





KZ-NIA JOURNAL · ISSUE 3/2002 · VOL 27 · ISSN 0379-9301

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Published by the KwaZulu-Natat Institute for Architecture, 160 Bulwer Road, Glenwood, Durban 4001

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H Q News

KZ-NIA Regional Committee 2003–04

The AGM of 29th October confirmed the appointment of the following nominations: Don Albert, Ms Angela Baker, John Bizzell, Bruce Clark, Dennis Claude, Ivor Daniel, Ms Patricia Emmett, Mohideen Abdul Gafoor, Saeed Jhatham, Mino Makhanya, Prof Walter Peters, and Tom Steer.

At the meeting, Honorary Life Membership was conferred upon Prof Rodney Harber. Thereafter Peter Rich, Adjunct Professor of Architecture at the University of the Witwatersrand, addressed members on 'Architects embracing Change in South Africa'.

At a subsequent meeting Mohideen Abdul Gafoor (Gaf) was elected President for the period 2003–04, and Bruce Clark Vice-President. This meeting co-opted Brian Johnson; Jonathan Edkins, Durban Metro Director of Architecture; and Prof Ambrose



Adebayo, Head of the School of Architecture, Planning & Housing at the University of Natal.

Mohideen Abdul Gafoor (Gaf) is KZ-NIA President for the period 2003–04. A graduate of the University of Natal in 1976, Gaf is principal of the Durban practice MA Gafoor Architect.

School of Architecture

Dr **Franco Frescura** has been appointed Professor to the vacant Chair in Architecture at the University of Natal. He assumed duty on 1st November 2002.

COVER:

View from Umhlanga Ridge New Town Centre towards Durban and the Bluff, due south. In the foreground are Gateway (left) and The Crescent (right) shopping centres. Tony Smith Photography by courtesy of Moreland.



OBITUARY Peter Louis 1936-2002

A pillar in the architectural life of KZ-N has fallen.

Peter Louis served his profession in many ways including a session as Chairman of the Natal Association of SA Quantity Surveyors. But, unusually, he also served on the KZ-NIA Architectural Heritage Committee, for many years as its treasurer. In fact this year marks a quarter century of his involvement which begun in 1977.

Extracts from the addresses read at the wake by architects David James and Robert Brusse celebrated the life of a remarkable fellow professional.

"Peter never seemed to make acquaintances but always firm friends" said David James who also unravelled the origins of Peter's conservation bent. "One of my first projects was the refurbishment of the Greytown Town Hall (while with Pooke & Bell, 1965). You will understand that at that time the idea of conserving old buildings was far removed from the minds of young architects emerging in the modern era, let alone the concern of the allied professions. However, in this case, Peter exhibited a unique attitude towards the preservation of the old building and worked tirelessly as a QS on the preparation of a comprehensive Bill of Quantities for tender purposes, which resulted in the successful completion of the project in all respects".

Rob Brusse pointed to the conservation consultancies beginning in the 1970s: the restoration and stabilisation of the main facade of the



Durban Railway Station; the restoration of Emmanuel Cathedral, Durban; various outstations of the Mariannhill missions including Maria Ratschitz at Wasbank (1992–8). Of the latter involvements Rob reminisced: "Travelling up to various rural projects with Peter, we were often confined in a car for several hours at a time. While I drove, Peter would feed the tape deck with his

latest find in classical music. He could discuss and inform on so many aspects of the music he loved – a particular conductor's interpretation, a favourite soloist, or just a passage that he particularly liked. He would always keep his eyes peeled for raptors along the road, and many a time Beethoven would have to "hang in there," while we stopped the car to admire a crowned eagle or a lesser species".

"One of Peter Louis' finest attributes was his great mind and intellect" concluded David, who also alluded to the breadth of Peter's mission in life: " Peter worked tirelessly with the more liberally-minded opposition parties in an attempt to overcome the injustices of the time. He possessed a great general knowledge and a prodigious memory, his interests were all encompassing and ever fresh and eager, and included music, history, the theatre and amateur dramatics, the arts in general and all aspects of nature. He loved fishing and the associated outdoor activity and he was a prodigious fly fisherman. He also had many trout fishing 'disciples', myself included, who he introduced to the sport and to whom he unselfishly imparted his skills and knowledge. We will all remember his spontaneous delight whenever we were successful in catching the elusive trout. Peter John Louis was an exceptional man and his family, colleagues and friends will all miss him terribly".

Our thoughts are especially with his widow, Maggie. – Editor

Brick Architecture

Corobrik @ 100

Students' Design Project in **Campus Accommodation**

Acting on the suggestion of Mr Mike Ingram, Corobrik Director of Sales, a brief for a Second Year design project was set which focused on masonry construction whilst promoting the potential of brick architecture. The learning outcomes were anticipated as providing a sound knowledge in load bearing design, as well as developing an understanding for architectural expression in brick detailing.

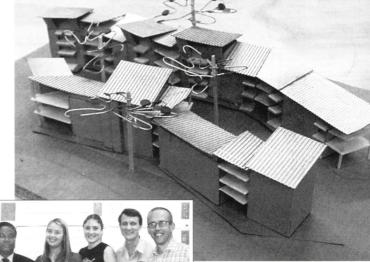
A four-week programme was set which integrated the technical expertise of the sponsor into the design process. A visit to the brick-

works at Avoca was arranged at which the manufacturing process was explained. A bricklaying workshop was also conducted, where the students experienced the difficulties of laying a simple wall, whilst concurrently demonstrating their abilities to construct irregular and 'rustic' brickwork! Additionally

Corobrik arranged for lectures on technical aspects and procured concomitant literature from the UK which was generously donated to the Barrie Biermann Architecture Library.

The brief called for the design of staff and visiting lecturer accommodation on the

Howard College campus. The students were asked to develop efficient plans for a range of unit sizes in buildings in excess of three stories. The selected site implied the further challenge of integrating the buildings within



LEFT: From left, Mike Ingram, Corobrik Director of Sales; Prof Ambrose Adebayo, Head of the School of Architecture, Planning & Housing; winners Kyria van Soelen and Kate Walden; Prof Walter Peters and Paul Sanders.

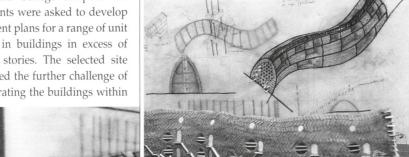
ABOVE: Kate Walden's model, and below, that by Kyria van Soelen. RIGHT: Brick details by Erica Coskey.

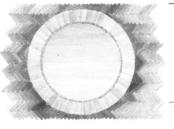
the prescribed constraints of an environmental impact study.

The outcomes were largely successful with significant learning occurring in the areas of spatial, technical, environmental and formal thinking.



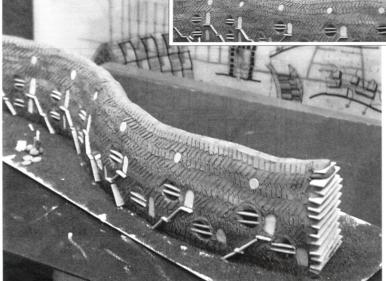
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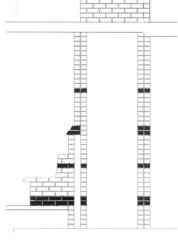




Upon completion of the project, a function was held at which the sponsors awarded two prizes of R1000 each. Ms Kate Walden received the prize for the best overall scheme, Ms Kyria van Soelen that for the best use of brickwork. It is hoped that the liaison between Corobrik and the University of Natal will continue at this level of study, with similar projects in the future.

Paul Sanders Semester 4 co-ordinator

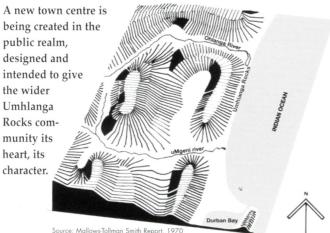




Introduction

Umhlanga Ridge New Town Centre

Keystones to Creating a Dense, Mixed-use City



focused on planning policy and the preparation of a spatial framework for development. Moreland Estates (Pty) Ltd, the property company of the owners, took up the challenge and began development within agricultural 'buffer' strip between the areas formerly designated for black

Context

Umhlanga Rocks, 18km north of Durban, began as a distant seaside refuge in the 1920s. Its name is derived from the Zulu word 'hlanga', meaning reeds, of which dense beds still flank the Ohlanga River mouth, and the rocky nature of its coastline. In 1931 a health committee was established which in 1970 was granted borough status. Thereupon a monolithic strip of up-market apartment and hotel development began astride the coastline.



Umhlanga Ridge New Town Centre is located on the western incline of Umhlanga ridge, between Umhlanga Rocks Drive and the N2 national highway. It is bounded on south-west by metropolitan motorway M41 and on north-east by the Prestondale residential suburb of Umhlanga Rocks.

In the early 1980s development spread inland across the national road (M4 now) and up to the eastern ridge (Umhlanga Rocks Drive). With the parallel construction of the N2 freeway west of the ridge in the mid-1980s, and the construction of the M41 which links the M4 coastal road to the N2, the infrastructure and setting was provided for a massive regional expansion.

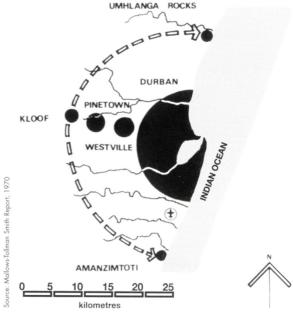
Consequently, during 1989-1990, the owners of the land, Tongaat-Hulett Group, convened a Planning Forum and released a report on development trends within the Durban Functional Region (slightly larger than the eThekwini Municipality of today). This report

and white population groups, thus creating a bridge. In the process, housing developments, factories, shops and offices were built to stimulate the provision of job opportunities. Until then only

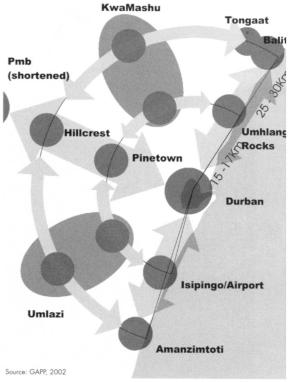
few job opportunities (some 11%) were available north of the uMgeni River where roughly 30% of Durban's population live.

Looking at the developments at Umhlanga Ridge New Town and La Lucia Ridge Office Estate, to the north and south of the M41 respectively, the obvious conclusion is that this development has caused if not precipitated the demise of the Durban city centre. Yet, research has shown that this trend accounts for only 9% of the development. A total of 77% is entirely new business ventures and the remaining 14% has always been located north of Durban's centre (McCarthy, J & Robinson, P The Forum & Moreland Today, 2000). This development thus complements economic growth throughout eThekwini and it should be noted that Durban remains the least decentralised city in South Africa with only 33.8% of it's A and B-grade office accomodation outside the central business district. By way of comparison, the corresponding figures for Cape Town are 57.4%; for Johannesburg 67.3%, and for Pretoria 74.1% (SAPOA Office Vacancy Survey, September 2002).

Due to its geography and transportation routes, the urban development of Durban resulted in a T-shaped formation. The 'stem' represents the route to the west leading to Pietermaritzburg in the interior; the 'arms' lead up the North Coast and down the South Coast respectively. Between these axes of development were built two townships, KwaMashu (in the north-west) and Umlazi (in the southwest). Thus the built development of Durban should rather be considered as an



arc drawn from Amanzimtoti in the south, through Hillcrest in the west, and to Umhlanga Rocks in the north, as had already been articulated in 1970 (EWN Mallows in association with Tollman Smith and Partners. Umhlanga Rocks Town Planning Report, 1970). The recent developments at the Umhlanga and La Lucia Ridges acknowledge the radial concept and aim to integrate marginalized areas into the urban mainstream by driving development axes through these previously marginalized areas and encouraging the development of local nodes and economies within them.



Urban Design and Architecture

The 142ha site at Umhlanga Ridge has been designed as a series of city blocks on a grid pattern traversed by tree-lined boulevards, with road forks, vistas, circles or circuses - some with fountains - and an oval. Street widths alternate between dual-carriage-ways for boulevards, wide streets with generous planting strips, and narrower, pedestrian-friendly lanes. Cars are corralled at mid-block where landscaping is carefully included in the design. The built environment at Umhlanga Ridge New Town Centre is thus shaped

around public spaces and boulevards with prime offices, and residential accommodation in the form of upmarket apartments and penthouses of 2–4 storeys, integrated into a mixeduse development. The largest building lots bound the M41 arterial and are given over to two shopping centres where motortown provides the prelude to an urban environment of mixed-use promoting street life. Interestingly, the Mallows-Tollman Smith Report of 1970 had already proposed a 'District Centre' here.

To ensure that the 3-dimensional reality of the New Town would fulfill the concept, *GAPP Architects & Urban Designers*, prepared a



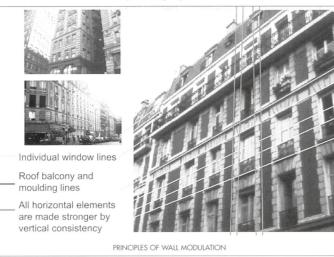
Development Manual during 1998-2000. This concept draws on historical precedents for what it calls 'value creation' eg the grachten of Amsterdam, the crescents of Bath, Hausmann's boulevards in Paris, and the Ponte Vecchio in Florence, and wishes to promote a new relevance for such 'classic principles of place-making'. The Manual lays down parameters for architects and developers to work within overall guidelines. Each building proposal is subjected to a design review panel whose role it is to protect the value of the overall project as well as the interests of individual developers who will in turn have the assurance that all

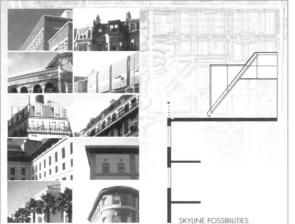
Umhlanga Ridge New Town Centre shaped around public spaces and boulevards.

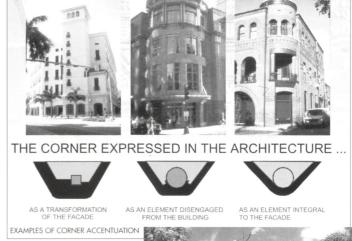
developments will undergo the same vigorous review.

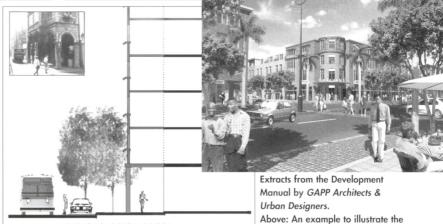
The architecture of slavish pastiche is discouraged. Instead, the underlying principles of historical styles are to be digested to reintegrate a contemporary historicism of timelessness. Depths to facades by horizontal scaling and vertical modulation is encouraged as is the inclusion of colonnades, canopies, screens and balconies. A distinction is made between corner and mid-block sites. For example building on a corner site abutting a primary street must be between

3–5 storeys high, have a floor to area ratio of between 1,5 and 2,1, and coverage of 80%. In addition corner site buildings are to be architecturally accentuated to enliven street activity and should, for example, be indented to acknowledge entrances. Different resolutions should be experimented with in the public-private interface at ground level, as should the junction between façade and roof, to provide a more elaborate public environment. The actual form of development is however dependent upon the street hierarchy, there being different requirements for primary, secondary and tertiary roads.









proposed environment.

ENGAGING AT GROUND FLOOR

New Urbanism

The principles espoused for Umhlanga Ridge New Town are the design objectives of the New Urbanism, a movement which rediscovered planning and architectural traditions that have historically shaped some of the most livable and memorable communities.

In the early 1990s this new architectural and urban design movement began in the USA. At first it was labeled 'Neo-Traditional'-planning because some design standards are reminiscent of the past and include dense development, vernacular architectural styles, buildings on small lots, front porches, narrow streets, lanes or alleyways, garages with apartments above, and convenient public transportation. New Urbanism aims to counter the urban sprawl with the

creation of compact, mixed-use, land-efficient, and close-knit communities

The advent of the motor vehicle provided an opportunity to disperse from city centres, and suburbia became the lifestyle of choice for most Americans. While this new way of living had many advantages, it also fragmented society and broke down the bonds of traditional community. New Urbanism promotes development forms based on proven options from the past which again seem suited to the needs of a diverse society.

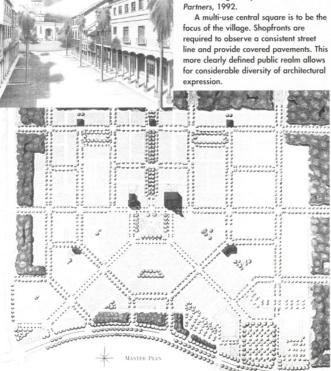
But, New Urbanism is not just

a revival. While it borrows heavily from traditional city planning concepts, it concedes that the realities of modern life eg cars and shedlike retail outlets, must be accommodated. It also acknowledges that current economic and political realities support growth at city edges, and that it is better to mould such new growth into a more sustainable development pattern that will not drain the vitality of estab-

lished urban centres.

Project for a new village at Kendall,

Project for a new village at Kendall, Florida, designed by *Dover Kohl & Partners*, 1992.



Source: Katz, P The New Urbanism. Toward an Architecture of Community. New York: McGraw-Hill, 1994

The Nascent New Town Centre

A Tale of Two Shopping Centres

According to convention, as people move to the suburbs, shops and shopping centres follow. Yet the unconventional occurred at Umhlanga Ridge, where Gateway shopping centre with its main street or 'strip front', provided the context for the urban development. What is more, exactly a year after opening (September 2001), another shopping centre opened (September 2002) and the two could not be more different in concept if not in size.

Once the sugar cane plantations were uprooted, Gateway began on a clean slate. There arose a post-modern centre of innovative construction and high-quality finish crowned by a roofscape of elementary architectural forms, that wrenched the architecture of Durban's regional shopping centres from the grips of neo-colonial masquerade.

While acknowledging its provision of the main street (Palm Boulevard) to the New Town Centre, Gateway Theatre of Shopping is actually an island with introverted 'theatre' of retail and entertainment activity along malls, surrounded by parking and outdoor recreation spaces, and thereby distanced from its neighbours. Acordingly, that is the context for development and the establishing of an urban character will depend on others.

By contrast, The Crescent was not planned for. A marketing possibility must have been sensed by a competitor, belatedly perhaps, because this centre came on the tail of Gateway and had literally to be 'squeezed in' on the edge of the developed New Town by consolidating a number of property lots abutting the major transportation routes.

The resultant configuration determined the concept of a 'laager' of retail outlets enveloping the main parking space, with a stub mall leading to the magnet, a supermarket. For someone with a phobia for being disorientated in shopping centres, the visibility integral with the concept, and the concomitant surveillance, are a godsend.

It is also interesting to note that after the neo-Victorian Pavilion shopping centre on the western gateway to Durban, the same architects have now produced a brutalist and high-tech architecture. However, so entranced were they with the new architecture that the perimeter wall awaits landscaping to re-contextualise the somewhat misnamed 'crescent' with its natural setting!

As interesting as the architectural and urban design dialectic is, the success of the centres will be determined by the shoppers. And given the choice of 3 food supermarkets between the two centres, the outcome will certainly be exciting to watch.

I am grateful for the assistance of Erky Wood and Marcel Zimmermann (GAPP Architects and Urban Designers, Johannesburg), Mike Deighton, project manager for Moreland's Umhlanga Ridge New Town Centre; Keith Pearson, site architect for Gateway; Profs Jeff McCarthy and Peter Robinson (members of the Tongaat-Hulett Forum); Ms Barthi Vithal and Andrew Murray (Johnson Murray Architects); and Rob Bray, Neil Evans and Edmund Batley (Bentel Abramson & Partners, Johannesburg).

Walter Peters, Editor



SUPA QUICK AUTO CENTRE, cnr Meridian Drive and Zenith Rd: Elphick Proome Architects.



THE CRESCENT: Architects Bentel Abramson & Partners.



The shaping of space was the essence of Roman architecture. Roman baths, thermae, were designed for a day's visit and contained shops and restaurants besides their inherent bathing facilities, and combined aspects of a modern health club with that of libraries, lecture halls and reading rooms. If Gateway represents a modern Baths of Caracalla, The Crescent is a latter-day Colosseum.

–Editor

Moreland Millennium Bridge, built 2000

The brief was to create an icon and focal point for the twin developments by Moreland astride the M41 arterial, Umhlanga Ridge New Town Centre on the north, and La Lucia Ridge Office Estate on the south.

The bridge (21m wide and 68m long), combines a solid concrete base with a segmentally-arched steel superstructure. The base resembles an inverted shallow vault with its convex soffit of constant 30m radius tapering to an arris over the sidewalks. The resultant tapered section is echoed in the pointed ellipse of the single pier, which could also be analogous with the prow of ship. The abutments are designed as conventional counterforts, clad



Echoing the concavity of the West Court circus: STANDARD BANK, Umhlanga Ridge, 1 Millennium Boulevard: Emmett:Emmett Architects.



RIGHT—ASSOCIATED MOTOR HOLDINGS (Citroen, Hyundai), Jubilee Grove: Giannini Loizos Architects.



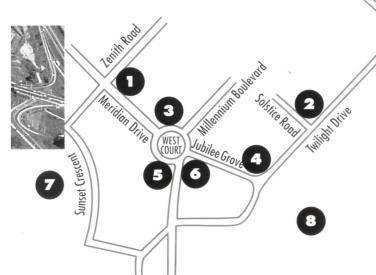
TIGER WHEEL & TYRE, cnr Solstice Road and Twilight Drive: Elphick Proome Architects



FAR RIGHT—ASSOCIATED MOTOR HOLDINGS (Renault, Kia Ssang Yong), West Court: Hersch Lewison Architects.



AUTO CITY in the prow facing West Court Circus, corner Millennium Way & Jubilee Grove: Stauch Vorster Architects.



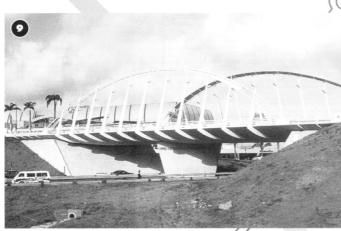


GATEWAY THEATRE OF SHOPPING: Architects and Principal Agents Johnson Murray Architects.

in reconstituted granite slabs. A visual tension is created

by the oblique angle of the bridge to the road beneath, a tension exploited by the vertical ribs affixed tangentially to the convex soffit which render each of the arches battered. Besides their structural purpose, the clusters of tubular steel arches represent an urban sculpture while providing practical support for an unusual lighting system.

Architects: GAPP Architects Civil Engineers: BCP Engineers (Pty) Ltd Geotechnical Engineers: Drennan Maud & Partners Lighting Engineers: Bosch Projects (Pty) Ltd Contractors: Grinaker-LTA



MORELAND MILLENNIUM BRIDGE: GAPP Architects.



Umhlanga Ridge New Town Centre

The Crescent





A Concept Suggested by the Site

The site proposed for this shopping centre was severely constrained, comprising an amalgamation of different sites. It was however endowed with extremely good visibility from the N2 motorway, and close proximity to the new Gateway shopping centre.

The site was also topographically challenging, and provided less area than desirable for optimum letting and parking, which gave rise to a multi-tiered concept not usually associated with the model for a 'Value' or 'Convenience' centre. The developers had studied a plethora of schemes prepared by various architects, most of which proposed small, fragmented courtyards and basement parking, terraced to acknowledge the inclined site.

While the solution proposed by Bentel Abramson & Partners (now Bentel Associates International) involved substantial earthwork, it resulted in a strong unifying concept for the scheme. This was achieved by providing a huge, 150m diameter, internal circular court-yard (hence the 'Crescent') as a "piazza" of parking, with a concave retail perimeter of well exposed shopfronts to define the "space" which became the *raison d'etre* of the centre.

The circular courtyard was then reinforced by a roofedparking level, to provide shoppers with continuous views of the retail experience below.

From the central area, shoppers perambulate the external walkway, adding energy to the active edge of merchandising and signage, which gradually evolves into the short enclosed mall drawing patrons to the centre's anchor, a supermarket.

By pushing the supermarket into the deepest and most concealed corner of the site, the general retailers were given the most visible and accessible areas. In addition, with the supermarket in a semi-basement position, its roof provides for retail opportunities which were in demand by detached retail tenants attracted by the exposure. These components allowed for the full perimeter of the site to be utilised with active, visual edges and internally framed spaces for shoppers.

Parking

Unusually, the site acknowledges 5 vehicular approaches. The main access dips into the circular "piazza" and entices the shopper to the immediate retail environment. On busy days, further parking possibilities are available by turning either left or right of the main entrance, to the southern or northern ramps, which lead to the roof parking areas. In addition, parking is available at the extreme ends of the site by accessing the basement or the rear perimeter service road. In a demanding retail environment, parking circulation is as important as pedestrian flow, the two needing to be complementing elements.

Architecture

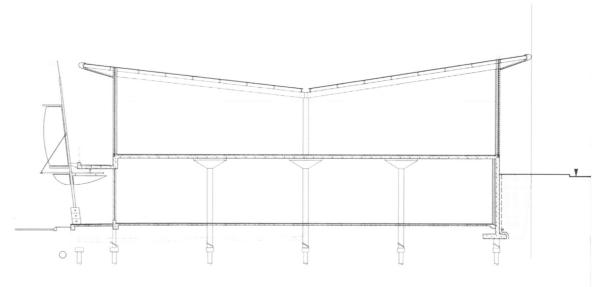
The Crescent is a bold concept with bold detailing to dignify the public realm. Thus, a

philosophy of 'community dominance above individual expression' was consistently applied with customized shop fronts subservient to the complex as a whole. So often anchor tenants are allowed to 'run riot' over the generic expression resulting in an array of visual clutter which detract from a centre's concept. Here the message was "Crescent first, tenant second".

This was a policy reinforced by Moreland whose Design Committee was intimately involved in the decision-making process and the promotion of design standards as seen elsewhere on Umhlanga Ridge.

The architectural language to achieve this was made up of a few simple elements. The roof of *Zincalume*, a butterfly section which is visually less intrusive than a pitched roof, and the eaves are of aerofoil design, to underscore a hovering of the roof over the solidity of the crescent. It is to the credit of the developers that the roofs were considered indispensable to the development.

The off-shutter finish to the concrete (*Cemwash* finish) set the theme for materials in their natural state, including the roof. The galvanised steel structures, pylons, lift towers,



signage, flag masts, balustrades and sunscreens, provide a counterpoint to the solidity of the crescent.

The all important shopfront design comprised clear glazing to the carcase openings, forcing ceilings to drop behind the glazing line and allowing maximum transparency in the shops. Bulkheads were avoided and tenants were required to accept appropriate signage, leaving the charcoal frame to the shopfront as a unifying element.

The building serves as a neutral backdrop creating an environment which puts the emphasis on the shoppers. The design of other elements, including the focal central building (housing the office of the Centre Manager), provides optimal sight lines, surveillance and orientation. In this way the architecture allows the customer, the retail displays and the shopping interaction to become the energy, the colour, and soul of the space.

In general the centre is meant to provide a pleasurable, easily accessible, delightful and easy going experience which should encourage customers to visit time and time again.

Rob Bray and Edmund Batley

Messrs Bray and Batley are Directors of the practice now restyled as Bentel Associates International. Mr Batley was project architect for The Crescent; assisted by Mr Jannie Loots. –Editor

Architects: Bentel Abramson & Partners (Pty) Ltd, Johannesburg

Quantity Surveyors:

Francis Williams-Jones Kigole

Structural Engineers:

May Househam & Associates

Civil Engineers: BKS (Pty) Ltd

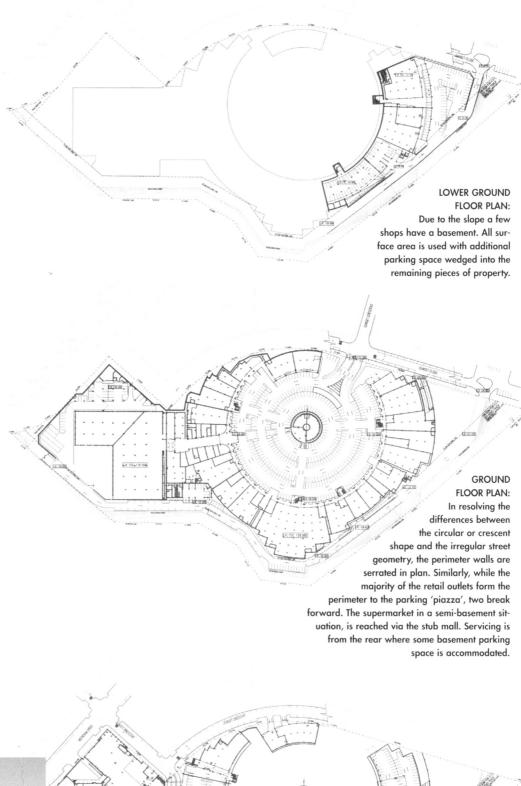
Electrical Engineers:

BFBA Consultants (Pty) Ltd

Mechanical Engineers:

Boardman, Donnelly & Oldfield CC

Contractors: Ross Construction





FIRST FLOOR PLAN:
Roof parking is accessed via the ramps tangential to the main axis.
Lift and stair cores project into the parking 'piazza' space. Two detached stores are accommodated on the roof level, one terminates the circular parking area, the other is at the rectangular end of the site.

Umhlanga Ridge New Town Centre

Gateway Theatre of Shopping

Ever since Old Mutual Properties (OMP) launched its vision of a mega-regional centre of international standard, there has been a lively debate by the public on its location, size, viability, architecture, tenant and consumer support etc and this article aims to clarify some of those issues.

The Urban Generator

Most cities have developed with high density down town CBDs surrounded by suburban residential neighborhoods. In this case, Gateway became the generator for the new town centre and had to accept its urban responsibilities and acknowledge its relationship within the overall streetscape.

The Boulevard and Fountain Circle is animated with pavement cafes and bars as social gathering spaces and is the framework around which the new town is to develop. It was styled on Meissner Park in Boca Raton, Florida, USA, with quality public spaces. The land opposite Gateway is zoned as a mixed-use four-storey urban precinct development with retail outlets, restaurants, offices and apartments, which should ensure 24-hour animation to the Boulevard. Although cars are allowed into the Boulevard it is primarily a pedestrian space with no curbs or pavements.

Development of the Mall

Keeping in mind the urban relationship of Gateway to the new town centre, RTKL recognised that with the Durban weather and the shoppers' mind set, an enclosed air-conditioned mall was required. However a close relationship had to be maintained with the external spaces. The outdoor space of the Palm Court is linked directly to the internal mall. The mall is also linked at the northern end with direct access from *Expo-Xplore*,

alongside the Imax theatre, to the Boulevard. The mall was developed not as a mere "passage" onto which shops could front but rather as a series of streets or court spaces, which were glazed over. Generous glazing allows maximum natural light and ensures that the shopper is always aware of the indoor-outdoor connections. The level of daylighting is further enhanced by recessing the line of shops on the 1st floor from the line of shops on the Ground floor. This allows for the development of what is known as the 'keyhole section' and creates a greater opportunity for glazed roof sheeting in addition to the clerestorey lighting. Also, without the usual approach of rooftop parking, the roof was accentuated with conical rooflights at the knuckles of the North and South transition courts, and domed roofs at the lead-in malls on the North and South malls. In the words of the designers, RTKL, the architecture is 'respectful of the multi-cultural appeal of the centre, the design looks to the rich colours, textures and cultural history of the region without depending on historical icons to define the architectural form".

Cars

Cars play a major role in the success of any shopping centre. In the mind of the shopper, ease of access and convenience are crucial to the attraction of Gateway. In order to accommodate 7500 bays and avoid destroying the ambience of the Boulevard, parking is situated around the side and back of the mall. This avoids the traditional South African regional centre approach, whereby the parking decks form the main façade when approaching the centre, and flatten the roofscape.

The parking is divided into five separate areas connected by a perimeter access road.

Two parking areas were developed into fourstorey parking structures and treated with the same care as the main building.

Shopping and Entertainment

The amalgamation of shopping and entertainment activities into 'shoppertainment' is a major concept. Gateway attempts to take advantage of this concept without trying to surround a traditional mall with a 'Disney' theme park, as is often the case in USA. Though the driving force remains as shopping, the "entertainment" components are basically in two forms. One is that retail-merchandising integrates entertainment in the form of music, coffee shops, promotions, etc. Fashion and merchandising has become more theatrical in order to grab attention. Second, are the complementary activities of 'pure' entertainment such as movies, the Imax theatre, amusement arcades, and the "edutainment" facilities such as the Science Museum. Restaurants perform both roles of retail and recreation.

Another concept used is that of zoning and branding. The traditional concept of comparative shopping was developed and divided into themed areas such as Cavendish style, Cavendish Trends, High Street, Palm Court, Expo Xplore, Home Base etc. Each of these zones is then branded by the tenants that are located there. The choice of tenant is critical to ensuring the maintenance of a high level of design in shopfitting, as is the understanding of the link between entertainment and shopping. The concept of branding of the mall is most evident in the design of the Expo-Xplore by Design Development Group. This brand encompasses 'extreme sports' and outdoor adventure. The location of the climbing wall and the hanging sculptures further reinforce the mood of excitement and adrenalin which typifies this zone.





C

With the centre now trading for one year there have been both casualties and successes. Some of the smaller retailers have experienced difficulty which could be attributed to their locations along the mall, or their specific retail offering, on the other hand stores such as Woolworths, Truworths, Imax, Ster Kinekor and some restaurants have recorded Gateway as their best performing stores in the country and are looking at expanding their operations there.

Historically centres of this size take two to three years to establish and this seems to be the case with Gateway.

Critical Mass

The sheer magnitude of Gateway (126 000m² of lettable area) creates the critical mass to generate its own success. Simply, the larger the centre, the bigger the draw and hence higher the foot traffic and trading densities of the individual shops. The best returns on investment have been from regional shopping centres over 75 000m² of gross lettable area.

Much of the development of Gateway was experimental and based on recognising global trends, and changing markets. The vision of OMP was to compete *both* nationally and internationally and to create unique features that are powerful enough to create interest through the international media. It requires a different mindset to the traditional Durban attitude of how you will compete with La Lucia Mall and the Pavilion. The investment of R1.5 billion is not for the meek or cautious. It requires vision, direction and decision-making that is not stifled by the committee processes.

Innovation in Construction

Construction began on March 1999 after a year of negotiation with contractors Grinaker, Group Five and WBHO who formed a joint venture. With a construction period of 29 months, and a building area of 320 0000 square meters the contractors were under pressure right from the outset. One of the non-negotiable criteria for the contractor was the quality

Tilt-up

In conjunction with the early erection of the roof was the development of the envelope of the building. A tilt-up system was developed that was previously used primarily in

industrial buildings. This system was selected for two reasons: the speed of construction and the quality of finish that was required.

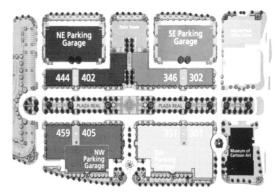
Each panel, 5m wide by 14m high, was cast on the ground adjacent to where it would be required. Formers were laid onto the casting bed to create all the reveals that were required in the finished product. Lifting hooks were cast into the back of the panels to facilitate the erection of each panel. Once cured the panels were lifted into position by mobile cranes and dropped into position by stays. This was the first time an attempt was made to lift a panel of this size into position. When the panels were in position the First Floor slab was cast and the panels fixed to the edge of this slab. This left the bottom of the panels free to cut any openings that were required further extending the flexibility of planning. At this stage the parapet, gutter and

roof eaves could be completed. This created a watertight building in which internal and external finishes could be completed simultaneously.



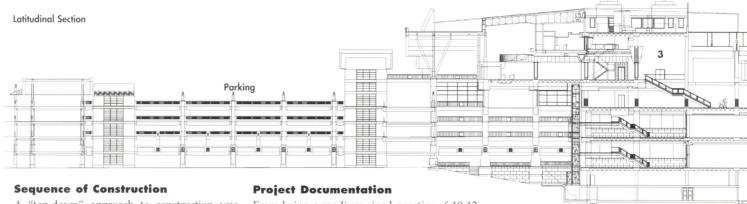
and standard of the construction the client demanded, bearing in mind the time frame for construction. This rigorous attention to quality, workmanship and safety was maintained during both the construction process and in the completed building. In order to attain the quality and the speed, a number of innovative building systems were developed, two of which are the sequence of building construction in the mall and the 'tilt-up' system for the external envelope.

The centre was opened on the 27 September 2001 at a total project cost of R1.5 billion of which the building cost was R900 million.



ABOVE: Meissner Park, Boca Raton. The central boulevard, Plaza Real, measures 300m x 55m, which approximates the Palm Boulevard at Gateway in size.



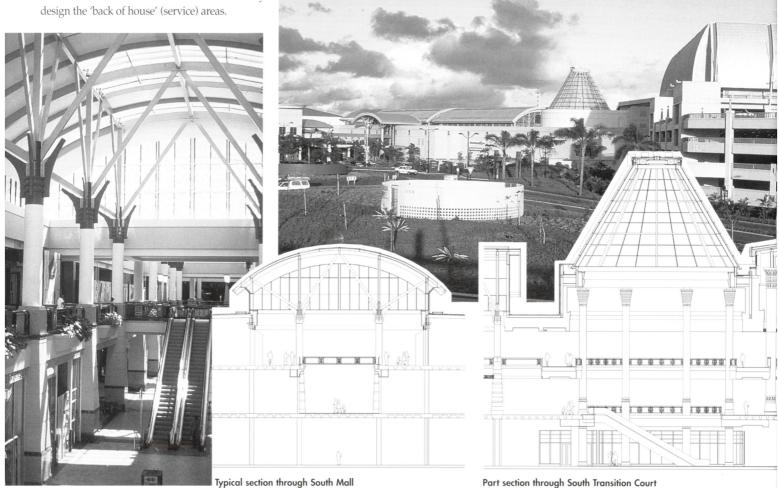


A "top-down" approach to construction was developed, particularly in the malls, which traditionally take the longest to complete due to the complexity of finishes and co-ordination of different sub-contractors. Once the piling was complete, the Ground Floor slab was cast. Thereafter, the columns from the Ground Floor were cast to the Roof Level. Scaffolding was erected to the underside of the roof and the roof completed without the intermediate floors being complete. Firstly, this created a covered environment to work in earlier than is possible in a traditional building sequence. Secondly, work was completed at the upper level and the scaffolding stripped down stage by stage. This ensured that no work was carried out on top of completed work, hence avoiding damage to completed work, creating a better end product. With the change in sequence of construction the sequence of information from the architect was dramatically changed. The architect has to develop information on the finishes in the malls much earlier and almost simultaneously

From being a medium sized practice of 10-12 people, Johnson Murray Architects had to grow to 30 plus people within a year at the peak of the project. Simultaneous with this was the growth of IT skills in the office. *ArchiCAD* was chosen as the software package for a number of reasons. It allowed a quicker learning curve for first-time users; it has an easy drawing exchange format with other packages such as ArchiCAD and Microstation (used by the American architects). A number of people could work on the same plan simultaneously with the teamwork function. The most critical reason though is its quick and easily accessible 3-D capability. Parts of the building could be modeled in 3-D while still continuing with the construction drawings. It also allows for quick and easy management of computer files as the building is always modeled as one entity.

The management of drawings issued to the contractor and consultants is critical on a project of this scale. A total of 2000 architects' drawings were produced. All drawings including the consultants' drawings were issued through the architect's office. Managing which drawings and revisions were issued to the contractor or consultants was done on a database controlled by a dedicated staff member. In order to appreciate the enormity of the task of issuing drawings, a total of over 41 000 architects' and 21500 engineers' drawings and new revisions were issued to contractors and consultants! This does not take into account the contractor's responsibility to issue drawings to a further 150 sub-contractors.

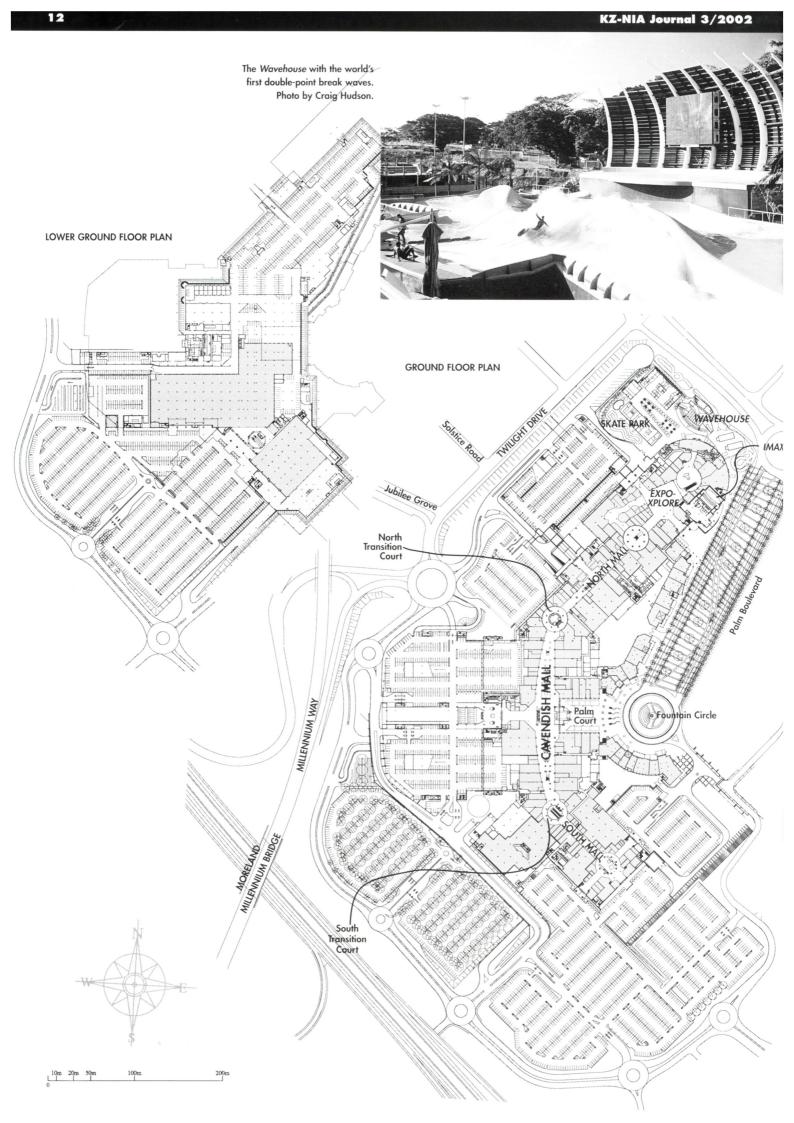
Drawings were received from RTKL, which were developed in *Microstation* and in *Archi-CAD* format periodically, either by e-mail or on

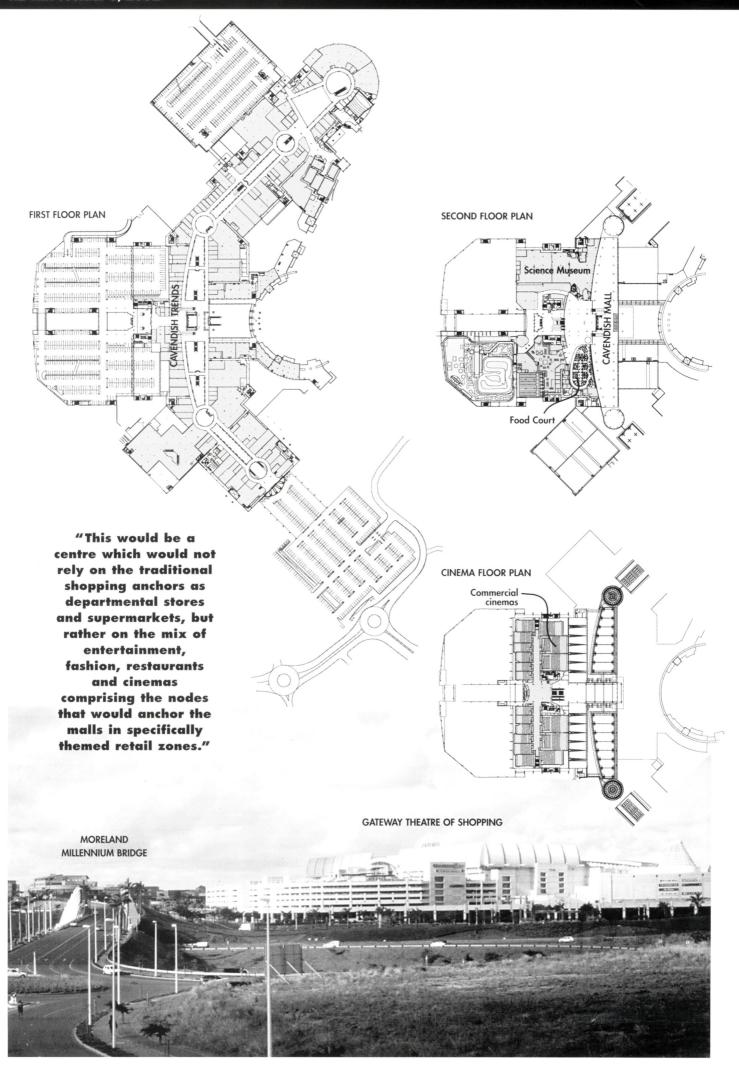


Side elevation

Section through Cavendish Hall

LG





Gateway, the Genesis of a New Town Centre

Some reflections on a seven year adventure in property development, urban design and retail architecture.

Shopping centres are one of the few building types that are totally accessible public buildings in the truest sense. They are designed to attract as many people as possible and to entertain, comfort and even amaze with their visual offerings. Thus, when there is a very large building which is drawing over a million visitors a month, there is the potential for creating a vibrant, urban place, a modern day market square around which a town could be developed. This was the basis of the development vision that was put to Moreland in 1994.

Those were uncertain days on the eve of the first democratic elections, but therein lay the opportunity for some ambitious but relatively inexperienced property developers such as attorney Peter Blanckenberg and I, to promote what we believed to be the development site of the century.

The greater site which extended to the N2 freeway was then owned by three parties, Tongaat Huletts, the Borough of Umhlanga, and the SA Sugar Association. Moreland, acting as the property development arm of Tongaat Huletts, had previously acquired development rights for a portion of the land to be developed which included a retail centre of 35000 gross lettable area (GLA) which had been named "Gateway", marking the northern portal to metropolitan Durban. The planning concept for the remaining land of about 120 hectares was at that stage, in 1994, modelled on Midrand as a business park, but this had run into fierce opposition from the adjoining residential community.

The concept of a regional shopping centre as the catalyst for a new town centre was ambitious and unique, however this was the attraction to the national retailers, this was not just another free standing shopping centre to compete with La Lucia Mall down the road, but a centre with enough critical mass to act as a regional magnet for the entire area north of Durban, set within an ideal urban context.

At the end of 1994 Moreland appointed Johnson Murray Architects to develop the town

centre together with Lance Smith of Hallen Custers Smith, who brought a clarity to the planning process and resulted in well

Master plan of Umhlanga New Town Centre as conceived jointly by Johnson Murray Architects and VARA, August 1997. The concept of Meissner Park is clearly imbedded between the two circuses.



Aerial perspective looking westward over the new town centre by Andrew Murray, 1996. The focus is on the boulevards with obelisks on circuses visually terminating vistas, while Gateway shopping centre, disposed around the crescent at left, is still shown at its 'modest' conceptual beginning.

articulated principles that shaped the early proposals.

In 1996 Moreland had accepted the New Urbanist principles for the new town centre. Willie Vandeverre of VARA Architects & Urban Designers and JMA were jointly appointed to develop the urban design master plan. We undertook a study tour to the USA to see in particular a retail development called Meissner Park in Boca Raton, Florida, where a failed 1960s mall had been replaced with a mixed-use, open-air retail centre, designed around a grand boulevard with a central landscaped garden space. This became the defining concept around which the Gateway town centre at that time was designed, and has remained the centrepiece of the current master plan, skillfully designed and detailed by Erky Wood of GAPP Architects & Urban Designers subsequently, in 1999.

By late 1996 the Foundation Property Group, which had grown out of the small group of professionals formed in 1994 to undertake the development of Gateway and other retail centres, had taken the project to the point where a major financial institution was required to invest in the project and Old Mutual Properties which was in the process of acquiring and developing regional centres, bought the Gateway site. Ian Watt, Managing Director of OMP, then brought an even more ambitious vision to bear, that of a super regional centre of 120 000m² area, which went beyond any centre

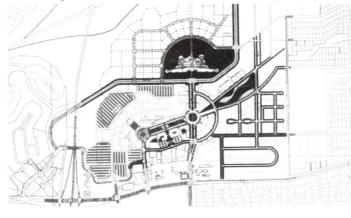
yet developed. This would be a centre which would not rely on the traditional shopping anchors as departmental stores and supermarkets, but rather on the mix of entertainment, fashion, restaurants and cinemas comprising the nodes that would anchor the malls in specifically themed retail zones.

In 1997 OMP appointed RTKL International of Baltimore, USA, to develop this concept. Specialists in retail design, RTKL produced a comprehensive design package which covered every detail of the mall as well as the external formal architectural language while respecting the urban design principles developed over the preceding years.

Johnson Murray Architects were then appointed by OMP to develop this design in response to the continuous changes required by the needs of the tenants and the ongoing development of the "shoppertainment" concept, and concurrently document and detail this in accordance with the fast-track building process which commenced on site in March 1999.

The boldness of the Gateway project cannot be overstated as new retail concepts and designs were developed favourable to the making of a financially viable property investment within the limits of time and budget. This required alternative and creative ways of reinventing the way shopping centres are designed, and broke the mould of traditional South African centres, leading the way in global terms with its innovative new attractions such as the *Wavehouse*, which is a world first with its double point break waves. The powerful, man-made waves are dubbed "the future of nature"; perhaps Gateway could emerge as "the future of retailing".

Andrew Murray
Johnson Murray Architects:
Principal Architect for the
Gateway Theatre of Shopping
Andrew Murray is now living
and practising in Melbourne,
Australia. – Editor



Book Review

A Guide to the Architecture of Durban and Pietermatizburg

Early in October, under the dome of Howard College, a gathering of people witnessed the launch of Dennis Radford's, *A guide to the Architecture of Durban and Pietermaritzburg*, published by *David Philip*, an imprint of *New Africa Books*.

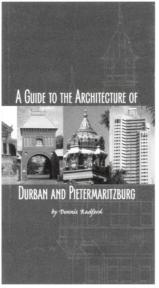
The modest event by no way belies the importance of the book, which is the first comprehensive pocket guide on local architecture to be made available at bookshops. As acknowledged in the introduction, the book follows a tradition of guides that have

been produced intermittently by the *Kwa-Zulu Natal Institute for Architecture* over many years, however these publications were not widely available to the public.

There is a wide-ranging and eclectic selection of buildings in the guide, while paying good attention to important historical references, the book makes significant inroads into the auditing of fine modern and contemporary buildings. It is here that this publication makes a new contribution, while public awareness in historical and conservation matters has been mobilised for some time, it is the interest in current architectural issues that needs to be promoted.

Emerging clearly from the pages is a profound catalogue of regional modernism which has been in effect for nearly half a century. The sublime residential apartment buildings of Crofton and Benjamin of the 1950s are featured, as well as the bold domestic statements of Hans Hallen and Building Design Group, an important period of architecture that followed in the wake of the seminal House Biermann of 1961. Hallen's larger projects of the 1970s are also accounted for, leading through to the contemporary work of currently practising firms of Johnson Murray, Stauch Vorster, and OMM Design Workshop, among others.

The format of the guide has been skillfully handled with the grouping of buildings logically arranged in terms of locality and an index of building types, styles, and architects has also been included to offer alternative categorisations. Each selection is identified by street address as well as an assigned code which assists with the location of the building on the



area maps that can be found at the start of each section. Where appropriate, referencing has been included to assist further research by others.

Radford's descriptive language of the featured buildings is informative and at the same time written in a conversational manner that will broaden the accessibility of the material. The layout has been designed to highlight the author's featured selections with large photographs accompanying the text. The desire to be widely inclusive is resolved by running a slender

pictorial bar at the foot of the pages. The graphic design is colourful and punchy, contributing to the visual appeal of the book.

On a critical note, the photography sometimes misses the iconic view, with some of the smaller pictures approaching the size of postage stamps difficult to decipher. The inclusion of drawings in some places is informative however the low resolution of some reproductions in print is unfortunate. A few editorial mistakes have crept in with respect to incorrect labeling, and hopefully these can be addressed in future editions.

This pocket guide to the architecture of Durban and Pietermaritzburg will undoubtedly become an essential acquisition for a broad interest group. For learners as an introduction to the architecture of the region, for students to pinpoint and locate notable buildings to visit, and for built environment professionals as an acknowledgement of corporate activity.

Ample content for a series of monographs in the future perhaps? Hopefully further partnerships can be struck between researchers and publishers to document the region's architectural virtues. Maybe it won't be long before we see a special volume of Benjamin or Hallen alongside the Gehry's and Foster's on the bookshelves at *Adams* and *Exclusive Books! Paul Saunders*

Mr Sanders, Lecturer in Architecture at the University of Natal, has accepted a position at Queensland University of Technology in Brisbane and will be departing for Australia with his family early in the new year. Our loss is indeed Australia's gain! – Editor

Dennis Radford. *Guide to the Architecture of Pietermaritzburg and Durban.* This 121-page pocket guide to the major buildings in the two principal towns of KwaZulu-Natal is published by *David Philip* and *New Africa Books* and retails at R154.00.



Natal School of Architecture 2002 Simulated Office Project

The 2002 SOP exhibition and prize-giving ceremony was held at KZ-NIA House on Wednesday, 20th November. The event was sponsored by *TotalCAD* and *Regma Drawing Office Supplies*. The following prizes were conferred:

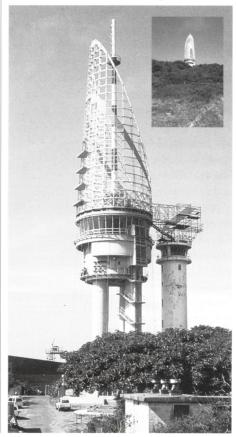
The KZ-NIA Prize for the Best 'Practice' went to DG4 which produced a Cold Storage Facility for Springfield Industrial Park, mentored by architect Richard Horner. Members of the practice were Ms Leigh Bishop, Naeem Cassim, Suhayl Ballim and Greg Hendricks.

The *ArchiCAD* Prize went to the practice LAMA for an Office Development at La Lucia Ridge, mentored by architect Peter Rees. The members of the practice were Ms **Lemohang Mabulu**, Ms **Maria Allinson**, **Ashwin Balkissoon** and **Jaysing Saulick**.

The Prize by the KZ-N Chapter of the Association of SA Quantity Surveyors went to the 'practice' A&T Consultants of which Ms Avitha Ramdaya and Thomas Fuller were the members.

Millennium Tower

Durban's Millennium Tower is nearing completion. On 29th August the cowl was hoist upon the base by special crane. At the time of this photograph, on 10th October, the rudder was being constructed atop the original signal tower, now in the process of pneumatic demolition. Architects: soundspacedesign cc



Reflecting on a visit to Moscow a couple of months 'down the line', is actually a good opportunity to revive those memories. With a diplomat-sister stationed in Moscow, the chance to spend a Russian Christmas together was an enticing prospect - albeit in the dead of winter and in sub-zero temperatures.

Having travelled to Eastern Europe just after the Berlin Wall had collapsed, I am pretty familiar with the woes of socialist ideology. Yet, much has happened in the interim twelve years. If I expected Moscow to resemble the gloominess of Warsaw, or the dilapidation of Bucharest, or even to share the 'empty shelf syndrome' of Sofia, I had been hugely mistaken. The 1950s Moscow international airport terminal building - complete with unfriendly custom officials and impatient queues - is about the only environment that recalls the former communist regime. (The building and the bureaucratic procedures are frequently attacked in the local press, and I bet it is only a matter of time before the terminal - as in Athens - will receive a complete face-lift.) By contrast, the city has been subjected to a huge restoration campaign, driven by a mayor intent on preserving its architectural heritage that is matched

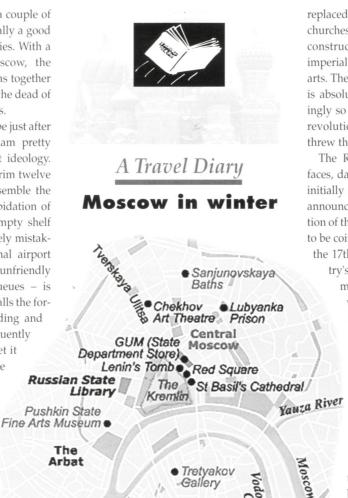
To Novodevichy Most of the historic sites are Convent situated in the city centre. which is breathtakingly beautiful. Apart from the imposing Kremlin and vast Red Square, the city is littered with the emblematic onion-domed Russian Orthodox churches. As annoying as the severe cold may be in restricting tourist movement, the snow-covered landscape provides a neutral canvas for the boldest of colours imaginable. The hues of the onion domes and church

by few other places in the

world.

spires must be the envy of any Dulux Match-maker Series, ranging from sunflower yellow, lime green, emerald green, cobalt blue, and turquoise to gold leaf. The distinct red facebrick of the dominating Kremlin walls adds to this visual spectacle. The city is a fairy-tale coming to life, and one must continually remind oneself that it is real, and not a stage set for a ballet performance or a Chekhov play.

The Kremlin ("fort-



ress") has, since its inception in the 12th century, served as the symbol of political power. It was the citadel of the Tsars, the headquarters of the former Soviet Union and now the official residence of the Russian state president. The initial wooden structures have long since been

Garden Ring

Central Artists

House

Gorky

Park

replaced by a magnificent ensemble of palaces, churches and cathedrals. The State Armoury, constructed in 1844, presently houses the imperial collection of decorative and applied arts. The abundance and the wealth on display is absolutely overwhelming - if not nauseatingly so - and immediately contextualises the revolutionary forces which violently overthrew the insular Romanov family.

The Red Square onto which the Kremlin faces, dates from the 15th century and served initially as a market, but later also for public announcements and executions. The association of the word "red" with communism is said to be coincidental as the denotation dates from the 17th century, but aptly reflects the coun-

try's tumultuous history. The square is 500 metres in length, flanked by two gateways, the legendary St. Basil's Cathedral, a history museum, and Lenin's mausoleum, which ironically faces the GUM shopping centre.

The unfortunate architect Postnik Yakovlev was commissioned by Ivan the Terrible to design St. Basil's Cathedral in celebration of the capture of the Mongol stronghold of Kazan in 1552. According to legend, Ivan was so taken with the beauty of the building that he had the architect blinded to prevent him from repeating any design of similar magnificence!

If Lenin's mausoleum is no longer an obligatory visit for the indoctrinated communist youth, it is still a sought-after tourist attraction, particularly by travellers from the Far East. The mausoleum is built in the distinctly stoic Soviet style of the 1930s, though dwarfed by the Kremlin behind. Bayoneted soldiers usher one respectfully, and in single-file, past Lenin's small, embalmed body. Like many Moscovites, one cannot help but to wonder whether it is not time to literal-

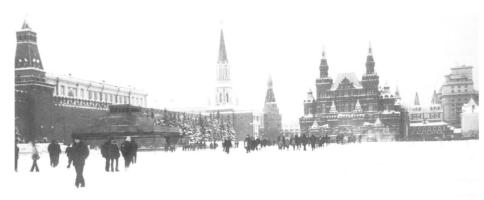
ly bury the past.

The GUM I recall from National Geographic exclusively offered state manufactured and controlled merchandise for sale. Subsequent to the democratisation of Russia, this shopping mall, dating from the late 19th century, features all the prominent fashion houses of the world, with wares sold at exorbitant prices, which the devalued Rand simply cannot meet. judging from its wellheeled and



dressed clientele, it is frequented by the everincreasing Russian *nouveau riche*.

The rest of Moscow is a treasure trove of museums and theatres, of which the Tretyakov Gallery, the Puskin Museum of Fine Arts and the Bolshoy Theatre are the most renowned. Much of the art works, accumulated by private collectors, were confiscated by the Soviet government after the Bolshevist Revolution, which again draws attention to the vast discrepancies in wealth that existed between the rich and the





Clockwise from top: Red Square; St Basil's Cathedral; and The Kremlin.

Opposite page: Gold-leaf covered onion domes of a Russian Orthodox church.

of the British Embassy, few contemporary buildings impressed. Judging from an article recently sent to me by my sister, the poorly designed state commissions (still awarded to an architectural oligarchy) are being deplored by members of the younger architectural fraternity who are particularly well

informed about avant-garde happenings in the rest of Europe.

Moscow is a city riddled with paradoxes and underlying symbolism. It is understandable that Moscow – as indeed Mother Russia – would feed the romantic soul of the Russians and capture the imagination of authors and artists alike. The irony is not lost when one sees huge and beautifully decorated Christmas trees on Lubyanka Square directly opposite the infamous headquarters of the former KGB. A general reluctance to engage in the hardships of the imminent past by all encountered, reinforces the prevailing commitment to the fledg-

ling capitalist future. In fact, being accustomed to the suspicious psyches of the Bulgarians, Romanians and Yugoslavs encountered in 1990, the freedom of association and movement is disconcerting – almost bordering on the disappointing.

My overall impression was one of a society determined to shed its stigmatised past; a highly educated people intent on competing on an equal footing with the rest of the world. And if the present state of economy does not yet match this aspiration, believe me, it soon will.

Ora Joubert

Professor Joubert is Head of the Department of Architecture at the University of the Free State. She visited Moscow during December/ January 2001/02.

-Editor

poor. The collections are astounding, and representative of all the major art movements of Europe, dating from antiquity to the present. An exhibition on Iakov Chernikhov's architectural fantasies at the Moscow State Museum was a highlight, as was a visit to the house museum of the controversial futurist poet Vladimir Mayakovsky. Regrettably, due to the fact that very little information is available in English, it is difficult to establish whether the constructivist facade and bizarre interiors are original or a contemporary interpretation – the only example of that design genre that I encountered. An ice sculpture exhibition in Gorky Park, and a visit to the Novodevichiy Cemetery - a deceased Russian "who's who"were equally fascinating.

The sights are endless. Suffice to say that a three week visit, and especially in Winter, is way too short to absorb all this 800-year old city has to offer. However, with the exception



