Register of Significant Twentieth Century Architecture

of

RSTCA No: R101

Name of Place: Cameron Offices

Other/Former Names:

Address/Location: Chandler Street BELCONNEN TOWN CENTRE

Listing Status:

Date of Listing:

Citation Revision No:

Citation Revision Date:

Other Heritage Listings:

Level of Significance:

Category:

Style:

Section

Date of Design: Designer:

Block

Construction Period: Client/Owner/Lessee:

Date of Additions: Builder:

Statement of Significance

The Cameron Offices, located along Chandler Street Belconnen Town Centre, is an example of significant architecture and an educational resource. The office complex is a very good example of the Late Twentieth-Century International Style (1960-) and the Late Twentieth-Century Brutalist Style (1960-). The design incorporates most of the features which are specific to the styles including:

Late Twentieth-Century International Style (1960-) cubiform overall shape, structural frame expressed, large sheets of glass, and plain, smooth wall surface.

Late Twentieth-Century Brutalist Style (1960-) strong shapes, boldly composed, expressed reinforced-concrete, large areas of blank wall and off-form concrete.

The following design features are of additional significance; the precast post tensioned 'T' floor beams with the integration of the lighting and air conditioning, the landscaped courtyards with native Australian plants and water features, the structural system for the office wing's floors where the Gallows beams support the floors by hanging 'columns', the stepped floors at half levels, overhang of the upper floors for shading to the north, Corbusian (ribbon) window motif, assertive cantilever and lengthy expressed reinforced concrete balustrades along the 'Mall'.

The office complex is Canberra's, and it appears Australia's, first and possibly only true architectural example of "Structuralism" where buildings are integral and contributing elements of an overall urban order rather than separate and individual elements. Although the town plan for Belconnen was later altered during construction of the complex, it still exhibits to a degree this theory making it significant.

The structural system incorporated in the office wings where the floors are supported by columns to the north and are hung from "Gallows" beams to the south is a technically innovative solution. The use of post-tensioned precast concrete for much of the structure was a relatively new building type.

The architecture of this office complex may contribute to the education of designers in their understanding of Late Twentieth-Century Architectural Styles.

John Andrews is recognised as one of Australia's leading architects of the modern movement.

This office complex was his first and is his largest project in Australia. It is one of the two most important buildings designed by him in Australia, the other being The American Express Tower, Sydney.

Description

The Cameron Office complex was designed by John Andrews International for the NCDC starting in 1968 **1** and construction was completed in 1976 **2**. The building is an example of the combination of the Late Twentieth-Century International Style (1960-) with its Cubiform overall shape, structural frame expressed, large sheets of glass, plain, smooth wall surface, and the Late Twentieth-Century Brutalist Style (1960-) with its strong shapes boldly composed, expressed reinforced-concrete, large areas of blank wall and off-form concrete **3**.

Other examples of these styles in Canberra are the Edmund Barton Offices 1974, by Harry Seidler, (International Style), the High Court of Australia 1980 and the National Gallery of Australia 1982, both by Edwards Madigan Torzillo & Briggs (Brutalist Style).

These buildings can be compared and contrasted. "These buildings had in common the display of structural materials and a certain heroic presence but their broader, ideological bases were often diverse. Illustrating polar positions are the social-urban construct of the Cameron Offices and the symbolic, sculptural monument of the High Court of Australia, both of which can be seen to have their roots in Brutalism and ultimately in (Le) Corbusier's concrete architecture." 4

The Cameron Office Complex is more than a building: it is "a varied streetscape of walks, gardens and pavilions. Its triumph lies in the interlocking unity of its concept and the diversity within it." 5

The growth of Canberra from Griffin's plan to the "Y Plan" is evident in the development of Woden and Belconnen (8km from Canberra Civic Centre). These two new town centres were planned to cater for the increase in population and government office space to house the expanding public service and associated services.

The Cameron Offices were the first major buildings to be built in Belconnen. They formed part of the original town plan in which the aim was to provide a relatively compact pedestrian oriented scheme on a north south axis following the slope of the land from housing to the south through the office areas, transport interchange and shopping centre on to the manmade Lake Ginninderra which was to have cultural buildings and housing along its shore.

John Andrews was chosen by Sir John Overall of the NCDC as the architect, mainly on the recommendation of Professor Gordon Stephenson 6. Andrews is an Australian architect whose firm was located in Canada, and who had a professorship in architecture at a Toronto university 7. He returned to Australia specifically to undertake this project 8. Andrews felt that the design "in terms of function, amenity and delight" should not be a group of office towers, as the NCDC proposed, but that the "sense of urbanity that the client sought would best be met with an intensity of activity along the pedestrian routes, and with a mix in the purpose of those using the paths as could be achieved. The great horizontal spread of his design brought a new dimension to the Belconnen central plan." 9 Andrews wished to create a truely Australian modern large scale building suited to Australian conditions, something that he believed had not been achieved 10.

The complex was planned as a continuous element extending north and south along Chandler Street containing executive offices and the 'Mall'. At the southern end of the complex is a large computer centre. Two thirds of the way along this east side the building bridges Cameron Avenue, reminiscent of Gropius' design for the Bauhaus in Germany, to connect with the northern section of the complex. The seven office wings extend to the west in a finger pattern with landscaped courts between. Each consecutive office wing's floors are staggered a half-level, thus accommodating the slope of the land and functionally allowing for flexibility to accommodate various sizes of departments. The north and south facades of each office have full height and full length glazing allowing extensive views of the landscaped courts.

It was designed to accommodate approximately 4,000 public servants.

The complex is constructed in insitu-concrete - much of the Mall, and precast concrete (mostly

post-tensioned) - the office wings, with precasting being done on site.

The structural system chosen for the office wings was complex yet logical in that it was to provide efficient and economical use of materials, column free office spaces with clear spans of 17m in the north-south shortest direction, sun shading to the north facing office wings and a pleasing regular architectural rhythm to the overall complex. The 17m long precast concrete 'T' beams, which form the floors and roofs, overhang to the north and are picked up by edge beams which are in turn supported by individual columns staggered for each floor. The southern ends of the 'T' beams are supported by edge beams which are picked up by individual staggered hanging 'columns' from large 'gallows' beams which span across the landscaped courtyards. The gallows beams are in turn supported by large full height columns to the south of the hangers and the main structure of the offices on the north. Since the gallows beams are being 'pulled down' by the hangers the load on the beam at the other end where it is supported by columns is minimal, thus providing an efficient structural system that is in tension at one end and under compression at the other. To provide column free offices the structural columns are located in the landscaped courtyards between each wing.

The 'T' beams, shaped specifically to accommodate the loads and shear forces, are exposed internally forming the ceiling and expressing the structure of the building. The lighting and air conditioning extend along the space between each beam integrating the services with the structure.

The large 'Gallows' beams extend across the courtyards forming a pergola that 'roofs' the native landscaping and water features. These spaces enhance the Australian character that Andrews desired.

The main architectural elements that are specific to the Late Twentieth-Century International Style (1960-) and that are displayed by this building complex relate to the external forms. They are:

- cubiform overall shape,
- structural frame expressed.
- large sheets of glass,
- plain, smooth wall surface.

Other architectural elements of this style displayed by the building complex that relate to the external forms are:

- overhang for shade,
- Corbusian window motif,
- assertive cantilever.

The main architectural elements that are specific to the Late Twentieth-Century Brutalist Style (1960-) and that are displayed by this building complex relate to the external forms.

They are:

- strong shapes,
- boldly composed,
- expressed reinforced-concrete,
- large areas of blank wall,
- off-form concrete.

Other architectural elements of this style displayed by the building complex that relate to the external forms are:

-lengthy, aggressively expressed reinforced concrete balustrade.

The major architectural elements listed above place this building in both the Late Twentieth-Century International Style (1960-) and the Late Twentieth-Century Brutalist Style (1960-) 11.

The buildings are in good condition and are well maintained. The roofs were renovated and the materials changed several years ago including cappings. They were the subject of a libel court case. The landscaped courts were planted to represent a variety of natural Australian landscapes and are in a good condition.

Background/History

The strong and forthright architecture of the Cameron Offices and its innovative planning and partially achieved urban aspirations make it one of the most important buildings of its time. It is believed to be the first extensive complex "constructed in this country to give architectural expression to the expansive essence of the land itself." and it "is a raw but intellectual building with a vigour and life that seems in phase with this country"12.

The use of off-form-insitu concrete associated with robust and raw sculptural architecture has its origins in the post World War II work of Le Corbusier, such as his various Unite d'Habitations, France and Germany, the Chapel at Ronchamp, France, and the government buildings at Chandigarh, India. "The Brutalist ethic was one of social concern, urban responsibility and integrity in the expression of the material, structure and function." **13**

"Structuralism", where buildings are integral and contributing elements of an overall urban order rather than separate and individual, was a theory "widely discussed in the 1950s and 60s". Structuralism on a extensive scale has been explored by many significant architects of the 20th Century but it has rarely been achieved in the built form. The design by Andrews appears to have altered the thinking of the planners of Canberra. "The rationale of the walk up solution, together with the availability of land in the Capital Territory, led to the favouring of this kind of order for future office accommodation." **14**

John Andrews returned to Australia in 1969 after studying at Harvard University and carrying on his own practice in Toronto, Canada from 1961 where he designed notable buildings such as the Scarborough College, Toronto, Harvard Graduate School of Design and the Miami Passenger Terminal.

The office complex is Andrew's major work in Canberra. There are examples of his student residential housing at Toad Hall ANU and Student Residence Group 2 University of Canberra, 1973.

In Australia his notable buildings are The American Express Tower, (former King George Tower), Sydney (1976), Woden Technical and Further Education College, Canberra, (1981) Darling Harbour Convention Centre, Sydney, (1990), and various university buildings and residential works.

He also designed the Intelsat Headquarters, Washington USA, (1980).

John Andrews was awarded the RAIA Gold Medal in 1980. "His presence in this country has provided a stimulating influence for Australian architecture." **15** Andrews was a committee member for the Judging of the Parliament House of Australia.

Due to commercial pressures and possibly the topography the shopping centre was not located to the north of the Cameron Offices along the axis and in front of the lake but was relocated to the north west **16**. This decision resulted in Belconnen Town Centre not becoming the intended pedestrian oriented centre. It has resulted in a townscape of isolated buildings separated by streets and carparks with the shopping centre predominantly vehicle oriented and the lake shore of secondary importance.

The office complex was built by T C Whittle Pty Ltd.

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 design of the office complex from 1968 in the combination of the Late Twentieth-Century

International Style (1960-) and the Late Twentieth-Century Brutalist Style (1960-) represents a new architectural style in Australia at that time.

The Late Twentieth-Century International Style is a continuation of the Post-War International Style. Notable early Australian examples are the Water Board Building Sydney 1963, by McConnel Smith and Johnson, and the Edmund Barton Offices 1974, by Harry Seidler.

The earliest notable Australian examples built in the Late Twentieth-Century Brutalist Style date from the late 1960s and include the Maquarie University Union Building 1968, by Ancher Mortlock Murray and Woolley and the Seidler House Killara 1967, by Harry Seidler.

The office complex represented the first Australian example, and subsequently a very rare example of, "Structuralism", where buildings are integral and contributing elements of an overall urban order rather than separate and individual elements. The design by Andrews appears to have altered the thinking of the planners of Canberra. His design philosophy of the walk up solution, together with the availability of land in the Capital Territory appears to have led to the favouring of this kind of order for future office accommodation in Canberra.

The strong and forthright architecture of the Cameron Offices and its innovative planning and partially achieved urban aspirations make it one of the most important buildings of its time. Associate Professor Jennifer Taylor believes it to be the first extensive complex constructed in this country to give architectural expression to the expansive essence of the land itself. She also believes that it is a raw but intellectual building with a vigour and life that seems in phase with this country.

The extensive use of post-tensioned precast concrete for much of the structure was a relatively new and innovative building system which was further utilised in many other later office buildings. The use of post-tensioned precast concrete "T" floor beams which occurred in the late 1960s to mid 1970s is now rare in Australia.

John Andrews is recognised as a key practitioner of the Late Twentieth-Century Brutalist Style of architecture. 17

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

The office complex exhibits the particular architectural elements specific to the Late Twentieth-Century International Style (1960-) with its Cubiform overall shape, structural frame expressed, large sheets of glass, plain, smooth wall surface, and the Late Twentieth-Century Brutalist Style (1960-) with its strong shapes boldly composed, expressed reinforced-concrete, large areas of blank wall and off-form concrete.

The following design features are of additional significance; the precast post tensioned 'T' floor beams with the integration of the lighting and air conditioning, the landscaped courtyards with native Australian plants and water features, the structural system for the office wing's floors where the Gallows beams support the floors by hanging 'columns', the stepped floors at half levels, overhang of the upper floors for shading to the north, Corbusian (ribbon) window motif, assertive cantilever and lengthy expressed reinforced concrete balustrades along the 'Mall'.

The office complex is valued by the RAIA as an excellent example of these styles of architecture by a prominent Australian architect.

The Cameron Offices are of international significance.

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

(iv) a place which is highly valued by the community or a cultural group for reasons of strong or special religious, spiritual, cultural, educational or social associations

- (v) a place which is the only known or only comparatively intact example of its type
- (vi) a place which is a notable example of a class of natural or cultural places or landscapes and which demonstrates the principal characteristics of that class
- (vii) a place which has strong or special associations with person, group, event, development or cultural phase which played a significant part in local or national history

John Andrews played a significant role in Australia's cultural history. He is one of the most important architects of the late twentieth century in Australia and this is a major work in his Australian career in terms of its size and type - "structuralism". It is one of Andrew's two major projects in Australia, the other being The American Express Tower, Sydney, 1976.

Professor Jennifer Taylor referred to John Andrews as providing: "a stimulating influence for Australian architecture".

He returned from his established architecture practice in Canada specifically to design this office complex.

John Andrews was awarded the RAIA Gold Medal in 1980.

The Cameron Offices is featured in major national and international publications.

The office complex is of much significance to Canberra and Nationally, specifically in its early date, being designed from 1968, in its architectural expression to the expansive essence of the Australian landscape, in its direct influence on the design philosophy of future office complexes in Canberra and the sound and far sighted vision of the National Capital Development Commission, notably that of the outstanding Commissioner, Sir John Overall.

The complex was the first to be designed and built as part of the town plan for Belconnen which was to have a pedestrian oriented urban structure.

(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

Through its architectural style, planning and urban form this precinct is a valuable educational resource for designers and planners. Its architecture is characteristic of the Late Twentieth-Century International and Brutalist Styles and the planning and massing of the office complex reflects the ideals of the theory of "structuralism" and the vision of the NCDC. The whole composition creates a unique urban form.

The architecture of this office complex and urban form may contribute to the education of designers in their understanding of Late Twentieth-Century Architectural Styles.

The Cameron Offices can be compared and contrasted in its structure, materials, "certain heroic presence" and the ideological base, that of social-urban construct, with the symbolic, sculptural monument of the High Court of Australia, and to a lesser degree with the Australian National Gallery, the Edmund Barton Building and the Woden Technical and Further Education College, all in Canberra. Each of these buildings has its roots in Brutalism and ultimately in (Le) Corbusier's concrete architecture.

Arguably Canberra has only a small number of internationally significant buildings. The Cameron Offices and the Parliament House are two of them **18**.

References

Conversation with John Andrews.

- 2 Jennifer Taylor. Australian Architecture Since 1960. RAIA 1990.
- Richard Apperly Robert Irving Peter Reynolds. <u>Identifying Australian Architecture: Styles and Terms from 1788 to the Present.</u> Angus & Robertson 1989.
- 4 Jennifer Taylor opcit.
- 5 Ibid
- 6 Ibid & Conversation with Sir John Overall. Overall first knew of Professor Gordon Stephenson when he was Professor of the School of Civic Design, University of Liverpool. He then had similar positions at Harvard, where he knew Andrews, at UCLA and at the University of WA. Overall believed the NCDC should have the best Australian architects design the important buildings in Canberra.
- 7 Sir John Overall opcit. Jennifer Taylor opcit.
- 8 John Andrews opcit. His condition was that it was to be a major building.
- 9 Jennifer Taylor opcit. Sir John Overall opcit. Overall does not recall the tower concept.
- 10 John Andrews opcit.
- 11 Richard Apperly Robert Irving Peter Reynolds opcit.
- 12 Jennifer Taylor opcit.
- 13 Ibid
- 14 Ibid
- 15 Ibid
- Sir John Overall opcit. Overall believes the decision was made by the ACT Advisory Council.
- 17 Richard Apperly Robert Irving Peter Reynolds opcit.
- 18 Conversation with Professor Jennifer Taylor. Sir John Overall opcit.

Other Information Sources