ARCHAEOLOGICAL EXCAVATIONS ON THE
FORMER AUSTRALIAN GAS LIGHT COMPANY SITE
HAYMARKET, SYDNEY

A Report for Australian Construction Services (NSW Region)
Department of Administrative Services

by
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1.0 Foreword

1.1 Acknowledgements

The archaeological excavation of the former Australian Gas Light Company's site at the Haymarket in Sydney was funded by the Commonwealth Government as a part of its redevelopment of the whole site. The excavation was made possible by the co-operation of all of those involved in the redevelopment project on behalf of the Commonwealth Government and by the skill and exertions of the excavation team. Particular thanks are due to Rob Baird of Australian Construction Services and to all the members of the Sydney Central Project team and to Lyn James for her able assistance with financial matters. Lindsay Morphett of Australian Construction Services provided regular assistance with practical matters including equipment and also arranged for the storage of the artifacts from the site at the Alexandria Depot and for the transportation of the finds.

Paul Kouros and the staff of Metropolitan Demolitions, the contractors working on the site at the same time as the archaeological excavation took place, coped with a team of archaeologists on their site with great courtesy and gave all assistance possible to ensure the smooth running of both activities on the site at the same time. Their willing co-operation ensured that as much archaeological work as possible could be completed within the time available. The expert backhoe operators who worked with the archaeological team provided invaluable assistance in coping with a site of this size and with advice on the best techniques of mechanical excavation. The occasional use of much larger machinery provided by Metropolitan Demolitions was also much appreciated.

In the excavation team thanks are due to Tony Lowe who acted as Site Assistant during the first season of excavation and to Leah McKenzie for her able management of all of the artifacts from the site and for identifying and cataloguing them. This was an enormous job carried out in less than ideal conditions and I wish to express my considerable debt to Leah McKenzie for her dedication to this task. Work on the site was strenuous and demanding in order to keep to the excavation time schedule and was ably carried out by the excavation team:

Nicholas Arnold, Jodie Benton, Kate Bishop, Jay Bruckmann, Jenny Buchanan, Richard Carey, Jacqueline Carless, Ben Churcher, Kate da Costa, Norma Dickson, Paul Donnelly, Georgina Ewart, Anne Fletcher, Halina Francki, Marita Fraser, Paula Gannon, Alice Gorman, Nadia Iacono, May King, David Kraatz, Patricia Leo, Tony Lowe, Jane Lydon, Leah McKenzie, Jane Mitchell, Bettina Napier, Mike Newton, Peter Rees, Mafalda Rossi, Katharine Sale, Cathy Snelgrove, Rachael Sparks, Dominic Steele and Jonathan Wooding.
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Details of the construction of Gasholder No. 5, found in 1989 during construction work for the new building were recorded by Steve Neal of Walkers.

Historic photographs of the site have been reproduced by kind permission of the Council of the City of Sydney and the Royal Australian Historical Society.
The site location map was provided by the Cartography Department of the University of Sydney.
Dr. Ken Sheedy of the Mint and Barracks Museum assisted with the identification of coins from the site. Dr. George Gibbons, Assistant Director of the Geological Survey of NSW, Department of Mineral Resources examined bricks and kiln waste from the early layers and provided much helpful discussion on brick manufacture and the brickfields in Sydney.
1.2 Abstract

Two seasons of archaeological excavation were carried out in 1988 on the former Australian Gas Light Company site comprising the city block bounded by Pitt Street, Barlow Street, Parker Street and Hay Street, in the Haymarket, Sydney. This work formed a part of the redevelopment of the site by the Commonwealth Government and was funded by the Department of Administrative Services, Australian Construction Services (NSW Region). Following the preparation of a Conservation Analysis by Peter Freeman & Partners, discussions with heritage organisations and a Parliamentary Public Works enquiry four of the existing structures were retained to be incorporated within the new development and the rest of the buildings were demolished. The first season of excavation was carried out before demolition began and the second after demolition to ground level but as work continued to demolish below ground features and to excavate the site in preparation for new construction. The timetable for archaeological excavation was determined by the schedule established for the demolition contractor's work and the time available to investigate different parts of the site differed according to the demolisher's progress and needs. The site was richly productive of archaeological remains from the later 18th century to the present. These were concentrated on the north, east and south-east sides of the site. Elsewhere the latest buildings and structures including the two large gasholders, the Hordern Building and the AGL Engineers' Building, all of which had deep foundations, had largely removed any traces of earlier occupation. The area excavated was about 1,580 square metres.

The earliest features found consisted of traces of the (?) Carters' Road, built in 1819 across the Government Paddock, and a large stone based and brick vaulted drain probably constructed in the late 1830s. A 34.5 m length of this drain survived, crossing the site from the north-east corner (beneath the later Manse) to the north side of Gasholder No. 4. The construction fill contained brick kiln waste and clay tiles, probably from the nearby brickfields which were being levelled and cleared away at the same period. Little is known of these extensive drainage works from documentary sources and evidence of them is largely confined to the archaeological record.

At the corner of Hay Street and Pitt Street were found the foundations of the outbuildings of the Presbyterian Manse, first occupied in 1847 by Dr. James Fullerton. The stone Manse has been retained in the new development. These consisted of the kitchen, store room, cellar entry, stables, coachhouse with loft, cellar, privies and well. A substantial deposit of artifacts was recovered from the well of late 1850s date. When the area occupied by these outbuildings was redeveloped in 1891 the foundations of the earlier buildings and one wall of the kitchen were incorporated into the plan for the new buildings with the re-use of some original building materials.
The old privies were filled in with a large quantity of domestic ceramics and glass. Above this fill were about 500 iron objects, largely hardware items and probably part of the stock in trade of the ironmongers who used the premises at this time. The new shops and the original Manse were used for retail purposes and continued to serve this function until 1988.

At the corner of Hay Street and Parker Street the foundations of the Wesleyan Chapel, opened in 1846, survived in their entirety. Slight traces were also recognised of the house adjacent to the Chapel built in the 1850s. Alterations and additions to the Austen Building, which had been built on the site of the earlier house in 1891, were also evidenced in the archaeological remains. Part of the line of the stream which ran across the site and is shown in early maps was found behind the Chapel. This had been straightened and channelled, probably in 1842, and completely filled in during the 1860s. A large amount of fill had been placed around the Chapel in the 1890s and contained many artifacts especially ceramics and glass. These were not thought to have originated on the site but provide a most useful body of evidence for the types of ceramics in use at that period and will be of use in developing type series of ceramics for Sydney generally.

The redevelopment of the Wesleyan Chapel area in 1906-7 included the adaptive reuse of the Chapel foundations. These were retained as the major foundations of the new shops, the size and plan of which were determined by this earlier feature. Parts of the sub-floor area of the Chapel were also utilised as cellars. Archaeological remains of alterations and additions to the Austen Building in the 1920s were also found.

On the east side of the site slight vestiges of the 19th century timber yard survived. The most extensive remains however were those of the stables built in the 1890s for the shops in Pitt Street. At least three phases of stables occupation were discerned complete with stable floors, hay and chaff sheds and yard areas. These buildings were removed in the 1920s and the site used as a garage.

At the corner of Pitt Street and Barlow Street, south of the AGL Main Hall and Gasholder No. 5 which were retained in the new development, the site of Gasholder No. 2 was excavated. Four large brick piers together with part of the area of the backfilled tank and concentric circles of timbers laid at the base of the tank were found.

As the foundations of the Hordern Building were being removed a domed brick well was uncovered and excavated in part. This probably belonged to the farriers and wheelwright's yard which had formerly occupied the site. The lift shaft for the original Hordern Building hydraulic lift system was also uncovered but was not investigated further.

Artifacts from the site (about 200 Archive boxes in total) have all been identified and catalogued and are currently stored by the Commonwealth Government at the Australian Construction Services Alexandria depot.
1.3 Arrangement of the Report

This Report presents the results of excavations undertaken on the former Australian Gas Light Company site at the Haymarket, Sydney on behalf of the Commonwealth Government. The Report is arranged in four main volumes with four volumes of Appendices as follows:

Volume 1 Text
Volume 2 Figures 1 - 64 comprising site plans, sections and historical maps and plans used in the interpretation of the site
Volume 3 Site photographs, numbered S1 - S 62
Volume 4 Artifact photographs, numbered A1 - A 95

References for the Figures are given in Volume 2. Unreferenced Figures have been prepared for this Report by Rosemary Annable.
In Volumes 3 & 4 negative numbers for photographs are given in parentheses.

Appendices 1 - 4 comprise the artifact identification and catalogue sheets for all material excavated on the site.

This Report does not include a detailed analysis of all artifacts from the site but presents a summary of this material as it contributes to the interpretation and dating of the archaeological remains. Several large deposits of artifacts appear to have been brought on to the site as site fill. While this material is not therefore directly relevant to the occupation of this site, such assemblages are of considerable importance for artifact studies in general. As more such material becomes available for study it will be possible, by comparison within and between sites, to build up a type collection of ceramics, glass and other artifacts regularly found in Sydney. This will assist in dating and also provide information concerning the composition of households, their socio-economic status and other factors which cannot be fully assessed at present.
Artifacts from the site are currently stored at the Australian Construction Services Alexandria Depot. The original site records are held by Rosemary Annable.

The history of the occupation of the site, as presented in the Conservation Analysis, forms the basis of the historical discussion in this Report and should be read as the basic work of reference throughout. For this reason the Conservation Analysis is not therefore constantly referenced. Photographs, copies of documentation and references presented in the Conservation Analysis are not repeated here, with the exception of detailed site plans of various dates to which reference is frequently made in this Report. Additional historical research for this Report, specific references to parts of the Conservation Analysis for the purposes of discussion and other references are listed in Section 11.0 of Volume 1.
2.0 Introduction

2.1 Site location
(Vol. 2 Figs. 1 & 2)
The site is located at the south end of the Central Business District of Sydney near Central Railway and comprises the city block bounded to the north by Hay Street, to the east by Pitt Street, to the south by Barlow (formerly Gipps) Street and to the west by Parker Street. The area is commonly known as the Haymarket after its nineteenth century usage.

2.2 Commonwealth Government ownership of the site and redevelopment plans 1975-1988
The whole of this city block was purchased by the Commonwealth Government in 1975 with a view to redevelopment for the construction of Government offices. Subsequent changes in government and in government policy towards the question of owning or leasing space for government offices resulted in inactivity on the site for ten years. During that time the majority of the buildings were unoccupied, with the exception of the Pitt Street and Hay Street shops. In 1985 new plans to use the site were drawn up and as a part of the planning process a Conservation Analysis of the site was commissioned.

A brief was issued dated 26 May 1986 to Peter Freeman & Partners, Architects and Planners, requiring that a Conservation Analysis be prepared for the whole site to include a concise appraisal of the cultural significance of the site as a whole and of its component elements. The Analysis included a history of the development of the site and its individual elements and statements of cultural significance for the component parts. The archaeological potential of different areas of the site was briefly noted in this document. The Consultants advised the retention of the AGL Main Hall, the Fire Station and Meter Room, the Manse, the facade of the Austen Building, the Engineers' Building, the gasholder tanks and the possible retention of the Hordern Building (Fig. 9)

During the planning process submissions were also made by the Australian Heritage Commission, the National Trust (NSW) and the Heritage Council of New South Wales concerning the site. The Public Works Committee of the Commonwealth Government held an enquiry in 1988 examining the proposed plans for redevelopment and the various submissions concerning the heritage significance of the site. The Committee reported to Parliament in May 1988 and recommended the retention of the Manse, the Fire Station, the AGL Main Hall and Gashoide No.5 beneath it and the demolition of all other buildings on the site (Fig. 10). The site is to be used for both Commonwealth Government offices and for office and retail space for lease. The plans for redevelopment incorporate a tower block at the south end of the site with smaller scale buildings at the north end and the retention of the Manse, Fire Station and AGL Main Hall within the new complex.
Before demolition, measured drawings were made of the Hordern Building, the Engineers' Building and the Austen Building by the firm of Schwager Brooks and James, Architects, and of Gasholder No.4 by Australian Construction Services. Measured drawings were also made, for the purposes of restoration work, of the Manse, the Fire Station and the AGL Main Hall by Australian Construction Services.

2.3 The history of the occupation of the site c. 1845 - 1975

The history of the site is well illustrated by a series of detailed plans from 1865 to 1920 and was described in detail in the Conservation Analysis (1). The documented history of the site can be divided into two phases, the 19th century, from c. 1845 to 1890, and the later 19th to the 20th century. Subdivision of the site began in the 1840s. Some grants were made for religious purposes and other allotments were put up for sale in the usual way. From the 1840s until about 1890 the north end of the site was occupied by a Wesleyan School and Presbyterian Manse with a timber yard and the Volunteer Fire Station on the east on Pitt Street. The centre of the site was the property of the Australian Gas Light Company which used it for the installation of gasholders to boost the supply of gas at the south end of the town. At the south-west corner of the block was a wheelwright and farrier's yard (Figs. 3, 4 & 5).

From the last decade of the nineteenth century the type of occupation of the site began to alter. The Australian Gas Light Company began to use their site for administrative purposes instead of for the supply of gas (a move begun earlier in the century by the transfer of some of its gasholders to other sites), culminating in the construction of the Engineers' Building in 1915 and the Main Hall in 1922. The property at the south-west corner of the area was acquired by the Hordern family and redeveloped. On it was built a large furniture warehouse. At the north end of the site the Manse outbuildings and eventually the Wesleyan School were replaced by shops with the main house of the Manse complex surviving for a similar usage (Figs. 6, 7 & 8) and on Pitt Street the timber yard was similarly replaced by shops and stables. The Australian Gas Light Company consolidated its ownership of the block, of which it was the major land owner, when it purchased the Hordern Building in 1934. In 1955 it purchased all the church properties at the north and east sides of the site. The entire block was purchased by the Commonwealth Government in 1975.
3.0 Archaeological excavation

3.1 Archaeological work on the site
(Vol. 2 Fig. 10)
Archaeological involvement with the site began after the Conservation Analysis had been received and while discussions were continuing as to which buildings were to be retained in the redevelopment plans. On the basis of the historical documentation provided in the Conservation Analysis and a consideration of the size and method of construction of the buildings on the site, certain areas were identified as having the potential for the survival of archaeological remains, although the extent of such survival could not be predicted (Fig. 10). In other parts of the site, such as the Hordern Building, which had a sub-pavement basement level and was, as a whole, of massive construction or the Engineers' Building, again of massive construction, it was thought unlikely that any remains of much less substantial earlier nineteenth century occupation would survive with the exception of wells or similar deep features. It was agreed that where buildings were to be demolished they would be removed down to ground level leaving the present flooring levels in situ. Archaeological excavation would then begin at that level. It was initially thought that all archaeological work would take place after all above ground demolition work on the site had been completed. However, delays in the timetable for the works, due to the need to place the plans before the Public Works Committee, resulted in one season of excavation being carried out before demolition began and the second being carried out after the buildings had been demolished but as below ground demolition work and excavation continued elsewhere on the site. The below ground demolition and excavation carried out at this time by the demolition contractors included the removal of Gasholder No.4 and of the foundations of the Hordern Building and clearing the entire site down to a depth of about 8 metres in preparation for building work to begin. As a result of these changes it was agreed that in those parts of the site where it seemed less likely that archaeological remains would survive a 'watching brief' would be maintained and the demolition contractor would be aware that the archaeologist may need to record any structures found in these areas. Two seasons of excavation were carried out, from 7 March-12 May 1988 in the open area behind the Pitt Street shops and from 30 August-18 November 1988 on the site as a whole while below ground demolition work proceeded. Additional work was carried out from 3-8 January 1989 to finish excavating the well belonging to the Manse. A total of 34 people were employed on the site on a paid basis working both full and part-time. The site was not open for inspection to the general public during the course of the archaeological work because demolition work was being carried out at the same time. This made the site hazardous for the general visitor and difficult of access in various areas.
3.2 Method of archaeological excavation.

The timetable for the archaeological excavation of the site was determined by that established for the demolition contractor and within that general timetable the site was divided into areas which were to be completed within specified times. In general the demolition contractor kept to this plan of works, but the nature of the material excavated from the site, and when and how it could be disposed of, sometimes caused changes in plan. These were accommodated within the archaeological excavation but sometimes severely restricted the amount of excavation possible. Other restrictions arose as a result of the need to maintain access to parts of the site for trucks and large machinery, in particular around the gasholder which was being demolished.

A backhoe was used to remove the flooring of demolished buildings, which usually consisted of concrete slabs. The backhoe continued in use throughout the excavation to assist in the removal of rubble layers, spoil, overburden of various sorts and also to test some layers and to remove deep homogenous layers of fill. The machine was used with great accuracy and delicacy by the various operators employed during the excavation and its use made it possible to investigate the majority of this large site within the time available. On occasion it was also necessary to use the much larger machine being used by the demolishers, for large concrete slabs and reinforced concrete beams which were beyond the capacity of the backhoe. The larger machine was also used for large quantities of fill which it would have taken the backhoe a very considerable time to remove. Conventional archaeological excavation techniques, namely excavation by hand, used in combination with machinery proved a suitable way of dealing with a site of this size and type.

The first season of excavation was hampered by several weeks of rain over the Easter period 1988 but the second season was carried out in unseasonably hot and dry weather with only one day of rain in eleven weeks.

3.3 The subdivisions of the site used for the description of the archaeological remains

(Vol. 2 Fig. 10)

The archaeological remains recorded on the site are described by area according to the divisions established in the subdivision of the block in the 1840s and 1850s, as these have remained unchanged throughout the occupation of the site. Cross-reference is also be made to the designations used in the Conservation Analysis to identify each area (Fig. 10). The features discovered on the site which pre-date the subdivision of the block are described separately as these cross-cut the later subdivisions, being in no way related to them.
4.0 The archaeological remains of the occupation of the site in the late 18th and early 19th centuries

4.1 Evidence of early occupation pre-dating the subdivision of the site (Vol. 2 Fig. 11)

The earliest remains discovered on the site pre-date its subdivision in the 1840s and relate to its earlier use, adjacent to the Brickfields, as a Government Paddock and as a means of access from George Street to the southern part of the town. None of these activities is well recorded in documentary sources and the archaeological evidence provides information about the history of the area which is not available from other sources. Evidence of occupation of early date was restricted to the north end of the site and consisted of the following:

(1) layers of fill, that is material not of natural deposition, which may be road layers, with artifacts dating to the late-18th and early 19th centuries

(2) a large stone based and brick vaulted drain, probably a storm water channel built in the 1830s

4.2 Features of probable late 18th - early 19th century date associated with the use of the site as a Government Paddock (Vol. 2 Figs. 11-14, 36 & 38)

Stratigraphic layers which produced artifacts of this date were located in sections excavated along the length of the north side of the site. The location of these sections is shown in Fig. 11. The stratigraphic relationship of these layers to other features on the site may be summarised as follows:

In Section 1 (Fig. 12) in the north-west corner, these layers were overlaid by later fill relating to the Wesleyan School which opened in 1846.

In Section 2 (Fig. 13) immediately to the east, they were found against the north edge of the site where they were cut through by the construction trench for the foundations of the porch of the Wesleyan School built c.1845-6.

In Sections 8 (Fig. 38) and 9 they were located within the Austen Building below layers of building rubble which could be attributed to the demolition of the house which predated the Austen Building. This demolition took place in 1891.

In Sections 43 and 45 (Fig. 14) in the area of the Presbyterian Manse these deposits were found below the Manse stable floor layers where they were cut through by the construction trench for the 1830s brick drains, and also by the construction trench for the stables themselves built in the mid-1840s.

In summary all of these layers pre-dated all other features on the site including the brick drains dated to the 1830s.
In Sections 1, 2 and 17 (Fig. 36) these early layers consisted of a very distinctive white and pink mottled clay and were found immediately above a fibrous brown clay which overlies the natural blue and red clay. The fibrous brown clay had the appearance of an old ground surface with impressions of vegetation. To the east the layers in Sections 8 and 9 were much thinner deposits of clay without the distinctive mottling and in Sections 43 and 45 within the Manse stables were different again consisting of fill containing broken brick with some small sandstone and charcoal. None of these layers could be completely defined in plan. They survived only in small patches between the north boundary of the site and the buildings later constructed along it or in fragments beneath later features such as the Manse stables.

4.3 Artifacts recovered from early features
The quantity of finds from these layers was small and consisted largely of ceramics but there were insufficient sherds of any size for reconstruction. The assemblages were however consistent in composition and included cream ware, pearlware, lead glazes, lustre ware, Mocha ware and feather edge decoration in both green and blue suggesting a date range from the late 18th to the early 19th century. This is confirmed by the stratigraphy of the site as all of these layers pre-date features securely dated to the 1830s and 1840s.

4.4 Stone and brick drain constructed in the 1830s
(Vol. 2 Figs. 11, 15-19: Vol. 3 S1-S10)
A large stone-based and brick vaulted drain was found which ran across the site from the north-east corner (at the junction of Hay Street and Pitt Street) south-west to the southern edge of the Wesleyan School site. This was first located when excavating a section at the south end of the Austen Building. A fragment of the brick vault was found which had been cut through and levelled by the construction of the Austen Building, but it could not be fully investigated in the area available. The drain was also found immediately beneath the small outbuilding to the south of the Wesleyan School but was not fully explored here due to time constraints. The full size and extent of the feature was only seen when demolition began in the area behind the Pitt Street shops and the drain was sectioned by machine at the corner of the area. The section surviving against the south boundary of the Manse property was cleaned down and loose rubble removed. After this it was possible to excavate a section through the fill of the drain to obtain dating material (Fig. 19). A second section was also cut by machine and then hand excavated within the area of the Manse in which both the main drain and the side drains were found (Figs. 16 & 17). Advantage was taken of the sewer line through the manse property carriageway which provided another partial section of the same feature (Fig. 18) and the smaller drains were also investigated in smaller sections. The line of the drain in the immediate vicinity of the Manse was
established in small sections excavated only to the top of the brick vault. In 1989 when the area immediately to the west of the Manse was being cut back by the building contractors in order to construct concrete walls around the building area it could be seen that the Manse foundations cut through the top of the brick vault. In the two sections cut through the complete depth of the drain in which it was possible to see the fill of the feature (and from which it was also possible to see along the length of the drain for some distance) it appeared that the drain was filled with deposit to a depth of about 1.3 metres (Figs. 16, 17 & 19). The total length of the drain surviving on the site was 34.5 metres, dropping from east to west approximately 1.2 to 1.3 metres within that length (Fig. 15). The drain construction consisted of a base of sandstone slabs, with sandstone blocks forming the sides to a height of 90 cm from which level sprang a brick vault forming the top arch. Internally the drain measured 1.6 m in width and the same dimension in height. The construction of the brick arch consisted of two layers of sandstock bricks laid alternately around the arch as stretchers and headers with the exception of the central part of the arch where five or six rows were all laid in the same manner with headers on the inside row and stretchers on the outside. The mortar used was shell mortar and was thickly laid in parts of the arch to make up the semi-circular form as the bricks used were of regular rectangular shape and had not been specially shaped for this purpose (Figs. 16-18).

In one of the sections through the main drain which had been cut when the main sewer connection was laid for the Hay Street shops, an additional feature was seen on the south side of the drain. This was a timber lined drain running parallel with the large drain and built within its construction fill (Fig. 18). This feature was not located within other drain sections but these were not extended sufficiently to the south to have located it if present.

4.5 Brick side drains associated with the stone and brick drain
(Vol. 2 Fig. 16 ; Vol. 3 S3-S4 )
Two side drains of much smaller size were found when Section 40 was excavated and a similar feature was seen at the southern edge of the Wesleyan School site as demolition proceeded. These side drains had a flat base and straight sides with a small arched top built of four bricks. The internal dimensions were about 25 cm by 12.5 cm (Fig. 16). The extent of these smaller drains was examined in plan and section and they were found to extent for only a few metres to either side of the main drain.

4.6 Construction and plan of the large stone and brick drain
(Vol. 2 Figs. 16-19 ; Vol. 3 S1, S2, S7-S10 )
Sections 40 (Figs. 16-17), 44 (Fig. 19) and 47 (Fig. 18) were excavated within a comparatively short distance of each other. The construction of the drain was consistent throughout but the construction fill around the
4.7 Construction and plan of the small side drains
( Vol. 2 Figs. 14, 16 & 20 : Vol. 3 S3-S4 )
Two sections were excavated to establish the line of the small drain found on the north side of Section 40 which appeared to end by the east wall of the later manse stables. It was not possible in the time available to excavate the feature to natural ground but in both sections excavated it could be seen that the brick drain was built on a layer of charcoal which included much animal bone (Fig. 20). This was also recorded in Section 40. As also in Section 40 the top of the drain and all its associated construction layers were sealed with a layer of red sandy clay which was very distinctive. Similar fill was found adjacent to the northern end of the small drain in Sections 3B, 45 (Fig. 14) and 43 (Fig. 20) and may also be related to the construction of this feature.

4.8 Artifacts from the construction fill of the drains
( Vol. 4 A1-A4 )
Artifacts were found in the construction layers of the large and small drains in Sections 47 (Fig. 18), 43 (Fig. 20) and 48, but not in Sections 40 and 44 (which were excavated by machine) and were also excavated in horizontal plan within the area of the later manse outbuildings. The finds consisted of broken bricks, fragments of clay tiles, large quantities of hand made nails (many in new condition), a few sherds of lead glaze pottery and Chinese ceramics and several pieces of vitrified brick. The latter have been identified by Dr. George Gibbons as brick kiln waste, consisting of those bricks which were too close to the fire of the kiln and which "blew" (that is, exploded) during firing or which vitrified for the same reason and would have been discarded. This debris, together with the
fragments of bricks and tiles (which are known to have been manufactured at the Brickfields) suggests that the fill used to cover over the brick drains was being taken from an area where brick and tile making had been carried out. The ceramics in these deposits, although small in quantity, are consistent in date range and can be assigned to the period from the late 18th to the early 19th century.

4.9 Artifacts from the layers of fill which accumulated inside the main stone and brick drain drain

( Vol. 2 Fig. 19 : Vol. 4 A5, A6 & A51 )
One well stratified sequence of deposits within the large drain was excavated by hand in Section 44 (Fig. 19). Thirteen distinct layers of fill were identified with a total depth of 1.3-1.4 m, that is, almost filling the full height of the drain. With the exception of the fill which accumulated above some building debris near the base of the drain all of the layers of fill are evenly horizontal. This would suggest that there was no deep scouring of the drain as might be expected to occur with a rapid flow of water from the heavy rainfall to which Sydney is subject. Artifacts from these deposits consisted mainly of sherds of ceramics and glass, with some iron objects, pieces of leather and fragments of clay pipes. Layers 9 and 13 contained the largest quantity of artifacts with comparatively little in the other layers. Layer 13, the earliest in the drain, is distinctively different in its range of ceramic types from Layer 9 and from other material from the site (A5-6). A date in the early nineteenth century is suggested, probably in the later 1830s. Joins between the broken ceramics from Layers 6, 7, 8 and 9 indicate that these layers are contemporary. One blue and white transfer sherd from Layer 9 joined a jug which had been reconstructed from the fill of the Manse privies (A51) suggesting a connection between the fill of the drain in these layers and the occupation of the Manse area. As the foundations of the Manse cut through the top of the drain (and may have gone through the void to some depth), it is possible that from that date, c. 1846-47, the deposition of material in the drain may have been limited to that coming from the Manse rather than from other areas which the drain had originally served.

4.10 The historical evidence for the occupation of the area before the subdivision of the site

From 1788 until the 1830s the southern most limit of the town of Sydney was demarcated by the site of one of the colony's oldest and most important industrial enterprises, the Brickfields. Situated at the bottom of the steep descent on the main road through the town, before it branched west to Parramatta, the brickfields were concentrated around substantial tidal creeks which flowed into the southern end of Cockle Bay (Darling Harbour). In 1792 the brick kilns were located to the east of the main road (George Street) near the place at which it crossed the tidal inlet and the brickfields, that is, the place where the clay was cut, were to the
south-west between the road, Cockle Bay and the two main tidal creeks (2). In 1802 (Fig. 21) a neat arrangement of allotments was depicted at the 'Brickfield Village' on both sides of the road, where Lesueur noted 'there are manufacturies of tiles, pottery, crockery etc.' (3). By 1807 the industry had shifted to the east straggling a considerable area and a road branched off the east side of George Street leading to the brickfields, rejoining the highway at the turnpike (4). In 1810 official limits were put upon the brickmakers in their search for suitable clay when Governor Macquarie established the limits of his newly created Hyde Park (5). In an attempt to prevent any encroachments upon it by brickmakers the Acting Surveyor marked out the boundary line dividing Hyde Park from the brickfields. This ran from the rear of Mr. Wilshire's lease (which was on George Street) east across to Mr. Palmer's premises (at Woolloomooloo). Those who had been granted permission to make bricks and who transgressed this boundary would have their permission rescinded and would also be prosecuted. Brick making had been open to private enterprise from about 1800 although it was also a major occupation for convicts (6).

By the end of Macquarie's term of office the town of Sydney had expanded considerably and the grid pattern of settlement extended as far as Liverpool Street. To the south, the brickfields were still in business, sited along the many creeks which drained the southern foot of the hill (7). Other institutions had by this date been located in this part of the town in particular the Carters' Barracks, opened in 1819 and the new burial ground which was consecrated in 1820. In 1819 a road was constructed through the brickfields 'and thence to Parramatta Road near the new toll house' for the exclusive use of heavy government vehicles (8), presumably the government carts which the carters drove. This road left George Street at the corner of Campbell Street running in a curve to the road in front of the Carters' Barracks and then back to the toll house. On this route it ran across the Government Paddock (and the line of the later Hay Street) parallel with the stream which crossed the area running from behind the Carters' Barracks into Cockle Bay. The road was probably also used for access to the burial ground, as at the time it was consecrated and for some years afterwards there was no road to the Burial Ground from the east side of the town. Elizabeth Street did not extend this far and the Carters' Road would provide the most direct access from the George Street side. The line of the road is well illustrated in the 1822 map of Sydney (Fig. 22) and is marked in the much later Surveyor's plan of 1839 (Fig. 23) which also shows the proposed site for the Presbyterian School opposite the Manse (9).

By the 1830s Sydney was rapidly extending to the south and with the subdivision of new areas of the town there was a need to extend the existing streets to serve these parts and also to join up with the existing roads. These had not been designed on a grid plan.
Clay cutting and brick making had again moved to the east and the government's contribution to the brick making industry was diminishing, probably due in part to a reduction in the availability of convict labour. A cattle market was established on the government ground south of Campbell Street in the early 1830s and tenders were called for the erection of a Market House in 1833 (10). Campbell Street was at this time the southern most street on the east-west axis of the town. Under the direction of the Town Surveyor considerable improvements were effected in the condition of Sydney's streets and their associated drainage. Amongst these was the levelling of the considerable gradient on both George Street and Pitt Street between Bathurst Street and the foot of the hill formerly used as the brickfields. Between 1837 and 1839 work was undertaken levelling Brickfield Hill involving the removal of large quantities of earth and its redeposition in other areas to level the gradient (11). In 1837 the line of Pitt Street, which had previously stopped at Campbell Street, was fenced in across the Government Paddock south of Campbell Street and the front of the Carters' Barracks, incorporating the old Carters' Road. The arch (or bridge) over the stream was extended to take the continuation of the road (12). The Town Surveyor's work in extending Pitt Street ran ahead of the Surveyor General's Department's town planning and a temporary halt was called in December 1838 to enable that Department to draw up plans (13). Any attempt to continue the grid plan of the already established town streets was hopeless as too many buildings, some of considerable size and importance, lay in the way (Fig. 24). The old road in front of the Carters' Barracks was used as the continuation of Pitt Street and was called Parramatta Street from its junction with the Burial Ground Road to the turnpike. In addition to levelling and metalling streets, improvements in drainage also fell within the Town Surveyor's jurisdiction. In most cases this meant the construction of a system of street drains where none had previously existed. During the 1830s tenders were called for the installation of drainage systems in many parts of the town (14). These are not well documented in plans but the location of many of them can be ascertained from tender notices. Three types of drain are itemised, brick barrelled, stone flagged and stone drains which were arched (15). Neither the supply of the bricks nor the construction of the drains was carried out by convict labour but was open to tender. In 1835 tenders were called for a substantial stone drain 'at the back of the Corn Market' (16) and again in 1839 for a drain at the new Corn Market (17). In some areas these drains probably served a dual function taking stormwater and channelling numerous small streams which once flowed across Sydney. These can be seen in early maps. Several flowed from the higher ground on the east (in the district of the present Surry Hills) down to inlets at the south end of Cockle Bay, being tidal in their lower reaches. These provided a vital water supply in the brickfields. As the town of Sydney grew these streams disappeared, presumably being channelled into stormwater systems.
4.11 The archaeological evidence.
The archaeological evidence of activity on the AGL site before its subdivision in the 1840s is limited to the north end of the area but is both varied and substantial. It seems probable both from the historical and archaeological evidence that the clay layers found in section in the centre of the north side of the site, and in particular those in the area of the later Manse stables, are parts of the road built across to the Carters' Barracks in 1819. Their position accords well with the line of the road as shown in a number of different maps and plans (Figs. 23 & 24). A comparison of the levels at which the natural clay occurs across the site suggests that the natural contour of the land sloped down from the north-east corner to the west and south, towards the stream which crossed the site from the other side of Pitt Street flowing into Cockle Bay. The road was built along the highest level of the site parallel with the stream. Although the road would have been cut through by the drains, which were probably constructed in the 1830s, the road may have remained in service after that time. Evidence for this is provided by the substantial and slightly cambered layer of small sandstone rubble, which may be interpreted as road metalling of the period, overlying the red clay which sealed the top of the drains (Fig. 14). These probable road layers are in marked contrast to the much thinner layers of clay recorded to the west (within the later Austen Building) which may be interpreted as old ground surfaces. Although there is no evidence of permanent occupation on the site in this early period, the area would have been crossed by those working in the brickfields and there may have been earlier tracks across it, not shown on maps and plans, of a less official and permanent nature than the road to the Carters' Barracks. The clay layers at the north-west corner of the site are more difficult to interpret. The distinctive pink and white mottled clay immediately above the natural clay had an uneven profile making it difficult to determine the exact extent of the fill in section. A small number of artifacts from the clay indicated that the layers were not natural. It was the mottled clay in this area, occurring close to the surface, which was used for brick and tile manufacture (18). These pockets of mottled clay may represent natural layers, with some artifacts from casual occupation, or clay mixed for brick making but discarded for some reason. The substantial stone and brick drains found across the site post-dated these features but pre-dated the occupation of the site subsequent upon its subdivision. Historical documentation and the artifacts excavated in both the construction fill of the drain and the fill which accumulated in it, suggest that this large example of drainage engineering was probably built in the mid to late 1830s. The area was being considerably improved at the time and the remains of the brickfields occupation were being cleared away. Kiln debris in the construction fill over the drain indicates that the filling material was being obtained from an area once used for firing bricks. As it seems unlikely that fill for such a large construction would
be carted from any great distance so this probably came from the immediate vicinity. The full extent of the large drain is unknown, but it was also found just outside the boundaries of the site in Hay Street during excavations by the Metropolitan Water Sewerage and Drainage Board in 1988. The line of the drain as found suggests that it may have connected with a stream originating on the east side of Elizabeth Street as seen in various maps of the period. It seems most probable that the drain was originally excavated throughout its length in open ground (that is, it did not go beneath existing buildings), and that therefore it was constructed before this area was substantially built over. The south end of the drain on the AGL site would have been removed, at the latest, by the construction of Gasholder No.4 in 1872. It is however possible that the drain was built to discharge into the stream which ran across the site. This too was finally destroyed when Gasholder No.4 was excavated, with the exception of a small length found in these excavations (6.10).
5.0 The Presbyterian Manse site [ Area H ]

5.1 Method of excavation

The terrace of shops, Nos.199-207 Hay Street, numbering from west to east, were demolished down to ground level leaving in place their concrete floors. No partition wall had been built on the east end of shop No. 207 when the shops were built in about 1891, but instead the new building had been keyed directly into the back (west) wall of the Manse. At the same time new openings were made in the west wall of the Manse to allow access from the Manse (then used as a store) to the new buildings adjacent to it, in particular at the first floor level. The west wall of the Manse had thus been considerably altered and the outside face of the wall much mutilated by its use as an internal wall of the shop. Attached to it were wooden battens, plasterboard and tiling. This was later cleaned off revealing openings in the wall at ground floor level. Some of these could not be seen in an inspection of the interior of the Manse because of later partitioning and electrical fitments. Archaeological excavation began with the removal of the concrete floors using the backhoe. Hand excavation began immediately below this level in No.199, but in Nos.201 and 203 a layer of building rubble 20-30cm thick below the concrete was also removed by machine. The area occupied by No.205 Hay Street was almost completely disturbed by the main sewer connection for this part of the site. Before it had been filled in for use as an additional shop this area was originally the carriageway entrance which gave access to the back of the shops. The greatest depth of concrete flooring was found in No.207, comprising three different layers of concrete on top of each other. This concrete was cut through by a saw where it adjoined the back wall of the manse and the south wall of No.207 (a stone wall identified as part of the original Manse outbuildings) to avoid any vibration in the remaining buildings when it was removed. It was then necessary to use the larger machine to pull the concrete away as it was too heavy for the backhoe to manage. Some rubble layers between the back walls of the shops and the southern boundary of the area were also removed by backhoe.

The relationship of the earliest features found on the site, which have been described above, to the Manse outbuildings is shown in Fig. 25.

Substantial archaeological remains were found of the following structures associated with the Presbyterian Manse as originally constructed in about 1847:

(1) the outbuildings immediately adjacent to the back (west) wall of the Manse identified as the kitchen, storeroom and cellar

(2) the well

(3) the stables and coachhouse, with a cellar and loft

(4) the privies
5.2 The Manse and its associated outbuildings

5.3 The outbuildings adjacent to the back wall of the Manse
(Vol. 2 Figs. 25-29 : Vol. 3 S13-S16)

As demolition on the site proceeded it had been discovered that the south wall of No.207 Hay Street was built of stone to the height of the ground floor ceiling, above which the wall was built of brick. A short length of the wall also survived to the same height on the west side at the south-west corner and for a further distance at the level of the foundations. Attached to the wall at the ground floor level was a false wall of plasterboard and tiling, part of the kitchen of the Chinese restaurant which had occupied the premises immediately before demolition. The brick upper part of the wall was removed by the demolishers but the lower stone portion was left in situ during the archaeological excavation. It was then removed after it had been recorded.

The stone wall as found consisted of a single stone block thickness and was keyed into the Manse wall at the south-west corner of the main building (Fig. 27). The wall was 5.6m in length from the back wall of the Manse and 2.9m high with a return (at the same height as the south wall) along the west side of about 0.5m, but at the level of the foundations continued for a length of 4.7m (Fig. 28 & 29). In the west wall there was evidence of a doorway 2m high with a timber lintel. This doorway was in use as a part of the kitchen arrangements of the Chinese restaurant in conjunction with a partition wall which had been built about 1m within the back wall of the building. When the plasterboard and tiling were removed from the wall it could be seen that the inside of the stone wall had been painted white. At the corner of the wall on the outside there were two small holes just below the level of the lintel (Fig. 29). These may have been for a wooden gate or fence along the southern boundary of the Manse property. It appears that this stone wall was a remnant of the original outbuildings of the Manse, as known in plan from various detailed surveys of Sydney. This was corroborated by the discovery of other traces of these structures found beneath the concrete floors of No.207 Hay Street. The other remains of these outbuildings consisted of rows of flat stone blocks or piers. These were arranged in two main lines, the first running west-east parallel to the stone wall but stopping short of it at the east end and the second running north from this point parallel with the back wall of the Manse. The imprint of two other such blocks was noted west of this line. There were traces of slate on top of some of the blocks. These stone blocks probably functioned as the bases of the other walls of the outbuildings. Similar blocks could be seen under the surviving stone wall. Between the north end of this row of blocks and the Manse wall was a square setting of roughly shaped sandstones adjacent to a footing against the back wall of the Manse (Fig. 26). This may have been a threshold. There were no archaeological deposits directly associated with these features which were immediately on top of the clay layers.
sealing the fill over the earlier brick drain. Against the back wall of the Manse, slightly north of centre, was the entry to the cellar. This had been filled in with clinker-like material similar to that found below the earliest concrete floor of the shop. The cellar entry was lined with stone and was 1m deep. The doorway to the cellar in the manse wall had been bricked in. This opening was still visible inside the building.

5.4 Interpretation.
The archaeological evidence indicates that the outbuildings at the back of the Manse consisted of a rectangular building (of which the surviving stone walls and foundations were a part) 5.4m by 4.4m and a smaller narrow building 4.5m by 2.4m at right angles to it, parallel with the back wall of the Manse and covering the cellar entry. It appears that the only part of these walls to be keyed into the back of the house proper was the south wall of the larger building as there were no other marks on the back wall of the Manse to indicate where other walls joined it. A horizontal piece of wood set into the back wall of the Manse on the south side and a series of small joist holes may indicate the ceiling level of the larger building. (These were located below the later joist holes cut into the stonework of the manse when the Hay Street shops were built in 1891). The slightness of the supports for the walls and of the surviving wall suggest that these buildings were single storey only, presumably of stone for the larger building, like the surviving wall, but possibly of other materials for the building over the cellar entry. The stone footing adjacent to the manse wall at the north end may also have formed a part of these structures and the rectangular setting of sandstones next to it may be interpreted as the base for steps or a threshold of some type. It seems most likely that the larger room was the kitchen of the Manse and the narrow room associated with the cellar entry some type of storage place. The dimensions of the archaeological remains of these structures as excavated are in accordance with the historical evidence. The detailed plans of 1865 (Fig. 3) and 1880 (Fig. 4) show buildings of these dimensions and shapes at the back of the Manse. In the survey of 1886 (Fig. 5) the narrow building over the cellar entry seems to have been removed. The impressions of stone blocks to the west of the cellar area may indicate the line of another wall not recorded in documentary sources, possibly an extension to the storeroom, or a verandah. The archaeological remains provide little evidence as to how this area functioned in relation to the residential part of the Manse.

Unfortunately the back wall of the manse had been so mutilated by adaptation for later usage that the original openings on the ground floor had been totally removed, with the possible exception of the window at the north end. At least one doorway in the back wall of the Manse would have been necessary to allow access from the house to the privies, coachhouse and stables in the back yard and also to connect the kitchen with the dining room of the house.
5.5 The well

A well is not indicated on any of the detail plans of the site but was to be expected as a regular feature of houses in Sydney before the widespread availability of piped water. It was located near the middle of the northern edge of the property (within the later shop No.203 Hay Street) close to the street line and about 30cm below the present pavement level (Fig. 26). The clay packing of the top of the pit dug for sinking the well could be seen in plan. The well had an internal diameter of 84cm and was brick lined to its full depth of 4.82m from the top course of the brickwork (Fig. 30). The bricks, which were sandstocks with a deep rectangular frog, were dry laid flat throughout, that is with their sides facing into the well, with a number of half bricks completing the circle in those courses where it was necessary. At a depth of about 2.8m the sides of the well belled out gradually to a diameter of 1.2m at the base. This widening was not completely regular but was wider from north to south than from east to west. Across the bottom of the well and below the level at which the brickwork started there was a large timber beam and a few broken bricks firmly set in pale grey clay. Above this was the fill of the well. The fill was excavated in twelve layers of which seven were stratigraphically distinct, distinguished by different types of fill. The others were arbitrary divisions, adopted when there was no evident change in the fill for some depth. At a depth of about 3.7m there was water seepage and from this level to the bottom of the well the fill was wet sieved. The earliest layer of fill within the well was also the deepest stratigraphic layer, about 1.6m deep, with a large amount of domestic debris. Later layers were all much smaller, only 20-30cm deep and containing fewer artifacts. The top 70cm of the well contained a large worked sandstone block and the material around it was not compacted but very loose (Fig. 30).

5.6 Artifacts from the well - Layers 9-12. The earliest deposit

The homogeneity of the fill in the bottom 1.6m of the well, which is indicative of a single contemporary deposit, is confirmed by the artifacts from this layer. These are a closely dated group and there are ceramic joins throughout the three arbitrary divisions in which it was excavated. Similarly the same types of artifacts occur throughout the deposit. The largest quantity of artifacts from the well are from these levels and include the following types of material:

- **ceramics** - tableware from breakfast services, dinner services, serving dishes, small jugs and one washstand bowl (A27-A41)
- **glass** - the majority porter bottles with a few wine bottles, some oil and vinegar bottles and a very few pieces of large wine glasses and a few pieces of vases (A11-A17)
stoneware - ginger beer bottles and blacking bottles
iron - cooking pots and a few other iron objects
leather - shoe leather, mostly soles of shoes both adults' and children's sizes but with few fragments of uppers & two leather straps (A43-A44)
earthenware - flower pots
food remains - animal bones, 1 fish bone, a large quantity of peach stones, a fragment of coconut shell and a hazel nut
tin - cooking dishes
building materials - slates, window glass, wooden battens(?), wall plaster
household items - candle snuffer, brushes, chair leg (A19, A21)
children's toys - (A25-A26)
dress fastenings - 2 hooks
sewing items - a few pins, wooden bobbin, tatting shuttle, bone pins (A23)
tools - 2 awls (A22)
personal items - pen holders and pen nibs, letter seal, clay pipes, a heart shaped amber pendant (A23)
well bucket - wooden with hooped metal bindings and a metal handle (A7-A9)
metal name plate of a type for attachment to outside of the house - inscribed 'Revd. Jas. Fullerton' (A10)

Little of the ceramic material from the well was reconstructable although the method of excavating the deposit, in particular wet sieving, should have facilitated a good recovery level for artifacts. This would suggest that much of the material was already broken or damaged before it was thrown down the well. The condition of other artifacts from the deposit is similarly incomplete. The range and types of artifacts recovered are representative of many aspects of domestic life, food preparation and storage, cooking, dining, sewing, shoe repairs, gardening, children playing. The areas of the house in which these items might be expected to be found are equally diverse. The name-plate outside the front door, writing items in the study, tableware and glassware in the kitchen or pantry, tools and leather working in a workshop, cooking pots in the kitchen, a bag of peaches in the cellar or storeroom, food debris in a rubbish area. It is notable that there are only a few personal items in the collection and that these are sufficiently small to have been lost in the house and perhaps swept up at a later date. In addition to these items there are also building materials, in particular a quantity of wall plaster and wooden battens. The whole character of the deposit is suggestive of clearing out the premises after a family had moved, accompanied by a limited amount of repair work. None of the items thrown away is of great value, many were broken or damaged before deposition and all were thrown on top of the well bucket which was at the bottom of the well without any trace of the bucket rope. The inclusion of Dr. Fullerton's name plate amongst this removal debris is particularly indicative of a change of tenancy.
5.6 The date of the deposit
Many of the ceramic types in this deposit are not closely datable. Blue
transfer printed wares were the most common, with smaller quantities of
black, green and brown transfer prints, single glazes and also some hand
painted breakfast ware. Two wares were datable however, a grey transfer
print by Pinder, Bourne and Hope who worked from 1851-1862 and a black
transfer print known as ‘Sutherland’ design of the period 1851-1860.
Registration marks for the years 1849 and 1853 were identified on several
pale green bottles. The pen nibs were from California made by John
M(oc-hns?) but a date is not known for these. On the basis of this evidence,
combined with the general dating for the bulk of the deposit, a date range
in the 1850s is suggested, possibly in the first half of the decade.

5.8 Later layers c.1850s to the 20th century
( Vol. 2 Fig. 30 : Vol. 4 A42 )
The earliest and largest deposit of rubbish thrown down the well filled it
to a depth of about 2.6m and must therefore have rendered it useless as a
source of water. A depth of about 2.2m still remained void and was only
gradually filled over the next 50 years. The two layers immediately above
the earliest deposit may also be of 1850s date. These consisted of dark
soil and charcoal with a layer of broken bricks (Layer 8) with some
ceramics of the types found in the lower layers, most notably the green
and blue hand painted ware and above it a deposit of yellow mortar, like
that used for wall plaster. This deposit (Layer 7) had few artifacts but of
these the most distinctive was a Chinese bowl (A42). Layers 4, 5 and 6
contained few artifacts but appear to be of the period c.1860-1870.
Similarly Layer 3 had little dating material but what there was is
suggestive of the later 19th century. The loose top fill of the well
contained building rubbish of 20th century date.

5.8 The stables and coachhouse
( Vol. 2 Fig. 26 : Vol. 3 S17 )
Against the western boundary of the manse site were found the footings of
a rectangular building which, from its position and from the historical
evidence for the structures on the site, is interpreted as the coachhouse
and stables. This structure was 6.3m by 4.5m (20ft by 15ft) with the two
privies adjacent on the south side. The footing for an internal wall divided
the building into two parts, the northern end about 4m by 3.5m internal
dimensions (13ft by 11.5ft) and the southern, possibly in two parts 2.5m
by 1.25m (8ft by 4ft) and 1.25m by 0.8m (4ft by 2.5ft). A piece of stone
paving survived in the southern half of the building next to a thin stone
block set on edge. As the footings for the dividing wall had been removed
down to a lower level than those of the side walls it was not possible to
see if there had been a doorway in this wall. The footings of the building
were not fully excavated at the south-east corner and so the possibility of
an entrance at this corner was not investigated. Along the east wall of the
building the foundations were discontinuous suggesting that there may
have been both a set of double doors and a single door in this wall. The
larger part of the building could have accommodated stabling and a coach.
The flooring material associated with the first use of the stables was a
layer of small crushed sandstone. There were no significant stratified
deposits of finds specifically associated with the original usage of this
building. The only written descriptions of the manse outbuildings are those
given in the Rate Books. These refer to a cellar, stable, coachhouse and loft
together with a cellar, kitchen and storeroom as well as the dwelling
house proper. The cellar, kitchen and storeroom have been identified as the
buildings next to, and below, the Manse. In the building on the west side of
the yard the larger part probably constituted the stable and coachhouse
with a loft over. At the south end of the building the room with the stone
flagged floor was probably the cellar with the smaller area on the east
side providing access to the loft or perhaps an entrance to the cellar
separate from the coachhouse. (The term cellar refers only to a storage
place. The definition of the word does not include the concept of it being
under a building although this is often the case within houses). It is
assumed that like the Manse itself these outbuildings were built of stone.

5.10 The privies
( Vol. 2 Figs. 26 & 31 : Vol. 3 S18-S19 )
The foundations of two identical and adjoined rectangular buildings were
found on the south side of the stables and coachhouse. Each was 1.5m by
1.2m (5ft by 4ft) and on excavation proved to consist of a stone lined pit
1.05m deep interconnecting through a gap in the central stone ‘wall’
between the two. These are identified as the privies for the manse. The
northern of the two privies had been used until recently as a lavatory with
modern sewer connections and the top fill of the original pit had much
pipeline disturbance (Fig. 31). It seems that the original buildings were
probably demolished with the manse stables when the Hay Street shops
were constructed but that the function of this structure was retained. The
earliest layers of deposit in this feature were however undisturbed by
sewer connections. The southern privy pit contained well stratified
deposits with a large number of artifacts. The bottom layers consisted of
charcoal with a large quantity of ceramics, above which was a substantial
deposit of metalwork, mainly iron objects with some slag, indicating
smithing. Part of the bottom layer of charcoal and ceramics extended into
the gap in the wall between the two privies and some sherds from the
bottom layers of the northern privy joined those from the southern. This
would suggest that both pits were being filled in at the same time up to
the level of the top of the gap. The weight of the metalwork in the top of
the southern privy may have increased the compression of the deposit
forcing part of it through the gap in the wall as well as this occurring
naturally as the deposits on either side of the wall settled.
5.11 Artifacts from the fill of the privies
( Vol. 4 A45-A70 )
The bottom three layers of fill in the southern privy were clearly
distinguishable stratigraphically but the numerous joins between ceramics
from all three layers suggests that they were contemporary in deposition.
Similarly, joins between these layers and the bottom two layers of the
northern privy indicate that this pit was also being filled in at the same
time. Many of the ceramics were complete and could be reconstructed and
were therefore probably undamaged at the time they were deposited.
Amongst the items which could be reconstructed were several washstand
basins of the type used with ewers in the bedroom (A56-A57), a large ewer
(A50), a decorative flower pot (A47), chamber pots (A48-A49), a morality
plate (Dr. Franklin's maxim) (A68), a large quantity of plates, cups and
saucers in white porcelain with moulded blue design (A66-A67) and small
jugs with basket weave pattern (A52). Notable amongst the dinner ware
were plates and soup plates with the New South Wales coat of arms with
the kangaroo and emu as supporters and the motto 'Advance Australia'
(A69-A70). A joining sherd from the lip of a blue transfer print 'classical'
design jug which was reconstructed from this layer was found in Layer 9
of the fill of the large brick drain (A51). There was also glass including
wine and porter bottles (A46) and some window glass. Few personal items
were found in these layers although there were some fragments of china
dolls. Although many of the types of ceramics and glass were in circulation
from about the middle of the 19th century, their use is of long duration
making a narrower date range difficult to determine. A few items from
these layers which can be reasonably securely dated indicate that the
period of deposition must be towards the end of the 19th century, from
the later 1880s to the 1890s. The plates with the New South Wales coat of
arms are unlikely to date before about the 1880s. These would have been
imported from England as there were no local manufacturers who had the
expertise to manufacture wares of this sort. A fashion for patriotic wares
largely began with the Garden Palace International Exhibition in 1879 and
continued from that date. A small model of the Eiffel Tower (A45) also
found in these layers can be no earlier than the period 1887-1889 when the
tower was under construction.
Above these layers of domestic ceramics and separated from them by a
layer of molten metal was a large amount of metalwork, mostly iron. Over
500 identifiable items have been recorded in fair condition with a large
quantity of others in corroded lumps. Included in this deposit were nails,
screws, bolts, padlocks, washers, nuts, chains, keys, hinges, scissors,
grates, chains, bits, rods, files, calipers and spanners. In fact a huge
quantity of ironmongery such as might be expected in a hardware store.
There were few artifacts of other types amongst the ironwork, which is of
itself difficult to date precisely, but a few other items were indicative of
a date range into the 20th century, post-dating the construction of the
Hay Street shops. A similar but much smaller amount of iron objects on the south side of the privy against the west wall of the area may indicate that after the privy had been demolished above ground level the stone surround of the pit was still visible and was used as an area in which to throw scrap iron objects. This was probably under the cover of the shed which ran along the south wall forming an outbuilding to the shops with the functioning 'privy', now a water closet, next to it.

5.12 The Manse yard
( Vol. 2 Fig. 26 )
The area of the yard around the Manse and its outbuildings was not excavated in its entirety. Much of the area was taken up with the 1830s brick drains and their associated construction fill, which had been investigated in a number of sample sections. The clay layers sealing the top of this feature formed the ground surface on top of which the kitchen outbuildings were constructed adjacent to the Manse. Similarly in the centre of the area, these layers were close to the surface and were cut through by the drainage connections at the back of the shops. It is possible that in removing a depth of about 20-30cm of building rubble with the backhoe some traces of other buildings were lost, but sewer and stormwater drainage connections had disturbed much of the area. The only other features found in this area were an entry into the brick drain and a wooden beam in the south-west corner against the wall. The small vertical drain connecting with the main brick drain was 1.1m deep and covered over on top by three bricks. At a lower level a ceramic pipe led into it but as only one length of the pipe remained, it is not known what this served. The timber beam found in section in the corner of the Manse property may be part of one of the sheds against the southern boundary which are shown in various plans of the property. Artifacts stratified above the beam were of late 19th century date.

5.13 The manse and its outbuildings c.1847-1891 : the historical and archaeological evidence
( Vol. 2 Fig. 26 )
Land was granted to the Presbyterian Church in 1842 for a residence for the minister of the church which was then being built in Pitt Street South at the south-east corner of what was later to be named Hay Street. The architect of the church was James Hume and the builders the firm of Brodie and Craig (19), well known Presbyterian stonemasons. It appears from Surveyor Rawnsley's sketch that there was some discussion about the choice of site for the Manse as two sites are marked on his plan, that immediately opposite the church and another the 'allotment as selected' further south on the government paddock on the other side of the stream (Fig. 40). No details are known of the architect and exact date of construction of the Manse, but Dr. Fullerton was in residence in 1847, having previously lived with his brother at 57, Pitt Street (20).
When Dr. Fullerton moved into 'The Manse, Pitt Street, Cattle Market' he was married and had three young sons (21). Two daughters were to follow, born at the Manse in 1849 and 1851 (22). The house was of stone with a slate roof and is regularly described as having two floors and seven or eight rooms with the outbuildings described as a kitchen, storeroom and cellar and a stable, coachhouse, loft and cellar (23). The internal arrangement of the rooms in the house including their connection with the kitchen, cellar and storeroom adjacent is now difficult to determine because of later alterations. The cellar of the house is confined to the south end of the building and the central passage below the hall. This was probably because of the large brick drain built in the 1830s which passes at an angle beneath the northern part of the house site. If it was not visible on the surface by the 1840s its presence was certainly discovered by the builders, who cut the foundations of the Manse through it. The plan of the foundations in the basement and other surviving features including the level of the centre window in the back wall indicate that the central entrance hall of the house widened at the west end for the staircase. The position of the back door of the house is not known. The fenestration of the front of the house on the ground floor repeated that in the floor above with the front door below the central upstairs window. This can be clearly seen in photographs taken in 1902 (S50-S51).

Dr. Fullerton is listed in street directories and Rate Books as the occupant of the Manse from 1847 until 1858-1859. In 1859 he remarried (24) and moved to Elizabeth Street (25). He had been widowed in 1852 (26). The Manse must have been rather small for a family with five children. After Dr. Fullerton and his family left, the Manse was let to tenants until 1882. In 1883 its domestic and residential use ceased and it became a hardware store. None of the tenancies during this period was of long duration. The deposits excavated from the well in the back yard are suggestive of the house and outbuildings being cleared out in the 1850s and of some minor works being carried out, possibly replastering. Precise dating evidence is lacking in this deposit with the exception of bottles with registration dates of 1849 and 1853 and none later. It is possible that the Fullerton family moved before 1858-1859 but were still listed in the Directories at the Pitt Street address, or even that the Manse was used by Dr. Fullerton mainly for parish purposes while he resided elsewhere. The archaeological evidence would not however contradict the documentary evidence that he continued to live there until he remarried.

The positions and sizes of the Manse outbuildings are first documented in the 1865 Trigonometric Survey of Sydney (Fig. 3) and the archaeological remains are in accordance with these. The Rate Book descriptions assist in the identification of the function of the various parts of the buildings. As the well was rendered useless as a water source when it was partly filled in, it is assumed that a piped water supply was available in this part of Sydney by the late 1850s. No changes to the outbuildings are evidenced by the surviving remains but had there been any, these
may not have manifested themselves at the level of the foundations. No evidence was found in excavation of two additions to the buildings in the yard which are indicated in plans. These were an additional structure against the south edge of the site shown in the Surveyor General's Sketchbooks (Fig. 32) and a larger shed in the same position in Percy Dove's 1880 plans (Fig. 4). The sketchbook plan is undated but is with a collection of plans from the period 1863-1867 (27). The 1880 shed could have been an enlargement of the earlier structure. In the 1880 plan the ?storeroom parallel to the back wall of the manse extends to the Hay Street frontage. This is not evidenced in the archaeological remains but all traces of it could have been obscured by the later Hay Street shop. By 1886 this appears to have been removed although some aspects of this plan (or at least of its dating) seem to be unreliable.

In 1883 the Manse became the premises of Robert Harwood, ironmonger and locksmith. The firm stayed in business at this address for the next thirty years. It is not known if any major alterations were made to the building for this change of usage before those which accompanied the construction of the Hay Street shops in 1891. The former Manse stables, yard and shed provided considerable space for the ironmongery business and could be entered from Hay Street. The dating of the material found in the southern privy and the types of object it contained suggest some domestic usage for the site until late in the 1880s. This could have been by Robert Harwood or his employees or perhaps even by tenants. When Mrs. Sarah Keefe was listed as the occupant of the house in 1876 it was a boarding house (28). The ceramics from the privy included several washstand basins and jugs (all of different patterns) which might perhaps indicate multiple occupancy by tenants. It is possible that the Manse continued to have some domestic occupancy when the premises were first used by Harwoods. In about 1890 the manse allotment was redeveloped and its new buildings and usages are recorded from 1891.

5.14 Redevelopment of the manse allotment 1891

In about 1890 the Manse allotment was redeveloped and four shops built on the area which had once been the yard. This redevelopment coincided with the construction of the New Belmore Markets on the opposite side of Hay Street. Although the economic climate was not good this renewed interest in the old markets no doubt prompted many owners to reconsider the potential of their own properties in the area. The archaeological remains of these 1890s buildings were excavated after they were demolished in 1988. The Manse was retained as a part of the 1890-1891 changes but its outbuildings were largely demolished. This redevelopment did not however involve the total clearance of the area to the west of the Manse but rather, significant features of the former outbuildings were retained in the new plan and influenced its layout to a considerable degree. The most significant features to be retained in the redevelopment
were the footings of the original stables, the location of the northern privy, the south wall of the Manse kitchen and the line of the west wall of the same building. This re-use of parts of earlier buildings was found also in the shops built in 1907 over the site of the Wesleyan Chapel. On the west side of the Manse property the lines of the walls of the stables were re-used as the foundations for the shops. As these were not continuous on the east side, large stone blocks were laid at right angles across the line of the earlier wall and another stone footing was placed on top of this (Fig. 34). This technique of construction was only used along this wall line. At the back of the Manse the south wall of the former kitchen was retained, thus dictating the size of the new building, and the foundations of the west wall were simply added to, and extended to the street frontage to form the west wall of the new building. Within these parameters, and using the old stables as the basic unit the block was divided from west to east into three terraced stores and a carriageway with another store, also part of the terrace, joined on to the back of the Manse. The foundations of these buildings were of stone, possibly reusing material from the site, with brick partition walls between them. None were of great depth. Drainage and sewer connections were laid at the back of the stores, exiting from the site along the carriageway. An area of brick paving was found outside the back wall of No.199 but did not survive elsewhere. It is probable that the back yard was originally all paved in this manner but that this had been largely removed by drainage connections of various dates. The site of the old northern privy continued to be used as a lavatory though presumably with a new building above ground level.

5.15 No.195 Hay Street
(Vol. 2 Figs. 33 & 34)
The only significant sequence of floor deposits was that found within the original Manse stables, later the store No.195 Hay Street. Artifacts from the fill above the foundations of the wall which divided the original stables into two parts are of later 19th century date and indicate that the wall was probably removed when the rest of the stables was demolished. The robbed wall trench and the floor area to the south of it were filled in to the level of the coachhouse floor with a layer of crushed sandstone (Fig. 34). The foundation of the east wall of the new store was then made by placing stone blocks on top of the existing lower courses of the stables foundations rather than by excavation. The construction of the new building did not remove any of the earlier layers and the floor level was left higher than that of the other new buildings. A layer of compacted mixed fill was laid contemporary with the brick partition walls of the store. On this were placed four flat stone 'pads' or piers to support a wooden floor. Traces of the timber flooring and nails were found (Fig. 34). This floor was later covered with a thick layer of yellow clay with crushed sandstone possibly used as the base for the concrete floor.
5.16 Nos.197-199 Hay Street
(Vol. 2 Fig. 33)
The area within these two stores was not totally excavated but was
sampled in No.197 in the sections dug across the small 1830s brick drains.
The only deposits which may have related to the occupation of the stores
were those immediately below the concrete flooring which were removed
by backhoe. This material (about 20-30cm deep) consisted of rubble fill
used as a base for the concrete. No stratigraphic distinctions were
apparent in the fill. Immediately below this fill were the layers associated
with the drains, the fill of the pit for sinking the well and some material
which may have been road metalling of a surface of the Manse yard. There
does not therefore seem to be any evidence in the area of substantial
clearance for the construction of the new stores or any significant
accumulation of deposit associated with their occupation before the
concrete floors were laid.

5.17 The carriageway entrance
(Vol. 2 Fig. 33)
Almost the entire width of the original carriageway entrance to the stores
had been disturbed by a major sewer connection which was encased in
concrete. Two stone bases remained in situ on either side of the entrance
on a line with the back of the stores. That on the east side of the entrance
rested on the brick vault of the 1830s brick drain (Fig. 18). Changes in the
numbering of the properties in about 1920 suggest that this entrance was
filled in to form another shop at that time.

5.18 No.201 Hay Street
(Vol. 2 Fig. 33)
While it is apparent that the form of the original outbuildings of the Manse
substantially influenced the redesign of the site in 1890-1891, the
sequence of building immediately behind the house and its connection with
the existing building is not well documented. There were no archaeological
deposits relating to the occupation of the premises as a shop. The
successive concrete floors of the shop occupation lay immediately over the
clay layers sealing the top of the 1830s drain, with only the foundations of
the original Manse outbuildings between. As noted previously, the south
wall of the old Manse kitchen was retained and the foundations of the west
wall. These were added to, to form the west wall of No.201 Hay Street. No
partition wall was built on the east side of the building but instead the
front wall and the floor joists were keyed directly into the back wall of
the Manse. Unlike the other stores built on the site in this redevelopment
the building consisted of two parts with different roof lines. The front
part was of the same dimensions from north to south as the other shops
with the same roof line, that is, sloping from front to back (S12). The back
wall of this part of the building coincided with the line of the north wall
of the original kitchen. Behind this part of
the building the roof line of the rear part of the new premises sloped from the back (south) wall to meet the back line of the other roof. The coincidence of the lines of the back of the front part of the building and the line of the earlier kitchen wall can of be explained by the re-use of the foundations of the original stables for the new stores, for the south wall of the stables and the north wall of the kitchen were in line. However it may also be a possibility that the single storey kitchen was originally retained in the redesign of the site and that another storey was added to it at a later date. Unfortunately the interior of the buildings were not studied in sufficient detail for the purposes of the Conservation Analysis to be able to attribute the constituent parts to phases of specific date and the exact sequence of building cannot now be determined. Similarly it is difficult to analyse and date the various rearrangements which took place in the Manse. With the redevelopment of 1891 many of these were related to the adjacent building No.201 Hay Street, or at least to the upper part of that building, and the two must be considered together.

5.19 The occupation of the Manse allotment 1891 - 1920s
Although all of the new stores in Hay Street were of two stories they were designed such that the two floors were independent of each other. There were no stairs connecting any of the ground floor establishments with the area above. Instead this upper space, which consisted of one large open room without internal dividing walls, was entered via the old Manse building and was utilised as a part of Harwood's ironmongery establishment as its warehouse. No doubt it was needed, for the store had lost the area which it had previously used in the Manse yard. In 1891 the old Manse and the new building next to it (then No.201 Hay Street) were assessed together for rating purposes and were described as having two floors and eleven rooms. The whole was called the 'Beehive Stores' and the name was painted on the outside walls of the manse. The name painted on the south wall was revealed again in 1988 when the adjacent Pitt Street shops were demolished.

Because of this horizontal division of the property its occupancy is quite hard to interpret from Rate Assessment books and street directories. The Metropolitan Detail plans of Sydney for 1895 (Fig. 6) and 1901 (Fig. 7) indicate the buildings only as blocks. A fire insurance company plan of a somewhat later date however provides more information, although not of the internal arrangements of the buildings (Fig. 8). The inclusion in this plan of buildings on the AGL part of the block built in 1915-1920 and the names of the tenants shown on the properties indicate that the plan is dated about 1920. It shows the three stores on the Presbyterian property still numbered Nos.195-199, the carriageway, store No.201 and the Manse. In the back yard of the property behind Nos.195-199 and the carriageway is what would appear to be an open shed and between it and the back corner of No.195 a small building, the lavatory. Incorporated in the shed was the site of the earlier privy probably reduced to a foundation.
As noted above (5.11) it is difficult to attribute a precise date to the metalwork found in this area which was typical of the type of stock in trade that Harwoods' might be expected to carry. It could have accumulated at any time in their occupation of the 'Beehive Stores'. The layer of slag at the base of this deposit indicates a small forge on the premises and the stone lined pit (half filled) of the old privy was probably suitable for the purpose. A fragment of corrugated iron sheeting found next to this is interpreted as a part of the old shed. The arrangement of the small buildings at the back part of this area prior to demolition in 1988 was not recorded but seems to have consisted of an assortment of sheds possibly including parts of that shown in the 1920s plan. Adaptive reuse of materials already on the site seems to have been typical of the site.

The next major reorganisation of the buildings, in particular the old Manse and its adjacent store and upper area above the other stores took place in the 1920s. The only archaeological evidence of these changes was that the carriageway was filled in for use as a shop. In 1925 alterations were made so that the upper rooms above the terrace of stores could be let separately rather than as one large warehouse as it had been used by Harwoods. The doorway in the north wall of the old Manse (on Hay Street) and the alteration of the position of the staircase in the Manse may date from this time. If a second floor had not been built on the back part of No.201 before this date, as suggested above, then these changes would certainly have necessitated such an addition. This provided access to the first floor via the newly positioned stairs. The lavatory addition on the west wall of this part of No.201 may also be a part of these changes. Before this the buildings were not well served with sewer connections and the only lavatory seems to have been that outside in the yard by the shed. Other alterations to the Hay Street properties were not evidenced in the archaeological record. These mainly relate to the function of the various rooms and how they were tenanted and include connections made through the south wall of the Manse upper floor into the adjacent Pitt Street shops.
6.0 The Wesleyan Chapel site [Areas I & J]

6.1 The earliest remains
(Vol. 2 Figs. 11 & 35)
The earliest features found in this part of the site consisted of layers of mottled clay found in section against the north-west corner, thin layers of clay within the area of the Austen Building and the large 1830s stone and brick drain. These are discussed elsewhere (4.0). A prominent feature of the early plans of the area, the stream which crossed the site, is discussed below (6.10). The location of the drain across this area in relation to later features is shown in Fig. 35.

6.2 The Wesleyan Chapel and its associated features as originally constructed
(Vol. 2 fig. 35; Vol. 3 S21-S26)
The most impressive feature of this part of the site was the foundations of the Wesleyan Chapel which were found intact beneath the later shops. These consisted of the well fashioned stone foundations of a rectangular building, with the longer axis along the Parker Street frontage and a small square porch at the north end. The building measured 13.3m by 10m externally and 12.45m by 9.1m internally, that is, approximately 40ft by 30ft. This confirms the dimensions known from documentary sources. The internal dimensions of the porch were 1.65m by 1.95m, that is, approximately 5ft 5in by 6ft 5in. The stone foundations survived to a maximum height of six courses of stone, about 1.55m in depth. The foundations were a single stone block in thickness widening in four places along the east, south and west walls at regular intervals. The walls of the porch had been removed down to a uniform foundation level as had those of the east wall, with more variation along the other walls. This is attributable both to the processes of demolition and to the subsequent history of use of the site. In the porch was a substantial layer of shell mortar covering the whole area. Within the building proper the sub-floor area was much lower and had been filled in with building rubble and other debris at various periods. Five stone piers survived within the building, three in a line on the west side and two on the east. Four of these comprised single square sandstone blocks and the fifth two blocks one on top of the other. These were probably supports for wooden floor joists. Traces of slate, presumably a damp course, were noted on top of the foundations of the east wall. The damp course would have been below the plate of the floor joists. The depth of the sub-floor area of the Chapel was about 1.5m measured from the natural ground within the Chapel foundations to the assumed level of the wooden floor relative to the damp course. The natural in this area consisted of clay which retained in parts the fibrous impressions of an old ground surface. There were no traces of a wooden floor or of any type of flooring material on top of this. The depth of the foundations may be attributed to various factors namely.
the need to find a consistent solid base for the foundations in an area in which the upper layers of deposit were rather mixed, the size of the building to be constructed and a need to accommodate to the contours of the site which sloped away to the south and west. The construction trench for the north wall of the Chapel foundations and for the porch was investigated adjacent to the Hay Street frontage where it cut through the earlier mottled clay layers (Fig. 13). In this part of the building the construction trench was very wide to accommodate the porch. This was not however the case along the west and south walls where the foundation trench was also seen and where it was only slightly wider than the wall itself. This was the case on both sides of the foundations, that is, internally and externally.

There were no archaeological deposits within the Chapel or its vicinity which related to the use of the site for religious purposes.

6.3 The privies(?) (Vol. 2 Fig. 35)
The stone foundations of a small outbuilding were excavated to the south of the Chapel next to the southern boundary of the site. These were situated immediately on top of the vault of the large brick drain. The foundations could not be excavated in their entirety because of a large concrete foundation which overhung them, being part of the later shop foundations along the south side of the site. Parts of three walls of a small building were found, the stone foundations of the east wall ending where the top of the brick drain was highest. A layer of crushed orange sandstone covered the top of the drain within and over the foundations of this building. These foundations did not cut through the brickwork of the drain at any point. It is probable that this structure housed the Chapel privies.

6.4 Eaves drip gully (Vol. 2 Fig. 35)
A shallow gully extended along the full length of the west wall of the Chapel. It had a regular width of about 85cm coming to a point at the north end and squared at the south end. The shape and position of this feature suggest that it is an 'eaves drip gully', that is, a depression made by the action of water falling directly from the roof of a building without guttering or down pipes. The northern limit of the gully indicates the position of the end of the roof, showing the extent to which the roof line projected beyond the north wall of the building. The pointed shape of the north end of the gully would suggest that rainwater falling from the roof drained to the south which is the natural lie of the land. The area immediately to the east of the east wall of the Chapel was extensively disturbed by sewer and stormwater connections and it was not possible to identify the corresponding feature on this side.
6.5 Yard surface around the Chapel
( Vol. 2 Fig. 35 )
On the west side of the Chapel between the Chapel wall and the line of the Parker Street frontage was found a compact surface of orange-yellow clay. This deposit was packed up against the wall of the Chapel overlying the construction trench of the wall, the old ground surface and early layers of occupation, as seen in section at the north end of the site (Fig. 12). Into it were cut, or worn, features associated with the occupation of the Chapel. The clay level sloped down towards the south end of the site near the stream and varied in thickness from 20cm at the Hay Street frontage to 50cm near the back wall of the Chapel. It also continued in part around the south wall of the building. This is interpreted as a deposit laid down artificially to form a proper surface for the area surrounding the Chapel. Like the eaves drip gully this also drained to the south.

6.6 Postholes at the north-west corner of the site
( Vol. 2 Fig. 35 )
At the north-west corner of the site cut into the clay yard four postholes were found. These were on average 30-40cm in diameter and 20-30cm deep. They were probably postholes for noticeboards, one of which can be seen in this position in an 1897 photograph of Parker Street (29).

6.7 Postholes along the north boundary of the site
( Vol. 2 Figs. 35 & 36 )
Three postholes were identified in sections along the north edge of the site. These were seen in Section 2 (Fig. 13), a posthole 35cm in diameter and 60cm deep, at its base just touching the mottled clay layers and in Section 17 (Fig. 36) a post void and a wooden post still in situ 10 cm in diameter and 35 cm deep dug into mottled clay. These were probably parts of the fence which enclosed the front of the Chapel. A picket fence can be seen in the photograph of the Chapel taken in about 1880 (30). In Section 2 (Fig. 13) can be seen several clearly defined thin layers of deposit which had accumulated around the post including layers of different types of clay, sand and small sandstone rubble. These probably represent the different ground surfaces during the Chapel's use and may be representative of the surface of Hay Street as well as of the Chapel frontage. In Section 17 (Fig. 36) similarly, layers of grey clay are found and some sandstone fragments.

6.8 Foundation trench to the west of the Chapel (Vol. 2 Fig. 37 )
On the west side of the Chapel and cut through the clay yard was a straight sided trench running from the Parker Street frontage to the west wall of the Chapel. This feature was stratigraphically later than the clay yard and also the eaves drip gully which it cut near its northern end. As excavated, the trench was found to be about 50cm deep becoming shallower at the east end and terminating just short of the Chapel wall.
The widening of the trench in the centre proved on being sectioned to be indistinguishable in fill from the main trench. This may have been the foundation trench for a wall across the area with a central thickening for strength in the construction. The date of construction of this feature is not known but must have post dated the installation of guttering on the Chapel or else it would have impeded the drainage from the roof by means of the eaves drip gully.

6.9 The house built next to the Chapel in Hay Street

In the area between the east wall of the Chapel and the west boundary of the Presbyterian Manse property were found slight remains of the small house which once occupied the site. These were discovered within the footings of the later Austen Building when a section was cut through the fill of the building by machine and were also seen in plan in part of the area. The lines of two walls were identified running on the east-west axis at a distance of 4m (13ft) and 6.5m (21ft) respectively from the Hay Street frontage. The outside of the back wall of the building was approximately 6.85m (22ft 6in) from Hay Street. These wall trenches cut through earlier clay layers. Parts of the foundations of the west wall of the house were found in the north-west corner of the Austen Building. The continuation of the line of the wall can be further deduced from construction features of the later building. The stratigraphy in the north-west corner of the Austen Building had been destroyed in 1988 when a test pit was dug to determine the extent of the foundations with a view to the possible retention of the facade of the building in the site redevelopment. When archaeological excavation began certain features were identified in plan and in section as parts of the earlier building. These included stone foundations set at right angles to the front wall of the Austen Building (S30). Between this line of foundations and the west wall of the Austen Building, the front of the Austen Building comprised brickwork distinct from the rest of the front wall. This portion of brickwork had subsided. Two other stone blocks continued the line of the earlier foundations to the south where the vertical line of the foundation trench could also be identified in Section 8 (Fig. 38). This section was excavated to investigate the clay filled trench along the inside of the west wall of the Austen Building. This feature which was about 1m wide at the north end narrowed to the south and on excavation was also found to decrease in depth at the same point at which it narrowed. This variation in the construction of the later building coincides with the extent of the west wall of the earlier house as known from the position of its cross walls (Fig. 37). It would seem that the additional width and depth of the later construction trench was necessary to remove the foundation of the earlier wall and its associated construction fill and to make the new foundation secure. Beyond the point at which the earlier wall ended a much smaller trench was dug for the later foundations. The only remains of the
earlier house were those which were not completely removed on the street frontage. It is possible that parts of the north wall of the Austen Building were also built incorporating the earlier foundations. This could not be investigated as it was not possible to excavate the site right up to the street line because of the danger of pavement subsidence. The building rubble stratified above the remains of the foundations of the house contained much brick and slate probably from the demolition of the structure in 1891 (31). No other features of the internal arrangements of the house could be examined in the time available nor were any traces identified of the known outbuildings of the house. These were described as a shed (Fig. 4) and as such the remains may have been slight.

6.10 The stream which ran across the site
(Vol. 2 Figs. 35 & 39 : Vol. 3 S31)

In the south-west corner of the site and running across it at an acute angle was found a deep stone lined channel which had been filled in with a large quantity of sandstone boulders (Fig. 35). This was identified as a part of the stream which once ran across the entire site but which was eventually channelled and described as a 'drain'. The majority of this feature would have been destroyed by the large scale excavation work for the construction of Gasholder No. 4. The base of the channel or drain was 45cm wide and 1m deep, lined with carefully dressed sandstone masonry and with sandstone blocks across the top of the channel Fig. 39). Above this level on the south side was a wall of unmortared sandstone blocks 75cm high. On the north side the natural ground sloped gently upwards from the side of the main channel for a distance of 2m. Above the level of the main stone lined channel the layers of fill which had accumulated in the top of the feature followed the contour of the north side slope down to the drain. The level of the top of the wall of the drain was approximately that of the old ground surface or natural ground found within the chapel foundations. The bottom of the channel or drain was 1.56m below that level. A number of layers were defined in the fill of the feature and some of these were productive of artifacts (Fig. 39). A difference in the nature of the fill of the drain between the lowest layers on the north side, which consisted of yellow sand, and the layers above with much darker fill (including top soil-like material) is confirmed by an analysis of the artifacts. Joins in the ceramics from the top layers of fill indicate the contemporaneity of these layers which were of late 19th century date. These layers were a part of the fill placed around the Chapel in the later 19th century probably to level the yard area. Finds from the earlier layers probably date to the 1860s. In both cases the artifacts consisted mainly of domestic ceramics and glass.
6.11 The Wesleyan Chapel site 1846-1891
( Vol. 2 Figs. 35 & 37 )
In 1845 and 1846 the Wesleyan church was granted three sites at the south end of the town of Sydney for a school, Chapel and minister's residence. These were adjacent to each other in the same block of land. The school and residence allotments as granted were on the corner of Hay Street and Parker Street and the Chapel allotment on Pitt Street next to the Presbyterian manse and almost opposite the Presbyterian Church. The whole complex of buildings did not eventuate. Only the Chapel was built and that was erected on the allotments nominated for the school and minister's residence. The Chapel was built and opened for worship in 1846 and like many other such buildings was used as a Day School and Sabbath School as well as a Chapel. It was located towards the west side of the allotments with the front of the building facing Hay Street and the Cattle Market. Perhaps it was thought expedient to place the chapel as far as possible from the boundary of the Presbyterian minister's residence (the Manse) and the Presbyterian church. This location would however also ensure the maximum light in the building and may have been dictated by the topography of the site. On the Hay Street side the building's foundations were cut through layers of clay which once formed tracks across the former Government Paddock. At the south end the building extended to the edge of the level ground before the ground fell away to the stream or drain at the corner of the site. The foundations which were of stone were excavated to the level of the natural blue and red clay which provided a solid base for the structure. Certain features of the design and construction of the chapel can be deduced from the archaeological remains and are corroborated by photographs taken in about 1880 and 1897 (32). Although these photographs long post-date the construction of the Chapel, the archaeological evidence does not suggest any major alteration to the structure during its lifetime. Above ground the building was constructed of brick with thicker ribs of brickwork at regular intervals along the walls, as indicated at the foundation level. Central to each of these wall divisions was a large round headed window. The small entrance porch was open on three sides with arches reminiscent of the window openings. The shell mortar layer found in the porch may have formed the base for stone flagging in the entrance. The roof of the chapel was hipped and originally of shingles, later replaced by iron. The slight projection of the roof line over the end of the north gable was indicated in the archaeological record by the eaves drip gully. The Chapel consisted of one large room with a wooden floor with the joists supported on sandstone piers. These joists were presumably set into the brickwork above the damp course as there was no indication of them in the stone foundations. The level of the slate damp course along the east wall was comparable with that of the mortar layer in the porch suggesting a slight step up from street level into the building. The 1897 photograph, with a view of the back of the building, shows that unlike the other walls the fenestration in the south wall
consisted of oval windows set high in the wall. At this end of the building would have been the pulpit with the pews or benches arranged facing towards it. Around the chapel a yard surface of clay was laid, draining to the south with the natural lie of the land.

At the south end of the Wesleyan allotments was a stream or drain. A somewhat meandering water course is shown on many early maps crossing this area running from about the line of Elizabeth Street, north-west to the south end of Cockle Bay where it was probably affected by tidal flow. Through time the line of the water course becomes straighter on the maps suggesting that it had been channelled and is described as a 'drain'. This is most apparent when comparing plans dated March 1842 (Fig. 40) (33) and January 1843 (Fig. 41) (34) during which period the stream appears to have been considerably straightened. The exact position of the stream in relation to the boundaries of the Wesleyan allotments varies in different maps and plans but is most clearly indicated as cutting across the south-west corner of this site in the Surveyor's plan of 1846 (35). This was confirmed in excavation. No archaeological material was obtained from the layers associated with the construction of the masonry channel of the water course to indicate when it was built, but a date in the early 1840s would seem a possibility. This is suggested by the documentary evidence noted above and might have been undertaken as a part of the general improvement of the area with the subdivision of the site at this time. The top of the drain was probably covered over with stone slabs as seen in the section. Without this it would undoubtedly have been a hazard, particularly to children. Within the area of the Chapel property the ground sloped quite steeply towards the drain. Although perhaps a somewhat hazardous encumbrance the drain would have served a useful function for the Chapel property as suggested by the levels of the surrounding yard and the eaves drip gully. Although referred to in maps and plans as a drain, the Surveyor General noted in 1858 that the water course was used as a source of domestic water for people resident in the area (36). In 1864 the Colonial Engineer requested permission to fill in the drain but the outcome of this application is not known (37). From the archaeological evidence it would seem that the sandy fill which accumulated immediately above the stone channel can be dated to the mid-19th century. As the top of this layer sealed a channel full of layers of silt, the drain had probably ceased to have any effective purpose by this time. The large scale filling in and levelling of this area with which the upper layers of fill are associated is however of a later date. The greatest part of the length of the drain across the rest of the site would have been removed when the tank was excavated for Gasholder No.4 in 1872.

The small building of which some foundations were found against the south boundary of the site was probably the privies. A building is shown in this position in the 1865 plan of the site (Fig. 3) but had disappeared by 1880 (Fig. 4). It was removed in the early 1870s as a consequence of the rebuilding of the southern boundary wall when the AGL Company built its
Gasholder No.4 (38). The exact design of the small building could not be ascertained as the foundations had been removed to the base course. This course was discontinuous at this level as it had been built to accommodate the curve of the brick drain which ran immediately beneath it. The drain does not appear to have been used as a convenient sewer outlet for the privies as the brick arch was intact here.

On the east side of the chapel a small cottage was built in about the later 1850s (39). First numbered as 17 Hay Street it was described in the 1858 Rate Assessment Book as a house of brick and slate and in 1859 as single storey with four rooms. The archaeological evidence indicates that the house was about 8.25m by 7m (27ft by 22ft) with a dividing wall about 4m (13ft) from the front wall. If the internal arrangements of the house were symmetrical about a central entrance passage this would give two rooms at the front about 13ft square and two smaller rectangular rooms at the back about 12ft by 6ft. The rubble fill in the area which probably resulted from the demolition of the building in 1891 contained much brick, slate and fragments of wall plaster. A greater depth of rubble was found to the south of the area than near the street frontage probably because the construction of the new building would have required more clearance where new foundations were to be excavated.

6.12 Redevelopment of the site 1891

In 1891 the house next to the Chapel was pulled down (40) and replaced by two terraced stores, three stories high with a facade tending towards the plain, rather than the highly elaborate late-Victorian style. Although the Austens were not the first tenants, the building became known as the Austen Building. The original facade can be seen in a 1914 photograph (S32) and in later architectural plans (Fig. 44). Several alterations and additions were made later to both the building and its facade. The foundations of the original 1891 building were excavated and recorded when the wooden floors were removed after demolition. These foundations were of roughly shaped sandstone blocks with brickwork above. At the south-east corner of the building the east and south walls cut through the 1830s brick drain which ran beneath the site (S5). The intervening portion of the drain within the building was left in place but the top of the arch was broken through. The new building had a frontage to Hay Street of 9.6m (31ft 6in) and measured 21m from north to south (45ft). There is evidence from the Pitt Street stables of a connection between the two properties at about this time (Figs. 48 &49), when both were leased to the Austens. The foundations of the west wall of the new building were unusually deep. These, and traces of the earlier house, were examined in Section 8 (Fig. 38) and in other sections put across the area of clay fill against the west wall. It was found on excavation that the foundation trench for the west wall was wider and deeper at the north end for a distance of about 7m from the Hay Street frontage but then narrowed and became shallower.
along the rest of the length of the wall. It has been suggested that this may be accounted for by the foundations of the earlier house which were on this line and which were largely removed for the new construction. It is probable that the considerable depth of the foundations in this part of the structure (which does not appear to be repeated elsewhere) may also be attributable to other factors. The first of these was the propinquity of the Chapel. The distance between the two buildings as constructed was 91 cm (3ft) and within this area the ground had already been disturbed for the construction of the Chapel. In addition, the new building was to be taller than the Chapel and a firm base was no doubt sought for its stability. It might have been thought possible to found the building on sandstone bedrock but this is only found at a much greater depth in this area, although occurring at a shallower depth elsewhere in Sydney. Given all of these factors, the builders were evidently particularly cautious in digging these foundations.

Although the Chapel remained the same for some years after the eastern part of its site had been redeveloped, the archaeological evidence indicates that one major change was made to its surroundings. This was the filling in and levelling of the area which had once been a clay surfaced yard (Fig. 37). This was done by importing on to the site a large amount of top soil-like fill containing a very large quantity of artifacts, in particular bottles and broken crockery (A71-A82). This deposit was found along the full length of the west side of the chapel and continued round the back of the building. In the south-west corner of the site it filled in the depression left where the stream had been and had only been partly filled in during the 1860s. This large deposit effectively levelled the site bringing the general level around the chapel up to that of the adjacent street. At the Hay Street end the depth of the top soil like fill was about 30cm. This increased, accommodating the drop on the site, to about 70-80cm deep at the south end where large sandstone boulders were also used in the fill of the drain area.

The artifacts from this deposit have not been studied in great detail as they are not considered to have originated on the site and therefore do not contribute directly to its history. The material has however all been identified and catalogued. The nature of much of the ceramics which include large serving dishes and much dinner ware suggests that it may have originated in an hotel. Similarly the large numbers of clay pipe stems, ash and charcoal in part of the deposit may come from cleaning out fire grates. (Clay pipes were knocked out in the fire and the stems thrown away). The different nature of this deposit is also indicated by the large number and variety of ceramic patterns it contained. This was quite unlike that from elsewhere on the site being much larger in range of design and colour from any of the other deposits which are believed to have originated from occupation on the site itself. Joins between the ceramics found in different parts of this large layer indicate that the whole was
contemporary in deposition. Large quantities of glass bottles were also found, many almost complete. The date of the artifacts is in the range from about the 1860s to the late 19th century. The material may have come from a tip or from demolition work elsewhere in the city. Although the material does not add to the history of the Chapel site, it provides a most useful type collection of material in use in Sydney in the later part of the 19th century. Such comparative material is much needed to assist in the study of archaeological sites in Sydney in general. The date range of the material in the deposit suggests deposition in the 1890s. There were a number of joins in the ceramics found on the south side of the chapel with material found in the demolition layers of the house next to the Chapel. These indicate that these layers were deposited at the same time as the demolition and building work was going on. Some historical evidence also appears to corroborate this suggestion. When the new stores were leased to G. T. Austen in 1902 the lease included the land on which the stores stood from the Hay Street frontage to the southern boundary of the site, a 3ft passageway between the stores and the Chapel and also a right of way 10ft wide running along the back of the Chapel connecting the passageway with Parker Street. Thus Austen had access to the side and back of his stores via the Chapel passageway and also a right of way to Parker Street. For this to be an effective means of ingress and egress it would have been necessary to fill in the ground around the Chapel (in particular the depression over the stream) and to ensure that the level of the area round the Chapel did not drain to the south making this entry very wet. It seems most likely that this arrangement was effected when the new stores were being built in 1891 as the lessees would require a means of entry other than that from the street or by the passageway which would have been far too narrow for the delivery of goods and stock.

6.13 Further redevelopment 1906-1907

In 1906-1907 the Wesleyan site was further redeveloped when the Chapel was demolished and three stores were built in its place (S32) (42). The archaeological remains of this development show how parts of the Chapel foundations were utilised in this change and how the earlier structure on the site dictated its future plan and redesign. This has been seen also in the redevelopment of the Manse site (5.14). The major archaeological components of this redevelopment consisted of the adaptive re-use of the foundations of the Chapel, the addition of new brick foundations in association with these, two basement areas formed within the basement of the old Chapel and the filling in of the other areas of the basement to equal the level of the filled ground on the west side of the site.

When the Chapel was demolished its brick superstructure was removed down to the foundations which were left almost intact. These substantial stone foundations were used as the basis for the design of the new
buildings which were to be erected on the site thus considerably reducing
the labour of their construction. The back wall line of the Chapel was again
to form the back wall line of the new building and the east and west walls
to act as divisions within the structure. Short lengths of new brick
foundations were built from the front corners of the west and east walls
to the Hay Street frontage thus forming a continuous footing. Down the
centre of the Chapel a new division was made. This consisted of a short
length of foundations from Hay Street to the Chapel porch and then a new
brick dividing wall down the centre line of the Chapel. On the west side,
along the Parker street frontage, the whole of the foundation was new (Fig.
42). As the distance between the west side of the Chapel allotment and the
west wall of the Chapel was almost equal to half the width of the Chapel,
this division of the site using the old foundations produced three shops
within the new structure of almost equal size. Using the back wall of the
former Chapel as the back wall of the new building the 10ft wide right of
way at the back of the property was retained and could be used for the new
properties. Similarly the passageway between the east wall of the new
building and the west wall of the store occupied by George Austen
remained intact. In addition to the re-use of the old foundations the
sub-floor area of the chapel was used to form two cellars. These were
made at the south end of the Chapel by building cross walls from the west
and east walls to the new brick centre wall. These new dividing walls
were roughly constructed of brick and worked sandstone blocks. The west
end of the west cellar wall was keyed slightly into the stonework of the
Chapel foundations. The other joins were only roughly mortared. The floors
were concreted over immediately above the old ground surface. The rest of
the basement area was filled in with rubble, some of which was demolition
debris. This included some fragments of architectural detailing from the
chapel such as mouldings. Among the artifacts from the west side of the
chapel fill was a group of over 20 very large white, moulded breakfast
cups, the majority of which had lost their handles before deposition (S22).
These were found in a concentrated deposit in the north-west corner of the
basement above a layer of staining as if they had been in a container,
perhaps a cardboard box. With the cups was a gin bottle. Although the
majority of these ceramics were concentrated in one group, sherds of the
same type of cups and saucers were found throughout the full depth of the
basement fill. Similarly, joining sherds of other ceramics were found
from all layers suggesting that it had all been filled in at the same time.
Because of the large quantity of fill in this area the top 1m of the deposit
was excavated by the larger machine. The rest was excavated by hand. No
basement was constructed in that part of the new building which lay
outside the old ready made basement that is, in the store built between the
west wall of the Chapel and Parker Street. It is presumed that a brick wall
was built from the west end of the back wall of the Chapel to the west
wall of the new building to form the back of the store.
No indication was found of this and it must have been of superficial depth. Traces of it above the level of the late 19th century fill put into the site could have been removed by later concrete foundations. Nothing was apparent in the archaeological record of the internal arrangements of these new buildings except the line of the layers of fill above the porch on the west side parallel to the wall of the store. These are interpreted as the entrance to the middle store. There is no evidence that any changes were made to the buildings occupied by George Austen at this time. In 1909 these three new stores were leased to George Austen, the lease being back dated to 1902 to run concurrent with his lease for the rest of the property. The leases were for a period of fifteen years (43). In 1921 the land was sold to George Thomas Austen, junior. His father, who had been connected with the property for so long, did not himself effect the purchase as he had a conflict of interest being one of the trustees of the Hay Street property for the Methodist Church (44).

6.14 Alterations and additions 1926 -1927
( Vol. 2 Fig. 43 ; Vol. 3 S28-S29 )
In about 1926 the members of the Austen family began to upgrade and consolidate their holdings in Hay Street and Parker Street with a view to the various premises assuming the appearance of a single architectural style, without actually rebuilding the entire complex. Only part of this scheme was ever realised. The archaeological remains of these changes comprise the last major alterations to these buildings. Like the construction of the three stores on the Chapel site, this scheme included the re-use of parts of the existing buildings but with some substantial building additions. The plan comprised four elements (1) the incorporation of the building to the west into the complex (2) additions to the back of the original Austen Building (3) a new building in Parker Street and (4) a toilet block and light well between the original and new buildings.

(1) On the Hay Street frontage the major change was to incorporate the 1907 store next to the Austen Building on the west side into that structure but with a different more modern facade which was to be the prototype for the remodelling of the whole property (Fig. 43). This also included taking into the structure of the building the passageway which had previously existed between the two properties. Placed halfway along the length of the Hay Street frontage of the Austen property this new facade was to be the central element of the new design (45).

(2) Additions were also made to the original Austen Building. The archaeological and documentary evidence indicates that the original building, as constructed in 1891, did not have rooms extending to the back of the property but that the space at the back of the shop was probably used as a loading area with doors connecting with the Pitt Street stables. A photograph of the property in 1914 (S32) and the 1920 plan show this original arrangement (46). The extension to the building was probably built in about 1926 and was certainly in existence in 1927 (Fig. 44).
The foundations of this extension run along the boundary walls of the property on the east and south and form a continuation of the original wall on the west.

(3) The remaining unoccupied part of the site was now also built on. This was the former right of way from Parker Street to the original part of the Austen Building, past the backs of the shops on the Chapel site. A shop was built fronting Parker Street with a facade similar to that in the new central part of the Hay Street frontage and bearing the date 1926 (47).

(4) The light well and toilet block at the back of this building (3) connected the new building with the redesigned premises in Hay Street (including the former store and passageway) and with the west wall of the original building and its extension. These were now all interconnected, or capable of being such, all be it in a rather unorthodox manner.

The archaeological remains of these alterations and additions were the filling in of the two cellars which had been built in the old Chapel basement, the removal of the back wall of the shops on the Chapel site, the removal of some of the courses of the south wall of the Chapel which had formed the foundation for the back wall of the shops (in order to put in large concrete foundations for the new building), and the foundations of the new building and its associated light well and toilet facilities (S29). The line of the former passageway continued to be used for sewer, drainage and water connections despite the fact that these now ran beneath the floors of a building. These additions and alterations were essentially those that were still in existence in the buildings on the site in 1988, before demolition (Fig. 47). The reinforced concrete foundations of the new buildings were massive. These were not simply beams, but rather large rafts of concrete with reinforcing, much wider than the brick foundations which they supported, and as deep as they were wide.

The main deposits of artifacts associated with these alterations and additions were in the fill of the two cellars. Both contained large quantities of building rubble with brick and sandstone. The fill of the cellar of No.191 Hay Street also contained a very large quantity of metal much of which appeared to be parts of cars, including running boards and the ribbing for folding hoods. The occupants of the premises during World War I and in the early 1920s were motor car upholsterers (48). There were few ceramics but some glass, mainly bottles. These were largely of late-19th century date. These could have been thrown in with building and clearance rubble from elsewhere on the site. Some disturbance of the layers of fill put into the site in the later 19th century must have occurred during these alterations, particularly when parts of the south wall of the chapel were removed to put in the concrete foundations for the new building. The inclusion in the fill of the cellars of artifacts of this date is not therefore surprising. There were fewer artifacts in the cellar of No.193 and again the glass bottles could be of late-19th century date.
6.15 Subsequent alterations 1927
(Vol. 2 Figs. 44 & 45 : Vol. 3 S32)
A second and final stage of the remodelling of the Austen Building took place in 1927, although it was not intended at that date to be the final alteration to the property. There was no archaeological evidence below ground of this architectural change which was still in place when the building was demolished. This change was the alteration of the facade of the original Austen Building from its late Victorian style (Fig. 44: S32) to Art Nouveau in keeping with the new facade of No. 193 (Fig. 45). The plan for this alteration held by the Sydney City Council (49) also includes the scheme for the future extension of the design along the whole Hay Street frontage (Fig. 45). This never eventuated, leaving a rather uneven and asymmetrical building.
7.0 The Pitt Street Wesleyan property (Areas F & G)
( Vol. 2 Figs. 48-52 ; Vol. 3 S33-S49 ; Vol. 4 A85-A88 )

7.1 Method of excavation

The Wesleyan property, occupied in the 19th century by the Austens’ timber yard and subsequently by shops, stables and a garage was excavated in stages. In the first season of excavation the garage area (Area G), then an open yard, was investigated in part and was backfilled before demolition work began. A thick ‘carpet’ of protective material was laid down with some rubble on top to protect the area as it was to be heavily used for access during demolition work. This was necessary as access to the site was very restricted because of the buildings to be retained and the large gasholders which made this a difficult site in which to manoeuvre.

When above ground demolition was completed the site sheds and facilities were placed where the shops had been (Area F) and the area behind was required for access around Gasholder No. 4 to demolish it and for trucks removing demolition rubbish and fill from the site. When the stables/garage area finally became available for excavation again it was with a very restricted time schedule. Rubble layers below the stables floors as previously identified in the first season of work were excavated by machine and there was not sufficient time for much detailed work in the area. Sewer and drainage connections which had been re-excavated, repaired and added to on many occasions and three large fuel tanks for the garage had caused much modern disturbance. Test pits were dug by machine in parts of the site to the natural clay. It is probable that the need to use machinery, without sufficient time to then examine layers by hand excavation may have caused some loss of archaeological evidence in this area. However, a comparison of the levels at which the natural clay occurred across the site and the level of the demolition debris of the timber yard suggests that the site was extensively cleared in the later 19th century and that only vestigial remains survived of the earliest phases of occupation on this part of the site. Towards the end of the excavation and the end of the demolition work it was possible to excavate below the southern half of the Pitt Street shops, that is, on the south side of the carriageway entrance running through the terrace, up to the north wall of the fire station. No excavation was carried out under the north end of the shops.

The area behind the shops had previously been roofed but this had been removed in 1980 because it was unsafe. The whole floor area of the garage was covered with concrete and this was removed by machine. Beneath this level major disturbance of the site included drainage and sewer connections which had been replaced on many occasions, stormwater connections to the west wall, presumably associated with the need to take away the stormwater from the roof, and petrol tanks and associated features immediately behind the shops associated with the use of the area as a garage.
7.2 Problems of interpretation and dating specific to Area G

The majority of the remains found in this part of the site date to the late-19th and early 20th centuries and cover a period of about 20-30 years. These posed particular problems in interpretation as regards the exact sequence of construction and use, not encountered to the same degree anywhere else on the site. The reasons for this relate to the remains themselves and also to the nature of the archaeological material recovered from them. The archaeological remains consisted of floor and yard areas of considerable area but of little depth and consequently with little true archaeological stratigraphy. Comparatively few artifacts were found on the site and of these most are of types which can only be dated within a comparatively large time range. This meant that in the majority of cases the artifacts were of little assistance in attempting to interpret the complex sequence of horizontal deposits. A number of detailed surveys of the site (Figs. 4-8) provided invaluable historical evidence for this comparatively short sequence of occupation of which there were substantial remains.

7.3 The earliest remains - the large brick and stone drain
(Vol. 2 Fig. 11)

The earliest feature identified on this part of the AGL site was the large brick and stone drain of the 1830s which cut across the north-west corner between the Manse property and the Wesleyan property, later the Austen Building. This was removed by the demolishers in this corner and the sections then cleaned up and excavated by hand (4.4-4.11).

7.4 Remains of the 19th century occupation of the site
(Vol. 2:Fig. 47)

Vestigial remains were found of the 19th century occupation of the site in the south-east corner behind the back of the shops. One small area in which features survived was found between the disturbance caused by sewer lines, petrol tanks and the foundation trench for the shops. These remains consisted of a thick deposit of black wood shaving or sawdust, very compacted, and to the west, traces of timber flooring with some small posts still in situ. In the centre of this floor was a deposit of artifacts which included corrugated iron sheeting, a bucket base, leather shoes and an oil lamp. A coin of 1881 was found close by. To the south and west the level consisted of a compacted crushed sandstone like layer. Between the sawdust and the timber building there was a distinct division with a row of bricks indicative of a wall running between the two. These remains were all covered with clay and small rubble well compacted. They are interpreted as the traces of buildings of light construction, probably timber and iron, associated with the use of the area as a timber yard. The artifacts were probably debris from the demolition or removal of the buildings when the site was cleared before the shops were built. A comparison of the level of these remains, of the depth of clearance of the
site found beneath the shops and the level at which the natural clay occurs indicated that these few traces of the timber yards survived at just about the same level as the natural and clearance layers. It seems possible therefore that these were the only traces left of the earlier occupation and that the site was extensively cleared down to the level of the natural clay when the shops and stables were built in the late 19th century. The date at which this was carried out is not known but would appear to have been some time in the later 1880s. The Metropolitan Detail Survey of 1886 (Fig. 5) shows the site to have been extensively cleared by that date with the exception of the 'house in the middle of the timber yard. Street directories however list the Austens' timber yard at this address until 1890. George Austen is listed as the resident of the house in Hay Street next to the Wesleyan Chapel only in 1890, just before it too was demolished, but not earlier, suggesting that he may have been living at the timber yard until that date. The redevelopment of the Pitt Street site took place, probably in two phases, in about 1891-1893.

According to the documentary evidence the northern half of the Wesleyan Pitt Street property was occupied as Smith's Cart Yard in the early 1880s (50). Excavation in this half of the site was restricted by time constraints but a number of trial pits were dug by machine from the black clay level below the stable floors. These showed that this black level lay immediately above the blue/red clay which had been identified elsewhere on the site as natural. This was tested to some depth. The nature of the black clay, which on being exposed became extremely hard and almost bitumen like, was unlike anything else encountered on the site. It is not known if this was natural or if the surface on which the stables were to be built had been prepared in some way which produced this type of surface. No features could be discerned in this layer and as it had proved in test pits to immediately overlie the natural, it was not investigated further. No traces were found in this area of structures associated with the cart yard. It is possible that like the timber yard these were of light construction and that the yard had been well cleared for the construction of the later shops and stables. The use of this part of the site as a cart yard appears to have been brief.

7.5 The stables associated with the Pitt Street shops

When the concrete was removed in the area behind the Pitt Street shops extensive remains were found of the stables associated with the shops. As noted above (7.2) these remains were difficult to interpret as the stratigraphy was largely horizontal and because within this palimpsest of flooring types it was possible for stone slabs and cobbling to be removed, replaced and reorganised without any obvious disturbance to the layers below. The following sequence of buildings is suggested by a study of both the archaeological evidence and the documentary record of the site.
7.6 The earliest stables c.1891
(Vol. 2 Fig. 49: Vol. 3 S36-S43: Vol. 4 A88)
The earliest remains which were identified, associated with the use of the shops by produce merchants, consisted of buildings around the perimeter of the area on all three sides surrounding a central yard. These comprised wooden floored buildings along the south and west walls and the foundations of three other structures along the north wall in which there were no traces of wooden flooring. These are interpreted as stables and hay and chaff sheds. Along the south and west walls remains survived of the joists of the timber floors and the lines of the partition walls marked by wood and lines of nails. The back of these structures was edged by rows of bricks laid flat and the front, opening onto the yard, had brick edging with the bricks laid on their sides, probably acting as a gully for drainage. It seems most likely that these buildings and their floors were of wood with wooden partitions probably under a continuous roof of galvanised iron.
The size of parts of the buildings along the west wall as shown by the partition divisions suggests that these were stables. In the north-west corner the divisions were larger and this area may have been used for storage. Along the north wall a small building at the north-west corner had brick edging similar to those along the west and south walls but no traces of wooden flooring. Next to this were the foundations of three brick walls forming a two-part building of more substantial construction with a continuous brick wall at the back, that is, on the north side, as distinct from the brick edging which was a feature of the wooden floored structures. These buildings extended almost to the back (west) wall of the shops. In the south-east corner traces of the foundation of a brick wall were found but the full extent of this was not determined. In the buildings on the west side of the site a small passageway marked by partitions was noted in line with a blocked up entrance to the Austen Building suggesting the connection between the two properties. Both were leased to George Austen when they were new and were built at about the same time.
The remains found are very much in agreement with the outline plan of the property provided by the Metropolitan Detail Survey of 1895 showing buildings around the three walls of the area surrounding an open yard (Fig. 6). The type of yard covering at this period is not known. It seems most likely that some type of hard standing would have been required with a traffic of horses, vehicles and goods. Later surfaces consisted of sandstone paving, granite cobbles and wooden blocks. Some of these may have been employed in this phase of occupation and then re-used later when the buildings were rebuilt and redesigned along slightly different lines. None of the later arrangements of paving can however be directly associated with these earliest stable buildings. In the few occupation layers which can be associated with this phase, or at least with the end of the use of this phase of buildings, artifacts were few in number and generally of undiagnostic type. One notable association with these layers
was however the presence of Chinese ceramics, mainly bowls (A88). This is in
accordance with the evidence from street directories and rate assessment books which show a majority of Chinese tenants as the first occupants of these premises. The shops were used by produce merchants, conveniently situated close to the New Belmore Markets. The redevelopment of this site in a period of economic depression might have been prompted by the New Markets construction.

In the west elevation of the Pitt Street shops (Fig. 53) a distinct difference can be seen in the brickwork on the south side of the carriageway (S34) which suggests that the terrace of shops was in fact built in two parts. The window and door openings in the two halves of the terrace are also of different sizes (S33-S35) as are the areas of paving at the back entrances to the premises (7.8). The documentary evidence corroborates this, for in the 1891 Rate Assessment part of the land is listed as unoccupied and the rest occupied by new two storey brick buildings (51). The position of the join in the brickwork between the two parts of the building indicates that the southern part must have been built first. The closeness of the buildings at the north end of the stables area to the back of the shops may be a result of their construction before that part of the terrace of shops was completed. The door and window openings at this end of the shops are neatly bricked in and may therefore have been so since they were built (Fig. 53).

7.7 The second stables phase

A number of changes in the arrangement and construction of the stables area are discussed here. These may not necessarily have all been carried out simultaneously but the evidence is insufficient to be able to date each of them very precisely. As these do not constitute a radical reorganisation of the area or re-use for another purpose, but rather adjustments within the original design and plan they are listed together.

Along the south and part of the west wall the wooden floored stables were replaced with brick floors and new brick ramps and edging gullies. These were laid on a slightly different alignment from the original wooden floors but in the main perpetuated the same divisions between the parts of the building. These were evidenced by differences in the pattern of the brickwork of the floors. These coincided exactly with the divisions between the earlier timber floors as seen in the positions of the timber partitions. The bricks which made up these new floors were laid on a layer of yellow sand (immediately above the remains of the timber floors) with the bricks laid on edge lengthwise to give greater strength and stability to the flooring. At the entrances to the stables, that is, on the side facing the yard, there were brick ramps sloping to the brick lined gully which was provided with proper drainage. This consisted of ceramic sumps with metal grates. The yard associated with this reconstruction was of substantial sandstone paving, neatly edged adjacent to the brick gully. At
the north end of the site a number of additions were made probably to provide more under cover storage. These consisted of a building added against the back wall of the Pitt Street shops. The foundation of this was found almost complete with the exception of the south end which had been damaged when a concrete bowser base and fuel tank were added at a later date. This wall was built as a continuation of the east wall of the stores against the north wall of the area but distinguishable from it. In the north-west corner three substantial brick pillars were built in line with the west wall of the same building presumably to hold an extension of the roof (S49). To the west of this the timber floors were replaced by brick. In the extreme north-west corner these bricks were laid flat without a good sand layer as bedding. To the south they were laid as elsewhere with the bricks set on their sides. Here too the pattern of the brickwork indicating different divisions within the building coincided with the earlier wooden partition divisions. In this corner the old brick edging associated with the earlier wooden floors was retained and there was no drainage provision. This was probably unnecessary as this part of the building was now under cover, with the roof line extended out to the three brick pillars. It is possible that some of the sandstone paving in this area was associated with the construction of this extension, although the paving remaining in 1988 did not fill the whole yard space. Wooden blocks found at the entrance to the stables area may have formed part of the entrance 'road' at this date set between large wooden beams as edging (S45). The extension of the building in the north-west corner and the new building at the back of the shops are shown in the detailed plan of 1901 which provides the only significant evidence as to their date. It is possible that these changes and the replacement of the wooden floors in the north-west corner of the site could have been carried out first, followed by the replacement of the rest of the timber floors by brick at a later date. One useful find for dating this change was a 1903 silver three penny piece which was stratified below the second phase brick edging. This suggests that the alterations in the north-west corner pre-dated those to the south. This might explain why the careful replacement of the stable floors on a somewhat different alignment was not continued around the full perimeter of the site. If the north-west corner had been redesigned with a different roof plan on substantial brick pillars first, then any rearrangement would have to work around this and take account of it. Nothing is known of the above ground structure of the stables but some fragments of moulding found in building debris at the south end of the site indicate an arch with a horseshoe decoration. It would seem that this remodelling of the original stables plan took place in stages, the first sometime after 1896 and before 1901 and the second after 1903.
7.8 The third stables phase

( Vol. 2 Fig. 51 : Vol. 3 S45 )

The third phase of occupation of the area as a stables saw the remodelling of the north end of the site. The central wall of the two smaller building along the north wall was removed to below ground level and massive sandstone paving was laid. This consisted of a distinct 'roadway' parallel with the building along the back wall of the shops with similar large blocks laid along the edges of the 'roadway'. To the west of this the area up to the brick edging was also paved, although some of this may have already been so. Adjacent to the south end of this paved area granite cobbles formed an entrance to this part of the site. The paving in this area was massive consisting of large sandstone blocks (not slabs) in a concrete mix which contained a large quantity of broken brick. It is possible that this area was all roofed and perhaps had an upper storey as a hay or storage loft. An additional brick wall running west-east from the west wall of the site may also be connected with this structure. The small building with brick edging against the north wall was probably also removed at this time and the remains concreted over. This arrangement is that which appears to be shown in the plan of the site dated about 1920 in which the structures at this end of the site are identified as hay and chaff stores and appear in part to be of two stories (Fig. 8). The concrete threshold between the two northern brick pillars may have been a doorway between the two parts of the building. It also helped to accommodate a drop in the level between the two parts of the structure.

Other alterations to the second phase of stables occupation consisted of new brick ramps and three sides of a small brick construction with a concrete skim floor on the west side of the site. There were also repairs or readjustments to the drainage system which required digging up the pipes and relaying them, with some relaying of brick gullies and edging. In the south-east corner of the area there were also traces of a wooden building south of the entrance way. These consisted of a timber sleeper beam? and a row of bricks as if for the base of a timber wall. The flooring within this area consisted of a clay layer with some small brick admixture. This may have been the 'old building' referred to in 1917 (7.9). At the back of the shops, south of the entrance, there was stone flagging with brick thresholds at the back entrances to the premises. Some stone flagging was also found at the back of the shops on the north side of the entrance but much of this had been disturbed by later drainage and other works. There was no trace on the north side of the brick settings at the back doors to these shops. Again, these differences may be associated with the different dates of construction of the two parts of the shops (7.6). This third stables phase would seem to be of early 20th century date c.1903 to c.1920.
7.9 The use of the stables area as a garage

Documentary sources indicate that the lessees of the property were given permission in 1917 to demolish the stables 'and another old building' (52). However, this may not have taken place straight away as the plan of the site which can be dated with some accuracy by the names of the tenants to about 1920 (Fig. 8) shows the stables still standing. Use of the shops by produce merchants had ceased by World War I and the Markets had moved. New occupants were in trades associated with the motor industry. Numerous changes in tenancies took place and in 1924-1926 changes to the buildings including alterations to the shop fronts. These factors would all suggest that the use of the area behind the shops as stables and associated facilities had certainly ceased by the early 1920s. Remains of the garage occupation found when the concrete flooring was removed (Fig. 52) included three large petrol tanks and two bowser bases with associated pipework. There was also an inspection pit. This was lined on one side by four pieces of brick pillars of the same dimensions as those which were built in the second phase of stables occupation. This would suggest that all of the stables superstructure was demolished for the purposes of building the garage and the whole of the inside space remodelled. The whole area may have been roofed when it was converted for garage use. This was effected by building brick piers against the walls of the area formed by the external walls of the surrounding buildings. Drainage connections to the roof were connected to the main drainage connection running across the site from the entrance carriageway. This cut through the brick floors of the stables completely destroying them in parts, indicating that they were no longer in use at the time. The brick floors and the drainage lines were concreted over to form the floor of the garage.

7.10 Excavation beneath the Pitt Street shops south of the carriageway [ Area F ]

Excavations were carried out beneath the floor levels of the three shops south of the entrance carriageway. In each the fill beneath the concrete flooring and above the natural clay layer was of similar composition and deposition. Immediately above the natural clay were found in the centre of each shop a row of brick piers. Above this and below the concrete flooring was a deposit of fill with artifacts, notably ceramics. In each shop the majority of the ceramics in this layer consisted of stoneware ginger beer bottles. This was the largest quantity of stoneware bottles found anywhere on the site. Date and name stamps included the 1840s and 1850s from the pottery of Thomas Field, with a few from Fowler's Camperdown works and some by Kearney (A89-A91). The stratigraphy of the fill showed that cart loads of material had been tipped into the area between the foundations working from the street frontage westwards. This could be
seen most clearly in the section which was retained through the fill against the north wall of the Fire Station (Fig. 55). The large amount of stoneware in the fill and the virtual absence of other types of artifacts suggests that this material had either been obtained from a tip, or more likely, from the site of the Field pottery itself. This part of the site had been excavated, for the foundations of the shops, to a depth of about 1m to accommodate a drop in the level of the ground from east to west. This slope was still apparent in the carriageway entrance in 1988 but had been levelled out across the garage floors when the concrete was laid. It would appear from the entrances to both the Manse and the Fire Station that there has been little change in street level in these parts of Pitt Street in 150 years. A photograph, looking north from the fire station in the 1860s (S53) does however indicate a drop in the street level between these two buildings which was not apparent by the early 20th century. It would appear that the redevelopment of the site at the end of the 19th century involved some levelling of the area to accommodate this variation. The original open fronts of the Pitt Street shops are well illustrated in photographs of the area taken during construction work for the Central Railway in about 1902 (S50-S51).

It was not possible to excavate beneath the Pitt street shops on the north side of the carriageway entrance.
8.0 The south-east corner of the site (Areas B & B1)

8.1 Gasholder No. 2
( Vol. 2 Figs. 56-59 )
During the nineteenth century the main purpose of the AGL Company's use of their site was for the storage of gas, to maintain the supply pressure at the south end of Sydney. A number of gasholders occupied the site and as demand grew these were replaced or rearranged to maximise the use of the space available, which was limited by the other varied occupants of this city block. The second gasholder to be installed on the site was originally placed on the east side of Gasholder No. 1 and completed in 1861. In the later 1870s however it was moved to the south-east and re-used for a few years in that position before it was finally removed between 1880 and 1886. A photograph of Belmore Park and Christ Church St. Laurence school in the collection of the Royal Australian Historical Society shows Gasholder No. 2 in this second position at the south-east corner of the AGL site, at the corner of Pitt Street and Gipps Street (S54). As the AGL Showroom, which was built on the site after the removal of the gasholder and completed in 1893, was only a single storey building without a basement area it was thought possible that some archaeological remains of the gasholder would survive. Some indication of the possible survival of the brick piers on which the metal framework for the Gasholder rested was also suggested by the plans of alterations to the buildings in 1921. These show five very large piers below the AGL Showroom (53). These were out of proportion with the size of that structure as features of its construction, suggesting that they were re-used from an earlier structure.

8.2 Method of excavation
The approximate position of Gasholder No. 2 could be estimated from the 1880 plan of the site (Fig. 4) on the south side in relation to Gipps (Barlow) Street but the east side had been removed from the boundaries of the present site when the line of Pitt Street was altered in 1902. Given the size and type of the structure to be investigated and the time available, the fill beneath the wooden floors of the AGL Showroom was removed after demolition by the backhoe. The east wall of the showroom as originally built (that is, at right angles to Gipps Street and not the later extension along the Pitt Street frontage) was used as the eastern limit of this excavation. It was not possible to go closer to the Pitt Street frontage because of the possibility of the pavement collapsing. Immediately below the floor level rubble, the fill consisted of fine brown topsoil like material with many artifacts, mainly domestic ceramics and glass bottles. Below this was yellow clay cut into which the line of the edge of the gasholder tank could be seen. Four of the brick piers which had supported the metal superstructure of the holder and the lifting
mechanism were located within the area available for excavation. In order to examine the full extent of the piers and the tank, two 'sections' were dug next to Piers 2 and 4. Because of their depth these 'sections' were excavated in steps by the backhoe thus making the area safe to work in. The steps were then cleaned up and excavated by hand in order to examine the fill of the tank more carefully and to recover artifacts. At the base of the brick piers timber beams were found apparently in a continuous circle around the circumference of the tank bottom. As it was not possible to examine these further within the sections, arrangements were made for this level to be uncovered during later demolition work. When the fill in this area was being removed as a part of the demolition contract a part of the area near Pier 2 was cleared by machine down to the level of the timbers. These were then cleaned off and recorded in an afternoon. About one sixth of the area of the base was cleared, which it was hoped would be a representative sample of the whole construction.

8.3 Archaeological remains of Gasholder No. 2
(Vol. 2 Figs. 56-59 : Vol. 3 S55-S58)
The archaeological remains of Gasholder No. 2 comprised three elements
(1) four brick piers
(2) the backfill of the tank
(3) timber beams at the base of the tank

Four of the six brick piers which carried the superstructure of the holder were found in the area available for excavation. These had been demolished down to various levels as necessary for the later construction of the AGL Showroom. The level of demolition related to the level of the Pitt Street frontage, which drops from south to north at this point. This relationship is shown in Fig. 58. The foundations of the Showroom were deeper at the north end of the building than at the south to take account of this drop in the level of the site and possibly also the nature of the fill of the area. The two largest surviving piers were on the south side of the gasholder (Piers 1 & 2) and the smallest on the north side (Pier 4) where the foundations of the Showroom wall had been built directly on top of it (Fig. 59b). Pier 2 (S55) and Pier 4 (S58) were fully excavated and part of Pier 1 was excavated by machine. Pier 3 was not examined. The surviving height of Pier 1 was 3.81m (12.5ft). The piers stood on stone bases comprised of two courses of dressed sandstone about 2m square and were about 1.5m square at the base tapering to 1.5m by 0.8m near the top (Fig. 59a). The inner face of the piers had been broken away, presumably during demolition, and so the complete profile did not survive. The brickwork and mortar was very strong. The piers could not be demolished by breaking individual courses of brickwork because of the strength of the mortar but could only be removed in large pieces. It is understood that another pier was uncovered during construction work for the new building, presumably that at the north-east side of the holder on the Pitt Street frontage.
The area once occupied by the gasholder tank had been filled in when the holder was removed. On the south and west sides the tank had been excavated in yellow clay which appeared to be the natural ground in this part of the site. Sandstone occurs at a greater depth. The definition between the fill and the tank sides was quite clear both in plan and in section. The material with which the perimeter of the tank space had been backfilled consisted of lumps of clay, clinker or cinders and loads of bricks. Only the fill around the perimeter of the tank was sampled and it was not possible to record the stratigraphy of the fill across the whole tank. The fill contained few artifacts and was in this respect and also in its composition of quite different type from the domestic tip type material encountered elsewhere as filling material on the site. The diameter of the tank from the inside edge of the piers was about 16.5 m, that is about 54-55ft, which is the recorded diameter of the gasholder in its original position.

At the base of the brick piers and the gasholder tank fill were found perfectly preserved timber beams set in pale grey clay (Fig. 57 : S56-S57). In the area excavated these were found to form four concentric circles with radial beams between them. The outer circle of beams touched the inner edge of the brick piers. There did not appear to be any further radial beams within the fourth (inner) circle. The beams were carefully morticed together. When the gasholder was excavated it was thought that the grey clay beneath the beams was natural clay and this was not excavated further. Details of the construction of Gasholder No. 5 which were discovered during excavation work for the new building in July 1989 suggest that this may have been incorrect. The bottom of the construction trench for that gasholder (which was excavated into the natural sandstone) was also filled with pale grey clay. This probably served as a seal for the base of the holder. It is possible that the grey clay at the bottom of Gasholder No. 2 served a similar function and so was a part of the construction fill and not natural.

8.4 Artifacts from the Gasholder
( Vol. 4 A92-A95 )
Very few artifacts were recovered from the sample of the fill of the holder excavated in the two sections by Pier 2 and Pier 4. These consisted only of small pieces of glass and ceramic sherds of undiagnostic type and did not assist in the dating of the removal of the gasholder. A number of sherds of ceramic and glass were recovered when the timbers on the base of the holder were being cleaned over, but as the area had been much disturbed by machine excavation these could not be considered as reliably stratified. The brown top soil-like fill above the fill of the holder but below the Showroom floors was however much more productive of artifacts. This material was removed by machine and so the artifacts
recovered represent only a sample of the total, collected as machine
evacuation took place. The material was of a domestic nature and can be
attributed to a date range from about the 1860s to the late 19th century. A
large variety of ceramic types was represented (A92-A95). Precise dating
of many of these ceramic types is not possible as many are of long
currency. Like the deposit of fill on the Wesleyan School site no small
fights were recovered. This may relate in part to the method of excavation
used but this fact, together with the large range of ceramic types
represented, is suggestive of tip material of domestic origin. Given the
nature of the occupation on the AGL site, which was largely industrial with
the exception of the Manager's house, it is unlikely that this material
originated from this part of the site.
9.0 The south-west corner of the site [Area A]

9.1 Archaeological remains beneath the Hordern Building
( Vol. 2 Figs. 60-61 )
It was thought unlikely that any archaeological remains of occupation prior to the construction of the Hordern Building would be found, with the exception of wells and other features of some depth. The scale of the original Hordern Building necessitated large foundations and the existing building included a sub-pavement basement level. The Hordern Building was demolished down to the basement floor level and the demolishers then began to remove the basement concrete and the large sub-floor piers. Two features were found during this work. These were a domed brick structure, here interpreted as a well, and a deep brick lined shaft which comprised part of the hydraulic lift system for the Hordern Building. The first of these was excavated in part archaeologically. The lift shaft, which was about 12m deep was covered over by the demolishers and not investigated further.

9.2 The well beneath the Hordern Building
( Vol. 2 Figs. 60-63 )
As the fill around the piers of the Hordern Building was being removed a circular domed brick feature was exposed about equidistant from the south and west walls of the building and 10m from the corner of Parker Street and Barlow Street (Figs 60 & 61). The top of the dome was broken by the machine as was a part of the north side of the structure and its fill. The projected top of the dome was at about the level of the basement floor of the Hordern Building. In the time available the position and construction of the structure was recorded and the section through the fill of the feature was cleaned down and excavated in part. It was not possible to excavate a section of the fill down to the base of the structure as the layers consisted of much loose rubble and it was unsafe to work beneath them. The feature consisted of a circular brick structure with a domed top approximately 3m high and 3.5m (11.5ft) in diameter (Fig. 62). The bricks were machine made and mortared together laid in alternate rows of stretchers and headers. A small metal pipe projected from the lower part of the structure on the east side. The material which was contained within the fill of the structure included a large quantity of loosely tumbled bricks at the base, with organic material, clay, charcoal, sand, rubble and brick above (Figs. 62 & 63). The layers of fill were not horizontal but were heaped up in the centre as if they had been piled in from a central opening. Artifacts from the fill included window glass, metal objects, rope, rubber tubing, horse hair, chicken wire, some fragments of newspaper and pieces of wood. There were only two sherds of domestic ceramics and four of bottle glass, none of them diagnostic as to date.
9.3 Interpretation
The feature found beneath the Hordern Building is interpreted as a well of the type with a domed top. These are not uncommon in Sydney. The exact nature of the opening in the top of the dome is not known as this was destroyed as the feature was uncovered. Before the site was purchased by Samuel Hordern in 1886 and 1891 it was occupied by Smith’s farriers and wheelwrights. The buildings on the site during this occupancy are shown in plans of 1865, 1880 and 1886 (Fig. 3-5). These comprised workshops and sheds and two houses facing Gipps Street. The side of the houses with the name of the business painted on them can be seen in the photograph of Belmore Park which also shows Gasometer No. 2 (S54). When the position of this well is plotted on these plans it is found to be in the open yard between the sheds. A farrier and wheelwright would require a good supply of water for his work, possibly separate from that used for the domestic premises on the site. The material thrown down the well, presumably when it was no longer needed, comprises building materials and other debris consistent with the hypothesis that it was filled in when the farrier’s business ceased and the site was cleared for the construction of the Hordern Building. The level of the natural ground surface in this part of the site is not known but if the top of the dome of the well was close to the ground level, this would suggest that it was below the present pavement level.

9.4 Hydraulic lift shaft
A deep brick lined shaft was located below the Hordern Building but was not investigated. It is understood that part of this still survives on the site as construction for the new building progresses. This structure was about 4-5 m long of rectangular shape with rounded ends and about 1 m wide. The structure was divided into three compartments of about equal size, separated by brick walls. From the level at which it was exposed (which was considerably below pavement level) the shaft was about 12 m deep. Engineers working on the construction of the new building on the site report that the shaft is dry at the bottom. This structure is thought to be a part of the hydraulic lift system for the Hordern Building as originally constructed. This was replaced by electric powered lifts in 1902 when the building was remodelled and reduced in height as a result of the fire in 1901 (54).
10.0 Gasholder No. 5 [ Area C1 ]

10.1 Construction details of Gasholder No. 5

( Vol. 2 Fig. 64 )

In August 1989 as excavation work was in progress for the foundations of the new building certain details of the construction of Gasholder No. 5 were found. These details were observed in sections excavated on both sides of the wall and are shown in diagramatic form in Fig. 64. Two features of the construction are notable, the clay seal at the base of the wall of the tank and the timbering on top of which the tank wall was built. Gasholder No. 5, which was the largest gasholder excavated on the site extends to a depth of about 5m below sea level and a total of about 13.4m (44ft) below the street level of Pitt Street. Excavation at the base of the tank wall showed that the construction trench for the wall, which was cut through the natural sandstone, was packed with pale grey clay at the base. This clay extended under the wall and around both sides. In composition it resembles the clay which is found in the volcanic dyke which runs across the site. Above the clay, timber sleepers were laid diagonally across the bottom of the foundation trench and on top of these was built the brick wall of the gasholder tank. These timbers were still in good condition when uncovered. The thickness of the tank wall increased at the base. On the inside of the wall just above the level at which the wall widened towards the base there was a slab of concrete with a large amount of broken brick in the mix. This extended for a distance of about 3-3.5m inside the tank to the edge of the sandstone, which outcropped again within the holder. This slab effectively sealed the foundation trench of the wall. It is suggested that the clay layer around the foundations of the holder tank was put in position to act as a seal to prevent the percolation of water through the sandstone. When the clay had been laid it was then necessary to form a raft of timber on which to build the base of the tank wall for without this the bricks would simply have sunk into the clay. The timbers extended under the full width of the foundation and projected on either side. They were neatly laid but not of uniform width or length, being 10cm or 20cm wide and about 7-8cm thick.
11.0 References


(2) Sydney takes Shape ed. M. Kelly & R. Croaker (1978) p.8
'A Survey of the Settlement in New South Wales, New Holland, 1792

(3) ibid. p. 10 'Plan de la ville de Sydney' by Lesueur, 1802

(4) ibid. p. 12 'Plan of the Town of Sydney in New South Wales', 1807 by James Meehan

(5) Sydney Gazette 6 October 1810

(6) W. Gemmell : And so we graft from six to six : the brickmakers of New South Wales (1986) p. 60

(7) as (2) p. 14 'Plan of the Town and Suburbs of Sydney', August 1822

(8) Sydney Gazette 19 June 1819

(9) Archives Office of New South Wales Map 5618

(10) New South Wales Government Gazette 1833 p.103

(11) AONGSW Colonial Secretary's letters from the Town Surveyor 4/2832.3 (1837) and Colonial Secretary's letters from the Surveyor General 4/2476.1 (1839)

(12) AONGSW Colonial Secretary's letters from the Town Surveyor 4/2382.3 (1837) Letter no. 37/9255 of 4 October 1837

(13) AONGSW Colonial Secretary's letters from the Surveyor General 4/2475 (1839) Letter no. 38/13802 of 27 December 1838

(14) NSW Government Gazette Indexes 1832-1840

(15) AONGSW Colonial Secretary's letters from the Surveyor General 4/2383 (1837) Letter no. 37/4212

(16) NSW Government Gazette 1835 p.324

(17) NSW Government Gazette 1839 p.7

(18) Information from Dr. George Gibbons

(19) AONGSW Colonial Secretary Special Bundles 2/1850.2 Building of a Presbyterian Church on Pitt Street South

(20) Compare Francis Low's The City of Sydney Directory for 1844-5 and 1847


(22) Sydney Morning Herald 29/4/1849 : 2/4/1851

(23) City of Sydney Rate Assessment Books (see Conservation Analysis)

(24) Australian Dictionary of Biography Vol. 4

(25) Sydney Directory 1861
A.G.Foster : 'Odd Bits of Old Sydney' Journal of the Royal Australian Historical Society Vol. 7 (1921) pp 82-83

(26) Sydney Morning Herald 18/12/1852

(27) AONGSW Surveyor General's Sketchbooks Vol. 9

(28) Sands' Directory

(29) Conservation Analysis Vol. 2 p. 27

(30) ibid Vol. 2 p. 20
(31) City of Sydney Rate Assessment Books 1891. Entry for this property annotated 'Pulled down 1891'.
(32) See references (29) and (30).
(33) AONSW Surveyor General's Sketchbooks Vol. 4 fol. 77.
(34) AONSW Surveyor General's Sketchbooks Vol. 4 fol. 104.
(36) Conservation Analysis p.54.
(37) ibid p.54.
(38) ibid p. 55.
(39) The house is first listed in the 1858 Rate Assessment Books but was not listed in 1855.
(40) See Reference (31).
(41) Land Titles Office Primary Application No. 24211.
(42) Compare Sands' Directories for 1906 and 1907.
(43) See Reference (41).
(44) See reference (41).
(45) Sydney City Council Building Plans B.A. 227/27.
(46) Photograph 1914 : Council of the City of Sydney Demolition Photographs 51/3281, CRS 168/6 (City of Sydney Archives).
(47) This was still intact in 1988.
(48) Photograph 1914 see Reference (46) and Sands' Directories.
(49) See Reference (45).
(50) James Smith appears as the occupant of No. 441 Pitt Street from 1883 until 1888 according to Sands' Directories. Percy Dove's plan shows the site as Smith's Cart Yard with a shed on it c.1880 (this Report Vol. 2 Fig. 4).
(51) Conservation Analysis p.43.
(52) ibid. p.44.
(53) Conservation Analysis Vol. 2 p. 51 Elevation to Pitt Street.
(54) Conservation Analysis p.64.
(55) Access to the site to record these details was made possible by the kind co-operation of Steve Neal of Walkers.