

ITINERARY n.19



NOT ON MAP

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The Lichfield Building at Selwyn Village

KRTA in Auckland

Almost all key periods in the history of architecture have been associated with the development of a new building technology. Innovative technologies make possible what was previously impossible – think of the impact of the flying buttress on medieval cathedrals, or the role of Corbusier's Domino frame in liberating the house. At present, structural engineering is a key locus of new-ness, as advances in digital analysis techniques and new fabrication methods allow the realization of previously inconceivable structures such as Toyo Ito's Sendai Mediatheque or Herzog & de Meuron's Birdcage.

The last time that structural engineering played a central role in architecture in NZ was in the 1960s and 70s, a time when the firm of Kingston, Reynolds, Thom & Allardice was among the leading Kiwi proponents of engineering-based architecture. The years after the end of the Second World War were times of rapid technological development, and many new construction materials and methods began to be employed. Being among the first local firms to combine architectural and engineering expertise – as well as consulting services such as quantity surveying, and services and civil engineering – KRTA were ideally poised to exploit these new possibilities. The new building technologies included glue-laminated timber and concrete masonry, but KRTA made particular use of factory-made precast concrete structural and cladding systems, most notably at their NZIA Gold Medal-winning Victoria University Library. This building was constructed almost entirely of precast units. The benefit was to minimise the obstruction caused by internal supports, but using prefabrication and other industrialised methods also made particular sense because of the post-War labour shortage. Because employing such methods required close coordination between engineering and architecture, this approach played to KRTA's strengths. Similarly, KRTA's ability to deal with complex electrical and mechanical briefs resulted in commissions for factories, airports, and what was then a brand new building type – computer centres.

From the late 1950s, New Zealand underwent a period of rapid urban development, particularly in establishing housing and community services. With the talented architect and planner Ian Reynolds as a director in the firm, KRTA was able to meet the challenges posed by these massive social, economic, and demographic changes not just with engineering solutions but thoughtful design. KRTA was involved in designing town centres, huge industrial facilities for companies such as Tasman Pulp & Paper and NZ Steel, as well as the post-war building program at our universities. KRTA built at Massey, Victoria, and Lincoln, but had a particularly strong impact on Auckland University's city campus – their efforts at Auckland were recognized in 1995 with Reynolds receiving one of the University's first honorary Fellowships.

During the 1970s, the technological imperatives that drove many of KRTA's building projects fell from favour in the architectural world. Following the energy crisis of the early 1970s, however, new opportunities opened up. The firm developed expertise in geothermal energy, eventually working on such projects across Asia and the Pacific – by the 1980s, 80% of the firm's work was offshore!

Our current credit crunch will encourage architects to look beyond their normal roles to find new sources of work. For local designers able to expand their expertise or exploit new technologies – becoming a type of professional labelled the "expanded architect" by Mark Wigley – KRTA's ability to apply design thinking to a phenomenally wide range of problems and projects stands as key model. *Andrew Barrie*

Biography:

The firm was established in 1915 as a structural and civil engineering practice by bridge designer Stanley Jones. R.C. Adams became a partner in 1920, and the firm ran under the name Jones & Adams until 1950. Early projects included wharves, bridges (including preliminary schemes for Auckland Harbour Bridge), water and sewage projects, and structural design. Commissions in the 1940s to design a series of large dairy factories encouraged the practice to bring architects onto its staff. Jones retired in 1954, and engineers Bob Kingston, David Thom, and N.W. Allardice became partners in the firm during the 1950s. Architect and planner Ian Reynolds joined the firm in 1955, the firm becoming Kingston, Reynolds, Thom & Allardice in 1962, then the only comprehensive multi-disciplinary consulting practice in NZ. The firm's activities spanned the range from geo-tech consultancy, town planning, and engineering (civil, services, structural) to architectural design and quantity surveying. The firm merged with multi-disciplinary practice Morrison Cooper to become Kingston Morrison, and was absorbed into Sinclair Knight Merz in 1999.

1

Early 1950s-

Selwyn Village
43 Target Street
Pt. Chevalier



Designed for the Auckland City Mission, this large complex for the care of the elderly was masterplanned by KRTA on a stunning site overlooking the harbour. The many KRTA-designed buildings include a series of cottages and flats for elderly single persons and married couples, and the Lichfield Building - a pair of six-storey towers containing bed-sit flats and other amenities. The centrepiece of the complex is the KRTA-designed Church of Christ the King, which was completed in 1960 and earned an NZIA Auckland Branch Award. See *NZIA Journal* Dec. 1967. KRTA also designed Stevenson Village for the elderly at 8 Botany Rd., Howick (see *NZ Home & Building* no. 2 1976).

2

1959

St Philip's Church
92 St Heliers Bay Road
St. Heliers



When this parish was established in the 1880s, St Heliers was a small seaside holiday town with some twenty permanent residents working small farms and orchards. This Reynolds-designed church was built across the road from the original wooden church, which was moved to Glendowie. Built in brick, concrete, and timber, the buildings' key features are innovative roof structures - laminated timber beams in the church and lightweight steel trusses in the hall. The courtyard garden between the church and hall was enclosed in the 1980s to form the present entrance and lounge. See *Home & Building* Feb. 1961.

3

1964

Holy Family Catholic Church
94 Taikata Road
Te Atatu Peninsula



Photo: Nat Cheshire

This A-frame church applied infrastructure-scale construction techniques with incredible finesse - the building is composed almost entirely of huge, highly sculptural precast concrete panels. Light is carefully introduced through both low-level niches integral to the roof panels and the vertiginous, partially coloured glass end wall. The wooden structure that defines both the low-ceilinged entry spaces and the choir loft is especially elegantly planned and detailed. KRTA also designed the nearby Community Centre on Te Atatu Road, a complex that includes a library, hall, and Plunket rooms.

4

1965

Pakuranga Town Centre
Cnr Ti Rakau Dr. & Panmure-Howick Hwy., Pakuranga



Picking up new ideas from the US and Australia, KRTA were key players in the suburbanisation of Auckland, designing a number of suburban shopping centres. This comprehensive town centre for the then rapidly developing area of Pakuranga was one of the largest of its kind then built in NZ. The project included 140,000 sq ft of retail space, community facilities and parking for 1,000 cars. The originally open pedestrian zones have now been internalised, and most of the original detailing has been submerged. See *Home & Big* June 1964 and Oct. 1965. KRTA also laid out the nearby Sunny Hills Estate subdivision - see *Home & Building* Nov. 1960.

5

1965

Air NZ Maintenance Base
Auckland International Airport
Geoffrey Roberts Rd, Mangere



Photo: Barry McKay/Industrial Photography

This project was put together when the client, for whom KRTA had previously designed a large hanger at Whenuapai, was called Tasman Empire Airways Ltd (TEAL). This large complex of buildings includes hangars, workshops, stores, offices, flight kitchen, services and training. The project received an NZIA Silver Medal in 1968, and was significantly expanded by KRTA in the early 1970s when, due to the advent of the DC10, some engineering gymnastics were performed to increase the height of the centre hangar bay. See *NZIA Journal* May 1968 as well as *Home & Building* Dec. 1965, July 1968, and July 1973.

6

1967

BNZ Computer Center
Cnr Federal & Victoria Sts.,
Auckland



One of many computer centres KRTA designed around the country, this project was built to accommodate the people and equipment required by the introduction of computerised banking. To facilitate rapid construction, and also to avoid internal columns and maximise use of structure on external walls, KRTA developed an integrated system of precast concrete wall elements with in-situ column sections. As well as carrying all the structural loads, these create fire separations and form the exterior cladding. The building originally housed a computer suite, a BNZ Bank branch, and general offices, but has now been converted to apartments. See *NZIA Journal* Aug. 1968 and *Home & Building* July 1967 and Sept. 1967.

7

1968

Thomas Building
University of Auckland
Symonds Street, Auckland



In the 1950s the decision was made to transfer the University's activities to a new campus at Tamaki, but in the 1960s this decision was reversed, unleashing a flood of construction projects on the city campus. The first of many KRTA projects on the campus (including landscaping and other minor works), this building includes many of the features that were to become hallmarks of the firm's work of the 1960s and 1970s - structural exhibitionism and the use of precast concrete. The external appearance of the building gives little hint of what lies within - the building is wrapped around a lushly planted internal courtyard. The building received an NZIA 25 Year Award in 1994.

8

1970

School of Engineering
University of Auckland
Symonds Street, Auckland



Designed in the early 1960s, the massing and use of precast concrete on this building was strongly influenced by the town hall complexes produced in Japan by Kenzo Tange during the late-1950s. The building also follows Tange's division of zones for private and communal work - staff offices are housed in the vertical tower, with library, labs, lecture rooms, and workshops in the low horizontal blocks. The building won an NZIA Bronze Medal in 1970. See *NZIA Journal* Nov. 1963, as well as *Home & Building* Nov. 1963 and Sept. 1970. The building was extensively refurbished and extended in 2007 by Ashton Mitchell (see *Arch. NZ* July/Aug. 2007).

9

1970

All Saints Church
17 Selwyn Road
Howick



The original wooden church at All Saints is one of the oldest buildings in Auckland, dating back to the 1840s and the days of Selwyn. The new building is highly deferential, being built a little way down the slope with its steeply pitched roof sloping down over the sanctuary to reduce the scale of the building on its two street frontages. Within, it makes use of fairly pragmatic materials – in-situ concrete and blockwork prop up a roof supported on surprisingly chunky pre-cast concrete beams. In addition to the worship space, the building also includes parish offices and a hall in the basement created by the slope of the site. See *Home & Building* July 1971.

10

1973

Fisher & Paykel Factory
78 Springs Road
East Tamaki



Built on a 47 acre site for the F&P Refrigerator Division, this building accommodates both the production and administration sections of the operation. A repetitive structure based on a steel structural module, the building was designed as a prototype for similar buildings to be constructed as the firm's operation expanded. The building received an NZIA Auckland Branch Award in 1973. See *NZIA Journal* March 1974 as well as *Home & Building* June 1973 and Dec. 1973. The adjacent offices and staff facilities were added by Mason & Wales in 1991 (see *Arch. NZ* Sept./Oct. 1991).

11

1974

North Shore Memorial Park
Cemetery & Crematorium
235 Schnapper Rock Rd,
Albany



Laid out over 90 acres of beautifully landscaped grounds, this cemetery was created to serve the needs of the North Shore. The central feature is chapel and crematorium building with an adjacent garden of remembrance. Given the strikingly industrial exterior, all chimneys and long-run steel roofing, the subtlety of the chapel interior with its crisp planes of timber and golden-buff brick comes as something of a surprise. See *Home & Building* Nov/Dec 1974.

12

1978

School of Architecture
University of Auckland
Symonds Street, Auckland



The School of Architecture was established in 1917, and the completion of this building ended 55 years of temporary accommodation for the School, including 20 years in former army huts. Despite this long lead time, the project was a slow one – getting the building (which initially housed town planning and part of the geography department) from commissioning to completion took almost 10 years. KRTA also designed the adjacent computer centre and an as-yet unbuild tower on the site now occupied by the crèche. See *Home & Building* no. 4 1981 and no. 5 1982.

13

1979

Mobile Plant Workshop
Quay Street, Auckland



This project resulted from a report commissioned by the Auckland Harbour Board from KRTA on the aesthetic aspects of the future development at the port. Given the ports incredibly long frontage along Quay Street, the report recommended making the port's activities more visible to passers by. Known as the Straddle House, this building houses maintenance facilities for the straddle cranes that carry shipping containers around the port. It made extensive use of both glass and bold colours, creating what David Mitchell praised in *The Elegant Shed* as "high drama passed off as simple practicality." See *Home & Building* no. 5 1981.

Other Addresses:

Stanley St. Tennis Grandstand (1964)
Stanley Street, Auckland

Lynfield Shopping Center
Cnr The Avenue & Hillsborough Road
Lynfield (1960s)
Designed for Auckland Harbour Board and Foodstuffs NZ, this was the first stage of a shopping centre for Lynfield estate at Mt Roskill and included parking and a pedestrian court.

Kelston Community Centre
Cnr Great North & Awaroa Rds., Kelston (1977)
See *Home & Building* no. 1, 1978.

Colin Maiden Park (1979)
Morrin Road, Glen Innes
The park includes a KRTA-designed clubhouse. See *Home & Building* no. 2, 1979.



BNZ Computer Centre, Wellington

Elsewhere:

Grandstand (1958)
Hinuera Road, Matamata
The stand features a timber roof structure. See *Home & Building* April 1958.

Christ Church (1960s)
2B Kamo Road, Whangarei
Tapered RC column/beams

Arts & Library Block (1963)
Victoria University
Kelburn Parade, Wellington
The project received an NZIA Gold Medal in 1967. See *NZIA Journal* Sept. 1967 and May 1969. The building formed part of a campus-wide development plan - see *NZIA Journal* Nov. 1969.

Weir House Extension
Gladstone Terrace, Kelburn
Wellington (1966-68)

Arts & Library Building (1968)
Massey University, Library Rd., Palmerston North
See *NZIA Journal* April 1967.

BNZ Computer Centre
Cnr Vivian & Taranaki Sts., Wellington (1968)
Now occupied by Ricoh, this building received an NZIA Merit Award in 1970. See *NZIA Journal* July 1968, *Home & Building* July 1970.

National Provident Fund Bldg.
Cnr Terrace & Bowen Sts., Wellington (1979)
See *NZ Architect* no. 5/6, 1981.

Sources:

Except where noted the photographs are by Andrew Barrie. Given the size of the practice, its huge output, and the significant NZIA awards it received, it is surprising to find that KRTA is almost absent from our major architectural histories – only Beaven & Stacpoole's *Architecture 1820-1970* (Wellington: Reed, 1972) and Errol Haarhoff's *Guide to the Architecture of Central Auckland* (Auckland: Balasoglou Books, 2006) make more than passing mention of the firm. The best source on the firm is a substantial promotional pamphlet published by the firm in 1966 and entitled "Kingston Reynolds Thom & Allardice: Architects, Engineers, Planners & Quantity Surveyors". Individual projects were well represented in the journals of the day. See also two articles: Ian Reynolds "Kingston Reynolds Thom & Allardice" in *NZIA Journal* April 1975 and Brenda Lobb's "KRTA - A Commitment to Design" in *Architecture NZ* July/Aug. 1988. Reynolds, who served as President of the NZIA in the 1970s, frequently contributed texts to local journals. One of the best is "Changing Society and its Influence on Architects" (*NZIA Journal* May 1964), a still relevant think-piece on the architect's role in consumer society.