C263 LATE EAST

Non-listed Built Heritage Recording Report

North Woolwich Railway Footbridge

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1 Introduction

This report presents the results of the NLBH survey and recording work undertaken by the MOLA Standing Buildings team on the iron foot bridge at the North Woolwich Portal site (NGR 542876 179966). All fieldwork was conducted between 03/08/11 and 04/08/11 and supervised by David Sorapure (MOLA Supervisor). A level 3 record of the iron footbridge was undertaken the fieldwork for which consisted of:

- A series of measured sketches to produce one section and one elevation of the structure
- Annotated sketches made during an on site analysis of the structure's make up, with attention paid to any areas of alteration and repair
- A photographic record including general and detailed shots taken by the MOLA photographic team, as well as photographs taken by the Standing Buildings team as an aid to off site analysis.

The event code (sitecode) is XSV 11

The fieldwork was carried out in accordance with:

- The Crossrail **Generic WSI**: *Archaeology Generic Written Scheme of Investigation*, doc no. 140022008-44ES-P2Z1
- A Crossrail **Site-specific Written Scheme of Investigation** (SS-WSI): *North Woolwich Portal Archaeological WSI, Doc. No. CR-SD-PRW-X-IS-00006*, Rev. 8, 10/01/11
- An **Archaeological method Statement** MOLA, C263 Archaeology Late east Method Statement, watching Briefs, Non-listed Building Recording and Geoarchaeological Borehole Survey Victoria Dock Portal and North Woolwich Portal. Doc no. C263-MLA-X-RGN-CRG07-50003 12/07/11.

In addition the fieldwork, the off site analytical study and the reporting in this document comply with the relevant guidelines from the Institute for Archaeologists, (IFA 1996), English Heritage (EH 1991, GLAAS 1998, 2000, 2006 and 2008), the Royal Commission of Historical Monuments, England (RCHME 1996), the Museum of London Archaeology Health and Safety Policy (MOLA 2008), and the Museum of London Archaeology Service site manual (MoLAS1994).

2 Site Methodology and fieldwork objectives

2.1 NLBH recording methodology

The overall mitigation strategy for the NLBH on the North Woolwich Portal is to be preservation by record. The majority of this recording work had previously been achieved to the required level. However the late 19th century footbridge, as a heritage asset of moderate importance required a level 3 record. As a further mitigation measure the footbridge has been dismantled, rather than demolished, and has been reassembled at the Whitwell and Reepham Heritage Railway. The field recording to enable the level 3 record was carried out prior to the footbridge being dismantled.

Other than the OS data no existing plan, section and elevation drawings were available at the time of the field recording. Annotated and measured sketches were made on site and digital colour photographs were taken, both general views of the whole structure within its setting and detailed shots. Interventions into the fabric of the structure or the removal of samples of fabric were not necessary. The fabric of the structure underwent visual analysis on site, with the analysis continuing after the fieldwork, and an appropriate level of documentary archive research was carried out, accessed through the National Archives, Kew.

2.2 Fieldwork Objectives

The overall objective and aims of the NLBH recording was to secure preservation by record of the late 19th century cast iron foot bridge prior to its dismantling and reassembly at the Whitwell and Reepham Heritage Railway. This was to achieve a level 3 record in accordance with the specification set out in the English Heritage Guidelines (EH 2006) The field work undertaken and the office based off-site work has produced the requisite results in the form of this report and its subsequent archive.

This report gives a written and illustrated description of the structure, analysis of its fabric, its history and use with site photographs and drawings reproduced.

This report and the site drawings and photographs will be archived under the site code XSV 11, whilst a summary will appear in an appropriate publication such as the annual fieldwork round-up in the London Archaeologist.

3 Analytical description of the structure

Photo 1 A general view of the late 19th century footbridge looking west

In appearance the structure is one of a typical type of late 19th century wrought iron foot bridges on cast iron columns which were once commonplace on Britain's railways, (Photo 1). The designs for such structures were often standard, with the same basic design being produced time and time again. The structure is supported on twelve ornate Tuscan cast-iron columns, four large versions of these support the winder (the platform between the two sets of steps, where the direction turns 90˚) onto the foot bridge at the top of the staircases on each side whilst two smaller versions are present supporting the staircases on each side (Photo 2).

Unfortunately no manufacturers name plate was found on the footbridge which would enable the location and possibly an exact date for the bridge's construction. The central part of the footbridge, that spans the former track bed, is composed of four equal panels in a row, with a curve downwards at each end, formed from two panels, which corresponds to the steps at either end.

The western and eastern sides of this central area are identical. On the exterior of the four central panels are brackets attached to the five upright elements. All of these are curved and formed from a single '**L**' bar, with the exception of the central bracket on each side, which is an angled bracket, formed from 2 straight '**L**' bars bolted together (Photo 3). The use of bolts instead of rivets suggests this is an alteration and the central position and identical arrangement of this bracket on both the western and eastern is not likely to be coincidental. The angled bracket may have held a lamp, semaphore signal or overhead cable, though it may have been a simple modern replacement for the original curved brackets that were lost or damaged.

The structure comprises panels of lattice iron work, riveted between pairs of '**L**' and occasionally single '**T**' bars of iron, the latter being used on the stairs only. In some areas a fish plate was used on the upper surface of the pairs of '**L**' bars to fix them together (Photo 9). The panels that form the sides of the stairs are comparatively

large and the entire structure, with the exception of the brackets that support the timber steps, has been riveted together (Photo 4), the step brackets being bolted (Photo 5). The common method of manufacture and construction for composite iron structures was usually to rivet panels and other elements together off site during the manufacturing process and transport these components to the site, where they would be bolted together and assembled. Although the transportation of large ready-made elements of the structure to the site by rail is highly likely, it seems probable that the on-site assembly also requited rivets to be heated and applied to the footbridge during its assembly, by today's standards a particularly labour intensive construction method, in particular riveting by hand which required at least two or three workmen.

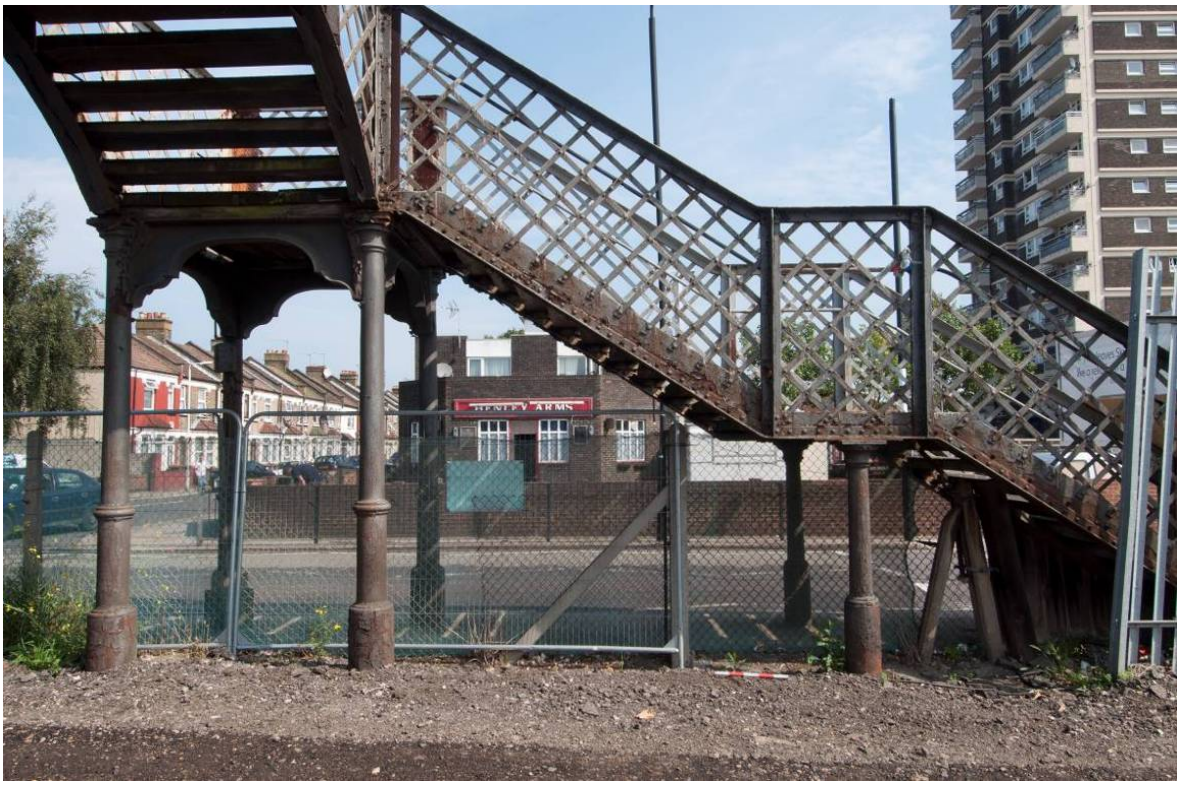

Photo 2 A view of the columns and staircase on the north side of the foot bridge, looking north

Photo 3 The central angled bracket on the eastern side, bolted onto the structure, looking south.

Photo 4 Riveted elements on the newel post on the southern side of the bridge, looking north east.

Photo 5 Rivets and bolts in the string panel of the southern steps, the rivets securing the lattice bars, whilst the pairs of bolts secure the brackets for each of the timber steps.

Repairs were noted to the structure during the survey, such as the replacement of one of the smaller columns with an RSJ on the south side of the structure (Photo 6), probably as a result of a vehicle strike. The hand-rail had also been entirely replaced within the stairs on the south side, probably during the mid 20th century, whilst on the north site the original hand-rail remained, with some modern repairs and a small section replaced at the top (Photo 7). The addition of electrical lighting or illuminated signage seem likely at some stage in the structure's history, with the probable position of former lamps being marked by scars on the upper surface of the foot bridge top-rail (Photo 8), whilst an electrical supply box and a conduit remain attached to a column at the north end of the bridge.

The northern end of the foot bridge had two steel panels added, one at the top of the stairs (Photo 7) and the other in the north–west corner (Photo 9). The depiction of the foot bridge on the OS map of 1894 (Fig 3) suggests there has been an alteration in the orientation of the steps from their original position, on the north–western side of the structure, to the north–eastern side (There are two footbridges shown on the 1894 OS map, the North Woolwich Portal foot bridge is marked *F.B*. above the words *Electric Cable Works*). The steel plate repairs to the north area of the bridge may correspond to an alteration in the orientation of the steps from their original position, on the north–western side of the structure, to the north–eastern side. However there is no clear reason as to why the position of the north steps would have been altered in this way.

Photo 6 The southern façade of the structure, looking north. Note the RSJ replacing the small column.

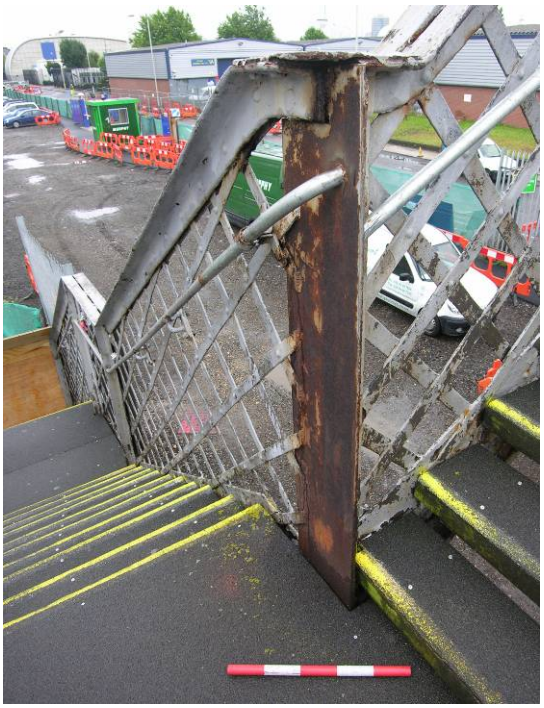

Photo 7 Modern repair to the north hand-rail including a welded steel plate, looking south east

Photo 8 A scar on the upper surface of the foot bridge top-rail looking north, possibly from a lamp fixing or illuminated sign

*Photo 9 A fish plate securing two '**L**' bars the foreground, and a steel plate added to the north–west corner of the structure, in the centre right of the photograph. Note the textured tread surface.*

4 Documentary archive research

4.1 Discussion

Through documentary archive research the footbridge on the North Woolwich Portal site has been identified as Henley's Footbridge, which was built as a pedestrian bridge in North Woolwich, across the railway between the site of Henley's Electric Cable works and Fernhill Street.

North Woolwich railway station (0.5km to the south-west of the footbridge), and the branch line serving it, were built in 1847 by the Eastern Counties Railway Company (ECR) as the southern terminus of the Eastern Counties and Thames Junction Railway (Course 1962). The footbridge itself was not built until 1892 (RAIL 227/124, 514-5, 526-7) thirty years after the ECR had merged with several other companies to become the Great Eastern Railway Company (GER) (Awdry 1990, 126).

The minutes of the GER's Locomotive and Way and Works Committee for 1st March 1892 (RAIL 227, 514-5) demonstrate that the company had received communication with the local authority as far back as 1886 requesting that a footbridge be installed in this location to replace a level crossing on the site. At this time the level crossing served Henley's Electric Cable Works, established 1859, to the south of the railway and residential housing, which accommodated many of Henry's workers, to the north. Initially the GER resisted the footbridge scheme on the grounds of cost; however they had reached a resolution with the local authority by March 1892 that the £400 cost would be shared equally. The cable works are visible on the 1869 OS map (Fig 2), labelled *Electric Telegraph Works*, along with workers housing to the east of the works and to the north of the railway tracks. On the 1894 OS map (Fig 3) the works have expanded, along with the workers housing to the north and Henley's Footbridge is marked with *FB*. Henley's Electric Cable Company set up as a submarine cable maker in 1857 and by 1859 the North Woolwich site had opened. Working closely with Glass, Elliot and Company, Henley's went on to manufacture the shore ends of the first successful Trans-Atlantic cable in 1865, which helped to lay the foundations of modern communications.

The following month the Committee's minutes for 19th April (RAIL 227/124, 526-7) show that tenders from six engineering companies had been received by the GER to quote for the creation of four company footbridges including Henley's, North Woolwich. The Derby-based engineering firm of Eastwood Swingler and Co. Ltd were granted the contract for £1695,4,2 – the cheapest quote of the six, staving off competition from other firms in the Isle of Dogs, Leeds, Derby, Stockton-on-Tees and Middlesborough. Eastwood Swingler's yard was located

Eastwood Swingler was formed in 1867 when James Eastwood merged his firm with that of the adjacent business Messrs Swingler and Son. Eastwood was born in 1808 in Alderwasley, Derbyshire where he learned his trade alongside his father at Alderwasley Forge. Eastwood later moved to Manchester and then Liverpool where he worked for the Mersey Steel and Ironwork. Here he contributed to the construction of steamships such as President and Great Britain. In 1847 he left Liverpool and set up his own engineering business in Derby initially in partnership with Thomas Frost of Wigan (Inst. Mech. Eng. 1875, 21-2). Eastwood died in 1874 however the company continued until it was liquidated in 1925 (London Gazette, 1925, 2869)

It has been assumed that the footbridge construction works took place in a reasonably short space of time after the Committee had authorised the costs, potentially later in 1892. The footbridge was certainly in place by 1894 as mentioned above, it appears on the 1894 Ordnance Survey 1:1056 London Town Plan Map. However it is depicted with its northern steps descending from east to west, whilst the footbridge recorded on site has its northern steps descending from west to east.

Despite this apparent inconsistency it is highly likely that the footbridge recorded on site is in fact the same Henley's Footbridge, built between 1892–94. A discussion on the reason for the change in orientation of the northern steps is included in the conclusions in section 16.

4.2 A transcription of some of the notes resulting from the archive research

Woolwich Line

1889

- Canning Town. Footbridge at Star Lane. Tenders (J.J.B. Porter: £270,4,0) W171
- Footbridges at North Woolwich, Swaffham and Scotland Green. Tenders. W207

1892

- Footbridge at Henley's Level Crossing between Silvertown and North Woolwich. W514. A194.

(GER Locomotive and Way and Works Committee 1887 – 1892 RAIL 227/124)

Proposed Footbridge at Henley's Level Crossing between Silvertown and North Woolwich Stations (pp. 514-5)

1st March 1892

Submitted report from the General Manager stating that we have had some correspondence with the Board of Trade and the local authority of the neighbourhood since 1886 respecting the erection of a footbridge which we have declined to construct at the sole cost of the Company. A footbridge can be erected for about £400 as per plan submitted and the local authority now offers to contribute half this amount. M. Birt recommends that the work be authorised. Resolved that the work be carried out accordingly and the outlay of £200 be reported to the Accounts Committee.

(GER Locomotive and Way and Works Committee 1887 – 1892 RAIL 227/124)

Footbridges at Harleston, Hadham, Woolwich and Kelvedon

19th April 1892

Referring to Minutes of this Committee of 5th February 1889 1st December 1891 and 1st March 1892 and of the Board 3rd March 1891 – submitted Tenders viz.:

Name	Amount of Contract		
Eastwood Swingler and Co. Ltd	1, 695	4	2
J. Westwood and Co. Ltd	1,767	15	0
J. Butler and Co.	1,752	2	6
A. Handyside and Co. Ltd	1,945	2	1
The Stockton Forge	2,343	15	0
Teeside Iron Foundry Ltd	2,143	1	3

Resolved that on recommendation of the General Manager the offers of Messrs Eastwood Swingler Co. Ltd of Derby at £1695,4,2 for the 4 Bridges be accepted.

5 Conclusions

Though a combination of on site recording and analysis, along with off site archive research the Level 3 recording of the footbridge at the North Woolwich Portal has revealed the structures place, date, method and reason for manufacture. It would appear that a footbridge was required for workers at the Henley's Electric Cable Works, to be able to cross the railway tracks from their homes to the north. Henley's was established on the site in 1859 manufacturing early Trans-Atlantic cables, and it seems that by the 1890's, previous level crossing was inadequate. A footbridge may have been built on the site sooner had not the question of who should pay for it's construction been disputed. Finally in the early 1890s Henley's and the Great Eastern Railway split the cost and the Derby-based engineering firm of Eastwood Swingler and Co won the contract.

The structure was probably assembled on site, being entirely riveted together with the exception of the brackets for the timber steps. The fact that Eastwood Swingler and Co won the 1892 contract to supply the GER with four footbridges in total suggests that the surviving Henley's footbridge on the North Woolwich site would have closely resembled, if not been identical to the others built as a part of the same contract.

However a puzzle remains as to the original form of the bridge and possible changes to it. As mentioned previously the 1894 OS map (Fig 3) clearly shows the footbridge, labelled *FB*, to the north of the Electric Cable Works. However it is depicted with its north stairs descending from east to west, whilst today, the north steps mirror the south and run from west to east.

There is a possibility that the northern set of steps, along with the two smaller supporting columns have been moved from their original position. Evidence for this alteration would be expected and indeed it is at the north end of the structure that two later steel plates have been added (Photo 7 Modern repair to the north hand-rail including a welded steel plate, looking south east and Photo 9). However the reason for moving the steps and justifying the cost of such a move are unclear. No clear benefit is obvious and yet it appears from the physical evidence and the historic maps consulted that this may be the case.

The possibility that the way the footbridge is represented on the 19th century historic OS maps may be inaccurate has been considered. The use of a generic mapping symbol for a footbridge could result in the depiction of the structure at odds with what exists on the ground but this seems unlikely for a number of reasons.

Firstly, the 19th century OS maps tend to be extremely detailed and indeed the 1894 OS map (Fig 3) shows not only the Henley's footbridge, but another footbridge to the east, the Store Road footbridge, which has its steps in going in the opposite direction to the Henley's footbridge. Therefore it can be assumed that the 1894 OS map is accurate in its depiction. Generic mapping symbols for footbridges do not seem to appear until the late 20th century.

However other historical maps consulted, (but not illustrated in this report) vary in the footbridge's depiction. Firstly, those of a large scale, (1:10560) do not depict the structure at all until the1960s. The table below illustrates the OS mapping of the area since the 1860s and shows how the structure is depicted and the orientation of the stairs, along with the nearest comparable example, the Store Road footbridge.

YEAR	SCALE	HENLY'S	STORE ROAD
1996	1:10000	|	|
1974-5	1:10000	|	|
1962-9	1:10560	|	|
1958-60	1:2500	C	S
1949-50	1:10560		
1946	1:10560		
1938	1:10560		
1922	1:1056	Z	S
1920	1:10560		
1919-20	1:10560		
1916	1:2500	Z	S
1898-99	1:10560		| FB
1896	1:10560		| FB
1896	1:2500	Z	S
1895	1:1056	Z	S
1872-82	1:10560		
1870	1:10560		
1869	1:2500		
1864-82	1:2500		Land not developed

Table 1 The development and variation in design of North Woolwich footbridges as demonstrated on the historic mapping

Key

Orange = 1:10000

Torquoise = 1:10560

Yellow = 1:1056

Green = 1:2500

| = Footbridge shown notionally as a crossing over the railway with no detail

C = Both sets of steps facing east

S = Southern steps facing west, northern steps facing east

Z = Southern steps facing east, northern steps facing west

Unsurprisingly the appearance of the footbridge coincides with the date of its construction found from the archive research. Interestingly the first depiction of the footbridge in its modern form (ie 'C' shaped), is in the late 1950s–early 60s, a date which easily corresponds to the two welded steel plates at the bridge's northern end (Photo 7 Modern repair to the north hand-rail including a welded steel plate, looking south eastand Photo 9). It seems probable therefore that the bridge was altered at its northern end, with the stairs being moved from the western to the eastern side in the mid 20th century.

Appendix 1

*Archive research **primary Sources***

Table 2 The National Archives, Kew, Richmond, Surrey, TW9 4DU, were visited by James Wright : 14/09/2011

Sources consulted at the National Archives, Kew:	
RAIL 227	Great Eastern Railway Company
RAIL 227/212	General Index to Minutes 1889-1900
RAIL 227, 514-5	minutes of the GER's Locomotive and Way and Works Committee for 1st March 1892
RAIL 227/124, 514-5, 526-7	Locomotive and Way and Works Committee's minutes for 19th April 1892
RAIL 227/125	Locomotive and Way and Works Committee 1892 – March 1894
RAIL 227/125	Way and Works Committee March 1894 – 1898
RAIL 227/148	Land and Construction and Rates and Fares Committee March 1894 – 1896

Appendix 2

Bibliography

Crossrail Generic WSI: *Archaeology Generic Written Scheme of Investigation*, doc no. 140022008-44ES-P2Z1

Crossrail Site-specific Written Scheme of Investigation (SS-WSI): *North Woolwich Portal Archaeological WSI, Doc. No. CR-SD-PRW-X-IS-00006*, Rev. 8, 10.01.11

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

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

RCHME [Royal Commission on Historical Monuments, England], 1996 *Recording historic buildings: a descriptive specification*

On line sources

http://atlantic-cable.com/CableCos/BritishMfrs/ accessed 14th September 2011

http://www.wt-henley.com/our%20heritage.html Accessed 14th September 2011.

Appendix 3

Table 3 Photographs taken by MOLA on 03/08/11 of the North Woolwich Footbridge

Photo ID/Serial number	Oracle Number/Original File Name	Description	Direction of view
030811-1	25111001	General shot of footbridge	south west
030811-2	25111002	General shot of footbridge	south west
030811-3	25111003	Detail small column, north end	north west
030811-4	25111004	Tops of columns, with electricity supply box, north end	north east
030811-5	25111005	Tops of columns, with electricity supply box, north end	north east
030811-6	25111006	Northern steps	north
030811-7	25111007	Southern end	south west
030811-8	25111008	General shot of footbridge	north west
030811-9	25111009	Small column. Southern end	south
030811-10	25111010	General shot of footbridge	west
030811-11	25111011	General shot of footbridge	south west
030811-12	25111012	Electricity supply box, detail, north end	north east
030811-13	25111013	Steps southern end	west
030811-14	25111014	From top of bridge, eastern side of structure with brackets	north
030811-15	25111015	From top of bridge, eastern side of structure	north
030811-16	25111016	Top of span	north
030811-17	25111017	Steps to Top of span, southern end	north
030811-18	25111018	Top of span	North west
030811-19	25111019	General view from top of bridge	north
030811-20	25111020	Panel detail with fishplate	east
030811-21	25111021	Panel detail	east
030811-22	25111022	Panel detail	west
030811-23	25111023	Handrail and added steel plate, north west corner of footbridge	north west
030811-24	25111024	north west corner with added steel plate	north
030811-25	25111025	North steps	east
030811-26	25111026	North end, detail, handrail	north east
030811-27	25111027	North end, detail, handrail	north east
030811-28	25111028	North end, handrail etc	south west
030811-29	25111029	Top flight of steps, north end	west
030811-30	25111030	Fish Plate	west
030811-31	25111031	north west Corner, steel plate added	north west

030811-32	25111032	General shot from footbridge	south
030811-33	25111033	General shot	north west
030811-34	25111034	Southern end	north
030811-35	25111035	Southern end	north
030811-36	25111036	Southern end	north west
030811-37	25111037	Underside	north
030811-38	25111038	Underside	north
030811-39	25111039	Working shot	south west
030811-40	25111040	Working shot	south west
030811-41	25111041	Working shot	south west
030811-42	25111042	Working shot	north east
030811-43	25111043	Working shot	north east
030811-44	25111044	Working shot	west

Table 4 Photographs taken by MOLA of the North Woolwich Footbridge on 04/08/11

Photo ID/Serial number	**Oracle Number/Original File Name**	**Description**	**Direction of view**
040811-1	DSCN5647	The east facing elevation of the footbridge	west
040811-2	DSCN5650	North side of footbridge	east
040811-3	DSCN5651	Column detail, north side of footbridge	east
040811-4	DSCN5663	Repair to handrail and welded steel sheet on north side of footbridge	south east
040811-5	DSCN5672	Original hand rail, north side of footbridge	south west
040811-6	DSCN5695	Detail of rivets of lattice bars and bolts to steps, south side of footbridge	south
040811-7	DSCN5700	South end of footbridge	east
040811-8	DSCN5708	south side of footbridge with RSJ replacing original column	north
040811-9	DSCN5714	Rivets, lattice panel, steps and handrail on south steps of footbridge	north east
040811-10	DSCN5699	Timber underside of footbridge	north
040811-11	DSCN5648	Central panel of span	west
040811-12	DSCN5649	north end of bridge	East
040811-13	DSCN5652	Central panel of span	south west
040811-14	DSCN5653	Central panel of span	west
040811-14	DSCN5654	Small column, north end	East
040811-15	DSCN5655	North end	north east

040811-16	DSCN5656	south end	East
040811-17	DSCN5657	north end	east
040811-18	DSCN5658	south end and steps	west
040811-19	DSCN5659	Lattice panel on span	west
040811-20	DSCN5660	Repair to north east corner	north east
040811-21	DSCN5661	Repair to north east corner	north east
040811-22	DSCN5662	Scar on upper surface, north end	north
040811-23	DSCN5664	Handrail, repair, detail	south east
040811-24	DSCN5665	Handrail, repair, detail + added steel plate	north
040811-25	DSCN5666	Handrail, repair, detail	south
040811-26	DSCN5667	Handrail, repair, detail	south west
040811-27	DSCN5668	Handrail, repair, detail	south
040811-28	DSCN5669	Handrail, repair, detail	south
040811-29	DSCN5670	Handrail, repair, detail	south
040811-30	DSCN5671	Original hand rail, north end + Stairs	west
040811-31	DSCN5673	Original hand rail, north end	west
040811-32	DSCN5674	Central panel of span and angled brace	south
040811-33	DSCN5675	curved bracees	south
040811-34	DSCN5676	Central panel of span	
040811-35	DSCN5677	Fishplate	west
040811-36	DSCN5678	Fishplate	west
040811-37	DSCN5679	Steps on south side	north west
040811-38	DSCN5680	Handrail detail, southern steps	east
040811-39	DSCN5681	Newel post and fishplate, southern side	east
040811-40	DSCN5682	Newel post and fishplate, southern side	north east
040811-41	DSCN5683	Steps, southern side	west
040811-42	DSCN5684	Steps, southern side	north
040811-43	DSCN5685	Steps, southern side	north
040811-44	DSCN5686	Steps and top rail, southern side	north
040811-45	DSCN5687	Top rail, southern side	north
040811-46	DSCN5688	Handrail and steps, south side	north east
040811-47	DSCN5689	Replacement hand rail south side	north west
040811-48	DSCN5690	Step brackets, underside of stairs on south side	North
040811-49	DSCN5691	underside of stairs on south side	North
040811-50	DSCN5692	Step brackets, underside of stairs on south side	North
040811-51	DSCN5693	Step brackets, underside of stairs on south side	North

040811-52	DSCN5694	Top of column, south side	north west
040811-53	DSCN5696	Top of columns, southern end	south west
040811-54	DSCN5697	Top of columns, southern end	south west
040811-55	DSCN5698	Underside	north
040811-56	DSCN5701	Small column, north end	north
040811-57	DSCN5702	Small column, north end	north
040811-58	DSCN5703	Southern steps	north west
040811-59	DSCN5704	Southern steps	north west
040811-60	DSCN5705	Southern steps	north west
040811-61	DSCN5706	Southern steps	north west
040811-62	DSCN5707	Southern end	north west
040811-63	DSCN5709	Southern steps	north west
040811-64	DSCN5710	Southern steps	north
040811-65	DSCN5711	Southern steps	north
040811-66	DSCN5712	Southern steps	north
040811-67	DSCN5713	Southern steps	north
040811-68	DSCN5715	Electricity conduit in south west corner	south
040811-69	DSCN5716	south west Corner	south

Appendix 4

Site plan, historic mapping and survey section and elevation drawings

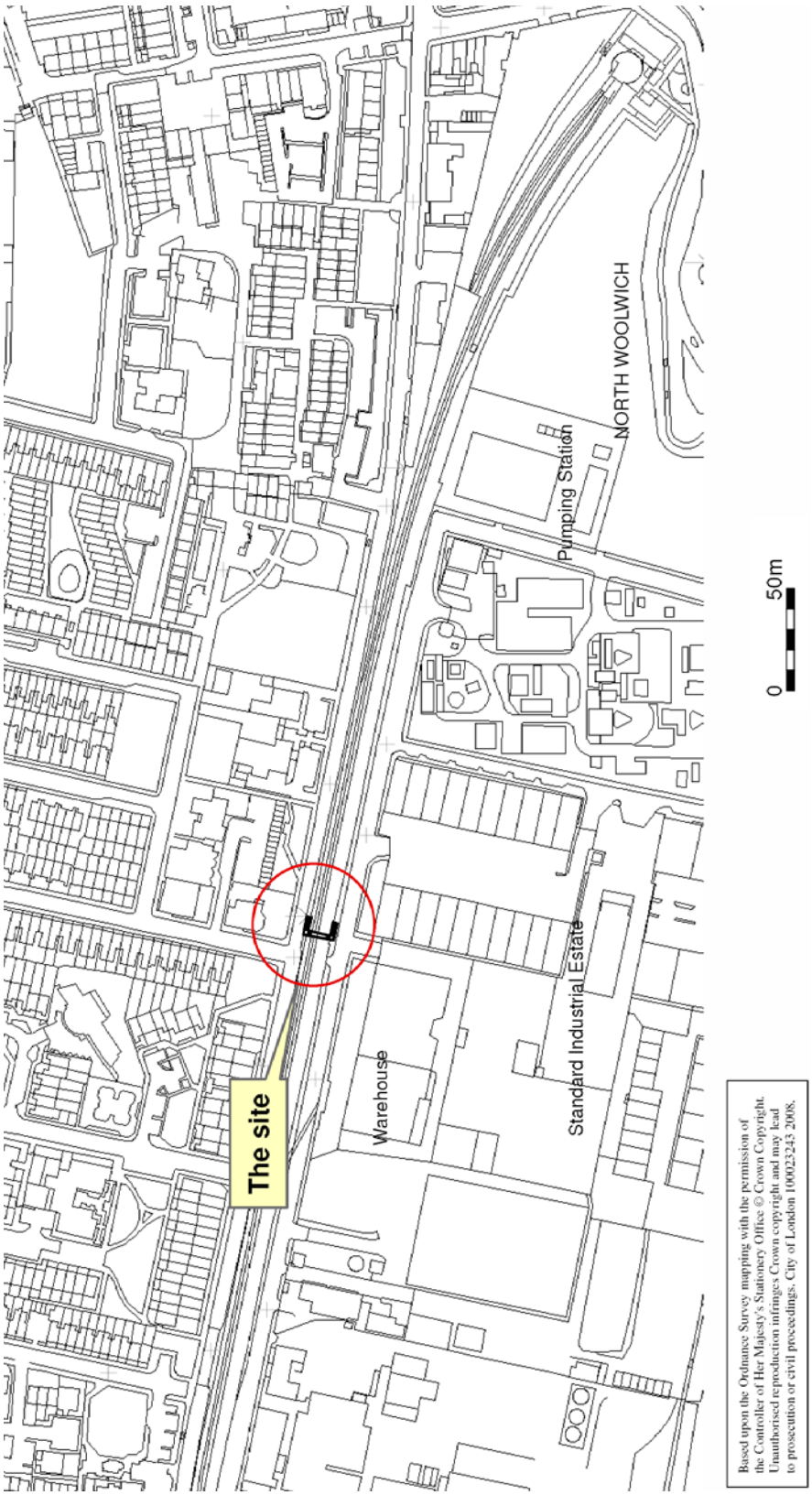

Fig 1 Location of the footbridge at North Woolwich

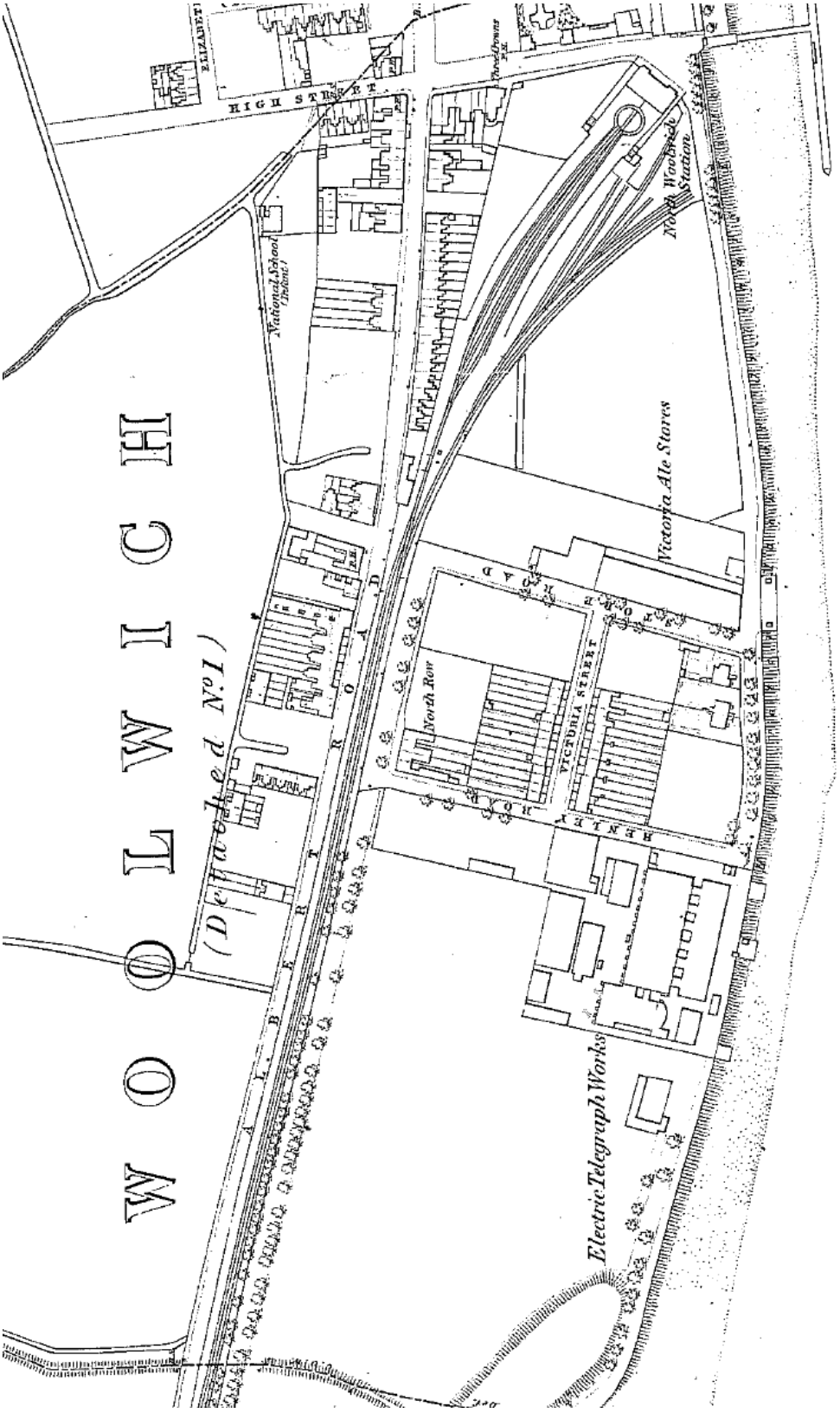

Fig 2 the OS map of 1869, prior to the construction of the footbridge.

Fig 3 The OS map of 1894 showing the Henley's footbridge marked FB with its northern steps pointing west, above the Electric Cable Works. The Store Road foot bridge is to the east.

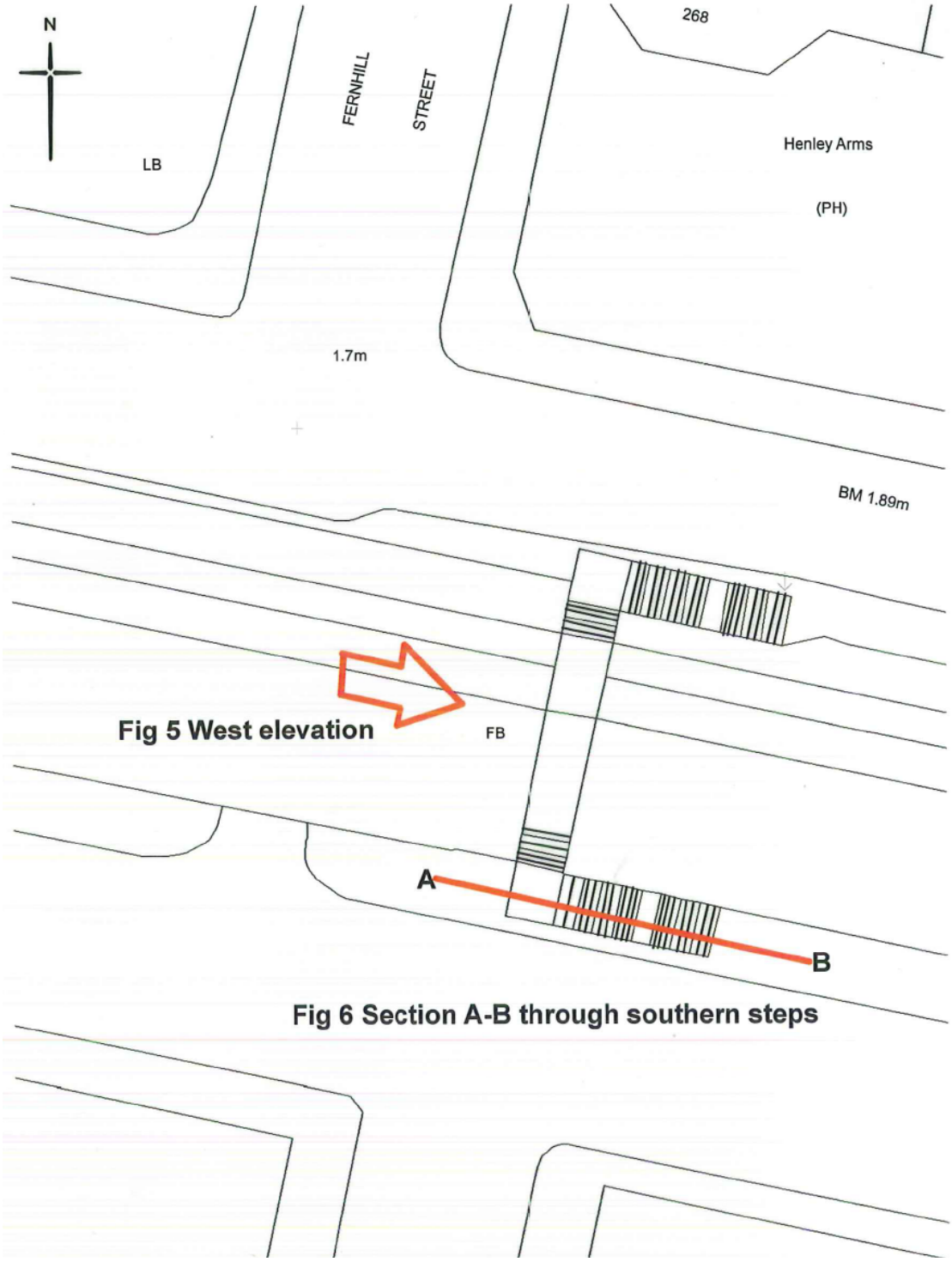

Fig 4 Plan showing the location of the survey drawings Figs 5 and 6

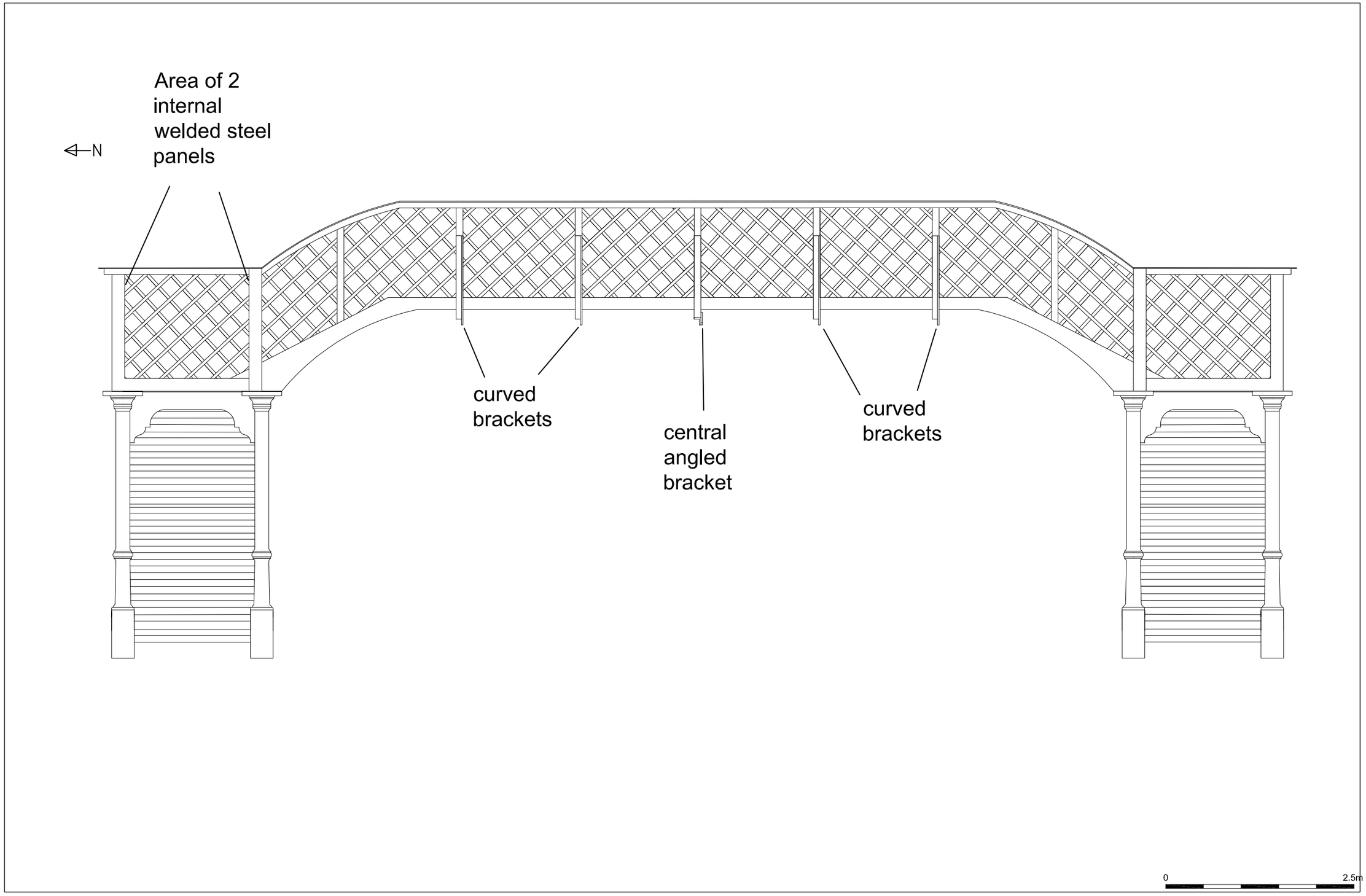

Fig 5 The west facing elevation

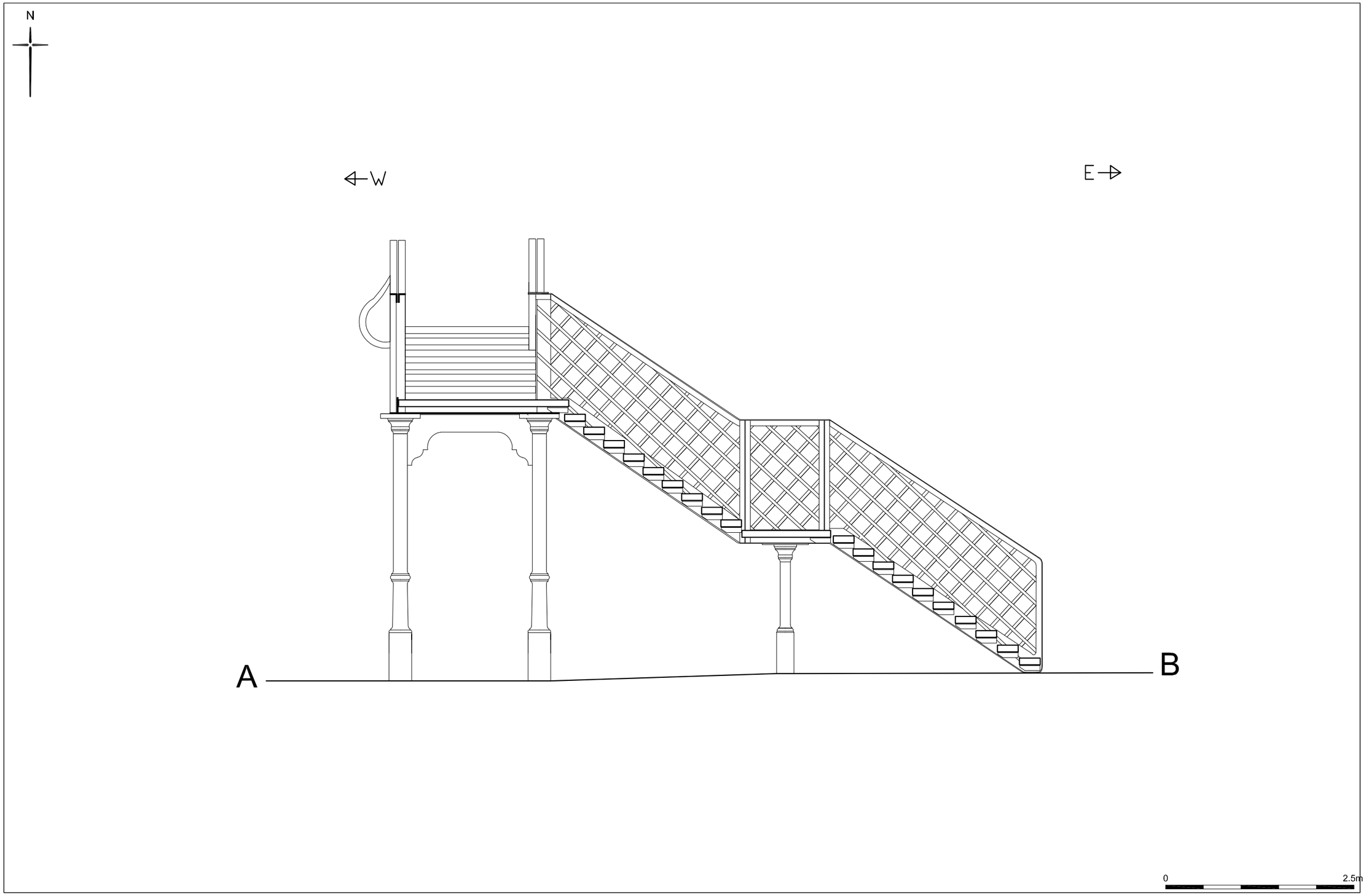

Fig 6 Cross section A-B, west to east through the southern steps of the footbridge

5.1 OASIS ID: molas1-111738

Project details

Project name	The Footbridge North Woolwich Portal
Short description of the project	An iron footbridge was recorded by MOLA which formerly spanned two tracks of the Great Eastern Railway Company line to North Woolwich and dated to 1892. Onsite recording and analysis was undertaken by MOLA along with documentary archive research. The bridge was built by the Derby-based engineering firm of Eastwood Swingler and Co. Ltd, and was formed from iron lattice panels supported by cast iron Tuscan columns, with a staircase at the northern and southern ends. Repairs and modifications had been undertaken including the change in orientation of the northern steps. The bridge has been dismantled and removed and may possible be relocated in the future.
Project dates	Start: 03-08-2011 End: 03-08-2011
Previous/future work	No / No
Any associated project reference codes	XSV11 - Sitecode
Type of project	Building Recording
Site status	None
Site status (other)	Non-listed built heritage
Current Land use	Transport and Utilities 2 - Other transport infrastructure
Monument type	FOOT BRIDGE Post Medieval

Project location

Country	England
Site location	GREATER LONDON NEWHAM NEWHAM North Woolwich Portal
Study area	20.00 Square metres
Site coordinates	TQ 42876 79966 Point

Project creators

Name of Organisation	MoL Archaeology
Project brief originator	Crossrail
Project design originator	MoL Archaeology
Project director/manager	David Divers
Project supervisor	David Sorapure
Type of sponsor/funding body	Crossrail Ltd
Name of sponsor/funding body	Crossrail Ltd

Project archives

Physical Archive Exists?	No
Digital Media available	'Images raster / digital photography','Text'
Paper Media available	'Drawing','Photograph','Plan','Report'

Entered by	David Sorapure (dsorapure@museumoflondon.org.uk)
Entered on	10 October 2011