

**ARCHAEOLOGICAL BUILDING RECORDING OF THE BRISTOL
BREWERY, COUNTERSLIP, BRISTOL; PHASE ONE.**

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1 INTRODUCTION

1.1 Outline

- 1.1.1 It is proposed to redevelop the site of the Bristol Brewery, Counterslip, City of Bristol, (National Grid Reference 58188 72923)(Fig.1). The new development, by J G Bristol Limited, will consist of the retention and refurbishment of the Tramway Generator Building and the Bath Street Terrace, the retention of the external walls of the Fermentation Building, the riverside walls of the Compressor Room, Finzel Building and the northernmost riverside wall of the Cask Store. It is currently proposed that the SE facing façade of the "Bristol Brewery Georges & Co Ltd" building (hereafter, the Georges Building) will be dismantled, retained and reconstructed elsewhere on the site. All other buildings, walls and roofs will be demolished. The new development will incorporate the retained buildings and walls described above with new structures for business, retail, residential and community facilities.
- 1.1.2 It is a condition of an existing planning consent that an archaeological building recording project is undertaken on the structural remains of the buildings currently standing on the site (see para 1.2.2). The investigations will inform the planning process, the process of conservation of the structures to be retained and will form part of the overall archaeological archive for the site. The building recording is considered to be part of an overall programme of archaeological works, which will investigate, analyse and report on the archaeological deposits and structures both above and below the ground.
- 1.1.3 Before the field recording commenced, an assessment¹ of the existing non-historical site survey was prepared and agreed with the Bristol City Archaeologist, so as to understand the current baseline, establish the nature and level of any required recording, and the appropriate techniques to be used. Pre-Construct Archaeology Ltd was commissioned by Eric Norton, Norton Thompson Associates, on behalf of J G Bristol Ltd, to undertake this historic building recording project.
- 1.1.4 The field recording undertaken has been designated as Phase One, comprising the recording of all accessible parts of the site, except the Bath Street Terrace. Further recording will take place during demolition works, when access to currently inaccessible areas (such as those with asbestos, structural problems or hidden fabric) may be obtained, and new areas are revealed, under the designation of Phase Two. Additional recording will be required during the enabling works associated with the

¹ Moore P and Sabel K, "Assessment of Existing Survey Data and Specification for Further Archaeological Building Recording of the Bristol Brewery, Counterslip, City of Bristol" Pre-Construct Archaeology Ltd, March 2004.

refurbishment of retained buildings, such as in the Bath Street Terrace and Fermentation Building, under the designation Phase Three.

- 1.1.5 An extensive survey of the existing site was undertaken by Colwyn Foulkes & Partners², and the Phase One building recording project started with this survey and updated, amended and added historical, architectural and archaeological details to it, creating a new archive of drawings that conforms to the requirements of the RCHME (now English Heritage). Plans, elevations and sections not already in existence were also drawn as part of the recording project. In addition, the Phase One recording undertook a fabric analysis of the different buildings on the site, aimed specifically at determining details of their construction and phasing, as well as recording and analysing surviving elements of the buildings' functions.
- 1.1.6 The Phase One field recording was undertaken between 7th July and 27th August 2004 and, while some features and areas could not be recorded due to access problems, significant progress was made in addressing the aims set out in the assessment and specification, and a larger than expected archive of data was collected. The initial analysis of this data shows that a comprehensive understanding of the nature, development, workings and survival of the buildings and industries on the site, as well as the social and wider contexts, will be possible at the completion of the project.
- 1.1.7 The initial analysis has also produced information about the sub-surface archaeological deposits and structures, which further refines our most recent understanding of the site's archaeological potential.³ Additional basements and walls have been identified truncating earlier archaeological deposits, as well as potentially important industrial archaeological features.
- 1.1.8 This report details the nature and extent of the recording that has been completed, a new summary of the history of the buildings taking the new information into consideration, an updated understanding of the archaeological potential of the north of the site and the schedule of works still to be undertaken. All references to building names follow the buildings key set out in the assessment and specification⁴, and is reproduced here as Figure 1.
- 1.1.9 The work was monitored on behalf of the council by Bob Jones and on behalf of the client by Eric Norton. The building recording was supervised by the author, with the

² Ibid, Appendix 1

³ Wragg E "An Archaeological Evaluation and Watching Brief at the Bristol Brewery, Counterslip, City of Bristol" Pre-Construct Archaeology Ltd, September 2004.

⁴ Moore and Sabel, op. cit. in note 1, Figure 1.

specialist direction and management of Ken Sabel and project management of Peter Moore.

1.2 Planning Status & Standards

1.2.1 Planning permission, reference 02/01540/F/C, was granted in May 2003 on the completion of a Section 106 Agreement for the redevelopment of the site, and established the precedent for an acceptable loss of existing building fabric. Listed Building Consent, reference 02/02099/LA, was granted in May 2003 for a series of internal and external alterations to the Tramway Generator Building which again has established the acceptable parameters of the development of this Grade II* building.

1.2.2 The Planning Permission stated that:

Condition 32 *The developer shall ensure that all groundworks and the demolition of all standing buildings and structures are monitored and recorded by an archaeologist or archaeological organisation to be approved by the Local Planning Authority and working to a brief and specification prepared by the Local Planning Authority. No development, including preliminary site clearance, shall commence until at least two weeks notice has been given in writing to the Local Planning Authority and the appointment of a suitable archaeologist or archaeological organisation has been confirmed in writing.*

Reason *To record remains of archaeological interest before destruction.*

Condition 33 *The developer shall ensure that all the buildings on the site to be demolished are accurately surveyed and recorded, by an archaeological organisation (either photographically or by measured survey or both as appropriate) to be approved by the Local Planning Authority and in accordance with a brief issued by the Local Planning Authority. The developer shall publish the results of the survey in a form to be agreed by the Local Planning Authority.*

Reason *To ensure that features of archaeological or historical importance including the historic sequence of buildings and their alterations are recorded before their destruction, concealment or alteration.*

1.2.3 The overview and context for a series of revisions, forming the basis of a new application have been set out by Sheppard Robson Architects.⁵ On the basis that any new planning permission will have a similar condition applied to it, Pre-Construct Archaeology Ltd drew up an Assessment and Specification⁶ for the building recording survey, which was agreed with the Bristol City Archaeologist.

1.2.4 All work has and will be undertaken in accordance with current best practice. The work will conform to the guidance of the statutory and professional bodies including:

⁵ Sheppard Robson Architects, "Bristol Brewery, Draft Design Statement, JG Bristol Limited", January 2004.

⁶ Moore and Sabel, op. cit. in note 1

- Association of Local Government Archaeological Officers: *Analysis and Recording for the Conservation and control of works to historic buildings* (1997)
- British Archaeologists and Developers Liaison Group: *Code of Practice* (1986)
- British Standards Institution: *Guide to the Principals of the Conservation of Historic Buildings (BS 7913)* (1998)
- English Heritage (Clark, K.): *Informed Conservation: Understanding historic buildings and their landscapes for conservation*, (2001)
- English Heritage: *Guidance Paper 98*; GLAAS: *Guidance Paper 3-Standards and Practices in Archaeological Fieldwork in London*; English Heritage (Clark K): *Informed Conservation* (2001)
- English Heritage: *The presentation of historic building survey in CAD* (2000)
- IFA: *Standards and guidance for the archaeological investigation and recording of standing buildings or structures* (1999)
- Royal Commission on the Historic Monuments of England (now part of English Heritage): *Recording historic buildings: a descriptive specification*, 3rd edition (1996)

1.2.5 Pre-Construct Archaeology Ltd is a Registered Organisation with the IFA.

1.2.6 All written and drawn descriptions and illustrations in this report will use the convention of north following the Ordnance Survey grid.

1.3 Site Background

1.3.1 The site lies within the Redcliff Conservation Area, an area of architectural and historic interest. The Bristol Bridge, buildings in Bath Street and the Tramway Generator Building are listed as being of special architectural or historic interest. The current understanding of the background to the site, the importance of the setting and buildings and the state of preservation within the buildings are set out in detail in two desk based assessments⁷, a Conservation Area assessment⁸ and a structural survey.⁹

1.3.2 The site presently consists of the remains of the former Courage Brewery, an area known to have long been a focus of brewing, sugar refining and other industries. The current layout of the site partly preserves, and partly masks, a known pattern of medieval and post-medieval streets and buildings. Grimes Lane and Hawkins Lane

⁷ Bryant, J, "Archaeological Desktop Study of Courage Brewery Site, Counterslip, Bristol", BaRAS Report No. 890/2001, September 2001.

Leech, RH, "A Desk Top Evaluation of the Counterslip Brewery Site, Bristol", 2000.

⁸ Richard Pedlar Architects, "JG Bristol Ltd., Courages Brewery, Bristol: Conservation Assessment Study", unpublished report no. CRG1265/Conservation01, April 2002.

represent medieval streets leading to slipways on the old River Avon, now the Floating Harbour. The position of the former East Tucker Street is still represented on the site by façade of the “Bristol Brewery Georges & Co Ltd” building and by the alley between the main site warehouse and the Tramway Generator Building. The Bath Street/Philip Street link between the Bristol Bridge and the St. Philip Bridge survives only along the length of Bath Street. The current complex of buildings represents the organic growth of the site over several hundred years, with changing requirements leading to ad hoc changes to existing buildings, as well as the erection of new structures. This arrangement has led to the incorporation of parts of the older brewing and sugar refining operations, especially within the Fermentation Building, the Finzel Building, and the Cask Store.

⁹ Guy Lewis, “Bristol Brewery: Preliminary Visual Structural Inspection Report of Existing Buildings”, Clarkebond unpublished report no. 16350/GL/1, August 2001.

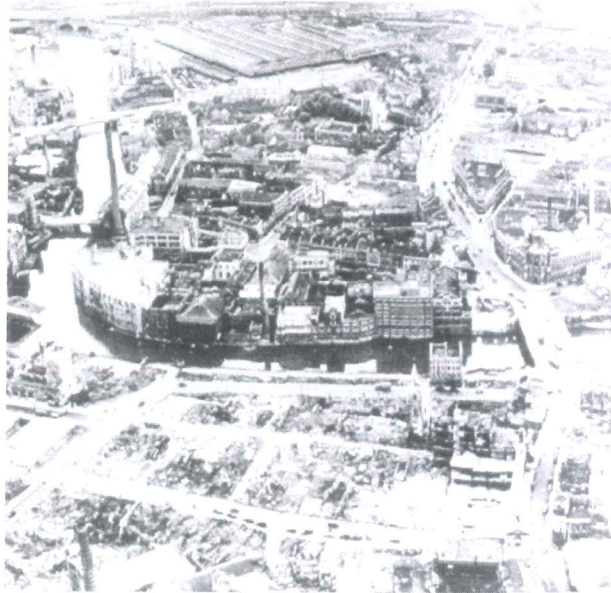


Plate 1: The site From The Northwest Showing Damage By WWII Bombing



Plate 2: The Site From The West After 1986



Plate 3: The Site Today From The North

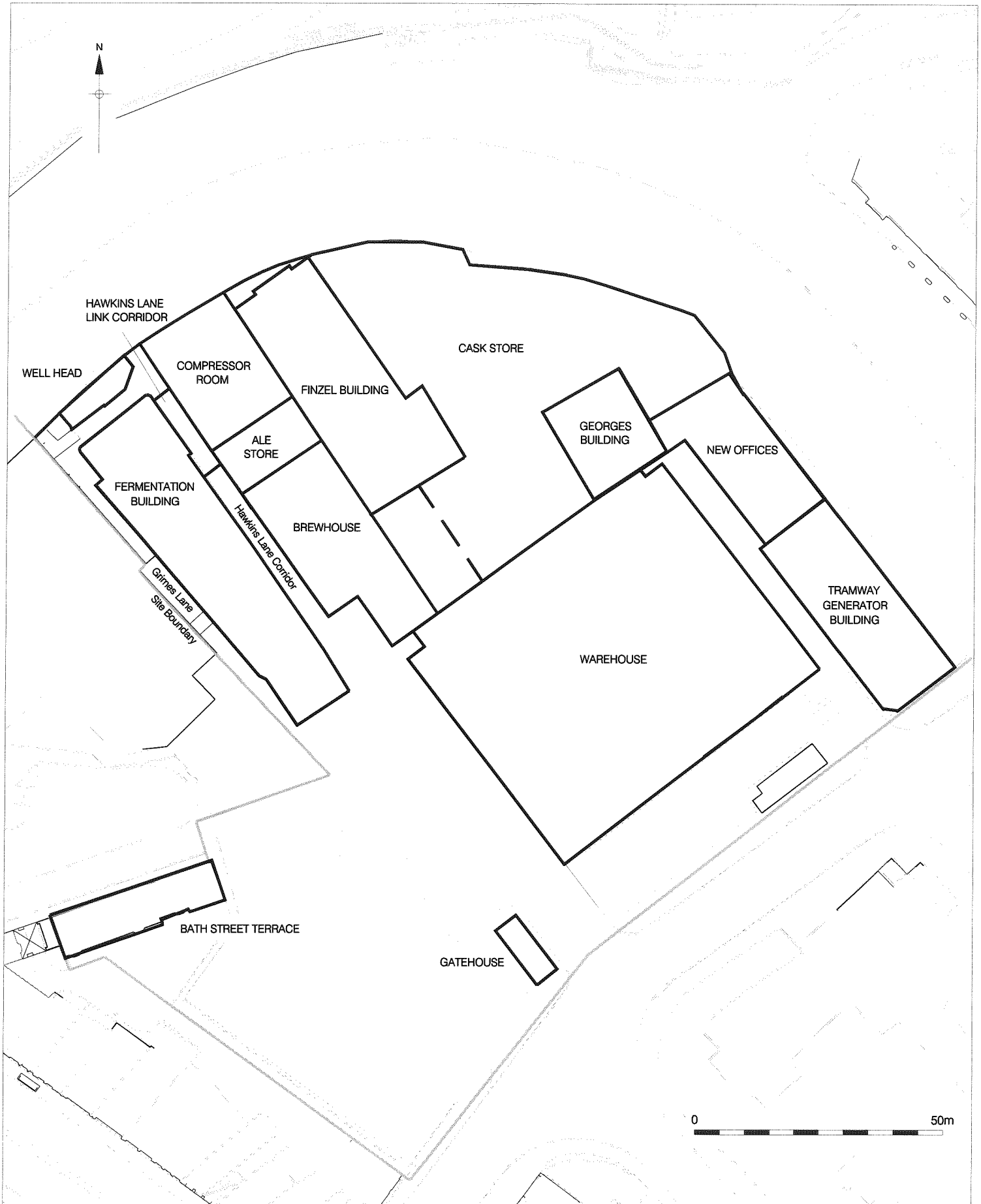


Figure 1
Key To Buildings
1:1000

2 PROJECT AIMS AND OBJECTIVES

2.1 Research Aims

2.1.1 The overall building recording project aims to establish the physical, social and economic history of the site and brewery, including its role in the history of Bristol. It is also an aim to establish not only the significance of the site in the historical development of the brewing and sugar refining industries, but also its significance in regional, national and international terms.

2.1.2 The project specification for the Phase One archaeological building recording was primarily aimed at establishing the historical development of the brewery and related buildings and structures. This was to be done through field recording, photography, surveying and fabric analysis, as well as through archival research supplemented with oral history.

2.1.3 The archaeological development and historical morphology of the buildings was to be looked at in specific relation to the working, interrelations of, and circulation between the buildings during their period of industrial occupation. This was to be achieved through an understanding of the process, changing nature and modernisation of both the brewing and sugar industries and of the significance of evidence for different materials, architectural fashions, innovations, forms and processes.

2.2 Objectives

2.2.1 The following objectives were set for all buildings:

- Establishing the accuracy of the past survey and all drawings.
- Drawing former external elevations discovered within extant buildings.
- Photographically recording all internal furnished spaces as existing, prior to the removal of fixtures/fittings/contents.
- Adding missing opening arches, surrounds, door cases, stringcourses, changes in build, fixtures and fittings, former structural and mechanical openings and mortices etc., to existing elevations.
- Adding major features not already recorded to existing plans.
- Photographically recording minor features.

3 METHODOLOGY

3.1 General

3.1.1 This report summarises the results of the first stage of concentrated building recording by a team of building recorders, a surveyor and photographer. In this Phase One project, the major features were drawn and located in elevation and plan, with minor features/fixtures/plant scars etc., recorded photographically. There will be watching briefs undertaken on the proposed demolition works (Phase Two) and construction works (Phase Three), which will be based on the recommendations of this report. These additional watching briefs will be undertaken where these works may reveal previously covered, or inaccessible, fabrics, building phases or structures.

3.2 Surveying & Drawing (See Appendix 1)

3.2.1 Electronic surveying took place using a reflectorless EDM, recording features inaccessible for hand recording, but currently visible. Some features and facades could not be surveyed using this technology due to restricted angles of vision, reflective materials and certain circular pipes. These will be recorded by hand when accessible.

3.2.2 Where appropriate, details were hand-drawn, either to be added to the existing survey sections, plans and elevations (called the "base plans") or produced as separate illustrations. Detail was recorded at an appropriate scale, relative to the size and complexity of the subject. Where possible, mouldings were recorded at a scale of 1:1, with other detail being recorded at 1:2 and 1:5.

3.3 Photography

3.3.1 Large-format photography, colour and B&W, was used to record large internal spaces, specifically the Warehouse, the upper floors of the Cask Store, the ground floor of the Finzel Building and the fourth floor and roof structure of the Tramway Generator Building. Large-format photography was also used to record the riverside elevations of the whole complex as well as those external Cask Store elevations retaining stone sections of the Conrad Finzel's Sugar Refinery complex.

3.3.2 Medium-format photography (colour and B&W) was used to record details and fixtures of interest. Also recorded in medium-format were smaller internal spaces, machinery and pipe detail and the internal and external elevations not covered by

large-format photography. General views of the site and its context were also taken using this format.

3.3.3 35mm photography (colour slide and B&W) was used to record minor fixtures and general views of the site and its context.

3.3.4 All photographs are registered and archived and form the basis of the Photographic Archive. On completion of the project a full catalogue of all photographs will be included in the final report.

3.4 Recording

3.4.1 Descriptive and interpretative notes were made concerning all rooms, buildings and elevations. These recorded function, materials, phases, sequences, fixtures and fittings and machinery. The extant plans, sections and elevations were hand annotated and the information transferred onto the digital drawings. The written analysis will be derived from these drawings and notes. Sections through beams, girders and 'I' section columns were also recorded, along with detail of the different column capitals in the older sections of the site.

3.5 Oral Testimony

3.5.1 Invaluable oral testimony concerning the history and function of the site and its buildings was taken from the last surviving director of Georges Brewery, Stuart Hadley, and the recently retired Chief Engineer of Courage Breweries Ltd, Brian Mortimer, both of whom worked on the site from the early/mid 1950s to the late 1970s. This took the form of a walking tour of the site discussing the changing uses



of individual buildings and rooms, the functions of extant machinery and general site history, and a session of specifically targeted questions concerning building uses and the deployment of staff throughout the brewery. Both gentlemen expressed interest in continuing to help the recording project and will be consulted again.

Plate 4: Ex-employees of Courage Brewery, Brian Mortimer (l) and Stuart Hadley (r), visiting the site during recording.



Plate 5: Riverside Elevation

3.6 Fabric Analysis

- 3.6.1 During the recording, care was taken to record, by drawing, hand-written notes and photography, details relating to the physical make up of the site, including differing uses of iron and steel, flange analysis of structural rolled-steel joists to determine their likely use dates, the different materials used in wall construction and how these relate to the general phasing of the site and the changes in use of specific rooms and areas during the life of the brewery.

3.7 Archive Research

- 3.7.1 A large amount of data already exists for the site in the form of archaeological, building and conservation reports.¹⁰
- 3.7.2 In the initial time allotted for research at the beginning of the project, time was taken to research the brewing and sugar refining processes, both physically, in terms of the buildings, machines and processes used, and socially, in order to gain an idea of the local national and international importance of the buildings on the Counterslip site.
- 3.7.3 Further archive work will be undertaken, using existing 1912 and 1985 archive drawings to determine further architectural details, and to determine the movement of the brewing process through the buildings in the most recent configuration of the brewery. Examination and copying of historic photographs, relating to the construction and use of the various parts of the brewery between 1900 and present, will also be undertaken for archival and analysis purposes.

3.8 CAD

- 3.8.1 A new archive of digital drawings was created by taking the existing digital drawings, adding site recorded details where appropriate, and adapting them to conform with the RCHME (now English Heritage) conventions. All new digital drawings were created using these conventions.

3.9 Reporting

- 3.9.1 Additional phases of building recording, during demolition and construction works, will be reported on at their completion. The full report will be produced after the completion of all site recording and archival research. It will combine the fieldwork and archive research outlining the site architecture, structure, historical development

¹⁰ See footnotes 1-4.

(chronologically), materials, operation and their significance. It will also identify the significance of the findings, their interrelationship to the structures found during the archaeological excavations and the level to which they require publication, meeting the 'minimum requirements' set out in Appendix 7 of the English Heritage *Management of Archaeological Projects* 1991.

3.9.2 The full building recording report will include the following sections:

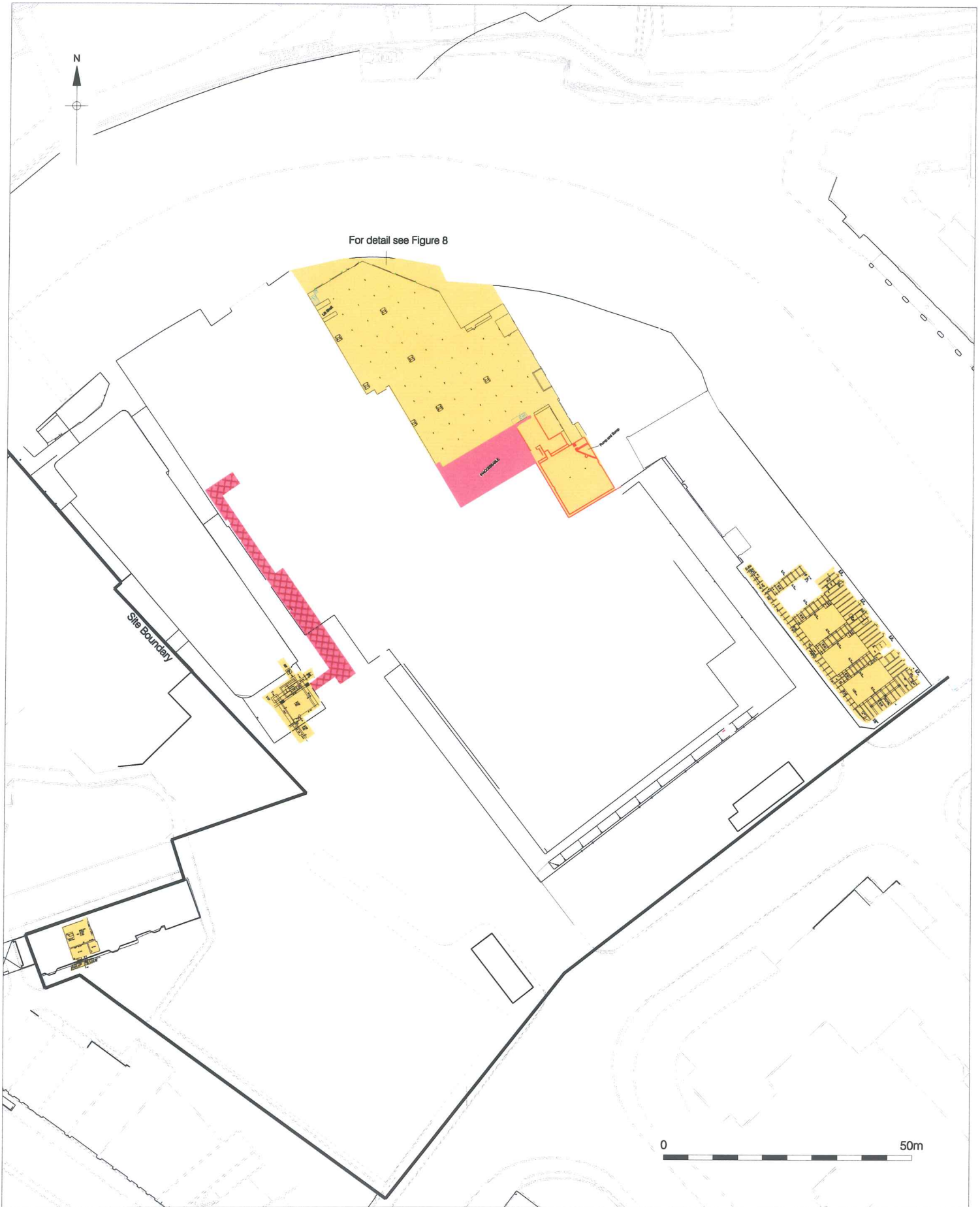
- Introduction
- Historic background
- The brewing and refining processes
- Description of the buildings
- The historic sequence (including the development of the buildings and their fixtures/operations)
- Discussion and conclusions
- Illustrations (relevant plans, sections, elevations, details and photographs)
- Schedule of the contents of the archive (i.e. all plans, sections, elevations, details and Photographs)

3.10 Access & Safety

3.10.1 Reasonable access to the site was granted to representatives of the City of Bristol and other representatives of the client who wished to be satisfied, through site inspections, that the archaeological works were being conducted to proper professional standards and in accordance with the agreements made.

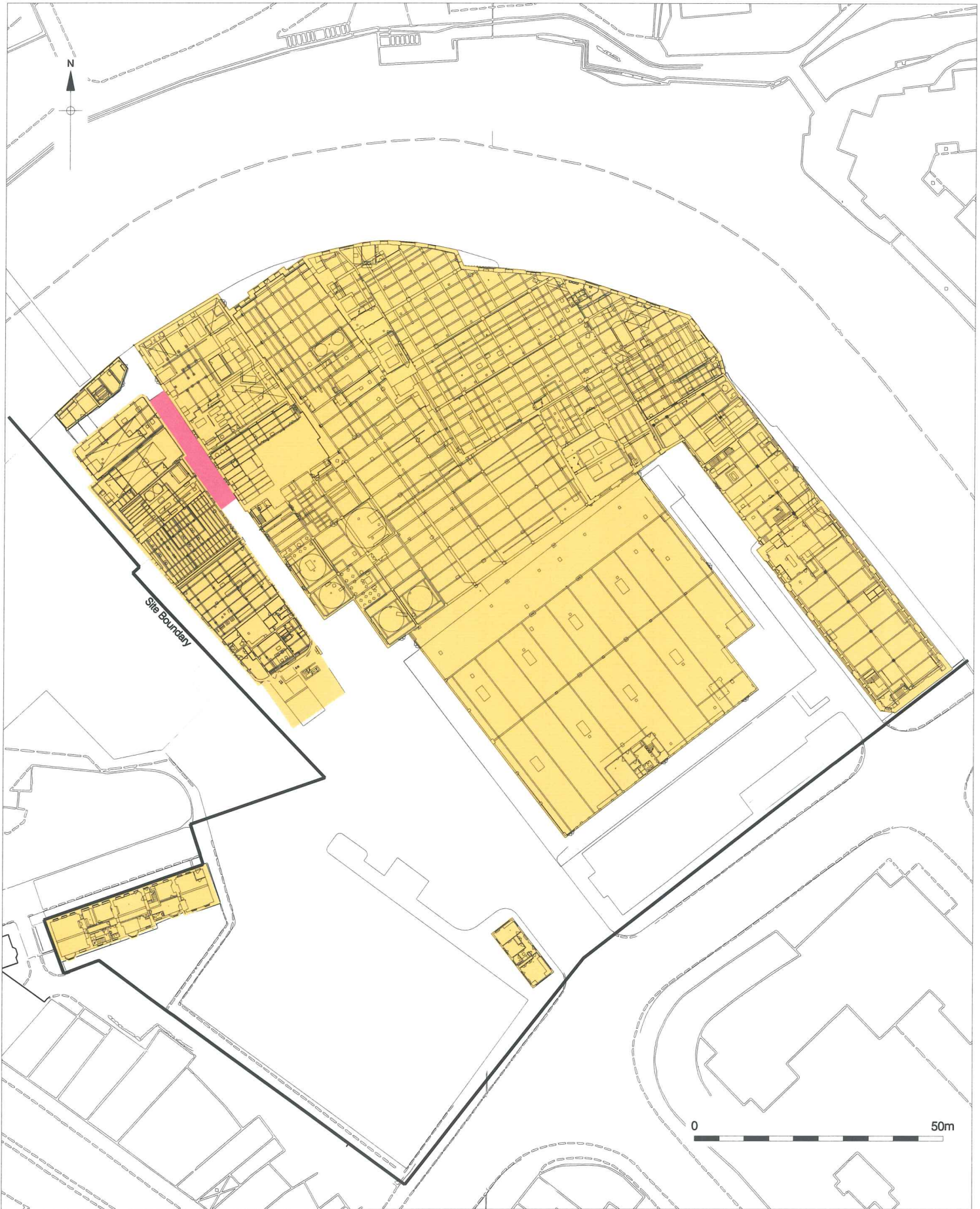
3.10.2 All relevant health and safety legislation, regulations and codes of practice have been respected.

3.10.3 The building recording team were not allowed to enter some rooms of the buildings because of defined asbestos problems. In addition the basement corridor underneath the Compressor Room, Ale Store and Brewhouse was found to contain asbestos during the survey and work there stopped. Some structural elements in the Link Corridor between the Fermentation Building and the Compressor Room were also judged to be too dangerous for our staff to access.



- Key
- Plans now completed
 - Outline plans exist but require further recording

Figure 2
Building Recording Progress
Basements
1:1000



- Key
- Plans now completed
 - Outline plans exist but require further recording

Figure 3
Building Recording Progress
Ground Floor
1:1000



Key
■ Plans now completed

Figure 4
Building Recording Progress
Ground & First Floor Mezzanines
1:1000



- Key
- Plans now completed
 - No plans exist

Figure 5
Building Recording Progress
Roofs
1:1000



- Key
- Elevation/Section now completed with full detail
 - Elevation/Section requiring further recording

Figure 6
Building Recording Progress
Elevations & Sections
1:1000

4 PHASE ONE FIELDWORK RECORDING

4.1 Tramway Generator Building

4.1.1 Previous recording of the Tramway Generator building is generally satisfactory. The Phase One recording worked to establish the historic development of the building, including the insertion of additional floors, and a chronology of the changing uses of the building, placing it into its wider site and local contexts. EDM survey was undertaken to add some construction detail to the existing riverside elevation (Fig 12). Internal details were added to the building sections by hand measurement. The lower rooms of the building were recorded photographically both in medium-format and 35mm and the third floor and top-floor space, showing the roof trusses, was recorded photographically in large-format. Samples of the frieze details on the elevation were recorded by hand at a scale of 1:2. The riverside and SE elevations were recorded photographically in large-format.



Plate 6: Third Floor Of The Tramway Generator Building

4.1.2 Phase Two recording of the Tramway Generator Building will require further work to identify and trace the construction breaks on its NW elevation. The recording of these breaks may require a reflectorless EDM unless access can be gained with the erection of scaffolding (Fig 6).

4.2 New Offices

- 4.2.1 Previous recording of the New Offices is generally satisfactory. EDM survey was undertaken to add a sample of window-surround detail and the rusticated stonework of the historic Counterslip ferry landing to the riverside elevation (Fig 12). The interior was recorded photographically both in medium-format and 35mm. The riverside elevation was recorded photographically in large-format.
- 4.2.2 Phase Two recording of the New Offices will comprise the checking of existing plans of the ground floor level Boiler Room and the photography of machine detail inside the room, after the removal of the asbestos currently restricting access.

4.3 Georges Building

- 4.3.1 In addition to annotating existing plans, the Phase One recording of the Georges Building involved EDM work to record the visible sections of the building's southwest elevation (Fig 7), which retains elements of previous structures on the site. Through a map regression exercise, it was also possible to identify the existence of pre-building routeways, respected by the layout of the current building, and forming an integral part of the operation of the brewery. The interior of the building was recorded photographically in medium-format and, in the middle floor, in large-format. The upper SW elevation was recorded photographically in large-format.



Plate 7: Southwest Elevation Of Georges Building And Cask Store

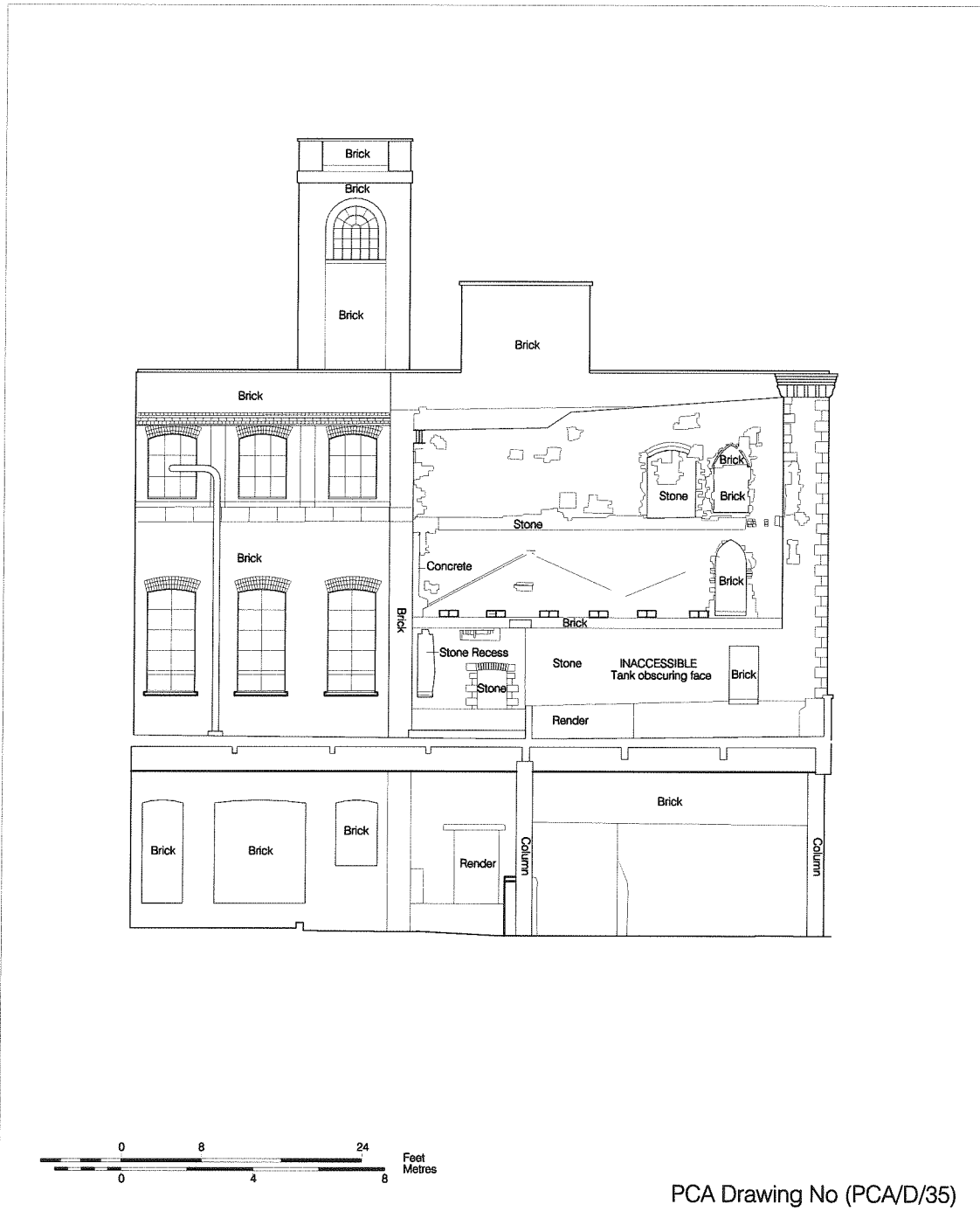


Figure 7
 Georges Building
 Southwest Elevation
 1:200

4.3.2 The Georges Building will require further recording, comprising the large-format photography of the complete Counterslip façade of the building following the demolition of the Warehouse built up against it and the completion of the southwest elevation.

4.4 Cask Store

4.4.1 Owing to severe flooding, the basement of the Cask Store was not included in the Colwyn Foulkes & Partners survey¹¹, however at the time of the Phase One project the level of the water had reduced sufficiently giving access to most of the basement, and allowing a degree of recording to be undertaken. It was planned by hand as a room outline also showing extant machine bases, ceiling structure and pipework relating to machinery in the ground floor level (Figs 2, 8), but requires further digital surveying when conditions allow. The overall space was recorded photographically in large-format. The analysis of this recording has furthered our understanding of the archaeological potential of the area, and is discussed in Chapter 7.



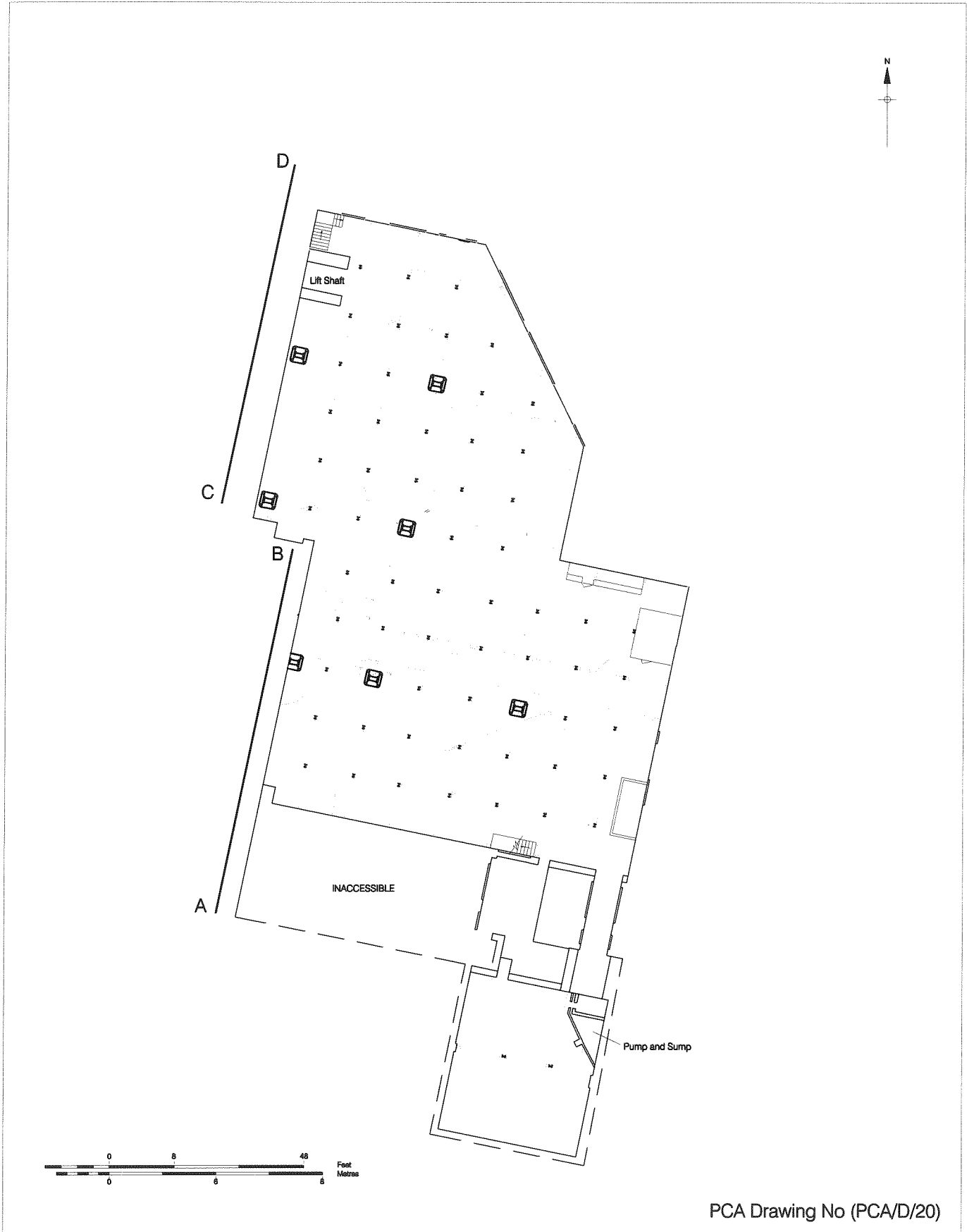
Plate 8: View Of The Flooded Cask Store Basement Looking Southeast

¹¹ Moore and Sabel, *op. cit.*, Appendix 1



Plate 9: View Of The Flooded Cask Store Basement Looking Southwest

- 4.4.2 At ground floor level, extant machine bases and fixtures were added to the base plans and these were annotated with reference to the materials used in the building's construction. Through map regression and fabric analysis it was also possible to identify the partial existence of pre-building routeways respected by the layout of the current building and forming an integral part of the operation of the brewery. Also identified were elements of pre-brewery stone structures, possibly relating to Conrad Finzel's 1847 sugar refining complex (Fig 14). The N face of these was hand-drawn as elevation detail (Fig 10a). The sections were also completed with the addition of all structural and functional elements (Fig 6). The ground floor and internal stone elevations were recorded photographically in medium-format.
- 4.4.3 The modern ground floor mezzanine office, in the Cask Store had not previously been surveyed, so it was recorded and added to the base plans (Figs 4, 9).
- 4.4.4 Previous recording of the first floor level is generally satisfactory, with structural and functional elements added to the base sections. The first floor was recorded photographically in medium-format and in large-format.



PCA Drawing No (PCA/D/20)

For elevations A - B & C - D see Figure 10

Figure 8
 New Plan Of Cask Store Basement
 1:400

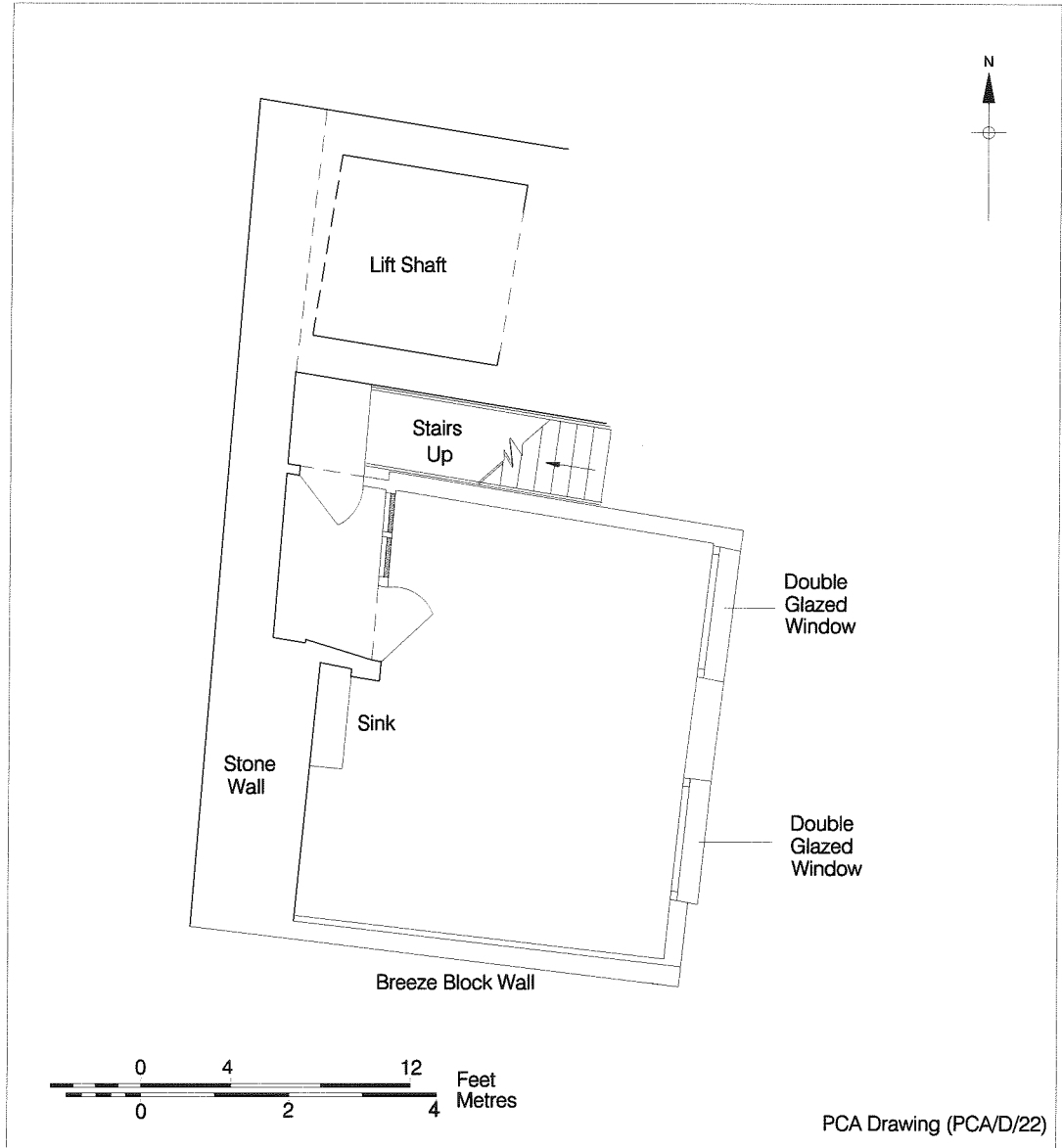
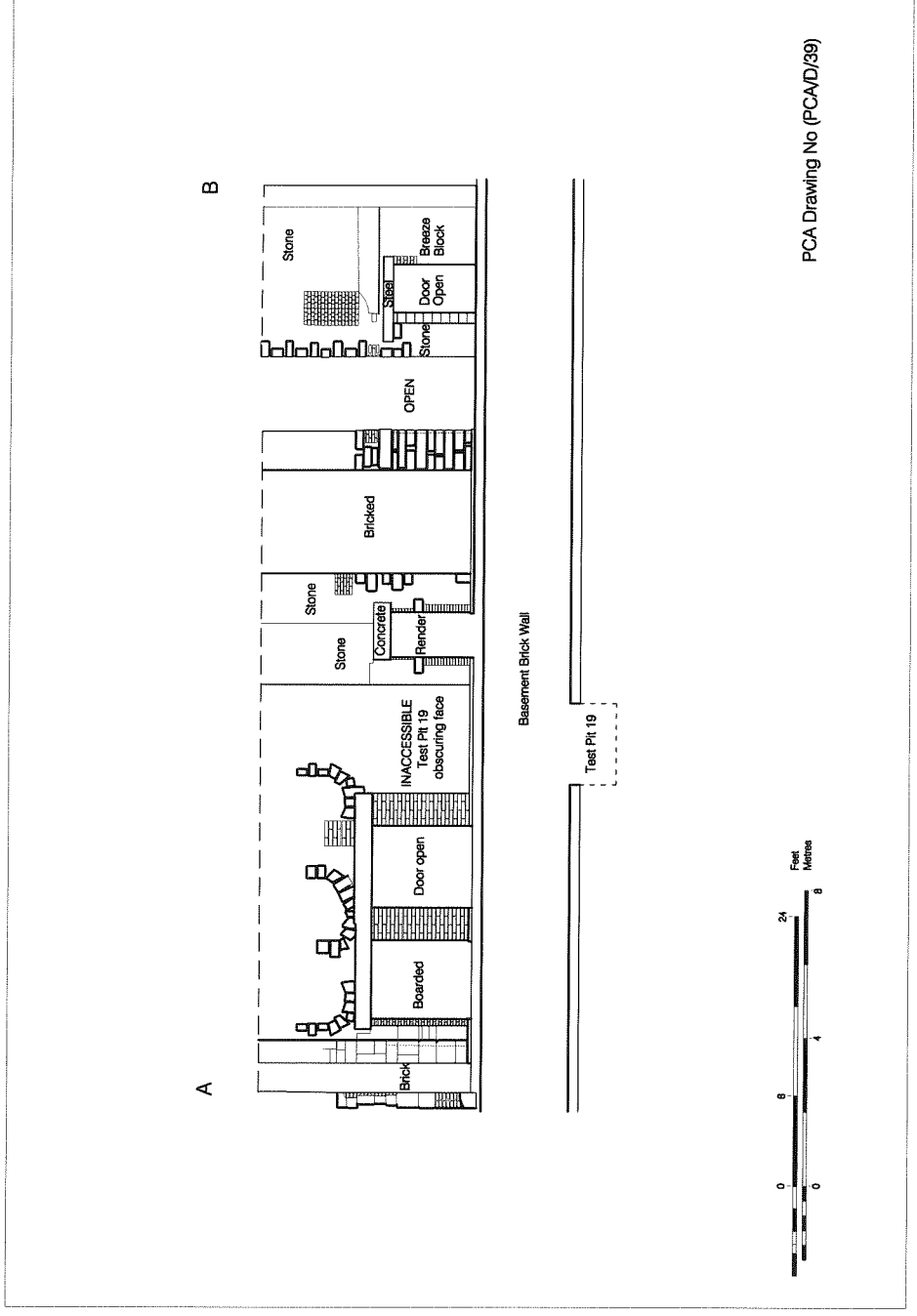
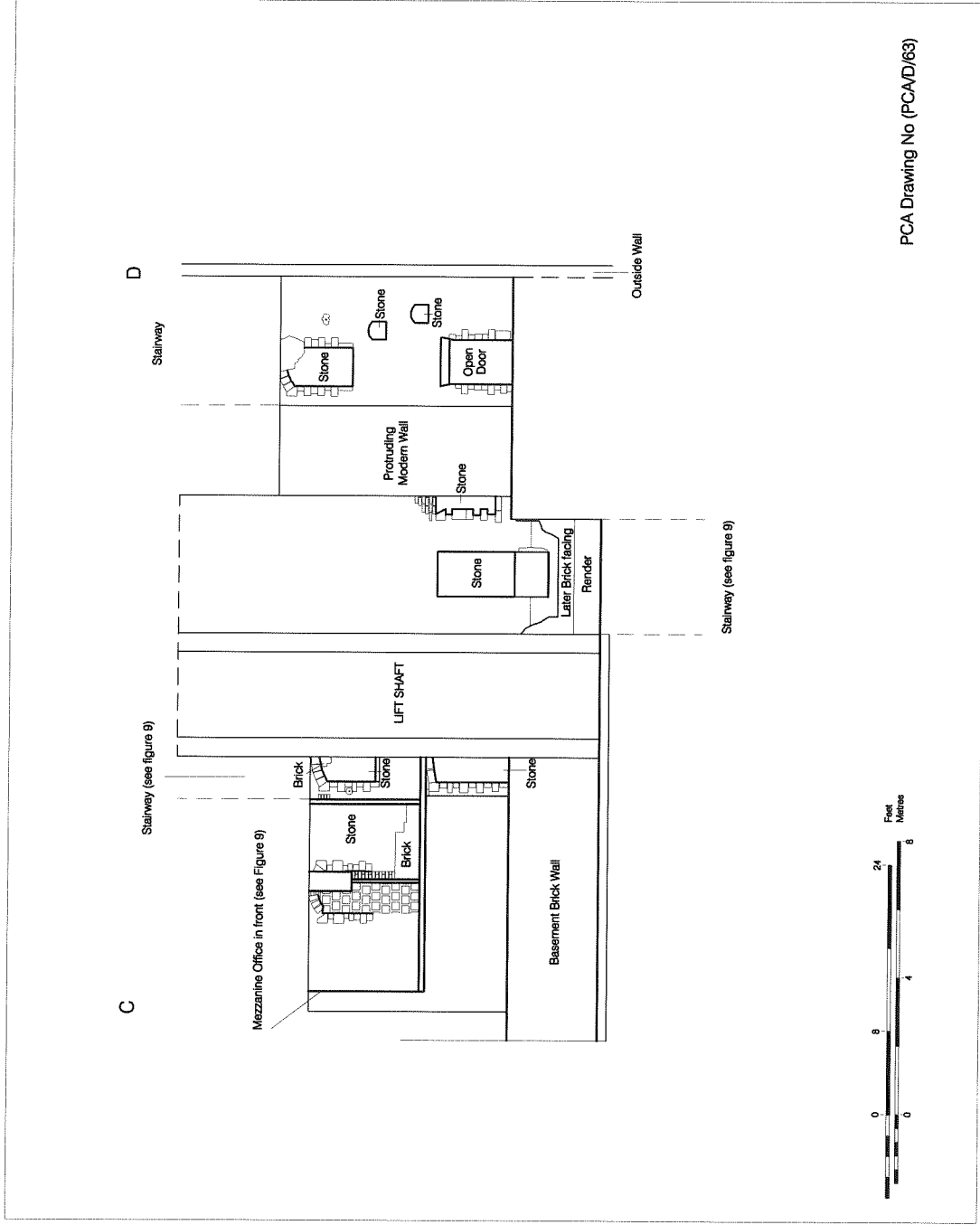


Figure 9
New Plan Of Cask Store Ground-First Floor Mezzanine
1:100



For location of A-B see Figure 8

Figure 10a
Cask Store
Basement & Ground Floor Elevation
1:200



For location of C-D see Figure 8

Figure 10b
Cask Store
Basement & Ground Floor Elevation
1:200

4.4.5 Previous recording of the second floor is generally satisfactory. Notes were taken concerning the specific uses of machinery and tanks in relation to the brewing process as a whole. An external stone elevation on the SW side of the building possibly relating to Conrad Finzel's 1847 sugar refining complex was recorded by hand and was historically located through map regression. The second floor was recorded photographically in medium-format. The external stone elevation was recorded photographically in large-format.

4.4.6 Previous recording of the roof level is generally satisfactory (Fig 5). An example of lift-machinery in one of the roof towers was recorded photographically in medium format.

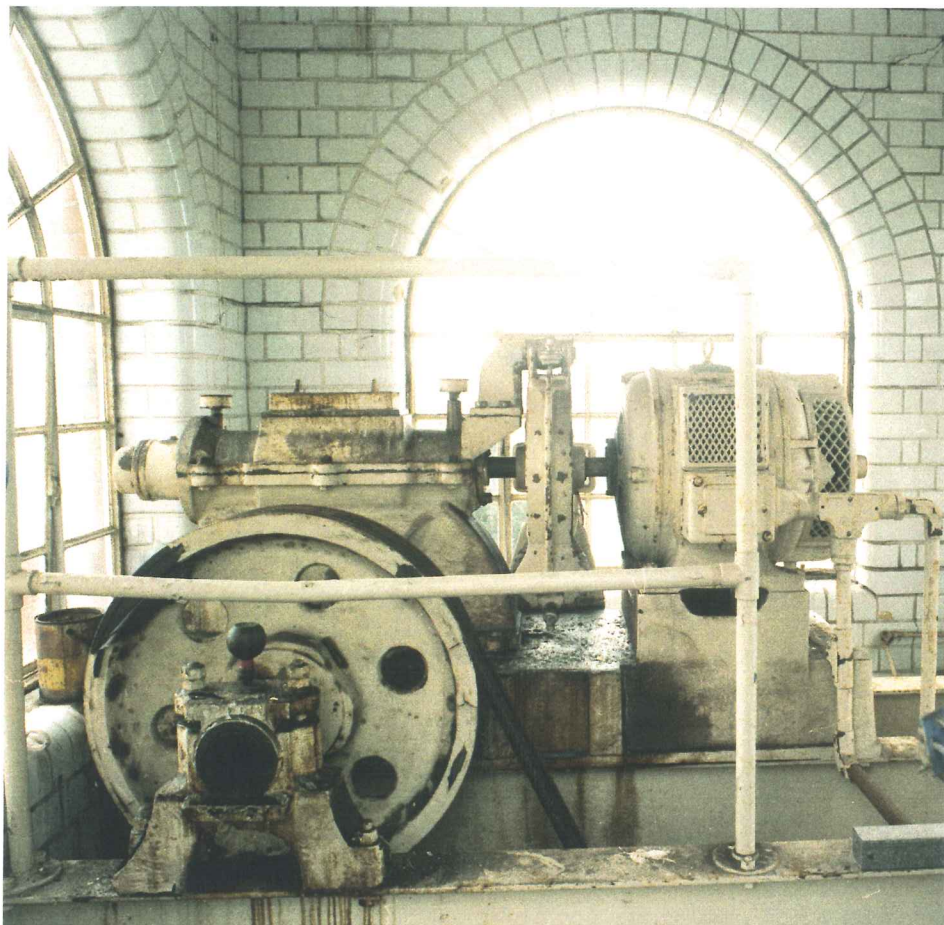


Plate 10: Hoist Mechanism In Cask Store Roof Tower

4.4.7 Window surround detail was added to the riverside elevation of the Cask Store using reflectorless EDM (Fig 12). This elevation was also photographically recorded in large-format.

4.4.8 Further recording of the Cask Store will involve the planning of high-level pipework on the ground floor, which could not be precisely defined by the reflectorless EDM. It will also comprise the checking of base plans and the photographic recording of the Boiler Room section of the Cask Store, once the removal of the asbestos allows access. A section through one of the roof towers housing the lift mechanism will also be required, as will a full record of a stone elevation on the SW of the building, when it can be accessed (Fig 6). There is also a need to fully record the line of the interior elevations (Fig. 10 a/b) in the Cask Store basement to determine the survival of any pre-brewery elements, such as walls. This will involve either the removal of a probable brick skin over the previous wall, or its examination during general ground reduction from the western side.

4.5 Finzel Building

4.5.1 Previous recording of the ground floor level of the Finzel Building is generally satisfactory. Through fabric analysis and map regression, it has been possible to identify those elements of the surviving structure remaining from the 1847 sugar refinery and it is possible to integrate this with the results of previous below ground archaeological evaluation to gain an idea of the original function, and layout, of the building.¹² It has also been possible to identify where at least one floor level has been removed and a new first floor inserted, contemporary with the early 20th century redevelopment of the building. Major structural and functional elements were added to the base sections and a stone elevation relating to the 1847 sugar refinery was hand-drawn (Fig 11b). The ground floor level was recorded photographically in large-format.



Plate 11: Ground Floor Of The Finzel Building

¹² BaRAS 2002, Trench 3

- 4.5.2 On the first floor, concrete tank bases and the footing scars of a raised steel walkway relating to the room's most recent function were added to the base plans. It was possible to identify the insertion of a new ceiling level during the early 20th century. The first floor was recorded photographically in medium-format.
- 4.5.3 The roof level of the Finzel Building was generally satisfactorily recorded on the base plans. Elements were recorded in large-format and in 35mm photography.
- 4.5.4 Window and door surround details were added to the riverside elevation using a reflectorless EDM (Fig 12). The riverside elevation was recorded photographically in large-format.
- 4.5.4 Further recording will aim to accurately record the position of the ground floor high level pipe work.

4.6 Brewhouse

- 4.6.1 At ground floor level a number of machine bases and some pipework relating to the most recent development of the brewery were added to the base plans and the base sections were amended to include any omissions. It should be noted that this building is over part of the old Counterslip and the area of the sugar refinery complex, and that an initial analysis of historic maps with the results of the archaeological evaluations¹³, has further defined our understanding of the survival of archaeological deposits and structures in this area (see Chapter 7). The NW interior wall of the lower levels of the Brewhouse can be identified as the battered stone SE wall of the Ale Store (see 4.9). The ground floor was recorded photographically in medium-format.
- 4.6.2 Previous recording of the ground floor mezzanine level is generally satisfactory. Notes were added to the base plans concerning building fabric.
- 4.6.3 On the first floor, notes were added to the base plans concerning machinery and room functions in relation to the rest of the brewery complex. The first floor was recorded photographically in medium-format and in large-format.
- 4.6.4 The first floor mezzanine level viewing platform was recorded satisfactorily on the base plans. The view over the brew-deck (first floor) was recorded photographically in large-format.

¹³ Ibid, Trench 7; Wragg op. cit. in note 3, Trenches 18 and 24.

- 4.6.5 Previous recording of the second floor is generally satisfactory with notes added to the base plans concerning machinery and vessel functions.
- 4.6.6 Previous recording of the second floor mezzanine is generally satisfactory with notes added to the base plans concerning machinery and vessel functions. The second floor mezzanine was recorded photographically in medium-format.
- 4.6.7 Previous recording of the roof level of the Brewhouse is generally satisfactory with notes added to the base plans concerning the location of lift related machinery. It will be necessary to draw a plan of the roof above the fermentation room of the Brewhouse, when accessible (Fig 5). Due to the height of the Brewhouse roof level, a series of photographs were taken in 35mm to illustrate the context of the building within the whole brewery complex and to record some architectural detail of other buildings.
- 4.6.8 Those sections of the NW elevation visible from the riverside were recorded photographically in large-format. Those sections of the SW elevation visible from Hawkins Lane were recorded photographically in medium-format and in 35mm. Additional architectural details were also added to this elevation by hand.
- 4.6.9 Phase Two recording of the Brewhouse will require base plan notation, base section additions and photographic recording of the Fermentation Room section of the Brewhouse, once removal of the asbestos allows access. Also required is the photographic recording, in large-format, of the old Counterslip façade following the removal of the Warehouse.

4.7 Warehouse

- 4.7.1 Previous recording of the ground floor of the Warehouse was satisfactory. The ground floor was recorded photographically in large-format.
- 4.7.2 Previous recording of the first floor of the Warehouse was satisfactory. The first floor was recorded in medium-format.
- 4.7.3 Previous recording of the roof level of the Warehouse was satisfactory.
- 4.7.4 Missing architectural details were added to the SW, SE and NE elevations of the Warehouse.

4.7.5 Archaeological building recording of the Warehouse was completed during the Phase One works, and no further recording is required.

4.8 Compressor Room

4.8.1 The Compressor Room was generally satisfactorily planned on the base plans, however it was necessary to add details of its machinery, and record their operation. The record of its operation takes the form of a flow-chart with notes added to the base plan. No evidence for previous floor levels could be discerned, though a blocked window was located in the NE wall that has important implications for the phasing of the structure. This was recorded photographically. Analysis of archive photographs revealed the current roof to have been inserted post-1938, most likely as part of a 1948/49 rebuild. A section through the Compressor Room was missing from the Colwyn Foulkes & Partners survey and was completed by hand. The Compressor Room was recorded photographically in medium-format with machine detail recorded photographically in 35mm. A 'flattened' series of photographs taken from the middle of the room was also made, to illustrate the machines and pipes in the room and the flow between them.



Plate 12: Tanks And Pipes In The Compressor Room

4.8.2 The riverside elevation of the Compressor Room was completed using reflectorless EDM (Fig 12) and recorded photographically in large-format. Missing architectural detail was added to the SW elevation by hand and the visible parts of this elevation were recorded photographically in medium-format and 35mm. A visible section of the NE elevation was recorded by hand and recorded photographically in large-format.

4.8.3 Further recording of the Compressor Room will include the full recording of a sample roof truss, not recordable by the reflectorless EDM equipment. The possibility that there is evidence of removed floor levels, and scars relating to former plant, will be investigated after the removal of some of the current internal machinery has improved access to the walls of the structure.

4.9 Ale Store

4.9.1 Previous recording of the ground floor of the Ale Store was generally satisfactory. The Electricity Substation in this building, which Colwyn Foulkes & Partners were unable to survey, was recorded. Also recorded was a battered stone wall representing the extant southernmost, previously external, wall of the building. A sample cross section through an 'I' beam was also completed for the archive and to provide phasing information.

4.9.2 Previous recording of the first floor of the Ale Store was generally satisfactory. Details of extant stone walling were added to the base plans and detail sketches drawn of sample column capitals and beam sections as well as details of the inscriptions on the cast iron columns. The first floor of the Ale Store was recorded photographically in medium-format.

4.9.3 Previous recording of the second floor of the Ale Store was generally satisfactory. Some detail of construction, phasing, materials and laboratory functions were added to the base plans. Detailed sketches were drawn of a sample column capital and a typical 'I' beam section. The second floor of the Ale Store was recorded photographically in medium-format and in 35mm.

4.9.4 The roof level of the Ale Store had been satisfactorily planned, and it was photographed from above in 35mm.

4.9.5 Archaeological Building Recording of the Ale Store was completed during Phase One works, and no further recording is required.

4.10 Fermentation Building

4.10.1 The basement to the southern end of the Fermentation Building was generally satisfactorily recorded on the base plans. Some pipes and notes on construction material were added to the base plans.

4.10.2 At the northernmost end of the Fermentation Building, the base plans were annotated with details of the fabric, and a number of missing features were added including overhead pipes, structural trusses and machine details. Detail drawings were produced of each different type of structural column and 'I' beam to aid the basic phasing of the building. Missing structural and functional elements were added to the base sections by hand and with reflectorless EDM. The ground floor was recorded photographically in medium-format, with machine details recorded photographically in 35mm.

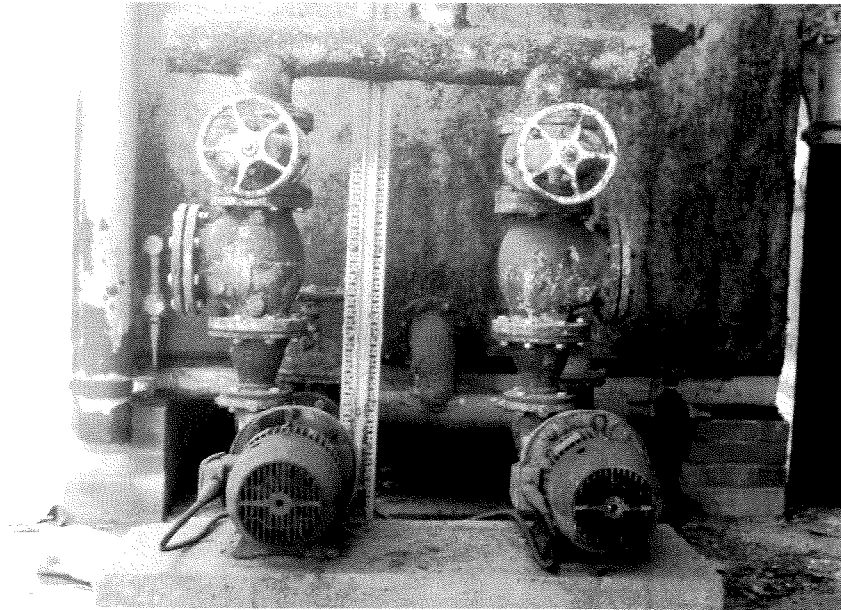


Plate 13: Details Of Pumps In The Fermentation Building

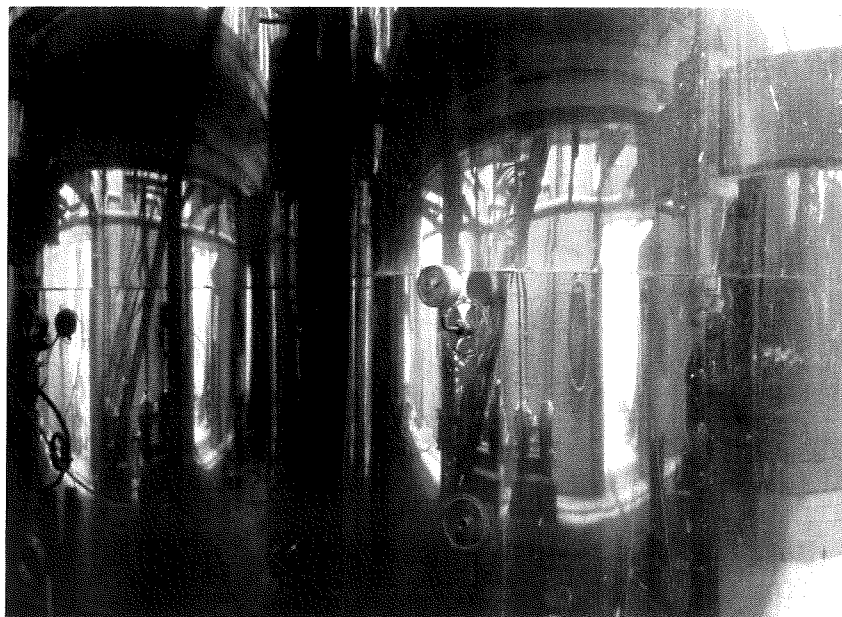


Plate 14: Details Of Tanks In The Fermentation Building

- 4.10.3 In the first floor mezzanine office at the northernmost end of the Fermentation Building, detailed drawings were made of window and door mouldings at a scale of 1:1. The room was recorded photographically in medium-format.
- 4.10.4 The missing base survey of the northernmost end of the Fermentation Building third floor was surveyed. A number of structural and functional elements were additionally added onto the base sections and plans. Detail drawings were produced for each different type of structural column and 'I' beam to aid the basic phasing of the building. The third floor was recorded photographically in medium-format and in 35mm.
- 4.10.5 At the southernmost end of the Fermentation Building, notes were added to the base plans concerning the various builds and materials used, and the function and location within the brewery of the first floor room and walkway. Some missing structural and functional elements were added to the base section by hand, while out of reach architectural features were added using reflectorless EDM. The first floor and walkway were recorded photographically in large-format.



Plate 15: The First Floor Of The Fermentation Building, Southern End

- 4.10.6 Beyond the southernmost end of the Fermentation Building, a canopy and ground level features, previously unrecorded, were surveyed.
- 4.10.7 Those elements of the NW elevation visible from the riverside were added to the base elevation using reflectorless EDM with reachable features added by hand. The NW elevation was recorded photographically in medium-format and large-format. Missing architectural details on the SW, SE and NE elevations were added to the base elevations by hand, or if they were out of reach, they were added using the reflectorless EDM (Fig 11a/b). The elevations were recorded photographically in medium-format and 35mm.
- 4.10.8 Phase Two recording of the Fermentation Building will consist of three main tasks. The first is the base plan notation and photographic recording of the ground floor at the southernmost end of the building, following the removal of the asbestos. The second is the base plan notation and photographic recording of the first and second floors after the decaying stairways have been made safe for access, or alternative access is arranged. The third task is the consultation of known 1912 plans to obtain copies of the roof truss details for the building alongside a full recording of the window framing itself (Fig 5).

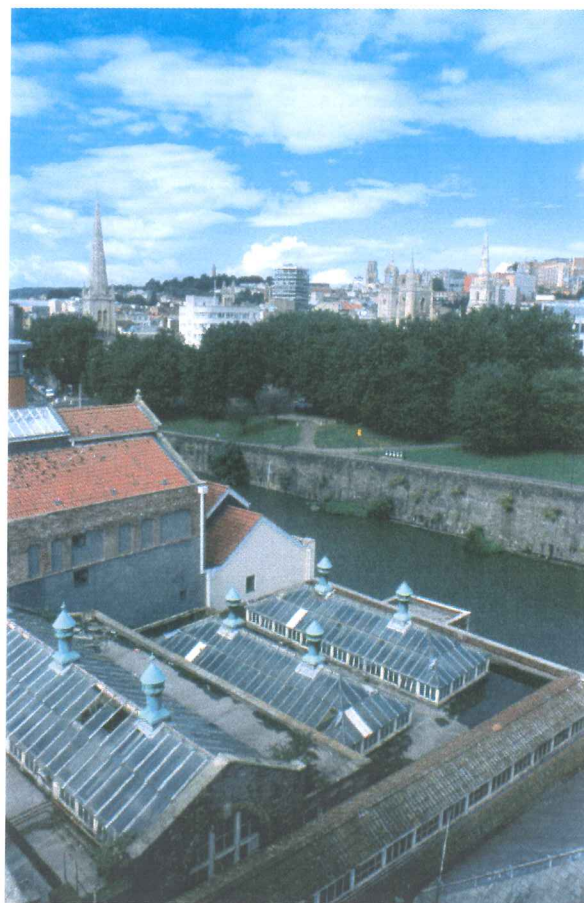
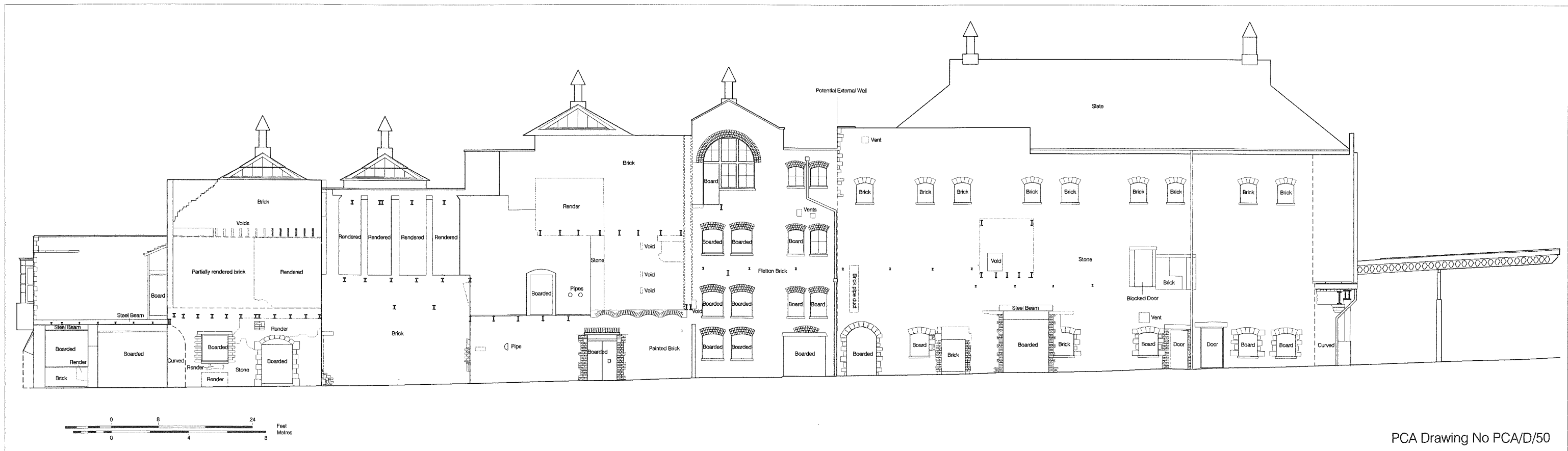


Plate 16: Roof Of The Fermentation Building



Figure 11a
Original Survey of the Fermentation Building; West Elevation
Colwyn Foulkes 2001 (Drawing No. 0/077/01/52)
1:200



PCA Drawing No PCA/D/50

Figure 11b
Archaeological Survey of Fermentation Building; West Elevation
PCA 2004
1:200

4.11 Wellhead

4.11.1 The base plans of the Wellhead are generally satisfactory with additional notes added regarding construction, fabric and machinery. The interior of the Wellhead was recorded photographically in medium-format.

4.11.2 The missing NE and SE base elevations of the Wellhead were drawn and recorded photographically in medium-format. Missing architectural details on the riverside elevation of the Wellhead were added to the base elevation using reflectorless EDM (Fig 12). The riverside elevation was recorded photographically in large-format.

4.11.3 Phase Two recording of the Wellhead will comprise the planning of the Wellhead roof, which was not included in Phase One owing to lack of safe access (Fig 5).

4.12 Hawkins Lane Corridor

4.12.1 The high-level pipework and link corridors in Hawkins Lane Corridor were recorded photographically in medium format and in 35mm.



Plate 17: Looking northwest Along Hawkins Lane

4.12.2 Phase Two recording will produce a hand-measured plan accurately showing the location of the reachable pipes.

4.13 Hawkins Lane Link Corridor

4.13.1 A Link Corridor, sitting above Hawkins Lane, is absent from the previous survey, but could not be accessed owing to the deterioration of the stairways in the Fermentation Building. Planning, sectioning and photographic recording of this Link Corridor will take place after the stairways have been made safe for access or alternative access has been arranged.

4.14 The Tunnel

4.14.1 A tunnel leading from the northernmost end of the Brewhouse to the Fermentation Building basement is not recorded on the previous survey. The Tunnel was partly planned by hand before the discovery of asbestos, not encountered in the asbestos survey¹⁴, stopped further investigation of this area. The planning and photographic recording of the Tunnel will be completed in Phase Two, following the assessment and removal of this asbestos.

¹⁴ SET Solutions "Asbestos Survey for JG Bristol Limited at the site of Bristol Brewery, Counterslip Passage, Bristol BS1 6BX", unpublished report 13/2/04

5 SUMMARY OF INITIAL FINDINGS

5.1 Historical Development of Courage Brewery

5.1.1 The following summary will take the form of an updated chronological development of the buildings on the site. The dates correspond to known documentary sources and otherwise identified major building phases.

5.1.2 1568 Smith's map Bristol¹⁵ appears to show little development on the site, apart from some buildings on either side of a river slipway, likely to represent Hawkins Lane.

5.1.3 1673-1715 Millerd's maps of Bristol¹⁶ made during this period show the development of buildings along the old Counterslip although there is no extant evidence of these. The Grimes Lane and Hawkins Lane slipways can be seen at this time, defining a block of housing. It is known that brewing and sugar refining in the area began during this period with a number of small breweries and sugar houses being identifiable on, and behind, the Counterslip and in the 'Bristol Porter Brewery' to the west of the site.

5.1.4 1742 John Roque's map¹⁷ continues to show the two lanes with unspecified building between them. It also shows the establishment of the ferry point at the east end of the old Counterslip. It is likely that rusticated stonework forming a part of this ferry point survives on the riverside elevation beneath the New Offices (Fig. 12).

5.1.5 1788 - 1837 The Bristol Porter Brewery was purchased by Phillip George and Partners in 1788, forming the beginning of Georges Brewery. During this period, the boundary of the brewery complex extended to include the area of the Fermentation Building and some land to the eastern side of Hawkins Lane. Ashmead's map of 1828¹⁸ (Fig. 10) and fabric analysis of the Fermentation Building suggest that elements of its exterior and interior structural elements were constructed during this time, although further analysis may pull this date forward. To the east of the brewery complex, Ashmead shows a timber yard and sugar-house, no evidence of which is to be discerned in the fabric of the extant buildings, save for a modern double-width doorway in the approximate position of the timber yard entrance. There is also a new slipway to the eastern end of Counterslip that survives in the façade of the Georges

¹⁵ Bryant op. cit. in note 7, Fig. 4.

¹⁶ Ibid., Fig. 5, 6 and 7

¹⁷ Ibid., Fig. 8

¹⁸ Ibid., Fig. 10

Building. The sugar-house on the site was in the possession of Conrad Finzel by 1837.

- 5.1.6 1837-1882 It is known that the original sugar works purchased by Conrad Finzel was destroyed by fire in 1847. Ashmead's revised map of 1854¹⁹ (Fig. 11), shows development of the brewery site to the west of Hawkins Lane, including the area now occupied by the Compressor Room and Ale Store. Consequently, it is likely that the extant structures of these buildings date from just prior to this period, possibly post-1847 if they were affected by the Finzel fire. Ashmead shows the same plan of the Finzel complex as in 1828, although he may not have had access to the site. It is likely that the southwest elevation of the Georges Building survives from before the 1847 fire. A plan of the rebuilt Finzel's sugar works survives from 1879²⁰, showing the contemporary layout of walls, some of which survive within the Finzel Building, Cask Store and the Georges Building. It may be possible, through fabric analysis, to develop a construction sequence for these walls and buildings between 1847 and 1879.
- 5.1.7 Through the period of Finzel's ownership of the sugar refinery, it is possible to assess both the regional and wider significance of the site. The development by Conrad Finzel of the process for the centrifugal crystallisation of sugar, led to a wider and easier use of sugar, due to removing the need to bake it into loaves²¹. The resulting economic gain to Finzel from this innovation saw the family enter into a tradition of local philanthropic industrialists (Champion, Goldney etc.) with, for example, major contributions to a local orphanage run by a fellow ex-patriot German. However, the industry as a whole collapsed in Bristol and Finzel's sugar refinery, the last in Bristol, closed in 1881.
- 5.1.8 1882 - 1930 The Ordnance Survey map of 1882²² shows two important developments, these being the addition of link corridors above Hawkins Lane (extant) and Grimes Lane (survives as scars on southwest elevation), and the extension of the southern end of the Compressor Room to link with the Ale Store. It is likely that the interior structure of the Ale Store was altered during this period by engineers George Adlam and Sons of Bristol and an exact date for this redevelopment will be gained through further fabric analysis. Goad's Fire Insurance Plan of 1887²³ details a number of alterations to the Wellhead area and northernmost end of the Fermentation Building. The area of the old Finzels sugar refinery is marked as 'under alteration to

¹⁹ Ibid., Fig. 11

²⁰ Bristol Record Office, 36772 Box 6

²¹ Murray WB "Sugar-making at the Counterslip Refinery, Bristol", *The Illustrated London News*, 29 Nov 1873

²² Bryant op. cit. in note 7, Fig 13

be warehouses, January 1888', this giving an approximate date for the removal of much of the interior walling of this part of the site. The map also gives a good indication of which walls survive in the fabric of the extant structure.

- 5.1.9 The Tramway Generator Building was constructed in 1899, following demolition of the Counterslip Warehouse, as a two-storey basemented building housing the generating equipment and boilers for the Bristol tram system.
- 5.1.10 Planning proposals from 1903 to 1912 detail a number of proposed interior alterations to the Fermentation Building. These alterations were planned to facilitate an updating of brewery equipment at a period when the building housed the fermentation tanks of Bristol Brewery Georges and Co. The additions of this period, namely a new staircase between vats and new roofing structures, still remain in the building. A Fletton brick insert into the SW and NE elevations relates to this period of development. These plans also show a warehouse for Bennett Brothers' Printing Works to the SW of what is now the Georges Building.
- 5.1.11 Goad's updated Fire Insurance Plan of the early 1930s²⁴ (Fig. 16) lists the uses of the different sections of the Fermentation Building as well as the Compressor Room (Refrigerating Plant) and the Ale Store. Large parts of the old sugar refinery site were taken over by Georges at this time. A major redevelopment took place during this period comprising the construction of a new brick riverside frontage, and the addition of the current façade of the Georges Building. The interior of these buildings was also altered during this period, with the ceilings raised in the Finzel Building to match those in the redesigned Cask Store. A number of extant interior walls were retained during this development, including some relating to Finzel's sugar refinery.
- 5.1.12 Post-Second World War - 1986 The first post-war development of the brewery site appears to have been the reinstatement of damaged roofs above the Finzel Building and Compressor Room. The Bennett Brothers' warehouse, to the southwest of the Georges Building, was also damaged during the war and was demolished in the 1960s during the expansion of the brewery, after its acquisition by Courage Barclay and Simonds. This period also included the construction of the New Offices building, above the existing boiler house, and the addition of floors to the Tramway Generator Building, converting it from a wine store and mineral water factory into the accounts centre.

²³ Ibid., Fig. 14

²⁴ Ibid., Fig. 16

- 5.1.13 The most modern development of the Courage Brewery took place in 1985/6, with the demolition of the large Bennett's printing works on the south side of Counterslip, the erection of the steel-framed cask Warehouse, and the development of the new brewhouse with updated brewing equipment and structural elements.
- 5.1.14 1986 - Present Brewing activity ceased on the site in 1999 and the site was subsequently sold for redevelopment in two lots; that to the west of Grimes Lane, The Georges Square Development, has already been completed.

5.2 Revised Research Aims

- 5.2.1 The aims outlined in 2.1 still represent the research framework within which all further field recording and analysis will work. However, while the Phase One work has considerably enhanced our ability to address these aims, it has also served to highlight some new key areas for further research.
- 5.2.2 A good amount of evidence for the sugar refining industry has been found to survive at the site, and more is expected, both above and below ground level. A brief survey, therefore, of the use of sugar produced both on the site, and in Bristol generally, will enable light to be shed on both the international significance of Finzels sugar refinery and its collapse. Sufficient evidence for several other industries also survive to allow a greater analysis and comparison to be made for them.
- 5.2.3 Greater survival, of 18th and 19th century structural and industrial elements in general, is present on the site than was predicted. It is therefore expected that, by the end of the overall archaeological and building recording fieldwork, sufficient data will have been gathered to allow a better understanding of the site's development, and of its components, to be traced over a long period of time, and likewise the structural development of each building.
- 5.2.4 An important new research aim is to make a detailed analysis of the 20th century development of the brewing process and its relation to the site, as it appears that there was almost constant changing and updating of equipment and its location. A specific understanding of these is instrumental to the history of the site, and will also allow an assessment of whether the brewing processes employed at the Bristol brewery were particularly innovative, or in any other way distinct from other contemporary brewing operations. This will be best done through close map regression, with reference to deeds and previous planning applications, and further oral testimony from Courage Breweries Ltd Chief Engineer Brian Mortimer.

6 RECOMMENDATIONS FOR FURTHER WORK

6.1 Unsafe Areas

6.1.1 Further recording will aim to plan, and photographically record, those areas declared inaccessible for safety reasons prior to or during the Phase One recording. These are:

- The first and second floors towards the northern end of the Fermentation Building
- The Link Corridor above Hawkins Lane (Fig 3)

6.2 Areas with Asbestos Risk

6.2.1 Further recording will aim to plan and record photographically those areas that were inaccessible due to the presence of certain types of asbestos prior to or during the Phase One recording. These are:

- The ground floor at the southern end of the Fermentation Building
- The ground floor boiler house of the New Offices
- The ground floor boiler house of the Cask Store
- The tunnel beneath Hawkins Lane (Fig 2)
- The fermentation room of the Brewhouse

6.3 Inaccessible Elevations (Fig 6)

6.3.1 Those areas which were not previously accessible for hand recording, or which were not visible for recording by the reflectorless EDM will be recorded when made accessible. These are:

- The SW elevation of the Georges Building
- The SW external elevation of the cask store
- Upper sections of the NE elevation of the Fermentation Building
- The NW elevation of the Tramway Generator Building
- An interior elevation of the Compressor Room detailing removed floor levels
- A possible external elevation now internal to the Fermentation Building

6.4 Inaccessible Roof Spaces (Fig 5)

6.4.1 Further recording will aim to record by hand and by photography any roof spaces that were omitted from the Phase One recording due to lack of access. These are:

- The Wellhead roof
- The roof over the Brewhouse fermentation room

6.5 Obscured wall fabric

6.5.1 There are a number of walls within the complex that require the careful removal of either render or brick facings to enable full recording and fabric analysis. These are:

- The internal southwest wall of the Cask Store over all floors
- The internal walls of the Finzel Building
- A previous external wall inside the Fermentation building

6.6 Pipework

6.6.1 Further recording will aim to record by hand and by photography any areas of pipework which are visible and which could not be recorded by the reflectorless EDM. These are:

- The pipes in the Hawkins Lane Corridor
- The high level pipes in the Cask Store
- The high level pipes on the ground floor of the Finzel Building.

6.7 Archive Research

6.7.1 Detailed archive research will be required in order to illuminate the history of the site. Specific directions include:

- Copying building deeds available in the Courage Brewery Archive
- Locating historic pictures of Conrad Finzels Sugar Refinery
- Assessing the international importance of Bristol's sugar refining industry
- The compilation of a chronological set of historic photographs detailing the history of the site as far back as is possible
- Investigating on-site plans and plans known to be held by the LPA for information on machine detail and structural alterations to the brewery

6.8 Oral Histories

- 6.8.1 It is proposed that further oral history sessions are undertaken to cover areas of the brewery that become newly accessible or visible as demolition progresses, to answer questions resulting from further analysis and to obtain a detailed chronology of the movement of brewing equipment and processes around the site.

6.9 Photography

- 6.9.1 Phase Two will record photographically any elevations and façades that are newly revealed during the demolition, particularly the old Counterslip frontage of the brewery.

6.10 Future Phases of Work

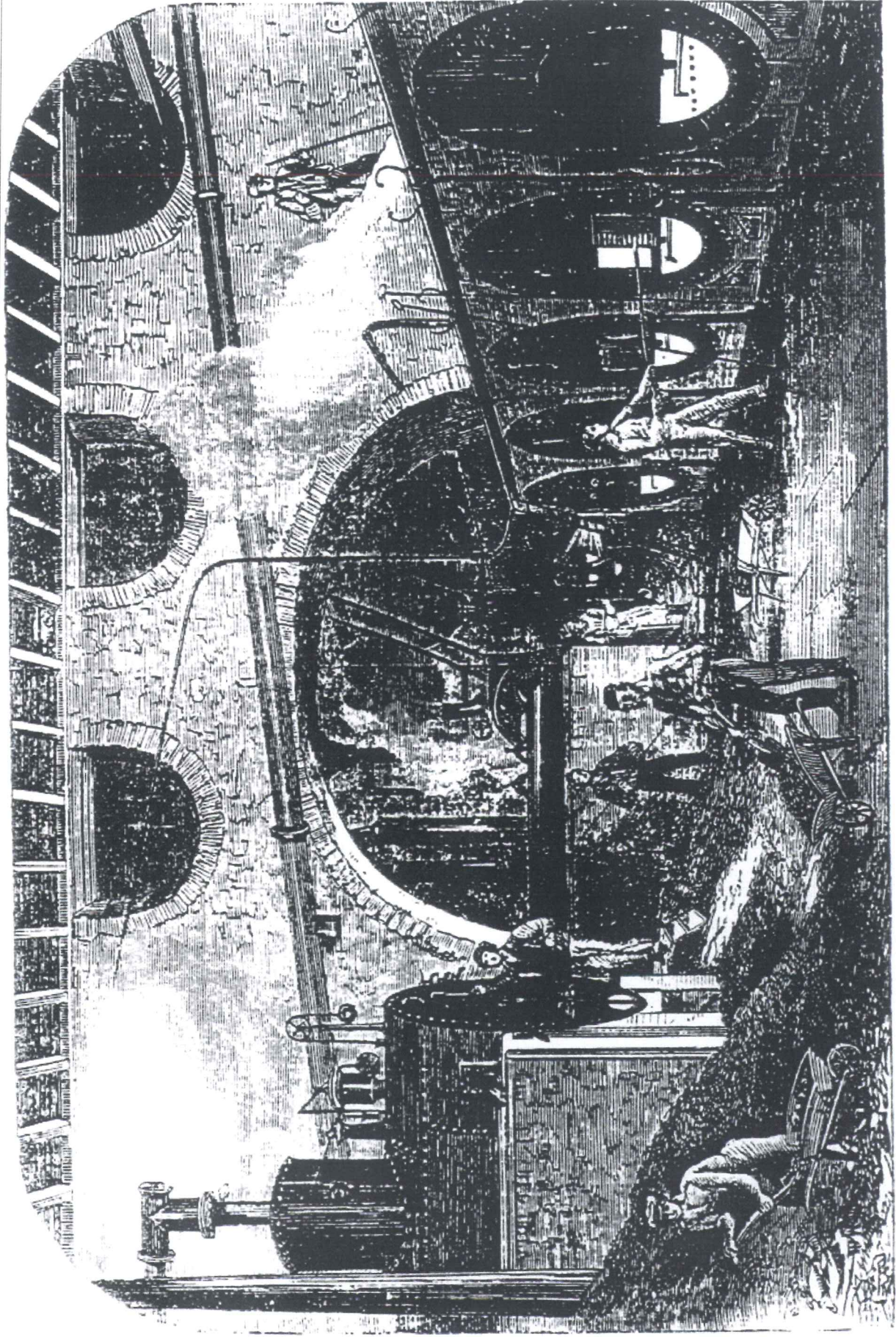
- 6.10.1 It is anticipated that two further phases of fieldwork recording will take place. Detailed negotiations with the project team and main contractors will allow the relative timing of the phases to be decided, will allow access to be gained to hitherto inaccessible areas, and will ensure a smooth programme of building recording within the overall project schedule of works.
- 6.10.2 The Phase Two survey will consist of the building recording works undertaken during the demolition programme.
- 6.10.3 The Phase Three survey will consist of the building recording works undertaken during the construction works, i.e. on renovation/refurbishment works undertaken on structures which are being retained on the site, including the Bath Street Terrace and Fermentation Building. It is expected that these works will, by stripping plaster and other coverings, reveal structural, phasing and industrial details.

7 ARCHAEOLOGICAL POTENTIAL

- 7.1 The archaeological evaluation report on the site has highlighted a number of areas that hold high, moderate and low archaeological potential.²⁵ An initial analysis of the Phase One building recording allows this model to be further developed in and around the northern end of the site. A comparison of the current layout of the Cask Store and the 1879 plan of the Finzel Sugar Refinery, allows us to compare what parts of the current basement lie within what was then a lower ground floor. We know from a 19th century illustration²⁶ of the furnaces (Fig 13), which show a 2-storied room with wall openings now at ground floor level, that a floor was later constructed, dividing the ground floor from what is now the basement. However as can be seen on Figure 14 not all areas of the former lower ground floor were incorporated in the new basement.
- 7.2 While further survey work within the basement is required, sufficient correspondence exists between elements of its walls to the historic boundaries of the Compressor Room/Ale Store and the Georges Building, to indicate the great variance between the current NW and NE basement walls and the 1879 walls.
- 7.3 This would indicate that the areas lying between the current basement inner walls and the Floating Harbour lie in what was the lower ground floor of the Finzel Refinery. This means that they have the same low potential for archaeological deposits as the basement area because they are likely to have removed all earlier deposits.
- 7.4 An area of basements has been shown to exist to the S and SW of the current basement. On the 1879 plan these rooms are shown to be for furnaces, boilers and a chimney stack, and machinery can be seen in the 19th century illustration. This would seem to indicate that the arch was blocked up, abandoning the rooms behind it. This would suggest that there is a potential for the survival of industrial archaeology, in the form of plant and machinery relating to the very end of sugar refining at Finzel's and in Bristol.
- 7.5 Recognition of these changes to the overall archaeological potential of the site are illustrated in Figure 14 and are set out below.

²⁵ Wragg op. cit. in note 3, Fig. 33.

²⁶ "The Official Illustrated Guide: The Commercial Aspect of Bristol", P759



THE FURNACES.

Figure 13
Illustration of the Finzel Sugar Refinery Boiler Room After 1847 Rebuild Looking Northeastwards Towards The Titler House
(In G Meason, 1852, 'The Illustrated Guide To The GWR')

7.6 Updated Statement of Areas of High Archaeological Potential

- 7.6.1 Area I - Within the Finzel Building, the Old Compressor Building and in Hawkins Lane, large deposits of significant archaeology survive because of the relatively low level of later disturbance by foundations and piles. This archaeology consists of the remains of medieval buildings and industrial/domestic structural remains in Trenches 7, 8 and 18, along with evidence of post-medieval made-ground, industrial buildings and internal structures in Trenches 3, 6, 7, 18, 21 and 24.
- 7.6.2 The evidence suggests that the top of archaeologically significant deposits exists at heights of c.8.40m OD in the SW, c.7.90m OD towards the north and c.8.20m OD in the west of the building. The evidence from Borehole 10, in the north of the building suggests that natural deposits are not reached until a depth of 4.14m OD, while Borehole 7, located just to the south, indicated that natural deposits were reached at a height of 6.14 m OD. Archaeological deposits probably survive, therefore, between c. 8.40 and 6.14m OD in the south and SW of the area, increasing in depth to between c.7.90 and 4.14m OD towards the north.
- 7.6.3 Area J – The current carparks, located to the SE and SW of the cask warehouse, and the open area between the cask warehouse and the Old Tramway Generator Building, were shown to contain extensive areas of the deeply stratified medieval and post-medieval buildings, structures and deposits, representing the history of the urban development of this part of Bristol. While a number of basements were identified across the area, which significantly if not totally destroyed localised archaeology, the destruction for the most part represented and reinforced the emerging picture of different activities within individual property boundaries. Of particular importance was the presence of the Law Ditch, a sewer, which formed a major property boundary and had been continuously altered from the 12th century through to 1984. This ditch overlay major land reclamation dumps, sealing a land horizon with two phases of an earlier ditch: possibly the earliest phase of the Law Ditch.
- 7.6.4 The top of archaeologically significant deposits and structures exists at a height of c.7.70m OD in the south of the area, c.7.90m OD in the SW, c.7.40m OD in the north of the main carpark, c.8.00m OD in the east of the area and c.8.50m OD in the NE. Natural deposits were found at heights of 6.10m OD in the SW of the area, 6.14m OD in the north of the main carpark, 6.72m OD in the east of the area, and 4.46m OD close to the NW part of the open space between the Cask Warehouse and Old Tramway Generator Building. Archaeologically significant deposits probably survive, therefore, between c7.90 and 6.10m OD in the SW of the area, between

c.7.40 and 6.14m OD in the north of the main carpark, and between c8.00 and 6.72m OD in the east of the area. In the area of the earliest ditch in the main carpark, archaeological deposits may well extend in a depth of below 5.07m OD.

7.6.5 Area L – The area between the Old Boiler house and the Old Tramway Generator Building is considered to have a high potential for surviving archaeological deposits because of the evidence for post-medieval structures cutting medieval features and deposits.

7.6.6 The top of the archaeological horizon in this area was encountered at 7.32m OD. with natural deposits at a height of 4.46m OD..

7.6.7 Area K – This area comprises the harbourside NW of the Finzel Building, where, because no significant data was recovered, the exact nature of the deposits is unknown. However plinths and sections of the existing harbour walls do not relate to the current buildings, and may therefore belong to pre-19th century waterfronts. Given the lack of known basements in this area, the potential for late post-medieval waterfront and industrial archaeological structures is considered to be high.

7.6.8 As no data is available for this area the possible depths and heights are unavailable. It is presumed, however, that they would be similar to other waterfront areas of the site: archaeological deposits being encountered at c8.00m OD and features extending down to a possible depth of –0.50 or –1.50m OD.

7.7 Updated Statement of Areas of Moderate Archaeological Potential

7.7.1 Area E - Within the Old Fermentation Building, medieval, post-medieval and industrial archaeological deposits survive, as seen in Trenches 1, 19 and 20, and Trial Pits 07 and 08. However, dense arrangements of piles and pile caps, each measuring approximately 2m x 2m, have significantly truncated the deposits leaving a moderate potential for the survival of a lattice of archaeology. The confined internal nature of the Old Fermentation Building will cause significant problems of access/egress for plant and spoil making an open area excavation logistically complex.

7.7.2 The top of the archaeological horizon in the central part of the area lay at c7.50m OD and in the NW at c7.80m. Natural deposits sloped downwards from 7.00m OD in the SE of the area to 6.67m OD in the centre. No data for the natural deposits by the waterfront exists for this area, although evidence from the adjacent Area I suggests that waterfront structures may penetrate beyond a depth of 1.09m OD.

- 7.7.3 Areas F, G and H – Three areas within the current Cask Warehouse lie outside the known basement of the Bennetts warehouse. Medieval and later structures and features were shown to survive in Area F and G, with localised significant truncations by later activities such as piling trenches at 1m intervals, and the piles themselves. The concrete floor of Area G was heavily reinforced with thick bars. Area H has not been examined but is interpreted as having the same moderate potential for surviving archaeological remains as Areas F and G.
- 7.7.4 Archaeological features survive in Area F to a height of 7.85m OD. Natural deposits were recorded to the SW at 6.14m OD and to the NE at 4.46m OD.
- 7.7.5 The top of the archaeological horizon was reached at c7.65m OD in Area G. Natural deposits were recorded at 6.99m OD.

7.8 Updated Statement of Areas of Low Archaeological Potential

- 7.8.1 Area A - Large, deep basements are known to exist to the south of the current Fermentation Building. These represent the footprint of the southernmost extent of the old Fermentation Building. No archaeology is likely to survive beneath these basements.
- 7.8.2 Area B – The basements within the Old Bennetts Building were exposed during the construction of the current Cask Warehouse in the 1980's, and any surviving archaeological remains were either destroyed during the new construction, or recorded in a contemporary watching brief.
- 7.8.3 Area C – The basements under the Basement Cask Store and Old Boiler House are known to be extremely deep and are likely to have totally removed any archaeological deposits in this area.
- 7.8.4 Area D - The basement under the Old Tramway Generator Building together with a large gas main running along its western side define this area, where no archaeological deposits are believed to survive.
- 7.8.5 Area M – This area was previously thought to have a high potential for archaeology, but the initial building recording analysis has identified the fact that this area was previously within the Finzel Refinery lower ground floor, most of which now forms the basement. This together with the subsequent construction of walls for the current building means that it is unlikely that any archaeology could survive.

7.8.6 Isolated Basements Within Area J – The exact positions and extents of the basements exposed in Trench 26 were recorded. Fuel tanks are also known to exist in the main carpark area and Trench 27 also showed the position of a small basement. With the possible exception of some of the basements in Trench 26 (which may not have totally destroyed the very wide and, therefore, possibly very deep early ditch), it seems unlikely that any archaeologically significant deposits would have survived within these localised areas.

7.9 Updated Statement of Area With High Potential For Industrial Archaeology

7.9.1 Area N – This area consists of at least two rooms within the lower ground floor of the Finzel Refinery which were not incorporated with the current basement. These rooms are likely to have been blocked off and may contain the remains of industrial plant, fixtures and fittings as well as structures associated with the decline of the sugar refining industry in Bristol.



Key

- Extent of current Cask Store Basement
- Basements no longer extant
- Walls of Finzel Sugar Refinery Basement still surviving

Figure 14
1879 Finzel Sugar Refinery Basements In Relation To The Current Basement Footprint
1:500



Figure 15
 Areas Of Archaeological Potential
 1:1000

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APPENDIX 1

BRISTOL BREWERY :
 PLAN, SECTION & ELEVATION DRAWING NUMBERS

PCA DWG NO	DERIVED FROM	DESCRIPTION	COMPLETED Y/N	FURTHER WORK REQUIRED
	COLWYN FOULKES DWG			
PCA/D/01	0/077/01/17	TRAMWAY GENERATOR BASEMENT	Y	
PCA/D/02	0/077/01/18	TRAMWAY GENERATOR GROUND FLOOR	N	NORTH AREAS TO ACCESS AFTER ASBESTOS REMOVAL
PCA/D/03	0/077/01/19	NEW OFFICES & TRAMWAY GEN 1ST FLOOR	Y	
PCA/D/04	0/077/01/10	NEW OFFICES & TRAMWAY GEN 2ND FLOOR	Y	
PCA/D/05	0/077/01/11	NEW OFFICES & TRAMWAY GEN 3RD FLOOR	Y	
PCA/D/06	0/077/01/12	TRAMWAY GENERATOR MEZZANINE 3-4	Y	
PCA/D/07	0/077/01/13	NEW OFFICES & TRAMWAY GEN 4TH FLOOR	Y	
PCA/D/08	0/077/01/14	NEW OFFICES & TRAMWAY GEN ROOF	Y	
PCA/D/09	0/077/01/16	NEW OFFICES & TRAMWAY WEST ELEVATION	Y	
PCA/D/10	0/077/01/17	TRAMWAY GENERATOR NORTH ELEVATION / COUNTERSLIP	N	MORE DETAILED SURVEY REQUIRED OF UPPER ELEVATION
PCA/D/11	0/077/01/18	NEW OFFICES & TRAMWAY GENERATOR SECTION	N	GROUND FLOOR TO ACCESS AFTER ASBESTOS REMOVAL
PCA/D/12	0/077/01/19	BATH ST BASEMENT	N	
PCA/D/13	0/077/01/19	BATH ST GROUND FLOOR	N	
PCA/D/14	0/077/01/19	BATH STREET 1ST FLOOR	N	
PCA/D/15	0/0777/01/20	BATH ST 2ND FLOOR	N	
PCA/D/16	0/077/01/20	BATH ST 3RD FLOOR	N	
PCA/D/17	0/077/01/21	BATH ST ELEVATION	N	
PCA/D/18	0/077/01/22	BATH STREET ELEVATION	N	
PCA/D/19	0/077/01/23	BATH STREET SECTION	N	
PCA/D/20	NONE	CASK STORE BASEMENT	N	SOUTH PART TO ACCESS AFTER WATER DRAINED

PCA/D/21	0/077/01/24		CASK STORE GROUND FLOOR - NORTH		N	SOUTHEAST AREA TO ACCESS AFTER ASBESTOS REMOVAL
PCA/D/21	0/077/01/25		CASK STORE GROUND FLOOR - SOUTH		N	SOUTHEAST AREA TO ACCESS AFTER ASBESTOS REMOVAL
PCA/D/22	0/077/01/26		CASK STORE MEZZANINE G-1		Y	
PCA/D/23	0/077/01/27		CASK STORE 1ST FLOOR - NORTH		N	AREAS ADJACENT TO TUNS TO ACCESS
PCA/D/23	0/077/01/28		CASK STORE 1ST FLOOR - SOUTH		Y	AFTER ASBESTOS REMOVAL
PCA/D/24	0/077/01/29		CASK STORE MEZZANINE 1-2		Y	
PCA/D/25	0/077/01/30		CASK STORE SECOND FLOOR		Y	
PCA/D/25	0/077/01/31		CASK STORE SECOND FLOOR		Y	
PCA/D/26	0/077/01/32		CASK STORE THIRD FLOOR		Y	
PCA/D/26	0/077/01/33		CASK STORE THIRD FLOOR		Y	
PCA/D/27	0/077/01/34		CASK STORE ROOF		N	AREA TO ACCESS AFTER WATER DRAINED
PCA/D/28	0/077/01/81		CASK STORE ROOF WEST ELEVATION & SECTION		Y	
PCA/D/29	0/077/01/82		CASK STORE ROOF EAST ELEVATION & SECTION		N	ROOF DETAIL NEEDS TO BE ADDED
PCA/D/30	0/077/01/37		CASK STORE WEST ELEVATION		N	UPPER PARTS TO ACCESS
PCA/D/31	0/077/01/38		INC COMPRESSOR ROOM WEST ELEVATION		N	UPPER PARTS TO ACCESS
PCA/D/32	0/077/01/39		CASK STORE SOUTH ELEVATION		Y	
PCA/D/33	0/077/01/40		CASK STORE WAREHOUSE WEST ELEVATION		Y	
PCA/D/34	0/077/01/41		CASK STORE WAREHOUSE SOUTH ELEVATION		Y	
PCA/D/34	0/077/01/41		CASK STORE WAREHOUSE EAST ELEVATION		Y	
PCA/D/35	0/077/01/42		CASK STORE SECTION N - S		N	2ND & 3RD FLOORS NOT COMPLETE
PCA/D/36	0/077/01/43		CASK STORE SECTION N - S		N	TANK OBSCURING FACE OF WALL
PCA/D/36	0/077/01/43		CASK STORE SECTION N - S		N	2ND & 3RD FLOORS NOT COMPLETE
PCA/D/37	0/077/01/44		CASK STORE SECTION E - W		N	2ND & 3RD FLOORS PARTLY RECORDED
PCA/D/38	0/077/01/45		CASK STORE SECTION E - W		N	2ND & 3RD FLOORS PARTLY RECORDED
PCA/D/39	NONE		CASK STORE INTERIOR WALL ELEVATION N-S		N	UPPER WALLS & ROOF NEED TO BE ADDED
PCA/D/62	NONE		CASK STORE INTERIOR WALL ELEVATION		N	UPPER WALLS & ROOF NEED TO BE ADDED
PCA/D/40	0/077/01/24		COMPRESSOR ROOM GROUND FLOOR		N	SOUTH AREA TO ACCESS AFTER RMOVAL OF ASBESTOS

PCA/D/41	NONE	COMPRESSOR ROOM SECTION E - W	N	MEZZANINE & ROOF NEED TO BE ADDED
PCA/D/42	NONE	COMPRESSOR ROOM EAST ELEVATION	N	ROOFLINE NEEDS TO BE ADDED
PCA/D/43	0/077/01/46	FERMENTATION BUILDING BASEMENT	N	AREAS TO ACCESS AFTER WATER DRAINED
PCA/D/44	0/077/01/47	FERMENTATION BUILDING GROUND FLOOR	N	SOUTH AREA TO ACCESS AFTER ASBESTOS REMOVAL
PCA/D/45	0/077/01/48	FERMENTATION BUILDING 1ST FLOOR	N	SOUTH AREA TO ACCESS AFTER ASBESTOS REMOVAL
PCA/D/46	0/077/01/49	FERMENTATION BUILDING 2ND FLOOR	N	SOUTH AREA TO ACCESS AFTER ASBESTOS REMOVAL
PCA/D/47	0/077/01/50	FERMENTATION BUILDING 3RD FLOOR	N	SOUTH AREA TO ACCESS AFTER ASBESTOS REMOVAL
PCA/D/48	0/077/01/51	FERMENTATION BUILDING ROOF	Y	
PCA/D/49	0/077/01/52	FERMENTATION BUILDING WEST ELEVATION	Y	
PCA/D/50	0/077/01/52	BEFORE & AFTER FB WEST ELEVATION	Y	
PCA/D/51	0/077/01/53	FERMENTATION BUILDING EAST ELEVATION	Y	
PCA/D/52	0/077/01/54	FERMENTATION BUILDING SOUTH ELEVATION	Y	
PCA/D/53	0/077/01/54	FERMENTATION BUILDING NORTH ELEVATION	Y	
PCA/D/54	0/077/01/56	FERMENTATION BUILDING SECTION D1	N	SOUTH AREA TO ACCESS AFTER ASBESTOS REMOVAL
PCA/D/55	0/077/01/57	GATEHOUSE GROUND FLOOR	Y	
PCA/D/56	0/077/01/57	GATEHOUSE ELEVATION NORTH	Y	
PCA/D/57	0/077/01/57	GATEHOUSE ELEVATION WEST	Y	
PCA/D/58	0/077/01/57	GATEHOUSE ELEVATION SOUTH	Y	
PCA/D/59	0/077/01/57	GATEHOUSE ELEVATION EAST	Y	
PCA/D/61	NONE	TUNNEL UNDER HAWKINS LANE	N	TO ACCESS FOR ALIGNMENT AFTER ASBESTOS REMOVAL
PCA/D/62	0/077/01/15 & 0/077/01/68	NEW OFFICES & TRAM RIVERSIDE ELEVATION	Y	
PCA/D/62	0/077/01/35 & 0/077/01/69	NEW OFFICES & CASK RIVERSIDE ELEVATION	Y	
PCA/D/62	0/077/01/36 & 0/077/01/70	CASK STORE & FERM RIVERSIDE ELEVATION	Y	
PCA/D/62	0/077/01/55 & 0/077/01/71	FERMENTATION RIVERSIDE ELEVATION	Y	
PCA/D/63	NONE	PILLAR HEAD A, FERMENTATION BUILDING	N	TO CAD
PCA/D/64	NONE	PILLAR HEAD C, FERMENTATION BUILDING	N	TO CAD
PCA/D/65	NONE	STEEL GIRDER INTERSECTION, FERM BLDG	N	TO CAD

PCAD/66	NONE	STEEL GIRDER INTERSECTION, FERM BLDG	N	TO CAD
PCAD/67	NONE	CHANNEL COVER DETAIL, FERM BLDG	N	TO CAD
PCAD/68	NONE	PILLAR HEAD D, FERMANATATION BUILDING	N	TO CAD
PCAD/69	NONE	PILLAR HEAD E, FERMENTATION BUILDING	N	TO CAD
PCAD/70	NONE	PILLAR HEAD F, FERMENTATION BUILDING	N	TO CAD
PCAD/71	NONE	PILLAR HEAD G, FERMENTATION BUILDING	N	TO CAD
PCAD/72	NONE	STEEL BEAM RIVETTING, FERM BLDG	N	TO CAD
PCAD/73	NONE	BADGE DETAILS, COMPRESSOR ROOM	Y	
PCAD/74	NONE	BADGE DETAILS, COMPRESSOR ROOM	Y	
PCAD/75	NONE	BADGE DETAILS, COMPRESSOR ROOM	Y	
PCAD/76	NONE	PILLAR HEAD H, BREWHOUSE	N	TO CAD
PCAD/77	NONE	PILLAR HEAD I, CASK STORE BASEMENT	N	TO CAD
PCAD/78	NONE	PILLAR HEAD J+K, CASK STORE BASEMENT	N	TO CAD
PCAD/79	NONE	PILLAR HEAD L, CASK STORE BASEMENT	N	TO CAD
PCAD/80	NONE	FRIEZE DETAIL, TRAMWAY GENERATOR BLDG	Y	
PCAD/81	NONE	1' BEAM SECTION, FERMENTATION BLDG	N	TO CAD
PCAD/82	NONE	1' BEAM SECTION, FERMENTATION BLDG	N	TO CAD
PCAD/83	NONE	PILLAR HEAD M, ALE STORE	N	TO CAD
PCAD/84	NONE	BADGE DETAIL, PILLAR M	Y	
PCAD/85	NONE	1' BEAM SECTION, ALE STORE	N	TO CAD
PCAD/86	NONE	1' BEAM SECTION, ALE STORE	N	TO CAD
PCAD/87	NONE	1' BEAM SECTION, ALE STORE	N	TO CAD
PCAD/88	NONE	MOULDING DETAILS, FERMENTATION BLDG	N	TO CAD
PCAD/89	NONE	MOULDING DETAILS, FERMENTATION BLDG	N	TO CAD