



## NEDBANK HEAD OFFICE PHASE II

4 Star Green Star SA - Office v1, Achieved 15/10/2009  
 135 RIVONIA ROAD  
 SANDTON 2196  
 GAUTENG  
 SOUTH AFRICA



TOTAL GROSS FLOOR AREA 45,401 m<sup>2</sup>  
 TOTAL COMMERCIAL OFFICE AREA (GFA) 41,946 m<sup>2</sup>  
 TOTAL COMMERCIAL OFFICE USABLE AREA (UA) 36,246 m<sup>2</sup>  
 TOTAL COMMERCIAL RETAIL (GFA) 3,775 m<sup>2</sup>  
 TOTAL COMMERCIAL RETAIL (UA) 2,733 m<sup>2</sup>  
 CAR PARKING AREA 59,253 m<sup>2</sup>

### INTRODUCTION

Nedbank Phase II is located in the hub of Sandton on the corner of Rivonia Road and Maude Street, opposite the Village Walk. The architectural style of the building mirrors the first phase building. However, unlike the Nedbank Phase I, the detail of the design of Phase II is governed by environmentally sustainable principles epitomising Nedcor's commitment to environmental sustainability.

Officially the first Green Star SA rated office building in the country, Phase II of Nedbank's Head Office will provide new accommodation for 3,000 employees. The development will include retail spaces on the ground floor, presenting an active edge to the public realm, and seven levels of office space above. Three basements are provided for car parking space and below basement three, further excavations make space for the black water treatment plant and storage of rainwater and treated black water. Construction began in April 2008 and will reach practical completion at the end of April 2010.

From early 2008, the design team has worked to assist Nedbank in implementing environmental initiatives for a 4 Star Green Star SA - Office Design v1 rating which was achieved on 15 October 2009. The project is currently registering for a Green Star SA - Office As Built v1 rating.

OWNER  
 Nedbank Limited

ARCHITECTS  
 GLH Architects  
 Terra Ether Architects

DISABILITY SPECIALIST  
 Disability Solutions (Pty)

ELECTRICAL ENGINEER  
 Claasen Auret Inc.

FIRE ENGINEER  
 TWCE

LIFT SPECIALIST  
 Building Transportation  
 Consultants

MECHANICAL ENGINEER  
 Aurecon

PROJECT MANAGER  
 Coffey Projects

MAIN CONTRACTOR  
 Group 5 Building

QUANTITY SURVEYORS  
 SBDS  
 LDM JHM Inc.

STRUCTURAL ENGINEERS  
 WSP Structures  
 Asakheni

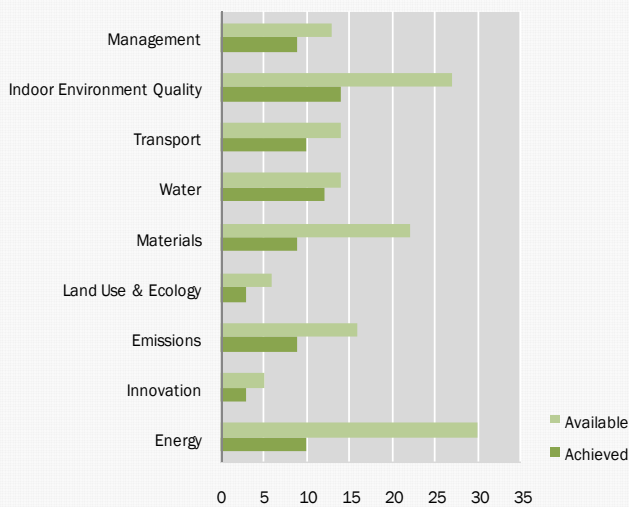
SUSTAINABLE DESIGN REVIEW  
 CONSULTANTS  
 GREEN by DESIGN  
 PJCarew Consulting  
 CSIR

SUSTAINABLE BUILDING  
 CONSULTANT  
 WSP GREEN by DESIGN

WET SERVICES  
 WSP Group

## POINTS ALLOCATION

TOTAL POINTS: 54



## MANAGEMENT

- Monthly monitoring for one year after practical completion to tune the building systems and re-commissioned 12 months after practical completion
- Building User's Guide compiled for staff in close cooperation with design professionals
- Contractor has developed and is implementing and monitoring a project-specific Environmental Management Plan
- Contractor tracks all waste streams and completes quarterly reports on waste generation, recycling and reuse; Estimated 85% of all waste to be recycled or reused

## INDOOR ENVIRONMENT QUALITY

- Fresh air intake in the building 100% greater than required by Legislation
- Carbon dioxide sensors integrated at the return points on each floor to ensure continuous monitoring and adjustments of fresh air into the building
- High frequency ballasts installed in office area fluorescent luminaires
- 60% of office areas have a direct line of sight to the outdoors or atrium
- Building is designated as non-smoking

## TRANSPORT

- Number of parking spaces does not exceed minimum local requirements, thus encouraging alternative modes of transportation
- 5% of the parking bays dedicated to alternative fuel and hybrid vehicles and 5% are for motorbikes, mopeds and scooters with preferred parking locations
- Bicycle storage, showers and lockers are provided for 3% of the building staff; Visitor bicycle parking is provided
- Mass transport options for building occupants include minibus taxis, Metrobus, PUTCO buses, future Rea Vaya buses and the Gautrain Rapid Rail Link
- Location in Sandton and across from the Village Walk shopping centre offers numerous public amenities within a five minute walking distance

## WATER

- Efficient water fixtures and fittings installed resulting in significant savings in water consumption
- Water meters installed for all major water uses and connected to a Building Management System to support proper facility management of water consumption
- Blackwater treatment system to be installed providing recycled water for all non-potable water uses including irrigation, toilet flushing, and cooling towers

- Landscape designed with waterwise plantings
- Pump test water from the fire protection system is collected and reused

## MATERIALS

- Dedicated storage area provided for the separation and collection of recyclables by all building occupants from both Phase I and II and for collection by recycling companies
- Offices delivered as an integrated fit out
- Portland cement quantities reduced by 30% as an average across all concrete mixes by substituting it with fly-ash
- Building predominantly framed in reinforced concrete with a 95% recycled content for all reinforcing steel
- Total cost of PVC reduced by 30% through replacement with HDPE plumbing and stormwater pipes

## LAND USE & ECOLOGY

- 75% of the site had been previously built on; The site is located on a municipally approved urban edge
- Ecological value of the site enhanced beyond its previously existing state with indigenous plantings

## EMISSIONS

- Refrigerants and gaseous fire suppressants have an Ozone Depleting Potential of zero
- Thermal insulants have an Ozone Depleting Potential of zero
- Outflows to sewerage system reduced by 90% through the implementation of high efficient fixtures and fittings and the blackwater treatment system

## INNOVATION

- Blackwater treatment system
- Market transformation in the South African paint industry

## ENERGY

- Heat rejection of the chillers via energy efficient open circuit evaporative cooling towers
- Air Handling Units fitted with variable speed drives providing variable air volume to offices
- Digital Addressable Lighting Installation (DALI) provided for office areas with fully addressable fittings controlled by motion and light sensors

