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ESTATE ARCHITECTURE

Journal of the KwaZulu-Natal Institute for Architecture

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This journal, now in its 32nd year of publication, has since inception been sponsored by Corobrik.
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Ivor Daniel being handed the reigns of office by immediate-past KZ-NIA-President Bruce Clark.

Induction of KZ-NIA President

At a function held at KZ-NSA Gallery, 166 Bulwer Rd., Ivor Daniel was inducted as KZ-NIA-President for 2007/08.

Certificates were handed to the clients and architects of the four award-winning buildings for the period 2005/06 (see *KZNIAJ* 2/2007).

At the same function, KZ-NIA President Ivor Daniel bestowed upon past KZ-NIA and SAIA President Patricia Emmett an illuminated scroll "in recognition of a decade of selfless service to the profession of architecture, and for nurturing links with the fraternity on the continent of Africa and internationally".

Guest speaker was Cape Town colleague Heinrich Wolff, winner of the 2007 *DaimlerChrysler* Award, who addressed the meeting on "Architecture and Contemporary Culture". This annual Award for South African culture was initiated in 2000, and serves to give international exposure to people under forty working creatively in their respective fields of culture. The 2007 award was dedicated to architecture. The portfolios of the eight architectural nominees were exhibited concurrently in the Durban Art Gallery, and included that of KZ-NIA member Ndabo Langa.

Left to right, Peter du Trevou, *Corobrik* Managing Director; Trish Emmett; Ivor Daniel; MEC Lydia Johnson (KZN Works); and SAIA-President Hassan Asmal.

Guest speaker Heinrich Wolff.

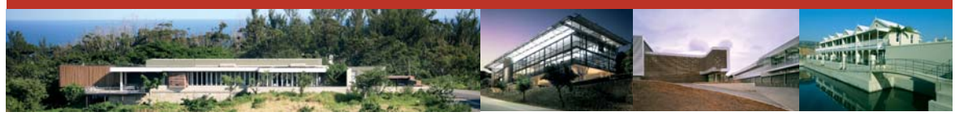
KwaZulu-Natal Institute for Architecture
KZ-NIA AWARDS FOR ARCHITECTURE 2007

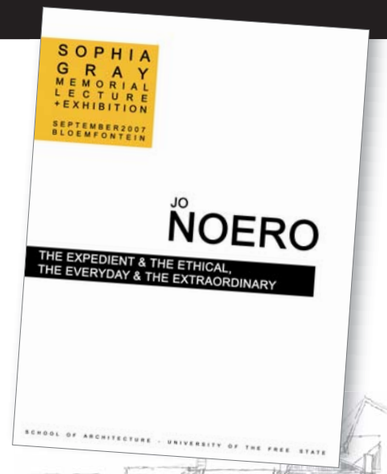
Photographed with Ivor Daniel, *OMM Design Workshop*, from left to right: Carina Strauss; Janina Masojada and Andrew Makin.

Emmett:Emmett Architects: Mike Shannon (client); Frank Emmett and Trish Emmett.

Elphick Proome Architects: Jonathan Hall, George Elphick and Nich Proome.

sound space design cc: Don Albert and Chantal Pieterse.





Forever friends: Rodney Harber and Jo Noero.

19th Sophia Gray Laureate

On Thursday, 30th August, Jo Noero, Professor at the University of Cape Town, presented the 19th Sophia Gray Memorial Lecture, entitled "The Expedient and the Ethical, the Everyday and the Extraordinary", in Bloemfontein. Following Paul Mikula (2005), Janina Masojada and Andrew Makin (2006), Jo Noero is the third Natal alumnus in succession to be chosen laureate of this prestigious event. The concomitant exhibition was on display at the Oliewenhuis Art Museum, where Jo had arranged his work, both built and published, in a timeline. It is planned to bring this exhibition to Durban in mid-February 2008.

Durban's New Airport

Construction has begun on the new Durban International Airport on the La Mercy site designated three decades ago. The project, to be completed by 2010, is designed to cater for 7.5m passengers annually. The iLembe EPC Joint Venture has been appointed by ACSA on a "design and construct" basis. The architectural team is headed by Osmond Lange Architects & Planners, which practice has been appointed in association with Mthulisi Msimang Architects cc, Pietermaritzburg, NSM Design (Noma Manci), Ruben Reddy Architects cc, Durban, and Shabangu Architects cc, Johannesburg.

UKZ-N School of Architecture, Planning & Housing

Professor Ambrose Adebayo has been appointed Head of the School for a further term, 2008–10.

UNIVERSITY OF KWAZULU-NATAL

Pan-African Parliament, Midrand

The design competition for the Pan-African Parliament at Midrand was won by the Durban-based practice Earth-Lab Architects, a collaboration of CNN Architects, Reynolds & Vidal Architects and i3LAB.

The two-phase competition was restricted to practices based on the continent of Africa. Of the original fifty-five submissions, five were selected for participation in the second phase. The entry by Earth-Lab was judged winner due to its "innovative concept, the strength of its architectural statement, clarity of design and the elegance of its resolution". KZ-NIA member Rodney Harber served on the "Deputy Jury".

From left: Karuni Naidoo, Rodney Choromanski and Dean Ramlal of CNN Architects; Steve Reynolds of Reynolds & Vidal Architects; and Suren Indhul of i3LAB.

Editorial
Estate Architecture

The modern housing trend is towards a perceived stable living environment in the form of controlled residential estates with regard to physical security, controllable aesthetics, reliable infrastructure, neighbourhood facilities, financial investment and prestige. The residential estate model is often characterized by houses all "produced" in a defined historical style, fashionably marketable by the developers.

Here architecture is about assembling a kit of parts, which has been made popular by slick and evocative marketing by developers and estate agents. Architects have either bowed to the pressure of the developers and gone along for the ride, while trying to influence the developments, or scoffed at this area of work and busied themselves on a higher plane.

However, residential estates are a fact of life in South Africa and in fact world-wide. Therefore, as architects, we need to look at our responsibilities towards what is obviously a desired need. If this is destroying the basic human settlement model and the architectural environment, then by looking at the needs of all the parties involved we should be able to make a difference. In this issue, we look at the involvement of architects in all the stages of estate development, what they are confronted with and their responsibilities.

Estates are typified by a developer who buys land with the express purpose of developing a gated community. He then sells the land to individual purchasers, or mini-developers in respect of cluster homes within the same estate, through a strong marketing package setting out controls and guidelines relating to the urban design, architecture, landscaping, the building process and code of living conduct.

Architects, technicians, landscapers, developers and builders design and build the residential environment within certain defined design parameters, controls and service conditions. This is a brand of lifestyle with an aesthetic theme sold to the public under all sorts of slick, smart guises.

Political debates and struggles between the developers and homeowners' associations change as developments progress and responsibilities are established. In a long development period, the pace of these changes often puts strains on the design guidelines and the temptation to relax the rules and living concept is felt. Homeowners now control the estate and the period of maintenance, additions, upgrading and re-sales begin to test the acceptability of the original guidelines and rules.

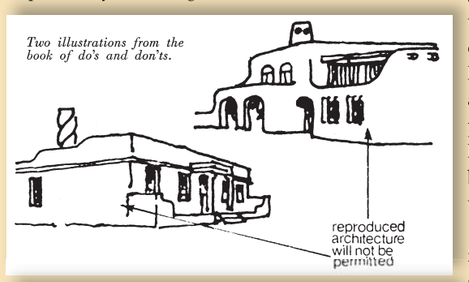
In compiling this issue we drew up a list of all the estates we could think of in the KwaZulu-Natal area and sent out requests for participation. The response was not as good as we had hoped, but from those who did respond we managed to select a variety of estate types with the issues involved in these developments which gives a fair representation of the debate. —*Kevin Lloyd*

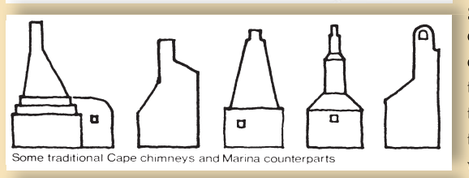
Kevin Lloyd has a long personal engagement with estate architecture in KwaZulu-Natal. Having been appointed design architect for Zimbali Coastal Resort from its inception, he was responsible for the hotel and clubhouse (each awarded a KZ-NIA Special Mention in 1999) and some 30 houses there. .

Upon graduating from UPE in 1979, Kevin gained experience in the office of Wim Phielix Architects, Bloemfontein, while earning an MTRP from UOFS in 1983. In 1985 he migrated to Durban where he rose to become director of the Natal offices of Theunissen Jankowitz in Durban and Margate. In 2002, Kevin commenced independent practice, specializing in residential architecture striving to make every house site and client-specific. With commissions from beyond our national borders, Kevin is able to sustain and enjoy his hobby, travel, together with his architect-wife, Hanlie. –Editor

Estate Architecture in Perspective

To most people, living in an estate conjures up the image of an exclusive, access-controlled development with elaborate homes in a sensitive environment belonging to affluent owners. Those who opt to live there have a desire for status and privacy and seek contact with a community of like-minded people, who socially mirror their own aspirations and share their sense for investment potential, willingly tieing themselves to a common code of architecture and conduct, including the collective responsibility for management.




Some traditional Cape chimneys and Marina counterparts

In such enclaves it is important that the first buildings set the standard which subsequent designs must respect. Thus arises the very real problem of deciding on how and what kind of building will fit appropriately in the given environment providing its unique character. To achieve this, an ecological and urban design approach to development must first be established.

This task is assumed by what I call "conceptors" – people who evaluate a scene and then visualise a concept within which framework buildings can enhance communal life while sitting comfortably within the natural environment. By neglecting to follow the building code established by these conceptors, a slow but insidious process begins which could eventually devalue the whole estate. Thus it is important to set the original standard for any alterations or additions to be measured against.

With the escalation in crime and advertising promoting the ideology of safe and secure environments in gated communities, there has been an alarming growth in enclaves promoting increasingly privatized lifestyles, maintenance of homogeneity of scale and use of materials within the present-day architectural idiom.

MARINA DA GAMA

The first attempt at estate architecture in South Africa was during the early 1970s when Marina da Gama was developed at Muizenberg in Cape Town. Here the developers maintained strict control of the architecture by way of a Design Manual and introduced the concept of an Architectural Review Committee to process and approve applications to "prevent a patchwork of periods and styles". Interestingly, all architectural work, both for new buildings or alterations, was reserved for registered architects.

At Marina, the developers opted for an architecture different from the grandeur of homesteads, and instead chose the simplicity of Cape coastal cottages to "capture the character of the early Cape and yet to ensure that the design belongs distinctively to today", i.e., a functional vernacular, walls coated with lime-plaster and whitewash, roofs with parapets, small window openings often protected with shutters and courtyards with vine-covered pergolas.

The walled architecture boasted small timber windows and door openings and 10–25 degree roof pitches enclosed by parapets as extensions of the walls on two or more sides and always on gable ends. Masonry walls were plastered or bagged, but painted white, chimneys were exposed in contemporary interpretations and there were shaded pergolas. There were usually boundary walls, quarry tiled floors andtimber decks.

Source:
Marina de Gama at Muizenberg, Cape Town, in *Architect & Builder*, April 1975.
Architects: Revel Fox & Partners; Munnik, Visser, Black and Fish.

SAN LAMEER

In KwaZulu-Natal, the first estate architecture was seen at San Lameer, 150km south of Durban, and was conceived as a resort village of second homes. Here, the environmentally-orientated development was commenced in 1974, preserving the exceptional landscape while the maximum carrying capacity was determined by ecological factors. The sites for development were grouped in "villages" with gated access control and security staff and roads.

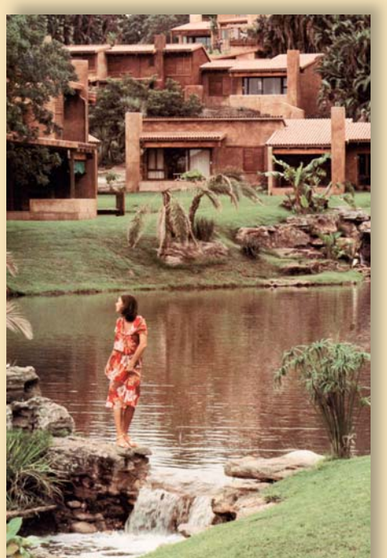
***KZ-NIA* 3/2007 — ESTATE ARCHITECTURE: House Mulholland — Zimbali Coastal Resort. *Theunissen Jankowitz Architects*, completed April 2000. Project architects: Kevin Lloyd and Keith Gavin. Photographer: Craig Hudson.**

There were three dwelling types in villages observing a complexity of form and layout. A study of architectural forms in Natal, taking cognizance of NBRI *Design for Humid Sub-Tropical Areas* to promote air movement and protection to walls and windows from sun and rain, revealed common features apparent in older Mediterranean villages such as terra cotta pitched roofs, plastered walls, wooden windows, abundant use of pergolas and covered verandas and vegetation. There were low-pitched roofs with deep over-sailing eaves and an absence of parapets as they constitute a waterproofing problem in an area subject to considerable rainfall.

Outdoor living facilities were prevalent with covered terraces and built-in barbecues and screens of indigenous foliage to create privacy between dwelling units. The roofs were of specially designed terra cotta tiles, which provide insulation and protection for malthoid. External walls were plastered with a mixture of cement and local pit sand to give the desired colour.

—Walter Peters, *Editor*

Source:
San Lameer in *Architect & Builder*, March 1979.
Architects: El Graff, Kruger Associates, Johannesburg, in association with L Louw and Partners, Johannesburg.
Design architect was Natal graduate John Halford.



Estate Architecture

Estates featured in this journal

Estate Architecture: Some views on 'Design by Code'

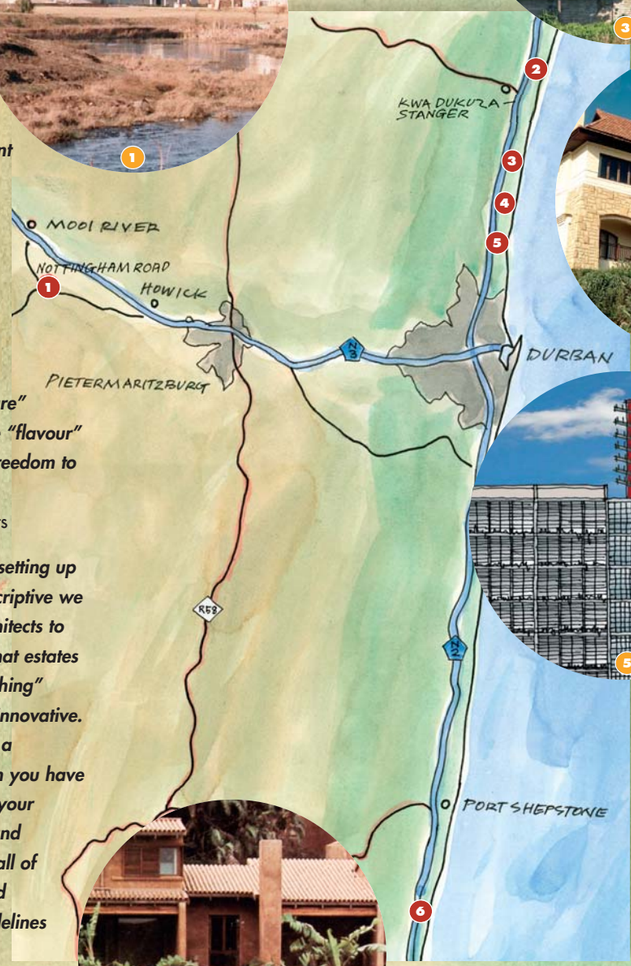
"Estate architecture is prefaced on the core informants of lifestyle and confidence in a recognisable unity of design alternatives (i.e. I know the design characteristics my neighbour will follow). This creates 'sameness' but perhaps that is preferred to the lack of any unifying element to hold a collection of unconstrained and unrelated design solutions in context".
John Cook, architect and development executive: Tongaat Hulett Developments

"I believe the adoption of an appropriate architectural language is better, as sufficient controls within the language provide for both visual unity and independent expression. The architecture of the Greek Islands and Spanish hillside-villages (Malaga) are typical examples of the visual success of a simple architectural language".
Dennis Boyd, Seitter Boyd Architects

"Based on my experience with estates, I recommended that we do not have a prescriptive style but rather a set of "signature" controls which would specifically identify the "flavour" of the estate but allow architects a level of freedom to express these elements".
Llewellyn Cronjé, Cronjé Associated Architects

"Generally when we have been involved in setting up guidelines for estates, I believe the less prescriptive we are and the more we rely on competent architects to do good designs, the better. I truly believe that estates that have the same colour, style and "everything" leave little for the architect to attempt to be innovative. It is very easy to churn out a Tuscan, Bali or a 'whatever' style, but to allow creative design you have to trust the architects who are designing on your estate. This way you get different, exciting and innovative things happening. The upshot of all of this is to write your design guidelines around choosing good architects as opposed to guidelines that tell how to do architecture".
Mike Tod, Michael Tod Architects

"Good estate design solutions are possible only where there are sufficient informants to maintain that which defines the place but leaves greater individual expression for the architect and client alike".
Kevin Lloyd, Kevin Lloyd Architects



1 Gowrie
2 Prince's Grant
3 Dunkirk (see *KZ-NIAJ* 2/2007)
4 Zimbali
5 Sibaya
6 San Lameer

Estate Architecture

Zimbali Coastal Resort

Launched in 1996, this ecological estate set new standards in residential and resort estate development and has won a variety of international awards. It is not an ecological estate in the sense we define this type of development today. It is an estate set in natural coastal vegetation, which is retained as far as possible, while developing the most up-market estate and resort on the coast of KwaZulu-Natal. However energy saving and sustainable material-usage is not always permissible due to the constraints on form and material. Development guidelines have been adapted and used in many other estates, and Zimbali maintains an open policy whereby any registered architect and builder (draughtsmen are specifically excluded) may undertake work.

Architect John Cook, the original estate director representing the developer, and Kevin Lloyd and Dennis Boyd, were the architects responsible for drafting the guidelines, and monitoring the implementation. The threesome, together with colleague Llewellyn Cronjé, comment as follows:

The process begins with an orientation meeting – one of the first estates to insist – where the client, agent and architect are given an introduction to the ethos of the estate and the proposed architecture. Concepts are looked at, discussed and advice given. At the next meeting sketch plans are presented. There may then be a third meeting. Emphasis is put on getting a concept and design appropriate to the environment.

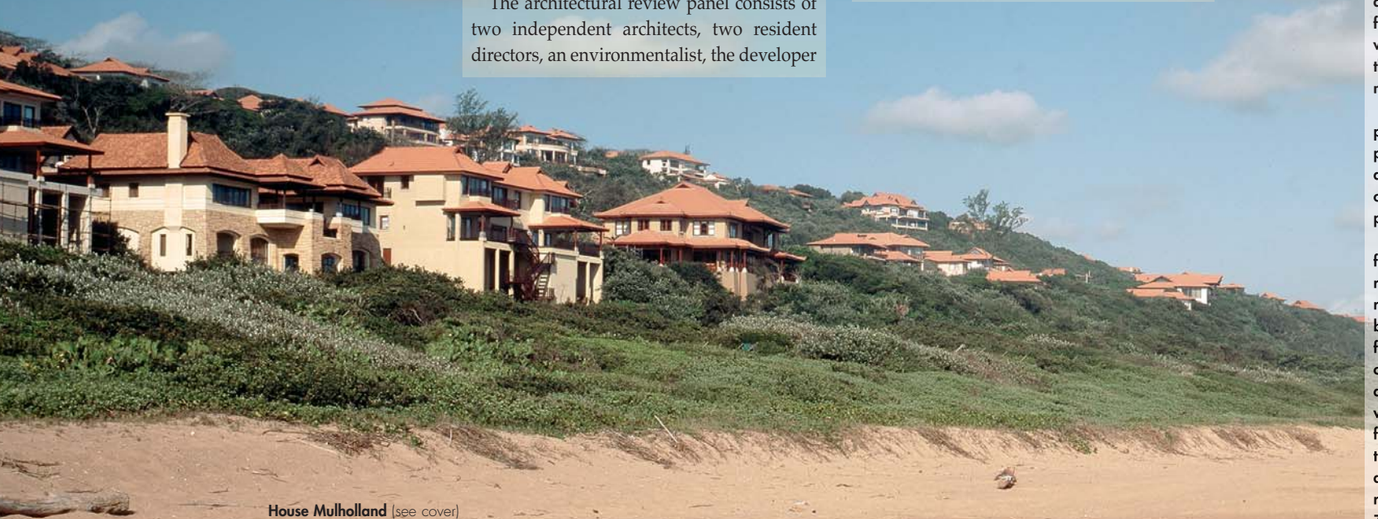
The architectural review panel consists of two independent architects, two resident directors, an environmentalist, the developer as chairman, and the Local Authority Building Control Officer. So far the architects have managed to convince the committee to stay away from the checklist mentality.

"Estate architecture has generally been driven by marketability and financial viability, with a recognizable "style" as the principal driver. Zimbali Coastal Resort, however, was launched without visuals but with a language, a vocabulary and syntax that each owner and architect was able to use, independent of "style". It set out with this intention, but was rapidly overtaken as people began to positively identify with some of the early designs, most noticeably the Zimbali Lodge, and a "style" was born." [John Cook]

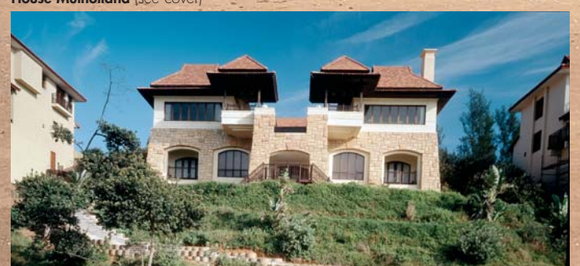
"Very simply, the planning and design of residential estates involves the "buildings" and the "spaces" in between. The "spaces" in between, on most estates, take the form of either golf courses, or eco-spaces, or a combination of these, as in the case of Zimbali which has both a golf course and coastal forest as the two main green spaces. These spaces, if well handled, are a very positive contribution to the lifestyle on an estate." [Dennis Boyd]

"The strong dominant roof requirement has been a very important unifying component of Zimbali, which, together with design responses to the coastal locality and sub-tropical climate, are major design constraints." [John Cook]

Kevin Lloyd



House Mulholland [see cover]



HOUSE CARTER ZIMBALI
Brian Johnson Architects

I was approached by Dr and Mrs Carter to design a house for them in Zimbali as they enjoyed the house we had built together some twenty five years ago in Westville. (See *NPIA Journal* 1/1988). Although a childless couple, their brief was extensive but very specific with the stated objective of achieving a similar quality of living environment that they had grown used to.

Most of the Zimbali sites, especially in the dune forest where House Carter is situated, are extremely narrow and the already difficult buildable areas are further challenged by ZEMA (Zimbali Estate Management Association) imposing meandering footprint areas which wind around almost every tree and bush on the site. Our contorted building envelope would have far better suited a double storey house but the Carter's, used to single storey living, would not entertain a two level solution.

ZEMA's architectural guide lines call for clay tiled roofs with either a 20° or 40° pitch, which has been used on most sites as a bent roof leaning towards a "Balinese" interpretation of form and aesthetics, which, together with the restricted sites, have produced a smattering of two storey "cookie cutter" Bali style houses scattered through the bush.

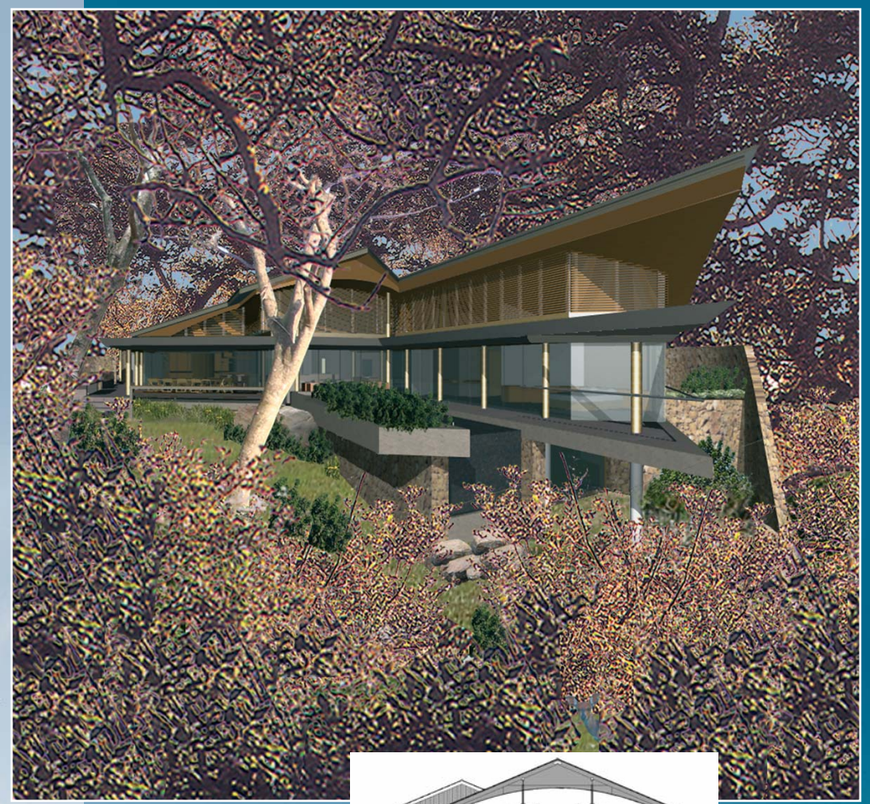
As the Carter's planning requirements were generated from a Western technological lifestyle, we had to look for an appropriate design approach that would still fall within the restrictions set by ZEMA. Although wanting all the 21st century technological conveniences, the Carters enjoy living outdoors as much as possible and required all their interior spaces to flow effortlessly to the outside terraces. They wanted all their activities to blend seamlessly through the day in simple, uncluttered space with a minimalist approach to structure and finishes.

After many evenings of debate about living patterns, we evolved the concept of a travertine platform meandering over the site and moulding around the trees and bushes, with a timber vaulted ceiling cut to echo and follow the undulations of the platform below.

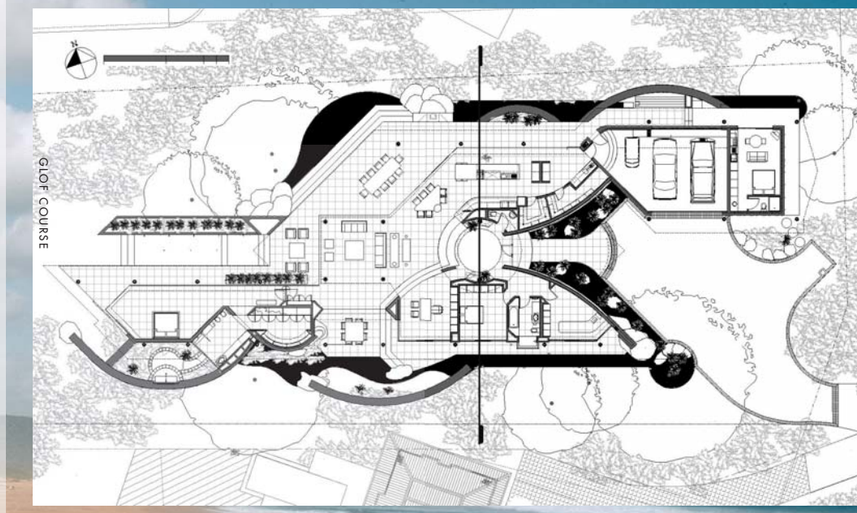
The slatted Paumarfin ceiling is suspended from formers bolted to a simple lean-to clay tile roof that springs from two concrete eave beams running down either side of the site. These eave beams balance on rows of columns, widened to form intimate terrace coverings and cut back to open the platform to the sun and sky while always allowing any part of the inside space to extend out visually and physically into the surrounding dune forest. The eave beams facilitate the cut backs to the vaulted ceiling and roof covering around the designated untouchable flora creating a sculptural roof line within the forest in harmony with the ZEMA footprint. As all the walls have clerestory glazing above two meters, the whole vault is visible from any part of the house or terrace and forms a unifying parasol over all the spaces.

With the curving dry stack stone screen walls we hope that the house will harmonise and eventually disappear into the Forest.

Brian Johnson

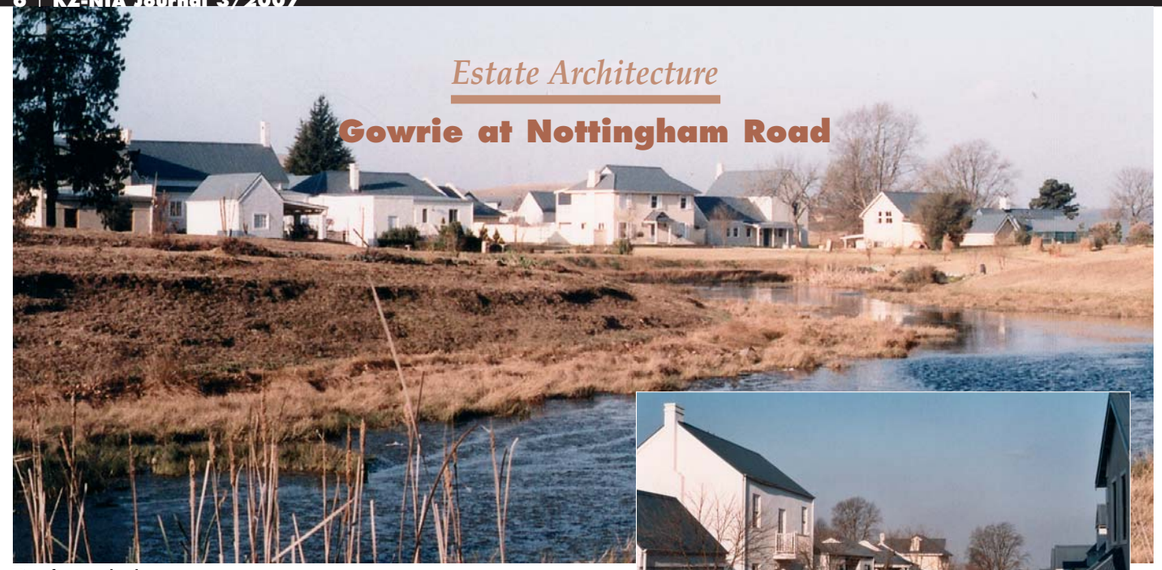


House Carter Zimbali—view from golf course



Estate Architecture

Gowrie at Nottingham Road



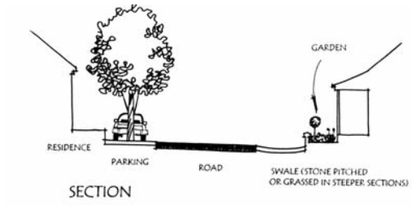
View from wetland.
Right: Lynedoch Road.

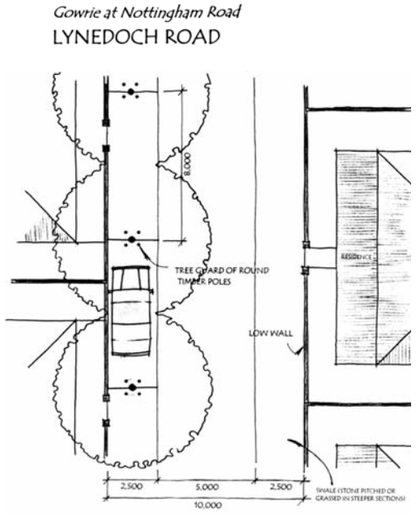
Conceived as a village at Nottingham Road in the KZ-N Midlands, Gowrie is replete with an agricultural commonage and wetland. The developer was Guy Smith and the urban design was entrusted Paul Wygers of Urban Solutions cc, Johannesburg.

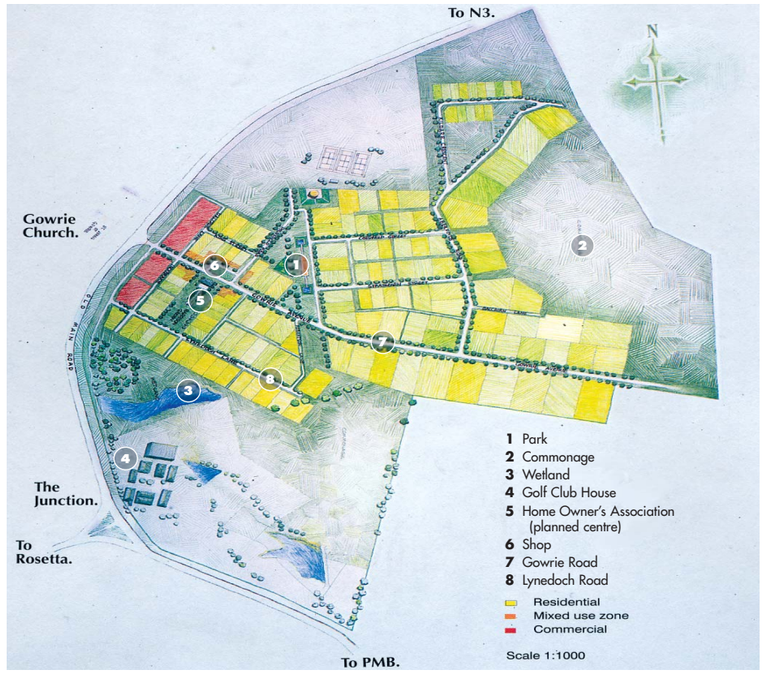
The village boasts a planned centre with formal gardens and walkways linking various parts of the village. The village quality is derived from the nature of the buildings, designed as communal "rooms, spaces and passages", lining the streets. The design, position and construction of the houses were prescribed in order to give definition, and there is a requirement that buildings overlook and interact with the street where slow-moving cars allow children to play and people to meet. Where possible, garages are placed behind the houses, accessible off service lanes, to preserve the pedestrian-friendly character.

The architectural code was developed to give substance to the village character and to ensure that each house is integrated into the development as a whole. It was prepared by the developer, an architect by avocation, who sought inspiration from both the Cape Dutch heritage of the south-western Cape and from the rustic settler cottages of the Eastern Cape.

Roofs have to be grey in colour, of 30° pitch, with clipped eaves and gutters of ogee profile while the mono-pitch roofs are to have parapets on three sides. Walls are to be rough-plastered and painted to an approved light colour. The streets should be fronted with vertical sliding sash or square windows and only angled bay windows were permitted. Boundaries are to be marked by walls or picket fences, while wire mesh fences with wooden poles are allowed out of the public eye or on meeting with agricultural land. —*Walter Peters*







Estate Architecture

Prince's Grant, Golf Course Resort

SOURCE: Prince's Grant Architectural and Building Code, May 2005, and personal communication with Glen Gallagher, amenitus Director: GAPP Architects & Urban Designers.

Following a chance meeting between the developer, Guy Smith, and architect, John Rushmere of Port Elizabeth, the basis for the constructed environment was formulated together with Glen Gallagher of GAPP Architects & Urban Designers, Johannesburg.

A land surveyor had already prepared the site parallel to the northern boundary with "fingers" branching off at right angles along the ridges of the undulating landscape toward the lagoon on the southern boundary. This concept allowed for the retention of swathes of natural forest and wetlands, and the placement of the golfing fairways in the valleys. Lots intended for freehold ownership and varying in size from 600–1200sqm were clustered in groups astride the roads, each somewhat square in proportion to allow for centrally spaced villas surrounded by gardens, an arrangement which negated any connection with the road, but provided a measure of privacy for residents, and the promotion of a village character. The allotments were changed to become elongated with narrow street frontages. If the roads were marked by building mass, L-shaped houses would allow for private outdoor spaces shielded from the wind. The architectural code thus aimed to derive much of its quality and character from the nature of its streets. These are intended to function as the "public living rooms" to be experienced as spaces where people belong and can interact. In consequence, the public faces of the houses are the 'walls' which define the streets in proportion, and give them life and the character of a village. But, for reasons of practicability, a 1m setback is observed on one side boundary. The street boundary is thus a compulsory "build-to" line, and the remainder that is not covered by an actual structure, is defined by garden walls. To give effect to the people-friendly streets, each lot is required to have a minimum of one habitable space on the street boundary with a door or window overlooking the street, and this space could be on ground or first floors. The resulting "village street" is therefore to encourage human interaction between its residents.

According to the Prince's Grant building guide, the purpose of the architectural code is to "maintain a degree of discipline and uniformity" in the development of the estate, with character "derived as much from the pigmented and painted walls and small punctuated openings of Africa" as it was from the "tin roofs and wide verandas of KwaZulu-Natal's colonial past".

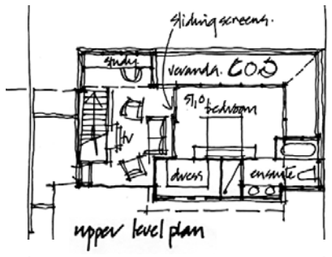
While variations can be considered and specific sites may be otherwise defined, generally "primary" spaces, ie the main habitable spaces of the dwelling, are limited to a maximum width of 5m; while secondary spaces should conform to the lean-to principle. The elemental composition should have a clearly articulated roof and wall spaces. Walls should be of masonry or clapboarding, with openings limited in size and number to read as deliberate and controlled punctuations of the solid plane. Generally, buildings on the lower street boundary are restricted to a height of no more than one storey above street level. A second storey is restricted to 24sqm with a maximum width of four metres to allow a house on the upper side of the road a view to the Ocean. Roofed verandas under 6sqm are excluded from this calculation. Building spaces not on the street boundary may not exceed two storeys above natural ground level, measured at the lower edge of the primary space of the building.

Architects may apply for inclusion in a list of approved designers "initially as probationers". Others are considered on their abilities demonstrated in their portfolios. Construction commenced in 1994. —*Walter Peters, Editor*

HOUSE FREEMAN
Sally Adams Architect
LOT 1, Plantation Place

Completed 2003
Client *Wendy and Cliff Freeman*
Architectural team *Sally Adams, Lindsay Napier, Ursula de Haas*
Structural Engineer *Zank Zietkiewicz*
Interior Design *Darryl Freeman*
Building Contractor *Rupert Goodwin–Supa Struct*

The site is probably the most remote on the estate and one of the most beautiful sites on the inland boundary of Prince's Grant. It looks down eastward to the lagoon over indigenous bush towards the Ocean, and south into more bush and a hill of plantation towards Blythedale. The site was narrow and long, 15x43m, with a no-build zone of 1m on the north and a 30m building line from the street boundary. It could, in time, have another adjacent house built, which provided a good reason to borrow light from the north, but open up to the south. The usual code requirement for living space overlooking the street was waived as the street is single-loaded and this was the last property served from a cul-de-sac.



My clients, who had lived a farm life, were moving here permanently and loved the bush. This is a bush house, rather than a beach house, which is interpreted through dark timber, earthy colours, raw cement and the impact of the bush through glass. They wanted always to feel part of the outdoors and the house, essentially for the two of them, opens almost entirely from the lagoon side to the courtyard. There is no front door, instead, there is a forest walk taking the visitor through the garden and past the pool and guest wing. The clients bought some treasured furniture with them. Darryl Freeman played an integral part in designing the fittings and the furniture as well as the colour palette for the house interior.
Sally Adams

7 Essentials of the Prince's Grant Architectural Code

- The architecture is an interpretation drawing on a colonial past, an earthy African form, and a modern interpretation of the Natal Veranda style.
- The street is always a build-to line.
- An interactive living element is required at the street or overlooking it.
- The principle living spaces are single loaded and double pitched, controlling roof height and allowing natural ventilation, and secondary spaces must display a light-weight or veranda quality.
- Sites below street level must follow the natural ground level at any point down the site to a maximum of two storeys, and one storey at street level.
- Sites above street level may have three storeys at street front and two inward, again following natural ground level.
- There must be at least one usable, open, lean-to veranda.

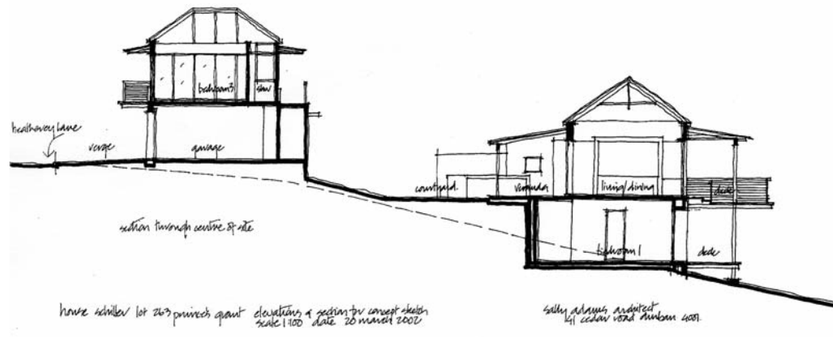
Sally Adams

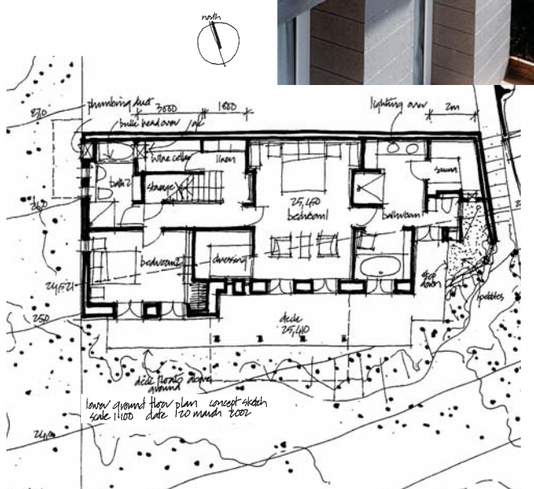
HOUSE SCHILLER
Sally Adams Architect
LOT 261, Heatherey Lane

Completed 2005
Client *Lawrence and Brigitte Schiller*
Architectural team *Sally Adams, Lindsay Napier, Suhayl Ballim, Murray Blore*
Structural Engineer *Zank Zietkiewicz*
Quantity Surveyor *Dick Hathorn Associates*
Building Contractor *Sagah Reddy and Mauro Peranovich – Dolphin Paradise Estates*

The site is high on Heatherey Lane overlooking Prince's Grant's signature thirteenth tee with great views south all the way down the fairway and the coastline to Ballito. This is a holiday home for a German couple who love Africa, the outdoors, the sun and swimming. They are also fantastic cooks. They wanted a house that felt like a beach house, although it was quite far removed from the beach.

Design considerations were transparency at the living level while maximizing the amazing views, protection from the strong coastal winds and privacy from passing golf cart traffic. The views are still visible through the house from the courtyard. Pushing the house forward on the site exaggerated its considerable bulk, and this was disguised by retaining a veranda feel to the house. The house illustrates themes that have developed in Sally's work: the adaptation of traditional Natal veranda buildings as a means of reducing bulk, and the creation of outdoor rooms to respond to the coastal climate. The use of screens provides partial privacy, and contributes a sense of lightness and allows breezes into the courtyards.
Murray Blore





HOUSE DIRKER
LOT 32, Blink Bonnie Lane

HOUSE VAN HOEGAERDEN
LOT 3, Plantation Place

Amanda Lead Architect

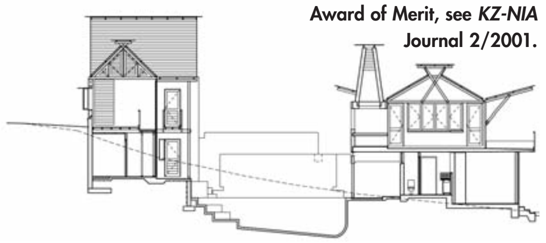
I have mixed feelings about estates, but as estates go, I have always felt that Prince's Grant is one of the more successful ones, architecturally speaking. Development of our coastline seems inevitable, but where estates like Prince's Grant do make a positive contribution to that process, is that development is carefully controlled, and the overall impact of four hundred or so sites is minimized.

The urban design vision is one of closely developed properties that line the streets and create a sense of 'village'. This concentration of buildings along the streets frees up a lot of space on the estate, firstly for the golf course, but also large tracts of indigenous bush and wetland along the river estuary.

The aesthetic 'code' has a fairly regional intention – 'Natal veranda' would be a broad description. The defined roof pitches (over main areas at a minimum of 30 degrees), and limited spans, do create a fairly Victorian proportion, which predominates over the built landscape. Verandas and the 'lean-to' roofs have the effect of often softening vertical proportions, created by the roof forms on two or three storey houses. The sites are fairly small, and building lines are minimized, so that boundaries are 'build-to' lines, especially on the streets. For this reason eaves are not allowed, and I feel this is where the code has its major drawback. Weathering conditions and sun angles would be far better controlled if these houses had eaves. Privacy is also an issue with the houses being so close together.

In the early years, variance to the code on the basis of architectural merit was allowed. OMM Design Workshop produced an award-winning house that managed to achieve a very modern aesthetic.

Holiday Home for Accurate Trading, *KZ-NIA* 2001 Award of Merit, see *KZ-NIA* Journal 2/2001.



However, recently, the rulebook has become more and more set in stone and in some cases the code has been enforced where in my opinion, it simply doesn't make sense. In my opinion, good architecture should always be the guiding factor.

My other criticism of the development guidelines is that there isn't enough emphasis on being environmentally responsible. Golf estates are notoriously wasteful of water, and I feel this could be balanced by more stringent water management rules for sites. I pushed for solar panels on one of my houses but was told these would have to be hidden from view!

Prince's Grant has recently limited the number of accredited architects to 15. Although I was offered accreditation, this came with a number of imposed conditions, which I find unworkable. An annual fee has also become a condition. My concern that tighter controls in terms of the code and imposed conditions on architects will result in mediocre architecture.

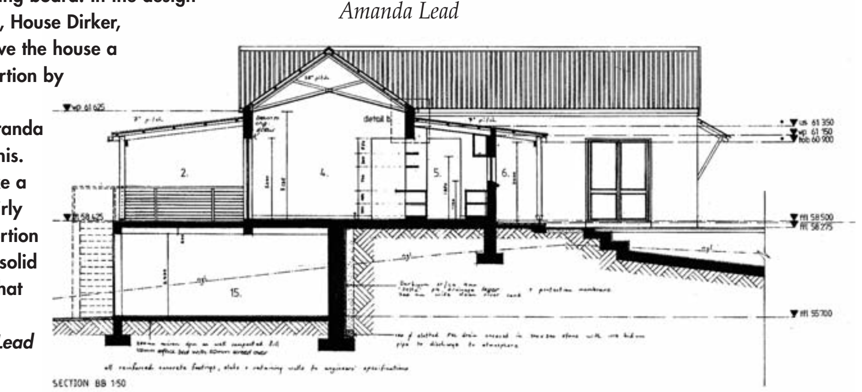
House Dirker

House Van Hoegaerden not yet constructed, is a far more substantial house, and takes the form of a courtyard building, with a double-storey walkway veranda wrapping around on three sides of the courtyard, the fourth side being open to the north. Many of the sea-facing houses have view-catching verandas that are exposed to the wind and out of the sun. A second, north-facing outdoor living space is usually needed as an alternative protected sunny space. The house itself acts as a barrier to the wind and has a see-through quality so that views can be seen through the house on both levels.

Height restrictions were a challenge on this house, we needed to make use of a 'dormer' roof form to achieve usable volumes internally. The combination of height restrictions and building lines on the steeper sites has the effect of forcing architects to design semi-basement bedrooms. This is something we have aimed to avoid at all costs as these bedrooms lack cross-ventilation and have poor orientation. On house Van Hoegaerden I designed one lower bedroom, on the north corner, with both the bedroom and bathroom being naturally ventilated.

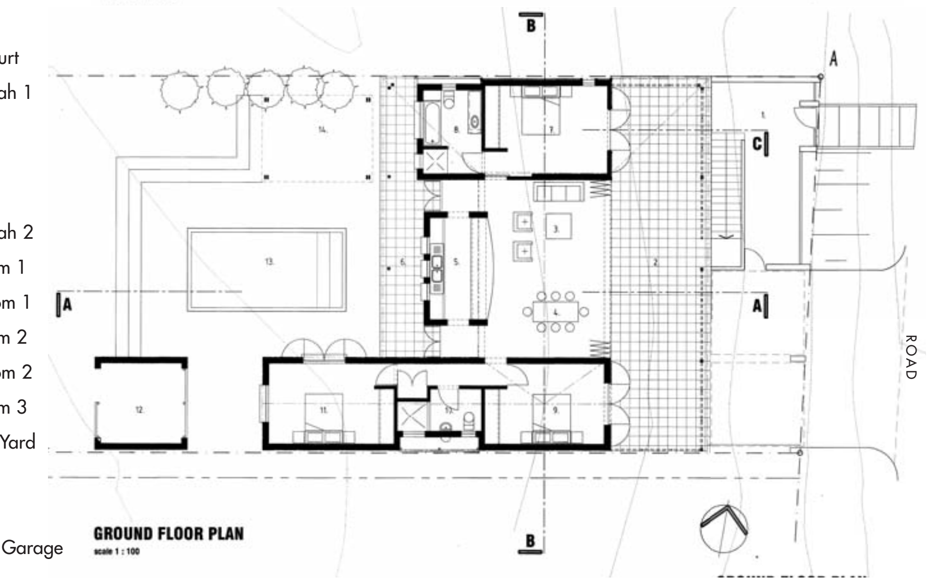
Amanda Lead

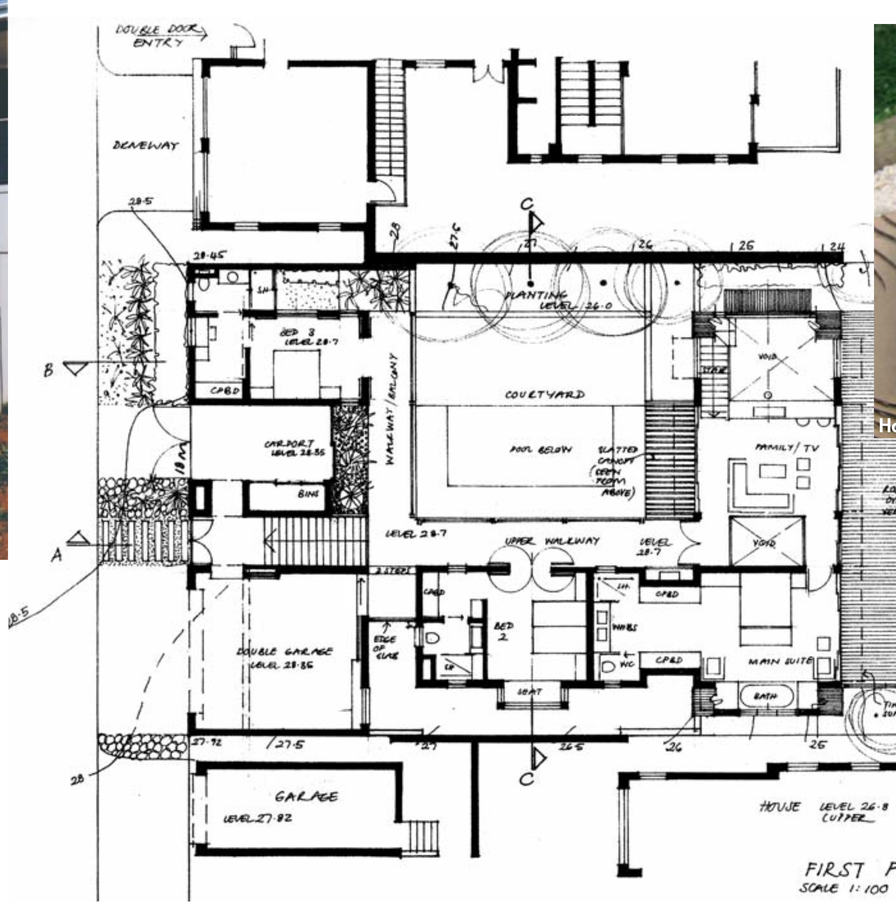
"This practice has completed three houses on the Estate; I have two in the pre-construction stage and one on the drawing board. In the design of the first house, House Dirker, I attempted to give the house a horizontal proportion by utilizing a deep, wrap-around veranda roof to achieve this. The house sits like a light pavilion, fairly modern in proportion and detail, on a solid masonry plinth that grows out of the slope." ***Amanda Lead***



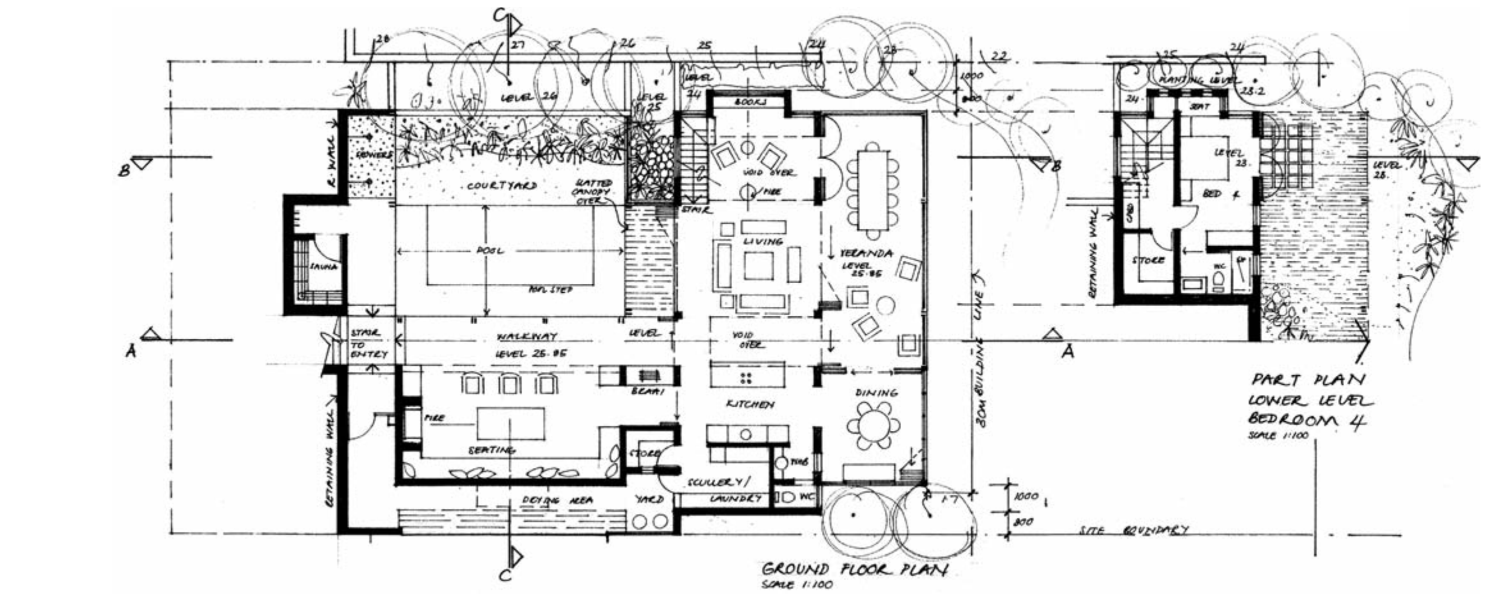
Legend

- **1** Ent. Court
- **2** Verandah 1
- **3** Living
- **4** Dining
- **5** Kitchen
- **6** Verandah 2
- **7** Bedroom 1
- **8** Bathroom 1
- **9** Bedroom 2
- **10** Bathroom 2
- **11** Bedroom 3
- **12** Drying Yard
- **13** Pool
- **14** Pergola
- **15** Double Garage





House Van Hoegaerden: Model from North.



The developer of Princes Grant and Gowrie, Guy Smith, has since developed Gowrie Farm and is currently busy with Garlington at Hilton. These estates draw on the principles of New Urbanism (see KZNIAJ 3/2002) with its penchant for dense development, vernacular architectural styles and buildings on small lots, front porches, and narrow streets.
Smith has visited the prototypical New Urbanism town of Seaside in Florida, and is in contact with the architects and protagonists of the movement, Andres Duany and Elizabeth Plater-Zyberk.
Readers are referred to Katz,P The New Urbanism. Towards an Architecture of Community. New York: McGraw-Hill, 1994.
–Editor

Pietermaritzburg from Fort Napier, 1851. Note the rows of houses lining the wide streets and the enclosures of the elongated lots.

Photo: Natal Museum, Pietermaritzburg.

Urban design and townscape prescriptions to achieve a particular built character have their origins in KZ-N with the arrival of the Voortrekkers from the Cape in 1837.

Pietermaritzburg, a day trip from the Bay of Natal, was chosen as the capital. This site met the prime requirement of all dorps – it was irrigable. It was laid out on a spur with long streets running down the slope and lots at right angles, stretching from long street to long street. A canal diverted water from the appropriately named Dorpspruit and a series of water leads crossed town to irrigate the gardens behind the houses.

In 1839 the Volksraad promulgated six regulations for residents in Pietermaritzburg. The two most important and relevant to the establishment of the townscape are: Article 4, which required lots to be surrounded by a sod wall or wooden palisade; and Article 5, which stipulated that *"De woonhuizen zullen…in den front moeten worden gebouwd, en in een gelyke linie"*, i.e. houses were to be built on the street boundary and in one continuous line. A few years later, the fledgling *dorp* thus presented a picture of regularity and orderliness.

Source: Haswell, R, & Brann, R, Voortrekker Pieter Mauritz Burg. *Contree*, No16, July 1984, pp16–19.

Estate Architecture

Sibaya

Sibaya urban design proposals by Iyer Rothaug Collaborative cc.

Left: Massing proposals for southern hilltop node.

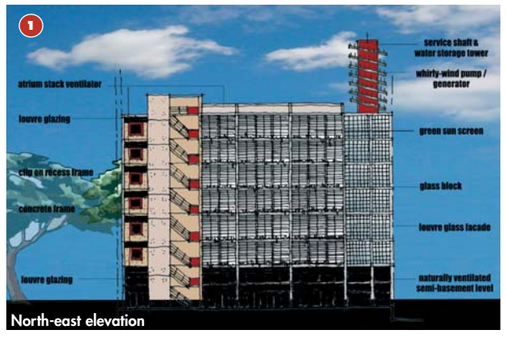
Right: Site between Sibaya Casino (foreground) and the Indian Ocean.

Between the N2 and the Indian Ocean and incorporating the existing Sibaya Casino (opened end 2004), Tongaat Hulett Developments (formerly Morelands) are planning an eco-estate which includes open-space linkages, nature trails and buildings free of any stylized architecture. Half of the 855ha precinct is under coastal dune forest, wetlands, the Ohlange River flood plain, estuary and a one kilometer-long stretch of relatively undisturbed beach, which will all be retained. Consequently development will be restricted to the hilltops, where sustainable development is to be to be promoted in line with "One Planet Living Principles" (www.oneplanetliving.com or www.bioregional.com)

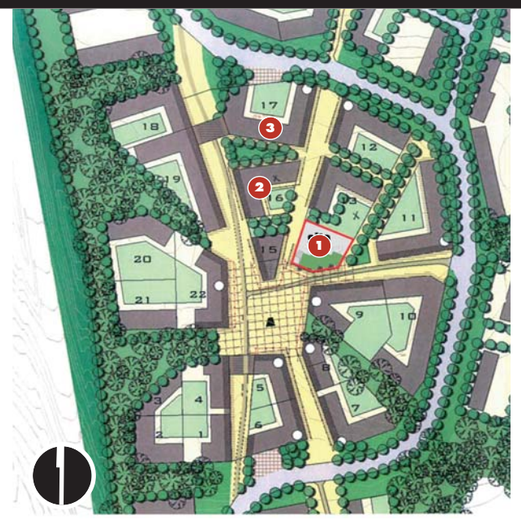
The architecture is to be performance-driven, the buildings being conceptualized as having five elevations including the flat roofs, with accessibility and partly gardened. The placement plan furthers the development of a supportive public and private open-space network wherein the 'build-within zone' is set to ensure varied and modulated edges. The 'encroachment zone' ensures the public domain is enlivened with building components of visual interest and colonnaded edges to shelter pedestrians by providing shaded outdoor spaces. The building masses are to be vertically articulated with base, shaft and capital, while vehicles are to be corralled underground.

Collection and storage of rainwater is obligatory, as is the separation of grey and black water. Sustainable assessment focuses on three criteria: human comfort (social); economy of means; and environmental efficiency. Only registered architects may be appointed and expressly in their capacity as principal agents.

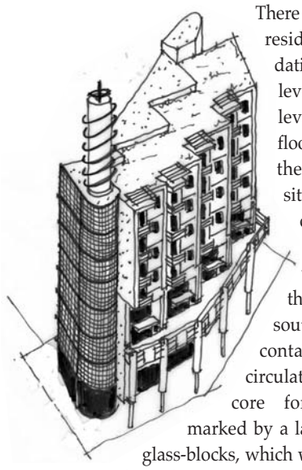
To put the code to the test, the developers commissioned three architects to prepare designs for mixed-use projects on selected lots surrounding the southern hilltop node, inaccessible to the usual municipal services infrastructure.



North-east elevation



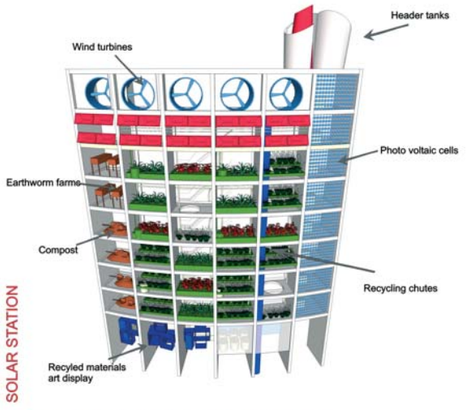
1 Elphick Proome Architects: Lot 14



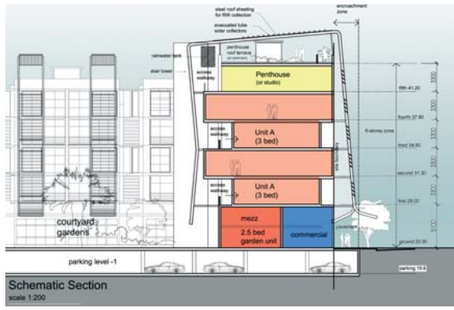
There are four floors of residential accommodation atop two office levels with a multi-level retail ground floor, all of which line the chamfer of the site and enjoy views of the ocean while defining the urban square on the north-east. The south-western corner contains the vertical circulation and services core for the building, marked by a landmark tower of glass-blocks, which would reduce heat gain through increased thermal insulation. It is terminated by an iconic whirly-bird, used to generate wind power, wrapped around a rainwater harvesting tank. The north-east facing elevation is defined by an atrium, a louvred intermediary space between inside and out, with ledges for shade planting and containing the access-ways to the naturally ventilated units. It is conceived as a stack for cooling updrafts encouraged by ventilators located on the landscaped roof terrace, which houses solar panels for solar water heaters as well as whirly birds.

2 East Coast Architects: Lot 16

This proposal is distinguished by its articulation in massing. An L-shaped plan with retail use on the ground floor rises to become a residential tower block on the western boundary of the trapezoidal site and provides views towards the ocean, while a podium marks the northern boundary. The hinge is offset by an arc-like structure labeled 'the solar station' with horizontal layers of typical floors, catering for the cultivation of hydroponics, for composting, earthworm farms, solar panels, wind turbines with a contrasting vertical stack of photo-voltaic cells. Rainwater and grey water are harvested and both are filtered through a reedbed on the roof of the podium before cascading into a surface pond on the street-level courtyard. A skim weir maintains the water level in the pond and overflow water is stored in a cistern in the parking basement. This water in turn provides cooling to air ducts which feed air through dehumidification filters into the living units. Air is extracted through turbine-assisted exhaust stacks on the roofs of the residential block.



RAINWATER HARVESTING AND RECYCLING



3 Don Albert & Partners: Lot 17

The island lot has articulated residential blocks surrounding a courtyard, maximizing cross-ventilation, daylight and access to outdoor spaces. A pergola literally covers the sides and roof of each block to shade the structure, and its lightness contrasts with the solid massing of the residential accommodation.

In their submission, the architects proposed to the developers that devising a formula, which would limit energy consumption per area of constructed environment, might better promote sustainability in design than any formal or tectonic responses. They also suggested that if the developers were concerned about green building, a more appropriate place to start would be the regeneration of downtown Durban.

Walter Peters, Editor

Credits:

Urban Design: *Iyer Rothaug Collaborative cc*

Architectural Code: *Rodney Choromanski, Glanville Jacques, Frank Reitz, Steve Reynolds, Kevin Lloyd, and John Cook (Development Executive: Tongaat Hulett Developments).*

Emerging Practices

Architects a decade into independent practice

Ken Solomon House—Home of *Decorland*

The Editorial Committee of *KZ-NIA Journal* has decided to promote the work of emerging practices by featuring a project by a practice in operation for less than a decade in every issue. KZ-NIA members who meet this criteria, are encouraged to contact the KZ-NIA Executive Officer so that coverage can be planned for.
—*Editor*

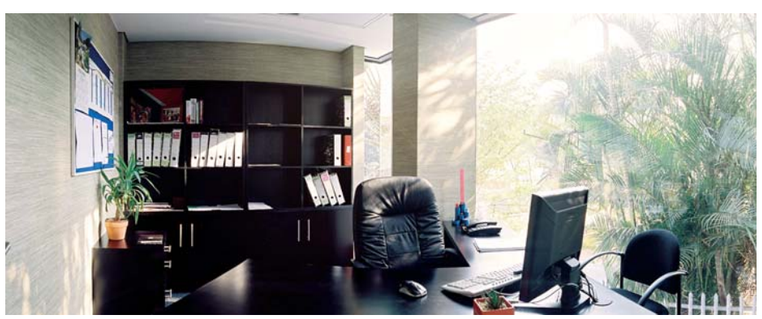
Decorland
5 Windmill Rd, Berea, Durban

The site is situated on Windmill Road running between Essenwood and Ridge Roads in the Musgrave area of Durban. It was bought with a host of problems, the least of which was that the existing house had already half collapsed. There were also a number of local authority issues that had to be dealt with. The site is zoned General Residential but there is a policy in place which allows, with special consent, for conversion to Business/Office usage in this specific area. This, however, came with its own set of challenges – chiefly the reduction of the allowable bulk by 50%.

Fortunately for us, the City issued the new owners with a demolition order due to the dangerous condition of the building at the time of purchase, which allowed us to begin with a vacant site.

Design constraints

The site is 14.3m wide, excluding encroachments from the adjoining properties, which, once the retaining walls for the basement had been built, meant that we had the minimum width in which parking was feasible. Coupled with the Town Planning limitations of 50% bulk for offices, building lines and set back requirements, we were left with a very small area on which to put the accommodation required by the client. The site runs north to south with the east and west sides being the longest. Another problem was the significant noise levels generated from the large volume of traffic running along Essenwood Road from which angle the site is visible.



The client's requirements

The clients, *Decorland*, a second generation family business, are a Décor franchise which operates in all *Game* and *Dion* stores throughout Africa. They have been based on the Berea for thirty years, and due to the excellent growth they have experienced over the last ten years, they wanted to have their own office building which would symbolize their business and be a modern iconic building to house their head-office functions.

The brief

The program itself was very straight forward, "…as much office space as possible, lots of parking, two apartments for visiting directors, must look great and not cost a fortune."

The response

The building is designed as two halves. One side is solid and robust, the other light and airy. The solid side contains the functional processes which require security and privacy whilst the light side houses the people. The building draws upon some of the principles of the Berea vernacular while reinterpreting them into a modern context. The solid and robust side shields the building from the east and the noise from Essenwood Road, whilst the light and airy side opens the building up to the environment and the neighborhood to the west. The massing of the building, its alignment with the street, and the dominance of the roof form are elements taken from the neighboring buildings but translated into a modern aesthetic.

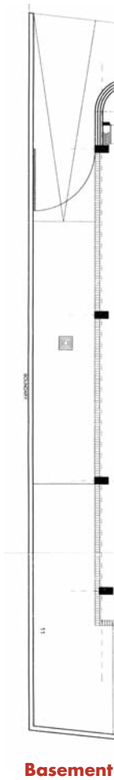
The choice of materials is both robust in longevity but also tactile and human in scale. The building is obviously not domestic in appearance but it takes from the domestic context the small front garden and the axial entrance etc, to conform to the neighboring buildings. While internally the building houses the head-office functions it also shows off the products and services offered by *Decorland*, by combining a showroom with the office space. The apartments, situated at the rear of the building, span the two sides. The private bedrooms are accommodated in the solid and robust side, and the entertainment and public rooms in the open and airy side.

Client reaction

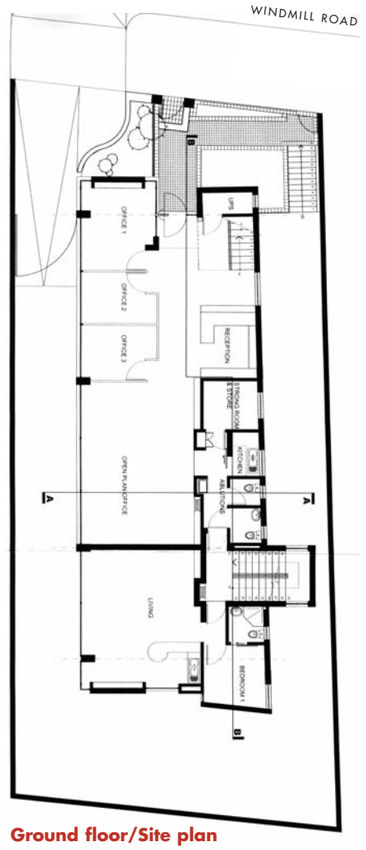
The clients are happy with the way the building has turned out and they feel that it has more than answered their brief. The public awareness of the building and comments to the client have been favorable for both them and us. We are currently engaged in two more similar schemes as a direct result of this one.

Adrian Hallam

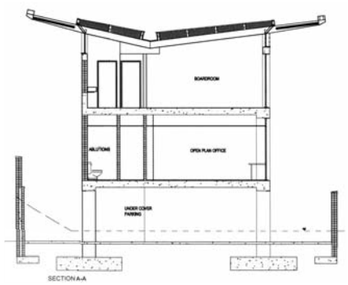
On graduating from the University of Natal in 1991 and gaining experience in established practices in Durban, Adrian Hallam commenced independent practice in 1997 –Editor



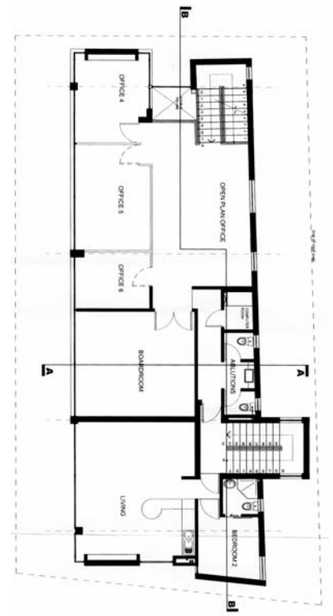
Basement



Ground floor/Site plan



Section A-A



First floor

A Travel Diary

Salt Lake City

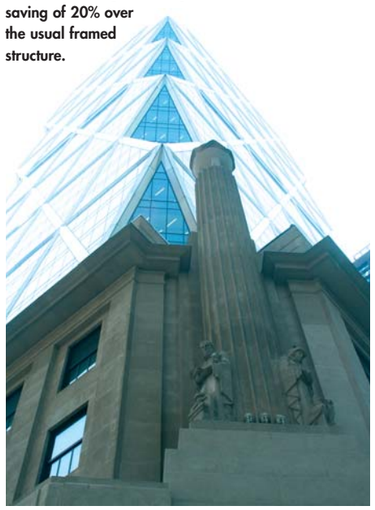
Salt Lake City, the state capital of Utah, derives its name from the undrinkable alkaline Great Salt Lake that spreads to the west.

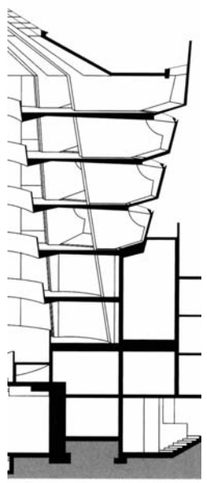
In June 2007 I attended a conference in Salt Lake City on behalf of SAIA to further the interests of the new CCN (Construction Communication Network) venture. The short stop in New York provided some relief to the long journey.

New York. Manhattan, the island with a high density of tall buildings is impressive, and to put things into perspective, is the size of Durban from the airport to the Umgeni River.

I played the tourist game with gusto which had me rushing from one end of the city to the other by helicopter, boat, taxi, busses and the underground. The scale is amazing and one is constantly looking up. First stop was the local inner-city Architecture Institute offices where I saw an exhibition on high-rise housing projects and the new Hearst Tower by Foster and Partners. I obtained my bookshop lists and armed with references, was ready to conquer the city by foot. Places visited included the Guggenheim, Empire State, the Chrysler Building, Financial District, Times Square, Ground Zero (above) and the street vendors in between. Manhattan is not the same without the Twin Towers and many images for sale on the streets show the Towers reflected in the water but missing from the skyline.

Hearst Headquarters, Columbus Circle, New York. Architects Norman Foster Associates with Adamson Associates, 2000–06. —Designed to consume 25% less energy than its conventional neighbours, the 42-storey tower sits atop the six-storey Art Deco building of 1928. Most of the tower is constructed of recycled steel; which usage in triangulated form resulted in a saving of 20% over the usual framed structure.



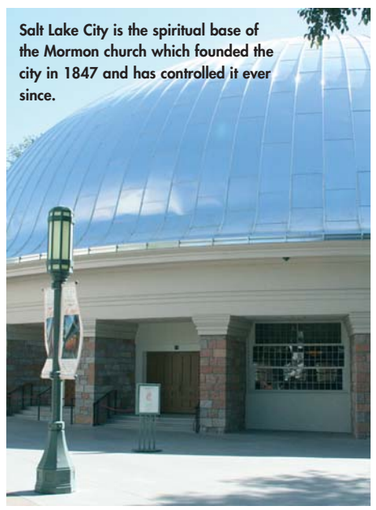


The Guggenheim was being renovated and a series of really detailed drawings showing the spalling and rusted reinforcing were on display. A continuous exhibit occupied an entire floor. The building is a marvel and I spent many hours there. The most amazing aspect of the design for me is the bands on the exterior which are made up of sloping floor sections on one level and the sloping ceiling on the other to form a gap allowing diffused light into the building around the perimeter, as a continuous feature.

Salt Lake City was a big contrast to cosmopolitan New York with the most notable change being in the people. I met very few Americans in New York and found the real home-bred variety to be much more friendly and patriotic.

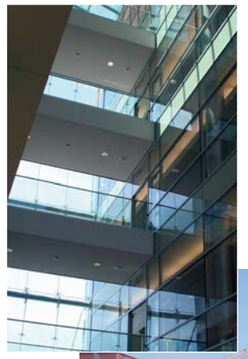
Salt Lake City has a typical grid layout with blocks 180m square. The Mormon population dominates with their many temples clearly being the focus in the minds of all the people, including the visitors. Temple Square was on the agenda for an afternoon tour and we were guided through the newly renovated Mormon Tabernacle (below) by the project architects. The acoustic reverberation pattern set up by the existing building had to be retained and the demonstration that takes place every half hour involves a young girl in front of the stage, turning around through 360 degrees and being heard at all times while speaking in a normal tone. Pins and a nail are dropped into a box to show how well the sound is controlled and the marvel has not been able to be replicated.

Salt Lake City is the spiritual base of the Mormon church which founded the city in 1847 and has controlled it ever since.



Mormon Conference Centre auditorium.

The same firm was commissioned to design a new auditorium, producing what must be the world's largest indoor theatre. The seating capacity is 22,500 and at the height of the Easter celebrations there are three sittings a day. Clever use of the sloping site allowed for the raked seating area to rest comfortably on the site with the massive retaining wall, which formed the front of the building, being buried allowing no chance of outside noise interference. The pictures reveal that there are no internal columns holding up the really large curved platform galleries for the various seating levels, which is an amazing engineering feat. Live television broadcasts cover the proceedings every Sunday. Crowd movement to empty the auditorium and fill it again takes a short time with escalators, roof gardens and many large foyers to cater for the movement of all these people. The capacity is twice that of Kingsmead Cricket Stadium. Taking photographs was difficult as my wide-angle was just not wide enough.



The University's Eye Centre. Inset: Atrium.

As part of the tour we were taken to the Genealogy Library where local Mormon assistants were called upon to take each of the groups of delegates to the different parts of the building to look up their family histories. There were Finnish, Japanese, Australian, South African, Dutch, Norwegian, Swiss and New Zealand delegates, and each one was presented with guide books and a personal guide in their own home language. That was a real eye-opener when one considers we work in a service industry.

After the conference I spent some time seeing the rest of the City and visited the university and an award-winning library by Moshe Safdie & Associates. The optometry department at the university was the most interesting with a large atrium and rooflight demonstrating that this model works in a warm climate. The reflection of the light down the south wall into the workspaces is one of many classic green building attributes.

I spotted the library while traveling to the university, and on the way back I used up the remainder of my time there enjoying the many rich aspects of this design. The building is filled with natural light coming from all directions and is built with a huge circulation ramp dominating the outside. The detail in the design was pleasing and the building is well used. There are commercial activities associated with the library separating the main circulation routes and, on the upper levels, working rooms with reading areas are accessed through the use of strategic points to limit the flow of people and minimize disturbance to the quiet areas. The staff members are very proud of their building and I was free to take photos, and was provided with a brochure of the building with plans and contact details of the architect. This public relations exercise is something we should seriously consider implementing with our local interesting buildings.

Bruce Clark, immediate-past KZ-NIA-President.

Public library and circulation ramp below.