

Worcestershire Archaeology Research Report No.11

Historic Building Recording at the site of

**THE HIVE,
THE BUTTS, WORCESTER**



Shona Robson-Glyde

Worcestershire Archaeology Research Report no 11

**Historic Building Recording
at the site of
The Hive,
The Butts, Worcester**

(WCM 101656, 101657, 101658)

Shona Robson-Glyde



2018

Worcestershire Archaeology Research Report no 11

Historic Building Recording
at the site of
The Hive, The Butts, Worcester

Published by Worcestershire Archaeology
Archive & Archaeology Service,
The Hive, Sawmill Walk,
The Butts, Worcester.
WR1 3PD

ISBN 978-1-9998288-2-0

© Worcestershire County Council 2018

Worcestershire, County Council
County Hall, Spetchley Road, Worcester.
WR5 2NP

This document is presented in a format for digital use.
High-resolution versions may be obtained from the publisher.

worcestershirearchaeology@worcestershire.gov.uk

Front cover illustration: The Butts frontage of the Joseph Wood office building

Contents

Summary	1
1 Background	2
1.1 Reasons for the project	2
1.2 Project design and the planning process	2
2 Aims and objectives	3
2.1 Aims	3
2.2 Objectives	3
3 Methods	4
3.1 Personnel.....	4
3.2 Documentary research	4
3.3 List of sources consulted	4
3.4 Fieldwork strategy	5
3.5 Building analysis	6
3.6 Statement of confidence in the methods and results	6
4 Context	7
5 The buildings	7
5.1 Transwipers site	7
5.1.1 Description.....	7
5.1.2 Historical information	8
5.1.3 Building recording	9
5.2 City wall.....	10
5.2.1 Description.....	10
5.2.2 Building recording	10
5.3 Cattlemarket counting house	11
5.4 Boundary walls	12
5.4.1 26 The Butts front wall	12
5.4.2 26 The Butts, Netherton Lane wall	13
5.4.3 Coomber's boundary wall to Croft Walk	15
5.5 Air raid shelter	15
5.6 History of Joseph Wood's builders yard and Council Depot.....	16
5.7 Joseph Wood building	20
5.7.1 Building description.....	20
5.7.2 Building development and discussion	22
5.8 Excavated sawpit and shed	23
5.9 Excavated workshop or shed	24
5.10 Sawmill building	24
5.10.1 Building description.....	24
5.10.2 Building development and discussion	24
5.10.3 Excavated prop structure and engine house extensions	25
5.11 Excavated sawmill range and workshops	26
5.12 Almshouses	27
5.13 Viaduct.....	27
6 Conclusions	28
7 Acknowledgements	28
8 Bibliography	29
Plates	32
Figures	141

List of plates:

- 1 Transwipers building from the north-west
- 2 Transwipers building from the north-east
- 3 Transwipers building from the east
- 4 Transwipers building from the south-west
- 5 Transwipers interior from the west
- 6 Transwipers interior stanchion structure from the west
- 7 Transwipers interior roof structure building from the east
- 8 Transwipers interior roof structure tied into city wall from the west
- 9 Entrance into cellar from The Butts
- 10 Corridor and stairs into cellar
- 11 Base of chimney stack from the south
- 12 Chimney stack within Rack Alley elevation from the south
- 13 Cast iron boiler with Transwipers cellar, from the north
- 14 Cast iron boiler with Transwipers cellar, from the south
- 15 Beeston 'Robin Hood Major' boiler
- 16 Riley Stoker Co. Ltd. 'Robot Stoker'
- 17 1947 Advert for the Riley Robot Stoker
- 18 'Robot Stoker' and coal cellar hatch from the south
- 19 Coal cellar, from the south
- 20 Coal cellar hatch from the south
- 21 19th century brickwork on The Butts elevation, from the north
- 22 East elevation of Transwipers
- 23 Earl of Dudley Steel stanchion
- 24 Transwipers (building in centre field with long roof lights) and Joseph Wood's yard from the north
- 25 British Steel stanchion
- 26 Interior space of Transwipers from the east
- 27 Interior, roadside, space of Transwipers from the east
- 28 New stud wall hiding city wall from the north
- 29 New offices from the west
- 30 New breeze block utility rooms
- 31 City wall on site adjacent to Transwipers (with Transwipers building on right)
- 32 City wall once Transwipers building was demolished from the north
- 33 Stonework at top of the city wall
- 34 Tower or bastion remains on land adjacent to Transwipers

- 35 Holes cut into city wall to test the make-up of the wall
- 36 West side hole cut into city wall
- 37 East side hole cut into city wall
- 38 Foundations of octagonal cattle market counting house
- 39 1920s aerial photograph showing cattle market and the counting house
- 40 1960s photograph showing cattle market and the counting house
- 41 The Butts boundary wall to the former City Council depot from the south-west
- 42 West end pier of The Butts boundary wall
- 43 Sandstone capital to pier
- 44 The Butts boundary wall rebuilt east section
- 45 Inserted opening at the east end of The Butts boundary wall
- 46 1930s/40s inserted door, box and air vent
- 47 Cast iron box to east of door
- 48 Inserted opening
- 49 Netherton Lane boundary wall from the south
- 50 Joseph Wood building on Netherton Lane
- 51 Netherton Lane boundary wall from the north
- 52 Three phases of brickwork of Netherton Lane wall
- 53 Flemish bond brickwork of Netherton Lane wall
- 54 Raising of Netherton Lane wall height
- 55 Blocked opening on wall section 2-3
- 56 Wall section 3, Netherton Lane side
- 57 Depot side of Netherton Lane wall
- 58 Wall section 3, depot side of Netherton Lane wall
- 59 Building scar from roof of demolished structure Netherton Lane
- 60 Wall section 4, blocked gateway
- 61 Hook for holding hinges of a gate
- 62 Wall section 5 of Netherton Lane wall, depot side
- 63 Foundations of range of buildings during excavation
- 64 Foundations of range of buildings and the corresponding building scars on the wall
- 65 Building scar formed by filling holes with cement
- 66 Roofline of former structure on wall section 5
- 67 Wall section 6, depot side of Netherton Lane wall
- 68 Breeze block stub-wall and scar from similar wall
- 69 Wall section 6 of Netherton Lane wall, depot side
- 70 Coomber's boundary wall from the north
- 71 Coomber's boundary wall from the south

- 72 Coomber's boundary wall brickwork and sandstone top
- 73 Tubular railing posts and spiked tops
- 74 Square post and bracket of railings
- 75 Northern pier of Coomber's boundary wall
- 76 Sandstone block
- 77 Modern bricks at top of north pier of Coomber's wall
- 78 South pier of Coomber's boundary wall
- 79 East elevation of air raid shelter
- 80 North elevation of air raid shelter
- 81 West elevation of air raid shelter
- 82 Entrance to air raid shelter on The Butts
- 83 Air vent at top of wall of air raid shelter
- 84 Air vent at base of wall of air raid shelter
- 85 Unfinished mortar on air raid shelter west elevation
- 86 Remains of demolished structure to west of air raid shelter
- 87 Chimney from demolished structure to west of air raid shelter
- 88 Low level wall constructed of engineering brick
- 89 Interior of air raid shelter
- 90 1825 drawing of Netherton House and grounds (WRO ref BA14904)
- 91 The Butts frontage of the Joseph Wood office building
- 92 Depot (west) elevation of Joseph Wood office building
- 93 Middle, two-storey range of Joseph Wood building
- 94 West elevation of single-storey range of Joseph Wood building
- 95 North elevation of single-storey range of Joseph Wood building
- 96 Example of window arches showing decorated brickwork and limestone keystone
- 97 Decorative brickwork and terracotta around front door with bolection moulded panels
- 98 Moulded terracotta string course
- 99 Moulded terracotta and brick eaves cornice
- 100 Blue brick door surround of two-storey range
- 101 Blue brick window arch on two-storey range
- 102 Plinth of two-storey range
- 103 Door way of single-storey range showing blue brick detail
- 104 Dentilated cornice and terracotta pediment to front entrance
- 105 Ground floor, south elevation of the 'office building' fronting The Butts, showing door surround, window surround and string course
- 106 First floor, south elevation of the 'office building' fronting The Butts, showing the eaves cornice, window surrounds and string courses
- 107 Moulded plaster corncicing within the main building

- 108 Moulded plaster corncicing within the main building
- 109 Moulded plaster corncicing, Room G3
- 110 Roll moulded skirting in the building fronting The Butts
- 111 Moulded plaster corncicing within the main building
- 112 Roll moulded skirting in the building fronting The Butts
- 113 Plain fanlight above front door, Room G5
- 114 Example of bolection moulded window frame, Room G5
- 115 Dog leg staircase with quarter landing and winder
- 116 Roll beaded skirting on staircase
- 117 Curtail step with foliate carved central post and tapered column balusters
- 118 Open string with decorated scroll type brackets
- 119 Example of plaster moulded cornice on staircase
- 120 Looking up to ceiling showing surviving cornice, Room F3 cupboard
- 121 Cornice and picture rail, Room F1
- 122 Unusual feature – example of ventilator with hand shaped handle
- 123 Example of roll beaded skirting, Room F1
- 124 Cornice and picture rail in building fronting The Butts
- 125 Staircase window, Room F3
- 126 Looking up to ceiling cornice and picture rail, Room F4a
- 127 Surviving bolection moulded door surround, Room F4a
- 128 Example of surviving bolection panelled door, Room F4a
- 129 Roll beaded skirting on staircase, Room F3
- 130 Ovolo moulded wood creating panelled ceiling, above later suspended ceiling, Room F10
- 131 Slider quadrant window stay
- 132 Curved turnbuckle window catch
- 133 Slider Quadrant bar and curved turnbuckle window catch
- 134 Spiral turnbuckle window catches
- 135 Spiral window stay and handle
- 136 Gently curved flat top stair handrail
- 137 Example of moulded plaster cornice in two-storey range, Room G6
- 138 Example of blue engineering brick window details and iron casement
- 139 Welsh Midland Railway Plan of 1845 (WRO ref b496.5 BA9360/Cab25/5/4)
- 140 Building break between middle and rear sections
- 141 Building break between first floors of frontage and middle sections
- 142 Clear building break between frontage and side elevations
- 143 New wall and double-doored opening of 1970s date
- 144 1970s toilet area

- 145 1970s drying room
- 146 Former clerks work area then 1980s interview room
- 147 1980s corridor alongside 1870s staircase
- 148 1980s access to middle section first floor
- 149 1980s kitchen on middle section first floor
- 150 1980s passage space
- 151 1980s bathroom area middle section first floor
- 152 Office space of 1980s usage of middle section first floor
- 153 1980s bathroom created on frontage section first floor
- 154 Sawpit from the north, showing the full length
- 155 Sawpit showing the timber floor
- 156 Series of five postholes from the south
- 157 Posthole showing the lias post pad
- 158 Section through posthole showing post pipe
- 159 Section through posthole showing post pipe
- 160 Sawmill building from the north
- 161 Sawmill building from the south, west elevation on Croft Walk
- 162 Sawmill building from the south-east, east elevation from the depot
- 163 North elevation of sawmill building from north
- 164 South elevation of sawmill building from south
- 165 Building break with earlier section to right, note change in eaves treatment
- 166 Buttresses formed from remains of structures built against the elevation
- 167 1920s aerial photograph with Joseph Wood site on left middle, note tall chimney
- 168 Interior ground floor of sawmill building from the north
- 169 Interior ground floor of sawmill building from the east
- 170 Interior ground floor of sawmill building showing windows of west elevation 171
- Vaulted ceiling of ground floor of sawmill building
- 172 Vaulted ceiling of ground floor of sawmill building
- 173 Windows cut across by ceiling vault
- 174 Staircase added into building and cut across windows
- 175 One of the small office spaces on sawmill first floor
- 176 Corridor on sawmill building first floor
- 177 Small office space on sawmill building first floor
- 178 Prop shaft structure from the east
- 179 Engine and boiler house attached to sawmill building
- 180 Eastern part of sawmill range from the east
- 181 Eastern part of sawmill range from the west

- 182 Eastern part of sawmill range showing hearth in centre right and nag stable to right
- 183 Foundation of staircase within archway of sawmill range
- 184 Western part of sawmill range
- 185 Western part of sawmill range and lean-to sheds
- 186 1970s photograph of almshouses (right)
- 187 1970s photograph of almshouses
- 188 1970s photograph of almshouses
- 189 Almshouses foundations, from the west
- 190 Almshouses yard, from the east
- 191 Almshouses cess pit, from the south
- 192 Railway viaduct running across the site, west to the left
- 193 Railway viaduct running across the site, west to the left
- 194 Viaduct arches 25 to 33 during excavation
- 195 Viaduct arch showing stepped cornice and parapet
- 196 Viaduct arch hoodmould and stop of brick
- 197 Viaduct arches showing arches of The Butts siding
- 198 Arch of The Butts siding
- 199 Brickwork of The Butts siding arch
- 200 Vitrified bricks of The Butts siding wall
- 201 1920s aerial photograph showing railway viaduct and siding
- 202 Blocking of The Butts siding arch

List of figures:

- 1 Location of the site
- 2 Location of buildings recorded
- 3 Ground and cellar plans of Transwipers building
- 4 The Butts and Rack Alley elevations of Transwipers building
- 5 City Wall from the north
- 6 26 The Butts boundary wall and air raid shelter
- 7 Depot and Netherton Lane elevations of boundary wall and single storey part of Joseph Wood building
- 8 Croft Walk boundary wall to Coombers
- 9 Ground and first floor plans of Joseph Wood building
- 10 South and north elevations of Joseph Wood building
- 11 West and east elevations of front and central part of Joseph Wood building
- 12 West elevations of Joseph Wood building showing different brick colours
- 13 Sawmill plans
- 14 Elevations of Sawmill building
- 15 Location of below ground features discussed
- 16 1771 Worcester City Corporation Plan (WRO ref 496.5 BA9360/C1/1)
- 17 1784 Worcester City Corporation Plan (WRO ref b496.5 BA9360/C1/2)
- 18 1824 Worcester City Corporation Plan (WRO ref b496.5 BA9350/C1/3)
- 19 1846 Worcester City Corporation Plan (WRO ref 496.5 BA9360/Cab14/5)
- 20 Excerpts from 1846 Plan from Netherton House Estate Lease (WRO ref 496.5 BA9360/Cab14/5)
- 21 1854 Plan from leasehold assignment (WRO ref 496.5 BA9360/Cab14/15/A)
- 22 Detail from 1854 Plan from leasehold assignment (WRO ref 496.5 BA9360/Cab14/15/A)
- 23 Advert from Billing's Directory 1855
- 24 Advert from Post Office Directory 1860
- 25 1857 Plan from property enfranchisement (WRO ref 496.5 BA9360/Cab14/15/A)
- 26 Detail of 1857 Plan from property enfranchisement (WRO ref 496.5 BA9360/Cab14/15/A)
- 27 Advert from Littlebury's Directory 1869
- 28 1871 Plan of Cattle Market area (WRO ref r496.5 BA9360/Cab17/39)
- 29 1877 Worcester City building application (WRO ref b496.5 BA10827/9)
- 30 Detail of 1877 Worcester City building application (WRO ref b496.5 BA10827/9)
- 31 Detail of 1877 Worcester City building application (WRO ref b496.5 BA10827/9)
- 32 1878 conveyance plan (WRO ref 496.5 BA9360/Cab 14/15/A)
- 33 Detail of 1878 conveyance plan (WRO ref 496.5 BA9360/Cab 14/15/A)
- 34 Advert from Littlebury's Directory 1879

- 35 Advert from Littlebury's Directory 1879
- 36 Extract from 1886 Ordnance Survey map
- 37 Extract from 1904 Ordnance Survey map
- 38 1905 Extract from mortgage (WRO ref r496.5 BA9360/Cab14/15/A)
- 39 Joseph Wood and Sons (Worcester) Ltd seal from 1905 mortgage (WRO ref r496.5 BA9360/Cab14/15/)
- 40 Advert from Littlebury's Directory 1905
- 41 Advert from Littlebury's Directory 1908
- 42 Extract from 1928 Ordnance Survey map
- 43 Extract from 1940 Ordnance Survey map
- 44 Advert from Worcester Directory 1955-6
- 45 Adverts in 1960 Telephone Directory
- 46 1970 Ordnance Survey map
- 47 1974 Planning application for almshouses
- 48 1976 Planning application for rear part of Joseph Wood building range
- 49 1976 Planning application for near part of Joseph Wood building range
- 50 1981 Planning application for front and middle part of Joseph Wood building range
- 51 1995 Planning application site layout
- 52 1996 Planning application for the sawmill building

Summary

Historic building recording was undertaken at The Butts, Worcester (NGR SO 846 550). It was undertaken as part of the construction of The Hive which involved the demolition of a number of historic buildings and the restoration of the Joseph Wood building as well as works to the city wall and railway viaduct.

Original records relating to the Joseph Wood and Sons builders yard and the Transwipers site were studied at Worcestershire Record Office along with historic maps and trade directories. Online census records were accessed along with digitised historic mapping, aerial photographs and other online sources.

The building recording project consisted of the recording of structures on the former Worcester City Council depot site, boundary walls to the site and on Croft Walk, the former Transwipers building and the city wall behind it, as well as other structures such as the historic boundary wall between Croft Walk and Coomber Electronic Equipment Ltd, and the railway viaduct. This report also incorporates excavated evidence for buildings and activities related to the period of the standing buildings, recorded as part of the archaeological project reported elsewhere. The analysis of the structures and historic documents revealed that, with the exception of the city wall, the site was first developed in the early 19th century with a house and turners shop being built on land adjacent to the city wall. Portions of these buildings survived through the development of the site by Carmichael's, fire engine makers, until the building was demolished in 2008. The rest of the site was historically part of the grounds of the early 18th century Netherton House. It had become a timber yard by the 1840s when the Netherton House estate was leased. Only one of the buildings of this period survived to be recorded, a portion of the sawmill on the west boundary of the site. The east boundary wall with Netherton Lane was also proved to date to this early development of the site and formed the east elevation of a range of buildings extended along the boundary. By the 1850s the firm of Joseph Wood and Son had taken on the timber yard and started developing and expanding the business and the buildings. They constructed a number of new buildings, including a large range running east to west across the site. The foundations for this structure were revealed during the excavation. The sawmill was extended and the range of buildings on the east elevation were rebuilt and also extended. The timber yard eventually covered most of the land between The Butts and the railway viaduct and Croft Walk and Netherton Lane. The remains of a wooden floored, brick sawpit, a post-built shed and engine house were recorded during the excavation. The sawpit was shown to belong to the early phase of the timber yard with the shed and engine house belonging to Joseph Wood's occupation of the site. Joseph Wood and Son left The Butts in the 1940s and the City Corporation took over the site. The City Corporation left the standing buildings relatively intact, at least until the 1970s, with only minor alterations appearing to have been undertaken on the building. Nash's Almshouses, a terrace of nine cottages, were constructed in the 1830s. Their foundations were uncovered during the excavation showing that they had consisted of one room on each of the ground and first floors. The almshouses and a number of Joseph Wood's buildings were demolished in the 1970s and the site was sold by the City Council in 2008 for the construction of the new library building, The Hive.

1 Background

1.1 Reasons for the project

From July 2008 to October 2009, the Field Section of Worcestershire Historic Environment and Archaeology Service (WHEAS; now Worcestershire Archive and Archaeology Service) carried out archaeological excavation, evaluation, watching brief and building recording at land off The Butts, Worcester, prior to and during redevelopment of the area as the Worcester Library and History Centre (NGR: SO 8463 5507). This was officially named as 'The Hive' in 2011 and was opened by Her Majesty the Queen on 11 July 2012.

The development was first proposed in 2004, when Worcestershire County Council and the University of Worcester began working together to create the idea of a joint public and university library, the first of its kind. In addition to the library, the building was designed to include a history and archives centre, as well as a council customer services area, and with support from Worcester City Council and Advantage West Midlands the opportunity of creating a combined facility for the whole community was realised.

1.2 Project design and the planning process

A desk-based assessment was prepared in 2005 (Miller *et al* 2005), and was revised at various times to incorporate new information as the project progressed. This anticipated numerous archaeological deposits and structures of varying date within the site area. A number of the buildings were shown to date to the 19th century including some that could be related to the earliest development of the site in the early 19th century. The final revision of the desk-based assessment was in 2008 (Miller *et al* 2008). Outline planning permission and conservation area consent was obtained on 12 October 2006 (application numbers P06D0271 and L06D044). Final planning permission and conservation area consent was obtained on 23 July 2009 (application numbers P09D0168–9 and L09D0032).

The planning permissions contained conditions relating to archaeology. These conditions included the following:

- A written scheme of investigation (archaeological mitigation strategy/programme of archaeological work).
- Provision for the preservation of significant remains or their recording.
- Provision for substantial public involvement during excavation.
- Recording of historic buildings.
- Monitoring of burial environments.
- Arrangements for dealing with unexpected discoveries.
- Arrangements for publication and archiving.
- A requirement to agree design of groundworks and foundations.

A written scheme of investigation (WSI) was prepared at the request of the Joint Project Team, co-ordinated by Strategic Projects, Worcestershire County Council (HEAS 2008a). Further WSIs were prepared to cover the recording of the Transwipers building and City Wall (HEAS 2008b) and the Joseph Wood building (HEAS 2008c). The WSIs were developed to address the conditions of the outline planning permission, and to conform to briefs prepared by Worcester City Council (WCMAS 2008a, 2008b and 2008c). A WSI for a programme of archaeological excavation was also prepared (HEAS 2008d). A major component of this project design was the implementation of a ten week programme of public engagement, comprising on-site training in a community excavation, daily site tours and educational activities, including building recording as an element of an open day. The recording of the historic buildings was to be undertaken just prior to demolition which was to clear the site in preparation for the archaeological excavation. Following the recording, analysis of the

buildings was undertaken in association with relevant research to allow phasing and function of the structures to be identified.

The archaeological fieldwork recorded extensive and significant structural remains and associated deposits relating to historic buildings. All the historic buildings and boundary walls on the site were fully recorded prior to demolition or refurbishment. Where deposits were related directly to the recording of historic buildings they are covered in detail in this report focused solely on the building recording, but are summarised in the archaeological report (Bradley *et al* 2014). Two very small interventions were also carried out through the brick facing of the extant city wall aiming to establish the nature of the original city defences. The section of wall within the site limits is scheduled as an ancient monument under the *Ancient Monuments and Archaeological Areas Act 1979* (NHLE 2014, 1003778); it is also a Grade II Listed Building (NHLE 2014, 1390186), although the scheduling takes precedence. It was first listed in 1971 (amended in 2001) and is described as follows: 'City wall. C14. Dressed red sandstone. Almost entirely refaced in C18-19 brick, leaving some chamfered plinth stones exposed' (NHLE 2014, 1390186). Scheduled Monument Consent was given for this part of the project.

The building recording project conformed to the *Standard and guidance for the archaeological investigation and recording of standing buildings or structures* (IfA 2008) and the English Heritage Guidelines *Understanding historic buildings: a guide to good recording practice* (EH 2006).

2 Aims and objectives

2.1 Aims

Following the fieldwork stage and initial assessment of results, during both of which it was apparent that the archaeological results were more extensive and wide-ranging than had been originally anticipated, an updated project design was issued (HEAS 2011). Revised aims for the project were therefore identified, based on the new understanding of the archaeological potential for the site. Those which were relevant to this report were:

- To produce a detailed investigation into 19th century buildings and land use in The Butts area of Worcester.

2.2 Objectives

The primary objectives for the fieldwork were based on research priorities identified by the Curator, augmented to include additional priorities highlighted as the result of the revised desk-based assessment (Miller *et al* 2008). These objectives were detailed in the WSIs (HEAS 2008a-c) and were largely drawn from the published research framework for the City of Worcester (WCC 2007). In that document a wide range of archaeological research priorities are identified, both for broad periods and for cross-period themes.

It was evident at the outset of the work that the project would contribute towards a number of the published Research Priorities. In the event, the objectives for the project were slightly revised as a result of fieldwork and the assessment stage of work (HEAS 2011), highlighting the following overall research priorities for the project (RP – Research Priority; ARP – Additional Research Priority) which are relevant to the subject of this report:

- Northern medieval defensive sequence (RP 5.23)
- Industrial and land-use patterns associated with the canal and railway (RP 6.20)
- The development of post-medieval industry in Worcester (**ARP 1**)

3 Methods

3.1 Personnel

The project was undertaken by Shona Robson-Glyde (BA, Post-Grad Dip Arch); who joined Worcestershire Archaeology in 1998 and has been practicing archaeology since 1996. The project manager responsible for the quality of the project was Simon Woodiwiss (BA, Cert Arch, MIfA). Illustrations were prepared by Shona Robson-Glyde and editing of the draft text was completed by Peter Lovett, Richard Bradley and Tim Cornah.

3.2 Documentary research

A desk-based assessment of the site has already been produced in which discussion of the relevant archaeological sites in the area has been included (Miller *et al* 2008). An historical assessment and architectural appraisal of the buildings was also produced by Nick Joyce Architects (Joyce 2006). A research project on the Worcester City Corporation archives held at the Worcestershire Record Office was carried out, termed the Worcester Archives Source Project (WASP), the scope of which covered records relating to the area of the site. In addition, a search of Record Office sources, listed in Appendix 2, was also undertaken. The sources listed in the bibliography and the following sources were also consulted.

3.3 List of sources consulted

Cartographic sources

Numerous maps and plans were consulted and are presented as figures at the end of the report, with archival references (if applicable) listed in Appendix 2 and Appendix 3. However, for ease of reference, they are listed here in date order.

- 1741 Map of Worcester by John Doharty
- 1771 Worcester Corporation Plan
- 1784 Worcester Corporation Plan
- 1824 Worcester Corporation Plan Book
- 1845 Welsh Midland Railway Plan
- 1846 Netherton House Estate lease plan
- 1854 Plan from leasehold assignment showing summerhouse
- 1857 Plan from property enfranchisement
- 1871 Plan of Cattlemarket area
- 1877 Plan No 525 – New Offices for Messrs Wood and Sons
- 1878 Conveyance plan
- 1887 1:2500 Ordnance Survey 1st edition
- 1904 1:2500 Ordnance Survey 2nd Edition
- 1928 1:2500 Ordnance Survey 3rd Edition
- 1940 1:2500 Ordnance Survey 4th Edition
- 1970 1:1250 National Grid map
- May 1974 Planning application 'Proposals for Nash's Almshouses'
- April 1976 Planning application 'The Butts Depot Survey of Existing Storage Space'
- Aug 1976 Planning application 'New Messroom Facilities at the Butts Depot'

- Nov 1981 Planning application 'Alterations to 26A & B The Butts, proposed office accommodation'
- July 1995 Planning application 'The Butts Depot Site Layout'
- March 1996 Planning application 'The Butts Depot Office Accommodation Plans and Elevations Existing (Stores Building)'

Aerial photographs

- Britain from Above images (© English Heritage).
 - <http://www.britainfromabove.org.uk/image/epw001301>.
 - <http://www.britainfromabove.org.uk/image/epw001304>.
 - <http://www.britainfromabove.org.uk/image/epw005383>.
 - <http://www.britainfromabove.org.uk/image/epw005384>.
 - <http://www.britainfromabove.org.uk/image/eaw023845>.
 - <http://www.britainfromabove.org.uk/image/eaw023848>.

Documentary sources

- Published and grey literature sources are listed in the bibliography.
- Trade directories are listed in Appendix 1.
- Worcestershire Archive and Archaeology Service (WRO ref).
A large number of original documents were used for reference, they have been listed in Appendix 2.
- Archive drawings from Worcester City Council have also been referenced and are listed in Appendix 3.

3.4 Fieldwork strategy

Detailed specifications had been prepared by the Service (HEAS 2008a, HEAS 2008b and HEAS 2008c). The structures recorded, analysed and discussed in this report consist of the following:

- Transwipers (19 The Butts).
- City wall at 19 The Butts.
- Boundary wall to the front of 26 The Butts.
- Air raid shelter on the front boundary wall of 26 The Butts.
- Boundary wall to Netherton Lane, 26 The Butts.
- Boundary wall and railings on Croft Walk.
- Sawmill, 26 The Butts (depot building 4).
- Joseph Wood building, 26 The Butts (depot buildings 1–3).
- Railway viaduct arches, 26 The Butts.
- Below ground remains of associated buildings discovered during the excavations.

Fieldwork was undertaken between 10th June 2008 and 24th August 2009.

Building recording consisted of a photographic survey of the interior and exterior of the buildings, analysis of their development, annotation of existing survey drawings, measured survey and reflectorless EDM (electronic distance measure) survey. All photographs were taken with photographic scales visible in each shot. The photographic survey was carried out with a Sony a350 digital SLR camera. All photographs were recorded on pro-forma Photographic Record Sheets. Annotation of existing ground plans and elevations, and completion of pro-forma Building Record and Building Phase sheets, complemented the photographic record along with measured drawings completed to scale on drafting film.

Recording of the city wall consisted of a photographic survey of the face of the structure, from which a photomosaic was created. A reflectorless EDM was used to produce an outline scale

drawing onto which hand measured detail and detail sourced from the photomosaic was added. The photographic survey was carried out with a Sony a350 digital SLR camera.

Recording of the Transwipers building, former depot boundary walls, Croft Walk wall and railings and the air raid shelter conformed to the specification for a level 3 survey as defined by English Heritage (2006). This required the following elements of survey:

Survey and drawings

- Plans of all main floors and elevations as existing.

Photography

- Overall appearance of rooms and circulation areas.
- Detailed coverage of the building's external appearance.
- Building contents, ephemera, machinery or plant, or evidence of their former existence.
- Dates, inscriptions, signage, maker's plates or graffiti relevant to an understanding of the building, its fixtures or machinery.
- Any detail, structural or decorative, relevant to the building's design, development and use, which does not show on general photographs.

Recording of city wall, the Joseph Wood building and the Sawmill conformed to the specification for a level 4 survey as defined by English Heritage (2006). This required the following elements of survey:

Survey and drawings

- Plans of all main floors and elevations as existing.

Photography

- General view or views of the buildings.
- Detailed coverage of the building's external appearance.
- Overall appearance of rooms and circulation areas.
- Building contents, ephemera, machinery or plant, or evidence of their former existence.
- Dates, inscriptions, signage, maker's plates or graffiti relevant to an understanding of the building, its fixtures or machinery.
- Any details, structural or decorative, relevant to the buildings' design, development and use, which do not show on general photographs.

A photographic record was produced of the railway viaduct arches. This conformed to the requirements for a photographic survey as defined by English Heritage (2006).

3.5 Building analysis

Analysis of the buildings was based on the study of the photographic record, building recording forms, annotated drawings and measured drawings. It was also informed by the documentary sources listed above. This allowed plans to be drawn up showing the structural development of the buildings.

There are a number of event references for the multiple elements of this project that have been provided by the Worcester City HER. These comprise: the overarching archaeological intervention (WCM 101475); recording of the city wall at 19 The Butts (WCM 101657); watching brief observation of building demolitions (WCM 101658); and the building survey of the Joseph Wood building (WCM 101656).

3.6 Statement of confidence in the methods and results

The project was required to produce a record of the standing buildings on the site of the former City Council depot, Croft Walk, Netherton Lane and Transwipers. A full record of these buildings

was completed, including drawings and photographs, and therefore the results of the project have achieved the aims required by the briefs. The below ground structures associated with the recorded standing buildings were recorded in different ways. During the community excavation, one part of the sawmill range of buildings was uncovered which was excavated by hand and recorded in great detail as were a number of features, such as the sawpit, during the excavation. However, the foundations for the rest of the sawmill range and almshouses were excavated by machine, photographed and located using EDM and then removed by machine. The brief for the excavation did not require that these below ground structures of modern buildings be recorded to the same detail as those still standing above ground. This meant that detailed phasing and analysis of these structures was not always possible.

4 Context

The area that covered the buildings to be recorded was situated on both sides of The Butts (Fig 1) and consisted of the former City Council Depot on the north side and the former Transwipers site on the south side. These two plots of land were both historically part of the Netherton House Estate. In the late 18th century the plots were both open land used as pasture or gardens. The first constructions took place in the early 19th century with a summerhouse on the north side of The Butts, adjacent to Croft Walk, and a turner's house and shop on the south side. By the 1840s, the land on the north side of The Butts had changed into a timber yard with ranges of buildings across the site and the turner's shop and house had expanded to other structures. The cattle market had also been built by this time at the west end of The Butts. From the 1850s, Joseph Wood's builders firm had taken over the timber yard and expanded the buildings on the site. From the 1860s a carriage building company had taken over the turner's plot and from the 1870s Wilson, Carmichael and Fleming were on the site. This company eventually became Amdac-Carmichael, fire engine makers famous for their airport fire-tenders, although they had left The Butts by the 1980s. Joseph Wood's builders continued expanding their business and buildings on The Butts until they left in the 1940s, the site being taken over by the City Council. The cattle market carried on until the 1990s when it moved out of the City centre.

5 The buildings

The buildings recorded and discussed below consisted of all of the structures surviving on the former City Council Depot and its boundary walls, the Transwipers buildings and section of the city wall and a section of wall on railings on Croft Walk (Fig 2). The recording of these buildings produced a large number of drawings and photographs. Relevant drawings of the buildings have been reproduced as Figures 3–14, Figure 15 shows associated below ground remains that were uncovered during the excavation (Bradley *et al* 2014). Historical documents have been reproduced as Figures 16–52. These are numbered in date order. A number of relevant photographs of the buildings and their details have been reproduced as Plates 1–202.

5.1 Transwipers site

5.1.1 Description

The Transwipers building (Fig 3 and 4, Plate 1) consisted of a large warehouse type structure. Its external walls were constructed partly of brick and partly of corrugated metal sheeting. The north elevation, partly of brick and steel sheeting had two large openings with roller shutters, a glazed opening and two smaller openings with wooden doors (Plates 1 and 2). The east elevation was completely encased in metal sheeting with the exception of a small section of modern brickwork (Plate 3). The west elevation was visible from Rack Alley and partly obscured by its close proximity to the former Images nightclub to the west. It was formed of brick on the lower part of the wall with the upper part of steel sheeting (Plate 4). The south elevation of the building was not externally visible. The interior of the structure was open with smaller spaces around the exterior (Plate 5). The floor levels varied within the structure and a cellar was accessed from The Butts. With the

exception of the external brick walls, the structure was formed of steel stanchions (Plate 6) with boarded walls between them and the roof was supported by steel trusses (Plate 7) that were keyed into the city wall (Plate 8).

5.1.2 Historical information

The site of Transwipers is recorded on the two early Corporation Plans of Worcester drawn up in 1771 (WRO ref 496.5 BA9630/C1/1; Fig 16) and 1784 (WRO ref 496.5 BA9630/C1/2; Fig 17). On both of these plans the site is recorded as plot number 7, a garden in the occupation of John Edwards. The 1824 Corporation Plan (WRO ref b496.5 BA9630/C1/3; Fig 18) shows the site as plot 14 and is described as a house and garden measuring only '16 perches'. Its proprietors are recorded as the 'Reverend Wheeler' and 'Mr Matthews'. A plan produced in 1846 (WRO ref 899:749 BA8782/63; Figs 19 and 20) for the lease of the Netherton House estate shows the site as plot 7 a 'coal and slate yard', plot 8 a 'Gig, Summerhouse and Garden', and plot 9 a 'Stable, Turner's Shop and Garden'. Pigot's 1828–9 trade directory shows that Mr Richard Matthews was a 'turner' on The Butts (Pigot 1828–9, 890). Presumably this is the same Mr Matthews that was recorded on the 1824 Corporation Plan. The Matthews family carried on as turners on The Butts with Charles Matthews shown in the 1835 directory (Pigot 1835, 676) and in every directory until the 1840–1 directory which shows R and C Matthews together (Bentley 1840–1, 192). The 1842 directory only shows Richard Matthews (Pigot 1842, 57). The 1851 (Lascelles 1851, 110) and 1855 (Billing 1855, 49) directories clarify the occupation of Richard Matthews by listing him as a wood turner. The final directory showing a Matthews on The Butts is Cassey's 1860 directory which records C Matthews as a wood turner (Cassey 1860, 369). In the same year the Post Office Directory records Hallam and Palmer, carriage builders, on The Butts (Kelly 1860, 1272). They even have an advert within the directory (Fig 24; Kelly 1860, ads 140). From 1870, the trade directories record them as Hallam and Co, coach builders on The Butts (Kelly 1870, 1396).

In 1874, a new partnership of William Wilson, a carriage painter, Thomas Carmichael, a carriage body maker, and Hugh Fleming, a carriage smith, was created (WRO 705:477 BA1420/48 (ii)). The articles of partnership were drawn up on 20th June and on the same date an agreement for the sale and purchase of stock-in-trade and business from Mr Charles Hallam to Messrs Wilson, Carmichael and Fleming was written (WRO 705:477 BA1420/48 (ii)). Also an indenture of 9th July 1874 shows that Charles Hallam leased his land on The Butts to the new partnership. It is described in the indenture as;

...all those several workshops with the yard and outbuildings thereto adjoining and belonging situate and being in the said City of Worcester now and for many years past in the occupation of the said lessor [Charles Hallam] bounded on the north by the street called The Butts on the east by property belonging to Messieurs Joseph Wood and Sons on the south by houses by houses belonging to the lessor and on the east by a passage called Rack Alley (WRO 705:477 BA1420/48 (ii)).

The new partnership was included in the trade directories for 1876 and 1879 with an advert being included in the 1879 directory (Fig 35; Littlebury 1879, 152) which described the company as 'Wilson, Carmichael and Fleming (late Hallam and Co) Carriage Manufacturers'. In November 1879, the partnership between William Wilson and Carmichael and Fleming was dissolved, with Wilson said to be 'anxious to clear out' (WRO 705:477 BA1420/48 (ii)). He received £590 for his share of the business. The business continued on the same site on The Butts. It was called Carmichael and Fleming and is included in the 1884 trade directory (Kelly 1884, 1231) as coach manufacturers. March 1887 saw the dissolution of the partnership between Thomas Carmichael and Hugh Fleming with Fleming being paid £313 for his share (WRO 705:477 BA1420/48 (ii)).

The coach manufacturing business of Carmichael and Sons continued on The Butts for the rest of the 19th century as can be seen by its inclusion in a number of trade directories variously described as carriage or coach builders or manufacturers. This is shown in the 1900 directory where they are listed as Carmichael and Sons, coach manufacturers (Kelly 1900, 282). The trade directories show no change in their listings for Carmichael and Sons in the early 20th century but they do show

Thomas Carmichael being resident at Netherton House on The Butts from at least 1905 (Littlebury 1905, 142).

With the expansion of the motor car industry, the description of Carmichael and Sons' trade changes to carriage and motor builders (Littlebury 1915, 147), or coach builders and motor car body builders (Kelly 1930, 281 and 362). The company website for Amdac-Carmichael, as Carmichael and Sons are now known, records that they were manufacturing specialist bodywork for the agricultural industry during the early years of the 20th century (Amdac 2014). It also states that they were seconded during World War II to make fire pumps for the war effort (*ibid*). It was this experience that made them add the manufacture of fire fighting vehicles to their product range in the late 1940s. Whilst this is not shown in the trade directories of that time, it is detailed in a book by Roger C Mardon (2001, 45) that Carmichaels were manufacturing bodies to fit onto existing motor chassis. The company apparently produced their first fire fighting vehicle in 1947 for Worcester Fire Brigade and exported the first trucks, to New Zealand, in 1952 (Amdac 2014). The 1955–6 Worcester Directory is the first instance that we see Carmichaels, by then a limited company, detailed as fire appliance manufacturers (County 1955–6, 83). The full entry reads 'Carmichael and Sons (Worcester) Ltd: motor body builders, fire appliance manufacturers, motor engineers, agents and distributors; The Butts'. The same directory had a full page advert on the map at the rear of the book (Fig 44; County 1955–6, after 588). The 1960 telephone book shows that the company was expanding and then had premises in The Butts and Clerkenleap (GPO 1960, 4030). They even had adverts at the top and bottom of the page in the telephone book (Fig DD). The 1962 telephone book records that the company had again expanded, with premises in The Butts, Clerkenleap and Gregory's Mill Street (GPO 1962, 4026). It is around this time that the company manufactured their 'first airfield fire fighting vehicle' (Amdac 2014). The 1963 telephone book shows that the company had given up Clerkenleap with premises only on The Butts and at Gregory's Mill Street (GPO 1963, 4026). This entry is repeated in phone books and Yellow Pages through the rest of the 1960s and 1970s until 1978 when they are detailed as 'Carmichael Fire and Bulk Ltd' with premises only at Gregory's Mill Street (GPO 1978, 45). The company still exists today as Amdac-Carmichael and is renowned as manufacturers of fire fighting vehicles including those for airfields. The next company known to use the building was Transwipers and they appear in telephone books at 19 The Butts from around 2000.

5.1.3 Building recording

As discussed above, the late 18th century plans (Figure 16 and 17) of the Transwipers area show that the land was being used for gardens at this time with Rack Alley also very obvious. Rack Alley is also marked on the first of the maps that shows buildings on the Transwipers site, the 1824 Corporation Plan (Fig 18). There was no surviving evidence of fabric of this date on the site.

Small parts of the structure could be dated to the 19th century, in particular that of the cellar and the chimney (Figs 3 and 4). The bricks of these two parts of the building measured 9½x4¼x2¾" dating them to the early to mid-19th century. The cellar was accessed from an opening on The Butts (Plate 9; Figs 3 and 4). This opening led to a small corridor and onto a single flight of steps down into the cellar (Plate 10). The cellar consisted of three rooms; the large room contained the base of the chimneystack (Plate 11) which still survived above ground (Plates 4 and 12). There was an adjoining smaller room that may have been a coal cellar and a room that was not accessible (Fig 3). The large room also contained a large cast iron boiler (Plates 13 and 14). The boiler was marked with 'Beeston Robin Hood Major' (Plate 15) and dated to the early part of the 20th century. It was made by the Beeston Boiler Company and was one of their most popular boilers; it went through a number of variants from the late 19th century to the mid-20th century.

The boiler was attached to a number of cast iron pipes, flues and an automatic stoking system called the 'Robot Stoker' (Plate 16). It was manufactured by the Riley Stoker Co Ltd which was a company started in 1911 by R Sanford Riley in Worcester, Massachusetts. An advert of 1947 shows one of the Riley 'Robot Stokers' (Plate 17) that may be the same as the one seen in the cellar. The 'Robot Stoker' was located in close proximity (Plate 18) to the adjoining coal cellar (Plate 19), with a hatch between the two rooms (Plate 20) providing access to fill the 'Robot

Stoker'. The coal cellar had a chute running almost the width of the room on the street side (Plate 19, Fig 3).

There was one other section of 19th century fabric within the building. This was a section of wall on The Butts frontage (Plate 21; Fig 3) that had been partly altered with the insertion of a long rectangular window. The east elevation of the Transwipers building showed how the 19th century section of brick wall had been truncated and incorporated into the later structure (Plate 22).

The 19th century fabric on the Transwipers site can be seen on the 1st edition Ordnance Survey of 1886 (Fig 36). Rack Alley is clearly visible and the cellar and chimney stack section of the building is shown adjacent to the alley. The wall on The Butts frontage can be seen at the eastern part of the plot alongside an opening allowing access into a yard.

The early 20th century saw a new structure built towards the back of the Transwipers plot. The 1928 map (Fig 42) shows that an open fronted structure was built against the city wall. Some of the steel stanchions from this structure still existed on the site (Fig 3) and were located close to the city wall (Plate 6). These early stanchions were marked 'Earl of Dudley Steel' (Plate 23) and were manufactured by the Earl of Dudley's Round Oak Iron and Steel Works at Brierley Hill, Kingswinford. The works were founded in 1857 and started casting steel in 1894.

The 1965 and 1970 Ordnance Survey (Fig 46) show that the building had been enlarged by Carmichael's to cover the whole of the Transwipers and adjoining plot by partly encasing the older buildings within later fabric (Fig 3). This building is shown on a photograph of autumn 1976 (Plate 24) and was very similar to the building recorded. The structure had been built with steel stanchions, marked with British Steel (Plate 25), and brick. The building consisted of a large open space (Plates 5 and 26; Fig 3) that was used as a manufacturing space. There were a number of smaller rooms around this large space that were used during Carmichael's ownership. The largest of these was a room that also opened on to The Butts (Plate 27).

Carmichael's had moved from The Butts by the late 1970s. Sometime after this the building was used by a different company and they added new stud walls to the rear (Plate 28; Fig 3), masking the city wall and the earlier stanchions. New internal office spaces were created with partitions (Plate 29) and utility rooms with breezeblock walls (Plate 30). It is possible that these changes were made when Transwipers moved on to the site around 2000.

5.2 City wall

5.2.1 Description

The city wall on the Transwipers site is a listed building (as well as a Scheduled Ancient Monument). The listed building description described the wall as follows: 'City wall. C14. Dressed red sandstone. Almost entirely refaced in C18–19 brick, leaving some chamfered plinth stones exposed' (NHLE 2014, 1390186). This description seems to match the section of wall to the immediate east of Transwipers, in the car park of the adjacent building (Plate 31). The section of the city wall, hidden by the Transwipers structure, was hoped to consist of, at least in part, a medieval stone wall. Once Transwipers was demolished, however, it was revealed to be almost entirely constructed of brick (Plate 32) with just one small area of stonework existing at the top of the east part of the elevation (Plate 33).

5.2.2 Building recording

The city wall along the entire length of the site had been replaced or rebuilt in brick (Plate 33; Fig 5). The part at the west end of the site was constructed of much later bricks than the rest of the wall and may have formed part of the early 20th century structure at Transwipers—that was built from the 'Earl of Dudley' stanchions (see above). These bricks can be seen to be late, not only by their size (9 $\frac{1}{8}$ x4 $\frac{1}{4}$ x2 $\frac{7}{8}$ "") but also by their colour, fabric and because they were machine made. The bricks at the east end of the site are earlier. They are mould made and their colour, fabric and size (9x4 $\frac{3}{4}$ x3"") give a date of the late 19th century. The portion of the city wall in the adjoining car park to the east of Transwipers—contains a large amount of red sandstone although it has also been partly rebuilt in brick (Plate 31). This part of the Wall is steeply raked back and also contains a

distinct curve or change of direction that had been interpreted as indicating the site of a tower or bastion (Plate 34; Miller *et al* 2008, 12). However, evaluation on the site (Rogers *et al* 2009, 8) showed that this was not the case and the curve, or change in direction, of the wall at this point is still unexplained.

Two holes (Plate 35; Fig 5) were broken into the brickwork of the city wall in order to investigate the possibility of the medieval stone wall still surviving behind the brick structure. It was believed that the city wall had merely been refaced in brick and that on removal of the brickwork, the rubble core of the medieval wall would be visible. However, the fabric that was revealed was not the medieval wall. The western hole revealed 19th century building demolition rubble (Plate 36). The eastern hole revealed a large amount of very loose sandy matrix with large pieces of used medieval sandstone, some of which still had lime mortar adhering to the surface (Plate 37).

It was initially considered that despite the city wall consisting of brick rebuilds, it was still possible for the medieval wall to exist behind it. The late 19th century brick wall may have replaced the stone wall by being constructed away from the city wall itself. Ruinous or extant buildings then standing against or on top of the medieval wall (on the Crowngate side) were then pulled, or pushed, into the space between the brick and stone wall. The presence of the brick, tile and slate in the fill behind the western part of the wall would show that a building was demolished into the void behind the brick wall. The used medieval stonework behind the eastern section of the wall suggests that a ruinous part of the medieval wall was demolished into the void.

The 19th century brick wall was raked back to provide a stronger support to the soil and backfill it was holding back. This raked surface joined up with still surviving medieval stone work at the top of the east end of the wall (Plate 33). A photograph of the wall taken in 1926 showing more of this stone work, and the buildings still surviving to the south of wall, is held by the Worcester City HER (WCM 96120). The stonework appears to date to the mid-16th century and is the same as repairs that have been recorded on the Wall in City Walls Road. It is possible that the Wall on the Butts was rebuilt or refaced with stone from Blackfriars following the Dissolution, when the church became a quarry for building material (Hughes 1980, 272). This repair is different to that of the original stone wall. When first built the city wall was faced with large well-coursed, ashlar of red and green sandstone. The later medieval repairs of the Wall consisted of square or rectangular re-used sandstone ashlar that were not coursed and merely fitted together to fill holes and make up the height of the wall.

5.3 Cattlemarket counting house

Prior to the 1830s, Worcester's stock market had been held in the city centre at All Hallows and then Angel Place. In 1836, a plot of land at the river end of The Butts was taken for use of as a cattle market and it is shown as such on the 1845 railway plan (WRO ref b496.5 BA9360/Cab25/5/4; Plate 136). Prior to the building of the cattle market, at least part of the land had been pasture and a timber yard. The 1784 City Corporation Plan (WRO ref b496.5 BA9360/C1/2; Fig 17) shows the land as pasture within the grounds of Netherton House. The 1824 Corporation Plan (WRO ref b496.5 BA9360/C1/3; Fig 18) is more accurate and describes the same plot of land as a 'timber yard' in the ownership and occupation of Mr Abraham Edwards.

The plot of land marked out as the cattle market on the 1845 railway plan (Plate 136; WRO ref b496.5 BA9360/Cab25/5/4) is much larger than those shown on the 18th century plans. It also shows a building in the centre of the cattle market which appears to be an unusual shape as it almost has round corners. An 1871 plan of the cattle market (WRO red r496.5 BA9360/Cab17/39; Fig 28) shows the structure was actually octagonal in shape and is marked as a 'Business House'.

Excavation over the site of the building (Fig 15) revealed part of the footprint of a brick building (CG 1034) that was octagonal in shape (Plate 38). The bricks from the structure were orange red in colour and measured $9\frac{1}{2} \times 4\frac{1}{2} \times 2\frac{3}{4}$ ". The wall was 0.6 metres (1' 11 $\frac{1}{4}$ ") wide and the length forming one side of the octagon was around 4m (13' 1 $\frac{1}{2}$ ") in length. The date of the bricks is the early to mid-19th century and matches the date of the construction of the cattle market in the 1830s.

An aerial photograph of the 1920s (Plate 39) shows that the building, which was known as the counting house in the 20th century, was surmounted by a bell or clock tower. This is shown more clearly on a photograph of 1961 (Plate 40) and can be identified as a clock tower. The counting house is shown on the historic maps of 1904 (Fig 37), 1928 (Fig 42) and 1940 (Fig 43) but is not on the map of 1970 (Fig 46) and therefore must have been demolished in the 1960s.

5.4 Boundary walls

A number of boundary walls were recorded as part of the project. They consisted of the three boundary walls surrounding the former Worcester City Council Depot; fronting on to The Butts, Netherton Lane and Croft Walk, as well as the boundary wall, with railings, between Coomber Electronic Equipment Ltd and Croft Walk.

5.4.1 26 The Butts front wall

The Butts boundary wall (Fig 6; Plate 41)-was constructed of brick and had two inserted openings and one pier (Plate 42) topped with red sandstone (Plate 43). The east end of the wall had been rebuilt. It was originally longer, as can be seen by the conveyance plan of 1878 (Fig 33) and a 1903 photograph (Joyce 2006, 11).

The majority of the wall (Fig 6) was constructed of mould made red-brown bricks measuring $9\frac{1}{4} \times 4\frac{1}{4} - \frac{1}{2} \times 2\frac{3}{4}$ " and coursed in English Bond (Brick Style 1 shown on Fig 6). This size and coursing of the brick gives the wall a date of the mid-19th century. It is possible that the wall relates to the range of buildings shown on The Butts frontage on a map of the Netherton Estate dated 1846 (Fig 19). The pier was also constructed with the same size bricks and coursed in English Bond, although it used rounded bricks for the corners and is topped with a pyramidal sandstone capping stone (Plates 42 and 43).

Above the courses of English Bond bricks were two phases of rebuilding of the wall and a phase of capping it (Brick Styles 2, 3 and 4 shown on Fig 6). The first phase (Brick Style 2) probably dates very close to the original construction as the mortar is very similar. These bricks are the same size ($9\frac{1}{4} \times 4\frac{1}{4} - \frac{1}{2} \times 2\frac{3}{4}$ ") but are coursed in a variation of Flemish Garden Wall and Flemish Stretcher Bond with three stretchers between each header and a course of stretchers between each course of Flemish Garden Wall. The second phase (Brick Style 3), above this, again uses the same bricks and is coursed in Flemish Garden Wall Bond (3 or 5 stretchers between headers) but these use a harder white mortar. There is also a capping (Brick Style 4) of two courses of stretchers with a course of blue engineering bricks topped with blue brick coping stones, triangular in section (Fig 6). The coping stones and engineering brick are of late nineteenth century date, but may have been reused in the 20th century.

At the east end is a section of wall that had been recently rebuilt (Fig 6), reportedly after being hit by a lorry (Plate 44). The rebuilding was carried out using the original bricks and was coursed in English Bond and Flemish Stretcher Bond with the blue coping bricks also reused at the top.

The wall has two inserted openings at its eastern end (Plate 45; Fig 6). The first opening was a doorway (Plate 46). It was inserted in the late 1930s or early 1940s, and the wall was rebuilt using the original bricks around the opening. The opening was constructed with a segmental arched head formed of header bricks. To the immediate east of the opening, a small air vent and a cast iron box are set into the wall. The box has the maker's mark of Hardy and Padmore Limited, Worcester (Plate 47). This company, which traded from Worcester Foundry, was known for their cast iron products, from benches to fire surrounds, manhole covers and fountains. They specialised in decorative lamps and were famous for the dolphin lamps on the Thames embankment in London. They also manufactured tram and electric company junction boxes, of which this may be an example. The doorway opened into an air raid shelter of the late 1930s or early 1940s (see below).

The second of the openings was inserted in the later 20th century. This opening has double doors and a concrete lintel (Plate 48) and the wall was rebuilt using the original bricks around the opening. The doorway used to open into a structure that was probably an electricity substation but

has since been demolished. Evidence of its size can still be seen on the east wall of the air raid shelter (Fig 6).

5.4.2 26 The Butts, Netherton Lane wall

The curved Netherton Lane boundary wall (Plate 49; Fig 7) to the former City Council Depot was formed partially by the east elevation of the Joseph Wood office building and its adjoining two storey structure (Plate 50; see Section 5.5 below). This section of wall was recorded as part of the recording of the Joseph Wood building. The remaining part of the boundary wall (Plates 49 and 51) was around 48m long. 31m of the wall was recorded from the Netherton Lane side of the wall with 22 metres being recorded from the Depot side. Wooden hoarding was blocking the rest of the wall on the Netherton Lane side.

Netherton Lane elevation

Wall section 1 (Fig 7)

Section 1 of the boundary wall was around 12.5m long and formed part of the back wall of the range of buildings that were the northern part of the Joseph Wood Building (Plate 51). It was constructed with three phases of brickwork and capped with limestone coping stones (Plate 49; Fig 7). The majority of the wall section was constructed using mould-made red-orange bricks coursed in a variation of Flemish Stretcher Bond. The bricks measured $9\frac{1}{2} \times 4\frac{1}{2} \times 2\frac{3}{4}$ " (Brick Style 5 on Fig 7), which gives them a date of the early 19th century. This brickwork was the original construction fabric and it occurs along almost the whole length of the boundary wall.

Above these original courses were later bricks of a very similar fabric (Plate 52; Fig 7). They were red-brown mould-made bricks coursed in a variant of Flemish Stretcher and Garden Wall Bond. The bricks measured $9-\frac{1}{2} \times 4\frac{1}{2} \times 3$ " (Brick Style 6 on Fig 7), which gives them a date of the mid-19th century. These bricks were also mortared with a different type of mortar that contained a large amount of cement. On top of these courses were three courses of machine-made bricks, of London Brick type, coursed in Flemish Stretcher Bond (Plate 52; Fig 7). They measured $9\frac{1}{4} \times 4\frac{1}{4} \times 3$ " (Brick Style 7 on Fig 7) and date to the early 20th century.

Wall section 2 (Fig 7)

Wall section 2 began around a third of the way along the Netherton Lane elevation. It was around 13.5m long and also formed part of the back wall of the range of buildings that were the northern part of the Joseph Wood building (Plate 51). The top courses of this part of the wall had been rebuilt. The first section of rebuilding consisted of reused mould-made bricks with modern machine made bricks and was coursed in Flemish Stretcher Bond (Plate 53). The modern bricks measured $9\frac{1}{4} \times 4\frac{1}{4} \times 3$ " (Brick Style 8 on Fig 7) and were similar to the London Brick type. These bricks date to the early 20th century.

A further area of rebuilding involved raising the height of the wall considerably (Plate 54). The bricks used to do this were reused mould-made bricks coursed in Flemish Garden Wall Bond and measured $8\frac{1}{2} \times 4 \times 3$ " (Brick Style 9 on Fig 7). At the end of this raised section, and crossing into wall section 3 (see below), was a blocked opening that can be distinguished by straight building breaks (Plate 55). The blocked opening was part of the original fabric of the wall. The north side of the opening had a red sandstone block set into the wall and the south side was a similar-shaped cement area that is probably hiding another sandstone block (Plate 55). The rebuilding of the wall above this had removed the evidence for the blocked opening. This opening was probably a gateway into the depot, when it was used as a timber yard. It may also have been an opening into one of the structures built along the inside of the wall. The sandstone blocks would have been used as bases for gate hooks, a widely used building technique in the 19th century. The 1878 conveyance plan (Fig 33) shows a gate in the Netherton Lane wall at the end of Joseph Wood range of buildings that may correspond with this opening.

Wall section 3 (Fig 7)

Adjoining the blocked opening that crosses between wall sections 2 and 3, the last section of wall on the Netherton Lane elevation consisted of dark orange-red mould-made bricks crudely coursed

in a variant of Flemish Garden Wall Bond (Plate 56) and was around 5m in length. The bricks measured $9\frac{1}{4} \times 4\frac{1}{4} \times 2\frac{7}{8}$ " (Brick Style 4 on Fig 7), which gives the wall a date of the early 19th century. It was probably constructed at the same time as the rest of the wall and the gateway were constructed. Topping the wall is a phase of rebuilding that is part of the rebuilding that raised the height of the wall to the immediate south.

Depot elevation

The north end of the Netherton Lane wall (Fig 7; Plate 57) was recorded from inside the depot. The length of wall recorded was around 21m and had a different appearance to that of the Netherton Lane elevation. This was mainly due to the large number of building scars on the wall from structures that had been built against it.

Wall section 3 (Fig 7)

The southern part of the wall (Plate 58), where it joined the northern part of the Joseph Wood range, was the same part of wall as section 3 above and therefore had been recorded from both elevations. The only difference on this internal face was a building scar and small hole for supporting the roof of a structure built against the wall (Plate 59). The 1st edition Ordnance Survey, dating to the 1880s (Fig 36), shows a small structure in this position which appears to have been partially roofed.

Wall section 4 (Fig 7)

Wall section 4 was covered by modern wooden hoarding on the Netherton Lane elevation. This section of wall was only around 2m wide and consisted of a blocked gateway (Plate 60). The two gate jambs have the same bricks as wall section 3, which measured $9\frac{1}{4} \times 4\frac{1}{4} \times 2\frac{7}{8}$ " (Fig 7) giving the wall a date of the early 19th century. The north jamb of the gateway had two red sandstone blocks built into it. These were used as bases for gate hooks which held hinges (Plate 61) both of which were still in existence at the time of recording. The south jamb also contained a sandstone block, at a height between the two blocks on the north jamb. This sandstone block was used as a base for the gate catch which had been removed when the gateway was blocked. This gateway would have allowed access into the timber yard, as the site was functioning in the early 19th century, from Netherton Lane, and therefore probably from Netherton House also. The 1878 conveyance plan (Fig 33) shows a gate in the Netherton Lane wall at the end of the Joseph Wood range of buildings that may correspond with this opening.

Wall section 5 (Fig 7)

Wall section 5 was around 8m long and most of the surface had been painted white (Plate 62). This section was constructed of handmade bricks measuring $9 \times 4\frac{1}{2} \times 3$ " (Brick Style 3 on Fig 7) coursed in Flemish Stretcher Bond. This gives the brick a date of the early 19th century. On this section some building scars could be seen that were related to a range of demolished buildings constructed to the north of the Joseph Wood building range. The foundations were revealed during excavation (Plates 63 and 64). The demolition of the range left holes in the surface of wall section 5, which were then filled with cement leaving straight building scars (Plate 65). The lines of the roofs are also visible on wall section 5 (Plate 66).

Wall section 6 (Fig 7)

Section 6 of the boundary wall was around 5m long and was constructed of mould made bricks, many of which were over fired (Plate 67). They were coursed in a rough variation of English Bond and measured $9\frac{1}{2} - 10 \times 4\frac{1}{4} - \frac{1}{2} \times 2\frac{1}{4} - 2\frac{1}{2}$ " (Brick Style 2 on Fig 7). This size and type of brick can be dated to the mid- to late 18th century and therefore this section of wall is the earliest building recorded on the site. It pre-dates the construction of the Joseph Wood yard and was possibly part of a garden wall, or garden building, for Netherton House. The 1824 Corporation Plan (Fig 18) shows a small structure on the edge of the garden for Netherton House that may correspond with this short section of wall.

Also attached to this section of wall was a short, single width, breeze block wall and the scar from a matching wall (Plate 68 and Fig 7). These walls are not shown on the 1970 map (Fig 46) and probably relate to a City Depot building or storage area of the 1980s or 1990s use of the site.

Wall section 7(Fig 7)

This final section of wall was only 1.5m long (Plate 69) and had been constructed of orange mould made bricks coursed in Flemish Garden Wall Bond. The bricks measured 9¼-½x4¼x3" (Brick Style 1 on Fig 7) which can be dated to the late 19th century. This section of wall may have been built when the access to the site along the railway viaduct was created in the 1860s or soon after.

5.4.3 Coomber's boundary wall to Croft Walk

Croft Walk was a lane that ran from The Butts northwards to join up with Croft Road (Figs 1 and 2). To the west of Croft Walk, the former cattle market abattoir had been converted to offices for use by the electrical company Coomber Electronic Equipment Ltd. Between Croft Walk and the building was a 21m section of brick wall (Plates 70 and 71) that had formed part of the eastern boundary of the cattle market (Fig 8). The wall was constructed of ten courses of brick topped with sandstone coping stones. It was constructed of mould made brick coursed in Flemish Bond (Plate 72) and measured 9½x4½x2¾" (Fig 8). This brickwork can be dated to the mid-19th century and probably related to the construction of the cattle market in the late 1830s. Set into the sandstone coping stones was a row of cast iron railings (Plates 70 and 71; Fig 8). These consisted of panels of eighteen cylindrical posts topped with spikes (Plate 73). The end of each panel had a wider square post, also topped with a spike, and supported with a curved bracket (Plate 74). The railings were part of the original fabric of the boundary wall and therefore were also of mid-19th century date.

At each end of the wall was a brick pier. The northern pier (Plate 75) was constructed of the same brickwork as the wall and had sandstone blocks (Plate 76) embedded to take the rail of the cast iron railings (Fig 8). The pier was angled showing where the wall had originally altered alignment, as can be seen on the historic maps (Figs 36, 37 and 16). The top part of the pier had also been rebuilt in the 20th century using modern bricks, measuring 9x4x3", and mortared with thick concrete joints (Plate 77). The pier was topped with a limestone capping.

The southern pier was of modern construction (Plate 78, Fig 8), probably after the cattle market was demolished, in the 1980s, and the space re-used as a car park. Its brickwork was coursed in Stretcher Bond and 9½x4½x3" (Fig 8). The corners of the pier were finished with round edged bricks with the same dimensions. This pier was also capped with limestone.

5.5 Air raid shelter

In the late 1930s or early 1940s a small building was constructed immediately behind The Butts frontage boundary wall (Plates 79-81, Fig 6). It was constructed of brick on a concrete foundation and with a thick concrete roof. Its entrance was from The Butts and a doorway (Plate 82) was inserted into the boundary wall to allow access into the shelter from the public highway.

The building was identified as a 'non anti-invasion air raid shelter' by the Defence of Britain project (DoBA 2014, Non anti-invasion record no 4454). However, reservations about the function of the building were still held by members of the group (Mick Wilks pers comm) and it has only tentatively been identified as an air raid shelter until further information is discovered. Despite this, the building meets all criteria for it to have been constructed as an above ground shelter, with its concrete roof, brick walls and air vents. Non anti-invasion air raid shelters were typically constructed of brick walls, at least 9" thick (two brick widths) with a concrete roof at least 6" thick. There were two air vents on opposite walls, one at the top (Plate 83) and one at the bottom (Plate 84) of the wall, to allow for an air flow. The brick above-ground public shelters, such as this, were not constructed to with-stand a bomb blast but were to protect people from flying debris caused by a bomb exploding nearby. This structure, although within the City Council Depot, was for use by people caught in the street during an air raid rather than for use by employees at the Depot, as can be seen by its entrance being on The Butts rather than within the depot.

The structure was formed of bricks measuring $9 \times 4\frac{3}{8} \times 3$ " (Brick Style 8 on Fig 6) coursed in Flemish Stretcher Bond. It stood on a foundation of concrete, containing a large amount of broken brick, pebbles and broken china, topped with a row of red-brown headers (Brick Style 10 on Fig 6). Above the foundation were four courses of highly fired, blue-purple bricks (Brick Style 9 on Fig 6), the bottom course of which was headers and the other three courses were stretchers. The roof was constructed of a twelve inch thick concrete slab set at a slight angle, for water drainage, sloping down from west to east (Fig 6; Plate 80).

The west elevation had been constructed against an already existing building as can be seen by the unfinished mortar joints between the brickwork on that elevation (Brick Style 13 on Fig 6; Plate 85). The remains of this building were visible against the rear of The Butts boundary wall and the west elevation of the air raid shelter (Plate 86). It consisted of a chimney projecting 0.3m above The Butts boundary wall (Plate 87; Fig 6) and foundations that were cemented over (Plates 81 and 86). The bricks of the chimney measured $9 \times 4\frac{1}{4} \times 2$ " (Brick Style 12 on Fig 6) and were coursed in Stretcher Bond. This size of brick can normally be dated to the 16th or 17th century, but the fabric of these bricks was much more modern and dated the bricks to the early 20th century. They were probably made for a specific purpose, such as restoration of an old building. The chimney is not visible on a photograph of 1903 (Joyce 2006, 11), but a building is shown on the site on maps of the 1920s (Fig 42). Therefore the structure must date to the early 20th century.

A low wall was constructed against the north elevation of the air raid shelter (Plate 88; Fig 6). This structure was formed of reused blue engineering brick measuring a massive $15\frac{3}{4} \times 10 \times 4\frac{1}{4}$ " (Brick Style 11 on Fig 6). These bricks were originally used as a floor surface and have here been reused as a retaining or protective wall for the foundation of the air raid shelter. The wall was not originally constructed as part of the air raid shelter. It is likely that the wall was constructed after the air raid shelter was reused as an electricity substation later in the 20th century.

Internally the shelter had been re-used as an electricity sub-station, as shown on the 1970 Ordnance Survey (Fig 46), which was then dis-used at a later date leaving the building completely empty (Plate 89).

5.6 History of Joseph Wood's builders yard and Council Depot

The site that became Joseph Wood's builders yard, and later the City Council Depot, can be seen on the 1741 Doharty plan of Worcester City (WRO ref b899:31 BA 3156 item 1). This map shows the site as part of the grounds of a large building. The 1771 Worcester City Corporation Plan Book (WRO ref 496.5 BA9360/C1/2; Fig 16) shows the building and its adjoining land as 'Mr Netherton's Premises. Plot C on the plan is described as 'Premises in the Occupation of Edward Haskew, consisting of a Dwelling House Workshops Gardens and Pasture Ground'. Joseph Wood's yard was constructed where the plan is marked 'Pasture' (Fig 16). The 1784 Corporation Plan (WRO ref b496.5 BA9630/C1/2; Fig 17) shows the same layout as the earlier plan with the 'Pasture' marked and plot C described as 'In the occupation of Edward Haskew consisting of a Dwelling House, Workshops, Gardens and Pasture Ground containing 2A 3R 35P' (Fig 17). The 1824 Corporation Plan (WRO ref b496.5 BA9630/C1/3; Fig 18) includes more detail than the previous plans with the site identified as Plot 12. The legend describes Plot 12 as 'Netherton House, Offices, Pleasure Ground, Gardens &c'. Its proprietors are recorded as the 'Reverend Mr Wheeler and the Earl of Stirling'. Pigot's directory of 1828–9 lists the Earl of Stirling as a member of the nobility and gentry in Worcester (Pigot 1828–9, 884).

The Earl of Stirling was a Mr Alexander Humphrys-Alexander. He was prosecuted in Edinburgh in 1839 for forging documents to support his claim to the title of Earl of Stirling, and lands in Nova Scotia, Maine and Scotland. The prosecutor in his trial stated that 'he was at the head of a school in the town of Worcester' (Turnbull 1839, 281–2). This school was the 'Oriental and Classical Establishment at Netherton House as depicted on the 1825 drawing of the school (Plate 90). At the trial it was proven that at least some of the documents were forged but not that Mr Humphrys-Alexander had forged them, or used them fraudulently, and he was acquitted.

The Earl of Stirling is not included in the 1835 trade directory but this directory does show Joseph Wood as a builder and a carpenter and joiner in Blackfriars (Pigot 1835, 671). This occupation is repeated in the 1840–1 directory (Bentley 1840–1, 146). The 1841 and 1842 Pigot directories show that Joseph Wood had expanded to occupy land on the Butts as well (Pigot 1841, 50; Pigot 1842, 50 and 55). In 1846, a 'Lease of the Netherton Estate situate in the Butts' (WRO ref 496.5 BA9360/Cab14/5; Fig 19) from the Corporation of Worcester to the Reverend George Williams was drawn up. This included a plan of the land that would become Joseph Wood's builders yard. Unlike the previous plans, what was open pasture and gardens to the west of Netherton House is shown with three ranges of buildings across it (Figs 19 and 20). Plots 12, 13, 14 and 15 encompass the land that became Joseph Wood's builders yard. Plot 12 was described as 'Work Shops, Sawpit, Shed and Timber Yard', Plot 13 was described as 'Garden an Work Sheds', Plot 14 was described as 'Stable, Work Shops, Sawpit, Sheds, Offices and Yard', Plot 15 was described as 'House Offices and Garden' (Fig 20). It is possible that some of these structures were leased to Joseph Wood at this time. He was certainly still recorded as occupying land on The Butts, along with land in Blackfriars, in the 1850 trade directories (Kelly 1850, 497; Slater 1850, 66, 68 and 72).

An assignment dated 13th November 1854 from 'John William esq and others to Joseph Wood' (WRO ref 496.5 BA9630/Cab14/15/A) shows that Joseph Wood was already using the property described before he agreed to pay £1160 for its absolute purchase. The reference on the plan accompanying the assignment (Fig 21) details the buildings of the builders yard as Plots 12 and 14 which are described as '12 – Timber yard with Workshops Sheds and Sawpits', '14 – Yard with Workshops Sheds Sawpits Stables and Offices also House with Offices and small garden'. The buildings themselves are also labelled on the plan, as can be seen on Figure 22. The western range is labelled as 'sawpits', the central range as 'stable, sawpits and lofts over' with attached 'shops' and 'shed' and the eastern range is labelled as 'offices' and 'shopping' with a 'house' to the north (Fig 22). The 1855 trade directory entry for Joseph Wood shows that he was by this time much more than a builder. He is described as 'Joseph Wood, builder, brick and tile manufacturer, coal, stone and marble dealer, The Butts, house, Blackfriars' (Billing 1855, 61). This directory also has a much more detailed advert for the company (Fig 23) which states that it has timber yards at Blackfriars and The Butts, stone and marble yards at Lower Butts and coal yards at The Butts.

In July 1857 a further document was drawn up from the 'Mayor, Aldermen and Citizens of Worcester to Mr Joseph Wood'. This enfranchisement (WRO ref 496.5 BA9630/Cab14/15/A) was for the absolute sale of the remainder of property in The Butts to Joseph Wood for £435.12.0. The reference on the plan accompanying the document (Fig 25) shows the buildings of the builders yard as Plots 12 and 14 which are described as '12 – Timber yard with workshop, sheds and sawpits', '14 – Yard with workshops, sheds, Saw Mills, Stables and Offices also House with Offices and small garden'. This is virtually identical to the 1854 description. As with that earlier document, the buildings themselves are also labelled on the plan (Fig 26). The eastern range is labelled as 'offices' and 'shopping' with a 'house' to the north, the central range as 'stable, sawpits and lofts over' with attached 'shops' and 'shed' and the only change to the earlier document is the extended building of the western range which is now described as 'saw mills' (Fig 26).

By 1860 the company was known as Joseph Wood and Sons as is shown in Cassey's 1860 trade directory, which has the entry of 'Joseph Wood and Sons, builders, brick and tile makers, coal, stone and marble dealers, The Butts and Blackfriars' (Cassey 1860, 377). At some point during 1860, the company concentrated all of its business at The Butts. The 1860 Post Office directory has the simple entry of 'Joseph Wood and Sons, builders, The Butts' (Kelly 1860, 1277). The Littlebury directory of 1869 had a short entry for builders 'Joseph Wood and Sons (and timber, brick and coal merchants, steam saw mill proprietors, &c &c), The Butts' (Littlebury 1869, 70). The entry then refers you to their advert which includes a large amount of detail (Fig 27). The 1870 and 1872 directories record that Joseph Wood and Sons also had sites at Diglis and Grimley (Kelly 1870, 1402; Kelly 1872, 1549). Diglis was the canal basin adjoining the Severn within Worcester and it is likely that their brick manufacturing was based at Grimley, which has the marls and clays suitable for making bricks. The 1872 trade directory records a brick maker called Adam Challow at Grimley (Kelly 1872, 1441). The 1873 Littlebury directory, as well as having an advert for the

company, had a very extensive entry – 'Josphe Wood and Sons, builders and contractors; English and foreign timber, brick and coal merchants; steam sawing, planing and moulding mills; importers of slates, and dealers in all kinds of building materials, sanitary pipes &c; offices, The Butts; wharves at the railway stations and Lowesmoor', Lowesmoor was probably the canal basin (Littlebury 1873, 872). This directory also included 'Joseph Sharman Wood' and 'Richard Wood' who are both recorded as being 'firm of Joseph Wood and Sons' (*ibid*).

In 1877 plans for altering the offices of the firm, fronting The Butts, were submitted to Worcester City Council (WRO ref b496.5 BA10827/525; Fig 29). The drawings show that the office building was completely rebuilt with the exception of the wall on Netherton Lane (Fig 30) and extended the building to include a first floor. The interior of the building consisted of an entrance off The Butts that opened into a lobby and then a clerk's office area. A rear entrance from the yard opened on to a lobby and was presumably for staff. A large staircase led from the ground floor to the first floor where there was a private room and an office for the partners (Fig 30). The drawings also included the proposed frontage and yard elevation details of the new offices (Fig 31) which show that the building was completed basically as detailed on the drawings (Fig 31; Plates 91 and 92). In 1878, the year following these plans being drawn up, a conveyance of property from Mr Richard Wood to Joseph Sharman Wood and John Joseland was produced (WRO ref 496.5 BA9630/Cab14/15/A). This document details the sale of Richard Wood's portion of Joseph Wood and Sons to his brother and Mr John Joseland for the sum of £2000. The document also includes a plan of the buildings (Fig 32), which shows that a great deal of change has occurred since the enfranchisement of 1857 (Figs 25 and 26). The central range of buildings has been demolished and a new range of buildings crosses the site to the north of the sawmill (Figs 32 and 33). The west range, against Croft Walk, is labelled as 'sawing and planing mills with joiners shops over'. Attached to this building were two small structures labelled as an 'engine' and 'boilers'. The east range, against Netherton Lane, is labelled as 'offices, 'stores' and 'plumbers shops, stores &c'. The new range running across the site west to east, to the north of both the sawmill and office ranges of building, is labelled as 'machine room and shopping over', 'cutting out mill, stores and shops over', 'stores and shops' and 'nag stable'. There is also an archway marked with stairs allowing access to upper floors of the buildings.

The 1879 trade directory shows no change in the company name or circumstances following Richard Wood being bought out. The directory has a long entry recording Joseph Wood and Sons as 'builders and contractors; English and foreign timber; brick and coal merchants; steam sawing, planing and moulding mills; importers of slates and dealers in all kinds of building materials, sanitary pipes, &c; office, The Butts; wharves at the railway stations and Lowesmoor' (Littlebury 1879, 153) and an even more detailed advert (Fig 34). The 1880 directory shows that the company still had Diglis and Grimley bases as well (Kelly 1880, 1220).

During the 1880s and 1890s the company was carrying out a large amount of work and a number of entries for them are included within the Worcester City Planning Applications 1865–1901 index (WRO ref b496.5 BA10465). 1884 saw them planning on building a villa in Barbourne Terrace (WRO ref b496.5 BA10465/955) and in 1886 they are building a mason's shed on Croft Walk (WRO ref b496.5 BA10465/1143). This building was probably constructed on their own property. The 1886 Ordnance Survey (Fig 36) shows no different or new buildings on the site when compared with the 1878 conveyance plan (Figs 32 and 33). However, the 1904 Ordnance Survey (Fig 37) shows two new buildings, either of which could be the mason's shed.

In 1890 the planning index records that Joseph Wood and Sons were planning on building an extension to Sharman Road (WRO ref b496.5 BA10465/1454). In this year they are recorded simply in Bennett's directory as 'Wood and Sons, Builders, The Butts' (Bennett 1890, 46). 1892 saw them planning to build a 'machine house, kilns, sheds etc' on Sherriff Road (WRO ref b496.5 BA10465/1675). These buildings could relate to either the Shrub Hill China Works or the Shrub Hill Brick Works, both of which were located near Sherriff Street and both of which were expanded or built at this time. The 1892 directory showed that the company still had sites at Grimley and Diglis (Kelly 1892, 261). From 1896 however, a number of the directories for Worcester became street directories and thereafter only included short descriptions. Kelly's directory of that year merely

recorded 'The Butts (north side), Joseph Wood and Sons, builders, ' (Kelly 1896, 277). Even Littlebury's usually loquacious entry was reduced to 'Joseph Wood and Sons, builders, contractors, steam sawing and planing mills, The Butts' (Littlebury 1896, 56). In 1898 they are recorded as planning to build seven houses in Vauxhall Street (WRO ref b496.5 BA10465/2556) and in 1901, two houses in Sharman Road (WRO ref b496.5 BA10465/3103).

In 1905 it appears that the company was doing well. The Littlebury directory carried a full page advert (Littlebury 1905, adverts page 4; Fig 40) which detailed all types of work that the company have carried out – 'erected many Mansions, Public and Private Buildings, and Manufactories' – and also referred the reader to the works they'd carried out at 'Witley Court ... the Victoria Institute, Worcester, and the Restoration of St David's Cathedral, Pembrokeshire' (Fig 40). It is also seen from this advert and the entry in the directory that the company had become a limited company with the name Joseph Wood and Sons (Worcester) Ltd (Fig 40; Littlebury 1905, 142). Also in 1905, however, the company mortgaged its assets. The mortgage document (WRO ref 496.5 BA9360/Cab14/15/A) stated that it was a mortgage of all of the Joseph Wood property in order to 'pay debt to the bank, Messrs Berwick and Co'. The first schedule of the mortgage detailed the structures of the timber yard; 'the offices storerooms warehouses workshops saw mills builders yards stables land and hereditaments situate on the north side of the Butts in the Parish of Saint Nicholas in the City of Worcester and now in the occupation of the Company' (Fig 38). The end of the document included signatures and the seal of Joseph Wood and Sons (Worcester) Ltd (Fig 39). The mortgage document does not detail why the mortgage was necessary but considering that the company continued trading for many years, it is possible that it was needed to cover non-payment of customer's fees.

In the early 20th century, Joseph Wood and Sons continued advertising in the trade directories. Littlebury's directory of 1908 included a virtually identical advert (Fig 41) to that included in the 1905 directory (Fig 40). The entry itself was short, merely stating 'Joseph Wood and Sons (Worcester) Ltd, builders, contractors, steam sawing and planing mills, 26 The Butts' (Littlebury 1908, 161). The same entry is included in the 1915 directory (Littlebury 1915, 140) and also includes 'Joseph Wood and Sons (Worcester) Ltd, blacksmiths shop' on the south side of The Butts (*ibid*). Kelly's directories tended to include much shorter entries with their 1921 directory entry for the company being typical, 'Joseph Wood and Sons (Worcester) Ltd, building contractors, The Butts' (Kelly 1921, 302). The 1928 entry was identical to this (Kelly 1928, 307). In the same year an Ordnance Survey map (Fig 42) was produced which shows very little alteration to the Joseph Wood site.

The 1930s directories are all very similar to that of Cope in 1933 which states: 'Joseph Wood and Sons (Worcester) Ltd, The Butts, builders and builders' merchants' (Cope 1933, 180). The 1940 Ordnance Survey (Fig 43) again shows very little alteration to the site in the form of new structures although it is possible that alterations to the internal functions had been made by this time. The 1940s show no change reflected in the trade directories with the entries being along the same lines as that of the Kelly 1940 directory – 'Joseph Wood and Sons (Worcester) Ltd, builders, The Butts' (Kelly 1940, 307). In 1947, the telephone book (GPO 1947, 459) records Joseph Wood and Sons still on The Butts as 'Bldrs, Decrtrs, Plmbrs', i.e. builders, decorators, plumbers, but from the following year the company are recorded on Gregory's Mill Street instead. They appear in the trade directories and phone books on Gregory's Mill Street throughout the 20th century until the last entry of 1989 (BT 1989, 439). The business currently operates from Buckholt Drive, Warndon.

The telephone book of 1951 shows that the Worcester Corporation had taken over the former site of Joseph Wood's timber yard and at that time the Town Planning Officer was based at 26 The Butts (GPO 1951, 534). In 1952, the Streets Department are listed as occupying 26 The Butts (GPO 1952, 586). This had changed to Highways by 1970 (GPO 1970, 173) and was still listed as the depot for Worcester City Council Highways in the 1983 telephone book (BT 1983, 375). The final usage of the site, before it was closed and then demolished in 2008, was as a City Council Depot.

5.7 Joseph Wood building

5.7.1 Building description

The Joseph Wood building (Figs 7, 9–12) is a long range of buildings constructed along the eastern boundary of the site. They follow the line of Netherton Lane, which marked the boundary between Netherton House and the timber yard. The range of buildings can be broken down into three parts: the south (frontage) building (Plates 91 and 92 Fig 10) facing The Butts; the middle two-storey building (Plate 930; Fig 11) and the attached single-storey range (Plates 94 and 95; Fig 7). The buildings are all constructed of red brick and have segmental arch heads to many of the doors and windows.

Externally, the building fronting The Butts (Fig 10) had detail around the windows, in the form of cills, keystones (Plate 96) and decorative arches. There was also a large amount of decorative brickwork and moulded terracotta particularly around the door on The Butts (Plate 97) and for the string course (Plate 98) and eaves cornice (Plate 99). The two-storey range behind this (Figs 11 and 12) had external details picked out in blue engineering brick, possibly made in the Kings Norton area, such as around the doorways (Plate 100), the window arches (Plate 1018) and for the plinth (Plate 102). The single-storey workshop range behind this also had blue engineering brick details (Plate 103) but had been significantly altered over time including the blocking of many of the original openings.

Architectural components

A large number of original architectural features remained intact within the buildings. These are detailed in the table below with their respective plate numbers.

Feature	Place	Description	Date	Room no (Fig 9)	Plate no (Fig 9)
Door	Exterior	Heavy wooden panelled door with plain fanlight. Bolection moulded panelling.	1870s	South elevation	97
Door surround	Exterior	Decorative moulded brickwork. Dentilated cornice and moulded terracotta pediment. Slender pilasters.		South elevation	97, 104
String courses	Exterior	Moulded terracotta in 2 sections.		South and west elevations	98, 104–107
Window surrounds	Exterior	Moulded brick segmental arches and window openings with limestone key stones and cills.		South and west elevations	96, 105, 106
Windows	Exterior/ Interior	Recessed sash windows with segmental heads and 2 panes to each sash.		South and west elevations	96, 105, 106
Cornicing	Interior	Plaster moulded cornice at top of walls. Simple but elegant.		G1, G2, G3, G4, G6, F1, F2, F3, F4a	104–109, 111, 119, 120, 137
Skirting	Interior	Base of walls. Simple skirting with roll beading at top.		G1, G2, G3, G4, F1, F2, F3	110, 112, 116, 123, 129

Feature	Place	Description	Date	Room no (Fig 9)	Plate no (Fig 9)
Fanlight	Interior/ Exterior	Plain, undecorated fanlight above front door, with wooden surround. May have originally had decorated glass.		G5	113
Window frames or surrounds	Interior	Decorative frames similar to bolection moulding.		G1, G2, G3, G5, F1, F2	114
Staircase	Interior	Dog-leg with quarter landing and winder.		G4, F3	115
Staircase	Interior	Skirting with roll beading.		G4, F3	116, 129
Staircase	Interior	Curtail step, with foliate carved central post.		G4	117, 136
Staircase	Interior	Open-string with decorated brackets scroll-types design brackets.		G4, F3	118
Staircase	Interior	Simple turned tapered-column shape balusters (more typical of late 18 th C style).		G4	115, 117, 118
Staircase	Interior	Simple gently curved flat top stair handrail.		G4, F3	136
Picture rail	Interior	Wooden picture rail in similar moulding to that of cornicing and window frames.		F1, F3, F4a	121, 124, 126
Ventilators	Interior	Steel boxed ventilators with beading and opening handle on side (in shape of hand).		G1, F1	122
Stair window	Interior/ Exterior	Segmental head sash window with 6 lights in each sash and moulded glazing bars.		F3	125
Door surround	Interior	Surviving decorative architrave similar to that of window surrounds and cornice.		F4a,	127, 128
Door	Interior	Heavy wooden panelled door. Bolection moulded panelling.		F4a, F3-F5	128
Ceiling	Interior	Ovolo moulded beading to create panelled ceiling.	Early 20 th century	F10	130
Window	Interior	Slider quadrant window stay.	Late 19 th or early 20 th century	F5	131, 133
Window	Interior	Curved turnbuckle window catch.		F5	132, 133
Window	Interior	Spiral turnbuckle window catches.	Late 19 th century	F6, F9, F10	134
Window	Interior	Spiral window stay and handle.		F6, F9, F10	135
Windows	Exterior	Iron frame windows with 20 lights and central opening casement.	Mid-19 th century	G19	138

5.7.2 Building development and discussion

The first structure built on what became Joseph Wood's builders yard (Fig 9) was part of the Netherton boundary wall (Wall section 6). This section of 18th century wall has been discussed above. The rest of the Netherton Lane boundary wall can be dated to the early 19th century (see above). It is unknown whether it was constructed as part of the development of the pasture land that became the builders yard, or whether it had been built earlier as part of the gardens of Netherton House.

At some time in the 1830s or early 1840s, the timber yard of Netherton House was constructed on the former pasture land to the south of the house, as shown in the 1820s drawing (Plate 90). It is unknown which of the buildings were first constructed on the site, but by 1845 there were a number of buildings already in existence, as shown on the Welsh Midland Railway Plan of this date (WRO ref b496.5 BA9360/Cab25/5/4). As can be seen on this plan (Plate 139), the Joseph Wood range of buildings was already, at least partly, in existence at the east of the site against the Netherton Lane boundary. More detail of the building can be seen on the Netherton Estate plan (WRO ref 496.5/Cab14/5/1; Figs 19 and 20) which describes the building as 'stable, workshops, sawpit, sheds, offices'. Given that the later plan of 1854 (WRO ref 496.5 BA9360/Cab14/15/A; Figs 21 and 22) has the range labelled as 'shopping' and 'office', it is likely that the original function of the range was workshops and offices.

It is obvious from the plans (Figs 19-22, 25, 26, and 29-33) that the middle section of the range of buildings was built in the 1830s or 1840s (Fig 9) and the entire Netherton Lane boundary wall was also constructed by then. There was a building break between the single-storey and two storey structures (Plate 140; Figs 7 and 11) which suggests that they were built independently of each other. Whether this was as two separate phases of building or merely two structures built one after the other in the same phase was not discernible. The brick sizes of the two sections (Brick Style 10 on Fig 7 and Brick Style 4 on Fig 11) are incredibly similar and both date to between 1805 and 1850 whilst the brick tax was in force. This fits in well with the likely construction date of the 1830s or 1840s. The roofs of these buildings were similar in that they were of low pitch and covered with slates, as was not untypical of buildings of this date. The northern gable end of the central building of the range was raised above the roofline with stepped endings. The limestone capping had a central decorative ball on the gable (Plate 93). The roof structure was not seen internally within the central section of this range. The ridge of the northern single storey element followed the line of the building, turning to run east-west at its northern end (Plates 94-95). The roof of this range was a softwood common rafter roof supported on brick internal divisions and purlins.

In 1877, plans were drawn up to alter the front section of the Joseph Wood building (Figs 29-31). The plans suggest that the office structure was originally a single-storey structure with it being rebuilt as a two-storey building. The plans show that the ground floor east (Netherton Lane) wall was retained whilst the south and west walls were rebuilt. The building break between the first floor of the frontage and the middle section is visible on the Netherton Lane elevation (Plate 141; Figs 7 and 11). The building break for the addition of the frontage of the building on The Butts can also be seen on the Netherton Lane elevation (Plate 142). The new building created a work area for a number of clerks on the ground floor (Figs 29-31). The first floor, reached by an elegant staircase (Plate 112), contained the partner's office and a private room along with a storeroom (Figs 29-31). The building contained a large amount of notable architectural detail (see above) and it seems plausible that the building was used as a 'show house' to 'advertise' the type of work that Joseph Wood and Son could produce. It is also possible that the private room on the first floor was used to meet with clients.

The roof of the front section of the Joseph Wood buildings was also of low pitch and covered with slates and hipped over the front section (Plate 92). Within the roof space, a single softwood queen post truss was seen that supported the hip and principle rafters along with the purlins.

A number of alterations were carried out on the Joseph Wood range of buildings. These were mainly confined to internal re-ordering of the layout of the structures leaving the exteriors relatively untouched. The historic maps of the late 19th century and through the 20th century (Figs 36, 37, 42,

43 and 46) show very little overall change to the layout of the builders yard and no change at all to the Joseph Wood range of buildings. Although Worcester City Council took over the builders yard in the 1950s, they appear to have carried out no alterations until the 1970s. A City of Worcester plan of April 1976, (Fig 48), shows the north section and part of the middle section of the range being used as stores and a blacksmith. The frontage structure and part of the middle section are labelled as 'living accommodation' (Fig 48). In August of the same year, the City Architect and Planning Officer drew up proposals for alterations to the same part of the range (Fig 49). This drawing shows that the majority of the openings on the west elevation of the range were to be repaired or altered. This included the changing of the most northerly room from a gated store to a double-doored oil store (Plate 143; Figs 7 and 12). In the centre area a new toilet, shower and drying room area was created (Fig 9) by the insertion of partitions, an area that was still intact when the building was recorded (Plates 144 and 145). It was alongside a newly created kitchen, cloakroom and mess room.

In 1981, the City Architect and Planning Officer produced plans showing changes to the front and middle sections of the Joseph Wood range, (Fig 50). The drawings show that the ground floor of the frontage building was remodelled by the partitioning of the former clerks work space into a kitchen and interview room (Plate 146) and the creation of a corridor alongside the stairs (Plate 147). The staircase giving access to the upper floor of the middle section of the range was removed, with its former position shown on the drawing (Fig 50), and a new access was created from the quarter landing of the main staircase (Plate 148). The first floor of this middle section had previously been used for living accommodation (Fig 49) with a kitchen (Plate 149), passage (Plate 150) and bathroom (Plate 151) in the north part of the structure surviving from this usage. The other two rooms, partitioned from the original large area, were re-used as stores in 1981. The southern part of the first floor, adjacent to the frontage section of the range, was converted for use into office space (Plate 152). By contrast, the first floor of the frontage building was proposed to be changed into a large open space general office by the removal of original partitions (Fig 50) although it is not known whether this was actually carried out as one of the partitions was still in place at the time of recording (Fig 9). A lobby and bathroom were created as shown on the 1981 drawings and were still in place at the time of recording (Plates 127, 128 and 153).

A drawing produced by the City Council Director of Technical Services in 1995, shows the whole of the City Council depot-(Fig 51) and describes the frontage and middle sections of the Joseph Wood range as offices with the rear part as 'toilets/showers/sewer section offices'.

5.8 Excavated sawpit and shed

Close to The Butts boundary wall at the south of the site, a rectangular brick lined pit (CG 1023) was uncovered during the excavation (Fig 15) and was identified as a sawpit. The structure (Plate 154) was around 1.3 metres (4' 3¼") wide and 7.4 metres (24' 3") long and constructed of bricks measuring 8¾x4¾x3". This size of brick dates to the early 19th century. The base of the structure was lined with timber planks that were well preserved but looked worn (Plate 155).

The sawpit can be identified on the historic documents of the 19th century timber yard. The 1846 Netherton House Estate lease plan (WRO ref 496.5 BA9360/Cab14/5) shows a central range of buildings, running north to south, over the area of the sawpit and details the plot, plot 14, as 'Stable, Work shops, Sawpit, Sheds, Offices and Yard' (Figs 19 and 20). The slightly later 1854 leasehold plan (WRO ref 496.5 BA9360/Cab14/15/A) also shows this range over the site of the sawpit but it is labelled as 'stable, sawpits and lofts over' (Figs 21 and 22). This indicates that the sawpit uncovered during the excavation was part of this early phase of the timber yard.

To the immediate west of the sawpit (Fig 15), the remains of a brick structure (CG 1024) was uncovered which can be identified as the shed and workshop marked on the 1854 leasehold document (Figs 21 and 22). This is also shown on the 1846 Netherton House plan (Figs 21 and 22) and is therefore also part of the early phase of the timber yard.

5.9 Excavated workshop or shed

A series of five postholes (CG 1026) ran north to south across the middle of the timber yard (Fig 15, Plate 156). These consisted of roughly square holes measuring around 0.50 metres in width with a square lias slab, post pad, at the base (Plate 157). The fill of the postholes contained artefacts that were 19th century in date. Visible in the sections of a number of the postholes were the post pipes from the posts that previously stood on the lias post pads (Plates 158-9).

The postholes were the foundations of a structure that appears to have related to a large work shed built across almost the entire central area of the timber yard. This structure appears on the 1904 Ordnance Survey map (Fig 37) on which it is shown with dashed sides indicating that it was open rather than walled in. The structure is not shown on the earlier, 1886 map (Fig 36) and therefore must have been constructed at the end of the 19th century.

5.10 Sawmill building

5.10.1 Building description

Against the west side of the former City Council depot was the sawmill building (Plate 160, Figs 13 and 14). The west elevation of the building faced onto Croft Walk (Plate 161). This elevation had a number of small windows on the ground floor which had segmental arched heads and painted cills but the glazing was covered over. The upper floor had large rectangular windows, particularly covered, with blue brick cills. The roof of this building was of a similar low pitch to the Joseph Wood buildings and also slate covered. It retained a similar architectural detail to the central element of the Joseph Wood buildings in that its gables were slightly raised above the roofline and had stepped ends (Plate 160). These were also limestone capped though the central decoration on the ridge differed, it being an elongated round moulding here as opposed to a single ball. This roof was supported internally by eight king post trusses, which were constructed using steel fittings such as bolts. These in turn supported two sets of double purlins.

The east elevation of the building faced onto the depot yard (Plate 162; Fig 14). This elevation had a number of alterations and changes to the structure had been carried out. The ground floor had a number of semi-circular headed openings, three of which were windows, one a door and one blocked (Fig 14). There were also two large openings at the northern end of this elevation adjacent to brick piers formed from the stub walls of now demolished adjoining structures (Fig 14). The north elevation (Plate 163) was very simple and only had two doorways, one now blocked. The south elevation (Plate 164) had a doorway on the ground floor with blue brick jambs. The first floor of the elevation had segmental arched head doorway and window. The most obvious feature about this elevation was the evidence for a former-fire escape.

5.10.2 Building development and discussion

The first structure was a small summer house constructed within the grounds of Netherton House. This semi-circular building is visible on the 1824 Corporation Plan (WRO ref b496.5 BA9360/C1/3; Fig 18) and also on the 1846 Netherton House estate lease (WRO ref 496.5 BA9360/Cab14/5; Figs 20 and 21). The plot of land containing the summerhouse, plot 13, is marked as 'gardens and work sheds'.

The adjacent plot 12, contains a building on the left (west) that can be identified as the northern part of the sawmill building (Fig 13). Therefore that part of the building was constructed between 1824 and 1846. The bricks used to build the structure correspond with this date of the early to mid-19th century. They measured $8\frac{5}{8} \times 4\frac{3}{4} \times 2\frac{5}{8} - \frac{3}{4}$ ", coursed in a variant of Flemish Bond, and $9\frac{1}{4} \times 4 \times 3$ ", coursed in English Garden Wall Bond (Fig 14). Plot 12 is described as 'Work Shops, Sawpit, Shed and Timber Yard'. Clearly the sawpit was the building against the west boundary. A building break on the sawmill east elevation (Plate 165) showed the extents of this early sawpit (Figs 13 and 14).

The 1854 assignment document (WRO ref 496.5 BA9360/Cab14/15/A; Figs 21 and 22) shows the same arrangement of structures against the west boundary of the site. The document also shows writing over the outline of the summerhouse stating 'part' or 'imprint' of summerhouse.

Unfortunately the writing is not clear enough to read properly but it suggest that by this time the

summerhouse was no longer used and had been completely replaced by the sawpits also labelled (Fig 22).

The 1857 enfranchisement document (WRO ref 496.5 BA9360/Cab14/15/A; Figs 25 and 26) shows a much larger structure against the west elevation. It is labelled 'sawmills' indicating that the sawpits had been superseded by a mechanical process. This structure, which can be identified as the sawmill building, was obviously constructed around 1855 (Fig 13) and was built of bricks measuring $8\frac{3}{4} \times 4\frac{3}{8} \times 3$ ", coursed in English Garden Wall Bond, and $8\frac{1}{2} \times 4 \times 2\frac{1}{2}$ ", coursed in English Bond. The Croft Walk (west) elevation of the original sawpit building was rebuilt in the same style as the rest of the structure at this time (Plate 161). The join between the sawpit and later sawmill buildings could be seen by the building break and change in eaves treatment on the east elevation of the building (Plate 165; Fig 14). The later structure had a dentilated eaves cornice while the early building had plain unadorned eaves.

The 1857 document (Figs 25 and 26) shows three small structures adjoining the east elevation of the sawmill building. The remains of these structures were utilised as buttresses following their demolition (Plate 166; Figs 13 and 14). These three small structures are also shown on the later plan of 1878 (WRO ref 496.5 BA9360/Cab14/15/A; Figs 32 and 33) which describes the sawmill as 'sawing and planing mills with joiners shops overs'. Trade directories from the 1860s onward include adverts for Joseph Wood and Sons (Figs 27 and 34) make a point of mentioning, in an eye-catching font, the 'Steam Sawing, Planing and Moulding Mills'. The function of the small structures as shown on the plan, 'Engine' and 'Boilers', makes sense as they were used for machinery to power the sawing and planing mills in the building. The small square structure to the north can be seen from aerial photographs of the 1920s (Plate 167) to be the chimney for the boilers.

The interior of the sawmill had changed very little on the ground floor since it was built. The southern end of the building on the ground floor still consisted of a large open space floored with lias stone slabs (Plate 168; Fig 13). The northern end of the building had been partly partitioned into smaller spaces and the floor had been replaced with concrete (Plate 169). The original 1850s windows were also intact along the entire west side of the ground floor of the building (Plate 170). At some point in the late 19th century or early 20th century the ground floor ceiling was replaced with a strong brick-vaulted ceiling. This was formed from steel joists (Fig 13) with segmental arched vaults between them (Plate 171). The two end bays, at north and south, had three vaults each (Plate 172) running north to south rather east to west like the rest of the building. The insertion of the new floor caused the ground floor windows of the west elevation to be partially cut off (Plate 173). At the same time as the ceiling was replaced the 1st floor windows on the west elevation were also replaced with large triple lighted windows that had blue brick cills (Plate 161). These windows are visible on the 1920s aerial photograph (Plate 167) and therefore the alterations must have been completed by this time.

Plans of the sawmill building in 1996 produced by the City Council Technical Services (drawing no 6069-01; Fig 52), show that during the 20th century a number of divisions were added into the building (Fig 13). On the ground floor, a wooden staircase (Plate 174) with lobby, store keepers office and holding store were created between two open storage areas. The staircase cut across two of the west elevation windows and therefore it must have been added into the structure. The upper floor was originally completely open but as shown on the 1996 drawings (Fig 52), it had been altered by the insertion of partitions at the north end to create small office spaces (Plate 175) on either side of a central corridor (Plate 176). By the time of the recording in 2008–9, the rest of the upper floor had also been partitioned into smaller spaces (Plate 177; Fig 13).

5.10.3 Excavated prop structure and engine house extensions

To the east of the sawmill building, and to the north-west of the sawpit, a brick feature that has been identified as having contained a prop shaft (CG 1027) was uncovered during the excavation (Fig 15). The structure (Plate 178) was built of brick coursed in English Bond and measuring $9\frac{1}{2} \times 4\frac{1}{2} \times 3\frac{3}{8}$ ". It consisted of a single channel to hold the prop shaft, with four wider, square, openings which were likely to have contained pulleys for belt drives leading upwards to power

machinery associated with the timber yard, or for bearings. The bricks of the structure were of late 19th century date. At least one of them was stamped with the maker's mark of 'BARKER' in the frog. D W Barker's Patent Brick Works was based at Gregory's Bank, Worcester from the early 1870s.

The machinery running the prop shaft was located in the sawmill building. Attached to the exterior of the east wall of the building from around 1850 onwards were three, possibly four, small buildings as can be seen first on the enfranchisement plan of 1857 (WRO ref 496.5 BA9360/Cab 14/15/A; Figs 25 and 26). These buildings are shown in more detail on the 1878 conveyance plan (WRO ref 496.5 BA9360/Cab14/15/A, Figs 32 and 33) on which they are detailed as an engine and boilers (Fig 33). The foundations of these structures, and of the chimney to their immediate north, were revealed during the excavation (Fig 15; Plate 179). The engine and boiler houses were both around 30 years earlier than the construction of the structure. They were built between 1854 and 1857 whilst the structure cannot have been built prior to the 1870s and was more likely built in the 1890s around the same time as the post-built shed shown on the 1904 map, whose foundation postholes, (CG 1026), are discussed above.

5.11 Excavated sawmill range and workshops

A large part of Joseph Wood's builders yard was covered with a range of buildings running from east to west across the site to the north of the sawmill building and the Joseph Wood range. This range of buildings can be seen still existing on a 1970s photograph of the site (Plate 24). This image shows the north elevation of the range and the large semi-circular headed opening allowing access through from the north to the south parts of the site. The historical maps show that the sawmill range of buildings was constructed between 1857 (WRO ref 496.5 BA9360/Cab14/15/A, Figs 25 and 26) and 1878 (WRO ref 496.5 BA9360/Cab 14/15/A, Figs 32 and 33).

The walls uncovered (CG 1020) were the foundations of the structures to the east of the large opening, shown on Plate 24, and the space of the opening itself (Fig 15; Plates 180-1). The walls of these foundations were constructed of brick coursed in Flemish Garden Wall bond and measuring 9x4 $\frac{1}{4}$ x3". This size of bricks is consistent with the known construction date of the range, the mid- to late 19th century.

The 1878 plan (Fig 33) shows that this part of the range was used as stores, workshops and a 'nag stable'. In a photograph of this range of buildings (Plate 24), a chimney stack can be seen at the east gable of the range. The hearth for this chimney was revealed in the excavation (see Plate 182) and immediately adjacent to the gable were the windows of the nag stable, the foundations of which can also be seen in Plate 182.

The 1878 plan (Fig 33) shows an opening through the range which is marked as 'archway'. Within this archway a set of stairs is drawn, to give access to the upper floors of the range of buildings. During the excavation, the foundations of this set of stairs were also revealed (Fig 15; Plate 183). This foundation was adjoined to the western part of the sawmill range (CG1022) (Fig 15). This part of the range (Plate 184) is shown on the 1878 plan (Fig 33) as having the functions of cutting out mill, stores, machine room and workshops. The 1878 plan (Fig 33) also shows that the north elevation of the range had sheds attached to it and these are visible as lean-to structures on historic photographs (Plate 24). The foundations of these structures were revealed during the excavation (Fig 15, Plate 185).

The same photograph (Plate 24) shows that the range was not one structure, as the 1878 plan (Fig 33) suggests, but that it consisted of the large two storey section with the archway, a section attached to the north elevation of the sawmill building itself and a building adjoining the two. This distinction was not visible during the excavation of this part of the range due to the excavation technique.

Historic mapping shows that the full range of buildings survived throughout the 19th century and most of the 20th century. The 1970 Ordnance Survey (Fig 46) still includes the full sawmill range of buildings and the structures were demolished after the almshouses in the autumn/winter of 1976. The photograph showing the site (Plate 24) was taken only a couple of months after the

almshouses had been demolished earlier in the year. This shows the architectural roof detailing of raised gable and moulding as the extant sawmill building.

5.12 Almshouses

In the 1660s John Nash, Alderman and Mayor of Worcester City, left a will detailing that land and money were to be used for the benefit of the poor. Almshouses were built in his name in New Street and later, in the late 1830s, a further set of nine cottages were built on land off The Butts on the alley that became known as Croft Walk. 1830s maps of the area do not show the almshouses but the 1945 railway plan has them in place (Plate 136) and it is believed they were built in 1838.

Photographs (Plates 186-8) show that the almshouses were a brick terrace of 9 cottages each with a front door and single window on both the ground and first floors. There was a chimney between each of the houses. The bricks were coursed in Flemish bond and the windows and doors had flat head arches of gauged brickwork. The windows themselves were multi-light sash windows set in frames flush with the face of the building. This style of construction is more typical of the mid- to late 18th century. Excavation over the site of the almshouses revealed their foundations (CG 1053) and showed that the houses themselves consisted of one room on the ground floor and it is assumed that the first floor was also of one room (Plate 189).

The almshouses were separated from the timber yard by a brick wall and yard area to the front, south. This can be seen on the 1878 conveyance plan (WRO ref 496.5 BA9360/Cab 14/15/A; Fig 33) and was also revealed during the excavation (Fig 15; Plate 190). The 1878 conveyance plan also showed a small structure at the east end of the row of houses (Fig 33). This small rectangular structure was attached to the gable of the last of the almshouses and was uncovered during the excavation (Plate 191) when it was revealed to be a cesspit probably servicing the almshouses.

Worcester City planning documents, ref 74/0217, regarding a proposal in 1974 to convert the almshouses, included a plan of the terrace and a partial elevation of the frontage (Fig 47). At this time the almshouses had been empty for a number of years and it was proposed to change the use of the houses into offices, storage and light engineering workshops for a fire prevention sprinkler manufacturing company. Part of the proposals would involve the removal of the ground floor of cottage number 3 in order to provide a turning area for the vehicles belonging to the company. The proposals were turned down and the houses were eventually demolished in late summer and autumn 1976.

5.13 Viaduct

The former Council depot site was dominated by the railway viaduct that crossed from east to west at the north of the site (Plates 192 and 193). The railway viaduct was planned in the 1840s for which a map was drawn up in 1845 (WRO ref b496.5 BA9360/Cab25/5/4; Plate 136) but it wasn't until 1859 that work began, eventually carrying the Worcester to Hereford railway line. A spur to the viaduct was built in the 1860s running from Foregate Street Station to the river, although it was originally intended to join up with a line that ran alongside the river to Diglis. The Butts siding closed in the 1950s.

The arches of the viaduct are numbered with arch 25, at the west extent of the site, to arch 33, at the east extent of the site, being recorded (Plate 194). The viaduct was constructed of red brick coursed in English Bond and topped with a blue brick stepped cornice and parapet (Plate 195). Each of the arches was picked out with a rounded hoodmould of vitrified brick which joined the hoodmould of the adjoining arch at a brick stop (Plate 196).

The elevations of The Butts siding were partly hidden by the viaduct itself but sections were visible between each of the viaduct arches (Plate 197). The brickwork of the siding was coursed in English Bond on the spandrels and walling over each arch (Plate 198). The arch itself was coursed in a variation of English Bond with up to 20 courses of stretchers between each course of headers (Plate 199). The bricks themselves were highly vitrified (Plate 200) but had been replaced at the top of the walling with red brick of a later date. The arches of the siding were originally open providing walkways beneath through the viaduct, although it is likely that access into Joseph

Wood's builders yard was blocked. The arches do not appear to be open in an aerial photograph of the site taken in 1920 (Plate 201). The blocking of the siding arches therefore must have taken place before this. The blocking itself is formed of red brick, with vitrified headers, coursed in English Bond (Plate 202). Each section of blocking also incorporated two flat pilasters or buttresses coursed in Flemish Bond (Plate 202).

6 Conclusions

The site produced a series of developments that did not span a great length of time but was intensive. With the exception of the medieval stone city wall, only a small part of which is visible, the first phase of construction on the site took place only around 200 years ago with the early 19th century construction of buildings on the site of Transwipers and portions of these buildings survived until the demolition of the building in 2008. As can be seen from the historic documents, and the fabric of the recorded buildings, the mid-19th century development of the Netherton House Estate pasture land for industrial use took place over a short period of time. It is possible that the planning of the railway, and the eventual building of it, changed the importance of the land and left little options for usage. It can, however, be seen by the 1824 Corporation Plan that The Butts was already fast becoming an industrial suburb of the City with timber yards, blacksmith, wheelwright, carpenter, bricklayer and stables already in residence. The use of Netherton House as the Oriental and Classical school, with the Earl of Stirling as headmaster, was unusual within this industrial landscape.

Although a timber yard was in existence on the site by the 1840s, there was further development of the site once Joseph Wood officially took over the site in the 1850s. The partial rebuilding of the eastern range, the demolition of the central range and the construction of the north range across the site all took place between 1857 and 1878. It is likely that Joseph Wood and his sons were consolidating the processes used on the site and producing a more efficient site and process layout.

Little change in the Joseph Wood site was seen in the early part of the 20th century which may have been the result of the mortgaging of the site in 1905. With no real financial control over the buildings and their development, the site and the company probably stagnated before they moved out of The Butts and into new accommodation elsewhere. This would have allowed the company to expand and use more up to date equipment and buildings leaving behind the 'antiquated' and cramped conditions of the 19th century. With the use of the buildings by the City Corporation from the 1940s and 1950s onwards, the vast majority of the historic fabric survived, at least until the 1970s for some and 2009 for others.

7 Acknowledgements

Worcestershire Archaeology would like to thank the following for their kind assistance in the successful conclusion of this project:

Iain Paul, Peter Parkes, Anne Hannaford, Nick Hughes, Malcolm Saxby, James Dinn, Galliford Try and Hyder Consulting.

8 Bibliography

- Amdac 2014, *Amdac Carmichael history*, Available: (<http://www.amdac-carmichael.com/carmichael/history/> Accessed Dec 2014)
- Bennett 1890 *Business directory of Worcestershire*. Birmingham: Bennett and Co Ltd
- Bentley, J, 1840–1 *History, directory and statistics of Worcestershire*, **2**. Birmingham: Bentley and Co
- Billing, M, 1855 *Directory and gazetteer of the County of Worcester*. Birmingham: Billing
- Bradley, R, Evans C J, Pearson, E, Richer, S and Sworn, S, 2016 *Excavation at the site of The Hive, The Butts, Worcester*, Worcestershire Archaeology, Archive and Archaeology Service, Worcestershire County Council, report **2173**
- BT, 1983 *Telephone directory: West Midlands (Southern) area*. London: British Telecom
- BT, 1989 *The phone book: Worcester area*. London: British Telecom
- Cassey, E, 1860 *Directory of Worcestershire*. Preston: Cassey and Co
- Cope, 1933 *Worcestershire directory and buyer's guide*. Walsall: Cope and Co
- County, 1955-6 *Worcester Directory*. London: County Publishing Ltd
- DoBA 2014, *Defence of Britain Archives*, Archaeology Data Service, (<http://archaeologydataservice.ac.uk/archives/view/dob/> Accessed December 2014)
- EH 2006 *Understanding historic buildings: a guide to good recording practice*. Nottingham: English Heritage
- GPO 1947 *Post Office Telephone Directory, III, Section 26*. London: General Post Office
- GPO 1951 *Post Office Telephone Directory, 3, Section 26*. London: General Post Office
- GPO 1952 *Post Office Telephone Directory, 3, Section 26*. London: General Post Office
- GPO 1960 *Post Office Telephone Directory: West Midlands (Southern)*. London: General Post Office
- GPO 1962 *Post Office Telephone Directory: West Midlands (Southern)*. London: General Post Office
- GPO 1963 *Post Office Telephone Directory: West Midlands (Southern)*. London: General Post Office
- GPO 1970 *Post Office Telephone Directory: West Midlands (Southern)*. London: General Post Office
- GPO 1978 *Post Office Telephone Directory: West Midlands (Southern)*. London: General Post Office
- HEAS 2008a *Proposal for recording of historic buildings at the proposed new library site, The Butts, Worcester*, Unpublished report, Historic Environment and Archaeology Service, Worcestershire County Council, 1st February 2008, P3031
- HEAS 2008b *Proposal for an archaeological watching brief and evaluation at Transwipers, The Butts, Worcester*, Unpublished report, Historic Environment and Archaeology Service, Worcestershire County Council, 12th March 2008, P3031
- HEAS 2008c *Proposal for recording of historic buildings of 'The Joseph Wood building' at 26 The Butts (former City Council depot), Worcester City*, Unpublished report, Historic Environment and Archaeology Service, Worcestershire County Council, 18th November 2008, P3031
- HEAS 2008d *Proposal for a programme of archaeological works at the Worcester Library and History Centre, The Butts, Worcester*, Historic Environment and Archaeology Service, Worcestershire County Council, revision 1: document dated 18th June 2008
- HEAS 2011 *Excavation and building recording at The Hive (Worcester Library and History centre), The Butts, Worcester: Archaeological assessment and updated project design*, Historic Environment and Archaeology Service, Worcestershire County Council, document dated 2 September 2011, **P3031**
- Hughes, P 1980 Houses and Property in Post-Reformation Worcester: A Topographical Survey, in M O H Carver (ed), *Medieval Worcester: An Archaeological Framework*, Transactions of the Worcestershire Archaeological Society Third Series, **7**, 269-292
- IfA 2008 *Standard and guidance for the archaeological investigation and recording of standing buildings or structures*, Reading: Institute for Archaeologists

- Joyce, N, 2006 *Site of proposed new library and heritage centre, The Butts, Worcester. An historical assessment and architectural appraisal*, Unpublished report, Nick Joyce Architects, March 2006
- Kelly, W, 1850 *Post-office directory of Birmingham with Staffordshire and Worcestershire*, London: W Kelly and Co
- Kelly, 1860 *Post-office directory of Worcestershire*, London: Kelly and Co
- Kelly E R, 1870 *Post-office directory of Worcestershire*, London: Kelly and Co
- Kelly E R, 1872 *Post-office directory of Worcestershire*, London: Kelly and Co
- Kelly, 1880 *Directory of Birmingham, Staffordshire, Worcestershire and Warwickshire*, London: Kelly and Co
- Kelly, 1884 *Directory of Worcestershire*. London: Kelly and Co
- Kelly, 1892 *Directory of Worcestershire*. London: Kelly and Co Ltd
- Kelly, 1896 *Directory of Worcestershire*. London: Kelly and Co Ltd
- Kelly, 1900 *Directory of Worcestershire*. London: Kelly's Directories Ltd
- Kelly, 1921 *Directory of Worcestershire*. London: Kelly's Directories Ltd
- Kelly, 1928 *Directory of Worcestershire*. London: Kelly's Directories Ltd
- Kelly, 1930 *Directory of Worcestershire*. London: Kelly's Directories Ltd
- Kelly, 1940 *Directory of Worcestershire*. London: Kelly's Directories Ltd
- Lascelles, E C, 1851 *Directory and gazetteer of the city of Worcester and neighbourhood*. Worcester: Lascelles and Co
- Littlebury, J, 1869 *Directory of Worcestershire*. London: Littlebury and Co
- Littlebury, 1873 *Directory and gazetteer of the County of Worcester*. London: Littlebury
- Littlebury, 1879 *Directory and gazetteer of the County of Worcester*. London: Littlebury
- Littlebury, 1896 *Annual of official information and street directory of the city of Worcester*, Worcester: Littlebury and Co
- Littlebury, 1905 *Directory of Worcester and district*. Worcester: Littlebury and Co
- Littlebury, 1908 *Directory of the city of Worcester*. Worcester: Littlebury and Co
- Littlebury, 1915 *Directory of the city of Worcester*. Worcester: Littlebury and Co
- Mardon, R C, 2001 *An Illustrated History of Fire Engines*. Surrey: Ian Allen Publishing
- Miller, D, Robson-Glyde, S and Woodiwiss, S, 2005 *Archaeological assessment for the Worcester Library and History Centre*. Unpublished report, Historic Environment and Archaeology Service, Worcestershire County Council, report **1338**
- Miller, D, Robson-Glyde, S and Woodiwiss, S, 2008 *Archaeological assessment for the Worcester Library and History Centre*. Unpublished report, Historic Environment and Archaeology Service, Worcestershire County Council, report **1338**, rev 5
- NHLE, 2014 *National Heritage List for England*, English Heritage (<http://www.english-heritage.org.uk/professional/protection/process/national-heritage-list-for-england/> Accessed Dec 2014)
- Pigot, J, 1828-9 *National commercial directory of Worcestershire*. London: Pigot and Co
- Pigot, J, 1835 *National commercial directory of Worcestershire*. London: Pigot and Co
- Pigot, J, 1841 *Royal National and commercial directory of Worcestershire*. London: Pigot and Co
- Pigot, J, 1842 *Royal National and commercial directory of Worcestershire*. London: Pigot and Co
- Slater, I, 1850 *Royal National and commercial directory of Worcestershire*. London: Slater and Co
- Rogers, T, Robson-Glyde, S and Woodiwiss, S, 2009 *Archaeological evaluation and building recording at Transwipers, The Butts, Worcester*, Unpublished report, Historic Environment and Archaeology Service, Worcestershire County Council, report **1662**

Turnbull, W (ed) 1839 *The Stirling peerage: Trial of Alexander Humphrys or Alexander, styling himself the Earl of Stirling*. Edinburgh: Blackwood and Sons

WCC 2007 *An outline resource assessment and research framework for the archaeology of Worcester – consultation draft Sept 2007 (Version 2.51)*, Worcester City Council
(<http://www.worcester.gov.uk/documents/10499/47612/Worcester+Research+Framework+v2.51-reduced.pdf/bc7e8fb8-f6fc-4061-b483-f22dabae323c> Accessed December 2014)

WCMAS 2008a Brief for archaeological building investigation and recording, proposed library site, The Butts, Worcester. Unpublished document, Worcester City Museum Archaeology Section, 1st February 2008, 08/05

WCMAS 2008b Brief for a programme of archaeological work, Transwipers site, The Butts, Worcester. Unpublished document, Worcester City Museum Archaeology Section, 11th March 2008, 08/07

WCMAS 2008c Brief for archaeological building investigation and recording, 'Joseph Wood building', library site, The Butts, Worcester. Unpublished document, Worcester City Museum Archaeology Section, 20th November 2008, 08/28

Plates



Plate 1: Transwipers building from the north-west



Plate 2: Transwipers building from the north-east



Plate 3: Transwipers building from the east



Plate 4: Transwipers building from the south-west



Plate 5 Transwipers interior from the west



Plate 6 Transwipers interior stanchion structure from thh west



Plate 7: Transwipers interior roof structure building from the east

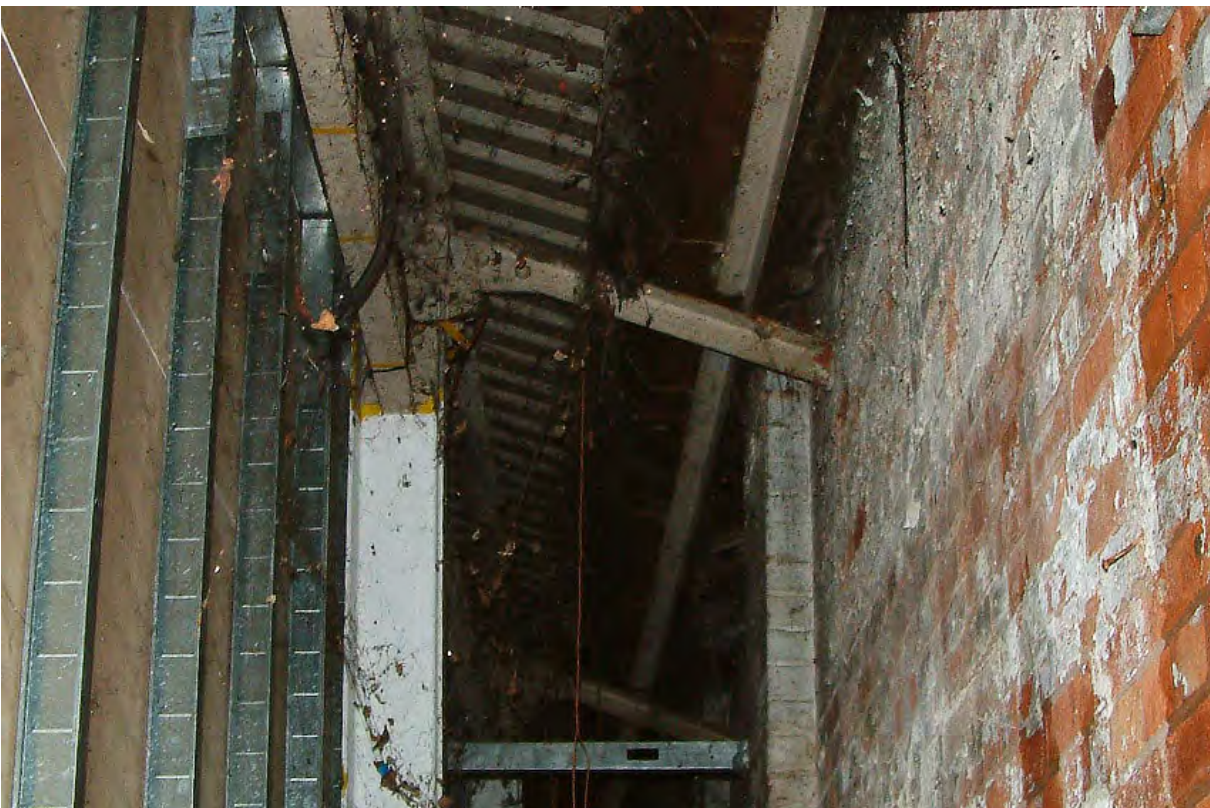


Plate 8: Transwipers interior roof structure tied into city wall from the west



Plate 9: Entrance into cellar from The Butts

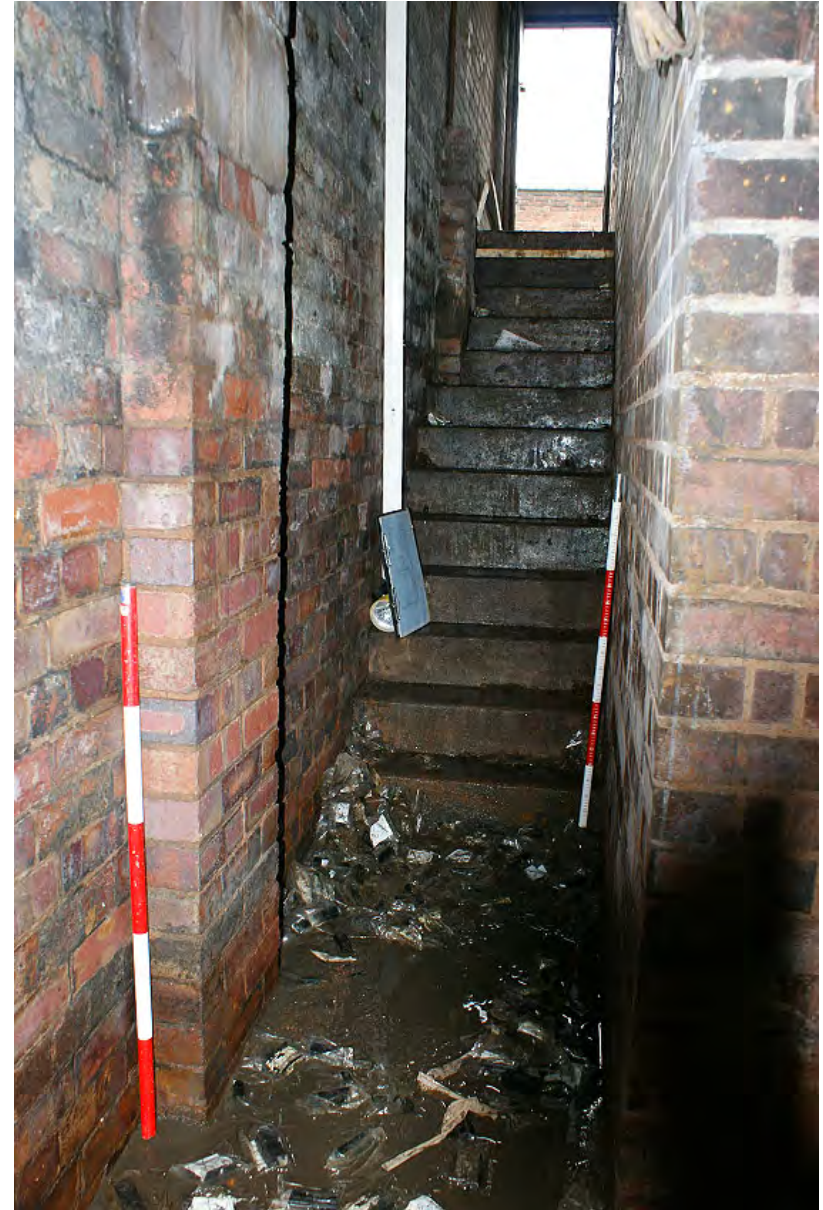


Plate 10: Corridor and stairs into cellar



Plate 11: Base of chimney stack from the south



Plate 12: Chimneystack within Rack Alley elevation from the south



Plate 13: Cast iron boiler with Transwipers cellar, from the north



Plate 14: Cast iron boiler with Transwipers cellar, from the south



Plate 15: Beeston 'Robin Hood Major' boiler



Plate 16: Riley Stoker Co. Ltd. 'Robot Stoker'

SECTION 14 559



'Yes, it's comfort that counts'
says O'Riley, 'and that means Controlled Heat'



THE RILEY ROBOT STOKER

If you are in any doubt about the type of stoking machinery that will give the best results in terms of ample—and controlled—heat, we shall be glad to put our long and intimate experience at your disposal.

FOR FLATS BLOCKS OFFICES LARGE BUILDINGS * FOR TOWN & COUNTRY HOUSES



The Riley Robot Stoker is the foremost mechanical stoker for central heating and hot water boilers in large buildings. It burns low-grade fuel with high efficiency, meets fluctuating loads with ease. Ten sizes for various ratings up to 2,700,000 B.Th.U's.

*

The Baby Robot Stoker is specially designed for heating and hot water furnaces in town or country houses. It can be fitted to most existing domestic boilers supplying, for example, two bathrooms and eleven radiators. It carries its own 1/2 h.p. motor and needs only the coal hopper filling and the ashes emptying once every twelve hours. The Baby Robot burns efficiently low-grade bituminous coal. For ratings up to 100,000 B.Th.U's.

*

Fully illustrated literature dealing with these stokers will be gladly sent on request.





THE BABY ROBOT STOKER attached to a domestic boiler

RILEY ROBOT STOKER

RILEY STOKER COMPANY LIMITED
Member of the International Combustion Organisation
NINETEEN WOBURN PLACE, LONDON, W.C.1

R.44

Plate 17: 1947 advert for the Riley Robot Stoker

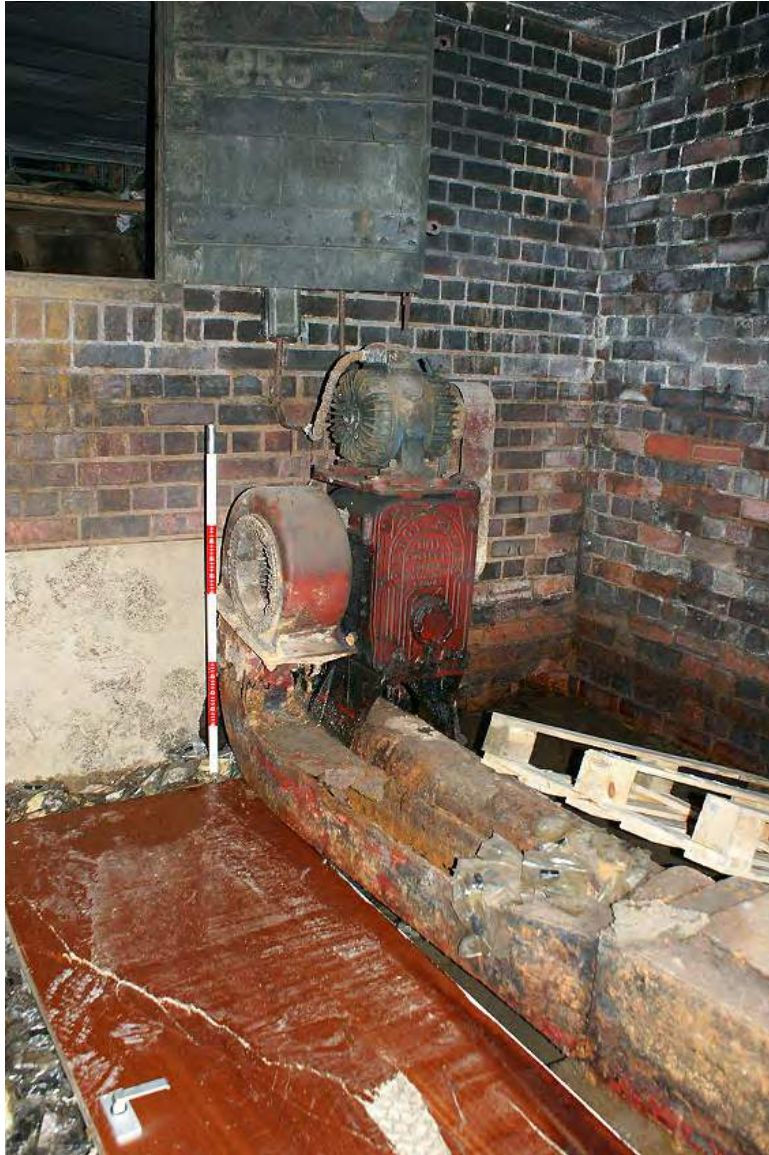


Plate 18 'Robot Stoker' and coal cellar hatch from the south



Plate 19: Coal cellar, from the south



Plate 20: Coal cellar hatch from the south



Plate 21: 19th century brickwork on The Butts elevation, from the north



Plate 22 East elevation of Transwipers

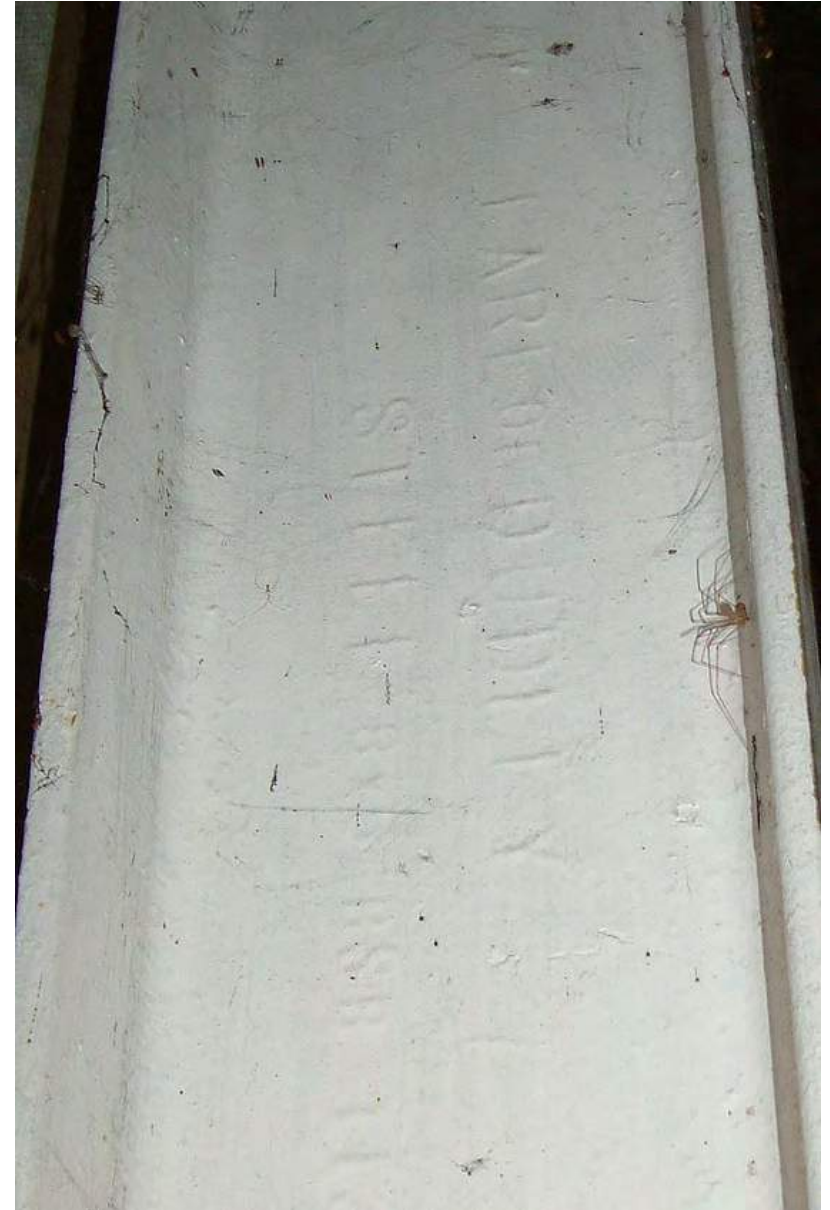


Plate 23 Earl of Dudley Steel stanchion



Plate 24 Transwipers (building in centre field with long roof lights) and Joseph Wood's yard from the north



Plate 25: British Steel stanchion



Plate 26: Interior space of Transwipers from the east



Plate 27: Interior, roadside, space of Transwipers from the east



Plate28: New stud wall hiding city wall from the north



Plate 29: New offices from the west



Plate 30: New breeze block utility rooms



Plate 31: City wall on site adjacent to Transwipers (with Transwipers building on right)



Plate 32: City wall once Transwipers building was demolished from the north



Plate 33: Stonework at top of the city wall



Plate 34: Tower or bastion remains on land adjacent to Transwipers



Plate 35: Holes cut into city wall to test the make-up of the wall



Plate 36: West side hole cut into city wall



Plate 37 East side hole cut into city wall



Plate 38: Foundations of octagonal cattle market counting house

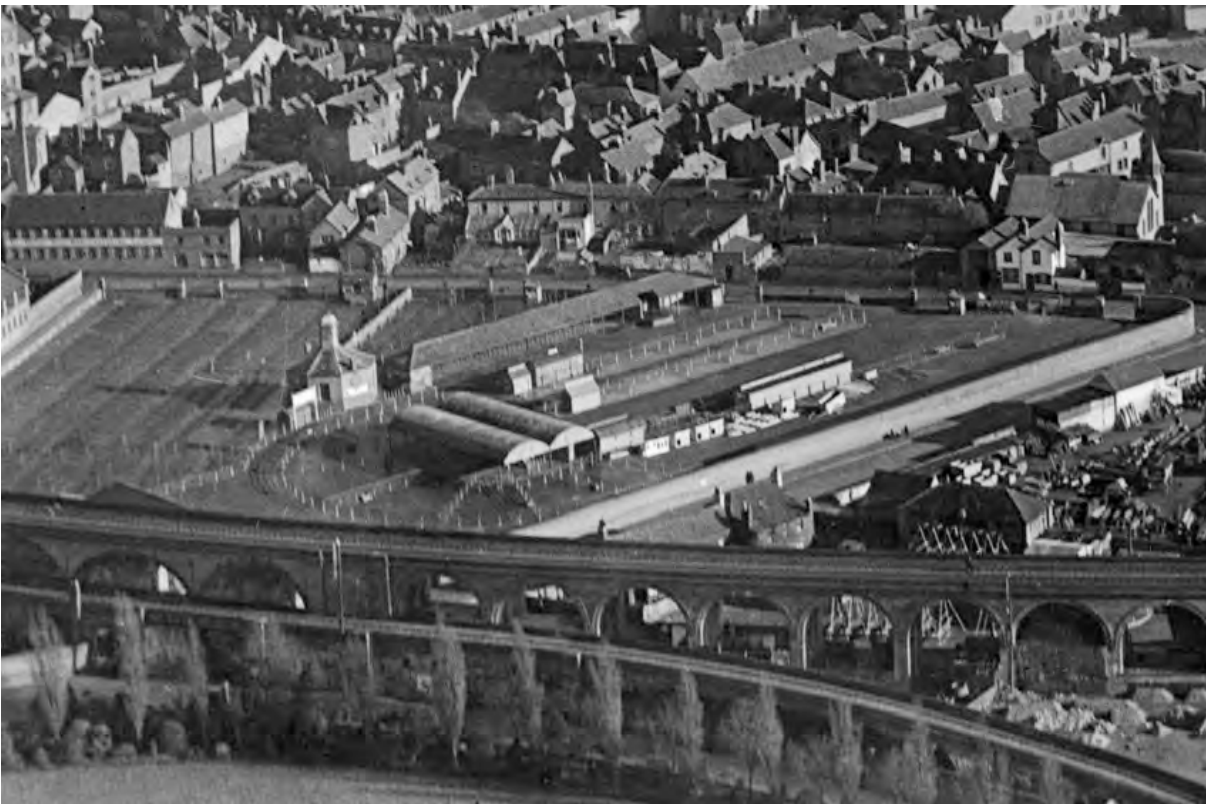


Plate 39: 1920s aerial photograph showing cattle market and the counting house
(© English Heritage <http://www.britainfromabove.org.uk/image/EPW005383>)



Plate 40: 1960s photograph showing cattle market and the counting house



Plate 41: The Butts boundary wall to the former City Council depot from the south-west



Plate 42: West end pier of The Butts boundary wall



Plate 43: Sandstone capital to pier



Plate 44: The Butts boundary wall rebuilt east section



Plate 45: Inserted opening at the east end of The Butts boundary wall



Plate 46: 1930s/40s inserted door, box and air vent



Plate 47: Cast iron box to east of door



Plate 48: Inserted opening



Plate 49: Netherton Lane boundary wall from the south



Plate 50: Joseph Wood building on Netherton Lane



Plate 51: Netherton Lane boundary wall from the north

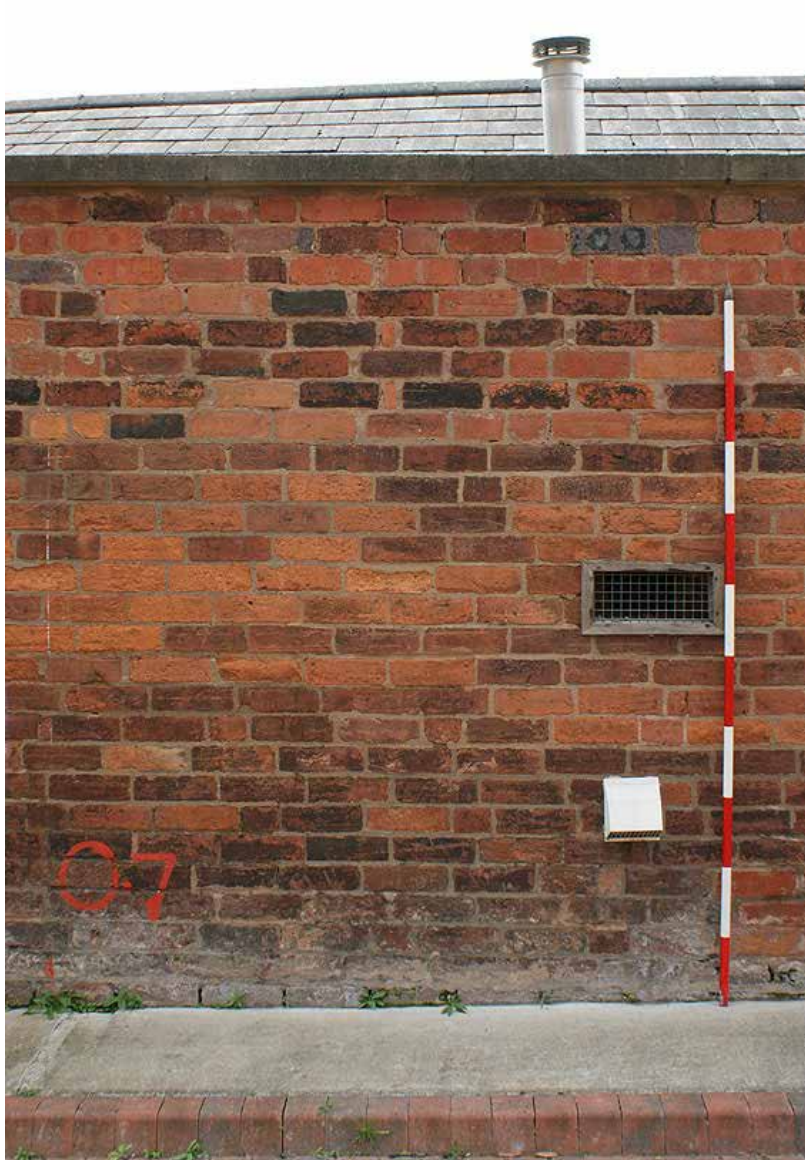


Plate 52: Three phases of brickwork of Netherton Lane wall



Plate 53: Flemish Bond brickwork of Netherton Lane wall

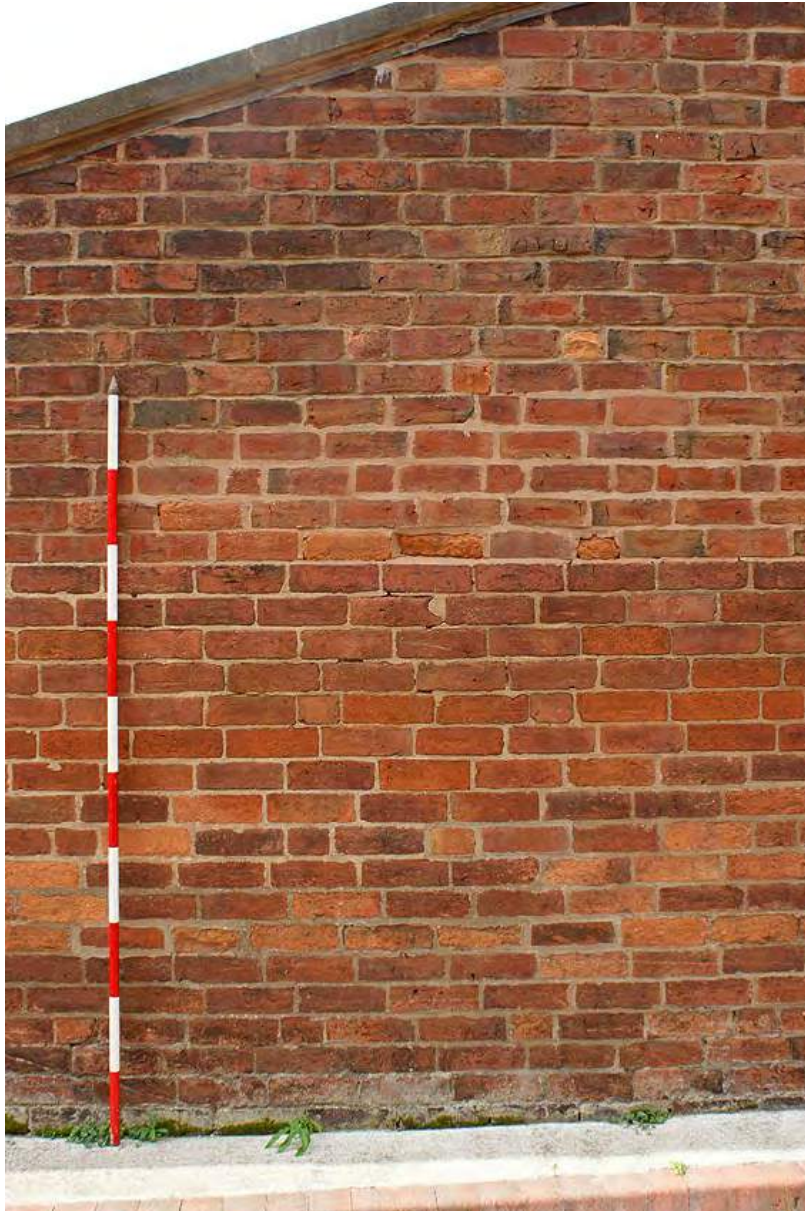


Plate 54: Raising of Netherton Lane wall height

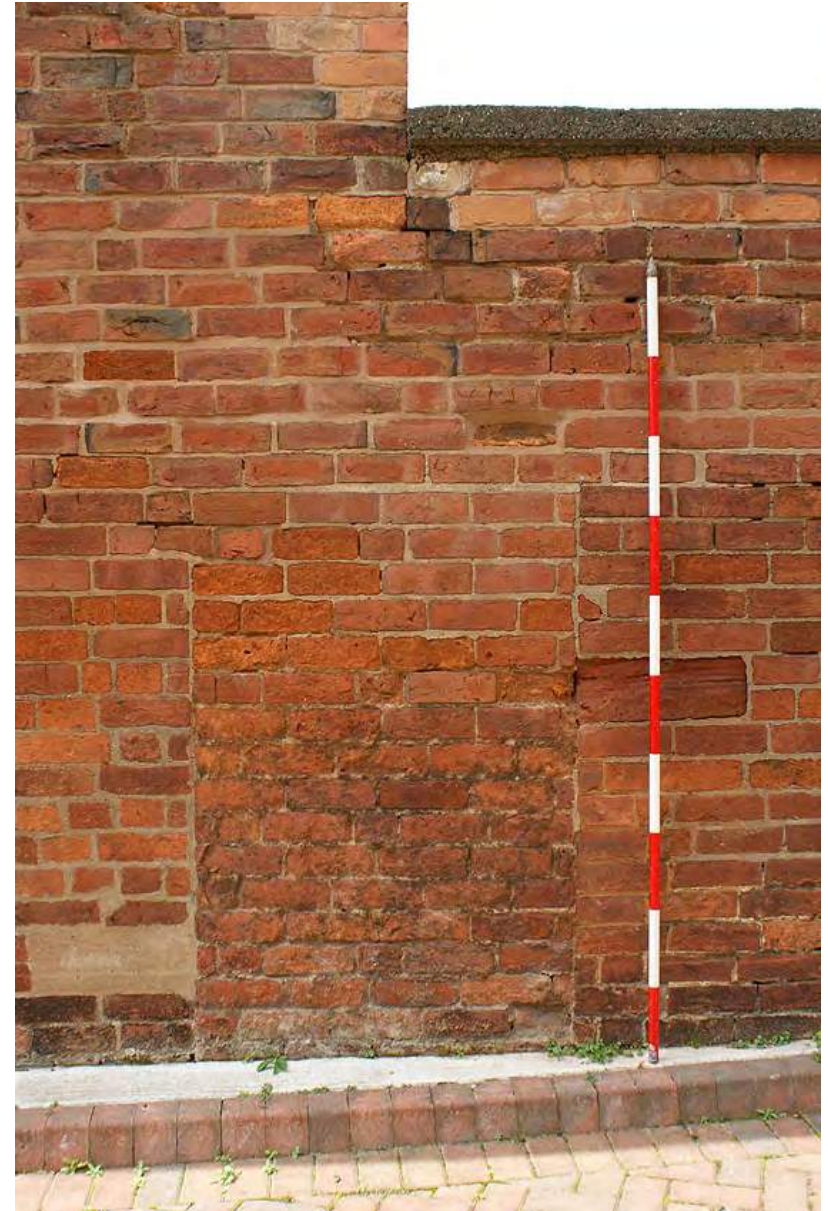


Plate 55: Blocked opening on wall section 2 - 3

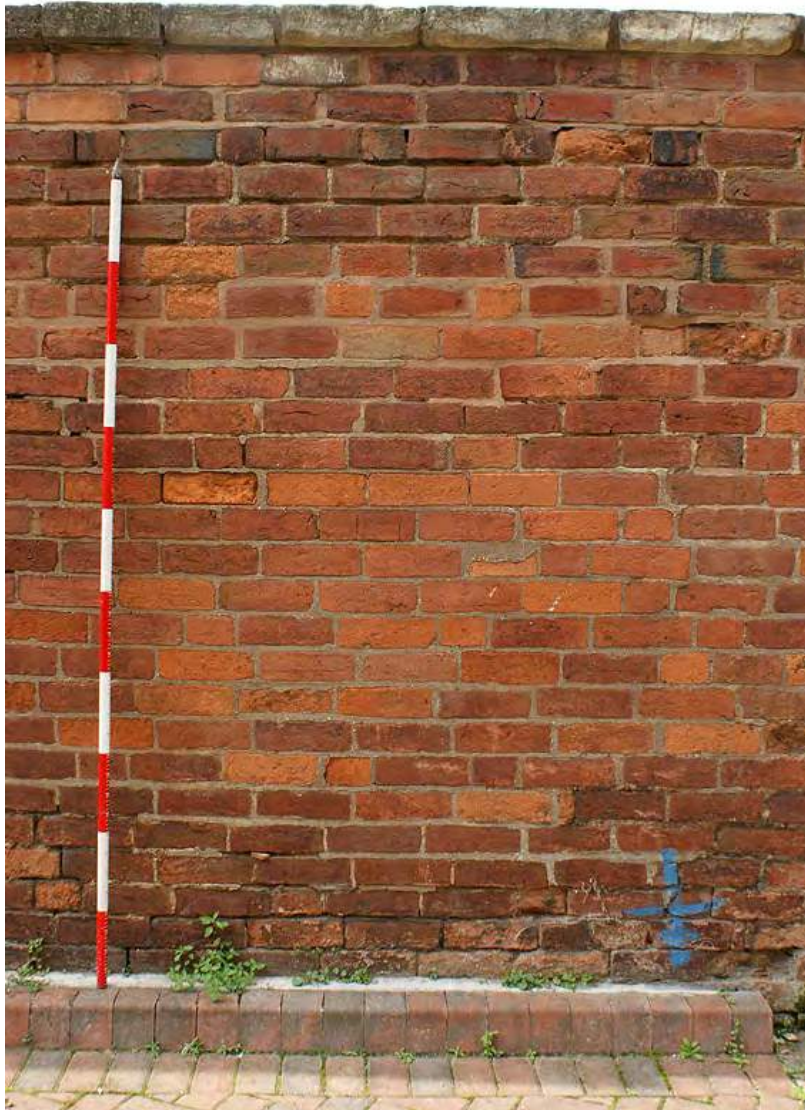


Plate 56: Wall section 3, Netherton Lane side



Plate 57: Depot side of Netherton Lane wall



Plate 58: Wall section 3, depot side of Netherton Lane wall



Plate 59: Building scar from roof of demolished structure Netherton Lane



Plate 60: Wall section 4, blocked gateway



Plate 61: Hook for holding hinges of a gate



Plate 62: Wall section 5 of Netherton Lane wall, depot side



Plate 63: Foundations of range of buildings during excavation



Plate 64: Foundations of range of buildings and the corresponding building scars on the wall



Plate 65: Building scar formed by filling holes with cement



Plate 66: Roofline of former structure on wall section 5

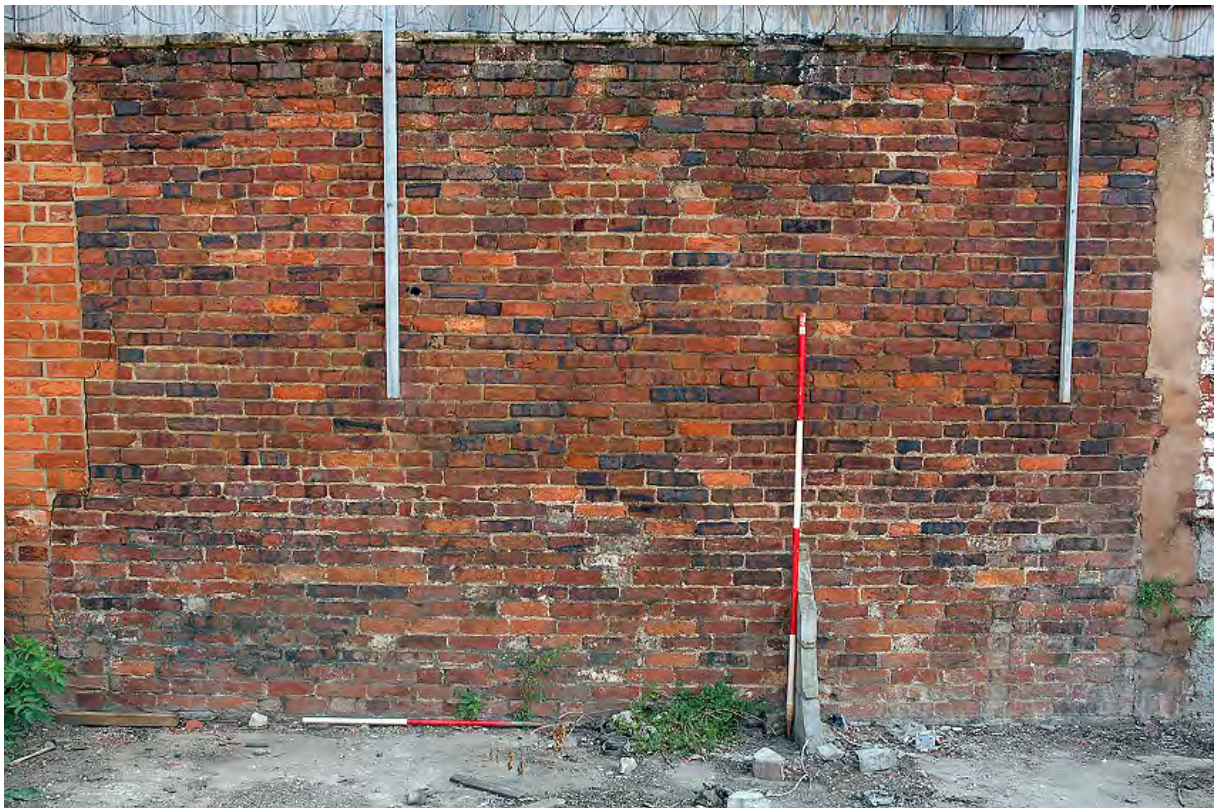


Plate 67: Wall section 6, depot side of Netherton Lane wall



Plate 68: Breeze block stub-wall and scar from similar wall



Plate 69: Wall section 6 of Netherton lane wall, depot side



Plate 70: Coomber's boundary wall from the north



Plate 71: Coomber's boundary wall from the south



Plate 72: Coomber's boundary wall brickwork and sandstone top



Plate 73: Tubular railing posts and spiked tops



Plate 74: Square post and bracket of railings



Plate 75: Northern pier of Coomber's boundary wall



Plate 76: Sandstone block



Plate 77: Modern bricks at top of north pier of Coomber's Wall



Plate 78: South pier of Coomber's boundary wall



Plate 79: East elevation of air raid shelter



Plate 80: North elevation of air raid shelter



Plate 81: West elevation of air raid shelter



Plate 82: Entrance to air raid shelter on The Butts



Plate 83: Air vent at top of wall of air raid shelter



Plate 84: Air vent at base of wall of air raid shelter



Plate 85: Unfinished mortar on air raid shelter west elevation



Plate 86: Remains of demolished structure to west of air raid shelter



Plate 87: Chimney from demolished structure to west of air raid shelter



Plate 88: Low level wall constructed of engineering brick



Plate 89: Interior of air raid shelter



Plate 90: 1825 drawing of Netherton House and grounds (WRO ref BA14904)



Plate 91: *The Butts frontage of the Joseph Wood office building*



Plate 92: *Depot (west) elevation of Joseph Wood office building*



Plate 93: Middle, two-storey range of Joseph Wood building



Plate 94: West elevation of single-storey range of Joseph Wood building



Plate 95: North elevation of single-storey range of Joseph Wood building



Plate 96: Example of window arches showing decorated brickwork and limestone keystone

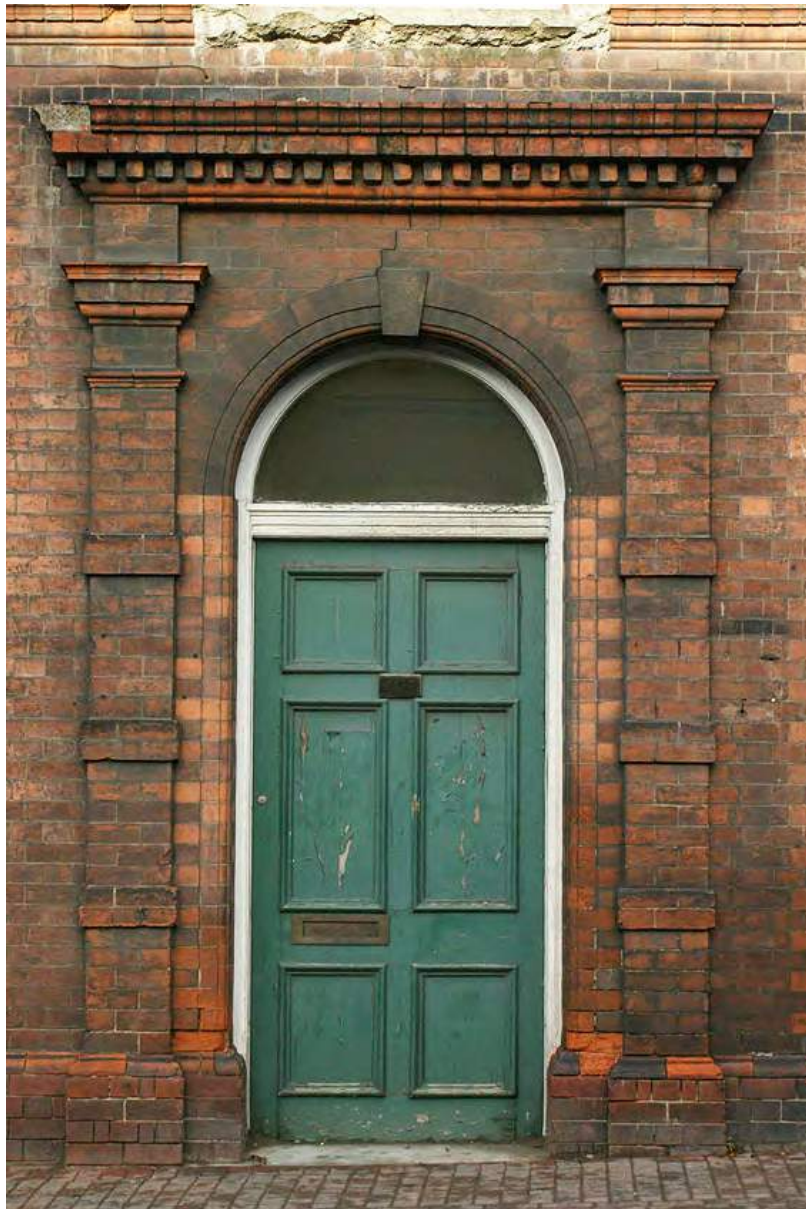


Plate 97: Decorative brickwork and terracotta around front door with bolection moulded panels

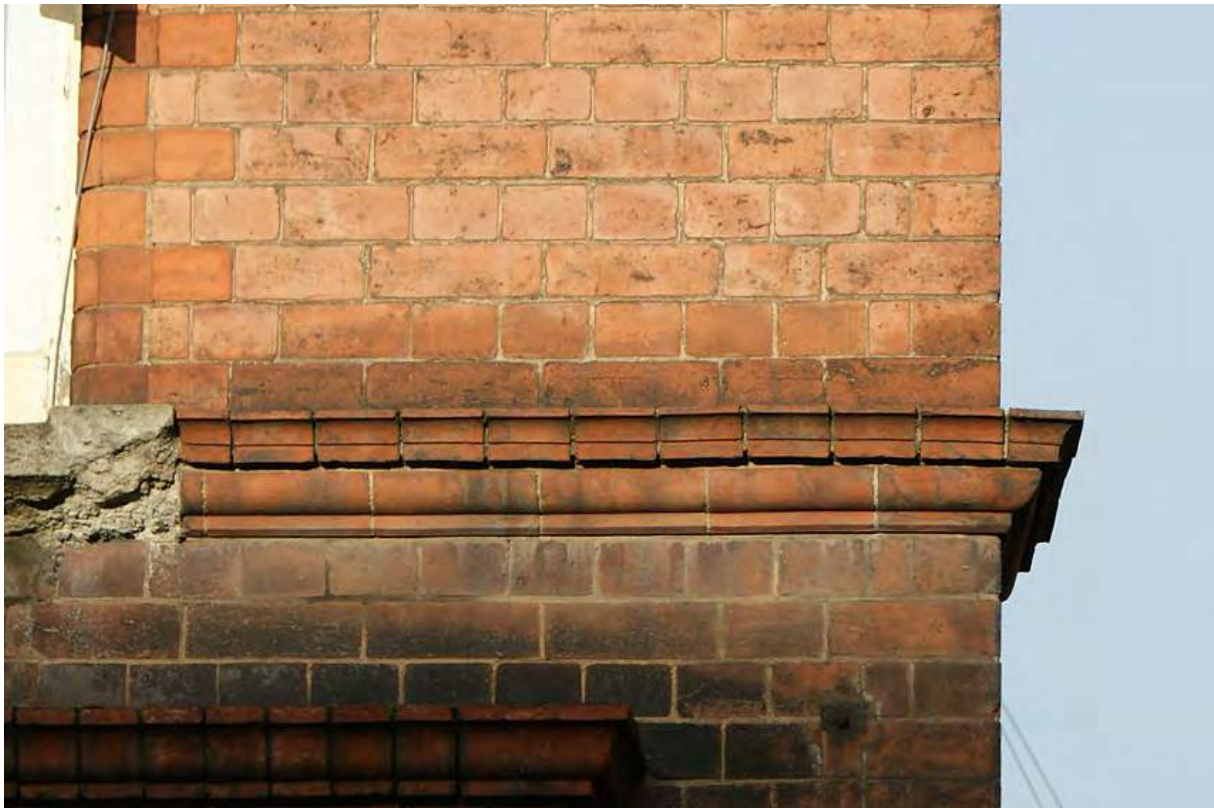


Plate 98: Moulded terracotta string course



Plate 99: Moulded terracotta and brick eaves cornice



Plate 100: Blue brick door surround of two-storey range



Plate 101: Blue brick window arch on two-storey range



Plate 102: Plinth of two-storey range



Plate 103: Door way of single-storey range showing blue brick detail



Plate 104: Dentilated cornice and terracotta pediment to front entrance



Plate 105: Ground floor, south elevation of the 'office building' fronting The Butts, showing door surround, window surround and string course



Plate 106: First floor, south elevation of the 'office building' fronting The Butts, showing the eaves cornice, window surrounds and string courses



Plate 107: Moulded plaster cornicing within main building



Plate 108: Moulded plaster corncicing within the main building



Plate 109: Moulded plaster corncicing, Room G3



Plate 110: Roll moulded skirting in the building fronting The Butts



Plate 111: Moulded plaster corncing within the main building



Plate 112: Roll moulded skirting in the building fronting The Butts



Plate 113: Plain fanlight above front door, Room G5



Plate 114: Example of bolection moulded window frame, Room G5



Plate 116: Roll beaded skirting on staircase



Plate 115: Dog leg staircase with quarter landing and winder



Plate 117: Curtail step with foliate carved central post and tapered column balusters



Plate 118: Open string with decorated scroll type brackets



Plate 119: Example of plaster moulded cornice on staircase



Plate 120: Looking up to ceiling showing surviving cornice, Room F3 cupboard



Plate 121: Cornice and picture rail, Room F1



Plate 122: Unusual feature – example of ventilator with hand shaped handle



Plate 123: Example of roll beaded skirting, Room F1



Plate 124: Cornice and picture rail in building fronting The Butts



Plate 125: Staircase window, Room F3



Plate 126: Looking up to ceiling cornice and picture rail, Room F4a



Plate 127: Surviving bolection moulded door surround, Room F4a



Plate 128: Example of surviving bolection panelled door, Room F4a



Plate 129: Roll beaded skirting on staircase, Room F3



Plate 130: Ovolo moulded wood creating panelled ceiling, above later suspended ceiling, Room F10



Plate 131: Slider quadrant window stay



Plate 132: Curved turnbuckle window catch



Plate 133: Slider Quadrant bar and curved turnbuckle window catch



Plate 134: Spiral turnbuckle window catches



Plate 135: Spiral window stay and handle



Plate 136: Gently curved flat top stair handrail



Plate 137: Example of moulded plaster cornice in two-storey range, Room G6



Plate 138: Example of blue engineering brick window details and iron casement



Plate 139: Welsh Midland Railway Plan of 1845 (WRO ref b496.5 BA9360/Cab25/5/4)



Plate 140: Building break between middle and rear sections



Plate 141: Building break between first floors of frontage and middle sections



Plate 142: Clear building break between frontage and side elevations



Plate 143: New wall and double-doored opening of 1970s date



Plate 144: 1970s toilet area



Plate 145: 1970s drying room



Plate 146: Former clerks work area then 1980s interview room



Plate 147: 1980s corridor alongside 1870s staircase



Plate 148: 1980s access to middle section first floor



Plate 149: 1980s kitchen on middle section first floor



Plate 150: 1980s passage space



Plate 151: 1980s bathroom area middle section first floor



Plate 152: Office space of 1980s usage of middle section first floor



Plate 153: 1980s bathroom created on frontage section first floor



Plate 154: Sawpit from the north, showing the full length



Plate 155: Sawpit showing the timber floor



Plate 156: Series of five postholes from the south



Plate 157: Posthole showing the lias post pad



Plate 158: Section through posthole showing post pipe

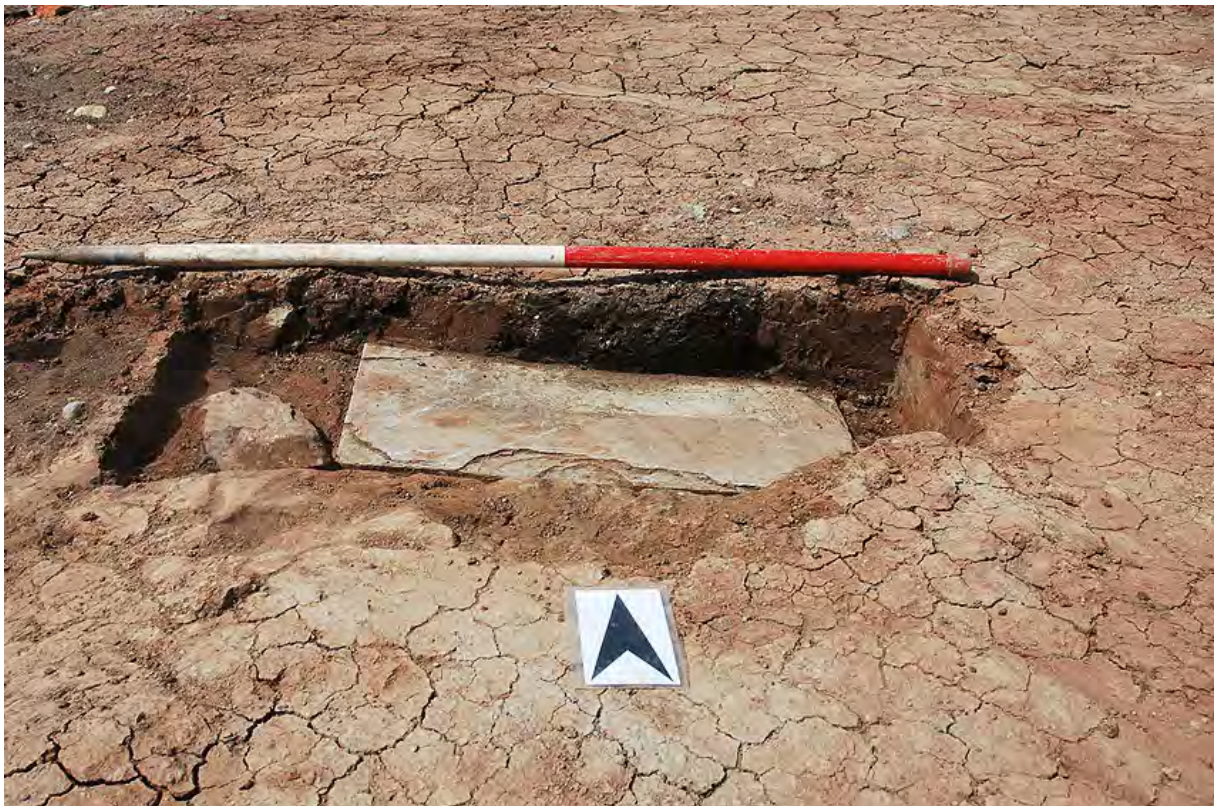


Plate 159: Section through posthole showing post pipe



Plate 160: Sawmill building from the north



Plate 161: Sawmill building from the south, west elevation on Croft Walk



Plate 162: Sawmill building from the south-east, east elevation from the depot



Plate 163: North elevation of sawmill building from north



Plate 164: South elevation of sawmill building from south

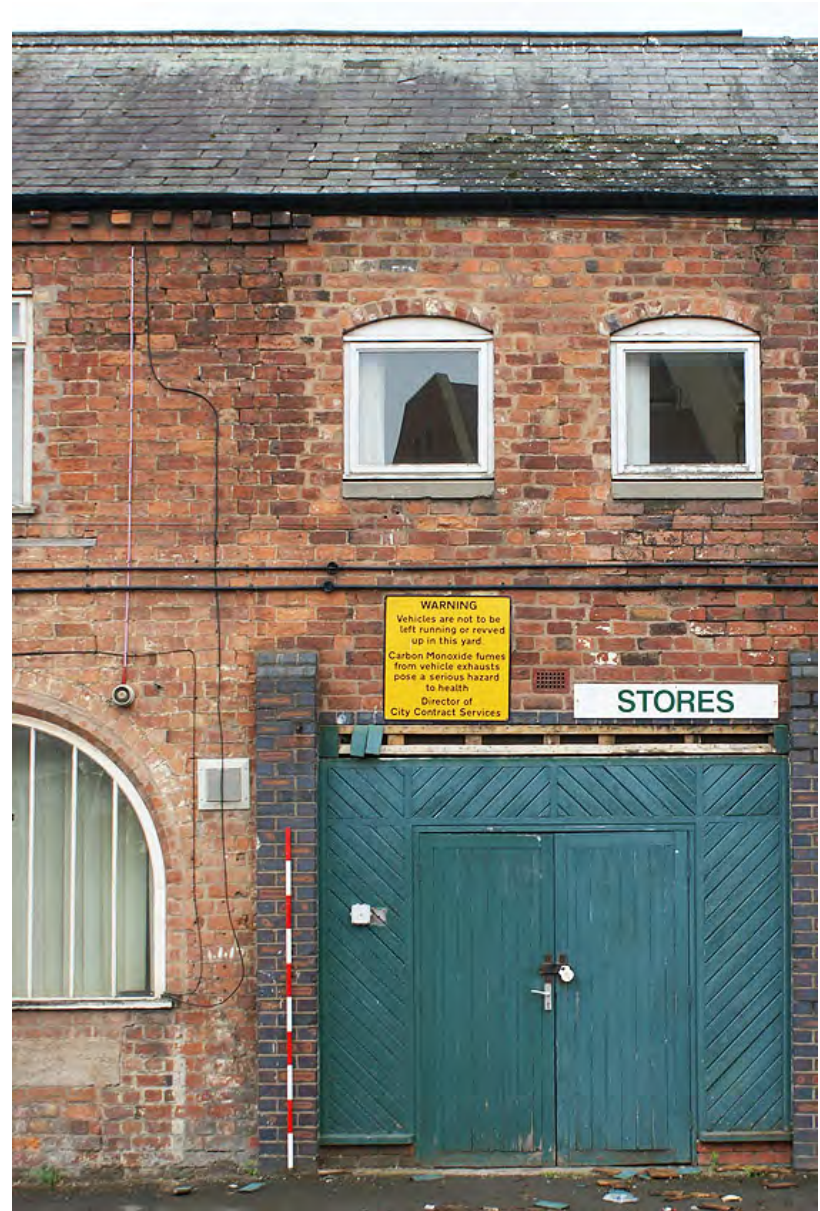


Plate 165: Building break with earlier section to right, note change in eaves treatment



Plate 166: Buttresses formed from remains of structures built against the elevation



Plate 167: 1920s aerial photograph with Joseph Wood site on left middle, note tall chimney
(© English Heritage <http://www.britainfromabove.org.uk/image/EPW005383>)



Plate 168: Interior ground floor of sawmill building from the north



Plate 169: Interior ground floor of sawmill building from the east



Plate 170: Interior ground floor of sawmill building showing windows of west elevation



Plate 171: Vaulted ceiling of ground floor of sawmill building



Plate 172: Vaulted ceiling of ground floor of sawmill building



Plate 173: Windows cut across by ceiling vault



Plate 174: Staircase added into building and cut across windows



Plate 175: One of the small office spaces on sawmill first floor



Plate 176: Corridor on sawmill building first floor



Plate 177: Small office space on sawmill building first floor



Plate 178: Prop shaft structure from the east



Plate 179: Engine and boiler house attached to sawmill building



Plate 180: Eastern part of sawmill range from the east



Plate 181: Eastern part of sawmill range from the west



Plate 182: Eastern part of sawmill range showing hearth in centre right and nag stable to right (back)



Plate 183: Foundation of staircase within archway of sawmill range



Plate 184: Western part of sawmill range



Plate 185: Western part of sawmill range and lean-to sheds



Plate 186: 1970s photograph of almshouses (right)



Plate 187: 1970s photograph of almshouses



Plate 188: 1970s photograph of almshouses



Plate 189: Almshouses foundations, from the west



Plate 190: Almshouses yard, from the east



Plate 191: Almshouses cess pit, from the south



Plate 192: Railway viaduct running across the site, west to the left



Plate 193: Railway viaduct running across the site, west to the left



Plate 194: Viaduct arches 25 to 33 during excavation



Plate 195: Viaduct arch showing stepped cornice and parapet



Plate 196: Viaduct arch hoodmould and stop of brick



Plate 197: Viaduct arches showing arches of The Butts siding



Plate 198: Arch of The Butts siding



Plate 199: Brickwork of The Butts siding arch



Plate 200: Vitrified bricks of The Butts siding wall

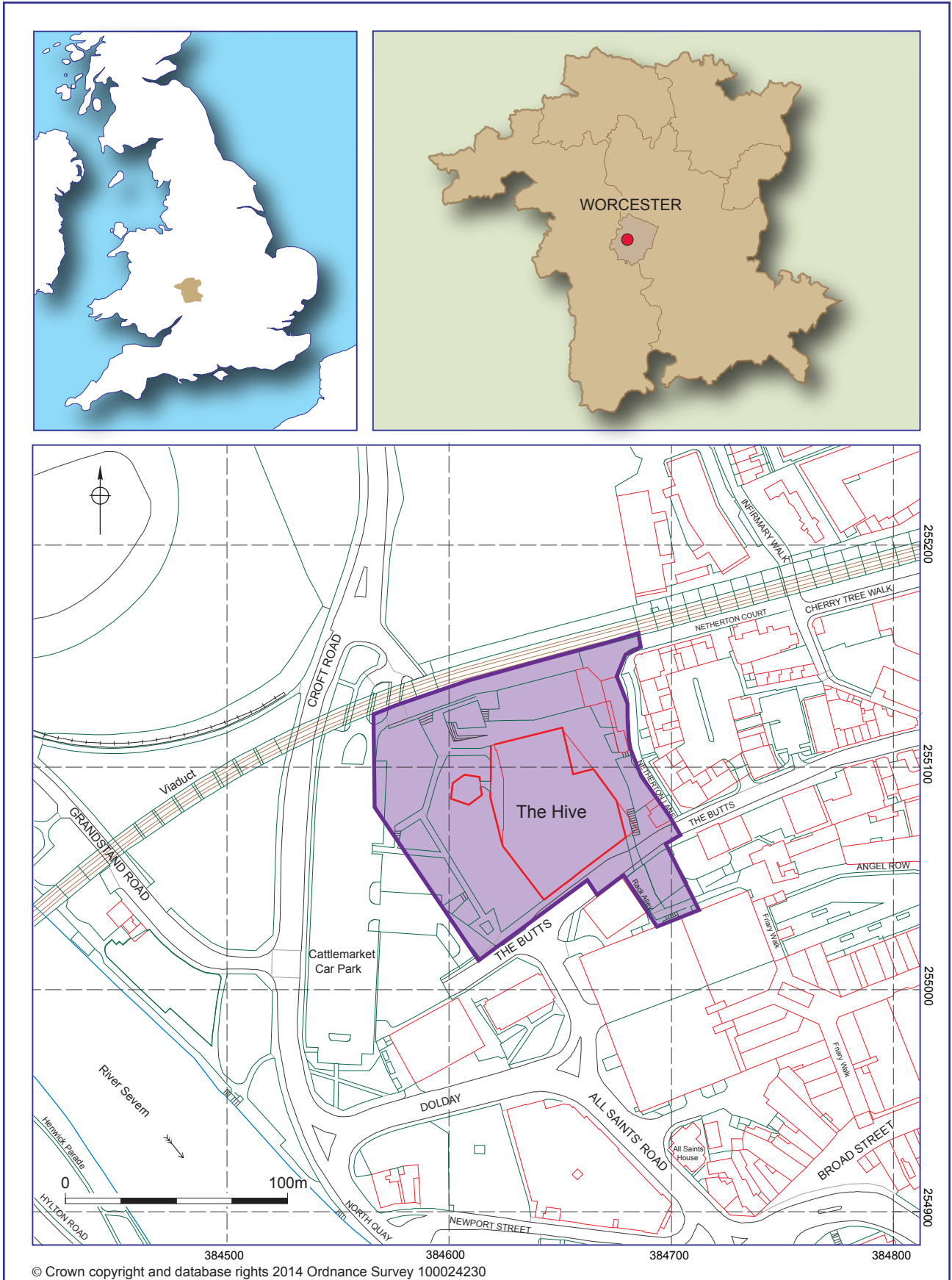


Plate 201: 1920s aerial photograph showing railway viaduct and siding (© English Heritage <http://www.britainfromabove.org.uk/image/EPW005383>)



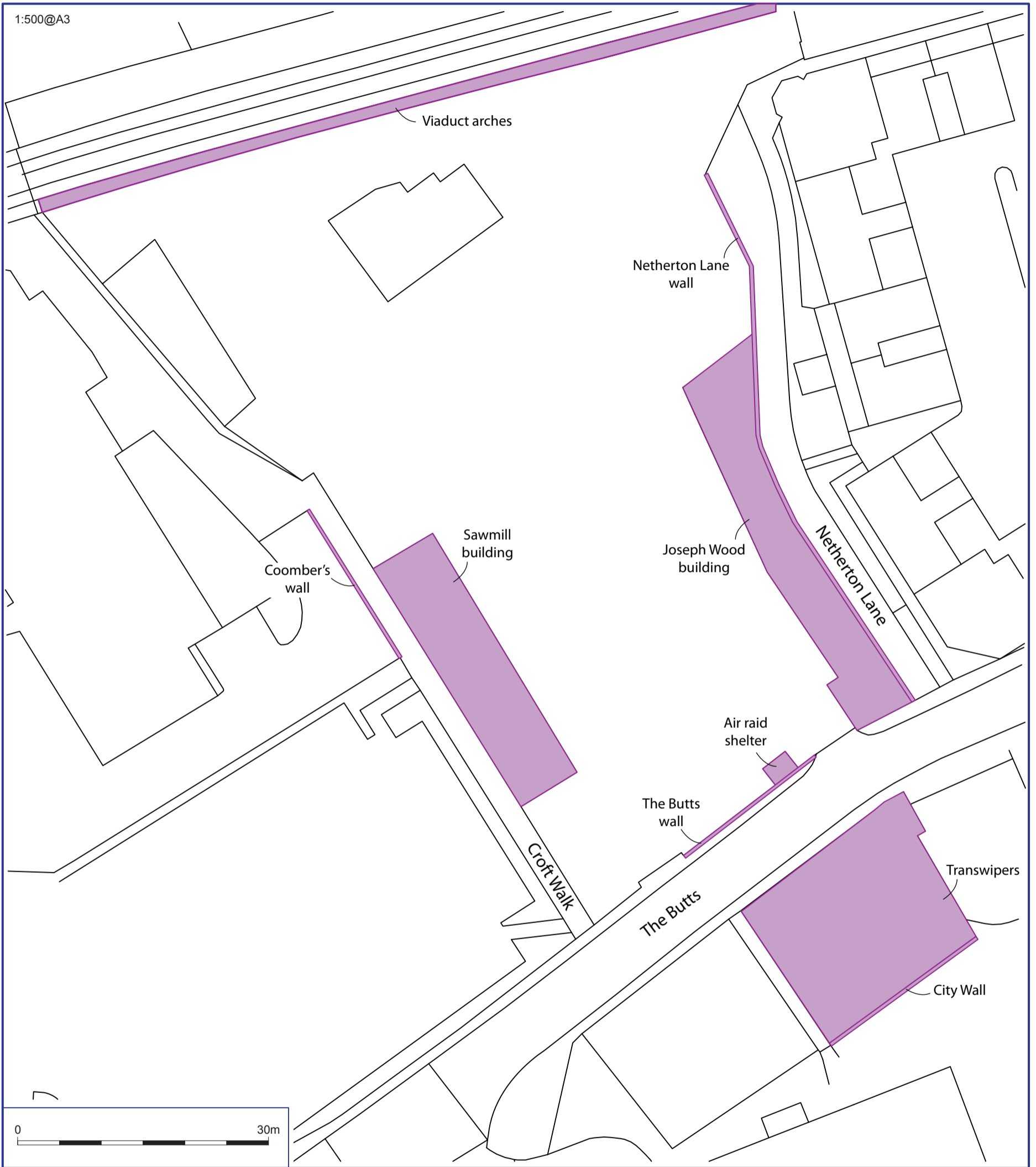
Plate 202: Blocking of The Butts siding arch

Figures



Location of the site

Figure A



Locations of buildings recorded

Figure 2

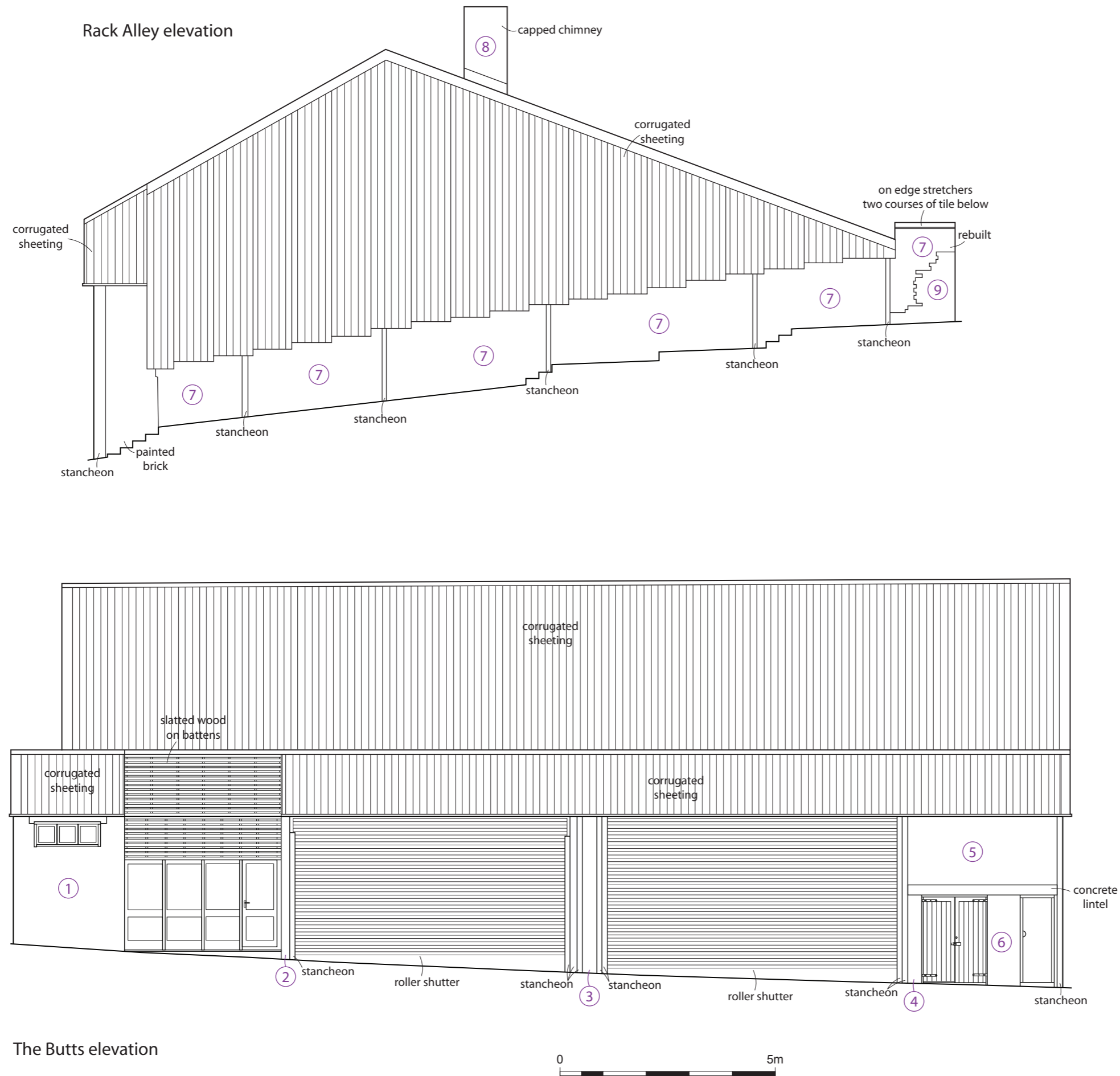
1:100@A3

- Early to mid 19th C
- By 1928
- By 1970
- Late 20th C



Ground and cellar plans of Transwipers building

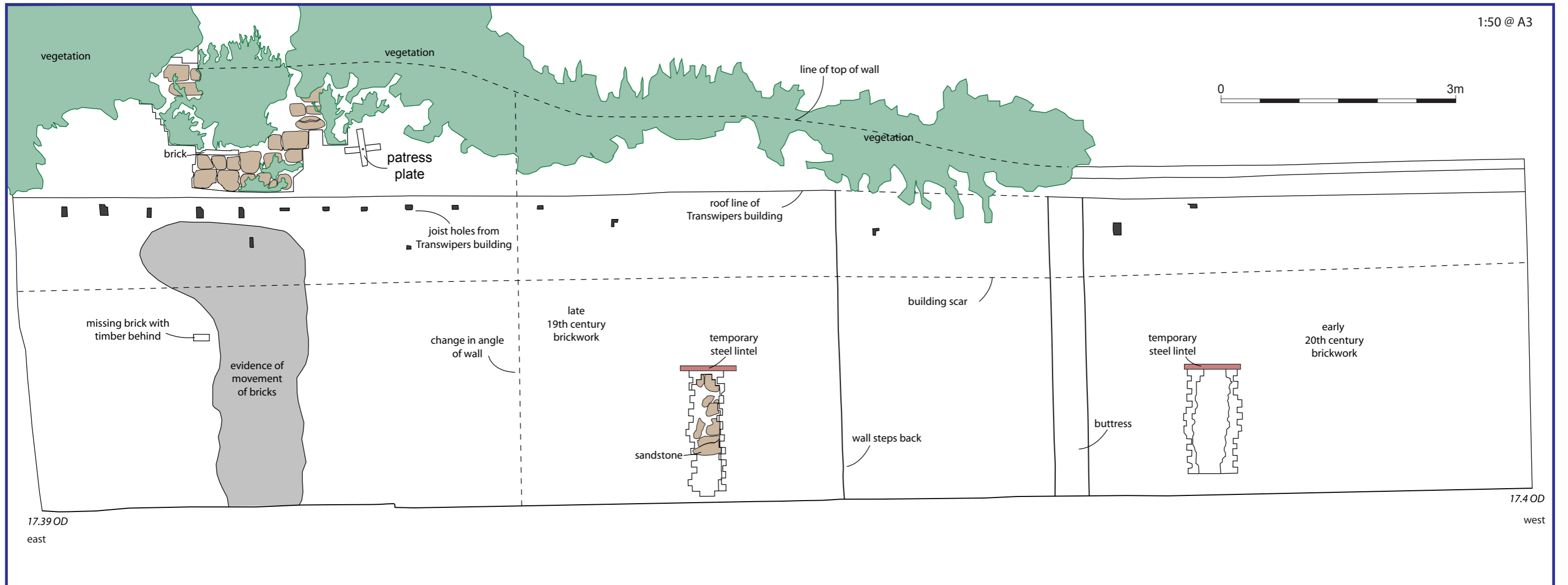
Figure 3



- ① white painted brick, 8 3/4" x 4 1/2" x 2 7/8", Flemish Bond, 19th century date
- ② white painted brick, 8 1/2" x 4" x 2 1/2", English Bond
- ③ white painted brick, 8 7/8" x 4 3/8" x 3", Flemish Bond
- ④ same as 3 but coursed in Flemish Bond variant
- ⑤ white painted brick, 8 7/8" x 4 3/8" x 3 1/4", Flemish Bond variant
- ⑥ white painted brick, 8 5/8" x 4 1/2" x 2 3/4", Flemish Bond variant
- ⑦ machine made red-orange brick with pale stripes, 9" x 4 1/4" x 3 1/4", modern London Brick
- ⑧ dark red-brown brick, 9 1/2" x 4 1/4" x 2 3/4", Flemish Bond, 19th century date
- ⑨ machine made red brick, 8 7/8" x 4 3/8" x 3 1/4", Flemish Stretcher Bond,

The Butts and Rack Alley elevations of Transwipers building

Figure 4



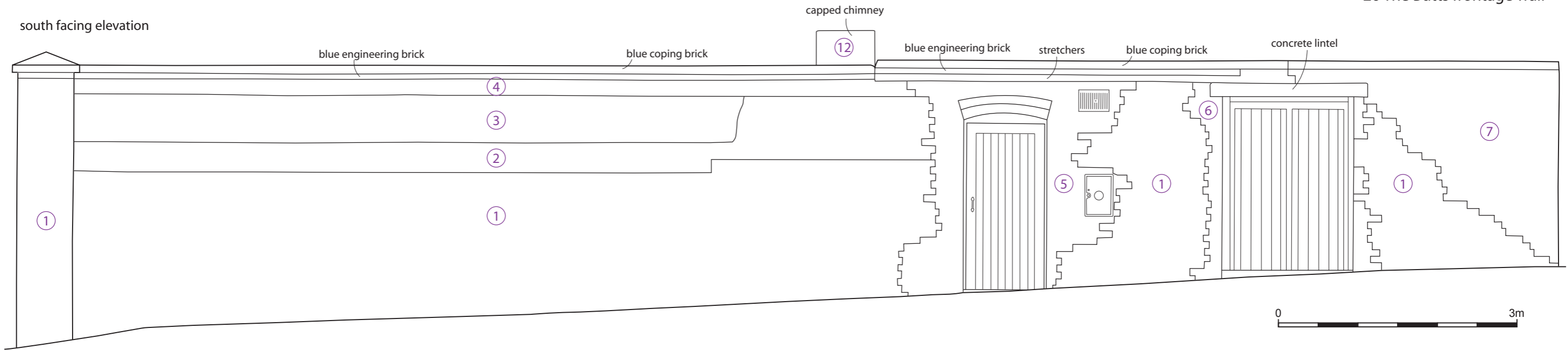
City Wall from the north

Figure 5

1:50 and 1:10 @ A3

26 The Butts frontage wall

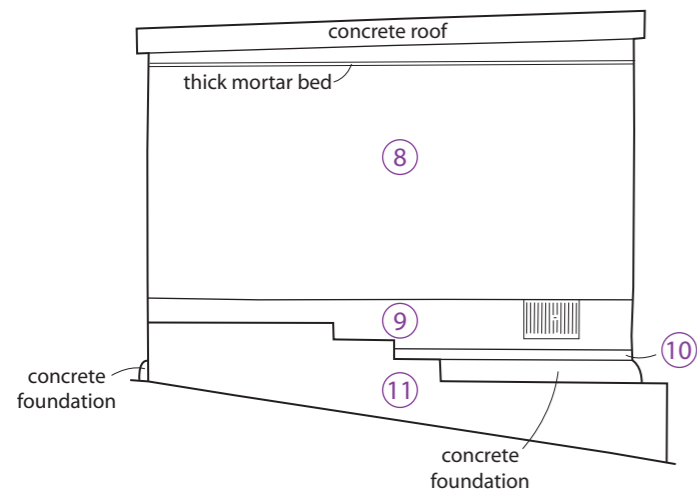
south facing elevation



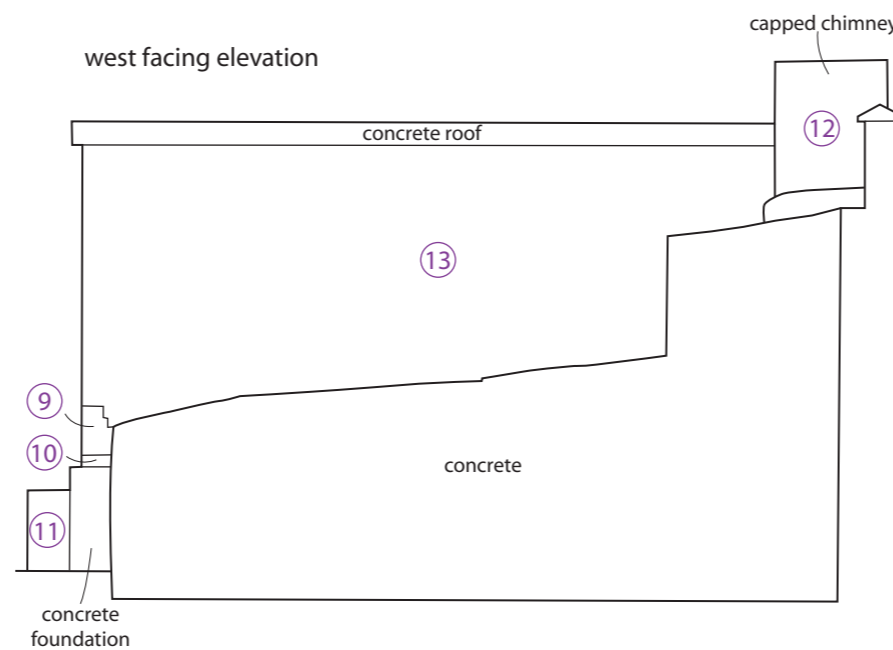
- ① mould made bricks, 9 1/4" x 4 1/4" - 4 1/2" x 2 3/4"; English Bond
- ② same as 1, coursed differently, Flemish Stretcher Bond/Garden Wall Bond
- ③ same as 1, reused, Flemish Garden Wall Bond
- ④ same as 1, reused to cap wall
- ⑤ same as 1, reused to rebuild wall, ribbon pointing
- ⑥ same as 1, reused to rebuild wall
- ⑦ same as 1, rebuilt using original bricks
- ⑧ machine made bricks, red colour, 9" x 4 3/8" x 3"; Flemish Stretcher Bond
- ⑨ high fired brick, blue-purple colour, 4 courses, Stretcher Bond, bottom course headers
- ⑩ brick foundation, headers
- ⑪ large blue engineering bricks, 15 3/4" x 10" x 4 1/4"
- ⑫ machine made bricks, 9" x 4 1/4" x 2", Stretcher Bond
- ⑬ same as 3, not finished on exterior face



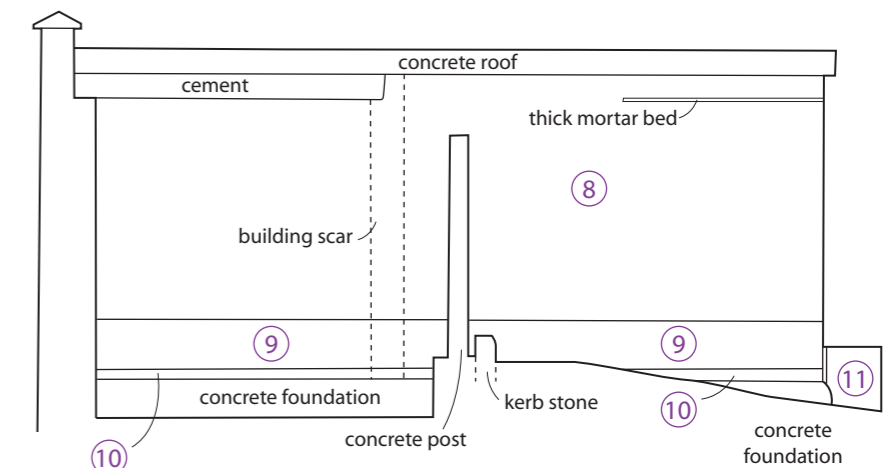
north facing elevation



west facing elevation



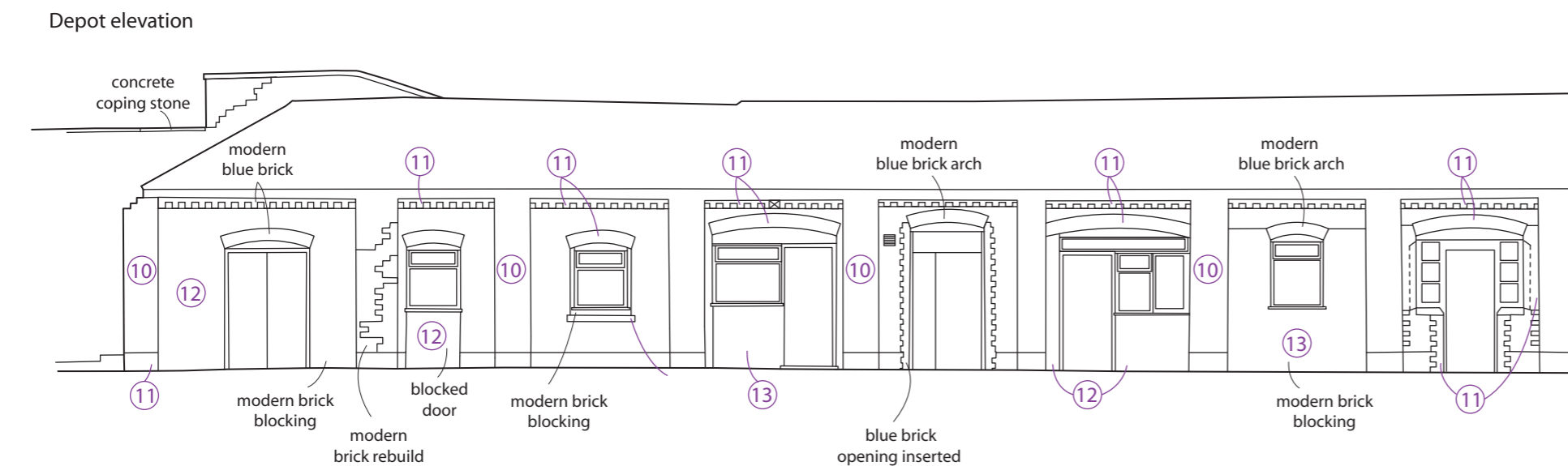
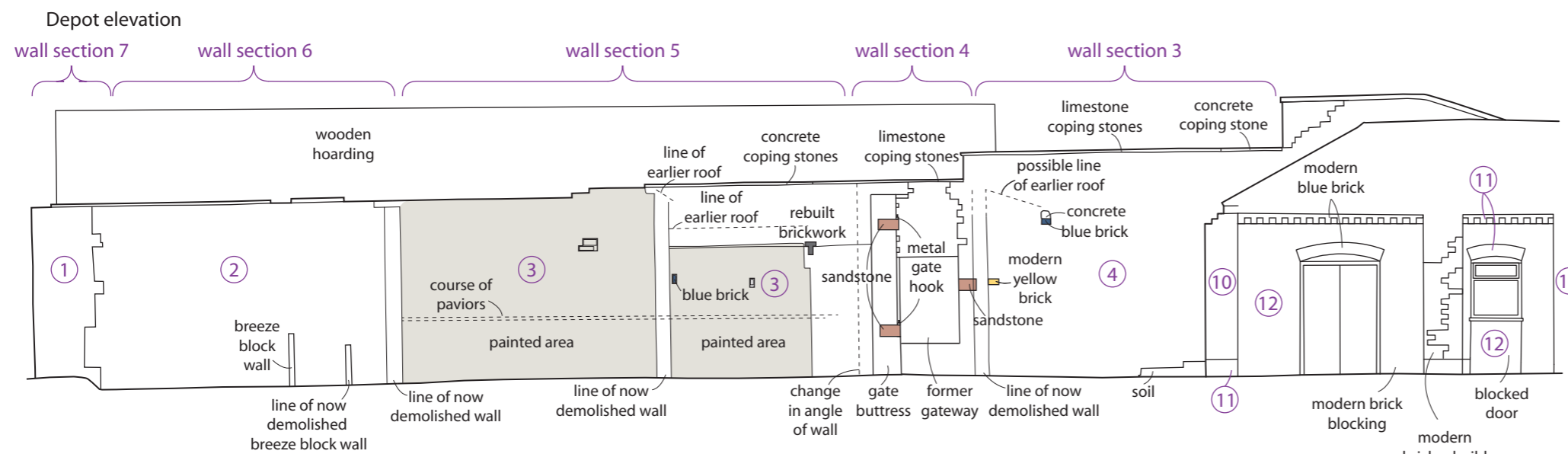
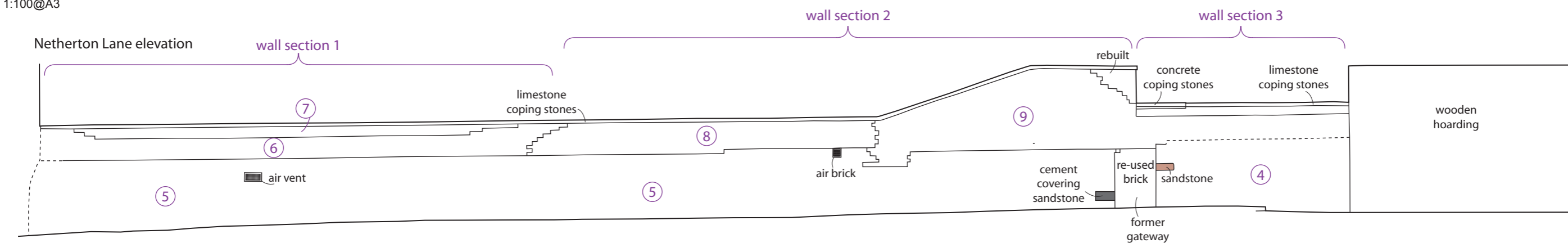
east facing elevation



Air raid shelter

26 The Butts boundary wall and air raid shelter

Figure 6

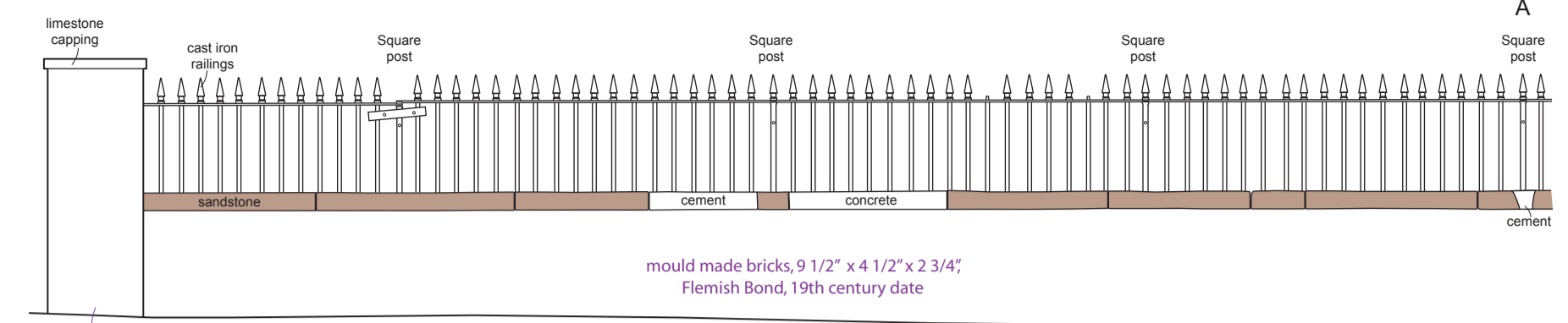


- ① mould made bricks, 9 1/4 - 9 1/2" x 4 1/4" x 3", Flemish Garden Wall Bond, very orange in colour
- ② mould made bricks, many over-fired, 9 1/2" - 10" x 4 1/4" - 4 1/2" x 2 1/4" - 2 1/2", rough variation of English Bond, pale buff mortar with many inclusions
- ③ mould made bricks, 9" x 4 1/2" x 3", Flemish Garden Wall Bond
- ④ mould made bricks, 9 1/4" x 4 1/4" x 2 7/8", variation of Flemish Garden Wall Bond, dark red colour
- ⑤ mould made bricks, 9 1/2" x 4 1/2" x 2 3/4", variation of Flemish Stretcher Bond, red colour
- ⑥ mould made bricks, 9 - 9 1/2" x 4 1/2" x 3", variation of Flemish Stretcher Bond, red colour
- ⑦ modern machine made bricks, 9 1/4" x 4 1/4" x 3", Flemish Stretcher Bond, red colour
- ⑧ modern machine made and re-used bricks, modern bricks 9 1/4" x 4 1/4" x 3", Flemish Stretcher Bond
- ⑨ re-used mould made bricks, 8 1/2" x 4" x 3", Flemish Garden Wall Bond
- ⑩ mould made brick, 9" x 4 1/4" x 3", English Bond, badly weathered, red-orange colour (pantone 166)
- ⑪ blue engineering brick, 8 1/2" x 4" x 3", English Bond, used for plinth, cornices and openings, blue colour (pantone 276)
- ⑫ modern machine made brick, 8 1/2" x 4" x 2 1/2", English Bond, orange-red colour (pantone 173)
- ⑬ modern machine made brick, 8 1/4" x 3 7/8" x 2 1/2", English Bond, orange-red colour (pantone 159)

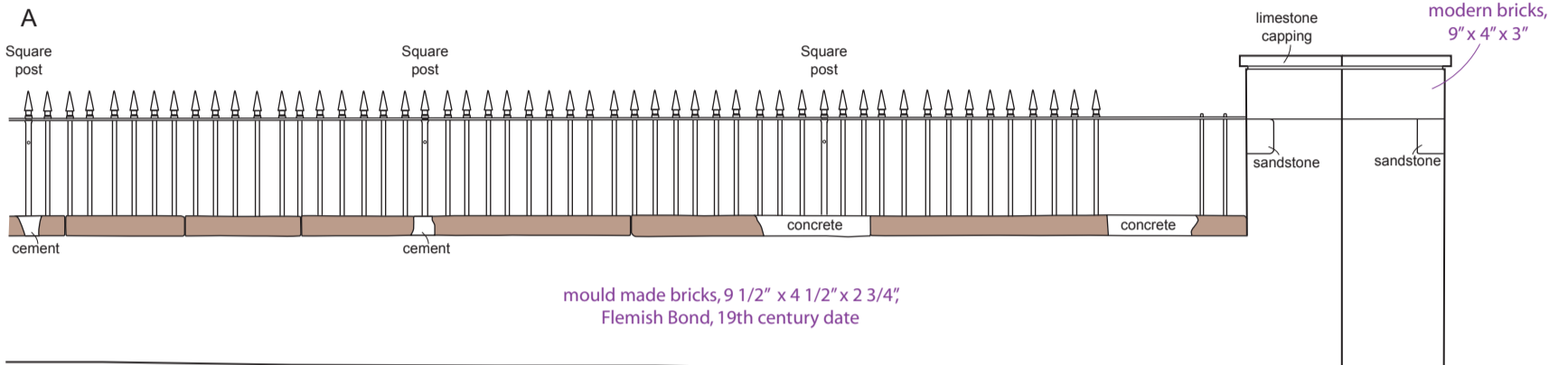
Depot and Netherton Lane elevations of boundary wall and single storey part of Joseph Wood building

Figure 7

1:50 and 1:10@A3



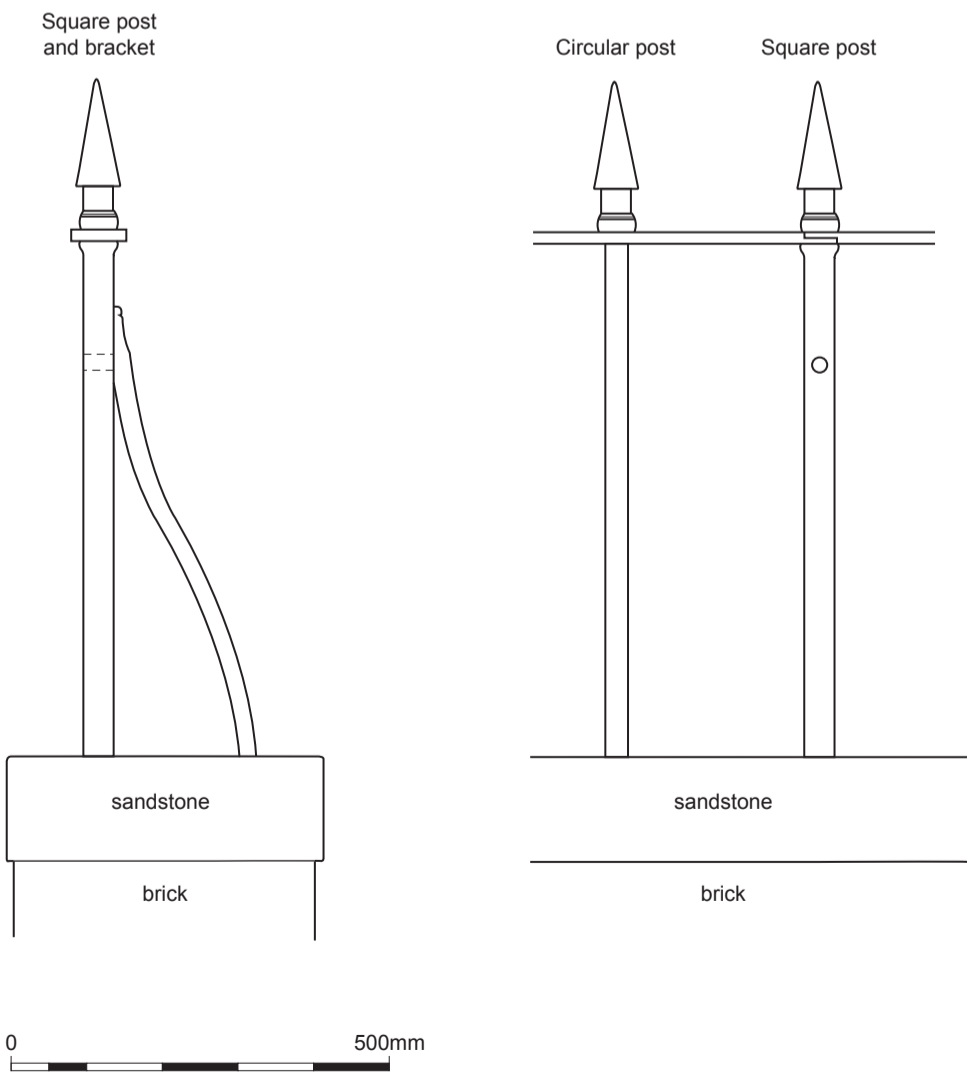
bricks with rounded edge,
9 1/2" x 4 1/2" x 3";
Stretcher Bond, modern



View north along Croft Walk



View south along Croft Walk










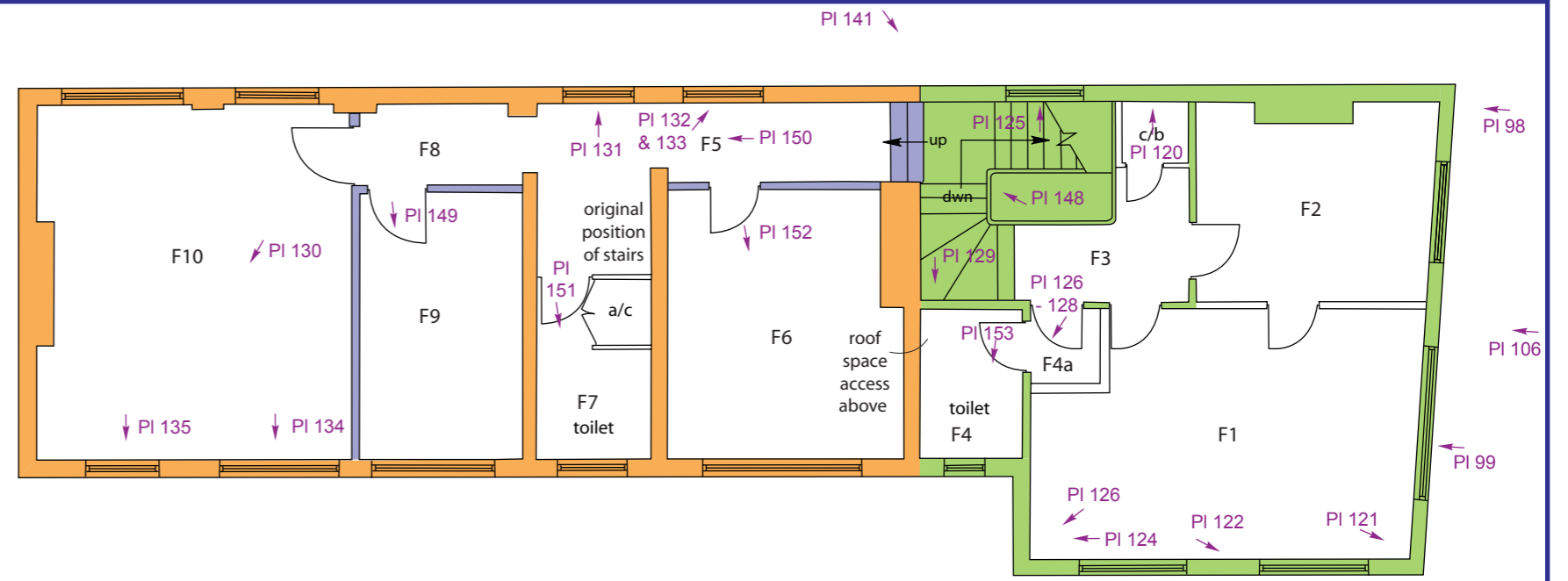
Croft Walk boundary wall to Coomers

Figure 8

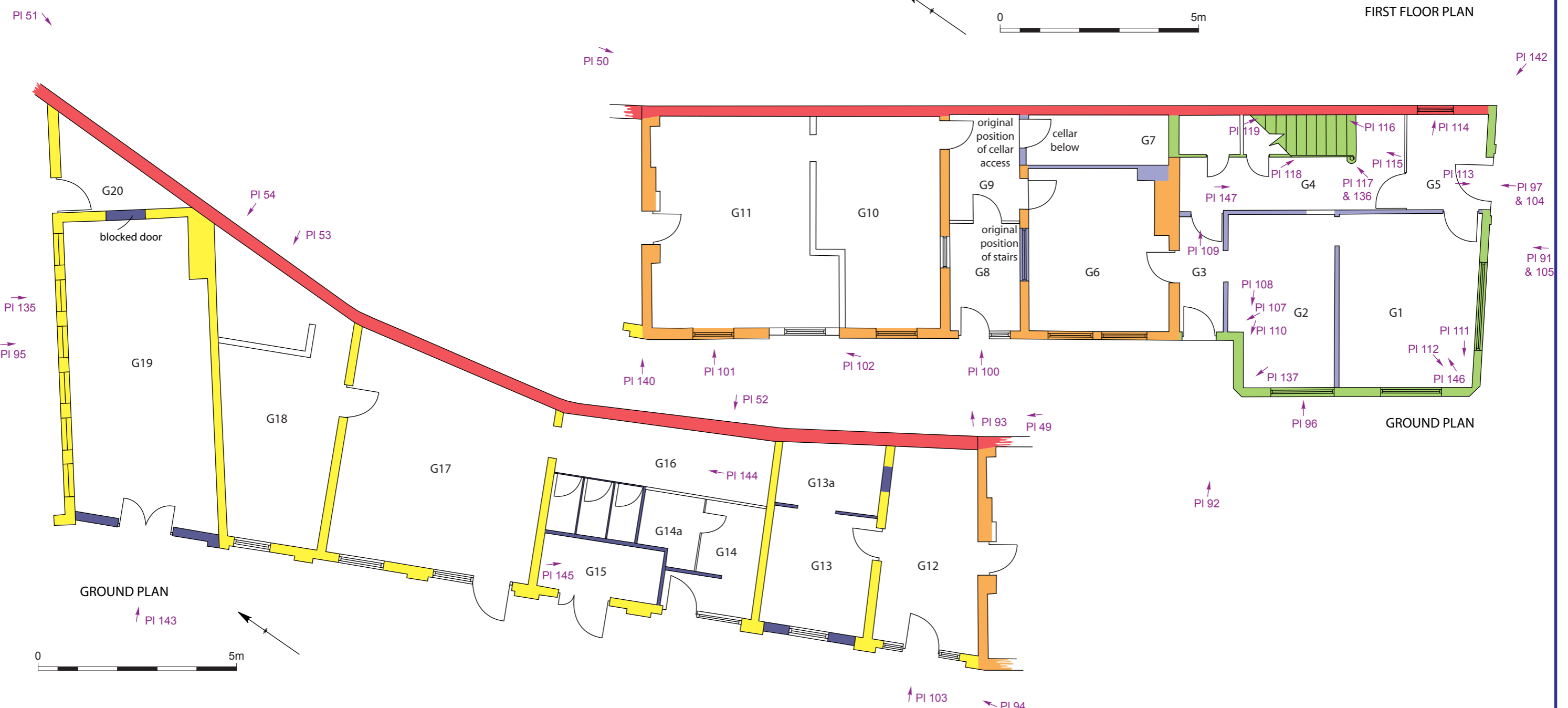
do not scale from this drawing

1:100@A3

- | | | | |
|---|-----------------------------|---|-----------------|
|  | 18th and early 19th century |  | Late 1976 |
|  | 1830s/1840s |  | Late 1981 |
|  | By 1846 |  | 1990s and 2000s |
|  | 1877 (partial rebuild) | | |



FIRST FLOOR PLAN

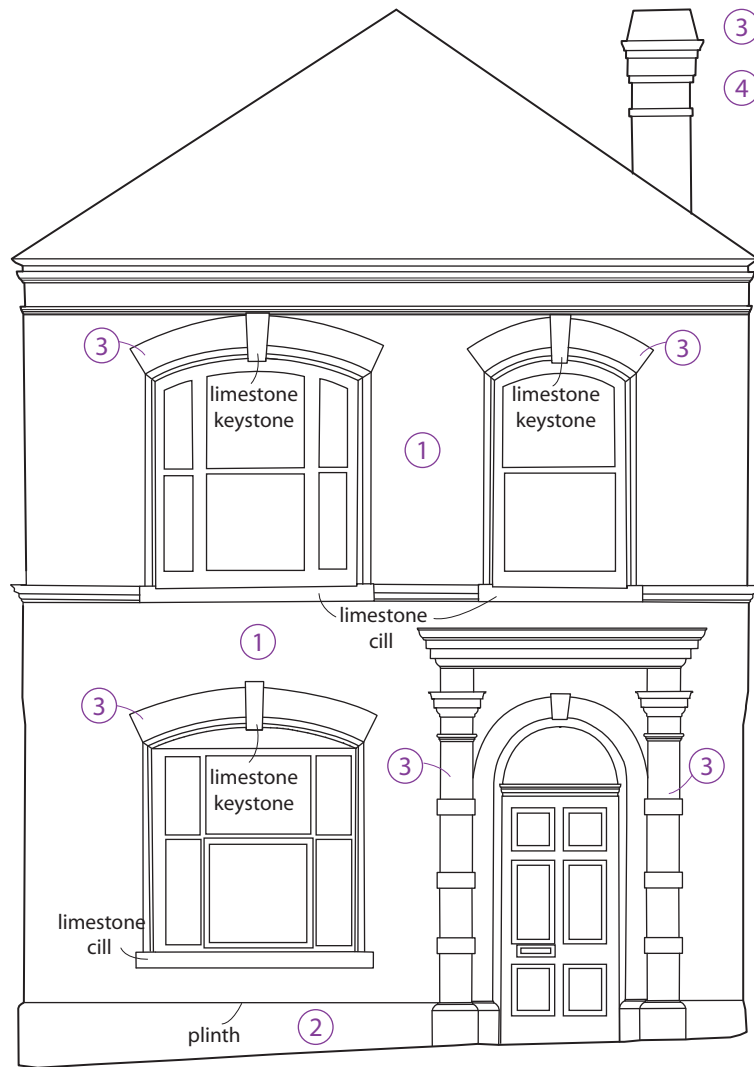


GROUND PLAN

Ground and first floor plans of Joseph Wood building

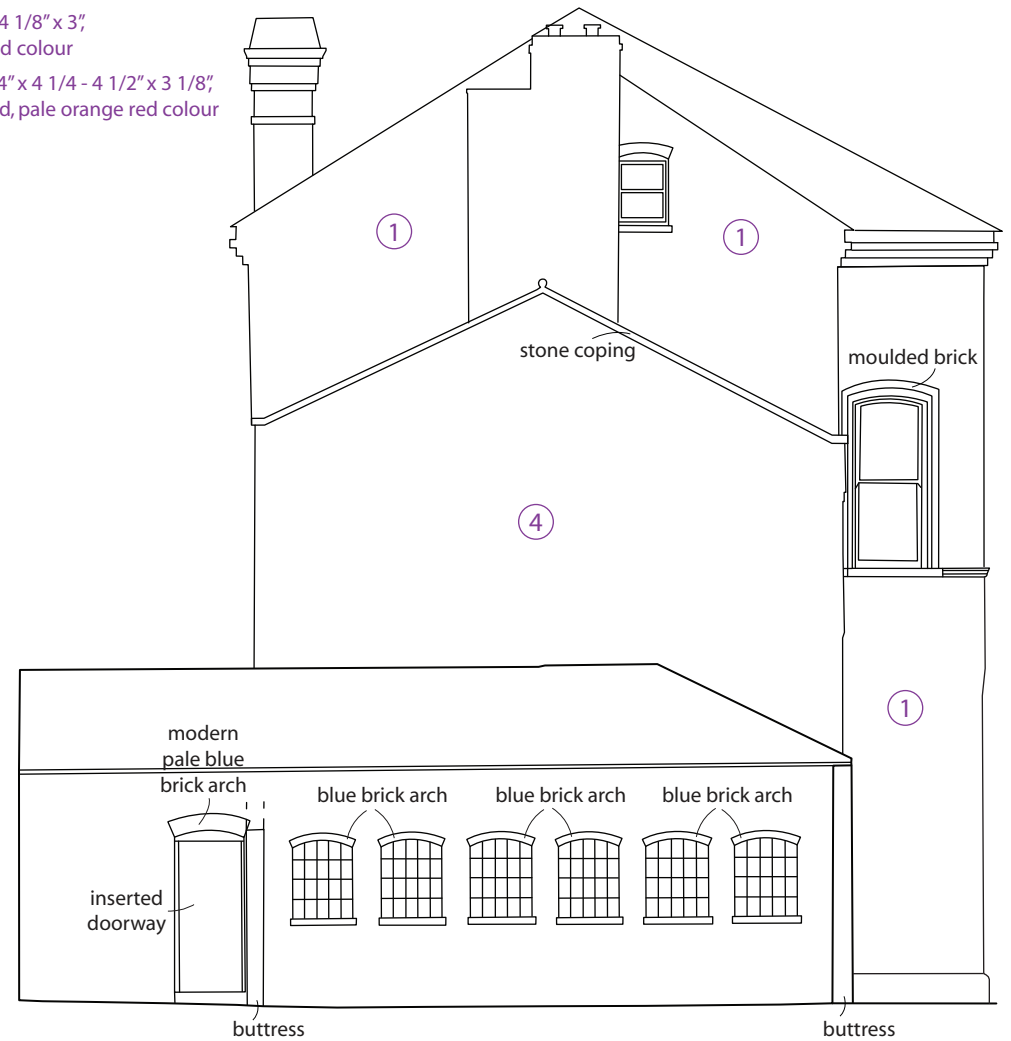
Figure 9

South elevation



- ① mould made bricks, 9 1/2" x 4 3/4" x 3", English Bond, orange red in colour
- ② mould made bricks, 9 1/2" x 4 3/8" x 3", English Bond, dark orange red, highly fired
- ③ mould made bricks, 9" x 4 1/8" x 3", shaped bricks, orange red colour
- ④ mould made bricks, 9 1/4" x 4 1/4" - 4 1/2" x 3 1/8", variation of Flemish Bond, pale orange red colour

North elevation

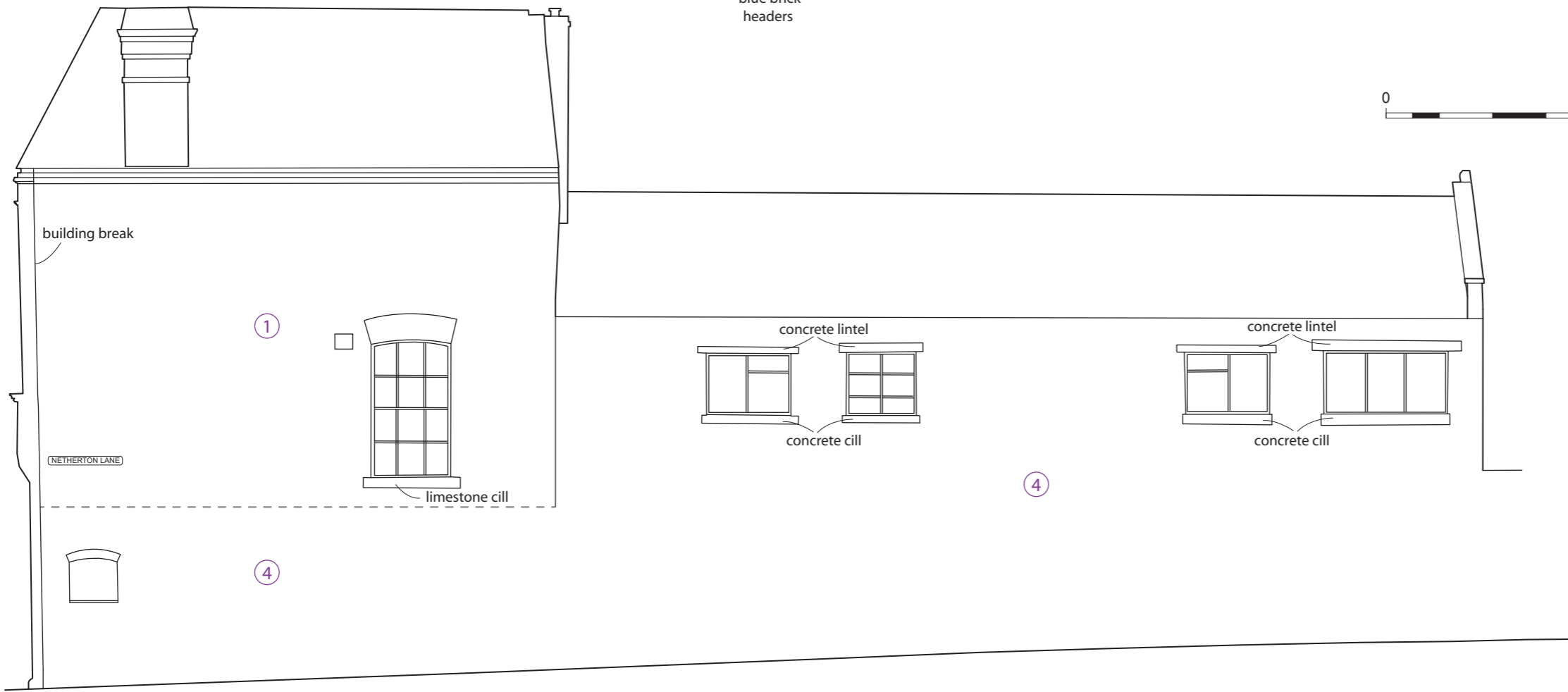


South and north elevations of Joseph Wood building

Figure 10

1:100@A3

- ① mould made bricks, 9 1/2" x 4 3/4" x 3", English Bond, orange red in colour
- ② mould made bricks, 9 1/2" x 4 3/8" x 3", English Bond, dark orange red, highly fired
- ③ mould made bricks, 9" x 4 1/8" x 3", shaped bricks, orange red colour
- ④ mould made bricks, 9 1/4" x 4 1/4" - 4 1/2" x 3 1/8", variation of Flemish Bond, pale orange red colour
- ⑤ mould made bricks, 9 1/4" x 4 1/4" - 4 1/2" x 3 1/8", English Bond, pale orange red colour
- ⑥ engineering bricks, 8 3/4" x 4 - 4 1/4" x 3 1/4", variation of Flemish Stretcher Bond, red colour



West and east elevations of front and central part of Joseph Wood building

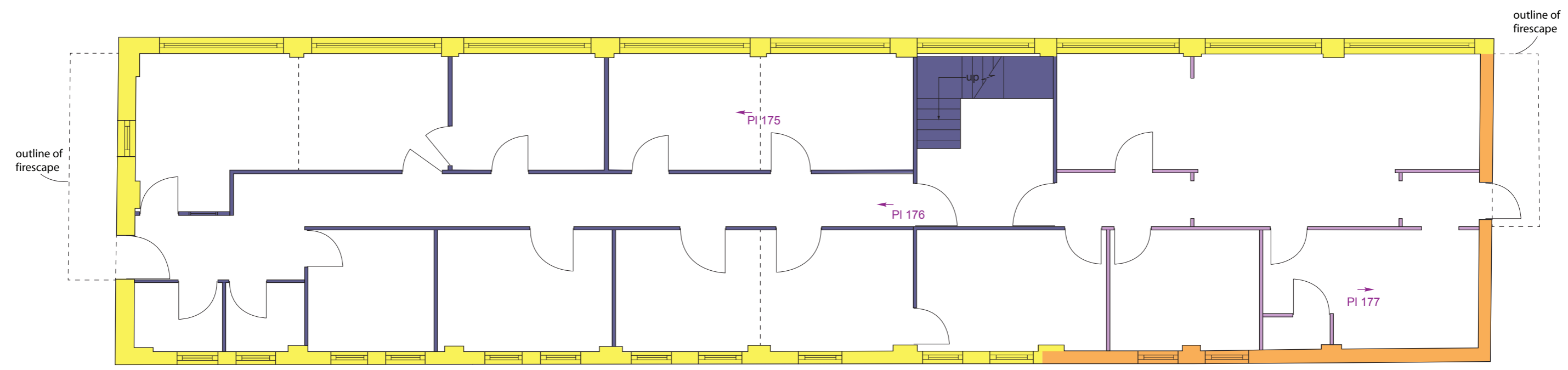
Figure 11

1:100@A3



West elevations of Joseph Wood building showing different brick colours

Figure 12



FIRST FLOOR PLAN

- 1830s/1840s
- Early 1850s
- By 1857
- By 1996
- Post 1996

PI 161

outline of firescape

PI 164

PI 162

PI 170

PI 168

PI 165



PI 166

up

PI 174

PI 173

PI 172

PI 169 & 171

outline of firescape

PI 163

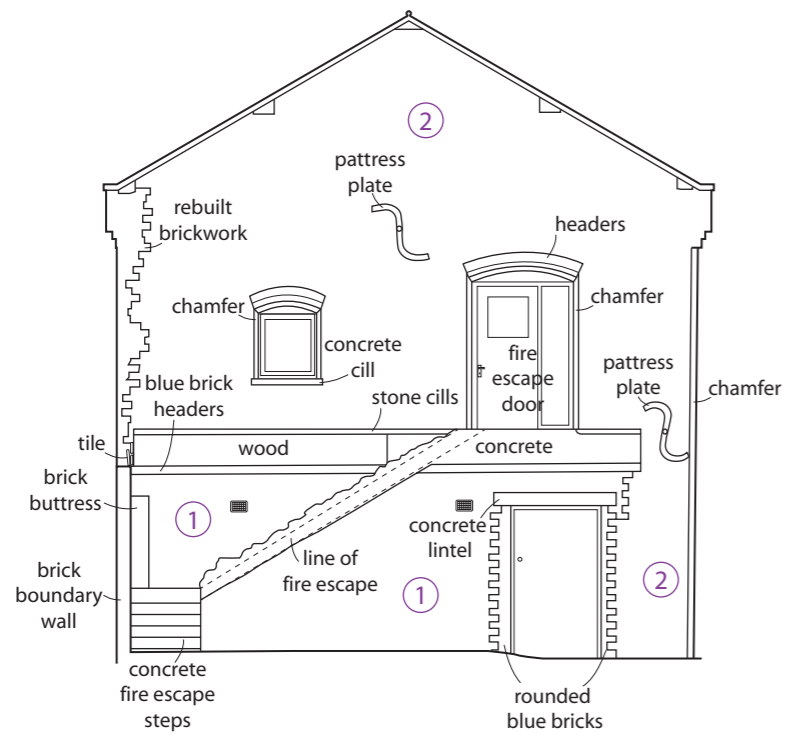
PI 160

GROUND PLAN

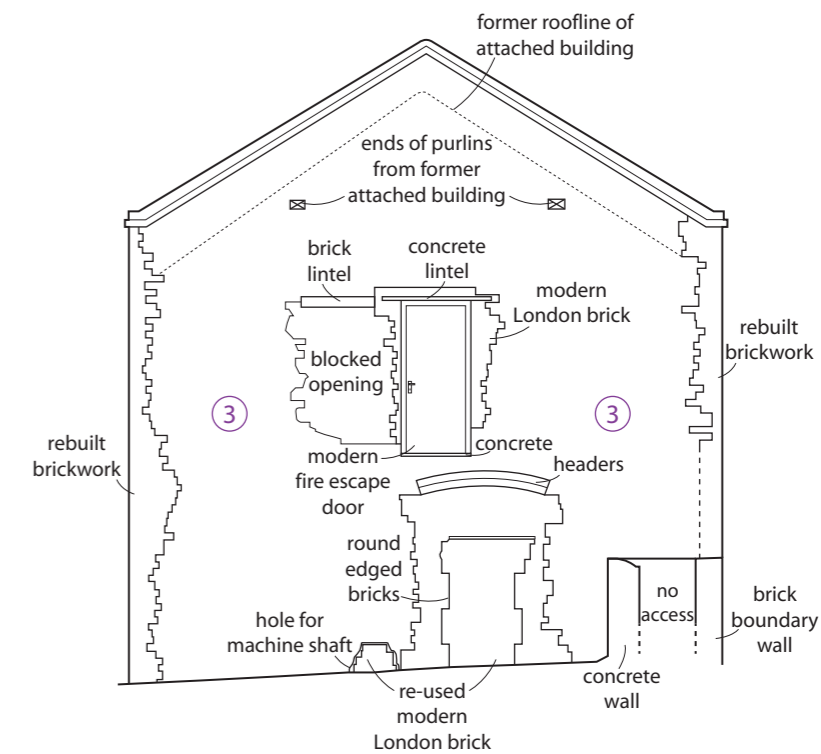
Sawmill plans

Figure 13

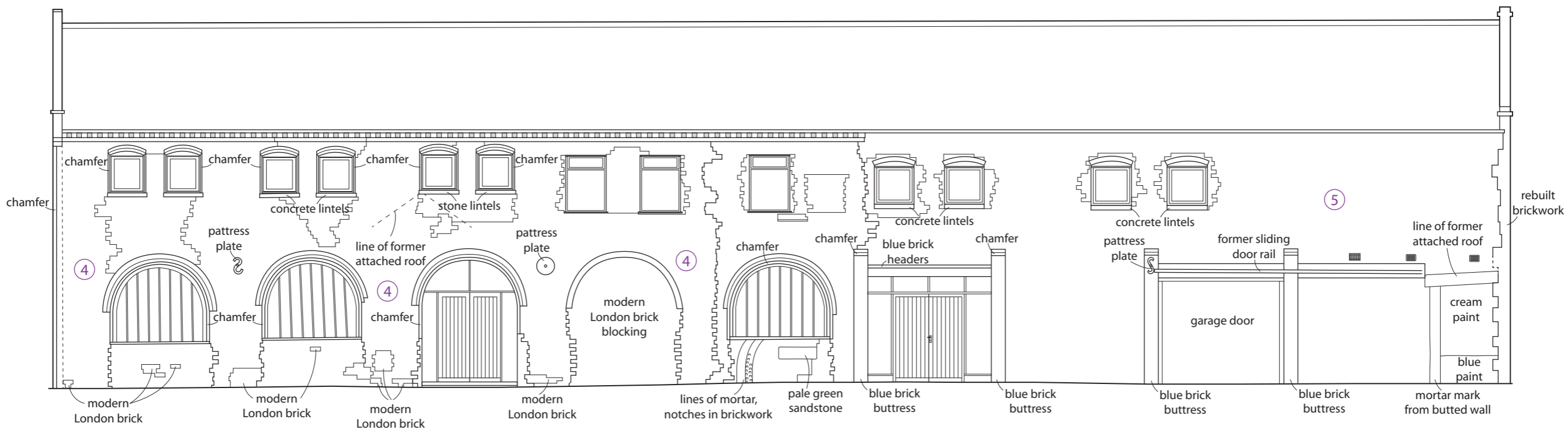
South east (The Butts) elevation



North west (viaduct) elevation



- ① re-used, pale red-pink brick, 8 1/4" x 4" x 3 1/4", English Bond
- ② red-brown brick, 8 1/2" x 4" x 2 1/2", English Bond, mid to late 19th century
- ③ dark colour brick, 9 1/4" x 4 1/4" x 3", English Garden Wall Bond, many mishapen/overfired, keyed for plaster and blast cleaned, early to mid 19th century
- ④ pale red-brown brick, 8 3/4" x 4 3/8" x 3", English Garden Wall Bond, mid to late 19th century
- ⑤ red-brown brick, 8 5/8" x 4 3/4" x 2 5/8 - 2 3/4", Flemish Bond variant, in places rebuilt/re-pointed, 19th century

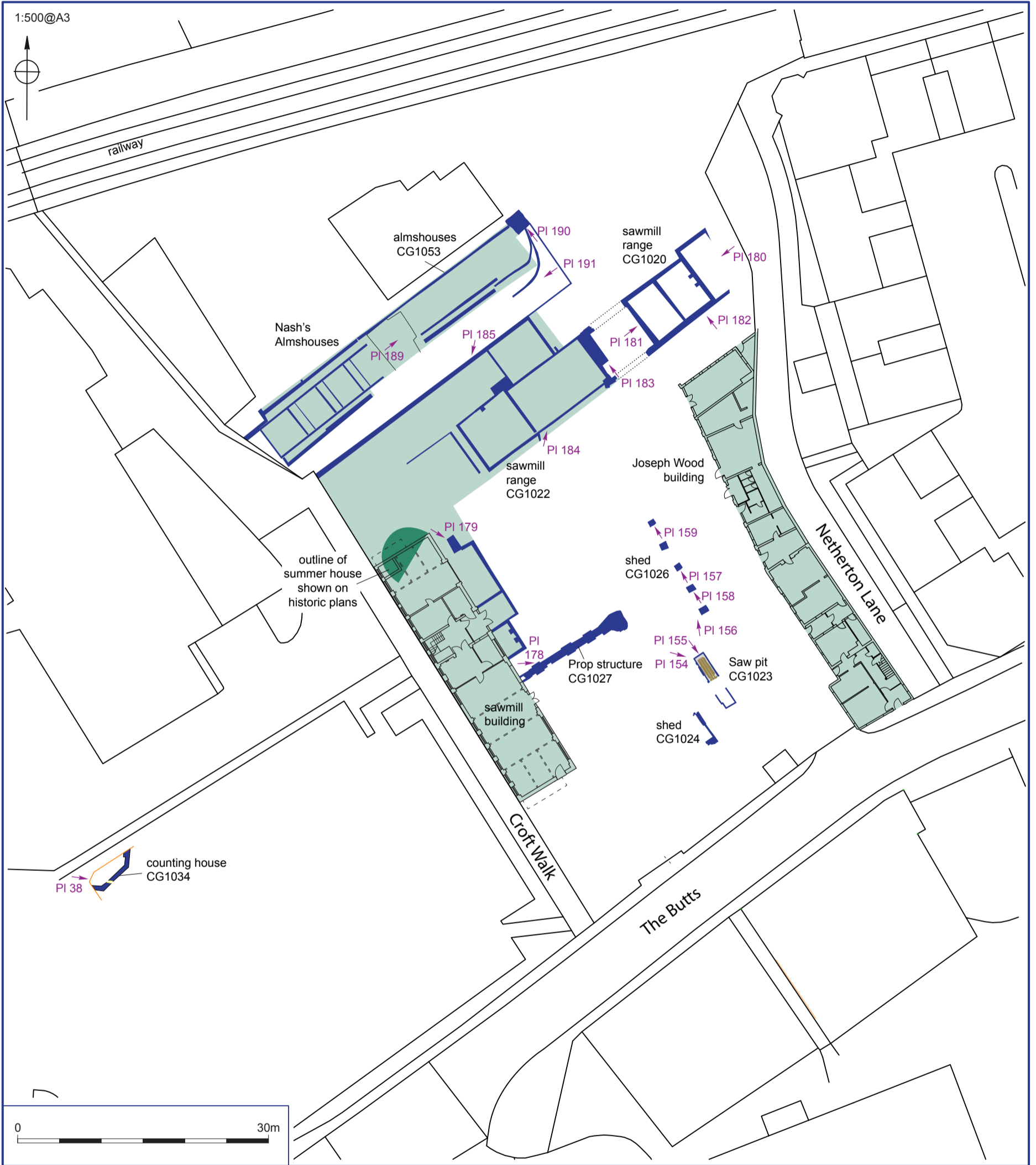


North east (depot) elevation



Elevations of sawmill building

Figure 14



Location of below ground features discussed

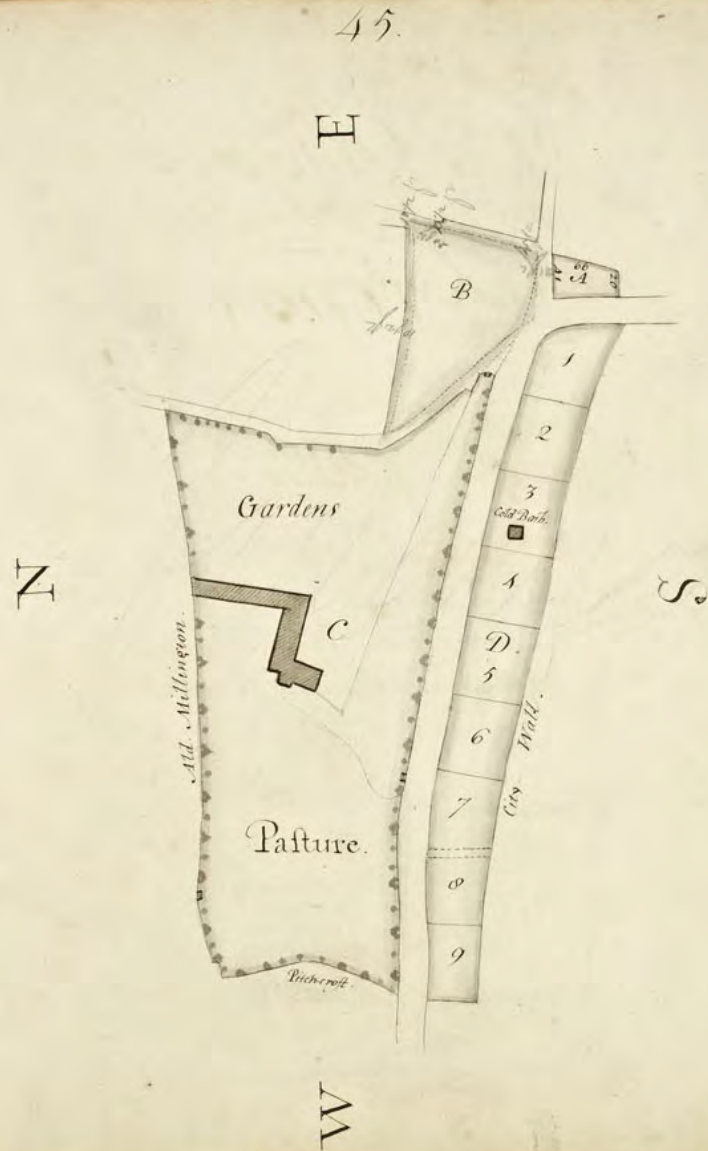
Figure 15

Mr. Kesterton's Premises

- A. Stone Yard, in the Occupation of R. Spivell
- B. The Baths in the Occupation of _____ containing nearly a Road, deducting the Roads.
- C. Premises in the Occupation of Edw^d. Haskew, consisting of a Dwelling House, Workshops, Gardens & Pasture Grounds, containing 2. 3. 35.
- D. Gardens in the Occupation of _____

- 1 Ben. Baker
- 2 W. Saunders
- 3 Humph. Soule
- 4 Moses Richards
- 5 Tho. Yorle
- 6 R. Hill
- 7 John Edwards
- 8 Ann Nixon
- 9 John Pumphrey

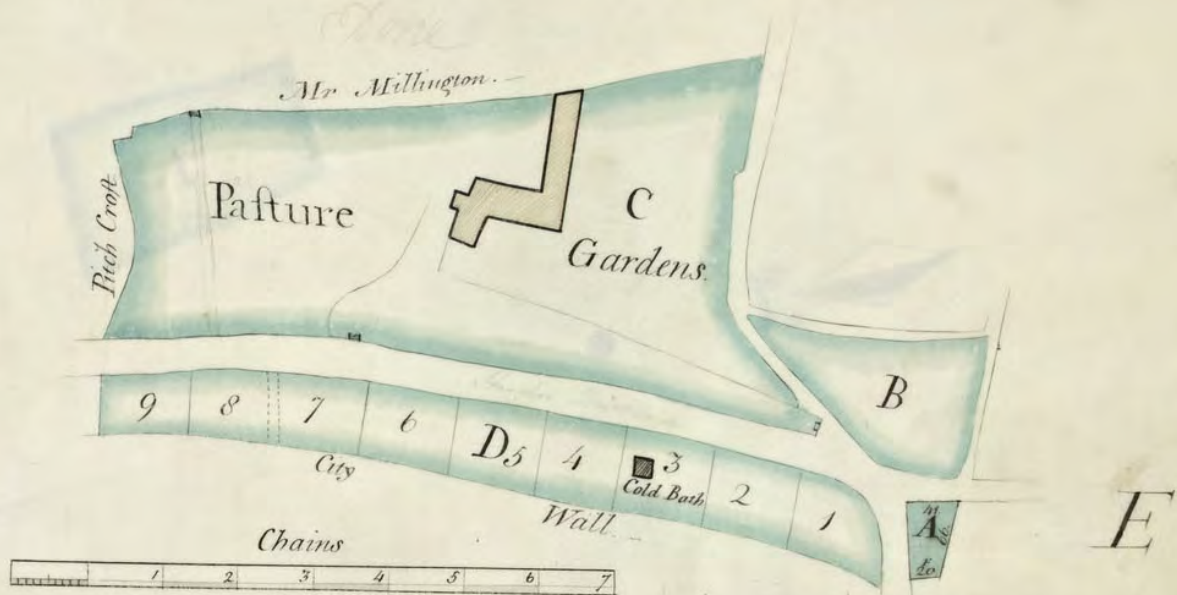
The whole containing A. R. 2
1. 0. 14



1771 Worcester City Corporation Plan (WRO ref 496.5 BA9360/C1/1)

Figure 16

29
*N. Mr Netherton's Premises
 in St Nicholas.*



- A. Stone-Yard, in the Occupation of Richard Squire. —*
*B. The Butts in the Occupation of _____ containing
 about 1 Rood, deducting the Roads.*
*C. In the Occupation of Edward Haskew consisting of a Dwelling House
 Work-shops, Gardens and Pasture Ground, containing ^{A. R. P.} 2. 3. 35. —*

- D Gardens occupied by*
- | | |
|---------------------------------|-----------------------|
| <i>1 Ben Baker</i> | <i>6 Richard Hill</i> |
| <i>2 W^m Saunders</i> | <i>7 John Edwards</i> |
| <i>3 Hump^d Soute</i> | <i>8 Samuel Nixon</i> |
| <i>4 Moses Richards</i> | <i>9 John Pumphry</i> |
| <i>5 Thomas Gorle</i> | |

The above 9 Gardens are ^{A. R. P.} 1. 0. 14. —

PREMISES SITUATE IN THE
 BUTTS,
 in the Parish of S^t. Nicholas.

No.	PROPRIETORS.	PREMISES,	Quantity, a. r. p.
1	Abraham Edmunds,	In Hand, Timber-yard, Stables and Workshops, ——— 0.1.30 $\frac{1}{2}$	0.1.31
16		D ^r , Timber-yard, ——— 0.1.31 $\frac{1}{2}$	
2	Weaver, D ^r	Blacksmiths and Shoeing Shop, ———	0.0.07 $\frac{1}{2}$
3	Benjamin Blower, D ^r	Five Tenements and Gardens, ———	0.0.03 $\frac{1}{2}$
4	— Lane, ———	Stables, Yard, &c. ———	0.0.13 $\frac{1}{4}$
5	— Palfrey, ———	D ^r ———	0.0.22
6	— John Jones, ———	D ^r ———	0.0.23
7	— Hughes, ———	House and Bricklayers Yard and Bath, ———	0.0.23
8	— William Honmery, ———	Timber-yard, ———	0.0.29 $\frac{1}{2}$
10	— ———	Five Tenements and Gardens, ———	0.1.15 $\frac{1}{4}$
11	Rev ^d M ^r Wheeler, ———	House, Garden and Shop, ———	0.0.20
12	— The Earl of Surland, ———	Notterton House, Office, Pleasure Ground, Gardens, ———	1.2.01
13	— Andrew Mound, ———	House and Garden, ———	0.1.11
14	— Mathony, ———	D ^r ———	0.0.16
15	— Marlin, ———	D ^r ——— and Wheelwrights Shop, ———	0.0.16 $\frac{1}{4}$
16	— Morris, ———	D ^r ——— and Carpenter's Shop, ———	0.0.06 $\frac{1}{2}$
17	— Charles Goodman, ———	D ^r ——— and Stables, ———	0.0.07
19	Rev ^d M ^r Williams, ———	Seven Gardens, ———	0.2.27 $\frac{1}{2}$



NB. The Blue Line is the Division of Property.

SCALE OF FEET

1824 Worcester City Corporation Plan (WRO ref b496.5 BA9360/C1/3)

Figure 18

No. 211

Unfranchised

Dated 11 April 1846

(Counterpart)

The Corporation of Worcester

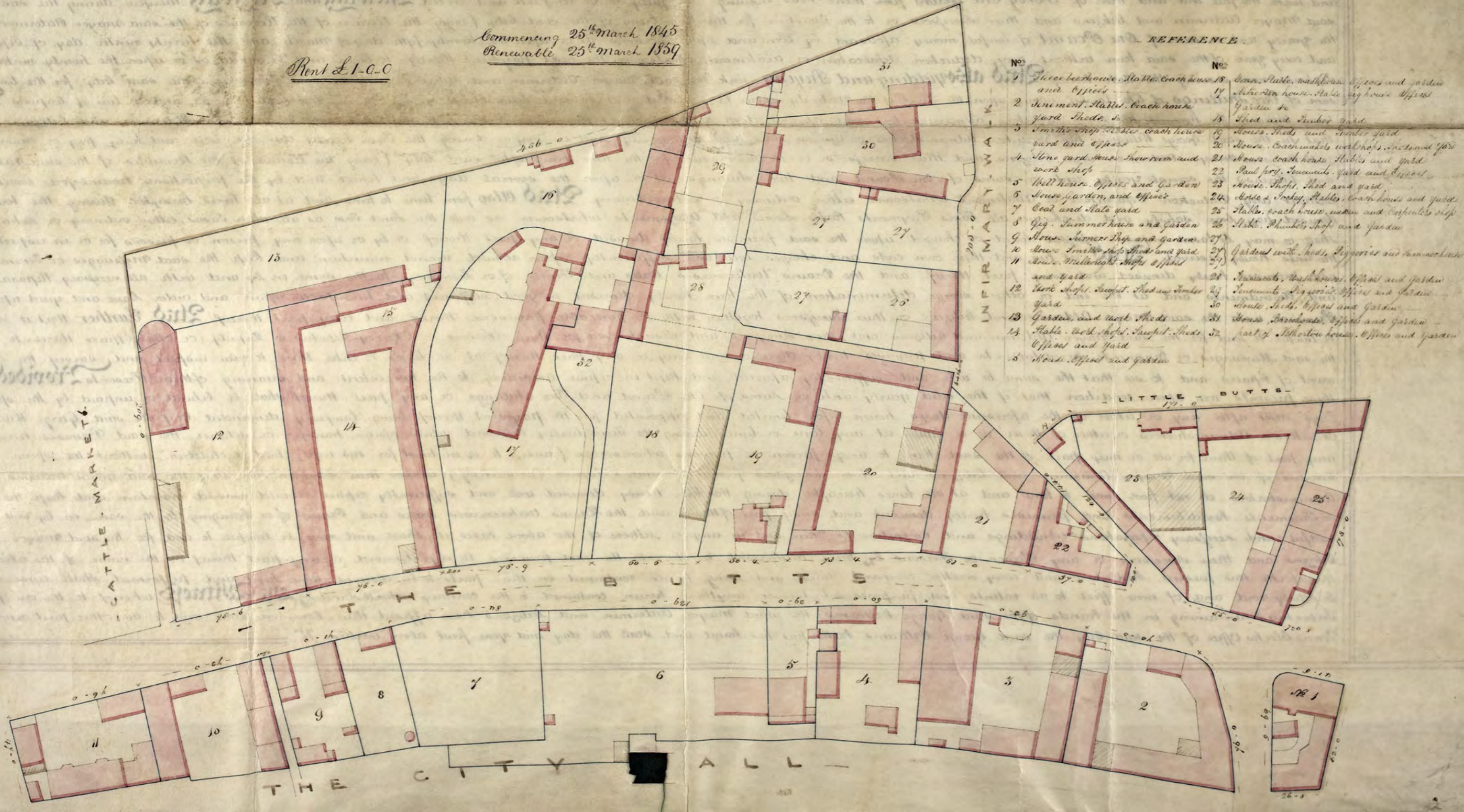
to

The Reverend Geo. Williams (Bishop)

Lease of the Netherton Estate situate in the Butts in the City of Worcester for Forty One Years

Commencing 25th March 1845
Renewable 25th March 1859

Rent L1-0-0

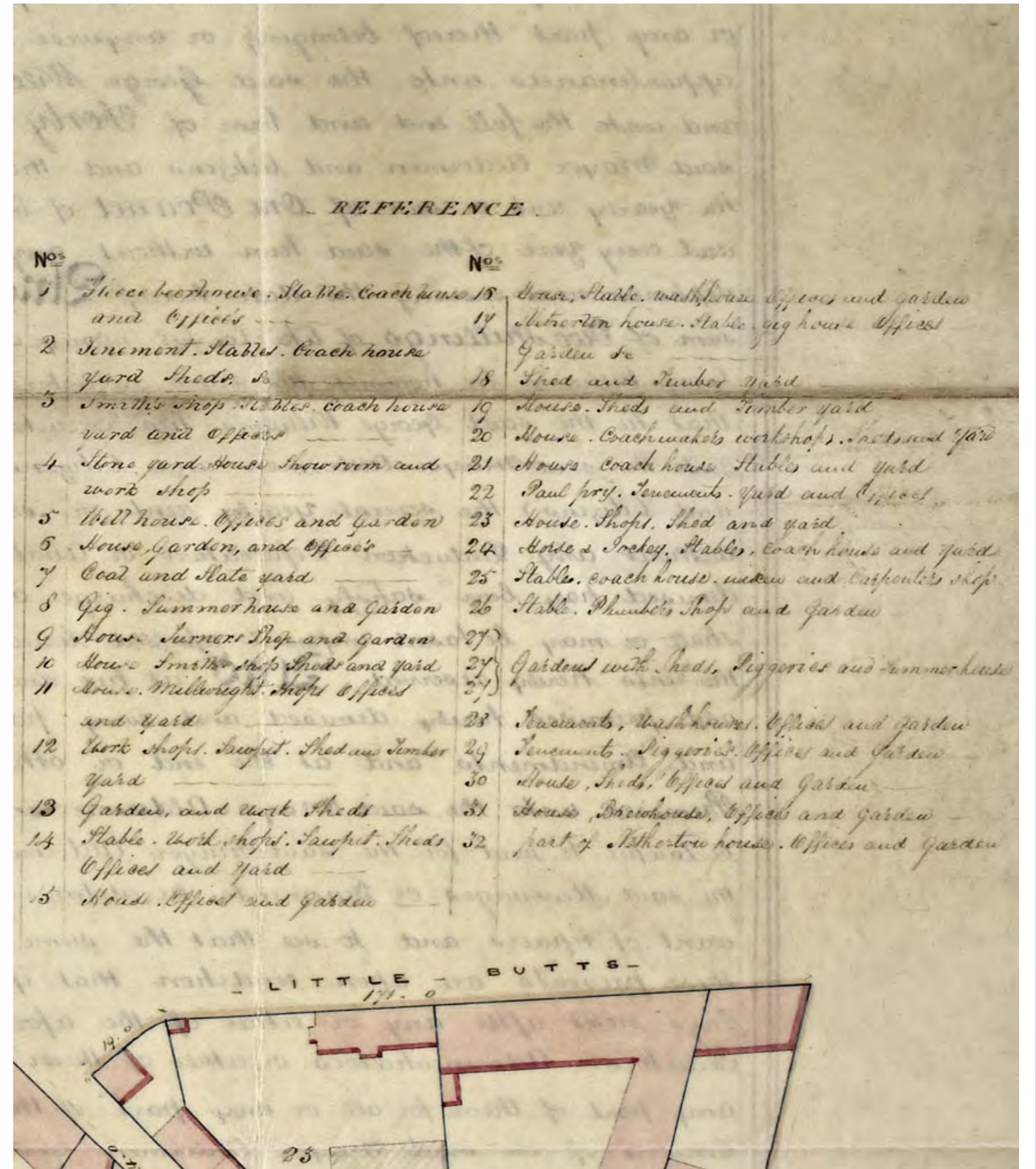
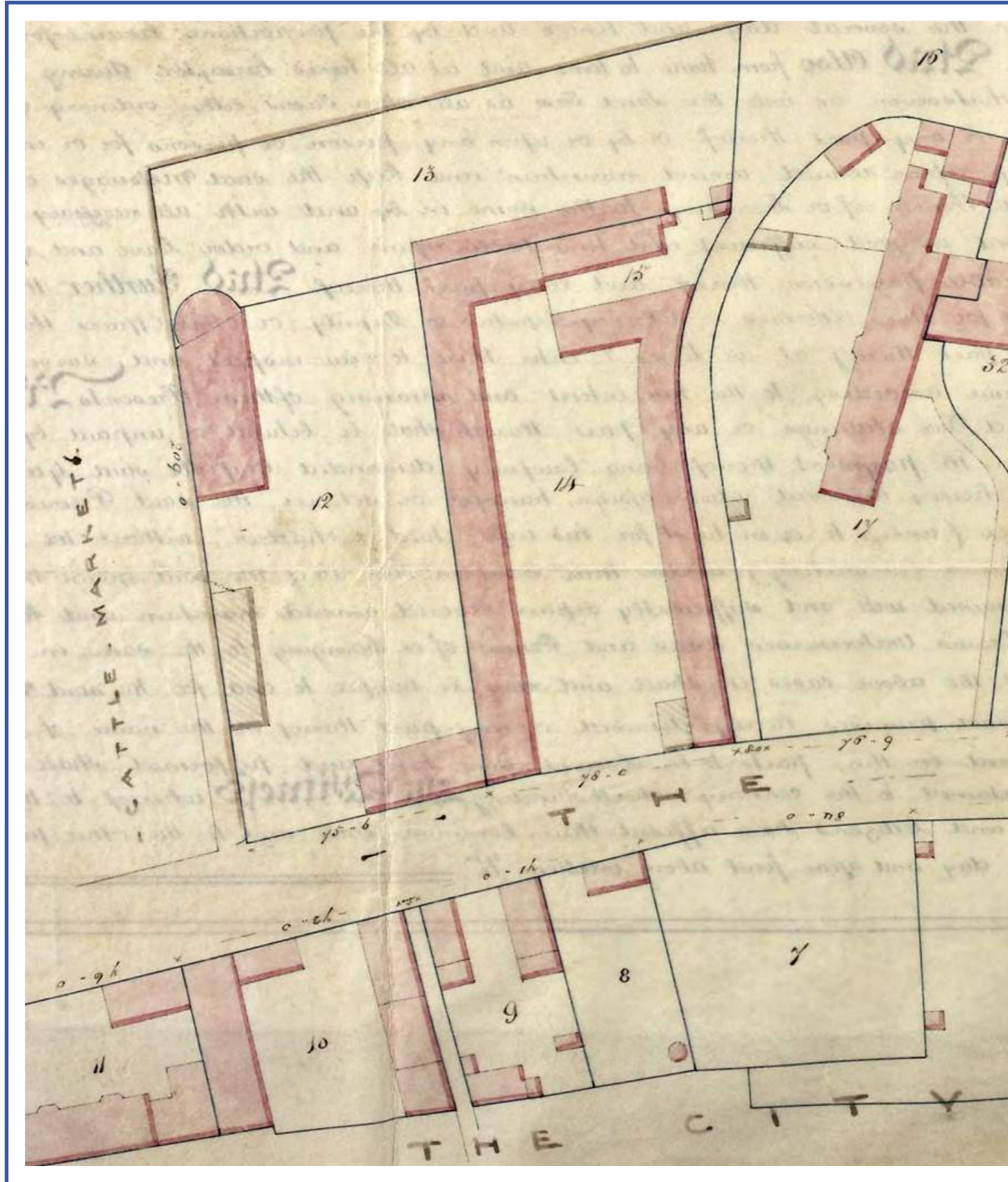


REFERENCE

No.	Description	No.	Description
1	Three beehives, Stalls, Coach house and Office	18	Stable, Washhouse, Offices and garden
2	Stable, Stalls, Coach house yard, Sheds, &c.	19	Stable house, Stable, pig house, Office, Garden &c.
3	Smith's Shop, Stalls, Coach house yard and Office	20	Stable and Timber yard
4	Stone yard, Stalls, Snow room and work shop	21	House, Coachmaker's workshop, Stable and yard
5	Well house, Office and garden	22	Paul prof., Tannery, yard and Office
6	House, Garden, and Office	23	House, Shop, Shed and yard
7	Coal and Slate yard	24	House, Shop, Stables, Coach house and yard
8	Fig. Summer house and garden	25	Stable, Coach house, water and Carpenter's shop
9	House, Turner's Shop and garden	26	Stable, Plumber's Shop and garden
10	House, Smith's Shop, Shed and yard	27	Garden with, beds, Pigeon's and summerhouse
11	House, Millwright's Shop, Office and yard	28	Tannery, Washhouse, Office and garden
12	Work Shop, Sawpit, Shed and Timber yard	29	Tannery, Pigeon's Office and Garden
13	Garden, and work Sheds	30	House, Stalls, Office and Garden
14	Stable, Work Shop, Sawpit, Sheds, Office and yard	31	House, Barndoor, Office and garden
15	House, Office and garden	32	part of Stable house, Office and garden

1846 Plan from Netherton Estate Lease (WRO ref 496.5 BA9360/Cab14/5)

Figure 19

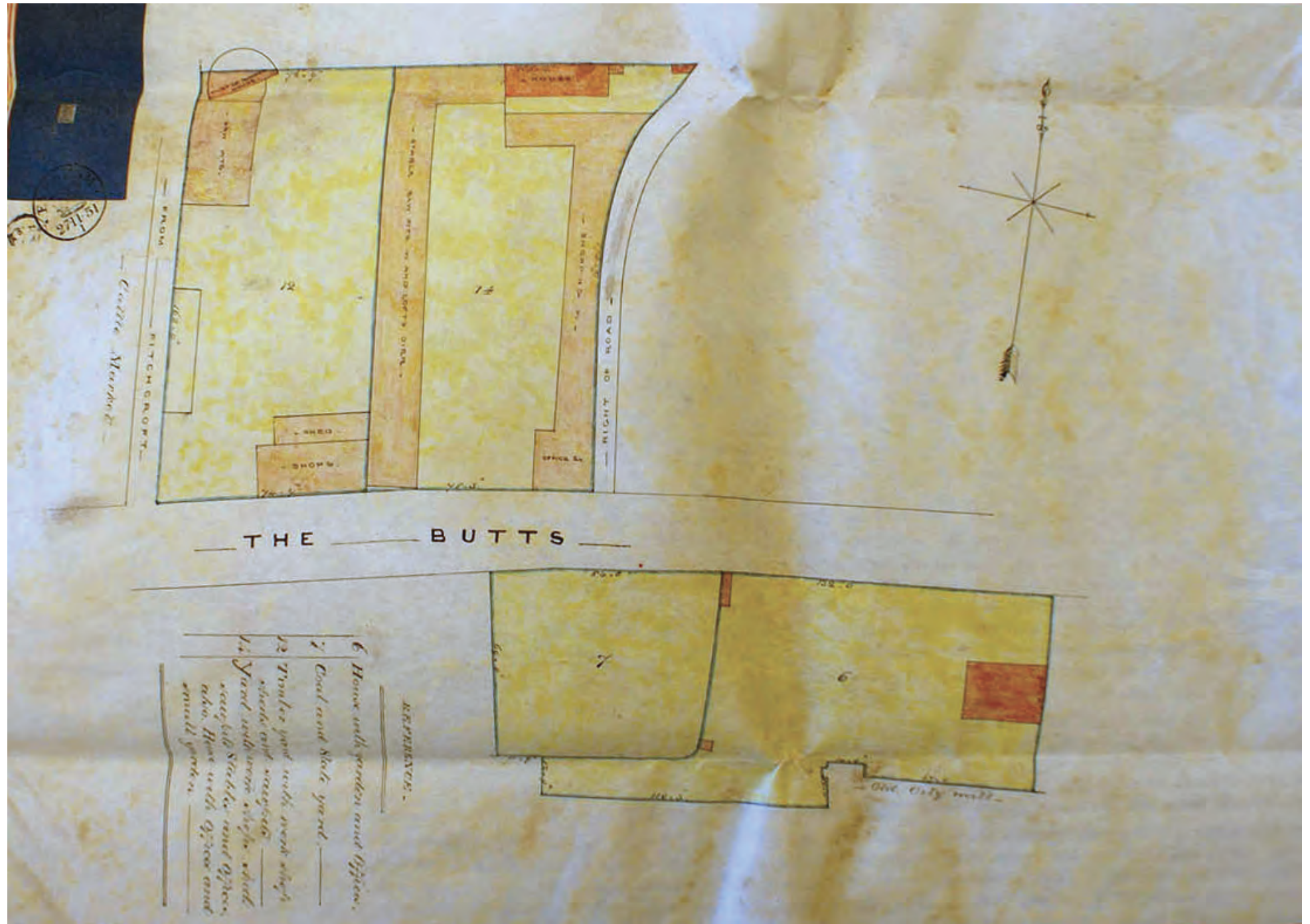


REFERENCE

Nos		Nos	
1	Three beerhouse, Stable, Coach house and Offices	18	House, Stable, washhouse, Offices and garden
2	Stencement, Stables, Coach house yard Sheds, &c	19	Wetherston house, Stable, gig house, Offices Garden &c
3	Smiths shops, Stables, Coach house yard and Offices	20	Shed and Timber yard
4	Stone yard, House, Snow room and work shop	21	House, Sheds and Timber yard
5	Well house, Offices and Garden	22	House, Coachmakers workshops, Sheds and yard
6	House, Garden, and Offices	23	House, Coach house, Stables and yard
7	Coal and Slate yard	24	Paul proj. Tenements, yard and Offices
8	Gig, Summer house and garden	25	House, Shop, Shed and yard
9	House, Turners Shop and garden	26	House & Tackey, Stables, Coach house and yard
10	House, Smiths shop, Sheds and yard	27	Stable, Coach house, window and Carpenters shop
11	House, Millwrights shops, Offices and yard	28	Stable, Plumbers Shop and garden
12	Work Shop, Sawpit, Shed and Timber yard	29	Garden with Sheds, Diggeries and Summerhouse
13	Garden, and work Sheds	30	Tenements, Washhouses, Offices and garden
14	Stable, Work shops, Sawpit, Sheds, Offices and yard	31	Tenements, Diggeries, Offices and Garden
15	House, Offices and Garden	32	House, Sheds, Offices and Garden
		33	House, Beerhouse, Offices and Garden
		34	part of Wetherston house, Offices and garden

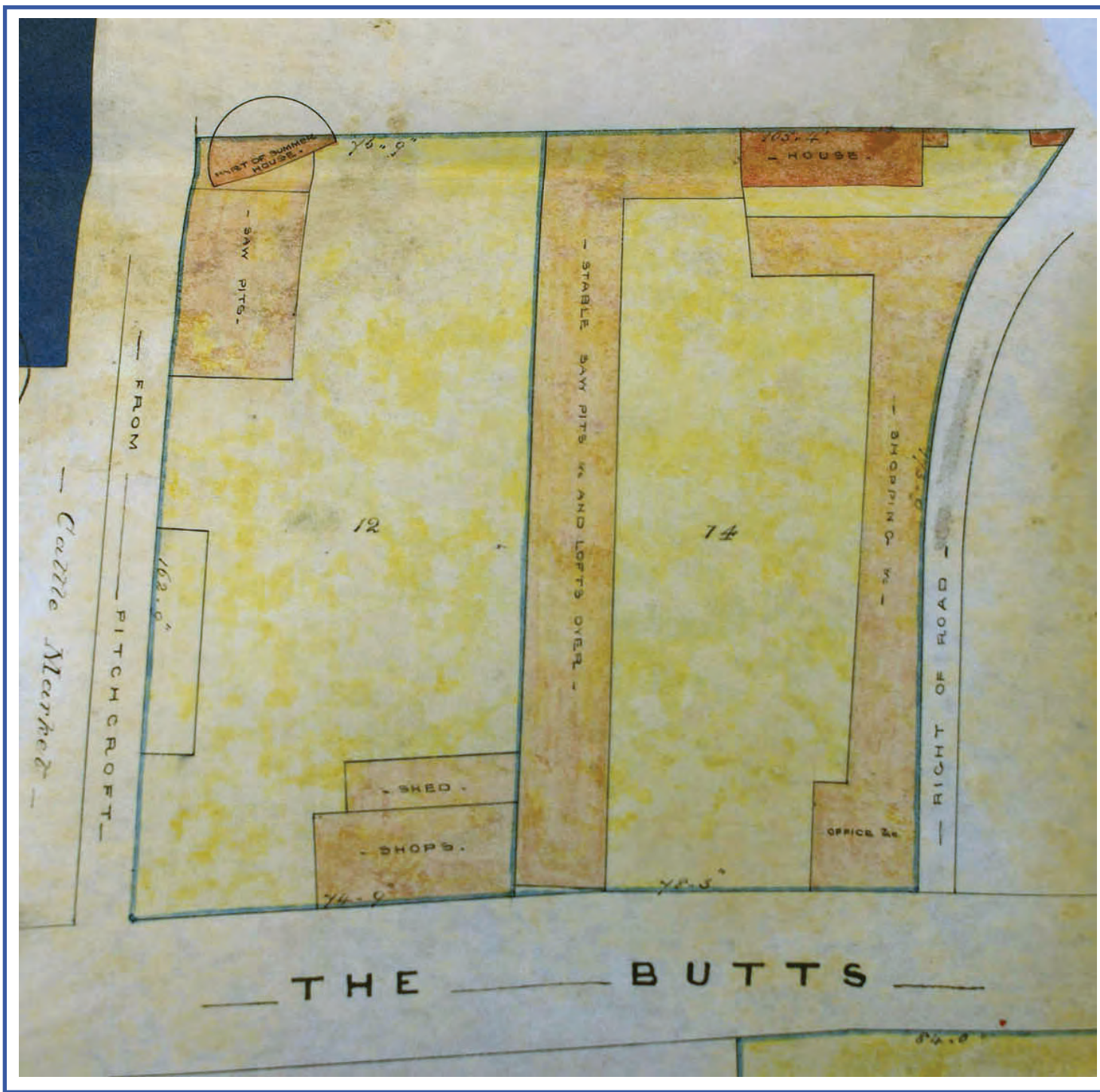
Excerpts from 1846 Plan from Netherton House Estate Lease (WRO ref 496.5 BA9360/Cab14/5)

Figure 20



1854 Plan from leasehold assignment (WRO ref 496.5 BA9360/Cab14/15/A)

Figure 21



Detail from 1854 Plan from leasehold assignment (WRO ref 496.5 BA9360/Cab14/15/A) Figure 22

JOSEPH WOOD,
BUILDER,
WORCESTER,
BRICK, TILE, AND DRAINING TILE
AND PIPE MAKER,
WORKS--DIGLIS, WORCESTER; & BANK WORKS, MALVERN.
IMPORTER OF BEST WELSH SLATES AND SLABS.

Dealer in British and Foreign Timber, Mahogany, Rosewood, Ebony, Cedar, Veneers, Oak and Deal Lath, &c.; Broseley Bricks, Tiles, Squares, Wire Bricks, Best Fire Bricks, Squares and Burrs, Bath, Painswick, Forest, Hanham, Elmley, Alverley, Bidford and other Stone and Paving; Barn Floor Bricks and Paving, Marble, Marble Chimney Pieces, &c.; Best Brooch, Hard, and other Coals.

Residence and Offices, Blackfriars, the Butts.

TIMBER YARDS	BLACKFRIARS AND BUTTS.
STONE AND MARBLE DITTO	LOWER BUTTS.
COAL DITTO	BUTTS.

Advert from Billing's Directory 1855

Figure 23

The greatest attention is given to the Diet and Domestic Comforts; and unremitting attention to the Health, Moral Training, and Deportment of the Pupils.
For Prospectuses, with a View of the Premises and Terms, &c., apply to the Principal.

HALLAM & PALMER,
CARRIAGE MANUFACTURERS,
THE BUTTS, WORCESTER.

UPWARDS OF TWENTY YEARS IN THE EMPLOY OF THE LATE
 FIRM OF KINDER AND COMPANY.

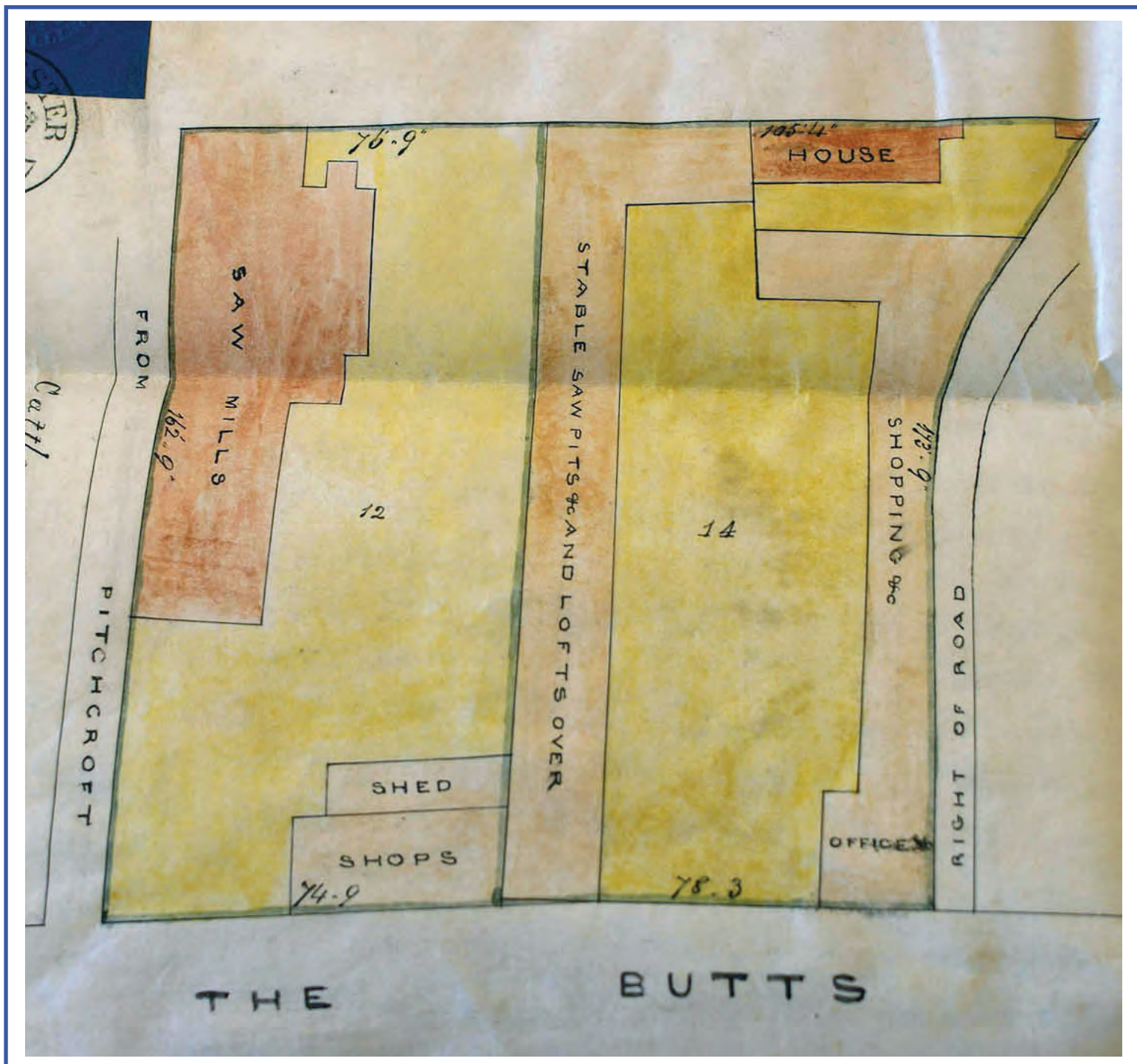
at,



21

Advert from Post Office Directory 1860

Figure 24



Detail of 1857 Plan from property enfranchisement (WRO ref 496.5 BA9360/Cab14/15/A) Figure 26

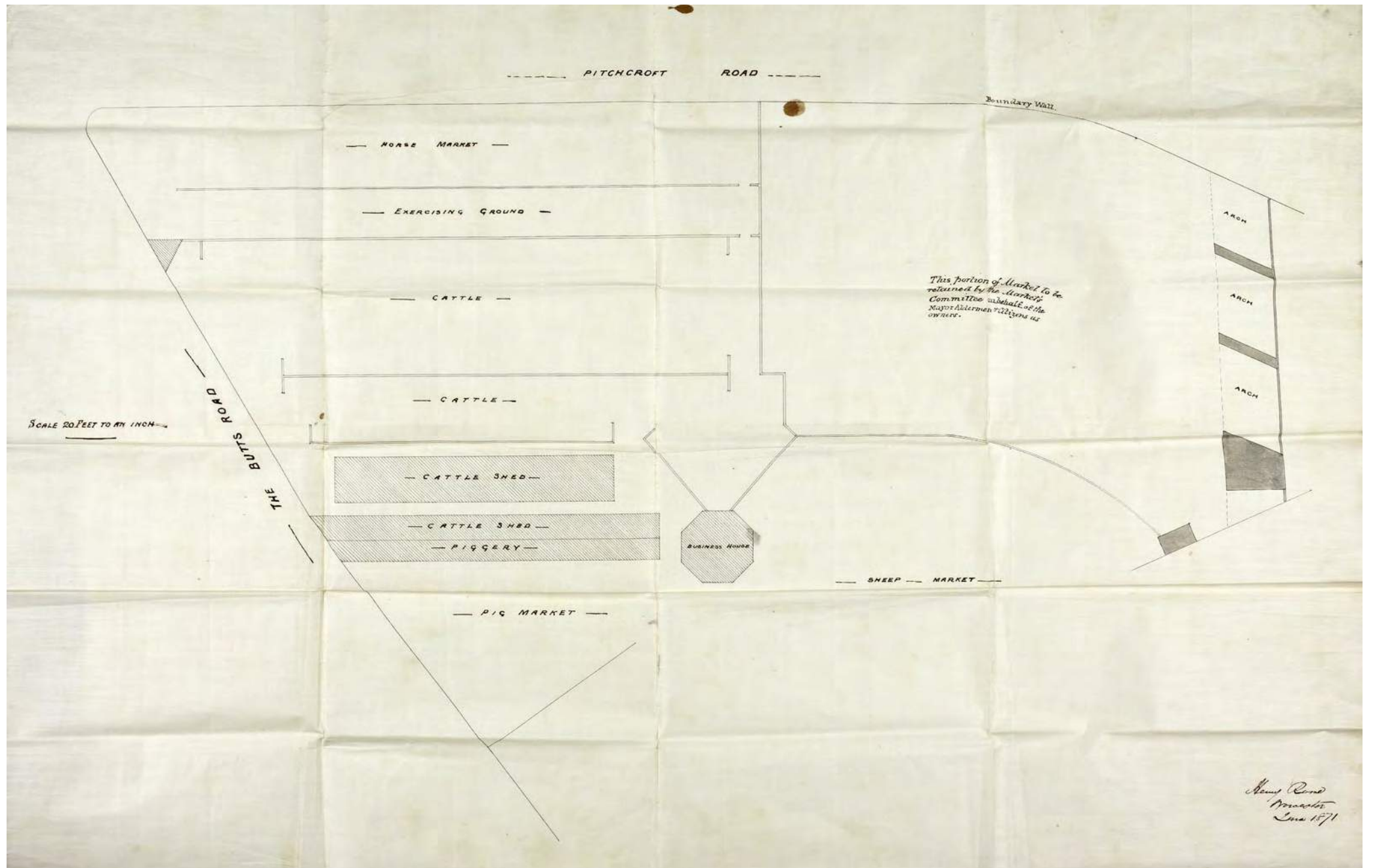
JOSEPH WOOD & SONS,
BUILDERS AND CONTRACTORS,
ENGLISH AND FOREIGN
TIMBER, BRICK, AND COAL MERCHANTS,
Steam Sawing, Planing, and Moulding Mills,
BUTTS, WORCESTER.

Importers of Best Welsh Slates and Slabs; Dealers in Brosely and Staffordshire Bricks and Tiles; Ornamental and Plain Ridges, Garden Tiles, Flooring Bricks and Quarries; Stourbridge and other Fire Bricks and Lumps; Draining Tiles and Pipes, Cement, Plaster, Laths, &c.

A LARGE STOCK OF DRY BOARDS AND PLANKS,
SPANISH AND HONDURAS MAHOGANY, BIRCH, &c.

Well-seasoned Prepared Flooring & Steam Struck Mouldings always on hand

AGENTS FOR THE SALE OF SANITARY PIPES, CLOSETS, &c.



1871 Plan of Cattle Market area (WRO ref r496.5 BA9360/Cab17/39)

Figure 28

New Offices for Messrs Wood & Sons

525



ELEVATION NEXT YARD

Scale four feet to one inch



ELEVATION NEXT STREET

Shs be built with brick
cornice with slate or tile



Block Plan
Scale 40 feet to an inch



FIRST FLOOR



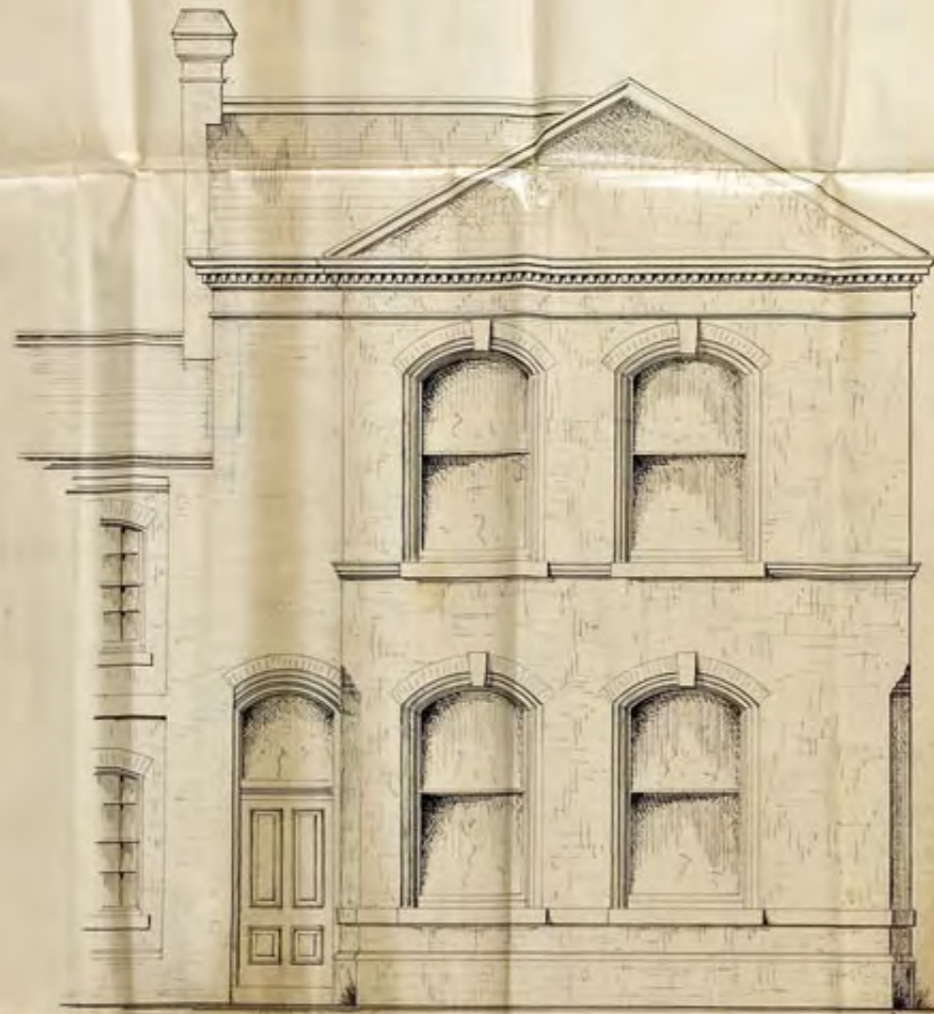
ground FLOOR

1877 Worcester City planning application (WRO ref b496.5 BA10827/9)

Figure 29

New Offices for Mess^{rs} Wood & Sons

525



ELEVATION NEXT YARD

Scale four feet to one inch



ELEVATION NEXT STREET

*To be built with bricks
covered with slates or tiles*

Detail of 1877 Worcester City planning application (WRO ref b496.5 BA10827/9)

Figure 31

All

which premises firstly secondly and thirdly described are delineated and described with the boundaries and measurements thereof on a map or plan drawn in the margin of this present and known to be true together with all other the buildings, boundaries, cisterns, fences, ditches, walls, courts, yards, alleys, lanes, gates, drains, ways, passages, lights, easements, liberties, privileges, tenements, advowsons and appurtenances to the said premises and premises firstly secondly and thirdly heretofore described and every part thereof respectively appertaining or belonging or reputed or known as part or parts thereof or appurtenances thereto. And the commission and execution hereby and also



remaineth quiet and other rights here interest claim and demands whatsoever of him the said Richard Wood of us to and upon the said part or parts boundaries and premises and every part thereof. **To have and to hold** the said part or parts of and in the said copyhold or tenement lands, cottages and tenements and all and singular other the premises firstly secondly and thirdly heretofore described and intended to be held conveyed with the appurtenances unto the said Charles Joly Sidcock his heirs and assigns to the use of the said Joseph Thomas Wood and John Foreland their heirs and assigns for ever as part and parcel of the messuages situate in the town of Kew the said Joseph Thomas Wood and John Foreland and to be held by them as persons able in the full and sole possession in which they are respectively entitled to be situated in the copies of their partnership deed and to that effect the said messuages of the said Joseph Thomas Wood and John Foreland respectively the same shall be deemed and considered on the nature of a joint estate and all part of the partnership deed and may be disposed of by law or in equity of law or equity to the contrary notwithstanding. And the said Richard Wood doth to the said tenements and premises firstly secondly and thirdly heretofore described and intended to be conveyed granted and conveyed doth hereby for himself his heirs executors and administrators covenant with the said Charles Joly Sidcock his heirs and assigns in manner following that is to say that notwithstanding any act and matter or thing whatsoever by law the said Richard Wood made and or knowingly signed to the contrary he the said Richard Wood now both in living and right to grant and convey the said part or parts of him the said Richard Wood of and in the said boundaries or parts firstly secondly and thirdly heretofore described and premises thereof as all that hereafter he hath occupied and enjoyed since the death and proper burial of the said Charles Joly Sidcock his heirs and assigns according without any interruption or disturbance by the said Richard Wood or any person claiming through or in trust for him. And that fees and charges and party claims and accounts required accounted and for him discharged or otherwise by him the said Richard Wood his heirs executors or administrators sufficient indemnities against all claims demands claims and demands whatsoever occasioned or made by him or any person claiming through or in trust for him. And further that he and every person having or claiming any estate or interest in the said part or parts boundaries and premises through or in trust for him or theirs shall and will at all times of the said Joseph Thomas Wood and John Foreland their heirs and assigns make certain and do every such agreement and thing for the further or more perfectly enjoying all or any of the said part or parts and premises unto the said Charles Joly Sidcock his heirs and assigns as by him or theirs or counsel in the law shall be reasonably caused or required. **In witness** whereof the said parties to these presents have hereunto set their hands and seals the day and year first above written.

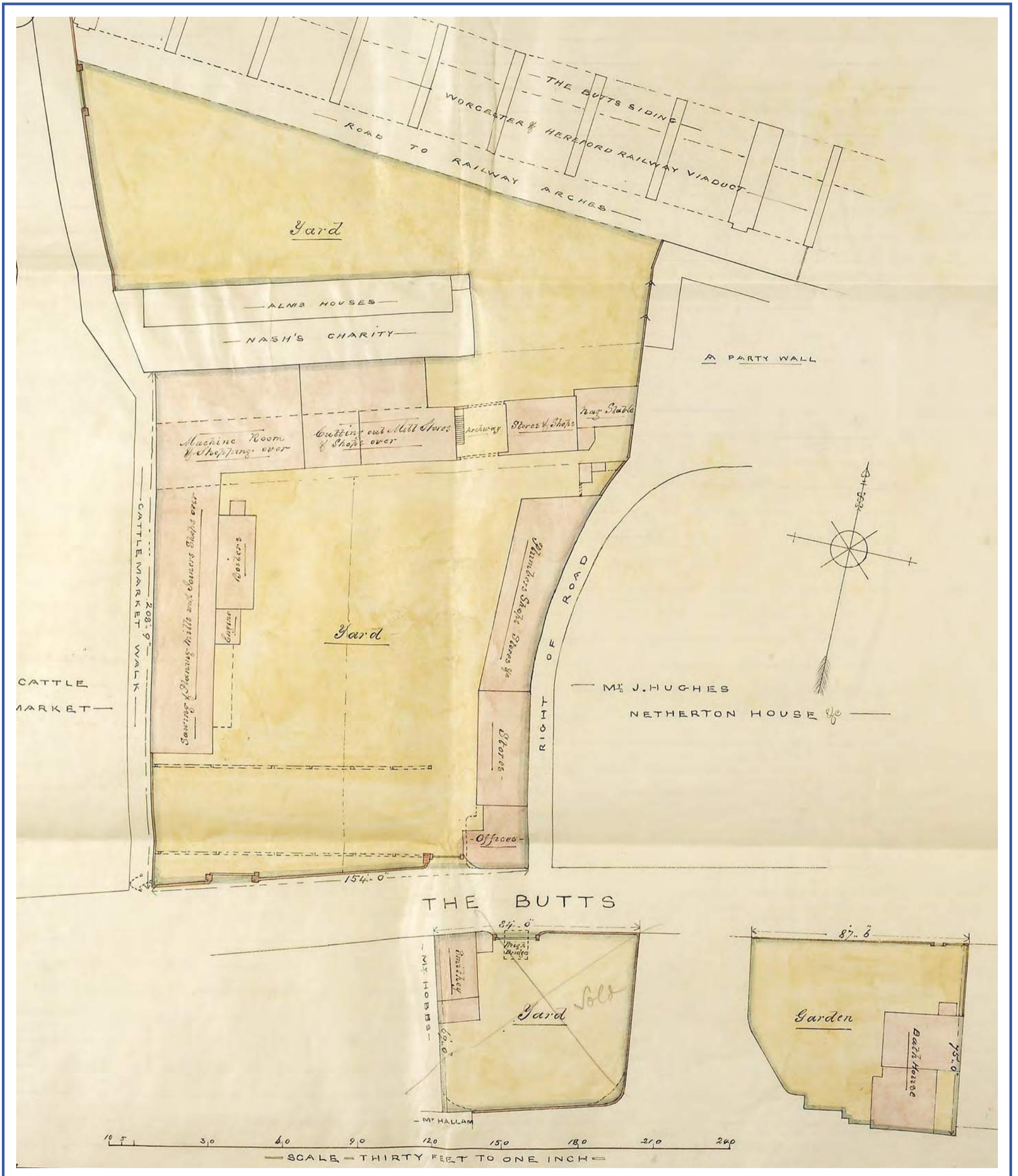
Richard Wood

Joseph Thomas Wood
John Foreland

Charles Joly Sidcock

1878 conveyance plan (WRO ref 496.5 BA9360/Cab 14/15/A)

Figure 32



Detail of 1878 conveyance plan (WRO ref 496.5 BA9360/Cab 14/15/A)

Figure 33

JOSEPH WOOD & SONS,
BUILDERS & CONTRACTORS,
ENGLISH AND FOREIGN
 TIMBER, BRICK, AND COAL MERCHANTS,
 Steam Sawing, Planing, and Moulding Mills,
BUTTS, WORCESTER.

Importers of Best Welsh Slates and Slabs; Dealers in Brosely and Staffordshire Bricks and Tiles; Ornamental and Plain Ridges, Garden Tiles, Flooring Bricks and Quarries; Stourbridge and other Fire Bricks and Lumps; Draining Tiles and Pipes, Cement, Plaster, Laths, &c.

A Large Stock of Dry Boards and Planks, Spanish and Honduras Mahogany, Birch, &c.

*Well-seasoned prepared Flooring and Steam-Struck Mouldings
 always on hand.*

AGENTS FOR THE SALE OF SANITARY PIPES, CLOSETS, &c.

Advert from Littlebury's Directory 1879

Figure 34

WILSON, CARMICHAEL, & FLEMING
 (Late **HALLAM & CO.**),

Carriage Manufacturers,
BUTTS, WORCESTER.

THOMAS ABELL,

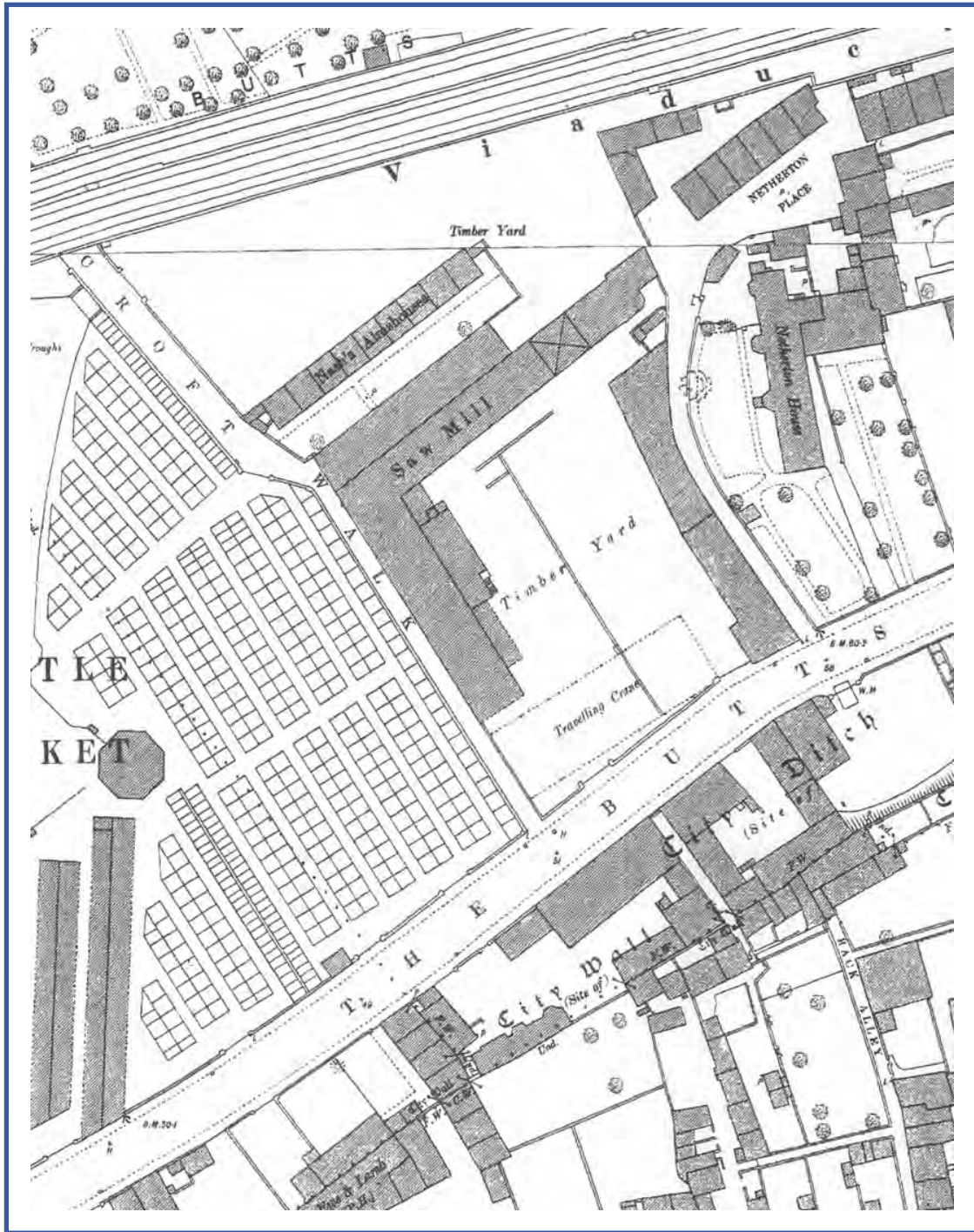


SHOEING SMITH AND



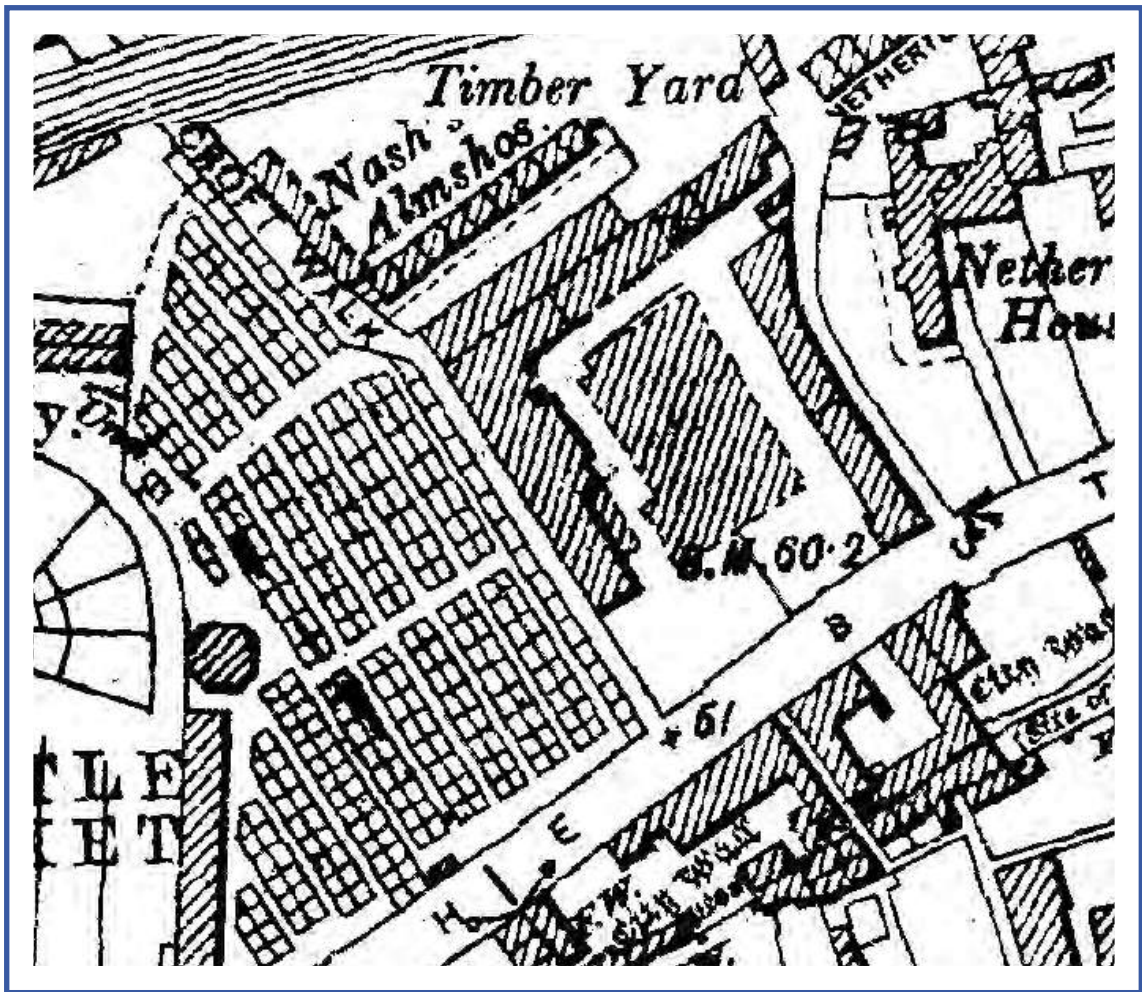
Advert from Littlebury's Directory 1879

Figure 35



Extract from 1886 Ordnance Survey map

Figure 36



Extract from 1904 Ordnance Survey map

Figure 37

herunto set and the Bankers have herunto
set their hands and seals the day and year
first above written.

The First Seized title referred to.

1. The offices storerooms warehouses workshops saw
mills builders yards stables land and
hereditaments situate on the North side of the
Butts in the Parish of Saint Nicholas in the City
of Worcester and now in the occupation of the
Company.
2. The messuage tenement or dwellinghouse called
"Bath House" with the outbuildings garden and

1905 Extract from mortgage (WRO ref r496.5 BA9360/Cab14/15/A)

Figure 38



Joseph Wood and Sons (Worcester) Ltd seal from 1905 mortgage
(WRO ref r496.5 BA9360/Cab14/15/A)

Figure 39

JOSEPH WOOD & SONS (Worcester), Limited,

Builders, Contractors,

and Merchants, = =

THE BUTTS, WORCESTER,

Successors to, and continuing the business of

JOSEPH WOOD & SONS (Established for nearly a Century), who have erected many Mansions, Public and Private Buildings, and Manufactories in this County, and in other parts of the Kingdom.

They specially refer to Witley Court, the Worcestershire residence of the Earl of Dudley—the Victoria Institute, Worcester—and the Restoration of St. David's Cathedral, Pembrokeshire as examples of the important works they have executed.

BUILDING WORKS of every description—large or small undertaken and efficiently carried out.

HIGH CLASS SANITARY WORKS, PLUMBING, DRAINAGE AND PAINTING, either plain or decorative, will have special and personal attention.

GENERAL REPAIRS AND JOBBING WORKS are solicited, which will be done by steady and reliable workmen under efficient supervision, and being large buyers, materials of the best quality will be supplied at moderate cost.

JOSEPH WOOD & SONS
(Worcester), Limited,
Builders, Contractors,
and Merchants, = =

THE BUTTS, WORCESTER,

Successors to, and continuing the business of

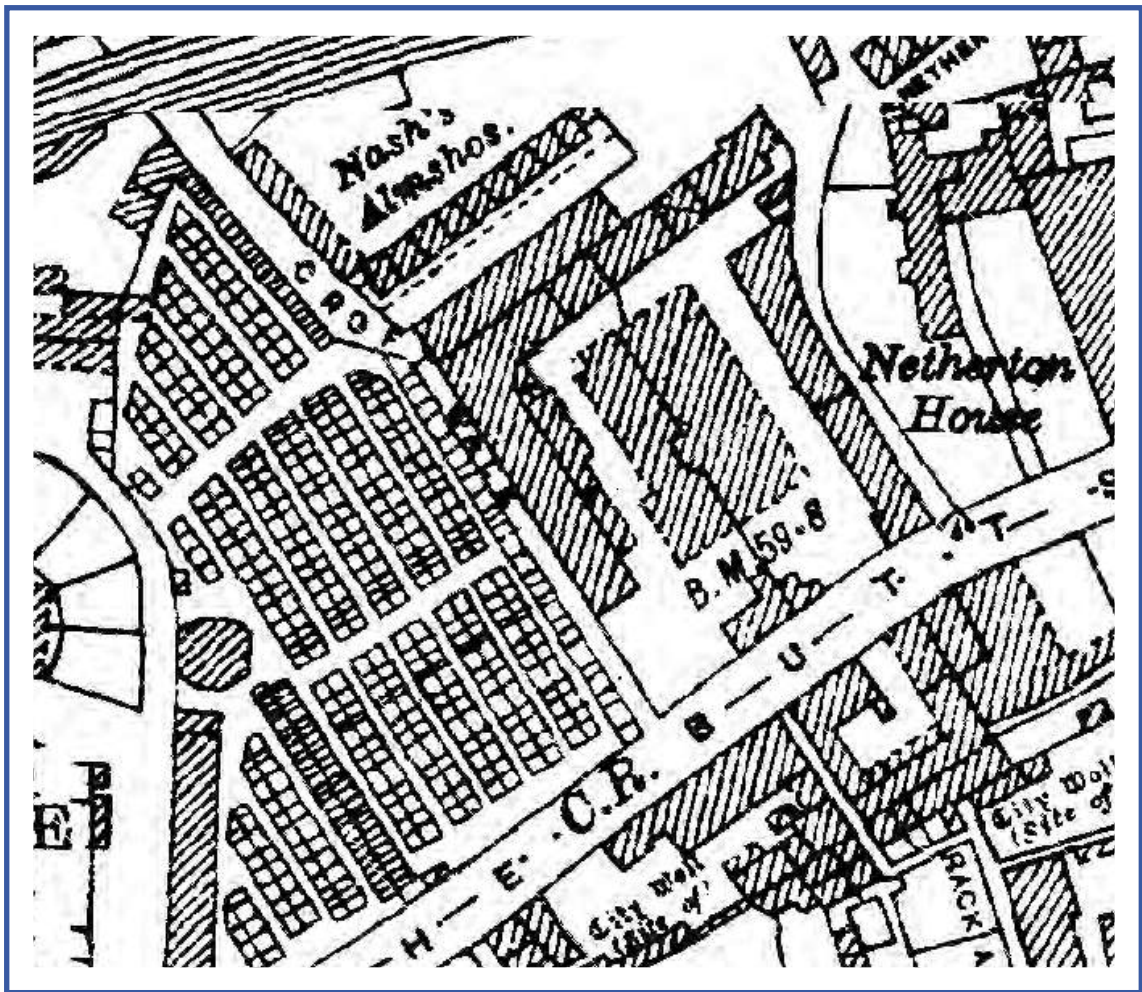
JOSEPH WOOD & SONS (Established for nearly a Century), who have erected many Mansions, Public and Private Buildings, and Manufactories in this County, and in other parts of the Kingdom.

They specially refer to Witley Court, the Worcestershire residence of the Earl of Dudley—the Victoria Institute, Worcester—and the Restoration of St. David's Cathedral, Pembrokeshire, as examples of the important works they have executed.

BUILDING WORKS of every description—large or small—undertaken and efficiently carried out.

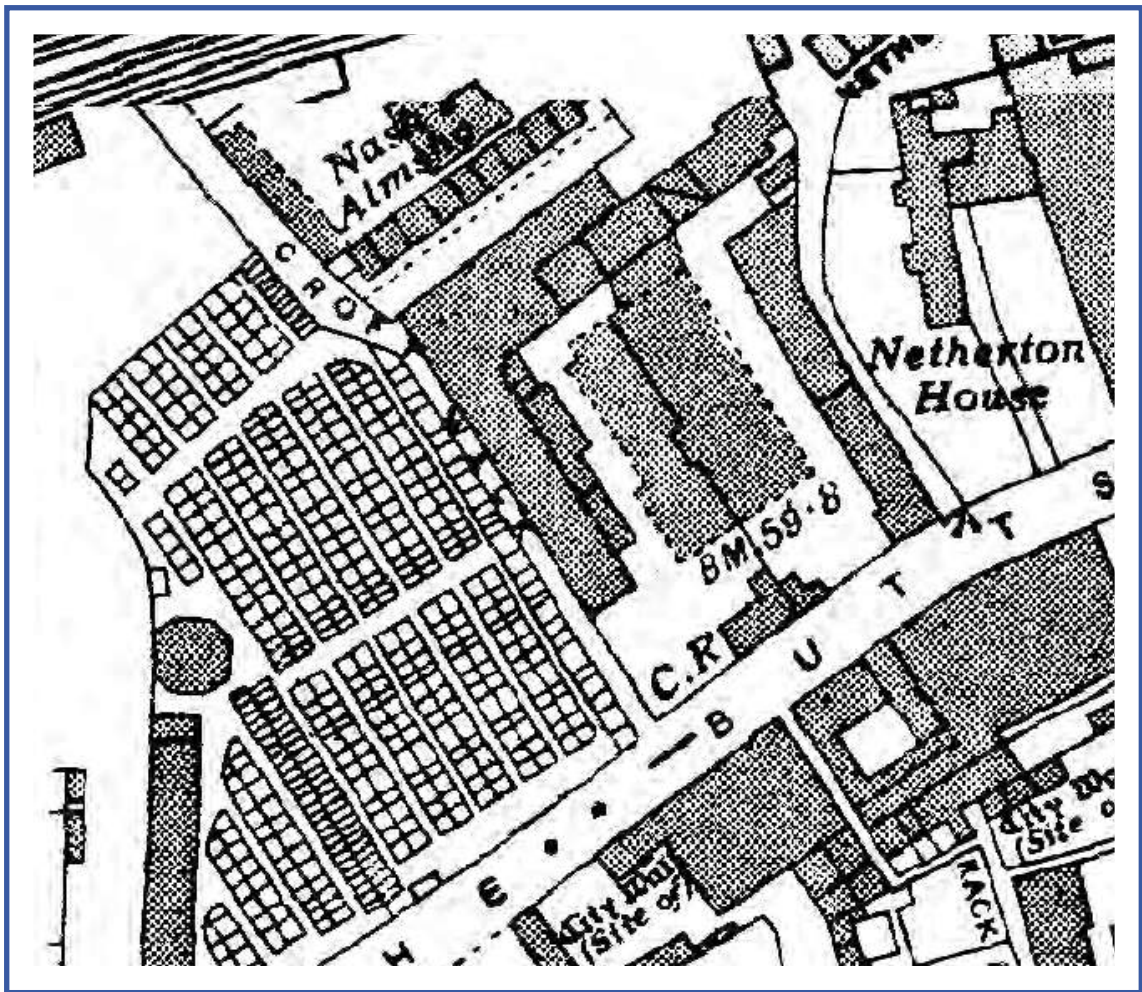
HIGH CLASS SANITARY WORKS, PLUMBING, DRAINAGE AND PAINTING, either plain or decorative, will have special and personal attention.

GENERAL REPAIRS AND JOBBING WORKS are solicited, which will be done by steady and reliable workmen under efficient supervision, and being large buyers, materials of the best quality will be supplied at moderate cost.



Extract from 1928 Ordnance Survey map

Figure 42



Extract from 1940 Ordnance Survey map

Figure 43

All roads lead to:—

CARMICHAEL & SONS

LTD.

AUTOMOBILE AGENTS & COACH BUILDERS

THE BUTTS, WORCESTER

who can offer you
***THE BEST
service FOR
YOUR car***

MECHANICAL OVERHAULS
REGULAR SERVICING MAINTENANCE
ACCIDENT REPAIRS
SAFETY GLASS REPLACEMENTS
UPHOLSTERY AND SEAT REPAIRS
PANEL BEATING AND WELDING
RE-SPRAYING

ALSO CALL AND SEE OUR LARGE STOCKS OF
NEW & SECOND-HAND CARS, VANS & TRUCKS

PHONE: WORCESTER 3315 (3 LINES)

4030 Cam—Cartwright

Before dialling—WAIT for the dial tone

Telephone:
WORCESTER
26383
(5 Lines)

CARMICHAEL & SONS (WORCESTER) LTD.
COACH BUILDERS AND MOTOR AGENTS

ADDRESS:
THE BUTTS,
WORCESTER

Agents for: AUSTIN—COMMER—MORRIS—HILLMAN—STANDARD CARS SALES and SERVICE

Cam J.L., 31 Richmond rd., Malvern 4368
Cambridge A. & J., Malvern
75c Waterworks rd., Worcester 23089
Cambridge D.W., 163 Upper Welland rd., Malvern 2594
Camden Mrs. E., Weatherholt cott
Church la Wyre., Pershore 2296
Cameron A.R.P.P.K., Charity fm., Stanton 279
Cameron D., Bon-Ton., Clows Top 282
Cameron Dr. D.H.W.
(Surgery) 33 The Tything., Worcester 23983
(Res) Beech ho Beech av., Worcester 23983
Cameron E.A., Antia, 12 Graham rd., Malvern 1918
11 The Tything., Worcester 27755
Cameron F.Y., 6 Homefield rd., Worcester 26061
Cameron W.L., Lintridge Court rd., Malvern 148
Cameron W.L., Str., 49 Church st., Malvern 1133
Cammell E.B., 10 Albany ter., Worcester 26027
Campagne Mrs. E., Lozds Barn
Westington., Campden 524
CAMPBELL A.G. (ARCAM) Ltd., Hallow 361
Partidge fm Lr Broadheath., Hallow 362
Campbell B.A., The Old Priory., Powick 365
Campbell Mrs. C.D., Byfields Brook End
Welland., Upton-upon-S 360
Campbell G.B., Haxtonford ho., Worcester 2058
Campbell Mrs. H.E., 25 St Peters rd., Malvern 26061
Campbell J.I., Lechmere cres., Malvern 3551
Campbell Mrs. John, Corsall ho., Broadway 3146
Campbell J.W., 1/32 Priory rd., Malvern 1636
Campbell Malcolm V.,
Dilke St John's av., Kidderminster 2689
Campbell M.C., 4a Whittington rd., Worcester 27952
Campbell M.H.,
Auchenbreck Rashwood hl., Wychbold 261
Campbell Richard R.,
West Croft Brockhill rd., Malvern 626
Campbell S.G., Hrders, 13 Old st., Upton-upon-S 125
Campbell-Orde Miss M.F., Garden flat
32 Abbey rd., Malvern 2263
Campbell-Orde Mrs. R.,
Willow cott Newbridge Gno., Upton-upon-S 202
Campden A.J., Mkt Gdnr.,
The Bungalow, Upton Snodsbury 208
Campden Builders Supplies Ltd., Campden 485
Campden Dairies Ltd., Westington., Campden 325
Campden Dr. G.R.C.
(Res) Springhill fm Wribbenhall., Bewdley 2248
(Surgery) 24 Church st., Kidderminster 2051
Canal Pleasurecraft (Stourport) Ltd.,
Locksde Boatyard., Stourport 2970
Candleford Nurseries, Market fm
Wants Ga., Knightwick 378
Candlin Mrs. N.E., 20 Southoppe rd., Blakedown 491
Candy A., White cott Fairfield., Bromsgrove 3647
Candy R.R., Agric Centre,
Ardencote Shellfield., Gt Alne 306
Cane F.T., PO, 10 High at Market pl., Bromsgrove 2111
Canham Miss A.L., Long Acre
Evesdine la., Colwall 377
Canham's Stores, Wines, 37 Alcester st., Redditch 2075
Canning G.W., 33 The Hill av., Worcester 27860
Canning Mrs. M.N., 56 Bromyard rd., Worcester 23618
Canning W.F.W. & Son, Mkt Gdnr., Redensdale
Oak Tree rd., Harvington 315
Cannings Mrs. E.M., 3 Station rd., Blockley 383
DANNOCK CHASE COALS Ltd.,
54 Foregate st., Worcester 22281
Henwick Station yd., Worcester 24389
Malvern Link., Malvern 93
Malvern Link Station yd., Malvern 59
24 Swan la., Evesham 6359
15 Stoke rd Aston Flds., Bromsgrove 2067
Cant J., Falcon htl Vine st., Evesham 2717
Cant M., Newhaven Beech av., Worcester 24068
Cape of Good Hope, New rd., Kidderminster 2660
Capel R.G., 28 Redfern av., Worcester 26475
Capener C., Rock Bank cott High st., Blockley 345
Capewell H.W., 7 Severn side Stn., Worcester 2253
Capewell R.C., Nisrman, 21 Hornold rd., Malvern 2347
Capewell R.D., 118 Dorsett rd., Stourport 2640
Capewell R.D., Drp, 2 Queens rd., Stourport 2058
Capewell W.H., Burcot ho., Bromsgrove 3838
Capstick J.R., Plough & Harrow
Guarilford rd., Hanley Swan 379
Car Body Repairs Ltd., Bromsgrove rd., Worcester 22201
CAR & GENERAL INSURANCE
CORPORATION LTD.,
Car & General Bldgs Foregate st., Worcester 23653
Car Tyres Worcester Ltd., 9 The Butts, Worcester 27395
Carbery Miss M.E.,
The Little ho Court rd., Malvern 1394

Carburettor & Battery Service,
Abbey rd., Worcester 24962
Card G.A.J., 15 Wickham rd., Upton-upon-S 681
Card H.T., Gcr, 132 West Malvern rd., Malvern 2060
Cardinal F.J., 306 Evesham rd., Astwood Bk 127
Cardinal F.J. & Fisher H.G., 6 Bates hl., Redditch 2045
Careless A. & Co. Ltd., Fruit, Vgs.,
Growers, 145 Cheltenham rd., Evesham 2412
Grounds, Cheltenham rd., Evesham 2574
Careless F.R., Showford., Gt Alne 262
Careless & Heathfield, Veg Mchts.,
60 Port st., Evesham 2321
Careless Martin C., 18 Greenhill., Evesham 2072
Careless R., Mkt Gdnr.,
Ravenhurst Offenham., Evesham 6515
Careless Ronald, Mkt Gdnr.,
The Mount., Upton-upon-S 249
Pillington fm., Worcester 263
Careless T.B., Big Boat fm., Inkbarrow 327
Careless W.N., Newsagt, South Littleton., Badsey 550
Carey Lt.-Cdr. A.F.B., Elmbridge Green ho
Elmbridge gn Droitwich., Cutnall Gn 280
Carey B., Rozel, Quarry Bank., Hartlebury 224
Carey J.H.F., Kennels, Hewell., Redditch 3591
Carey W.H., 1 St Nicholas st., Droitwich 2154
Carey W.S., 6 Mollard rd., Studley 249
Carey-Walker C.J., The Homestead
Walkers la Whittington., Worcester 24238
Carless Miss M., Bay Tree cott
Gt Comberton., Elmley Castle 283
Carless Roy, LDS, Dent Surg.,
24 Somers rd., Malvern 2664
Carley Mrs. A., Bradon
Pichersleigh rd Malvern Link., Malvern 1700
Carlie Miss M., 111 Court rd., Malvern 2552
Carlie Kathleen, 4 Tennis wk., Worcester 26278
Carlow S.A., 82 St Johns av., Kidderminster 5649
Cadye Allan K.,
Lr House fm Mappleboro gn., Studley 193
Carmichael H., Hilton ho Claines., Fernhill Hth 226
Carmichael J.S.R., Binhill
Battenhall av., Worcester 24586
CARMICHAEL & SONS (WORCESTER) Ltd.,
Gen Bldr, Mtr Engs, The Butts, Worcester 26383
Used Car Depot Clerkenleap., Kempsey 417
Clerkenleap depot., Worcester 439
Carmichael T.R., 25 Silverdale av., Worcester 26657
Carpenter C.H., French Polnah Contr.,
9 Georgina av., Worcester 22498
Carpenter E.H.O.,
Holbeache ho Trimley Bewdley., Upton 256
Carpenter E.J.,
8 Highfield rd Malvern Link., Malvern 2167
Carpenter F.C., Westville Beckford., Ashton-u-Hl 221
Carpenter Mrs. M.A.,
63 Wolverhampton rd., Kidderminster 5214
Carpenter R.A., 137 Northwick rd., Worcester 25076
Carpenter W., Dinglewell fm Sheffield la., Gt Alne 210
Carpenter W.H.,
Coventry Arms htl Plivin., Pershore 212
Carpenter Mrs. W.M., Yearaton ct
Clifton-on-Teme Worcester., Upr Sapey 227
CARPET MANUFACTURING Co. Ltd., Carpits & Rugs,
New rd., Kidderminster 3883
Day Nursery, The Mount Park la., Kidderminster 3883
Carpet Planners (Kidderminster) Ltd.,
Pile mills Green st., Kidderminster 4711
CARPET TRADES Ltd., Carpet & Felt Mfrs.,
Wrat & Woolen Spinnrs, Mill st. Kidderminster 2461
Castle mills New rd., Kidderminster 2094
Carpet Wool Co., Wool Yarn Mchts.,
Orchard st., Kidderminster 2937
Car Miss A.D.,
Applegarth Malvern Wells., Malvern 684
Car C.W., Drp, 72 High st., Broadway 3297
Car Mrs. D., Wyth cott., Broadway 3302
Car Rev. Frank,
The Vicarage Bengeworth., Evesham 6164
Car J. & B., Frms., Foxley fm Mumble, Clows Top 259
Car J.R., 178a Birmingham rd., Bromsgrove 2663
Car K. & Russell rd., Malvern 1266
Car Mrs. M.M., 9 Ideal bldgs Mill st., Kidderminster 3358
Car His Honour Judge Norman A.,
Grazings Churchill., Blakedown 244
Car P.H., 12 The Penrings Crabbas X., Astwood Bk 2251
Car Mrs. P.J., W, 35 Linden av., Kidderminster 2735
Car W.A., The Retreat., Fernhill Hth 203
Car W.B., Btchr., Clows Top 349
Carey Mrs. M., 11 The Grove Claines., Worcester 24227
Carrington D.D., Orchard ho
Woodrow., Chadsey Corbett 206
Carrington D.W., James, Elm ho., Blockley 327

Carrington G.D.,
Woodrow ho Woodrow., Chadsey Corbett 309
Carrington Mrs. G.F.,
Bevere ho Bevere., Fernhill Hth 401
Carrroll Maj. J., Moffatt, 26 Abbey rd., Malvern 43
Caruthers Geo. J.,
72 Wolverhampton rd., Kidderminster 5591
Caruthers R.D., High Rising Greenhill., Evesham 2123
Carsales Worcester, 37 Hylton rd., Worcester 22847
Carson J., Lowell, 29 New rd., Worcester 27984
Cart S.G., Gcr, The Stores., Wychbold 250
Carte Les G., 41 Redditch rd.,
Stoke Hth., Bromsgrove 3182
Carter A., Gen Stores, 1 Sidbury., Worcester 27843
Carter A.J., Kingsley Tolladine rd., Worcester 25987
Carter A.L., 6 Council cotts., Ekington 214
Carter A.Y., Mtr Cys, 243 Worcester rd., Malvern 1638
Carter Mrs. B.M., 38 Ombersley rd., Worcester 25794
Carter C.H., Bruom fm Cradley., Sushley 266
Carter C.T.,
The Cottage Abbots Morton., Inkbarrow 282
Carter D.G., Fox Hollies Claines., Fernhill Hth 382
Carter Doris, Shire End Wickhamford., Badsey 235
Carter E., Suncoot Cleeve Priory., Bidford-on-A 2346
Carter Mrs. E., 21 Guarilford rd., Malvern 1004
Carter E.T., 174 Sutton Pk rd., Kidderminster 2198
Carter F., Yarros fm Fae Forest., Rock 344
Carter F.G., Walnut cott Rushwick., Worcester 24566
Carter F.H., Grafton
Beckford Tewkesbury., Ashton-u-Hl 278
Carter Frank, Briar cott
132 Henwick rd., Worcester 24400
Carter G.A., Barbourne rd., Worcester 27923
Carter G.E., Mkt Gdnr., Carsholme
Station rd Breftorton., Badsey 437
Carter G.H., 290 Chester rd Nth., Kidderminster 3054
Carter G.V.W., 32 Heathfield cres., Kidderminster 4605
Carter H., The Swan htl., Blakedown 229
Carter H.W., Wollars fm Wyre Forest., Rook 326
Carter I.H., 3 Avon rd., Kidderminster 5435
Carter Mrs. I.M., Of Lic.,
162 Ombersley rd., Worcester 26788
Carter Ivor L., Ladies Hdrsr.,
55 The Tything., Worcester 22891
Carter J., Laights fm Harvington
Kidderminster., Chadsey Corbett 241
Carter J.A., 1 Norton clo., Worcester 24767
Carter J.M.M., 154 Birmingham rd., Kidderminster 4235
Carter John P.,
Vine cott N Piddle., Upton Snodsbury 279
Carter Miss M., Sunnydene
Sommerleyton av., Kidderminster 9398
Carter Marjory, 73 Bruce rd., Kidderminster 3167
Carter Michael H., 265 Chester rd Nth., Kidderminster 5627
Carter Mrs. M.E.,
Lynwood Stratford rd Oversley., Alcester 194
Carter M.J. & Sons, Mkt Gdnr., Breftorton, Badsey 261
Carter The Mice,
Chipping ho Westington., Campden 363
Carter Paterson—see British Road Services—
Parcels Service.
Carter P.G., 49 Sutton Park rd., Kidderminster 4384
Carter R.E.B., 29 St Johns av., Kidderminster 4437
Carter R.H.A., 16 Queens dr., Malvern 2112
Carter R.J., Frmr, Chadswell Hall fm
Cookhill., Astwood Bk 166
Cartland Albert, 352 Alcester rd
Burcot., Bromsgrove 3491
Cartland Mrs. Bertram,
Littlewood ho Poolbrook., Malvern 643
Cartledge D., Lynellon Orchard yd., Studley 255
Cartmel Rev. R.G., Up Sapey rectory., Upr Sapey 211
Cartridge C.D., Hinchley ho., Cutnall Gn 203
Cartridge P.T., Frmr, Bradford ho., Hartlebury 325
Cartwright A., 66 Comberton rd., Kidderminster 3138
Cartwright A., Cater, Waterlade Cafe., Hartlebury 222
Cartwright A.E., 12 Grange av., Worcester 25256
Cartwright D.G.V., Hamlands
Haberley rd., Kidderminster 5522
Cartwright E.G., Summerville av., Kidderminster 4374
Cartwright F.J., Forest gnge Dowles., Bewdley 2144
Cartwright G.H., 279 Hurecott rd., Kidderminster 3349
Cartwright G.L.R., Sheffield ho., Gt Alne 202
Cartwright Gordon H., Eridene
Thornogrove rd., Malvern 2307
Cartwright H.B., 357 Stourbridge rd., Bromsgrove 3563
Cartwright J.T., 45A High at Broom, Bidford-on-A 3137
Cartwright R., The Firs Whitbourne., Knightwick 294
Cartwright R.A., Bredon Church la
Whittington., Worcester 27302
Cartwright Mrs. S., 434 Stourport rd., Kidderminster 2938
Cartwright V.A., The Thatch
Todenham., Barton-on-the-Hth 209

CARMICHAEL & SONS (WORCESTER) LTD.

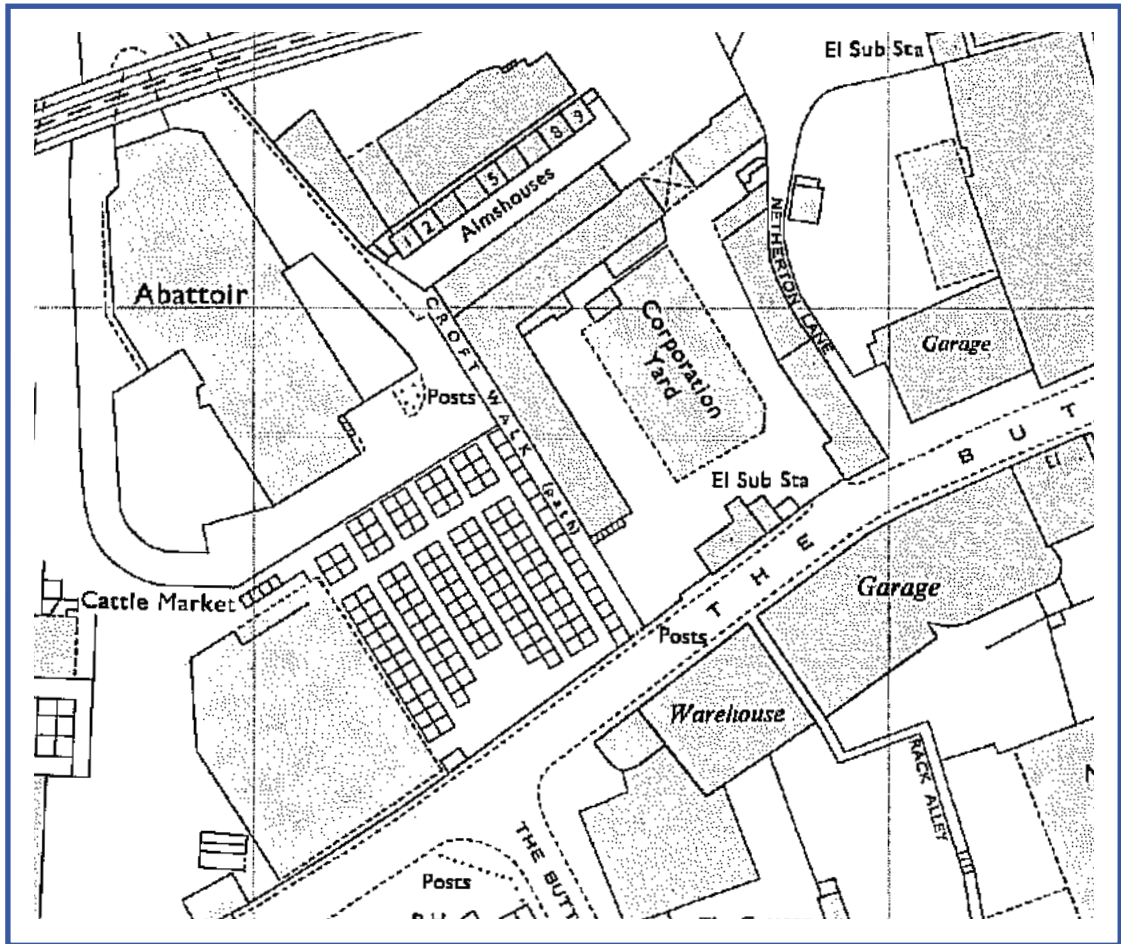
SALES THE BUTTS, WORCESTER
You can't do better than come to us if you want to buy
A NEW CAR or COMMERCIAL VEHICLE
Call and see our Stock of New Cars and Used Vehicles
IMMEDIATE DELIVERY PART EXCHANGES

WE are in the best position to offer you
AFTER SALES SERVICE
Car Washing—Valeting Service—Regular Lubrication—Constant Tyre Inspection
All Panel Repairs—Re-spraying—Safety Glass—Coach Trimming

Telephone:
WORCESTER
26383
(5 Lines)

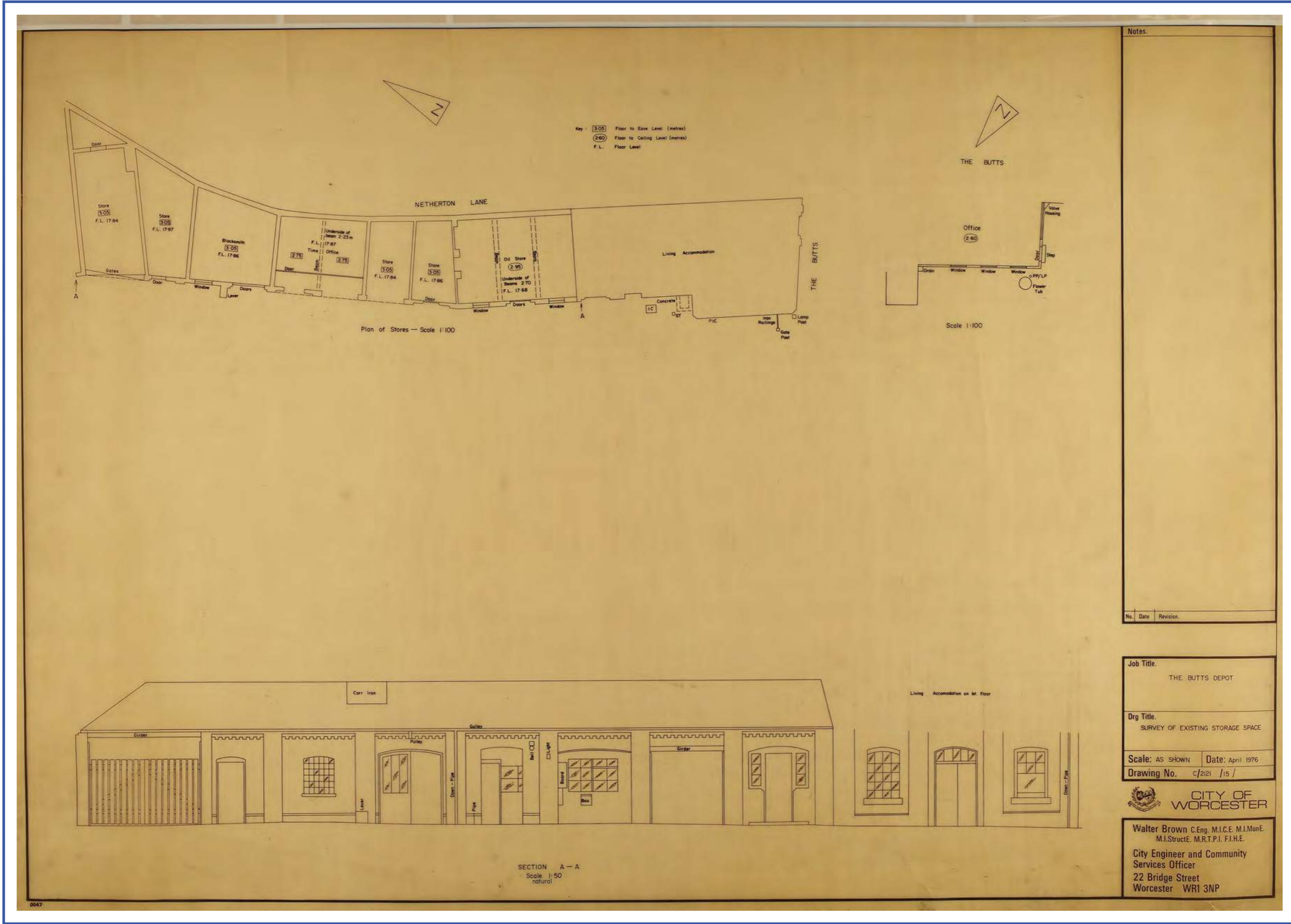
Adverts in 1960 Telephone Directory

Figure 45



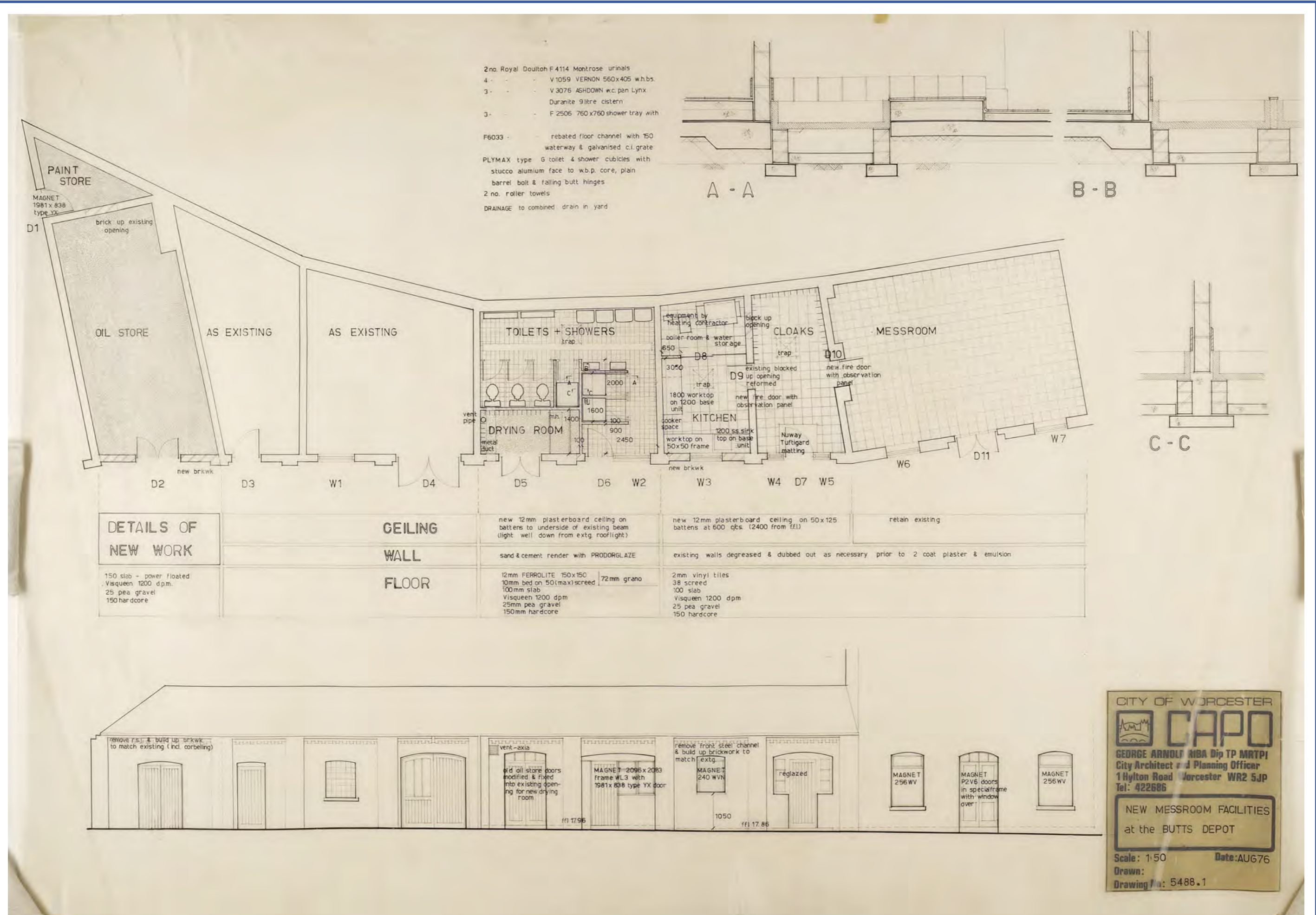
1970 Ordnance Survey map

Figure 46



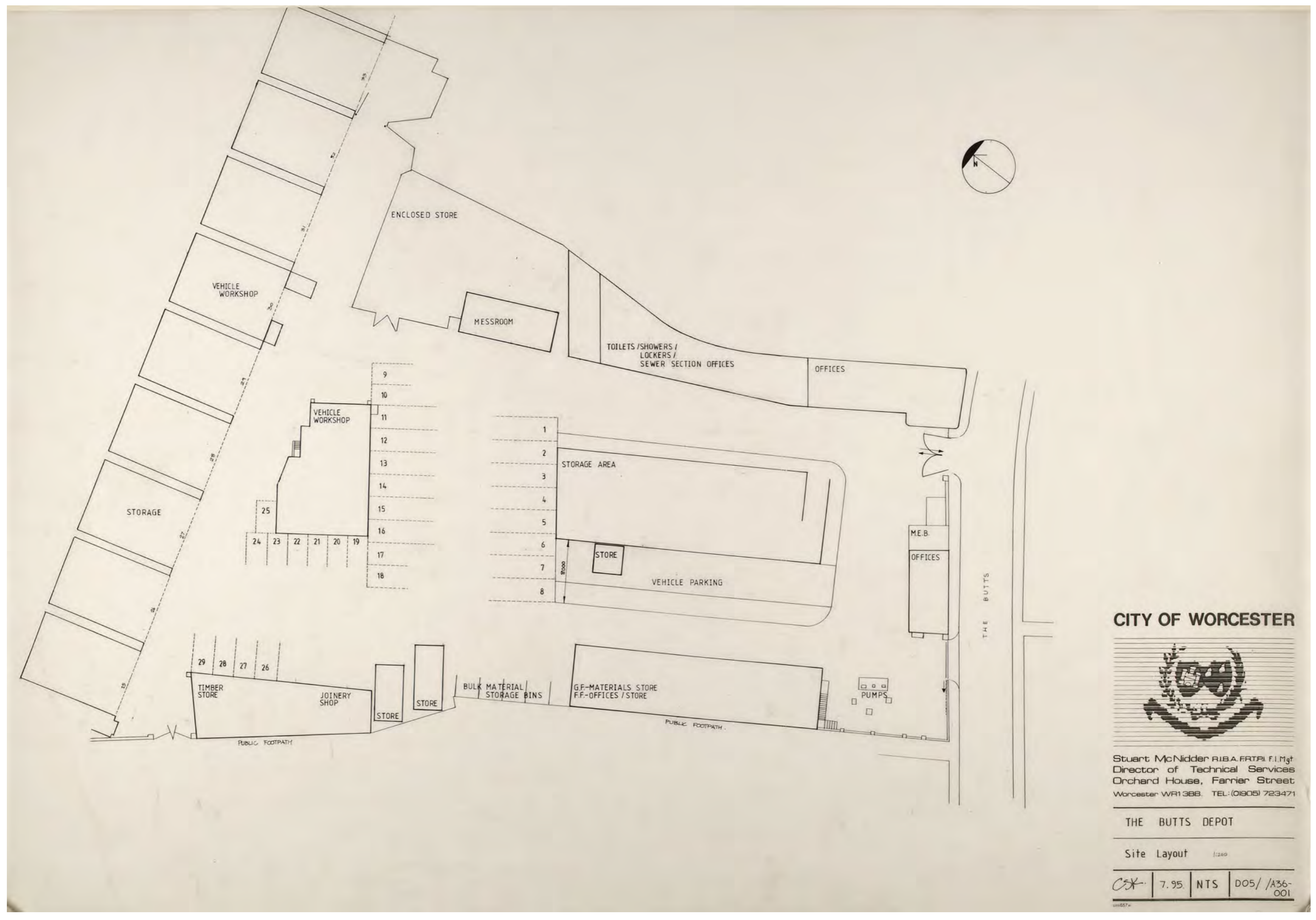
1976 Planning application for rear part of Joseph Wood building range

Figure 48



1976 Planning application for rear part of Joseph Wood building range

Figure 49



CITY OF WORCESTER



Stuart McNidder R.I.B.A. F.R.T.P.I. F.I.M.I.g.
 Director of Technical Services
 Orchard House, Farrier Street
 Worcester WR1 3BB. TEL: (01805) 723471

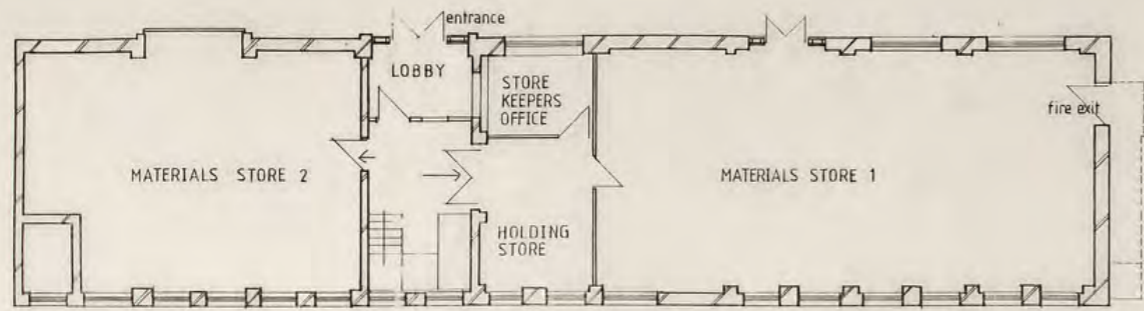
THE BUTTS DEPOT

Site Layout 1:200

CSX 7.95 NTS DO5/A36-001

1995 Planning application site layout

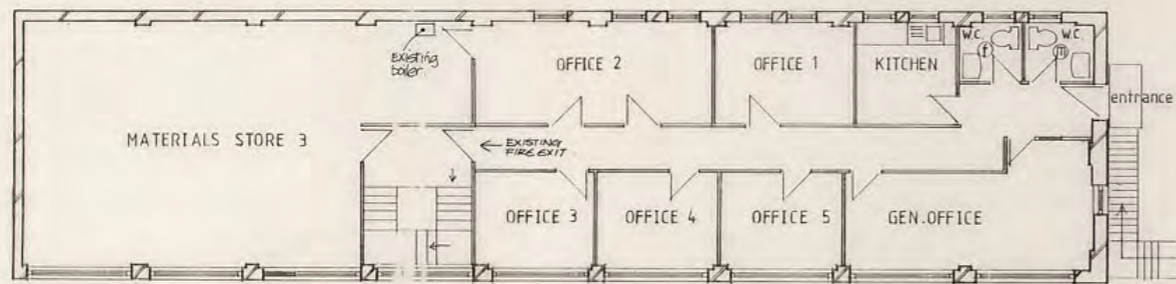
Figure 51



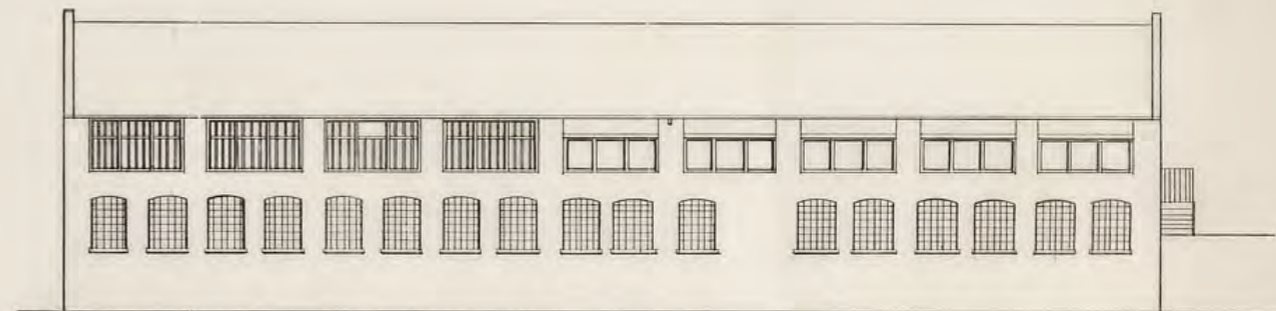
GROUND FLOOR PLAN



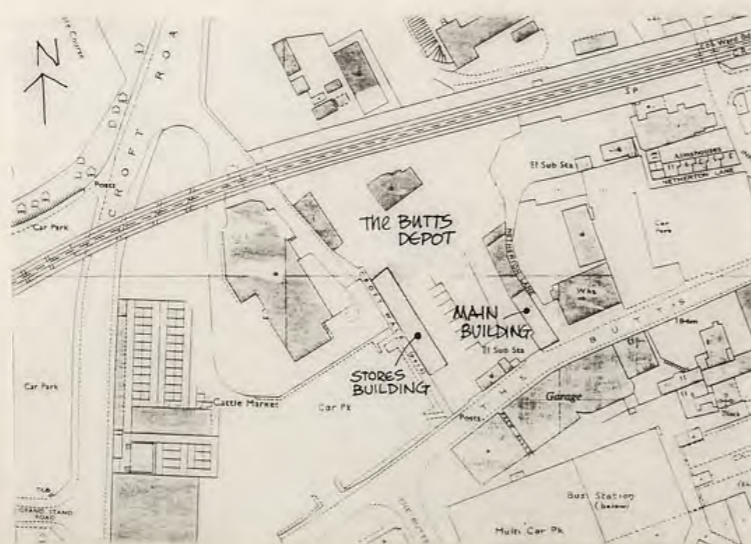
EAST ELEVATION



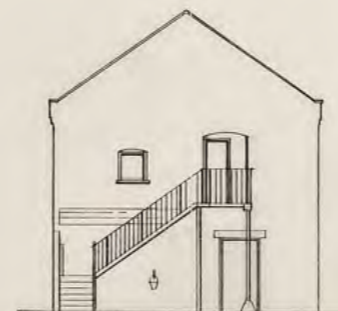
FIRST FLOOR PLAN



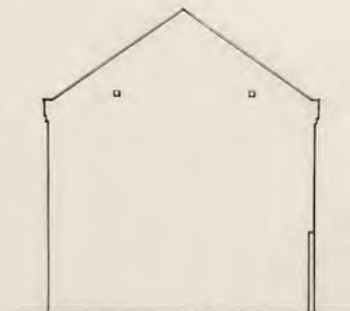
WEST ELEVATION



SITE LOCATION 1:1250



SOUTH ELEVATION



NORTH ELEVATION

CITY OF WORCESTER



Stuart McNidder RIBA FRPI FIMgt.
 Director of Technical Services
 Orchard House, Farnier Street
 Worcester WR1 3BB. TEL: (0905) 723471

THE BUTTS DEPOT
 OFFICE ACCOMMODATION

Plans + Elevations
 Existing (Stores Building)

CSK	1:100	3.96	6069-01
-----	-------	------	---------

Appendix 1 Trade directories

Directory	Title	Year	Page No.	Person	Occupation	Address
Pigot and Co	National and Commercial Directory	1835	671	Joseph Wood	Builder	Blackfriars
					Carpenter and joiner	
Stratford	Guide and directory to the City and suburbs of Worcester	1837	155	Joseph Wood	Builder	Blackfriars
Haywood	Directory of the City and borough of Worcester	1840	21	Joseph Wood	Builder	Blackfriars
Bentley	History, Guide and Directory of the Borough of Worcester	1841	146	Joseph Wood	Builder	Blackfriars
Pigot and Co	Royal National and Commercial Directory	1842	50	Joseph Wood	Builder	Blackfriars and Butts
			51		Carpenter and joiner	Blackfriars
			55		Slate merchant	Blackfriars and Butts
			57		Timber merchant	Butts and Blackfriars
Kelly	Post Office Directory of Birmingham, Staffordshire and Worcestershire	1850	497	Joseph Wood	Builder, Timber marble and slate merchant, Brick and tile manufacturer	Blackfriars and Butts
Slater	Directory of Birmingham, Worcester and the Potteries	1851	342	Joseph Wood	Brickmaker (and draining tile and pipe)	Malvern and Lower Butts
			343		Builder	Blackfriars
			344		Carpenter and joiner	Blackfriars and Broad Street
			345	Alfred Hallam	Coach builder	Little Angel Street
			346	Joseph Wood	Coal merchant	The Butts
			357		Slate merchant	Blackfriars and Butts
Lascelle and Co	Directory of Worcester and neighbourhood	1851	86	Joseph Wood	Brick and tile manufacturer	Lower Quay, Blackfriars (house)
Billing	Directory and Gazetteer of Worcestershire	1855	43	Alfred Hallam	Coach builder	Little Angel Street, Moorfield Street (house)
			61	Joseph Wood	Builder, brick and tile maker, coal, stone and marble dealer	Butts, Blackfriars (house)
			67	Alfred Hallam	Coach and carriage builder	Little Angel Street
			ads 35	Joseph Wood	Builder, Brick Tile and Draining Tile and Pipe Maker. See Figure H for other info	Timber Yards – Blackfriars and Butts Stone and Marble Yards – Lower Butts Coal Yards – Butts
E Cassey and Co	History, Topography and Directory of Worcestershire	1860	365	Alfred Hallam	Coach builder	Little Angel Street, Moorfield Street (house)
			377	Joseph Wood	Builder	Blackfriars, Rainbow Parade (house)
Kelly and Co	Post Office Directory of Worcester	1860	1272	Hallam and Palmer	Carriage builders	The Butts
			1277	Joseph Wood and Son	Builder	The Butts
			ads 140	Hallam and Palmer	Carriage manufacturer See Figure I for other info	The Butts
Percy, Butcher and Co.	City of Worcester and Malvern Directory	1873-74	147	Hallam and Co	Carriage manufacturers	The Butts
			181	Joseph Wood and Sons	Builders and contractors, builders material dealers and coal merchants	The Butts and railway station

			193	J Wood and Sons	Builder and builders material dealers	The Butts and railway station
			194	Hallam and Co	Carriage builders	The Butts
			196	Joseph Wood and Sons		The Butts and Shrub Hill Station
E R Kelly	Post Office Directory of Worcestershire	1876	1093	Wilson, Carmichael and Fleming	Coach manufacturers	The Butts
			1093	Joseph Wood and Sons	Builders and contractors, Steam saw, Planing and Moulding mills and dealers in building materials and brick and tile manufacturers	The Butts, Brick works – Diglis and Grimley
Littlebury	Directory and Gazetteer of Worcester District	1879	152	Wilson, Carmichael and Fleming (late Hallam and Co)	Carriage Manufacturers	The Butts
			153	Joseph Wood and Sons	Builders and contractors, English and foreign timber, brick and coal merchants, Steam sawing, Planing and Moulding mills, Importers of slate and dealers in all kinds of building materials, Sanitary pipes, &c.	The Butts, offices Wharves at the railway stations and Lowesmoor
			162	Joseph Wood and Sons	Builders and contractors	The Butts
			166	Wilson, Carmichael and Fleming (late Hallam and Co)	Coach and carriage builders	The Butts
			ads 34	Joseph Wood and Sons	Builders and contractors. See Figure S for other info	The Butts
			ads 65	Wilson, Carmichael and Fleming (late Hallam and Co)	Carriage manufacturers. See Figure T for other info	The Butts
			Kelly	Directory of Worcester	1892	249
261	Joseph Wood and Sons	Builders and contractors, Steam saw, Planing and Moulding mills and dealers in building materials and brick and tile manufacturers				The Butts, Brick works – Diglis and Grimley
Directory of Worcester	1896	277		Joseph Wood and Sons	Builders	The Butts (north side)
				Carmichael and Sons	Coach manufacturers	The Butts (south side)
		279		Alderman Nash's	Almshouses	Croft Walk
Directory of Worcester	1900	282		Joseph Wood and Sons	Builders	The Butts (north side)
				Carmichael and Sons	Coach manufacturers	The Butts (south side)
Directory of Worcestershire	1904	294		Joseph Wood and Sons	Builders	The Butts (north side)
		402		J Wood and Sons	Builders	The Butts
		410		Carmichael and Sons	Coach and Carriage Builders	The Butts

Littlebury	Directory of Worcester and District	1905	ads 4	Joseph Wood and Sons (Worcester) Ltd	Builders, Contractors and Merchants. See Figure Y for other info	The Butts, Worcester
			142	Joseph Wood and Sons (Worcester) Ltd	Builders, Contractors, Steam sawing and planning mills	The Butts (north side)
				Thomas Carmichael (Carmichael and Sons)		Netherton House, The Butts (north side)
				Carmichael and Sons	Carriage builders	The Butts (south side)
Kelly	Directory of Worcestershire	1908	305	Joseph Wood and Sons (Worcester) Ltd	Builders	The Butts (north side)
				Carmichael and Sons	Coach Builders	The Butts (south side)
			408	Joseph Wood and Sons (Worcester) Ltd	Builders	The Butts
			416	Carmichael and Sons	Coach and carriage builders	The Butts
Littlebury	Directory of Worcestershire	1908	ad 6	Joseph Wood and Sons (Worcester) Ltd	Builders, Contractors and Merchants. See Figure Z for other info	The Butts, Worcester
			161	Thomas Carmichael (Carmichael and Sons)		Netherton House, 24 The Butts
				Joseph Wood and Sons (Worcester) Ltd	Builders, Contractors, Steam sawing and planning mills	26 The Butts
	Directory of the City of Worcester	1910	157	Thomas Carmichael (Carmichael and Sons)		Netherton House, 24 The Butts (north side)
				Joseph Wood and Sons (Worcester) Ltd	Builders, Contractors, Steam sawing and planning mills	26 The Butts (north side)
				Carmichael and Sons	Carriage Builders	The Butts (south side)
			313	Joseph Sharman Wood J P	Private resident	4 Selbourne Road West, Barbourne
			363	Joseph Wood and Sons (Worcester) Ltd	Builder and contractor	The Butts
			365	Carmichael and Sons	Carriage Builder	The Butts (south side)
			E F Cope and Co	Worcestershire Directory and Buyers' Guide	1911	137
138	Carmichael and Sons	Carriage Builders				The Butts
Kelly	Directory of Worcestershire	1912	303	Carmichael and Sons	Coach and motor builders (motor cars built and repaired)	The Butts
			307	Joseph Wood and Sons (Worcester) Ltd	Building contractors	The Butts (north side)
				Carmichael and Sons	Coach manufacturers	The Butts (south side)
Littlebury	Directory of the City of Worcester	1915	147	Thomas Carmichael (Carmichael and Sons)		Netherton House, 24 The Butts (north side)
				Joseph Wood and Sons (Worcester) Ltd	Builders, Contractors, Steam sawing and planning mills	26 The Butts (north side)
				Carmichael and Sons	Carriage and motor builders	The Butts (south side)
				Joseph Wood and Sons (Worcester) Ltd	Blacksmiths shop	The Butts (south side)

			351	Joseph Wood and Sons (Worcester) Ltd	Builder and contractor	The Butts
			352	Carmichael and Sons	Carriage builder	The Butts
Kelly	Directory of Worcestershire	1916	299	Joseph Wood and Sons (Worcester) Ltd	Building Contractors	The Butts (north side)
				Carmichael and Sons	Coach Manufacturers	The Butts (south side)
			398	Joseph Wood and Sons (Worcester) Ltd	Builder	The Butts
			402	Carmichael and Sons	Carriage and motor car body builders	The Butts
Littlebury	Directory of the City of Worcester	1922	156	Thomas Carmichael (Carmichael and Sons)		Netherton House, 24 The Butts (north side)
				City of Worcester Road Department	C I Carey Walker, City Road Surveyor	West of Netherton Lane
				Joseph Wood and Sons (Worcester) Ltd	Builders, Contractors, Steam sawing and planning mills	26 The Butts (north side)
				Carmichael and Sons	Carriage and motor builders	The Butts (south side)
				Joseph Wood and Sons (Worcester) Ltd	Blacksmiths shop	The Butts (south side)
			370	Joseph Wood and Sons (Worcester) Ltd	Builders and contractors	The Butts
			371	Carmichael and Sons	Carriage builders	The Butts
Kelly	Directory of Worcestershire	1928	307	City of Worcester Road Department	C I Carey Walker, City Surveyor	The Butts (north side) east of Netherton Lane
				Joseph Wood and Sons (Worcester) Ltd	Building Contractors	The Butts (north side)
				Carmichael and Sons	Coach builders	The Butts (south side)
			411	Joseph Wood and Sons (Worcester) Ltd	Builder	The Butts
			415	Carmichael and Sons	Carriage and motor car body builders	The Butts
	Directory of Worcester and Neighbourhood	1930	22	City of Worcester Road Department	C I Carey Walker, City Surveyor	The Butts (north side)
				Joseph Wood and Sons (Worcester) Ltd	Building Contractor	The Butts (north side)
			23	Carmichael and Sons	Coach builders	The Butts (south side)
			281		Coach builders	The Butts
			314	Joseph Wood and Sons (Worcester) Ltd	Building contractors	The Butts
			339		Builder	The Butts
			362	Carmichael and Sons	Motor car body builder	The Butts
	Directory of Worcestershire	1932	304	Carmichael and Sons	Coach builders	The Butts (south side)
			305	City of Worcester Road Department	C I Carey Walker, City Surveyor	The Butts (north side) east of Netherton Lane

				Joseph Wood and Sons (Worcester) Ltd	Building Contractors	The Butts (north side)
			412	Joseph Wood and Sons (Worcester) Ltd	Builder	The Butts
			416	Carmichael and Sons	Carriage and motor car builders	The Butts
Kelly	Directory of Worcestershire	1936	308	Joseph Wood and Sons (Worcester) Ltd	Building Contractors	The Butts (north side)
				Public Works Department	C I Carey Walker, City Surveyor	The Butts (north side) east of Netherton Lane
				Carmichael and Sons	Coach builders	The Butts (south side)
			416	Joseph Wood and Sons (Worcester) Ltd	Builder	The Butts
			422	Carmichael and Sons	Carriage and motor car builders	The Butts
	Directory of Worcester and Neighbourhood	1937	30	Public Works Department	C I Carey Walker, City Surveyor	26 The Butts (north side)
				Joseph Wood and Sons (Worcester) Ltd	Building Contractors	
				Alex Carmichael		Netherton House, 24 The Butts
			394	Joseph Wood and Sons (Worcester) Ltd	Builder	The Butts
			419	Carmichael and Sons	Motor car and coach body builders	The Butts
	Directory of Worcestershire	1940	307	Public Works Department	C I Carey Walker, City Surveyor and public works manager	The Butts (north side)
				Joseph Wood and Sons (Worcester) Ltd	Building Contractors	The Butts (north side)
				Carmichael and Sons (Worcester) Ltd	Coach builders	The Butts (south side)
			416	Joseph Wood and Sons (Worcester) Ltd	Builders	The Butts
			421	Carmichael and Sons (Worcester) Ltd	Carriage and motor car builders	The Butts
County Publicity	Worcester Directory	1955-56	83	Carmichael and Sons (Worcester) Ltd	Motor body builders, fire appliance manufacturers, motor engineers, agents and distributors	The Butts
				Children's Officer		26 The Butts
			111	Joseph Wood and Sons (Worcester) Ltd	Builders	Gregory's Mill Street
			219	Carmichael and Sons (Worcester) Ltd	Motor body builders, Fire appliance manufacturers, motor engineers, agents and distributors	The Butts
			374	Joseph Wood and Sons (Worcester) Ltd	Builders	Gregory's Mill Street
			ad on map after 568	Carmichael and Sons Ltd	Automobile Agents and Coach Builders. See Figure CC for other info	The Butts

	Worcester Directory	1957-58	83	Carmichael and Sons (Worcester) Ltd	Motor body builders, fire appliance manufacturers, motor engineers, agents and distributors	The Butts
				Children's Officer		26 The Butts
			111	Joseph Wood and Sons (Worcester) Ltd	Builders	Gregory's Mill Street
			219	Carmichael and Sons (Worcester) Ltd	Motor body builders, Fire appliance manufacturers, motor engineers, agents and distributors	The Butts
			373	Joseph Wood and Sons (Worcester) Ltd	Builders	Gregory's Mill Street

Appendix 2 Record Office Documents

Reference	Accession No.	Date	Description
b899:31	BA3156/1	1741	Map of Worcester by John Dohartey
496.5	BA9360/C1/1	1771	Worcester Corporation Plan Book
496.5	BA9360/C1/2	1784	Worcester Corporation Plan Book
b496.5	BA9360/C1/3	1824	Worcester Corporation Plan Book
	BA14904	1825	Lithograph of Oriental and Classical Establishment, Netherton house
b496.5	BA9360/Cab25/5/4	1845	Welsh Midland Railway plan
899:749	BA8782/63	1846	Netherton House Estate lease plan
496.5	BA9360/Cab14/15/A	1854	Assignment of leasehold properties, J Williams to J Wood
496.5	BA9360/Cab14/15/A	1854	Plan of summerhouse
496.5	BA9360/Cab14/15/A	1857	Enfranchisement of property, Mayor and Alderman to J Wood
b496.5	BA10465	1865-1901	Worcester City Planning Index
r496.5	BA9360/Cab17/39	1871	Plan of Cattlemarket
b496.5	BA9360/10827/9	1877	Plan No 525 – New Offices for Messrs Wood and Sons
496.5	BA9360/Cab14/15/A	1878	Conveyance of property from R Wood to J S Wood and J Joseland
496.5	BA9360	1905	Mortgage of all property, J Wood to Berwick and Co.

Appendix 3 Worcester City Council Archives

Drawing No	Date	Description
	May 1974	Planning Application No 74/0217. Proposals for Nash's Almshouses
C/2121/15	April 1976	The Butts Depot Survey of Existing Storage Space
5488.1	Aug 1976	New Messroom Facilities at the Butts Depot
5591/1J	Nov 1981	Alterations to 26A & B The Butts, proposed office accommodation
D05/ /A36-001	July 1995	The Butts Depot Site Layout
6069-01	March 1996	The Butts Depot Office Accommodation Plans and Elevations Existing (Stores Building)

Appendix 4 Technical information

The archive (WCM 101656, 101657, 101658)

The archive consists of:

- 30 Photographic records AS3
- 1134 Digital photographs
- 1 Drawing number catalogues AS4
- 33 Scale drawings
- 1 CD-Rom/DVDs
- 1 Copy of this report (bound hard copy)

The project archive is intended to be placed at:

Archaeological Data Service (ADS)

<http://archaeologydataservice.ac.uk/archives/>



Published by
Worcestershire
Archive & Archaeology Service

www.explorethepast.co.uk/

