

## PROJECT FEATURE

# WSP KNIGHTSBRIDGE

**WSP KNIGHTSBRIDGE**  
Bryanston, Johannesburg

**DEVELOPERS**  
Emira Property Fund

**PROJECT MANAGERS**  
Orb Consulting

**ARCHITECTS**  
Boogertman + Partners Architects

**QUANTITY SURVEYORS**  
RLB Pentad Quantity Surveyors

**CIVIL, MECHANICAL & ELECTRICAL  
ENGINEERS**  
WSP

**FIRE CONSULTANTS**  
WSP

**GREEN CONSULTANTS**  
WSP

**INTERIOR DESIGNERS**  
Boogertman + Partners Interiors

**MAIN CONTRACTOR**  
Archstone International

**PHOTOGRAPHY**  
Graeme Willy

**K**nightsbridge is a redeveloped office park in Bryanston, Johannesburg being developed by Emira Property Fund. Upon completion this prime located office development will boast 29,352m<sup>2</sup> in terms of GLA office space. Located in Sloane Street opposite the Didata Campus, redevelopment commenced in November 2015. Linked to this development has been the upgrading of the intersection of Sloane Street and William Nicol Drive in order to minimise the impact of expected additional traffic feeds in the area, now and into the future.

One of the seven new buildings planned houses the South African headquarters of global multi-disciplinary engineering consultants, WSP.

### Client Brief

Designed by Boogertman + Partners, the design brief from the client, the Emira Property Fund, was for the phased redevelopment of the previous office complex of two storey office buildings. The previous character of the Knightsbridge Manor development was office buildings within a green park with a large number of fully grown trees. The brief therefore was to ensure that the impact of the increased bulk GLA from ±10,000m<sup>2</sup> to ±30,000m<sup>2</sup> was mitigated by relocating indigenous trees and upgrading the landscaping and planting of endemic plant species.



Knightsbridge is a redeveloped office park in Bryanston, Johannesburg being developed by Emira Property Fund. Upon completion this prime located office development will boast 29,352m<sup>2</sup> in terms of GLA office space







### Masterplan

The masterplan was developed around the relocation of the site entrance and exit from a previous mid-block connection to the upgraded Sloane Street traffic circle. The masterplan layout is focused around the idea of a central urban park with buildings located within a dense urban forest. The Central Park houses a restaurant and conference facility with a tiered garden. Running tracks and outdoor relaxation spaces are provided within the landscaping. The periphery of the office park is densely planted with indigenous trees as well as the salvaged mature trees from the previous Knightsbridge Manor.

### Biophilic Approach

The client endorsed the initial concept of a biophilic approach and reconciliation ecology within the development and as such the team actively sought out methods for implementation, whether it be the relation of the buildings to the landscaped site, 'green' façades, roof top gardens, the peripheral densification of trees or the experience of the external landscape while you are within the building environment. The completed development will have a nature walk / running track around the extent of the site, with outdoor relaxation spaces and gym. The aim is to foster a natural environment that requires minimal



irrigation and low maintenance while increasing the biodiversity of both fauna and flora.

### Design Concept

The design brief for the buildings was to develop design resolutions that would allow sub-divisibility during the life-cycle of the buildings to ensure resource conservation by maximising use and future usage. The design is minimalistic while being conscious of the passive design principles in terms of solar exposure, orientation, and daylighting as well as resource efficient active design strategies. Roof gardens allow the user access to great views and a social interaction space.

The Central Park Facility housing the restaurant and conference facility is seen as the heart of the project. Ensuring the successful integration into the sloped landscaping and having the roof of the Central Park building as the fifth elevation was paramount to the design consideration. The landscaping is again tiered to allow users different environments depending on their requirements, while water-features will create a backdrop of white noise within the relaxed atmosphere. The roof of the Central Park Building will be planted with endemic low maintenance grasses to ensure that the surrounding buildings look onto a landscaped area rather than a concrete roof.







### The Site

The site has quite a steep gradient with a fall of 14m over the length. The design of the buildings has to follow the slope and as such it was a challenge to not have basement parking levels dominate the aesthetic. Tiered landscaping was used to minimise the extent of the visible parking level to foster buildings that are part of the landscape. It was also quite challenging to have a contextual street relation as the buildings are separated by a see-through fence. The client acknowledged the importance of street activation or rather street frontage and allowed Building A at the main entrance not to have a fence separation between the sidewalk and the building.

Considered security measures within the ground floor design of Building A had to be implemented to ensure a secure and safe environment while still having the building as part of the sidewalk. The site placement of the buildings in terms of levels as well as creating pockets of planting on suspended slabs tries to increase the landscaped areas to the maximum.

### Façade

The façades comprise masonry cavity walls with Versus Textured Plaster, single and double glazed unitised aluminium façades as well as external horizontal and vertical steel screens for creepers.

### WSP

Building C which houses WSP, is built over 6,300m on a three level basement superstructure for both buildings A and C. The U-shaped building is accessible from the Basement level -1 on the eastern façade with

lobbies fronting onto street level. These lobbies, as well as the cyclist facility were placed at the eastern portion of the basement level to activate the eastern vehicular street. On the ground floor level, entrance into the building is via the landscaped courtyard into a three level atrium. The building was designed with two vertical circulation cores to ensure maximum future flexibility in terms of sub-tenants. The building has 330 parking bays.

As the anchor tenant for the first phase of the redevelopment project, WSP played a pivotal role in the design of not only the company's own new building, but the layout and planning of the precinct. For the construction of their new HQ building, the company provided a full host of design consulting services – across civil, structural, mechanical, electrical and electronic, plumbing, fire and sustainability – and worked closely with the architect, project manager, quantity surveyor and full construction team, which resulted in a better coordinated outcome.

### 3D/Virtual Reality

In the early design phase, WSP used its 3-dimensional (3D) assets to design an immersive, gamified, virtual reality (VR) rendering of the planned redevelopment for the precinct and a detailed rendering for the company's building.

Once the detailed rendering of the new HQ was completed, WSP were able to host 3D coordination sessions. This not only enabled the collective project team to ensure that the design process was done thoroughly, but also to identify any potential problems or snags early on in the design phases - and take







steps to correct these in the 3D environment. This provided a holistic and integrated design compliment that truly allowed the full project team to be proactive and collaborate on solutions – and lead to far more coordinated and streamlined construction phases as well.

#### Sustainability

The new WSP building has been awarded a 4-Star Green Star SA Design rating certification from the Green Building Council of South Africa (GBCSA) – and in time WSP will also apply for an ‘Existing Building’ rating, based on the actual performance of the building.

The design of the building is on the cutting edge of modern working environments. Following biophilic design principles, the building offers staff an amazing space to be inspired and work in. WSP’s underlying intent on this project was to prove that it is possible

to have a well-designed, efficient building that is more cost effective to build and maintain than a non-rated building.

#### WSP INTERIORS

##### Workspace Strategy & Re-Branding

This unique tailor-made workspace was developed by Boogertman + Partners Interiors by means of a ‘WSP-specific’ Workspace Strategy. The Workspace Strategy revolves around processes that are people-centred, immersing the employees in the decision making process from the get-go. The Workspace Strategy included company-wide electronic surveys, interviews with a cross section of the company, detailed observations on site and rounds of interactive spaceplanning.

The collected data informed the design. The end result incorporates a wide variety of department specific workspaces, allowing the user to choose



the environment most conducive to their own productivity and wellbeing.

As part of the WSP rebranding strategy the company moved away from the traditional closed offices to open plan office space. All members of the company sit together in the open plan areas. These areas are supplemented with a vast array of alternative workspaces.

Many of the furniture items in the new office consist of reused and adapted furniture items. This includes workstations; recycle bins, storage cabinets, soft seating and over 100 table legs.

#### Biophilic Design Approach

In order to inform the department-specific aesthetics and arrangement, the interior designers adopted a biophilic design approach. ‘Biophilic design acknowledges that humans have an instinctive tendency to seek out connections with nature and other living forms.’

With this in mind they created an ecosystem of spaces through the use of a central spine which connects the alternative workspaces and the various departmental zones. This spatial layout encourages movement, socialisation and collaboration which in turn optimises productivity, increases health and wellbeing, while supporting the company’s corporate culture. Facilities such as a Mothers room, multi-faith prayer room, cycle & shower facilities and staff restaurant are provided within the workspace.

Visually the circulation spine is accentuated by means of coloured ceilings and matching coloured carpets. The colours of the circulation spine were selected to reflect nature with its green and turquoise hues. The spine moves through the whole building like a colourful ribbon tying all of the parts together into one unified design.

The journey through the interior ecosystem starts in WSP’s spacious entrance lobby. Aesthetically, the design echo’s natural forms, patterns & textures in various ways. Upon arrival in the lobby one is greeted

by the organically shaped ceiling lines, balustrades and reception desk. These biomorphic forms provide an indirect connection with nature, as they are symbolic references to contoured arrangements that persist in nature.

Behind the reception desk the intricate herringbone timber wall cladding creates a material connection with nature. The carefully designed leaf-patterned decals imbue the space with rich sensory information. This complexity and order is enhanced by clusters of pendants that sway lightly overhead, highlighting airflow within the lobby to mimic nature in the space. The custom organically shaped carpet grounds the furniture in the space. The carpet pattern is derived from an aerial view and hand-made to be one of a kind.

The colours that were selected were used for the various different functional areas. This included the smaller meeting rooms dotted around the building interior. Here the signage that was incorporated was derived from the herringbone texture found in the reception area. The herringbone pattern is representative of the dense repetition of leaves and vegetation in nature. In order to ensure a unified design intent throughout the interior, the herringbone pattern can also be found in various other spaces. Some examples include fixed timber screens, mobile timber screens with white boards and pin-boards, and sliding textile screens that create flexible spaces of refuge. The partially obscured views through the slatted herringbone screens create a sense of mystery that entices the user to travel deeper into the environment.

In conclusion, WSP’s office interiors illustrate the successful implementation of a tailor-fit workspace strategy and biophilic design principles. This design approach not only addresses the aesthetics of the interior but also how it can have a positive impact on emotional, cognitive and physical wellbeing of the user. WSP’s new interiors can be seen as a rediscovery of the intuitively obvious.

