

# Register of Significant Twentieth Century Architecture

**RSTCA No:** R127

**Name of Place:** Callam Offices

**Other/Former Names:**

**Address/Location:** Callam & Easty Streets WODEN TOWN CENTRE

Block 29 Section 80 of Phillip

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Listing Status:	Registered	Other Heritage Listings:	
Date of Listing:	2005	Level of Significance:	Local
Citation Revision No:	0	Category:	Civic
Citation Revision Date:		Style:	Late Twentieth-Century Structuralist

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Date of Design: 1973 - 1977

Designer: John Andrews International

Construction Period: 1977 - 1981

Client/Owner/Lessee: NCDC

Date of Additions:

Builder:

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## STATEMENT OF SIGNIFICANCE:

The Callam Offices has an important association with the development of new town centres in Canberra by the National Capital Development Commission, in particular with the provision of large-scale office buildings to accommodate substantial numbers of public servants as a result of the expanding federal public service in the early 1970.

The office complex is a well-preserved example of a 1970's designed office building. The open setting is distinctive of the modern style and the planning intentions of the National Capital Development Commission. The setting and the architecture combine to produce a building of integrity, illustrative of modern architecture.

The Callam Offices is one of two examples of a large government office building designed by John Andrews in Canberra, one of Australia's internationally noted architects.

The office complex demonstrates an architectural theme of modern architecture with planning of modular offices incorporating a building system with repetitive distribution of office pods, service zones and connecting pedestrian links. This is combined with floors suspended from above incorporating a structural system of central columns extending beyond the roof level to support encased high tensile steel suspension cables. This approach was innovative at that time in Australia

The Callam Offices represents the ideal of innovative modern architecture and planning; clean, functional and well sited. As a design in the Late Twentieth-Century Structuralist style of architecture it is of special interest in being one of the earliest designed in Canberra of this modern ideal by one of Australia's important architects.

The place has been acknowledged for many years as a distinctive example of architecture by professional bodies and architecture critics, and has been included in publications about significant architecture. It fulfils its original design purpose and its planning remains innovative and sound.

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## **DESCRIPTION**

The Callam Office complex was designed by John Andrews International for the National Capital Development Commission (NCDC). Design work began in 1973, (working drawings dated 1977), construction being completed in 1981 1. The building is an example of the Late Twentieth-Century Structuralist Style (1960-) with its compression mast(s), (thickened) cable stays forming triangular steel supports to roof (and floors), reinforced-concrete support structure and cover to anchorage of post tensioned cables. 2.

Callam Offices are located on the eastern edge of the Woden Town Centre between Callam and Easty Streets on a relatively flat flood-susceptible elongated site with a concrete lined stormwater channel extending directly along the western edge and under part of the western most office building. Edison Park and the Woden Cemetery are to the east of the site.

### **The Original Design for the 'Woden Government Offices'**

The original 1975 office complex proposal was for 26 three-storey octagonal office pods on a 5.26 hectare (13 acre) site, elevated above the flood plain with three separated functional spaces; the offices, utility service zones and circulation connections. The architecture of the office pods was a clearly expressed "system" all set out on a combined 12m and 9m plan controlling grid. 3

The complex was planned as a continuous element extending north and south along Callam Street between the Woden Town Centre to the west and what was intended to be parkland and new housing adjacent to the Woden Cemetery to the east. The complex was to be connected back to the civic square via an elevated public walkway along the east/west axis of the town centre plan. The level of the walkway was raised to be at the same level as the civic square. Approaching the complex from the civic square the walkway spanned across Callam Street and then split in two directions at 45 degrees forming the two main access routes to the office pods. At the termination of the single main walkway a ramp lead on down to a large, landscaped, central public garden.

Two three-storey, elongated carpark buildings and two nine-storey octagonal office buildings were to be located symmetrically along Callam Street.

The intended overall plan formed a symmetrical geometric plan in the form of an inverted "W".

Each 30m wide office pod was to be indirectly linked by expressed, wide, elevated concrete continuous walkways for the public at the second (mid) level, located between the pods. There were to be smaller separate "tube-like" enclosed elevated links for the office workers running perpendicular to the wider public walkways at the first and third levels, as well as full width transition spaces between each paired pod also at the first and third levels; all set out on the diagonal and also located between the pods. In discussing the design, Associate Professor Jennifer Taylor and John Andrews state, "The hierarchical differences in the public through-circulation and the private office connections show clearly." 4

At the first and third levels the full width transition spaces were to allow for variations in department sizes on the one level utilizing two pods. At the mid-level the transition spaces provided the public lobby off the continuous through walkway that linked to the offices. The lobby was a glazed circular space within the rectangular transition space leaving corner voids between levels.

The utility service zones, including toilets, tearooms, cleaner's stores and vertical circulation, were placed in attached separate circular service tower structures between the pods. This provided the access to the enclosed walkways as well as a connection between pods for the office workers in the opposite direction. Each office pod had direct access to the toilets while the location allowed the toilets to be naturally lit and to have views to the outside.

Combined circular lift and stair well towers were placed centrally between each group of four pods, linked back to the pods along the covered walkways via the circular service towers at the first and third levels. The public walkway extended through the towers at the mid-level perpendicular to the office workers' covered walkways.

Vehicle parking was to be located beneath the pods.

### **Woden TAFE & Subsequent Callam Offices**

Between 1977 and 1981 three of the office pods were constructed for the Woden Tertiary and Further Education (TAFE) facility, but the building's present use is as it was first intended, as offices for public servants. 5

The complex as constructed includes one transition space; one central circular lift and stair well tower; three circular service towers; two circular concrete fire-stair towers; one open link lobby; one mid-level open walkway either side of the central lift and stair tower, and two enclosed elevated links either side of the central lift and stair tower.

The separate circular concrete fire-stair towers to the southwest and an open link lobby to the northeast were attached along short links to the pods where a circular service tower and transition space would have been located, respectively, if the original extensive scheme was constructed, but in this 'incomplete' complex were not required.

The main entry to the building is via a lightweight glazed ground floor link and entry lobby located to the northeast of the transition space below the mid-level walkway. The lobby includes a lift and storage space. 6

The "space age" repetitive striking form of the pods clearly expresses the structural system. The waffle slab concrete floors of each three-storey pod are expressed on the façade and are supported in the central floor zone by four concrete columns that extend through to well above the roof forming compression masts. The concrete columns are located well in from the perimeter to form both a central support to each level and, above the roof level to support the thickened suspension cables that extend diagonally out to the perimeter in a triangular form to support the eight perimeter corner suspension columns. Each mast supports two perimeter columns and is tied and braced back to the other three central columns. The anchorage of the post-tensioned cables is expressed at the junction of the suspension members at roof level. The suspension cables, suspension columns and stays are constructed with high tensile steel cables encased in grout filled circular hollow steel sections.

The reduced diameter of the perimeter suspension columns as they extend down the façades to the lower floor level expresses their structural function where the load carried is reduced at each level.

The façades of the offices are fully glazed from floor to ceiling between the exposed slab edge beams and are shaded to the north, east and west by stainless steel framed glazing screens. Each blade of the screen is tilted so that about 50% of the screen is open letting in some direct daylight. This shading system was developed by John Andrews' firm for the American Express Tower in Sydney, 1976, however, the glazing on the tower was polycarbonate rather than glass as it is on the Callam offices. 7

The offices have particleboard false floors with a 700mm services zone.

The covered walkways are glazed with curved acrylic in a light steel frame. The soffits to the links and towers are curved fibre sheet.

Internally the office areas are a combination of open plan and partitioned offices.

A timber and steel bridge extends across the stormwater channel. This was originally a temporary structure. 8 Steel security fencing encloses car parking under much of the offices.

Located below ground level, between the four structural columns of the two eastern 'pods', are two circular concrete hot water storage tanks of about 250 cubic metres volume each. These were part of the air-conditioning system.

Two items impacted on the construction cost of the works, one was a change to the brief and the other was related to the foundations. The brief was altered to include air conditioning that required the two large storage tanks for heated water transfer. The foundations had been inspected when the 1975 Woden Offices were designed and the footings were documented accordingly. During the period between that design and the construction of the Woden TAFE College large amounts of fill had been placed on the site. This information was not conveyed to the consultants by the NCDC, and it was not until site excavation began, once the contract had been let, that it was revealed additional site works were necessary. 9

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## CONDITION AND INTEGRITY

The Callam Offices are in good condition externally and mature trees around the site add to the aesthetic quality of the complex.

### Design Comments

The following design features are of additional significance: the open public walkways and covered office worker walkways; the large areas of glass and glass shading devices; the service towers and lift tower; the transition spaces; the exposed waffle slab soffits and open ground level expressing the structure; original detailing and finishes.

The Callam Offices can be compared and contrasted with Guardian House (former Woden Food Services Building), Woden, designed by Ian McKay and Partners and constructed in 1970. (The comparison and contrast with places of a similar type will provide the necessary context and depth to assist in analysing the significance of the offices.)

Both buildings display the structural materials and demonstrate “a determination to get ‘the most from the least’ from the structural system,” but the materials used contrast. The Callam Offices demonstrate the use of heavy materials and space-age aesthetics floating above the site while Guardian House utilizes lightweight mostly natural materials and a crafted aesthetic to dramatic affect. 10

The structural system, where the floors are hung from above using suspension columns, is very rare in Australia. One of the few examples where suspension columns have been used to partially support floors in an office building, that is comparable to the Callam Offices, is the Cameron Offices, Belconnen, constructed being completed in 1976, also designed by John Andrews International. Andrews used a similar system to support the southern side of each office wing for the Cameron Offices where each level of offices stepped forward of the level below. At Cameron the suspension columns supporting each floor extend down from large gallows beams that span across the landscaped courtyards and are in turn supported by the preceding office structure and an isolated central column within the courtyard. 11

Other significant examples of the Late Twentieth-Century Structuralist style in Canberra are the Shine Dome, Acton, 1958, by Grounds Romberg & Boyd; Canberra Stadium, 1977, and Bruce Indoor Arena, 1981, Bruce, both by Philip Cox & Partners. 12

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## BACKGROUND AND HISTORY

The ‘new town’ development and associated office development such as the Callam Offices, were an integral part of the creation and planning of Canberra. As Paul Reid states, “The first three districts, Majura, Belconnen and Woden, were sited respectively on the outside of Griffin’s ‘local mountains’...combined into a new town with a population of between 60,000 to 100,000. Each unit was inwardly focused to shops and work places...” 13

The growth of Canberra in the latter half of the 20<sup>th</sup> century resulted in the development of the “Y Plan” by the NCDC and is evident in the development of Woden and Belconnen in the 1960s and 1970s; Majura has not been developed, however Tuggeranong and Gungahlin were developed in the 1980’s and 1990’s. These new town centres were planned to cater for the increase in housing and government office space required to accommodate the expanding public service and associated services.

The suburb of Phillip, where the Woden Town Centre is located, began development in 1966. 14

The cruciform urban plan of the Woden Town Centre, master planned by the NCDC in 1964 15, has a north/south lineal axis, more dominant today than originally intended, with development that stretches from the south end large indoor shopping mall, Woden Plaza, and associated car-parking facilities, across the civic square, which is surrounded by commercial buildings including Canberra’s tallest office building, Woden Tower, to the north where various multi storeyed public service buildings are situated. The east/west axis, which is less obvious today, extends across Callam Street from the Callam Offices to the civic square and community facilities to the west.

The NCDC chose John Andrews as the architect, mainly on the demonstrated ability shown by the firm in its design for the Cameron Offices in Belconnen, construction being completed in 1976. 16. Andrews felt that the design for large office complexes in Canberra would best be met with an intensity of activity along pedestrian routes. The great horizontal spread of his designs was intended to bring a new dimension to the new town centres. Andrews wished to create buildings suited to Australian conditions; something that he believed had not been achieved. 17

The Callam Offices were the last major office building complex to be planned in Woden for the NCDC; originally intended to form a major part of the town centre plan in which the aim was to provide a pedestrian oriented town centre. Callam Offices was originally designed to accommodate 6,000 public servants and construction was to begin in 1975, however, the Federal Labour Government cut funding to most government projects and the development was cancelled. In 1977, the NCDC decided to build three of the pods to house the Woden TAFE College. 18

The structural engineer was Ove Arup & Partners and the builder was Max Cooper. 19

In describing the Woden TAFE College Associate Professor Jennifer Taylor states, "It is an uncompromising but totally consistent building with a 'futuristic' imagery that relates to the Archigram projects of the 1960s." 20 Andrew's may have been aware of the Archigram Montreal Tower project, 1967, by Peter Cook, where the three low level structures have trussed and space framed structure while the whole is raised over the St Lawrence River. 21

The site planning may have been influenced by Walter Jonas' "Intrapolis", 1966, where the cone shaped residential units are laid out along a 45 degree radiating axis while the whole is linked to a more regular urban space via a major axis across to the side. 22.

The Pritzker Architecture Prize winning architect Kevin Roche's Union Carbide World Headquarters, Danbury, Connecticut, USA, constructed between 1976-82, designed around the same period as the Callam Offices, is a vast complex of office clusters set along the outer side of massive parking facilities with a central glass roofed entry lobby. The clusters or pods are raised above ground level and linked with elevated covered walkways. The facades and structural system are relatively conservative in design; the facades have simple ribbon glazing and horizontal glass shading hoods in aluminium framing while the structure is a simple load-bearing system of cantilevering slabs supported on circular concrete columns. 23

The idea of suspending the structure from a central support above the roof level can be seen in the "Dymaxion House" concepts of Richard Buckminster Fuller, 1927, his literal 'machine for living'. This concept was an engineering solution where the structure was an assemblage of mechanical services in conjunction with living spaces. The term Dymaxion stood for 'dynamic plus maximum efficiency'. 24

It is clear from the photomontage, prepared in 1973 to explain the complete Woden Office Project, that the offices were to have two quite distinct settings. The setting from the town centre side (west), shows the commercial offices and car parking structures were to have a strong urban edge along Callam Street. The east side shows a spacious park setting with a small number of trees close to the pods, overlooked from the offices. 25

The Callam Offices is one of two large-scale office complexes designed by John Andrews International in Canberra, the other being the Cameron Offices at Belconnen, designed in 1972, most of which is under threat of demolition. They are two of five such complexes in Canberra commissioned by the NCDC in the 1960's and 1970's, the others being the Edmund Barton Offices, Barton, 1974, by Harry Seidler and Associates, the McLachlan Offices, Barton, 1980 by Daryl Jackson Evan Walker Architects, and the Benjamin Offices, Belconnen, 1981, by McConnel Smith & Johnson. A large part of the Benjamin Offices has been demolished. 26

John Andrews confirmed that the Callam Offices are considered by him as a significant work in his career. 27

The "free form" horizontal walk-up design of four of these complexes was a departure from the normal tower office design of the time and can be contrasted with the more reserved rectilinear form of the Edmund Barton Offices which relies more on its lifts for vertical circulation.

Even though it remains incomplete, its urban aspirations having not been fulfilled, it is one of the two most important buildings in the Woden Town Centre, the other being Guardian House, (Former Food Services Building), which is to be demolished. 28

When the TAFE College vacated the buildings the interior was fitted to accommodate offices and occupied by the ACT Planning Authority and later other ACT Government Departments.

### **John Hamilton Andrews AO LFRAIA (1933-)**

John Andrews returned to Australia in 1969 after studying at Harvard University and carrying on his own practice in Toronto, Canada from 1961-69, and teaching at the University of Toronto. He designed notable buildings in Canada and USA including Scarborough College, Toronto; Harvard Graduate School of Design, Boston; the Miami Passenger Terminal, and the Intelsat Headquarters Building in Washington, DC. 29

The Cameron Offices, Belconnen, 1976, is Andrews' major work in Canberra and Australia. His other major buildings in Canberra are the Student Residence Group 2 at the University of Canberra, 1973, and student residential housing at Toad Hall ANU, 1977. 30

His other notable Australian buildings include the American Express Tower, (formerly King George Tower), Sydney (1976), Darling Harbour Convention Centre, Sydney, (1990), and various other convention centres, university buildings and residential works.

Among his many international awards are the Centennial Medal and the Massey Medal for Architecture in Canada, 1967; the Arnold Brunner memorial Award in Architecture from the American Academy and the Institute of Arts and Letters, 1971; and the American Institute of Architects Honor Award, 1973. He was made a member of the Order of Australia in 1981; received the Advance Australia Award in 1982; won the Sulman Medal in 1983 and was awarded a Centenary Medal in 2001. 31

John Andrews was a committee member for the judging of the Parliament House of Australia and was awarded the RAI Gold Medal in 1980. Associate Professor Jennifer Taylor states, "His presence in this country has provided a stimulating influence for Australian architecture." 32

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#### **ANALYSIS AGAINST THE CRITERIA SPECIFIED IN SCHEDULE 2 OF THE LAND (PLANNING AND ENVIRONMENT) ACT 1991:**

##### **(i) A place which demonstrates a high degree of technical and/or creative achievement, by showing qualities of innovation or departure or representing a new achievement of its time;**

The creativity of the architect John Andrews is apparent in the design of the Callam Offices, 1975, which was innovative when compared with other office buildings built in Canberra and Australia.

The design of the office 'pods' where each floor perimeter is suspended from above incorporating a structural system of central support columns extending beyond the roof level to support encased high tensile steel suspension cables that extend diagonally out to the perimeter corner suspension columns was innovative at that time in Australia and demonstrates a high degree of creative achievement.

The Callam Offices was the first example, and is the only known example, in Australia where the complete perimeter structure of an office building is supported by suspension cables. The Cameron Offices, Belconnen, by John Andrews was designed prior to this office complex and its structure is partially supported by suspension cables.

The design of the hexagonal modular offices incorporating a building system rather than a finite building with its repetitive distribution of office pods, service zones and connecting pedestrian links, with the segregation of public and staff circulation paths, demonstrated a high degree of creative achievement.

The design treatment of the fully glazed facades with their structural frames and integrated sunshields are carefully composed to give an articulated, balanced pattern, and maximise the occupant's outlook and facilitate natural passive climate control..

The building is one of two office complexes in Canberra designed by architect John Andrews in the same period. The other, built slightly earlier, is the Cameron Offices in Belconnen, construction completed in 1976. It is innovative in its planning, it has office fingers with landscaped courtyards extending out from a long mall containing pedestrian circulation and further offices.

The innovative qualities of the Callam Offices have been acknowledged in national publications including Associate Professor Jennifer Taylor's *Australian Architecture Since 1960* and John Andrews' and Associate Professor Jennifer Taylor's, *Architecture; a performing art*, 1982.

##### **(ii) A place which exhibits outstanding design or aesthetic qualities valued by the community or a cultural group;**

The Callam Offices is a very good example of the Late Twentieth-Century Structuralist Style (1960-). The building exhibits many of the particular architectural elements specific to the style, including compression mast(s), (thickened) cable stays forming triangular steel supports to roof (and floors), reinforced-concrete support structure and cover to anchorage of post tensioned cables. It is notable for displaying the high design skill of the architect John Andrews.

The following design features are of additional significance; the walkways and links; the large areas of glass and glass shading devices; the towers; the exposed waffle slab soffits and open ground level expressing the structure; original finishes and details.

The Callam Offices was carefully planned to create a good spatial relationship between the buildings, to

express a delight in the structural capabilities of its materials and to achieve a form that appears to float above the site in an urban context. The buildings are remarkably intact externally and mature trees around the site add to the aesthetic quality of the group.

The office complex is included in the RAI ACT Chapter Register of Significant Twentieth-Century Architecture being valued by the RAI as a very good example of the style of architecture by a leading internationally renowned architect.

The Callam Offices can be compared with another 'structuralist' buildings in Woden, also considered by the RAI to be of significance; the nearby Guardian House, 1970, by Ian McKay and Partners.

The five examples of large low-level office complexes in Canberra that most closely compare with the Callam Offices (each commissioned by the NCDC in the 1960's and 1970's) are the Cameron Offices at Belconnen, 1976; also by John Andrews International; the Edmund Barton Offices, Barton, 1974, by Harry Seidler and Associates, (the RAI considers that both of these are significant); the McLachlan Offices, Barton, 1980 by Daryl Jackson Evan Walker Architects, and the Benjamin Offices, Belconnen, 1981, by McConnel Smith & Johnson. All of these are examples of the Late Twentieth-Century International style, with the Cameron Offices also having elements of the Late Twentieth-Century Brutalist style.

**(iii) A place which demonstrates a distinct way of life, taste, tradition, religion, land use, custom, process, design or function which is no longer practised, is in danger of being lost, or is of exceptional interest;**

The Callam Offices is particularly interesting as it demonstrates an important time in Canberra's history: a time of great expansion, in the construction of large office complexes to house government departments in new town centres in the 1970s under the control of the National Capital Development Commission.

The design of the offices reflected a departure from the normal tower office design of the time to a "free form" horizontal walk-up design.

The planning of the offices is of exceptional interest in its circulation and use of materials. Each office pod is the same and is indirectly linked by continuous walkways for the public at the mid level. There are separate links for the office workers running perpendicular to the public walkways at the first and third levels; all set out on the diagonal. The structural capabilities of materials are used to their full potential where the least amount of material does the most work. These two planning ideals were at the foundation of Andrews' architectural philosophy.

The design of the offices demonstrates an important development in building construction after WWII, by contrast with more prevalent load-bearing construction. Few offices were built in Australia that used high-tensile steel suspension systems.

**(v) A place which is the only known or only comparatively intact example of its type;**

Few office buildings were built that used high-tensile steel suspension systems in Australia, the other known example is the Cameron Offices, Belconnen, 1976, also designed by John Andrews International. The Cameron Offices incorporates a suspension system in part of its structure, supporting the southern side of the office wings. The Callam offices suspension system supports the perimeter of each office 'pod'.

**(vii) A place which has strong or special associations with a person, group, event, development or cultural phase which played a significant part in local or national history;**

The Callam Offices is important for its association with the development of large office complexes to house government departments in new town centres in the 1970s under the control of the National Capital Development Commission.

John Andrews AO LFRAIA. has played a significant role in Australia's cultural history, as well as designing a number of major buildings in North America. He is one of the most important architects of the late twentieth-century in Australia.

John Andrews was awarded the RAI Gold Medal in 1980, an Order of Australia in 1981 and a Centenary Medal in 2001.

The Callam Offices is one of two examples of his office buildings in Canberra. It has a special association with him being specifically confirmed by him as a significant work in his career and referred to in publications about his work.

**(xi) A place which demonstrates a likelihood of providing information which will contribute significantly to a wider understanding of natural or cultural history, by virtue of its use as a research site, teaching site, type locality or benchmark site.**

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The architecture of this office complex is of high educational worth for students of architecture and may contribute to an understanding of late twentieth-century architectural styles. Experiencing heritage buildings enables the visitor to locate the building in its historical and environmental contexts. These experiences readily enable the establishment, understanding and interpretation of the building's heritage value and significance. This office complex is a very good example of mid-twentieth-century modern architecture, in this case an example of the Late Twentieth-Century Structuralist style, based on a delight in structural capabilities of new materials and 'futuristic' imagery. Its innovative planning contributes to its significance and educational heritage.

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- 2 Richard Apperly Robert Irving Peter Reynolds. Identifying Australian Architecture Styles and Terms from 1788 to the Present. Angus and Robertson 1989.
- 3 Compiled from Jennifer Taylor & Working Drawings. Woden College of Technical and Further Education. Opcit. & John Andrews & Jennifer Taylor. Architecture: a performing art. Oxford University Press, Melbourne, 1982.
- 4 John Andrews & Jennifer Taylor. Opcit.
- 5 Working Drawings. Woden College of Technical and Further Education. Opcit
- 6 The lobby and lift were not in the original 1977 scheme and were added later when converted to offices, date not known.
- 7 Conversation with John Andrews.
- 8 Working Drawings. Woden College of Technical and Further Education. Opcit
- 9 Conversation with Warrick Werner, site architect.
- 10 RSTCA.
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- 13 Paul Reid. Canberra following Griffin A Design History of Australia's National Capital National Archives of Australia 2002.
- 14 Canberra Times 7<sup>th</sup> June 2005.
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