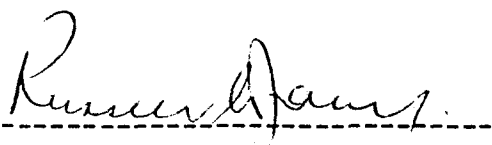


**THE WORK OF THE N.S.W. GOVERNMENT
ARCHITECTS' BRANCH - 1958 - 1973**

**M. ARCH. DEGREE THESIS
FACULTY OF ARCHITECTURE
THE UNIVERSITY OF NEW SOUTH WALES
Russell C. Jack 1980**

The material contained in this thesis has not been submitted
for a higher degree to any other university or institution.

A handwritten signature in cursive script, appearing to read "Russell C. Jack", written over a horizontal dashed line.

RUSSELL C. JACK. *March 1980*

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VOLUME I

Introduction and Summary

The period under consideration saw the growth and fruition of a radical approach to architectural design in the Government Architect's Branch of the New South Wales Public Works Department.

High aesthetic standards were set: the application of these standards in an atmosphere of enthusiastic dedication produced a new, vital architectural expression for the public buildings of New South Wales.

The quality of the Government Architect's work brought the Branch to the forefront of the architectural profession, whence it exerted a beneficial influence on many private practitioners.

E.H. Farmer, the Government Architect of the period, gained the high respect of his peers and in 1972 he was awarded the R.A.I.A.'s Gold Medal - the highest honour which can be bestowed on a member.

The early chapters of this study describe, in broad chronological order, the developments which took place in the Government Architect's Branch. Mention is also made of the influence which many leading architects, as well as other professionals, had on the Branch's design work.

In later chapters the buildings designed by the Branch are classified into broad use-types and each type is then examined in chronological order. While this method of analysis necessitates some back-tracking and repetition, it provides a better understanding of the evolution of the various building types than would be provided by a broader survey.

The appendices include a chronological list of significant events, in precis form, for convenient reference.

Apart from a few short papers on specialised subjects, there has been no comprehensive documentation of the history of the Government Architect's Branch during the period being examined. Consequently the story of the Branch's development has been pieced together from interviews with many people who were members of the Government Architect's Branch during this period. Some accounts of events have

appeared conflicting. It is natural that individual comment may be unintentionally biased. Every effort has been made by the author to present an accurate and balanced assessment.

E.H. Farmer delivered the Hook Memorial Address on 11th May, 1973. In the course of this address the beliefs which contributed to his leadership of the Branch were succinctly revealed:

"...if the voice of the architect goes unheeded, humanity is that much closer to the abyss."

**SECTION 1
HISTORY AND PHILOSOPHY
OF THE
GOVERNMENT ARCHITECTS'
BRANCH**

**Chapter 1
The Period Leading up to 1958**

Both during the war years and later into the 1950s, the Government Architect's Branch of the N.S.W. Public Works Department received little respect from those members of the architectural profession who saw architecture as an image of progressive contemporary society.

Enthusiastic architects, especially younger graduates and part-time students,* were not attracted by or drawn to the Department, whose advertisements for design architects proved fruitless. This disenchantment was due almost entirely to the fact that potential employees considered that the bureaucratic climate "...of rigidity, conformity and lack of opportunity"¹ restricted good design. A vicious circle existed: on the one hand, low quality design work out of tune with contemporary architectural thought and on the other, a lack of enthusiastic and inspired architects in the Government Architect's Branch.

Unlikely as it may seem, the N.S.W. Government Architect's Branch rose from this inauspicious position during the early 1950s to the forefront of the architectural profession. By the mid 1960s a new image of the branch had arisen, since by that time it had produced sufficient fine buildings to stir the profession and fire the imagination of architects throughout Australia.

That such high aesthetic ideals could be generated in a bureaucratic environment and flourish in the way they did, was an outstanding achievement and is to the lasting credit of the Government Architects of the period.

During the Depression of the 1930s and the Second World War (1939-1945), there was very little public building in the State. What was built was basic and generally undistinguished.² Some fine buildings had been produced, but they were far from being typical of the work of the Branch.³

* Many students studied at the Sydney Technical College in the evening and worked during the day as a pre-requisite for their professional training.

Buildings were designed in much the same way as in previous years, with little spirit or evidence of love of building or the environment. The position was static.

Schools designed by the Branch were institutional and uninspiring in those days. Their designers never considered the young occupants or the need to generate a suitable learning climate. Nurses' homes were similar - dull, unloved and unloving - never homes, only places in which to reside.

Such buildings were usually of load-bearing brick, with box-framed windows in apologetic Georgian style. The principles behind these buildings may have been honest and direct, but the buildings never reached any architectural heights and probably never sought them.

It should be realised that after Barnet and Vernon,⁴ Government Architects were no longer great design men, but rather administrators and directors of large drawing offices. The quality of the work resulted from the ability of the staff, with the Government Architect being able to influence, encourage and it was hoped, inspire.

When Cobden Parkes was Government Architect in the mid and late 1930s the design work of Harry Rembert⁵ showed the beginnings of change. His name will constantly recur in any examination of this period for he stood almost alone within the materialism and bureaucratic strangulation which was common in the Branch at the time. From such classic gems as his Quirindi Court House^{*} of 1930, he proceeded in the mid 1930s to design the Newcastle Technical College and the School of Automotive Engineering at the Sydney Technical College.^{**} In the 1940s Rembert was acclaimed for such designs as Fort Street Primary School^{***} and the Wallace Theatre at The University of Sydney.

These buildings and some hospitals of the time showed an acceptance of the then new architectural philosophy of Functionalism i.e. "Form follows Function," as proclaimed by Louis Sullivan of Chicago. The

* Illustrated on page 2, Vol. 2.

** Illustrated on page 3, Vol. 2.

*** Sketch drawings by W. Mostyn. Illustrated on page 4, Vol. 2.

packing-case Georgian schools and nurses' homes were abandoned by Rembert, but they remained almost standard practice in the Branch even into the 1950s.

Rembert's work had a strong relationship with current European architecture, especially that of Dudok. Rembert's buildings were direct, simple, uncompromising and honest. Long horizontal and vertical strip windows in brick facades expressed the plan and a new-found structural freedom.

Rembert demonstrated that architecture was more than window dressing; he appreciated the role of structure (as did E.H. Farmer) and its direct or implied expression as such. No doubt Rembert saw that architecture needed to make a statement and a contribution to man's environment and well-being.

In 1947 Harry Rembert was appointed Senior Design Architect under Cobden Parkes. His influence on a few staff members was notable and it marked the start of the Branch's design resurgence. He was, however, unable to influence the design standards of the Branch as a whole. His was almost a lone voice, constrained by the majority and the bureaucratic air of the Branch. He was not to be an influence on the general work of the Branch until the end of the Cobden Parkes' leadership and the beginning of the Farmer period.

A clear turning point in the quality of the work of the Government Architect was reached in the late 1940s. European ideas of modern architecture had gained ground in Australia; new materials and structural techniques, especially in steel and reinforced concrete, were becoming not only accepted, but available. Perhaps the apparent conflict between the differing architectural philosophies emanating from Europe and America - Functionalism on the one hand and Romanticism on the other - contributed to our slow advancement through confusion and hesitancy. Geographic isolation should also be regarded as a cause of our late development.

There was a re-appraisal of design attitudes in the Branch and steps were taken to implement the more progressive ideas which emerged from this re-appraisal.

Harry Rembert, for all his high ideals and hopes for good design standards in the Government Architect's Branch, had been unable to influence the Branch as a whole.

Nevertheless, both Cobden Parkes and Rembert realised that some re-organisation in the Branch had to occur, and they were determined to persevere with their efforts. Fine design men had to be attracted to the Department - people of sensitivity who would be strong enough to influence the work of the Branch as a whole and arouse it from its lethargy and dullness. They had been unable to recruit such people by normal advertising. Gifted designers were not interested in joining the Government Architect's Branch ranks: the vicious circle had to be broken.

It is not clear whether the solution came from Cobden Parkes or Rembert.* The Department's Engineers had a trainee system, so why not the Government Architect's Branch? Why not seek out school leavers who were anxious to study architecture, interview them and select one each year - giving him financial assistance. The Government would then pay all his university fees, plus a small living allowance, and the student would be bonded to the Department for five years after graduation. In addition, he would work in the Government Architect's Branch during the holidays.

No doubt they had hope and faith in their proposal, but they could never have imagined how successful it would become.

In 1948 the first students were interviewed. It was a small beginning with only three applicants, G.P. Webber being the successful man. He was successful indeed, for he rose to be Government Architect in 1974.

In 1960 there were approximately one hundred applications for ten positions. By the end of the 1960s, when the Branch had established its enviable reputation for quality work, one thousand five hundred school leavers applied for twelve positions. Charles Weatherburn

* G.P. Webber considers that the idea came from Parkes supported by an enlightened Public Service Board.

recalls that after the screening of the applicants by the Public Service Board he would spend three whole days interviewing the remaining applicants at quarter hour intervals. Sometimes he was assisted by Harry Rembert, if he was well enough, for by then Rembert was an ill man.*

The majority of the early trainees proved to be highly successful designers and, indeed, the Public Works Department Report of 1958 says:

*"...The policy of appointing University trainees is very pleasing, three of the first graduates under the scheme have had high academic careers and have won travelling scholarships."** 6*

The selection committee initially consisted of Cobden Parkes as Government Architect (whom Charles Weatherburn remembers as being "...really the committee"), the chairman of the Public Service Board and a Public Service Board Inspector.***

Initial selection was made on the following criteria:

- (i) A required I.Q. of at least one hundred and thirty five.
- (ii) A good Leaving Certificate result. (The Branch had access to the results prior to their publication.)
- (iii) The applicant had to be eligible for a Public Service Scholarship.

If the applicant satisfied these conditions he was interviewed to ascertain whether he had the necessary dedication and background. The background sought was one where a broad education and balanced outlook had been fostered. The committee also sought a demonstrable appreciation of the Arts in its successful applicants.⁷

* J.W. Thomson and G.P. Webber told the author that they and a number of other staff members were on the interview committee from time to time.

** The three referred to were G.P. (Peter) Webber, Peter Hall and Ken Woolley.

*** Andrew Andersons recalled that eminent private architects served on the selection committee, Arthur Baldwinson being on his.

The selection committee had the remarkable perception to realise the potential of its early nominees. The early trainees - G.P. Webber, K. Woolley, P. Hall⁸ and M. Dysart⁹ - all proved outstanding, and had a direct influence on the rise to fame of the Government Architect's Branch.*

It was realised that the trainees' interest and enthusiasm had to be maintained after their graduation, lest they be tempted to pay off their bonds and leave the Branch. Conditions became appealing in the following ways:

- (i) They were permitted to travel after graduation before taking up their bonds.
- (ii) Rapid promotion was granted to those who showed outstanding ability.
- (iii) By the early 1960s there was an interesting and varied range of projects to maintain their interest. They were entrusted with important projects and permitted to remain in control through all phases of documentation and construction.
- (iv) This small select group remained separate from the main drawing office.

The Government Architect's Branch also sought part-time students from the Sydney Technical College School of Architecture. This course was conducted mainly in the evenings, with the students working in architects' offices during the day. The appeal of the Branch to these cadets** was not as strong as it was for the trainees, since they were already employed by private architects and the financial gain available from the Branch was minimal.*** At no time did the Branch have many trainees; even in the late 1960s the intake never exceeded four or five men.

* Tom Kilgariff was another early trainee who only stayed three years with the Branch. He was a Commonwealth Reconstruction Training Scheme (ex serviceman) student, who started his course at the same time as Webber but did not initially become a trainee.

** 'Cadets' - official name given to part-time students under the scheme.

*** Some cadets did join the Branch straight from school.

The trainee scheme was abandoned in 1974 after the Commonwealth Government abolished fees for tertiary education, since there was no longer the same financial attraction for the students.*

A high design standard had always been the goal of the Government Architect's Branch, at least for the dedicated few.

Under Cobden Parkes there was a select group of approximately six men, known as the Design Room, by whom all major works were designed. The Design Room was dominated by Harry Rembert, the senior design architect, and its natural leader in the 1950s. E.H. Farmer, who succeeded Cobden Parkes as Government Architect, was an early member of the group, as was Charles Weatherburn. The latter also became the Government Architect after G.P. Webber resigned in 1974.

Rembert was well aware that design standards needed improvement, but prior to the 1950s he did not have sufficient staff of the right ability to achieve his aims. It was the advent of the trainee system in 1948 which turned the tide.

The Design Room soon became a force. In 1952 Harry Rembert took Peter Hall and G.P. Webber from the general drawing offices into his Design room. The work of these two men proved to be the fulfilment of many of Rembert's expectations. Ken Woolley and Michael Dysart soon followed them.

* Subsequently Webber became concerned that the Branch would find it hard to recruit good men. Refer to his correspondence in Appendix No. 8. J.W. Thomson and D. Excel, of the Public Service Board, told the author that the State Government could have continued some assistance to students, but that its experience of students, other than architectural ones, showed that a large proportion of them left the Government service soon after they graduated.

These four soon became an elite group, an Atelier in the real sense, and were dubbed "the Young Turks" by the staff of the Branch.* The four of them almost lived for Architecture. Their enthusiasm was unbounded. They discussed and debated either among themselves, or often with Harry Rembert. Individual members of the group often met Rembert after office hours at the Hotel Metropole, where he lived during the week.

The sheer enthusiasm of these four early members of the new-born Design Room gave them a tremendous will to succeed. They, and many other young members of the community, were at this time beginning to question and were refusing to accept traditional ways merely on their face value.

Throughout the early years the members of the Design Room remained few in number and consequently somewhat elite. In 1960 for instance, the section consisted of two rooms connected by Harry Rembert's office. In the first room were five architects - G.P. (Peter) Webber, Peter Hall, Ken Woolley, Michael Dysart and Arthur Bruner,¹⁰ with two students - Rodney Connors¹¹ and another. The second room housed four architects - J. Van der Steen,¹² W. Turner,¹³ V. Selig,¹⁴ J.W.(Ian) Thomson¹⁵ and three interior designers.

Peter Proudfoot¹⁶ in reply to the author's questionnaire,** saw the Design Room as follows:

"...During the early 1960s the office was much like an 'atelier' in the true European sense of the word. The members of staff came and went more or less at will about their duties - provided that they had regular consultations with their immediate superiors,

* Webber and Hall told the author that they were not aware of being called "Young Turks". R.W. Kirkwood and B. Scott said that the term was first used in the 1960s. Initially there was some implication of jealousy in its use since those four men were entrusted with the most interesting work. However, respect for them soon grew and the term developed into one of friendly admiration.

** A questionnaire was sent to all design architects mentioned in this study, seeking information and opinions.

such as Peter Webber, Ken Woolley or Peter Hall, or again Harry Rembert. These group leaders had some three or four assistants on major projects, but each design architect was responsible usually for at least one design project in his own right at any one time."

Harry Rembert provided the milieu. He protected them from the ravages of the over-practical establishment, who no doubt saw their safe life style threatened. Above all, he encouraged them. As an 'esprit de corps' developed in the Design Room encouraged by Harry Rembert, a very real mutual love and respect developed between the 'Young Turks' and Rembert.

In these early days the Design Room handled only selected projects. It did not, or was not able to, influence general drawing office design standards. The members of the Design Room became project group leaders, with three or four beneath them. The work was produced in an atmosphere of trust and freedom from enforced discipline.

This combination of circumstances - the trainee system on the one hand, and the Young Turks on the other - was without doubt the beginning of the golden period of design in the Government Architect's Branch. A start was made in 1952, but real evidence was not to appear until the early 1960s.

Thus it may be seen that the changes evident after 1959 under E.H. Farmer had their roots earlier; in fact they extended back to the first designs of Harry Rembert in the 1930s.

Again it should be appreciated that without an enlightened Public Service Board the trainee system would not have been established. No doubt the dynamic charm of Cobden Parkes played no small part in convincing the Board of the value of the idea and the urgent need for its implementation.

Two significant buildings designed by the Branch and erected during the 1950s were physical evidence of the new spirit which was starting to permeate the organisation.

In 1950 the Tallawarra Power Station on Lake Illawarra was under construction (at this stage the Government Architect's Branch still carried out work for the Electricity Supply Authority).*

The building was designed by E.H. Farmer as a member of the Design Room. Farmer has a strong appreciation of structure and the fitness of a building for its purpose. Tallawarra was seen by Farmer as pure Functionalism; he saw an honest and simple shelter for the impressively functional turbine generators. He wanted to break away from the heavy masonry and monumentality which was current for the expression of power stations. In fact he could see no reason why a building was required. His ideas were considered too revolutionary and had to be modified.

The final design was cheaper and lighter than any previous similar buildings.

Farmer said:

*"...It is still maintained by senior officers of the Commission that this is the best type of building they have, but for some reason unknown its design has not been repeated."*¹⁷

The Chemistry School at The Sydney University seems to have been the identifiable breakthrough and the beginning of the period which culminated under E.H. Farmer. The first stage of the Chemistry School was designed by G.P. Webber¹⁸ and K. Woolley¹⁹ under H. Rembert and documented in 1955 by Charles Weatherburn,²⁰ Grant Devine and others; the second stage, comprising the Lecture Theatre Block, was documented in 1956.**

The building was a significant one. It was a very early curtain wall project but, more significantly, it employed new and advanced structural concepts such as pre-cast concrete cladding and 'V' shaped pre-cast concrete floor units which due to their shape gave structural economy and reticulation space for services. It thus went further

* Illustrated on page 5, Vol. 2.

** Illustrated on page 7, Vol. 2.

than the work of Harry Rembert whose design, whilst advanced, did not demonstrate such technological progress.

The building may be criticised for having too many materials and finishes, especially when compared with the Fisher Library almost opposite it. The latter building was documented four years later to the design of Woolley.* The Chemistry School exhibits exposed aggregate panels in white and brown, several different coloured glass mosaic tiles, white-faceted precast panels, open blockwork, two different spandrel colours in curtain walling and two colours in the glazing of the Link block. Nevertheless, at the time, architectural philosophy was not laying stress on a limited palette and Robin Boyd had yet to declare war on the Feature Wall.

In the author's opinion the design and construction of this building is essentially the beginning of architectural rationality within the Branch. It demonstrates its designers' realisation that the design of a building should grow from functional and psychological needs and that the ultimate expression of these needs in structural, aesthetic and contemporary terms results in architecture.

The building clearly shows the then current Scandinavian and English influences on young Sydney architects. The foyer of the lecture theatres has a strong Scandinavian feeling, both in concept and in details such as its light fittings and the spaced vertical battens on the circular columns.

The curtain wall on the Chemistry School was a very early instance of the use of this element in Sydney and further evidence of the technological advances displayed by the building. The Branch members, however, were soon to discover that the curtain wall had serious practical disadvantages, so that its use was limited. E.H. Farmer says quite unequivocally that he had little regard for it. After he became Government Architect he realised its serious limitations, such as the difficult waterproofing problems and the equally difficult problems caused by the different movement coefficients of the various materials used.²¹

* The Government Architect and T.E. O'Mahoney were joint-architects on the project. Illustrated on page 84, Vol. 2.

Prior to the 1960s architectural design both inside and outside the Government Architect's Branch was seldom concerned with people as users. Occupants were merely seen as having physical functions to be satisfied.

Even the Dudok-inspired buildings of Harry Rembert were little more than essays in facade treatment. Despite the claims of the functionalists that buildings were now being designed from the inside out, it seems that the interiors were of secondary consideration to Rembert.*

The 1960s brought a new realisation: buildings were for people and the public as users were after all a collection of individuals. The enrichment of daily activity for all building users became an important concern. Functionalism became more than a merely physical consideration. A deeper and more meaningful architecture was sought by a few designers in the Branch. These men demanded a more humanistic approach to design. The Government Architect's Branch Romantic Period had begun. The new attitude was at first evident, of course, in only a few isolated buildings.

* The Wallace Theatre at The University of Sydney is a notable exception.

THE PRIVATE PRACTITIONERS.

Since the Government Architect's Branch is staffed by members of the profession, and is hence part of the profession at large, it is germane to consider some of the significant buildings produced outside the Government Architect's Branch prior to the period 1958-1973.

The Sulman Award of 1950 was won by the architects Spencer, Spencer and Bloomfield for the Top Dog factory at Dee Why, the design of which, like Rembert's earlier work, seems to have been influenced by Dudok.

Sydney Ancher won the Sulman Award in 1945 for the first of several houses in Maytone Avenue, Killara. His work was in fact contemporaneous with that of Harry Rembert, and in 1937 he showed the same inspiration from Dudok in a relatively unknown house at Rupertswood Avenue and Kambala Road, Bellevue Hill.²² In the early 1950s Ancher built many honest, direct and simple houses. He had an enthusiastic and admiring following of younger architects. Not only was his work simple, functional and stripped of ornament, but it had the elegance and grace of Georgian design.

In 1952 Harry Seidler won the 1951 Sulman Award for his house in Clissold Road, Turramurra and a new era had arrived. His work was functional and international, allowing no compromise and not seeking harmony with the landscape in the organic sense. His houses were powerful, positive and assured. Seidler made strong pleas for rationalism and for true comprehension of structure, materials and contemporary art. At the time he received little recognition from the establishment or from many members of the Government Architect's Branch. But at least the profession sat up and took notice, even if not always with approval or understanding.*

At this time Peter Muller, a true romantic and a disciple of Frank Lloyd Wright, was attracting attention for his houses. His work

* Subsequently Seidler gained just recognition and in 1976 the R.A.I.A. awarded him its gold medal.

grew from a philosophy different from that of the functionalists, since it was organic.

Most work by the private practitioners in the early 1950s was small in size and certainly most of the buildings of merit were houses. Architects such as Baldwinson, Ancher and Seidler were the leaders in Sydney.

In 1954 the Sulman Award went to the Boots Factory, designed by J. Torzillo with Stafford, Moor and Farrington. This was a very simple and elegant piece of sophisticated functionalism in a style seldom seen in the Government Architect's Branch. It seems that Ancher, Torzillo and Seidler had little influence on the Government Architect's Branch, whose philosophy, as it developed, became far more organic and romantic.*

By the end of the 1950s the leaders of the profession had established a refined functional style - evidenced by such buildings as the Belmont Hotel by Baldwinson, Booth and Partners in 1956, Anzac House by Bunning and Madden in 1955** and the M.L.C. Building at North Sydney by Bates, Smart and McCutcheon in 1957. These buildings were only the highlights. The general standard of design by the private practitioners was similar to the general level within the Government Architect's Branch. However, the breakthrough to improved design standards occurred earlier amongst the private practitioners than in the Government Architect's Branch.²³

* J.W. Thomson and G.P. Webber disagreed with the author's opinion. Thomson considered that the Fisher Library at The University of Sydney was influenced by Mies Van der Rohe. Whilst the author acknowledges this opinion, he considers that the subsequent work of the Branch was both more organic and romantic than the Fisher Library.

** The Belmont Hotel was awarded the N.S.W. Chapter of the R.A.I.A. Sulman Award and Anzac House a R.I.B.A. Bronze Medal in 1956.

By 1961 Ken Woolley and Michael Dysart, from within the Government Architect's Branch, were exerting a powerful influence on the profession with the early project house designs for merchant builders such as Pettit and Sevitt.*

The same differing philosophies existed outside the Government Architect's Branch as were found in it. But whereas the leading private practitioners usually turned towards an elegant functionalism, the Government Architect's Branch became more romantic. Surprisingly, the small romantic stream of private practitioners, led by Muller, was more radical than the similar stream in the Branch. The Design Room members of the Branch applied a basic practical and functional tenet to their organic philosophy.

* The first two designs for Pettit and Sevitt were done jointly by Woolley and Dysart; later designs were done by Woolley alone.
Authority: R. Sevitt, of Pettit and Sevitt.

Chapter 2

The Early Years of the 1958 - 1973 Period

Cobden Parkes, who became Government Architect in 1935, retired in 1958. He had steered the Government Architect's Branch through very difficult times, initially during the war years and latterly through the years of shortages after the war. There had been little opportunity for thoughtful design in such circumstances and even when the opportunity arose he had not been blessed with many capable or inspired design architects. But, as has been seen, he had laid firm foundations and left high aspirations.

Cobden Parkes was keen for E.H. Farmer to become his successor and he brooked no opposition.* Farmer, after initially declining nomination, agreed and was appointed over five contenders of greater seniority. Peter Hall says:

*"...At the time of his appointment as Government Architect he (Farmer) was some sort of rarity in the Public Service. University degrees were scarce in Technical Departments in those days."***

Edward Herbert Farmer was born in Perth, W.A. in 1909, and educated at Melbourne Grammar School. At the time the school placed emphasis on Classics, Literature and the Humanities and this left its mark upon him. After a year abroad with his family, he commenced his tertiary education at Melbourne University, graduating as an architect in 1939. At that time there was no Chair of Architecture - the Dean of Engineering being ex-officio Dean of Architecture - *"...and the Architectural students were subjected to a most rigorous science-based course for three years while doing architectural subjects at night classes."*¹

This training no doubt had a bearing on his understanding of building integrity through the honest expression of structure.

"...For the later years of the course the students were obliged to work in an office and attend the design atelier at the University at night. This atelier was run by the late Leighton

* H. Rembert preferred not to be considered for the appointment due to his poor health.

** Of forty-nine Architects, eight architectural assistants and sixteen draughtsmen recorded in the Public Service List for 1958, only twenty-seven had University or Technical College qualifications.

*Irwin, who supported and encouraged aesthetic experiments and way-out design proposals, but was adamant that all details of design and construction be shown, as pretty pictures were not enough and indeed dangerous, misleading both to their author and his client."*²

Farmer recalls his admiration and respect for Leighton Irwin, first as his teacher and subsequently as his employer. He joined the firm of Leighton Irwin and Co. in 1934 (prior to his graduation). Farmer's immediate response to the author's request to name architects whom he admired most was to name Leighton Irwin.

In 1936 Farmer was transferred to Sydney to run Leighton Irwin's office there. He did this single-handed without even a secretary, until 1939, when he resigned and joined the Government Architect's Branch of the Public Works Department under Cobden Parkes.

Two factors influenced Farmer to leave private practice and join the Government Architect's Branch.

One was the wide range of building types and experiences which the Government Architect's Branch would offer. Furthermore he considered that he would be able to continue his hospital interests.³

The other reason was a disenchantment with private practice. He stated that he was not interested in domestic architecture which normally formed the nucleus of the sole practitioner's office.

More importantly, he said:

"...I am not the sort of person who could make a good private architect, because I am not a salesman and I am afraid that a private architect has got to be a salesman."

Another factor influencing him concerned his ideals and his desire to improve the environment for all, not just for the individual client. His discussion with "Architecture in Australia", published in the February 1973 issue, says in part:

"...As far as Government buildings are concerned, I do think that for me there was a challenge when I came into the Department, because I couldn't see for the life of me why buildings which the Government did, shouldn't be equal to, or better than any private enterprise did. I thought there was every reason for them to be better in fact, because the Government resources are tremendous. Also it seemed to me that the Government, because of the extent of its building programme and its great power, could very much affect what happened to the environment."

Farmer in his speech of farewell to the staff on 7th December, 1973 said:

"...In this valedictory address perhaps I can be excused for thinking back to the Government Architect's Branch thirty-four years ago when I came to it. To most of you now, it would be an unbelievable place. Many of the older staff wore hard collars, black alpaca jackets, and a gold watch and chain. They seemed to me funny old men living in a kind of ancient Public Service fog, which dated back probably to Mr. Commissioner Bigge and his Lordship, the Secretary for the Colonies in London. The whole show was based on established precedent, immutable procedures, avoidance of responsibility and anything for a placid and uneventful life. Indeed some of the gentlemen had a regular post-prandial sleep in the plan room, and several carried on quite good private practices, using office materials and time.

I came in after having opened and run a branch office in Sydney for a Melbourne Hospital architect.⁴ This had been a single-handed effort in which I was everything from typist to principal, from design architect to fighting with contractors and it was a tough life; so tough that I left it and joined the Department after three years of struggling with it at much personal cost. The contrast from this to the metropolitan drawing office was shattering, in fact I was hauled over the coals by the late Sam Colman for working too fast and for doing elevations of a building when I'd only been told to plan it.

I was nearly driven out again, but then I began to make friends, to realise the great latent abilities of some of them, and to see the

immense possibility of achieving good architecture in the Government Architect's Branch. I have never regretted my decision for one minute."

On taking over as Government Architect Farmer realised that not only was there a vast programme of work ahead of the Branch, but also that it was not organised to cope with such a work load. He also appreciated that much of the work required a knowledge of the new and complex services and equipment which would be incorporated in the hospitals especially and that his engineering officers did not have such knowledge and experience. He realised that there were good men in positions where their talents were wasted. They and others were denied promotion because of the bureaucratic order of seniority. Further, he could not tolerate the gulf which had existed between the architects and the electrical and mechanical engineers. The structural engineers were not such a problem, since that work was performed largely by outside private consultants who Farmer felt were architecturally orientated. The whole organisation he saw as too diverse; the architects and engineers never consulted, let alone discussed mutual problems and philosophies. The architectural design men never went into the field (apart from those in the Design Room) and the various Government Architect's Branch sections never interacted.⁵

Farmer considered he had to make staff changes no matter how much precedent and seniority he had to combat. He realised that he was not going to achieve his aim of a first class Government Architect's Branch producing work of note with the lacklustre bureaucratic organisation of the time. Traditionally to do what he wanted was unusual, but the Public Service Act did state that *"...special ability shall take precedence over seniority."*^{*} The appointments were made. There were several appeals from staff members who had been displaced or by-passed. Such appeals were taken to litigation and all were lost.⁶

* As has already been stated, E.H. Farmer gained his appointment in this fashion.

Refer also to Appendix 6, Correspondence by Cobden Parkes, page 247.

Harry Rembert and the Design Room architects had ideas for improving the office organisation whilst Cobden Parkes was Government Architect. Farmer agreed with their aims and when he became Government Architect he sought to implement them.

The architectural drawing office, he considered, was too fragmented. There was a metropolitan drawing office, a country drawing office, a detail room where only detailing was done, a specification writing section and of course the elite Design Room - aloof, remote and probably despised by many of the non-privileged.

Farmer saw the need to integrate the architectural drawing offices. He could see no merit in the existing fragmentation and the consequent lack of co-ordination, integration and mutual interchange of ideas and experience. Why, he argued should metropolitan and country jobs be different? Why should they be documented in separate drawing offices? He wanted to abolish this anomaly and also the Detail Room, for surely, he argued, the details should be part of the contract documents and prepared or at least overseen by those doing the main documents.*

He considered that the tender documents of the Branch should be complete and must include all details. Nothing should be "to future detail" as was often the case at that period in the profession outside. Complete documents, Farmer argued, were fairer to the tenderers since they knew exactly what to expect. They were of course fairer to the Government, as it was less likely that there would be claims resulting from incomplete documents.

The change was slow. Rembert's Design Room architects strongly objected to this fragmentation of the organisation and especially to the lack of control of projects during documentation and

* Andrew Andersons⁷ recalled that K. Woolley had objected strenuously to his projects being detailed by the Detail Room, maintaining that their standard details were out of keeping with his design approach. Peter Hall made similar observations in discussion with the author.

construction. It was not surprising therefore that the first projects to be under the total control of the design architect were those from the Design Room.* The extension of this idea into the drawing offices was gradual and took many years before it was realised fully.**

Farmer's other important contribution on taking over was his conception of the Government Architect's Branch as a team.

He supported the Design Room idea of all disciplines becoming united - all his architects working in harmony with the other professional disciplines. Furthermore, he agreed strongly with Rembert and his Design Room staff that the clerks should not only be appreciated by the architects, but that they should themselves realise that they had an important role to play in the overall order of building, design and construction.

The clerks gained in importance and stature. Under Farmer they were introduced into all sections of the office. They relieved the architects of a great deal of paper work. This was appreciated by the architects, who disliked clerical duties and were seldom good at them. The clerks on the other hand, had been trained for just such work. They had a greater knowledge of ministerial need and no doubt had more tolerance of the required procedures.

Farmer wanted to go further and place typists in his office sections, but the Public Service Board would not agree. Nevertheless, Farmer had a drawing office which was happier and more efficient for those architects who were really concerned for

* The first examples were the Chemistry School at the University of Sydney designed by Webber and Woolley and documented in 1955 and St. Margaret's Hospital Chapel designed by Woolley and documented in 1956. Mona Vale Hospital was another early example.

** J.W. Thomson recalled to the author that it was first applied outside the Design Room when a small group, led by V. Selig with W. Turner and J. Kinstler, was detached to form a Health Buildings group.

architecture. He also went some way towards achieving his basic aim of a team organisation.

But perhaps of greatest importance was the fact that the Government Architect's Branch was becoming more attractive to potential staff of merit.*

Farmer pursued his team aim further, wherever he felt a greater 'esprit de corps' could be created. He would have liked to institute morning tea meetings for the staff - architects, engineers, quantity surveyors, draftsmen, clerks and typists. Again the aim was to achieve interaction of the various disciplines. At such informal meetings he hoped each discipline could begin to understand the other's approach, outlook and problems and work towards a common goal. Unfortunately, the idea was not realistic as the office was so large and the staff so scattered.

Farmer, himself a cultured man, realised that his designers could not produce worthwhile architecture unless they were men of broad culture, aware of the Arts other than Architecture. His Design Room staff instituted periodic luncheons in first class restaurants or had them catered for by Douglas Lamb, a wine merchant of repute. Farmer encouraged these luncheons, but seldom attended them. In such an atmosphere of conviviality, fine food and conversation, he hoped his staff would extend the ethos of good taste beyond architectural boundaries.

The senior staff attended concerts at the Art Gallery where weekly lunch-hour performances by a string quartet were given. These concerts were organised by Eugen Prokop, a protege of Eugene Goosens the resident conductor of the Sydney Symphony Orchestra and also a Director of the Conservatorium of Music.

Farmer commented: "...*They were late back, but it was so worth it.*"

* At the time, Harry Seidler advised David Turner⁸ to contact Peter Hall regarding possible employment with the Branch. W.E. Lucas similarly suggested to Leif Kristensen⁹ that he contact Hall.
Authority: P. Hall.

THE DIVISION OF THE DRAWING OFFICE

The Division of the Government Architect's Branch drawing office into building type groups began under Cobden Parkes. The change from a general drawing office overseen by the Design Room to a group of sections each controlling one building type was very slow. It was not achieved completely until the end of the Farmer period.

One reason for the slowness was a shortage of good designers in the early 1960s. It was felt that the small number of dedicated and able design architects could only remain influential if they were retained in the elite Design Room. The beginning of the change can be traced to Parkes' appreciation of the interest and skill in hospital design acquired by Farmer whilst working for Leighton Irwin. Hospital design was the specialty of that office and Farmer had developed an abiding interest in that field. Three or four years before the end of Parkes' leadership he placed Farmer in charge of hospital work - a rare honour in those days.

The concern of Rembert and Farmer for design standards and client service led to their idea that members of the Design Room should spend short periods in the various drawing offices in an attempt to improve outlook and the quality of work. This idea could not be implemented until there were sufficient members of the design room who Rembert felt were of sufficient calibre to be able to influence their fellow architects.

J.W. (Ian) Thomson recalled that the idea when tried did not work. The design room men "...*did not speak the same language*" and despite their enthusiasm they were unable to influence the disinterested architects they encountered.

In 1962 Rembert and Farmer became concerned at the poor quality of some of the Branch's design and the standard of service being given to its clients. This concern was directed initially towards the court houses and police stations. Peter Hall had several times been called upon to redesign proposals found unacceptable by

Rembert. Following such action for the Darlington Court House,^{*} it was decided to form a small group within the Design Room to handle police stations and court houses. J.W. (Ian) Thomson became the logical choice to head the group since he had recently taken over the running of Darlington Court House and the Cootamundra Court House. He was asked to examine the court house and police station work and to advise on the best way to improve design standards and service to clients.

In the same year (1962) a similar concern about the future quality of school design arose, when it became apparent that a vastly increased school building programme would be required to cope with the increasing numbers of children reaching school age.^{**}

At the time schools were designed in a fragmented fashion throughout the drawing office, without co-ordination or mutual contact between groups. The apparent programme ahead demanded an organised approach to design and documentation if the results were to be worthwhile and design standards were not to be sacrificed on the altar of urgency. This realisation led to the formation of the Schools Section in 1962. The logical choice to head the new section was R. Kirkwood,¹⁰ who had been overseas studying school design with Clive Hadley, the secretary of the Education Department. The section eventually became a resounding success; its design work became recognised by the profession as being exceptional.^{***} Also in 1962, the hospital work was brought formally into a section headed by V. Selig.⁺

In 1963 Thomson's court house and police station group could no longer be accommodated in the main office and had to be moved to Mena House, so that whilst the group was kept intact it became isolated from the main stream. Thomson instigated the involvement of the client body in the preparation of meaningful briefs for

* Illustrated on page 64, Vol. 2.

** Due to the post war population explosion.

*** This work is considered in chapters 7 and 8.

+ Refer also to footnote on page 23.

proposed buildings. This was a new development and demonstrated a determination to build not only with high aesthetic standards but also with rational aims from the client's view point. Michael Dysart, in the schools section, took a similar approach with the Education Department.

These sections were not autonomous and were subject to control from the senior design architect and/or the Design Room. Furthermore, supervision continued to be done by a separate section so that little contact or feedback took place. Members of the Design Room did, however, have access to and worked closely in association with the architects supervising their particular jobs.

REALISATION OF EARLY AIMS

Despite the expressed concern at the quality of some police stations and court houses, by 1962 the hopes of Farmer and Rembert were being realised. Buildings of recognised merit such as Lidcombe Hospital Chapel and Hall,^{*} several buildings at the University of New England, the Fisher Library at the University of Sydney,^{**} Broughton Hall,^{***} the State Office Block,⁺ Belmont Primary School,⁺⁺ Goldstein Hall at the University of New South Wales⁺⁺⁺ and the State Office Block at Cootamundra[#] had all been documented. As they were built they received enthusiastic and respectful attention from the profession. This recognition reached its culmination in 1962 when the Branch was awarded its first Sulman Medal, for the Fisher Library.

Not only had design standards been improved, but the more prosaic consideration of construction cost had received attention. Following financial restriction by the Universities Commission in the early 1960s, Peter Hall working with a consultant team produced

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- * Illustrated on page 136, Vol. 2.
 - ** Illustrated on page 84, Vol. 2.
 - *** Illustrated on pages 137-138, Vol. 2.
 - + Illustrated on page 78, Vol. 2.
 - ++ Illustrated on pages 12-13, Vol. 2.
 - +++ Illustrated on pages 85-88, Vol. 2.
 - # Illustrated on page 79, Vol. 2.

a cost plan for Duval College at the University of New England¹¹ which he claims was the first use of this technique in Australia.* Subsequently cost plans were produced for Baxter College^{**} at the University of N.S.W.¹² and for Macquarie University Library.^{*** 13} These proved most successful and assured the cost planning technique of general acceptance by the Branch. Subsequently, cost planning became a normal part of contract documentation. In this regard it would seem that the Branch adopted the technique before many of the private practitioners.

The enthusiasm, high ideals and ability of the Young Turks, enabled Rembert to pursue his aim of improving the quality of design throughout the Branch. Once the Young Turks were established in the Design Room, Rembert was able to bring new staff members who had demonstrated potential talent into his atelier. Consequently, the quantity of good work emanating from the Branch gradually increased.

The new members of the Design Room were trained by Rembert and his team. This training (or at least influence) was based inevitably on the aims and philosophies of the foundation members of the Design Room. Further, many of the second and subsequent waves of design architects entered the Branch because they admired the work being done by the original members. It is not surprising therefore, that no further radical change took place in the aesthetic philosophy of the Branch's work. Under the guidance of the second and subsequent waves of Design Room staff, the quality of the design evolved rather than changed. New branches of the original philosophy of the Young Turks can be detected, but these were nearly always based on their principles of fitness for purpose and humanistic expression.

J.W. (Ian) Thomson made this clear in his reply to the author's questionnaire. He said:

* John Carter, a quantity surveyor from the U.K. who was associated with Don Gazzard, was a leading member of the team.

** Illustrated on pages 85-87, Vol. 2.

*** Illustrated on page 89, Vol. 2.

"...My own philosophy of design had been formulated before joining the Government Architect's Branch.¹⁴ I think my ideas were refined and strengthened working with Ken Woolley on Fisher Library which I found rewarding as it followed the same philosophy. It was particularly satisfying and hard work to keep simplifying and refining the job in detail as we progressed and to have the opportunity to look at every element and combination of elements afresh ... I hope that these contributions, plus the influence I may have had on others in the Branch, has kept the simple visual approach rather than the fussy self-conscious, personal ego-boosting styles from dominating the Branch's work."

It is difficult to nominate individuals from the second and subsequent groups of Design Room men, since so many were exceptional design architects. However, a list of those who were influential would include the following names:

Rodney Connors, Donald Coleman,¹⁵ Lionel Glendenning,¹⁶ Andrew Andersons, Leslie Reedman,¹⁷ Ross Bonthorne,¹⁸ John McKinney,¹⁹ Colin Still,²⁰ Brian McDonald,²¹ Leif Kristensen and David Turner.

EARLY INFLUENTIAL MEN

Several people made significant contributions to the early work of the Branch, all of whom are given recognition and tribute by E.H. Farmer.

HARRY REMBERT

No chronicle of this period, as has been seen, can possibly overlook the ever-present name of Harry Rembert. Farmer said of him:

"...To the late Harry Rembert I must pay personal and feeling tribute. Our profession knows too little of what he did for architecture, for professional integrity and of his encouragement and training of young architects. He was my friend and without him I could never have coped with the initial burden of that curious, unique and stressful organisation - the Government Architect's Branch of New South Wales."²²

High praise indeed - certainly valid and fully justified.

Harry Rembert left an architectural firm specialising in cinemas^{*} to join the Government Architect's Branch in 1926. He became Senior Design Architect under Cobden Parkes in 1947 and Assistant Government Architect (Design) in 1960 under E.H. Farmer. (Charles Weatherburn was Assistant Government Architect - Administration - at the time.)

Harry Rembert was canvassed as successor to Cobden Parkes, but he declined the offer. At the time he had a weak heart and this, coupled with tuberculosis in his youth, had left him far from robust. He considered the role would overtax him, but afterwards he remarked to his 'Young Turks' that he felt he could have handled it.^{**}

Without exception all Harry Rembert's design architects speak highly of him. Their praise reached a peak when one of them suggested that the R.A.I.A. never understood his worth and that indeed he should have been awarded a Gold Medal.^{***}

Rembert sought no publicity and does not seem to have been appreciated fully by the profession outside the Government Architect's Branch - certainly not in his lifetime.

Harry Rembert was a man who carried his authority lightly, who above all else commanded the respect and also the love of those architects under him. He had the happy knack of being able to engender and sustain their enthusiasm. As a critic they admired him. He had an open mind towards design philosophy.

* Office of Henry White. Authority: G.P. Webber.

** Farmer commented to the author: *"He (Rembert) should have been Government Architect of course, but his health was fast breaking up and that was impossible..."* Farmer also said *"...Harry Rembert I had appointed as acting Government Architect during my five months absence overseas in 1964. He was most reluctant to take it, but I particularly wanted him to be Government Architect even for a short time."*

*** Suggested by Michael Dysart.

His own early work ranged from Quirindi Court House,* a charming "Georgian" concept, to his own organic-romantic house at Wentworth Falls which was built in 1935, and finally, through his love of the work of Dudok, to functional and clean design, always finely proportioned. No doubt his catholic appreciation of design concepts gave him understanding and tolerance towards his designers and influenced the work of his early design staff.

Like Farmer, Rembert was a cultured man. He sought to influence and enthuse those around him in the Arts generally. He had a fine musical appreciation and was also a talented cricketer and golfer. He had an undoubted love of architecture in all its breadth and an abiding interest in the work of the Government Architect's Branch. This is proved by his role in the establishment of the Design Room and the trainee system.

By the time Farmer became Government Architect Harry Rembert had ceased designing and was prepared to allow considerable freedom to the chosen few in the Design Room. They were, however, always under his gentle but determined guidance.

Before his retirement in 1964 due to ill health, his role as Assistant Government Architect (Design) had been increasingly taken over by G.P. Webber who was the Government Architect's heir apparent.

Harry Rembert had a firm determination in dealing not only with his design staff but also with the bureaucracy around him. Two comments from his staff are germane:

J.W. (Ian) Thomson²³ says of Rembert:

"...The principle influence on my approach to organisation and management was that of Harry Rembert, whose work I admired and who had this ability to get the best out of other people by example and trust. I don't think he was often let down. He used techniques which are now widely written about in management papers of

* Illustrated on page 2, Vol. 2.

consultative or co-operative management and he had no concern for hierarchical or formal authorities. His judgements were personal, on your views, abilities and general discussion. His objectives were clear - we were there to produce good buildings - all else was secondary, although not necessarily ignored or unimportant. His personal support for his staff at all times was without question, which of course ensured you worked harder and better. If any person had to receive credit for the work in that period it must be Harry Rembert, although obviously the lead and support for him by Ted Farmer, Charles Weatherburn and the abilities of Peter Webber, Ken Woolley, Peter Hall and Michael Dysart are also significant in this office's success."

Peter Proudfoot²⁴ made the following observations:

"...Whilst Harry Rembert played no active part in the creation of fine architecture after 1958, as he had done earlier in his career, he created the necessary conditions for it. This is in a sense of freedom of imagination, also combined with rigorous discipline, but with the individual architect in a sense, protected from the mechanical discipline of the Public Service Board.

Provided each design architect performed his duties, in Rembert's eyes he was a member of an elite group that was supplied with the most important projects undertaken throughout the state. If an initiate under trial failed extensively, he was kindly treated but methodically disposed of to another drawing office.

The time taken to come to some conclusion about a design problem was, within reason, not considered to be a paramount problem in Harry Rembert's mind. Only the final quality of the design, and not often the huge cost, was critical to Harry."

THOMAS BARFORD

Under Cobden Parkes, Harry Rembert and Thomas Barford²⁵ formed a powerful team. Barford joined the Branch in 1925 and in 1941 was appointed Senior Design Architect, with Harry Rembert his second in-charge.

Whilst Barford was active in the Branch prior to the Farmer period and he died in the mid 1950s before Farmer became Government Architect his influence was important and remained after his death.

Cobden Parkes recalled Barford as a "*good all-rounder*". He was a practical man trained as a carpenter but he served as an architect in the Branch.

When Harry Rembert in 1947 became Senior Design Architect, he had Barford demanding quality of detail in the drawing office and very high standards on the job. The range of enlightened control consequently was extended.

JACK CLAYTON

Cobden Parkes and later E.H. Farmer received unusually responsible and invaluable assistance from Jack Clayton,²⁶ a departmental clerk who had trained as an accountant.

Clayton was a clerk without equal, especially in the late 1950s. He had unusual intellect and an ability to offer genuine help and advice to the Government Architect on matters of procedure and administration generally. Farmer pointed out that in Cobden Parkes' day clerks were considered as "*...necessary nuisances*" and were never involved in other than mundane and simple duties. Towards the end of the Cobden Parkes era some change did occur and Clayton was the reason for it. Clayton, Farmer says, was "*...a likeable fellow and quite extraordinary.*" He had friends throughout the Public Service. He was very helpful to Cobden Parkes, rather like a private secretary. He protected him and guarded him. He had a brilliant financial mind, especially in such matters as the administration and the spending of money which was under the control of the Government Architect's Branch. Clayton originated and developed systems to ensure that these procedures went smoothly: they were eventually adopted by Farmer. Clayton made a habit of approaching the architects to ensure that they performed the clerical duties they found so distasteful. In earlier days Farmer said, "*...This would have been a dreadful heresy - imagine a clerk doing this!*"

The architects soon realised the contribution that Clayton could make and that they could consequently be freed from the tasks they considered onerous.

Clayton was also gifted at drafting letters for the architects. Previously of course, this was unheard of - a clerk would never have so presumed. Clayton coped with the difficult financial matters in draft form, leaving the architects to make such alterations as they saw fit.

H.R.W. ORR

Farmer also mentions H.R.W. Orr as another man whose "...ideas influenced me strongly as they did Harry Rembert."

During the 1939-1945 war the Government Architect's Branch was engaged in the design of air-raid shelters and the strengthening of existing buildings against bomb damage. Cobden Parkes saw the need for expert assistance and arranged for two architects from London to come here as advisers.

H.R.W. Orr was one of these men. He was an Australian who graduated from the Sydney Technical College, won a travelling scholarship and then went overseas. In London he conducted a small but successful practice until the outbreak of war, when Parkes arranged to bring him to Sydney. Harry Rembert realised that Orr had great design ability and as soon as the air-raid precaution work was completed, Rembert made Orr an assistant design architect. Farmer was influenced by Orr's^{*} ideas, saying to the author:

"...Bof had very strong and I think excellent ideas on design. He could handle brickwork and indeed most natural materials in a masterly way. He started me off on grid or modular planning and together we designed and documented a girls' school for Child Welfare (near Hornsby) using the grid technique ... Bof went back to London as soon as the war ended and re-opened his practice..."

* H.R.W. Orr was known as "Bof".

THE YOUNG TURKS

E.H. Farmer as Government Architect never issued or suggested any broad design philosophy to his staff. This surely was one of his greatest strengths; he appreciated the fine potential talent of his senior assistants in those early days and was prepared, indeed willing to encourage and nurture it.

The early trainees in the Design Room - G.P. (Peter) Webber, Ken Woolley, Peter Hall and Michael Dysart (the Young Turks) all proved to be exceptionally fine designers. Each of them held fervent aesthetic convictions. Despite their own strong persuasions an atelier spirit soon developed. There was a great deal of general exuberance, enthusiasm and discussion, often prodded by Harry Rembert.

Peter Hall feels in retrospect that while they enthused, there was little really fundamental thinking: he saw their architecture as good but in a somewhat shallow, fashionable and acceptable way. This seems harsh self-criticism and, whilst healthy, it is overstated.

The group concerned themselves with purity of design. They believed that a limited palette of materials was vital to any project and that structural elements should clearly express themselves as the dominant elements, with cladding and other aspects having an obviously subservient role. They also concerned themselves with the selection of materials and their detailing in such a way that natural weathering qualities received due consideration.

Another indication of the architectural enthusiasms evident at the time was the formation in the late 1950s of the Architectural Society. This was a group initiated by R.N. Johnson and T. Heath consisting of young Sydney architectural graduates together with a few men from allied disciplines. The Society had a select membership of approximately twenty people and included such men as Webber, Woolley, Hall and the late Leo Port.

They held monthly meetings, often at the Belvedere Hotel, at which they presented papers on architectural design theory, architectural education and also on allied discipline subjects such as environmental planning.

The N.S.W. Chapter of the R.A.I.A. had no such forum and the group felt the need to discuss their attitudes over a broad range of architectural subjects. Unfortunately the Society only lasted for seven or eight years.

Not only were the Young Turks concerned with broad design concepts, but they extended their inquiries into the mechanical and structural sections of the Branch. For example, they upset the old and tried rules of artificial lighting design and demanded rethinking and aesthetic consideration where such had never been tolerated. They spend hours creating and examining designs for light fittings and switches, for hardware and for all related building elements.*

Discussion with product manufacturers embraced not only aesthetic matters but became deeply immersed in practical and scientific aspects. When Peter Hall was a student at the University of Sydney, Professor Cowan had introduced training in architectural science and technology; this gave Hall and those who followed him a broad outlook and fitted them for in-depth inquiry into technical aspects of architecture. At this period architects generally had not reached such levels of inquiry, so that the Government Architect's Branch was indeed beginning to lead the profession. Undoubtedly these young men influenced trade design for the better, by making producers of standard or special building elements re-assess their products at both practical and aesthetic levels.

* G.P. Webber commented that: *"...a very talented and co-operative senior electrical engineer, Andrew Laird, was very influential."*

The large market potential offered by the Branch attracted manufacturers of such goods and made them amenable to pressure from the Design Room architects.

The Young Turks really shook the dust out of the corners of the Government Architect's Branch. Whilst they held firm convictions and were determined to carry them out, they did sometimes need the support of Rembert and/or Farmer against the more conventional members of the Public Works Department.

Upon graduation Woolley, Webber and Hall went overseas,²⁷ returning to inspire and lead the work of the Branch. It seems clear that despite the fine aims of Farmer and Rembert the Government Architect's Branch would not have achieved the heights it did without these young men, nor would it have gained such respect from the profession throughout Australia and to some extent also overseas.

Chapter 3
The Middle and Later Years
of the 1958_1973 Period

By 1963 the Government Architect's Branch had established a reputation for an enthusiastic approach to architectural design. The excellent emerging results of this could be classified as rational romantic.

The concern for rational design solutions, seriously researched and analysed at all levels of the design process, was rooted in the functionalism of the period. It led logically to the establishment of research groups.

The anticipated demand for schools had led to the formation of the Schools Section¹ in 1962, and in 1963 a research group also headed by R. Kirkwood² was formed to examine principles, needs and solutions. The first noteworthy result from the group was the evolution of the doughnut design solution by Michael Dysart.³

Also in 1963 K. Woolley left the Branch to enter partnership with the Sydney firm of architects, Ancher, Mortlock and Murray.* He was the first of the Young Turks to leave the Branch, but in the thirteen years he had been there his name had become synonymous with outstanding design.

In 1964 Harry Rembert retired. No doubt his going left a vacuum; he had been a driving force as a Senior Design Architect since 1947 and as Assistant Government Architect since 1960. G.P. Webber, who had been assisting Rembert for some time, due to Rembert's poor health, was appointed as Senior Design Architect.

Two years later in 1966 Peter Hall resigned, the second of the Young Turks to leave. He had been with the Branch for fourteen years and like Woolley his contribution to the fine work produced by the Branch was of great consequence.

Farmer said that he realised that his exceptional designers would eventually leave but that he was prepared for it and whilst he regretted their departure he was satisfied, since they had indeed *"...planted the seed."*

* The reason for the resignation of Woolley and other Young Turks is discussed later in this chapter.

The fame and publicity by then being accorded the work of the Branch extended beyond Australia when in 1967 the leading British Architectural journal "The Architectural Review" published a four-page illustrated article on the work of the N.S.W. Government Architect.⁴ The editorial material was written by Tom Heath⁵ and said in part: *"...The office (the G.A.B.) alone among the public offices, can be relied on to produce good architecture as well as good buildings, not only as a response to some outstanding opportunity but almost as a matter of routine..."*

Subsequently, after recording that the Branch had won three awards for distinctive architecture from the N.S.W. Chapter of the R.A.I.A.,⁶ Heath said:

"...These awards were obtained at a time when the quantity and quality of architecture being produced by the profession generally were greater than they had been for decades..."

The volume of work undertaken by the Branch continued to grow. In 1958 with seventy-three architectural staff it handled forty hospital sketch plans, sixty-seven educational buildings, ten court houses and police stations and six miscellaneous sketch proposals. By 1967 with one hundred and thirty-five architectural staff⁷ it handled ninety hospital sketch proposals, three hundred and seventy-one educational buildings, nineteen court houses and police stations and fifteen miscellaneous sketch projects.

At this time the Branch moved from the Colonial Secretary's Building on the corner of Bridge and Phillip streets to the newly-completed State Office Block.^{*8} At the same time, the 'tin shed' opposite the old venue and the earlier home of the Branch, was demolished. Whilst the move overcame the crowded conditions and brought all sections of the Branch back together, it also made a perceptible change in the organisation and influence of the Design Room. It now consisted of seventy people, spread over two floors of the new building. Its size, plus its vertical separation from the drawing offices made a different kind of organisation necessary.

* Illustrated on pages 77-78, Vol. 2.

The force and influence of the small nucleus Design Room gradually declined from this date as more and more able designers were trained and were able to be placed in the sections.* This change was gradual. The Design Section remained as such until the end of the Farmer period, being finally disbanded by Webber when he became Government Architect in 1974.⁹

In 1966 the Schools' Research and Development Group was formed and lead by C. Carter. This new group was an extension and formalisation of the previous research group. Its formation was recommended by R. Kirkwood following his overseas tour of schools with C. Hadley.** Whilst the Schools Section had been enthusiastically progressive for some years, the establishment of this formal group gave the research programme control and organisation.

Whereas universities had been granted reasonable government funds for their building programmes, the technical colleges' tertiary needs had not been satisfied. The position started to improve in 1967 when David Turner designed the first College of Advanced Education at Lindfield.¹⁰ Subsequently, further colleges were designed for Bathurst, Newcastle, Goulburn, Milperra and Nepean.***

Webber had been concerned about the limited scope of architecture as practised by the Branch. Much research and enlightened design ability had been lavished on the actual buildings, but little consideration had been given to the environment, landscape, or interior design. In order to broaden the scope of the work Webber formed a Landscape Group within the Design Section in 1968. Approval for the formation of this group from the Public Service Board was difficult to obtain, Webber recalled, since it required

* In 1964 Michael Dysart was moved from the Design Room into the Schools Section.

** See page 26

*** A new Section was formed when G.P. Webber became Government Architect to handle the emerging and specialised building type. The Section was the Tertiary Education Section headed by L. Reedman. It was in two parts; one handled Colleges of Advanced Education under Brian McDonald and the other handled Technical Colleges under L. Reedman.

a new category of staff to be engaged. However, this problem was overcome and Alan Correy,¹¹ a landscape architect then practising in South Australia, was appointed to lead the group.

In the same year groups were formed to examine and control interior design and industrial design. Whilst interior designers had been staff members since the early 1950s, Webber's action gave the group greater recognition.* The group expanded to six people by the end of the Farmer period.

The industrial design group arose inter alia from the need to create a new range of furniture for the Government stores range when the furnishing of the State Office Block (Sydney) was being considered.**

By the end of 1968 there were sufficient numbers of new and interesting design proposals to enable staff to be drawn together at informal meetings. Lunch hour talks took place in the drawing office, when the design architects explained their proposals to those members of the staff interested in attending.

Michael Dysart left the Branch in 1969, the third of the Young Turks to do so and Webber became the only original member remaining at the Branch.

As the Branch expanded the administrative work increased. C. Weatherburn had made an outstanding contribution in this area but his work load became excessive. It was decided to place Weatherburn in charge of all matters concerning outside consultants and major contractual issues. V. Selig was placed in charge of personnel, and technical matters such as computer applications and modular co-ordination.

* The Public Service lists show one interior designer on the staff from 1948. The early member was Joyce Grahame, who was later joined by Joan Reedman (nee Russell). Authority: C. Weatherburn.

** This group was staffed by C. Wettan, a journalist, stained glass designer and graphics expert and C. Tesdorf, an industrial designer trained in Stockholm. Authority: G.P. Webber.

Farmer also told the author that T. Walker, who was a lawyer, gave him invaluable assistance.

"...He knew all about legal pitfalls, how to deal with politicians, contract law and such matters of which I knew little. He was a tower of strength in the Opera House days and was responsible for thinking up many shortcuts in old fashioned bureaucratic ways. He was a dear man with a great sense of humour. He sadly died on retirement."

By 1970, the growing demand by the Branch's clients for greater cost control and more efficient buildings required that the Branch take action to provide better job management. The Government Architect's Branch was expanding each year - the 1967 figure of one hundred and thirty-five architectural staff had risen to one hundred and fifty-eight in 1970.¹² Such expansion had produced serious problems. The sheer numerical size meant less control and supervision in the drawing offices and the loss of a feeling of personal responsibility by many members. Errors occurred, such as inadequate client consultation, poor cost estimates and impractical detailing, which necessitated costly subsequent rectification on site.

Three distinct responses by the Branch may be discerned; firstly a new approach to the organisation of the various sections of the drawing office, secondly an impassioned address to the staff by Farmer and thirdly, the formation of a design review committee.

The first response, namely a new approach to the way in which the drawing office sections were to be structured, was conceived by Webber. The idea was simple and, in retrospect, obvious. Each section became an autonomous body responsible for its own design, documentation, supervision and administration. This structure, it was reasoned, should overcome the current problems of poor communication and lack of feed-back. But it should also go to the core of the problem and restore interest and enthusiasm by restoring personal responsibility.

The successful implementation of this idea led to the final demise of the Design Room and the Supervision Section.* The idea really meant the end of central control such as the Design Room had provided; the Branch was by then too large for such a system. In effect the Branch became a series of Architectural offices, connected only by the top administration, who ensured that major policies were common to all sections.

The second response to the Branch's introspective examination was an address to the staff by Farmer in February 1972. The design approach of some design architects, he said, had become radical. New forms and difference for its own sake had become paramount in the minds of many of them. Consequently there had been instances where costs were excessive or buildings had leaked or where sun penetration had made conditions inside buildings unbearable. In short the needs of the occupants were being subjugated to the design concept. The early ideals of the Design Room in such cases had deteriorated, in fact they had been degraded. Whilst only a small proportion of the design emanating from the Branch was so unrealistic, it did not require more than several such disasters for the reputation of the Branch to be destroyed. Farmer said in his address to the staff:

"...Since I became Government Architect in 1958, this office has expanded into one of the largest architectural offices in the world. It has developed a wide competence and a great experience and I flatter myself, has achieved an aim (which was always before me) - and that is to lead the profession both in aesthetic and practical aspects. The public recognition we have received both in Australia and overseas is proof of this. I think our status was never higher.

Now I don't want all this to be destroyed - this fine thing we have built, often at great personal cost. Make no mistake about it

* Whilst the plan was conceived several years before Farmer retired it was not implemented until he left. The actual implementation was done by Charles Weatherburn and others under G.P. Webber at the time Webber became Government Architect.

this could very rapidly happen. And so therefore I must demand that the Branch takes a very careful look at itself and how it is doing what it does and this exercise includes all of you individually and personally..."

The third response originated at a meeting in 1972 between Farmer, Weatherburn and Webber and resulted in the formation of the Design Review Committee. The function of the committee was simply to monitor design proposals. It looked at each sketch design, usually in company with the particular design architect. Various senior staff members sat on the committee and assessed different aspects such as overall aesthetic quality, client appeal potential, construction technique and cost.

Farmer commented to the author:

"... It (the committee) was something we were driven to, but it was good because it made those young fellows justify themselves ...how it can be constructed etc...we had to protect ourselves."

At the end of the Farmer period greater recognition was given to the importance of historic building preservation, not only in relation to specific buildings, as had long been the case, but more generally and over a wider spectrum.

Peter Bridges¹⁴ was placed in charge of historic Australian buildings to advise clients on their maintenance, to dissuade them from un-sympathetic alterations and to act generally as a specialist in that field for the Branch.

The foregoing indicates that the final years of Edward H. Farmer's period as Government Architect were unfortunately marred by problems requiring appraisal of the Branch structure, followed by major re-organisation.

Whilst it could be claimed that there were fewer revolutionary buildings towards the end, it would be wrong indeed not to appreciate the high standard of the work generally. Unlike the early years when there were bad buildings and very fine ones, at the end of the Farmer period almost all the work produced was of

note and a great deal of it was outstanding. The enthusiasm and skill of the Design Room had finally pervaded most corners of the Branch.¹⁵

The Royal Australian Institute of Architects heaped honours upon Farmer, in just recognition of his contribution to the architecture of New South Wales. In 1970 he was made a Life Fellow of the R.A.I.A. and in 1972 he received its Gold Medal - the highest honour it can bestow upon a member. These accolades were a fitting culmination to a lifetime of devotion to improving and broadening the quality and scope of Architecture in its widest sense for the people of New South Wales.*

THE YOUNG TURKS - VALE

Farmer realised that his Young Turks were likely to leave the Branch eventually. He was grateful for their contribution, reconciled to their departure and conscious of the fact that they had sown and nourished the seeds of change.¹⁶

The first of the Young Turks to leave was Ken Woolley, in 1963. He had by that time become somewhat disenchanted with the Branch. His main concern was the failure of the system to grant recognition to individual design architects. He considered it only reasonable that when the Government Architect's Branch was gaining kudos for the design of outstanding buildings the actual designer should be named, rather than see his contribution obliterated by the perpetration of the image that the work was actually designed by the Government Architect.

Woolley also considered that the Branch was becoming too large, with the consequent danger that it would become unwieldy. Even more serious, he considered, was the potential danger of lowered design standards. He wanted the Branch to be restructured, by breaking it into small autonomous groups of no more than thirty

* On April 5th, 1974 Farmer was given a civic reception at Sydney Town Hall, attended by approximately seventy guests including Sir John Kerr, the Governor General Elect.

people. He saw each such group led by a first-class architect, who would be one of several such group leaders each being a Government Architect of equal status. The structure he envisaged for the Branch was similar to that found in large private practices having several equal partners.

Woolley then argued that if there were in the Branch insufficient real leaders to head groups, that the work should be passed to the profession under an 'Architects in Association' arrangement.

Woolley suggested that if the equal-ranking government architects idea was seen to have administrative or political problems, then there could be an appointment made above them, under a suitable new title.

Farmer did not approve of recognition being given to individual designers and further he did not support Woolley's ideas for restructuring the Branch.*

At that time, Woolley had won two design awards for outside work so, with his name having had some publicity, he considered the time was opportune to enter private practice.**

In 1966 Peter Hall resigned, the second of the Young Turks to leave. He, like Woolley, was concerned that the Branch was becoming too large. He wanted a much smaller organisation which was very selective in the work undertaken in its drawing office.

* Farmer said: "...The Government Architect had to be given the credit or receive the brick bats (and there were plenty of these). Politically and administratively there was no other way and whenever possible credits were always given to the 'Project Architect' by me. I took the view also that in many of our large jobs, it could not be said that one man designed them. They were part of a closely knit team..."

The proposal mentioned on page 42 conceived by Webber was in effect the implementation of a structure similar to that proposed by Woolley. Recognition was given to design architects by 1965.

** Woolley joined the partnership of Ancher Mortlock & Murray.

The earlier idea, considered by Rembert, of the Branch being mainly an organisation which prepared briefs with the profession providing full service, appealed to Hall. Under such a system the Branch would only undertake important or unusual projects.

Farmer did not agree with the proposal and for eighteen months Hall debated his position until finally in 1966 his urge to enter private practice became too strong.

A year later, after having been approached by Farmer to test his interest, Peter Hall entered into partnership as design architect with David Littlemore and Lionel Todd to complete the Sydney Opera House.

Michael Dysart had never willingly accepted the bureaucratic controls of the Branch; he often worked long hours, but they were his hours and not bounded by nine-to-five attendance. Dysart himself considered in 1968 that he had gone as far as he could in the Branch. He had been involved with the Institute of Technology project at Ultimo for a considerable time and felt trapped in its vastness. He was weary of the project, having prepared five or six design schemes for it and he saw the task extending endlessly. He was restless.

These factors combined to eventually sever the relationship between Dysart and the Branch - very much to Farmer's regret.

G.P. Webber remained with the Branch, gradually taking a greater part in organisation and administration than in design. Eventually, when Farmer retired in 1973, Webber was appointed Government Architect; truly a successful journey for the first trainee in 1949.

Chapter 4
E.H. Farmer

Having traced the development of the Government Architect's Branch over the years of Farmer's leadership, it is now germane to examine his philosophy and attitude to architectural education. Finally in this chapter, comment will be made on the leadership of E.H. Farmer.

THE PHILOSOPHY OF E.H. FARMER

Farmer's architectural philosophy during his student days in the early 1930s is revealed in his draft memoirs.* He understood the dilemma facing architectural philosophers, and says in part:

*"...The imported Californian bungalow theme was in, and as usual was used ad nauseum. ...in the 1920s the Spanish Mission craze arrived. Leslie Wilkinson, when he arrived in 1921 (sic)** to be Professor of Architecture at Sydney (first in Sydney) was probably responsible for introducing it to Eastern Australia - and in his hands it could be very beautiful and very suitable to the intense light of Australia. In the hands of the Jerry Builder it was just awful - but it was still the same old use of styles and until people like Hardy Wilson, Desbrowe-Annear and Walter Burley Griffin, design was in a bad way. They decided to go back to the kind of functionalism which was part of Australia's colonial period until imported fashions and eclecticism put an end to it. However, they had little popularity and anyhow the depression intervened. Modern Architecture began to be seen in the early 1930s - it was largely a glib use of brick facing, terracotta, huge masses of brickwork, apparently supported on glass, a horizontal emphasis, jazzy ornamentation and no sense of unity at all... It was not a pretty scene, however, to us at the University the winds of change from Europe were being felt and I think that we all under Irwin's leadership realised the wretchedly low standards maintained, even by many of the big firms and began to search for something better. Functionalism was the key word and although in its hard*

* E.H. Farmer is writing his Autobiography.

** Leslie Wilkinson arrived in Sydney in 1918

austerity it was pretty inhuman, it cleaned the slate for us to draw a prettier picture. I admired and still admire Irwin's hospital design, even major jobs like the Heidelberg Military Hospital and Prince Henry in St. Kilda Rd., which had a lightness, a grace and humanity about them... I admired tremendously the houses that Newton and Grounds did. They seemed to regain some of the spontaneity and unselfconscious beauty of our colonial days..."

This passage revealed Farmer's early belief that the pure architecture of the Functionalists often lacked grace and sensitivity. The passage also shows his early and deep-rooted appreciation of pure structure:

"...huge masses of brickwork, apparently supported on glass" would never satisfy his philosophy.

Farmer claimed that he did not impose a philosophy upon his Branch, preferring to allow proven ability to mature and grow. Nevertheless it seems he did impress his ideas on his staff, perhaps by subtle means which were more acceptable to the strongly individualistic design staff.

Farmer told the author when asked if he imposed any such control:

"...There always seemed to be something of interest in every man. It was more like education in the proper sense of the word... extract what was already there, this is what it means, not something which has been put in - it is something being drawn out."

Long before he was Government Architect he tried to set down a definition of Art.¹ He thinks this may have arisen out of a discussion on the preservation of old buildings - an early and abiding passion of his. He said:

"...How do you find what is beautiful? If beautiful in one age, is it necessarily beautiful in another one?"

Years later in 1973, he expanded on this theme.² Having commented on the failure of professionals - including architects - to create an acceptable environment in today's complex and technological age, he then considered that architects should be fitted for such a task:

"...because by nature or nurture they can produce beautiful things or can explain the nature of beauty to others."

He then went on to say:

"...This of course assumes that beauty has any relevance at all in our tortured age. Many would say it had not, or perhaps would maintain that the beauty of one generation was not of another. That in fact, there is no continuity, no tradition, no acceptance of historic human criteria of what is good, what poor. To me of course, such thoughts are abhorrent beyond words, for history most decidedly is not bunk."

In his paper "What is Art?" Farmer defined Art, saying:

"...Art is the expression of the more or less acute sensitivity or perceptiveness of the artist to stimuli of whatever nature he has experienced."

and went on to say:

"...It would appear that though many are sensitive to these stimuli, it is only given to the chosen few to interpret them or record them in terms intelligible to their contemporaries, or to posterity."

It could be assumed from the preceding quotation that Farmer would see architecture as an art aloof from the general public. However, this is not so. For instance, in speaking of hospital design at an Institute of Hospital Matrons' seminar in Sydney on the 21st September, 1967 he said:

"...There is an inclination even among architects to shrug and say - 'there is not much you can do, the modern hospital is more machine than architecture anyway'. This attitude, it has been said is characteristic of the present over-infatuation with technology and science as an end rather than with the human being, it is supposed to serve. The many sidedness of human demands within and around the hospital of the future is the antithesis of the standardised package and is a rich source of creative design in its deepest sense."

Even earlier, in an address entitled "The Hospital of the Future" given in 1958 at the annual conference of the N.S.W. Branch of

the Australian Institute of Hospital Administrators, he said:

"...The contemporary building depends very much for its appearance on the choice of finishing materials and the interplay of geometrical shapes. There is a tendency for the completed building to lack appeal to the man in the street; he is prone to regret the disappearance of what he has come to call 'architecture' which of course the contemporary architect dismisses as 'applied ornament', since with modern methods of construction it will, in fact, be so much unnecessary dead weight which has to be supported by the building. Be that as it may, there is a grave danger that buildings do tend to become inhuman; they tend to ignore those who must enter their doors. It would be unpleasant to find the hospital of the future a machine wherein illness is treated efficiently - possibly by the aid of complex and intimidating apparatus - with little regard for the state of mind of the unfortunate human who is being processed."

These remarks showed an understanding of people and the need for design solutions to go beyond 'form follows function'; but further, Farmer declared himself at a time when few N.S.W. architects had thought of their design in such human terms.

Perhaps the link between his humane understanding of building and his very real appreciation and love of structure, may have been his expressed appreciation of the Golden Mean and Fibonacci.³ Here was ordered control through which art as he saw it could be perceived and attained.

A reminiscence by Farmer showed his very early sense of structural refinement.⁴ He was discussing the pleasure he received working with engineers, especially during the Tallawarra Power Station project. He recalled that the engineers had designed a traditional masonry chimney. Upon reflection, he suggested that the shape should be modified and that the areas of greater stress should express themselves with greater mass. He won his argument and the final form became an elegant and structurally refined concrete shaft.

Farmer extended his humanistic concept of design beyond the confines of a building's perimeter. Although not necessarily the first local architect to do so, he was sufficiently concurrent with leading architectural thought to keep the Government Architect's Branch abreast of the movement.

In an address at the St. James' Church sesqui-centenary dinner at the Wentworth Hotel, Sydney, on 7th. October 1969, he made the following comments when referring to the place of Greenway's St. James' Church in the proposed Queen's Square Plan:

"...I think that in these times, one of the most pressing problems facing us and one of the most difficult, is how to make our great cities places in which the dignity of the individual inhabitant will not be impaired and in which he will find an environment likely to enrich him spiritually. To this end he must restore the organic and human components that are now so necessary in our compulsively dynamic and over-mechanised culture before it is too late to do so."

Later, in 1972 he spoke on "Contrasts" to the Parramatta and District Historical Society, and compared living in a tower block with occupying *"...a cottage in a narrow street with its bit of garden, its corner pub and small store and its sense of belonging."* He went on to extol the virtues of the lifestyle enjoyed by the inhabitants of the Greek Islands, who, whilst having *"...no electricity, no television, no motor cars and precious little of any material possessions, did have pride of race, personal dignity and their religion."*

E.H. Farmer's fervent interest in historical buildings and their preservation went beyond stressing the need for their survival because of their architectural significance. Just as he related beauty with history, so he related preservation with history.

In his Hook Memorial address on 11th. May, 1973 he said:

"...Mumford said that historic accumulations of culture form the top soil and humus in which the higher life of man has flourished and if the historic roots of culture be ploughed up, what is left

is a bare surface of non-historic experience which will not sustain human life or thought. Perhaps then one of the greatest duties of our profession is to jealously guard this inheritance from the past and explain its relevance to the present."

Elsewhere in the same address he quoted D.H. Lawrence:

"...D.H. Lawrence put it beautifully: 'Things men have made with wakened hands and put soft light into, are awake through years with transferred touch and go on glowing for long years. And for this reason some old things are lovely - warm still with life of forgotten men who made them.' - He knew - he knew!"

In the same paper (the Hook Memorial address) he also spoke of poetry in the following terms:

"...Robert Graves once pointed out that true poetry makes things happen, that the word is from the Greek 'POIEIN' - to make or do - and that poetry at its most intense level works in a dimension independent of time. I like to think that architectural beauty resembles poetry, in that it can also profoundly influence thoughts and actions and that it is in a way, timeless."

Farmer had a deep concern for the state of architecture and was worried by its lack of response to the emerging needs of the contemporary world.

His writings repeatedly mention the population growth crisis and the prognostication that the world population could double by the end of the century. He warns that it follows that in the next thirty years we shall be required to double our existing quantity of building. Furthermore he reminds us that our current buildings took centuries of development both in technique and in culture. He wonders how fitted we are to perform such a gigantic task with any sensibility.

Farmer felt that architects were becoming less fitted to cope with peoples' needs, often because they were not prepared to consider new aims and methods. Consequently they were losing respect, if not their actual role. Even that he saw endangered, unless architects responded to the challenges of their times.

Farmer's Hook Memorial address on 11th. May, 1973 is revealing and significant. He said in part:

"...I found the other day, a passage I had jotted down some time ago - I forget where - which says 'Our architecture is us. If we hate it, it is because we hate ourselves. Architecture is a mirror of its age all right, but real architecture is also as cruel as a mirror and our age has of course, not a very pretty face. So meanwhile we must do the best we can with what we have - a dying culture and a half-baked architecture'..."

He went on in his own words:

"...Very cruel and pessimistic perhaps, but unless we bestir ourselves, not so far from fact. Though many architects have concerned themselves with the nature and responsibilities of their profession in this frightening culture we have created, many seem to bat on, turning out buildings as well as they can and satisfying their clients' every wish, good, bad or indifferent. Others are content to become successful and rich by selling their professional soul. Not nearly enough attempt the noble aim of bettering the human situation in this jungle that has been made by man. Surely the last is what we are here for and what I hope we were trained for."

These were strong and brave words, especially when one remembers the venue and audience - the R.A.I.A. Annual General Meeting.

Later, in discussing architects' failure to discern and interpret the needs of their clients in human terms, he saw demand being often artificially created and buildings erected not for human needs at all, but merely to satisfy commerce, with lamentable architectural results.

He quoted Mumford:

"...We have been living in a fool's paradise, so far as we took for granted that mechanical progress would solve all the problems of human existence and we have found that the crystalline purity of form of our steel and glass monsters may be elegant monuments of nothingness."

Farmer then commented as follows:

"...What seems to me to be the most difficult situation at present is how to preserve the authority of our profession. How its, I hope, informed opinions can be heard in all the wild turmoil of 'progress' and 'development' which the media and the financiers enjoy. Amid the wild orgy of destruction of our familiar environment how can we find the means to make an effective protest without being looked upon as crackpots? Let me say that what some of our brothers have been saying so vehemently is nearly always right. The mistake they made is being too emotional, intolerant and terribly bad salesmen.

Those of us who try to protest must realise that we are dealing with astute ruthless people who, given the validity of assumption that a rising gross national product, improvements to property, ever expanding markets and all the rest of it, are good things, are acting perfectly logically and sensibly within a money-based philosophy."

Farmer could see no panacea. He advocated preservation and the teaching of the young the value of their heritage and environment. He saw the danger of the package dealer exploiting economic situations to the detriment of the built environment.

In his valedictory address to his staff Farmer on 7th. December, 1973 said as his final words to the Government Architect's Branch staff:

"...We flatter ourselves that with all our pretty toys, our computers, management techniques, rationalised buildings and all the rest of it, we can perhaps solve the problems. Yes, but will the intellect or the spirit or the need for beauty around us be forgotten in the rush and bustle of getting a roof over our heads? It could well happen and so much the worse for the soul of man.

'Commodity, firmness and delight' are one and indivisible still and in fact define what architecture has meant to me and for which I have striven."

Such was the philosophy E.H. Farmer brought to his guiding role as Government Architect - a sincere love for and appreciation of the

higher aspects of man's existence. He believed that architecture should not merely have a place in the community, but that it should play a guiding and influential role.

Over the years a milieu developed in the Government Architect's Branch in which such ideals could flourish and influence the public buildings for the people of New South Wales.

MEN OUTSIDE THE BRANCH WHO INFLUENCED FARMER

Farmer had no hesitation in giving credit to Dr. Chris McCaffery and the late Professor Sir John Loewenthal for the strong influence they had on his leadership. When Farmer was Architect in Charge of Hospitals under Cobden Parkes, the Chairman of the Hospitals Commission suggested that he spend a week at the Royal Newcastle Hospital to gain a further insight into hospital operation. Cobden Parkes apparently thought little of the idea, claiming it would be "...a waste of time". Farmer went, however, and met the Hospital Superintendent, Dr. Chris McCaffery. Farmer found him to be "...an extraordinarily competent man."

McCaffery ran his five hundred bed hospital in a way which appealed to Farmer. It was a system which Farmer thought could operate well in his Branch, being simply based on lines of parallel authority. There were specialist departments each under a senior man, responsible to McCaffery, with each senior man having a line of authority beneath him. Naturally some cross influences operated laterally. Subsequently a similar system was instigated in the Branch.

The idea for meetings of all staff* also came from Dr. McCaffery whose meetings, unlike those of the Branch, took place and were successful. Farmer said that the closest he came to such gatherings were the staff luncheons and later on in 1969 the formation of the Government Architect's Board. This Board consisted of senior staff

* Refer page no. 24

who met monthly for discussion and direction by Farmer. He said:
"...Grudges and problems could be settled in front of me in a friendly way and senior clerical staff could learn of architectural problems and perhaps gain enthusiasm for what we were trying to do."

Farmer's contact with Dr. McCaffery lead him to realise that the answer to many problems should come from the 'user' source. Farmer called it *"the grass roots idea."* Farmer pointed out that one should not even design a cleaner's cupboard unless one discussed the needs with the cleaner himself and examined his criticism of existing facilities.

Farmer learnt from McCaffery that sometimes it was necessary to go deliberately against established procedure. Farmer pointed out to the author that as he did not have a Public Service background, he did not see the need to keep himself *"nicely protected"*. He went on to say:

"...We didn't really think about that (being protected) you know, if it was the right thing to do, you jolly well did it. If there was trouble, well, you would talk your way out of it perhaps, or if not, well all right you had made a mistake."

The late Professor Sir John Loewenthal, the second man Farmer acknowledged for his guidance, was an outstanding surgeon attached to Sydney University. Loewenthal possessed the art of dealing with people and Farmer said:

"...He was an artist at it, he was no snob - you can't be a snob with Australians."

Professor Loewenthal showed Farmer how to assess people's worth; how to identify those who were of value as opposed to those who had no worthwhile contribution to make to any particular problem. Farmer said to the author:

"...he continually stressed that the individual, often frightened patient, came first in hospital design and treatment."

Farmer realised that clients or their representatives seek design solutions based on prejudice gained from acceptance of detailed aspects of existing buildings. Such people need to be awakened to new potential solutions or improvements before ideas can be discussed fruitfully.

FARMERS'S ATTITUDE TO ARCHITECTURAL EDUCATION

Both Cobden Parkes and Farmer were aware of the importance of continuing education for the staff after their graduation.

Webber, Woolley and Hall each wanted to go overseas after they completed their university training. Parkes and later Farmer supported the idea. They no doubt realised the benefits that would accrue to the branch when they returned. Staff who had gained higher degrees or worked with influential overseas architects, or who had merely been broadened by overseas travel, should be able to make a better contribution to the work of the Branch.

Consequently Webber, Woolley and Hall were given special leave of absence on half salary, as were the men who followed them.⁷

Woolley and Hall were not interested in taking higher degrees. As Hall said, they were anxious "...to make buildings" and were impatient to start.

Webber went to the United Kingdom where he worked and travelled extensively in Europe and toured Finland with Woolley. On his return, Webber enrolled at Sydney University for a town planning degree under Professor Denis Winston. He interrupted this work in 1959 when he went to the United States of America where he took a Master of Architecture degree from Columbia University. He then returned to Sydney and completed his town planning course in 1962.

Woolley travelled in Europe and worked in the United Kingdom with Chamberlain, Powell and Bon.

Hall went to Europe and the United Kingdom when Woolley returned.

Many of the design architects who followed the 'Young Turks' had similar academic success. R. King⁸ and P. Proudfoot took Master of Architecture degrees at Pennsylvania University. A. Andersons worked with Arup Associates in London and took a Master of Architecture degree at Yale University. L. Glendenning, R. Bonthorne

and C. Still each took Master of Architecture degrees at Harvard, and B. McDonald took a Master of Science in Urban Planning at Edinburgh. R. Connors did not undertake further academic studies, but travelled frequently and worked in the United Kingdom with Robert Matthew. D. Coleman travelled but did not further his formal tertiary education.

Unlike many leaders in similar situations Farmer was aware of the changing attitudes towards architects in our society.

The February 1973 issue of "Architecture in Australia", in announcing Farmer's Gold Medal award, reported a conversation with him in which he spoke of architectural education with balanced insight:

"...Whether we like it or not we'll have to make some changes. What they are going to be I haven't many any firm opinion. I do think that in the changing system in which we live and with the demand for more and more buildings to be built more and more quickly, there have got to be different ways of doing this and it seems to me that the role of the architect has got to be examined. An architect as he used to be, may more or less disappear, or change into something different. I don't know if the Architect is going to be responsible for the sociological side of building things and making precincts. He may bow out from some of the managerial work on projects, but this seems to me to be a very dangerous thing because the architect must have authority to be able to influence people to do the things that he wants them to do from the sociological point of view. This is the danger and I think this lies largely with the architectural profession. Architects can influence and are trained to know how to influence the human side of existence. This is becoming increasingly difficult these days in our cities for instance, in the peculiar civilisation in which we live. What worries me very much is how the architect is going to keep his authority to enforce these ideas that he's got. I think perhaps that the whole method of education of architects would have to be looked at with this in view."

In his Hook Memorial Address in 1973 at the New South Wales Chapter headquarters of the R.A.I.A. Farmer mentioned the competition faced by the profession from package dealers and went on to discuss education in more immediate terms than in his Gold Medal comments. He said:

"...How the architect can equip himself to compete (with the package dealer) is a matter of immense difficulty. The content of the Architectural courses now is so overwhelmingly wide that I fear nothing but a pretty superficial knowledge in any part can be expected in the few short years available. Can every graduate be expected to be competent in all things, including the most difficult - design. There are limits to what can be stuffed into a curriculum. It is amusing to read of James' Law - Lord James of Rushworth claims that he discovered a valid law, which he calls the law of conservation of the curriculum. It states that whenever you add anything fresh to the curriculum you must inevitably take something out and state honestly what it is and why. I think we tend to ignore this. Perhaps a school should always have as its aim, that the young graduate should leave as a harmonious personality and not a specialist. (One of Einstein's dicta about education.) What worries me is the period of the 'getting of wisdom'; experience will ultimately teach - but what of the learning period and the service to the client during it?

I suppose the large office is the only solution, large enough to be multi-disciplinary, to be able to train the new graduates adequately, to be able to accumulate a body of data and experience and to undertake a certain amount of research.

But could some kind of co-operative system be devised for the small practices within which they could share skills to the mutual advantages of the group. I do not think I would like to see the small practice squeezed out of existence - on the contrary we must find how to preserve it.

...What then should be the nature of the architectural courses to which we subject our young? I confess I do not know but I am beginning to suspect that to an extent, a good architect is born and not made; it matters little what he is 'taught' but how he is

'educated' in the proper sense of the word, that will tell."

Farmer's awareness of the importance of a broad education for architects to fit them for their problem solving has been demonstrated. These talks, coming at the end of his period of Government Architect, show that his attitude in this regard did not waver but that in fact it broadened.

THE LEADERSHIP OF E.H. FARMER

Farmer as the leader showed a sympathetic understanding of his design staff and an attitude to discipline unusual in government service. Perhaps his greatest strength as Government Architect was this comprehension of human nature. He understood its motivations and its needs and was able to incorporate them into the bureaucratic environment. Furthermore, he kept his sense of values and always nurtured and protected his design staff from the more frustrating aspects of the bureaucratic environment. For him the encouragement of architecture was ultimately more important than his role as senior administrator.

In an address to the Australian Regional Groups of the Royal Institute of Public Administration in 1962 he said in part:

"...In my Branch I am fortunate to have a number of young architects who are competent to solve any design problem speedily and the solution will be masterly from the aesthetic point of view. It is a fact that such people march to a different tune from their fellows. Without them we couldn't continue, but from a management point of view they sometimes find it difficult, or impossible to conform to the rules; their loyalty is to their profession and they must preserve the integrity of design at all costs. What is one to say to a man who fails to report for work until lunch time, when it is ascertained that he wasn't satisfied with a sketch he was doing and worked for the preceding twenty-four hours without cessation 'till he got it right'? These people are the salt of the earth but sometimes very, very hard to manage."

Farmer realised from the outset how important it would be to give the staff delegated authority in order to interest and enthuse

them and so achieve his ideals for the Branch. He says this delegation seldom let him down, and indeed the rise in the standard of work produced under such freedom is proof of this.

In February 1972, there was concern at some practical aspects of the work of the Government Architect's Branch. As previously mentioned Farmer called the entire staff to a meeting* and said:

"...I have noticed for some time now (and I see most of your drawings) a kind of perverse gimmickry beginning to infest some of our design. It seems almost as though a deliberate choice of the most way-out, usually quite impractical, and of course most expensive methods have been made."

A little later in the address he stated his policy of delegation in forceful terms, saying:

"Remember this, my dear colleagues, remember this! I have deliberately delegated authority - I have deliberately given the young and inexperienced a stake in the destiny of the office because I felt this was where the future lay, this was how the departmental stodge of the past could be eradicated and architecture of the Government of N.S.W. could achieve decent standards. Up till recently there was no financial crisis and up till recently we have achieved, with your help, the impressive stature we now hold. But as I have warned - when you achieve success - look out - because the envious will try to pull you down. Might I remind you of this kind of fate which disgraced Macquarie and Greenway and brought down the greatest of my predecessors, poor Barnet and had him publicly disgraced."

This address was not well received by many of the staff. The many complaints Farmer had received from Treasury and clients concerning excessive costs and impractical details, had made some drastic action imperative.

Treasury concern over building costs started in 1961. Farmer was accused by them of being the most expensive Government Architect they ever had. This was an unfair reaction to a better standard of Architecture.⁵

* Farmer claimed that this was the first time that a full meeting of the Government Architect's Branch had ever been called.

Farmer was prepared to support his staff against biased criticism from above. He waged battles on their behalf, especially when clients protested at unusual designs.

Peter Proudfoot's clinker brick Police Station at Merrylands was an example of such traumas. The Police thought that they would become a laughing-stock because of the 'rough' brickwork with squashed out mortar joints. They also considered that some 'Accused', such as inebriates, could injure themselves. (A reasonable criticism, the author imagines.) Farmer visited the building and soon convinced Ryan, the Minister of Public Works at the time, that the building had aesthetic worth. Ryan advised the Police Commissioner to respect the wisdom of the Government Architect. In such situations Farmer was convincingly authoritative.

Prior to Farmer's leadership the Branch had been dominated by the mechanical and electrical engineers.* He considered that the architects could not function in a real sense under them. Their attitude was perforce based on a limited standpoint and could frustrate conceptual design. This situation changed and the architect became the team leader. Farmer's concept of the Branch as a team with all its disciplines placed in their correct area of contribution, coupled with his appreciation and understanding of structural concept, no doubt enabled the engineers to understand and accept his principles.

The culmination of this change of status occurred, Farmer considered, when he was appointed Acting Director of Public Works in 1969 during the absence of the Director.⁶ On previous occasions whilst Farmer was Government Architect, the Acting Director had been an engineer.** Farmer's appointment to the position had brought the status of Government Architect to a new level; the whole Public Works Department was prepared to accept him as Acting Director. Farmer said:

* At that stage most structural engineering design was done by outside consultants.

** Cobden Parkes had been given the role of Acting Director in similar circumstances. Authority: C. Weatherburn.

"...It put an end to the infernal jealousies... prior to this... there would have been an uproar if the architects looked after the engineers."

Farmer gave due credit for his changed status to Alan Johnson, who became Director of Public Works a few months after he was appointed Government Architect. Johnson was a lawyer who consequently had balanced judgement and appreciated different viewpoints; he was without bias toward engineer or architect. He had similar interests to Farmer - he loved poetry and music, so that a rapport developed between the two men to the benefit of the Branch.

Farmer's leadership showed gentle perseverance but firm authority when necessary.

This delegation, or 'drawing back' has been seen by some as weakness, but surely it demonstrates his wisdom, and his greatest strength.

Chapter 5

The Relationship of The Government Architect's Branch with the Private Practitioners

Historically the relationship between the Government Architect's Branch and the Profession has frequently been tense.

J.M. Freeland vividly explains the early hostility between the profession and the government architects saying:

*"...N.S.W. has been the toughest and most resilient stronghold of government architecture. There the strain between official and private architects was at its greatest. James Barnet, the Colonial Architect during the booming years of 1863-90...was never admitted to the Institute of Architects of N.S.W. for no other reasons than that of his position. Only after his retirement was he accepted as an honorary member..."*¹

Over the years, Freeland says, there were repeated attempts to reduce the high percentage of public buildings totally designed and documented by the Colonial Architect and to control the bad blood, ranging from *"...private mutterings, presidential threats, Institute motions, parliamentary committees and Royal Commissions."*²

Freeland pointed out that Greenway, Lewis and Barnet were

"...Clawed down in jealousy and vindictiveness..."

In 1905 *"...a policy of sharing work by allocation was instituted"*³ and later still Parkes had made genuine efforts to aid the profession and ease tensions. Nevertheless the relationship at the beginning of the Farmer period bore the seeds of discontent.

Soon after the Second World War the then Government Architect, Cobden Parkes, who always maintained a strong interest in the outside profession, considered that the Branch and the profession could and should work more closely together.

Architectural consultants at the time were engaged by the Branch to undertake only working drawings and specifications - very seldom design, and never superintendence. The architectural consultant was called into the office and briefed on general matters by Farmer in his capacity as second-in-charge to Harry Rembert and by William Wren on more practical aspects such as

document production, standard details and special items to be specified.

Both Farmer and Rembert considered that the briefing of consultants should be done by the design architect who could convey to the consultant a more intimate understanding of the design aims. Further, they considered that the final checking of the consultants' documents should not be done by the remote special central checking group, but also by the design architect. Such changes meant that the design architect should have an all round ability and be well versed in practical and economic aspects of design. It was many years before these proposals were implemented generally.

Parkes considered that the architectural consultants should not merely be used as contract draughtsmen, and the profession agreed. He envisaged the Branch becoming an authority which undertook research and merely prepared briefs for consultants. The brief would be handed to the consultant who would provide a total service. Parkes had seen and been impressed by such a system operated by the British Ministry of Works.

This desired change never took place, but after the war Parkes did increase the amount of documentation work given to the outside profession, with the specific aim of helping the younger architects to become established in the difficult post-war years. There was a secondary aim. Parkes foresaw the forthcoming work load in the post war years and strenuously resisted the danger of the Branch becoming a large impersonal office.

The system used in the post war years to allot work to the profession was by ballot drawn from a list of approved applicants. But Parkes found that in many cases the very people he hoped would get the work - i.e. the younger members - in fact did not do so and the work too frequently went to the larger offices. Contrary to expectation, the results from the larger offices were often unfortunate, since they did not always allocate partners to supervise the work.⁴

Farmer as Government Architect held different views from Parkes. He saw the profession aiding and assisting the Branch but seldom giving total service. He certainly did not envisage the Branch being merely a brief-preparing authority. On the contrary, he considered that the Branch should function as a normal architect's office as well as engaging consultants. He also believed that most major prestigious and experimental projects should be handled inside the Branch.⁵

In the early 1960s the Branch was producing some very fine design work well above the general standard emanating from the profession outside. Whilst the profession sought total service, Farmer and Weatherburn considered, not without some justification, that the Branch could design better buildings. Evidence for such an attitude can be drawn from the impressive number of design awards which the Branch received.

C. Weatherburn put it plainly. He said:

*"...we felt that in the broad context we could design things better than the outside people..."*⁶

On some special projects the Branch did engage outside consultants as architects in association.* Weatherburn commented that such architects were *"...carefully selected..."* He went on to say that such arrangements were seldom really satisfactory saying:

"...I don't think it is possible, irrespective who the actors are, for that (architects in association) situation to be entirely successful. It is either them or us..."

Only on very rare occasions did the Branch permit consultants to carry out superintendence** as it considered itself more able to

* Fisher Library at Sydney University, documented in 1960 in association with T.E. O'Mahoney, was an example.

** One such occasion was the alterations to Mark Foy's building for the Planning & Environment Commission by Hely and Bell. Rembert and Weatherburn considered that the amount of detail input required the consultants to superintend.

control variations and extras than the private practitioners. It saw itself as a public instrumentality which consequently had a responsibility to control expenditure.⁷

Under Farmer the ballot system was abandoned and specific consultants were appointed from an approved list directly to the project. Farmer pointed out that the ballot system "*...came to a point where it was ridiculous.*"

He approached the then President of the N.S.W. Chapter of the R.A.I.A.,⁸ suggesting that the Branch, because of its dealings with many architects, was aware of their capabilities in all architectural fields. Under the ballot system then agreed to by both parties, the Branch was unable to appoint the most suitable architects for any particular project. After discussion the President readily agreed saying, Farmer recalled, "*...you are perfectly entitled to do that...*" Farmer went even further than selecting a particular firm, he often nominated the partner required by the Branch to be in charge of the project.

Frequently the outside profession was unimpressed by the attitudes of the Branch, feeling it was unreasonable and over-reactive; but it would seem that the Branch had some grounds for adopting the attitude it took.

The desire by the profession for greater involvement in the Branch work was a minor matter when compared with the long and bitter fracas over the question of rightful reimbursement for professional services rendered to the Branch.

Many members of the profession considered that the Government Architect's Branch was not paying fees in accordance with the Scale of Minimum Professional Charges and that it was requiring architects to enter into fee arrangements contrary to the Scale. There had been precedents for such an attitude by the Branch. During the Second World War, the R.A.I.A. offered the assistance of its members to the Commonwealth to aid the Department of Works and as a further contribution to the war effort, to do so at less than the minimum scale fees. Further, after the war the N.S.W.

Chapter of the R.A.I.A. offered the assistance of its members to the Government Architect to help cope with the backlog of urgently needed schools and hospitals.

It was felt by the N.S.W. Chapter that the Branch had not always honoured the spirit of the Scale of Minimum Professional Charges from that time on.

By 1960 the N.S.W. Chapter Council⁹ considered that any period of national or state emergency was over and that architectural consultants should receive their just dues.

Following this decision the N.S.W. Chapter Council sent a letter to all members of the Chapter dated 21 April, 1960 which read in part:

"...Information received from a number of members indicates that the Department of Public Works, N.S.W. is placing a variable and incorrect interpretation on the Scale of Minimum Professional Charges. A guide to the interpretation of the Scale for partial services is again repeated on the attached sheet and members are requested to abide by this scale and interpretation..."*

This letter was followed five months later by another more detailed statement in September 1960 which read in part as follows:

"...Fees payable for Architectural Services carried out for Commonwealth and State Government Departments.

A survey of information relating to arrangements between various firms of architects and the principal Commonwealth and State Departments of Works has been made and the conclusion reached is that in few cases did it appear that fees in accordance with the Scale of Minimum Professional Charges were being paid.

The Chapter Council is of the opinion that the Government Departments concerned are placing an incorrect interpretation upon the Scale of Charges which came into operation from 1st November, 1959. The

* The Government Architect heads a branch of the Department of Public Works.

Departments have been advised that any special arrangements previously existing must now be considered at a conclusion as the current scale of Minimum Professional Charges is the only Scale approved by the Institute's Federal Council.

In order to guide Members, the Council considers that it is necessary to indicate in greater detail than the Scale sets out, the services which should be performed and the charges which should be made in accordance with the Scale.

This method of describing the stages of the architectural service is set out below and should be used as a basis for determining any deductions from the total charge if portions of the service are carried out by a Government Department and the other portions by a private architect..."

The circular then provided a detailed break-up of information and conditions pertinent to fee charges at various stages of a project, including a clear statement covering allowances for fees payable to consultants.

On the third and last page of the circular members were left in no doubt as to the attitude of the N.S.W. Chapter concerning compliance with the Scale of Minimum Professional Charges. It says: *"A previous statement was made on this subject in the Chapter Bulletin for April, 1960. This statement now being circulated provides further particulars and explanations. Members are reminded that it is their responsibility to charge for their services as described in The Scale of Minimum Professional Charges. The Principal Government Works Departments have been sent copies of this circular so that each Department is fully aware of its contents.*

The Council requests Members to carefully study this circular and to comply with its contents. Under the Code of Professional Conduct as stated in Clause 1 'It is the duty of a Member to observe and uphold in every way possible the Scale of Minimum Professional Charges adopted by the Institute'..."

It is apparent that the feeling of the members was not unanimous and that some members were still accepting commissions from the

Branch under terms contrary to the wishes of the N.S.W. Chapter Council.

Farmer made his attitude clear.¹⁰ He considered that the percentage reduction being made from the fee percentage stated under the Scale was fair. The Branch was a professional client, providing not only sketch plans, but back-up information such as documents of similar projects, their expertise built up over the years and last but by no means least protection from the client body. Farmer added that if under the circumstances the brief was adequate - and the consultant should ensure that it was - then the consultant was being fairly reimbursed.

Farmer went so far as to intimate that he saw his first allegiance to the Branch even if the situation arose where he had to resign from the R.A.I.A.

The negotiations between the Chapter and the Branch, represented by Charles Weatherburn, continued but did not resolve the matter.

A further circular to all members from the N.S.W. Chapter of the R.A.I.A., dated 5th July 1961, couched in far stronger terms than its predecessor, warned members that failure to comply with the circular's instructions would place a member architect "... *in breach of the code of Professional Conduct...*"

The length and thoroughness of the circular indicated the importance placed on the matter by the N.S.W. Chapter Council and the unfortunate relationship which had developed between the Council and the Government Architect's Branch.

The full text of this circular is as follows:

"...Important Circular to Members of the N.S.W. Chapter
FEES FOR ARCHITECTURAL SERVICES CARRIED OUT FOR THE
N.S.W. DEPARTMENT OF PUBLIC WORKS.

The abovementioned subject has been under the constant observation of the N.S.W. Chapter Council since the R.A.I.A. Scale of Minimum Professional Charges was amended to operate from 1st November, 1959.

Two circulars on the subject have previously been sent to Members.

It has come to our notice that the Department of Public Works is offering 2½% for architectural work for which the Council considers a 3% fee should be paid. Such offers are considered to be less than the minimum scale rates and consequently must be refused.

From investigations and enquiries made it seems evident that the Scale is complied with by all interested parties including Federal and State Government Departments except the N.S.W. Department of Public Works in quite a number of instances.

From past experience the Department of Public Works normally produces the sketch plans (Stage 1) and then engages a practising architect to complete the working drawings and specifications (Stage 2).

The normal fee for producing the working drawings and specifications in accordance with the minimum scale is 3% of the total cost of the works and this percentage is established by deduction of a 1% allowance to the Department for the production of the sketch plans. Thus the total of 4% indicated by the minimum scale for all drawings and specifications (Stage 1 and 2) is produced.

The Chapter Council is adamant that fees in accordance with the Scale of Minimum Professional Charges should be charged to the N.S.W. Department of Public Works on the same basis as fees are charged to any other client whether that client be a Federal or State Government Department or a Company or a private individual.

Members are asked therefore to comply with the precise terms and spirit of this Circular. Should this not be done the Members concerned will be held to be in breach of the Code of Professional Conduct.

It is realised that this is a lengthy circular and Members are asked to read its contents and to particularly study it if acceptance of an arrangement by the N.S.W. Department of Public Works is contemplated.

GENERAL BACKGROUND HISTORY

To assist Members in fully understanding the position, the background history on the subject is provided.

During the early years of 1939-45 war, the Royal Australian Institute of Architects offered the assistance of architects in private practice to the Commonwealth Department of Works which, at that time, was unable to cope with the great volume of building projects demanded by the war effort.

The offer embraced complete or partial services by the private firms. The majority of work was done under the latter basis and further, the Institute agreed that its members would provide architectural services at fees below the minimum scale of fees then operating as a contribution towards the country's war effort.

Preliminary sketch drawings were usually prepared by the Department of Works or other Federal Departments and most of the private firms were engaged to prepare working drawings and specifications, after which supervision was carried out by the Department of Works and Allied Works Council.

At a later date, the New South Wales Chapter of the Royal Australian Institute of Architects offered the assistance of architectural firms in private practice to the Public Works Department of New South Wales.

In the immediate post-war years, the Department took advantage of such offers as the Department was unable to cope with its own staff with the large amount of building works and additionally ex-service architects were returning to practice and naturally seeking work during the period when building materials were rigidly controlled.

The works involved comprised housing, both single units and multiple units, schools, hospitals and other buildings. In the majority of projects, the Public Works Department prepared the programme and preliminary sketch drawings and sometimes final sketch drawings.

The architectural firms in private practice were commissioned to prepare working drawings and specifications and supervision was carried out by the Department.

However, from the end of the war up to the present time, the Public Works Department has not always interpreted the Scale of Minimum Professional Charges in a manner strictly in accordance with the intent and the spirit of the scale.

The original offer to the Commonwealth Department of Works was made during a period of extreme national emergency and the architectural profession was quite prepared to make sacrifices in respect of accepting fees lower than the minimum scale of fees.

The New South Wales Chapter's offer in the immediate post-war years was also made to the Public Works Department of New South Wales during the emergency conditions and shortages in housing, schools and other public buildings, but the time has arrived when such emergency no longer exists and an equitable arrangement in accordance with the minimum scale of charges should be accepted by the Public Works Department of New South Wales.

To the best of our knowledge all other professions are paid by the N.S.W. Department of Public Works in accordance with the professional scale rates applicable. The Department contends that owing to the large volume of work placed with practising architects special consideration should be given to its case. The Chapter Council does not accept this contention. Additionally it is asserted that the Department is a very special client able to contribute substantially to the overall work concerned within the design stages. Provision for this situation is recognised by the details set out in the attached interpretation of the scale.

To sum up the situation the N.S.W. Chapter Council is determined to enforce the compliance by all concerned with with Scale of Minimum Professional Charges and to couple this with the responsibility of Members to comply with the Code of Professional Conduct.

Members who undertake work for Government Departments are asked to

apply to that work the highest possible professional skill and in return to charge fees in accordance with the R.A.I.A. scale. This is a fair basis for all concerned.

Attached for the assistance and guidance of Members is a further copy of the interpretation of the scale of Minimum Professional Charges as it applied particularly to partial services likely to be required by the N.S.W. Department of Public Works. Precise compliance with this interpretation is requested by the Council.

If any further information or explanation is required it may be obtained by application to the Chapter Office.

Should any Member be in doubt about a specific proposition or interpretation relating to an offer of engagement by the Department any question relating to it may be submitted to this Office for the considered opinion of the Professional Committee. Such opinion would be of substantial value to support any Member who may be involved in a negotiation with the Department of Public Works.

R.S. Greig,
SECRETARY. "

The circular then appended a detailed interpretation of the Scale of Minimum Professional Charges; the full text of this document was as follows:

"SCALE OF MINIMUM PROFESSIONAL CHARGES PARTICULARLY DESCRIBING PARTIAL SERVICES.

In order to guide Members, the Council considers that it is necessary to indicate in greater detail than the R.A.I.A. Scale sets out, the services which should be performed and the charges which should be made in accordance with the Scale.

This method of describing the stages of the architectural service is set out below and should be used as a basis for determining any deductions from the total charge if portions of the service are carried out by a Government Department and the other portions by a private architect.

The following basic information should be provided by the Client Department:-

- (a) Detailed written information as to the specialised requirements of the projected building and the manner and purpose for which it will be used.
- (b) A site plan showing outline of services available, all bearings and boundary dimensions, adjacent streets, features, existing buildings and any other fixed items.
- (c) Adequate site levels and foundation data as may be necessary.

The foregoing information would normally be obtained before the first stage of the architectural services are commenced.

The Council considers that the following descriptions are reasonable statements of the architectural stages and the proper charges applicable to each stage are stated.

STAGE 1.

- (a) Sketch Drawings 1/8" scale or in exceptional circumstances 1/16" scale, showing:-
 - (i) Plans of all floors fully developed to show all built-in fittings and essential equipment.
 - (ii) At least one elevation or where levels or other factors effect the plan as applicable to the site, elevations at least in outline.
 - (iii) Sections adequately illustrating the scheme.
- (b) Written information describing:-
 - (i) Proposed construction.
 - (ii) Materials and finish.
 - (iii) Electrical, mechanical and other services required.
 - (iv) Estimates of cost.

The charge for this stage of the architectural services should be 1/6th of the total charge applicable to the works as defined in the Scale of Minimum Professional Charges based on the total cost of the

works including engineering works, P.C. items and provisional sums. Under normal conditions the fee for this stage would be 1%.

If these services are provided by a Client Department an equivalent deduction from the total fee may be made. If portion only of Stage 1 as described is carried out by the Client Department then a proportion only of the normal charge for the stage may be deducted from the total charge applicable.

STAGE 2.

- (a) All working drawings (5 copies)
- (b) Specifications (5 copies)
- (c) $\frac{1}{2}$ " details and additional details as may be necessary for the preparation of the contract drawings and to enable quantities to be prepared.
- (d) Collaboration with consultants on the preparation of their drawings.
- (e) Collaboration and advice to the Quantity Surveyor.

The charge for this stage of the architectural services should be $\frac{1}{2}$ of the total charge applicable to the works as defined in the Scale of Minimum Professional Charges based on the total cost of the work including engineering works, P.C. items and provisional sums. Under normal conditions the fee for this stage would be 3%. This charge is separate and additional to the fee applicable to Stage 1.

Note: Adjustment for fees payable to Consultants.

Under the Scale of Minimum Professional Charges, Architects are entitled to increase their charge for architectural services by an amount equal to $\frac{2}{3}$ of the charges paid or payable to Consultants provided the engagements and consultation has been approved by the Client. Alternatively it is in order for the architect's charge to be reduced by an amount equal to $\frac{1}{3}$ of the fees paid or payable to consultants by the Client Department or by an equivalent amount if the consultant services are provided by the Client Department.

STAGE 3.

Supervision of the works and superintendence of the contract including any further details as may be necessary to direct the construction.

The charge for this stage of the architectural services should be 1/3rd of the total charge applicable to the works as defined in the Scale of Minimum Professional Charges based on the total cost of the works including engineering works, P.C. items and provisional sums. Under normal conditions the fee for this stage would be 2%. This charge is separate and additional to the fee applicable to stages 1 and 2..."

Finally in April 1962 members were sent a letter and circular indicating that agreement had been reached between the Chapter Council and the Government Architect's Branch.*

The Branch had agreed to comply with the Scale of Minimum Professional Charges with an acceptable reduction for its technical assistance to the member.

The letter said in part:

"The P.W.D. recognises that members of the R.A.I.A. have declared that they will abide by the rules and codes of the Institute and respect these obligations. The R.A.I.A. recognises that its members have a primary duty to their clients to provide the highest possible skill and diligence and accepts responsibility to ensure that these obligations are met..."

It would seem that there was a quid pro quo. In return for an increased standard of documentation from the profession generally the Branch agreed to abide by the fee scale.

The circular to members concluded by indicating that representatives of the Public Works Department and the Chapter would meet regularly in order to supervise the arrangements and to rule upon any exceptional fee cases and further to discuss dissatisfaction by

* The Chapter Bulletin of May 1962 carried a similar statement. A short half hour meeting had resolved the matter. Present at the meeting were J. Farrington (by then the new President of the N.S.W. Chapter), Charles Weatherburn and E.H. Farmer.

the Department of member's work, or any members complaint concerning his engagement by the Department.

THE INFLUENCE OF THE BRANCH ON THE PRIVATE PRACTITIONERS

The author asked several members of the Branch (including Webber and Hall) what influence, in their opinion, the Branch had on the private practitioners.

Most of the replies received did not demonstrate that they considered there was any direct influence. Hall suggested that, in fact, the private practitioners influenced the Branch. He recalled that the sketch plans issued to private practitioners were often vague and that the private practitioners "...made them into fine buildings."

Webber agreed with this view but considered that the Branch must have influenced the private practitioners since hundreds of them had documented the designs emanating from the Branch.

It would seem that the influence in the 1960s was often mutual. The Young Turks and other design room staff frequently asked that their projects be documented by consultant architects of their choice. Rembert was willing to agree to such appointments, provided the consultants concerned did not receive an unfair advantage over their colleagues in terms of total work allocation. This action was taken despite the then current ballot system for allocating work to the Consultants. Consequently the architects considered above average by the design room staff worked on projects with the better design men from the Branch and each had an influence upon the other.

It is difficult to see any direct influence on the private practitioners through the Royal Australian Institute of Architects. Cobden Parkes had taken an active role in Institute affairs whereas Farmer's role was appreciably less, with the notable exception of his service on the Historic Buildings Committee. With the exception of Webber very few members of the Branch staff served on Institute committees until the latter years of the period under consideration.¹¹

Whilst there may have been little official contact between the Branch staff and the private practitioners, there would have been communication on a social level. Discussion no doubt occurred, not only about design, but also about the Branch members' early activities in such fields as cost planning, documentation techniques, use of computers and its various research projects.

In the 1960s the private practitioners must have been aware of the work done by the Branch. After 1962 there was a steady stream of publicity in the popular press and the professional journals associated with the many design awards gained by the Branch. In December 1967 the "Architectural Review" - a journal of accepted prestige amongst architects - published an illustrated article on the work of the Branch.¹²

In 1961 Woolley and Dysart, working in a private capacity, produced several very fine project houses for Pettit & Sevitt Merchant Builders. These designs received widespread promotional advertising at the time and continued to do so when Woolley became the sole designer.

All this publicity reached the majority of practising architects and students. Proof of its influence upon them is seen in the large numbers of students and graduates seeking employment with the Branch. They sought the opportunity of being associated with a wide range of well designed and interesting work.*

Farmer was conscious of the reputation gained by the Branch and was determined that it remain high. In his address to his staff in February 1972 he expressed concern at the dropping design standards and the ineffectual detailing. He acknowledged the pride he felt in the position the Branch had attained. He said:

* Refer Chapter 1. The Trainee System.

In 1948 there were 3 applications for trainee-ships. In 1960 there were 100 and by the end of the 1960s, 1500 per year.

"...I flatter myself (the Branch) has achieved an aim, which was always before me, and that is to lead the profession both in aesthetic and practical aspects. The public recognition we have received both in Australia and overseas is proof of this. I think our status was never higher."*

Farmer considered that the Branch had a marked influence upon the outside profession. He disagreed with Hall, saying:

"...We did strongly influence the profession.

- (a) By our insistence on clear documentation.
- (b) By our concern for financial results of design i.e. cost planning.
- (c) By the influence of men who left us to go into private practice.
- (d) One only had to look around at new jobs done privately to see our own design palette being copied.
- (e) By our pressure on manufacturers of hardware and the like to improve design and quality.

Also to a similar extent the demands of the Interior Design Section had much effect. We bought so big we had strength enough to insist on high standards."

There is no doubt that the practising members of the architectural profession held the work of the Branch in high regard. The number of design awards made to the Branch is adequate evidence of this admiration. The ultimate mark of the Royal Australian Institute of Architect's respect for the work of the Branch was the granting of its gold medal to Farmer in 1972.

* Refer to page no. 43.

Chapter 6

Design Awards

Buildings which have won R.A.I.A. design awards are mentioned throughout the text as well as in the chronological list of significant buildings.* For ease of reference they are listed below.

It is noteworthy that the Government Architect's Branch did not receive any R.A.I.A. design awards until after Farmer became Government Architect.

Cobden Parkes, Farmer's predecessor, refused to nominate the work of the Branch for Awards.¹

Sydney Ancher had urged Parkes to nominate such buildings as St. Margaret's Hospital Ward Block (1944) and the later Chapel (1956), but he refused on moral grounds. Parkes considered that he could not satisfy the required conditions of authorship. Under the then Government regulations, the actual design architect could not be named. Parkes could claim the entry was designed under his supervision, but he would not certify that he had designed it when he had not done so.

* Chronological list of significant buildings, See Appendix No. 10.

DESIGN AWARDS TO THE BRANCH FOR WORK INSTIGATED BETWEEN 1958 AND 1973

| <u>DATE</u> | <u>AWARD</u> | <u>BUILDING</u> |
|-------------|---|---|
| 1962 | Sulman Award | Fisher Library, University of Sydney (T.E. O'Mahony architect in association). |
| 1962 | R.I.B.A. Bronze Medal | Fisher Library |
| 1964 | "Architecture & Arts" Award | Goldstein Hall, University of N.S.W. |
| 1964 | Blacket Award | Taree Technical College |
| 1965 | Special commendation by Sulman Jury | Malvina St. Ryde, High School |
| 1965 | Sulman Award | Goldstein Hall, University of N.S.W. |
| 1968 | Prince Philip Award for Australian Design | Divisible Mobile Classroom Unit. |
| 1968 | Blacket Award | Albury Government Offices. |
| 1969 | Sulman Award | Marsden Retarded Children's Centre, Parramatta. |
| 1970 | I.E.S.A. Meritorious Lighting Award | Industrial Arts Building at Newcastle Teachers College (Stage 1 of Newcastle College of Advanced Education). |
| 1970 | Sulman Award | Student's Residence - Mitchell College of Advanced Education, Bathurst. (Edwards, Madigan, Torzillo & Partners, architects in association). |
| 1972 | R.A.I.A. Merit Award | William Balmain Teachers College (Renamed Ku-ring-gai College of Advanced Education) Stage 1. |
| 1972 | I.E.S.A. Meritorious Lighting Award | William Balmain Teachers College (Renamed Ku-ring-gai College of Advanced Education). |
| 1972 | I.E.S.A. Meritorious Lighting Award | Art Gallery of N.S.W. - Extensions. |
| 1973 | R.A.I.A. Merit Award | Art Gallery of N.S.W. - Extensions. |
| 1973 | R.A.I.A. Merit Award | State Brickworks, Blacktown. |

| | | |
|------|---|---|
| 1973 | I.E.S.A. Meritorious Lighting Award | Royal Mint Building. |
| 1973 | I.E.S.A. Certificate of Commendation | Treasury Building. |
| 1973 | R.A.I.A. Merit Award | Australian Section of Taronga Park Zoo for outstanding environmental design. |
| 1973 | Honourable mention for excellence in concrete - Concrete Institute of Australia | William Balmain Teachers College (Renamed Ku-ring-gai College of Advanced Education). |
| 1973 | Civic Design Award - Sydney City Council | Art Gallery of N.S.W. - Extensions. |
| 1974 | R.A.I.A. Merit Award | Academic Site Boiler Station University of New England. |
| 1975 | R.A.I.A. Merit Award | Parramatta Court House and Police Station. |
| 1975 | Sulman Award | Art Gallery of N.S.W. - Extensions. |
| 1976 | R.A.I.A. Merit Award | Shalvey High School. |
| 1976 | I.E.S.A. Certificate of Commendation | Bini Shell - Peakhurst High School. |
| 1978 | Sulman Award | Ku-ring-gai College of Advanced Education. |
| 1979 | R.A.I.A. Merit Award | Food Training School, Ryde. |

SECTION 2

THE WORK OF THE BRANCH

Chapter 7

The High Schools Programme

HISTORY OF DEVELOPMENT

The response by the Government Architect's Branch to the daunting post-war demands by the Department of Education was impressive and worthy of the recognition it ultimately gained. These demands were created by the post-war population explosion together with the immigration policy of the Government. The extent of the demand for additional schools may be imagined when it is realised that in 1947 there were eighty thousand secondary school pupils in N.S.W., in 1962 there were one hundred and eighty thousand pupils and in the next ten years the figure escalated to two hundred and seventy-seven thousand, seven hundred and fifty pupils.¹

The buildings produced by the Branch in reply to this challenge were unquestionably of high design standard. The output was accompanied by constant research into new aims and ideals in education techniques and their ultimate expression as Architecture.

THE IMMEDIATE POST-WAR PERIOD

The achievement of such a high standard of design in the post-war period is remarkable since it developed from a very static attitude to school design. The N.S.W. Government schools during the period encompassing the two world wars followed a set precedent. For instance, the Education Department's policy was directed towards fixed pupil venues; students only changed class-rooms for activities such as science and craft. The architects were not challenged by the Department of Education to change standard approaches, nor were they motivated to seek better design resolutions themselves.

Pre-war high school plans invariably followed a single-loaded corridor principle, usually over two stories. This planning approach continued into the 1950s* before being appraised. These buildings were uninspiring as learning environments and did nothing to encourage the pupils to break away from the current attitude that schooling was drudgery.

* For example, Normanhurst High School, documented in 1953
Illustrated on page 6, Vol. 2.

The planning concept of single-loaded corridors and solid construction did, however, produce schools which were reasonably well lit and cross-ventilated and which gave adequate acoustic isolation between classrooms.

The fenestration of these buildings consisted of three metre wide pairs of double-hung box-framed windows separated by one metre brick piers.

As architecture these buildings offered their occupants no joy or pleasure in their environment - education was a serious business, to be borne, tolerated and seldom enjoyed.

The early buildings of Harry Rembert, such as Fort Street Primary School* documented in 1941, had demonstrated an architectural awareness, certainly in fenestration, but they also showed the introduction of some planning freedom. As has been demonstrated, however, his influence on the work produced by the Branch generally was not felt for some years.

J. Van der Steen, who designed several early schools including the Beverly Hills Girls' High School** (documented in 1957) and Manly Girls' High School (documented in 1958), pointed out to the author that rational thinking on school design preceded the Farmer period, but that it was slow to take hold. He said in part:

"...Even before the Farmer period there had apparently been a realisation of a need for more information on fundamental factors and statistics affecting school design. This included the following:-

1. *Clear analysis of requirements set out in basic diagrammatic form for briefing the designer, including fundamental requirements for equipment.*
2. *Particulars of climatic conditions throughout the State to assist in appropriate design.*

* Illustrated on page 4, Vol. 2.

** Illustrated on page 8, Vol. 2.

3. *Information on forms of construction which would not present escalating maintenance costs for the future.*

These studies had already commenced in perhaps an obscure and somewhat piecemeal fashion, but it had begun and assisted greatly in the gradual reappraisal of the design standards which eventually touched off a much more satisfactory approach."

The work produced in the immediate post-war period at the Branch was essentially an extension of the pre-war approach. The position was static and remained so until the Wyndham scheme required an additional year at school. Tertiary education in those years was only for the select few who could afford to pay the tuition fees. The demands which were to be placed upon the Branch in the future due to the additional secondary school year and free tertiary education could not be imagined.

Some change was forced upon the indifferent Branch, due largely to the post-war shortage of building materials. For instance, ceilings were reduced in height from 3600mm. to 2700mm, with a consequent saving of bricks, which were in critically short supply.

PREFABRICATION

The post-war shortage of materials led to a wave of enthusiasm for prefabrication. Prefabricated aluminium buildings were imported from English war-time aircraft plants, which had applied their post-war production resources to the serious problem of rebuilding bomb-damaged Britain.

As early as 1951 the N.S.W. Public Works Department Report gives some guarded indication of the frustrations experienced in the implementation of the scheme. It drew attention to the problems being experienced in erecting the buildings with local unskilled labour and also to shipping delays which upset time schedules on site.

The 1955 N.S.W. Public Works Department Report indicated that some prefabricated building containers had remained unopened and stored

for several years, as funds were not available for their erection. Obviously the shipping position improved, but by then there were economic concerns.

The Public Works Department Report of 1957 stated that the pre-fabricated building programme was being terminated gradually, due to restrictions in granting import licences for aluminium components. One senses that this slow demise was accompanied by a feeling of relief from the Government Architect. The Buildings were unsuitable for our climate and the ordered effect of their regular juxtapositioning was too reminiscent of the recent army camps. Some thought was given to developing similar forms in timber construction, but the idea was not developed.

The pressures of accommodation urgency in the still prevailing climate of material shortages did bring about one change. Precast concrete framing members were inserted into existing designs, thus reducing construction times, saving bricks and reducing costs. Bricks were used only on end walls, and spandrels beneath windows were made from various infill materials.

CURTAIN WALLS

At this time, the curtain wall was being enthusiastically recommended by architectural commentators as the logical light-weight solution for cladding framed buildings. The element, however, never gained any wide acceptance at the Branch. Farmer used a version of it at the Tallawarra Power Station in 1949. Its first real use was at the Chemistry School at Sydney University in 1955,^{*} followed by the Dixon Library at the University of New England in 1956. Subsequently the curtain wall was used in 1957 at Beverly Hills High School and the Manly Girls' High School and in 1958 for the Rural Sciences Building at the University of New England.

* Hall and Webber both recalled the technical difficulties experienced when detailing the wall. Manufacturers had difficulty in coping with the proposed sizes of glass panes and spandrel panels. It became necessary to introduce vertical divisions in the metal spandrel panels.

In 1958 Hall investigated the use and implication of curtain walls as his study subject for a Board of Architects of N.S.W. Bursary. He concluded that it was an impractical building element especially since it depended on short life-span sealants for water proofing. The fact that it produced an aesthetic expression foreign to his ideas of a natural architecture using organic materials must also have added to his dislike of the element.

Rembert and his design team resisted the use of curtain walls whenever they were proposed by the staff. Farmer, on becoming Government Architect, agreed with them. He said to the author: *"...We soon woke up to that one - it was such a gimerack kind of thing and in those days of course, by no means solved. All the disasters that occurred - leakage and collapse and so forth and we were afraid too, that in a Government building you are expected to build for a good many years and it did not seem to me to be the sort of thing that would have a long life."*

He went on to say:

"...Fairly early on I realised too, that in this climate, we were just putting too much glass in buildings. It was just becoming ridiculous - it was glass for the sake of it."

The author then suggested to Farmer that the curtain wall seemed to have a valuable potential - it was light and theoretically was ideally suited for cladding framed buildings. Was it not strange that the Branch with its vast potential for research, had not investigated the subject further? He replied: *"...Well, we could have done"* but clearly, he just did not like curtain walls.

However, the Branch did spend considerable time developing and perfecting metal windows for its schools. The need for this investigation was largely forced upon it. Costs, poor performance and lack of technical detailing knowledge had caused many problems which forced the branch to develop standard details to which all window manufacturers and design architects had to conform. Farmer remarked that these standards were derived from *"bitter experience"*

- they were "...proof against weather, school children and teachers."*

EARLY SIGNS OF CHANGE

Towards the end of the 1950s, whilst basic planning attitudes had not varied, some changes were apparent. Continuing demands for cost savings which earlier had brought about the reduced ceiling heights, resulted in the introduction of a higher proportion of glass to compensate for the reduced window heights. Fireplaces were replaced by gas or electric space heaters and colour was introduced internally. This use of colours seems significant: it was probably the first positive evidence of the realisation that a school need not and should not be a dreary institution.

The curtain wall period, short as it was, did produce some interesting concepts, which with hindsight can be seen as the tentative beginnings of the stimulating school design which was to occur in the 1960s. The real breakthrough came with the documentation of the Beverly Hills High School in 1957.** This school plan reverted in part to double-loaded corridors and set the classrooms around an internal covered divisible assembly space which formed the core of the school. It was a compact design which gave secondary lighting where needed to ground floor spaces by the imaginative use of dropped roof planes. Further three dimensional interest was achieved by dropping the floor level of the central area.

Today, over twenty years after its construction, the building still expresses a strong architectural authority which must have been radical in 1957.

* Evidence of the short duration of the curtain wall period at the Branch is shown by the additions designed for Fort Street Boys' High School (illustrated on page 29, Vol. 2) by B. Mc.Donald and documented in 1962. The idea of maximum glass is continued, but achieved simply by reducing the structural brick wall to a minimum required for brick columns.

** Beverly Hills High School. Design Architect J. Van der Steen. Illustrated on page 8, Vol. 2.

The use of open planning around a core and the exploitation of level changes for high-level daylighting demonstrated at Beverly Hills were not taken up by the Branch for some years. This is surprising, since the present headmistress is enthusiastic about the design of the school and has no criticism of the location of the assembly space (such as noise penetration to other areas) as might have been expected.*

The Manly Girls' High School** plan, which followed Beverly Hills, was based on the more normal linear blocks, but with double-loaded corridors. Two parallel blocks were offset and connected by the assembly area. The scheme was interesting, but it was not as radical a departure from the prevailing style as Beverly Hills had been.

In the following year Heathcote High School*** was documented. Like the two preceding schools discussed, it was clad in part with curtain walling. The assembly hall was of Besser block construction with a self-pattern motif in the walls. The use of pattern had a short popularity at the time amongst some architects,† being a tentative step towards a more human architectural expression. It was the beginning of a realisation that decoration, which had been banned by the Functionalist, might produce a more human architecture.

* Webber told the author that there had been criticism of the design at the time. Complaints were received that the building over-heated in summer due to the amount of curtain wall and there was concern at aspects of the planning including the central location of the assembly area.

** Manly Girls' High School documented in 1958. Design architect was J. Van der Steen.

*** Heathcote High School documented in 1959. Designed by Ken Woolley. Built as a 'document and construct' project with Architects Rudder, Littlemore and Rudder, and Builder, T.C. Whittle Pty. Ltd.

† The influence may have come from Denmark, where patterned brick was common at the time.

The overall plan of this school was formed by a number of blocks arranged round a quadrangle. Some blocks had double-loaded planning which in some cases omitted the central corridor and provided end access only. It was an interesting forerunner of the Study 2 schools of 1969.

Peter Hall sees this school as the "...*First attempt in years to design a school.*" This remark, the author considers, ignores the Beverly Hills High School, which earlier had made interesting and thoughtful planning changes.

The population growth by the end of the 1950s was placing serious demands upon schools, which, with the prevalent single-loaded classroom block caused the buildings to sprawl across their sites. Such development resulted in inordinate travel distances between classrooms and often left insufficient ground spaces for sporting activities. Consequently the double-loaded corridor solution became common, bringing with it, no doubt, regrets at the loss of natural light, cross-ventilation and acoustic privacy offered by the old single loaded solutions. The Branch had never considered three-storied single loaded development as a solution to the sprawl problem, because of the disadvantage of the additional vertical access.

The implementation of the Wyndham scheme after 1962 placed urgent demands upon the Branch. As the scheme required an additional school year and a more comprehensive syllabus, existing schools lacked the necessary accommodation, and also new schools were urgently needed.

The initial solution for new schools, typified by Mitchell High at Blacktown, was merely to extend the double-loaded corridor system of planning, using a steel framed structural system. The simple nature of the block plan enabled it to be adapted to individual sites. It could also be easily modified and was able to provide some flexibility to cope with later planning modifications or additions.

Initially these High Schools had a student intake of approximately three hundred and were required to expand by staged development to one thousand pupils. Staged development was economical, since far more schools could be started within a given budget. The steel-framed system, which also had a metal-decked roof, meant that the buildings quickly reached a stage where finishing trades could work despite adverse weather conditions. Consequently the programme answered the stated paramount needs of speed and economy.

The disadvantages of the double-loaded corridor soon became apparent.* It seemed strange that, with the background and tradition of single-loaded plans, the Branch ever embarked on the other solution, even as an expedient to satisfy the problems of urgency and cost. It was realised that these functional problems had to be overcome, but it was also realised that the schools being built were prosaic - they were deficient by any architectural criteria as contributions to the built environment for the nurturing of young minds.

THE DOUGHNUT SOLUTION

The start of a meaningful change in school design occurred earlier than the schools which followed the Wyndham scheme of 1962. In 1958 Michael Dysart, whilst in the Design Room, produced a scheme for a primary school; a design which eventually influenced and changed the high school programme and set it on the road to its ultimate success. The Branch produced a pamphlet on the project which said:

"...This school was designed to cut across existing standards in educational theory, construction procedure and planning. Designed in 1958 for general country conditions, where good cross ventilation and double sided lighting is necessary, the school was finally built at Belmont, N.S.W. and completed in 1964."**

Due to the hours of occupation, orientation was not considered an important factor, so a general overhang of roof and balcony reduces glare and minimises sun penetration. The building is two stories

* As previously discussed - poor natural light, lack of cross-ventilation and inadequate acoustic isolation.

** Illustrated on pages 12-13, Vol. 2.

in height, the lower level containing classrooms, administration and food service, the upper level containing the classrooms.

Access to both levels is by wide colonnades. The structure is exposed steel frame, infill walls are in clinker brick and where concrete is visible, it is 'off the form'. Frameless sliding windows are used above panel walls for through ventilation. The roof is large corrugated asbestos cement, pitched in towards the courtyard. All materials, where possible, are left in their natural finish; paved courtyard in brick; handrails, fascias and window framing in western red cedar. Walls inside classrooms, clinker brick; stairs are in 'off the form' concrete. The school in the final analysis of cost structure proved very economical, at \$682 per 10 sq. metres² and has been used as the basis for the entire N.S.W. secondary schools programme."

The last sentence is indeed modest.

The Belmont Primary School formed the conceptual basis for a new standard design for high schools. The plan was developed by Michael Dysart and finally documented in 1964; it was the first real step in a total reappraisal of high school design. Because of its hollow square shape it became known as the "doughnut" scheme.*

The contribution that Michael Dysart made to the Government Architect's school design was impressive. Initially he operated from the Design Room. Later, in 1964, it was realised (as previously mentioned) that a stronger and wider influence could be obtained if he was moved away from the somewhat remote, if not aloof, Design Room into the Schools Section proper. Dysart indicated to the author that he agreed with this action. His zeal longed for the challenge of a direct design influence on the section at large, for at the time many staff members were, in his words "...hidebound architects, who had stopped thinking." Once established in the section he said that he was able to approach problems with the Department of Education at a personal contact level.

* The Doughnut scheme is enlarged upon later in this chapter.

Dysart eliminated many unnecessary committees and was instrumental in reducing the approval time of sketch plans by the department of Education from six months to a few weeks.

The Doughnut design was essentially a response to the problems of the double-loaded corridor and an answer to the excessive circulation of earlier single-loaded designs. Acceptance of the proposal was aided by the favourable economic climate created by the Belmont School.

The doughnut scheme, like so many good solutions, was simple. Instead of a linear single-loaded plan, it formed an open square, hence its name, although it did not approach a circular plan shape as closely as the Belmont plan had done. The landscaped courtyard space in the centre of the doughnut was a response to the realisation of the need for human expression and intimacy in schools, as well as a device to overcome the planning problems.

A school complex was formed by grouping the doughnut units and connecting them with covered ways. Such a solution was easily related to site contour conditions. Staging was accomplished by simply adding another doughnut module when required.* The steel framed structural system was retained, but the columns were placed externally to allow greater freedom in planning. It was considered that exposed steel had become a practical possibility on all but exposed sea-air sites, due to the improvement in the technique of cold galvanising products.**

The doughnut school as an answer to the form-based classroom system of the time, was very simple, direct and basic. It was influenced by functionalism and economy.*** The introduction of pre-cast

* Standard doughnut model illustrated on page 15, Vol. 2.

** The doughnut schools had a 3600 grid for columns and roof trusses and a 7200 span for teaching spaces. Suspended floors were flat hollow block, cantilevered to form balconies. Windows were continuous on the 1800 module with sliding sashes, all in anodised aluminium. East and West facades had sun protection with expanded mesh screens. Window spandrels were in-situ concrete.

*** The early doughnut schools especially were very economical.

Authority: J.W. Thomson.

concrete arch forms in the covered ways seems, in the author's opinion, a rather alien and forced romantic element in an otherwise straightforward basic concept. Michael Dysart obviously had a predilection for such shapes; they had been used by him at Robb College at the University of New England in 1959.* In conversation, he told the author that the influence came from his admiration of the arches and vaults in the old Public Works building, and that later, he designed a house in Vaucluse where he "...got it out of his system."

The first group of doughnut schools consisted of Turramurra (now named Ku-ring-gai); Malvina Street, Ryde; Pendle Hill; Miller and Lurnea at Green Valley.**

These four projects were put to tender simultaneously. Dysart told the author that while they were at tender, "...people started to say that they were going to be expensive and duck for cover." In fact, all tenders came in beneath their estimates.***

The doughnut school at Malvina Street, Ryde, was designed by Dysart especially to fit into its steep site. Its overall design concept, whilst based on the same principle as the doughnut, showed radical departures. It is less rigid and more informal than the standard doughnut school. Its courtyards are more flowing and interlock with interest and subtlety. The pitched tile roofs and organic materials give a more romantic expression than the standard version of this school type.

* Illustrated on pages 108-110, Vol.2.

** Ku-ring-gai High School, documented in 1964. Illustrated on pages 16-18, Vol. 2.

Malvina Street, Ryde High School, documented in 1964, illustrated on page 21, Vol. 2.

Miller High, documented in 1964, illustrated on page 19, Vol. 2.

*** Dysart recalled to the author how the Lurnea school had been sited to retain a grove of 15m. high paper-bark gum trees and in fact the buildings had been set out from several key trees, which had been identified. The successful tenderer subsequently rang Dysart enquiring how he was to set out the buildings - the Housing Commission had razed the site.

The publicity statement by the Government Architect's Branch says: *"...This school was designed to be built in stages to accommodate one thousand children between the ages of ten and eighteen years, and to offer a full range of academic and manual arts subjects. The five acre site is only about one third the area normally allocated for a school of this size and the steep site added a further complication. The problem was overcome by using a split level design, the first for a school building in N.S.W. and utilising the slope to form, on three levels, a series of sloping, interlocking quadrangles enclosed by classrooms.*

The bell tower, serving as a focal point and rostrum in the central assembly area, is designed also to house the incinerator stack and switch room. Existing gum trees on the site were preserved as far as possible and incorporated into the layout of buildings and courtyards. Construction is steel framed, painted brown where exposed, with cream brick infill walls. Exterior timbers are oiled, rough-sawn western red cedar. Dark olive roofing tiles were especially chosen to blend with the colour of the surrounding bush. Concrete paving was brushed to expose the aggregate.*

Internal finishes are:-

Walls: 150mm mountain ash planks, fixed horizontally with ship lapped joints.

Ceilings: are sprayed vermiculite to lower floors and gyprock to upper floors.

Floors: vinyl tiles on concrete slabs."

Despite the impressive leap in design attitude and resolution of the basic doughnut design, it did, in the author's opinion, still retain a vestige of the old inhuman and uncompromising attitude in its expression.

Ryde, however, is something different. It has excellent scale and a happy environment, being designed and executed in impeccable taste.

* Similar element at Canley Vale High.

Illustrated on page 20, Vol. 2.

The levels and spaces of the school relate with distinction. They are always appealing and in the best townscape tradition entice one to further investigation.

The building received a special commendation from the N.S.W. Chapter of the R.A.I.A. Sulman Committee in 1965.*

Dysart realised that the schools programme really required a prefabricated system of building to solve its immense programme and urgency. Unfortunately the Sydney construction industry was unable or unsuited to develop fully along such lines. A short report on the Doughnut High School Programme prepared by the Branch, said in part:

"...To achieve the economies necessary all structure and detail has been treated in the most direct manner. Constructional efficiency and prefabrication within the present limits of sub-contracting standards has been the aim and though total prefabrication is desirable with a programme as large as this, it will be some years before Sydney's building industry is comprehensive enough to handle it, both physically and economically. It is a sobering thought that after 2,000 years, an earthen brick laid one by one in a bed of mud, is still our cheapest building unit."

At the Ryde school, Dysart was able to satisfy his personal ideals in the expression of regional characteristics, and he overcame his hatred of all schools appearing similar. The Ryde school showed the same expression and the same romantic philosophy seen in Dysart's domestic architecture at the time. Dysart was at heart a Romantic. That he was able to see the need for industrialisation and prefabrication in the school programme, which really ran against his deeper aesthetic convictions, shows the flexibility of his thinking. It perhaps also explains why the doughnut schools, whilst very fine architecture, did not totally achieve the crisp

* In that year the Sulman Award was won by the C.B. Alexander Presbyterian Agricultural College at Tocal by Ian McKay and Philip Cox.

machine quality which Dysart saw as right for them.*

Dysart was anxious to develop his doughnut design before a second group was built. He was frustrated, however, as the programme demanded another ten high schools urgently. Eight of these schools were replicas of the original design, but two of them, namely Randwick Girls' High and Pennant Hills High did show quite radical departures from the standard design.

The Randwick Girls' High School** was designed by Sandy Bishop³ under Michael Dysart and documented in 1965. The building uses concrete shapes in a strong almost dramatic way. The handling of the forms and materials is in direct contrast with the romantic philosophy expressed in Malvina Street, Ryde. In fact it is hard to realise that it came from the same stable. That it did is an important fact, since it demonstrates the individual freedom allowed to the Branch's designers, once their merit and ability had been demonstrated.

Whilst it may be discerned that the Randwick plan is derived from the original doughnut concept, it is looser in arrangement and less regimented.

The building, which is significant and interesting, was acclaimed at the time. It gained the distinction of being discussed and analysed in the Fine Arts course at Sydney University in 1968. Sandy Bishop, in reply to the author's questionnaire said in retrospect:

"...I am not now happy at the harshness of this design."

He went on to express his philosophy, saying:

"...In my younger days and when the modern movement was younger and still had certain illusions I was impressed more with the

* Many people to whom the author has spoken in the course of this study, have paid tribute to the contribution Dysart made to the Schools Section. His enthusiasm, effort and notable ability must be acknowledged in this chapter.

** Illustrated on pages 22-23, Vol. 2.

Brutalist, Functionalist more monumental approach and aesthetic. In the years (at the Government Architect's Branch) when I wasn't designing, however, I came to feel more and more that this aesthetic did not satisfactorily relate to the needs of man's soul. I even came to feel that perhaps I was rather glad that I had been prevented from doing what might have been much bad architecture ... I feel strongly that a new philosophy based on the human needs of everyday man must be sought - perhaps more domestic and soft in feeling, certainly less self-conscious and attention seeking, which, as with people, is just bad manners and prohibitive of the formation of a unified and harmonious built landscape."

This is an interesting criticism from the building's designer and one which many thinking architects of today would endorse. It would seem that the more romantic approach to design offers a more human result, even to some architects of Brutalist persuasions.

The Pennant Hills High School* was designed by Mike Waller⁴ under Dysart and documented in 1965, the same year as Randwick Girls' High. Pennant Hills departs less from the doughnut standard than does Randwick. Its main blocks are rectangular rather than square, still hollow, but they are interconnected on a diagonal axis, so producing interlocking courtyards. The concept is one of floating horizontal planes very different from the more static standard doughnut. The design solution recognises the steep site by stepping the blocks and connecting the courtyard spaces with strong stair flights.

The buildings are steel framed, clad with precast concrete panels finished with a mixture of brown river gravel and blue metal. Fascias and spandrel cladding between ground floor ceiling and first floor levels (which, in the author's opinion, seem inordinately deep, due to the use of trusses to support the first floor slab) are formed from

* Illustrated on pages 24-26, Vol. 2.

pressed metal panels coloured brown. The resultant character, coupled with imaginative and sensitive landscape design which preserves some fine gum trees in the courtyards, combines to create an atmosphere which is restful, tasteful and of a high architectural order.

PREFABRICATED CLASSROOMS

Since the Branch had found it impossible to fulfill the demands of the Education Department for more and more schools, pre-fabrication was re-introduced in 1965. This time the buildings were designed at the Branch by John Zaat⁵ under Dysart and fabricated by Tullochs Ltd. The buildings were, and still are, functional, elegant and durable but somewhat expensive. No doubt a greater production quantity would have produced an optimum output, and hence a cheaper unit cost.*

In 1968 the design won the Prince Philip award for Australian design - the first non-purely architectural award to the Branch. The buildings proved versatile, being used not only as classrooms, but over the years, for hospitals, site offices, dental clinics and police stations.

Each unit was steel framed, clad with aluminium faced polyurethane panels. As the units were totally demountable and re-erectable they were ideally suitable for temporary accommodation. Each classroom block was delivered on site in four sections and laid on top of pre-prepared sleeper piers. The sections were joined by compression gaskets and bolted.

Their use has extended to temporary accommodation for whole schools. Bensley Primary School and Shalvey High School were two examples where total temporary accommodation has been supplied 'off the shelf.'

* Illustrated on page 27, Vol. 2.

CONSORTIUM SCHOOLS

It became apparent by 1966 that the doughnut schools were not large enough to absorb the higher pupil retention which had developed in the senior years, nor could they provide space for the new facilities being required by the educational system. The doughnut standard school had an area of approximately 6420 sq. metres, whereas 7350 sq. metres was the area required to answer the new demands of the Department of Education.

The additional area was introduced merely by elongating the original hollow square plan of each block and interconnecting them on the diagonal at the corners. Canobolas at Orange East* is a typical example.

The Education Department required twenty-seven of these schools for the 1967 school year. The Government Architect decided that the only way in which such a demand could be met was to hand the sketch plans to private architects for documentation in the usual way, but in addition to co-ordinate the production of the documents and to tie all the outside consultants into a consortium. This meant less duplication of problem solving, plus other mutual assistance schemes and consequently a reduction of documentation time.

This method of production suggested the name "Consortium Schools", by which they are now known.

The Consortium schools were not an aesthetic success, largely because the innate shape of the doughnut schools would not accept the expansion. The article by the Branch entitled "Secondary Schools in N.S.W. - Ten Years of Progress"⁶ expressed concern about the design saying:

* The design was developed by Sandy Bishop under Dysart.

"...They (the consortium schools) are similar to the original doughnut, but because of their size they are less satisfying architecturally."

The Government Architect was concerned that the diagonal connection of the shapes tended to make the group read as one building, with a resultant large scale being imposed.

At this time (1967) Dysart's influence upon the Schools section ceased. He had been working for some time on the design of the Institute of Technology at Broadway and it became obvious because of the large size of the project that his venue should change to the office of the private consultants who were to do the contract documentation.⁷

By 1968 it was realised that neither the doughnut nor the consortium solutions to high school design were any longer acceptable. In the then current practice each stage of the school (i.e. each separate doughnut) provided both classrooms and specialist rooms and consequently allowed for growth as well as answering the school's organisation of its timetable on a firm basis.

But it was realised that the single-loaded corridor system, apparently so fine in principle, could not provide acoustic isolation for classrooms when noisy areas were in the same block. Another problem arose when the school numbers built up. It was found that the circulation systems were inadequate. They could not cope with the pupil movement between classes required by the Wyndham system once the school numbers reached their designed maximum. In fact the very real apparent merit of the doughnut principle, which was its compactness, became its serious disadvantage once the school was fully operational.

STUDY 1 SCHOOL

The response from the branch to this new challenge came in 1968 from the School Research and Development Group, as a design known as the "Study 1 School" by Ken Thirsk.⁸

The first school to be built to this design was Busby High School at Green Valley.* As an experiment it was considered to have failed, so that it remains the only example of the Study 1 school design.

The main difference in planning from the Consortium schools was that whilst it retained the single-loaded corridor system, it reverted to one direction blocks. These blocks were spaced to form courtyards and linked by covered ways. As an essay in quality human environment it lacked subtlety and variety.

STUDY 2 SCHOOL

The Research and Development Group continued its investigation work, having come under strong pressure to produce schools for considerably less cost, as well as to overcome the planning faults which had been revealed in practice.

Consequently the Study 2 School, designed by Charles Carter⁹ in 1968 was quite different from the Study 1 prototype. It was an highly cost orientated design, being fifteen per cent cheaper than the Study 1 school and still of a comparable area.

The Study 2 solution came to terms with zonal noise in the final development by building the spaces required for noisy areas in the first stage, and temporarily fitting some of them out as classrooms. (One must, however, imagine that this solution was not satisfactory in the early stages.) The design reverted to double corridor loading and in some areas omitted the corridor entirely, providing back-to-back classrooms having end access. Exhaust fans were used extensively to provide cross-ventilation and corridors had fixed glazing in an attempt to prevent noise penetration to the classrooms.

The construction, in keeping with the cost oriented approach, discarded framed construction in favour of load-bearing brickwork,

* Illustrated on page 33, Vol. 2.

which alone showed a saving of \$7.5 per sq. metre. Glass was reduced considerably at first floor level as a further economy, being supplemented by continuous roof lighting.

The economic success of the Study 2 Schools was undeniable.

Externally these schools, represented by Windsor High^{*} as the first built, followed by several such as Kingswood High^{**} and Figtree High, in the author's opinion, express a much more imaginative architectural quality and one from which the pupils could be expected to gain some environmental interest.

STUDY 3 SCHOOL

In 1971 towards the end of the Farmer period the Department of Education again revised the requirements for basic design concepts. Investigation had revealed that the old idea of form-basing for pupils should be replaced by subject basing. To meet this requirement the Branch evolved the Study 3 School,^{***} which was basically a series of room clusters. Each room was seen as being able to serve more than one similar subject. The subject-based classroom principle meant that pupils, rather than staff, moved between lessons. Consequently a large number of pupils could be changing their venue between lessons. The Branch was aware that in order to avoid congestion and long delays between lessons, consideration had to be given to circulation systems. Classrooms had close proximity to staff rooms and to an area known as a "resources area". The planning was more open and freer than it had been, using both single and double-loaded corridor systems. The multi-purpose shelter and canteen were enlarged and the library was free-standing to give better acoustic isolation.

The standard site plan had seven separate blocks, designed to permit its use on most sites irrespective of contour or orientation variations. It also allowed varied staging to suit individual needs.

* Illustrated on pages 31-32, Vol. 2.

** Illustrated on page 37, Vol. 2.

*** Study 3 School designed by: I.J. McHutchinson,¹⁰ D. Anderson,¹¹ R. Powell.¹²

Eight Study 3 schools commenced building in 1972 - Evans High at Blacktown,^{*} Galston, Lake Illawarra, MacIntyre at Inverell,^{**} Koorinal at Wagga,^{***} Mulwarree at Goulburn, Casula and Davidson at French's Forest.

In the report by the Government Architect's Branch, entitled "Secondary School Progress in N.S.W.", the Branch comments upon its Study 3 Schools saying:

"...the largest and most expansive and in terms of the 'heavy' style of architecture, the most handsome yet evolved."

After inspection of the Davidson School, one must agree with the Branch's self-expressed satisfaction of its visual expression. The various blocks are well grouped - less formally than the doughnut layouts - and they consequently create a more human atmosphere. There are some lapses in scale from that which would seem appropriate for children. For instance, the use of deep window reveals in the brick walls is almost monumental. Generally there is a friendliness apt for its purpose, enhanced by the restrained use of primary colour on columns, balustrades and doors. These elements provide enlivening contrast in the face brickwork and off-form concrete surfaces.

A refreshing lightness is offered as contrast to the main masses by the single and double-storied covered ways. These expand without appearing forced, to become larger roofed areas at nodal points such as stair heads.

Internally the friendly and colourful atmosphere really becomes enveloping. The library has pea-green carpet; red columns, balustrades and exposed air conditioning ducts; yellow on the chairs and orange pendant lights. The mental image created by this riot of colour is in fact not the gaudy kaleidoscope one might imagine, but an interior colourful and fitting for its occupants.

* Illustrated on pages 51-52, Vol. 2.

** Illustrated on page 54, Vol. 2.

*** Illustrated on page 53, Vol. 2.

A publication available from and produced by the Davidson High School makes the following statement on Course structure:

"Officially designated High School Study 3, the school is one of a group of eight identical designs planned by the Government Architect in consultation with practising teachers, for experimental purposes.

The design breaks new ground in a number of fundamental ways. Previously schools have been planned as Form-based schools. This term is used to describe the system of form organisation in which classes remain in the same classroom for the majority of lesson types. The development of the Wyndham pattern of organisation in high schools has resulted in the abandonment of the traditional class comprised of the same pupils for all subjects, in favour of 'ability grouping' in every subject, to enable each pupil to undertake studies commensurate with his abilities.

This new pattern of organisation has influenced the decision to experiment, in this design, with the concept of 'subject basing'. Subject basing provides for the allocation of groups of learning areas with facilities especially planned for the requirements of particular subjects.

It is anticipated that the development of specialist facilities for each subject will result in a more satisfactory learning environment for pupils."

SPECIAL DESIGNS

In some cases, educational requirements or special restrictions, meant that the standard designs were unsuitable. The logical outcome was the preparation of special designs to meet these cases. The need for these individual solutions arose from such factors as site restriction, unusual climatic conditions, or peculiar local educational needs. There have also been cases of experimental buildings to test new materials and building techniques.

Five of these schools are examined in the following text. They are each designed by different architects and further illustrate the freedom allowed to designers of recognised ability.

BROKEN HILL NORTH HIGH SCHOOL

The Broken Hill North High School^{*} is interesting as it was the subject of a special study which sought a solution to the harsh local climate.

The building was designed by A. Van der Steen¹³ and documented in 1972. It is an extremely compact plan on three levels with almost no external light or ventilation, being fully served by mechanical evaporative cooling equipment.

In many ways it is a prototype for the Shalvey school documented in the following year, since the latter sought to come to terms with the relatively hot climatic conditions at Mt. Druitt in a very similar fashion.

The almost blank walls, punctuated with a rhythm of very few narrow slit windows, suggest an appealing internal retreat from the local heat. The subtle asymmetrical placing of the slit windows creates a relaxed quality and removes any suggestion of formality.

SHALVEY HIGH SCHOOL^{**}

This school was the subject of a special study which had three main precepts:

1. To produce an integrated school with minimum circulation areas;
2. To overcome the poor comfort conditions usually associated with double-loaded two storey, naturally ventilated classroom blocks, and
3. To reduce the cost of the then current standard high school of equivalent accommodation.^{***}

* Illustrated on page 52, Vol. 2.

** Illustrated on pages 59-60, Vol. 2.

*** These conditions were the same as Broken Hill North; One aim was to prove that such an approach, especially the use of mechanical cooling, could be economic. The tendering results of Broken Hill North were not considered to be realistic; those of Shalvey proved that the approach was valid. Authority: J.W. Thomson

The design produced by John Rabong¹⁴ and documented in 1973 achieved the aims of the brief. The plan, whilst extremely compact, achieves the first aim by resorting to a number of enclosed rooms including classrooms. These spaces are provided with evaporatively cooled mechanical ventilation (following the example of the Broken Hill North High School). Physical comfort is gained, but the enclosed classrooms raise the question of psychological acceptance by the students.* Significant cost savings were achieved, the school being ten per cent cheaper than earlier ones of the same accommodation.

The building received a merit award in 1976 from the R.A.I.A. whose jury said in part:

*"...This high school in the Mt. Druitt area for 1100 pupils achieves a level of sophistication; the sense of a place of learning and a warm friendliness which commend it as an excellent building. It is characterised by compact planning made possible by the use of mechanical evaporative cooling in the main block and by the use of the cheapest materials ... The staff are pleased with it. We were told the community is proud of it. The jury enjoyed being in it. The overall light grey colour of the carefully chosen concrete bricks and the asbestos cement roof are relieved by accents of strong, warm colours and by a warm coloured carpet in the main block.** (The quietness achieved by this use of carpet makes a stunning difference to the feel of the building and must extend the patience and capability of the staff to a considerable degree). A very simple circulation system makes good use of the fall in the site and places an emphasis on the large double height library which is readily accessible from all the classrooms (as it should be) but also conveniently located for community use ... To reduce the heat gain and to focus attention inwards to the classrooms, only small windows are provided. These admit sufficient pleasant light and views over the playing fields. The workshops and gymnasium have a totally appropriate light and workmanlike character. All*

* The present headmaster informed the author that there was no student or staff criticism or adverse reaction to the internal classrooms.

** Exposed steel is yellow, window frames are scarlet externally, and in Block 1 each level has a different carpet colour (green, blue and orange), with contrasting joinery.

the corridors are open ended and should more space be required, either in more permanent accommodation or in portables, it can be easily and logically connected to the existing circulation system. The massing of the building is bold and has a strong, yet human presence. The jury hope that there will be more like it."

BALMAIN HIGH SCHOOL

The Balmain High School was documented in 1972 as an answer by Barry Sneyd¹⁵ for a special design due to a very steep site on Sydney harbour.*

In a review of the building Roger Pegrum¹⁶ says in part:
"...The solution, a building on seven levels, is splendidly organic and avoids the pavilion-type structure that was, until recently, the standard answer to a complexity of functions. As a result, there is an ant-heap atmosphere, with vertical external spaces dominant. Existing cliffs of sandstone form high walls to interesting, if daunting, courtyards.

It works and as far as the building is concerned, it is an ingenious and intelligent solution to a tricky site problem. Its failings are those of scale and attendant alienation - factors outside the control of the designer - and a lack of empathy with the suburban environment, which is something that could have been ameliorated by a better understanding of school/community inter relationships..."

On first sight one is conscious of being in the presence of a mature designer's work. The image is one of smooth brutality and almost uncomfortable faultless purity. But the immediate image softens; the off-form concrete is given a human expression with primary colour relief on doors and down pipes and the brown brick walls and copper brown pitched roofs assert themselves against the original concrete dominance. The sheer simplicity and sense of rightness overtake one to a point of admiration and then pleasure in the environment created.

* Illustrated on pages 47-49, Vol. 2.

Internally the use of primary colour is continued, giving good atmosphere to the sensitively designed and flowing spaces within the complex.

GIRRAWEEEN HIGH SCHOOL

The Girraween High School was documented in 1973 to a design by Craig Burton.¹⁷ The concept was to consolidate the complex as a continuous structure rather than as a grouping of separately linked blocks, according to the G.A.B. Schools Newsheet No. 2. Such an aim is apparent in most of the special schools since the Study 3 type.

The news sheet goes on to say:

"...a conscious attempt has been made to break down the scale by the use of repetitive elements based on typical span situations and to relate to the surrounding housing fabric by the use of domestic materials (brick and tile).^{} Small courtyard areas are interspread throughout the scheme for use by class groups or individuals as outdoor learning spaces..."*

MOOREBANK HIGH SCHOOL

Moorebank High School was designed by Rudi Seidel¹⁸ and documented in 1973.^{**} It is another example of a closely knit site plan with interesting juxtapositioning of the blocks and sensitively considered landscaping.

The building is a fine architectural composition, but is somewhat large in scale for pupil relationship. Criticism can be made of the rather sombre liver brown brickwork externally which reduces any sense of joy and welcome.

It is in plan that the design really excels. The site plan is good, the blocks are sensitively juxtaposed, resulting in flowing, interesting and varied spaces between them. The whole is linked

* This attitude is interesting in the light of Roger Pegrum's criticism of the Balmain High School.

** Illustrated on pages 56-58, Vol. 2.

with river gravel finished concrete paving blocks, which relate architecturally to the building and join the built form with the landscape exceptionally well.

Internally one is immediately aware of the value of the broken external masses - the long uninteresting corridor has gone, to be replaced by well handled fluid spaces which relate convincingly and usefully expand to form resource centres.

STANDARD DESIGNS FOR ASSEMBLY HALLS, LIBRARIES AND LABORATORY BLOCKS

Once the Wyndham scheme was approved and before it could be implemented properly, it was necessary to provide additional accommodation at most existing schools. Assembly Halls, Libraries and Laboratory blocks were designed as standard detached buildings for incorporation into the existing school complexes. In order to satisfy the urgent demand for the many buildings needed, the Branch saw a standard design as the only possible solution available to them in the time available.

STANDARD ASSEMBLY HALLS

The first standard Assembly hall was built at the Asquith Boy's High School to documents prepared in 1960. The design was developed by another designer from a hexagonal hall designed by Ken Woolley for the Katoomba High School earlier in the same year.

The Asquith Hall is basic, simple and straightforward, expressing its functional purpose with splayed walls and asymmetrical gable roof. However, in the author's opinion, it lacks the sagacity, the sophistication and the mature design flair of Woolley's Hall at Lidcombe State Hospital^{*} documented in the same year. The interior, especially, of the Lidcombe Hall has stood the test of time with consummate ease. It is today - by today's exacting standards - a fine and inspiring space. Nevertheless, the Asquith Hall was a great step forward and indeed, when compared with the earlier standard at such schools as Normanhurst High School (1953), must be seen as progressive.

* Illustrated on page 136, Vol. 2.

The next development was an hexagonal hall, designed by Michael Dysart and first documented in 1966, for Chatswood High School, Northmead High School, and several other schools.

This had an hexagonal plan shape, a level floor with the inner skins of the external walls formed in pierced brickwork backed with mineral wool. The roof was supported by steel pipe trusses sloping to a central ring.*

It was a crisp building, expressing its plan shape with well integrated stage and foyer shapes. Each panel of the hexagonal brick walls was pierced with narrow slit windows.

The design remained standard for some years.** In 1971 it was built at St. Ives High School, with only minor modifications, principally to incorporate a fully suspended stage floor with free space below. In 1974 it was built at Castle Hill High, and at Mitchell High at Blacktown. These examples extended the foyer and placed chair stores on ground floor level instead of below stage, and also modified the roof truss system. In the same year a version with different roof framing and steeper pitch was built at Narrabri.

To conclude this section, it is interesting to comment on a non standard hall design, if for no other reason than to underline the fascinating diversity of design approach permitted in a bureaucracy.***

* The origin of this roof concept may have been Woolley's design for the Chapel at St. Margaret's Hospital, Sydney, documented in 1956. Illustrated on page 70, Vol. 2.

** Maroubra Hall, which is an example, illustrated on page 63, Vol. 2.

*** This permissive atmosphere is a tribute to Farmer as Government Architect and to his attitude to his staff. Further it is a tribute to the N.S.W. Government's lack of interference and its confidence in the work of the Branch. Farmer has told the author that he had very little interference from N.S.W. State Government Ministers.

A restricted site at Riverside Girls' High, Gladesville, required an individually designed hall. The building, which was designed by T. Keen¹⁹ and documented in 1971, is rectangular on plan with a steeply pitched roof which drops down on three sides to little more than head height. The fourth side, forming the stage end, had a high stepped brick wall.

There is no doubt that the building is a special design, being very much the personal statement of its designer. It is dominated externally by its steep shingle-clad roof, the rising planes of which are terminated with a flat plane sheeted with a membrane. The face brickwork is brown, the fascias are copper clad and the joinery is painted bright red. Internally a vital freshness is achieved with light pine boarding on the ceiling planes.

BINI SHELLS

The beginning of a new, interesting and aesthetically contentious standard hall was rather forced upon some senior members of the Branch. David Hughes,²⁰ when Agent General in London, wrote to the Director of Public Works in enthusiastic terms about a domed building in Italy which was designed by Dr. Dante Bini. Hughes suggested that the system may have advantages for the school's programme and that if a Department senior architect or engineer was in Europe it might be valuable for him to examine the proposal.

According to Thomson, Farmer, Weatherburn and initially Thomson, were not enamoured of the idea. Farmer did not consider that the positive circular form of the proposed domes could be satisfactorily integrated with the current rectilinear shapes used in high schools.

Nevertheless, the idea was seen as a possible answer to the Government of the day's undertaking to construct halls at all high schools without them and to do so in its remaining two-year life.

As J.W. Thomson was about to go overseas he was asked to visit Italy and to make an evaluation of the technique. His scepticism soon changed. He saw that there were advantages in the clear span offered, in the speed of the erection time and in possible savings of labour and materials.

Farmer and Weatherburn remained unconvinced. Thomson told the author; but the Director of Public Works and G.P. Webber supported Thomson's recommendation that a trial shell should be built.

The concept of the building technique is recorded in the Public Works Department Review of 1976, which said:

"...The dome structures are formed by slightly compressed air supplied by the electrically driven centrifugal fans through ducts under the concrete ring foundation. Prior to inflation, steel reinforcement and concrete is placed on the top of the neoprene membrane and then covered with a P.V.C. membrane. For a thirty-six metre dome, pouring the concrete takes three hours, while inflating the structure takes another hour."

Dr. Bini advised the Branch to build small domes first, to enable it to acquire a proper understanding of the technique. This advice was taken and the first building was a complex of three eighteen-metre domes at Narrabeen North Public School.* Two interconnected domes formed a Library with an attached third dome for Administration. This structure was followed by a single eighteen-metre dome at Killarney Heights Public School for use as a Library.

The first thirty-six metre Bini shell was built in 1974 (after the Farmer period) at Peakhurst High School. This example had additional half prism structures at its cardinal points. Similar buildings soon followed at Pittwater High, Randwick High, Fairvale High, Ingleburn High and Ku-ring-gai High.

The Government Architect's expectation that the eighteen-metre diameter shells would not be as cheap as conventional structures proved correct but the thirty-six metre diameter shells were slightly more economical. Both sizes, of course, had the advantage of rapid construction times. The smaller shells would be poor acoustically as halls and were never used as such, whereas the larger proved to be acoustically satisfactory. Many large shells are used as gymnasias, or as combined halls and gymnasias.

* Illustrated on page 63, Vol. 2.

It is interesting to record that the Fairvale High School shell collapsed soon after it was constructed. The reasons later advanced for the failure were that after an extremely hot day, when the interior had become unusually hot, there was a cold change accompanied by a thunderstorm, which rapidly lowered the outside temperature. The effect of this was to induce skin stresses which, coupled with a somewhat flatter arch than should have been the case, caused the failure. It was also pointed out that the insulation was not installed at the time.

Since that time many shells have been constructed and the original technology relating to thermal gradients in shell structures has been advanced by the Sydney engineers, Taylor, Thomson and Whitting, with assistance from Dr. Bini and Professor Campbell-Allen of The University of Sydney.

As well as the hexagonal hall and the Bini shell Harry Seidler also designed a standard hall for the Branch. One was built at St. Mary's but not repeated.

STANDARD LIBRARY AND LABORATORY BLOCKS

The Study 2 school plan had complied with the Wyndham scheme requirements for library and laboratory facilities in schools. But in 1967 the Education Department doubled the required size of libraries and increased the laboratory needs from four or five rooms to six or seven rooms in the larger high schools.

Consequently it again happened that a standard detached building was the most satisfactory solution to the additional accommodation problem. It could be built quickly and it could be fitted into most school site plans.

Standard designs for combined library and laboratory blocks were derived from the Study 2 school prototype in two forms; one being designed to serve a one thousand one hundred pupil high school, whilst a second version served the smaller six hundred pupil high school.

The smaller standard library-laboratory building designed by John Moran²¹ was known as L.L. Block B.1970. It had two laboratories, a preparation room, store and a classroom on the ground floor and the library on the first floor. The building was square in plan, with a shingle tiled pyramidal roof, crowned with a louvre-walled plant room.

The larger version, also designed by John Moran, was called L.L. Block A.1970.* It contained four laboratories, a preparation room and two work rooms on the ground floor with again the library on the first floor. The library also had a narrow central mezzanine level. The building was rectangular on plan, with a tiled gabled roof recessed along the ridge to provide two-sided high-lighting.

In 1972 the smaller L.L. Block B was amended slightly. The original version had external access to its ground level laboratories - the newer version provided a central corridor and hence internal access.

Where additional laboratory accommodation was not needed, standard detached libraries had been designed by Barry Krone,²² again in two versions, one for the six hundred pupil high school and a larger one for the one thousand one hundred pupil high school. The smaller design, known as the S.L.70 B was square on plan, single-storied with a concrete tiled pyramidal roof rising to a four-sided aluminium-louved roof lantern. The larger library, known as S.L.70 A, was two-storied and split-levelled, having a low profile metal deck roof with a full-length glazed highlight.

CONCLUSION

The development which took place in high school design was remarkable. It was accompanied constantly by the Branch's conviction that its results should be reviewed as a guide to modification in future projects.

* Illustrated on page 38, Vol. 2.

This desire to refine its own work was a healthy architectural sign. It was an expression of enthusiasm and determination to develop and improve its results.

It must be asked how aware pupils are of their environment and how they respond to it. Does an architectural style assist or hinder the learning process? Does Romanticism or Brutalism or any other style provide the better school environment? Not all pupils consider environment at all, other than perhaps at a subconscious level. Several senior students to whom the author spoke at Malvina St. Ryde high school when asked how they responded to their building asked:

Why, is it different?"

When assured that indeed it was, one replied,

"Well I suppose it has sloping ceilings."

It would seem that only a small percentage of students would be conscious of the architect's aims. Hopefully a larger percentage would have a subconscious reaction and in consequence some response in terms of learning.

It is also interesting to consider the post-war British school development, especially the work of the Hertfordshire County Council. The schools produced by this authority in the late 1940s and early 1950s captured the world's attention. They cast aside restrictive building regulations. They realised the need for a scale and expression related to children and produced light, elegant, friendly prefabricated buildings of outstanding architectural quality.

Here in Australia the Belmont school was designed in 1958 and the Doughnut school in 1968. Both were very fine, especially when viewed against the N.S.W. scene which preceded them. Seen, however, against the Hertfordshire developments, one cannot help but feel that the early work was somewhat awkward by comparison. No doubt our isolation from the world scene at the time and our lack of historical precedent were the main reasons for the difference.

The Branch's self-confessed heavy expression,²³ especially in the latter years of the period under consideration, followed the Brutalist philosophy. It produced an architecture which had a fine sculptural quality. But, in the author's opinion, an architecture having a lighter quality would have allowed the children to relate more comfortably with their school buildings.

Any criticism the author has made of the Branch's schools should on no account be construed as even mild condemnation. The schools were and still are, very fine and showed remarkable advance under the enthusiastic and talented guidance of J.W. (Ian) Thomson, R.W. Kirkwood and M. Dysart. Further, criticism based on the quality of human expression was not common in the early 1960s whilst it is common today. "Form follows function" was still the criterion of many Australian architects at the time the Branch was producing its early schools.

Chapter 8

The Primary Schools Programme

HISTORY OF DEVELOPMENT

Primary school development was neither as structured nor as radical as the evolution of the high school. Primary school design continued to follow pre-war concepts with only minor changes, until the Wyndham scheme of 1962.

The demands of the Wyndham scheme were directed towards the high school so that the Branch naturally concentrated its greatest attention on the area of emergency.

Education at the time was based on a one classroom system, resulting in cellular planning and runs of single-loaded classrooms opening off verandahs, "trains" as they were called by the Branch. The buildings were usually of single-storied timber construction, with weatherboard cladding and gabled roofs. The verandah adjunct with its basic timber balustrade gave the building a simple and human quality in fitting scale with its purpose and occupants. Groupings of such buildings on site, whilst not great spatial architecture, were at least often agreeable.

There were two noteworthy departures from the general approach in the years before Farmer became Government Architect.

The first was Fort St. Girls' and Boys' Primary School,^{*} documented in 1940 to the design of Harry Rembert. It was a fine building, basically linear in concept, but more compact than usual. Its importance, however, lay in its departure from the normal aesthetic. Like other Rembert design discussed previously, it demonstrated the strong influence of Dudok on his design philosophy at that time.

The second departure was the Moree Public School (Infants' Section) documented in 1949 and also designed by Harry Rembert. It was a sensitive building, also linear in plan with arcades at Ground level reminiscent of his Quirindi Courthouse of 1930.

* Illustrated on page 4, Vol. 2.

Rembert obviously was searching for a new expression for the primary school but, as with his other work, his designs remained special cases, and did not influence the overall design of the Branch until later.

There were instances in the 1950s when the verandah was eliminated and a steel frame substituted, so that larger glass areas could be incorporated as had been the case in high school development. These changes coincided with the improvement in the supply of building materials following the immediate post-war shortage. Whilst this urge to improve the design standard was commendable, it appears that too much emphasis was placed on following overseas trends, which were very often unsuited to our climatic conditions. Our short but valuable indigenous architectural heritage was seldom recognised in those days as a worthy basis for development.

The results were not favourably received; the omission of the verandah meant poor circulation, since classrooms were entered from a porch serving a pair of rooms. Sun penetration became a problem and there was insufficient wall space for display purposes. Then, too, the loss of the verandah meant that there was not external shelter available for general use.

The "train" approach continued in the 1960s often with unfortunate results. As demands for more accommodation grew, new linear buildings were added, sprawling across the site. Whilst the design concept for the new blocks remained the same, the construction and the materials varied, so that a school complex displayed buildings having walls of timber, brick veneer and asbestos, with as many different roofing materials.

*"...Predetermined maximum school sizes, properly staged development, a number of options to meet future variables and a co-ordinated system of temporary accommodation were still to come."*¹

The real turning point in the school development programme came in 1958 when Michael Dysart designed the basic doughnut form. He had been concerned at the lack of planning in the primary school programme. This one design gesture eventually led, as has been seen, to

the inspired high school development. Dysart realised the need for a major examination of the primary school field, but was unable to make any real contribution, due to his total involvement with the high school programme.²

Dysart did, however, develop his doughnut principle as a solution for the Fred Birks Hospital School at Camperdown^{*} which was documented in 1960. The plan is square with a central courtyard, but unlike Belmont, it leaves three external corners open. It is a flat-roofed building having simple well proportioned fenestration and the patterned brickwork popular at that time. It reveals a true searching for simple elegance and human scale and, above all, a striving for non-institutional architecture closely approaching the English Herfordshire aesthetic.³

Whilst there was no strong line of general development in the primary programme, there were a number of fine schools built in the 1960s. The Ultimo Public School^{**} documented in 1962, solved the difficulties associated with a small city block. The fenestration is similar to the work then being produced by Peter Hall for the University of New England. Whilst the glass areas were reduced, no doubt for reasons of acoustics and western exposure, no attempt was made to sun-screen them.

Another interesting building of the 1960s was Mica Street Primary School at Broken Hill. It was designed by Don Coleman as a special case, to cope with the rigorous climatic conditions. The building has two main blocks, each planned linear-fashion around courtyards revealing the influence of the doughnut scheme. The courtyards give protection from the hot summer winds and also from the cold winter ones. There are covered play areas and extensive areas of shade planting.

* Illustrated on page 9, Vol. 2.

** Ultimo Public. Designed by G.P. Webber. Building illustrated on page 11, Vol. 2.

Primary classroom light is drawn from the courtyards to avoid glare, with only small areas of glazing on the outside perimeter walls. (It is interesting to note that this fenestration pattern closely resembles that used at the earlier Ultimo School.) The roof space in the truss depth is ventilated fully by fixed timber louvres forming fascias on each side. Local gneiss stone is used in masonry walls, again reminiscent of the work at the University of New England at the same period.

By the mid 1960s the Branch was giving consideration to ultimate primary school size so that rational designs could be prepared for staged development.

Educational requirements were changing. The school curriculum had been revised and expanded and there was a tendency towards fewer pupils in each class. Buildings were needed which could adapt to the new needs as well as cope with unknown future needs. Design deficiencies of the immediate past were recognised. The verandah was restored, the excessive use of glass was restricted and even two-storied primary schools were built in defiance of the old single-storied tradition. This latter change was brought about in an attempt to overcome the long communication problems and excessive site coverage required by schools with greater numbers of pupils and new specialised space requirements.⁴

THE CLUSTER PLAN

The Schools Building Research and Development Group continued their research into the changing needs of primary schools. R. Bailey produced a new design known as the Cluster Plan, the prototype of which was built in 1967. The design did not supersede the linear approach, as each form was considered to have merit in different circumstances.

The characteristics of the Cluster Plan as seen by the Branch are:⁵

- "... (1) *Site development to a flexible pattern in clusters of classrooms, up to a maximum of eight in each.*
- (2) *Primary and Infants integrated by a central administration, library, food service and staff common room.*

- (3) *Clearly defined areas for kindergarten, infants and primary.*
- (4) *Toilet and washing facilities in each complex.*
- (5) *Small multi-purpose spaces associated with classrooms for group work.*
- (6) *Openable walls to provide double classroom spaces for a variety of learning situations.*
- (7) *Storage walls. ..."*

These stated aims were far-reaching and indicate the considerable change in attitudes towards school design which had taken place. The Branch claimed that the design was informal and that it had a domestic scale even when fully developed.

The scheme overcame the sprawl problem by being compact. It was composed of two-storied blocks each with double-loaded corridors, only two classrooms long. Each block had a tiled pyramid roof and the blocks were grouped to form a cluster, as the name suggests. The blocks were connected with links and covered ways. The resultant scale is satisfying and there does seem to be a suitability of purpose, as claimed by the Branch.

Early examples of the Cluster Schools were Tregear Primary, documented in 1967, Lethbridge Park Primary documented in 1968,^{*} and Blakett Public School, documented in 1970.

Two special designs of the time should be mentioned.

The first school was Calare Primary School at Orange West.^{**} Its first stage was designed and documented in 1967 by Hawke and Pereira in association with the Government Architect. Subsequent stages in 1968 and 1972 were designed by J. Moran and R. Scott⁶ of the Branch.

It is a single-storied linear scheme having two main blocks, each with three sides enclosing a courtyard. The basic approach, plus the use of large projecting roof planes to form verandahs, seems to have developed from the doughnut scheme. It is a simple, almost understated building of good scale, having an expression which does not strive for effect.

* Illustrated on pages 34-35, Vol. 2.

** Illustrated on page 28, Vol. 2.

The second school was a special cluster school designed by C. Carter for the Chertsey Public School near Gosford and documented in 1968.* It was based on the cluster principle, having the same square blocks, but it was single-storied. In addition it had a kindergarten block formed by two rectangular blocks of single-loaded classrooms linked at one end with stepped flat roofs. The square blocks have pyramidal roofs, while the roof form of the kindergarten blocks is basically gabled, with the planes extended beyond the ridge to provide highlights.

K PLAN OR 1-70 SCHOOL

A design known as the '1-70' or 'K-Plan' school was developed contemporaneously with the cluster schools. It was designed by K. Thirsk and J. Lowing and documented for Tolland School at Wagga and Mimosa (Sorlie) at Frenchs Forest in 1969.**

The continuing drive for cheaper schools was the prime reason for the development of the K-Plan. The concept was more compact than the cluster solution and consequently cheaper. The basic plan was a four classroom block, generally on one level, having only external access to each room. (Some examples were two storied.) The fenestration was basic, seemingly derived from the cost constraints, but the result was in good scale and achieved a simple directness devoid of any affectation.

The easy design, the fitness of purpose both in plan and elevation, the scale and in some cases the grace of the High Schools was yet to be achieved in the Primary school programme, but the 1-70 plan could be regarded as a significant beginning.

Eleven of these schools were built, either as fourteen, twenty-one or twenty-eight classroom schools, all based on the standard block, and differing only by their siting arrangements.⁷

* Illustrated on page 34, Vol. 2.

** Illustrated on page 36, Vol. 2.

VARIATIONS

Several interesting departures, or at least variations, from the standard primary school designs occurred in the early 1970s. These buildings, whilst not contributing directly to the main stream of development, will be examined in this chapter. They are evidence of the continuing enthusiasm and the high design standards of the design architects. In that they are all designed by different architects, they are also further evidence of the individual freedom allowed to proven designers by the Government Architect. Four schools from this non-standard group were: Berinba at Yass, Marton at Engadine, Brisbania near Gosford and Whitecross Rd., (Winmalee) at Springwood.

Berinba Public School at Yass was designed by Douglas Anderson and documented in 1971.* It is an interesting and sensitive handling of a linear plan on a sloping site, which approaches a cluster development in its resolution. The one-way pitched roof blocks are easily and simply juxtaposed, resulting in interesting spaces and connections between the blocks.

Marton Public School at Engadine was designed by R. Powell in association with architectural consultants Melman and Newman and documented in 1971.** Like Berinba it is an interesting linear plan which becomes a cluster development on a sloping site. The blocks are each split-level in section, having one storey on the low side and two stories on the high side.

Brisbania Public School near Gosford*** was designed by Olga Kosterin⁸ and documented in 1971 as a major addition to an existing small school.

A very steep site has been sensitively handled. Two two-storied buildings are set apart to form a sloping courtyard and connected at each end by stepped covered ways.

* Illustrated on page 43, Vol. 2.

** Illustrated on page 41, Vol. 2.

*** Illustrated on pages 39-40, Vol. 2.

Tiled gabled roofs have one side extended to form highlights.

The building has domestic scale, seems friendly to its pupils, is rational and achieves these desirable qualities without recourse to any forced design.

Whitecross Rd. Public School (Winmalee) at Springwood North, was designed by Ian McHutchinson in association with architectural consultants Hawke and Pereira Pty. Ltd. and documented in 1971.

This scheme consists of linear two-storied blocks separated by narrow single-storied passages which extend to become covered ways. It is an interesting derivation of the cluster principle.

Like the previous examples, the blocks have one-way pitched roofs all carefully modulated. End walls are allowed to extend into the landscape to form semi-enclosed spaces. The whole is a carefully and adroitly studied example of mature design.

EXPERIMENTAL SCHOOLS

Towards the end of the 1960s the Schools Section staff working closely with the School Building Research and Development Group produced designs for six special experimental primary schools. These designs were produced in response to new ideas for the primary school learning process. The solutions were all different so that their individual solutions to teaching spaces could be evaluated. These schools, by consciously coming to terms with the functions which the buildings were to shelter, brought an even higher level of integrity to the Branch's architectural approach. In 1971 the Branch submitted a report to the Director of Primary Education citing the six schemes as solutions to the then seen need for flexible spaces which could be adapted easily and quickly to different kinds of learning situations.

The N.S.W. Builder of December 1973, in reviewing these designs, made the following editorial comment:

"...In the past, primary schools of N.S.W. have been designed as a number of classrooms, a library and storerooms, offices and staff rooms. This was the result of the educational system of the day,

when a rigid timetable, a self-contained class and a set number of pupils per teacher established a standard size for a classroom. This, along with piecemeal growth, gave rise to the linear plan type. The present need is for a different type of school, in which teaching can proceed in areas which are quickly adaptable for different kinds of learning situations.

The designs for these experimental primary schools ... provide opportunity for principals and staff to develop varying types of teaching procedures and school organisation. They make it possible for teachers to share resources, to work together in a teaching situation and to provide both small and large, group and individual, instruction.

The practical activities area of the new standard primary room and other modern features will be welcomed by teachers who plan and implement integrated programmes for pupil development and who for example, see in the new Art and Craft syllabuses, unlimited opportunities for individual expression.

A practical assessment of these six quite different designs, as education organisms, must await their completion and use. Such an examination will be the next logical step in the continuing process of improving Primary schools."⁹

Not only was the overall concept of the school under review, but also the individual teaching space was re-assessed. The old idea of the teacher at the front of the classroom commanding ordered rows of desks was abandoned. Instead, the layout became flexible. Desks and chairs became modular and capable of re-arrangement or grouping to suit different needs.

The six experimental schools were: Toongabbie North (later renamed Winston Heights), Briar Road Public School at South Campbelltown, Newling Public School at East Armidale, Widemere Public School at Merrylands West, Quarry Creek Public School at Baulkham Hills, and Murray Farm Public School at North Rocks.

Toongabbie North (Winston Heights) was designed by C. Burton and documented in 1972.

The basic principle adopted for this scheme was the provision of spaces in which two teachers could combine their classes or alternatively conduct normal one teacher situations in half the space. Each 'block' of two classrooms is in fact one 'two-teacher space' divisible by a folding wall. The seventy pupils and two teachers can group and regroup as desired during a teaching day. Each space has a general learning area, a practical area and a quiet area. The practical area, which is stepped on two sides for seating, can be partially screed with fitments. The site plan has three classroom 'blocks', an administrative block and a shelter. It is basically a double-loaded linear plan, but instead of a continuous row of rooms on each side of the spine, one side of the spine becomes a court and the classroom is moved along. The building is a very simple, one-storied, flat-roofed structure. It is unpretentious, functional, elegant and a thoughtful solution to a specific design problem.

The Schools Building Research and Development Group carried out an evaluation of this school¹⁰ several years after its completion. Members of the staff, both past and present, were interviewed in a wide-ranging series of discussions. The open teaching situation caused most criticism, as would be expected, if only because of its unusual nature. Some teachers understandably criticised the lack of acoustic isolation between planned areas, especially in the recessed 'quiet' area. This aspect of the planning they considered impractical. Problems were also experienced with the large group situation. Whilst it suited many students, it was found that some children needed to relate to a small group. The open plan tended to thrust these diffident children into a public situation, thus causing timidity.

Briar Road Public School at Campbelltown was based on the 'courtyard cluster' approach. It was designed by P. Rochaix¹¹ and documented in 1972.

The plan was made up of 'U' shaped blocks, each having a combination of single classrooms and double ones capable of subdivision. All classrooms of the 'U' shaped blocks open to the courtyard spaces

which are designed to function as external teaching spaces. Large overhangs on each block extend to become covered ways linking the whole together. The blocks are very simple and unpretentious with a definite domestic character due largely to the use of a traditional hipped roof. The use of such conventional elements with which the child can relate must go a long way towards overcoming any pupil intimidation.

This school has been evaluated by the Government Architect's Branch.¹² The research revealed the same dissatisfaction by some staff with the open teaching areas as at the Winston Heights School. They would have preferred the practical teaching areas to have been acoustically isolated from the teaching spaces, but still connected visually. The report commented on the courtyard idea, saying:

"...Since each cluster is designed around its own courtyard the school is ideally suited for inside/outside activity relationships. Although all teachers used the outside areas infrequently, they did comment that the basic concept was worthwhile and practical.

The most common activities which occurred in the courtyard areas were group reading, some practical activities and use as space for eating lunches. As well as very practical spaces, the courtyards were very aesthetic and enhanced the total school environment."

The report indicated that classroom lighting was poor, due to the low eaves level of the verandahs, and that cross-ventilation was inadequate.

The human scale and domestic character was appreciated; the headmaster even pointed out that it had apparently contributed to the school's lack of any break-and-entry problem, which elsewhere in the district was of serious concern.

The real appropriateness of the cluster approach could not be evaluated at the time the survey was carried out. During the first years of the school's life it had not reached its capacity, since local housing had failed to reach the anticipated numbers.

Newling Public School at East Armidale* was based on a multi-circulation principle. It was designed by Olga Kosterin and documented in 1972.

The plan follows the flexible multi-use classroom approach with, in this case, special emphasis as a demonstration teaching school. Two classrooms are arranged around a practical space in such a way that each classroom can be separate or used with the practical space by operating folding screens. The plan enables visiting student teachers to observe all forms of teaching techniques, ranging from single class lessons to multi-class ones.

The building has two blocks, one single-storied and one double-storied. It is low-keyed and well scaled. The roof form is a combination of a central flat shape, with single-pitched forms on two sides. The roof planes rise towards the centre of the building, providing central highlighting as well as overcoming the rather excessive height at the higher end of one-way pitch roofed blocks of some of the other primary schools.

Widemere Public School at Merrylands West was an experimental school based on a co-operative cluster approach. It was designed by Grahame Stocks¹³ and documented in 1972.

The cluster is formed by four classrooms and two practical areas arranged so that each classroom may separately relate to the practical area or to other classrooms. Alternatively, the four classrooms can all be opened to form one space.

The scheme is similar to the cluster primary schools in arrangement and siting potential. It has the same external access, protected only by a narrow roof overhang, but unlike the cluster school, the classrooms are separated by folding walls, providing opportunities for very flexible use.

* Illustrated on page 46, Vol. 2.

Quarry Creek Public School at Baulkham Hills was based on a family cluster principle. It was designed by Barry Sneyd and documented in 1973.

The design is a variation of the idea of classrooms being clustered around a common activities area.

Each teaching block has two classrooms on an upper level, with the common family room and two additional classrooms at a lower level. The two levels are connected by four steps intended to be used as an elevated stage, or as seating for dramatic presentations or assemblies.

Systems of sliding and accordion doors enable each classroom to be separate or connected to the family room.

The single-storied block has a flat roof, with raised high lights lighting the inner areas. It is low scaled and sensitively handled. The site plan shows the same sensitive handling as other experimental schools in related courtyards, level changes and connections between blocks.

This school was not built. When construction was due to start the subdivision formalities were incomplete and a bridge across the creek became necessary to provide access for the builder's vehicles. The project was deferred.¹⁴

Unlike the previous examples, the experimental design for Murray Farm Public School at North Rocks was added as stage three to the existing school.

The initial scheme, documented in 1968, was a linear development, single-storied and loosely arranged around a courtyard. The roof form consisted of pyramids over the classrooms, lifted just clear of an enveloping flat roof. It seemed to be an attempt to gain the pitched roof character of the Lethbridge type cluster school but on a linear plan.

The second stage, documented in 1971, continued simply as a replica of the first stage.

The additions documented in 1972 were, however, the result of a new experimental design approach by Charles Carter. The new concept extended the cluster principle by adding a resources store. Two blocks were added, one single-storied and the other two-storied. Each level had four classrooms set in two pairs on opposite sides of the resources store. The two classrooms forming the pair could be opened by sliding doors to form one space, allowing classes to group and interact according to the particular activities being pursued.

CONCLUSION

The Branch continued its normal programme at the same time as the six experimental schools were being developed.

Two primary school designs were of particular interest and serve to illustrate the work being done by the Branch at the end of the Farmer period.

The Darlington Demonstration School* was designed by Douglas Anderson as a special solution for a small inner city site. It was documented in 1973.

The plan is a combination of single and double classrooms with folding divisions in some rooms. Many of the classrooms open to courtyards used both for teaching and playing.

The concept follows the established romantic tradition of the Branch, using juxtapositioned single-pitched tiled roof shapes in good scale. Its sensitive handling and friendly domestic scale must create a receptive attitude in the pupils and help to make the learning process enjoyable.

* Illustrated on page 62, Vol. 2.

One corner of the grounds has an imaginative adventure playground formed from logs. It is used as a physical teaching aid in addition to being a playtime structure.

The flow of spaces internally in areas such as the internal shelter or multi-purpose space and the adjacent library, or the staff room and the adjoining conference area, is very fine, not only in plan relationships but also in the subtle use of level changes.

The friendly character of the building comes in part from the use of primary colour throughout. Externally, a hint is given with bright red doors in the light brown face brick walls. Internally, classrooms, for instance, have pea-green carpet and vinyl floors, naturally finished pine boarding on walls, and bright red benches and sinks. Additional interest is given by using yellow accents to the light fittings and balustrades.

The understanding of colour parallels that shown in high school school design at the same time. The result is not blatant, as might be expected from reading the palette, but sensitively balanced, bright and appealing.

The second primary school design of interest is Shalvey Public School.* This school was also designed by Douglas Anderson and documented in 1973. The building was successfully documented and built by the building firm of Paynter and Dixon Pty. Ltd. who also carried out the second stage in 1974 under a similar contract.

The plan is more conventional than those of the six experimental schools, being generally linear and two-storied. It consists mainly of normal classrooms, only a few having folding screens for flexibility.

The blocks loosely enclose two courtyards, with a resultant site plan similar to many high school layouts. The overall aesthetic quality is high and forms a fitting termination to the period under review.

* Illustrated on page 61, Vol. 2.

Apart from the design achievements made by the Branch in both high school and primary school design, the work of the Schools Research and Development Group resulted in significant reductions in building costs.

J.W. Thomson commented to the author that since the Schools Section commanded the largest budget outlay, it was obviously the first to develop a sophisticated cost budget procedure. Farmer mentioned that the real cost per pupil place figures over the period "...*did not greatly rise.*" This was impressive, especially when related to inflation and the demands of the educationalists for more complex spaces and equipment.

An article by F.D. Underwood in N.S.W. Builder of December 1973¹⁵ showed the change that occurred in the branch's approach to architecture in the Farmer years.

After having discussed the new design approach of the six experimental primary schools, he said in part:

"...Few of us forget our early days at school. For most of today's parents they were a slow progression, year by year, room by room, teacher by teacher. Education was static, the building plan was fixed and the mind was squarely proportioned. Yet the men and women who matured in this restrictive environment originated the patterns of enlightened education our children enjoy today. One wonders - what will their children produce?"

Chapter 9

Police Stations and Court Houses

There is no discernible line of development in the police stations and court houses produced by the Branch during the period under consideration.

The planning needs of both building types remained broadly constant so that there was not the same impetus to re-examine needs and aims, as occurred in the school programme.

The conditions, however, under which many police lived and worked concerned Farmer. He saw the "...quite disgusting conditions..." as being detrimental both to police morale and to the public image of the Force.

After a great deal of persuasion Farmer, assisted by Sir John Goodsell, the Chairman of the Board, and Norman Allan, the Commissioner of Police, was permitted to change the image and conditions under which the police lived. One of the first new buildings was at Walgett* where in that "...awful summer climate..." a sensitive and human-scaled building was built which Farmer said "...the police loved..." and added "...I think they though somebody had their welfare at heart..."

The courthouses and police stations produced showed a marked contrast in architectural philosophy and consequent expression. They ranged from rather formal concepts such as the Darlinghurst Court House additions by Peter Hall,** to almost domestic, and at the time controversial, clinker brick buildings by Peter Proudfoot such as the Merrylands Police Station. At this latter rather domestic level of architectural expression was the very sensitive addition to the Coonabarabran Court House and Police Station by John Rabong.***

Several buildings were controversial and aroused both police and public criticism. Farmer recalled to the author that he had enjoyed "...a good working relationship" with Norman Allan, who was Commissioner

* Illustrated on page 66, Vol. 2.

** Documented in 1962. Illustrated on page 64, Vol. 2.

*** Documented in 1966. Illustrated on page 68, Vol. 2.

of Police during Farmer's term of office. When aesthetic controversy arose, Allan was prepared to accept and respect Farmer's explanation of the building's concept and consequent appearance.

The police station at Wee Waa^{*} in north-western N.S.W. was, however, an unfortunate case. It was one of the few occasions when the Branch produced a building with aims which, in the author's opinion, were concerned with a pre-conceived form rather than with functional needs. The "Australian" Newspaper of 10th May 1975 published an article which was extremely critical. Under the heading "Police Station everyone wants to forget",¹ it said in part:

"...At first glance the odd-shaped building, looking like a lop-sided pyramid in the blazing sun of north west New South Wales, could be mistaken for a solar energy plant.

Closer inspection, and the assistance of a sign outside, reveals it to be a police station.

...Politicians who normally bend over backwards to open a new police station have avoided the Wee Waa edifice.

...The station, which cost \$250,000 to build, has concrete walls and a long slanting galvanised iron roof with a series of skylights overlooking the cells and exercise yard.

Police say this has given the opportunity to locals to climb up the roof and look in on their mates in the cells."

Other complaints mentioned in the article included a comment that the front door fitted so neatly into its frame, that it had to be left open so as to be seen, and further that the lock-up keeper's wife had to walk out onto the street to reach her clothes line. Whilst the practical aspects of the criticism may have validity, the article failed to recognise that the building did have a remarkable presence and exceptional sculptural qualities.

Wee Waa was only an isolated example of adverse criticism. There were many other fine police stations and court houses designed by the Branch architects.

* Designed by Rodney Connors, documented in 1967 and illustrated on page 65, Vol. 2.

One such outstanding building was the Parramatta Courthouse and Police Station designed by Andrew Andersons and documented in 1969.* The N.S.W. Branch of the R.A.I.A. awarded the building a Merit Award in 1975. The Award Jury made the following assessment of the building:

"This large structure stands in a suburban commercial environment surrounded by buildings of widely varying uses, scales and architectural styles. It successfully and positively avoids the pitfalls of monumentality without sympathy and relates well to its surroundings while relinquishing nothing of its own strength.

The forecourt is well considered in detail and contributes to the street intersection as much as to the building. Retention of the old brick tower helps to establish the relationship of the new building to the street. The transparency of the main lobby and public counter area also makes the building human and alive.

In planning, complex interrelated circulation of public, prisoners, juries, employees and others is well solved, providing the necessary options, albeit at the cost of generous corridor and stair space for specific purposes. The circulation to the offices of the court is open to the main lobby area, three stories in height; the movement of people around these galleries contributes a good deal to the humanising of the space.

Accessibility to the public courts and public offices is immediate and direct, but a directory in the lobby as a supplement to the services of the custodian would help both him and the public. The junction of building is not readily identified from the street, - one assumes local knowledge suffices.

The courts themselves are well and generously detailed; the volume of space and extent of area provided far exceed the direct functional requirements of hearing argument - no doubt for the purpose of maintaining the majesty of the law.

Offices and amenities are most generously provided and equipped.

* Illustrated on page 68, Vol. 2.

Public space is ample and well provided with comfortable and convenient seating, together with a balcony off the main courts lobby.

The courtyard between the two building masses will benefit greatly from growth of the planting being established there."

The police station at Grafton which was designed by C. Still was another notable building.* Combined with the new Government Office Building** it forms part of a civic group of buildings having National Trust 'A' classification.

The group contains the original Police Station and the Court House, both designed by James Barnet in 1880, together with the Post Office designed in 1874 and also by Barnet. Editorial comment in "Building Ideas"² paid due tribute to the original buildings, saying in part:

"...With their verandahs and wide eaves, cross ventilation and double ceilings, the buildings show Barnet's awareness of the importance of climate control. The forms and detailing combine a dignity appropriate to the court's judicial role with a curious, almost oriental spirit, which is peculiarly appropriate to Grafton's sub-tropical landscape..."

The new buildings are frankly contemporary and in direct contrast with the old buildings. They are simple and devoid of detail. Their bold horizontal precast concrete louvres produce a texture which relates to the old buildings and provides them with a simple unassuming background.

These police stations and court houses, together with the others illustrated*** show the same varied approaches to architectural design as did the work from other sections. They indicate the latitude Farmer allowed his design staff once they had demonstrated their capabilities and so gained his confidence.

* Illustrated on page 69, Vol. 2.

** Designed by J. Rabong and I. Bailey and documented in 1967. Illustrated on page 81, Vol. 2.

*** Refer to illustrations numbers 125-142 on pages 64-69, Vol. 2.

Chapter 10

Health Buildings

HOSPITALS

Farmer had an abiding interest in hospital design stemming from his association with Leighton Irwin in his student days. This enthusiasm led to his being placed in charge of hospital work under Cobden Parkes and ended with his involvement in the preparation of the original brief for Westmead Hospital.*

The very early tentative steps, especially those made by Harry Rembert, towards the golden period of the 1960s in the Branch are seen in hospital design as much as in the design of educational buildings. This early high design standard is evidenced by such buildings as St. Margaret's Hospital Ward Block (1944) designed by H.R.W. Orr** and Bankstown Hospital (1948) designed by E.H. Farmer.

The subsequent work of the hospital section never seemed to gain the enthusiasm of the staff generally as did, for example, the schools programme. Consequently, in the author's opinion, the results did not reach the same level of general excellence. Several reasons have been advanced for this. For instance, at the beginning of the Farmer period hospital briefs were not prepared in conjunction with the Hospital Board or the Hospitals Commission other than in a very broad way. The Government Architect's Branch was often told merely to design a hospital having a stated number of beds. Consequently, the resultant buildings sometimes proved unsatisfactory and received adverse criticism from the medical profession.

This situation, in which the client was not directly involved with the building's needs, was not conducive to attracting into the section the dedicated design-orientated members of the staff.

Another reason for the general results not being as high as in the Schools Section was the vast number of 'wild cat' schemes passed on by the Hospital's Commission for consideration by the Branch.

* C. Weatherburn was the first head of the hospitals section under Farmer. He was followed by V. Selig then I. Roberts and later by W. Kingston.

** Illustrated on page 4, Vol. 2.

These schemes, W. Kingston¹ recalled, were at the behest of hospitals all over the State, calling for many and varied piece-meal additions and alterations. They were unco-ordinated and sought to provide often unnecessary and ill-considered repetitive accommodation having no hope of realisation. The Branch thus became involved in uninteresting work which seldom proceeded and so the staff became disenchanted.

At the beginning of the Farmer period the hospital section of the Branch had two client departments - the Hospitals Commission, which was basically a funding organisation, and the Health Department, which had all its work done by the Branch. Later the Board of the Health Department was formed and empowered to commission private architects. For many years it gave about twenty per cent of its work to private architectural firms such as Stephenson and Turner or Leighton Irwin & Co. Gradually the proportion increased until at the end of the Farmer period the private firms were undertaking more work for the Health Department than was the Branch.²

The Government gave scant attention to psychiatric hospitals until the Royal Commission in 1961 on Callan Park highlighted the jail-like conditions which existed at the time. The Branch was called upon to respond urgently, being required to upgrade existing buildings and construct new ones. The work was so urgent politically that not only was there inadequate time for considered design, but the actual construction was often undertaken by the Public Works Department staff without firm contract prices. This resulted in uncontrolled spending and excesses of cost over estimates. Later in 1965 when W. Kingston became involved in the programme the initial rush was subsiding and a proper contractual system was adopted.³

The concern of the Branch in the early years of the Farmer period for improved hospital design went beyond the pursuit of fine aesthetics or fashionable following of the international style. Farmer had a deep understanding of the whole clinical process and an appreciation of the technological problems involved which went

well beyond that of the normal architect. He sought to improve not only the architectural qualities of hospitals, but also to improve many servicing techniques through research.

After reports, especially from the U.S.A., of serious accidents in the handling of anaesthetics he began research in 1952 into anaesthetic safety. Whilst at that time there had been no serious accidents here, Farmer was aware of the hazards associated with the careless use of flammable anaesthetics. He alerted the authorities to the potential dangers and in 1956 he was successful in having a joint committee set up by the Hospitals Commission under his chairmanship. Later in the same year the Standards Association of Australia, following contact with the Branch, issued the first official code covering anaesthetic safety.

Following laboratory accidents in Sydney and resulting fires^{*} at Liverpool and Lidcombe hospitals, Farmer's concern caused him to write to H. Heath who was a member of the Public Service Board. Farmer recalled that the thrust of his correspondence was:

"...urging the establishment of an expert committee to set up safety standards for laboratories in hospitals, schools, universities, etc. since I felt that as an architect I had not the knowledge to accept responsibility..."

The fires were caused by carelessness and Farmer realised that as Government Architect he had no control over the use or abuse of ether, or any other flammable substance used in laboratories. His discussions with the Fire Brigade and various laboratory safety committees in universities made it obvious that control was needed at all levels and that architects generally required design guidelines. The first committee meeting was held at the Public Service Board in 1966. However, no code was issued until 1973.

The rise in the rate of wound infection in the mid 1950s concerned Farmer; he considered that the goods being produced were not sterile.

* The first fire was at Liverpool Hospital in the late 1950s due to decanting ether and a serious fire ensued, burning out the building including an x-ray section. Fortunately nobody was injured.

For years he had tried to persuade the Hospitals Commission to introduce a Central Sterile Supply System and to abolish as he said "...such antiquities as boiling water sterilisers..." Eventually the Central System was adopted and the Commission became a firm supporter of the principle.

The reduction of staphylococcal infection in obstetric units was another area where research occurred under Farmer. Much work was done by the Branch in close co-operation with Dr. Grace Cuthbert Brown who was Director of Maternal and Baby Welfare in the mid 1950s. Following these investigations a brochure of required procedures was issued in 1958 which resulted in a significant control of the disease.

A major technical and architectural contribution was made by the Branch in the design of operating theatres and their auxiliary services. This work commenced with a project to remodel the Princes Block at Prince Alfred Hospital, as an improved operating section. The scheme was prepared by Farmer in close consultation with Dr. John Loewenthal and submitted in 1957 to the Hospital Board, who rejected it. It was then resolved to demolish the Princes Block and in 1958 G.P. Webber and W. Turner designed a new operating block to be called the Blackburn Pavilion.* This building Farmer said:

*"...embodies all our experimental theories and has contributed much to surgical knowledge. The theatre layouts we planned are now (1974) almost standard in all new work in N.S.W. and have been much followed elsewhere..."***

* Illustrated on page 71, Vol. 2. The brief was prepared by Farmer, C. Weatherburn and Dr. J. Loewenthal without interference from the Hospitals Commission. The document was prepared quickly and was highly successful.

** The developments incorporated included: improved circulation, choice of finishes, safer handling of sterile goods, disposal of contaminated goods and better lighting. The induction rooms for anaesthesia became pleasant spaces to help the patients' psychological comfort.

The final and perhaps most important contribution made to hospital design during the period in which Farmer was Government Architect was the research into and preparation of, the brief for Westmead Hospital. Farmer said:

"...This (Westmead) is the greatest and most advanced concept of Health Service facilities attempted in the country and I am proud to have been in it since its inception..."⁴

The project commenced in 1968 when Minister Jago wrote a Cabinet minute pointing out the need for a new hospital to serve the western suburbs of Sydney. In 1969 he appointed a Planning Committee^{*} which in 1970 issued a Functional Brief. Subsequently an Executive Planning Committee was formed consisting of Professor Bruce Williams as Chairman, Dr. J. Loewenthal and Messrs. Selle, Rimes^{**} and Farmer. This Committee had overall control of the project and was directly responsible to the Minister.

The supremacy of the committee was lessened when the Government advised the committee that in its opinion, overseas hospital consultants should be appointed to assist in formulating the brief. Farmer took strong objection to this suggestion as he maintained he had equal, if not better, expertise within the Branch. Subsequently both Farmer and Rimes resigned from the committee and the management structure was altered.

Towards the end of the Farmer period, troubles ensued. The Federal Government advised the State Government that, unless evidence was forthcoming that construction could be started in the near future, it would itself take over the project.

* The Planning Committee had approximately twenty members, including E.H. Farmer, V. Selig and I. Roberts from the Branch, H. Selle the Chairman of the Hospitals Commission, Dr. J. Loewenthal, Dean of the Faculty of Medicine at Sydney University. The committee was under the chairmanship of Professor Bruce Williams, the Vice Chancellor of Sydney University.

** Permanent Head of the Department of Public Health.

This interference, coupled with the embarrassing and devastating realisation by the Branch that its original estimate had been exceeded to an alarming extent,^{*} required that urgent and radical action be taken.

The Branch determined that the only possible course was to abandon the existing concept^{**} and to redesign the project completely in as short a time as humanly possible.

The Branch argued^{***} that it could not possibly expect the original designer and his team, who had spent so many months on the project, to suddenly abandon it, to rethink the concept and then to re-document it under extreme pressure. Such an action would be a human impossibility.

G.P. Webber undertook the re-evaluation of the project. In conjunction with the Health Commission he re-organised the administrative structure and appointed Llewelyn-Davies Kinhill as consultants for the new brief. R. Bonthorne was given the awesome task of redesigning the project.

Whilst basic proposals were prepared and a special management team set up during the Farmer period, the actual documentation took place under C. Weatherburn as Government Architect and hence is not within the scope of this study.

Farmer's understanding of the need for hospitals to serve their patients' psychological needs as well as their physical requirements has already been seen. Farmer said:

* The earlier estimate given the State Government had been \$100,000,000 and the new estimate was \$160,000,000.

** The original scheme designed by R. Foster had each hospital floor inter-spaced with a services floor. The solution offered excellent potential for the economical alteration and variation of services, but at somewhat high initial cost.

*** V. Selig in discussion with the author in October 1978.

"...In our hospitals we must not forget that it is the 'whole man' we are dealing with, an individual who is a system of prejudices, cultural mores and innate sensitivities. He must not be regarded just as 'Clinical material' as an item passing along the production line or as a 'bit' of information to feed the computers.

No, he is often a suffering, terrified, lonely person who needs the support and sympathetic human, personal staff of an environment in which he is to be treated, recover or perish from which he can draw comfort, which is not impersonal and in which he can feel at ease..."⁵

The Government Architect's Branch staff realised the growing need in the 1970s for buildings to be sufficiently flexible to accommodate varied and new needs, both social and technological. Farmer saw hospitals especially falling into such a category; the rapid and expanding technological developments in health care and patient treatment and attitude demanded very flexible hospital buildings.

In the paper Farmer gave to the International Hospital Federation⁶ he suggested that there were three main problem areas to be considered in hospital design. The first problem he saw as the need to identify "...growth, change and development as having the highest priority in hospital planning."

The second problem was the time required to prepare a brief and the immense effort needed to ensure its accuracy and completeness. Farmer pointed out:

"...if the future is unknowable or if at least the main thing we know is that the future will in some way be different from the past, then the notion of compiling a finite and detailed brief makes nonsense."

The third problem concerned the realisation of the vital necessity to tailor the building concept to the services, rather than attempt to integrate services into a preconceived building envelope.

Farmer commented:

"...In the face of such problems (the uncertain future) we are crazy if we persist in designing buildings which are portrait architecture (of the Professor, the Doctor or the Architect concerned at the time) which are tailored to our set of concepts and which cannot readily be altered in the future, even though they may appear to be fine architectural monuments..."

Whilst, in the author's opinion, the aesthetic design of hospitals did not generally gain the acclaim bestowed upon some other sections of the Branch, the work produced was based on a thorough and sincerely rational approach to the technological problems involved. Farmer saw these problems as demanding a new aesthetic concept and a perception, different from the more simply-serviced buildings of the other sections. It would seem that the first solution to Westmead Hospital did attempt a resolution in such terms.

The illustrations of selected hospitals and health centres* indicate the range of work over the period under review and continue to confirm the fact that the Branch produced many worthwhile buildings which differed in scale and architectural philosophy.

* Refer to illustrations numbers 145-157 on pages 71-76, Vol. 2.

Chapter 11

Office Buildings

Despite the fact that relatively few office buildings were designed and constructed during the period under consideration, several of them are of significance.

The first, a major addition to the Registrar General's building in Sydney, was documented in 1961. The original building had been designed by W.L. Vernon¹ in Gothic Revival style. Peter Hall's design for the addition was originally to have been sandstone veneer faced to match the Vernon work. This was changed subsequently to clinker brickwork which was considered to be a more honest expression of materials and a more faithful response to the Young Turks' design aims.

The first of a number of regional state office buildings was constructed at Cootamundra,^{*} being documented in 1962, following a design in which P. Hall, P. Webber and P. Proudfoot each had an influence. The design was simple, with a sensitive appreciation of the degree of monumentality suited to such a government building in a country town. The building was built with clinker brick walls, but whereas they were accepted in the Registrar General's Building in Sydney, their use in Cootamundra caused a deal of controversy. Subsequent regional office buildings tended to be more monumental than the Cootamundra office and more expressive of government.

Albury, Inverell and Narrabri^{**} government office blocks were documented in 1964.

The Albury building won the Blacket Award of the N.S.W. Chapter of the R.A.I.A. for 1968. It is a simple building, fittingly expressive of its purpose. It is interesting to compare the Albury Office Block with the William Balmain Teachers' College documented at the same period and also designed by David Turner. The former is a simple, uncompromising building, whereas the latter is its antithesis. William Balmain is organic, almost brutal, and a very personal statement.^{***}

* Illustrated on page 79, Vol. 2.

** Each illustrated on page 80, Vol. 2.

*** William Balmain see page 153. (Renamed Ku-ring-gai College of Advanced Education.)

The Blacket Award Jury for 1968 made a joint award to the Albury office and the Warren Shire Library by architects Edwards, Madigan, Torzillo & Partners. The Jury said that each of the buildings was excellent within its area of expression, but it considered that as each differed so widely in form and scale that comparison was impossible. The Jury comments on the Albury office were as follows:

"...The N.S.W. Government Offices at Albury is a fine example of the main stream of the International tradition. The modern movement, now over fifty years old, here achieves a successful urban expression, apt for such government buildings. In the Albury offices, the planning of verandah access balconies is a tradition of Administration and Military buildings, but the colonnade has not been allowed to become pompous or neo-classic. The public fore-court treatment is bold and simple. The building scale has apt relation to a large country centre. Its crisp form, elegantly finished concrete and smooth detailing all add up to a direct and handsome statement..."

Goulburn, Grafton,^{*} Moree^{**} and Dubbo office buildings followed, all adopting a monumental expression, thought by their designers to be expressive of their purpose.

The most significant building, however, was the Sydney State Office Block.^{***} It was designed by Ken Woolley and, when documented in 1962, was the first major office building constructed for the N.S.W. Public Service since 1927.

It is a handsome building, of commanding presence and effortlessly expressive of its purpose - it is monumental but not pompous. The building has, in fact, three blocks - one of nine stories, one of ten stories with the whole group dominated by a thirty-five storey tower. The projection of each floor slab of the tower block 1400mm beyond the glazing line and the placement of the perimeter columns at the face of this extension, produces the building's characteristic

* Illustrated on page 81, Vol. 2.

** Illustrated on page 79, Vol. 2.

*** Illustrated on pages 77-78, Vol. 2.

three-dimensional facade quality. Its materials are tastefully selected and subdued in colour - bronze cladding for the columns and river gravel finished precast concrete for the spandrel panels. These, in conjunction with the shadows of the modelled facades, produce a somewhat dark appearance and caused the architectural profession to dub the building affectionately as the "Black Stump".

A second major and significant office building of the period in Sydney was the Goodsell Building designed by R. Connors and G.P. Webber and documented in 1966.* It is more modest than the State Office Block and consequently expresses suitable deference to the main government seat of administration. The facade is also dark, but not deeply recessed like the State Office Block. It has good scale and sensitivity, marred somewhat in the author's opinion by the disparate scale of the large arched supports at ground level, which are unable to adjust comfortably to the sloping site.

At Grafton interesting and successful attempts were made to integrate and relate a new office building** with the existing small police station and court house. The existing buildings were renovated and the original police station used for the Crown Prosecutor's Office. The office building was designed by Ian Bailey² and documented in 1967. Subsequently in 1973 C. Still designed a new police station*** to form a related civic group. The new buildings, whilst expressing the usual monumentality associated with the majority of the Branch's government offices, were also related to the domestic scale and detail of the existing buildings by the introduction of quite fine and sensitively detailed vertical sun-control louvres.

Another major city office building in Rawson Place, Sydney was designed by Lionel Glendenning and documented in 1971.+ The building has assurance; it is straightforward and economic. Its crisp flush-faced eastern, western and southern facades are typical

* Illustrated on page 78, Vol. 2

** Illustrated on pages 69 and 81, Vol. 2.

*** Illustrated on page 69, Vol. 2.

+ Illustrated on page 82, Vol. 2.

of the better high-rise office towers of the period, whilst the recessed facade treatment on the north shows distinctive simplicity.

The office buildings designed by the branch were few in number and did not evidence any real line of development. However, the expertise shown in this special design field, as well as the aesthetic quality of the buildings, placed them in the forefront with the comparable buildings produced by private architects at the time.

Even when office buildings were unexceptional they were direct and simple and always free from any forced striving for effect.

These buildings are further evidence of the high standard of work produced by the Branch during the period under consideration.

Chapter 12
Tertiary Education
and
Technical Colleges

TERTIARY EDUCATION BUILDINGS

The Branch built many outstanding tertiary buildings and technical colleges during the period under review. In this chapter, the most important buildings will be discussed individually rather than by collective analysis.

In 1961 the Federal Government appointed the 'Martin Committee' to make recommendations to the Australian Universities Commission on the future development of tertiary education.

The recommendations indicated the Committee's belief that far greater emphasis should be placed upon modern technological skills and that the teaching should occur in special establishments and not within the ambit of existing universities.

The drive for better facilities and new buildings for the Universities had achieved tangible results by the late 1960s. Consequently the Government was able to turn its attention and resources to other forms of tertiary education buildings.

The long-standing need for teacher training buildings was reduced dramatically in 1968 when the branch documented three major projects for new teachers' colleges. They were funded liberally by the Commonwealth Government. From the outset the buildings were seen as significant and prestigious, required to be of high quality and to set new standards for teacher training.

The N.S.W. Department of Education took not only an interest but a positive and active role by appointing a full-time planning unit to assist the Branch, staffed by an educationalist, R. Underwood, and an administration officer, R. McLintock (succeeded by B. Howle).

The Department had been an informed client so that this action was but one further step in the team design approach encouraged by Farmer. It was decided that three colleges were required and that each should have a unique identity, as well as a different emphasis.

William Balmain College^{*} was situated at Lindfield with a teaching emphasis on secondary school science and a total projected student population of nine hundred.

The Goulburn Teaching College is similar in size but has its emphasis on primary teaching. It differs from the other two by having residential accommodation for the students.

The Newcastle College is larger than the other two, having a projected maximum student population of thirteen hundred students and a wider range of courses embracing industrial arts, science, commerce and music.

KU-RING-GAI COLLEGE OF ADVANCED EDUCATION^{**}
(FORMERLY WILLIAM BALMAIN TEACHER'S COLLEGE)

DESIGN ARCHITECT : DAVID TURNER¹
DOCUMENTATION : STAGE 1 1968 STAGE 2 1971

The Ku-ring-gai College of Advanced Education gained great acclaim from the architectural profession. Its first stage was awarded a R.A.I.A. merit prize in 1972,^{***} the Illuminating Engineers Society of Australia Lighting Award in 1972 and honourable mention for excellence in concrete by the Concrete Institute of Australia in 1973.

The building is brutal but organic, uncompromising but friendly, full of interest and variety but integrated. Through all these antithetical qualities is interwoven an excellent scale and a fine integration with the landscape. Both these aspects combine to give the building its assurance and success.

* Subsequently renamed "The Ku-ring-gai College of Advanced Education. The other two became the Goulburn and Newcastle Colleges of Advanced Education.

** Illustrated on pages 97-100, Vol. 2.

*** The building won the Sulman Award in 1978.

Great care was taken to integrate the building with its natural bushland landscape, both by David Turner and by Bruce Mackenzie, the consulting landscape architect. The basic design concept took sensitive cognisance of the site, its contours and the pattern of its plant growth.

Landscape elements are extended into the building in a logical manner without recourse to forced or false contrivance. Accessible flat roof areas used by the students are luxuriantly planted with local native species which not only integrate the building with its landscape but also offset the extensive use of grey "off form" concrete.

When viewing the building from a distance one can not escape the impression of an Italian hill town. The building expresses strength and unity due to the integration of its shapes. At the same time, like the hill town, it fits well into its environment.

The self-contained village is part of the concept which extends into the pedestrian circulation system. The main internal pedestrian traffic flow is a real "street" or concourse having spaces where students may pause to talk along the way and off which, activity areas both relate and address themselves.

David Turner's philosophy of design is straightforward and has been achieved in full measure. He considers:

"...that a building should reflect closely the users' needs in a human way..."

and that it should:

"...be a strong statement, but one that adapts to environmental forces."²

Accompanying its announcement of the Sulman Award to the building in 1978 the Sulman Jury of the N.S.W. Chapter of the R.A.I.A. issued the following enthusiastic appreciation of the building:

"It is a visually strong and dramatic structure, heavily articulated in both internal and external form.

The landscaping, which is an important element of the building design contributes greatly to its close integration with the site, especially along the Millwood Avenue approach.

Strength of expression is retained in the detailed consideration of the building elements. The off form concrete which predominates is expertly handled in design and construction.

The quality of the design concept is evident as one enters the central spine of the building which is its circulation space, its internal street. It is here evident that this building is the first in Australia to come to grips successfully with the essence of a college as a close collection of teachers and students - a social entity.

All the functions of the college are drawn together by this street which offers spaces of great variety of scale and character, inviting its users to enjoy them in passing through, in lingering, in relaxing.

The building invites and rewards explorations; it does not reveal its variety and complexity at once but continues to offer surprise and stimulation to the user.

Individual spaces, in particular the library and the main auditorium exemplify the care in detailed design which maintains the building's consistency of character.

The building capitalises on its location with views, vistas, light shafts and roof decks; it is here that the detailed consideration of landscape design makes most significant contribution to its success.

Choice of materials and integration of services have been carried out with great care so that maintenance is minimised. Colour is introduced in materials and finishes which by nature are renewable. The use of colours complements and emphasises the quality of the beautifully modulated and studied spatial relationship.

There is a strong sense that there has been effective and continuous control and co-ordination of the design and construction process.

The building has been in use for some time - its quality as a piece of social architecture, accessible to the community is best evidenced in the enjoyment and enthusiasm it engenders in its users."

GOULBURN COLLEGE OF ADVANCED EDUCATION*
(FORMERLY GOULBURN TEACHER'S COLLEGE)

DESIGN ARCHITECT : JOHN KINSTLER³
DOCUMENTATION : STAGE 1 1968 STAGE 2 1970

The Goulburn Teacher's College had the same self-contained aim as the Ku-ring-gai College of Advanced Education with the additional advantage of requiring residential student accommodation.

The resolution is interesting since it seeks its village atmosphere in a very different architectural language. The designer has used the same traffic segregations as at Ku-ring-gai and kept cars on the perimeter, but then the complex becomes a series of related pavilions across the site. The site plan juxtapositioning of these blocks creates an interesting series of well related spaces and a strong feeling of village entity.

NEWCASTLE COLLEGE OF ADVANCED EDUCATION**
(FORMERLY NEWCASTLE TEACHER'S COLLEGE)

DESIGN ARCHITECT : JOHN MCKINNEY
DOCUMENTATION : STAGE 1 1968 STAGE 2 1970

The Newcastle College of Advanced Education has a similar concept to the Ku-ring-gai College since it is seen essentially as a single building complex. The relatively simple shape of the building, in the author's opinion, results in a less romantic architectural expression than at Ku-ring-gai. This simplicity is derived from the concept of a large level flat roof under which is ranged a series of up to four levels determined by and conforming with the contours.

* Illustrated on pages 95-96, Vol. 2.

** Illustrated on pages 91-94, Vol. 2.

The convincing architectural expression may have influenced subsequent high schools such as Moorebank, and the compact plan arrangement could have been the forerunner of similar planning at Broken Hill and Shalvey high schools.

Like many of the high schools, the building has activities arranged around interesting internal courtyards and achieves a fitting scale both internally and externally.

The Branch continued the programme for Colleges of Advanced Education. In 1969 the Mitchell College of Advanced Education at Bathurst and the Orange Agricultural College of Advanced Education were documented.

MITCHELL COLLEGE OF ADVANCED EDUCATION BATHURST

| | | |
|-------------------|-------------------------|-------------------------------|
| DESIGN ARCHITECTS | : DINING HALL & LIBRARY | : J. MCKINNEY |
| | DOCUMENTED | : 1969 |
| | : RESIDENCE 'A'* | : EDWARDS MADIGAN & TORZILLO. |
| | | 'JOINT ARCHITECTS' |
| | DOCUMENTED | : 1970 |
| | : RESIDENTIAL VILLAGE | : J. MCKINNEY |
| | DOCUMENTED | : 1971 |
| | : TEACHING COMPLEX** | : R. DINHAM |
| | DOCUMENTED | : 1973 |

The buildings at Mitchell College of Advanced Education are typical of the high standard of work produced by the second wave of designers in the late 1960s.

The library building by John McKinney is a very assured and sophisticated example of the current work of the period. The construction of "off form" concrete and face brickwork is combined to produce a building with a positive expression, but at the same time this expression, together with the materials, exhibits a great deal of finesse.

* Illustrated on page 101, Vol. 2.

** Illustrated on page 101, Vol. 2.

The teaching complex is also a simple straightforward and direct example of the high standard of work emanating from the Branch at the end of the Farmer period.

The Residential Village is some distance from the Campus proper. The concept of its site plan is somewhat similar to Leif Kristensen's plan for the Parramatta Training Centre of 1966;* it has the same series of low-scaled buildings loosely arranged around a large open space.

The village was designed by J. McKinney and documented by Ancher, Mortlock, Murray and Woolley as consultants to Pettit and Sevitt Pty. Ltd., project builders. Each unit was derived from one of their standard house plans.

Residence 'A', designed by Edwards Madigan and Torzillo in association with the Branch, received the Sulman Award for 1970. The planning is imaginative and solves the social grouping of students exceptionally well. The Sulman Jury in commenting on the building said:

"...the jury was aware that the building is by no means perfect. It is a building which makes a new approach in an area which is becoming of increasing importance and in which many of the existing solutions have been relatively unimaginative, particularly in the contribution they have made to the social relationships of students living in the Colleges..."⁴

ORANGE AGRICULTURAL COLLEGE OF ADVANCED EDUCATION^{*}

DESIGN ARCHITECT : DONALD COLEMAN

DOCUMENTATION : STAGE 1 1970 STAGE 2 1971 STAGE 3 1972

The Orange Agricultural College is considerably smaller in size and scale than the original three Colleges of Advanced Education and seeks to express this architecturally.

It has a relatively formal dual-axis site plan with pure axial planning about one axis for the student accommodation, with informal

* Illustrated on pages 102-103, Vol. 2.

yet balanced planning about the other axis for the administration and teaching areas.

The buildings are all well related, low keyed, two storied and domestic in scale and character. Each block has brick walls, tiled roofs, exposed roof trusses internally and naturally finished timber joinery - very much in the "Sydney School" expression of the 1960s. The main buildings have sensitively juxtaposed roof slopes with vertical level changes at each ridge to allow top lighting into the internal spaces.

UNIVERSITY OF NEW ENGLAND

Prior to the creation of the University of New England at Armidale, in the mid 2950s, the establishment was a college of Sydney University.

Farmer was associated with the University from its foundation. Under Cobden Parkes he designed two of the earliest buildings; the Mary White Residential College and the first stage of the Dixon Library.* Farmer from the outset was fascinated at the chance of being able to design a complete university campus on an almost virgin site.

A very close-knit committee was formed, consisting of Sir Robert Madgwick (the first Vice Chancellor 1954 - 1966), the late W. Robb who became Registrar, six founding professors and Farmer.

These men formed an amiable and effective working Committee with a common aim.

Farmer especially, was anxious to see Armidale become an Australian counterpart of Oxford with a similar integration of town and gown. The fact that the site was on the outskirts of Armidale was not

* Both illustrated on page 107, Vol. 2.

conducive to any real physical integration. Nevertheless, the town's people supported the idea of a university at Armidale.

The town already had academic roots with its technical college and two private boarding schools. The community responded to the new academic establishment by serving on its council, by billeting its students until residential accommodation was available and by attending the campus functions.

The original aims behind the Branch's master plan for the campus were that the relaxed rural environment should be preserved by the use of a free site plan, that buildings be well spaced and finally that they should be low in scale. G.P. Webber produced such a master plan in the early 1960s, but by 1963 it was realised that the development proposed was so great that modification of the original aim was imperative. Leif Kristensen then produced a new master plan for the central area which showed with very sensitive drawings how a system of infill development could be achieved.*

The concept of the early master plans required not only that the buildings be separated by flowing space but also that all buildings should be uniform in scale and colour. This latter aim was achieved by the use of white painted external walls. Later, however, this aim was also abandoned when the university authorities became concerned at the maintenance required to keep the buildings looking respectable.

Towards the end of the Farmer period the university authorities became somewhat disenchanted with the service from the Branch, especially in areas of project administration. Following Zelman Cowen's appointment as Vice Chancellor in 1967, several academic staff argued that the University would have greater control of its building programme if a staff architect were appointed as occurred in other Universities. Subsequently, Barry Davis was appointed as staff co-ordinating architect to nominate and oversee private consulting architects on behalf of the University.

* Illustrated on pages 113-116, Vol. 2.

The growth of the Branch had meant more delegation of responsibility with a consequent fragmentation and loss of personal service which in turn affected the financial efficiency of job control. It was an unfortunate end to what had been such a long enthusiasm and interest.

Some comment on a selection of the more significant buildings on the campus follows. A significant number of buildings are examined by the author for two reasons; firstly the University of New England project was very important to Farmer and secondly the various projects cover the whole period of this review and hence give an opportunity to determine if there was any line of aesthetic development or change.

MARY WHITE COLLEGE

DESIGN ARCHITECT : E.H. FARMER
DOCUMENTATION : 1955

The building^{*} really predates the period under consideration but it is important, firstly as it was designed by Farmer and secondly since it formed the basis of the architectural character of the then future campus.

The building has a slightly irregular site plan of staggered rectangular blocks around two, three sided courtyards. This approach expresses the aim of the campus development. It is relaxed, informal and in harmony with the landscape. The two storied blocks have simple fenestration, low pitched copper sheeted roofs and were the first buildings to conform with the white painted walls principle.

The direct and simple character seems to owe some allegiance to the then contemporary Scandinavian architecture which was so admired in this country at the time.

* Later additions are illustrated on page 107, Vol. 2.

DIXSON LIBRARY STAGE 1

DESIGN ARCHITECT : E.H. FARMER
DOCUMENTATION : 1956

Stage one of the Dixson Library^{*} was also documented prior to the period under consideration. It appears to be an attempt to integrate the domestic informal character required in the overall aim with a larger scale considered more in keeping with the importance of the building. The east and west elevations are similar to those of Mary White College with piercings in the white painted walls, whilst the north and south elevations have full curtain walls.

ROBB COLLEGE

DESIGN ARCHITECT : M. DYSART
DOCUMENTATION : 1959

This residential college^{**} was designed on the open courtyard principle by Dysart in the same year as he designed the Belmont Primary School. Consequently its courtyard approach could be a link between his Belmont school and his subsequent doughnut high schools.

The Branch rationalised the courtyard approach at the time by pointing out that it enabled:

*"...each block to have its own physical identity, so difficult to achieve in a college built in stages."*⁵

At the time there was some adverse criticism of the concrete cross vaulting roof system to the dining hall. Dysart explained⁶ that his concept for the dining hall roof was inspired by similar constructions in Sydney warehouses of the nineteenth century. Following that tradition he had proposed to span the space with rolled steel joists having galvanised iron vaulted form-work to take the concrete. However, the project engineers, Woolacott, Hale, Bond and Corlett modified the proposal and substituted the all reinforced concrete vaulted system.

* Illustrated on page 107, Vol. 2.

** Illustrated on pages 108-110, Vol. 2.

The architectural expression achieved in the building complex with the concrete vaulting, walls of local basalt, quarry tile floors* and areas of natural boarding follows the organic philosophy of the Young Turks.

The work was a fine start to the new buildings on the campus at the beginning of the Farmer period. It followed the aims laid down, of domestic scale and preservation of the existing environmental character of open space.

AGRICULTURAL ECONOMICS BUILDING

DESIGN ARCHITECT : P. HALL

DOCUMENTATION : 1962

This small building** exhibits many of the characteristics of the Sydney School of the period. It has a simple open courtyard plan so popular at the time with the Branch's designers. Its shapes are direct and its materials, namely painted brickwork, naturally stained timber doors and windows with terra cotta tiled roofs, are all in keeping with the Sydney School work and the Young Turks' aims. The scale is domestic, in keeping with the original aim. It is an appealing building, surely handled, but gracious, very obviously designed by the same architect as Goldstein Hall at the University of N.S.W.

PSYCHOLOGY AND EDUCATION BUILDING

DESIGN ARCHITECT : G.P. WEBBER STAGE 1
P. HALL STAGE 2

DOCUMENTATION : 1962

This building,*** like the Agricultural Economics building, is designed to conform with the University aim of low scale in the rural environment and to follow the maxims of the Sydney School.

* Subsequently replaced by parquet.

** Illustrated on page 111, Vol. 2.

*** Illustrated on page 112, Vol. 2.

It has a simple and direct plan with a fine internal courtyard but, in the author's opinion, the external expression lacks the masterly resolution of Agricultural Economics. The sloping site required floor level change resolutions which appear awkward and the expression of the minimum roof slope on the boarded fascias, whilst an honest and praiseworthy aim, lacks sure resolution.

MASTER PLAN OF CAMPUS CENTRAL AREA

DESIGN ARCHITECT : L. KRISTENSEN
DOCUMENTATION : 1963

This scheme^{*} unfortunately never proceeded. Leif Kristensen's sensitive drawings reveal an imaginative and fascinating possible solution for the core of the Campus. The scheme unites "Booloominbah", the original homestead^{**} now used for administrative purposes, with the first stage of Dixon Library, the then existing Union buildings with Union extensions, a great hall, an experimental theatre and council chambers, all grouped around a fine central space.

This ambitious scheme managed to be dignified in keeping with its purpose, but at the same time it conformed with the informal basis of the original Campus concept.

SQUASH COURTS

DESIGN ARCHITECT : J. PAYNTER
DOCUMENTATION : STAGE 1 1963

The squash courts,^{***} like Kristensen's Master Plan, are designed by the second wave designers, who ably took up the torch offered by the Young Turks.

The plan is simple with two Squash courts forming one block, connected with a second block housing changing areas.

* Illustrated on pages 113-116, Vol. 2.

** Architect, Horbury Hunt

*** Illustrated on page 117, Vol. 2.

The expression of the building shows the same organic quality as the previous campus work by Hall, but is more direct, even tense.

In reply to a question about his design philosophy in the author's questionnaire, Paynter's remarks are seen to follow the Branch's aim for the Campus development. He says that he has an "...*appreciation of natural (local) materials, natural colouring and bush environment...*" and later concludes by stating his appreciation of "...*simple vernacular style, logical and efficient planning all related to the environment.*"

DUVAL COLLEGE

DESIGN ARCHITECT : I. COLLINS
DOCUMENTATION : 1963

Duval College is another straightforward campus building which seeks human scale in a very direct manner by using small openings in its brick walls.

Duval's blocks are again arranged to form courtyards, with more freedom than seen at Robb College, but with more positive enclosure than seen at Mary White College.

BOILER HOUSE ACADEMIC SITE

STAGE 1 DESIGN ARCHITECT : L. KRISTENSEN
DOCUMENTATION : 1965
STAGE 2 DESIGN ARCHITECT : R. BRYANT
DOCUMENTATION : 1971

The Merit Award Committee for the N.S.W. Chapter of the R.A.I.A. in announcing a merit award for Stage 2 of the building* made the following remarks.

"...The site for this building is in a commanding situation, being on the side of a tree covered hill dominating the University. The building is closely related to the site and its function is clearly expressed in its simple form. The general form of the building

* Illustrated on page 118, Vol. 2.

... indicates a framed structure which is honestly clad in asbestos while the fuel storage is expressed as load bearing concrete hoppers. One of the hoppers is carried through the roof plane and vaulted over the operations area to give a good blending of materials and an interesting inter-relationship of spaces. On the whole, this is a satisfying building and a very economic solution. However, there were some jarring points and we were critical of minor construction details."

EARLE PAGE COLLEGE

DESIGN ARCHITECT : L. REEDMAN
DOCUMENTATION : 1965

This college^{*} follows the aims and principles of scale and site planning laid down by its predecessors in a simple, unassuming way.

ARTS THEATRE AND BUILDING

DESIGN ARCHITECT : L. REEDMAN
DOCUMENTATION : 1966

The Arts complex^{**} is economic, simple, relaxed and low scaled, in admirable keeping with similar campus work at the time.

BOOLOOMINBAH EXTENSIONS

DESIGN ARCHITECT : L. REEDMAN
DOCUMENTATION : 1967

These extensions were required for additional administrative space and are located where shown on Leif Kristensen's Master plan for the central area of the campus.

The building is a simple rectangle in plan with a direct machine-age quality and an elegant character created by fine proportion and

* Illustrated on page 107, Vol. 2.

** Illustrated on pages 119-120, Vol. 2.

detailing seen especially in the continuous mesh sun screens over each long facade. The screens are supported by an expressed steel structural framing grid.

RURAL SCIENCE
PHYSIOLOGY*

DESIGN ARCHITECT : D. BORAM
DOCUMENTATION : 1968

AGRONOMY**

DESIGN ARCHITECT : D. BORAM
DOCUMENTATION : 1968

The Physiology building is a departure from previous design concepts on the campus since it represents a more subjective design approach than had prevailed previously. The building is sculptural with strong dramatic qualities due especially to the use of cantilevered forms. Whilst, in the author's opinion, the break from the rural campus tradition would be argued by some critics as being unfortunate, the quality of this design in its own terms is real.

The Agronomy Building is also an imaginative and worthwhile architectural contribution to the Campus. In the author's opinion, it is not such a 'tour de force' as the Physiology building. It has elements of mannerism but at the same time can be seen to demonstrate clearly the human scale sought for the University.

PROPOSAL FOR RESIDENTIAL DEVELOPMENT TO THE NORTH OF THE CAMPUS

DESIGN ARCHITECTS : D. BORAM AND R. BRYANT
DOCUMENTATION : 1968

An article in "Architecture in Australia"⁷ explains the very interesting and imaginative proposal,^{***} which unfortunately never proceeded beyond the design concept stage:

"The study examined the effects on future university structure of the progressive development of student housing on various sites

* Illustrated on page 118, Vol. 2.

** Illustrated on page 118, Vol. 2.

*** Illustrated on pages 121-122, Vol. 2.

throughout the campus and recommended the site north of the academic area for its proximity to the centre and all academic functions.

All parts are within ten minutes easy walking distance from this site and the large resident population would bring greater activity and use to the centre zone and make it a much more valid focus for the campus. Aspect and prospect are ideal. North facing slopes of the site have panoramic views across rural landscape to mountain ranges. Good pedestrian linkage will ease future traffic and parking problems.

For the study, a population grid provided ready appreciation of the visual bulking of various studied populations. The diagrams indicated an optimum of two thousand persons for this site and show this basic grid developed a stage further toward a building form with symbols for staircases, corridors and distinctive areas. Sub groups of twenty and one hundred persons on the grid were combined to give the totals studied - range one thousand five hundred to three thousand five hundred. Five levels were placed against the slope and step down to give large terraces to amenity rooms and bed/living rooms. All bedrooms were arranged to face north and provided a range of accommodation types, whilst all service rooms were arranged back against the hill. All main amenity functions were planned at an intermediate level, and at this level pedestrian and vehicular flows met. A pedestrian concourse was planned to give access to all parts of the structure, with access to any of the five levels direct from the ground. Organisation of social groupings were designed to be flexible and permit ranges from the traditional college of more varied forms."

DIXSON LIBRARY STAGE 2

DESIGN ARCHITECT : D. BORAM
DOCUMENTATION : 1970

The Dixson Library^{*} extension departs from the earlier organic approach to the campus buildings. This extension to the curtain wall expression of Stage 1 (which itself preceded the organic period)

* Illustrated on page 123, Vol. 2.

has shaped precast concrete panel cladding which shows some adherence to Brutalist expression.

The building has dignity in keeping with its importance and central location. It is interesting to note that Leif Kristensen's proposal for the central area does not show any proposed extension of Dixon Library.

ANIMAL LIVESTOCK HUSBANDRY BUILDING

DESIGN ARCHITECT : D. BORAM
DOCUMENTATION : 1971

This is another interesting small building* with a direct plan solution and an expression which has qualities derived from the organic tradition on the Campus overlaid with the sculptural approach of Brutalism.

CONCLUSION

It appears that no real line of architectural development occurred on the University of New England Campus. One can discern, however, a change over the period under consideration.

Initially architects such as Hall and Dysart expanded on the simple Scandinavian approach by Farmer to produce the beginning of a University of New England vernacular. This architecture was very much in keeping with the original aim of human-scaled, rural expression befitting the environment.

Later the design philosophy of the individual architects was allowed to dominate and in some buildings a suggestion of Brutalism appeared. In such context, however, they are valid and of high architectural quality.

Other later work, whilst following more directly the Hall and Dysart tradition, became less organic and more sculptural. This work,

* Illustrated on page 124, Vol. 2.

whilst not as radical as the other contemporary stream, nevertheless did reveal an apparent urge towards freedom and a desire for more dramatic forms.

There were many other university buildings designed by the Branch which had considerable architectural merit. Several of these are illustrated in the subsequent photographic section.

The earlier influential buildings such as the Chemistry School and the Fisher Library at The University of Sydney or the first stage of the Dixon Library at the University of New England have been mentioned already when discussing the general development of the Branch's work.⁸

TECHNICAL COLLEGES

THE INSTITUTE OF TECHNOLOGY

DESIGN ARCHITECT : MICHAEL DYSART
DOCUMENTATION : STAGE 1 1968

The Institute of Technology,^{*} the Flemington Markets^{**} and the Westmead Hospital were the largest and most complex projects undertaken by the Government Architect's Branch.

The decision of the State Government to move the municipal markets out of the central city area motivated the Institute of Technology project since it gave viability in terms of land availability.

The Institute of Technology is a vast proposal,⁹ the ultimate development of which will cover sixteen hectares in the Central Railway area of Sydney, and will involve a great deal of land acquisition and building demolition.

Despite the area of land proposed, the anticipated student population demanded a proposal involving high rise towers with extensive site coverage of four storied podium development beneath them.

* Illustrated on pages 130-133, Vol. 2.

** Illustrated on pages 151-152, Vol. 2.

The first stage of the project now completed is one of the Institute of Technology towers on the Broadway frontage. It has twenty-five levels rising above a four storied podium with three basement levels beneath it.

The design concept for the tower aimed to cope with today's rapidly changing technology by providing maximum flexibility of spatial layout and supporting services. This aim was achieved, albeit at some expense, by providing a floor system of twin-tee precast concrete sections to house service runs and a column free floor area.¹⁰

The Department of Public Works Review for 1976 says in part: *"...The project is conceived as a group of buildings which, through their materials, structure and services, will be an example of modern building technology appropriate to a centre of advanced education."*

The Institute of Technology was the largest and most important technical college project designed by the Branch. However, many other technical colleges have exceptional architectural merit.

Buildings such as the Taree Technical College which won the Blacket Award in 1964, the Hornsby Technical College and the North Sydney Technical College are examples of this standard. These buildings and others are illustrated in the subsequent photographic section.*

* Refer to illustrations numbers 242-262 on pages 125-135, Vol. 2.

Chapter 13
Special Projects

The Branch was called upon to design many buildings which fell outside the type-range of its usual Sections.* These buildings were very diverse in function and offered a variety of design experiences to their design architects.** This challenge was undertaken by the designers with enthusiasm and in very many cases resulted in the production of very significant buildings.

There does not appear to be any discernible line of development in the course of these buildings and no common architectural philosophy. These observations are not surprising when it is recalled that Farmer and his senior design architects never sought to impose other than rational restraints on the design architects. The additional fact that only in a few cases did the same architect design more than one of these buildings also led to a variety of expression.

The succeeding discussion of a selection of special projects forms an interesting cross section of the work of the Branch, not only of the special projects, but also of the Branch as a whole.

A study of these works and their attendant diversity, indicates the benign control exercised by Farmer over his designers.

* Prior to G.P. Webber becoming Government Architect in 1973 there were only two sections: Health and Schools plus a large Design Section. Subsequently Webber reorganised the structure, forming sections for Schools, Tertiary Buildings, Health Buildings, Public Buildings and Special Projects. In some instances a building could have conformed with a type but was considered to be a special case. Some special projects, whilst able to be typed, were designed prior to the section's formation.

** This range of building types is apparent from the list of buildings - refer to Appendix No. 10.

GOLDSTEIN HALL AND BAXTER COLLEGE
AT THE UNIVERSITY OF NEW SOUTH WALES

DESIGN ARCHITECT : PETER HALL
DOCUMENTATION : STAGE 1 1962 STAGE 2 1964

The group of buildings^{*} is undeniably one of the highlights of the Branch's golden period. The hall especially, glows with the dedicated enthusiasm of its then youthful design architect, Peter Hall, and it reflects the effective strength of the Design Room at the time. The merit of the design was recognised by the N.S.W. Chapter of the R.A.I.A., who awarded the building the Sulman Medal for 1965.

A review of the building written by Donald Gazzard was published in *Building Ideas* in 1964.¹ In it he recognises not only the individual merit of the building but also the influence he expected it would have. Gazzard said in part:

"...Peter Hall's exciting extensions to the Halls of Residence at the University of N.S.W. are among the few buildings completed in Sydney in the last year or two that will, I suspect, have a seminal influence among younger architects. If the basic thought processes that were behind the design of this building are understood and appreciated, then we may be getting somewhere at last..."

Gazzard was impressed with the use of "off form" concrete, considering it was the first time in Sydney that the material had been really understood. He appreciated the studied care in the selection, application and use of the formwork and the high standard of the resultant concrete.

The article goes on to provide a penetrating insight into Peter Hall's design philosophy. Gazzard says:

"...In more ways than one these buildings perform what Reyner Banham² has described as the technological/handicraft double-take and the traditional/modern double-take. This illustrates one of the characteristics of our generation, the willingness to be open and influenced from any source and to accept the given situation,

* Illustrated on pages 85-88, Vol. 2.

a non-doctrinaire approach concerned with the building rather than a theory. Central to the design of these buildings has been a special, imaginative care for the users of the building, a concern which has been continually critical and has gone back again and again to the programme to wrestle with its implications till it yielded an answer which has the stamp of reality. Over and above the routine functional uses, these buildings are concerned with, and promote, the real meaning of a university. Their spaces and corners are a standing invitation to linger and talk, argue and explain and to promote casual encounters and discussions. One trusts that the transparent honesty of this architectural approach will be a questioning silent witness to the quality of the intellectual life of the College...".

Gazzard then comments on the other aspects dear to the heart of the Young Turks - the use of natural materials and low maintenance elements. He says"

"...It is tempting but misleading to describe these buildings as 'brutalist'. Apart from clinker brickwork and off-form concrete, the glazing to the great north face of the dining hall is done with naturally finished rough sawn joinery. Other materials have also been chosen carefully for their low maintenance cost and are mostly used 'as found'. But there is not quite the freedom (the swinging acceptance of the mechanical services for instance) that goes with real Brutalism...".

Gazzard also appreciated the basic concept of the college, and especially the dining hall itself, saying:

"...The majority of students when the next stage is complete, will enter the dining hall from below. A sequence of spaces from the courtyard to the cave-like undercroft of the building leads to the extremely tall staircase space and into the monastic simplicity and austerity of the dining hall itself. The hall is very tall and owes something to an older collegiate tradition. It has what older writers might have called 'noble' proportions, an un pompous inevitable feeling. It is the extraordinary place of a special community, but not a bit overawing or monumental. The furniture is excellently simple and straightforward...".

Peter Hall replied to Gazzard's appreciation of the building in the same article. The most revealing comments he made were those which revealed his aims and design motivation. He said:

"...A group of residential buildings on a university site presents a problem in terms of people, not equipment. It provides for the most traditional activity likely to be encountered at this sort of modern university and was approached in a frankly traditional way, with the intention of creating an enclosed precinct, inward-looking and protected from the outside world. The proposed group of buildings is big enough to form its own environment, but then this size itself presents a problem of relation to human scale, the aim has been to make a series of spaces of varied size and character, within which the occupants are not continually aware of their place in a big university and city."

Gazzard concludes his article with a remark with which the author fully concurs, saying:

"...The Government Architect's Branch once again has set a standard of architectural excellence that does the whole Department credit".

Today, fourteen years later, whilst the building has passed into history and seen several architectural philosophies come and go, it still remains a fine building and still admirably fulfils its purpose.

BROUGHTON HALL PSYCHIATRIC CLINIC

DESIGN ARCHITECT : MICHAEL DYSART

DOCUMENTATION : 1962

The clinic^{*} is designed to provide rehabilitation for mental patients. It was considered that the therapeutic value of the environment would be a major factor in achieving this rehabilitation. Consequently not only is the building low scaled, but also the main activity spaces are interconnected by sensitively designed spaces.

The landscape design as an extension of the building concept is, in the author's opinion, the most striking and thoughtful aspect of the design. The materials and geometry of the buildings are extended into the landscape to produce a well integrated result. The basic hexagonal shape groups and regroupes in the two main blocks and cleverly continues as part of the landscape.

Elements such as a cooling tower and cooling ponds for the air conditioning are treated as part of the total design. Few buildings in Sydney at this time could boast of such an all-embracing design concept.

The courtyard plan used for one of the blocks indicates Dysart's continuing interest in this element. He first used the device in the design of the Belmont Primary School in 1958, then again for the residential blocks at Robb College for the University of New England in 1958. Its use here at Broughton Hall is logical since it provides the intimacy and association with the landscape required by the buildings' concept.

The acoustically motivated vertical elements of the hall recur to produce partial enclosure to the covered ways. This creates an interesting solution to the difficult problem which arises when one tries to integrate covered ways into the main building fabric.

* Illustrated on pages 137-138, Vol. 2.

PARRAMATTA TRAINING CENTRE FOR RETARDED CHILDREN (MARSDEN)

DESIGN ARCHITECT : LEIF KRISTENSEN
DOCUMENTATION : STAGE 1 1966 STAGE 2 1974

The Parramatta Training Centre* was the first centre designed especially for the purpose. The Branch undertook considerable research into the field before commencing design, but still considered that the results must, of necessity, be experimental.

The first stage of the project contains the following accommodation:³

Residential space for three hundred children in nine separate "houses".

Day care facilities for children living with parents within the region.

A school for the children living at the hospital as well as for a small number of children from the community.

A sheltered workshop for eighty to one hundred adults drawn mainly from institutions within the region.

A regional administration centre which includes a consultative service for the community.

The Parramatta Training Centre, which deservedly won the Sulman Award of the N.S.W. Chapter of the R.A.I.A. in 1969, is an extremely sensitive conceptual design. Its solution fully answers the stated aim of being scaled and proportioned for children, as well as being informal and avoiding any institutional character.

The complex suggests a small village complete unto itself - an harmonious collection of domestic buildings. The paramount interest is its fine site plan, which, loosely arranged around a circular playing field, introverts most activities into a world of their own.**

* Illustrated on pages 143-144, Vol. 2.

** A brochure produced by the Government Architect's Branch on the project states that the reason for the shape of the site plan was to allow all areas to have supervised external playing facilities.

The floor levels of the wards are extended as brick paving towards the circular playing field, in a manner which imaginatively and skilfully links the geometry of the buildings with the playing field.

As the buildings are single storied and deliberately small scaled, their low height around the perimeter of the playing field seems insufficient to enclose the space adequately. Consequently, the quitesessential aim is weakened, as the space seems too large to be friendly.

In the author's opinion, the second stage, built in 1974, tended to destroy the clarity of the concept, by building across part of the circular playing field.

It is interesting to record that in the author's discussion with staff working at the centre in 1978 - some twelve years after its documentation - they considered the buildings worked well and that their only complaints centred around the danger of glass taken to floor level and the placement of light switches.

TARONGA ZOOLOGICAL PARK

| | | |
|--------------------------------|--|----------------------|
| PLATYPUS HOUSE* | | |
| DESIGN ARCHITECTS : | D. COLEMAN G.P. WEBBER | DOCUMENTATION : 1968 |
| BIRD HOUSE | | |
| DESIGN ARCHITECT : | D. COLEMAN | DOCUMENTATION : 1969 |
| REPTILE HOUSE | | |
| DESIGN ARCHITECT : | D. COLEMAN | DOCUMENTATION : 1969 |
| KANGAROO AREA | | |
| STAGE 1 | | |
| DESIGN ARCHITECT : | D. COLEMAN | DOCUMENTATION : 1969 |
| STAGE 2 | | |
| DESIGN ARCHITECT : | D. CHURCHES ⁴ | |
| AVIARY** | | |
| DESIGN ARCHITECTS : | D. COLEMAN G.P. WEBBER | DOCUMENTATION : 1969 |
| VETERINARY QUARANTINE BUILDING | | |
| STAGE 1 | | |
| DESIGN ARCHITECTS : | D. COLEMAN O.M. PODGER ⁵ | DOCUMENTATION : 1969 |
| STAGE 2 | | |
| DESIGN ARCHITECT : | E. YUEN ⁶ | |
| KOALA HOUSE*** | | |
| DESIGN ARCHITECT : | D. COLEMAN | DOCUMENTATION : 1970 |
| NOCTURNAL BUILDING | | |
| DESIGN ARCHITECT : | D. COLEMAN | DOCUMENTATION : 1970 |
| FOOD PREPARATION BUILDING | | |
| STAGE 1 | | |
| DESIGN ARCHITECT : | D. COLEMAN | DOCUMENTATION : 1972 |
| STAGE 2 | | |
| DESIGN ARCHITECT : | D. CHURCHES | |

The Branch has undertaken a major transformation of the Taronga Zoological Park based on a totally new comprehension of the needs and purposes of zoos.

In 1967, the Under Secretary of Lands instigated a planning committee to undertake systematic replanning and redevelopment of the Taronga Zoo. The committee consisted of J.E. Hallstrom as Chairman,

* Illustrated on page 146, Vol. 2.

** Illustrated on page 146, Vol. 2.

*** Illustrated on page 147, Vol. 2.

W.J.P. Stack and D.C.B. MacLurcan from the Zoological Park Trust, R. Strahan, Director of the Zoo and G.P. Webber and D.M. Coleman from the Government Architect's Branch.

G.P. Webber was overseas at the time so the opportunity was taken to extend his studies by examining and reporting upon significant zoos.* Webber considered that this examination and study of overseas zoos set the standard and formed the basis for the committee's attitudes to zoo design. Consequently, D. Coleman was later able to design his fine buildings without firstly having to debate design philosophy with the client.

Sensibly, the new development was based on the need to provide a new master plan for the whole site. The scheme consisted of a central north-south spine and main pedestrian circulation, with east and west lateral paths on each side. As far as possible, all service roads and activities were kept to the perimeter of the site.

The committee was anxious to avoid:

"...the 19th century idea of a zoo as a menagerie exhibiting animals for public entertainment and showing little more than what kind of animals there are...".⁷

The new concept saw the zoo primarily as an educational resource and considered further that the animals should be displayed in as realistic a way as possible. Each species should be shown to its peculiar best advantage, in surroundings indicative of its natural environment. The educational aspect required the provision of laboratories for scientific research and lecture rooms for formal classes.

A great deal of research was undertaken to determine how each species should be shown to best advantage. Viewing principles varied according to each animal's physical characteristics; fences, pits, screens, moats, glass and the walk-through principle, all found their place.

* Webber had been sent overseas in 1967 on a study tour associated with the proposed new law courts.

The concern with creating an impression of each animal's natural habitat was skillfully moulded into a unified total site landscaping scheme by Allen Correy with G.N. Oates and K.D. Harris in the Branch's landscape section. Generally plant species indigenous to the area were used, except where more exotic types were required to generate a feeling of the animal's natural environment.

The overall design was governed by the desirable aim of organic design deliberately created to blend with the environment. There are no longer any pseudo concrete caves or crude mural backgrounds in cages.

The animal houses were mostly romantic. They were sensitive and well designed, constructed in natural materials such as 'off saw' stained timber, timber shingles and face brickwork.

In the author's opinion, admiration stops just short of being total; there is a slight doubt in the Koala House for instance. Here, the retreat from the mock natural style associated with branch-shaped concrete seats and concrete goat hills, may have found a new baroque expression based on the Sydney School of the 1960s. The Koala House has a brilliant concept, but the apparently oversized timber beams, and their continuance just above the sloping ground, suggests a use of structure for its own sake, rather than logical practicability.

Any such criticism is, however, but minor; the buildings are exceptional and worthy responses to the overall aims of the Committee.

The Director of the Zoo (R. Strahan) clearly stated these aims for the development and was at pains to add his admiration and deep satisfaction with the work of the Branch. He said:⁸

"...The architect of an exhibit in a zoological garden has, in effect, four clients: the animal which requires a natural environment, shelter and lack of disturbance; the visitor who wants maximum accessibility to the animal, aesthetic satisfaction and a degree of entertainment; the keeper who seeks physical security for

the animal and himself and ease of service of the enclosure and the director who is concerned that the exhibit provide a service to education, research and faunal conservation and at the same time contribute to the efficiency and economic viability of the zoo. Obviously any design must be a compromise between these conflicting demands: what is perhaps surprising is that exhibits which have been designed for Taronga Zoo give a considerable degree of satisfaction to each client. This has been achieved in some cases by grasping the nettle of "naturalness" and interpreting the needs of animals in terms of their physical requirements rather than by attempting the almost impossible task of re-creating, in miniature, their natural environments.

The kangaroo and wombat enclosures are the most "natural" exhibits: a "plain" for the kangaroo and a mound of clay in which the wombat can burrow. The platypus house, on the other hand, meets the biological requirements of the animals but is unashamedly artificial.

The waterfowl ponds consist of a large expanse of circulating water, but do not attempt to simulate swamp or lake. However, the planting around the ponds will provide very natural shelter and breeding grounds.

The walk-through aviary is an immense enclosed space in which birds may fly - eventually in a simulated rainforest. It was designed, firstly to avoid acute solid angles in which birds might find themselves trapped and secondly to be an aesthetically pleasing shape. In removing the normal barriers between birds and public, the greatest problem has been to protect the animals from the visitors.

Turning night into day is essentially artificial and the nocturnal house, as a whole, is conceived as a series of rectangular prismatic enclosures with separate naturalistic micro-habitats in each of these.

Koalas hardly need an enclosure: their place is in a tree. However, on the Taronga site they need protection from cold southerly winds and a certain degree of shelter from rain. Believing that the "up-ness" of a koala is important, we have designed a structure in which visitors first see these animals from below; then climb up a helical ramp to see them at eye-level. There are many ways in

which this could have been done, but the final design is one that has a component of lightness and fun.

The veterinary-quarantine complex is, of course, in the nature of a hospital, with prime importance given to isolation and sanitation. In the redevelopment of Taronga Zoo, we are not forcing a single design theme. Where soil or timber is appropriate, we are using these materials, but we are not shy of concrete or structural steel. The coherence of the total design concept is seen in details such as road and path surfacing, roofs, signage and eventually, an efficient and meaningful flow of vehicular and pedestrian traffic."

THE ART GALLERY OF NEW SOUTH WALES
MAJOR ADDITION

DESIGN ARCHITECT : ANDREW ANDERSONS
DOCUMENTATION : 1969

The success of the addition to the Art Gallery of N.S.W.* comes from the demonstrated understanding of the need to respect the classical Victorian facades and interiors of the original building, whilst allowing the addition to be honestly expressive of contemporary architectural philosophy and techniques.**

Andrew Andersons' response to these criteria is not only of a high order but also both sensitive and subtle, especially in his handling of the interior spaces. The refurbished entrance hall ties together the old galleries on one side and the new ones on the other in a masterly fashion.

The building gained a merit award from the N.S.W. Chapter of the R.A.I.A. in 1973. The jury commented as follows:

* Illustrated on pages 148-149, Vol. 2.

** The original building was designed by J. Horbury Hunt in 1883 with later major additions, including the facades, in stages between 1897 and 1909, designed by the then Government Architect, W.L. Vernon.

"This (the Art Gallery of N.S.W.) is a building which can contribute greatly in the life of the city and the importance of it as an efficient store house for the benefit of future generations is paramount.

The setting is ideal, the job - to treat a classical Victorian work in a sympathetic way and to extend the delight into a building for our time, to show works of art and to house the many supporting functions. The first has been done with an expert eye for the period giving scale to the lofty galleries and a rich background to the sober works. The second leads from the first in an interlocking way yet is separated structurally by means of clear panels of glazing. The transition from the grand and highly detailed is executed by the clean lines of the two level concrete frame containing the restaurant.

The whole completes the exercise in a most satisfactory manner. Finishes are simple yet range from the white of the wall panels, to the deeply coffered ceiling boxes and the warmth of the travertine paving. Flexibility is at an optimum with wall panels and lighting on a close grid system with an interpenetrating space from one floor to another. There is a general feeling of comfortable enclosure and concern for people. The concentration is on the work of man with only an occasional but superb glimpse of the world outside.

Surrounding the picture hung walls are the working parts - well planned storage rooms, library, print room, laboratory and well lit restoration rooms and offices. All these closely relate to and connect to the galleries.

This building in our view should serve the city well and give tremendous pleasure to a large number of people."

Subsequently in 1975 the building was awarded the Sulman Award by the N.S.W. Chapter of the R.A.I.A.

The report from this jury recommending the award is reproduced below. The jury fully comprehended the architect's aims and through its eulogistic comments indicated the high regard in which the work of the Branch was held by the private architectural practitioners of the time.

"R.A.I.A. N.S.W. CHAPTER
THE SULMAN AWARD 1975
REPORT OF THE JURY.

The Jury recommends that the Sulman prize be awarded to the Art Gallery of N.S.W.

The extensive additions to the Gallery have enormously increased its capacity for exhibition, storage and supporting functions.

Joining a new structure to a classical Victorian building presented the architect with a considerable functional and aesthetic challenge.

The strength of the building lies firstly in the effectiveness with which these challenges have been met.

There is wonderful compatibility of scale between the new and old sections of the building where they interlock inside the entrance; on entry one is immediately conscious of both parts of the building and of their successful integration. The crisp lean mass of the restaurant floats in the highly detailed arched structure of the existing building; there is excellent use made of transparent planes to articulate the structures so that they are at once joined and separate.

From the restaurant one is delightfully close to and aware of the detail of the existing building.

The visitor to the Gallery moves easily into, between and through either the old or the new portions; in the working circulation there are some less well resolved matters for example multiple use of the one lift, an economic question, and circulation through the restoration areas. The facilities provided however are impressive and appear to provide adequate and efficient service in the working areas.

The new exhibition space is visually simple, flexible and workable; these qualities are clearly the result of considerable research and thought by the designers.

The building elements are very much a background to the works to be displayed, and this unobtrusiveness is the outcome of sensitive detailing and selection of materials. Finishes are of a high standard and give the galleries a warm and positive character.

Detailing is consistently good and deceptively simple in appearance - it is only in the area of the Gallery offices that there is any lapse from this high standard.

A comfortable sense of enclosure is created with an occasional glimpse of the world outside and an easy interesting flow of space through the exhibition areas. The usefulness or otherwise of the sculpture court has clearly not been resolved by the Gallery itself and it appears, as a result, to be presently superfluous provision.

Externally the use of sandstone frankly as a veneer helps tie the new and old visually. The sympathy of scale gives the building strength externally as it does internally; one is more aware of the quality of the work the longer one looks critically at it.

The building offers nothing revolutionary or innovative in architectural thought but it illustrates how with sensitivity and skill, the architecture of different times can be related and integrated. It provides Sydney with a facility of high standard for storing, restoring and exhibiting works of art and in doing so it will itself give great pleasure of aesthetic appreciation to those who use it."

PARLIAMENT HOUSE AND THE EAST SIDE OF MACQUARIE STREET
DESIGN ARCHITECT : ANDREW ANDERSONS

The dream of a new parliament house befitting Sydney has been the hope of local State parliamentarians for generations.

Over the years there have been many proposals for a new building but all failed to reach fruition, usually resulting in abandonment or simply minor additions and repairs to the existing building.

The depression of the early 1930s forced any idea of a new parliament from members' minds. The improved economy in the mid 1930s and the then current proposal to extend Martin Place to Macquarie Street allowed the politicians to again turn their attention to the future of Macquarie Street.

A Committee known as The Macquarie Street Replanning Committee was formed in 1935 under the chairmanship of Sir John Butters. The Committee was empowered to consider new law courts, new parliament buildings and a new Sydney Hospital. Its report recommended that Sydney Hospital be rebuilt at the rear of its present site, that the existing historic buildings be removed and a new parliament building be constructed in front of the Conservatorium of Music. The area of vacant land so created would have been considerable. It was proposed that it become the site of a huge law court complex closing the Martin Place vista.

The law court aspect of the report received emphasis by the Committee and acceptance in principle by the Government. Subsequently in 1938 an Australia-wide architectural competition was held for the new law courts. It was won by S.G. Thorp, F.H.E. Walker and F. Thorp.*

However, even before the law courts competition, the Government decided that a new parliament was impossible and further it appreciated that the re-building of Sydney Hospital was also a financial impossibility at that time.

* These men were partners in Peddle, Thorp and Walker. The conditions of the competition required individual architects to enter, not firms. Authority: G. Thorp.

By 1939 Australia was at war, so that the parliament house and Macquarie Street dream faded completely.

The post-war years saw a revival of the enthusiasm for a new parliament building. The emphasis was on the need to relocate Sydney Hospital so that the parliament building could terminate the Martin Place vista.⁹ The hospital authorities continued to resist strenuously all proposals to relocate their building. This adamant attitude together with the formidable costs involved in a new hospital plus a new parliament house again caused the postponement of the proposals.

Enthusiasm revived in 1960 following the publication of a scheme prepared by the Town and Country Planning Branch of the Department of Local Government under Adrian Ashton.^{*10} This new solution retained the idea of demolishing Sydney Hospital and placing the new parliament building on the Martin Place axis. The north and south wings of the Rum Hospital and the Barracks were retained and a new State Office tower suggested to the south of the plaza opposite Martin Place and in front of the Parliament.

In 1962 there was a report from the Commonwealth State Law Courts Joint Planning Committee on the proposed Law Courts. The Branch saw their recommendations as detailed developments of the 1960 proposals and was impressed with the suggestion that King Street be closed to form a pedestrian space on the south of the law courts.

The first really serious attempt to prepare a scheme for the east side Macquarie Street redevelopment during the Farmer period was a proposal by Andrew Andersons and G.P. Webber in 1964.^{**}

* The Government Architect's Branch had no part in the Ashton proposal and were unaware of its existence until its publication.

** Andrew Andersons recalled to the author that Webber whilst acknowledging the value of the Ashton scheme was concerned at the introduction of a high rise development and that the Branch's 1964 scheme was to some extent a reaction against the Ashton one.

The brochure illustrating the proposal was entitled "Report and Development Plans for Eastern side of Macquarie Street" under E.H. Farmer's signature. It indicated that E.H. Rembert was Assistant Government Architect and that the scheme was prepared by G.P. Webber and A. Andersons.* ¹¹

This proposal still adhered to the idea of removing Sydney Hospital, based on the assumption that it would be replaced by the proposed Westmead Hospital. Again both wings of the Rum Hospital and the Barracks were retained and a law courts complex suggested to the north of the Barracks. The new Commonwealth - State law courts were shown on the King Street-Macquarie Street corner together with the Joint Planning Committee's idea of 1962 to close King Street outside the law courts. The 1960 proposal to remove the court buildings from around St. James' Church and allow it to stand free in the new Plaza, was also retained by the Branch.

It was a noble scheme, simple and formal but refreshingly free from overstrained or forced axial planning. It sought to link the complex with the Domain by bridging Hospital Road and generally emphasising pedestrian spaces and their connection one with the other.

The report reveals a great deal of sensitive consideration in the aims of the proposal. For instance, it was appreciated that the scale of the new buildings should be seen in their city context rather than in terms of political aggrandisement. The new buildings were to be low not only to complement and lead up to the city skyline, but also to respect the scale of the historic buildings on the site.

The report acknowledged the problem of Sydney Hospital; it indicated the incompatibility of use in such a civic concept but also recognised the value of a casualty department in the city, together with the proximity of the Macquarie Street doctors' rooms.

* Illustrated on pages 139-142, Vol. 2.

As with earlier schemes which required the removal of Sydney Hospital, this one had to be abandoned for exactly the same reasons.

An attempt was made in 1965 to resolve the impasse caused by the Sydney Hospital authorities refusal to move. The State Government appointed a committee to report on the most suitable site for Parliament House. However, the matter went no further, no recommendations ever being received.

Finally in 1968 the inevitable was accepted and investigations took place for a new scheme based on the premise that Sydney Hospital had to remain.

Andrew Andersons was again entrusted with this important project. His preliminary sketch plans were presented to the Public Building Advisory Committee at its meeting in October 1969. Eventually the Branch was given instructions to proceed with final sketch plans in 1971 and subsequently to prepare contract documents for the first stage, which is now under construction.

The new parliament buildings* are conceived essentially as major extensions behind the existing Rum Hospital wing. The present entry and legislative chambers remain, being connected by a relatively low block to a seven storey building along Hospital Road.

This new block facing the Domain houses the members' rooms and supporting administrative services.

The scheme makes provision for the extension of the Public Library and the relocation, removal and rebuilding of Richmond Villa.¹²

In order to provide members with temporary accommodation during the demolition and construction period Andrew Andersons designed a sensitive temporary building which was erected adjacent to the library and fronting on to Macquarie Street.

* Illustrated on page 155, Vol. 2.

The new parliament building addresses the Domain but its main approach and entry is from the old building. It will be a simple straightforward building, apparently of civic scale and dignity but at the same time it will respect the scale of the historic buildings in accordance with the original aim. We must await its completion before any meaningful architectural assessment can be made.

STATE BRICKWORKS BLACKTOWN^{*}
 DESIGN ARCHITECT : C. STILL
 DOCUMENTATION : 1970

This building is one of the few industrial buildings produced by the Branch during the period under review. The fact that it gained a N.S.W. Chapter Merit Award in 1973 is a measure of the design standard reached at the end of the Farmer period.

The Merit Award Jury did not have a great deal of comment to make on the building, but what it did say is pertinent:

"A simple and direct answer to suit the manufacture of bricks. All details are with purpose and are carried out with a minimum of fuss. The processes are carried on within allowing the ultimate of mechanisation, supervision and expansion.

The result is a forceful expression of simplicity in factory architecture."

THE SYDNEY OPERA HOUSE

The role played by the Government Architect in the completion of the Sydney Opera House was essentially administrative.

After Utzon's resignation the Minister for Public Works (David Hughes) appointed a panel of architects to complete the project. The panel consisted of E.H. Farmer as Chairman with Peter Hall, D.S. Littlemore and L. Todd.

* Illustrated on page 153, Vol. 2.

John Yeomans¹³ understood the role played by Farmer and said:

"...It was a time of some strain for E.H. Farmer the Chief of the New South Wales Government Architect's Branch. He was naturally closely consulted by the Minister as to who could take Utzon's place - and he also had to receive a petition signed by seventy or eighty of his own staff saying they believed Utzon was the only architect able to complete the job..."

The Branch's role required a great deal of time to be spent on the project by Farmer, Weatherburn and others. Since this contribution was essentially liaison work between the architectural panel and the Minister or administrator, the author does not see it as a significant part of the actual work produced by the Branch. Consequently this study will not do other than record the fact that such work was undertaken.

Chapter 14
Preservation
and
Conservation

Farmer had a strong sense of the importance of history, not only in its own right but also as a necessary background for our cultural advancement. In his introduction to a publication by the Australian Council of National Trusts he demonstrated his fervent interest in our history.¹ He said:

"...Our ancestors had good red pioneer blood in their veins and set about building their buildings with all the violence that they used to open up this ancient country, to slaughter its forests, to dig out its gold and begin to make fortunes. What absolute confidence our forefathers had in the future of the country they were building and what enthusiasm they showed in expressing this confidence by building in as grand a manner as possible, in finding the money to do so and in all the rush and bustle to put so much effort into their Public Buildings.

For myself, the achievements of Colonial times will always, in part at least, exceed much that came after. The Governors had so little in the way of craftsmen, materials or tools available. They received so little encouragement or financial support from the Home Government and yet they founded their villages and turned them into urbane and well-favoured towns. We owe so much to our Governors and in particular I think, to Governor Macquarie who, in his rough and cruel times, had faith in the future of what he was doing and was convinced of the human need for beauty and dignity in its man-made environment. It is of interest to compare his attitude in this period to the official attitudes of the Victorian era.

This attitude has unfortunately survived to quite recent times; as recently as twenty years ago Sydney was on the verge of losing Greenway's wonderful Hyde Park Barracks and it was reported that 'the building has little real value...its past has nothing worthy of remembrance...we cannot make out a case for its retention...' Mercifully it was spared, but how many fine Colonial buildings did we lose through just such a point of view?"

Farmer considered that the Government Architect's Branch should be custodian of historic buildings belonging to the State Government. He considered that this responsibility should include the maintenance of historic buildings as well as the more obvious preservation. By such control he hoped to prevent the unsympathetic additions and makeshift maintenance that often took place.

Farmer's interest in the preservation of historic buildings led to his appointment by the N.S.W. Chapter of the Royal Australian Institute of Architects as its representative on the National Trust Council.*

A close association formed between Farmer and the then chairman of the Trust, Reginald Walker. It followed naturally that the Government Architect's Branch became involved on a semi-official basis in advising the Trust and providing it with normal architectural service for the restoration of its buildings. The first building restored under this system was St. Matthew's Church at Windsor** in 1962 and 1963.

Farmer with Rodney Connors*** and Peter Bridges† from the Branch were appointed members of the Historic Buildings Committee of the N.S.W. Chapter of the R.A.I.A., and served on the team preparing the lists of classified buildings. Consequently the Branch became closely connected with the National Trust in this State.

Since the Branch had such a large and diverse staff it was able to offer the Trust an unusual architectural service. Not only were there architects on the staff with knowledge and expertise in the particular field, but also the Branch had access to older tradesmen who were capable of executing traditional building construction techniques.

In 1967 Farmer was asked to address a seminar on Historic Preservation in Australia at the Australian National University in Canberra.

* E.H. Farmer appointed in 1965 on the death of Mansfield, retired in 1972.

** St. Matthew's Church, Windsor designed by Greenway in 1820.

*** Connors appointed in 1961, retired in 1962.

+ Bridges appointed in 1967, still serving.

This was an important event, as it was the first time that all the various Trust Bodies had come together. At that time only the Commonwealth Government and the N.S.W. Government Trust Bodies had achieved any real success with preservation. Farmer told his audience of the work that had been done in N.S.W., and suggested that other states could achieve similar results if they were sufficiently determined and if they were prepared to fight for their beliefs.

This address did not aim to appeal to the emotive side of his subject. He was careful to present a considered case for conservation. He realised the danger of appearing over-zealous. He said:

"...We must be very careful and selective and, as is expected of us, advise our clients sensibly. We are not living in a museum and we are working under the eagle eyes of the Treasury, the Press and the Opposition and any ill-advised use of public moneys would instantly be noted - and the worse for our hopes in this field."

He also appreciated the problems encountered in finding contemporary uses for some old buildings which were under threat of demolition. In discussing preservation of old sandstone buildings and trying to find economic uses, he said:

"...Most of them were planned in the ways of our forefathers - from the outside the grand elevation - and let the inside look after itself. It is virtually impossible to convert them to modern use because of the huge floor to floor heights and the cellular nature of the masonry construction. I know only too well how difficult it is to organise a professional office in such a building. My own office was accommodated in the Colonial Secretary's Building and any kind of efficient spatial organisation of staff such as is called for in the present day architect's office could not be managed. The retention of such a building on its valuable site, knowing that maintenance expenditure will grow yearly, is extremely difficult to recommend." *

* The building has now been converted into Courts of Law. Its dignity and high ceilings make it very acceptable for such a use.

In the same address Farmer spoke of our large heritage of court houses in the country areas of the State and of the fortunate fact that the function of courts had changed but little, so that sympathetic maintenance is their only need. He also pointed out that in many country towns the court house is the only worthy architectural link with the past and consequently its preservation is important. There have been cases he said, such as at Carcoar, where the court house was no longer required but had been rescued from near dereliction by establishing a new use as a community centre.

The State Government through the Branch has also been active in the restoration of historic churches. It has given financial aid, and full architectural service to the National Trust, so that many of their buildings have now been fully restored.

Farmer, in pursuing a balanced rational approach to conservation, made another valid point when in the same address he said:

"...Like all operations in my profession, restoration work must have a greater or less content of compromise. At Windsor Court House, which is still in use for court purposes, one could not go back to a stone floor nor to lighting by candles, nor could one with safety replace the original shingle roof. Electric light fittings had to be designed, the new floor was timber, and the roof finished up as a modern steel decking. Yet I have never heard criticisms of these decisions. Furthermore, to what period in the life of the building do we return? We may not even know what it was like in its early years. We must compromise."

In the Canberra address in 1967 Farmer expressed his concern for the future of the conservation movement. He hoped for and worked towards the establishment of some protective legislation, for unless future Government Architects and the State Government maintained the same zeal and interest as then prevailed, the concept of preservation would fail. He also pointed out that his client department could demand that unsympathetic additions or alterations be carried out to an historic building in its possession; or that

it even be demolished. The Government Architect would be powerless to prevent such development and could only comply with the wishes of his client.

After discussion with Mr. Justice McClemens* on ways in which some modus operandi could be established, he submitted a memorandum to the Minister of Works, suggesting that the National Trust should assist and advise the Government when any work was proposed on buildings of national importance. No such control was established, but public opinion came more and more to support Farmer and to strengthen his hand, until finally in 1978 (after his retirement) protective legislation was passed.

In 1972 the Branch produced a publication² listing buildings throughout the State considered by it to be of historic value. In the Introduction, the Branch made its attitude to preservation perfectly clear - short term and economic expedience should not be countenanced. The first paragraph reads as follows:

"...The purpose of this booklet is to provide an authoritative list of those public buildings belonging to the Government of New South Wales which, by general consensus of informed opinion, are now accepted as being of special historic or architectural importance. The list has been prepared by the Public Works Department and is intended to serve as a reference for determining a consistent and informed policy towards such buildings whenever their future should be in question. It will enable a system of relative value to be established when dealing with such matters as restoration, alteration, demolition or incorporation in proposals for redevelopment. Such evaluations should be based on permanent issues of the broadest kind and freed from factors of immediate convenience or expediency. These factors should be taken into account only after the long-term issues have been weighed."

The purposeful and determined attitude taken by the Branch in matters of conservation augurs well for the preservation of our architectural

* President of the National Trusts of Australia.

heritage. The Introduction makes the point by saying:

"...The retention of distinguished old buildings is essential if an unique urban identity is to be retained and a faceless anonymity is to be avoided."

Chapter 15

Conclusion

Farmer, when asked by the author to suggest his achievements during the years he was Government Architect, replied with modest understatement. He firstly mentioned his work and research associated with hospital planning. This was a continuing interest of his, which achieved far-reaching results. The other achievement he mentioned was that he had created the milieu in which fine architecture could develop. This he did by careful delegation of authority and by the fostering of a team spirit and approach at all levels of his Branch.

Farmer was more forthright when questioned about his disappointments. His greatest regret was his inability to change his Branch into a separate Department. It was, he said "*...a cross he had to bear*". He considered that the architects had greater responsibility than the engineers. The allocation in State grants to the Government Architect's Branch exceeded that of the engineering section. Furthermore Farmer considered that his work was more complex, especially the field of contract administration. His staff, he said, always saw their allegiance to the Government Architect's Branch and not to the Public Works Department as a whole. Farmer maintained that the political resistance and inter-department jealousies were such that he could never achieve his aim.

Other disappointments he cited were that he never finished the Tallawarra Power Station, as the Authority took over control of their own work; that he did not carry on with Westmead Hospital and, finally, the break with the University of New England.

These disappointments are relatively minor when viewed against the achievements made by the Branch during the Farmer period. These achievements were not only in the more obvious field of improved design standards, but covered areas such as research, computer technology, client involvement, cost control and improved standards of building documentation.

Farmer was essentially a scholarly architect placed in an administrative position. Because of this quality he was frequently frustrated but it caused him to see the need to shelter his staff from bureaucratic annoyances.

An atmosphere developed in the Branch which not only attracted outstanding architects on to the staff but encouraged enthusiasm and the creation of worthwhile architecture.

He gained professional respect from the private practitioners and a measure of freedom from his Ministers.*

Farmer, in commenting to the author on his relationship with his Ministers said:

*"...What I should like to get across to you...was the battle I had to fight from my induction to my retirement to produce an environment in which good architecture could be introduced come what may. It was a battle because many of my seniors simply could not understand what I was at..."***

Farmer hoped that his period as Government Architect would be quoted by the historians as having been of significance. He likes to think they will say *"...that was in Farmer's day..."* Such a wish seems certain of fulfilment; his period was indeed one in which the cause of Architecture was advanced in its broadest sense.

Recognition by one's peers would seem to be the ultimate acclaim a professional man can receive. Such recognition surpasses popular or superficial distinction; it is only given for sustained excellence and never lightly.

Farmer gained such honour for himself and the members of the Branch when the R.A.I.A. awarded him its gold medal in 1972.

It seems fitting to conclude this study by repeating the tributes paid to Farmer by his fellow architects at that time.¹

* Refer Appendix No. 11.

** Farmer particularly mentioned that Alan Johnston who was Director of Public Works was a *"...splendid fellow...he loved Latin poetry, was a Latinist, loved serious music and married a viola player in the Sydney Symphony Orchestra. With such a man I could deal."*

Peter Keys L.F.R.A.I.A., A.R.I.B.A., Chairman of the R.A.I.A. Publications Management Committee* said:

"...With the awarding of the RAIA Gold Medal to Mr. Ted Farmer, recognition is being given for the first time by members of his own profession, to a Government Architect of this country, whilst in office. This is history-making and is a true indication of the increasingly high standard of public architecture carried out in NSW, largely due to his enthusiasm and influence. In this, he has been extremely successful in attracting the kind of support from the profession necessary for such a task. The high standards which he himself has set are reflected through to the staff working with him.

As the Chapter's representative on the National Trust of NSW, he has not only faithfully represented his profession in all fields of preservation, but has also manifested this role as the Government Architect of NSW.

I believe that past preservation policies of the State Government of NSW, culminating in the recently declared policies, have also been largely due to his influence. I am extremely pleased with the decision of the jury and I take this opportunity of congratulating Mr. Farmer."

John Fisher, F.R.A.I.A. Senior Vice President, N.S.W. Chapter of the R.A.I.A.** said:

"...I cannot imagine any architect more worthy of this high honour from his own profession.

Without doubt the most significant NSW Government Architect in a line of distinguished holders of that office, he has created a climate in which good buildings are both expected and produced. He has championed the cause of architecture and of historic preservation with courage, dignity and great wisdom.

* Peter Keys occupied positions associated with R.A.I.A. publications between 1962 and 1975.

** John Fisher was Senior Vice President of the N.S.W. Chapter of the R.A.I.A. from 1972 to 1974.

And all this done with an unassuming and genial air which has endeared Ted Farmer to all who have been associated with him."

Geoffrey Lumsdaine, F.R.A.I.A., A.R.I.B.A., President of the N.S.W. Chapter of the R.A.I.A.* said:

"...It would be hard to over state the contribution which Ted Farmer has made to standards of architecture in NSW, and indeed all Australia. Under his leadership the NSW Government Architect's Branch has set an unequalled standard of quality in public architecture. His buildings are sufficient evidence of this, and it is noteworthy that he has won more architectural awards than any other architect in the State. His department has often led the way in organisation innovations in architectural practice.

His personal contribution in other fields has also been great, including the restoration of historic buildings, to which he has brought a sensitive and sympathetic approach - he has represented Chapter on the Council of the National Trust (NSW) since 1965, and is a member of the Sydney Building Information Centre Advisory Council.

I can think of no more worthy recipient of the RAI A Gold Medal."

Professor R.N. Johnson, L.F.R.A.I.A., A.R.I.B.A.,** said:

"...The record of the NSW Government Architect's Branch under the leadership of Ted Farmer has been remarkable in any terms. The award of the RAI A Gold Medal is just reward for the personal contribution which he has made to this record and for the work he has done in a number of other fields. He would be the first

* Geoffrey Lumsdaine was President of the N.S.W. Chapter of the R.A.I.A. from 1972 to 1974.

** Professor R.N. Johnson was Dean of the Faculty of Architecture at the University of Sydney, N.S.W. Chapter of the R.A.I.A. representative on the National Trust of Australia and the S.B.I.C. Advisory Committee and a member of the N.S.W. Board of Architects Education Committee.

to say that the award of the medal also recognises the contribution made by the remarkable team of architects he has assembled and encouraged - building on firm foundations established by his predecessor, Cobden Parkes, and especially by the former Chief Design Architect, Harry Rembert.

Since he became Government Architect, rapid growth in the State has led to an extraordinarily productive period in which the quality of the work of the Government Architect has been an example to the profession generally.

Architecture is a result of the personal values held by architects in charge. Ted Farmer has had strong convictions about architectural values and has been able to ensure that these values have been translated into fine buildings.

His contribution has not been confined to new building - he has devoted great energy working to ensure that the architectural heritage of this State, a considerable part of which is Government-owned, is maintained for posterity. His work for the National Trust over a long period has been invaluable as has his contribution to ideas in the field of architectural education.

The award of the Gold Medal is a well deserved indication that his fellow professionals recognise the work that he has done. The people of this State have been served well by the Government Architect's Branch under Ted Farmer's direction."

The period under consideration in this study produced outstanding architects and architecture. It would not seem extravagant to suggest that it brought world attention for the first time to N.S.W. Government architecture and realisation that it had matured and could equate with world-class design.

E.H. Farmer wrote the foreword to the National Trust's publication "Historic Public Buildings in Australia".² Professor J.M. Freeland of the University of N.S.W. in reviewing the book sums up the Farmer period in the following succinct and pertinent sentence.

He says:

"...Mr. Farmer says that apart from Greenway, I think Barnet was the greatest of them all..."

To which Professor Freeland comments:

"...Some people would eliminate the first three qualifying words and at the same time mentally adding their suspicion that the future may well see Mr. Farmer himself as at least a challenger to Barnet..."

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CHAPTER 1.

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2. Authority: Peter Bridges - Government Architect's Branch, "*Public Buildings in N.S.W.*" - unpublished article.
3. Refer to Appendix No. 4 - List of Significant Buildings prior to 1959.
4. Refer to Appendix No. 1 - List of Government Architects of N.S.W.
5. Refer to Appendix No. 3 - List of Government Architect's Branch Staff - Harry Rembert.
6. Refer to Appendix No. 9 - List of Members of the Government Architect's Branch who were awarded Travelling Scholarships.
7. Authority for data - C. Weatherburn.
8. Refer Appendix No. 3 - List of Members of the Government Architect's Branch Staff - P. Hall.
9. *ibid.* - M. Dysart.
10. *ibid.* - A. Brunker.
11. *ibid.* - R. Connors
12. *ibid.* - J. Van der Steen.
13. *ibid.* - B. Turner.
14. *ibid.* - V. Selig
15. *ibid.* - J.W. (Ian) Thomson.
16. *ibid.* - P. Proudfoot.
17. Refer to Appendix No. 5 - Tallawarra Power Station Report.
18. Refer Appendix No. 3 - List of Government Architect's Branch Staff - G.P. Webber.
19. *ibid.* - K. Woolley.
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21. Refer to Chapter 7 "Curtain Walls" p.86.
22. House source: Apperly, Richard. *Sydney Houses 1914-1939*, M.Arch. Thesis, University of N.S.W.
23. Refer to Appendix No. 10 - Chronological list of Significant Buildings by the Government Architect.

CHAPTER 2.

1. *Architecture in Australia*. Feb. 1973. p.86 concerning the award of the R.A.I.A. gold medal to E.H. Farmer.
2. *ibid.*
3. This expectation proved true; he was placed in charge of hospital work by Parkes.
4. Leighton Irwin was the architect mentioned.
5. The authority for this discussion concerning attitudes and changes made by Farmer on assuming the Government Architect's position came from the author's discussions with him.
6. *ibid.*
7. Refer to Appendix No. 3 - List of Government Architect's Branch Staff - Andrew Andersons.
8. *ibid.* - David Turner.
9. *ibid.* - Leif Kristensen.
10. *ibid.* - R. Kirkwood.
11. Duval College, documented in 1963.
12. Baxter College, documented in 1962. Hall and Webber both informed the author that Duval College at the University of New England was the first project to employ the cost planning technique. The fact that the Baxter College documents show an earlier date could not be satisfactorily explained.
13. Library, Macquarie University, documented in 1966.

14. Thomson trained in the U.K. and worked from 1953 - 1955 with the Derbyshire County Council on school projects. From 1955 - 1958 he was in New Zealand and from 1958 - 1960 with the Kent County Council, again working on schools.
15. Refer to Appendix 3 - List of Government Architect's Branch Staff - D. Coleman.
16. *ibid.* - L. Glendenning.
17. *ibid.* - L. Reedman.
18. *ibid.* - R. Bonthorne.
19. *ibid.* - J. McKinney.
20. *ibid.* - C. Still.
21. *ibid.* - B. McDonald.
22. Address to the R.A.I.A. at the presentation of the Gold Medal to E.H. Farmer in 1972.
23. In reply to the author's questionnaire.
24. Refer to Appendix 3 - List of Government Architect's Branch Staff - Peter Proudfoot. Quotation from reply to the author's questionnaire.
25. Thomas Barford - Due to poor health he was not accepted for permanent employment and consequently has no service record in the N.S.W. Annual Public Service Reports.
26. Refer to Appendix 3 - List of Government Architect's Branch Staff - Jack Clayton.
27. Refer to Appendix 9 - List of Members of the Government Architect's Branch who were awarded Travelling Scholarships on graduation.

CHAPTER 3.

1. Schools - Refer Chapters 8 and 9.
2. Refer to Appendix No. 3 - List of Government Architect's Branch Staff - R. Kirkwood.

3. "Doughnut" school - Refer Chapter 8.
4. Heath, Tom. "The Work of the N.S.W. Government Architect" *Architectural Review*, Dec. 1967 p.73
5. Tom Heath - a partner of the Sydney architectural firm McConnell, Smith & Johnson.
6. Refer Chapter 6.
7. Reference figures quoted from N.S.W. Department of Public Works Reports up to 1960, when they were discontinued. Later figures obtained from the Government Architect's Branch. See also Reference No. 15 below.
8. State Office Block designed by K. Woolley.
9. Authority - C. Weatherburn in discussion with the author.
10. Name subsequently changed to Ku-ring-gai College of Advanced Education.
11. Refer to Appendix 3 - List of Government Architect's Branch Staff - A. Correy.
12. Authority - A. Andersons.
13. Does not occur.
14. Refer to Appendix 3 - List of Government Architect's Branch Staff - P. Bridges.
15. The size and rate of growth of the Branch may be seen from the following figures:
The N.S.W. Public Works Department Annual Reports reveal that in 1960 sketch plans were produced for 200 schools, 77 hospitals, 42 court houses and police stations and 26 miscellaneous buildings. In 1964 there were sketch plans for 349 schools, 56 hospitals, 26 court houses and police stations and 40 miscellaneous buildings. In 1970 there were sketch plans for 348 schools, 60 hospitals, 22 court houses and police stations and 35 miscellaneous buildings.
See also Reference No. 7 preceding.
16. The authority for the information in this section comes from the author's interviews with Farmer, Woolley, Hall, Webber and Dysart.

CHAPTER 4.

1. E.H. Farmer, unpublished paper, *What is Art?*
2. E.H. Farmer, Hook Memorial Address, 11th May, 1973.
3. In discussion with the author.
4. In discussion with the author.
5. Authority for statement - V. Selig.
6. Farmer was Temporary Director of Public Works from 30th April to 11th July, 1969.
7. Andrew Andersons' commented to the author that M. Dysart was one of the few design architects who did not travel overseas on graduation.
8. Refer to Appendix 3 - List of Government Architect's Branch Staff - R. King.

CHAPTER 5.

1. Freeland, J.M. *The Making of a Profession*, p.14.
2. *ibid.* p.14.
3. *ibid.* p.14.
4. Authority for Parkes attitude - the author's discussion with him in 1978, prior to his death.
5. Authority for Farmer's attitude - the author's discussion with him in 1978.
6. Weatherburn in discussion with the author. Farmer made a similar statement to the author.
7. Views expressed to the author by Farmer.
8. Farmer does not recall his name.
9. A.H.A. Hanson was N.S.W. President at the time.
10. Farmer in discussion with the author in 1978.

11. Webber served on several Information Committees and on the Salaried Architect's Committee, and became its Chairman.
12. Heath, Tom. "The Work of the N.S.W. Government Architect" *The Architectural Review*, December 1967 pp.472-475.

CHAPTER 6.

1. Authority - the author's discussion with Parkes in 1977 prior to his death.

CHAPTER 7.

1. Underwood, F.D. Secondary Schools Architect G.A.B. 1972. "Secondary Schools in N.S.W. - Ten Years of Progress" in *N.S.W. Builder*, August 1973, pp.344-354.
2. Figures converted to metric by the author.
3. Refer to Appendix 3 - List of Government Architect's Branch Staff - S. Bishop.
4. *ibid.* - M. Waller.
5. *ibid.* - J. Zaat.
6. Underwood, F.D. "Secondary Schools in N.S.W. - Ten Years of Progress" - *N.S.W. Builder*, August 1973 pp.344-354.
7. Private consultant was Gordon M. Jenkins.
8. Refer to Appendix 3 - List of Government Architect's Branch Staff - K. Thirsk.
9. *ibid.* - C. Carter.
10. *ibid.* - I.J. McHutchinson.
11. *ibid.* - D. Anderson.
12. *ibid.* - R. Powell.

13. *ibid.* - A. Van der Steen - son of J. Van der Steen.
14. *ibid.* - J. Rabong.
15. *ibid.* - B. Sneyd.
16. Pegrum, Roger. "A step away from the Education Factory". *Architecture in Australia*. December 1975, pp.75-77.
17. Refer to Appendix 3 - List of Government Architect's Branch Staff - C. Burton.
18. *ibid.* - R. Seidel.
19. T. Keen. The Staff Branch at the Public Works Department is unable to furnish his dates of employment.
20. Davis Hughes was N.S.W. Minister for Public Works from 1965 - 1973. He was appointed Agent General in 1973.
21. Refer to Appendix 3 - List of Government Architect's Branch Staff - J. Moran.
22. *ibid.* - B. Krone.
23. Article by Underwood, F.D. *op.cit.*

CHAPTER 8.

1. Underwood, F.D. "A History of Public Schools in N.S.W." *Builder*, December 1973, pp.560-572.
2. Authority - the author's discussion with Dysart.
3. English Hertfordshire schools - Refer p. 118.
4. These were similar problems to those which arose in the high school programme.
5. Underwood, F.D. *op.cit.*
6. Refer to Appendix 3 - List of Government Architect's Branch Staff - R. Scott.
7. Authority - J.W. Thomson.

8. Refer to Appendix 3 - List of Government Architect's Branch Staff - O. Kosterin.
9. At the time of writing, two of these schools have been evaluated by the Branch, viz. Winston Heights and Briar Road. These evaluations are discussed in the text.
10. Schools Building Research and Development Group of the Government Architect's Branch. *An Evaluation of the Two Teacher space Facilities at Winston Heights Public School.* Undated.
11. Refer to Appendix 3 - List of Government Architect's Branch Staff - P. Rochaix.
12. Schools Building Research and Development Group of the Government Architect's Branch. *Briar Road Primary School.* Undated.
13. Refer to Appendix 3 - List of Government Architect's Branch Staff - G. Stocks.
14. Authority - the author's discussion with F. Borgnis. and J.W. Thomson. In 1979 the project proceeded but to a new design.
15. Underwood, F.D. op.cit.

CHAPTER 9.

1. Malcolm Colless. "Police Station Everyone Wants to Forget" *Australian Newspaper.* 10th May, 1975. p.9A.
2. *Building Ideas.* Vol.5. No. 4. September 1972, p.4.

CHAPTER 10.

1. Refer to Appendix 3 - List of Government Architect's Branch Staff - W. Kingston.
2. Authority for comments, the author's discussion with W. Kingston.
3. *ibid.*

4. E.H. Farmer - statement in his Curriculum Vitae.
5. E.H. Farmer - *Flexibility and Convertibility as an Object of Hospital Design and Construction*. A paper given at the International Hospital Federation - Third Regional Conference at Sydney on 27th September, 1970.
6. *ibid.*

CHAPTER 11.

1. W.L. Vernon. N.S.W. Government Architect 1980 - 1912.
2. Refer to Appendix 3 - List of Government Architect's Branch Staff - I. Bailey.

CHAPTER 12.

1. Refer to Appendix 3 - List of Government Architect's Branch Staff - D. Turner.
2. Authority - D. Turner's response to a question in a questionnaire the author sent to all Branch design architects mentioned in this thesis.
3. Refer to Appendix 3 - List of Government Architect's Branch Staff - J. Kinstler.
4. *Architecture Today*. June 1971. pp.12,13.
5. Publicity note by the Branch. Author and date unknown.
6. Authority - the author's discussion with Dysart.
7. "Housing Study, University of New England, Armidale University", *Architecture in Australia*. October, 1972. p.569.
8. Refer to Chapter 1.

9. There were 587 drawings in the tender documents for the first stage of tower block which was allocated \$40 million.
10. Reference - N.S.W. Department of Technical Education with the assistance of the Government Architect's Branch. *A Proposal for a New Centre of Advanced Education to serve the City of Sydney and the State of N.S.W.* May 1968.

CHAPTER 13.

1. Donald Gazzard. *Building Ideas*. September 1964.
2. Reyner Banham. English architectural historian and commentator.
3. Information abstracted from *Architecture in Australia* August 1971.
4. Refer to Appendix 3 - List of Government Architect's Branch Staff - D. Churches.
5. *ibid.* - O.M. Podger.
6. *ibid.* - E. Yuen.
7. Editorial "Redevelopment". *Architecture in Australia*. December 1970. pp.843-866.
8. *ibid.* p.866
9. Authority - P.L. Reynolds B.Arch. PhD (N.S.W.) 1976 *Legislative Architecture in N.S.W. 1788 - 1974. A Study of Buildings Completed or Proposed.* pp.49-59.
10. The proposal was published in the following newspapers: *Daily Telegraph*, May 20th, 1960. p.20; *Sydney Morning Herald*, May 30th, 1960. p.3 and *Daily Telegraph*, May 30th, 1960, p.3.
11. E.H. Farmer. *Report and Development Plans for Eastern Side of Macquarie Street.* 1964.
12. Richmond Villa was designed by the Colonial Architect, Mortimer Lewis, for his own use. The building has been demolished and re-erected on the old Fort Street School site in Kent Street North for use by the National Trust.
13. John Yeomans. *The Other Taj Mahal.* p.155

CHAPTER 14.

1. Australian Council of National Trusts, *Historic Public Buildings of Australia*. 1971
2. *Historic Public Buildings of N.S.W.* 1972

CHAPTER 15.

1. Published in *Architecture in Australia*. February 1973, pp. 90, 91.
2. *Historic Public Buildings of Australia*. op.cit.

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PUBLICATIONS ISSUED BY THE GOVERNMENT ARCHITECT'S BRANCH UNDER
THE AUTHORITY OF THE GOVERNMENT ARCHITECT.

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"Briar Road Primary School". c.1976.

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Appendices

APPENDIX NO. 1

LIST OF GOVERNMENT ARCHITECTS OF N.S.W.

| | | |
|---------|---------------------------------|---|
| 1791 | JAMES BLOODSWORTH | A master bricklayer - Superintendent of tradesmen. |
| 1805 | RICHARD ROUSE | A craftsman - Superintendent of Public Buildings. |
| 1816 | FRANCIS GREENWAY | Assistant Engineer and Civil Architect - the first "Government Architect". |
| 1822 | STANDISH LAWRENCE HARRIS | Civil architect |
| 1825-26 | GEORGE COOKNEY | Civil architect |
| 1825-32 | JOSUA THORPE | Assistant Engineer and Superintendent of Public Works. |
| 1832 | AMBROSE HALLEN | Colonial Architect. |
| 1835 | MORTIMER WILLIAM LEWIS | Colonial Architect |
| 1849 | EDMUND THOMAS BLACKET | Colonial Architect |
| 1856 | WILLIAM WEAVER | Colonial Architect |
| 1856 | ALEXANDER DAWSON | Colonial Architect |
| 1863 | JAMES BARNET | Acting Colonial Architect |
| 1865 | JAMES BARNET | Colonial Architect |
| 1890 | WALTER LIBERTY VERNON | Government Architect |
| 1912 | GEORGE MCRAE | Government Architect |
| 1924 | GARRIE MCLEISH BLAIR | Acting Government Architect |
| 1925 | GARRIE MCLEISH BLAIR | Government Architect |
| 1926 | RICHARD MACDONALD SEYMOUR WELLS | Government Architect |
| 1929 | EDWIN EVAN SMITH | Government Architect |
| 1935 | COBDEN PARKES | Government Architect |
| 1958 | EDWARD HERBERT FARMER | Government Architect |

LIST OF GOVERNMENT ARCHITECTS OF N.S.W. CONT.

| | | |
|------|------------------------|----------------------|
| 1974 | GEOFFREY PHILIP WEBBER | Government Architect |
| 1974 | CHARLES WEATHERBURN | Government Architect |
| 1978 | JOHN WHYTE THOMSON | Government Architect |

APPENDIX NO. 2

THE MAIN EVENTS IN CHRONOLOGICAL ORDER OF THE GOVERNMENT
ARCHITECT'S BRANCH AFFECTING THE PERIOD UNDER CONSIDERATION.

- 1926 H. Rembert joined the Government Architect's Branch.
- Mid & late 1930s Rembert's early design work such as Newcastle Technical College and School of Automotive Engineering.
- 1935 Cobden Parkes appointed Government Architect.
- 1938 C. Weatherburn joined the G.A.B.*
- 1939 E.H. Farmer joined the G.A.B.
- 1947 H. Rembert appointed Senior Design Architect.
- 1948 First trainee interviewed.
- 1949 G.P. Webber appointed as first trainee.
- 1950 K. Woolley joined the G.A.B.
- 1952 P. Hall joined the G.A.B.
P. Hall and P. Webber went into the design room.
E. Farmer commenced work on anaesthetic safety in hospitals and on improved sterilising techniques.
- 1955 M. Dysart joined G.A.B.
Contract documentation completed for Chemistry School at Sydney University.
- 1958 E.H. Farmer appointed Special Assistant to Government Architect and later Deputy Government Architect.
Cobden Parkes retired.
E.H. Farmer appointed Government Architect, with S. Coleman, Principal Assistant Architect, H. Rembert, Senior Design Architect.
S. Slatter, Architect in charge of Metropolitan District. (No appointment for Architect in charge of Country District in that year.)

* G.A.B. Abbreviation for Government Architect's Branch.

- 1960 H. Rembert appointed Assistant Government Architect; C. Weatherburn, Executive Architect; N. Hain Architect in charge of Metropolitan District; C. Bourne, Architect in charge of Country District.
S. Coleman retired.
- 1961 K. Woolley and M. Dysart's project houses influenced the private practitioners.
- 1962 Belmont Primary School documented.
First Sulman award to G.A.B. for Fisher Library.
Hospitals Section started under V. Selig.
Schools Section started under R. Kirkwood.
- 1963 First cost planning done.
Court Houses and Police Stations group formed and soon moved to Mena House as no space available in the main office.
Schools Research Group formed.
At this time the G.A.B. had become recognised and admired by the private practitioners.
K. Woolley resigned.
H. Rembert resigned.
C. Weatherburn Assistant Government Architect (Administration).
G.P. Webber appointed Senior Design Architect.
- 1964 M. Dysart went to Schools Section.
- 1965 E.H. Farmer awarded Life Fellowship of the Royal Society for the Promotion of Health.
- 1966 V. Selig appointed Assistant Government Architect - Administration when C. Weatherburn took over Opera House Administration on site.
G.P. Webber appointed Assistant Government Architect - Design.
- 1966 P. Hall resigned.
H. Rembert died.
International recognition of the G.A.B., with an article in the Architectural Review by Tom Heath.
Schools Research and Development Group formed.

- 1967 G.A.B. moved to the State Office Block.
C. Weatherburn ceased role on Opera House Administration, reverted to Assistant Government Architect - Administration.
V. Selig became Assistant Government Architect - Research, Development, Personnel.
- 1968 Landscape Group was formed.
Interior Design Group was formalised.
Lunch time discussion on interesting projects in the drawing office.
- 1969 M. Dysart resigned.
- 1970 Clients demanding cost planning
E.H. Farmer awarded Imperial Service Order and Life Fellowship of the R.A.I.A.
- 1972 Farmer address to all staff concerning falling standards.
Design Review Committee formed.
Greater recognition given to historic Australian buildings.
R.A.I.A. Gold Medal awarded to E.H. Farmer.
- 1973 Farmer resigned.
G.P. Webber appointed Government Architect.
Tertiary Buildings Section started.
Technical staff moved to Godsell Building, due to lack of space in the State Office Block.
- 1974 Civic Reception to E.H. Farmer at Sydney Town Hall.
G.P. Webber resigned.
C. Weatherburn appointed Government Architect.
E.H. Farmer made Honorary Life Member of the National Trust.
- 1976 E.H. Farmer awarded Doctorate of Architecture by Melbourne University and made a C.B.E.

APPENDIX NO. 3

LIST OF GOVERNMENT ARCHITECT'S BRANCH STAFF MENTIONED IN OR
GERMANE TO THIS STUDY.

| | YEAR JOINED | YEAR LEFT | TRAINEE (T) OR CADET (C) - INDICATES STILL EMPLOYED IN 1978 | |
|---------------------|----------------|--------------|---|---|
| R.W. KIRKWOOD | 1925 | 1973 | | |
| T. BARFORD | 1925 | 1954 | | |
| H. REMBERT | 1926 | 1964 | | |
| J. CLAYTON | 1927 | 1970 | | (A Clerk) |
| C. WEATHERBURN | 1938 | 1977 | | |
| E.H. FARMER | 1939 | 1973 | | |
| E.D. TURNER | 1940 | 1971 | | (A Clerk initially. Qualified as an Architect 1959) |
| H.R.W. ORR | c.1940 | c.1945 | | |
| F. BORGNIS | 1941 | 1978 | | |
| P. BRIDGES | 1945 | - | | |
| G.P. (PETER) WEBBER | 1949 | 1974 | T | |
| K.F. WOOLLEY | 1950 | 1963 | T | |
| V.C. SELIG | 1951 | - | | |
| T. KILGARIFF | 1951 | 1954 | T | (T, 1-2 years only) |
| JOAN RUSSO | 1951 | 1974 | - | (Interior Designer) |
| P.B. HALL | 1952 | 1966 | T | |
| I. ROBERTS | 1952 | 1977 | | |
| W.R. BOWDEN | 1954 | 1964 | - | |
| A. BRUNKER | 1954 | - | T | (2 years only) |
| R. CONNORS | 1954 | 1976 | T | |
| R. KING | 1954 | 1968 | - | |
| R.J. BRYANT | 1954 | 1970 | | (2 periods : 1954-1958 : 1965-1970) |
| B. SCOTT | 1955 | - | | |
| J.W. VAN DER STEEN | 1955 | 1964 | - | |
| M.J. DYSART | 1955 | 1969 | T | (Paid own fees initially). |

| | | | |
|--------------------|-----------|------|---|
| I. COLLINS | 1956 | 1973 | T |
| D. COLEMAN | 1956 | - | T |
| D. ORR | 1957 | - | T |
| J. PAYNTER | 1957 | 1969 | T |
| W.J. KINGSTON | 1958 | - | - |
| J.R. KINSTLER | 1958 | 1974 | |
| T. WALKER | 1958 | 1977 | |
| D. MOLINE | 1958 | 1974 | T |
| MARGOT A.D. TAYLOR | 1958 | - | - |
| J.H.J. ZAAT | 1958 | 1969 | - |
| L. REEDMAN | 1959 | - | - |
| A. ANDERSONS | 1959 | - | T |
| L.W.A. GLENDENNING | 1958/1959 | - | C |
| W. TURNER | 1959 | 1970 | - |
| E. CULPIN | 1959 | 1976 | |
| P. PROUDFOOT | 1960 | 1964 | - |
| S. BISHOP | 1960 | 1976 | - |
| J. McKINNEY | 1960 | 1971 | - |
| J.W. (IAN) THOMSON | 1960 | - | - |
| J. NICHOLAS | 1960 | 1974 | T |
| R. BONTHORNE | 1960 | 1977 | T |
| B. McDONALD | 1961 | - | T |
| J. McHUTCHINSON | 1961 | - | T |
| C. CARTER | 1961 | - | - |
| O.M. PODGER | 1961 | 1970 | T |
| C. STILL | 1961 | - | T |
| M. STANDLEY | 1961 | 1968 | T |
| E. MACK | 1961 | 1970 | |
| K. BUCKLAND | 1962 | 1969 | - |
| I.G. STOCKS | 1962 | - | T |
| D. TURNER | 1962 | 1973 | - |
| L. KRISTENSEN | 1962 | 1969 | - |
| F. UNDERWOOD | 1962 | - | |
| D. JACKSON | 1963 | - | |
| D. ANDERSON | 1963 | - | T |
| R.F. POWELL | 1963 | - | T |
| R.C. BAILEY | 1963 | 1976 | |

(2 periods :
1958-1959 : 1961-1974)

(A Lawyer)

| | | | | |
|---------------------------------------|------|------|---|-----------------------------|
| FAY (N.W.) PACKCHUNG | 1964 | 1970 | | |
| M. ZATORSKY | 1964 | - | - | |
| B. KRONE | 1964 | - | T | |
| M. WALLER | 1964 | 1968 | - | |
| J. RABONG | 1964 | - | - | |
| R. DINHAM | 1964 | - | C | (1964-1967) |
| | | | T | (1967-1970) |
| D.R. CHURCHES | 1965 | - | T | |
| MARGARET (MAY) TURNER (NEE WATSON) | 1965 | 1970 | - | |
| K. THIRSK | 1965 | - | - | |
| R. TANNER | 1965 | - | | |
| A. VAN DER STEEN | 1966 | 1972 | T | |
| J. WERBELOFF | 1966 | - | | |
| T. MCGREGOR | 1966 | 1971 | - | |
| J. LOWING | 1966 | - | - | |
| D. BORAM | 1966 | 1974 | - | |
| C.A. BURTON | 1966 | - | T | |
| O. THIRSK | 1966 | - | | |
| J.S. BRANDON | 1966 | - | | |
| S. TANNER | 1966 | - | | |
| J. MORAN | 1966 | - | | |
| R. FOSTER | 1966 | - | | |
| W. WRIGHT | 1967 | 1976 | - | |
| P. ROCHAIX | 1967 | - | T | |
| B. SNEYD | 1967 | - | T | (2 years) |
| A. CORREY | 1967 | 1971 | - | (Landscape Architect) |
| E.A. RALPH | 1967 | - | | |
| P. STEPHENS | 1967 | ? | | (no record of date left) |
| G.W. ROTHWELL | 1969 | 1972 | | |
| A. HAMPTON | 1969 | - | | |
| H. RICHARDSON | 1969 | - | | |
| C. MORRIS | 1969 | - | | |
| R. SEIDEL | 1970 | - | - | |
| E.D.H. CLAIRE | 1970 | - | - | |
| MRS. O. KOSTERIN | 1970 | - | - | |

| | | | |
|-------------------------|------|------|---|
| T. SCHWEIGER | 1970 | 1976 | - |
| M.B. (PETER) MAROSSZEKI | 1971 | 1972 | - |
| I.W. BAILEY | 1971 | 1975 | T |
| R. JAANISTE | 1972 | - | |
| E. YUEN | 1974 | - | |

APPENDIX NO. 4

SIGNIFICANT GOVERNMENT ARCHITECT'S BRANCH BUILDINGS PRIOR TO 1959

| | DATE OF WORKING DRAWING | DESIGN ARCHITECT |
|--|-------------------------------|---|
| QUIRINDI COURTHOUSE | 1930 | H. REMBERT |
| SCHOOL OF AUTOMOTIVE ENGINEERING. S.T.C. | c.1936 | H. REMBERT |
| NEWCASTLE TECHNICAL COLLEGE | 1936-40 | H. REMBERT |
| FORT ST. PRIMARY SCHOOL | 1941 | H. REMBERT (SKETCH BY W. MOYSTON) |
| ST. MARGARET'S HOSPITAL BOURKE ST. WARD BLOCK | 1944 | H.R.W. ORR |
| WALLACE THEATRE, SYDNEY UNIVERSITY | 1945 | H. REMBERT |
| SUTHERLAND HOSPITAL | 1947 | T. BARFORD (ATTRIBUTED) |
| STANDARD PORTABLE TIMBER CLASSROOM | 1947 | TEAM DESIGN |
| BANKSTOWN HOSPITAL | 1948 | E.H. FARMER |
| TALLAWARRA POWER STATION | c.1948 | E.H. FARMER |
| MOREE INFANTS' SCHOOL | 1949 | H. REMBERT |
| GOVERNMENT PRINTING OFFICE, ULTIMO | 1952 | T. BARFORD |
| MARY WHITE COLLEGE, UNIVERSITY OF NEW ENGLAND | 1955 | E.H. FARMER |
| CHEMISTRY SCHOOL, SYDNEY UNIVERSITY | 1955 | P. WEBBER & K. WOOLLEY |
| DIXON LIBRARY, UNIVERSITY OF NEW ENGLAND | 1956 | E.H. FARMER |
| ST. MARGARET'S HOSPITAL CHAPEL | 1956 | K. WOOLLEY |
| BEVERLY HILLS GIRLS' HIGH | 1957 | J. VAN DER STEEN |
| MANLY GIRLS' HIGH | 1958 | J. VAN DER STEEN |
| SYDNEY MUSEUM ADDITIONS | 1958 | J. VAN DER STEEN |

APPENDIX NO. 5

TALLAWARRA POWER STATION REPORT

The following is an extract from a report prepared for the Department of Public Works on the Tallawarra Power Station.* The paper is titled "The Tallawarra Power Station Project of the Southern Electricity Supply of N.S.W.". It was presented on the 31st January, 1950 to the Institution of Engineers of Australia by J.G. Thornton, B.Sc., B.E., Dip. P.A., A.M.I.E.Aust. and prepared in collaboration with C.A. Saxby, B.Sc., B.E., A.S.T.C., A.M.I.E.Aust., A.M.I.E.E., A.A.I.E.E. and F.J. Aston, A.S.T.C., A.M.I.E.Aust, A.C.A.A.

The section on "architecture" in the report sets out an unequivocal case for functional architecture, in both rational and aesthetic terms. The account typifies the feelings of progressive architects of the early 1950s in Australia. J. Van der Steen was one of the few early members of the design room who supported the philosophy. The Young Turks preferred to temper their functionalism with more human qualities.

The extract is as follows:

"...After a study of the architecture of a number of modern power stations the conclusion was reached that a somewhat different approach could be made to this design from that previously accepted in most of the examples studied.

To the eye of the present day Architect the individual components of the engineering plant in a power station are generally examples of good aesthetic design in that they are designed to be as efficient as possible and their form is dictated by their function and not by some previously held "style" of exterior appearance. The clipper ship and the modern high speed aircraft have been claimed to be masterpieces in the history of aesthetics for these very reasons and the turbine generator of a modern power station also has this quality. It seemed logical, therefore, to apply this treatment to the buildings of the station. To design a power station loaded up

* Refer page 12

with hundreds of tons of heavy masonry, often distorted into traditional monumental forms with "Gothic" flavour, as has unfortunately been done in some quite recent stations in England, seems to be not only most extravagant, but also bad architecture. The buildings designed for Tallawarra have been designed with full regard to the actual needs of the work and the purpose they are to serve. These include speed of erection, lightness in weight, economy of cost and minimum maintenance. These needs, when approached with the attitude mentioned, dictated a steel framed building and accordingly it was decided to express that structural form frankly and to depend on the interplay of column shapes, masses and openings and the various natural textures and colours of the surfaces to achieve what is hoped will be a most satisfactory solution of the architectural problem. The exterior steel columns cased in with a thin precast concrete skin provided the principal unifying motif and all heights and widths of masses and openings have been related to the spacings of these columns.

All exposed concrete work is to be left "off the form" as it is thought that the slight roughness of texture of this will contrast pleasantly with the smoothness of the aluminium reeded siding that will form the actual exterior wall surfaces. Before finally choosing this aluminium siding full consideration was given to the various materials available as walling. Brickwork and concrete infilling walls were rejected on the grounds that both were heavy and inflexible and not easy to erect. Attention was therefore directed to some form of lightweight section. At first asbestos cement flat panels set in metal glazing bars were suggested, but this method was abandoned because of the high cost of the framing, the difficulty of procuring the large quantities of thick asbestos sheeting needed and because waterproofing presented a serious problem. Consideration was then given to the use of corrugated heavy asbestos cement sheets fixed between the columns with the corrugations running vertically. This material has many advantages as the appearance is good and it is easy to fix, but supply of the material was not good and its tendency to become brittle with age was held to be a decided disadvantage. The final choice fell on aluminium alloy sheeting (1½% Mn. alloy) rolled with stiffening flutes at 6-in. centres and

fixed vertically to light steel or timber girt framing secured to the main columns. This material is readily obtainable, has a pleasant and lasting appearance, is easy to work, light in weight and unlikely to collect dirt in service. Provided that certain precautions are taken, it has excellent corrosion resisting properties, both against industrial fumes and sea spray. The main precaution needed is to avoid electro chemical action, particularly to avoid copper alloy or lead attachments in contact with the aluminium. Where the sheeting will be in contact with steel work or with timber likely to contain sap, a bituminous base primer will be applied to meeting surfaces.

All the buildings will be constructed in a similar fashion, but the Administrative Building and the Workshop-Store Building will have lower walls with light face brick panels between the columns as a contrasting treatment. The roof of the Main Building will be concrete slabs over the steel work, overlaid with waterproof membrane protected with heavy concrete tiles. The roof of the Administrative Building will be the same aluminium sheeting as is used in the walls. The roof of the Workshop and Store Building will be of saw-tooth construction covered with corrugated aluminium and corrugated aluminium will also be used for the protection of all the coal conveyers.

Since the site is located in pleasant rural surroundings, it is believed that the light clean colour of the buildings generally will contrast pleasantly with the green fields and the blue of the lake. Moreover, it is expected from the nature of the surface finishes to be employed that this initial clean appearance will be retained without difficulty. While details of the interior treatment have not yet been determined, much of the preliminary work has been carried out in giving consideration to the nature of floor and wall surfaces, colour schemes, acoustic treatment and lighting, all of which will be designed to be in keeping with the general architectural treatment outlined above.

Generally, it is believed that a fresh and sound architectural solution has been found in this design."

APPENDIX NO. 6

CORRESPONDENCE BY COBDEN PARKES

The following notes were compiled by Cobden Parkes in reply to a request by Farmer for information on Parkes' service with the Department.

They provide a valuable historic record and an interesting introduction to the period leading up to the years being considered in this thesis.

19 Narooma Road,
NORTHBIDGE, N.S.W. 2063

8th February, 1977

Mr. C. Weatherburn,
Government Architect of New South Wales,
Department of Public Works,
State Office Block,
Phillip Street,
SYDNEY, N.S.W. 2000

Dear Charles,

Cleaning out my study recently, I came across the enclosed uncompleted notes. Ted Farmer had sought some information along these lines concerning my service with the Department, and checking over the material at some time or other I must have laid it aside.

This was written over ten (10) years ago at least so I will not attempt to complete. Should there be any specific matter you would like elucidated I will of course try and help.

Regards.

Yours sincerely,

COBDEN PARKES.

Encl.

The following notes were then appended:

"On May 7th, 1909, I joined the office of the Government Architect. I was the 1st cadet in the Branch and was employed in the nature of an articled pupil. I attended the architecture course at the Sydney Technical Drawings College under James Nangle and Alec Martin.

The Government Architect was Col. W.L. Vernon, a very fine gentleman. Senior Officers of the Branch included the Principal Assistant Architect, Mr. Geo. McRae, and the Design Architect o/c (sic) of the Drawing Office was Mr. Drew. Mr. Mitchell was in charge of construction. Interesting personalities on the Staff of the Branch were G. Blair, John Barr, Chas Coulter, Col. Seymour Wells, Grove, Godsell, Orwin, Hook, Kenworthy and Ruskin Rowe. Mr. Blair was engaged on the Mitchell Library. Earlier he had prepared drawings for the Art Gallery, the Registrar General's Department and the Railway Station. He became in charge of the Drawing Office and later succeeded to the position of Government Architect. Mr. Barr was regarded as a specialist in Gothic design and was engaged upon work at the Sydney University. He later resigned for private practice and built a church at Lithgow and Port Kembla Building in Margaret Street, Sydney. Mr. Coulter remained a member of the drawing office until retirement about 1931. He assisted other Departments in unusual design, illustrating in perspective form. He was an excellent artist.

Mr. Wells and later Mr. Grove became Architects to the Education Department. Mr. Godsell joined the firm of Robertson & Marks and became the first President of the Board of Architects. Mr. Orwin joined the Commonwealth Government and rose to the position of Director in New South Wales.

Mr. Kenworthy became Manager for Henry White during a boom in theatre construction and Ruskin Rowe resigned to join the firm of Ross & Rowe which became one of the large firms in New South Wales.

An interesting personality serving in the branch at that time was A.S. Hook. He became a part time lecturer in Structural Mechanics at Sydney University and later joined the University Staff and ultimately became a Professor in Architectural Science.

Other Senior Officers were Messrs. Stanton Cook, Purdue, Fairfax, Spark, Provost and Barnett.

After 2 years in the drawing office I was posted to the large project for New Abbatoirs at Homebush Bay, as assistant to Mr. J. Parle the Architect supervising the work. Roy Mandleson was the Clerk of Works. We had a 2 room site office and walked to the site from Flemington Station each day - a distance of about a couple of miles. My duties were the preparation of construction details under Mr. Parle's guidance; the preparation of monthly quantities for assessing the progress payments; and certain supervision duties as assistance to the Clerk of Works. These 2 years on site gave me a wider experience than would normally be the case.

I had a five years break in service from August 1914 to November 1919, due to War Service. War injuries to both hands caused certain adjustments in my Architectural training over some years because of the necessity to undergo fresh training in the art of drawing.

On resuming duties in the Department, the then Government Architect Mr. Geo. McRae offered me an appointment as Architect at Port Kembla but Senior Officers in the Branch advised me against the danger of retarding any opportunity to continue my studies. Mr. McRae readily appreciated the position and I continued as a member of the Drawing Office.

To gain field supervision, I sought service each year in the various District offices as relieving Architect, and found the experience gained to be invaluable. I spent 3 months as District Architect at the Armidale Office in 1920. This district covered a large area including the tablelands to Tenterfield and west as far as Walgett. Inspections were carried out by train travel and often hired buggy. The work supervised was mostly of a minor nature and the countryside about Inverell to the Queensland border was covered by buggy and pair, hired from Adams livery stables. Mr. Adams would be advised by letter and would meet me at the Inverell Hotel after breakfast, for a weeks tour of inspections commencing on a Monday morning and terminating at Deepwater on the following Saturday. Inverell

was reached from mail train from Armidale to Glen Innes and mail car on an early morning run before breakfast. I travelled back to Armidale by train.

Adams stocked the buggy with provisions, tent and stretchers. In this way some 20 inspections were undertaken and the need to stay in small bug-infested hotels was avoided. On occasions it was necessary to hire saddle horses to reach some isolated buildings located off the road system. Although this method of travel was slow it was the only way to cover the number of minor isolated jobs. The hours of travel were daylight to dark but the life was pleasant and the work enjoyable.

In the mid 1920's, Mr. G.M. Blair became Government Architect and Mr. V. Wilshire followed Mr. Blair as Designing Architect i/c of the Drawing Office. Wilshire was a sound architect. He was far from being a strict task master and some officers took advantage of his kindly nature. The discipline of the office suffered accordingly and some officers became engaged on private work which was conducted in a rather open manner and became generally known, and resulted in investigation by the Public Service Board. About 1929, it was apparent the Board was dissatisfied with the general performance of the Branch. Colonel Wells had succeeded Mr. Blair in the position of Government Architect. The responsibility for the lack of discipline, and for the extent of private work undertaken by certain officers rested with the Government Architect and so Colonel Wells retired and applications for the position were advertised. Early in 1930 the position was filled by Mr. Evan Smith, whom at the time was Principal Architect of the Public Works Department of Victoria. Mr. Smith carried out an investigation into the working of the Branch with a view to certain re-organisation. Just prior to this, the structure of the Department had been changed and the Under Secretary, Mr. C. Tye was transferred, and the position of Permanent Head taken over by W.G. Mitchell, as Director of Works. Mr. Mitchell was at the time, Head of the State Monier Works. Mr. Swift became Secretary of the Department.

At this period of time, the Branch occupied the 1st Floor and portion of the Ground Floor of the timber framed 2 storey building located at the corner of Bridge and Phillip Streets on the west side.

This building had been erected in 1913 as very temporary accommodation for certain engineering branches of the Works Department but on completion was occupied by the Government Architects Branch. The First Floor contained certain clerical space and offices for the Government Architect and his Senior Clerk and a large drawing office capable of seating about 50 persons, and as the Branch expanded a second drawing office was established on the Ground Floor, together with space for Mechanical and Electrical Staffs under the direction of Mr. J.B. Campbell. The heads of the two sections were Mr. Russell - Mechanical design and Mr. Crowley - electrical. These engineering staffs were the consultants to the Branch and were strengthened in 1931 by officers transferred from the Walsh Island Establishment at Newcastle and Mr. D.A. Evans and Mr. L. Yates took over the positions formerly held by Messrs. Russell and Crowley. The general direction of the Division was still undertaken by Mr. Campbell.

The design of steel and concrete structure was carried out by the State Monier Undertaking under Mr. Stevens and Bills of Quantities were prepared by the Building Construction and Maintenance Branch which had been originally established by Mr. Bruce about 1913 and now had Mr. Cameron as Manager. The general organisation of the Branch at this period (1930) was very simple in structure and consisted of design under the direction of the Designing Architect in charge of the Drawing Office and the supervision carried out by field staff in the Metropolitan Office or by an officer at one of the District Offices. The administrative control of the Metropolitan district and of the Country districts was undertaken by Inspecting Architects. The 9 Country districts were Newcastle, Lismore, Coffs Harbour, Narrabri, Port Kembla, Goulburn, Bathurst, Cootamundra and Dubbo.

It will be seen that the Administrative structure of the Branch was the Government Architect, the Principal Assistant Architect, the Designing Architect in charge of the Drawing Office and two Inspecting Architects. In 1930 the position of Principal Assistant Architect did not exist. The senior positions were filled by Mr. Wiltshire, Mr. Purdue and Mr. Fitzgerald. Before re-organisation could follow Mr. Evan Smith's investigation, certain Senior Officers were retired, including the Senior Officers in charge of the three sections of

the Branch and new appointments were made.

For some 20 years, 1910 - 1930, the Education Department had retained its own Architects Office to handle the school programme. Criticism of School design had been voiced in several spheres of Architectural influence and the Government decided that full advantage should be taken of the re-organisation with the Public Works Department to bring the two Architectural Offices together. At this time, the Architect in charge of Schools was Mr. Grove and he controlled a staff of some 30 persons with Principal Assistants in Messrs. Tristram, and Tourney-Hinde. Mr. Grove fitted into the Government Architect's new organisation as the Senior Assistant Architect and both Mr. Tristram and Mr. Tourney-Hinde were retired.

Mr. Evan Smith's re-organisation aimed at tighter control and certain delegation of authority. The Drawing Office was separated into two sections, the supervision of work within the Metropolitan District was carried out by Architects in charge of Sub-districts and the country districts were grouped under three Divisions - North, West and South - and each division controlled by a Divisional Architect. The work of Country Supervision and job control was greatly improved because the Divisional Architects were able to spend 50% of their time within their Districts handling the major problems on the work site and assisting in the training of junior staff. As the re-organisation became complete the new leaders of the main sections of the Branch were C. Parkes in charge of the combined Drawing Offices, H. Grove in charge of the Metropolitan District and W.S. Wallace, P.I. Ghiggino, S.A. Slatter the Divisional Architects of the Northern, Western and Southern Districts respectively.

One of the first problems facing the Officer in Charge of the Drawing Office was the question of records. Firstly, it was necessary to place the plan room on a completely new basis. Up to 1930, all tracings were rolled and kept in "drawer filing" without any system of numbering. Secondly, there was not any "work as executed" copies of plans and specifications. A copy of each specification as originally typed was bound in book form but alterations during construction were not recorded and the copies were of little real significance.

It was decided by the Government Architect that specifications for the bulk of the work would best be drafted by the person entrusted with the preparation of the drawings. Only one specification writer (Mr. Wright) was retained. This officer prepared a complete and thorough draft specification for use generally by all as a guide. Mr. Wright was otherwise employed in the preparation of specifications for major projects.

With the fall of the Lang Government in 1931, the great financial depression was felt in the State. Mr. R. Weaver became Minister for Works and Health. A new organisation called "Unemployment Relief" was set up under Mr. Dunningham as Minister and this called for expenditure on a large number of projects without proper consideration of the problem concerned. Unfortunately this need to provide work became paramount and the urgency to build became more important than the design and so the opportunity of taking full advantage of the funds made available did not exist. On many occasions the first effort on the drawing board was accepted without question. The time necessary for the collection of data, the analysis of the full needs of the problem and the further study of any initial scheme could not be afforded, and so a wonderful opportunity to improve the quality of work was lost. Foundations were being placed in position as buildings were in course of design and so adjustment by alteration was not possible. In some cases Hospital Boards were given a few days to accept or reject a new scheme in preliminary sketch form. The question of seeking variation to a scheme to more suitably meet needs could not be entertained. It was development at its worst, but it was recognised that the effort to provide employment was paramount.

As the work associated with unemployment problems began to ease, the opportunity was taken to prepare "work as executed" documents, and to check the existing plans of all large institutions. This preparation of records was essential and gradually a system of plan records was built up, where they did not previously exist. There are many disadvantages of operating a professional office as part of a very large Department. The delegation of control in expenditure was too tight and the Government Architect had no authority to approve of any funds whatsoever which meant a deal of

paper movement. This continued for many years.

The method of purchase of prime cost goods was antiquated. The selection was made to a description contained in the specification and caused untold complaints by Builders not knowing the value of the items to include. Actually the system resulted in certain ironmonger firms keeping a stock of outmoded articles and fittings for supply to Government order. Sympathetic understanding by Mr. Harry Tennant - the then manager of the Government Stores Dept., allowed a complete revision of Government contracts involving better competition and improved articles and fittings.

Mr. Evan Smith retired in 1935 and was succeeded by Mr. Cobden Parkes. The Branch still occupied the temporary building in Phillip Street but transferred to the main stone building located in Phillip, Bridge and Macquarie Streets and known as the Works and Chief Secretary's Office in 1937, when the 3rd Floor was vacated by the Department of Railways. The first problem was to obtain a better balanced staff. All the disadvantages of working as a large Branch of a large Department were soon evident. The mass of paper work involved, the slow movement of accounts and the unsatisfactory method of controlling design supervision as entirely different functions were some examples. All variations of contract involving expenditure were submitted to the Permanent Head of the Department, but variations on the site that could subsequently involve thousands of pounds could be arranged by the Government Architect without question. It was a crazy setup.

The form of contract used was to suit all Branches of the Department and because of this, it was in many respects entirely unsuited for the Branch purposes. The desirability to conform to Departmental practice was of course understood and so several revisions of both tender form and the general conditions became necessary. It was virtually impossible to make any undertaking concerning the payment of accounts because of the inter-branch communication and accounts were handled by a separate Branch of the Department. Whilst the class of work performed was the prime consideration, the economics of the problem was forever foremost within the Department circles and could not be overlooked. It seemed evident that the distinct

pattern of Designing Architect and Supervising Architect that existed for so many years was to be broken down and a number of conferences followed with the President and Secretary of the Professional Officers' Association re salaries.

During the close of 1937 preparations were complete for celebrating the 150th anniversary of the founding of Australia. Because of important visitors, Government House was completely renovated and an office for the official Secretary erected near the entrance gates. The existing office above the Governor's study was converted into a visitor's bedroom. The kitchen was modernised and hot water provided to the existing bedrooms. As part of the celebrations, and to mark Australia's primary industries, the Government provided funds for 2 large pavilions to be erected at the Sydney Showground. It was agreed the Agricultural Society could commission the Society's Architect but the plans were to be approved by the Government and the work was to be undertaken to the Government Architect's satisfaction.

I accompanied the Minister for Health on an extended visit abroad in 1939 and had the opportunity to study the operations of the Middlesex County Council which was an office comparable in size to that of the Government Architect in New South Wales and the same type of work was undertaken. The significant difference in operation was that in the county office the supervision of any large or important contract was undertaken by the designer. This, of course, was readily possible in a district as small as Middlesex County but the policy had great merit. I recognised the difficulty of transplanting such a desirable scheme to function smoothly and efficiently in such a large state as New South Wales could be impracticable, but a partial system conducted within the Metropolitan District was logical.

When in London I examined the question of tendering. The County Architect strongly advocated selective tendering with the firms selected from a Builders register. The Department, however, was not prepared at that time, to depart from the recognised normal practice of public tendering.

The 2nd World War broke out in September, 1939 when I was in America. When I returned to Australia a new organisation was set up called "National Emergency Services". The first Director was Colonel Lorenzo. Soon the organisation reached sufficient importance to warrant Ministerial control and Mr. R. J. Heffron was the Minister selected. A technical committee was set up to control all protection of buildings and air raid shelters. It consisted of the Government Architect as Chairman, and the Presidents of the New South Wales Chapter of the Royal Australian Institute of Architects, the Institute of Engineers and the Master Builders Association. The Government Architect also became a member of the State Camouflage Committee which mainly consisted of senior members of the three armed services.

With the cessation of hostilities an endeavour was made to increase the responsibilities of the District Architects. Previously the principle was often followed that any officer prepared to accept country appointment was posted to a District, irrespective of the suitability. Often too, this type of person was ready to completely shed his work in the drawing office for the freedom of supervision. More often than not these officers were not qualified for registration as Architects and this limited their salary range and gradually the positions lost their proper recognition. It was recognised that until the District Architect was able and willing to undertake certain design of minor works, and complete the drawings and specifications and invite the tenders before supervision, the full delegation of authority was not possible. It was considered too, that country service under delegated authority was essential in the proper training of a younger Architect, but implementing such a scheme was found difficult.

It was desirable to formulate a scheme where the interchange of Architects between Country and Metropolitan Districts was possible for several reasons. In the first place, it was necessary to have District Officers of certain design ability, in order to have smaller contracts dealt with completely within the framework of the District; secondly, it presented splendid opportunities for training, but at the same time it was essential to prevent stagnation of good designers in Country Districts.

Difficulties were always present such as availability of suitable officers, the question of adequate local housing, and salary grading. An important further difficulty was that of instituting a proper scheme where the District Engineer-Architect relationship and the Departmental approach which grew out of an Engineer must be in charge of a District office. It seemed an avenue of Engineer seniority and promotion. The whole framework of the Department appeared woven around this structure. I tried often but was never successful in having a District Architect appointed in control of a District. When the appointment of an Engineer was not justified on account of insufficient work, an Architect was also considered unnecessary by the Department, irrespective of the extent of the architectural work at the time."

The following consists of notes Parkes wrote in reply to questions put to him by Farmer. (The questions were not available.)

"Succession:

This would be difficult to define. Generally speaking the answer would be Yes - on the assumption that the P.A.A. (next senior) was the most suitable.

On the other hand:

- Col. Vernon - came in as Government Architect.*
- McRae - followed as was expected.*
- Blair - followed as was expected.*
- Wells - came as Senior Architect and transferred from the Education Dept.*
- Smith - came in as Government Architect from Victoria.*
- Parkes - came in over Grove who was Senior - no doubt looking for a younger man.*
- Farmer - came in from about the 5th position and passed over Coleman*
 - Rembert - (declined)*
 - Slatter*
 - Lucas.*

During my occupation of the position I could say with conviction that in the case of senior officers, seniority alone did not bring about any promotion - provided the recommending officer was prepared to substantiate a good case before an Appeal Board. Only once did an appeal go against my recommendation and this was really a case of preference for a permanent officer against a temporary rating.

In 1909 the Branch consisted of the Government Architect (Vernon), Prime Assistant Architect (McRae), 3 or 4 assistant Architects (Drew, Mitchell and Cook).

The rule was generally - Architects to design - Architects or Clerks of Works or Supervisors to carry out the contract. The details were supplied by the designer. The work outside the Metropolitan area was carried out by Officers in the District Offices under the District Engineers. There was a Chief Clerk and one other Clerk and 3 typists to attend the typing of correspondence and specifications.

The total Staff was approximately 40.

The procedures were simple - drawings were prepared on Watman hand-made paper with 3H pencils then traced in ink on to linen and prints made by sun process print proof copying machine (housed on roof). Small drawings and written matter was often duplicated by the gelatine roll process.

The dress was rather formal and many wore frock coat striped trousers and hard black bowler hats. This soon disappeared. We signed letters and minutes after the words:

"I have the honour to be
your obedient servant

-----"

Col. W.L. Vernon was an interesting personality. A tall man of dignified bearing who commanded full respect from all. During my early days in the Branch, he was partly occupied in two significant projects, one was the selection of the Australian Territory site and the other was the transfer of the Zoological Gardens from its site at Moore Park to the Northern shores of the Harbour. The National Art Gallery had just been completed and the Dixon wing of the Public Library commenced. At this time Macquarie Street was to be widened and one of my first tasks was to plot the position of all trees and shrubs in the wide garden beds inside the Macquarie Street alignment.

As far as I can recollect, Col. Vernon was retired before the normal run of office but I am hazy on this point. Probably some clash with the Minister and maybe concerning introduction of day labour.

Mr. Geo. McRae had been city Architect before joining the Government Architects Branch. One notable building was the Queen Victoria Markets near the Town Hall. He was a fine stamp of man. He gave the impression of possessing a nervous disposition but was very kind and considerate and was i/c when the Branch moved from the Public Works to the temporary building that had been erected in 1913 on the Western corner of Phillip and Bridge Streets. The structure was a timber frame building sheeted with C.G.Iron. It had been provided for one of the Engineering Departments. This building remained in service about 50 years.

Mr. J. Mitchell was an Architect in the Supervision field and more of an administrative Architect, in charge of all construction within the Metropolitan District. I knew little of this gentleman's career - just saw him in connection with these duties.

Mr. Drew was a portly type of gentleman with a bald head and a beard like Edward VII. He was Assistant Architect in charge of the Drawing Office when I joined the Drawing Office mid 1909 and seemed to drift into a sort of dead-end Administrative job about 1913 when the Branch transferred its accommodation to the Temporary Building on the Western side of Bridge Street.

Mr. G.M. Blair was the Senior Architect in the Drawing Office apart from the Assistant Architect i/c. He was recognised as a brilliant draftsman and was engaged upon the design of such buildings as the Railway Station, the National Art Gallery, the Dixon Library as part of a new Public Library and the Registrar General's Department. He became the Designing Architect i/c of the drawing office about 1914. He followed Geo. McRae as Government Architect about 1921.

Colonel Seymour Wells went across to the Education Department when that Department established its own Architects Branch about 1912. I knew him personally but under his leadership - Architect in charge of Schools - the school design dropped to a low ebb - due no doubt in some respects to the need to exercise restraint in expenditure. To obtain these results simple standard pattern design was used, frequently in common brick with some cement decoration and a temporary end wall intended for ease in future expansion - often not subsequently needed.

Col. Wells returned to the Government Architects Branch somewhere about 1926 to take up the position of Government Architect following Mr. Blair. To my mind the Branch reached a low pitch of discipline about this time - Mr. V. Wilshire i/c the Drawing Office was a sound Architect, a most humane and kindly gentleman and many members of the staff took full advantage of his goodness of heart to absent themselves from the office for hours and to engage in private work - almost glaringly - and this led to a certain discredit of the office.

Outcome - instead of an inquiry, retirement of Col. Wells and a general overhaul under new appointment of Evan Smith.

Mr. Evan Smith was appointed Government Architect in 1930 following public advertisement. He held the position of Principal Architect, Works Department, Victoria before his appointment.

He arranged a general re-organisation; from the shake up, a number of officers over 60 years of age were mostly retired."

APPENDIX NO. 7

NOTES BY C. WEATHERBURN

The following notes were written by Charles Weatherburn in reply to a request by the author. They are an interesting factual account of the highlights of the period under review, written by a man who was in a position of authority and who subsequently became Government Architect.

The outward signs of the success of the Farmer period are the buildings produced; consequently this is the aspect which has been stressed in this study. It should be appreciated, however, that without wise and sound administration, those outward signs could well have been fewer. Weatherburn provided the necessary administrative support, his assistance or more accurately as he put it, his "...*working partnership*..." was invaluable.

"GOVERNMENT ARCHITECT'S BRANCH

E.H. FARMER AND C. WEATHERBURN

Charles Weatherburn joined the Govt. Architect's Staff on 9th May, 1938 as an Architectural Assistant. Several weeks later (date unknown), * Edward Farmer also joined the Staff from the Sydney office of Leighton Erwin. (sic.)

Each of us worked in different sections of the office during the first year or so and in 1942 Charles Weatherburn joined the Army and was discharged after the end of hostilities in 1945. Ted Farmer did not become involved in any of the Armed Services.

In the years from 1938 to 1942 Charles Weatherburn was involved in projects in the Design Office under the control of Tom Barford - who had as his second in charge, one Harry Rembert an Architect who, in the years from 1950 to 1960, was to influence the structure of the office and standard of architectural design flowing from the office in a most significant manner. The reputation the office has earned over the last two decades can be fairly said to be due to the influence of Harry Rembert. It was only his ill health which prevented him from succeeding Cobden Parkes as Government Architect. Harry Rembert died in the early 60's from heart problems.

Following discharge from the Army in 1945 Charles Weatherburn was appointed Architect Narrabri District in 1946 and Cootamundra District in 1947 until 1951 - when he returned to Head Office.

Naturally during these years Charles Weatherburn and Ted Farmer did not see very much of each other but came in contact again when Ted Farmer designed the first building at what is now known as the Ryde Hospital. Charles Weatherburn led the team which produced the working drawings.

Following Tom Barford's appointment as Architect in charge of the Metropolitan District (date unknown) Harry Rembert was appointed as Senior Designing Architect and Ted Farmer his second in command.

* Farmer joined the Branch in 1939

Charles Weatherburn also found himself in charge of a Drawing Office which produced the design and documentation for further development of the Ryde Hospital during the years 1952-53 and in 1954 the Chemistry School at Sydney University (design schematics by Peter Webber).

When Cobden Parkes retired as Govt. Architect, Ted Farmer was appointed (Harry Rembert was not a candidate due to his health) Government Architect, and Charles Weatherburn succeeded Ted Farmer as second in charge to Harry Rembert and as Hospital Architect, an area in which Ted Farmer had always been interested.

With the retirement of S.E. Coleman in 1960 who was then Principal Assistant Architect to Govt. Architect, Charles Weatherburn succeeded Sam Coleman and the title of the position was changed to Executive Architect. A continuous working partnership persisted between Ted Farmer and Charles Weatherburn until Ted Farmer's retirement in 1974. During these 14 years (apart from the years 1966-68 - when Charles Weatherburn was involved in the Opera House on Site) Charles Weatherburn provided the Administration assistance to Ted Farmer as was required to run the Govt. Architect's Branch, and also selected and controlled Professional Staff which included selection of young people leaving school and who were granted University Traineeships."

Charles Weatherburn, 1978

APPENDIX NO. 8

LETTER FROM G.P. WEBBER THE THEN GOVERNMENT ARCHITECT TO THE DIRECTOR OF PUBLIC WORKS.

"GOVERNMENT ARCHITECT'S BRANCH : ABOLITION
OF THE TRAINEESHIP SCHEME.

There is no doubt good reason for the Public Service Board's decision to discontinue the Traineeship Scheme. However, an examination of Branch records show that since 1960 there had been 126 Architects in the Branch who were previously Trainees. Of this number, 43 have resigned and 83 are still serving with the Department. Termination of the scheme therefore will present problems in staffing in future years.

Of the number who resigned several did so to commence their own business or to enter into partnership with other members of the profession. Two notable cases being Mr. K. Woolley of the firm Ancher, Mortlock, Murray and Woolley, and Mr. P. Hall of Hall and Anderson.

As mentioned above the majority of new staff which flowed into the Branch in the past ten years came from Traineeship resources and this staff was of a high standard. If this intake is to be discontinued a different approach will be necessary to maintain the staff levels necessary to meet the work load of the Branch. Accordingly, action might be taken to recruit undergraduates for a period of twelve months upon completion of their third year at the respective University. Undergraduates gaining experience of the type of work available within the Branch under this scheme would probably be influenced in returning upon graduation.

In the case of the part-time students at the Institute of Technology, it is an essential requirement for entry to the course that these students be working in an architect's office. Some action to provide vacancies for these students therefore appears to be necessary. Also it is suggested that young people leaving school and who intend taking up Architecture at a University, be offered employment in the Department during the Christmas

vacation. It is quite probable that these graduates would find it attractive to continue working with the Department.

Government Architect.

22.5.74."

APPENDIX NO. 9

MEMBERS OF THE GOVERNMENT ARCHITECT'S BRANCH WHO WERE AWARDED TRAVELLING SCHOLARSHIPS ON GRADUATION.

(A) THE BYERA HADLEY TRAVELLING SCHOLARSHIP.

This scholarship is provided from funds bequeathed by the late Byera Hadley, former lecturer-in-charge of the Department of Architecture, Sydney Technical College. It is administered by the Board of Architects of N.S.W. In 1973 the annual sum awarded was \$6,000.

RECIPIENTS.

1954 G.P. Webber - a trainee
 1955 K.F. Woolley - a trainee
 1960 L.A. Reedman - not a trainee
 1962 D.M. Coleman - a trainee
 1964 J. Nicholas - a trainee
 1966 B.J. McDonald - a trainee
 1967 L.W. Glendenning - a cadet
 1968 O.M. Podger - a trainee
 1972 R.J. Dinham - a cadet

(B) THE HEZLET BEQUEST TRAVELLING SCHOLARSHIP.

This scholarship results from funds bequeathed to the University of Sydney by the late Arthur Ernest Hezlet to establish a travelling scholarship for architectural graduates. In 1978 the annual sum awarded was \$4,200.

RECIPIENTS.

1957 P.B. Hall
 (The University of Sydney Archives Department has no records of recipients before 1962).
 1964 J.P. Paynter
 1965 A. Andersons
 1966 A.R. Bonthorne

APPENDIX NO. 10

SIGNIFICANT BUILDINGS

The following schedule covers representative and significant buildings documented up to the end of the Farmer period.

The date shown for each building is the date of its contract documentation. There are cases where the design of buildings was significantly earlier than their contract documentation and conversely where construction commenced an appreciable time after documentation. However, the system adopted gives a reasonable overall guide.

In most cases it is impossible to establish the date when buildings were designed, since the Branch has destroyed all schematic drawings and only retains contract documents in its microfilm filing system.

Many projects have been built in stages. The schedule usually lists the first stage documentaiton date, since it is the significant one in the chronological sequence.

Buildings are listed in chronological order under building types - schools, police stations and court houses, health buildings, office buildings, tertiary establishments and technical colleges, special projects and restorations.

"DESIGN ARCHITECT"

The term "Design Architect" used in the following schedule should be explained since it can be misunderstood. In the latter years of the period under review many design architects were also project architects; they carried out all stages of documentation or at least supervised their execution. In many cases they also executed a great deal of authority over the superintending architect on the site.

ABBREVIATIONS USED IN THE SCHEDULE.

PERIODICALS.

| | |
|--------------------|---|
| ARCH. AUST. | "Architecture in Australia" Official Journal of the R.A.I.A. |
| A. REVIEW | "The Architectural Review" London. The Architectural Press Ltd. |
| ARCH. TODAY | "Architecture Today" Victoria. James S. Hill Publishing. |
| BLDG IDEAS | "Building Ideas" C.S.R. - Wunderlich Building Materials. |
| BLDG MATS & EQUIPT | "Building Materials and Equipment" Sydney. Murray Publishers Ltd. |
| CONST. REVIEW | "Constructional Review" Concrete Publishing Co. Pty. Ltd. for Cement & Concrete Association of Australia. |
| N.S.W. BUILDER | "N.S.W. Builder" Official Journal of the Master Builder's Association of N.S.W. |
| BOOKS. | Refer Bibliography for references. |

| BUILDING | DESIGN ARCHITECT | DOCUMENTATION DATE | ILLUSTRATION NO | COMMENTS | REFERENCE SOURCE |
|--|------------------|--------------------|-----------------|---|---------------------------------|
| SCHOOLS | | | | | |
| FORT ST. PRIMARY | H. REMBERT | 1941 | 4 | | |
| STANDARD TIMBER CLASSROOM | TEAM DESIGN | 1947 | | | |
| MOREE INFANTS | H. REMBERT | 1949 | | | |
| INVERELL HIGH | - | 1950 | | TYPICAL OF THE PERIOD | |
| NARRABRI HIGH | - | 1950 | | TYPICAL OF THE PERIOD | |
| MANLY BOYS HIGH | J. NOONE | 1951 | | TYPICAL OF THE PERIOD | |
| NORMANHURST HIGH | - | 1953 | 8 | TYPICAL OF THE PERIOD | |
| CHELTENHAM BOYS HIGH | - | 1956 | | DESIGNED BY K. CURTIN & PARTNERS EARLY EXAMPLE OF PRECAST CONCRETE FRAMING. | ARCH.AUST. JULY-SEPT. '58. p.54 |
| SPEERS POINT SCHOOL | R. EVANS | 1956 | | FROM NEWCASTLE OFFICE OF THE BRANCH. EARLY EXAMPLE OF DESIGN FREEDOM. | ARCH.AUST. JULY-SEPT. '58. p.56 |
| BEVERLY HILLS GIRLS HIGH | J. VAN DER STEEN | 1957 | 10 | EARLY CURTAIN WALL | |
| SEVEN HILLS HIGH | - | 1958 | | DESIGNED BY K. CURTIN & PARTNERS EXAMPLE OF CONCRETE FRAMING. | |
| MANLY GIRLS HIGH | J. VAN DER STEEN | 1958 | | MODULAR CURTAIN WALL. | |
| HEATHCOTE HIGH | K. WOOLLEY | 1959 | | | |
| KATOOMBA HIGH | K. WOOLLEY | 1960 | | | |
| ASQUITH BOYS HIGH. STANDARD ASSEMBLY HALL. | - | 1960 | | DERIVED FROM KATOOMBA HIGH NOT BY WOOLLEY. | |
| FRED BIRKS HOSPITAL SCHOOL, CAMBERDOWN. | H. DYSART | 1960 | 11 | | |
| ROOTY HILL HIGH | | 1961 | | CURTAIN WALL | |
| MATRAVILLE PUBLIC (CHIFLEY) | - | 1961 | | EARLY NEW APPROACH | |
| GREYSTANES HIGH BERESFORD RD. | - | 1961 | | SPECIAL ECOLOGY UNIT DOCUMENTED IN 1970. DESIGNED BY B. SNEYD. | N.S.W. BUILDER AUG.'73. p.353 |
| ULTIMO PUBLIC | G.P. WEBBER | 1962 | 15 | | |

| BUILDING | DESIGN ARCHITECT | DOCUMENTATION DATE | ILLUSTRATION NO | COMMENTS | REFERENCE SOURCE |
|--------------------------------|-------------------------------|--------------------|-----------------|--|---|
| SCHOOLS CONT. | | | | | |
| BELMONT PRIMARY | M. DYSART | 1962 | 17-18 | PREDATES THE DOUGHNUT DESIGNED IN '58 INFLUENTIAL | ARCH.AUST JULY-SEPT. '58. pp.46-47 SEPT. '65. p.82 BLDG. IDEAS MAR. '67. pp.3-4 |
| ASHCROFT HIGH | - | c 1963 | 14 | TYPICAL OF THE PERIOD | |
| CASTLE HILL HIGH | - | c 1963 | 12 | TYPICAL OF THE PERIOD | |
| INVERELL MAC-INTYRE HIGH | I.MCHUTCHINSON D. ANDERSON | 1963 | | CURTAIN WALL ORIGINAL SCHOOL IN 1950. STUDY 3. ADDITIONS IN 1974. | |
| PEAKHURST HIGH | B. SNEYD & F. UNDERWOOD | 1963 | 13 | CURTAIN WALL BINI SHELL ADDED IN 1974 | DEPT. OF PUBLIC WORKS REVIEW OF 1976. p.6. |
| BLACKTOWN HIGH (MITCHELL) | | 1963 | | EARLY WYNDHAM | N.S.W. BUILDER AUG.'73. p.345 |
| BROKEN HILL PRIMARY (MICA ST.) | D. COLEMAN G.P. WEBBER | 1963 | | CLIMATIC CONSIDERATION. FENESTRATION RELATES TO WORK AT U OF N.E. AND ULTIMO PUBLIC SCHOOL. | |
| RYDE HIGH (MALVINA ST.) | M. DYSART | 1964 | 29-31 | SPECIAL COMMENDATION BY RAIA (NSW CHAPTER) SULMAN AWARD COMMITTEE IN 1965. SPECIAL DOUGHNUT. | ARCH.AUST SEPT. '65 pp.80-81. BUILDING IDEAS MARCH '67 pp.4-6.SOWDEN TOWARDS AN AUSTRALIAN ARCHITECTURE. pp.208-213 |
| MILLER HIGH | M. DYSART | 1964 | 27 | EARLY DOUGHNUT. ALSO PENDLE HILL, LURNEA, CAHLEY VALE ETC. | |
| COBAR HIGH | O. PODGER | 1964 | 19-20 | SPECIAL DESIGN CLIMATE CONSIDERATION. | N.S.W. BUILDER AUG.'73. p.353 |
| KU-RING-GAI HIGH (TURRAMURRA) | M. DYSART | 1964 | 21-26 | EARLY DOUGHNUT, BINI SHELL ADDITION 1967 | N.S.W. BUILDER AUG.'73. p.346 444 SYDNEY BUILDINGS. p.67 |
| GRANTHAM HIGH (SEVEN HILLS) | M. DYSART | 1965 | | MODIFIED DOUGHNUT | |
| KIRRAWEE HIGH | M. DYSART | 1965 | | LATE DOUGHNUT | |
| WARNER'S BAY HIGH | M. DYSART | 1965 | | LATE DOUGHNUT | |
| CONDOBOLIN HIGH | F. UNDERWOOD | 1965 | | ARID CLIMATE CONSIDERATION | N.S.W. BUILDER AUG.'73. p.352 |
| RANDWICK GIRLS HIGH | M. DYSART S. BISHOP | 1965 | 32-34 | SPECIAL DESIGN | 444 SYDNEY BUILDINGS. p.49 |

| BUILDING | DESIGN ARCHITECT | DOCUMENTATION DATE | ILLUSTRATION NO | COMMENTS | REFERENCE SOURCE |
|----------|------------------|--------------------|-----------------|----------|------------------|
|----------|------------------|--------------------|-----------------|----------|------------------|

SCHOOLS CONT.

| | | | | | |
|--|------------------------|--------|-------|---|--|
| PENNANT HILLS HIGH | M. DYSART M. WALLER | 1965 | 35-40 | LOOSE DOUGHNUT | BUILDING IDEAS JUNE '76. p.10 444 SYDNEY BUILDINGS. p.69 |
| PREFABRICATED MOBILE CLASSROOM | J. KIRWOOD J. ZAAT | 1965 | 41 | PRINCE PHILIP AWARD FOR AUST DESIGN '68 (TULLOCH) | |
| STANDARD HIGH SCHOOL ASSEMBLY HALL | M. DYSART | 1966 | | HEXAGONAL STANDARD AT CHATSWOOD, NORTHWOOD, MAROUBRA, ETC. | |
| TUMBARUMBA CENTRAL | M. MCKINNEY | 1966 | 42 | COMPACT ADDITIONS IN 1978 | |
| ORANGE EAST HIGH (CANOBOLAS) | | 1966 | | CONSORTIUM SCHOOL IN ASSOCIATION WITH EDWARDS, MADIGAN & TORZILLO | N.S.W. BUILDER AUG. '73. p.347 |
| BROOKVALE SPECIAL SCHOOL | R. BRYANT | 1967 | 47 | | |
| CALARE PUBLIC ORANGE WEST | J. MORAN R. SCOTT | 1967 | 43-44 | SPECIAL DESIGN | |
| TREGEAR PRIMARY | R. BAILEY | 1967 | | SIMILAR TO LETHBRIDGE & BRACKETT | |
| MOREE HIGH | E. CULPIN | 1967 | | | |
| SYDNEY GIRLS HIGH | E. CULPIN | 1967 | | | |
| FORT ST. BOYS HIGH | B. McDONALD | 1967 | 45-46 | ADDITIONS IN 1973 BY K.WOOLLEY & E. CULPIN | |
| EA SOUTHEE PUBLIC, COOTAMUNDRA SOUTH. | J. PAYNTER | 1968 | | | |
| MURRAY FARM PUBLIC | C. CARTER | 1968 | | SPECIAL DESIGN, ADDITIONS | N.S.W. BUILDER DEC. '73. p.555 |
| BUSBY HIGH GREEN VALLEY | K. THIRSK | 1968 | 55-56 | STUDY 1 SCHOOL | |
| WINDSOR HIGH | C. CARTER | 1968 | 50-54 | STUDY 2 SCHOOL | |
| FIGTREE HIGH | C. CARTER | 1968 | | STUDY 2 SCHOOL | |
| LETHBRIDGE PRIMARY | R. BAILEY | 1968 | 59-69 | | |
| CHERTSEY PUBLIC, GOSFORD | C. CARTER | 1968 | 57 | SPECIAL DESIGN | |
| WARIALDA CENTRAL | J. WERBELOFF | c 1969 | 48-49 | | |
| TOLLAND PUBLIC | K. THIRSK J. LOWING | 1969 | | K PLAN OR 1.70 TYPE | |
| MIMOSA (SORLIC) PUBLIC, FRENCHS FOREST | K. THIRSK J. LOWING | 1969 | 61 | K PLAN OR 1.70 TYPE | |
| KINGSWOOD HIGH | C. CARTER | 1969 | 63-65 | STUDY 2 SCHOOL | |

| BUILDING | DESIGN ARCHITECT | DOCUMENTATION DATE | ILLUSTRATION NO | COMMENTS | REFERENCE SOURCE |
|---|------------------|--------------------|-----------------|---|--------------------------------------|
| SCHOOLS CONT. | | | | | |
| GREYSTANES HIGH ECOLOGY UNIT | B. SNEYD | 1970 | | SPECIAL DESIGN | |
| PENRITH, NEW INFANTS DEPART- MENT | I. MCHUTCHINSON | 1970 | 62 | 2 STOREY LINEAR BUILT IN 8 WEEKS BY KELL & RIGBY | N.S.W. BUILDER DEC.'73. p.569 |
| ORANGE PUBLIC, LIBRARY | K. THIRSK | 1970 | | | N.S.W. BUILDER DEC.'73. p.570 |
| STANDARD LL BLOCK A.70 | J. MORAN | 1970 | | STANDARD LIBRARY LAB. BLOCK | |
| STANDARD LIBRARY | B. KRONE | 1970 | | 600 PUPIL SECON- DARY LIBRARY | |
| EPPING HIGH, STANDARD LIBRARY. | B. KRONE | 1970 | | 1100 PUPIL SECONDARY S.L. 70 STANDARD | |
| MOREE EAST HIGH (COURALLIE) | C. CARTER | 1970 | | STUDY 2 SCHOOL | |
| BEVERLY HILLS HIGH LL BLOCK A 70 | J. MORAN | 1970 | 66 | STANDARD BLOCK ORIGINAL BUILD- ING FROM 1957 | |
| WHALAN HIGH | C. CARTER | 1970 | | STUDY 2 SCHOOL | |
| BLACKETT PUBLIC | R. BAILEY | 1970 | 58 | AS LETHBRIDGE PRIMARY OF 1968 | |
| DEE WHY PUBLIC, LIBRARY. | O. KOSTERIN | 1971 | | | N.S.W. BUILDER DEC.'73. p.570 |
| WHITECROSS RD (WINMALEE) SPRINGWOOD EAST | I. MCHUTCHINSON | 1971 | | A CLUSTER SCHOOL IN ASSOC- IATION WITH HAWKE & PEREIRA | N.S.W. BUILDER DEC.'73. p.570 |
| MARTON PUBLIC | R. POWELL | 1971 | 71-74 | A CLUSTER SCHOOL IN ASSOC- IATION WITH MELMAN & NEWMAN | |
| BRISBANIA PUBLIC GOSFORD | O. KOSTERIN | 1971 | 67-70 | | N.S.W. BUILDER DEC.'73. pp548-551 |
| BERINBA PUBLIC YASS SOUTH | D. ANDERSON | 1971 | 77 | LINEAR SCHOOL | N.S.W. BUILDER DEC.'73. p.569 |
| BELLINGEN HIGH LL BLOCK B.70 | J. MORAN | 1971 | | STANDARD LL (LIBRARY & LAB) BLOCK TYPE B 1970 | |
| RIVERSIDE GIRLS ASSEMBLY HALL GLADESVILLE | T. KEEN | 1971 | | SPECIAL DESIGN | N.S.W. BUILDER AUG.'73. p.354 |
| ST. IVES HIGH STANDARD ASSEMBLY HALL | M. DYSART | 1971 | | MAROUBRA HALL SIMILAR. REFER ILLUSTRATION NO. 122 | |
| HEBERSHAM PUBLIC | S. TANNER | 1971 | | SIMILAR TO LETH- BRIDGE & BLACKETT | |
| LAPSTONE PUBLIC | I. MCHUTCHINSON | 1971 | | | |

| BUILDING | DESIGN ARCHITECT | DOCUMENTATION DATE | ILLUSTRATION NO | COMMENTS | REFERENCE SOURCE |
|--|---|--------------------|-------------------------------------|--|--|
| SCHOOLS CONT. | | | | | |
| ARMIDALE HIGH LL BLOCK A 70 | J. MORAN | 1971 | | STANDARD LL (LIBRARY & LAB) BLOCK TYPE A 1970 | |
| DOVER HEIGHTS GIRLS HIGH | B. SNEYD | 1971 | 78-80 | SPECIAL DESIGN | |
| MARRICKVILLE GIRLS HIGH | B. SMITH | 1971 | 81-82 | SPECIAL DESIGN - COMPACT | |
| QUEANBEYAN PUBLIC | C. JOHNSON | 1971 | 75-76 | | |
| WOODBERRY PUBLIC (ORIG. WOODBURY) BERESFORD NEWCASTLE | J. RABONG | 1972 | | SPECIAL DESIGN - LINEAR DERIVATION | N.S.W. BUILDER DEC.'73. p.570 |
| DUVAL - ARMIDALE NORTH | T. SCHWEIGER | 1972 | 104-106 | | |
| CALARE PUBLIC, ORANGE WEST | B. SCOTT | 1972 | | SPECIAL DESIGN - STAGE 1 WAS BUILT PREVIOUSLY IN 1967 | |
| STANDARD LL BLOCK (LIBRARY LAB BLOCK) | J. MORAN | 1972 | | | |
| JAMES MEEHAN HIGH, MACQUARIE FIELDS. | C. CARTER | 1972 | | STUDY 2 SCHOOL | |
| WIDEMERE PUBLIC MERRYLANDS WEST | G. STOCKS | 1972 | | SPECIAL DESIGN, CLUSTER BLOCKS | N.S.W. BUILDER DEC.'73. p.554 |
| ARMIDALE EAST PUBLIC (NEWLING) | O. KOSTERIN | 1972 | 83-84 | SPECIAL DESIGN, DEMONSTRATION SCHOOL | N.S.W. BUILDER DEC.'73. p.556 |
| BRIAR RD PUBLIC CAMPBELLTOWN SOUTH | P. ROCHAIX | 1972 | | SPECIAL DESIGN, CLUSTER BLOCKS | N.S.W. BUILDER DEC.'73. p.555 |
| BROKEN HILL HIGH | A. VAN DER STEEN | 1972 | 95 | SPECIAL DESIGN FOR CLIMATE | |
| TOONGABBIE NORTH PUBLIC (WINSTON HEIGHTS) | C. BURTON | 1972 | | SPECIAL DESIGN | N.S.W. BUILDER DEC.'73. pp.553-554 |
| EVANS HIGH BLACKTOWN | I. MCHUTCHINSON D. ANDERSON R. POWELL | 1972 | 94, 96, 97, 98-100 101-103 | STUDY 3 SCHOOL GALSON, LAKE ILLAHARRA, McINTYRE (INVE- RELL) KOORINGAL (VAGGA) DAVID- SON (FRENCHS FOREST) WERE SIMILAR EXAMPLES | N.S.W. BUILDER AUG.'73. pp.332-340 BROCHURE BY DAVIDSON HIGH PRINCIPAL |
| BALMAIN HIGH | B. SNEYD | 1972 | 85-91 | SPECIAL DESIGN STEEP SITE | N.S.W. BUILDER SEPT.'75. pp.376-385 ARCH.AUST DEC.'75 pp.75-77 |
| BENSLEY PUBLIC MACQUARIE FIELDS | S. TANNER | 1973 | | ENTIRE SCHOOL OF TEMPORARY CLASSROOMS. | |

| BUILDING | DESIGN ARCHITECT | DOCUMENTATION DATE | ILLUSTRATION NO | COMMENTS | REFERENCE SOURCE |
|--|------------------|--------------------|-----------------|--|--|
| SCHOOLS CONT | | | | | |
| GIRRAWEE HIGH | C. BURTON | 1973 | | SPECIAL DESIGN, BUT THREE OTHERS SIMILAR BUILT | |
| SHALVEY PUBLIC | D. ANDERSON | 1973 | 118 | A SUCCESSFUL DOCUMENT AND BUILDING PROJECT. A SPECIAL DESIGN | |
| TERRY HILLS PRIMARY | H. RICHARDSON | 1973 | 92-93 | STAGE 2 IN '74 BY C. BURTON | |
| CAMBRIDGE PARK HIGH, NORTH KINGSWOOD | R. SEIDEL | 1973 | | SIMILAR TO MOOREBANK HIGH | |
| MOOREBANK HIGH | R. SEIDEL | 1973 | 107-111 | SPECIAL DESIGN | |
| DARETON HIGH | P. ROCHAIX | 1973 | | SPECIAL DESIGN | |
| QUARRY CREEK PUBLIC, BAULKHAM HILLS | B. SNEYD | - | | SCHEME NOT BUILT SPECIAL DESIGN FAMILY CLUSTER | N.S.W. BUILDER DEC.'73. p.556 |
| DARLINGTON DEMONSTRATION PUBLIC | D. ANDERSON | 1973 | 119-121 | SPECIAL DESIGN, INNER CITY SITE | N.S.W. BUILDER DEC.'73. PP.570-571 BLOG. IDEAS JUNE '76. p.11 |
| SHALVEY HIGH | J. RABONG | 1973 | 112-117 | RAIA N.S.W. CHAPTER MERIT AWARD. 1976 SPECIAL PROJECT | N.S.W. BUILDER APRIL '77. pp.116-127 CONST. REVIEW FEB.'77. pp.20-27 G.A.B. BROCHURE |
| UMINDA HIGH, WOY WOY | I. McHUTCHINSON | 1974 | | STUDY 3 SCHOOL | |
| MACINTYRE HIGH, INVERELL | I. McHUTCHINSON | 1974 | | STUDY 3 SCHOOL | |
| MITCHELL HIGH, BLACKTOWN ASSEMBLY HALL | G. MORRIS | 1974 | | CASTLE HILL HIGH HALL IDENTICAL | |

| BUILDING | DESIGN ARCHITECT | DOCUMENTATION DATE | ILLUSTRATION NO | COMMENTS | REFERENCE SOURCE |
|--|-----------------------------|--------------------|-----------------|--|----------------------------------|
| POLICE STATIONS & COURT HOUSES | | | | | |
| QUIRINDI COURT HOUSE | H. REIMBERT | 1930 | 2 | | |
| DUBBO POLICE STATION | P. PROUDFOOT | 1962 | | | |
| DARLINGHURST COURT HOUSE | P. HALL | 1962 | 125 | MAJOR ADDITIONS | |
| HILLSTONE COURT HOUSE | P. PROUDFOOT | 1963 | | | |
| KINGSGROVE POLICE STATION | J.W. THOMSON | 1963 | | | |
| REVESBY POLICE STATION | J.W. THOMSON | 1963 | 127 | | |
| HERRYLANDS POLICE STATION | P. PROUDFOOT | 1963 | | CONTROVERSIAL AT THE TIME | |
| BLACKTOWN COURT HOUSE & POLICE STATION | P. PROUDFOOT | 1963 | 126 | | |
| NEWCASTLE COURT HOUSE | M. STANLEY | 1964 | 131 | | |
| EASTWOOD POLICE STATION | P. PROUDFOOT | 1964 | 128 | | |
| PORT KEMBLA COURT HOUSE | J.W. THOMSON | 1965 | | CLINKER BRICKWORK CONTROVERSIAL AT THE TIME | |
| FAIRFIELD COURT HOUSE | J.W. THOMSON F. PAKCHUNG | 1965 | 136 | | 444 SYDNEY BUILDINGS. P.97 |
| WALGETT POLICE STATION | D. TURNER | 1965 | 133 | | |
| CARINDA POLICE STATION | L. KRISTENSEN | 1965 | 134 | EARLY DESIGN FOR ARID CLIMATE | |
| CAMPBELLTOWN COURT HOUSE | J. RABONG | 1965 | 132 | MAJOR ADDITIONS | |
| COONABARABRAN COURT HOUSE & POLICE STATION | J. RABONG | 1966 | 138 | MAJOR ADDITIONS. CONCERNED ATTEMPT TO RELATE TO EXISTING BUILDINGS | ARCH.AUST. FEB.'73. p.91 |
| WEE WAA POLICE STATION | R. CONNORS | 1967 | 129,130 | CONTROVERSIAL AT THE TIME | THE AUSTRALIAN. 10 MAY 1975.p.9A |
| WAVERLEY COURT HOUSE & POLICE STATION | D. COLEMAN | 1967 | | | |
| BLAYNEY POLICE STATION | M. WATSON | 1967 | | CONTROVERSIAL AT THE TIME | |
| WOLLONGONG COURT HOUSE ADDITIONS | A. ANDERSONS | 1967 | 139 | RELATES TO EXISTING BUILDING | |
| WOODSTOCK POLICE STATION | M. WATSON | 1968 | | TWO HIGH PITCHED ROOF BLOCKS. DOMESTIC SCALE | |

| BUILDING | DESIGN ARCHITECT | DOCUMENTATION DATE | ILLUSTRATION NO | COMMENTS | REFERENCE SOURCE |
|---|------------------|--------------------|-----------------|-----------------------------------|--|
| POLICE STATIONS & COURT HOUSES CONT. | | | | | |
| PARRAMATTA COURT HOUSE & POLICE STATION | A. ANDERSONS | 1969 | 137 | RAIA NSW CHAPTER MERIT AWARD 1975 | DEPT. OF PUBLIC WORKS REVIEW OF 1976. p.16 |
| COONAMBLE COURT HOUSE | M. WATSON | 1969 | | | |
| DEE WHY POLICE STATION | J. NICHOLAS | 1970 | | | |
| FOSTER COURT HOUSE | T. MCGREGOR | 1970 | | | |
| NEWTOWN POLICE STATION | F. PAKCHUNG | 1970 | | | |
| LOCKHART POLICE & RESIDENCE | R. BRYANT | 1971 | | | |
| MAROUBRA POLICE STATION | J. NICHOLAS | 1973 | | | |
| LIVERPOOL COURT HOUSE | M. STANLEY | 1973 | 135 | | |
| GRAFTON POLICE STATION & COURT HOUSE RESTORATIONS | C. STILL | 1973 | 140-142 | CIVIC GROUP WITH OFFICES IN 1967 | N.S.W. BUILDER AUG. '76. pp.334-342 ARCH.AUST. APRIL/MAY '76. p.60 |

| BUILDING | DESIGN ARCHITECT | DOCUMENTATION DATE | ILLUSTRATION NO | COMMENTS | REFERENCE SOURCE |
|---|--|--------------------|-----------------|---|--|
| HEALTH BUILDINGS (BUT EXCLUDING SOME SPECIAL PROJECTS) | | | | | |
| ST. MARGARET'S HOSPITAL WARD BLOCK | H.R.W. ORR | 1944 | 5 | | |
| BANKSTOWN HOSPITAL | E. FARMER | 1948 | | SIMPLIFIED "DUDOK GEORGIAN" | |
| SUTHERLAND HOSPITAL | T. BARFORD | 1947 | 143-144 | TYPICAL OF THE PERIOD | |
| ST. MARGARET'S HOSPITAL CHAPEL | K. WOOLLEY | 1956 | | | ARCH.AUST. SEPT.'59.p.77-79 |
| ROYAL PRINCE ALFRED PROFESSORIAL BLOCK - BLACKBURN PAVILION | G.P. WEBBER W. TURNER | 1960 | 145 | MONA VALE HOSPITAL BASED ON THIS BUILDING | ARCH.AUST FEB.'73.p.89 |
| LIDCOMBE STATE HOSPITAL CHAPEL AND HALL | K. WOOLLEY | 1960 | | | ARCH.AUST. SEPT.'65.p.87 444 SYDNEY BUILDINGS. P.89 |
| MONA VALE HOSPITAL | C. WEATHERBURI, PLAN K. WOOLLEY, ELEVATIONS | 1961 | 146 | | ARCH.AUST. FEB.'73.p.90 SEPT.'65.p.85 444 SYDNEY BUILDINGS. P.76 TOWARDS AN AUSTRALIAN ARCHITECTURE. pp.213-216 |
| PORT KEMBLA HOSPITAL | J. KINSTLER W. TURNER | 1962 | 147 | | |
| CHATSWOOD CHILD HEALTH CENTRE | G.P. WEBBER W. TURNER | 1962 | | | |
| BROUGHTON HALL PSYCHIATRIC CLINIC | M. DYSART | 1962 | | | ARCH.AUST. SEPT.'65.p.86 444 SYDNEY BUILDINGS. p.83 ARCH.AUST. FEB.'73. p.91 BUILD.IDEAS DEC.'63. pp.8-11 |
| ST. VINCENTS CARITAS CENTRE | J. KINSTLER | 1963 | 148-149 | | 444 SYDNEY BUILDINGS. p.34 |
| MINDA CHILD WELFARE REIMAND HOME | E.A. RALPH | 1964 | | | |
| NEWCASTLE PSYCHIATRIC DAY CENTRE "SHORTLAND" | W. TURNER | 1964 | | | |
| ST. MARGARET'S DARLINGHURST NEW NURSES HOME | K. WOOLLEY | 1964 | | EARLY CROSS-WALL LOAD BEARING | |
| BELMONT DISTRICT HOSPITAL | J. KINSTLER | 1964 | 151 | | |

| BUILDING | DESIGN ARCHITECT | DOCUMENTATION DATE | ILLUSTRATION NO | COMMENTS | REFERENCE SOURCE |
|--|------------------------|--------------------|-----------------|--|---|
| HEALTH BUILDINGS CONT. | | | | | |
| ACUTE OBSERVATION PSYCHIATRIC RYDE NORTH | A. KAGAN | 1965 | 150 | | |
| PRINCE OF WALES ADMISSION & POLYCLINIC | W. TURNER | 1965 | | | 444 SYDNEY BUILDINGS. p.49 |
| TAMWORTH BASE HOSPITAL BOILERHOUSE & LAUNDRY | I. ROBERTS | 1965 | | | |
| NEWCASTLE CHILD HEALTH CENTRE | I. KRISTENSEN | 1966 | | | |
| ORANGE BASE HOSPITAL WARD BLOCK | I. ROBERTS & E. MACK | 1967 | 152 | (1964 NURSES TRAINING BLOCK & HOME) | |
| MCCREDIE COTTAGE GUILDFORD CHILD WELFARE | E.A. RALPH | 1968 | | | |
| WINGHAM HOSPITAL | - | 1968 | 153 | | |
| PRINCE OF WALES WARD & THEATRE BLOCK | W. TURNER & I. ROBERTS | 1968 | 156 | | |
| COFFS HARBOUR HOSPITAL | I. ROBERTS | 1970 | | | |
| TAMWORTH BASE HOSPITAL THEATRE SERVICES & WARDS | R. FORSTER | 1970 | | | |
| TWEED HEADS HOSPITAL & BOILER HOUSE | I. ROBERTS | 1970 | | THOMSON & GLENDENNING IN ASSOCIATION | |
| LIDCOMBE HOSPITAL THEATRE BLOCK | R. FORSTER | 1970 | | | |
| COMMUNITY HEALTH CENTRE MANLY (QUEENSCLIFF) | L. KRISTENSEN | 1970 | 154-155 | L. KRISTENSEN & ROBERTSON & HINDMARSH JOINT ARCHITECTS | |
| BEVERLEY PARK ORTHOPAEDIC HOSPITAL SCHOOL CAMPBELLTOWN | P. ROCHAIX | 1971 | | | N.S.W. BUILDER DEC. '73. pp.544-547 |
| ROYAL PRINCE ALFRED PSYCHIATRIC PAVILION & PROFESSIONAL UNIT | R. FORSTER | 1971 | | BROWN BREWER & GREGORY IN ASSOCIATION | |
| WESTMEAD HOSPITAL | R. BONTHORNE | - | | DOCUMENTATION POST 1973 | DEPT.OF PUBLIC WORKS REVIEW 1976 p.12,1977. p.19, 1978. p.10,11 |
| CROWN ST.WOMEN'S HOSPITAL MEDICAL TEACHING BLOCK | J. BRANDON | 1973 | 157 | | |
| PRINCE OF WALES PAEDIATRIC BLOCK | W. TURNER | 1973 | | | |

| BUILDING | DESIGN ARCHITECT | DOCUMENTATION DATE | ILLUSTRATION NO | COMMENTS | REFERENCE SOURCE |
|--|--|--------------------|-----------------|---|---|
| OFFICE BUILDINGS | | | | | |
| REGISTRAR GENERAL ADDITIONS SYDNEY | P. HALL | 1961 | | | |
| COOTAMUNDRA OFFICES | P. HALL G.P. WEBBER P. PROUDFOOT | 1962 | 161 | | |
| STATE OFFICE BLOCK | K. WOOLLEY | 1962 | 158-159 | | ARCH.AUST. FEB '68. pp.75-87 GAB REPORT SEPT. '67. DEPT. OF PUBLIC WORKS REPORT 1978. p.18 TOWARDS AN AUSTRALIAN ARCHITECTURE. pp.203-207 |
| ALBURY OFFICES | D. TURNER | 1964 | 165 | RAIA NSW CHAPTER BLACKET AWARD 1968 | ARCH.AUST. DEC. '69. p.1036 |
| INVERELL OFFICES | D. TURNER | 1964 | 163 | | |
| NARRABRI OFFICES | D. TURNER | 1964 | 164 | | |
| GOULBURN OFFICES | J. RABONG | 1966 | | | |
| HUNTER ST. SYDNEY OFFICE (GOODSELL BUILDING) | R. CONNORS & G.P. WEBBER | 1966 | 160 | ALEXANDER & LLOYD IN ASSOCIATION | GAB REPORT. DEPT. OF PUBLIC WORKS REVIEW 1978. p.18 |
| GRAFTON OFFICES | J. RABONG & I. BAILEY | 1967 | 166-167 | CIVIC GROUP WITH POLICE STATION 1973 | |
| MOREE OFFICES | L. GLENDENNING | 1970 | 162 | | |
| DUBBO OFFICES | L. GLENDENNING | 1971 | | | GAB REPORT |
| RAWSON PLACE OFFICES SYDNEY | L. GLENDENNING | 1971 | 168 | | GAB REPORT. DEPT. OF PUBLIC WORKS REVIEW 1978. p.18 |
| SANS SOUCI OFFICES | F. PAKCHUNG D. JACKSON | 1972 | | | |
| BATHURST OFFICES | R. CONNORS | 1974 | | DESIGNED 1973 | |
| DAIRY INSTITUTE AUTHORITY WOLLONGONG | L. GLENDENNING | 1973 | | HE ALSO DESIGNED OTHERS AT LISMORE & NEWCASTLE, BOTH DOCUMENTED IN 1974 | |

| BUILDING | DESIGN ARCHITECT | DOCUMENTATION DATE | ILLUSTRATION NO | COMMENTS | REFERENCE SOURCE |
|---|----------------------------|--------------------|-----------------|--|---|
| TERTIARY BUILDINGS & TECHNICAL COLLEGES | | | | | |
| SYDNEY TECHNICAL COLLEGE SCHOOL OF AUTOMOTIVE ENGINEERING | H. REMBERT | c1938 | 3 | DOCUMENTED BY C. WEATHERBURN | |
| NEWCASTLE TECHNICAL COLLEGE TRADES BUILDING CLASSROOMS | H. REMBERT | 1940 | | VARIOUS BUILDINGS 1938-1963 | |
| UNIVERSITY OF SYDNEY WALLACE THEATRE | H. REMBERT | 1945 | | | |
| UNIVERSITY OF NEW ENGLAND. MARY WHITE COLLEGE | E. FARMER | 1955 | | ADDITIONS BY P. HALL ILLUSTRATION NO.212 | |
| UNIVERSITY OF SYDNEY CHEMISTRY SCHOOL | G.P. WEBBER K. WOOLLEY | 1955 | 9 | EARLY CURTAIN WALL STAGE 2, 1956 | |
| UNIVERSITY OF NEW ENGLAND DIXSON LIBRARY | E. FARMER | 1956 | 213 | STAGE 2, BY D. BORAM IN 1970 | |
| UNIVERSITY OF N.S.W. SCIENCE THEATRE | G.P. WEBBER | c 1958 | | | |
| UNIVERSITY OF NEW ENGLAND. SCHOOL OF RURAL SCIENCES | E.H. FARMER G.P. WEBBER | 1958 | | | |
| ALEXANDER MACKIE COLLEGE OATLEY | - | 1959 -'62 | | | |
| UNIVERSITY OF N.S.W. 'ROUND HOUSE' | J. VAN DER STEEN | 1959 | 169-170 | DOCUMENTATION, EDWARDS, MADIGAN & TORZILLO | |
| UNIVERSITY OF NEW ENGLAND ROBB COLLEGE (THIRD) | M. DYSART | 1959 | 215-218 | DINING HALL DORMITORIES ADDED 1960 & '61 EARLIER DORMITORY BLOCKS BY P. HALL & G.P. WEBBER | ARCH. AUST. SEPT. '65. pp.88-89. BUILDING IDEAS JUNE '65. pp.5-6 ARCH. AUST. FEB. '73. p.89 |
| SCHOOL OF GRAPHIC ARTS ULTIMO | W. TURNER | 1960 | 16 | | ARCH. AUST. SEPT. '65. p.152 |
| UNIVERSITY OF SYDNEY FISHER LIBRARY | K. WOOLLEY | 1960 | 171-172 | NSW CHAPTER RATA SULMAN AWARD 1962. T.E.O'MAHONEY IN ASSOCIATION. STACK ADDED IN 1965 | BLDG. IDEAS. MARCH '63. pp.12-13. |
| NORTH SYDNEY TECHNICAL COLLEGE QUADRANT BUILDING | - | 1960 | 251 | VARIOUS BUILDINGS FROM 1946 | |
| SCIENCE BUILDING | M. ZATORSKI | 1967 | 250 | | |
| ELECTRONICS BUILDING | - | 1972 | 252 | | |
| TAREE TECHNICAL COLLEGE | M. DYSART | 1961 | 242-243 | RATA NSW CHAPTER BLACKET AWARD 1964 | A. REVIEW DEC. '67. p.473 |

| BUILDING | DESIGN ARCHITECT | DOCUMENTATION DATE | ILLUSTRATION NO | COMMENTS | REFERENCE SOURCE |
|---|--|--------------------|-----------------|---|---|
| TERTIARY BUILDINGS & TECHNICAL COLLEGES CONT. | | | | | |
| SEAFORTH TECHNICAL COLLEGE | J. VAN DER STEEN | 1962 | | | |
| WAGGA TEACHERS COLLEGE | D. TURNER J. NICHOLAS | 1962 | | | |
| UNIVERSITY OF NEW ENGLAND AGRICULTURAL ECONOMICS | P. HALL | 1962 | 219 | STAGE 2 1965 | ARCH.AUST. SEPT. '65. p.151 |
| UNIVERSITY OF NEW ENGLAND PSYCHOLOGY & EDUCATION BUILDING | STAGE 1: G.P. WEBBER STAGE 2: P. HALL | 1962 | 220-222 | | BUILD.IDEAS JUNE '65. p.7. ARCH.AUST. SEPT. '65. p.150 |
| UNIVERSITY OF N.S.W. BAXTER COLLEGE | P. HALL | 1962 | 173-179 | MAJOR ADDITIONS 1964 | ARCH.AUST. SEPT. '65. p.79 |
| UNIVERSITY OF N.S.W. GOLDSTEIN HALL | P. HALL | 1962 | 173-179 | ARCHITECTURE & ARTS AWARD 1964 RAIA NSW CHAPTER SULMAN AWARD 1965 | ARCH.AUST. SEPT. '65. pp.73,78-79 BUILD.IDEAS SEPT. '64. pp.2-5. 444 SYDNEY BUILDINGS. p.48 |
| UNIVERSITY OF NEW ENGLAND MASTER PLAN FOR CENTRAL AREA | L. KRISTENSEN | 1963 | 223-226 | | GAB BROCHURE |
| WAGGA TEACHERS COLLEGE RIVERINA | J. NICHOLAS | 1963 | | VARIOUS SMALL PROJECTS FROM 1951-1972 | |
| UNIVERSITY OF NEW ENGLAND SQUASH COURTS | J. PAYNTER | 1963 | 227 | | |
| UNIVERSITY OF NEW ENGLAND DUVAL COLLEGE | I. COLLINS | 1963 | | | |
| UNIVERSITY OF N.S.W. HOUSE FOR MASTER OF BASSER COLLEGE | P. HALL | 1964 | | | |
| RANDWICK TECHNICAL COLLEGE EASTERN SUBURBS | | 1965 | | McCONNELL, SMITH & JOHNSON IN ASSOCIATION | |
| UNIVERSITY OF NEW ENGLAND BOILER HOUSE ACADEMIC SITE | L. KRISTENSEN R. BRYANT | 1965 1971 | 230 | STAGE 1 STAGE 2. NSW CHAPTER RAIA MERIT AWARD 1974 | ARCH.AUST. SEPT. '65. p.90. ARCH.AUST. FEB. '75 p.72 |
| UNIVERSITY OF NEW ENGLAND EARLE PAGE COLLEGE | L. REEDMAN | 1965 | 214 | | |
| HORNSBY TECHNICAL COLLEGE | M. ZATORSKI | 1965 | 248-249 | COLLARD CLARKE & JACKSON IN ASSOCIATION | ARCH.AUST. DEC. '68. pp.1100-1102 |
| ST. GEORGE TECHNICAL COLLEGE KOGARAH | K. WOOLLEY | 1965 | 244-247 | | 444 SYDNEY BUILDINGS. p.103 |

| BUILDING | DESIGN ARCHITECT | DOCUMENTATION DATE | ILLUSTRATION NO | COMMENTS | REFERENCE SOURCE |
|--|-----------------------|--------------------|-----------------|--|--|
| TERTIARY BUILDINGS & TECHNICAL COLLEGES CONT. | | | | | |
| BELMONT TECHNICAL COLLEGE | M. ZATORSKI | 1965 | | | |
| UNIVERSITY OF NEW ENGLAND ARTS THEATRE & TEACHING BLOCK | L. REEDMAN | 1966 | 231-234 | | |
| MACQUARIE UNIVERSITY LIBRARY | P. HALL | 1966 | 180 | STAGE 1 | |
| UNIVERSITY OF N.S.W. INTERNATIONAL HOUSE | P. HALL | 1966 | 181 | | |
| COWRA TECHNICAL COLLEGE | R. TANNER | 1967 | | | |
| UNIVERSITY OF NEW ENGLAND BOOLOOMINGAH EXTENSIONS | L. REEDMAN | 1967 | | | |
| UNIVERSITY OF NEW ENGLAND RESIDENTIAL DEVELOPMENT TO NORTH | D. BORAM R. BRYANT | 1968 | 235-239 | PROPOSAL ONLY | GAB BROCHURE ARCH.AUST. OCT. '72. p.569 |
| UNIVERSITY OF NEW ENGLAND RURAL SCIENCE BUILDING:- | | | | | |
| PHYSIOLOGY | D. BORAM | 1968 | 229 | | |
| AGRONOMY | D. BORAM | 1968 | 228 | | |
| N.S.W. INSTITUTE OF TECHNOLOGY | M. DYSART | 1968 | 253-258 | | GAB BROCHURE, BLDG IDEAS MAR. '67. p.7. PUBLIC WORKS DEPT. REVIEW '76. p.13 |
| NEWCASTLE COLLEGE OF ADVANCED EDUCATION | J. MCKINNEY | 1968 | 182-188 | IESA MERITORIOUS LIGHTING AWARD FOR INDUSTRIAL ARTS BUILDING 1970 | ARCH.AUST. JUNE '71. pp.436-440 |
| GOULBURN TEACHERS COLLEGE | J. KINSTLER | 1968 | 189-191 | | ARCH.AUST. JUNE '71. pp.430-435 |
| WILLIAM BALMAIN TEACHERS COLLEGE LATER KU-RING-GAI COLLEGE OF ADVANCED EDUCATION | D. TURNER | 1968 | 192-197 | RAIA NSW CHAPTER MERIT AWARD FOR STAGE 1 1972 IESA LIGHTING AWARD '72. HON. MENTION FOR EXCELLENCE IN CONCRETE CONC. INST. OF AUST. '73. RAIA NSW CHAPTER SULMAN AWARD '78 | ARCH.AUST. JUNE '71. pp.424-429 N.S.W. BUILDER FEB. '73. pp.4-14 ARCH.AUST. JAN. '79. pp.19-23 |
| GOSFORD TECHNICAL COLLEGE | R. TANNER | 1969 | | | |
| LISMORE TECHNICAL COLLEGE | - | 1969 | | | |

| BUILDING | DESIGN ARCHITECT | DOCUMENTATION DATE | ILLUSTRATION NO | COMMENTS | REFERENCE SOURCE |
|--|-------------------------|--------------------|-----------------|--|---|
| TERTIARY BUILDINGS & TECHNICAL COLLEGES CONT. | | | | | |
| MITCHELL COLLEGE OF ADVANCED EDUCATION, BATHURST | | | | | |
| DINING HALL & LIBRARY | J. MCKINNEY | 1969 | 199-200 | | |
| RESIDENTIAL VILLAGE | J. MCKINNEY | 1971 | | | |
| LECTURE HALL COMPLEX | R. DINHAM | 1973 | 199-200 | | |
| RESIDENCE A. | | 1970 | 198 | RAIA NSW CHAPTER SULMAN AWARD '70 EDWARDS MADIGAN TORZILLO & PTS. JOINT ARCHITECTS | ARCH. TODAY. JUNE '71. pp.11-13 THE AUSTRALIAN NEWSPAPER 14TH MAY '71 AND 21ST MAY '71 |
| SYDNEY KINDERGARTEN TEACHERS' COLLEGE WAVERLEY ADMINISTRATION AND TEACHING BLOCK | G.P. WEBBER | 1970 | | | |
| BANKSTOWN TECHNICAL COLLEGE | P. STEPHENS | 1970 | 260 | | |
| DAPTO TECHNICAL COLLEGE | J. LOWING | 1970 | 261-262 | STANDARD LIBRARY ADDITIONS 1974 | |
| DENILIQUIN TECHNICAL COLLEGE | P. STEPHENS | 1970 | | | |
| CAMPBELLTOWN TRAINING SCHOOL FOR GIRLS | E.A. RALPH | 1970 | | | |
| UNIVERSITY OF NEW ENGLAND DIXSON LIBRARY STAGE 2 | D. BORAM | 1970 | 240 | | |
| ORANGE AGRICULTURAL COLLEGE | D. COLEMAN | 1970 | 201-204 | | GAB BROCHURE |
| UNIVERSITY OF NEW ENGLAND SIXTH COLLEGE DRUMMOND DINING HALL & RESIDENCE | B. McDONALD | 1971 | | | |
| UNIVERSITY OF NEW ENGLAND ANIMAL LIVESTOCK HUSBANDRY | D. BORAM | 1971 | 241 | | |
| SYDNEY TECHNICAL COLLEGE APPLIED SCIENCE | P. STEPHENS | 1971 | 259 | | |
| BROOKVALE TECHNICAL COLLEGE | R. TANNER | 1972 | | | |
| N.S.W. COLLEGE PARAMEDICAL STUDIES "CUMBERLAND" | D. TURNER R. CONNORS | 1973 | 205 | SCHEME LATER ALTERED | |
| SHELL HARBOUR DENTAL NURSES TRAINING SCHOOL | A. HAMPTON | 1973 | 207 | IN ASSOCIATION WITH DEVINE ERBY & MAZLIN | |

| BUILDING | DESIGN ARCHITECT | DOCUMENTATION DATE | ILLUSTRATION NO | COMMENTS | REFERENCE SOURCE |
|--|------------------|--------------------|-----------------|--|---|
| TERTIARY BUILDINGS & TECHNICAL COLLEGES CONT. | | | | | |
| LIVERPOOL TECHNICAL COLLEGE | R. TANNER | 1973 | | PREVIOUSLY LIVERPOOL HOSPITAL ADDITIONS IN 1968 BY G. WEILLERMAN | |
| DENTAL NURSES TRAINING CENTRE MARSDEN - PARRAMATTA | - | 1973 | 208 | | |
| FOOD TRAINING SCHOOL - RYDE | A. ANDERSONS | 1973 | 209-211 | DESIGN UNDER FARMER, DOCUMENTATION UNDER WEBBER R.A.I.A. N.S.W. CHAPTER MERIT AWARD '79. | DEPT. OF PUBLIC WORKS REVIEW 1978. p.16, 17 |

| BUILDING | DESIGN ARCHITECT | DOCUMENTATION DATE | ILLUSTRATION NO | COMMENTS | REFERENCE SOURCE |
|--|-----------------------------|--------------------|-----------------|---|--|
| SPECIAL PROJECTS | | | | | |
| TALLAWARRA POWER STATION | E.H. FARMER | c1949 | 7 | | |
| GOVERNMENT PRINTING OFFICE ULTIMO | T. BARFORD | 1952 | | | |
| ST. MARGARET'S CHAPEL | K. WOOLLEY | 1956 | 143-144 | | ARCH.AUST. SEPT. '59. pp.77-79 444 SYDNEY BUILDINGS. p.29 |
| AUSTRALIAN MUSEUM SYDNEY ADDITIONS | J. VAN DER STEEN | 1958 | 6 | | |
| LIDCOMBE STATE HOSPITAL CHAPEL & HALL | K. WOOLLEY | 1960 | 263-265 | | ARCH.AUST. SEPT. '65. p.87 444 SYDNEY BUILDINGS. p.89 |
| BROUGHTON HALL PSYCHIATRIC CLINIC | M. DYSART | 1962 | 266-268 | | ARCH.AUST. SEPT. '65. p.86 & FEB. '73. p.91 BLDG.IDEAS. DEC. '63. pp.8-11 444 SYDNEY BUILDINGS. p.83 |
| ST. IVES DRIVING SCHOOL | J. NICHOLAS | 1964 | | VARIOUS ADDITIONS TO 1974 | |
| PARLIAMENT HOUSE | G.P. WEBBER A. ANDERSONS | 1964 | 269-273 | PROPOSAL 1974 | GAB BROCHURE |
| PARRAMATTA TRAINING CENTRE FOR RETARDED CHILDREN (MARSDEN REHABILITATION CENTRE, WESTMEAD) | L. KRISTENSEN | 1966 | 274-277 | NSW CHAPTER RAI A SULMAN AWARD 1969 STAGE 2 1974 | GAB BROCHURE ARCH IN AUST AUG. '71. pp.602-607 444 SYDNEY BUILDINGS. p.88 |
| PARRAMATTA CENTRAL BOILER HOUSE | C. STILL | c1967 | 278-279 | | |
| KURRI KURRI BOYS HOME 'YAWARRA' | - | 1967 | | | |
| TARONGA PARK ZOO BIRD HOUSE | D. COLEMAN | 1968-1969 | | | |
| REPTILE HOUSE | D. COLEMAN | 1969 | | | RAIA NSW CHAPTER MERIT AWARD FOR ENVIRONMENTAL DESIGN 1973 LANDSCAPE DESIGN BY A. CORREY |
| FOOD PREP BLDG STAGE 1 | D. COLEMAN | 1972 | | | ARCH.AUST. DEC. '70. pp.843-866. STUDY TOUR REPORT GAB |
| STAGE 2 | D. CHURCHES | | | | |
| NOCTURNAL BLDG | D. COLEMAN | 1970 | | | |
| KOALA BUILDING | D. COLEMAN | 1970 | 282-283 | | |
| KANGAROO AREA STAGE 1 | D. COLEMAN | 1969 | | | |
| STAGE 2 | D. CHURCHES | | | | |
| AVIARY | D. COLEMAN & G.P. WEBBER | 1969 | 280 | | |
| PLATYPUS | D. COLEMAN & G.P. WEBBER | 1968 | 281 | | |
| VET. QUARANTEN STAGE 1 | D. COLEMAN | 1969 | | | |
| LONG BAY JAIL (KATINGAL) | D. MOLINE | 1968 | | | |
| CESSNOCK CORRECTIVE CENTRE | D. MOLINE | 1968 | | | |

| BUILDING | DESIGN ARCHITECT | DOCUMENTATION DATE | ILLUSTRATION NO | COMMENTS | REFERENCE SOURCE |
|---|------------------|--------------------|-----------------|---|---|
| SPECIAL PROJECTS CONT. | | | | | |
| GOVERNMENT STORE BUILDING | - | 1968 | | H. SEIDLER IN ASSOCIATION | ARCH.AUST. APRIL '72. pp.184-193 |
| ART GALLERY OF N.S.W. ADDITIONS | A. ANDERSONS | 1969 | 284-287 | IESA MERIT LIGHTING AWARD 1972. NSW CHAPTER RAIA MERIT AWARD 1973. CIVIC DESIGN AWARD SYDNEY CITY COUNCIL 1973 NSW CHAPTER RAIA SULMAN AWARD 1975 | ARCH.AUST. AUG. '73. pp.68-71 |
| CLAIRVAUX CHILD WELFARE KATOOMBA | E.A. RALPH | 1969 | | LANDSCAPE BY A. CORREY 1971 | BUILD. IDEAS JUNE '76. p.14 |
| CENTRAL WEST GROUP LAUNDRY, ORANGE | W. KINGSTON | 1969 | 288-289 | | |
| FLEMINGTON MARKETS | C. STILL | 1969 | 290-293 | | DEPT. OF PUBLIC WORKS REVIEW '76. p.8. |
| BICENTENARY DECORATIONS SYDNEY | R. BONTHORNE | 1970 | | | |
| METHODIST NURSING SERVICE HOME MENINDEE | S. BISHOP | 1970 | | | |
| STATE BRICKWORKS | C. STILL | 1970 | 295 | NSW CHAPTER RAIA MERIT AWARD 1973 | |
| ROYAL BOTANICAL GARDENS GLASS HOUSE | G. ROTHWELL | 1971 | 294 | | |
| PARRAMATTA LINEN SERVICE | E. CLAIRE | 1972 | | THOMSON & GLEN-DENNING IN ASSOCIATION | BLDG. MATS. & EQUIPT. AUG-SEPT. '77. p.34-6 |
| BURRENDONG NATIONAL FITNESS CAMP | J. LOWING | 1973 | 296 | THE ONLY TOTALLY NEW NATIONAL FITNESS CAMP BUILT IN THE PERIOD UNDER REVIEW | |
| PARLIAMENT HOUSE | A. ANDERSONS | POST EHF | 298 | | THE SYDNEY MORNING HERALD. MAY 30TH '60. p.3 (EARLIER PROPOSAL) BLDG.IDEAS JUNE '76. p.13 |
| STATE ARCHIVES BUILDING | R. BONTHORNE | 1973 | 297 | | |

| BUILDING | DESIGN ARCHITECT | DOCUMENTATION DATE | COMMENTS | REFERENCE SOURCE |
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| | | | | ILLUSTRATION NO |
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| MACQUARIE FIELDS HOUSE | K. WOOLLEY | c1962 | | 444 SYDNEY BUILDINGS. p.115 |
| ST. THOMAS PORT MACQUARIE | D. COLEMAN | FROM c1964 | | |
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APPENDIX NO. 11

STRUCTURE OF THE DEPARTMENT OF PUBLIC WORKS AND FARMER'S ATTITUDE TO IT.

Farmer compiled the following notes for the author indicating the lines of authority within the N.S.W. Department of Public Works. He rightly considered that the relationship of the Government Architect with the Department of Public Works should be understood. He wrote:

*"...Firstly there is the Minister of Works - the Department is headed by a Director, next in responsibility are the Chief Engineer, Deputy Director Administration and the Government Architect. All three rank as Deputy Directors. The Chief Engineer headed a number of small Branches (e.g. Water Supply, Bridges, Harbours and Rivers etc.), but the scope, value and complexity of this work was far less than that of the Government Architect which is why I felt that it should be a separate Department seeing that it had a staff of well over one thousand people, bigger than many Departments."**

Farmer then revealed his lack of patience with the bureaucratic procedures. He said:

"...Officially everything was supposed to go through the Director to the Minister in true bureaucratic manner, but it didn't quite work that way, especially with intelligent and forceful Ministers like Sir Davis Hughes. He and his colleagues would want to see me personally and in fact some of them would come to my office to do so. Most irregular."

Farmer had mentioned previously to the author that Cobden Parkes had once said to him *"...you deal directly with Ministers, don't you - I was never allowed to do that."*

Farmer had by persuasion and perseverance developed this direct contact with his Ministers. He said to the author:

* Refer also to page 199.

"...it was sometimes a nerve-racking business, but it was much better for me to get first hand knowledge of the Ministers' problems and for them to know what I was trying to do."

Reverting to Farmer's comments about the bureaucratic environment, he went on to say:

"...I'm afraid I resented being forced into, so to say, the procrustean bed of Department administration. There was a Directors' Board every fortnight, consisting of all Branch Heads. It was a waste of time for me and I had no interest in what the Engineering Branches were up to, nor they in my work. Then there was a quasi-legal affair called the Board of Advice and Reference which reported on all tenders to the Department and could act as a court in cases of disputes by Local Government Bodies and contractors to them where Government grants were concerned. Again I had much more to do of importance than this. The work could well have been done elsewhere and not by us."

APPENDIX NO. 12.

LIST OF COMMITTEES ON WHICH THE GOVERNMENT ARCHITECT SERVED.

Farmer said that he served, or was represented, on thirty six committees and that the following list represented the more important ones. The range of subjects revealed by this list demonstrates the wide influence which the Government Architect can exert.

Architectural Advisory Council to National Trust (N.S.W.)
 Architectural Diploma Course Advisory Committee.
 Council School of Architecture and Building Institute of Technology.
 Central Laundry Planning Committee.
 Councillor National Trust of Australia (nominated by R.A.I.A.)
 Heights of Buildings Committee.
 Hospitals Research and Development Committee.
 National Committee of Rationalised Building.
 National Parks Advisory Committee of Architects.
 Opera House Opening Celebrations Citizens Committee.
 Public Buildings Advisory Committee.
 Planning Committee for both Bicentenary Celebrations and Papal Visit, etc.
 Red Cross Advisory Committee.
 Royal Prince Alfred Hospital Planning Committee.
 Schools Research and Development Committee.
 Sterilizing Standard Committee.
 Safety in Laboratories Committee.
 State X-Ray Committee.
 Technical Education Advisory Committee.
 Technical Education Building and Grounds Committee.
 Theatres and Public Halls Committee for revision of Regulations.
 Taronga Zoological Park Planning Committee.
 Technical Education Council.
 University of New England Building and Grounds Committee.
 Westmead Hospital Executive Planning Committee.

APPENDIX NO. 13

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