length the towpath is covered with gravel, but under the bridge and for a short distance to the north is paved with granite setts with a kerb of millstone grit. An earthen embankment is located to the north of the bridge, on the eastern side of the towpath; this is probably the embankment which separated the former East London Waterworks Company channel. Two cast iron weepers are built into eastern bridge abutment to drain any groundwater building up behind the abutment. The corners of the piers on the western side of the bridge are reinforced with steel plates with chamfered corners, perhaps after damage was caused by a barge or lighter.



Plate 4 The western approach to the Eastway Bridge, looking east (39507004)

The bridge has a long approach ramp from the west, and the parapet walls at the western end are splayed outwards, creating a wide ‘throat’ (Plate 4). East of the bridge, the Eastway continues at approximately the same level, carried on a causeway across the former marsh. This part of the Eastway was constructed at around the same time as the present bridge, and replaced Temple Mill Lane, which took a more north-easterly route.



MULTI1072SBR08#28

Fig 28 East-facing sectional elevation through Eastway Road Bridge

3.2.2 OL-05707: Bridgewater Road Concrete Bridge

This description should be read in conjunction with selected photographs taken in September 2007 (Plate 5 to Plate 7).



Plate 5 North side of The Bridgewater Road Bridge, and the Waterworks River, looking south (34707006)



Plate 6 Eastern approach to Bridgewater Road Bridge, looking north-east (34707003)

The bridge carries Bridgewater Road from east to west over the canalised Waterworks River (Plate 5, Plate 6). The bridge is approached from the junction of Warton Road and Bridgewater Road to the east, and at the time of the survey led to an industrial estate occupied by the Kendon Packaging Group on the western side of the Waterworks River. The bridge is built entirely of reinforced concrete cast *in situ*. The deck is formed of reinforced concrete slabs and beams with concrete poured over to form the roadway, and is

supported on a central A-frame of reinforced concrete fixed to the riverbed. Two timber piers set into the riverbed on the northern and southern sides of the bridge do not appear to be associated with any earlier or later bridges, as none are shown on the historic maps. They are probably associated with the construction of the bridge (Plate 7). There are no substantial abutments on either side of the river bank, with the bridge going over the towpath on the east bank.



Plate 7 Disused footings of The Bridgewater Road Bridge in the Waterworks River (34707009)

Concrete parapets rise symmetrically from both ends of the bridge to the centre, with concrete slabs on cantilevered concrete beams forming footpaths outside the parapets. Concrete posts with iron railings are set into the external edge of the bridge, providing a barrier for pedestrians. At the northern and southern ends of the bridge are steel expansion joints which allowed for thermal movement, whereby the steel-reinforced elements of the bridge could expand in warm weather and contract when it was cold.

Two plaques set into the outward faces of the parapets of the bridge give its date, 1938, the name of the construction company, Commercial Structures Ltd, and its engineer, A C Buck (Plate 8). Commercial Structures Ltd was a company specialising in the construction of reinforced concrete buildings, and by 1938 had built a number of commercial and industrial trading estates in Greater London.



Plate 8 Damaged plaque on the north parapet wall of The Bridgewater Road Bridge, looking south (34707010)

3.2.3 OL-05907: Waterden Road Bridge

It should be noted that observation and recording of the bridge structure was limited to those elements that were visible from Waterden Road, as the bridge spanned a live railway line, and access to the trackside areas could not be obtained.



Plate 9 The northern approach to The Waterden Road Bridge, looking south (34607001)



Plate 10 The railway line beneath The Waterden Road Bridge, looking east (34607013)

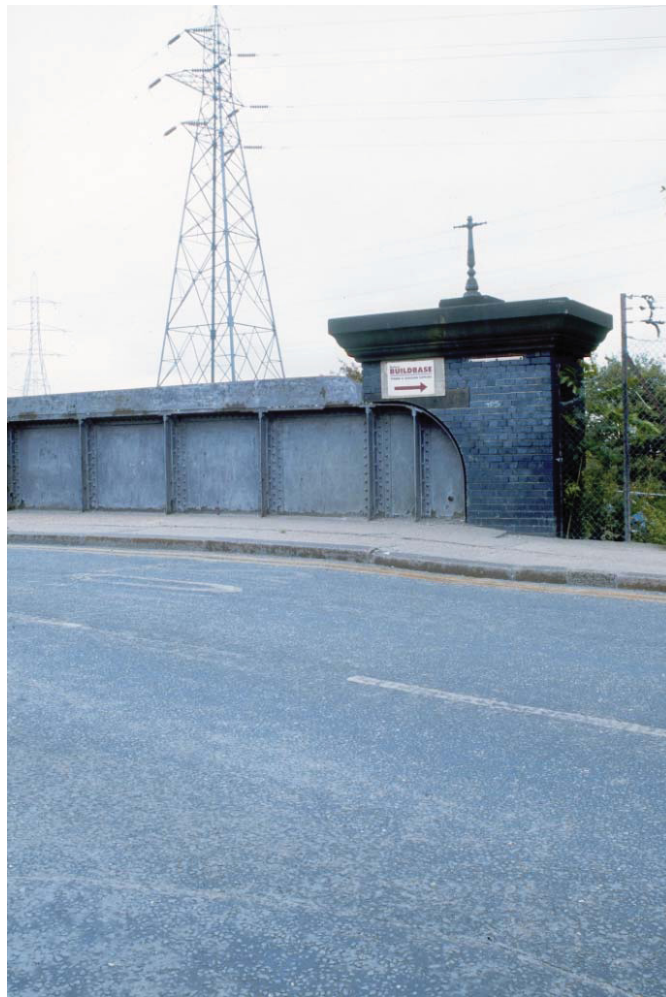


Plate 11 The south-eastern bridge pier of The Waterden Road Bridge, looking east (34607002)

This bridge carries Waterden Road, which connects Carpenters Road in the south with Ruckholt Road in the north, over the North London Railway, which runs between Hackney Wick and Stratford. The bridge was built in *c* 1902, when Waterden Road was established. The approach road to the south is steeply inclined and on a south-west to north-east alignment, to enable the road to pass over the North London railway line, which lies in a shallow cutting (Plate 10). The bridge deck and parapet walls are constructed of riveted wrought-iron plate girders, carried on abutments and piers of dark blue engineering brick laid in English bond. Steel plates are riveted onto brackets on the top surface of the parapet to increase its height; these vary in size so as to give a constant horizontal level along the top of the parapet (Plate 11). The bridge piers incorporate dressed and combed sandstone lintels which carry the piers over the downward-curving ends of the wrought-iron plate parapets, and are capped by moulded artificial stone copings; original fittings for gas lamp standards survive on the south piers. The north-east pier has been removed and the parapet rebuilt in order to accommodate an entrance gate and steps down to the North London railway line (Plate 11).



Plate 12 The east parapet wall and the altered bridge pier of The Waterden Road Bridge, looking south (34607010)



Plate 13 Detail of a gas lamp on the south-eastern bridge pier in Waterden Road, looking south-east (34607005)

The bronze or copper lamp standards on the south piers are elaborately chased and decorated in an Egyptian or Oriental style, and contrast with the plain surfaces of the bridge. Snakes are entwined around the arms which project from the northern and southern sides of the lamp standard (Plate 13). The lights would have been supplied with gas by a pipe passing through the centre of each brick pier. The original gas light shades, which probably took the form of glass globes, are missing.

3.2.4 OL-07007: White Post Lane Bridge

This description should be read in conjunction with selected photographs taken in October 2007 (Plate 14 to Plate 16) and a sectional elevation (Fig 29) and schematic plan (Fig 30).



Plate 14 The northern side of White Post Lane Bridge, looking south (40707014)



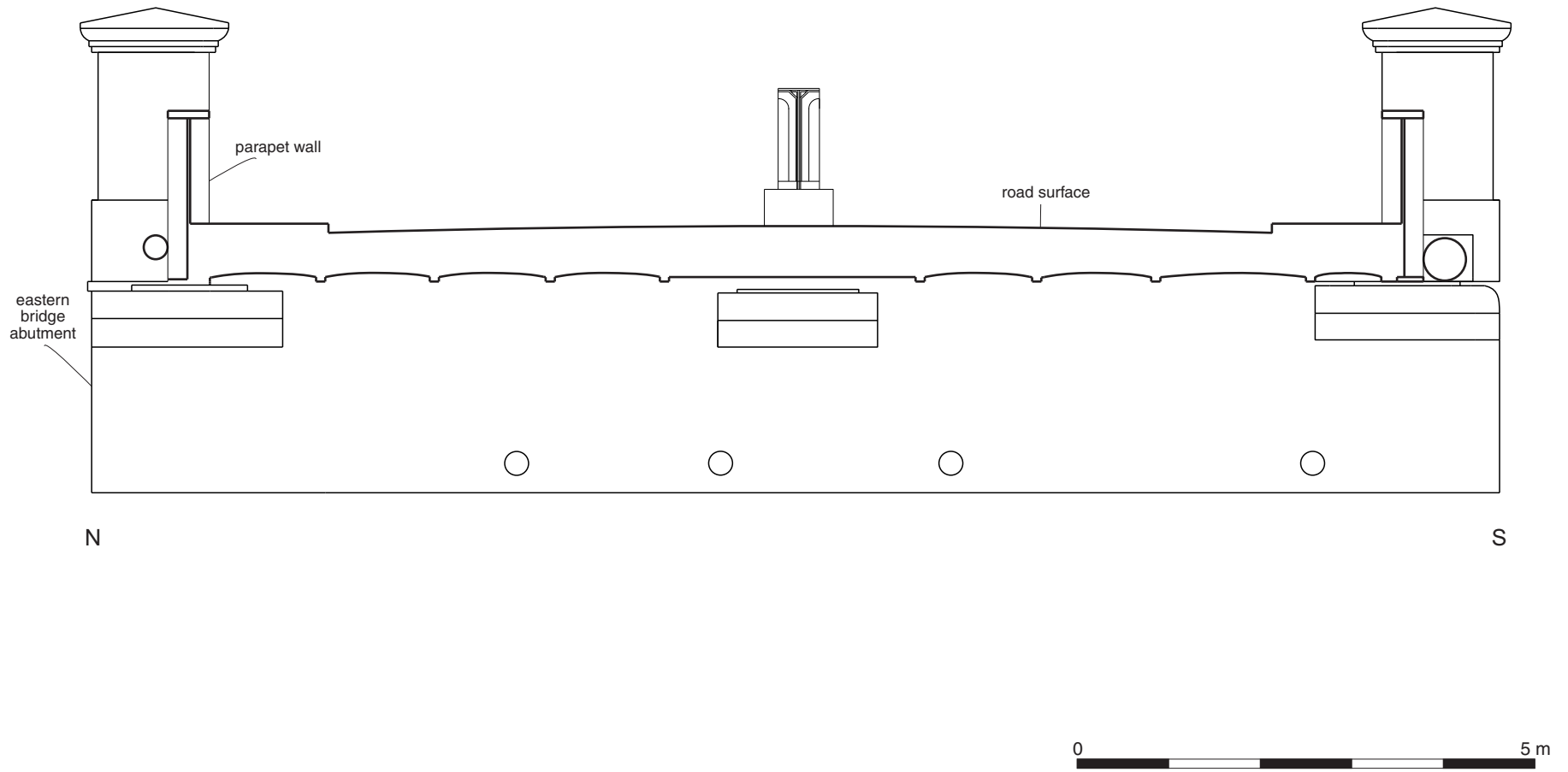
Plate 15 The underside of White Post Lane Bridge, looking south (40707016)

This bridge carries White Post Lane, which connects Rothbury Road in the west with Carpenters Road in the east, over the Hackney Cut of the Lea Navigation. The present bridge was built in the late 19th or early 20th century, at around the same time as Waterden Road was established. The bridges on these two roads are identical. The bridge deck and parapet walls are constructed of riveted wrought-iron plate girders and rendered brick jack-arches (Plate 15), carried on abutments and piers of dark blue engineering brick, laid in English bond. The bridge piers are rendered in pebbledash, and carry the downward-curving ends of the wrought-iron plate parapets. They are capped by moulded artificial stone copings. Original fittings for gas lamp standards survive on the piers.



Plate 16 The north-west bridge pier, White Post lane, looking north (40707009)

As with Waterden Road Bridge, the bronze or copper lamp standards on the south piers are elaborately chased and decorated in an Egyptian or Oriental style, and contrast with the plain surfaces of the bridge. Snakes are entwined around the arms which project from the northern and southern sides of the lamp standard. The lights would have been supplied with gas by a pipe passing through the centre of each brick pier. The original gas light shades, which probably took the form of glass globes, are missing (Plate 16).



MULTI1072SBR08#29

Fig 29 West-facing sectional elevation through White Post Lane Bridge

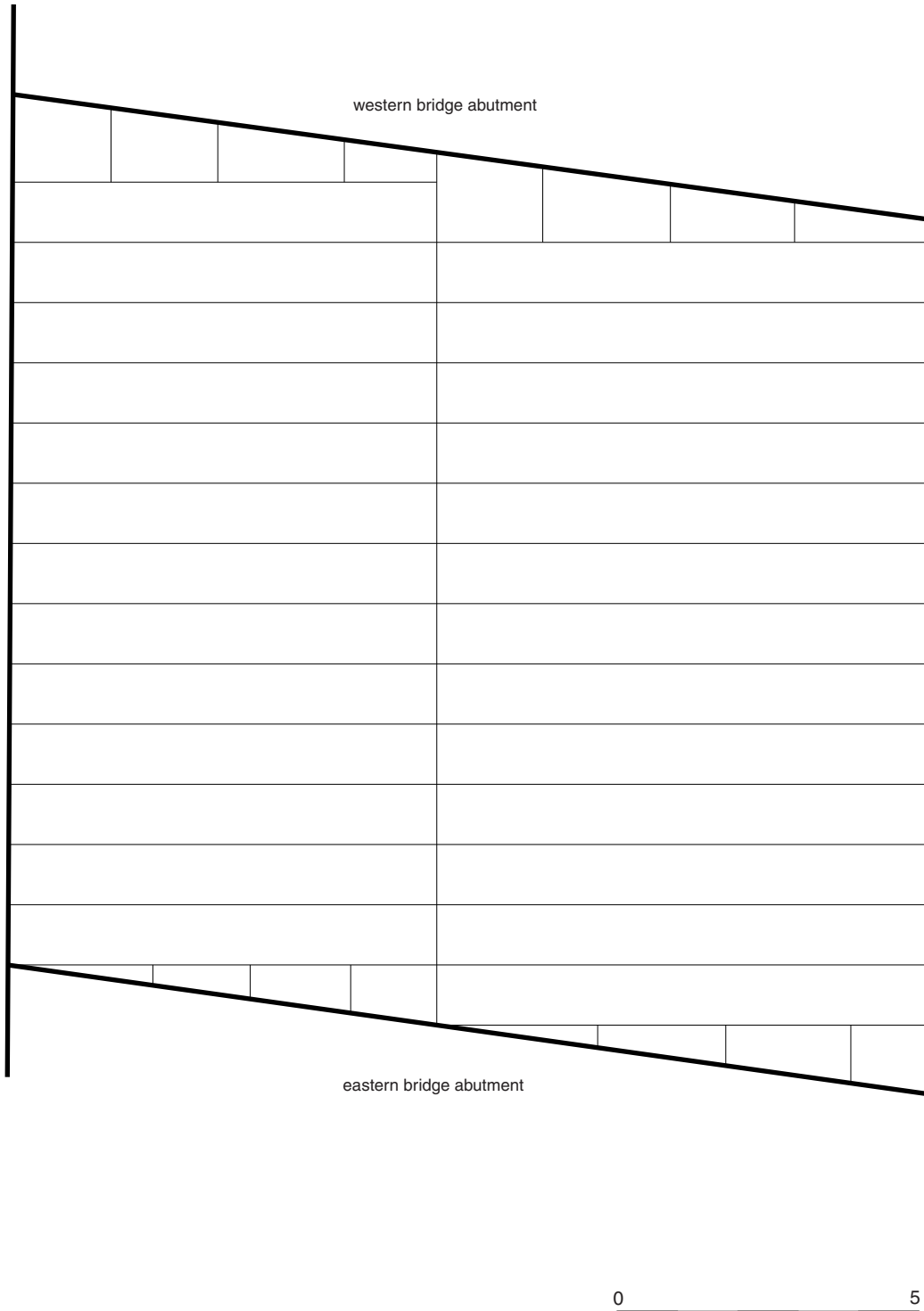


Fig 30 Schematic plan of the underside of the bridge deck, White Post Lane, showing the arrangement of wrought iron girders

3.2.5 OL-07507: Temple Mill Lane Bridge

This description should be read in conjunction with selected photographs taken in November 2007 (Plate 17 to Plate 19) and a plan (Fig 31). It should be noted that observation and recording of the bridge structure was limited to those elements that were visible from Temple Mill Lane, as the bridge spanned a live railway line, and access to the trackside areas could not be obtained.



Plate 17 The eastern approach to Temple Mill Lane Bridge, looking west (43707001)



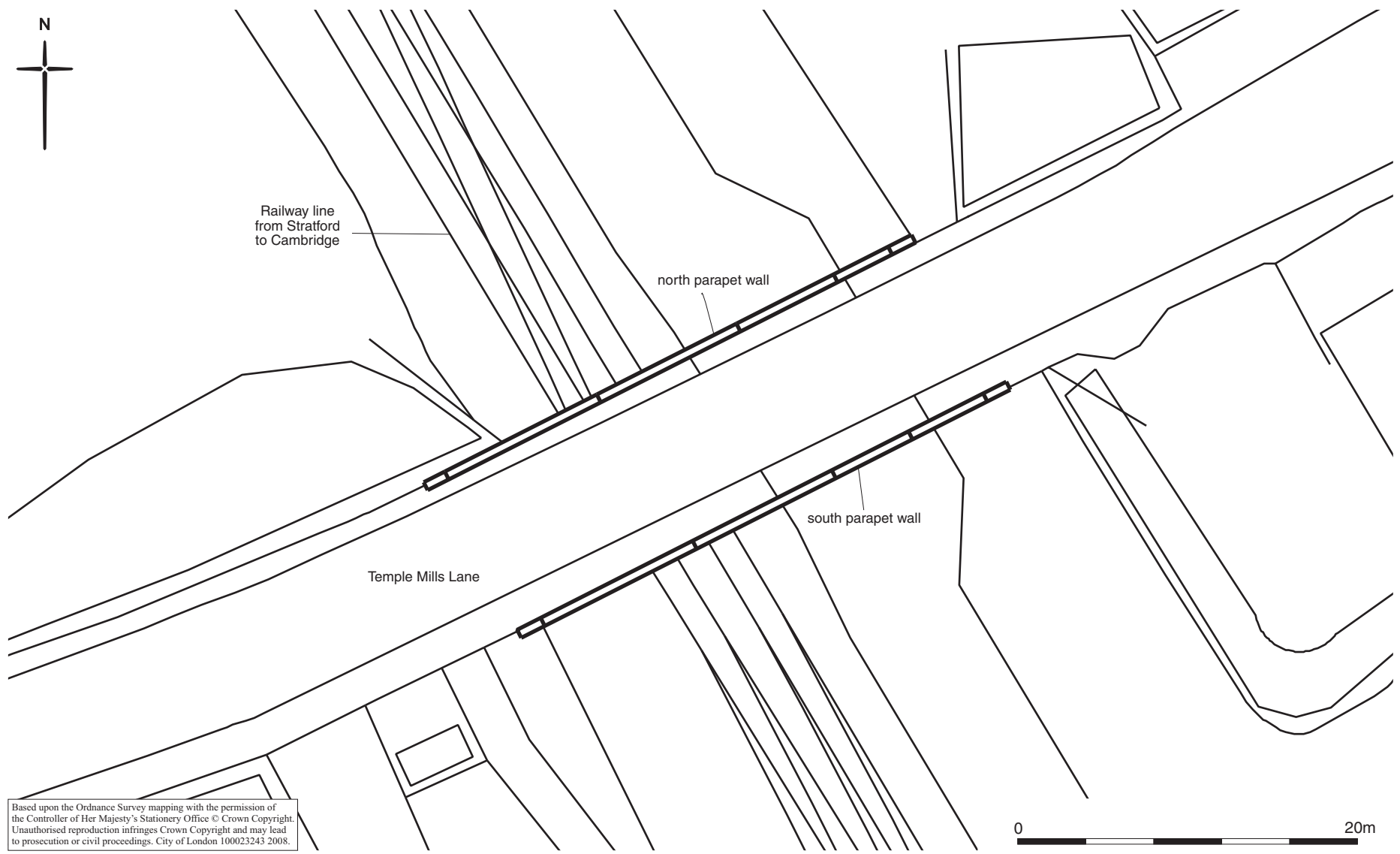
Plate 18 The eastern approach road to Temple Mill Lane Bridge, looking west (43707009)

This bridge carries Temple Mill Lane over the Cambridge line of the former Eastern Counties Railway, later the Great Eastern Railway. The present bridge appears to have been constructed in the mid-20th century, replacing at least one earlier bridge (Plate 18). The approach roads to the east and west are on a gentle slope, leading up to the bridge. The railway line from Cambridge to Stratford is located in a relatively shallow cutting, this would have required the approach roads to the east and west to be built up in the mid-19th century, to allow Temple Mill Lane to pass over the railway line.

The bridge deck is probably constructed of riveted iron or steel plate girders, and the bridge parapet walls are constructed of dark engineering brick, laid in English bond, with concrete capping stones. An OS benchmark is located at the east end of the north parapet and the eastern and western ends of the parapet walls have been painted white to increase their visibility to traffic. The pavements on either side of the bridge deck are exceptionally narrow, approximately 1.2 metres wide. The parapet walls were constructed in separate sections to incorporate expansion joints, allowing for thermal movement of the structure during extremes of hot and cold weather. A steel mesh fence had been recently mounted on top of the eastern ends of the parapet walls to increase their height. The Cambridge line connects the engine sheds and sidings used by the Eurostar trains with the high-speed railway line from St Pancras station to the continent, which now passes through Stratford, and the steel mesh fence would prevent objects from being dropped onto the line (Plate 19).



Plate 19 The southern parapet wall of Temple Mill Lane Bridge, looking east (43707003)



MULTI1072SBR08#31

Fig 31 Plan of Temple Mills Lane Bridge, showing the thermal expansion joints in the parapet walls

3.2.6 OL-07607: Angel Lane Bridge

This description should be read in conjunction with selected photographs taken in November 2007 (Plate 20 to Plate 22) and an elevation of the west parapet wall (Fig 32). It should be noted that observation and recording of the bridge structure was limited to those elements that were visible from Angel Lane, as the bridge spanned a live railway line, and access to the trackside areas could not be obtained.



Plate 20 The east parapet wall of Angel Lane Bridge, looking south-east (45407001)



Plate 21 The southern approach to Angel Lane Bridge, looking north (45407006)

This bridge carries Angel Lane over the former Eastern Counties Railway line from Stratford to Romford, and must have replaced an earlier bridge. Angel Lane is shown on some of the earliest available maps of Stratford, such as Rocque's map of 1746, and this

stretch of the Eastern Counties Railway was opened in 1839. The present bridge is first shown on the 2nd Edition OS map of 1894, and the bridge deck and parapet walls are constructed of riveted wrought-iron plate girders (Plate 20). Large wrought iron brackets are riveted to the top surface of the low parapet walls, and wrought-iron plates are riveted to these, in order to increase the height of the parapet walls. Due to the low-lying ground, the railway line under the bridge is not placed in a deep cutting, so the northern and southern approach roads are on a steep gradient (Plate 21).



Plate 22 Part of the riveted east parapet wall, looking east (45407004)

In recent years the inward-looking faces of the parapet walls have been painted with a stencilled design of an ivy-type plant, with heart-shaped leaves and berries (Plate 22). The northern and southern ends of the parapet walls are constructed of brick, with some remains of signs and other ephemera still adhering to the surface.

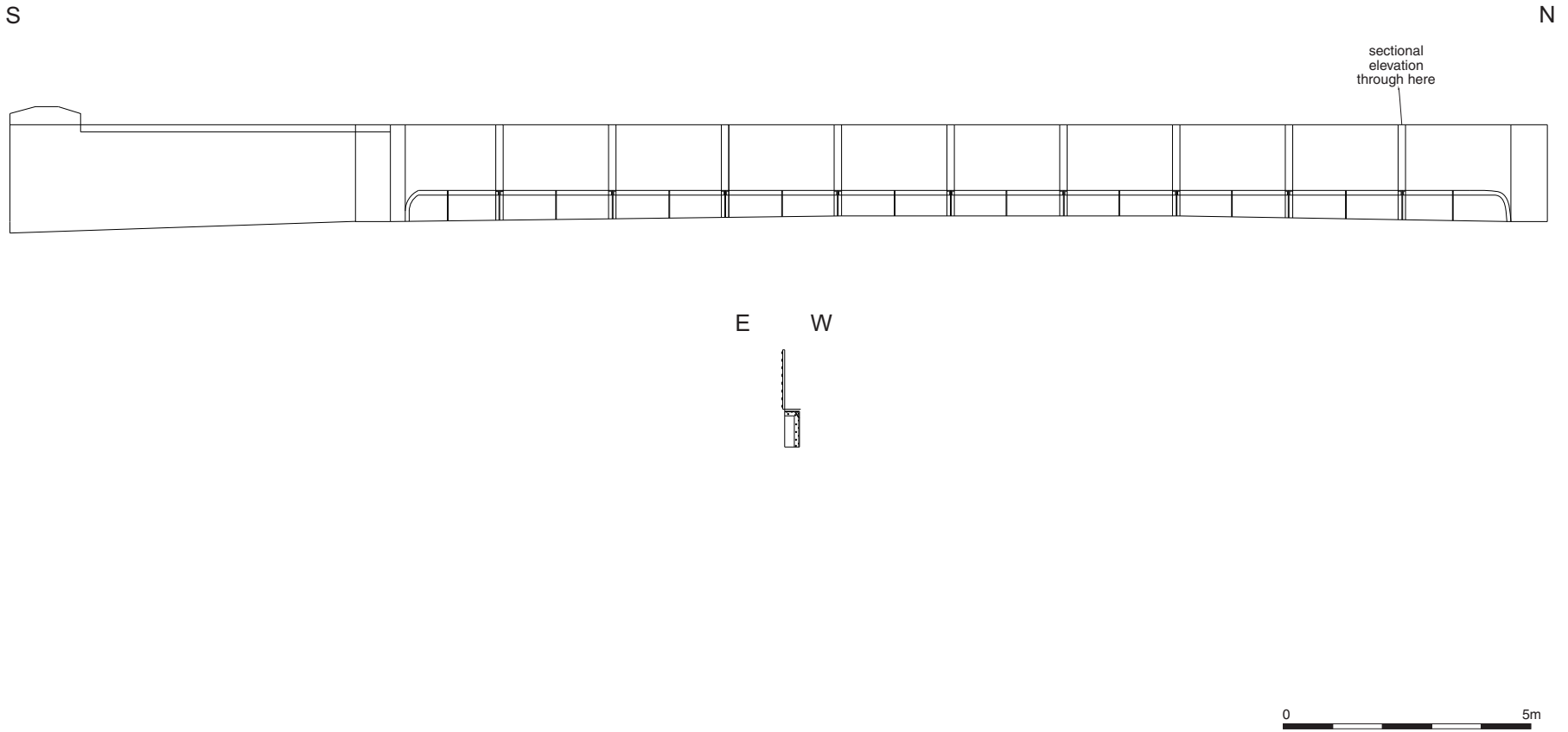


Fig 32 East-facing elevation and north-facing sectional elevation through the western bridge parapet in Angel Lane

3.3 Discussion and conclusion

Most of the bridges recorded and explored in this report date to the last two decades of the 19th century, or the first decade of the 20th, with the exception of Bridgewater Road Bridge, which was constructed in 1938. Some of these structures replace earlier bridges, and represent the continuation and formalisation of lanes and footpaths across the marshes shown on some of the earliest maps of the area. The route of the Eastway was shown on Rocque's map of 1746 as a field boundary on the southern side of Hackney Marsh, and was shown as a road leading north-east over the Hackney Cut on the Ordnance Surveyor's drawings of 1799. White Post Lane was also shown as a track on Rocque's map, and Angel Lane and Temple Mill Lane were main routes into Stratford from the north.

The two other bridges represent the increasing settlement of the marshes around the River Lea in the late 19th and early 20th centuries, after they were drained to create valuable land for agriculture and industry. Waterden Road was established across a drained meadow in 1902, and as late as 1938 the Bridgewater Road Bridge connected the northern side of Stratford High Street to a previously undeveloped plot of land on an island bounded to the east and north by the Waterworks River, to the west by the Great Eastern Railway and to the south by the Northern Outfall Sewer.

The effect that the insertion of linear features such as roads and railways has on the functioning and development of a landscape, and the people who populate it, has been researched by several authors. David Reeder (Hyde & Reeder 1984) has pointed out how Booth's 1889 map of poverty provides information on the impact that the spatial forms of London in the 19th century had on the location of economically poor areas. He notes that the map 'points to the significance especially of the innumerable dead ends, closed up vistas and backwaters in the layout of streets... a more careful reading indicates how some new addition to the ground plan – a dock or canal, for example, a gas works or waterworks, a railway line, or just the alignment of a new street – seems to have served to reinforce slum tendencies. Booth and his team were repeatedly to draw attention in later volumes to the importance of physical barriers' (cited in Vaughan 2005, 6–7).

While the land connected by the Bridgewater Road Bridge was not occupied by slum housing, it does demonstrate how parts of the Lower Lea Valley, close to the industrial heartlands of east London, remained unused and unsettled into the very recent past.

4 Potential of the archaeology

4.1 Original research aims

The archaeological investigation has fulfilled the original research aims through the creation of a photographic and drawn record and written description of the road bridges.

4.2 New research aims

More documentary evidence in the form of photographs and memorabilia may exist for the construction and use of the road bridges in the National Archives, London Metropolitan Archives and Tower Hamlets Local History Library. Further research may enhance the current understanding of the structures.

4.3 Significance of the data

The standing structures are undoubtedly of significance for the history of the immediate locality, and are of significance in the context of the expansion of the road network and increasing urbanisation of the Lower Lea Valley in the late 19th and early 20th centuries, but nothing was found to suggest that they are of wider national importance.

4.4 Salvaged fixtures, fittings and materials

There was no archaeological requirement to salvage any of the materials.

5 Publication and archiving

The site archive containing original records will be stored in accordance with the terms of the six Written Schemes of Investigation (MoLAS-PCA, 2007f, 2007g, 2007h, 2007i, 2007j, 2007k).

Information on the results of the survey will be made publicly available by means of a database in digital form, to permit inclusion of the site data in any future academic researches into the development of London.

It is also recommended that the results of this recording exercise are assimilated into a site-wide assessment of all archaeological interventions to assign contextual significance and further refine the importance of the archaeological survival, and thereafter assimilated into any publication discussing/disseminating the results.

6 Acknowledgements

The archaeological survey and this report were commissioned by the Olympic Delivery Authority, whom the project manager and author wish to thank. They are grateful especially to colleagues at Capita Symonds Ltd, both in and out of the field. They also thank the staff of Newham Archives and Local Studies Library and the London Metropolitan Archive for providing historic maps and information.

Archaeological analysis and recording, and pencil drawings, were by Emma Dwyer, Maria Utrero and Andrew Westman. The archaeological photographs of the standing structures and their landscape setting were taken by Maggie Cox, assisted by Emma Dwyer and Maria Utrero. CAD drawings were by Monica Cortelletti.

7 Bibliography and references

Bacon, G W, 1900 *Map of the environs of London*

British Geological Survey (BGS), 1993 *1:50,000, England & Wales, solid and drift geology, sheet 256, North London*

Department of the Environment (DoE), 1990 *Planning Policy Guidance 16: archaeology and planning (PPG16)*

Department of the Environment (DoE), 1994 *Planning Policy Guidance 15: planning and the historic environment*

English Heritage, 1991 *Management of Archaeological Projects* (2nd edition)

English Heritage (Greater London Archaeological Advisory Service), 1998 *Archaeological guidance papers*

English Heritage, 2006 *Understanding Historic Buildings: A guide to good recording practice*

Institute of Field Archaeologists (IFA), 2001 *Standard and guidance for archaeological investigation of standing buildings or structures*

LCC (London County Council), 1955 *Names of Streets and Places in the Administrative County of London* (London County Council)

Museum of London Archaeology Service, 2008 *Health and safety policy*

Museum of London, 1994 *Archaeological site manual* (3rd edition)

Museum of London, 2002 *A research framework for London archaeology 2002*

MoLAS-PCA. 2007a. *Lower Lea Valley Regeneration and Olympics Archaeological and Built Heritage Impact Assessment (Detailed Desk-based Assessment [DDBA]) Planning Delivery Zone Four* MoLAS-PCA Unpublished Report

MoLAS-PCA. 2007b. *Lower Lea Valley Regeneration and Olympics Archaeological and Built Heritage Impact Assessment (Detailed Desk-based Assessment [DDBA]) Planning Delivery Zone Five* MoLAS-PCA Unpublished Report

MoLAS-PCA. 2007c. *Lower Lea Valley Regeneration and Olympics Archaeological and Built Heritage Impact Assessment (Detailed Desk-based Assessment [DDBA]) Planning Delivery Zone Six* MoLAS-PCA Unpublished Report

MoLAS-PCA. 2007d. *Lower Lea Valley Regeneration and Olympics Archaeological and Built Heritage Impact Assessment (Detailed Desk-based Assessment [DDBA]) Planning Delivery Zone Eight* MoLAS-PCA Unpublished Report

MoLAS-PCA. 2007e. *Lower Lea Valley Regeneration and Olympics Archaeological and Built Heritage Impact Assessment (Detailed Desk-based Assessment [DDBA]) Planning Delivery Zone Eleven* MoLAS-PCA Unpublished Report

MoLAS-PCA, 2007f. *Written Scheme of Investigation for Historic Building Recording (level 1) of Eastway Road Bridge* MoLAS-PCA Unpublished Report

MoLAS-PCA, 2007g. *Written Scheme of Investigation for Historic Building Recording (level 1) of Bridgewater Road Concrete Bridge* MoLAS-PCA Unpublished Report

- MoLAS-PCA, 2007h. *Written Scheme of Investigation for Historic Building Recording (level 1) of Waterden Road Bridge* MoLAS-PCA Unpublished Report
- MoLAS-PCA, 2007i. *Written Scheme of Investigation for Historic Building Recording (level 1) of White Post Lane Bridge* MoLAS-PCA Unpublished Report
- MoLAS-PCA, 2007j. *Written Scheme of Investigation for Historic Building Recording (level 1) of Temple Mill Lane Bridge* MoLAS-PCA Unpublished Report
- MoLAS-PCA, 2007k. *Written Scheme of Investigation for Historic Building Recording (level 1) of Angel Lane Bridge* MoLAS-PCA Unpublished Report
- Saunders, A, 2005 *The London County Council Bomb Damage Maps 1939-1945* (London Topographical Society)
- Stanford, E, 1900 *Library map of London and its suburbs*
- VCH, 1966 *The Victoria History of the Counties of England: Essex, Vol 5: West Ham* (ed W R Powell)
- VCH, 1973 *The Victoria History of the Counties of England: Essex, Vol 6: West Ham* (ed W R Powell)
- VCH, 1995 *The Victoria History of the Counties of England: Middlesex, Vol 10: Hackney* (ed T F T Baker)
- Walford, E, 1878 'The northern suburbs: The Lea and Stratford-le-Bow' in *Old and New London: Volume 5*; Centre for Metropolitan History

8 Appendix 1: NMR OASIS archaeological report form

OASIS ID: molas1-44418

Project details

Project name Road Bridges in the Lower Lea Valley

Short description of the project The Museum of London Archaeology Service and Pre-Construct Archaeology (MoLAS-PCA) were commissioned by the Olympic Delivery Authority to analyse and record six road bridges which spanned waterways and railways in the Lower Lea Valley. The bridges were to be demolished and rebuilt and the archaeological investigation and a subsequent report were required as a condition of planning consent for the redevelopment. The investigation took place in September - November 2007, and comprised measured survey and photography of structures and their setting. The six bridges that were recorded were as follows. The Eastway Road Bridge carried the Eastway over the Hackney Cut of the Lea Navigation. The Bridgewater Road Concrete Bridge spanned the Waterworks River and connected a trading estate with Warton Road. Waterden Road Bridge spanned the railway line between Hackney and Stratford. The White Post Lane Bridge carried a road that dates back to at least the mid-18th century over the Hackney Cut of the Lea Navigation. Temple Mills Lane Bridge crossed the railway line from Cambridge to Stratford and the Angel Lane Bridge also carried an early street, one of the main routes into Stratford from the north, over a railway line.

Project dates Start: 10-09-2007 End: 30-11-2007

Previous/future work No / Not known

Any project codes associated reference OL-05107 - Sitecode

Any project codes associated reference OL-05707 - Sitecode

Any project codes associated reference OL-05907 - Sitecode

Any project codes associated reference OL-07007 - Sitecode

Any project codes associated reference OL-07507 - Sitecode

codes

Any project codes associated reference OL-07607 - Sitecode

Type of project Building Recording

Site status None

Current Land use Industry and Commerce 1 - Industrial

Current Land use Open Fresh Water 2 - Standing water

Current Land use Transport and Utilities 1 - Highways and road transport

Monument type ROAD BRIDGE Post Medieval

Monument type ROAD BRIDGE Modern

Methods techniques & 'Measured Survey','Photographic Survey','Annotated Sketch'

Prompt Direction from Local Planning Authority - PPG15

Project location

Country England

Site location GREATER LONDON HACKNEY HACKNEY Eastway Road Bridge

Site location GREATER LONDON NEWHAM STRATFORD Bridgewater Road Concrete Bridge

Site location GREATER LONDON WALTHAM FOREST LEYTON Temple Mills Lane Bridge

Site location GREATER LONDON TOWER HAMLETS BOW Waterden Road Bridge

Site location GREATER LONDON NEWHAM STRATFORD Angel Lane Bridge

Site location GREATER LONDON HACKNEY HACKNEY White Post Lane Bridge

Postcode E9

Study area 500.00 Square metres

Site coordinates TQ 3693 8508 51.5474797248 -0.02497549604110 51 32 50 N 000 01
29 W Point

Site coordinates TQ 3824 8379 51.5355663629 -0.00659959267697 51 32 08 N 000 00
23 W Point

Site coordinates TQ 3752 8460 51.5430221352 -0.01665866714120 51 32 34 N 000 00
59 W Point

Site coordinates TQ 3728 8451 51.5422718681 -0.02015288627490 51 32 32 N 000 01
12 W Point

Site coordinates TQ 3834 8539 51.5499209536 -0.00452947805284 51 32 59 N 000 00
16 W Point

Site coordinates TQ 3879 8470 51.5436092004 0.001685015488 51 32 36 N 000 00 06
E Point

Height OD Min: 4.00m Max: 8.00m

Project creators

Name of MoLAS/PCA
Organisation

Project originator brief Greater London Archaeology Advisory Service

Project originator design MoLAS/PCA

Project director/manager Gary Brown

Project supervisor Emma Dwyer

Type of ODA
sponsor/funding
body

Name of Olympic Delivery Authority
sponsor/funding
body

Project archives

Physical Archive No
Exists?

Digital Archive LAARC
recipient

Digital Archive ID OL-05107

Digital available Media 'Images raster / digital photography','Images vector','Survey','Text'

Paper Archive LAARC
recipient

Paper Archive ID OL-05107

Paper available Media 'Drawing','Map','Notebook - Excavation',' Research',' General
Notes','Photograph','Plan','Report'

Project bibliography 1

Publication type Grey literature (unpublished document/manuscript)

Title Road Bridges in the Lower Lea Valley

Author(s)/Editor(s) Dwyer, E, Sorapure, D

Date 2008

Issuer or publisher MoLAS-PCA

Place of issue or London
publication

Description A4 grey literature report, pdf

Entered by Emma Dwyer (edwyer@molas.org.uk)

Entered on 24 June 2008

9 Appendix 2: list of archaeological photographs

9.1 OL-05107 Eastway Road Bridge over Lea Navigation

Image number	Description
39507001	Western approach road to the Eastway bridge, looking north-east
39507002	Western approach road to the Eastway bridge, looking north-east
39507003	Western approach road to the Eastway bridge, looking east
39507004	Western approach road to the Eastway bridge, looking east
39507005	Eastway, and the parapet walls of the bridge, looking east
39507006	South parapet wall of the Eastway bridge, looking south-east
39507007	North parapet wall of the Eastway bridge, looking north-west
39507008	Detail of repair to the north parapet wall, looking north-west
39507009	North-east bridge abutment seen from the towpath, looking south
39507010	South-west bridge abutment, looking east
39507011	South side of bridge seen from the towpath, looking north
39507012	South side of bridge seen from the towpath, looking north
39507013	South side of bridge seen from Meadow Close, looking north
39507014	North side of bridge seen from the towpath, looking south
39507015	Riveted steel plate girders and brick jack arches, forming the bridge deck, looking west
39507016	Riveted steel plate girders and brick jack arches, forming the bridge deck, looking west
39507017	South side of bridge seen from the towpath, looking north
39507018	Footpath from the Eastway to the towpath, looking east

9.2 OL-05707 Bridgewater Road Concrete Bridge

Image number	Description
34707001	Western approach to Bridgewater Road bridge, looking south-west
34707002	Eastern approach to Bridgewater Road bridge, looking north-east
34707003	Eastern approach to Bridgewater Road bridge, looking north-east
34707004	Damaged plaque on south parapet wall, looking north
34707005	North side of the bridge, and the Waterworks River, looking south
34707006	North side of the bridge, and the Waterworks River, looking south
34707007	Disused bridge or jetty footings in the Waterworks River
34707008	Concrete footpath, parapet wall and iron railings on north side of bridge, looking west
34707009	Disused bridge or jetty footings in the Waterworks River
34707010	Damaged plaque on north parapet wall, looking south
34707011	Warehousing on western side of Bridgewater Road bridge, looking south-west
34707012	Hoarding in Warton Road, looking north-east
34707013	Warton Road, looking north-west
34707014	Warton Road, looking north-west
34707015	Working shot, Bridgewater Road, looking west

9.3 OL-05907 Waterden Road Bridge

Image number	Description
34607001	Northern approach to Waterden Road bridge, looking south
34607002	South-eastern bridge pier in Waterden Road, looking east
34607003	South-eastern bridge pier in Waterden Road, looking east
34607004	Detail of gas lamp on south-eastern bridge pier in Waterden Road, looking south-east
34607005	Detail of gas lamp on south-eastern bridge pier in Waterden Road, looking south-east
34607006	South-western bridge pier in Waterden Road, looking west
34607007	Southern approach to Waterden Road bridge, looking north
34607008	West parapet wall, looking north
34607009	West parapet wall, looking north
34607010	East parapet wall and altered bridge pier, looking south
34607011	Steps from Waterden Road to north side of railway line, looking east
34607012	Junction of parapet wall with bridge pier
34607013	Railway line, looking east
34607014	Working shot, looking south-west
34607015	Working shot, looking south-west
34607015	Working shot, looking south-west
34607016	Working shot, looking west

9.4 OL-07007 White Post Lane Bridge

Image number	Description
40707001	Eastern approach to White Post Lane bridge, looking west
40707002	Eastern approach to White Post Lane bridge, looking west
40707003	Top of bridge deck, White Post Lane, looking west
40707004	Top of bridge deck, White Post Lane, looking north-east
40707005	Detail of gas lamp on north-east bridge pier, looking north-east
40707006	Detail of riveted steel plates on central parapet, looking east
40707007	Detail of riveted steel plates on central parapet, looking east
40707008	North parapet, White Post Lane bridge, looking north
40707009	North-west bridge pier, White Post Lane, looking north
40707010	South-west bridge pier, White Post Lane, looking east
40707011	South-west bridge pier, White Post Lane, looking west
40707012	Pipe on southern side of White Post Lane bridge, possibly containing cables or gas, looking west
40707013	Southern side of White Post Lane bridge, looking north
40707014	Northern side of White Post Lane bridge, looking south
40707015	North-western bridge pier, looking south-west
40707016	Underside of White Post Lane bridge, looking south
40707017	Western embankment wall of Lea Navigation on southern side of bridge, looking west
40707018	Western embankment wall of Lea Navigation and underside of White Post Lane bridge, looking west
40707019	Northern side of White Post Lane bridge, looking south

9.5 OL-07507 Temple Mill Lane Bridge

Image number	Description
43707001	Eastern approach to Temple Mill Lane bridge, looking west
43707002	Northern parapet wall of Temple Mill Lane bridge, looking north-west
43707003	Southern parapet wall of Temple Mill Lane bridge, looking east
43707004	Northern parapet wall of Temple Mill Lane bridge and steel fence, looking north-west
43707005	Southern parapet wall of Temple Mill Lane bridge, looking east
43707006	Western approach to Temple Mill Lane bridge, looking east
43707007	Western approach to Temple Mill Lane bridge, looking east
43707008	Eastern approach to Temple Mill Lane bridge, looking west
43707009	Eastern approach to Temple Mill Lane bridge, looking west
43707010	Western approach to Temple Mill Lane bridge, looking south-east
43707011	Brick gate pier near eastern end of Temple Mill Lane bridge, looking north
43707012	Eastern approach to Temple Mill Lane bridge, looking north-west
43707013	Junction of High Road, Leyton, and Temple Mill Lane, looking west

9.6 OL-07607 Angel Lane Bridge

Image number	Description
45407001	East parapet wall of Angel Lane bridge, looking south-east
45407002	West parapet wall of Angel Lane bridge, looking north-west
45407003	Painted sign with bridge number '1-63', south end of east parapet wall, looking north-east
45407004	Section of the riveted iron or steel plate east parapet wall, looking east
45407005	North end of west parapet wall, looking north-west
45407006	Southern approach to Angel Lane bridge, looking north
45407007	South end of west parapet wall and railway line, looking north-west

10 Appendix 3: list of working drawings made on site

10.1 OL-05107 Eastway Road Bridge over Lea Navigation

Drawing	Description
1	Sketch elevation of the north face of the north side of Eastway Road Bridge
2	Measured sketch elevation of the north face of the north side of Eastway Road Bridge
3	Measured west-facing sectional elevation through Eastway Road Bridge

10.2 OL-05707 Bridgewater Road Concrete Bridge

Drawing	Description
1	Measured section through the south parapet wall of Bridgewater Road Bridge
2	Measured sketch details of Bridgewater Road Bridge

10.3 OL-05907 Waterden Road Bridge

Drawing	Description
1	Measured details of Waterden Road Bridge
2	Measured sketch elevation of west parapet wall of Waterden Road Bridge
3	Measured sketch detail of bridge pier and gaslight
4	Measured sketch detail of a riveted steel panel in the parapet wall
5	Measured section through the steel parapet wall

10.4 OL-07007 White Post Lane Bridge

Drawing	Description
1	Measured sketch elevation of north side of White Post Lane Bridge
2	Measured sectional elevation of the east side of White Post Lane Bridge, 1 of 2
3	Measured sectional elevation of the east side of White Post Lane Bridge, 2 of 2
4	Sketch detail of bridge pier
5	Sketch details of central parapet, White Post Lane Bridge
6	Sketch details of White Post Lane Bridge

10.5 OL-07507 Temple Mill Lane Bridge

Drawing	Description
1	Measured sketch plan of Temple Mill Lane Bridge
2	Amended OS plan of Temple Mill Lane Bridge

10.6 OL-07607 Angel Lane Bridge

Drawing	Description
1	Profile of east parapet wall of Angel Lane Bridge
2	Sketch elevation of west parapet wall of Angel Lane Bridge