



# IRENE VILLAGE MALL

**IRENE VILLAGE MALL**  
Irene, Gauteng

**CLIENT & DEVELOPER**  
Retail Africa

**ARCHITECT**  
Boogertman + Partners

**DESIGN ARCHITECT**  
Jan Loubser

**PROJECT ARCHITECT**  
Johann de Wet  
R & L Architects (Woolworths)  
Bentel Associates International (Pick n Pay)

**PROJECT MANAGER**  
MDSA Project Management

**QUANTITY SURVEYOR**  
NWS Quantity Surveyors

**STRUCTURAL & CIVIL ENGINEER**  
Sutherland

**ELECTRICAL ENGINEER**  
Watson Mattheus

**MECHANICAL ENGINEER**  
WSP in Africa

**WET SERVICES**  
Sutherland

**TRAFFIC ENGINEER**  
ITS

**FIRE CONSULTANT**  
Specialised Fire Technology

**LANDSCAPE ARCHITECT**  
Baumhaus

**MAIN CONTRACTOR**  
GD Irons

**PHOTOGRAPHY**  
Courtesy of Boogertman + Partners

The traditional Irene architecture is defined by the use of corrugated sheet metal roofs in grey and farm-impliment red

Irene Village Mall was conceptualised as a village-street retail scheme, with a distinct character and nature to complement the existing Irene vernacular and indeed become the “village centre” of the Irene area.

The Mall lies on the western side of the R21 freeway. The design development incorporated climatic considerations, building mass, scale, material usage and the articulation of the scheme. The main entrance fronts onto the existing Irene Farm Village single storey residential area, thus the contrast with the solid built mass which fronts onto the freeway – for functional, visual and acoustic reasons.

The architecture reflects the rich history of Irene, reminiscent of the old Transvaal architecture, which further underwrites and emphasises the farm atmosphere.

## ARCHITECT'S REPORT

The traditional Irene architecture is defined by the use of corrugated sheet metal roofs in grey and farm-impliment red. Walls are generally of plaster and paint in colours ranging from off-white to darker coffee tones. Wall plinths and boundary walls are constructed of rock found in the Irene region. The rock walls are the defining element in the existing town.

All of these elements are interpreted in the shopping centre to a large extent. Prevalent on the original farm holdings were the galvanised, corrugated water reservoirs, for the collection of rainwater. These were generally supported at a higher level to provide water pressure for gravity-fed irrigation systems. When a reference was sought for the tower element in the square, no single feature was more appropriate, and there was no need to look for further reference.



The clock tower with its water reservoir is an original interpretation of this feature, the aesthetic of which adds to the main purpose, which is to provide a “tent pole” for the space being captured by the buildings around the square. The square itself is the focal point of the building and provides a people’s space which, in plan, is rectangular in format and adheres to the rectangular proportion known as the Golden Mean. This governor, which is found in ancient architecture, can be defined by a mathematical equation, and is the building block for natural cells. The growth of a shell is defined in its spiral form by the multiplication of this mathematical equation. As such, humans, with this form built into their DNA, have a natural affinity for proportions, which adhere to this principle without necessarily knowing why.

By adhering to the existing Irene vernacular, the building transcends ‘bare façade architecture’ and is thus not themed in that architecture, but is an honest interpretation of the historic precedents in a contemporary setting.

## Design

In the design of the Village, the developers and architects adhered rigidly to the governors of successful retail flows. As such, the village is located between two strong anchor retailers on either extremity. But this is where the resemblance to normal retail centres ends. Too many developments pay lip service to the catchwords of “lifestyle” and “village” without going further than the marketing campaign. Einstein equated insanity to doing the same thing over and over again but expecting different results.

The centre, has in some parts, received the colloquial name ‘Moo Mall’ as cows are to be seen everywhere. In the piazza, permanent sculptures by renowned sculptor, Angus Taylor, create a delightful theme – bronze sculptures and the ‘upside down cow’ afford constant pleasure to hordes of children, who frolic between the teats! Near the entrance there is a giant living green sculpture, Trixie, which has its own irrigation system to maintain growth. Even



IRENE VILLAGE MALL

IRENE VILLAGE MALL



the directional signs to the toilets feature dancing cattle of both genders.

At Irene Village, the developers steered away from the norm and dared to be different while at the same time not discounting proven precedents. The walkways are covered, but open on one side to provide a real village environment. The shopping flows encompass a crescent boulevard that starts and ends in a court node in front of each anchor tenant.

A village street completes a racetrack pattern, which brings the shopper back to his/her starting point without having to backtrack in any way. Both these pedestrian flows intersect the square at the centre of the village, providing a space for pause and refreshment. The square is flanked on both sides by restaurants on two levels and can be

accessed via a dropoff area that engages with the outside. This inside/outside connectivity sets the development apart from any other existing retail centres. A Cinema complex is situated within the square precinct to ensure that the central space functions as a night-time experience in conjunction with the restaurants - extending the use of the building and elevating it further as a real functioning village over and above the daytime retail needs.

Retail space is designed as individual buildings with slightly different characters, but with a strong family resemblance to the architectural precedent. Trees, canopies, street signs and public art all add to a character and sense of place that aims to become no less than the very town centre of the Irene region.



#### RETAIL DESIGN & DEVELOPMENT AWARDS

The success of Irene Village Mall led to the entry of this project into the Retail Design & Development Awards. The Architect & Builder believes that the architects' submission, while perhaps repetitive in places of what has been stated above, is worthy of publication, so parts of it have been included below.

#### Why have you entered for a design award?

We believe that the words "lifestyle" and "village" are more and more used as catchwords in a marketing campaign. Very few developments actually practice what they preach. We believe we delivered on our promise and created a mall that adheres to all the retail principles but dared to be radically different.

#### Describe the design concept of the building:

People love the ambience of traditional town squares and little shopping streets, but it is impractical with the advent of the car and suburban living. Likewise, people like the convenience of the accessible mall, but it is not really a pleasant experience. We resolved to combine all the positive elements of both in a centre.

#### What makes this building different from other retail buildings?

It has a friendly, almost convenience-like penetrability. It is mostly open to the elements and provides for more than just shopping and the entertainment is not forced - it merely serves as a background so people can entertain themselves.



IRENE VILLAGE MALL



IRENE VILLAGE MALL



**Why could this building be held up as an example of design excellence?**

It is not driven by an outlandish theme. Nor is it contemporary just for the sake of wanting to do something modern. It is going back to a more simplistic way of building. The forms are expressed by their function and the architecture is informed by it. I have a building – it needs to be rain-protected – thus a pitched roof. It needs a cover for people to walk under – thus a lean-to veranda. And the pitched roof is not mono, back-pitched or contorted for any aesthetic reason. It is the simplest solution to the problem. There is integrity in that. It is also not layered. The exposed trusses are the real structure. The underside of the sheet metal is the ceiling. What you see is actually the aesthetic without any embellishment – and there is beauty in that.

**What influenced the design resolution in terms of the micro and macro context?**

We are not into themes, but we also believe that to introduce so-called contemporary architecture in an environment rich with its own vernacular would be an opportunity lost. We thus found inspiration in the Irene farm buildings and vernacular and used it as our base. All the colours and finishes and materials can be found in the area and historical precedent.

When a reference was sought for the campanile – the use of a traditional galvanised drum at the top made for an original interpretation of the local vernacular. In the macro context, the building presents its signage façade to the highway whilst presenting its friendly, village face to the housing estates and road leading to Irene town.

**Explain the design approach to pedestrian and vehicular circulation:**

Pedestrian is traditional with an entrance at either end and friendly walkways in the parking. The central entrance was allowed to give quick access to the square and it was not detrimental due to the racetrack design.

**Explain the design approach to the negative or open spaces (spaces between structure):**

The building had to be high enough to enclose the streets and provide an intimate street that encourages browsing. Widths were kept to a minimum to discourage single side shopping without making them too narrow. The square was designed with the golden mean and the height of the buildings either side made high enough to





capture the space. Likewise the campanile is a tent pole for that space.

**Explain the design approach to tenant installation controls and signage:**

We believe that too many constraints inhibit the different natures of the retailers to come to the fore. Thus, anything goes. Each proposal gets approved on its own merit and does not allow another tenant to assume the same.

**Explain the design approach to services and deliveries:**

As far as possible, all the big servicing is around the back and the customer never gets faced with it.

**What environmental techniques have been incorporated in the design?**

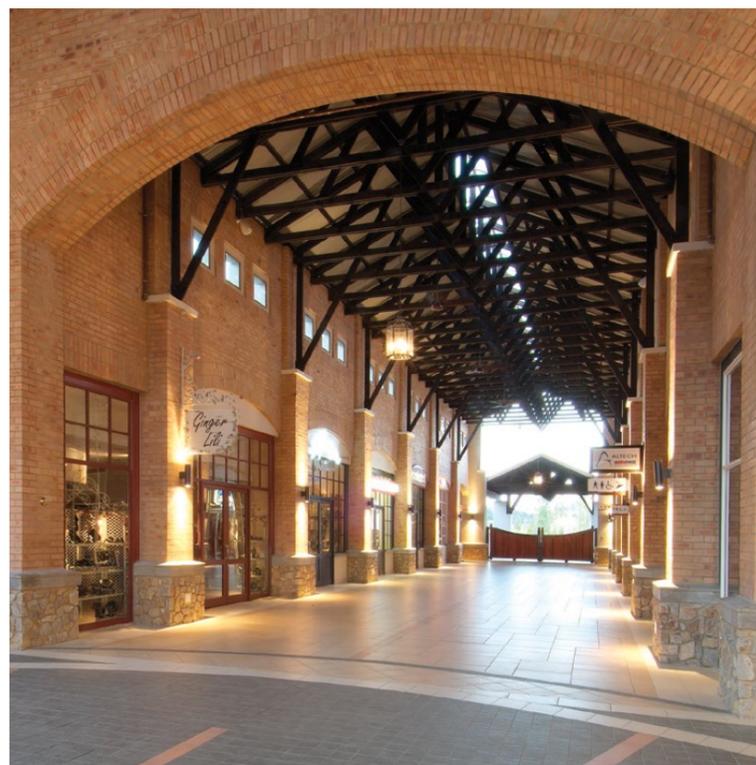
Being an open mall, careful design was undertaken to provide cover but not to restrict airflow. The mall spaces are not air-conditioned and are all naturally ventilated. We have gone to great lengths to ensure a green environment both internally and in the parking areas.

**Were the development goals and objectives achieved? If so, how? Provide information to back up your claim:**

Yes. The centre functions as a town centre for the Irene area, with all the functions normally associated with a town centre. Due to its ambience, it is a destination of choice for casual and business meetings which is something one would not normally contemplate for a shopping centre. The very upmarket fashion functions extremely well – backing up the demand for a niche, specialist centre that, because of its ambience, draws people from much further away. It is not just a shopping destination, but has become a pleasant place to be for its own sake.

**If the project was done over again, what would you do differently? Why? How?**

We would build it much larger in the first place. We see that people like being here. They want to be here – yet they are sometimes forced to go shopping somewhere else because we do not yet





have the full spectrum of retailers. We will show tenants that historically, by the time a centre is built and open, the original demographics are heavily outdated – we have to plan ahead to ensure that the final product takes cognisance of the inherent growth.

**Describe the key business reasons for the success of the project?**

1. Unique environment
2. Good tenant mix for the first phase
3. Delivering what you promise and more.

**What is the vision for the centre for the next five years – what enhancements or changes are planned?**

We plan to expand to twice the size without losing the overall look and character.

**In what ways do you feel other developers can benefit from this experience?**

We believe we have shown that something different can be created that still adheres to the retail principles. The spend on public art for its own sake and money spent on creating a pleasant



environment gets repaid in the long run by the customers preference for such an environment.

**Please highlight any other aspects which you feel the judges need to take into account:**

The sameness of the current retail offerings and the difference this centre makes to the face of retail as a whole. The first time I could honestly say that I can face a community and promise them that this development adds to their area rather than detracts from it. In what other centre do I see people walking in for the first

time and actually smiling from pleasure at what they see?

**Explain specific design or construction problems resolved, or how new standards and innovation in the areas of design and construction were established:**

The simplicity and almost homelike qualities of the construction helped a lot. Care was taken to place the building in such a way as to keep away totally from negative geological conditions prevalent in the area (dolomite).



# BLU BIRD

**BLU BIRD**  
Birnam

**DEVELOPERS & CLIENT**  
Capensis Investments 193

**ARCHITECT**  
Boogertman + Partners

**PROJECT MANAGER**  
SIP Project Managers

**QUANTITY SURVEYOR**  
MLC Quantity Surveyors

**STRUCTURAL & CIVIL ENGINEER**  
Pure Consulting

**CIVIL ENGINEER**  
Arup

**ELECTRICAL ENGINEER**  
Standard Electrical

**MECHANICAL ENGINEER**  
WSP in Africa

**TRANSPORTATION ENGINEER**  
Arup

**LANDSCAPE ARCHITECT**  
Archland Design Studios

**MAIN CONTRACTOR**  
Tri-Star Construction

**PHOTOGRAPHY**  
Courtesy of Boogertman + Partners

The shopping centre is the result of the creative foresight and investment of a client whose desired function for the site evolved over a four year period from a filling station into a small convenient centre located in the residential suburb of Birnam, east of Wanderers cricket ground, Johannesburg. Six suburban stands bordering on Lymington Park were consolidated and rezoned, and together with the establishment of future road networks on its immediate northern boundary, a highly intricate spatial planning and design challenge evolved.

## TRANSPORTATION & CIVIL ENGINEER'S REPORT

Arup were commissioned by Blu Bird to undertake a Traffic Impact Assessment for the new shopping centre which was integrated with a previous Melrose Arch Traffic Study and that of the proposed new road through Winston Ridge Park. Significant alterations to Athol Oaklands Road were recommended resulting from this combined analysis.

Arup were further engaged for implementing alterations to Athol Oaklands Road and the provision of a portion of the new road through Winston Ridge Park to facilitate access to the shopping centre. The widening required the diversion of water reticulation and major Telkom services. Although the new junction with Athol Oaklands Road is



The building forms a relationship between the user and the external context by means of its location and orientation towards the public park, offering a unique setting and experience against a backdrop of a clean and unpretentious design aesthetic



presently operating without signals, the installation of traffic signals will take place once the new road through the park is constructed in its entirety.

## ARCHITECT'S COMMENT

As architects, we were tasked with establishing a high street shopping experience, rather than a solely destination-orientated retail building where goods could merely be purchased - a place which would encompass the community as the user within a setting of open, yet protected, spaces, overlooking the council-owned park on the site's northern boundary.

The process that ensued was a thorough exploration of the architectural language of exposed and aggregated materials, and less aggressive ones of softer description - juxtaposed

by the challenging conditions of access and orientation that the site dictated for the building. What followed was a firmed set of guidelines of unpretentious and understated definition of forms, volumes and surfaces that would form the visual backdrop to, rather than be the subject of, the functions of the building.

## Site

The heavily contoured site contained between its immediate suburban building fabric on its northern, eastern and western boundaries, and the urban building mass to the south presented the first challenges of orientation, scale and access to the site. It was important to establish a link between this existing built context by layering the building from a smaller and more penetrable





scale and face on the north, to a harder and larger scale to the south.

Providing circulation to and on the site proved a challenging feat, particularly because of the spatial and parking requirements. The heavily contoured site is consumed by the building, with the main access on the northern boundary into parking on grade level and two basements beneath the building. It was important to keep the surface parking to a minimum so as not to create a heat island and a sea of parking typical of many other convenient retail centres.

A small secondary road on the southern boundary of the site is used by service and delivery vehicles to access the delivery yard, and tenant parking on the first floor level – thus keeping the main vehicular access for visitors free of larger vehicles.

#### Brief

The brief asked for a simple yet well-defined shopping environment, of which the building's scale, spatial and façade composition needed to respect its suburban contextual intervention.



#### Design

Sheltering itself from the harder traffic of the main arterial of Athol Oaklands Drive on the site's west boundary with large and almost uninterrupted planes, the building's softer centre opens to the north – acknowledging the park with a small parking forecourt accessed on grade level. This courtyard-like space, filled with soft landscaping of trees and timber planter boxes, serves as a lobby to the retail spaces beyond, describing an abstraction of positive to negative space between the building and the park.

Users are directed from this court and the two parking basements beneath, to the respective retail levels by means of a circulation core, comprising a pair of stairs, an escalator and a lift. This triple volume space with cantilevered steel staircase, glazed view lift and solar controlled glass façade, features as the building's key locator and orienteering mark for its users – both within the building complex and those external to the site.

The ground floor retail level comprises finer detail of a simple and well articulated mall





walkway as a public space open to the elements and natural light, yet sufficiently covered to provide protection – serving the 2,162m<sup>2</sup> of line-shops, an anchor tenant and a collection of restaurants that overlook the landscaped park, all formed around the court of grade parking.

Clear and well-defined shopfront façades for the respective shops set against a backdrop of undulating light washed bulkheads and ceilings describe an uncluttered visual palette.

Restaurants placed linearly fill the first floor level of 600m<sup>2</sup> with views again oriented to the park and residences to the north. A large cantilevered steel roof with a crisp ceiling and lighting finish reveals a sizeable covered space layered with a secondary steel and glass roof. More planters and umbrellas spill in between tables and chairs on the raised timber deck floor of the outside seating area, creating a café type ambience.



#### Finishes

Three hues of paint, two shades of tile, stainless steel balustrades and the stained teak timber boxes of the planters comprise the colour scheme throughout the centre, with back-lit stainless steel lettering washing the large painted surfaces.

#### The Building in Context

The building forms a relationship between the user and the external context by means of its

location and orientation towards the public park, offering a unique setting and experience against a backdrop of a clean and unpretentious design aesthetic.

Continuous input from the client throughout every building and landscaping component and its composition was instrumental in creating a successful relationship within the team, as well as what has proven to be a refreshing approach to retail architecture of this size.



# MELROSE PIAZZA PHASE 1

**MELROSE PIAZZA PHASE 1**  
Melrose Arch

**DEVELOPERS**  
Melrose Arch Investment Holdings

**RETAIL DESIGN CONSULTANT**  
Retail Africa

**ARCHITECT & PRINCIPAL AGENT**  
dhk Architects

**URBAN DESIGN**  
dhk Architects

**BUILDING DESIGN ARCHITECT**  
dhk Architects

**RETAIL DESIGN ARCHITECT**  
Boogertman + Partners

**QUANTITY SURVEYOR**  
NWS Quantity Surveyors

**STRUCTURAL ENGINEER**  
Pure Consulting

**CIVIL ENGINEER**  
ARUP

**ELECTRICAL ENGINEER**  
WSP in Africa

**WET SERVICES**  
WSP in Africa

**MECHANICAL ENGINEER**  
Spoomaker & Partners Inc

**LANDSCAPE ARCHITECT**  
Uys & White

**FIRE CONSULTANTS**  
Specialised Fire Technology

**HEALTH & SAFETY**  
Comprac

**TIME MANAGER**  
Orion Project Managers

**RETAIL TENANT CO-ORDINATOR**  
Orion Project Managers

**MAIN CONTRACTOR**  
Murray & Roberts

**PHOTOGRAPHY**  
Charles Corbett

Melrose Piazza is a welcome addition to the mixed-use retail, office and leisure precinct

Soon after their purchase of the existing Melrose Arch Precinct, our client, Melrose Investment Holdings decided that the property should be improved with the inclusion of a more extensive retail offer to their patrons.

## Clients' Brief

In keeping with the existing urban design code, this retail development was to be incorporated within a mixed-use development. A brief for 24,000m<sup>2</sup> of retail combined with 30,000m<sup>2</sup> of offices with a total height restriction of six storeys including a public open space and an extension to the super basement sufficient to accommodate the parking requirements was issued as the bulk requirement for the proposed erven located on the northern side of Crescent Drive.

## Urban Design

The architects envisaged a new development that would integrate seamlessly with the existing Melrose Arch surface and basement movement patterns. With the formation of a new public space, named the Melrose Piazza, on the northern side of the allocated erven and the introduction of an additional pedestrian walk named Slip Street, they have managed to create a natural movement line between the existing



MELROSE PIAZZA



Melrose Square (the existing Old House square), the existing retail on High Street and the retail Precinct northwards, recharging and invigorating two high energy nodes.

"Melrose Piazza", is a welcome addition to the mixed-use retail, office and leisure precinct, and together with the adjacent residential areas in Melrose Arch, it forms a genuinely integrated urban experience. The high fashion "Slip Street" intersects with "Cross Walk" which takes you from High Street into a two levelled "Galleria" which forms a traditional retail race track pedestrian route of shopping back towards the Piazza.

Focused on open air retail and natural light, the precinct adheres rigidly to sound retail principles in terms of access and the placement of various anchor stores. The new "Galleria" is not traditionally enclosed but is partly roofed

with glass to keep the rains out but allow for the natural flow of air. In line with traditional high street shopping principles, and current Melrose Arch philosophy, retail loading is from the front street.

The Piazza forms the nucleus of the new precinct. Whilst providing colonnaded retail edges for restaurant and entertainment use, it fulfils the additional function of a vibrant public meeting place in a traditional urban context. The subtly tiered Piazza forms an open air theatre for performing arts such as opera, music festivals and plays.

## Architectural Resolution

The natural fall of the site has been carefully manipulated to accommodate basement parking a minimum of two storeys below street level with street level retail creating a podium area topped



MELROSE PIAZZA



by office buildings and attractive landscaped inner courtyards.

Attractive, flexible and readily divisible office buildings line the streets above the retail levels. Their varied façades accentuate the urban street edges. Access to these offices is either directly from the parking in the basement or street level. The office entrances share frontage with the line shops integrating the office and retail experience for both the tenants and visitors to the precinct.

The architecture of the new precinct continues the existing measured expression characterised by the use of first world and natural materials.

Careful use of similar brick types and pointing details to the existing precinct and the introduction of new external plaster materials have created a sympathetic yet unique and varied architecture to enhance the powerful Melrose Arch brand.

The buildings are generally orientated to the north, and with the reduction of glass façades on the east and west façades, the use of performance glazing, in combination with deep balconies, horizontal shading devices and roof insulation, the heat loading has been reduced to an acceptable percentage for the HVAC system.

The buildings are all concrete framed with predominantly face brick façades for ease of maintenance. Each building has been carefully crafted to include distinctly different façades to the vehicular street, public piazza, office courtyard and/or pedestrianised shopping experience. Emphasis has been placed on the human scale at street level, encouraging comfortable interaction of the pedestrian retail interface with the corporate office above.

The buildings are all individualised by a singular architectural detail; a steel and timber sunsreen, full height flat iron curtain wall, a triangulated light filled foyer, a west facing sunsreen, opera box balconies, a two storey natural sandstone cladding all provide a easy means to name and localise the building within the greater precinct.

Adding a special dimension to the shopping experience is the faceted performance glazing of the "Galleria" roof. The traditional enclosed mall is completely reinvented, to have the light and open qualities of the High Street, by a protective canopy which keeps out the rain, reduces the



wind but still allows in natural light and fresh air. Mounted on the office inner courtyard deck, a full level above the upper retail level, it lets light in all the way down through the double volume shopping area.

#### 34 Whitely Road

A traditional doughnut building type has been transformed by the site to follow the curve of Slip Street down from Cross Walk into the Piazza itself. The three storey office building of approximately 2,000m<sup>2</sup> per floor has four distinctly different Roan Satin Face brick façades. Carefully fashioned to

appear to have corbelled brickwork detailing, it presents deep recessed windows to the north façade and a steel and timber sunsreen to the east over the Piazza. Two colonnades shade the visitor at street level; - a glass colonnade on High Street and a shade-providing steel colonnade on the north. At first floor level, the internal courtyard is a secluded private landscaped area.

#### 37 High Street

At 650m<sup>2</sup> per floor, this building serves as a singularly unusual and contemporary statement of executive and corporate power. The iconic glass





curtain wall at the southern end commands its position on the corner of Slip, Crescent and High Streets. A discrete formal entry point provides a low key, stand alone executive address on the eastern side of High Street. The glass colonnade on the western façade provides weather protection to the shopper, whilst large street level window boxes on Slip Street hold promise for the shopper of high-end international brands.

#### 11 Crescent Drive

Serving three office floor plates of  $\pm 880\text{m}^2$  each, a knuckle joint foyer with an open staircase gives this building a distinctly simple identity at the junction between the existing and new precincts. A north facing courtyard at first level provides the open plan offices with a view away from the street.

#### 20 Melrose Piazza

Two distinctly different building façades share the only office foyer located on the Piazza. The curved "Burnt Horizon" red Marmoran faced curved building follows Slip Street with a curved curtain wall at street level and a curved linearly stacked sunscreen at the office levels on the one side, whilst the seashell encrusted white Toupret finished balcony, angles itself to follow the edge of the piazza in the other. The balconies of both façades provide grand stand views of the Piazza at all hours for the  $\pm 1,060\text{m}^2$  office floor plates whilst the interior façades open directly at first level onto the carefully landscaped shared office courtyard.

#### 44 Melrose Boulevard

Making a bold corner statement at the corner of Crescent Drive and Melrose Boulevard as a brick work façade, this imposing four levelled office plate of  $1,570\text{m}^2$  subtly changes itself



into to a horizontal façade of ribbon windows at the foyer junction. A glass canopy at street level introduces the visitor to either the building or the shopping entrance on Melrose Boulevard. This building shares west and north facing areas in the common first floor office landscaped courtyard.

#### 54 Melrose Boulevard

A C-shaped building wrapping itself around an almost private courtyard with the largest office floor plate of  $1,850\text{m}^2$  offers a staid glass fronted foyer as the first building from the main entrance off Corlett Drive. With superb north and east facing views this building is subtly wrapped with a natural Namibian sandstone cladding to cover the retail back of house areas at street level but opens itself up at the upper office levels with balconies on three façades. Buff Satin face bricks complemented with panels of Toupret finished external plaster present a completely different feel to the group of buildings.



MELROSE PIAZZA



#### Retail

The shopping experience in the new Precinct has supplied a series of alternatives to the current mixed retail located on High Street.

Three major anchors located in the standard manner complete the race track pedestrian route that commences at the eastern side of the Piazza and winds its way circuitously around to the western side by means of the Galleria and level changes. At the Piazza entry to the Galleria, a multiple level escalator allows maximum choice of level, the lower Galleria offering direct access to the closest parking, the middle level offering exits back into Melrose Boulevard by means

of a small arcade and the upper level which connects back into Cross Walk. As stated before, the Galleria is not an enclosed mall, but rather a roofed multi level street. The Upper Galleria gives way to traditional street retail in Cross Walk and turns perpendicularly into Slip Street, where high fashion and international brands supply a route back to the Piazza.

Various types of external cover provide the pedestrian with shelter from the weather, a glazed colonnade in High Street, a metal roofed colonnade on Whitely Road, a glazed canopy in Slip Street and metal canopies on Crescent Drive and Melrose Boulevard.

#### Structure

In order to ensure that the new precinct remained within the tight budget indicated at the outset of the project, the structure of the entire Melrose Piazza Precinct had to be designed as one structural entity, in other words, the full structural loading implications of all the buildings from basement to roof had to be conceptualised before the piling and foundations could be laid. Previously, the Precinct had been designed as a super-basement with separate land parcels above and an intermediate basement accommodated large transverse beams to support the superstructure above the column grid of the super-basement.

The Structural Engineer has kept transverse beams to a minimum, only resorting to them where the intersecting grids and large openings in the slab required them. The lower two basements followed the gradients of the existing



super-basement and the natural topography of the original excavation. Once the rock outcrop occurred, the slabs were levelled over them to form the upper two parking decks and retail levels. The Ground Floor retail slabs were stepped with down stand beams to accommodate the sloping ground levels and the upper office slabs edged with post tensioning to remove the necessity of either up or down stand beams.

Careful detailing of the façades to accommodate brick modulated slab levels and stair treads, resulted in construction and expansion joints throughout the structure to accommodate all the separate types of movement between materials, platforms and columns.

All the office buildings were completed with a lift and service core to the roof and a roof slab that can accommodate an extra level of light weight office structure.

#### Interiors

As the office blocks are to be fitted out by the tenants, the office plates have been kept as skeleton structures with only the interiors of the common basement to roof lift lobbies and their associated fire escapes, toilet facilities and services plant rooms being completed. dhk Architects, with dhk Thinkspace, have kept a simple palette of tile finishes to detail these public zones. Porcelain tiles have been used throughout with the careful intervention of a series of modes of patterning to provide unique sets of lobbies (basement, street and office) with a separate identity to each of the six buildings.



In the retail areas, the tenants have all used their own designers for the shop interiors. Only the Galleria finishes and the associated public toilets have been finished with a high end finish of porcelain tiles with very simple banding and very simple illuminated and tiled exposed columns.

#### Infrastructure Services

Stormwater management of the new precinct supplied a challenge, as the previous scheme had used the full quota of the run off water into the Sandspruit on the eastern boundary. Intervention into storm water retention and improvements for the James and Ethel Grey



RED BASEMENT - LEVEL 4



RED BASEMENT - LEVEL 5



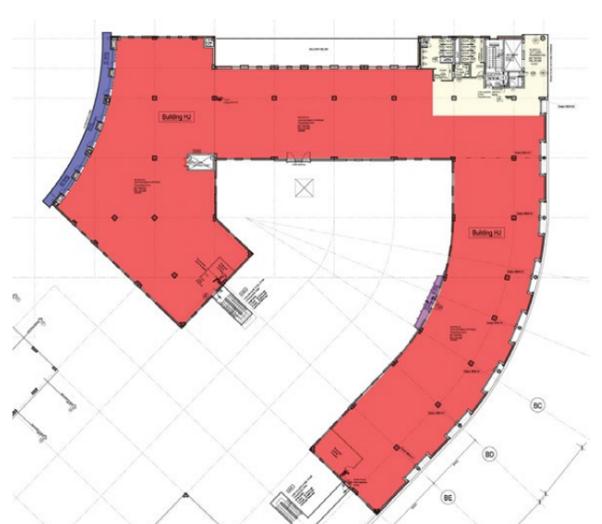
PURPLE BASEMENT - LEVEL 3



20 THE PLAZA - TYPICAL FLOOR LAYOUT



54 MELROSE BOULEVARD - TYPICAL OFFICE LAYOUT



11 CRESCENT DRIVE - TYPICAL FLOOR LAYOUT



Park have resulted in a scheme which does not rely on the building of a retention dam on the precinct and the stormwater run off has been dealt with by draining the hard roof run-off down the exterior building columns either onto the landscaped courtyards or the street levels, where it is systematically drained down through the supporting columnar structure to the subsurface drainage run-off trenches.

Similarly the balance of the Wet Services have been drained down to basement sub-surface trenches and led away to the sewer outfalls along the eastern boundary.

**Electrical Services**

Fortunately, the existing development had been provided with sufficient electrical power loading to accommodate the full quota for the entire envisaged development and the Eskom disaster had no effect on electrical provision to the new precinct.

Two separate high voltage chambers supply low voltage Transformer Rooms located adjacent to two standby generators to supply all the requirements of the mixed use buildings. Standby power supplies emergency services and lighting.

**Air-Conditioning Services**

Careful detail interventions with the architects in the initial stages of design have resulted in reductions to heat loading, with performance glazing, roof insulation and detailing to the façades that included deep set window penetrations, sun screening and shading overhangs.

Thereafter, the scheme has been designed using chilled water fan coil units all supplied by the District Cooling Units which are systematically extended to accommodate the loading as the precinct grows.

**Digital Technology**

Incorporating the existing centralised systems remained a prerequisite of the clients' brief. The new development has been merely added on in modular units to the fully integrated building services scheme; a single control room, the Precinct Integrated Engineering (PIE) Centre controls both the existing and new precincts' building management systems, ensuring supply of all standard services, the metering thereof and security (access control, surveillance) by means of a digital backbone.

The continued development and use of the centralised systems ensures efficiency and long term sustainability and is felt in the reduction in operational costs which is a result of the economies of scale created by the increased size of the precinct, greater diversities, and

higher co-efficiency of the building services performance in terms of both energy and cost efficiency.

**Construction**

A two and a half year project from bulk excavation to handover, this phase of Melrose Arch has tested and challenged the creativity of both the consultant team and construction team in a joint effort to achieve a unique set of individualised buildings all built on time.

Whilst not relying on a Project Manager, the consultant and contracting team have managed with the client, Time Managers, the Contractors Programming team, and Tenant Co-ordinators for both the Retail and Office sections to turn out a uniquely different and compact scheme with tight budget restraints.

44 MELROSE BOULEVARD - TYPICAL OFFICE LAYOUT



34 WHITELY ROAD - TYPICAL FLOOR LAYOUT



# BALLITO JUNCTION

## **BALLITO JUNCTION** Ballito

### **OWNERS & DEVELOPMENT MANAGERS**

Flanagan & Gerard  
Menlyn Maine Investment Holdings

### **ARCHITECTS**

MDS Architecture  
Boogertman + Partners

### **QUANTITY SURVEYOR**

NWS Quantity Surveyors

### **CIVIL & STRUCTURAL ENGINEER**

L&S Consulting

### **ELECTRICAL ENGINEER**

RWP Consulting Engineers

### **MECHANICAL ENGINEER**

Q-Mech Consulting Engineers

### **WET SERVICES**

Sutherland

### **FIRE CONSULTANT**

Specialised Fire Technology

### **TRAFFIC ENGINEER**

Royal HaskoningDHV

### **TIME MANAGEMENT**

Orion Project Managers

### **LIGHTING CONSULTANT**

Pamboukian Light Design

### **LEASING AGENT**

Flanagan & Gerard Property Consultants

### **MAIN CONTRACTOR**

WBHO Construction

The new three-level Ballito Junction opened in March 2017. It has extended an existing 12,000m<sup>2</sup> shopping centre, growing it by almost eight times its original size while offering simple, uncluttered and calming aesthetics.

Ballito Junction is now a regional shopping centre which offers 80,000m<sup>2</sup> GLA. It was designed by MDS Architecture in association with Boogertman + Partners Durban for a consortium of Menlyn Maine Investment Holdings and Flanagan & Gerard Property Development & Investment.

Sean Pearce, the partner at MDS Architecture who led the project, says that the three-level centre posed a number of design challenges, particularly given that it needed to tie in to an existing shopping centre, Ballito Junction.

“From Ballito Drive, you only see one level but the building is 35m high at the back (the equivalent of around 6 storeys in height). The design pays homage to the ocean and we have also been careful to design in such a way that guests experience a number of inter-connecting spaces to layer their experience,” he explains.

In addition to the planned extension, the owners extended the mall further during the construction phase in response to retailer demand. It now features six anchor retailers and a diverse mix of over 200 shops, restaurants, and services. The anchor tenants are Checkers, Woolworths, Edgars, Pick n Pay (existing), Game and Dis-Chem (existing).

Its location off the major N2 highway gives Ballito Junction ease of access from its immediate vicinity as well as to its north and south, and even inland. It has dedicated access around the traffic circles of Leonora Drive, off both Ballito Drive and Simbithi Drive, as well as from Ballito Drive itself.



Entrances at Ballito Junction are prominent and modern, featuring massive off-shutter concrete walls that are panelled to look like weathered timber and lead visitors to one of the three entrances



### Bringing Two Structures Together

Pearce says that bringing the two buildings together posed quite a design challenge. "This was solved by giving the existing centre a facelift and viewing it as a themed area that attaches itself to the new building," he says.

Ballito Junction's existing and well-loved piazza area with Mediterranean flair was retained and a second piazza was added to the new building. Five levels of parking lead straight into the three malls and the centre features a truck tunnel right at the bottom of the building so that no deliveries take place in a public interface but instead through a series of lifts and staircases concealed from the general public.

The old and new are brought together through the top level mall, creating a physical pedestrian link. Parking levels between the two buildings are connected at the upper and middle level malls, which assists with the accessibility and efficiency of the design.

### Seaside Aesthetic

One of Ballito's most appealing features is its outdoor lifestyle on account of its great climate and beachfront. Inspired by the ocean and sea-

side living, the design of the mall gives a nod to the area and lifestyle.

Entrances at Ballito Junction are prominent and modern, featuring massive off-shutter concrete walls that are panelled to look like weathered timber and lead visitors to one of the three entrances. Illuminated walkways are lined with screens of bouganvilleas. Glass-roofed car drop-off areas provide cover from the elements while wave roofs appear to float above the white building. Ocean blue glass has been used on the stairwells.

Various aesthetic elements combine to evoke memories of a seaside holiday, including a colour palette which includes beach sand and ocean colours. Sunny, windswept days are also conjured through references to water, timber boardwalks and decking.

Each of the building's three levels represents an aspect of the ocean. The upper mall level is an all-white theme depicting the rolling white waves of the ocean. Glass balustrades are used throughout the mall to create clean lines and this level offers entertainment, youth retail and niche fashion stores.

The middle level is the prime fashion level and is inspired by water. Blue feature lighting



ripples across the ceilings while the floors are covered in timber-lookalike and windswept sand porcelain tiles.

### Urban Eatery

The lower level's theme is the 'bottom of the sea' and it is here that the Urban Eatery is located. The

food court area is a highlight of Ballito Junction. It is a contemporary market space where patrons can enjoy fresh produce and take-aways, all found in one open-plan space. The aesthetic resembles an industrial building that has been retrofitted where the exposed steel and concrete structures are used as decorative elements. There are no





shopfronts in this area, only the kitchens are enclosed and the Urban Eatery features 6.5m high ceilings and a massive feature window which looks out to the north over the undeveloped green parklands of Simbithi Eco-Estate.

“Urban Eatery features subdued lighting and is a step in a new direction from the garish, bright and loud food court areas of the past,” says Pearce. Owing to the massive window, the Eatery is dark when it is dark outside, which creates an

intimate atmosphere. Specialist lighting sees the mood change during the day, creating both sunrise and moonlight effects during appropriate times of the day.

There are various abstract references to water and sand throughout Ballito Junction. Timber boardwalks, bubble mobiles, jellyfish mobiles and undulating waves in the ceilings all come together for a relaxing and contemporary shopping experience.



Skylights over the two main feature courts and clerestory windows provide abundant natural light which washes down to all the levels below. Large off-shutter concrete walls cast to look like timber clad walls help to delineate the main entrances. Internally, these concrete walls are exposed with the shopfronts in these areas popping out like bay windows. Scenic windows are also included in the double level major tenant stores to maximise views out over the immediate valley and the sea.

#### Screening Services from Residential Viewpoints

Pearce reiterates that while the building doesn't seem imposing from Ballito Drive, from the residential side of Ballito Junction, it is a 6-storey structure. “The building has two very distinct sides to it. Whereas the one side features prominent entrances, we worked to ensure that the back blends and recedes into the backdrop as much as possible. This side of the building is painted dark





with a combination of aluminium panels covering the services and vertical planting to ensure that in a few short years, the building will blend softly into its immediate context.”

Ballito Junction also offers a state-of-the-art Nu Metro cinema complex, including a Scene Xtreme cinema with a wall-to-wall, floor to ceiling screen and the latest in cinema audio technology. There are two Scene VIP cinemas, complete with a lounge/dining area where one can order hot/cold drinks and freshly prepared meals served

in the lounge or to one's seat plus five regular 2D and 3D cinemas.

22 Jump Street is a huge trampoline park which offers family entertainment including climbing-walls, dodgeball and a viewing area.

“MDS Architecture is known for their ability to maintain the tricky balance between design and commercial demands and they have managed to do so brilliantly on this project,” says Pat Flanagan of Flanagan & Gerard Property Development & Investment.



BALLITO JUNCTION



# CENTRAL SQUARE

## CENTRAL SQUARE

Menlyn Maine, Pretoria

## DEVELOPER

Menlyn Maine Investment Holdings

## PROJECT MANAGER & TENANT CO-ORDINATOR

Pro Annan

## ARCHITECT

Boogertman + Partners Architects

## QUANTITY SURVEYOR

RLB Pentad Quantity Surveyors

## CIVIL & STRUCTURAL ENGINEER

WSP in Africa

## ELECTRICAL ENGINEER

RWP Consulting Engineers

## MECHANICAL ENGINEER

C3 Climate Control Consulting Engineers

## WET SERVICES

CKR Consulting Engineers

## FIRE CONSULTANT

TWCE

## SUSTAINABILITY CONSULTANT

WSP in Africa

## ENVIRONMENTAL PRACTITIONER

LEAP Landscape Architects

## INTERIOR ARCHITECT

dsgn design

## SAFETY CONSULTANT

Cairnmead Industrial Consultants

## MAIN CONTRACTOR

WBHO Construction

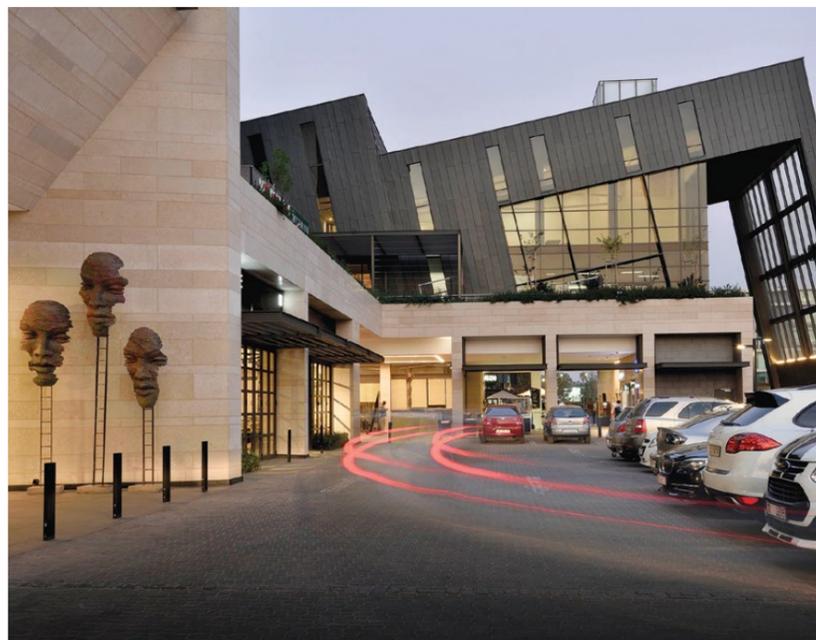
## PHOTOGRAPHY

Studio88 Photography

**M**enlyn Maine is a new city centre being developed in the east of Pretoria by Menlyn Maine Investment Holdings. With close links to the N1 situated between Atterbury and Garsfontein roads, it is an area that has seen large growth of new buildings and developments.

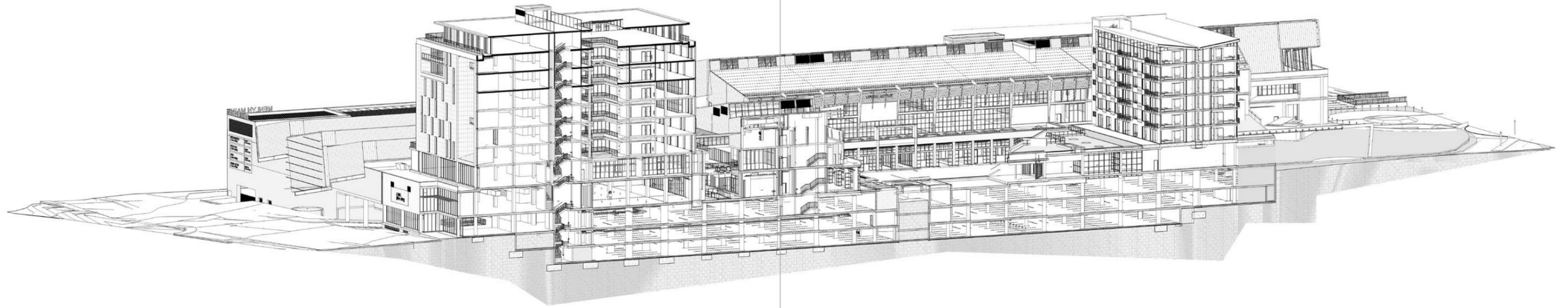
The Menlyn Maine mega development – a 350,000m<sup>2</sup> urban precinct that is being built at a cost of R10 billion, is according to Henk Boogertman, Menlyn Maine's Director of Architecture and Design: "A huge thing. It's one of the biggest commercial construction projects underway in the country today." Upon its completion Menlyn Maine will be comprised of 140,000m<sup>2</sup> of commercial office space, 35,000m<sup>2</sup> of retail, dining, and shopping space, 35,000m<sup>2</sup> of upmarket residential apartments, 18,000m<sup>2</sup> of luxury hotel space, a 60,000m<sup>2</sup> Time Square Entertainment Complex, and large tracts of scenic parkland and open urban space.

The Menlyn Maine development is truly unique in that it is the first green city of its kind to emerge on the African continent. Each and every component building in Menlyn Maine has been designed with environmental sustainability in mind, in order to create a precinct that is highly energy and carbon efficient, to the extent that it is Green Rated by the Green Building Council of South Africa – one of only a handful of urban regions in the world to earn this accolade.



Central Square is a mixed use complex in the heart of the Menlyn Maine precinct. It incorporates boutique shopping, offices, a Virgin Active Classic Collection gym and a 240 room hotel





**Central Square**

Central Square is a mixed use complex in the heart of the Menlyn Maine precinct. It incorporates boutique shopping, offices, a Virgin Active Classic Collection gym and a 240 room hotel. These various uses are brought together by a central open air piazza to create a dynamic, vibrant environment to suit the modern lifestyle.

Central Square is the retail and hospitality centre for this new urban precinct and was developed on land that was mostly residential. When Central Square began construction three office buildings had already been completed in the

precinct, the road network had been established as part of a larger masterplan done by Boogertman + Partners Architects and another building had started construction.

**Planning**

Central Square spans numerous erven and over three townships so the consolidation of the sites and acquisition of the required rights took a lot of close work with the city planning division. In addition to this The Capital Hotel, Menlyn Maine was developed on its own site by its own team within the Central Square erf.

**Brief**

The basic intent was a high end retail and restaurant offering with areas for a gym, hotel and offices. There was also a focus on public space and the requirement for the parking to be hidden under the buildings wherever possible. Underground parking means that the environment is uncluttered, and the flat cityscape is perfect for pedestrians. The space is enhanced further by the presence of art and sculptures in the main piazza and surrounding parks. Henk said, "We've embraced public arts, which are a common occurrence in other major cities around the world, but also performance arts.

In our piazza we have activities every weekend, so we tend to do a lot of events on our premises that activates the precinct".

According to Francois Bredenkamp of Boogertman + Partners Architects the client was always intent on establishing an urban, integrated lifestyle centre, not just a shopping mall. The scheme needed to fit within the larger plans for Menlyn Maine. Not just for the buildings that have already been built but also for future development. As the bulk can be adjusted over the other sites, the bulk required was to respond to the design rather than the design to maximise the allowed bulk.





### Concept

The conceptual design for the Central Square boutique mall is based on the principle that the development is to be seen as forming an integral part of a mixed use 'city centre' rather than a regular, stand alone shopping centre.

The Central Square portion of Menlyn is to be the heart of the newly developed Menlyn suburb and the intention is for Central Square to be the future 'Third Place', following on from Home and Work. For visitors, surrounding office users

and particularly residents, Central Square is to become not only their local retail destination of choice but also the place the relax and entertain after hours.

### Materials

The intent was to use long lasting high end materials that would stand the test of time rather than require the mall to be subject to ongoing renovation due to the materials used. Brick, stone, glazing and a Rheinzink cladding was the basic palette chosen.



The piazza is defined on the west and north by a colonnade made of Amalfi stone from Egypt and the eastern boundary is defined by an onyx brick. The majority of the upper level is clad in Rheinzink. The main office, No 1 Central Square, that houses the offices of the Public Investment Corporation, is clad in a lightweight thin tile which is mechanically fixed to ensure durability. Internally the mall floor is a Rustenburg tile and the shopfronts use a combination of steel, painted timber, glazing, natural timber and brick cladding.

### Retail

The retail portion was developed with interior designers, dsqn, designing the internal designs of the Mall. Each shopfront has a unique, individual style, with a palette of materials to tie into the larger aesthetic. The brief was for the retail elements of the mall to be more like a closed street than a conventional interior mall.

The central piazza is surrounded by restaurants creating a clear centre not only to this development but for the larger precinct.





**Sustainability**

A Green Star SA Custom Mixed Use rating for Menlyn Maine Central Square has been awarded. It is an industry first in South Africa that a project has been certified using a custom tool.

According to Alison Groves, HOD: Sustainability Consultant at WSP in Africa who were the sustainability consultants for Central Square:

“This is an exciting and important move for the industry towards having one overarching tool that can be customised and used to accredit all types of building models.”

Uptake of green buildings in South Africa continues to grow, driven largely by continuous and growing pressure on the ‘built’ space to consider and address inadequate energy



resources, carbon reduction targets and revised building energy efficiency standards. The Green Star rating and accreditation system has provided excellent guiding principles. However, existing Green Star tools only allow certification of single building types – i.e. commercial office, retail, multi-unit residential, and public and educational buildings.

“Where before it may have been difficult to entrench sustainability into projects that did not fit into the Green Star rating criteria, this progression to having a customisable tool that enables mixed-use developments to use the Green Star rating accreditation will allow robust sustainability in the built space to be applied across the board,” adds Groves.

To achieve the Custom Mixed Use rating for Menlyn Maine Central Square, WSP’s Green by Design team assessed all the current available ratings tools before deciding to make use of the Public and Education (P&E) Buildings Design Rating tool – as its structure offered the greatest semblance for what was required. The P&E tool offered added flexibility for adapting certain criteria to focus on different morphologies – and define how credit should be allocated for the Green Star rating that would more accurately reflect the building.

In addition to adapting the necessary criteria, the custom tool also allowed the incorporation of aspects such as ‘green leases’ to ensure that tenants can be held responsible for their own energy use – and particularly where this may be outside of the landlord’s control or influence. Groves says, “Green leases are growing in importance as the first step in changing mind-

sets towards sustainability and getting buy-in from tenants for retail, commercial or residential use, alike.”

Central Square acts as the heart of the new urban centre that is Menlyn Maine. The driving principles embodied in this new urbanism are certain to act as a benchmark in similar mixed use developments throughout South Africa.



# THE MARC

**THE MARC**  
Sandton

**CLIENT AND DEVELOPER**  
Eris Property Group

**PROJECT MANAGER**  
SIP Project Managers

**ARCHITECT**  
Boogertman + Partners

**QUANTITY SURVEYOR**  
AECOM

**TENANT CO-ORDINATOR**  
Tenant Co-Ordination Services

**TOWN PLANNER**  
Urban Innovate

**INDEPENDENT COMMISSIONING AGENT**  
Johnny Smit Technical Services

**STRUCTURAL ENGINEERS**  
Aurecon (now Zutari)

**ELECTRICAL ENGINEERS**  
Claassen Auret Inc

**MECHANICAL ENGINEERS**  
Spoormaker & Partners Inc

**FAÇADE & TRAFFIC ENGINEERS & ENVIRONMENTAL CONSULTANTS**  
Arup

**WET SERVICES**  
Sutherland

**FIRE ENGINEERS**  
Specialised Fire Technology

**EXTERNAL ROADS UPGRADE CIVILS**  
Kantey & Templer Consulting Engineers

**GREEN BUILDING CONSULTANTS**  
WSP in Africa

**ACOUSTIC CONSULTANT**  
Linspace

**LIGHTING CONSULTANT**  
Pamboukian Light Design

**LANDSCAPE CONSULTANTS**  
African Environmental Design

**HEALTH & SAFETY CONSULTANTS**  
Cairnmead Industrial Consultants

**LIFT CONSULTANT**  
Projitech

**MAIN CONTRACTOR JV**  
Aveng Grinaker-LTA / Trencon Village Walk

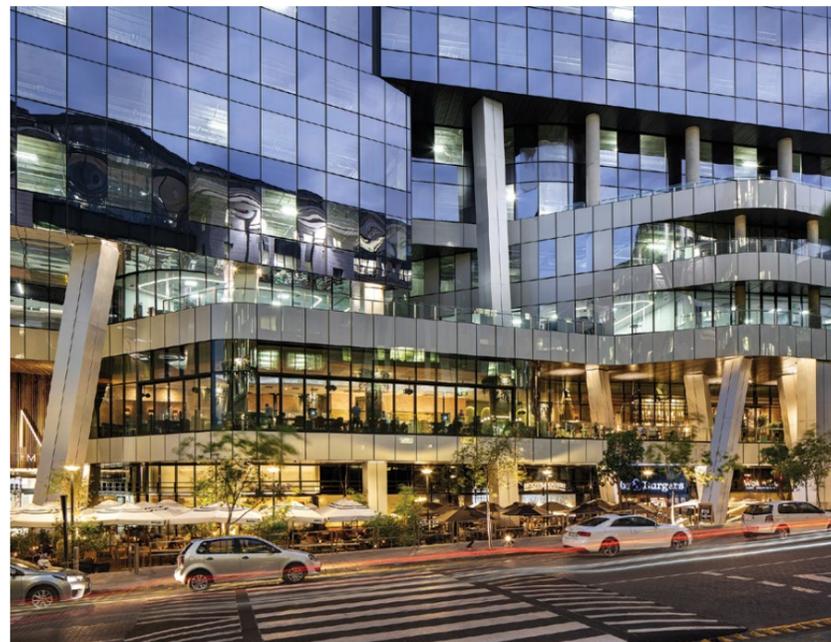
**PHOTOGRAPHY**  
Adam Letch

The MARC, the spectacular jewel-like edifice precinct on the corner of Maude Street and Rivonia Road in Sandton, developed by Eris Property Group and designed by Bob van Bebber at Boogertman + Partners, not only adds a bold, bright new icon to the Sandton skyline, but has also transformed the street-level of the precinct into a busy, pedestrian-friendly public space.

The MARC (an acronym for Maude and Rivonia Corner) has transformed the intersection in Sandton, Johannesburg, where the two roads meet, into a new urban landmark. The site, which was formerly occupied by the Village Walk Shopping Centre, has been redeveloped as a mixed-use precinct made up of two office buildings and a retail component, which includes restaurants, supermarkets, a fairly boutique shopping offering and a gym.

## Background

The MARC is on the site of the original Village Walk development which had struggled to remain tenanted and active. The then owners sent out a design competition to develop the full site as well as the Balalaika site to accommodate 192,000m<sup>2</sup>. This proved difficult to execute. Eris Property Group were then asked to get involved to see what was possible as a minimum intervention to extract enough value out of the



existing development. They asked Boogertman + Partners to look at a scheme. This proposal tried to use as much of the existing infrastructure as possible and to reposition the scheme in the market. This scheme was a minimum 45,000m<sup>2</sup>. What has finally been built in its current form is closer to 80,000m<sup>2</sup> as a full mixed use scheme.

None of the existing buildings of the old Village Walk development were retained. What was retained was the existing Balalaika Hotel and Crown Court Hotel with the 2 basement parking levels below the Crown Court. The new retail levels have been designed to ensure that the original connectivity between the retail and the hotel was maintained and improved.

#### Jewel-like Towers

Most visibly, The MARC consists of two towers: a dazzling 12-floor ovoid commercial tower with a gold-and-black faceted façade, which extrudes elegantly over the intersection and, set further back from the corner, a 17-floor tower occupied by a legal firm. Together they have become known as 'The Jewel' and 'The Jewellery Box' respectively

and have created an entirely new identity for the intersection. At the same time, they have also transformed the character of the surrounding neighbourhood on street level by activating a vibrant pedestrian-friendly public domain.

#### The Site

One of the first questions the architects, Boogertman + Partners led by director Bob van Bebber, faced was how to create the visual impact and engagement demanded by the prominence of the site without competing to be the tallest new building on the Sandton skyline. "We went through a process of mapping the existing aesthetics in Sandton, and found that one of the few opportunities to make a statement on the skyline was to use colour," says Van Bebber. So, the relatively diminutive but highly impactful gold-and-black façade was born, articulating the intersection like a glittering jewel cradled by the neighbouring 'boomerang shaped' tower. The tower's added height in turn imparts visual identity, even from a distance, from its position set back from the corner.

#### Accessible Urban Space

The architects placed a great premium on harnessing the opportunity the development offered to create accessibility and open up the public realm. Van Bebber says they went to considerable lengths to design "accessible urban space with no barriers" around the precinct while ensuring safety and functionality.

On street level, between the 6.5-storey base-ments and the commercial space in the towers above, is a two-story retail level. Apart from providing a shopping destination, this retail podium level activates the precinct on street level, integrates the complex with coherent pedestrian movement routes through Sandton's commercial node and maintains connections to the adjoining hotels.

Van Bebber argues that it was "very important that we achieve on-grade pedestrian access off both Maude and Rivonia" to create easy pedestrian access. The natural fall of the site required an urban staircase from the Rivonia and Maude Street intersection, but for the rest, access is completely unimpeded. This was another reason for the arrangement of the towers. While the Jewel

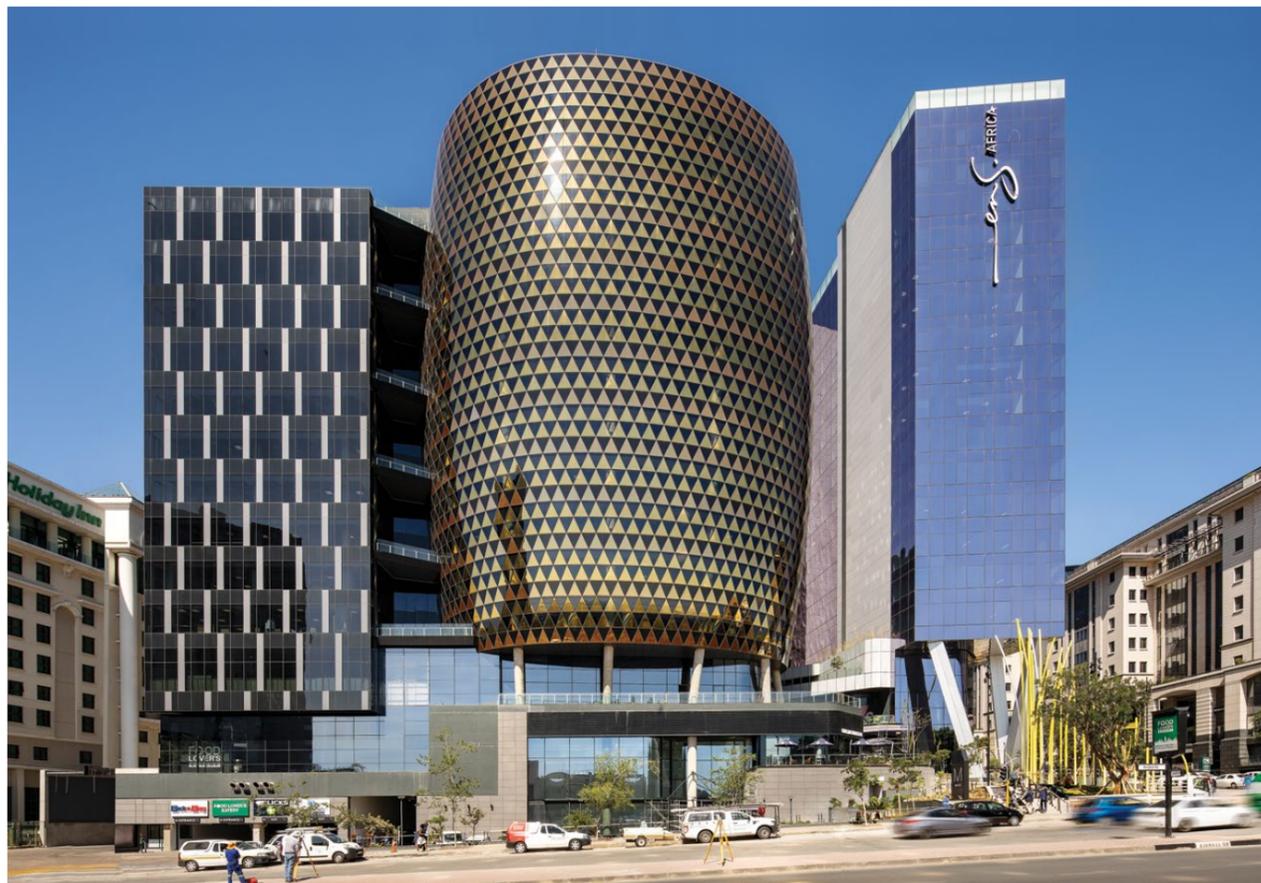
has presence, the tower connects at street level opening up considerable public space.

The generous pavements, public benches, public sculpture and soft landscaping bring human scale and appeal to the streetscape around the precinct, and the visible street frontage of the shops and restaurants and pedestrian accessibility draw office-dwellers out from the surrounding commercial buildings and onto the street.

#### Retail Component

The retail level, while fairly small and bespoke in its offering, is characterised by transparency and visibility. Overhead skylights help to flood the interiors with natural light and blur the distinction between interior space and exterior urban environment, conceptually linking the retail space with the landscaped podium outside. The movement routes through the interior are articulated with friendly curves and organic shapes.

Moreover, the subtle erosion of the boundaries between individual shops and mall space, achieved through the transparency of the glazing lines and curved glazing on the retail shopfronts,





which is unusual for retail, facilitates a sense of connection, engagement and shared ideas and a shared, dynamic retail experience rather than the compartmentalisation of a typical mall experience. Similarly, the way in which the restaurants open onto the sidewalk space along Maude Street activates the street edge.

The MARC has also been designed to actively interface and connect with neighbouring properties – particularly the Balalaika Hotel and the Holiday Inn. Van Bebber points out that “knitting The MARC back into the urban fabric” was essential to ensure the successful activation of the public space of the precinct, and to Sandton’s commercial centre more generally. The MARC is unique in Sandton in that it has three separate entrances, including the newly unlocked passageway from Stella Street to the south, which has been decorated with specially commissioned urban art, and draws pedestrians from neighbouring offices to the south, as well as Gautrain users, facilitating easy access to the centre and hotels beyond.

#### Innovative Façade Design

Arup provided specialised façade engineering services on The Marc’s façade. Matilde Tellier, senior façade engineer at Arup, commented, “One of the biggest challenges with a building of such unusual geometry was rationalising the façade envelope for efficient fabrication while adhering to the architectural concept.”

The façade’s surface is formed by a mesh of 5,620 alternating gold and black flat triangular elements whose vertices follow a nebula of points scattered in space with a specific logic.

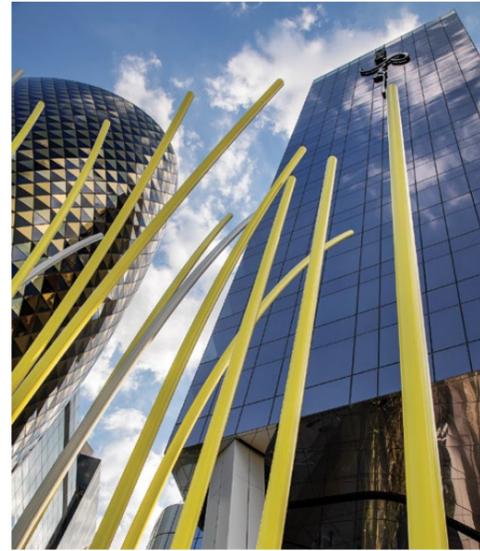
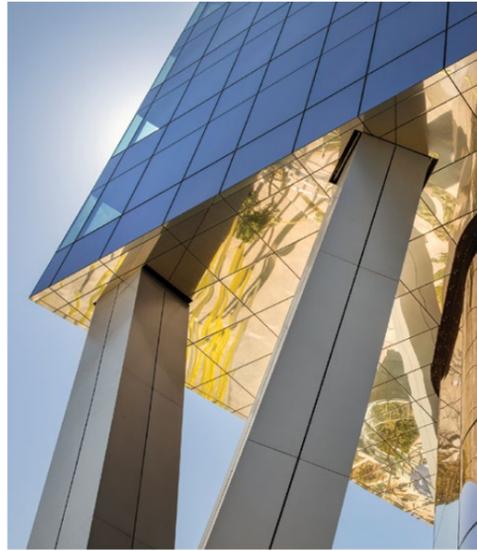
The Arup team approached the Jewel’s façade panelisation design by forcing the maximum number of equal triangles on the surface and exploring various combinations of curves.

The curve, generated surface and triangular panels were coded in a parametric environment, allowing the geometry of the spiral curve to be adjusted to change the overall shape of the façade and achieve different degrees of “bulginess”. This enabled the architect to make geometric adjustments, with the



THE MARC





parametric model ensuring that the geometric relationships that provide the smooth curvature and geometric rigour facilitating fabrication are maintained.

Tellier added, "We were able to accommodate and review any geometric or material changes and assess their impact almost instantaneously. The flexibility of our design process was a key factor in our contribution to the Jewel, which is much more than a building, it is a work of art."

#### Branding

The name origination, logo and wordmark were done by Boogertman + Partners graphics team led by Liesl Niemand, Senior Graphic Designer and Judith Jurgens, Architectural Team Leader.

According to Judith, the advantage of the architectural team working alongside the branding team is the integration of the core architectural concepts into the brand output. Continuing this understanding and working together as one



team ensures the consistent and cohesive application of brand from inception through to the full signage system.

#### Conclusion

What stands out for the architects is that they managed to turn around a challenging scheme and rescue it to eventually end up with a very successful mixed-use design that dealt with the compromises and complexities of towers

on top of retail and make the retail respond to the public realm. This project was done by the team at the same time as they were involved as architects on the Discovery Head Office as well as the Werksmans Head Office on Rivonia Road. All 3 buildings are very different in the way the firm responded to the end users and different developers, but most importantly they all responded to the public realm in different aesthetically and functionally diverse ways.



# FOURWAYS MALL

**FOURWAYS MALL**  
Fourways, Johannesburg

**PROJECT MANAGERS & PRINCIPAL AGENTS**  
SIP Project Managers

**LEAD ARCHITECT**  
Boogertman + Partners

**ARCHITECTS FOR NEW PARKADES AND FOURWAYS VIEW**  
ARC Architects

**CONCEPT ARCHITECT**  
Rob Bray Concepts

**QUANTITY SURVEYORS**  
Quanticost

**STRUCTURAL & CIVIL ENGINEERS**  
WSP in Africa

**ELECTRICAL & WET SERVICES**  
CKR Consulting Engineers

**HVAC ENGINEERS**  
Spoomaker & Partners Inc

**FIRE ENGINEERS**  
Spoomaker & Partners Inc

**TRAFFIC ENGINEERS**  
WSP in Africa

**MAIN CONTRACTOR**  
MECSA

**PHOTOGRAPHY**  
Nicholas Baleta  
InfrastructurePhotos (Aerial)

The renovation and expansion of Fourways Mall is complete, more than four years after breaking ground. The new Fourways Mall now positions this shopping mall, located in the Northern Suburbs of Johannesburg, as one of the largest in the Southern hemisphere.

The expansion project has added more than 220,000m<sup>2</sup> of space across all levels, with the total space available for retail being 178,000m<sup>2</sup>, including Fourways View and the previously standalone Game wing, which have now been embraced under the Fourways Mall roof. This will soon grow to 200,000m<sup>2</sup> with the launch of French home improvement mega-retailer Leroy Merlin, with its box to be linked to the main mall, currently under construction.

The entire project has cost R2.1 billion to complete, supported by roadworks expansions funded by developers Azrapart costing R400 million, which represents a massive investment into a vision for the future of Fourways.

Having welcomed more than 250 new brands and stores to the mall's retail mix, Fourways Mall now offers a total of 450 shops and experiences.



■ ORIGINAL BUILDINGS

The expansion project has added more than 220,000m<sup>2</sup> of space across all levels, with the total space available for retail being 178,000m<sup>2</sup>





#### DESIGN FOCUS & RESEARCH

Notwithstanding the sheer scale of the project, the infrastructure and the many years of collaboration and partnership to get the project consumer ready, the immense amount of project detailing is noteworthy and worth reflecting on.

With what Boogertman + Partners's Hennie Coetzee calls Interior Architecture, the mall really

comes to life once you enter it. The team did extensive research into future retail trends and visited top malls in the UK and the UAE to sense check their own design and to ensure that the mall had longevity.

Driven by the demands of retailers for more space and the growing demand of the surround communities for increased lifestyle and brand



offerings, the Fourways Mall has created a number of design focuses or key areas that ensure it is awesome. In reviewing such a large project and aiming to look beyond the sheer volume of the square metres it is important to span between the scale and the design detailing brought through in every aspect that creates the overall experience of the mall.

#### DESIGN DETAILS

A nautical theme originated from the origins of the original landowner, an Irish boat builder, and it has provided the cue for some of the theming.

##### The Boat Ceiling

The Boat Ceiling bulkhead located in Mall 1 is a tribute to his shipbuilding legacy. The 110m long





feature is shop-fitted from timber and inset with LED strip lighting to create an incredible ceiling feature that creates a destination for this part of the mall. In tracking social media (#fourwaysmall) it is currently the most photographed and 'selfied' feature of the Mall since it's opening late last year.

#### Glass Ceiling Features

The design for using glass as a decorative ceiling feature was originated by Anneke Dearlove of the Boogertman + Partners interior team.

"We were looking for something upmarket, beautiful and linked to raw materials. Glass was introduced to us by an international vendor but once we had done the designs outsourcing internationally was too expensive. We sought local craftsmen and I am delighted the Gary and his team at Trithor had the skill set and the appetite for detail that has created these unique features," said Anneke."

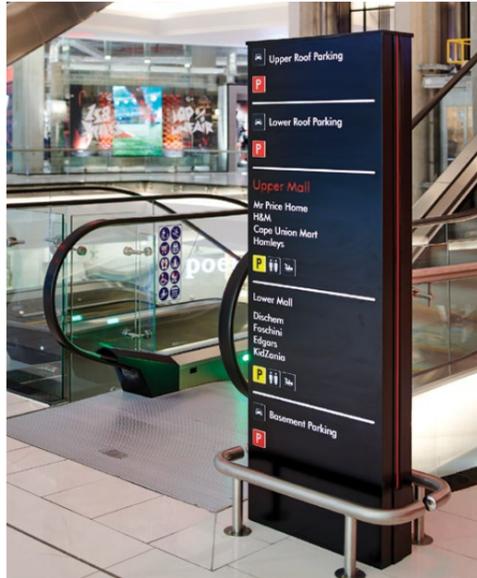
The glass plates are hand blown and individually coloured with pigment and range from 900mm to 500mm in diameter. They form a flowing pattern on the 60m ceiling detail in Mall 3.

This attention to detail and hand work is carried through in the glass chandelier features. The fish shaped installation in the elevator courtyard required intense collaboration between the malls production team, the installer and shop-fitter and the Boogertman + Partners design team. The resulting sparkling shoal of 800 floating fishes adds to the theme and the overall shopper experience.

"As retail design is under increasing pressure to compete with online retail it is important to create an environment that is rewarding and relaxing to be in for shoppers," explains Malcolm Coulson the Architecture team leader from Boogertman + Partners. "The reflection of the ceiling detailing in the shop fronts and the floor surfaces creates flow lines that bring cohesion and visual stimulation to the shopping experience." he said.



FOURWAYS MALL



#### PUBLIC MINDED DETAILING

##### Way-finding Design

The addition of extra wings to the Fourway Mall plan resulted in the shape of a four emerging as the central organising principle. Four anchor tenants, Game, Woolworths, Checkers and the Food Court are located on the four edges of the four wings with the three floors between creating concourses and display areas with line shops and brand offerings connecting pathways.



The navigation and wayfinding system was designed by Seek Design. Through bringing the colour in the parking garages into the shopping mall signage systems, and making visible the colour on central lift shafts and escalators including lighting features, consumers can easily identify that a particular court or section is linked to the parking entrance they entered from. As Brent Lindeque from The Good Things Guy notes in a review, 'it got bigger but not harder to navigate.'



#### Public Transport and Infrastructure

Over and above the investment in the road infrastructure around the mall, a further innovation in the design is the inclusion within the mall parking of a dedicated taxi rank for 80 taxis. With car wash facilities and bathrooms designed after consulting with the relevant taxi associations it brings consumers and commuters right into the mall with easy access up one escalator.

#### Lights and Colour

The old Fourways Mall connects to Fourways View, combining these previously two separate offerings into one accessible shopping experience. A new feature link bridge between the Mall and the new multi-storey parkade is enclosed on the north side with coloured glass panels that create a playful and memorable experience and an easily recognisable 'landmark' wayfinding structure.

The use of natural light to increase user comfort within such a large interior space is managed by the use of skylights - the largest being the 22m x 18m skylight over the Promotions Court. The skylight was a worthy SAISC Steel Awards 2019 winner in the tubular steel category. The large exo-skeleton for this skylight was produced on the ground and then lifted into place.

#### Seating

The care to bring the outside in was extended to the use of large pieces of shaped timber for the public seating throughout the mall. Offset

by planting, these features are deliberate soft touches brought in to bring human scale to the expanse of the mall. "Often shoppers have long distances to walk and providing natural pause areas allows people to regroup, refresh and then continue with their experience. This is often an overlooked component of improving the experience for the end user and something we believe quite strongly in when reviewing retail design" says Malcolm Coulson.

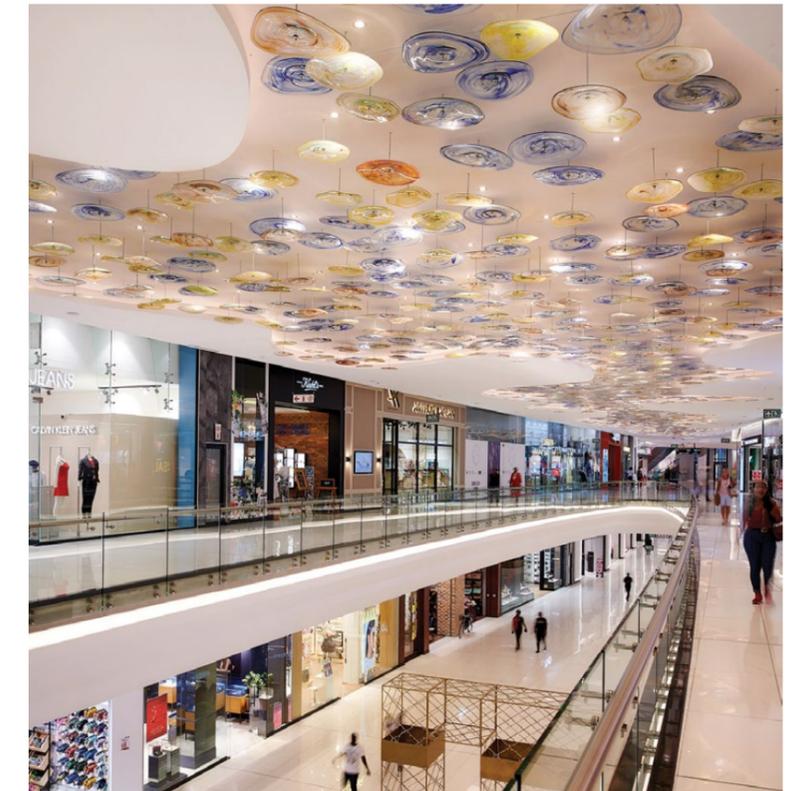
#### Consistent Detail

To retain the emphasis of light, transparency and volumetric design, the shop fronts in the main area of the 5-storey mall are designed as frameless glazing that start from 4.8m high and in some areas go up to 7,3m high. In lower parts of the retail outlets a smaller framed shop front was introduced to provide flexibility for smaller tenants and to create some variety.

Due to the size of the floor surface the architecture and interior architecture team, working to the client brief, were able to source a producer of tiles in Italy who could produce the high volume needed in the time and price range required.

#### CONCLUSION

The new Fourways Mall has taken the South African retail experience to the next level, meeting the demand for destination shopping that offers more for the customer than the traditional shopping mall environment.



# CASTLE GATE LIFESTYLE CENTRE

**CASTLE GATE LIFESTYLE CENTRE**  
Erasmus Park, Pretoria

**CLIENT**  
Castle Gate

**DEVELOPER**  
Atterbury Property Developments

**ARCHITECT**  
Boogertman + Partners

**QUANTITY SURVEYOR**  
NWS Quantity Surveyors

**TENANT CO-ORDINATOR**  
MDSA Project Management

**CIVIL & STRUCTURAL ENGINEER**  
DG Consulting Engineers

**MECHANICAL ENGINEER**  
Graeme Page Consulting Engineers

**ELECTRICAL ENGINEER**  
RWP Taemane

**FIRE CONSULTANT**  
Specialised Fire Technology

**WET SERVICES**  
CKR Consulting Engineers

**LANDSCAPE ARCHITECT**  
Daniel Rebel Landscape Architects

**ENVIRONMENTAL CONSULTANT**  
Nali Sustainability Solutions

**HEALTH & SAFETY CONSULTANT**  
Cairnmead Industrial Consultants

**MAIN CONTRACTOR**  
WBHO Construction

**PHOTOGRAPHY**  
Tristan McLaren

The 23,000m<sup>2</sup> Castle Gate Lifestyle Centre opened its doors to the public in November 2020. It is the first development in the initial phase of the billion rand Castle Gate Precinct masterplan located on the original Waterkloof Farm in the east of Pretoria. The Precinct is being co-developed by the Atterbury Property Fund and The Carl Erasmus Trust and offers a level of accessibility along with innovative retail design that sets a high precedent for future development within the masterplan.

Construction of the centre began in 2019 after three years of meticulous planning and approvals to develop the last portion of the original Waterkloof farm in Pretoria. However, work was shut down on the site for three months because of the Covid-19 lockdown. Despite this delay and the immense construction challenges that followed in terms of materials manufacturing and supply, among other things, Atterbury was able to accelerate the project so it could open in time for the festive season.

Prior to the opening Raoul de Villiers, Atterbury Development Manager, said, "The development of Castle Gate Lifestyle Centre has included so many highlights, but what stood out most, especially over the past six months, is the can-do attitude of everyone working on the project. Everybody rolled up their sleeves and got stuck in, working long hours, going above and beyond, giving of their very best. The sheer determination to create a beautiful place for the community that we can all be proud of helped to drive the project forward at full steam. This amazing spirit transformed under-used farmland into the heart of a neighbourhood in less than a year. We believe



At an urban scale the project can be described as an infill development between existing neighbourhood structures and forms part of an economic corridor to the south of Gauteng



Castle Gate Lifestyle Centre will be an asset for the community in this area of Pretoria and beyond. We are honoured to be associated with it."

**Location and Access**

At an urban scale the project can be described as an infill development between existing neighbourhood structures and forms part of an economic corridor to the south of Gauteng. Links to OR Tambo International Airport and the business hubs of Waterfall City and Sandton are accessed by the major N1 and R21 transport arteries that frame the site. On a localised scale the development will become the centre of the immediate neighbourhood and further connect to the east and west of Pretoria via Solomon

Mahlangu Drive which has been widened as part of the development and features a new intersection and traffic signals. A new bridge has been constructed over the N1 highway as part of the project, with a convenient link road. The major road infrastructure upgrades associated with the development are already proving to be life-changing for commuters in an area that was known for its rush-hour congestion. The project is seen as a catalyst for the precinct and will integrate with future adjacent projects into a cohesive and sustainable urban environment.

**Design Concept**

Designed by Boogertman + Partners, the name Castle Gate refers to the original owners, the



Erasmus family whose house on the property was known as the Castle and the Gate refers to the site's centrally connected location. The overall aesthetic theme of the lifestyle retail centre references the historical origins of the original Waterkloof farm with traditional brick and stone work combined with wood beams and detailing, while exposed steel structures and steel create a contemporary industrial feeling.

The two styles merge in a spacious open plan retail layout that is warm and inviting and evokes a large farmyard that is modern and durable with facilities that invite users to spend more time in the space. The site is located on a dolomite zone which presents challenges for the design and construction in that broader structural spans are

required. This challenge has been optimised as a design opportunity to create broader spaces with fewer column structures that allow for ease of pedestrian movement and increased visibility within the centre. The centre is eco-friendly with recycled grey water being used for the landscaping plus a solar farm with the capacity to generate about 1MW of power. All the gabions on site were constructed using rock excavated and sorted from the site during the earthworks phase.

**Evolving Retail**

The layout and tenant mix of the Castle Gate Lifestyle Centre is a departure from the traditional design approach for convenience retail centres and can be seen as a shift





towards accommodating how retail is evolving. The centre is a response to a global trend for hybrid retail spaces that offer leisure and outdoor public spaces alongside convenience and luxury shopping facilities. Moves towards these types of alternate concepts for leisure-based retail have been accelerated by the pandemic but were already in play due to the growth of online commerce.

Two key pavilion buildings define the entrances to a dispersed layout that has at its core a central green area that acts as an intersection of flow between the retail offerings and as a social condenser with restaurant and leisure offerings on the periphery. The resulting 'pocket park' within the retail space is orientated towards families with a fountain and play areas that creates a

relaxing outdoor area that benefits from the favourable local climate. Furthermore, the access to open air areas including all transit spaces and walkways encourages pedestrian mobility while allowing users a greater sense of well being and physical comfort.

The tenant mix includes an unusually high number of retail anchor tenants; Woolworths, Checkers, Builders Warehouse and Dis-Chem. The carefully planned precinct allows each brand to have a dedicated destination hub within the precinct, including direct parking access. The sites are interconnected through landscaped pedestrian walkways that accommodate a mix of 39 line shop tenants of which almost a third are restaurants, cafes and fast food outlets. A dedicated zone for the fast food outlets with



drive through links to the central access road allows users to flow through the precinct without having to engage with the central parking and retail spaces. This mix of key tenants to leisure offerings with outdoor landscaping and relaxation areas provides an environment in which shoppers are invited to spend more time. All of the retail and restaurants are on the ground floor level with future plans for a medical suite on a first floor level.

The integration of increased leisure and entertainment facilities alongside high volume retail offerings is in part a response to the changing needs of retail tenants. Brick and mortar locations need to become desired destinations to provide added value within the accelerated growth of e-commerce. Structurally large retailers



need to accommodate click and collect facilities to support their quick turnaround online services while still providing comfortable, engaging and entertaining experiences for consumers.

#### Conclusion

On completion, the Castle Gate Precinct is expected to represent a total investment of R6bn and 20,000 permanent jobs will have been created as a result of its development. A large-scale modern, multifaceted development, Castle Gate will ultimately also comprise 100,000m<sup>2</sup> of office space, 40,000m<sup>2</sup> of specialist medical facilities, and a hotel as well as 1,100 residential units. The precinct will also include 8ha of protected green areas with walking and running trails.



To view the full publication visit: <https://viewer.joomag.com/architect-and-builder-retail-retrospective/0877714001685576888?short&>