



PROJECT #1 THE MARC

Access to the retail podium from the street is completely unimpeded, and the visible street frontage of the shops and restaurants is designed to activate the street edge and draw office-dwellers out from the surrounding commercial buildings.

ne 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 boutique shopping

offering and a gym.

Most visibly, The Marc consists of two towers: a dazzling 12-floor ovoid commercial tower with a gold-and-black faceted façade, which bulges elegantly over the intersection; and, set further back from the corner, a 17-floor tower occupied by legal firm ENS. 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 pedestrianfriendly public domain.

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 only 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 iewel cradled by the neighbouring "boomerang-shaped" ENS tower. The ENS tower's added height in turn imparts visual identity - even from a distance - from its position

set back from the corner. 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 basements and the commercial space in the towers above, is a two-storey retail level, "the ham in the sandwich" as van Bebber puts it. Apart from providing a shopping destination, this retail podium level activates the precinct on street level, and integrates the complex with coherent pedestrian movement routes through Sandton's commercial node and maintains connections to the adjoining hotels.

"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. (The walkability of the precinct also encourages the use of public transport and mitigates congestion in the commercial hub of Sandton.)

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Van Bebber argues that it was





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The transparency of the glazing lines in the retail section facilitates a sense of connection, engagement and shared ideas and a shared, dynamic retail experience rather than the compartmentalisation of a typical mall experience.

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16 LEADINGARCHITECTURE@DESIGN DECEMBER 2018/JANUARY 2019

PROJECT #1 THE MARC >> BLUEPRINT



required an urban staircase from the Rivonia and

the surrounding up considerable public space on a pedestrian level.



This was another reason for the tower "connects at street level", van Bebber explains, opening up considerable public space on a pedestrian level.

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 easy pedestrian accessibility draw office-dwellers out

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

arrangement of the towers. While the Jewel "has presence", the ENS

from the surrounding commercial buildings and onto the street. The retail level, while fairly

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8 Handel Road, Ormonde, Johannesburg E-mail: drawings@cai.co.za | Telephone: +27 11 496 3101 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, 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.

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INNOVATIVE FAÇADE DESIGN

Arup provided specialised façade engineering services on The Marc's facade, supporting the developer, the architect and the facade contractor, Geustyn & Horak (G&H). Matilde Tellier, senior façade engineer at Arup, comments, "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 façade 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 team

utilised the geometry of a spiral, one of the fundamental geometric shapes in nature, to solve the need of gradually evolving curvature.

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

Tellier adds, "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."



1. 11 Diagonal St, Johannesburg 2. PwC, No 5 Silo, V&A Waterfront, Cape Town 3. No. 1 Mutual Place, Sandton, Johannesburg 4. Grain Silo Complex, V&A Waterfront, Cape Town 5. The Leonardo, Sandton, Johannesburg 6. Constitutional Court, Johannesburg 7. The MARC, Sandton, Johannesburg 8. Park Square, Umhlanga, Durban 9. PwC Tower, Midrand, Johannesburg 7.

A building's skin can define its value, performance and architectural expression. Arup has designed the façades of South African skylines since 1981.



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The ENS tower's added height

identity, even from

position set back from the street.

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.

Boogertman + Partners also provided name generation, brand creation, signage and comprehensive wayfinding design for The Marc.





Left: Overhead skylights in the retail areas help to flood the interiors with natural light and blur the distinction between interior space and exterior urban environment

PROFESSIONAL TEAM

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