



C261 ARCHAEOLOGY EARLY EAST Built Heritage Recording Report Whitechapel Station

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Contents

1	Introduction	4
1.1	Scope	5
1.2	Purpose.....	8
1.3	Fieldwork Objectives	8
2	Documentary sources for the history of the station	10
3	Analytical description and archaeology of the selected items	15
3.1	Item [1] Winthrop Street setts	15
3.2	Item [2] Staircase and footbridge leading to District Line platforms	16
3.3	Item [3] Canopy over Platforms 1/2 and 3/4.....	22
3.4	Item [4] Two low level subways, connecting Platform 1/2 and 3/4 to Platform 523	24
3.5	Item [5] Open ELL Platforms 5/6	24
3.6	Item [6] Former Metropolitan and District Line (MDL) booking hall	26
3.7	Item [7] Woods Buildings Footbridge	29
3.8	Item [8] Main Ticket Hall	30
3.9	Item [9] Durward Street Bridge	34
3.10	Item [10] Winthrop Street Bridge	34
4	Conclusions	36
4.1	Original research aims	36
4.2	Archiving.....	36
4.3	Publication	36
4.4	Acknowledgements	36
5	Reference Documents.....	37
6	OASIS ID: molas1-150743.....	38
7	Appendices	41

List of tables

Table 1	Features to be recorded	5
Table 2	Plans of Whitechapel Station held at the London Transport Museum.....	10
Table 3	Historic drawings, Item [2]	20
Table 4	Historic drawings, Item [4]	24
Table 6	Historic drawings, item [6]	28
Table 7	Historic drawings, item [8]	33

List of figures

- Fig 1 Site location plan
- Fig 2 View of the Winthrop Street setts, looking east
- Fig 3 The Winthrop Street Bridge, as seen from the top of Trinity House
- Fig 4 The footbridge, as seen from the top of Trinity House, looking south
- Fig 5 The access to the footbridge from the former MDL Booking Hall
- Fig 6 View of the main body of the footbridge, looking north
- Fig 7 Western range of windows along the wall of the footbridge
- Fig 8 Eastern range of windows along the wall of the footbridge
- Fig 9 Southern side of the staircase leading onto the former Platform 2
- Fig 10 Western side of the footbridge, as seen from the former Platform 2
- Fig 11 View of the southern staircase from the former Platform 2
- Fig 12 View of the northern staircase from the former Platform 1, showing the 1938 'Way out' sign
- Fig 13 View of the canopy over former Platform 2
- Fig 14 Vertical cast iron support on former Platform 2
- Fig 15 Detail of the dentelled wooden edging on former Platform 2
- Fig 16 Looking down into subway connecting Platform 1/2 to Platform 5, looking east
- Fig 17 Looking up into subway connecting Platform 1/2 to Platform 5, looking east
- Fig 18 Detail of the coloured glazed tiles in tunnel 1/2 looking south
- Fig 19 The eastern retaining wall to Platform 5
- Fig 20 View across the former MDL booking Hall, looking north
- Fig 21 View across the former MDL booking Hall, looking south
- Fig 22 View of the roof of the former MDL booking hall, looking south
- Fig 23 View across the Woods Buildings footbridge, looking south
- Fig 24 Cast iron panels along the sides of the Woods Buildings footbridge
- Fig 25 The north end of the Woods Buildings footbridge, looking south
- Fig 26 The south end of the Woods Buildings footbridge, looking south
- Fig 27 Detail of the footbridge wall abutting the corner of Woods Buildings
- Fig 28 Detail of joint between the Woods Buildings and the footbridge abutment
- Fig 29 View across the main booking hall, looking north
- Fig 30 The eastern wall, by the entrance into the station manager's office, looking east
- Fig 31 Detail of the lamp and the floral decoration of one of the ribs in the main booking hall
- Fig 32 View of the Durward Street Bridge from platform level, looking north
- Fig 33 View of the Winthrop Street Bridge from platform level, looking south

1 Introduction

This report presents the results of the survey and recording work undertaken by MOLA on the areas of the Whitechapel Station listed in C261 PMI 00024 (see 1.1). This is part of the Crossrail Whitechapel Station site in contract C261 Archaeology Early East. Whitechapel Station is located to the north of Whitechapel Road, within the London Borough of Tower Hamlets (Fig 1). The site is currently undergoing major redevelopment works due to the construction of a new cross-London link by Crossrail. The station is part of the Crossrail Durward Street worksite, and the works will mostly affect the Hammersmith and City Underground Lines and related structures.

The station is not a statutorily Listed Asset, and is included within the boundaries of the Whitechapel Market Conservation Area, as designated by the local authority in June 1997 and extended in October 2008. However, the corner of the Grade II Listed 261–263 Whitechapel Road (List entry ID 1260031), aka Wood Buildings, was included in the scope of the recording.

Other Listed assets in the vicinity of the station are: the Woods Building 265–267 Whitechapel Road (List entry ID 13575111), and the building formerly occupied by the Working Lads Institute at 279 Whitechapel Road (local listing).

The fieldwork was carried out in accordance with:

- C261_PMI_00024 WHI Updated building recording, C261-XLR-west-AIE-CRG03-50012, 29.06.12 – *the scope of works in this PMI supersedes that in the WSI (below)*.
- A Crossrail Site-specific Written Scheme of Investigation (SS-WSI): C140 – Whitechapel Station Written Scheme of Investigation, Doc. No. C140-HYD-T1-JLT-D061-00001, version 4.0, 03.05.11
- C261 Archaeology Early East, Method Statement, Standing Building Recording, Whitechapel Station (XSH10), CRL Document Number: C261-MLA-X-RGN-CR140-50083, v4, 04.09.12
- C261 Archaeology Early East, Revision to Method Statement for Standing Building Recording, Whitechapel Station – Scaffolding Tower, CRL Document Number: C261-MLA-X-RGN-CR140-50083, v5, 11.10.12
- BBMV, 2012 C512 – Whitechapel Station – Main station works, Building/Civils & Dilapidation Survey, CRL Doc No C512-BBM-B-GMS-D061-50001, BBMV Doc No C512-BBMV-MST-SWNS-CIV-0001, Rev 2 12.03.12 [‘Intrusive and non-intrusive surveys method statement’]
- Whitechapel Station, Station Bridge Conservation Area Consent C140-HYD-Z-QAP-D061-00030 version 3.0, 04.02.11
- C140 Whitechapel Station Bridges & Walls Conservation Area Consent: Planning and Heritage Statement C140-HYD-Z-QAP-D061-00032, Rev. 6.0, 05.04.11
- C140 Whitechapel Station Conservation Area Heritage and Planning Statement: Station Buildings and Structures, C140-HYD-Z-QAP-D061-00030, Rev. 3.0, 04.02.11
- C140 Whitechapel Station: Contract C512, RIBA Stage F Construction Report Volume 9 Construction Report, C140-HYD-Z-RGN-D061-00076, v 3.0, 06.04.11
- Crossrail, 2009 *Crossrail Generic WSI*, doc. no. CRPN- LWS-EN-SY-00001, draft v2 July 2009

- Crossrail, 2008 *Crossrail Environmental Minimum Requirements (including Crossrail Construction Code)*, doc. no. CR/HB/EMR/0001 v5
- Crossrail, 2008 *Code of Construction Practice [Annex 1 to Environmental Minimum Requirements]*

In addition to 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), Royal Commission of Historical Monuments, England (RCHME 1996), the Museum of London Archaeology Health and Safety Policy (MOLA 2012), and the Museum of London site manual (MoL 1994).

All fieldwork was conducted from 26/09/2012 to 13/10/2012, and supervised by Patrizia Pierazzo (MOLA Standing Building Specialist).

The event code (sitecode) is XSH10.

1.1 Scope

The revised scope of building recording work was set out in C261 PMI 00024, and clarified in emails from Mike Court and David Keeley of Crossrail and Martin Wilson of C512 BBMV between 16th and 18th July 2012. This is copied below. See **Fig 1**, below, for locations.

Table 1 Features to be recorded

Item	Description	Recording Level (see 1.2)
[1]	Winthrop Street Granite setts. Good survival of mid to late 19th-century rectangular setts laid in rows. Some ground disturbance has been caused by modern services and patches of poor reinstatement	L1
[2]	Staircase and footbridge leading to District Line platforms. Timber foot bridge. Early 20th-century glazed timber panelled footbridge, leading to the Hammersmith, City and District Line platforms (HCDL) and gable wall overlooking Platform 5.	L2
[3]	Canopy over Platforms 1/2 and 3/4. At east end both island platforms have canopies, steel girder uprights supporting steel sheet cladding and a glazed apex, along with decorative valances. To the western ends the platforms are covered by a later development.	L1
[4]	Two low level subways, connecting Platforms 1/2 and 3/4 with Platform 5. Finishes include extensive use of Poole large profile ceramic tiles, in oatmeal/yellow, with decorative bands in blue, green and orange. Above the staircases are two 'Way Out' 1938 Standard Signs Manuel pattern bronzed framed signs.	L1
[5]	Open ELL Platforms 5/6. The open sections of the platforms display fine brick retention walls, with details and replica lighting. The vitrious enamel clad sections no longer require recording (C261 PMI 0024).	L2
[6]	Former Metropolitan and District Line (MDL) booking hall. The ceiling is formed from three plain arches and has glazed hexagonal lights; there is a	L2

	circular window at the north end, a white glazed tile staircase with a Bostwick Gate leading to the London Overground footbridge and the timber entrance to the HCDL timber footbridge.	
[7]	<p>Woods Buildings Footbridge.</p> <p>Footbridge over the HCDL platforms, which connects to the Listed 'Woods Buildings'. Includes corner of adjacent Grade II Listed building, 265–267 Whitechapel Road (aka 'Woods Buildings') where the bridge is connected to it.</p>	L2
[8]	<p>Main ticket hall.</p> <p>Iron ribs and timber panelling to walls in Ticket Hall. Original early 20th-century ironwork and timber panels.</p> <p>Includes the wall behind the ELR footbridge (Crossrail, Conservation Area Heritage and Planning Statement, Station Buildings and Structures, C140-HYD-Z-QAP-D061-00030), which forms the external gable end of the Ticket Hall, and is believed to be the last part of a train shed or station that was demolished when the lines running east west were built (David Keeley, Crossrail, email 18.07.12).</p>	L2
[9]	<p>Durward Road Bridge.</p> <p>19th-century bridge over Platforms 5/6.</p>	L2
[10]	<p>Winthrop Street Bridge.</p> <p>19th-century bridge over ELL.</p>	L2

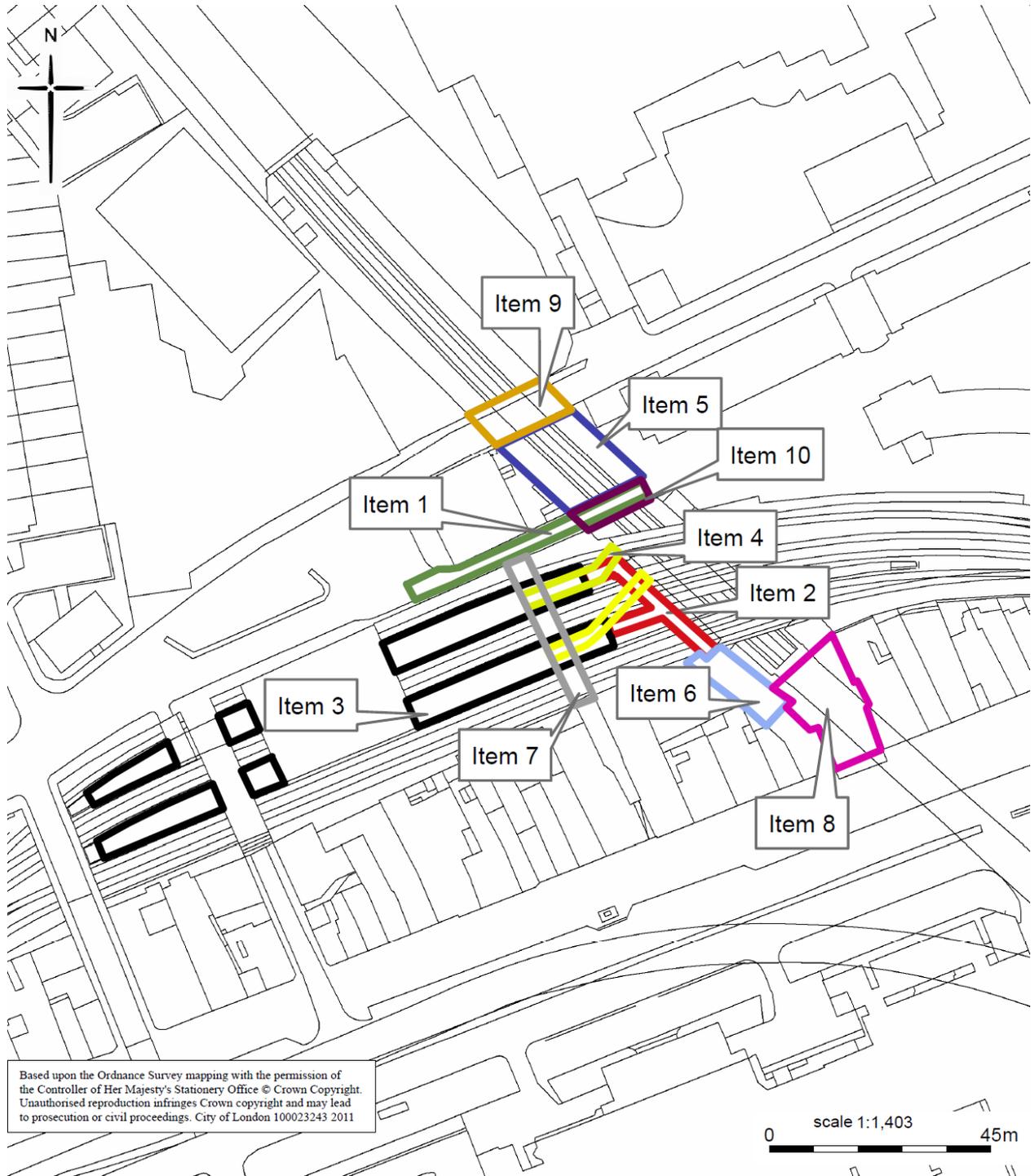


Fig 1 Site location and the location of the various items described in this report

1.2 Purpose

The mitigation strategy for the demolition and alteration to the fabric of the station building is *preservation by record*.

The investigation of the development site was undertaken at different levels of the English Heritage specifications (English Heritage, 2006) in accordance with the historical value of the built heritage, specified in C261 PMI 00024. The station features to be affected by the works were subdivided into 10 different recording tasks, for recording at either Level 1 or 2 of the EH specifications (see 1.1).

A Level 1 investigation is a basic visual record, inclusive of photography, notes, and a minimum amount of information needed to identify the buildings location, use, age, and type.

A Level 2 investigation is a descriptive record and comprises an internal (where possible) and external survey of the structure and a limited amount of documentary research. The record typically consists of sketch drawings, photography and notes made on site and presents conclusions regarding the structure's development and use.

The survey of the structures on the development site took place prior to the commencement of the demolition works.

The recording of the structure to Level 1 (fieldwork) consisted of:

- 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 recording of the structure to Level 2 (fieldwork) consisted of:

- annotated and measured sketches made during an on-site analysis of the structure, with attention paid to areas of alteration.
- 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.

Note that this recording is **not** intended to provide sufficient information for any salvage and reconstruction of structures, but is limited to the works instructed by Crossrail in C261_PMI_00024.

Interventions into the fabric of the structure or the removal of samples of fabric were not required.

1.3 Fieldwork Objectives

The overall objective and aims of the recording were to secure preservation by record of the station prior to demolition using Level 1 and Level 2 records in accordance with the specification set out in the English Heritage Guidelines (EH 2006). The fieldwork undertaken, and the office based off-site work have produced the requisite results in the form of this report and the associated archive.

As specified in the Addendum to the method statement: Doc. No. C261-MLA-A-RGN-CR140-50003, section 2; the objectives of the investigation were identified as follows:

- To investigate the fabric of the structure before demolition, alteration or refurbishment, with the aim of elucidating its structural history, and recording and analysing the resulting evidence using applicable archaeological methods.

- To make a record of the existing building in its present condition by means of photography, measured survey where necessary and annotated sketches.
- To carry out an appropriate level of documentary research in order to give a written account of the structure.
- To report the results in a suitable form in accordance with Crossrail requirements, and to archive the records.

This report gives a brief written and illustrated description of the structure, analysis of its fabric and its history and use, with site photographs and sketch drawings reproduced. This report, site drawings and photographs will be archived under the site code XSH10.

2 Documentary sources for the history of the station

For the general history and development of Whitechapel Station refer to Section 2 of the Conservation Area Heritage and Planning Statement: Station Buildings and Structures C140-HYD-Z-QAP-D061-00030-3.0.

A certain amount of desk-based documentary research was carried out for the purpose of the present report, but this has been restricted by the factors noted below.

Although the Tower Hamlets Local History Library and Archives is currently closed for refurbishment, a member of the enquiry team was able to help with the research and confirmed that photographs of Whitechapel Station held at the Archive consist of six images of the entrance front ranging in date from 1896 to 1987 and an image of the platforms c 1987; Tower Hamlets Library does not hold any plans or documents relating to the station, nor any publications beyond the mainstream ones.

Contact was also made with the London Transport Museum Information Desk and Library; a member of the enquiry team confirmed that the historic photographs of the station held by LTM can be seen online at the following address:

<http://www.ltmcollection.org/photos/results/results.html?IXsearch=whitechapel+station&button=GO%21>

The pictures, the earliest dating to 1916, portray the front the station at the beginning of the 20th century. The pictures also show damage to the canopies and rail tracks following the air-raids of 1941 and the ticket office and southbound platform in the mid 1950s.

There are also some additional records on a LTM database for photographs that may not be scanned; unscanned photographs are held at their Depot at Acton and can be viewed by appointment with the curators.

The London Transport Museum Library also contains a wealth of plans recorded in their database (see table below), the electronic copies of the plans are held by the London Underground Core Asset Information (CAI) service and access is restricted for security reasons. Having obtained a London Underground CAI authorisation, a member of the Standing Buildings Team was allowed access to the following plans and elevations of the Whitechapel Station; a selection of these plans is included in section 3 of the present report.

Table 2 Plans of Whitechapel Station held at the London Transport Museum

<p>2000/2867 Drawing: LT Whitechapel station - sections of new building adjoining sub-station compressor room, permanent way accommodation, signal breakdown garage and relay room, 1949 BRScode= D/061 drawing number = 5292FS microfilm = 34/004 /</p>
<p>000/2862 Drawing: LT Whitechapel station - plans of new building adjoining sub-station compressor room, permanent way accommodation, signal breakdown garage and relay room, 1949 BRScode= D/061 drawing number = 5291FR microfilm = 34/005 /</p>
<p>2000/2859 Drawing: LTE Whitechapel station - structural details of roof to building adjoining sub-station (relay room etc), 1949</p>

<p>BRScode= D/061 drawing number = 5402Fz microfilm = 53/010 /</p>
<p>2000/2856 Drawing: LTE Whitechapel station - structural details of PW breakdown garage, 1949 BRScode= D/061 drawing number = 5396F microfilm = 56/003 /</p>
<p>1999/261 Drawing: MDR Whitechapel Station - plan for attachment to agreement between MDR, W&BR & MR 1916 BRScode= D/061 drawing number = 8409 microfilm = 76/007 /</p>
<p>1999/259 Drawing: MDR - lease plan of no 199 Whitechapel Rd E1 1926 BRScode= D/061 drawing number = A2096 microfilm = 74/001 /</p>
<p>1999/258 Drawing: MDR - lease plan of no 243 Whitechapel Rd E1 1926 BRScode= D/061 drawing number = A2095 microfilm = 74/002 /</p>
<p>1999/256 Drawing: LPTB District Line - plan showing line of railway relevant to property between Whitechapel Rd & Durward St E1 1936 BRScode= D/061 drawing number = microfilm = 74/003 /</p>
<p>1999/254 Drawing: St Marys (Whitechapel) Station - plan referred to in Sir John Hawkshaws letter 02/08/1883 BRScode= D/061 drawing number = Plan no 15 microfilm = 76/003 /</p>
<p>1999/251 Drawing: St Marys (Whitechapel) Station - land plan showing boundary between MDR & Eastern Joint Line 1884 BRScode= D/061 drawing number = microfilm = 76/008 /</p>
<p>1998/113333 Drawing: LPTB District & East London Lines - interchange subways at Whitechapel Station 1935 BRScode= D/061 drawing number = E8819 microfilm = /</p>
<p>1998/98122 Drawing: MDR - details of main line junction work at east end of Whitechapel Station 1926 BRScode= D/061 drawing number = E1816 microfilm = 45/010 frames 1 and 2 /</p>
<p>1998/95453 Drawing: MDR - Whitechapel Terminal Station (plan & sections) 1882</p>



BRCode= D/061 (M/153) drawing number = 879 (on reverse) microfilm = /
1998/95451 Drawing: MDR - Whitechapel Station (land plan) 1883 BRCode= D/061 (M/153) drawing number = microfilm = /
1998/95448 Drawing: MDR - plan & sections of Whitechapel Station 1883 BRCode= D/061 (M/153) drawing number = microfilm = /
1998/95445 Drawing: MDR - plan of Whitechapel Station c1883 BRCode= D/061 (M/153) drawing number = microfilm = /
1998/95441 Drawing: MDR - Whitechapel Station (land plan) 1883 BRCode= D/061 (M/153) drawing number = microfilm = /
1998/95440 Drawing: MDR - Whitechapel Station (land plan) 1883 BRCode= D/061 (M/153) drawing number = microfilm = /
1998/95437 Drawing: MDR - Whitechapel Terminal Station (land plan) 1883 BRCode= D/061 (M/153) drawing number = microfilm = /
1998/95436 Drawing: Metropolitan Railway & MDR - City Lines & Extensions: Whitechapel Station (land plan) 1882 BRCode= D/061 (M/153) drawing number = microfilm = /
1998/95430 Drawing: Metropolitan Railway & MDR - City Lines & Extensions (plan of Whitechapel Station) 1882 BRCode= D/061 (M/153) drawing number = microfilm = /
1998/95429 Drawing: Metropolitan Railway & MDR - plan of Whitechapel Terminal Station c1882 BRCode= D/061 (M/153) drawing number = microfilm = /
1998/94424 Drawing: Metropolitan Railway & MDR City Lines & Extensions - plan of Whitechapel Station c1882

<p>BRScode= D/061 (M/153) drawing number = microfilm = /</p>
<p>1998/2889 Drawing of MDR Whitechapel terminal station - platform roof 1884 BRScode= D/061 drawing number = 56 of sequence (also numbered 857 on reverse) microfilm = 53/002 /</p>
<p>1998/951 Drawing - W&BR working plan & section (sheet no 1) c1899 BRScode= D/050 (D/061) drawing number = Sheet no 1 microfilm = 12/009 frame 1A /</p>
<p>1996/6538 Drawing: Bridge D124 at Whitechapel Station over ELR - Steelwork (1914) BRScode= D/061 drawing number = 386/2 microfilm = 11/020 frame 2 /</p>
<p>1996/6536 Drawing: Bridge D124 at Whitechapel Station over ELR - Steelwork (1914) BRScode= D/061 drawing number = 386/1 microfilm = 11/020 frame 1 /</p>
<p>1996/6535 Drawing: Proposed Alterations at 69 - 70 Whitechapel High St, London E1 (Detail) 1925 BRScode= D/061 drawing number = microfilm = 74/022 frame 4 /</p>
<p>1996/6534 Drawing: Proposed Alterations at 69 - 70 Whitechapel High St, London E1 (Elevation) 1925 BRScode= D/061 drawing number = microfilm = 74/022 frame 3 /</p>
<p>1996/6532 Drawing: Proposed Alterations at 69 - 70 Whitechapel High St, London E1 (Plans) 1925 BRScode= D/061 drawing number = N.DS/10 microfilm = 74/022 frame 2 /</p>
<p>1996/6530 Drawing: Proposed Alterations at 69 - 70 Whitechapel High St, London E1 (Steelwork) 1925 BRScode= D/061 drawing number = 2 (Job no 4930) microfilm = 74/022 frame 1 /</p>
<p>1996/4963 Drawing: Whitechapel Station - Plan (1944) BRScode= D/061 drawing number = E/D7727 microfilm = /</p>
<p>1996/4961 Drawing: Whitechapel Station - Plan (c1940s) BRScode= D/061 drawing number = microfilm = /</p>



1996/3721

Drawing: W & BR Whitechapel Station - Bridges over ELR (North & South Spans) D/124 & 124B
(1899)

BRScore= D/061

drawing number = Contract dwg 8A

microfilm = 11/019 /

1996/3718

Drawing: W & BR Whitechapel Station - Bridges over ELR (D124, D124A & D/124B) 1899

BRScore= D/061

drawing number = Contract dwg 8B

microfilm = 11/017 /

3 Analytical description and archaeology of the selected items

The following description of the buildings on the sites should be read in conjunction with the selected photographs (Fig 2 to Fig 33) and the site plan (Fig 1) in which each part of the station subjected to the survey is outlined in a different colour.

It was possible, from documentary research undertaken at the London Underground Core Asset Information (CAI) Service, to clarify some aspects of the development of the station. The results of the documentary research and relevant historic drawings have been included in this section.

3.1 Item [1] Winthrop Street setts

Winthrop Street, running east–west, is a road located along the north boundary of Whitechapel Station, to the south of Trinity House. The cobbled street is flanked to the south by the retaining wall of the station, and has shallow pavements on both sides covered in tarmac (Fig 2).

The setts paving the surface of the road, are regularly laid, vary in size, colour and shape, ranging from square to rectangular. The road presents areas of patching executed with tarmac and later replacement setts (Fig 3). The road has three main repair areas in the cobbled surface: the first, on the west side, is a mix of tarmac and setts, probably executed in two phases; the second major repairing is aligned with the south-eastern corner of Trinity House, and is probably caused by to the insertion of a drain cover (Fig 2); further to the east a trench, probably for services, has been dug across the road and has left a scar covered by tarmac along the whole width of the road; a later manhole and replacement setts are located before the western end of the Winthrop Bridge. The full extent of the area on Winthrop Street covered by the setts is roughly 60m x 2.50m.

Documentary research focused on this part of the station did not produce any useful documents, but it can be safely said that despite the numerous patches and repairs, the setts paving the Winthrop Bridge probably date to the construction of the bridge. This was amongst the structures built in the first phase of the Whitechapel Station in 1876 (C140-HYD-Z-QAP-D061-00030-3.0) when the station only served the north-south running railway section of the East London Railway.



3.2 Item [2] Staircase and footbridge leading to District Line platforms

The wooden footbridge, spanning over former Platforms 1 and 2 (now 1/2 and 3/4), is located to the north-west of the ticket hall, and links the former MDL Booking Hall to the platforms via two staircases, leading down to platform level (Fig 4 and Drawings 1 and 2).

Access to the footbridge is obtained via a wood lined pediment supported on two side walls (Fig 5) which projects from the northern wall of the MDL Booking Hall by c 1.30m; the existing 12 steps lead up to the level of the footbridge which is substantially higher than the level of the hall (approximately 1.80m higher).

The footbridge is formed of one main body measuring approximately 26.43 m x 2.85m and two staircases measuring approximately 10m x 2.44 m (southern staircase) and 5.90m x 2.90m (northern staircase), to the north and to the south, which link the footbridge itself to the platforms (Fig 6). The end wall of the footbridge leading to the northern staircase, to the north, is slightly curved towards the outside.

The double-pitch wooden roof of the footbridge, covered in corrugated iron sheeting (Fig 4), is supported on cast iron ribs painted green, gently following the roof profile in a curved shape. The ribs spacing is fairly regular, with a rib every 2.50m, and is interrupted by the junction with the southern staircase leading to Platform 2 where the gap is c 3.05m. The ribs are supported on the side walls of the bridge which are formed by a skeleton of cast iron elements riveted together, and onto the cast iron panels which form the lower half of the structure. The width of the footbridge is 2.42m and its height is 3.20m.

The windows along the side walls of the footbridge are of glass with embedded wire mesh in a square pattern. Each window is made of two glass panes and occupies half the length of one bay (the space defined by the cast iron ribs). The windows along on the east side of the footbridge (Fig 8) are considerably higher (the difference is around 330mm) than the windows along the west wall (Fig 7); both sets of windows end with a projecting wooden cornice.

The staircases leading onto the platforms (Fig 11 and Fig 12) are different in size from each other but they are both east-west oriented and at an angle with the footbridge; their structure is similar in shape despite the fact the the north staircase has a single flight of steps and the southern staircase had two flights of steps. The staircases are built with cast iron and wood like the main body of the footbridge (Fig 9 and Fig 10), with the addition of crossed braced panels placed externally below the windows. The roof of both staircases is supported on green painted cast iron ribs. The area below the staircases has been covered with modern panels and utilised as storage space.

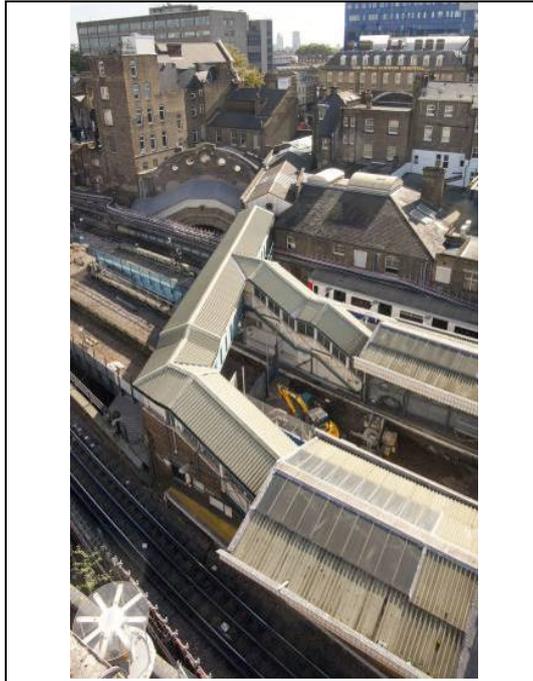


Fig 4 The footbridge, as seen from the top of Trinity House, looking south



Fig 5 The access to the footbridge from the former MDL Booking Hall



Fig 6 View of the main body of the footbridge, looking north



Fig 7 Western range of windows along the wall of the footbridge



Fig 8 Eastern range of windows along the wall of the footbridge



Fig 9 Southern side of the staircase leading onto the former Platform 2



Fig 10 Western side of the footbridge, as seen from the former Platform 2



Fig 11 View of the southern staircase from the former Platform 2

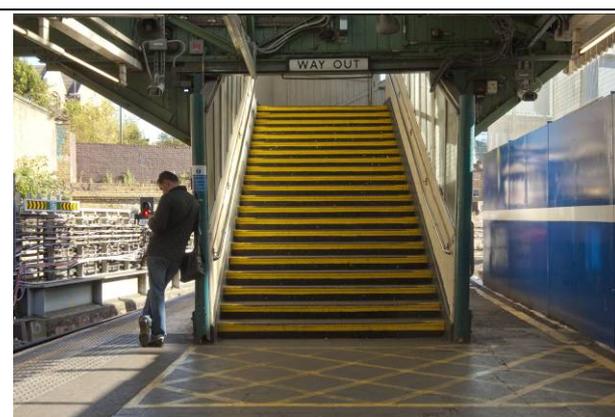


Fig 12 View of the northern staircase from the former Platform 1, showing the 1938 'Way out' sign

According to previously consulted documentary sources (OS maps 2nd edition and 3rd edition, not reproduced) the construction date for the footbridge could be placed between 1894 and 1913. Drawings found at the LU archive, Albany House, suggest that the footbridge was built in

1901 following the WBR (Whitechapel and Bow Railway) extension of the line from Whitechapel to Bromley-by-Bow (C140-HYD-Z-QAP-D061-00030-3.0).

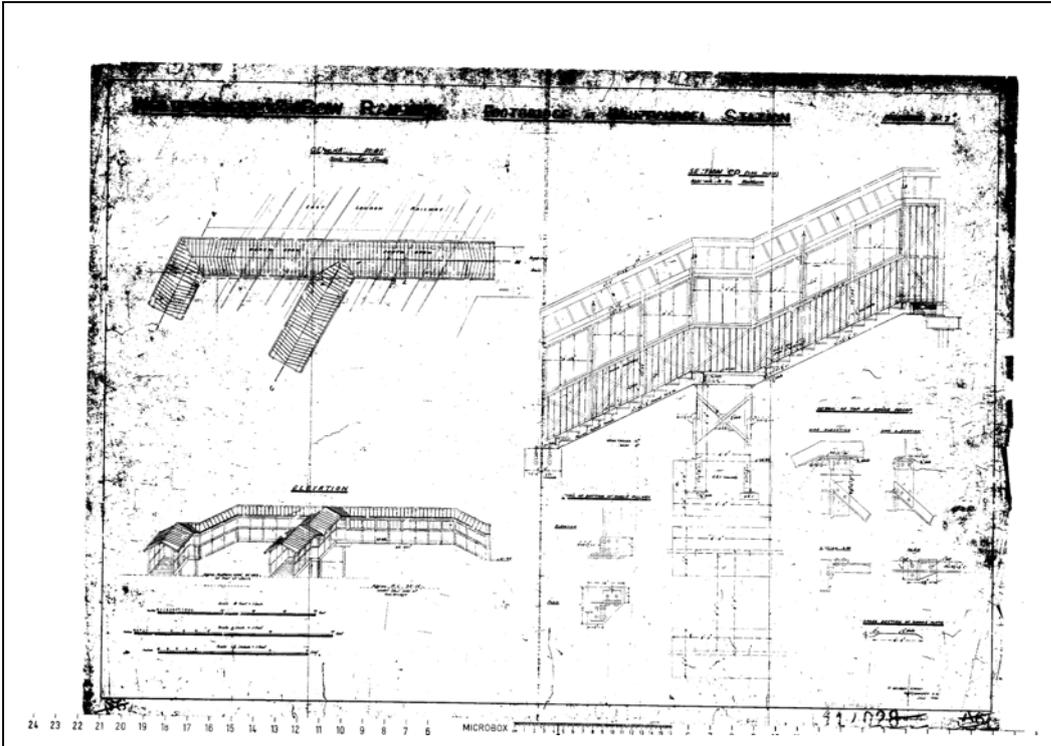
Drawing 0000369255-0.pdf, in the table below, shows the whole structure in plan and elevation and includes some technical details of the pillars and measurements. According to the drawing, the window bays were originally constructed in modules of 4' 0" which confirms that the present footbridge largely coincides with the original structure.

The main alteration noticeable from the selection of historic drawings is a change to the north end of the footbridge, executed in 1914 (Drawing 000369239-0.pdf); according to the elevation, the north end of the bridge and the staircase were replaced and raised with a new structure built in the same materials. The reason for the alteration is unknown but it could be attributed to the need to create more track space under the bridge itself.

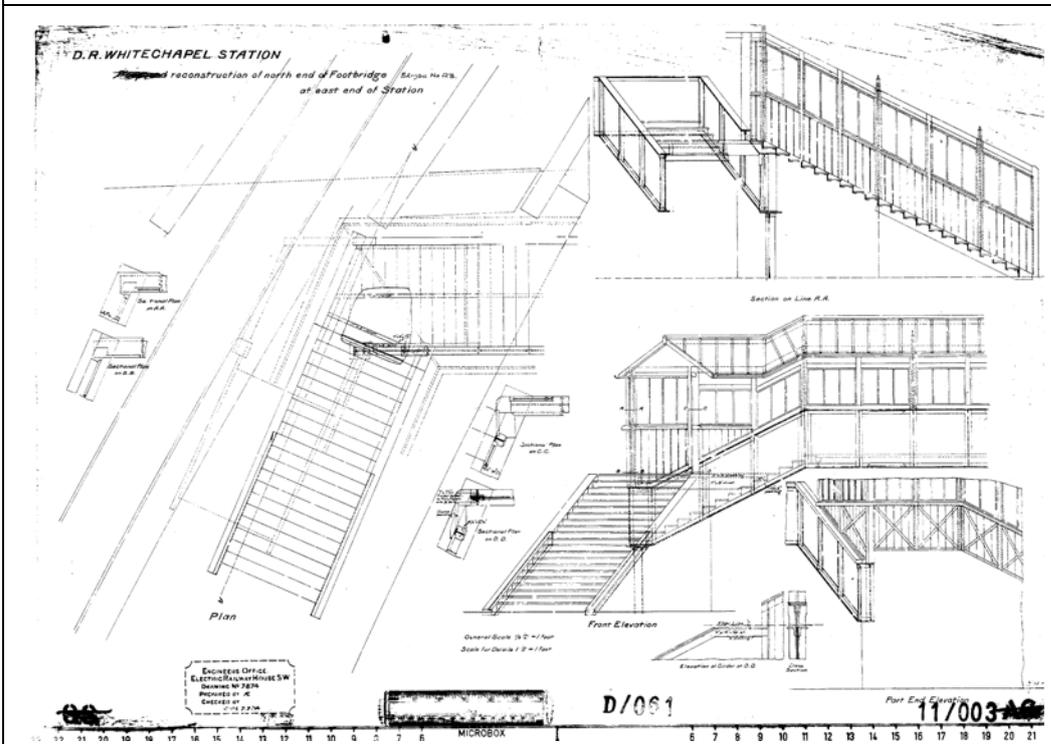
The reason for the difference in height of the windows along the sides of the footbridge still remains unidentified but, despite the lack of historic documents, they may be the result of bomb damage to the station during WWII and subsequent repair of the bridge.

Later drawings of the footbridge from September 1980 (Drawings 0000369279-0.pdf and 0000369495-0.pdf) confirm that no alterations were executed on the structure of the footbridge since at least the '80s.

Table 3 Historic drawings, Item [2]



FOOTBRIDGE AT WHITECHAPEL STATION, JULY 1901 (0000369255-0.pdf)



RECONSTRUCTION OF NORTH END OF FOOTBRIDGE AT EAST END OF STATION, JULY 1914 (000369239-0.pdf)

3.3 Item [3] Canopy over Platforms 1/2 and 3/4

The post-war cast iron canopies (measuring approximately 6 x 113m and 6.5 x 109m), covered in metal sheeting and glass, consistently cover the former Platforms 1 and 2, providing sheltering for passengers awaiting the eastbound and westbound trains. The canopies are fashioned from cast iron elements bolted together to form metal trusses; the various elements were cast by Glengarnock steel as marked on the joists. The skylights in the canopies are of mesh glass and with wood at the top of the pitch,

The canopies' roofs abut the sides of the Woods Buildings bridge; the gap between the canopies and the bridge is filled with wooden planks on both pitches (Fig 14). The trusses rest on an 'I' shaped beam. On both sides of Platform 3/4 the canopies are bolted to the end of the wooden gable of the footbridge; several 'I' section cast iron beams support the roofs from platform level (Fig 14).

The sides of the canopies originally had dentelled wooden edging (Fig 15) now only surviving in a fragmented state; the old 'Platform 2' sign (Fig 13) still hangs from the iron truss, and is an item that should be considered for salvage and possible reuse.



3.4 Item [4] Two low level subways, connecting Platform 1/2 and 3/4 to Platform 5

Two low level tunnels are located to the west of the footbridge, and link Platforms 1 and 2 on the Hammersmith and City Line to Platform 5 on the East London Line. Although of different shapes in plan, the tunnels have the same orientation, similar size and run partly parallel.

A brass tubular handrail and barrier protect the entrance into the passageway from Platform 3/4 (Fig 16). The side walls flanking the tunnels are lined with cream tiles measuring 302 x 423mm, blue tiles 74 x 302mm, green and orange tiles measuring 350 x 423mm. The coloured tiles decorate the whole length of the walls by the sides of the staircases, and a thin blue band of tiles follows the profile of the steps.

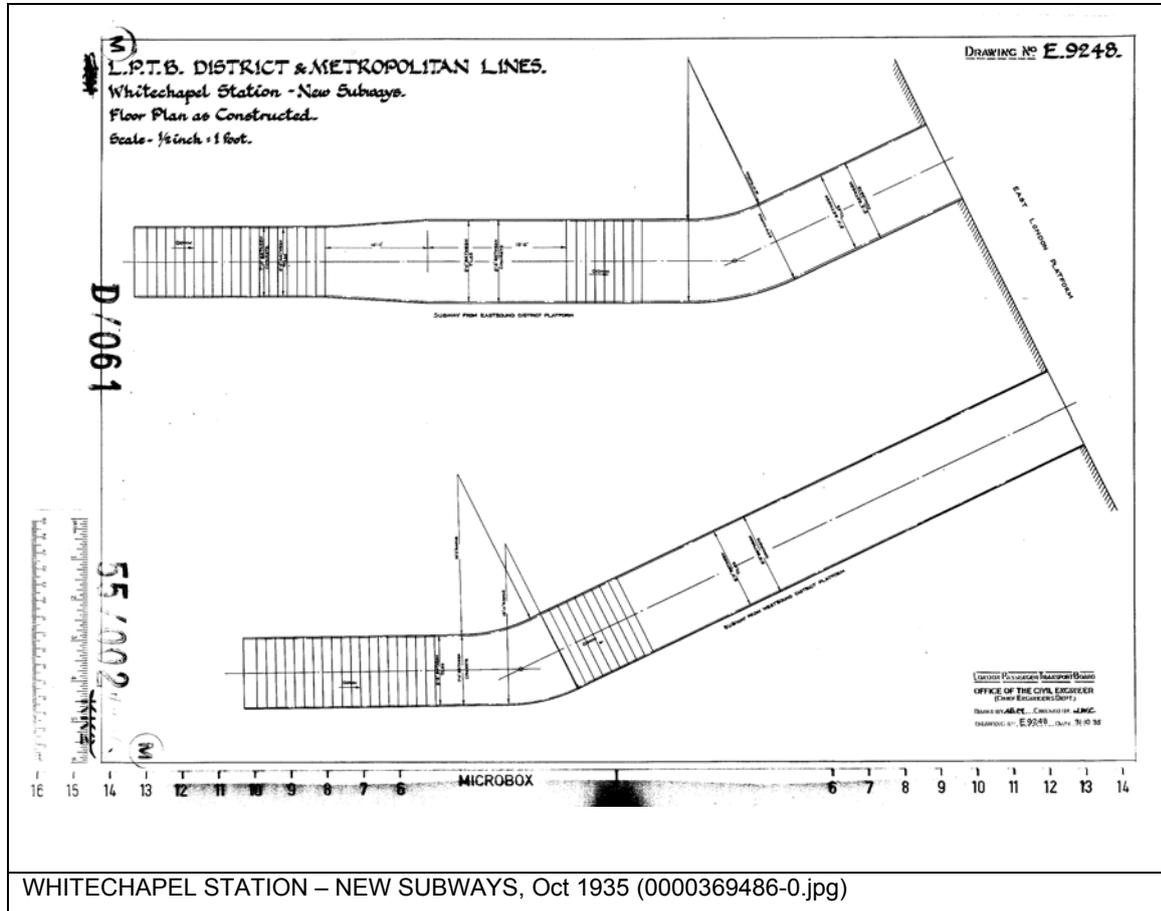
The staircases are formed of two separate flights of 20 and 8 steps respectively. By the gap between the flights, two black panels on the side walls interrupt the coloured tiled band (Fig 17); the panels themselves are enclosed in continuous bands of blue tiles (Fig 18). The northern and southern subways are similar in size and decoration but differ in plan, turning to reach Platform 5 at different points (Table 4).

The lower sections of the subways measures respectively: 2.43m in height and 2.43m in width (subway 1/2); and 2.29m in height and 2.42m in width (subway 3/4)



A plan of the northern and southern subways allows us to date the two structures to 1935, and confirms the structures have not been significantly altered since their construction (see Table 4).

Table 4 Historic drawings, Item [4]



3.5 Item [5] Open ELL Platforms 5/6

The side walls along the ELL platforms, approximately 20m in length, consist of 4 niches on each side, now occupied by services and barely visible. The niches have a segmental arch at the top and inverted segmental arches, of the same size and type, at the bottom.

A sample niche was measured along Platform 6: the southernmost niche measured 3.91m in height and 2.39m in width. The wall between the niches measured c 0.93m.

The level above that of the niches is ornamented by a projecting one course cornice, a dentelled cornice above it and recessed rectangular panels at the top. The pattern of the walls is comparable to the pattern of the Durward Street Bridge and the Winthrop Street Bridge.

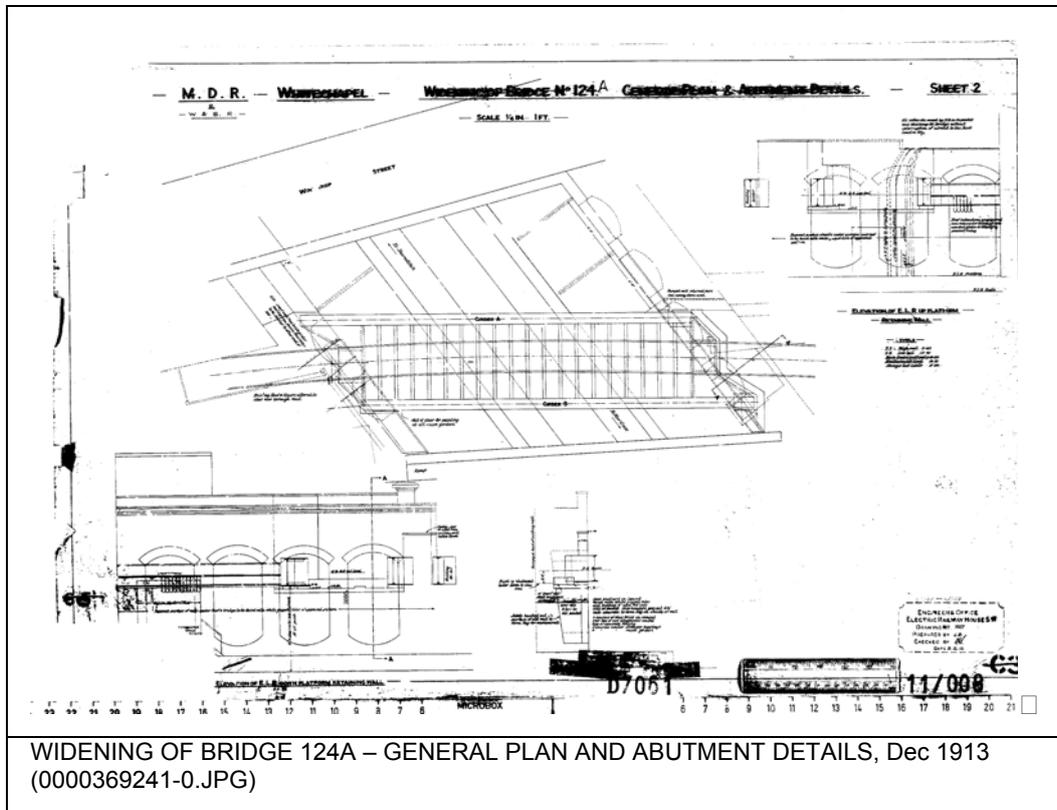


Fig 19 The eastern retaining wall to Platform 5

Documentary sources (see Table 5) suggest that the retaining walls of Platform 5/6 and their niches could have been built in relation to the widening of Bridge 124A, the present westbound bridge over the ELL platforms. The plan and elevation drawings refer to a stretch of the retaining wall located to the south of Winthrop Bridge but the structures are similar in size and construction type to the retaining walls located between Winthrop Bridge and Durward Bridge.

The drawings indicate that the retaining wall abutted a pre-existing wall at the same location, which was taken down to around 2 ft below the level of the top of the niches. The walls were originally made of stock brick in cement, faced with white glazed tiles. Two courses of blue brick also run along the top of the abutments.

Table 5 Historic drawings, Item [5]



3.6 Item [6] Former Metropolitan and District Line (MDL) booking hall

The former MDL booking Hall is rectangular in plan, south-east north-west oriented, and contains the staircase leading down onto the ELL platforms (Drawings 3 and 4). The hall measures 17.5 x 4.9 m and is currently used as a passage between the current Ticket Hall and the footbridge (Item 2).

The roof of the MDL booking hall is supported on green-painted wooden ribs with a circular lower profile (Fig 20). Every rib has six square bolts, placed on the underside, and is attached to the top of the pitch in the ceiling with an iron peg. The purlins above the ribs are visible supporting the roof sheets (Fig 21).

Natural light filters through the skylight on the roof, located between the third and fourth ribs, counting from the south side of the room. The skylight is formed of six wire glass panels on each side, of these four panels are fixed and two can be opened.

The purlin located on the eastern pitch in the southernmost bay is not aligned with the other purlins. This indicates that there is a joint between two phases in the building, clearly visible when the roof is seen from the outside (Fig 22).

The eastern entrance into the MDL booking hall has been created in what was originally the westernmost wall of the ticket hall. This is visible in the thickness of the truncated wall and the change in level between the two rooms. The northern end of the booking hall is occupied partly by the projecting entrance into the footbridge and a door on the left hand side, giving access to the non-public areas of the station. The wall is lined with wooden boards painted in white and has a bull's eye window visible on the external elevation (Fig 20 and Fig 22).



Fig 20 View across the former MDL booking Hall, looking north



Fig 21 View across the former MDL booking Hall, looking south



Fig 22 View of the roof of the former MDL booking hall, looking south

The present MDL booking hall is the last remaining section – still in use as a station - of the former MDR station.

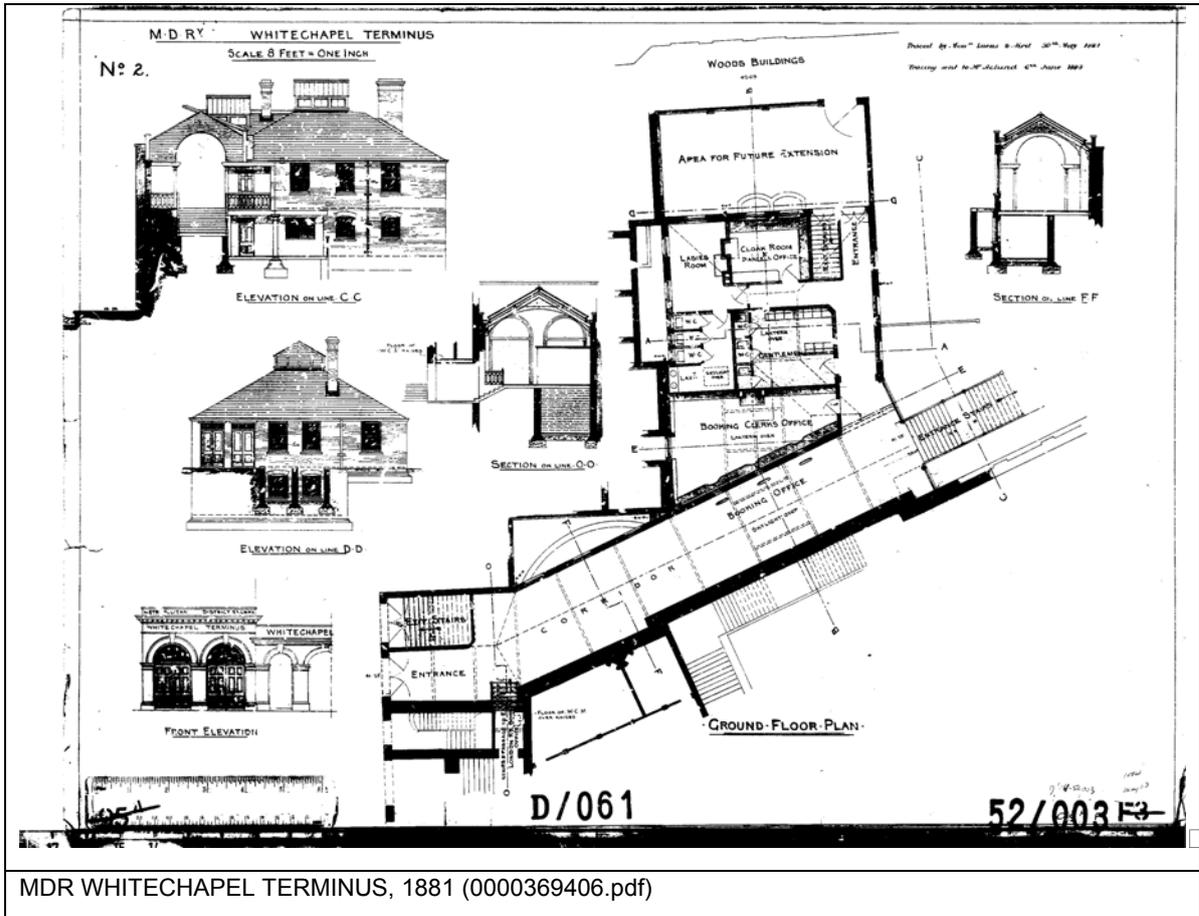
The station, opened in 1884 as Whitechapel (Mile End), was elongated and ran from the High Street to the platforms at the western end of Whitechapel Station. The long corridor located to the north of the entrance of the station was rectangular and flanked by some ancillary rooms to the west. On the north wall, a staircase led down to platform level.

The former MDL station booking hall has been considerably shortened, by removing the first wooden truss, the original end gable at the northern end, and a substantial section at the south end. The southernmost projecting gable corner in the south wall is now the side of the staircase linking the MDL booking hall to the ticket office. The wooden trusses appear to be original as their shape and spacing coincides with the trusses reproduced in section F-F of the historic drawing reproduced below (

Table 6, 0000369406.pdf).

A misaligned purlin, still visible at the south end of the MDL booking hall is the result of the alterations to the original MDL station buildings (executed before the construction of the footbridge in 1901) which shortened the original corridor, leaving the current MDL structure untouched.

Table 6 Historic drawings, item [6]



MDR WHITECHAPEL TERMINUS, 1881 (0000369406.pdf)

3.7 Item [7] Woods Buildings Footbridge

The Wood Buildings footbridge, running north–south and measuring 32.20 x 4.40m, connects Winthrop Street to the Wood Buildings passageway. The sides of the structure are formed of cast iron panels riveted together (16 rivets each) and painted grey; the bridge is covered mesh panels installed on the top of the side walls (Fig 23). ‘T’ shaped bars connect the panels and are held by the rivets. In many cases a single rivet can be seen placed on different locations in the panel. These may be post-war repairs to shrapnel/bomb damage to the iron panels. A similar method was noted in post-war bomb repairs at King’s Cross Station (D Sorapure, MOLA, pers comm.) The standard size of the cast iron panels is 1.65 x 1.65m but in places the panels are narrower (Fig 24), marking the joint between different sections of the side walls.

The floor of the footbridge is covered in tarmac, and has two sets of four steps at each end, with a handrail in the middle. The bridge’s metal structure abuts the northern retaining wall of the station to the north (Fig 25) and the chamfered north-western corner of the Grade II Listed Wood’s Buildings (rear of 265–267 Whitechapel Road) to the south (Fig 26, Fig 27 and Fig 28).



Fig 23 View across the Woods Buildings footbridge, looking south



Fig 24 Cast iron panels along the sides of the Woods Buildings footbridge



Fig 25 The north end of the Woods Buildings footbridge, looking south



Fig 26 The south end of the Woods Buildings footbridge, looking south

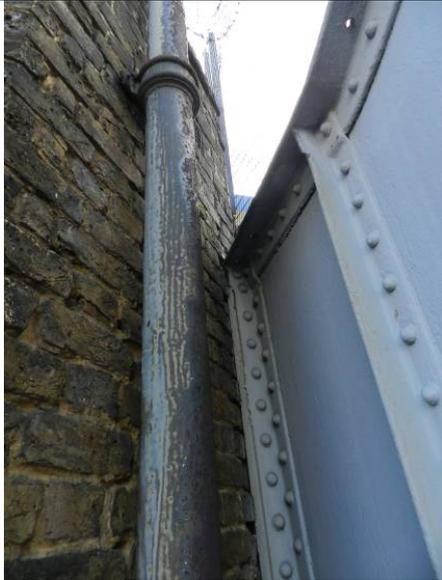


Fig 27 Detail of the footbridge wall abutting the corner of Woods Buildings



Fig 28 Detail of joint between the Woods Buildings and the footbridge abutment

3.8 Item [8] Main Ticket Hall

The Main Ticket Hall of Whitechapel Station is with the entrance hall the southernmost part of the station and is accessed from Whitechapel High Street and located across the road from the former Royal London Hospital. The Hall, which represents the pedestrian entrance into Whitechapel Station (Fig 29 Drawings 5 and 6), is joint at an angle to the entrance hall located to the south and measures approximately 12.30 x 5.9m.

Five green-painted cast iron ribs supporting the roof of the booking hall, are formed by the marriage of an upper pointed rib and a lower elliptical rib, bolted together, are gracefully decorated with floral castings in the three spaces between the upper and lower elements (Fig 31). The ribs divide the booking hall into 5 bays and are bolted onto the walls with 4 bolts, and sit on buttresses evenly spaced along the west and east walls.

The roof of the ticket hall rests on the ribs, and is made of glass panes with embedded wire mesh; each bay between the ribs is subdivided into 3 sections and contains 12 glass panes. Three lamps hang from the centre of the 1st, 3rd, and 5th ribs.

The top half of the side walls is lined with wood, with three lines of rectangular and square green-painted panels, on the north side of the east wall, by the entrance into the station manager's office (Fig 30), a single line of green panels is visible at the top. The lower part of the wall is now occupied by windows inserted at a later date.

The lower level of the walls is occupied by openings, windows, ticket machines and doors. The arch to the south of the Ticket Hall has an elliptical profile, and is aligned with the south edge of the ribbed ceiling. The skirting board visible in the southern part of the station entrance along the western wall is much taller than the skirting board along the other walls, and is likely to be original.

Brown-grey and brown tiles line the floor in a simple geometrical pattern of four squares with central dot, the size of the square tiles is regular at 287 x 287 mm.



Fig 29 View across the main booking hall, looking north



Fig 30 The eastern wall, by the entrance into the station manager's office, looking east



Fig 31 Detail of the lamp and the floral decoration of one of the ribs in the main booking hall

A plan of unknown date reproduced below (Table 7, 0000369408-0.pdf) shows the layout of the ticket hall. As the plan was produced for the London Passenger Transport Board it is plausible

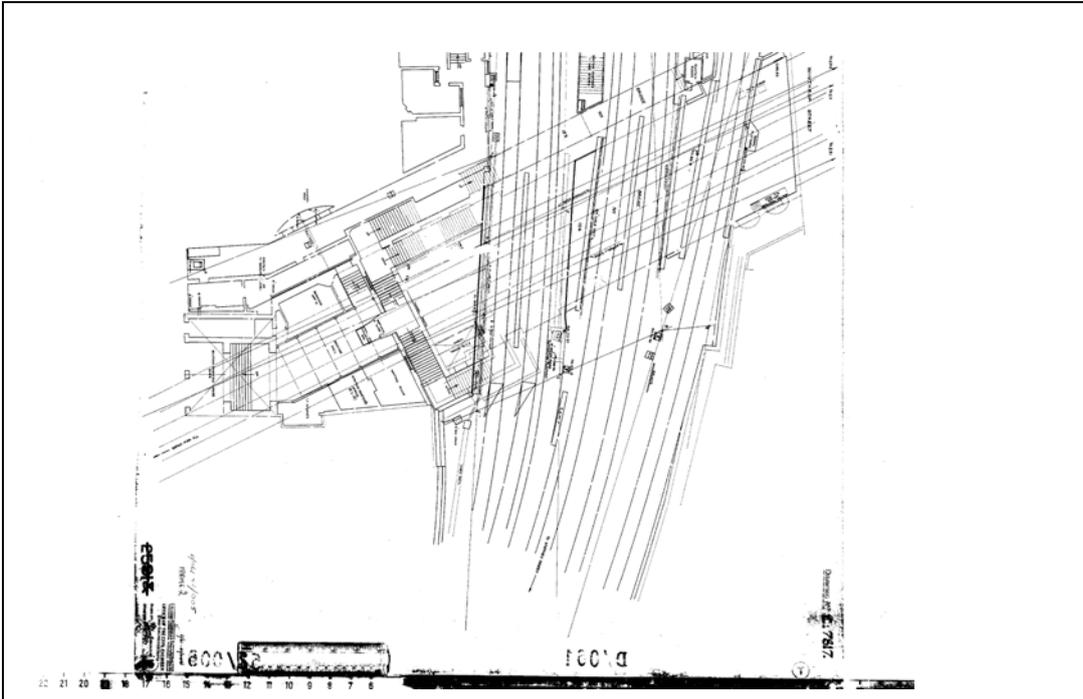
to date it to before the end of the 1940s. It shows that ticket hall as it exists at present, with the same layout and a gate at the end blocking the access through the arched opening. Bostwick gates and a collector box occupied the north end of the booking hall and the station master lived above the station entrance onto the main road.

Five ribs supported the roof and the room flanking the hall were originally used as lavatories, Station Masters office ELR, waiting room with fireplace, and booking office with fireplace. The original layout of the building can be seen in the present arrangement of the rooms around the ticket hall.

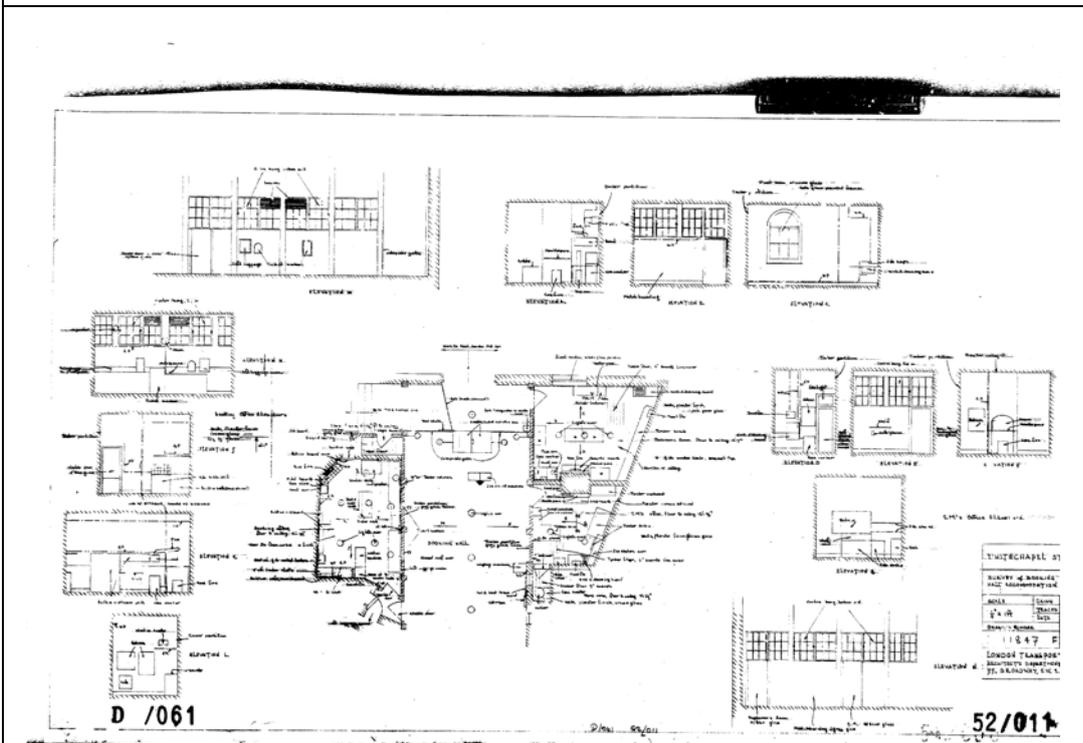
The drawing also shows that the link to the former MDL booking hall had already been created by the time the plan was drawn.

A second drawing, undated but probably of later date than the previous one, shows in detail the plans of the ticket hall and elevations of all the rooms surrounding it. The drawing (Table 70000369413-0.pdf) is a survey of the booking hall accommodation and includes several elevations of the partition walls and the internal features.

Table 7 Historic drawings, item [8]



PLAN OF WHITECHAPEL STATION, date unknown (0000369408-0.pdf)



PLAN AND ELEVATIONS OF THE TICKET HALL AT WHITECHAPEL STATION, date unknown (0000369413-0.pdf)

3.9 Item [9] Durward Street Bridge

The Durward Street Bridge, measuring approximately 8.50 x 16.50m and built across the north-south ELL tracks, is supported on a slightly elliptical six course arch. The bridge is entirely built of yellow stock bricks, and its parapet wall has recessed rectangular brick panels above the dentelled cornice and the projecting stringcourse (Fig 32).

The side walls supporting the arch, which measured from the west side of Platform 5, are 2.21m high and presents a supporting stone at its highest level; the full width of the arch is 9.11m, its length is approximately 16m.

The parapet wall at the top of the bridge is also made of yellow stock brick, surmounted by capping stones, each measuring 190mm in thickness and varying in length from 0.96m to 1.06m. The capping stones are surmounted by a metal fence with mesh panels aimed at protecting the safety of passengers travelling on the platform below.

The full length of the bridge as measured from above it, on Durward Street, is c 16.75m, and the bridge is provided with two pavements along the road running through it. The southern pavement is level with the road and 0.69m wide, the northern pavement is 0.10m high and 1.41m wide.

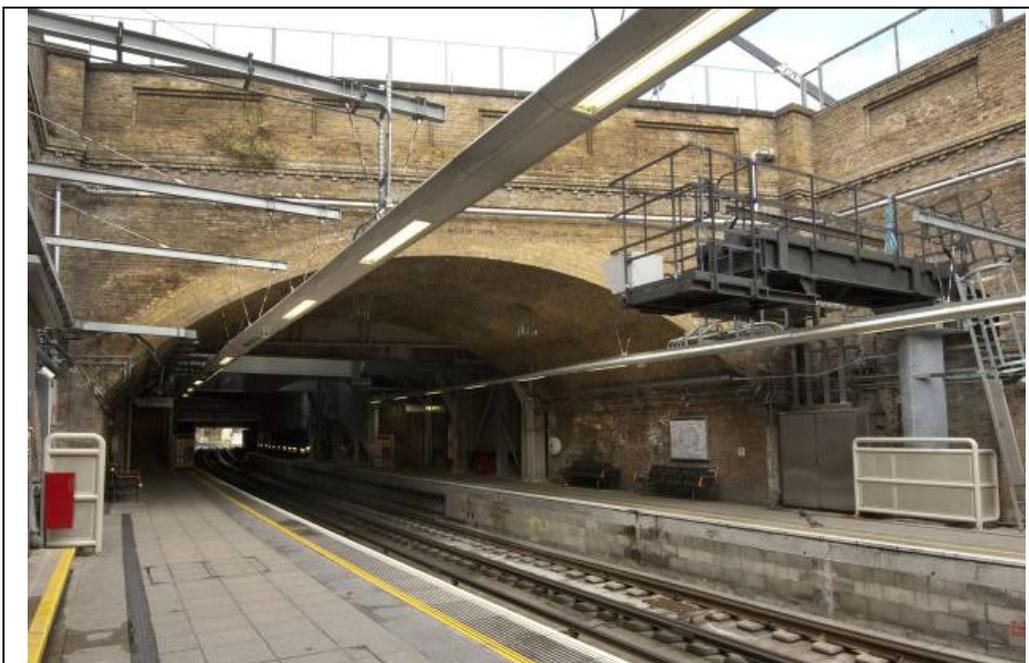


Fig 32 View of the Durward Street Bridge from platform level, looking north

3.10 Item [10] Winthrop Street Bridge

The Winthrop Street bridge, measuring approximately 14.8 x 5m, is built across the ELL Platform 5, and runs parallel to the Durward Street bridge to the south. It is a stock brick-built structure very similar in shape and size to the latter (see Item [9]). The slightly elliptical arch of the bridge is supported on the side walls. Unfortunately, due to the presence of panelling/hoarding (see Fig 33), the retaining walls could not be measured.

Above the six course arch, a projecting stringcourse precedes the dentelled cornice above, and the rectangular recessed panels at the top of the wall (Fig 33) which is topped by capstones.

There seem to be signs of restoration on the under-arch, where patches of different colour bricks are evident.

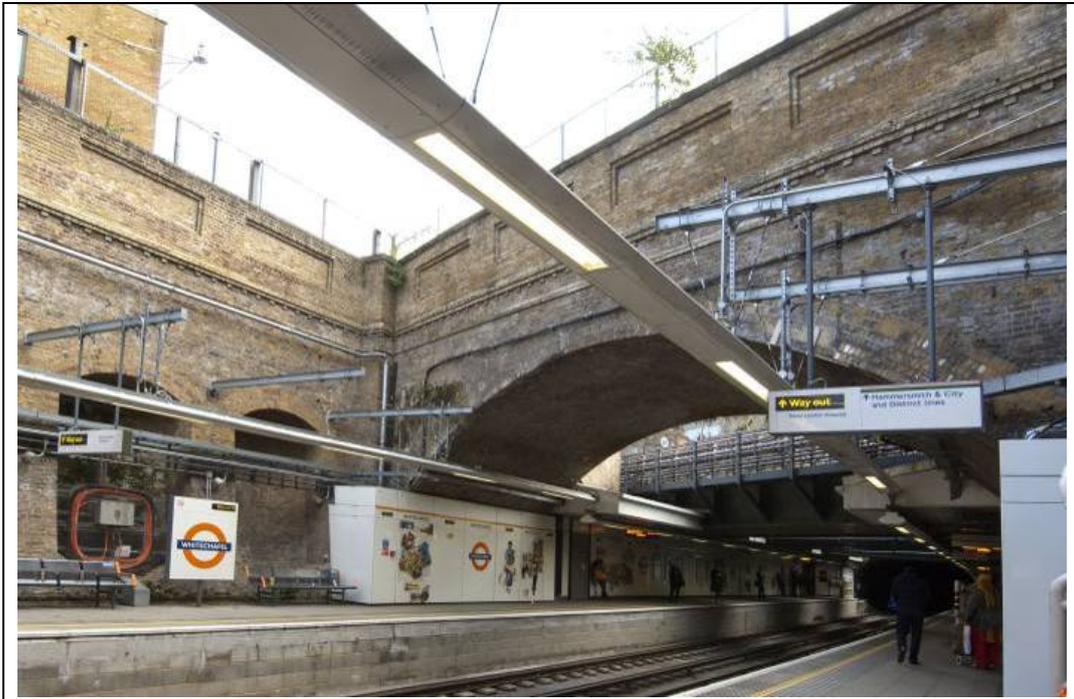


Fig 33 View of the Winthrop Street Bridge from platform level, looking south

4 Conclusions

4.1 Original research aims

The programme of archaeological investigation has produced an appropriate record of the structures to English Heritage Levels 1 and 2 (see 1.1), prior to their removal.

The initial objectives of the investigation were satisfied as follows:

- The fabric of the selected structures has been investigated prior to loss or alteration. It has been possible to make a record of the selected structures. The structures have been recorded photographically, and those selected for Level 2 recording by measured survey and annotated sketches, and all accessible areas have been included in the survey.
- It has been possible to carry out the necessary amount of documentary research, as appropriate to the level of recording, and to provide a written account of the structure.
- The results are here reported in a suitable form in accordance with Crossrail requirements, and the archiving of the records is detailed below.

4.2 Archiving

A copy of this report and all of the photographic images taken on site can be found under the site code XSH10 in the MOLA archive. They will be stored there pending a future decision over the longer-term archive deposition and public access process for the wider Crossrail scheme.

4.3 Publication

The results of the survey will initially be disseminated via this report and the supporting site archive of finds and records (including digital data). Any publication proposals will be considered at a later stage in relation and also the wider context of archaeological potential and results across the Crossrail scheme.

This report will be made available from The London Archaeological Archive and Research Centre (LAARC) in due course.

A summary report will be published in the London Archaeologist excavation round up, and also deposited with the LAARC.

4.4 Acknowledgements

The archaeological survey and this report were commissioned by the Crossrail Project Archaeologist, [REDACTED], who MOLA wishes to thank. MOLA are also grateful to [REDACTED] for facilitating access to site and to [REDACTED] for his help.

The Built Heritage survey was carried out and this report, including the graphics, was produced by Patrizia Pierazzo, professional photographs were taken by Maggie Cox. The MOLA Contracts Manager was Nicholas Elsdon.

5 Reference Documents

This list includes works consulted as well as those cited in the text.

C261_PMI_00024 WHI Updated building recording, C261-XLR-west-AIE-CRG03-50012, 29.06.12

A Crossrail Site-specific Written Scheme of Investigation (SS-WSI): C140 – Whitechapel Station Written Scheme of Investigation, Doc. No. C140-HYD-T1-JLT-D061-00001, version 4.0, 03.05.11

C261 Archaeology Early East, Method Statement, Standing Building Recording, Whitechapel Station (XSH10), CRL Document Number: C261-MLA-X-RGN-CR140-50083, v4, 04.09.12

C261 Archaeology Early East, Revision to Method Statement for Standing Building Recording, Whitechapel Station – Scaffolding Tower, CRL Document Number: C261-MLA-X-RGN-CR140-50083, v5, 11.10.12

BBMV, 2012 C512 – Whitechapel Station – Main station works, Building/Civils & Dilapidation Survey, CRL Doc No C512-BBM-B-GMS-D061-50001, BBMV Doc No C512-BBMV-MST-SWNS-CIV-0001, Rev 2 12.03.12 [Intrusive and non-intrusive surveys method statement]

Whitechapel Station, Station Bridge Conservation Area Consent C140-HYD-Z-QAP-D061-00030 version 3.0, 04.02.11

C140 Whitechapel Station Bridges & Walls Conservation Area Consent: Planning and Heritage Statement C140-HYD-Z-QAP-D061-00032, Rev. 6.0, 05.04.11

C140 Whitechapel Station Conservation Area Heritage and Planning Statement: Station Buildings and Structures, C140-HYD-Z-QAP-D061-00030, Rev. 3.0, 04.02.11

C140 Whitechapel Station: Contract C512, RIBA Stage F Construction Report Volume 9 Construction Report, C140-HYD-Z-RGN-D061-00076, v 3.0, 06.04.11

Crossrail, 2008 *Crossrail Environmental Minimum Requirements (including Crossrail Construction Code)*, doc. no. CR/HB/EMR/0001 v5

Crossrail, 2008 *Code of Construction Practice* [Annex 1 to *Environmental Minimum Requirements*]

Crossrail, 2009 *Crossrail Generic WSI*, doc. no. CRPN- LWS-EN-SY-00001, draft v2 July 2009

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* (Swindon: English Heritage)

English Heritage, 2008, *Conservation principles: policies and guidance*

IFA [Institute for Archaeologists], 1996, *Standard and guidance for archaeological investigation of standing buildings or structures* (revised 2001)

MOLA [Museum of London Archaeology], 2012, *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*

Whitechapel Market Conservation Area Character appraisal, June 2009, London Borough of Tower Hamlets

6 OASIS ID: molas1-150743

Project details

Project name	Built heritage recording at Whitechapel Station
Short description of the project	Specific items of built heritage were recorded in 2012, at or in the curtilage of Whitechapel Station to either a level 1 or level 2 in the EH specifications, prior to their demolition in advance of the station upgrade. Items recorded to level 1 were granite setts in Winthrop Street; the canopy over platforms 1 and 2; low level subways between platforms 1,2,3,4 and 5. Items recorded to level 2 were the staircase and timber foot bridge leading to the District Line platforms (built c 1901); the open East London Line platforms of 5 and 6 (created c 1913); the former Metropolitan and District Line booking hall (1884); the Woods buildings Footbridge; the pre-War main ticket hall; the late 19th century Durward Road Bridge (scene of the murder of Mary Ann Nichols by Jack the Ripper in 1888) and the Winthrop Road Bridge.
Project dates	Start: 26-09-2012 End: 16-05-2013
Previous/future work	No / No
Any associated project reference codes	XSH10 - Sitecode
Type of project	Building Recording
Site status	Conservation Area
Current Land use	Transport and Utilities 2 - Other transport infrastructure
Significant Finds	RAILWAY TRANSPORT SITE Post Medieval
Methods & techniques	"Annotated Sketch", "Measured Survey", "Survey/Recording Of Fabric/Structure"
Prompt	Conservation Area Consent

Project location

Country	England
---------	---------

Site location	GREATER LONDON TOWER HAMLETS TOWER HAMLETS Whitechapel Station
Postcode	E1
Study area	10800.00 Square metres
Site coordinates	TQ 34701 81857 51 0 51 31 08 N 000 03 30 W Point

Project creators

Name of Organisation	MOLA
Project brief originator	London Borough of Tower Hamlets
Project design originator	London Borough of Tower Hamlets
Project director/manager	Nicholas Elsdon
Project supervisor	Patrizia Pierazzo
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"
Paper Media available	"Drawing", "Notebook - Excavation", "Research", "General Notes", "Report"

**Project
bibliography 1**

Publication type	Grey literature (unpublished document/manuscript)
Title	C261 ARCHAEOLOGY EARLY EAST Whitechapel Station
Author(s)/Editor(s)	Pierazzo, P.
Date	2013
Issuer or publisher	MOLA
Place of issue or publication	London
Description	Unpublished client report

Entered by	D Sorapure (dsorapure@mola.org.uk)
Entered on	16 May 2013

7 Appendices

Drawing 1 Plan of Item 2, the footbridge

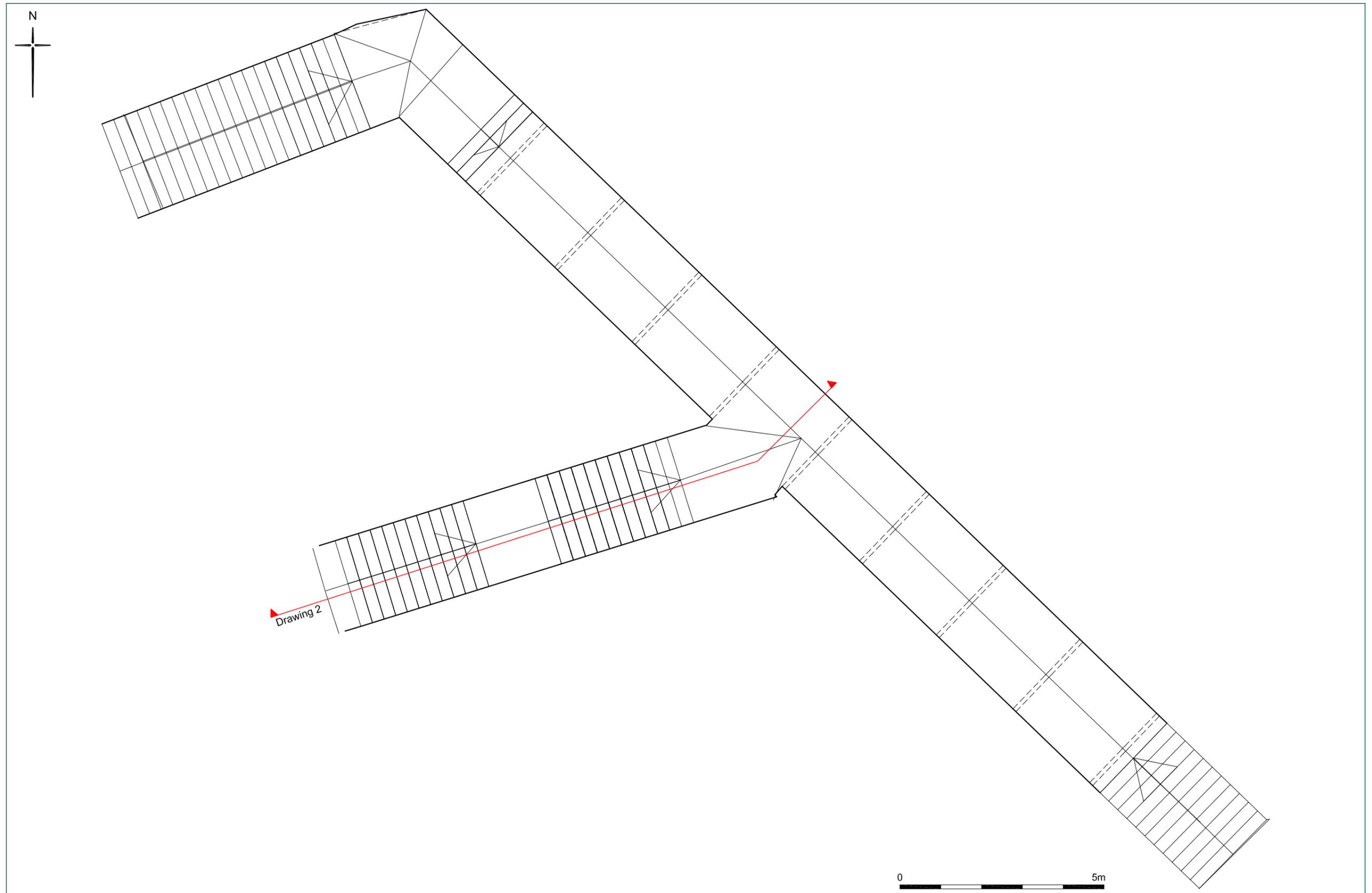
Drawing 2 Longitudinal section through Item 2, the staircase and footbridge

Drawing 3 Plan of Item 6, the MDL booking hall

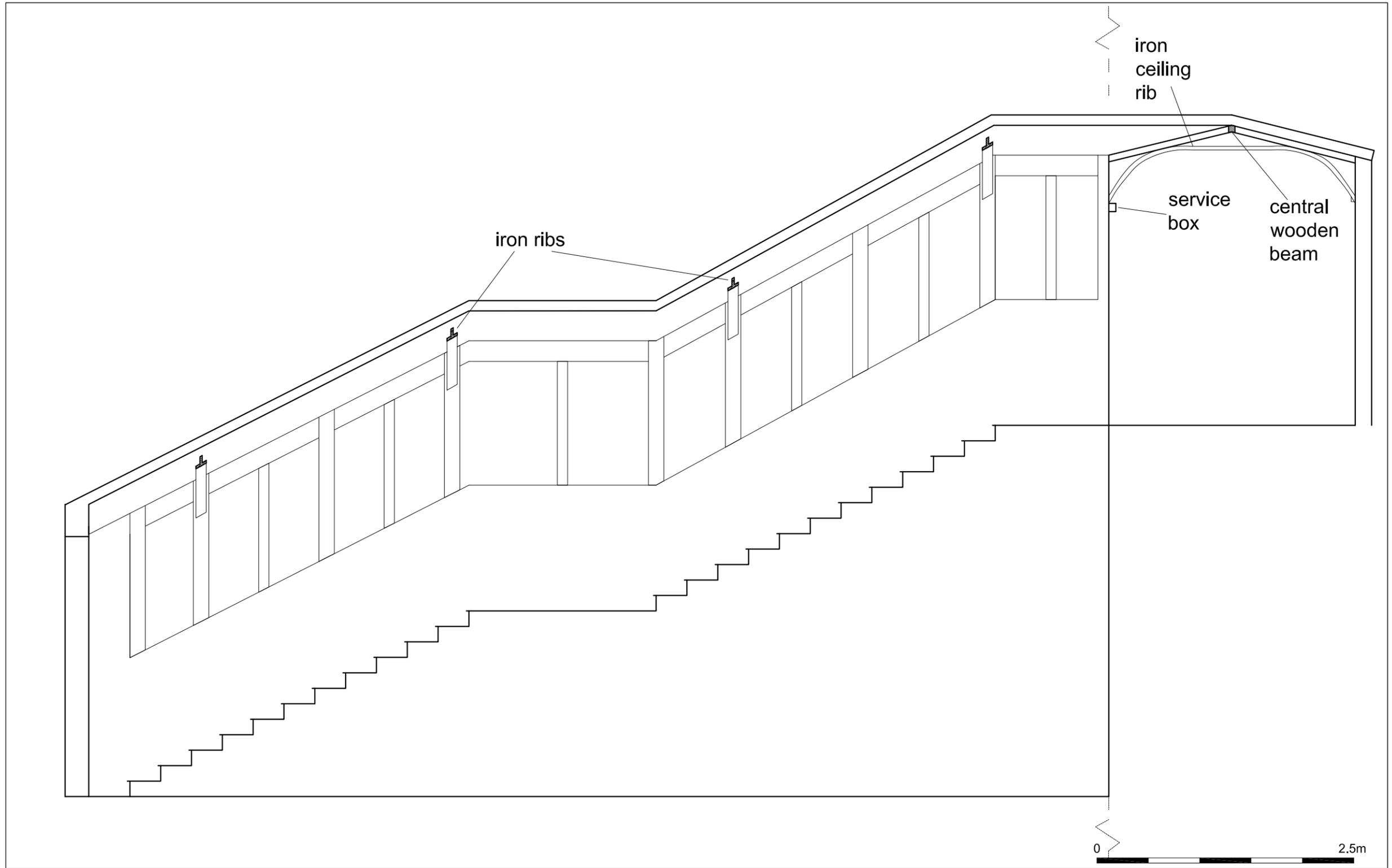
Drawing 4 Longitudinal section through Item 6 the MDL booking hall

Drawing 5 Plan of Item 8 the main ticket hall

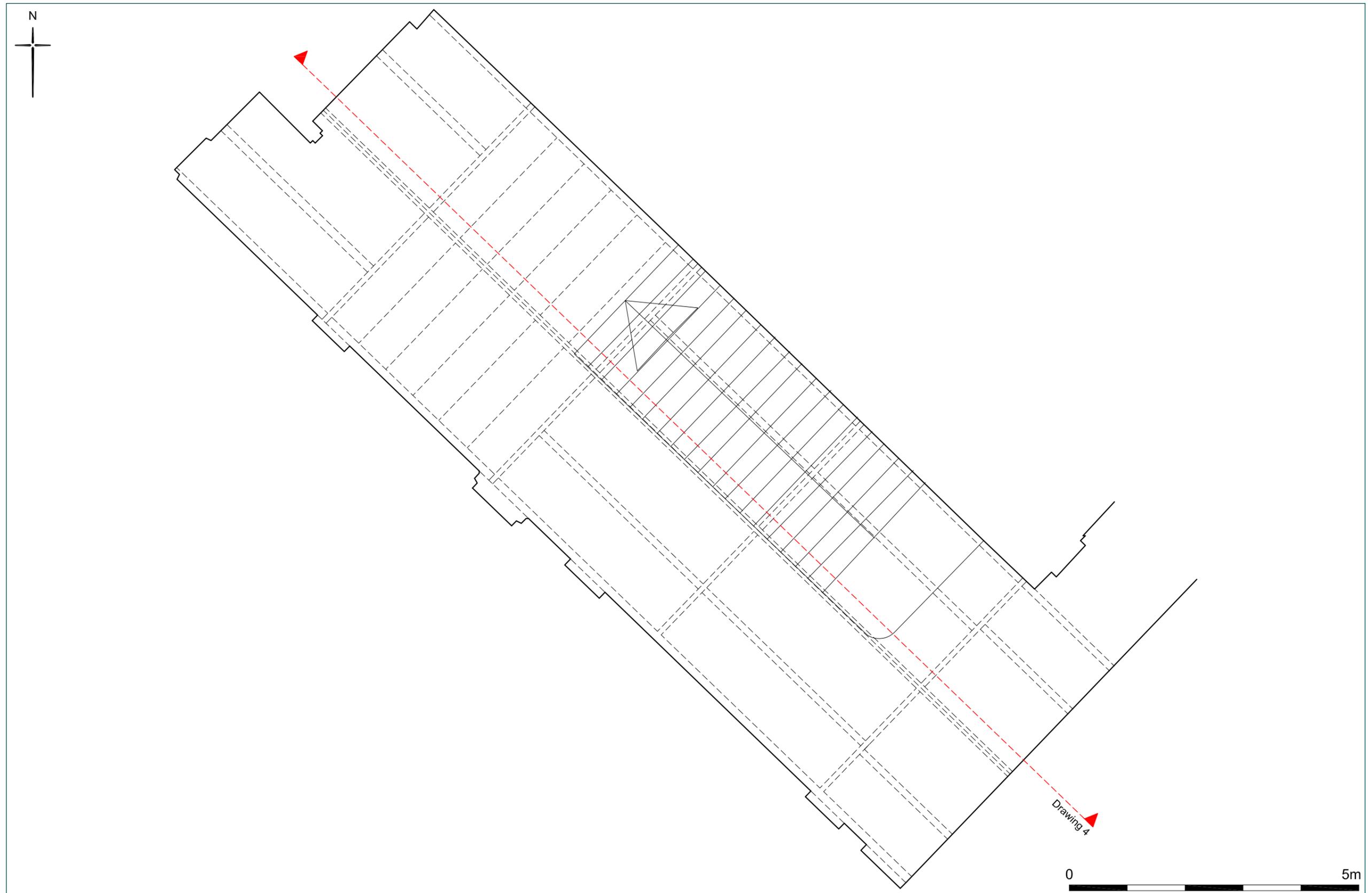
Drawing 6 Cross section through Item 8 the main booking hall



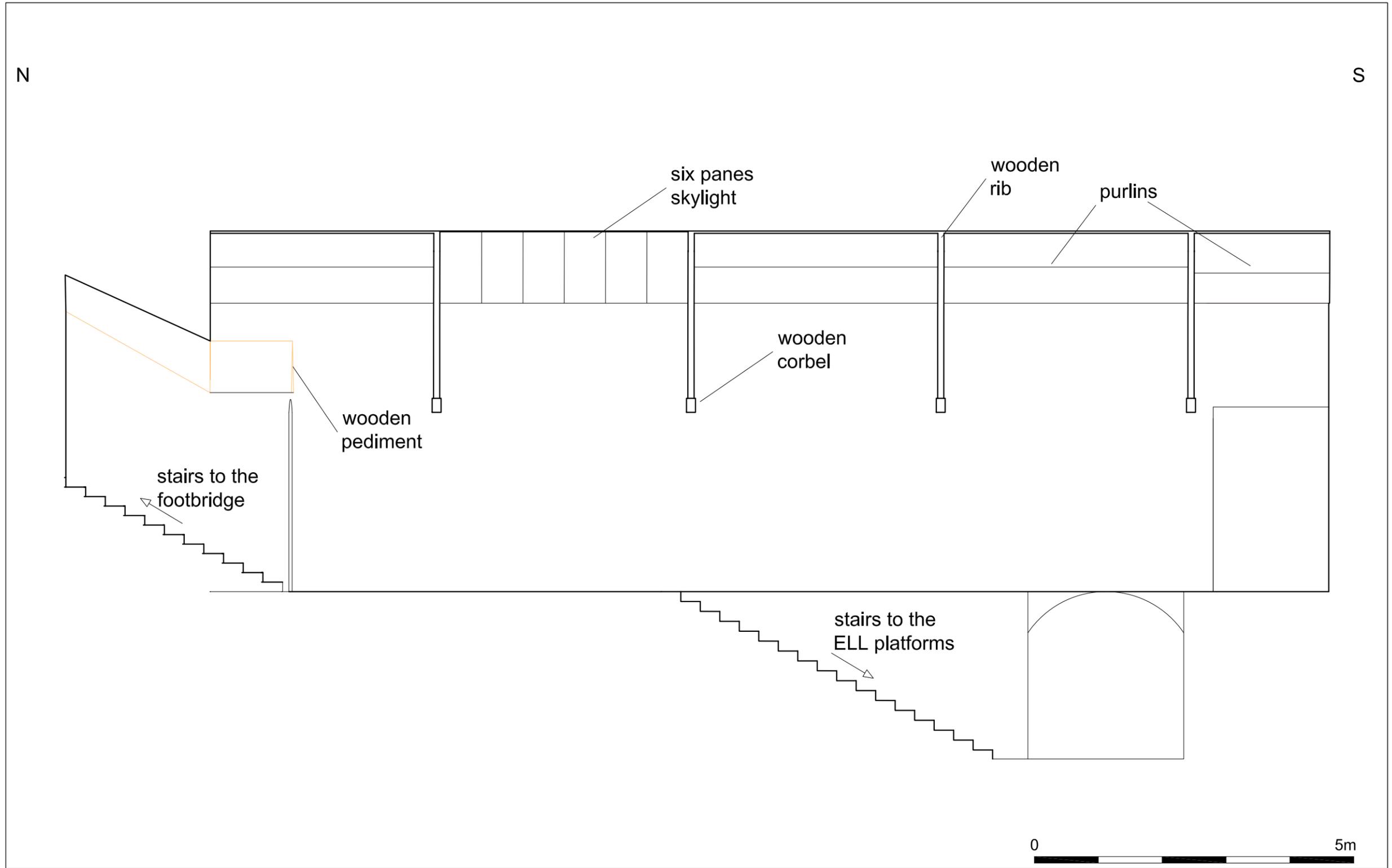
Drawing 1 plan of Item 2, the footbridge and step-stairs to the platforms



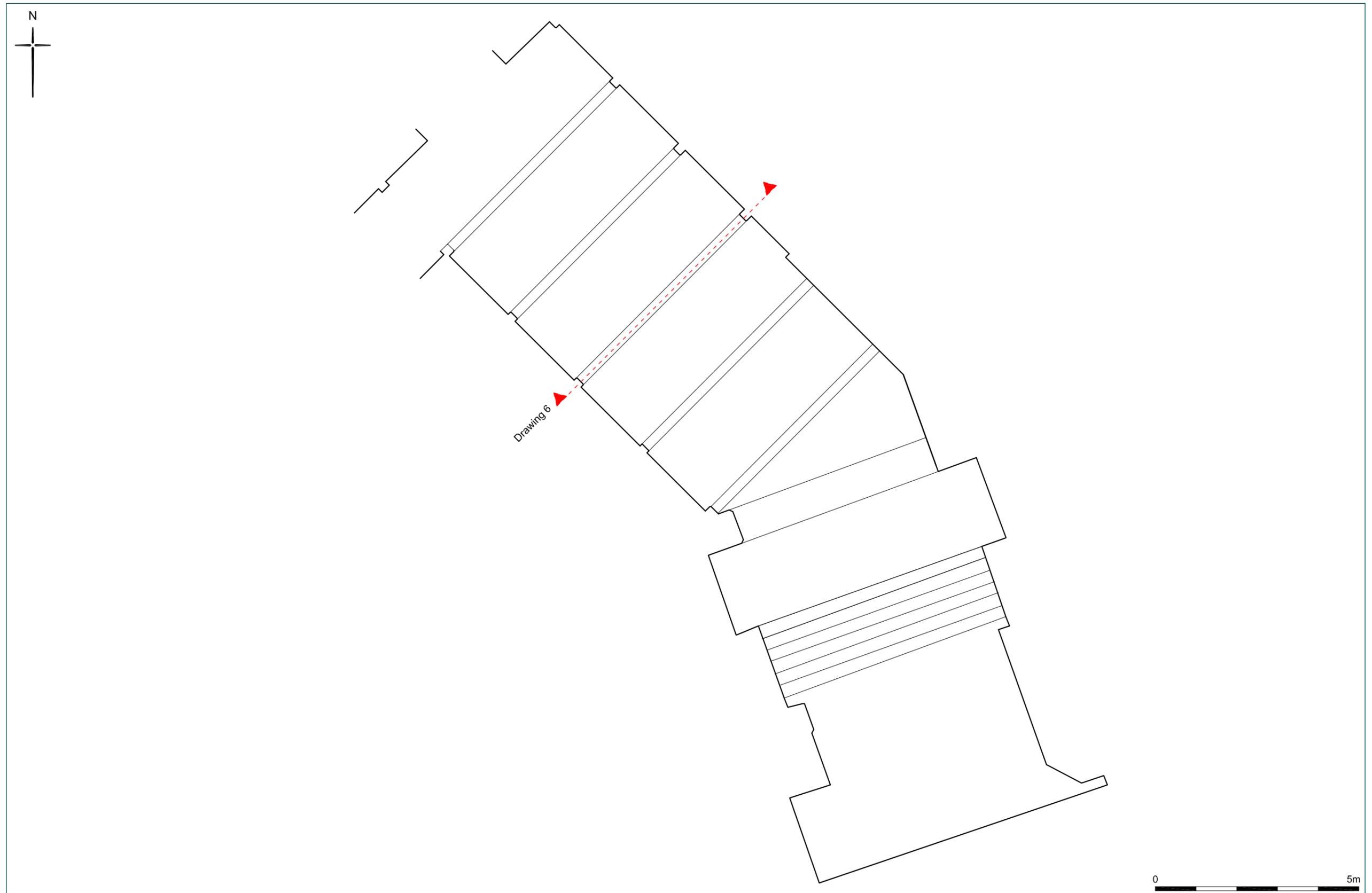
Drawing 2 Longitudinal sectional view of the staircase from the footbridge to platform 1 and 2 and cross section of the footbridge (looking north).



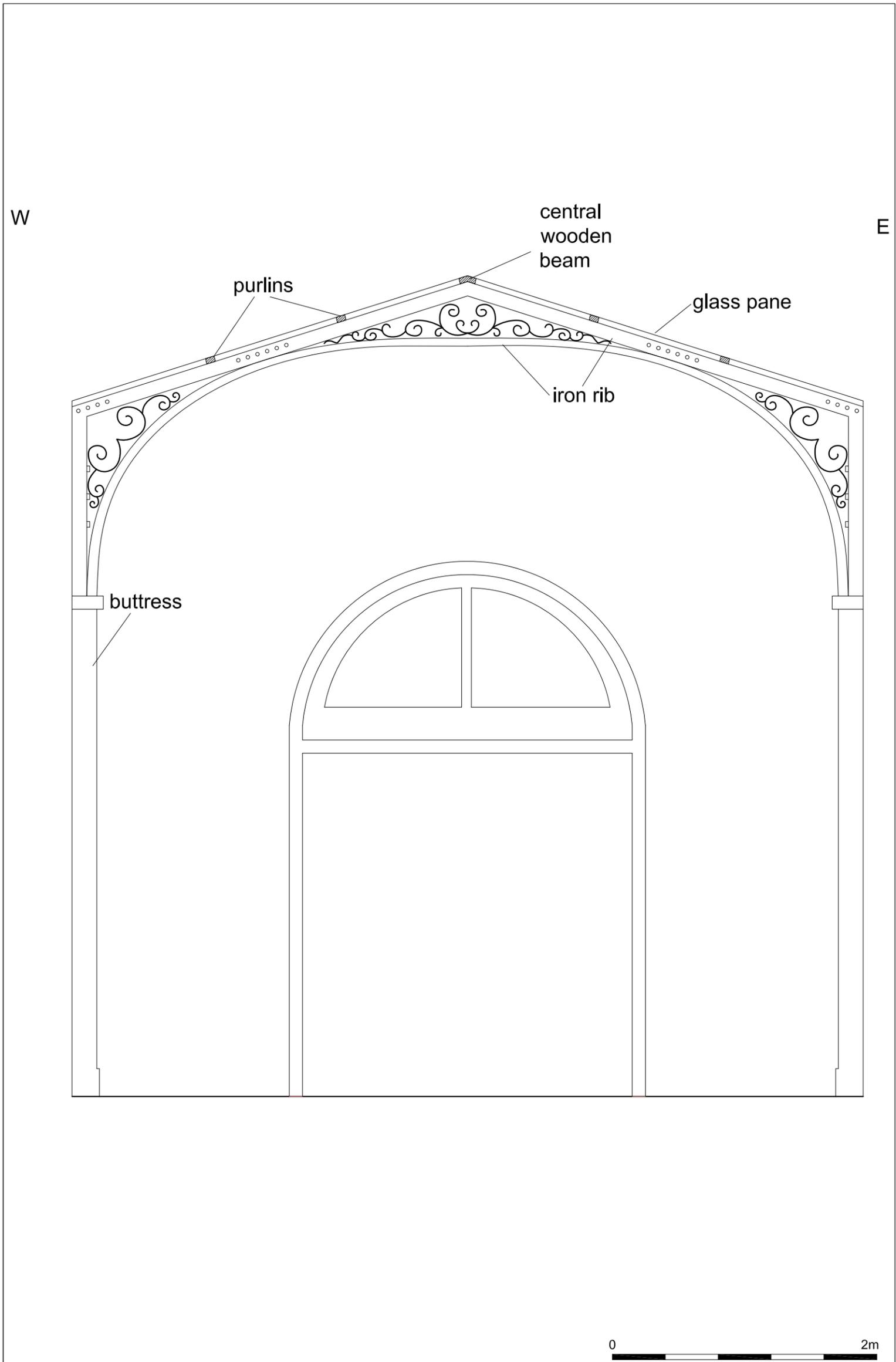
Drawing 3 Plan of Item 6, the MDL Booking Hall



Drawing 4 Longitudinal section through Item 6, the MDL Booking Hall.



Drawing 5 Plan of Item 8, the main ticket hall



Drawing 6 Cross section through Item 8, the ticket hall, looking north.