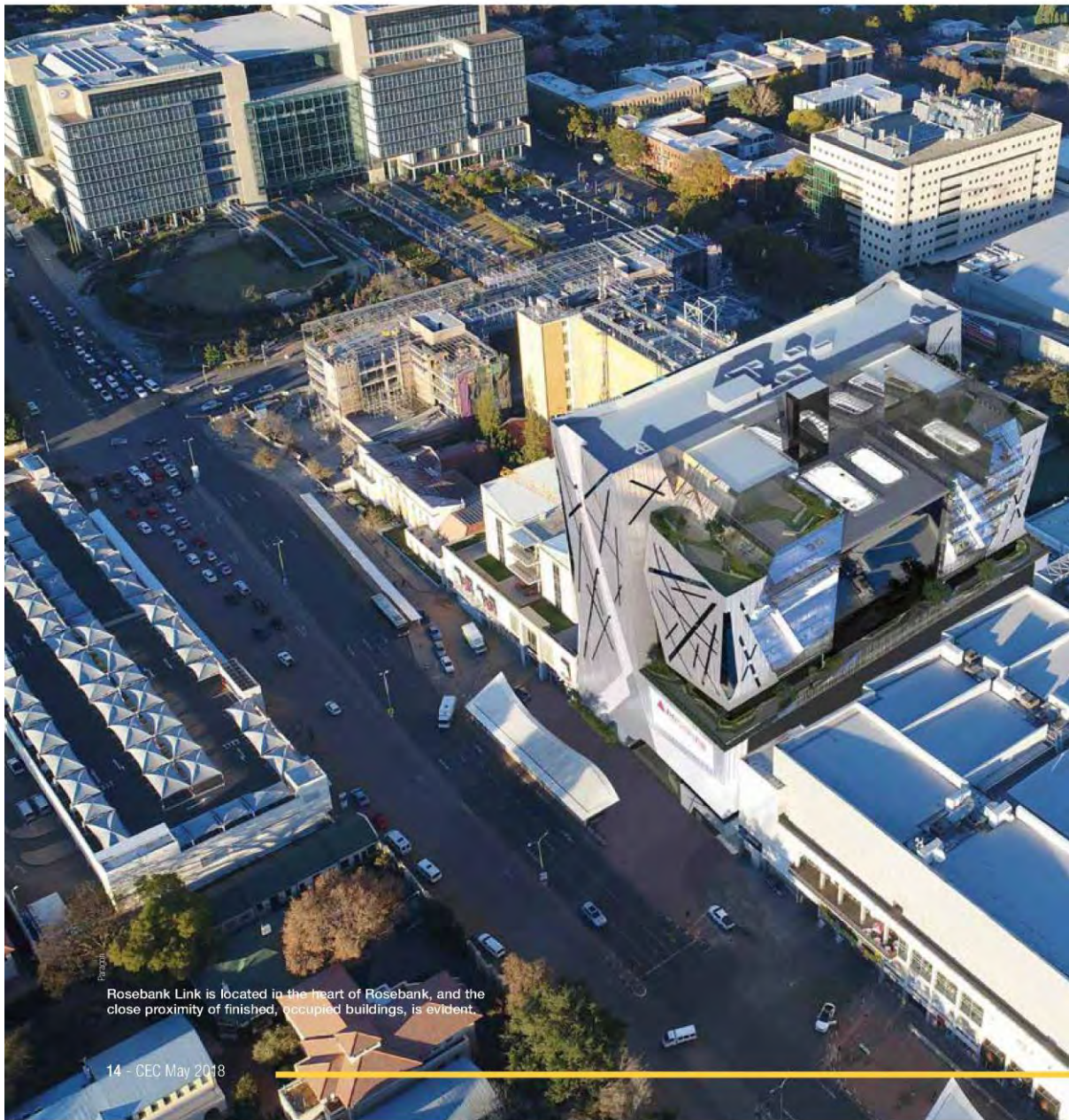


# Missing link

By Kim Kemp

The Rosebank business hub is exploding commercially, as office blocks jostle for space on this piece of prime property. All that was missing, is the Rosebank Link.



Rosebank Link is located in the heart of Rosebank, and the close proximity of finished, occupied buildings, is evident.



Johannesburg is seeing an increasing number of office blocks being constructed, specifically in already established business hubs, such as the Rosebank Link that, as its name implies, is in the heart of Rosebank — a popular venue for shoppers and businesses alike. As office space becomes sought after in these hubs, companies are making use of every piece of available land, often being forced to build within a confined footprint, with already well-established buildings on either side of the site.

At times, commercial congestion requires that buildings be demolished to accommodate newer, more modern replacements and, as in the case of the Rosebank Link, an existing building had to be demolished to make way for the new development.

### The build

The new building is located in what is now known as the Rosebank Mews and forms part of the R7-billion facelift that has been undertaken over for the past few years.

With its recent modernisation from an older office node to a mixed-use precinct, Rosebank is attracting tenants looking to leave outdated and inefficient office spaces and moving to more modern and Green Star-rated properties. Rosebank Link is targeting a 4-Star Green Star rating, as demand for such sustainable building continues to grow.

The Rosebank Link development was awarded to WBHO contractors, who were appointed for the complete project construction, which includes procurement, logistical planning, material management, subcontracting and more.

Dawid Joubert, quantity surveyor at WBHO Construction, says: "WBHO's scope of works includes the construction of two basement levels, one ground floor retail level, four parkade levels, and nine office levels, totalling 44 500m<sup>2</sup> construction area." The earthworks entailed excavating one-and-a-half basements and installing piling to retain the existing walls of adjacent sites' buildings. "A total of 119 piles were installed, ranging in diameter from 600 to 1 500mm, and driven to depths from 6 250 to 14 000mm, until they reached rock," Joubert adds. Asked to comment on the underfoot conditions, Joubert says: "I cannot really comment on the ground conditions seeing that we only took site after the platform was completed. We however did not encounter any problems relating to groundwater or hard rock where we had to excavate footings or bases." Towering 15 storeys above ground, the building consists of nine storeys of offices above a podium level, two basement parking levels, a ground floor public and retail level, and five parkade levels.

Total rentable area (TRA) comprises 18 744m<sup>2</sup> of office area and 1 553m<sup>2</sup> of ground floor retail area.

Construction started in September 2016 and the development is set to become Rosebank skyline's newest icon upon completion, which is due for October 2018.

While the cost of the project has not been disclosed, construction and project tracking group Leads 2 Business estimated it to be over R1-billion.

### The design

The building balances a shallow basement below a transitional

pedestrian thoroughfare from Oxford Road to The Zone/Rosebank Mall, which has its own retail offering. Designed as an open and green space, it is surrounded by an organic and geometric cladding that serves both a functional and aesthetic purpose. The multipurpose design masks a five-storey car park that services the eight storeys of commercial offices above, while central to the design of the building, is a multistorey enclosed, north-facing atrium designed to allow natural light to refract and



Artist's rendering of the finished development.



A multistorey enclosed, north-facing atrium captures the sunlight filtering down into a unique fluid underbelly.



ON SITE



Rosebank Link at 173 Oxford Road will be 15-storeys high and clad in glass and steel.

illuminate the pedestrian thoroughfare below.

Indigenous plants on the roof are part of the overall design of the development. The green roofs are aimed at complementing the installed energy- and resource-efficient HVAC systems, literally taking greenery to new heights. The purpose is to create a hub of calm in a bustling commercial space.

Smart metering throughout contributes to the development's 'green' credentials, which also include motion sensor-based internal lighting, backup water, and full backup on-site power generation.

The building is designed and will be operated in an environmental and sustainable manner. Passive building design techniques and environmental considerations will meet a 4-Star Green Star rating, creating a healthier and more productive environment.

### Challenges

The design constraints began with having to work within a small and narrow site to fit the client's brief, while working within certain limitations of the Rosebank town planning regulations. Each decision was interdependent on the other. The architecture, budget feasibility, client requirements, structure, construction, services, town planning, and building management had to be understood and accommodated, while creating a piece of architecture that combines contemporary South African architecture with innovation and design.

Being in such close proximity to other buildings created limited site access, compounded by the fact that the building site coverage is 100%, leaving no obvious on-site storage space. In addition, there is only one access route for construction vehicles, off Oxford Road, which is often hindered by the Gautrain commuters and mall visitors. WBHO had to negotiate these logistical



Looking through the development with the white cladding visible above.



There are two basement parking levels and five parkade levels.



The retail units project out over the thoroughfare below.

challenges while adhering to a very tight construction programme.

Joubert adds: "Major challenges are site access and lay down area. The only access to site is from Oxford Road, which carries high volumes of traffic throughout the day. The site entrance gate is situated next to the basement entrance of the neighbouring building, which means that deliveries have to be carefully coordinated.

"Also, with limited lay down area, all materials have to be lifted and stored on site as soon as they arrive," the QS explains.

The underfoot conditions were a combination of clay and rock,

making excavating a challenge, according to Paragon Architects. The site also required dewatering, owing to on-site seepage. Existing piles and foundation from the previous building needed to be removed, presenting an additional challenge, as the size and extent of the existing footings and piles were unexpected and proved excessive. The restriction to site access made programming of the piles and rigging equipment difficult to manage.

Well on its way to completion, Rosebank Link is set to be another iconic building on the Rosebank skyline. ■■

### Project professionals

**Project:** Rosebank Link  
**Site area:** 3 718m<sup>2</sup>  
**Client:** Private developer  
**Development manager:** Betts Townsend  
**Main contractor:** WBHO  
**Wet services and electrical engineering:** CKR Consulting Engineers  
**Architect:** Paragon Architects  
**Green building consultant:** WSP Group Africa  
**QS:** MLC Quantity Surveyors  
**Civil, structural and façade engineers:** Sutherland Engineers  
**Mechanical engineer:** Adaptive Resource Engineers