

Register of Significant Twentieth Century Architecture

RSTCA No: R086

Name of Place: Burgmann College, Australian National University

Other/Former Names:

Address/Location: 52 Daley Road, ANU 2601

Block 1 Section 63 of Acton

Listing Status:
Date of Listing: 2013
Citation Revision No: no
Citation Revision Date: no

Other Heritage Listings:
Level of Significance: Regional
Category: Residential
Style:

Date of Design: 1967-70
Designer: Dirk Bolt & Associates
Construction Period: 1970-71
Client/Owner/Lessee: Burgmann College affiliated with Australian National University

Statement of Significance

Burgmann College, ANU, constructed in 1971, is an example of significant architecture. The college is an excellent example of the Late Twentieth-Century International style (1960-) and is notable for displaying the design skill of the architect Dirk Bolt. The design incorporates many of the features which are specific to the style including: its cubiform overall shapes, structural frame expressed, large sheets of glass, and plain, smooth wall surfaces. The following design features are of additional significance; the overhang for shade, Corbusian window motif, contrasting textures, structural plywood deep beam roof structure to the dining hall, and original detailing and finishes.

The college makes a confident architectural statement with its innovative planning and structure based on proportions and careful detailing. Burgmann College has significant association with its designer, notable architect Professor Dirk Bolt. The college is Bolt's most significant work in Canberra.

The college is named in memory of Ernest Henry Burgmann (1885–1967), Anglican bishop and social critic. The college has had continual use as a mixed gender residence for Australian and international students studying at the Australian National University.

Description

Burgmann College, 1971, by Dirk Bolt & Associates, is a very good example of the Late Twentieth-Century International Style (1960-) with its cubiform overall shape, structural frame expressed, large sheets of glass, and plain, smooth wall surface. The Australian National University (ANU) is located in the suburb of Acton to the west of Civic and is at the foot of Black Mountain to the west. The 145 hectare campus with landscaping developed around a formal axis of University Avenue and the natural line of Sullivan's Creek with site planning originally by Professor Brain Lewis and subsequently by Professor Denis Winston (consultant to the ANU and NCDC), Grenfell Rudduck (associate commissioner of the NCDC) and Roy Simpson of Yuncken Freeman Architects (consultant to the ANU and NCDC). Burgmann College lies at the end of Daley Road on the south-west side of the ANU campus adjacent to Sullivan's Creek.

The college is an independent residential college and when constructed it provided accommodation for 230 mixed gender undergraduate and postgraduate students attending the ANU. The college is made up of a grouping of distinct interconnected buildings with two four-storey brick-clad residential blocks set at right angles and a single-storey amenities block placed adjacent to one end of each wing linked by a single-level glazed common area. The lowest levels are slightly elevated above the ground except for the elongated front brick façade of the amenities block. The two four-storey blocks are constructed at the lower level in an exposed concrete frame of columns and deep beams, supporting the upper levels. The lower level glazed façades are made up of timber-framed sliding doors and fixed panels above floor up-stand edge-beams that

are in turn supported on a triangulated column base at the ground level. The residential wings have three levels of student accommodation and establish a horizontal line at roof level. Vertical terminating blocks that extended out away from the courtyard side complete the external form. The long façades to the upper three levels incorporate deeply-recessed full-length ribbon-glazing with precast-concrete sills and glazed eaves soffits. The brick control joints to the external walls are in staggered horizontal panels with projecting precast-concrete rainwater overflows, each centered on a control joint. This composition results in a form where the upper-level brickwork appears to float above the lower level.

As a contrast to the two four-storey blocks the single-storey amenity building is a low-level broad architectural statement which includes a one-and-a-half storey-height dining hall to the southern half, with the kitchen and associated facilities to the northern half. To the west of the kitchen are the senior Common room and private dining room, both set either side of an internal courtyard. The formal entry to the college, in Block B, is approached from the south-east, south of the dining hall, along a straight path and over a timber bridge.

The slightly elevated ground level of Block B houses offices for administration and services, all set out on the module of the concrete columns. The glazed ground floor levels of the two residential blocks have a continuous quarry-tiled raised sill 340 mm above the floor level. A short corridor to the right of the entry leads to a small lobby. To the right of the lobby is the dining hall; to the left the circulation stairs up to the student accommodation, and straight ahead is the link to residential Block A. The north-west façade of the link is fully glazed and looks out onto a large partially enclosed landscaped area.

The square plan of Block C is divided into two main functions, the dining hall to the south-west and the kitchen and associated stores and service rooms to the north-east. The dining hall is a double square in plan. The roof of the dining hall was constructed with an exposed 760 mm deep one-way plywood-clad deep-beam system. The south-west glazed wall was timber framed, in eight 9'10"-high (3 m) horizontal panels of five vertical divisions, and overlooks the entry path and landscaping. The timber framed glazing has been altered with double doors and open able aluminum framed glazing installed. The deep fascias are clad externally with horizontal timber boarding. The single-storey height south-west elongated brick portion of Block C houses storage at the southern end, service-yards at the northern end, and facilities for kitchen staff, all behind a long plain face-brick wall. The elongated street façade is animated with deciduous vines supported by a steel and timber-framed pergola over a continuous seat-height brick planter. The wall and vines can be lit at night by down lights built into the steel frame of the pergola.

As with Block B the divisions for the various recreational spaces in Block A were determined by the module of the first floor concrete deep-beam structural system. At ceiling level, between the deep beams, there is a wide central services bulkhead, with a ceiling height at 2.82 m. The ceiling steps up a metre along both sides of the bulkhead, extending to the perimeter edge beam. The rooms are lit by continuous concealed lighting. The stairs up to the accommodation rooms are at each end of the residential blocks with open-tread return stairs closest to Block C, detailed with square steel posts and timber rails.

The plan for the accommodation rooms is repeated on all three levels with 18 rooms along each side served from two common corridors either side of a central service core. The double corridor layout provides accommodation rooms to the full extent of each floor. The return ends include rooms on the outer side of a single two-sided corridor and stairs and service rooms placed on the inner side. Each floor originally had two open communal spaces, one within the core area, and the other in the return end overlooking the courtyard. The latter is now enclosed to provide additional accommodation. Each student room includes a sink and a built-in wardrobe. The closely-spaced brickwork walls form a load-bearing masonry structure, repeated at each floor, which supports a simple flat floor/ceiling slab. Each room originally had full-width fixed glazing in aluminum frames extending 760 mm above the 1.12 m sill. This glazing has been altered to include framed sliding aluminum glazing. Incorporated in the eaves above the glazing was a sliding glazing system, laid on the flat, above the window head. These provided natural ventilation and additional natural lighting but have now been fixed in a closed position. The walls are extended between each room out to the external brickwork above window head height with support provided by cantilevered brickwork steel lintels with 250 mm precast concrete corbel beams built into and set flush with each room's brick dividing wall.

The brick-veneer residence for the Master of the college is located at the end of Block A at the northern edge of the site overlooking a generous private garden.

Other architectural elements of the Late Twentieth-Century International style (1960-) displayed by the building that relate to the external forms are:

- overhang for shade;

- Corbusian window motif, (horizontal strip windows) and
- contrasting textures (face brickwork, smooth concrete columns and beams, and timber boarding)”

The additional significant design features are; the plywood clad deep beam roof structure to the dining hall and the front brick wall that faces on to the street with its pergola and lighting.

While there are many student residence buildings on the university campuses in Canberra arguably only three are of great architectural significance. Burgmann College can be contrasted with the University of Canberra Student Residences Group 2, 1975, and ANU's Toad Hall, 1977, both by John Andrews International. The former an examples of the combination of the Late Twentieth-Century International style and Late Twentieth-Century Brutalist style and the later an example of the Late Twentieth-Century International style. The Student Residences Group 2 in off-form concrete with its bedroom clusters around common rooms all expressed in strong, robust, forthright architecture stepping down the slope of the site and the face brick Toad Hall which has an irregular interlocking plan of bedroom clusters around common rooms.

Condition and Integrity

The residences are well maintained and in good condition.

Background/History

Burgmann College is an amalgam of five churches; Anglican, Uniting, Presbyterian, Baptist and Churches of Christ and was named after Ernest Henry Burgmann (1885–1967), Anglican bishop and social critic, who was Bishop of Canberra and Goulburn from 1950-1960.

The first meeting to plan the college took place in the middle of 1964. Dirk Bolt was commissioned to design the residential college in 1965, however, it was not until March 1967 that the first master plan for the college was agreed upon. The brief required facilities for 500 residents, including a multi-denominational chapel/library and common support areas. Financial appeals commenced in 1967 with support from the Rt. Hon. Harold Holt, Prime Minister, the Hon. Gough Whitlam, Leader of the Opposition and the Hon. John Gorton, Minister for Education. The construction of the college was completed in 1971 and was officially opened by the Hon. David Fairbairn, Minister for Education and Science, in July. Bolt's plan for the college and to an extent the elevations, were determined by proportion, derived by the golden mean (or golden ratio) and the square. Bolt's first two years of formative education at the Technische Hogeschool Delft, The Netherlands, was in part grounded in the influential Dutch architect and teacher Hendrik Petrus Berlage's call for 'truth' in the use of materials, 'truth' in the creation of space, and 'truth' in the orderliness of proportion. Berlage reasoned that architecture founded on geometry would stand the test of time. The college as built includes less than half of the 1970 final master plan. Bolt's plan of four wings semi-enclosing a courtyard and chapel/library have not been realised. Instead the college has constructed separate accommodation blocks to the north-west.

The use of structural plywood lined deep beams (vertical-member parallel-chord timber frame) to the dining hall was pioneering at that time. Throughout the 1960s and 1970s the use of materials to get the most for the least from a structural system was a major design theme of modern architecture. Bolt had designed structural plywood lined deep beams for the Bahr House, Garran, ACT, 1968, (placed on the ACT Heritage Register) to enable fully glazed facades uninterrupted by structural members. The system was similar in part to the side by side prefabricated exposed triangulated plywood beams use to form the roof of Guardian House, the former Woden Canteen, 1969, by Ian McKay and Partners; formally on the ACT Heritage Register and now demolished.

The student residence is one of two shared residential type buildings Bolt designed in Canberra, the other being the Offices Sleeping Quarters, RAAF Base, Fairbairn, circa 1969. The precise form of the college and the spatial quality of its setting, allied with its innovative planning make it one of the architecturally important student residential colleges in Canberra and otherwise one of Canberra's more important buildings of its time.

Dirk Bolt migrated from The Netherlands to Hobart in 1951. On the completion of his architecture course in Hobart he was made a partner in the Hobart firm of Hartley Wilson and Bolt Architects and prior to his move to Canberra in 1964 was responsible for the design of many of Hobart's important modernist buildings. These included the Commercial Banking Company of Sydney building, Elizabeth Street, Hobart, stage 1 (1958) and stage 2 (1962); the Scottish Union Building at 152 Macquarie Street, Hobart (1962); University of Tasmania Christ College, Sandy Bay (1960); Cat and Fiddle Arcade, Hobart (1962); the Bathing Pavilion, Sandy Bay (1962), and Commonwealth Bank Glenorchy (1962). He collaborated with Hartley Wilson on the Hobart Savings Bank, the University of Tasmania Chemistry Building and the Cadbury Head Offices,

Claremont (1962). He designed the State Government Offices at 10 Murray Street, Hobart (1967); his 1962 design being altered after he had left Hobart for Canberra. Both the University of Tasmania Christ College and the Bathing Pavilion at Sandy Bay have been placed on the Tasmanian Heritage Register.

The Tasmanian Chapter of the RAI A acknowledged Bolt's 'outstanding service to the Chapter and the Institute over the past years' with an award in 1964, while the firm Hartley Wilson & Bolt was awarded the Triennial Design Award of the Tasmanian Chapter of the RAI A for the design of the Commercial Banking Company of Sydney Hobart Office (1958).

From late 1964 to 1971 Dirk Bolt practised architecture in Canberra and was a planning consultant to the NCDC responsible for the design of many of Canberra's neighbourhood and group centres allied with innovative multi-unit housing. Burgmann College is his major work in Canberra. The Church of Christ, Lyons, 1967, is his other important building in Canberra. Of the detached houses he designed during the 1960s in Canberra two have been awarded the Australian Institute of Architects ACT Chapter Twenty Five Year Award for their design, construction and integrity.

Bolt left Canberra in 1971 to work for the United Nations in Africa and later other developing countries in Africa, Asia and the Pacific. He was appointed professor of urban planning and management, ITC- Enschede, the Netherlands, from 1992 to 1995 where he developed remote sensing as a design tool for planning mega cities in developing countries. He was a prolific writer and consulted on low energy planning and sustainable development, developing proposals with respect to the relationship of urban form, technology and energy, and options for change.

Prominent Australians including Prime Minister Kevin Rudd and Minister Peter Garret were residents of the college in the 1970s. The university students value the residence as a pleasant place to live and study.

Analysis against the Commonwealth Heritage criteria

- a) the place has significant heritage value because of the place's importance in the course, or pattern, of Australia's natural or cultural history.
- b) the place has significant heritage value because of the place's possession of uncommon, rare or endangered aspects of Australia's natural or cultural history.
- c) the place has significant heritage value because of the place's potential to yield information that will contribute to an understanding of Australia's natural or cultural history.

Through its architectural style and planning this building will contribute to an understanding of Australia's cultural history. It is a significant example of the Late Twentieth-Century International style (1960-). Experiencing heritage buildings enables the visitor to locate the building in its historical and environmental contexts and to place it within the knowledge domain of architectural, urban and environmental histories. These experiences readily enable the establishment, understanding and interpretation of the building's heritage value and significance. Burgmann College can be contrasted with the University of Canberra Student Residences Group 2, 1975, and ANU's Toad Hall, 1977, both by John Andrews International. The face brick Toad Hall has an irregular interlocking plan of bedroom clusters around common rooms with internal stairs and circulation while University of Canberra Student Residences Group 2 is in off-form concrete with its bedroom clusters around common rooms all expressed in strong, robust, forthright architecture stepping down the slope of the site.

- d) the place has significant heritage value because of the place's importance in demonstrating the principal characteristics of:
 - i. a class of Australia's natural or cultural places; or
 - ii. a class of Australia's natural or cultural environments;

Burgmann College is a significant example of the Late Twentieth-Century International Style (1960-) with its cubiform overall shape, structural frame expressed, large sheets of glass, and plain, smooth wall surface. It is notable for displaying the high design skill of the architect Dirk Bolt. The following design features are of additional significance; the overhang for shade, Corbusian window motif, contrasting texture, and plywood deep beam roof structure of the dining hall. The student residence is valued by the RAI A as an excellent example of this style of architecture by a notable architect.

- e) the place has significant heritage value because of the place's importance in exhibiting particular aesthetic characteristics valued by a community or cultural group.
- f) the place has significant heritage value because of the place's importance in demonstrating a high degree of creative or technical achievement at a particular period.

The creativity of the notable architect Dirk Bolt is apparent in the design of Burgmann College which was innovative when compared with other residential colleges built in Canberra and elsewhere in Australia. The building is of considerable architectural merit, demonstrating an inventive structural and architectural response to the needs of students for their accommodation on campus. It has appropriate scale and accomplished site planning. The college has a clear distinction between public and private spaces, and expresses its function through the plan form and sculptural massing. Well-planned student rooms are served by two common corridors either side of a central service core enabling the student rooms to extend for the full perimeter. Innovative deep-recessed brick-clad façades are raised one level above the ground on expressed concrete frames. The use of plywood deep-beam construction to form the roof of the dining hall was innovative in Australia. The building is one of two college residences in Australia designed by Dirk Bolt, the other being Christ College, University of Tasmania. Both have the combination of load bearing masonry walls, concrete frames and large areas of glazing. Bolt believes that Burgmann College is of great importance in his architectural career.

- g) the place has significant heritage value because of the place's strong or special association with a particular community or cultural group for social, cultural or spiritual reasons.
- h) the place has significant heritage value because of the place's special association with the life or works of a person, or group of persons, of importance in Australia's natural or cultural history.

Burgmann College has a special association with its designer Dirk Bolt, an architect and town planner, who migrated to Tasmania in 1951 from The Netherlands. He is regarded as a notable architect in Tasmania and is celebrated for his contribution to Canberra's architecture and urban planning after his relocation to the Capital in 1964 until 1971. The innovative planning and form based on proportions and precise detailing of Burgmann College is characteristic of his architecture. Burgmann College is also associated with its namesake Ernest Henry Burgmann (1885-1967), Anglican bishop and social critic, who was Bishop of Canberra and Goulburn from 1950-1960.

- i) the place has significant heritage value because of the place's importance as part of Indigenous tradition.

Bibliography

ANU Drawings Series F052; Architectural and structural.

Apperly, Irving & Reynolds, *A pictorial guide to identifying Australian architecture*, Angus and Robertson, 1995.

Graeme Trickett and Ken Charlton, *REPOSE The contribution of Dirk Bolt to Canberra's Architecture and Planning*, Australian Institute of Architects, 2013.