

# REIGNITING EXCELLENCE

## CITY OF TSHWANE







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**PUBLISHED BY**

**SPECIAL**  
projects

**novus print**  
where printing is personal

**Publisher** Jacques Breytenbach

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**Printers** Novus Print Montague Gardens

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**PLEASE NOTE:** City of Tshwane statistics have been taken from publically available documents that may or may not reflect the absolute correct numbers applicable at the time of going to print.

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# Leading a financial recovery to reignite excellence

Executive Mayor Cllr Randall Williams gets candid about the challenges faced by the City of Tshwane and highlights the hard work being put in to place its finances back on sound footing.

**It is widely known that the current administration inherited numerous challenges, the most significant being a legacy of financial mismanagement and resulting insolvency.**

**How dire is the situation? What's the realistic recovery period and how does the City get there?**

The City's financial situation is very serious. It has been downgraded as a result of its declining financial health and it is critical that we embark on an extensive financial recovery. When I took office in November 2020, we found that we inherited a deficit of R4 billion from the provincial administrators. This was after the DA-led

administration left a surplus of R297 million in March of 2020. So, in a space of eight months, the City went from a surplus of almost R300 million to a deficit of R4 billion.

However, since taking office, in one year, we have managed to reduce that deficit by R3.4 billion – by stabilising the operating account and ensuring that we pass an adjustments budget that is in line with the City's revenue expectations.

One of the things we have made a point of doing is ensuring that we don't put unnecessary strain on rate payers, keeping our property rates as low as possible. That has made sure that – at least for now,

while residents are coping with significant electricity and water increases, which are beyond the City's control – residents are not facing inflated or higher based property rates increases.

**Are there any concerns of private sector disinvestment given the City's financial situation? How do you allay such fears?**

The City does have a very strong private sector investment community and continues to attract investment

from various sectors in its key competitive spaces such as the automotive industry – in particular, the Tshwane Automotive Special Economic Zone (TASEZ) located in Silverton, which is going to significantly develop the area and have a massive economic impact.

“Since taking office, in one year, we have managed to reduce a R4 billion deficit by R3.4 billion – by stabilising the operating account and ensuring that we pass an adjustments budget that is in line with the City's revenue expectations.”





So, in looking at potential private sector disinvestment, it is not at a critical stage. The City is, however, making sure that we manage our engagement with business very carefully. In addition to this, we have also been engaging proactively with credit agencies to ensure that we maintain communication with them on their credit ratings to assess on how we can improve our ratings speedily to restore the City's financial health.

**What are the priority interventions to get the City back on track?**

One of our first interventions was making sure we re-implement credit control procedures, and services cut-offs where

clients have failed to pay their bills. This must happen in order to meet revenue collection targets. We have also implemented a variety of cost-cutting measures – particularly on non-key items. What we are aiming for is to spend the majority of our budget on core basic service delivery matters and get the best value and efficiency out of our budgetary processes.

**How can the City further encourage and facilitate private sector investment? Would you characterise the relationship the City has with the private sector as largely positive and conducive to business?**

The City has very positive engagement with the private sector, and we

organise quarterly sessions with major business chambers in order to assess the needs of business in the City. We also have dedicated investment facilitation teams that assist developers in ensuring that they navigate City processes and bureaucracy to enable investors to start up their businesses smoothly.

**What sets the City of Tshwane apart from SA's other major metros as an investment destination?**

The City of Tshwane has various competitive advantages that







“We want to make sure that, in the City of Tshwane, we focus on our core mandate, which is basic service delivery in the most efficient manner, and this is what drives investment and attracts people to invest in the City.”

make it decidedly unique. The first is that Tshwane is the administrative capital, which houses the national government and the Union Buildings, where the Presidency is based. As a result of this, we have the largest home of diplomatic and foreign missions in the world after Washington, D.C. in the USA, meaning we have a highly established international footprint.

The second point is that we have a high density of research institutions, such as universities, located within Tshwane. We are home to institutions like the University of Pretoria, Tshwane University of Technology, Unisa and the CSIR. All of these institutions play a key role in positioning Tshwane as a key driver of research in the country.

Finally, the City has a number of incredibly competitive economic zones, starting with TASEZ based in Rosslyn and Silverton, where the City essentially becomes a key role player in housing car manufacturing and production plants. This is indeed a massive sector for the City.

Agri-processing is also incredibly competitive; the City of Tshwane has a very vibrant agricultural sector, which is well established. The defence industry is

also situated in the City of Tshwane and that drives a lot of our development.

So, the City really does have a number of competitive aspects – which even include tourism offerings, through game reserves with the big five located within our boundaries.

#### What have been the biggest challenges you've faced during your term of office?

Most certainly the first is the impact of Covid-19 on City operations. Not only has the City lost staff as a result of Covid-19, but there has also been a series of challenges in relation to how operations are run and how we can do our work safely while delivering on our mandate.

The financial situation in the City has also been challenging because, without funds, we can't drive the kind of services we would like to deliver. Other challenges include the fact that the current administration is a minority government, which means we do not have absolute majority in Council. This then leads to a lot of politicking in Council Chambers, which requires a lot of work to balance out the competing political interests.

#### What do you hope to leave as your legacy from this term in office and what do you hope to see from the subsequent administration who may take over after the next municipal elections?

Whether re-elected or not, the main legacy I'd like to leave is to make sure the City is in a stable situation with its financial health restored. It is also important that the City is refocused on basic service delivery. If this is achieved, it is going to drive economic growth and investment, which will enable the City to support the needs of its residents.

#### South Africa, as a whole, faces numerous seemingly insurmountable challenges – from addressing poverty and rampant inequality to endemic corruption and a vast skills/talent deficit. Where does one even begin to tackle these issues and at what level does this need to start?

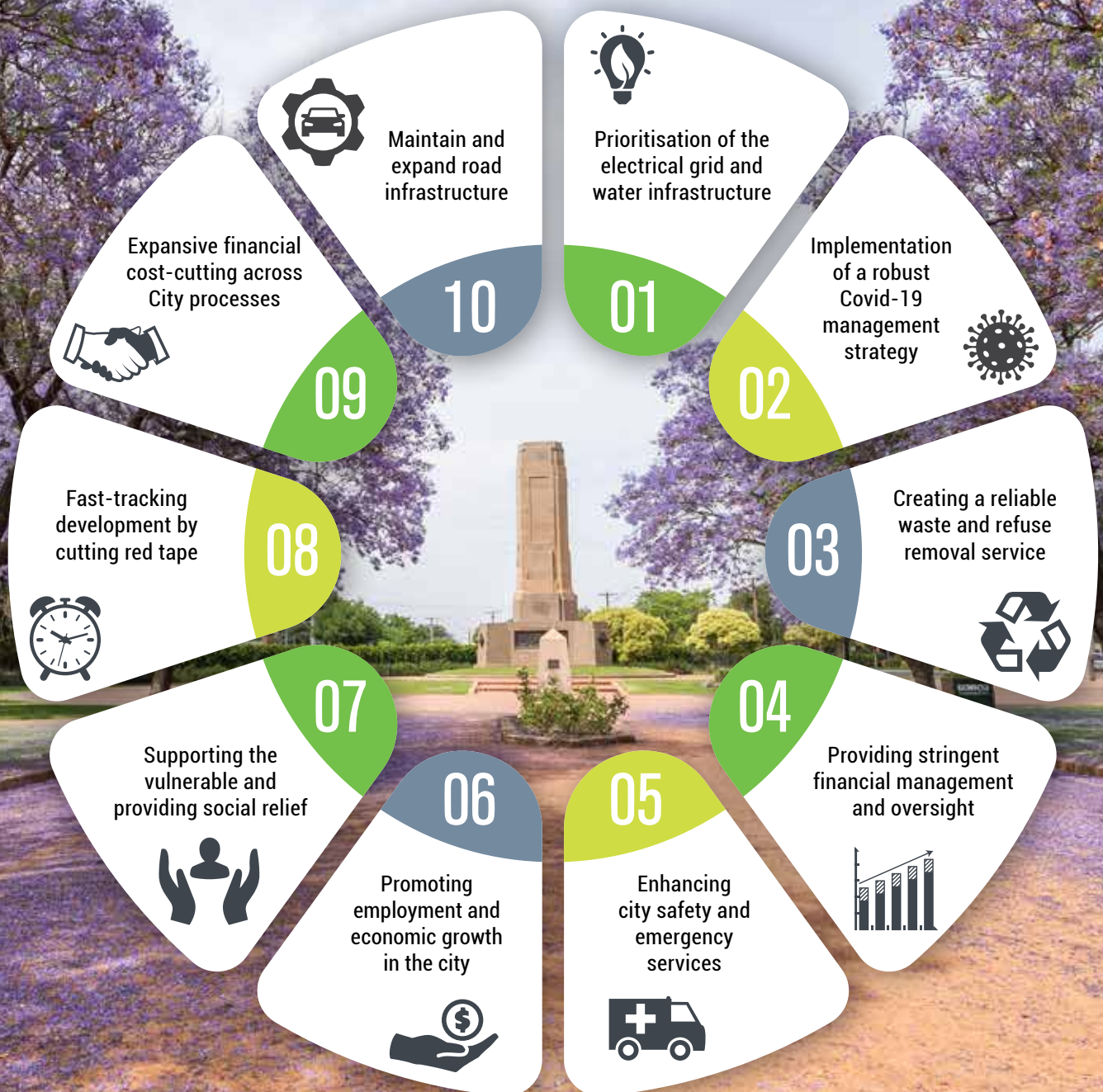
Critically, we want to make sure that, in the City of Tshwane, we focus on our core mandate, which is basic service delivery in the most efficient manner, and this is what drives investment and attracts people to invest in the City. If we do this right, we will be a driver of economic growth across the country. So, this is critical in terms of making sure that we as the City are able to assist in addressing some of the issues associated with poverty and inequality.

What is also very important is making sure that we have a highly skilled and professionalised civil service, where people with the right skills are in the right positions – leading the institution. 📍



# Righting the ship

The City of Tshwane, like the rest of South Africa, finds itself in the midst of a torrid economic climate, compounded by the raging Covid-19 pandemic. In working towards reigniting excellence in its operations, the Council has committed itself to a 10-point plan to steer the City into calmer waters.





# Ensuring **progress** through on-the-ground **interventions**

In order to attain innovative, inclusive and sustainable economic development in Tshwane, the City is hard at work in creating an attractive and conducive investment environment, while simultaneously helping existing businesses.

**T**his drive for improving local economic activity for growth and development relies on attracting businesses to invest in Tshwane, which, in turn, requires efficiencies in the management of municipal business.

It stands to reason, therefore, that to ensure sustainable local economic development, Tshwane must be a desirable location in which to do business, must be able to attract new investment and start-ups, and must be able to create market opportunities.

With the acknowledgement of the role that the City must play in the development of the local economy, the provision of wide-ranging support to all efforts of economic growth and development is critical. In this regard,

**Even through the devastation wreaked by the Covid-19 pandemic, the City continued and continues to deliver on its commitments in order to enhance economic growth and development**

the City's approach to economic development prioritises attracting and enhancing investments, providing effective support to small businesses for sustainability, creating income-earning opportunities, developing industry-related skills, and job creation.

With the support of the Tshwane Economic Development Agency, which is

the municipal entity that also contributes towards the objective of local economic development, the City has committed to the following priorities:

- attracting investment and encouraging growth by making it easy to do business in Tshwane
- revitalising and supporting Tshwane's entrepreneurs and SMMEs
- empowering individuals to take advantage of opportunities
- providing infrastructure-led growth to catalyse and revitalise existing nodal economies
- encouraging tourism and recreation.

## **LED highlights**

During the 2019/20 financial year, the City of Tshwane developed the Local Economic Development (LED) Strategy.



Among other things, the strategy identified and confirmed programmes and projects aimed at supporting the growth and development of SMMEs and cooperatives. The LED Strategy was adopted by the Mayoral Committee and for implementation during the 2020/21 financial year.

Over the same period, the City also collaborated with Standard Bank for the implementation of the business idea validation boot camps, targeting young people in Tshwane who are in business and those who are aspiring businessmen and businesswomen. The first of such boot camps was held in Mabopane on 20 November 2019 and was graced by the Executive Mayor and MMC for Economic Development and Spatial Planning Department. The rationale behind this initiative was to assist the youth on how to turn ideas into business opportunities, through proven various methods.

The first regional winner was Ms Kamogelo Nhlapo, who hails from Mabopane and is the founding CEO and managing director of Urban Groundwork Innovations. Urban Groundwork Innovations deals with everything that has to do with groundwork, such as manufacturing products from the ground (soil-based products like bricks, pillars and cobbles), manufacturing products for the ground (such as organic compost and fertilisers), as well as dealing with foundation work, builds, excavations. The services provided by the company include recycling waste for companies, collecting and cleaning influent waste used oil, and recycling as well as collecting rubble waste for construction companies.

### Supporting cooperatives and SMMEs

A total of 215 cooperatives were supported and provided with the following support: business skills training, technical skills training provided to agricultural cooperatives, and access to finance for equipment and working capital. A need to develop cooperatives sectorial programmes has been identified by the City and engagements have been held with some of the stakeholders to collaborate with the City. These programmes will assist the cooperatives to become commercial and competitive in the market, so that they can participate

## Tshwane Economic Development Agency

The Tshwane Economic Development Agency (TEDA) is a municipal entity of the City that provides support in facilitating economic development in Tshwane. It has various strategic objectives, which are to:

- promote, facilitate and coordinate trade and investment for strategic infrastructure and to create value for the City
- identify, design, develop and manage projects with strategic economic and social benefits for the greater Tshwane community
- develop and maintain Tshwane as a unique tourist destination
- develop and maintain a strategic immovable and property asset portfolio for maximum return on investment
- develop, facilitate and promote viable foreign and local investment for the City
- build TEDA as a strong and effective organisation in the context of good governance and best practice.

## TEDA's key service delivery achievements for FY 2019/20

TEDA participated and contributed to several webinars (online events) that aimed to attract investors during the lockdown period. This intervention created 1 000 jobs, which resulted in TEDA attracting R2.1 billion in financial commitments to the City of Tshwane through the following projects:

- Anheuser-Busch InBev Rosslyn Brewery expansion: The multinational brewery giant is expanding with an investment of R1.5 billion, which will result in it being the largest in southern hemisphere.
- The relocation of Bader South Africa from Ga-Rankuwa to a new plant in the same area. Construction of the new plant has commenced, with a total worth in the order of R600 million.

Two precinct plans were also developed during this period. These plans are focused on the Wonderboom National Airport and Pyramid South development areas, and are intended to analyse the areas' ability to expand and attract investment, as well as maximise the potential of the land, while adhering to the physical and legislative confines.

In September 2019, the Tshwane Trade and Investment Summit was held to promote the City of Tshwane as a preferred destination for the inflow of domestic and foreign investments. The event was organised in collaboration with several stakeholders, including the Gauteng Growth and Development Agency, Automotive Industry Development Centre, Capital City Business Chamber and embassies in Tshwane.

In leveraging the existing base of economy activity within the Tshwane region, TEDA aims to attract and facilitate investment in the following industries:

- aerospace and defence technologies
- automotive and components
- agriculture and agro-processing
- green economy
- mining and beneficiation
- the Tshwane Freight Rail Terminal and Logistics Hub.



in the economy and eventually contribute to the City of Tshwane's GDP.

The City also employs a number of interventions to empower and support SMMEs. These empowerment and support initiatives are implemented to ensure that they contribute to the reduction of unemployment, generate income and skills development, and attract investments in the City.

Support for SMMEs (small, medium and micro enterprises) is provided through the six City of Tshwane Small Enterprise Development Agency (SEDA) business support centres located in Mabopane, Mamelodi, Atteridgeville, Olivenhoutbosch, Hammanskraal and Bronkhorstspuit. The business support centres provide business development support services, which include assistance on the development of business plans to facilitate access to funding for new and existing businesses, concept plans for entrepreneurs, the development of marketing strategies, the development of promotional materials (including websites for clients), and export strategies.

A number of SMMEs operating in the construction and light manufacturing sectors of the economy were also supported through business incubation services. These City-funded business incubators are located in Atteridgeville, where technical and business training, mentorship, technology transfer, operating infrastructure, back-office support, and more were among the development and support services provided to incubatees in the 2019/20 financial year.

Furthermore, a total of 441 SMMEs were supported through various business support initiatives provided by the City, in partnership with SEDA, the Department of Trade, Industry and Competition, and the Gauteng Enterprise Propeller. In addition, a total of 297 of enterprises were supported by the City through business development support programmes.

### Tshwane Fresh Produce Market

The Tshwane Fresh Produce Market is the second largest out of the 19 national fresh produce markets in South Africa. The market has experienced resounding growth over the past financial years. It continues to play an important socio-economic role, such as improving access to quality food, providing better marketing opportunities for farmers, and providing employment and business opportunities to communities. Furthermore, it has a direct and indirect impact on the City's economy. The direct impact includes income, rental, food security, trade and employment; whereas the indirect impact includes taxes or tariffs, business development in the service industry, and investment in capital expenditure.

The role of the Tshwane Fresh Produce Market is to provide a central marketing distribution system primarily for the City and secondarily for the rest of South Africa. In the execution of its role as the central distribution system for the City, the market strives to fulfil the following objectives:

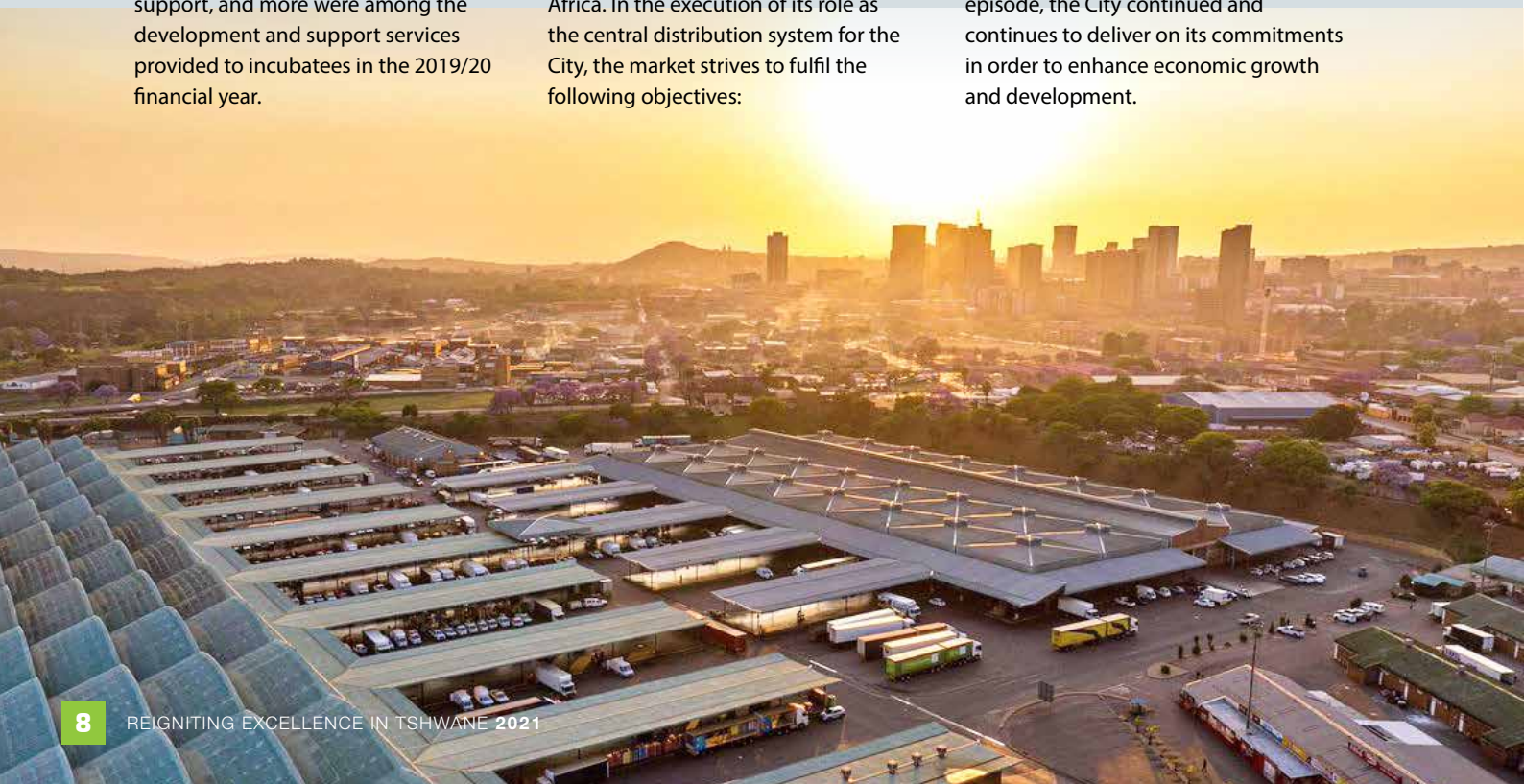
- to enhance food security for Tshwane by attracting fresh produce to the market
- to enhance food safety for Tshwane by regularly testing fresh produce sold at the market
- to provide infrastructure and services which satisfy the market users' needs
- to contribute towards the City's economic growth
- to contribute towards the City's job creation targets.

The Tshwane Fresh Produce Market experienced a positive growth in turnover of 2% over the previous financial year, from R3.245 billion in the 2018/19 financial year to R3.358 billion in the 2019/20 financial year. It achieved a market share of 2.53%.

In accordance with the 2021-26 IDP, the City has set within its sights the increased facilitation of smallholding farmers' offtake agreements with and access to produce markets within the City, including the Tshwane Fresh Produce Market. The envisioned goal for the 2021/22 financial year is to facilitate 25 of these offtake agreements, to make a meaningful difference in the lives of these small-scale farmers and their families.

### In closing

The Covid-19 pandemic demonstrated that it is far more than a health challenge; it is also a disruptive force that significantly impacted the City's economic outlook and the country at large. Notwithstanding this painful episode, the City continued and continues to deliver on its commitments in order to enhance economic growth and development.







## Catalytic projects in Tshwane

The City of Tshwane and TEDA more specifically have identified a number of catalytic projects intended to drive significant investment and local economic growth. These important development-driven sites are located across the municipal area. The currently listed catalytic projects are as follows:

**Rosslyn Hub** is strategically located opposite Nissan SA, BMW SA and Iveco on the doorstep of 750 000 people. It will provide a new 'town centre' for Rosslyn, The Orchards, Soshanguve and Ga-Rankuwa. It has strong international logistic links to the N4 highway (to Botswana and Mozambique) and the N1 highway (to Zimbabwe).

**Tshwane BPO Park** represents a major opportunity to stimulate socio-economic growth in the Hammanskraal area. The park is poised to become a centre of excellence for BPO (business process outsourcing) in South Africa and will offer operators modern and high-quality integrated contact centre services, providing a one-stop-shop approach for all BPO needs.

**East Capital** is a project entailing the development of the eastern areas of the capital city. This will result in a dynamic mega node covering the areas of Cullinan, Bronkhorstspuit and Rayton. The plan is to focus on developing a green belt of industries, agricultural beneficiation and green settlements.

**EcoOne** entails 35 ha of light industrial eco-development that is centrally located in the City of Tshwane. The greenfield site enjoys good visibility, access to major arterial roads and passenger and goods rail from a central location within the city. In addition, the site houses an established dam with water rights.

**Centurion Aerospace Village** is a high-tech, advanced manufacturing aeromechanical and defence cluster aimed at integrating sub-tier suppliers of the local aerospace industry into the global supply chain.

**Hazeldean Nodal Development** is envisioned as a mixed-use, self-sufficient, live, learn, grow, work and play eco-friendly suburban precinct. The development comprises an area of 900 ha and started in 2006.

**Rainbow Junction** presents a vision that encapsulates the delivery of a vibrant new economic node at a premier location of 140 ha at the entrance to the capital city, to reflect the dynamic lifestyle of the new South Africa, with a mixed-use property development. This unique address is serviced by road, rail and air.

**Wonderboom Airport** was established in 1936 as a training facility for Second World War pilots and has a rich history in South African aviation. It currently has national airport status and is owned and managed by the City of Tshwane.

**Tshwane Automotive Special Economic Zone** is a shared vision of national, provincial and local government represented by the Department of Trade, Industry and Competition, Gauteng Department of Economic Development, the City of Tshwane, and the automotive industry to transform Tshwane into a leading automotive investment destination. The industrial business development will not be limited only to automotive-related tenants but will also focus on incorporating the entire manufacturing value chain, which is instrumental in uplifting the community. 🌱





South Africa's largest privately owned commercial aviation manufacturer, Aerosud, is a key partner to the public and private sector. Its success is a clear example of the exceptional capabilities and potential of our country's high-tech industries.

# More than an aviation leader

**F**ounded in 1990 as a high-end aeronautical engineering and project-focused company, Aerosud was initially a defence-related firm that subsequently began to diversify into commercial applications. From breaking in the refurbishing market for airline interiors in the 1990s, today, Aerosud stands as the largest privately owned commercial aviation manufacturer and exporter in South Africa and is a globally established supplier of aircraft interior systems.

The South African aerospace industry is active and vibrant, and

demonstrates a significant history of aerospace innovation, research, development, and manufacturing – but there is some cause for concern, says Johan Steyn, managing director at Aerosud. “Opportunities in South Africa are the issue – years of decline in aerospace and defence spending and the demise of many state-owned entities have eroded the capacity of the network in general,” he explains. “Training of young talent is critical – and we have first-hand experience of the benefits of doing that – especially in terms of artisan training.”

## African NDT Centre

ANDTc (African NDT Centre) is a training and examinations facility, part-owned by Aerosud, which offers various technical courses focused on non-destructive testing (NDT) methodologies.

NDT and inspection are vital functions in achieving efficiency and quality at an acceptable cost. In many cases, these functions are highly critical and painstaking procedures are adopted to provide the necessary degree of quality assurance. The consequences of failure of engineering materials, components and structures are well known and can be disastrous. As such, it is vital that the employees responsible for quality assurance are adequately equipped with the requisite knowledge and skills.

ANDTc is one of only two facilities in South Africa to offer training and examinations towards internationally coveted Personnel Certification of NDT (PCN) accreditation, which ensures NDT technicians and supervisors meet BS EN ISO 9712 requirements and exceed the expectations of practitioners in the field.

Courses on offer include:

- Ultrasonic Testing
- Magnetic Particle Testing
- Penetrant Testing
- Radiographic Testing & Radiation Safety
- Eddy Current Testing
- Visual Testing
- Weld Inspectors.

Based at Aerosud's head office in Pierre Van Ryneveld, Centurion, ANDTc's certified level 2 and 3 trainers provide instruction to over 1 000 prospective NDT operators each year.

[www.andtc.com](http://www.andtc.com)







## Aerosud Metrology's Automotive Expertise

### Implementing 4IR

Having initially joined the organisation in 1991 as a senior structural systems engineer, Steyn took up the reins as Aerosud MD in 2007. "I'm proud of what Aerosud stands for and what we have achieved over the years, through the introduction of leading technologies in manufacturing and integrated business systems," says Steyn. "I am equally excited about the future and especially the rise and acceptance of Industry 4.0 (4IR) solutions in the sector."

He adds, "It's definitely important to implement 4IR strategies – but only if it makes sense and adds productivity to your company offering – never do it because everybody else is!"

The company is directly involved in 4IR technology applications and collaborations, which has facilitated and simplified its expansion into new business areas, offering its expertise to other advanced manufacturing sectors within South African industry, such as the automotive and energy arenas. ►

Informed by over 30 years of expertise in the aviation sector, Aerosud has expanded its service offering to span other diverse industrial sectors. Among these are mining, oil and gas, energy, and the automotive sector.

South Africa's automotive sector has long been a significant employer and contributor to the national economy, particularly in areas such as Tshwane, where the Tshwane Automotive SEZ is set to make a huge difference to the regional socio-economic landscape. As such, Aerosud is a keen partner to the automotive industry, which, like the aviation sector, relies on pinpoint accuracy in its manufacturing and inspection processes to ensure the effective functioning and, most importantly, safety of its vehicles.

Aerosud's metrology services are supported by extensive engineering and design resources to ensure that its offering is delivered to the highest of standards. The importance the company places on quality is further illustrated by its AS/EN 9100 and ISO 9001 Quality Management Systems accreditation. The in-house

metrology team consists of eight highly proficient individuals with professional competencies ranging from CMM operator to chief metrologist.

Currently operating out of Pierre Van Ryneveld, plans are under way to establish another Aerosud metrology centre in Rosslyn towards the end of 2021. Proving that Aerosud's operational footprint is not limited to its home base in Tshwane, the company can provide extensive metrology and related services to most locations across the country through the deployment of portable CMM (coordinate measuring machine) equipment.

The metrology services on offer include:

- Dimensional inspection
- Dimensional reporting
- Result analysis
- Statistical process control
- CMM programming
- Reverse engineering
- CMM holding fixture design.



“Our wide-ranging capabilities present a unique offering – often referred to as the Swiss army knife. Deep-rooted engineering competences also allow for Aerosud to industrialise new products and processes in an independent manner – without significant oversight by the customer/OEM.”



[www.linkedin.com/  
company/aerosud](https://www.linkedin.com/company/aerosud)



[www.youtube.com/channel/  
UCw4Muvij0jU9QfE-VU1H82w](https://www.youtube.com/channel/UCw4Muvij0jU9QfE-VU1H82w)



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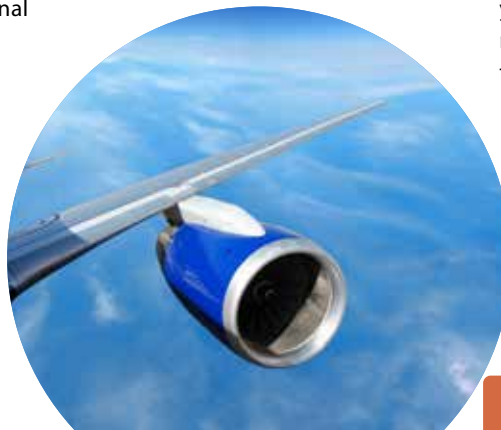
In order to streamline processes and increase efficiency, manufacturers around the world are embracing digital transformation and introducing new technology into operations. In the case of Aerosud, the company has introduced a highly specialised welding robot process on A320 and A350 products driven by cost, critical skills, and volumes to be produced. "Digital business processes and an integrated business system are very important," says Steyn. "These have to expand into the supply chain, internal operations and manufacturing, and are very often mandated by the customer. One must be able to integrate engineering data and business processes like product life-cycle management."

The aerospace manufacturing sector is dominated by OEM and regulatory requirements and regulations. This consists of a large supply chain of over 300 international suppliers of raw materials and parts, often with single source suppliers. "We have 10 suppliers that consist of 80% of the spend – but even the smallest parts are important to complete a product to the customer specifications," says Steyn. "Logistics integration and door-to-door tracking and reporting are critically important."

### Post-Covid expansion

Certainly one of the industries most impacted by the Covid-19 pandemic and lockdowns has been the aviation space. With flights grounded and air cargo significantly reduced, Steyn admits that the impact on firms such as Aerosud has been unavoidable. The pandemic, however, only accelerated the adoption of new technology across the board to not just ensure business continuity but to also achieve considerable growth.

"The global impact from Covid-19 began with logistics disruptions, followed by the South African lockdown and dramatic rate adjustments," he explains. "Aerosud has embarked on a strategy to diversify and develop by offering a number of digital product solutions



throughout the last two years. The crisis has highlighted the need to expand and accelerate such offerings, such as MWORX, which is a digital business platform for SME applications."

Looking to the future, Steyn is optimistic about the next couple of years and stresses the importance of having a positive mindset following a challenging year.

"We're working hard to maintain current business, which will require further investment by all suppliers to the OEMs," says Steyn. "We all work hard to stay relevant in three to five years with expanded offerings and most likely with further diversification to avoid or at least mitigate the pandemic's effects."

"Beyond the other fields we've already expanded into, Aerosud aims to diversify into medical and nuclear for manufacturing, and we plan to expand our digital offering and business solutions for SMEs." 🌱

### Major aerospace projects

Over the years, Aerosud has gained numerous real-life skills and experience across a range of business functions and systems in the innovative and competitive world of aerospace design and manufacturing. The organisation has become an internationally renowned supplier to some of the largest aircraft manufacturers globally.

Some of its major projects throughout the years include:

**1990-1995** – Aerosud was appointed as the main contractor to develop a solution for the life extension of the South African Air Force Mirage F1 fleet, using the Klimov RD-33 engine. Although technically very challenging, the project was completed successfully and two prototypes were extensively flight tested in South Africa.

**2007-2012** – Aerosud became a 'Design and Build Partner' on the Airbus A400 development project. The organisation was contracted for the development of six work packages with Airbus France, Germany and UK. This programme resulted in the development of interesting technical solutions, but also meant digital and collaborative design solutions along with several Airbus approvals for several products and engineering services.



# A prime partner to the public sector

Akhile Management and Consulting provides leading financial advisory services to the public sector. CEO Aneel Radhakrishna discusses the solutions making a difference to government and the lives of South Africa's citizens.

## **What advisory services does Akhile specialise in?**

Akhile boasts a team of dedicated consultants that specialise in the spheres of local, provincial and national government with a focus on financial advisory services, such as:

- asset management
- budgeting and financial planning
- debt and indigent management
- financial statement preparation and audit support
- financial management and accounting
- tariff and sustainability modelling
- mSCOA implementation and support
- municipal recovery and turnaround (MFMA Chapter 13)
- municipal viability and sustainability (MST)
- contract and cost optimisation
- revenue management and assurance
- big data analytics
- business process modelling, systems analysis and planning
- systems development and support
- modern-workplace hybrid working and cloud enablement
- resource augmentation.

Our services are customised to suit our clients' needs, draw on best practice and our vast municipal experience, and increasingly include digital, artificial intelligence (AI) and machine learning (ML) capabilities.

## **In what capacity has Akhile worked with the City of Tshwane?**

Akhile has implemented an asset management project for the City of Tshwane, which commenced in 2018 and is the first of its kind in the country. The forward-thinking and innovative project delivered a GRAP- and mSCOA-compliant asset register for the City for all categories of assets, among other deliverables.

The project was not only important from an mSCOA and GRAP compliance perspective, but has also facilitated the following key outcomes for the City to the benefit of its citizens:

- keeping track of all assets including location, use, history, condition and value
- understanding the capabilities of assets and how they can be operated in the most effective manner – thereby achieving effective operations and optimising revenue
- supporting risk management
- optimising operations

including planning, budgeting and resource use. The above directly impact the City's ability to improve service delivery for citizens and achieve service delivery and financial sustainability through informed decision-making.

## **What are some of the most common challenges facing municipalities in ensuring effective service delivery? Can your company help make a difference on the ground, in this regard?**

Municipalities operate in a highly complex and diverse ecosystem. In our experience, some of the common challenges facing municipalities across South Africa include sustainability, a capacitated workforce, reliable and effective systems and processes, ageing infrastructure, as well as socio-economic and governance challenges. This all results in service delivery and financial challenges.

While we are able to support

municipalities to address these challenges, we understand that each is unique and highly integrated. Therefore, any initiatives to be implemented must be done from a base of accurate and up-to-date data, as well as the willingness to implement workable solutions.

Akhile, therefore, has a holistic approach to ensure that government, business and citizens are all aligned, with a focus on how the municipality is enabled to







make real-time, smart decision-making. We have developed a local, South African solution, the Municipal Sustainability Tool (MST™), to support municipalities by integrating systems and presenting the data in a manner that facilitates real-time and informed decision-making. Through this, municipalities can respond to issues as they arise and ensure sustainability and continuity – in an integrated and holistic manner.

#### **Could you walk us through any specific examples of successful solutions Akhile has delivered to public sector clients?**

Akhile's MST™ – which facilitates data-driven and informed decision-making for municipal officials, and combines in excess of 100 years of municipal experience to identify the critical issues faced by municipalities – was used in several projects. The process utilised data science, AI, ML and numerous data sources to continuously update and inform users of the state of the municipality and enable them to make informed decisions that will:

- improve long-term financial and tariff management
- protect and enhance revenue
- ensure efficient and effective asset management utilisation and maintenance
- profile consumers and indigents
- identify human resource requirements and allocation across the municipality linked to revenue and social economic advancement
- foster sustainability of municipalities.

The MST™ reports on progress and highlights all exceptions for follow-up. The tool therefore enables stakeholders to make decisions based on actual data and thereby saves users a significant amount of time.

African solution allows an organisation to better manage, account and plan for their assets.

The data from our asset management solution ensures that asset recovery will lead to better returns, including supporting operations, accounting requirements, insurance requirements, asset financing, economic growth and revenue generation.

Among the modules we deploy is WIPHUB, which is a comprehensive tool used to track and monitor an organisation's work in progress (WIP). It allows the users to input project information and track the progress of a project until it is ready for use and brought on to the organisation's fixed assets register. It further assists the organisation in making decisions based on accurate and up-to-date information and with financial reporting and disclosure requirements in terms of GRAP and mSCOA.

The system has been developed in a manner that seamlessly integrates with accounting systems, relevant workflows and reporting channels. All the information populated on the system and all the outputs derived from it are fully customisable and can be updated to suit client-specific needs.

WIPHUB was instrumental in capitalising over R7 billion during the City of Tshwane project over its three-year period. It also assisted the City with the required financial disclosures.

In practice and in our experience, we have found that asset registers are incomplete, inaccurate and lack key data fields. Simply put, they do not meet the objectives of sound asset management. Our locally developed and proudly South

#### **What have been the observable impacts of Covid-19 on your public sector clients?**

Government, in particular, has struggled to adapt to the new way of work caused by the pandemic in that it is a challenge to access citizens, manage operations and grow local economic development. Akhile has partnered with industry players to support, assist and guide public sector during this trying time.

#### **How can Akhile help mitigate these challenges?**

Akhile has increased investment into a strong, innovative development team to drive application development and the implementation of systems for better governance and service delivery. These tools include the following modern-workplace applications:

##### **Ready to Work and Staff Whereabouts:**

The Covid Check-in and Employee Whereabouts solution is an online Covid-19 daily health screening solution that lets employees perform their health check and automatically log their results, from their mobile phones. These results then feed into a dashboard that automatically indicates whether employees are in the office, working from home, working from remote locations, off sick, etc. It is a state-of-the-art way to protect your company's health and safety, prevent the spread of Covid-19 throughout your business, and it enables you to leverage the productivity of your employees wherever they work. The system also allows employees to capture their vaccination status to ensure overall safety.



**Timesheets:** This is an online timecard-related administration solution that lets employees complete their timesheets from their desktops and mobile phones. These results then feed into a dashboard that notifies the manager allocated to approve the timesheets. It is a cutting-edge way to log, approve, reject and view employee timesheets for the month, and enables you to leverage the productivity of your employees for different tasks and projects.





**Claims (S&T):** This is a reimbursement processing app. If an employee had to use any money from their pocket for any company-related expense – such as buying a client lunch, coffee, fetching products using their personal car – they can always capture the information on the app and provide a receipt as evidence. Once the claim has been processed by HR and finance, the user will be reimbursed accordingly.

**Time Off:** This solution is an online app that allows employees to request leave, as well as view the status of their request, the number of remaining available leave days, how many days were taken, and company holidays. They can see their pending, approved and declined requests in-app. The types of leave that can be requested are vacation, sick, family responsibility, maternity, parental, surrogate, study, and other. Administrators and employers are able to view leave requests, as well as approve or decline requests by employees.

**Communications Log:** The Communications Log solution is an online app that allows users to communicate with project teams and stakeholders. It ensures that your communications plan is executed and that stakeholders are properly informed, distributing the right information to the right people, at the right time. The application tracks communication relating to specific projects and any action items arising from the communications. All communication logs and action items linked to a specific project can be searched. When action items are added to a communication log, the project relating to the action item, as well as the communication log, is posted to a Microsoft Teams group associated with the project. Additionally, the individual allocated to the action item is notified via email.

**Tender Management System:** This app is an innovative platform designed to allow

users to easily manage the entire tender bidding process – from having your team evaluate potential tenders and the initial bid, right through to attending briefing sessions and capturing all session notes from within the app, and scheduling reviews.

#### **What other digital systems have you developed to boost service delivery?**

Akhile understands government and the challenges it faces. We have developed systems to assist government in improving service delivery. These include:

**Invoice Builder:** The Invoice Builder is able to automate the complicated process of generating invoices. It allows you to build invoices with inputs like products, contracts, contract discounts, bulk discounts, clients, etc. all determining what the final .pdf invoice that is generated contains.

**Field Service Logging App:** Integrating with the Service Logging App, the Field version deals with the inputs from those actually working in the field. It allows them to add comments, navigate to the incident, mark it as resolved and more all while the app dynamically notes things like employee location, time employee arrives on-site, etc.

**Live Counter Bookings:** Live Counter Bookings eliminates the need for scheduling appointments or waiting in lines. It allows a business to put out their available hours for meetings and lets individuals book appointments (dynamically filling that slot in the process). It is fully compatible with Teams, generating a Microsoft Teams meeting if an online meeting is required.

**Municipal Power Virtual Agent:** The Municipal Power Virtual Agent is an AI agent able to automate the process of municipal informational queries. It is able to guide users through the process of registering as a municipal customer, querying the status of service

requests, asking general informational questions, etc.

#### **Council Secretariat and Meetings**

**Assistant:** The Council Secretariat automates the process of submitting reports and generating a municipal agenda. It also presents the agenda in a user-friendly format to the public, and later allows matters to be voted on and recorded for the public record.

**Supply Chain Management:** The Supply Chain Management application automates the process of creating tenders. It automates the process of creating and sending bid specifications. It collects responses from registered companies and allows scoring to take place in a user-friendly manner, and for a decision on what response is accepted to be made and recorded (and for automatic notifications to go to all other responses).

These solutions are innovative applications that leverage an organisation's Microsoft 365 environment.

#### **Any closing thoughts?**

Watching Akhile grow and seeing the difference it has made to the team, our clients, organisations and the people we have come into contact with has been incredible. Undertaking work such as the asset management project with the City of Tshwane has provided the company with the opportunity to showcase its capabilities, forge stronger partnerships and create jobs – while ensuring all project objectives are met beyond the expectations. Also, transitioning Akhile from the traditional consulting methodologies into the innovative and digital era has been my greatest achievement as CEO. 🌱

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# Progressing into the Tshwane of Tomorrow

The City of Tshwane has achieved some resounding successes in response to the Covid-19 pandemic, especially in addressing service delivery backlogs and customer payment levels, yet there is potential to unlock greater financial sustainability, explains **Empril Mathew\***.

**R**ecent City successes include increased meter reading (from 27% in January 2021 to around 80% within six months), improved cash flow vs budget projections (greater than 90% collection levels from lows of 75%), wider credit control efforts, and customer outreach initiatives. The City has thus successfully focused on liquidity improvement measures with key areas of emphasis such as dispute and query resolution, debt collection, customer satisfaction, and business confidence improvement measures.

Despite its success, it may be prudent for the City to further its work towards a more sustainable revenue model and revenue management machinery, especially in light of the sea changes happening within the energy industry.

Cities are confronted with some of the revolutionary changes of the past decade, especially regarding

distributed generation (such as solar, generators, etc.), smart metering, tariff/usage monitoring customers, online payment mechanisms, multiple communication mediums, and social media platforms. This calls for cautious planning to prepare the municipality for the 'business of tomorrow'.

Consequently, it is important to consider each element of the value chain and determine the people, data, system and/or process improvements that need to be looked into holistically and addressed in an integrated manner.

## Customer-centricity

A fundamental element is placing the customer at the centre of the City's role as a business, while also transitioning to a 'caring' city. The speedy resolution of queries and disputes and improving services or service delivery are central to keeping customers satisfied. Improved customer satisfaction has proven to translate into increased payments.

Importantly, keeping the customers happy implies the City will have processes, systems and the required skills to deal with potential service-delivery-related interruptions expediently, while keeping customers informed of progress towards resolving such issues. Therefore, technology is essential, particularly in tracking issue resolution and proactively

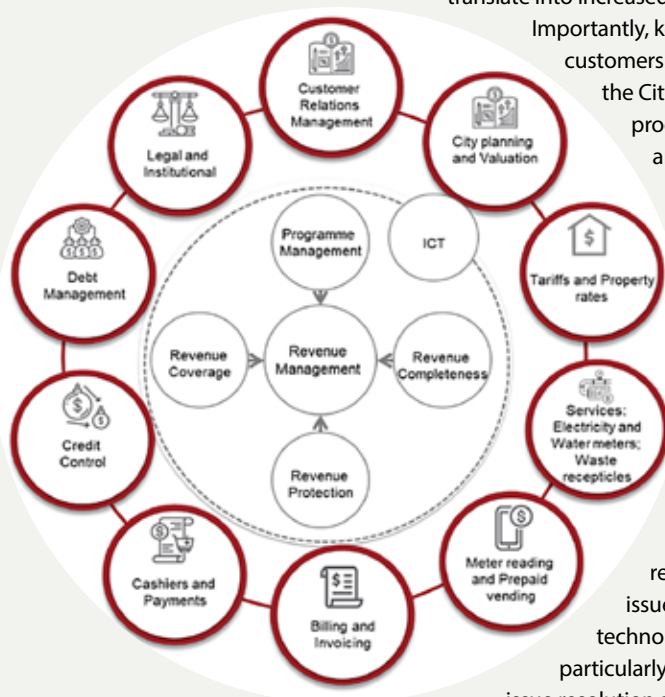
providing progress updates to City customers. For instance, an integrated communication platform entails attaining a high-impact communication capability and analytical ability that combines multiple communication channels (calls, emails, messages, social media), thus enabling customers to be kept up to date with their accounts and status updates related to their queries/disputes. Further, strategies need to be put in place to elevate internal communications, fostering better internal working cohesion and converting City employees into brand ambassadors.

Alternative revenue sources are also crucial to guaranteeing the future financial sustainability of the City. It is worth noting that the increase in self-generation threshold to 100 MW presents the City with an opportunity to hedge its electricity purchase costs, diversify its sources of energy supply, and mitigate against the risk of load-shedding.

## In summary

The aforementioned strides are expected to cut across multiple elements of the value chain; with the ultimate focus on cash flow improvements and debt book reduction in addition to optimising all existing sources of revenue (including tariffs/property rates), generating additional revenues, enforcing stricter credit control and revenue protection measures, and improving the levels of customer satisfaction. It therefore presents an excellent opportunity for the City to further itself with concrete time-bound actions; and thereby, progressively transition towards a 'world class capital city'! 🌱

*\*Associate Partner: Ntiyiso Revenue Consulting*





# Using sound principles to run a city effectively

During these tough times, when all manner of measures are being considered to get the City of Tshwane back on track, there is particular value in focusing on the principles that underpin the management of organisational performance and performance information.



**W**ithout having an effective guiding framework under and against which to reference operational performance, fixing what may be broken or what may need correcting is something of an impossible task. And it is for reasons such as this that the City of Tshwane has adopted numerous principles for the management of organisational performance and performance information. These principles include the following:

## 1 Evidence-based

The management of organisational performance and performance information in the City of Tshwane is evidence-based. This requires that the development of all plans (IDP, SDBIP, business plans, etc.) is informed to a

large extent by the evidence gathered through an extensive environmental scanning process in order to understand the trends that are present in the contextual environment and through gathering community needs through consultation processes that lead to prioritisation, which must be informed by the available resources (including budget, human resources, and other municipal capabilities).

Internal prioritisation decisions during planning must also be conducted based on empirical evidence – i.e. there must be credible proof that prioritisation is well informed by consideration of baseline information (such as lessons learnt and demonstrable experience). This further requires that the results – the outputs and outcomes – or the deliverables – the milestones or

progress – that are reported against predetermined objectives are supported by adequate or complete, accurate, valid and credible audit evidence or portfolios of evidence. By taking this approach, the municipality will strengthen accountability and transparency.

## 2 Integrity

Planning is to be conducted honestly, using reliable information. Reporting the performance of the municipality must always be underpinned by the desire to provide accurate information, without distortion, using performance information that is fit for purpose and of the highest quality possible.

## 3 Timeliness

Adhering to the timelines as

dictated in the local government planning cycle should be adhered to by all line function departments and entities, as well as other structures in the City. The collection, collation and reporting of performance information is to be done within the regulated timelines. Any contravention of planning and reporting timelines must constitute non-compliance with the management practices and must be understood to be compromising accountability.

Performance information reported must be for the period or cycle under review (monthly, quarterly and annually) and be aligned with the IDP, SDBIP and departmental business plans.

#### **4 Understandability**

Information in the plans or reported performance must be presented in a manner that is easy to understand and interpret, as well as tailored to suit all the intended audiences and stakeholders.

**Through lessons learnt, continuous improvement must influence and ignite a culture of excellence, expressed in the form of doing the right things the first time**

The information must have the appropriate content, must be objective and relevant to the services planned to be delivered, and should be measured by the indicators under consideration for it to be understood by all audiences and stakeholders.

It must be sound, free of errors, concise and must consistently represent the phenomenon or service under consideration. Planning and reporting information must be complete, timely and in line with the corresponding service under consideration and/or indicator or set target.

#### **5 Accountability**

A primary purpose for adhering to the planning cycle and planning requirements is to support the City to meet its accountability requirements. Reporting performance information provides substantive accountability for the resources allocated and expended. It also serves to demonstrate responsiveness to all the

municipality's stakeholders.

Results-based management requires that the organisation assesses its performance against its predetermined objectives through using a core set of indicators and targets. This makes accountability a core principle that drives organisational performance and performance information management. The outputs of the organisational performance management system – in the form of reports and other information or data that is made available and accessible to the general populace – make the municipality answerable to its stakeholders, especially members of the public.

#### **6 Transparency**

This principle calls for planning and reporting that are exhaustively transparent to all the City's stakeholders. Within this context, and also in acknowledging that transparency is expressed by







accessibility of information, planning documents and organisational performance information must be made available to all stakeholders in a transparent manner.

There must be open access to planning documents and performance information in order to allow for engagement by a broad range of stakeholders with the goal of influencing and increasing public awareness around the City of Tshwane's services.

Openness facilitates public oversight and public confidence. Various platforms for information-sharing will be utilised – such as the City of Tshwane's website, public engagements to exchange information, and the use of other means available to the City within the limits of its available resources.

## 7 Integration

Transversal management must be promoted in the planning, execution and reporting of the City's plans. The management of planning, performance and performance information must be integrated and streamlined with other related City of Tshwane processes and management practices. Integration promotes strategic alignment and supports compliance.

## 8 Learning

Institutional learning from the management of organisational

performance and performance information is a key principle upon which organisational performance planning and reporting activities are based. The learning principle involves the following:

- identifying and disseminating, in a timely manner, the lessons learnt from planning, programme and project implementation
- sponsoring implementable and relevant recommendations based on organisational performance reports in order to improve operational performance
- promoting the uptake of the findings and lessons learnt into future design, implementation and management of programmes and daily activities.

## 9 Continuous improvement

This policy is aimed at continuously improving processes, procedures, practices and quality control measures in support of efficiencies in managing performance planning and performance information within the City of Tshwane. Continuous improvement must be the hallmark of organisational planning and performance management. Through lessons learnt, continuous improvement must influence and ignite a culture of excellence, expressed in the form of doing the right things the first time.


The uptake of monitoring

information and evaluating findings into decision-making must foster effective and efficient service delivery improvement. Learning from doing and implementing customised improvement plans based on lessons learnt are the hallmarks for managing organisation performance.

## 10 Protection of privacy and confidentiality

Promoting confidentiality and protecting the privacy of groups and individuals is at all costs upheld in the planning and organisational performance management processes. The sources of data for planning and data collection, collation, analysis and reporting often require the disclosure of private, sensitive and confidential aspects of data about clients, patients and service beneficiaries – i.e. the beneficiaries of treatment programmes or beneficiaries of services for indigents.

To protect the confidentiality of data or information where the confidentiality of details is a concern, secondary data is used – for example for the identification of beneficiaries of tuberculosis treatment. The names and surnames of beneficiaries or patients must be substituted by client file numbers when identifying these patients on the data sheets.

The City is also guided by the relevant government legislation to protect privacy and promote the confidentiality of relevant information. 



# Perfecting a mixed style art to engineering

BVi has a proud history of providing essential engineering services to the City of Tshwane, forging ahead on diverse projects that range from social housing and water, to design services on South Africa's new automotive manufacturing hub.



**T**he City of Tshwane is South Africa's largest municipality. It also ranks among the biggest municipal regions in the world in terms of its footprint. The key distinction for South Africa is Tshwane's complex urban, peri-urban and rural composition, set within a developing nation context. This puts the talents of the best consulting engineers to the ultimate test in achieving an integrated and sustainable infrastructure delivery model.

It's not a new context for BVi, a multidisciplinary engineering, design, procurement, and management company that was established in 1967 in Pretoria, since expanding nationally and internationally. BVi has 20 offices operating across Southern Africa, with its head office situated in Tshwane.

"As a leader in the consulting engineering industry, BVi sets the highest possible standard, based on local and global design and construction management practices. This includes a non-negotiable adherence to construction material specification and quality on all our projects," says David Leukes, managing director, BVi.

## Local content, and the need for soft and hard skills

"Wherever possible, we reinforce the need to specify local content, since this is a direct and indirect enabler of much needed employment," he continues, adding that the company is a Level 1 BBBEE contributor, underscoring BVi's commitment to helping meet South Africa's 2030 Sustainable Development Goals.

"The so-called 'hard' engineering skills, when it comes to design and execution, remain paramount. Then there are the 'soft skills', which have become as important, since they're often the gateway to construction enablement," says Leukes.

"I'm talking specifically here about on the ground engagement – whether it's a potential investor, a landowner, or an affected community. Collective facilitation and buy-in from all stakeholders have become an extension of the traditional consulting engineering suite of services," he explains.

## Work in Tshwane

For the past 54 years, Tshwane has been BVi's foremost passion as its home city. And over the past five decades or so, the company has provided professional services for most of Tshwane's divisions and departments.

Recent Tshwane projects include road upgrades in Mamelodi, Soshanguve and Hammanskraal; infrastructure upgrades in Mandela Village; and water and sewerage installations in Kameeldrift and Kudube.

At Mandela Village, the works entailed the construction of various streets – delivering asphalt surfaced roads over the old gravel routes – as well as the







upgrading of the existing stormwater systems along existing surfaced roads. As part of the Expanded Public Work Programme, significant emphasis was placed on the deployment of labour-intensive construction methodologies – maximising employment opportunities for unskilled labour in the area. Combining this approach with conventional construction methods ensured an ideal balance between project efficiency and job creation.

BVi was also involved – as part of the electrical and mechanical engineering team – in the construction of a new school and facilities for the Marotola Primary School, also situated in the Hammanskraal area of Tshwane. This project, valued at nearly R50 million, saw the handover of the newly built school in 2019. The client was the Gauteng Department of Infrastructure Development.

While employment opportunities were created during construction, the true benefits to the local community will be reaped for many years to come since this modern learning facility accommodates the educational and extracurricular needs of some 1 000 learners at present, and more in the future.

### Refilwe Ext 10

Supporting housing in the region, in June 2021, BVi commenced with an approximately two-year contract for Tshwane's Department of Human Settlements to provide services related to the construction of sewer and water

reticulation infrastructure in Refilwe Extension 10.

This new housing development is located on Portion 80 of the farm Oog Van Boekenhoutsloof – alias Tweefontein 288-JR – which lies to the north of Cullinan. The planned total area for the development is 44.56 hectares and consists of 785 residential erven. Other land uses include various social amenities such as educational institutions, churches, municipal erven, and public open spaces.


### TASEZ

In the industry segment, a landmark project is BVi's involvement in the site development of the Tshwane Automotive Special Economic Zone (TASEZ) – dubbed 'Africa's First Automotive City'. Spearheaded by key stakeholders such as Ford and the National Department of Trade, Industry and Competition, TASEZ is primed to be Africa's premier automotive investment destination and is projected to create around 20 000 jobs as it develops.

BVi has been instrumental in ensuring SANS compliance in terms of the site's HVAC installations as well as wet and fire services at various clusters in the SEZ, which covers an area of some 162.6 hectares. Part of the firm's scope has included mechanical engineering services for the top structures that comprise compressed air, cooling water, argon and carbon dioxide gas, liquid petroleum gas, special ventilation, and effluent treatment.

## Key Services

- Structural Engineering
- Electrical Engineering
- Mechanical Engineering
- Civil Engineering
- Roads & Rail
- Project & Construction Management
- Social Housing & Residential Development
- Commercial & Administration Buildings
- Infrastructure Development
- Mining Infrastructure & EPCM
- Quality Control & Technical Audits
- Turnkey Projects
- Town Planning
- Agriculture & Agri-processing
- Water & Sanitation
- Waste Management

"BVi's continued presence in the City of Tshwane is of utmost importance to the company. Tshwane not only forms a critical part of the wealthiest and one of the fastest growing economies on the continent – namely Gauteng – but is also home to the centre of the South African government, with national departments located within the city," Leukes concludes. 







# Water drives progress

Water is the world's most precious resource. Industry, electricity and the sustenance of life all require it, which is why our cities and water custodians literally hold our lives and livelihoods in their hands.

**A** core part of Executive Mayor Cllr Randall Williams' 10-point plan involves prioritising the upgrading and maintenance of water infrastructure in Tshwane. The City's Utility Services Department is the custodian of billions of rand of water and sewerage infrastructure, which is key to the provision of basic services to all Tshwane residents.

Despite the real challenges that the Covid-19 national state of disaster has had on project timelines, the Utility Services Department has kept numerous projects on the go. Williams, in his 2021 State of the City Address (SOCA), stated, "I am happy to report that the Baviaanspoort Wastewater Treatment Works (WWTW) project is 88% complete and is on track for completion in May 2021. This R41 million project will restore the additional treatment capacity needed for the plant to ensure that the treated effluent released into the Pienaars River complies with national standards. This will stop further pollution of the Pienaars River and the Roodeplaat Dam downstream."

## Rooiwal WWTW

The second endeavour of note is the first phase of the multiyear project to upgrade the Rooiwal WWTW, which is proceeding well and of vital importance to improve conditions for the surrounding community in Hammanskraal. More than a decade of neglect – since a 2004 report highlighted concerns about the potential of water sources used by surrounding communities – has placed the City in a precarious position, which the current administration is adamant on solving. The Rooiwal WWTW is the biggest water treatment plant in Tshwane and purifies 45% of the city's wastewater. It will remain in operation during the upgrade project.

"Phase 1 is just the start, of course. We are still planning on implementing

Phase 2 and 3 over the next five years. This is where it gets exciting. For years, a big issue has always been the lack of funding to adequately address the issues at the Rooiwal WWTW. The full cost of the project is estimated at approximately R2 billion. It is an immense financial cost," explained Williams.

Just prior to the delivery of his SOCA speech, the Executive Mayor had conducted a site visit at the Rooiwal WWTW with the Minister of Water and Sanitation, Lindiwe Sisulu, who, according to Williams "was so impressed with the planning and progress that we have made that she has committed that her department will ensure we receive all the necessary funding to ensure Phase 2 and 3 run seamlessly.

## Rooiwal Wastewater Treatment Works Upgrade

More than a decade of neglect – since a 2004 report highlighted concerns about the potential contamination of water sources used by surrounding communities – has placed the City in a precarious position, which the current administration is adamant on solving



"Through increased allocations via the Utility Services Development Grant, she has committed that her department will make sure that the City receives the funds that it needs to fully upgrade the Rooiwal WWTW. This second phase is due to start in the 2021/22 financial year and will provide an additional 80 megalitres of treatment capacity per day to facilitate new developments in its catchment area for the next 20 to 30 years. This is a momentous achievement for the City and speaks to the hard work that has been put in by our teams to deliver to Tshwane residents," Williams beamed.

### Bulk services

The City's Utility Services Department is also responsible for installing bulk and internal water and sewer services to support various human settlements developments. The following key projects are of note:

- Rama City Mega Project: Construction of bulk water and sewers, and a water and sewer reticulation network for 1 660 stands.
- Nellmapius Willows Mega Project: Construction of a water and sewer reticulation network to support Phase 1 of 200 housing units.
- Hammanskraal West Ext 10:



Construction of bulk water and sewers, as well as a reticulation network to support 2 776 households as part of the Upgrading of Informal Settlements Programme.

- Nellmapius Ext 2: Construction of a sewer network as part of the Upgrading of Informal Settlements Partnership Grant to about 358 stands.
- Phomolong (Mamelodi Ext 6): Construction of water and sewer reticulation services to 1 051 stands.
- Mabopane Ext 12: Construction of a water and sewer network to benefit 538 families.

### Achievements

It is an unfortunate reality across South Africa that the results of decades of

little to no maintenance on much of our infrastructure have made themselves increasingly apparent, through failures and breakdowns.

The City's water and sewerage teams have been working hard to look after the municipality's ageing infrastructure. According to Williams, at the time of his SOCA, over 11 000 sewers had been unblocked and over 20 000 water leaks repaired. He added, "I am proud to say that the Regional Operations and Coordination Department is working diligently to advance efficiencies that would result in quicker repair times. There is still much that must be done but our focus on frontline service delivery will remain persistent."

In its 2019/20 annual report, the City recorded the following progress or results, and critical milestones as relating to water infrastructure across the municipal area:

- A total of 2 826 new water connections in households within the formal areas were installed (water connections effected).
- A total of 182 informal settlements were provided with basic water services.
- Water network or pipe replacements in Clubview, Hennopspark were completed.
- Water network or pipe replacements in Garsfontein and Sekampaneng remained in the construction stage and would be completed in the 2020/21 financial year.
- Water network replacement in Garsfontein Ext 2 recorded an installation of replacement pipes of 2 047 m.

At the time of its release, the City had managed to install 661 867 m of water pipes. 🌱





# LEADERS IN WATER MANAGEMENT SYSTEMS

Manufacturers, designers, exporters  
and distributors of quality water  
management systems



Global pioneers in the design,  
development and production of  
advanced engineering plastic  
products for the water and other  
specialised polymer engineering  
products since 1980.



## Testing and quality procedures

All products are tested to the most stringent requirements. Because of previous system failures in the field, due to poor installation and or supervision, we fully assemble and test all our valve boxes, meter boxes and above-ground meter box assemblies up to 24 bar for three minutes.

*Leaders  
in the  
industry for  
over  
40 years*

## About us

Davis & Deale Irrigation have been in the technology of developing, manufacturing, marketing and exporting of water-related innovative products since 1980.

Mr Davis has many past and current patents held in water-related and other polymer products.

[www.davisanddeale.co.za](http://www.davisanddeale.co.za)



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### Postal Address

PO Box 5070  
Delmenville, 1403  
South Africa



**DAVIS & DEALE**  
WATER MANAGEMENT



Davis & Deale and Conver-Tek have been respected suppliers of water-related and injection moulding products for over 41 years. They design the concepts, develop the products, build the tools and perfect the production workflows all under one roof.



Rooftop solar at the Brakpan plant

## The power to perform in the water reticulation market

**A**s group companies, Davis & Deale and Conver-Tek's reputation for excellence has always been based on innovation, working the problem and finding solutions. In this respect, the unexpected arrival of Covid-19 really put that to the test, with the group responding by rapidly adjusting its processes to meet production targets in a safe and efficient manner.

The Level 1 BBBEE supplier's solutions are being installed on municipal water infrastructure projects nationally. Key metros include the City of Tshwane, where the company has been supplying quality, affordable water-related metering and packaged products for nearly 20 years.

"As long-standing suppliers, we appreciate the ongoing input received from the City's engineers, water maintenance supervisors, and contractors. This has been instrumental in helping us perfect the design and development of many key products. A prime example is our Above Ground Box (AGB) and Meter. We believe this product has set the benchmark for durability and performance over the past two decades," says founder Bevan Davis.

Davis & Deale and Conver-Tek have set up an education trust to support employee learning and skills development

### Combatting clones

Products manufactured by Davis & Deale and Conver-Tek are subject to rigorous quality control. Each unit is pressure tested to 24 bar for three minutes, guaranteeing a world-quality technical standard.

"Some producers supply moulded boxes and parts using below-spec materials and sizes, which reduces prices yet is evident from failed products frequently seen in some areas. Where product failures, excessive leaks and breakages occur, you can be certain that this is a counterfeit, not genuine, item. We therefore strongly recommend that specifiers only use products from accredited sources," Davis stresses.

**Our innovative development skills with the ongoing water-loss problems faced by Tshwane and other councils have formed the basis of successfully resolving water-reading and water-loss problems."**

### Managing power security

Market leaders are defined by their response to threats and opportunities. In South Africa's case, load-shedding has become one of the biggest hurdles to business continuity.

"Aside from downtime and wasted materials, extended power outages have the potential to damage our high-tech equipment. For example, the expensive engineering polymers used to form product components can crystallise in the injection moulding machines,

completely destroying barrels and screws," Davis explains.

The group's first power mitigation measure started with the installation of a diesel generator to run during peak charging hours. The generator ensures that 24-hour operations can be maintained, when required, and radically reduces maximum demand charges.

"However, diesel is costly, so this generator was intended to form part of a hybrid system from inception. The objective is to move off the grid completely. Our key investment in achieving this is the installation of a R6 million rooftop solar system at our Brakpan factory. The seamless switchover to solar saved us over R100 000 in charges in month one," Davis continues.

Before committing to an off-grid strategy, an in-depth analysis was carried out in conjunction with solar energy specialist Millennial Reign. Production and electricity consumption patterns were monitored, assessed and logged for a few weeks. The results of this analysis were then used to determine the correct balance between panels, invertors, and the 500 kVA output of the generator selected.

### A worthwhile investment

"While we could have spent the money on significant additional machinery, we realised that going off-grid was the immediate priority," says Davis. The investment should pay for itself within four years.

"Renewable energy helps to reduce our carbon footprint and guarantees that we are self-reliant. Constant power equals consistent quality – and the ability to meet on-time customer consignment delivery targets," he concludes. 🌱

# Reforging the urban identity

The inner cities of South Africa's metros have rather poor reputations, often being seen as unsafe, unclean and dilapidated. The City of Tshwane, however, envisions a revitalisation of its city centre and other areas that will provide ideal, high-density hubs in which people want to live, work and play.

**D**uring 2014, the City approved initiated a revised multiphase plan towards the revitalisation of the capital core. As the first order node within Tshwane, the Inner City requires focused interventions that are informed by an integrated framework, facilitated by a

strategic, well-capacitated team and provided with the supporting enablers required for implementation.

Projects that have been identified include:

- enhancing the image of the City through beautification of the City's gateways and landmarks and through public art

- identification and development of a tourism route
- enhancing the integrated public transport network
- as the home to several national and local government departments, to create the 'government estate': a government boulevard and precincts that are attractive and functional
- development of West Capital, the western precinct of the Inner City, into a mixed-use residential area that includes Schubart Park
- reimagining the inner city as a desirable destination for investors, tourists and residents of the City, with a key focus on social spaces for the multitudes of inner-city workers.





Supporting interventions and actions include ensuring public safety, infrastructure assessment, the development and implementation of urban design guidelines, and by-law enforcement.

The realisation of these initiatives will require political will and championship that transcend political terms of office, as well as a sustainable funding strategy. To date, the City's Mayoral Committee has approved a draft Inner City By-law, which will enable the establishment of the Capital Commission, which is to be the special-purpose vehicle that will drive the detailed development, facilitation and implementation of the revitalisation strategy.

Although a single city, Tshwane is diverse in character when examining the spatial landscape. Due to the

varied nature of different spaces within the municipal area, each node requires area-based solutions, within the context and desired outcomes of the metropolitan and regionalised Spatial Development Frameworks (SDFs).

A number of nodes have been identified as being in need of local area spatial plans that require review, or nodes where SDFs had not been developed before. Due to developments in more recent times, precinct plans are now required.

## Bridging the gap

The City has identified a laundry list of short- to long-term plans that need either reviewing or entirely new plans. It is also cognisant of the fact that over time, this list may change, and further areas may become priority precincts for local area plans.

As a means of bridging the gap between the need for numerous precinct plans and the City's limited resources and stretched capacity, the City is open to accept assistance from the private sector, subject to predetermined criteria. In order for a private body or individual to identify a precinct in need of a local area plan, the outcome of developing such a plan should fulfil the following some or all of the following criteria at least:

### Integration zones

1. Fulfilling the outcomes of spatial transformation
2. Within integration zones, as reflected in the BEPP.

### Urban cores

1. Township centres
2. Within an urban core area with mixed land-use development
3. Transit-oriented development (TOD) ▶



4. Developed in line with the approved RSDFs and MSDF
5. Focus areas includes precinct plans in Saulsville, Mamelodi, Ga-Rankuwa, Hammanskraal, Mabopane and Olievenhoutbosch.

## Transport

1. Falls within a node, as identified in the MSDF
2. Precinct plan to address roads for economic growth – e.g. PWV 9 as identified in the MSDF and CITP
3. Within 5 km radius of an active (not decommissioned) public transport station
4. Study area is geared specifically to address TOD and non-motorised transport in line with the MSDF and CITP
5. Precinct plan geared to address detailed, integrated infrastructure planning in order to achieve spatial transformation outcomes as identified in the MSDF
6. Precinct plan geared to address the socio-economic needs of marginalised areas as identified in the BEPP.

## Economy

1. Specialised activity node, as identified in the MSDF
2. Precinct plan to address roads for economic growth
3. Study area is geared specifically to address job creation in line with the economic strategy of the City
4. Industrial node as identified in the MSDF and in line with the economic strategy of the City
5. Precinct plan geared to address detailed, integrated infrastructure planning in order to achieve spatial transformation outcomes as identified in the MSDF
6. Precinct plan geared to address the socio-economic needs of Marginalised areas as identified in the BEPP.

## Sustainable human settlements

1. Study area is geared specifically to address public housing implementation in line with the MSDF and sustainable human settlements planning
2. Precinct plan geared to address detailed, integrated infrastructure planning in order to achieve spatial transformation outcomes as identified in the MSDF
3. Precinct plan geared to address

## The benefits of higher-density urban spaces

Compact, mixed-use, transit-oriented neighbourhoods have dramatically lower emissions per person – as much as half or less per capita of sprawl developments.

The main objectives of densification and compaction are to:

- minimise the footprint of a city
- prevent the destruction of valuable agricultural land
- reduce pressure for the development of open spaces and environmentally sensitive land due to the optimal use of available land
- provide choice in terms of housing typologies
- improve the viability of public transport
- improve the efficiency of urban areas – increased convenience for the residents of a city in terms of improved access to goods, services and job opportunities, as well as a reduction in travelling times, cost and distances
- improve the use of service infrastructure
- increase the marketability of a city
- reduce inequality.

Densification programmes and the endeavour to reach the set objectives should be measured against a set of conditions or reservations, which ensure that densification occurs in a positive manner and does not occur without proper regard for the impact it may have on the way in which people live and the way a city functions. Densified neighbourhoods and nodes should still be liveable.

the socio-economic needs of marginalised areas as identified in the BEPP.


Each proposal for a precinct plan will be evaluated on a case-by-case basis and the City is under no obligation to support the development of a precinct plan proposed by a private individual or body should it not meet the requirements of the City or should the City not have the capacity to support such a project for any reason.

In addition to proposing an area in need of a precinct plan, the private sector may also provide necessary technical support and/or funding in order to develop such a plan. The City's precinct plans are also subject to predetermined criteria.

Precinct plans will be informed by a scope of works that highlight a status quo analysis, which includes looking at demographics, built environment, infrastructure, market, heritage, land use, transport network and the natural environment. Also key is a spatial

development plan, which entails the concept/vision, as well as plans surrounding transport, the economy, public amenities, open spaces, climate responsiveness and human settlements.

Components of the precinct plan should include an infrastructure plan, an urban design plan, an urban management plan, an implementation plan, as well as stakeholder engagement and public participation. Further to this, a precinct plan may not be developed for the purposes of amending the RSDF or MSDF. Precinct plans developed without the endorsement of the City will not be considered and only precinct plans that are officially adopted by the City Council will be recognised.

These criteria may be updated from time to time, as required, and it is advised that interested parties first communicate with the City prior to embarking on any related exercise to understand the latest requirements. 





# PROUDLY POSITIONED AS THE LANDLORD OF CHOICE

JSE-listed Delta Property Fund is an empowered listed real estate company specialising in providing quality office accommodation to government and parastatals across all nine provinces, with concentration in strategic nodes in Tshwane, Johannesburg, eThekweni, Pietermaritzburg, and Cape Town.

The Company is black managed with the largest shareholder comprising a female group and Delta's employees.

Delta has a significant footprint in the Tshwane CBD with an approximate GLA of 270 000m<sup>2</sup> across 19 buildings and is well positioned to assist tenants looking for corporate office space such as call-centres or even educational or healthcare facilities with quality accommodation at negotiable rates.

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For leasing enquiries, contact [leasing@deltafund.co.za](mailto:leasing@deltafund.co.za) | 087 803 3582

[www.deltafund.co.za](http://www.deltafund.co.za)





Delta Property Fund ('Delta' or 'the Company') is an empowered specialist real estate company listed on the Johannesburg Stock Exchange that specialises in office accommodation in nodes attractive to government and other tenants.

**A strategic partner for your office needs**





**T**he Company is black-managed, with the largest shareholder comprising a female group and Delta's employees. With a portfolio consisting of almost one million square metres of gross lettable area (GLA), Delta is represented in all nine provinces, with specific concentration in key CBD nodes in Tshwane, Johannesburg, eThekweni, Pietermaritzburg, and Cape Town.

**Delta Property Fund is well positioned to assist tenants looking for corporate office space such as call-centres or even educational or healthcare facilities, with quality accommodation at negotiable rates**

The Company's retail portfolio is based on the street levels of its corporate office buildings, with tenants benefitting from high trading densities and footfall.

Delta has a significant footprint in the Tshwane CBD, with an approximate GLA of 270 000 m<sup>2</sup> across 19 buildings. Our buildings are under

renovations, ready for a tenant looking for an appropriate corporate office.

For leasing enquiries, contact [leasing@deltafund.co.za](mailto:leasing@deltafund.co.za) or 087 803 3582.

 [www.deltafund.co.za](http://www.deltafund.co.za)

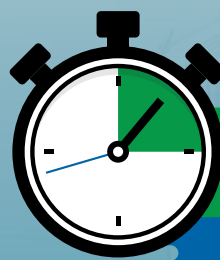
**“Our aim is to be known as a partner of choice for tenants seeking quality office accommodation in attractive CBD nodes. A key focus area for us is to build strategic relationships with our tenants wanting an exceptional user experience.”**

**Bongi Masinga, Acting Chief Executive Officer of Delta**



# eXpress Variable Speed Drive Booster Sets

e-SV pump booster sets with the new 5th generation Hydrovar®  
now available with eXpress delivery



**eXpress**

LOCAL  
PRODUCTION



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more info



## Premium quality combined with eXpress delivery

The GHV booster set combines the highly reliable multistage e-SV pump with the new 5th generation Hydrovar® and is now available from stock or manufactured in  $\leq$  two weeks plus delivery.\*

\*Delivery times to be agreed with our sales office when you place your order.



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Xylem Africa



The market has spoken, and Xylem Africa has listened! Our market-leading Lowara GHV booster sets are now available to local customers from stock or manufactured in under two weeks.

### Lowara GHV/eXpress features

- Fully automatic
- Certified for use with potable water
- All pumps are individually variable-speed controlled for best economy and system reliability
- Equipped with one to four Lowara e-SV multistage pumps and Hydrovar HVL variable-speed controllers
- Easy to install and commission, no advanced programming necessary
- Communicates with BMS systems
- Certified for use with potable water
- Delivery: up to 640 m<sup>3</sup>/h
- Head: up to 160 m

## Local production boost a boon for SA water sector

**T**o celebrate this new delivery capacity to the market, we have named the new products Lowara eXpress Variable Speed Drive Booster Sets. e-SV pump booster sets with the new 5th generation Hydrovar® are now available with eXpress delivery.

Since being launched in 2014, Lowara's GHV boosters, now locally marketed at eXpress boosters, have been in high demand for the incredible value they deliver. The booster sets are fully automatic for water supply, water pressure increase and water transfer in apartment buildings, office buildings, hotels, public buildings, industrial plants and other applications. The Lowara eXpress series operates in conjunction with the Xylem Hydrovar pump controller, delivering up to 70% savings on energy bills.

### Investing in SA

Our customers are responding enthusiastically to this incredible value, leading to immense demand across the African continent. To reduce delivery times, Xylem Africa has invested in fabrication and assembly facilities in South Africa, reducing the waiting period of eight weeks by more than 75%. Now, you

can expect your eXpress booster order to arrive much faster: the units are available from stock or manufacture within weeks. Delivery times are agreed with our sales office at the time of order placement.

"Xylem's Lowara eXpress boosters are a hit with our customers because they provide excellent value," says Vinesan Govender, Xylem's Engineering Manager for Africa. "Our customers are eager to unlock that value, so delays in deliveries won't do. We expanded our local delivery capacity to bring the eXpress units faster to customers across the continent. Xylem Africa can now deliver eXpress boosters to customers in under two weeks, and continue to support installation and maintenance through our vast domestic presence and partner network."

Xylem Africa established fabrication, assembly and greater stock capacity in response to incredible demand for the Lowara eXpress series. We localised the assembly of six models, maximised locally sourced items, and now operate agile fabrication and assembly to supply the continent.

### The booster that delivers

The GHV/eXpress series is equipped with up to four e-SV vertical multistage pumps,

each fitted with a Hydrovar HVL variable-frequency drive, pressure transmitters and a control panel – all mounted on a frame for easy installation. This series is easy to program, designed for maximum energy efficiency, and can communicate with a BMS system via Modbus or BACnet.

End-users benefit from a host of features, including dry-run protection, low noise, small plant room footprints, no large pressure vessels, soft-start, no hydraulic shock, auto changeover, fault history, protection against under-/overvoltage, and backflow protection through the use of a Cat 5 break tank type A/B air gap. It has a timed delay fill mode, which ensures the pumping system does not flood the building on start-up during a power failure due to the hydraulic surge.

The Lowara GHV/eXpress series from Xylem can meet the exact flow and pressure requirements across various applications, and Xylem's Hydrovar intelligent pump controller helps our customers achieve significant cost savings.

Contact Xylem Africa or one of our partners to learn more about how Lowara's eXpress boosters can save you money through rapid deployment. 🌱

# WORKING TOWARDS INCLUSIVITY



Socio-economic integration, especially in the context of South Africa and major metros like the City of Tshwane, is vital to drive inclusion and the upliftment of those living on our economy's periphery.

**D**ue to past policies, our communities have been accommodated in neighbourhoods based on either or both their income group and/or racial classification. Socio-economic integration redresses that imbalance by creating places of residence whereby communities are mixed and integrated through the provision of different housing typologies for various income groups, with supporting social facilities

and amenities that are essential for livelihoods such as government institutions, clinics, libraries, shops, transport facilities, places of employment, and communal spaces such as parks and public squares.

During apartheid, so-called township areas were developed as a result of forced relocation programmes. Inevitably, these townships grew to accommodate large populations of low-income or unemployed people. The economic circumstances were

clearly evident in the quality of the physical environment.

Under the new democratic dispensation established in 1994, these township areas were identified not as a blight in the urban fabric as previously thought of but as beacons of opportunity, through the human capital concentrated within their various communities.

Due to the great need that often belies such nodes, the government has to play a more active role in social and economic restructuring, especially in view of the limited private investment, relative to metropolitan cores. These urban cores are also the most spatially and economically marginalised areas within the urban fabric.

Many of the urban cores are still dependent on the inner city or metropolitan nodes for the majority of their needs. The distance to and inaccessible location of lower-income neighbourhoods highlights their dislocation and marginalisation since they have the lowest provision of social facilities, the longest travelling times and the highest population density.

## Neighbourhood development

The primary aim of the Neighbourhood Development Partnership Grant (NDPG), which is allocated to municipalities by National Treasury, is to create vibrant, quality spaces focusing on hubs of economic potential to act as catalysts for development. This includes but is not limited to developing squares, trading facilities and intermodal transfer facilities in largely dormitory areas, as well as the clustering of civic and social facilities around areas of potential to increase the economic viability of the areas and so attract and maintain private sector investment.

The nationally funded NDPG programme is exclusively targeted toward marginalised urban cores. It aims to address the improved quality



of environment in urban cores and is an important component of township regeneration and supporting the township economy.

The following township nodes have been identified to be implemented under the NDPG:

- Solomon Mahlangu precinct
- Saulsville Station precinct
- Hammaskraal Station precinct
- Mabopane Station precinct
- Ga-Rankuwa CBD
- Olivenhoutbosch CBD.

Even in metropolitan nodes, the increase in residential densities will result in the reduction of private recreation and entertainment space. Special attention should, therefore, be given to the creation, design and management of public spaces, as well as communal and social facilities (e.g. parks, sports fields, educational facilities, etc.) in areas where higher densities are developed.

Where space is limited or land is expensive, the use of multipurpose facility clusters is encouraged. A multipurpose facility cluster is a multifaceted facility under one roof or more, which offers a range of services such as social services, recreation, health, and other economic activities, in one location.

Multipurpose facility clusters are generally located together with structural elements of urban settlements (at a transport stop/ interchange, urban square, market, sports fields, etc.). This is also a viable option where several schools are required in a single locality but there is not enough space for separate sporting and recreation facilities.

The advantages of establishing multipurpose facility clusters are:

- convenience, as all services are located at a central point, allowing for people to accomplish more tasks in a single journey, equating to savings in both time and money
- reduction in the cost of providing public facilities through the sharing of resources, equipment, and land
- exposure for public facilities and

**Under the new democratic dispensation established in 1994, township areas were identified not as a blight in the urban fabric as previously thought of but as beacons of opportunity, through the human capital concentrated within their various communities**



- encouragement of their use
- integration of different communities
- reduction of inequalities in the provision of facilities
- provision of greater security
- offsetting of transport costs.

### Including the utterly excluded

An even darker historical stain on the socio-economic make-up of our country is manifested in the form of South Africa's many – and

growing – informal settlements.

This is largely driven by the rapidity of urbanisation met by the relative lack of opportunities and economic prospects.

Like other metropolitan municipalities, the City of Tshwane is not immune to urbanisation and its impact in as far as the increasing demand for safe places of shelter and affordable housing. Tshwane has a total of 227 informal settlements spread across its seven regions, with an estimated 345 710 households living in informal settlements. The City recently approved the Tshwane Informal Settlements Strategy, which seeks to provide a clear short-, medium- and long-term plan that will guide the incremental upgrading of informal settlements in Tshwane.

The strategy will be largely funded through the Upgrading of Informal

### Did you know?

**The capital budget contribution for 2021/22 from the Neighbourhood Development Partnership Grant is R20 million for the City of Tshwane.**





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Settlements Partnership Grant and will be focused on providing basic services like water, sewerage infrastructure and electricity in informal settlements. A total of 60 upgrading plans were developed for implementation in the short to medium term.

A total of 19 informal settlements are targeted for formalisation in the township establishment stage for the 2021/22 financial year, and a total of 52 in the next three years. These will form part of the City's pipeline of projects included for full upgrading, which involves providing formal services.

The following eight areas are targeted for formalisation in the current financial year:

- Ga-Rankuwa Unit 15
- Klerksoord Ext 32
- Mabopane Ext 11
- Nellmapius Ext 22, Stands 12 223 and 12 224
- Pienaarspoort Ext 20
- Pienaarspoort Ext 21
- Soshanguve Block T, Stand 1 266
- Stinkwater Ext 10.

The areas targeted for formalisation in the next three years will see 72 880 households provided with formal and permanent stands.

### Working towards a safe city

An unsafe beautiful city is not of much use to residents, for who – apart from those who have no choice – would venture out to engage the City at risk of life or property?

One of the key challenges facing many South Africans, including Tshwane residents is that of crime. Safe and liveable communities require more than just a reliance on effective policing or a well-functioning criminal justice system. Crime is a complex social and economic phenomenon that is linked to a myriad of factors, such as social change, urbanisation, power differentials, poverty, difficulties in integration, lack of opportunities, gender differences, and more.

**A total of 19 informal settlements are targeted for formalisation in the township establishment stage for the 2021/22 financial year, and a total of 52 in the next three years**



The policy framework required to deal with 'safety' must therefore be holistic, addressing issues of employment, urban planning and environment, education, transport, housing, etc. The safety of the community can only be achieved by an effort that includes the provision of recourse measures to the social and economic conditions that foster crime and victimisation.

Among Tshwane's targets should be:

- a safer city through environmental design
- using technology for public security
- visible policing
- community capacity for safety through legitimate means
- entrenched culture for respect of the law
- integrated safety strategies through interdisciplinary engagements
- partnering with the community and all relevant role-players
- efficient and effective response and recovery

• disaster risk reduction through risk reduction planning and initiatives. Disaster management activities are aimed at protecting lives, property and the environment. The importance of disaster management is to create safer and resilient communities through the coordination of all pre-disaster risk reduction – as well as post-disaster response activities within a framework of sustainable development.

Road safety planning should ensure the accessibility of policing and emergency services to the community by protecting and investing more in strategic road infrastructure in order to improve response times and operational coordination.

It is through the identification of interventions and approaches such as these that the City of Tshwane can and will improve the lives of all its citizens, especially those living in the margins of society. 🌱

# YOU SEE AN INDUSTRY BEING TRANSFORMED

# WE SEE WHAT WENT INTO THAT

Putting eager minds in touch with the training that can change their lives and transform an industry is a passion at PPC.

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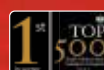


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Bricks and cement are basic requirements for any building project. They are also the unsung products that have opened opportunities for thousands of people, created employment, enabled entrepreneurs to create small businesses, earn a living and employ and upskill other people.



The bricklaying skills training funded by PPC will enable a new generation of specialist artisans

# PPC – bridging the skills gap, one brick at a time

**T**he fact is that bricklayers are always in demand,” says Njombo Lekula, Managing Director of PPC Southern Africa. “Whether the call is for someone to build a garden wall, braai area, do repairs or tackle a larger project, anyone who has skills, transport, some tools and a dash of determination can earn a living.

“That is why, this year, PPC introduced South Africa’s first bricklaying course for ‘bakkie builders’ – that intrepid breed of informal builders who are usually the first people called upon when something needs doing,” he explains.

“Until this year, however, many of these self-starters did not have the necessary knowledge about cement selection, creating mixes and the techniques needed to ensure that their projects would be totally fit for purpose. Often, the results have been mixed as far as quality is concerned.

“As South Africa’s largest cement producer, we felt we should be helping to create a new generation of bakkie builders – people with the knowledge and ability to deliver quality building projects.”

## Making a difference

The result of PPC’s determination to make a difference has been the two-week course

in bricklaying, which has the potential to change futures and provide a launching pad into the world of construction.

It has not just been people hoping to break out of poverty who are lining up to be trained. The course has also attracted unemployed young engineering and construction graduates looking for some practical experience to help kick-start their careers.

Thirteen students from Gauteng have already attended a course at the PPC Cement factory in Pretoria West. Within eight months, it is intended that more than 200 bakkie builders will be given a chance to improve their abilities.

“PPC understands that many attending the course will not have the funds to buy the tools necessary for bricklaying services after the course. In addition to the course, we are, therefore, assisting participants to buy the basic tools they require to start a bricklaying business,” says Lekula.

To ensure that access to the course is as easy as possible, PPC has partnered with private FET college Motheo Academy, an active participant in the built environment, to provide the training.

People wishing to enrol in a course, which is offered free of charge, can either apply to join a course, or be nominated by a retailer or supplier.

## Expanding programmes

Other courses that cover the theory and practice of bricklaying, plastering and construction management will soon be available across the country as PPC expands its efforts to promote skills development in the construction industry.

Programmes will include a 10-day plastering course covering wall plastering and the screeding of floors. A five-day management programme will include construction team management, health and safety, and the use and storage of construction materials.

All attendees completing the NQF level 3 (bricklaying and plastering) and NQF level 4 (construction management) programme will receive South African Qualifications Authority certificates.

“We believe that by helping create interest in construction at an informal, grassroots level – and further up the formal building chain – we will be encouraging more young people to consider construction as a career path.

“PPC is a proudly South African company. As such, we are committed to helping foster a vibrant construction industry so that the nation can reach its development goals. Ensuring this outcome can only be achieved by building the construction industry itself,” Lekula concludes. 🌱

For the City of Tshwane, the provision of affordable and sustainable access to electricity to all households in the municipal area remains one of the City's key service delivery priorities.

# Striving for electricity for all



**A**s unpacked in its Integrated Development Plan for the 2016-21 term of administration, the City committed itself to the provision of access to electricity as a basic service. This pledge was further translated into targeted deliverables, wherein the provision of access to electricity was identified as one of the critical deliverables that the City budgeted for and set out to deliver on.

In its quest to provide access to a reliable and sustainable supply of electricity, the City undertakes to connect households to the mains electricity supply, and upgrade, repair, refurbish and maintain the electricity infrastructure or network. The City also deals with illegal connections and tries to reduce uncounted-for electricity. Extending the provision of access to electricity to previously marginalised areas and addressing the backlog also mark focal areas.

While the City always makes strides to respond adequately to

the demand for electricity as a basic service needed by the residents, these intentions are constrained by a number of challenges, which continue to impede the response of the City to the needs of the communities it serves.

Compounding the challenges in the provision of access to electricity is the fact that the City has recorded countless illegal land invasions, which have contributed to the drastic increase in the number of households, especially in informal settlements. It is estimated that there are over 345 000 households in the informal settlements sited across Tshwane, and this places a significant strain on the City's ability to meet its access to electricity provision obligations.

## Providing access to citizens

The City has recently prioritised

the provision of electricity to areas without access, focusing specifically on low-cost housing through the implementation of the Electricity for All Programme. Although it has met with significant difficulties, which impeded the full realisation of the targets set, the City made a notable progress in the provision of access to electricity.

Through the New Connections Programme, the City supplies up to 11 kV electricity to all consumers in Tshwane. This takes into consideration the planning, processing and managing of all electrical supplies, and the speedy and accurate compilation of a quotation in accordance with the applicable tariff document, conditions of supply, by-laws and safety standards.

Although there was an observed underperformance with regard to

 **We cannot encourage development in Tshwane without supplying the needed infrastructure to support it.” Executive Mayor Cllr Randall Williams**



new electricity connections set to be achieved over the 2019/20 financial year, a total of 1 263 formal households were provided with access to electricity. The underperformance is attributed to the restrictions of the national lockdown, which was experienced from March 2020.

The national lockdown led to the suspension of the construction of projects that were implemented to provide the bulk infrastructure necessary in order to provide for the levels of access to electricity as targeted. It further reduced the capacity of the City and led to insufficient financial resources necessary to support the drive for access to electricity. In the main, new connections cater for the ad-hoc expansion of residential development in Tshwane. The need arises from private development for townships, land use applications (which include subdivisions). These are application driven and can be new upgrades of existing supplies for residences, businesses and industries.

### Electricity for All

The Electricity for All programme prioritises areas where there is no access to electricity, with a specific

focus on low-cost housing, formalised areas and informal settlements, ensuring that these areas are electrified. The programme contributes significantly to the reduction of the electricity access backlog by advancing the provision of new electricity connections to houses not formally connected to the grid.

It supports the provision of basic services in the form of electricity connections to households that were without electricity. Over the 2019/20 financial year, the City electrified a total of 468 households through the implementation of Electricity for All.

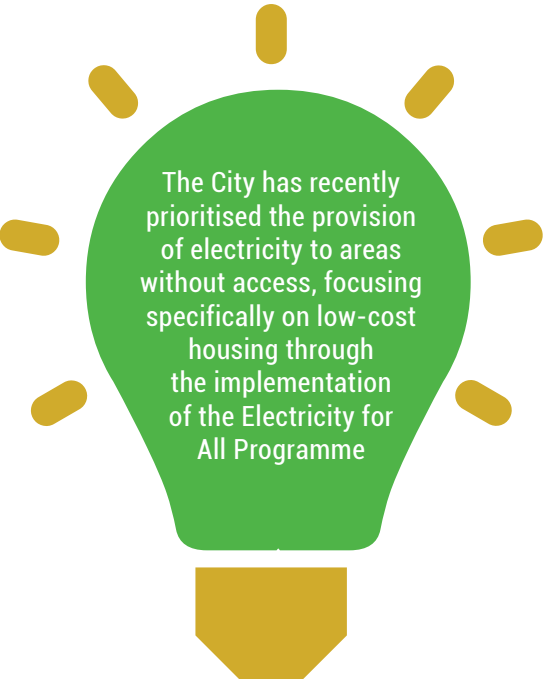
The communities that benefited from the Electricity for All programme include located in the following areas:

- Soshanguve Block MM – Region 1
- Soshanguve Ext 7 and 19, Zone 14 (informal settlement) – Region 1
- Booysens Ext 4 – Region 3
- Atteridgeville Ext 19 – Region 3
- Mamelodi Phomolong Erf 34 041 – Region 6
- Mahube Valley Ext 15 – Region 6
- Itereleng Informal Settlement and Zithobeni Ext 8 – Region 7.

### Progress report

In his 2021 State of the City Address, Executive Mayor Cllr Randall Williams reported that the new Wildebees Infeed Substation, which will link to Eskom and the rest of the Gauteng province, is on track to be completed by 2024 in partnership with Eskom.

“This is a critical project that is needed to allow our city to grow, to supply the rapidly developing eastern areas of Tshwane and to strengthen the backup supply to many other substations. We cannot encourage development in Tshwane

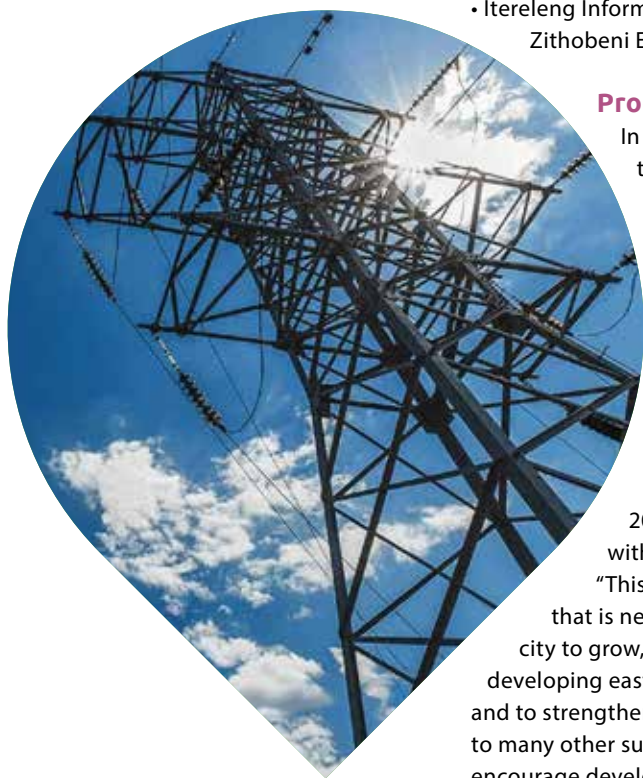


The City has recently prioritised the provision of electricity to areas without access, focusing specifically on low-cost housing through the implementation of the Electricity for All Programme

without supplying the needed infrastructure to support it. With this project, we are making a commitment to developers and residents that we can fix today's problems and build for tomorrow,” Williams stated.

“We are also at an advanced planning stage regarding the refurbishment of both the Mooikloof and Wapadrand Substations, which were damaged during fire incidents. The Utility Services Department is also cognisant of the damage illegal connections inflict on our infrastructure and the reliability of supply, while endangering the residents of Tshwane. This year, we have already conducted multiple removal operations and we will continue our efforts to protect our infrastructure and our people. Our Human Settlements Department is also playing a crucial role in facilitating development across Tshwane.

“These are endeavours by the City to effectively extend services to these areas. These projects will provide a significant improvement in the living standards of these communities. The projects will enhance safety and improve access to basic services in recognition of how important it is to uphold the dignity of those living in informal areas,” said Williams. 🌱



# PIONEERS IN WASTE-TO-ENERGY AND HYBRID GREEN RENEWABLE SOLUTIONS

Bio2Watt are climate-smart disrupters and enablers of a low-carbon South African energy landscape, delivering innovative green solutions that combine biogas and sustainable hybrid renewable energy technologies.

These solutions benefit the environment, reduce waste to landfills, support local industry through the beneficiation of organic waste, and create social upliftment.



WASTE

2

ENERGY

As a proudly South African climate-smart enterprise, Bio2Watt focuses on delivering hybrid renewable energy solutions that turn waste into a resource and create sustainable jobs for a greener future.

  
**bio2watt**  
PURELY GREEN ENERGY

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# A green energy pioneer

As a proudly South African company, Bio2Watt (B2W) is a pioneer in the alternative energy field and a leader in industrial-scale biogas waste-to-energy.

**E**stablished in 2007, B2W has successfully secured a number of firsts for South Africa, including the groundbreaking Bronkhorstspuit Biogas Plant (BBP) east of Tshwane, which started supplying power in 2015. BBP is a reference in terms of the private sale of power directly to industry.

B2W has been partnering with large South African metros to provide green hybrid renewable energy solutions to industrial sector clients, enabling them to achieve their green targets while creating jobs and commercial opportunities for the benefit of the city.

In the absence of receiving green power, South African companies can and/or will lose market share to industries located elsewhere in the world where their green credentials are achieved – this applies to manufacturing facilities throughout the value chain.

B2W will contribute to diversifying the South African energy mix away from fossil fuels and contribute to a just energy transition with the creation of much-needed green jobs.

## Purely green and hybrid solutions

While biogas waste-to-energy forms the bedrock of its energy technological solutions, B2W has complemented its offerings with utility-scale solar photovoltaics (PVs) and battery energy storage systems (BESS), culminating in a full hybrid renewable energy offering, which is driven by its clients' needs.

These include ensuring compliance with climate change objectives, while adhering to stable and competitive pricing for their energy demands; B2W's innovative green energy hybrid solutions unequivocally meet the needs of its clients.

B2W's hybrid approach to power entails a blend of biogas and BESS, and high-yield solar supplied from a solar PV park. The latter would be wheeled through the power utility's transmission network. The power will empower blue-chip companies and metros alike to remain competitive, and relevant in a low-carbon future.

B2W's 'purely green energy' approach presents a strong environmental impact that fosters the production of clean energy from a variety of natural sources and utilises what typically goes into landfills in the energy generation processes, aiding in decreasing water and air pollution. When this merges with B2W's hybrid renewable energy offering, demonstrable track record and sustainability initiatives, the company's clients and the metros are the ones who benefit. Municipalities are presented with a double bonus, being a stable grid and landfill space savings. The numerous benefits can be seen through B2W's achievements, which include, but are not limited to, the following:

- job creation
- infrastructure projects capital investment, which contributes to the City's GDP growth and localisation initiatives

- green power, augmenting clients' business growth and objectives in a globally changing, low-carbon environment
  - bolstering local markets impacted by mitigating electricity shortages
  - attracting foreign direct investment
  - processing hundreds of thousands of tonnes of organic waste per annum and offsetting hundreds of thousands of tonnes of carbon dioxide per annum, in line with the City's sustainability targets
  - environmental benefits of the digestate (final spent product), which can be used to rehabilitate decommissioned mines and as a soil enhancer
  - energy technology mix that offers a cost-effective benefit
  - commitment to using a percentage of investment towards the upliftment of adjacent communities
  - extending the life of existing landfill sites by removing organic waste from traditional disposal
  - opportunity for the City to offtake excess power at competitive rates, benefiting the City's green objectives.
- B2W's next steps see it expanding its national footprint based on its experience in waste-to-energy. This is underpinned by the need for decentralised power solutions combined with solar PV and BESS. B2W's extensive industry experience has afforded it the opportunity to become a trusted, versatile and dependable company that attracts local and international interests. 🌱

# Taking environmental concerns to heart

The City of Tshwane recognises that managing waste effectively and safeguarding our natural environments significantly contribute to promoting environmentally friendly communities as well as health and safety.

**A**s a champion of sustainable growth and development, the City believes that achieving sustainable development objectives depends heavily on the state of the environmental health. Therefore, providing a predictable, dependable and sustainable waste management service is one of the critical priorities the City focused on.

As part of its interventions for effective waste management, during the 2019/20 financial year, the City focused mainly on the following:

- collecting and transporting general waste to disposal facilities on a daily and weekly basis
- providing a bulk waste collection service – collecting and transporting bulk waste
- cleaning public spaces (picking up litter, preventing and clearing illegal dumping sites)
- managing waste disposal facilities
- minimising waste
- waste recycling
- providing a bulk waste collection service – collecting and transporting bulk waste
- promoting and enforcing effective compliance with legislation.

## Waste collection

Through a process of decentralisation, the City's waste management services are rendered in seven different regions, varying from a densely populated urban environment with short travelling distances between service points, to a sparsely populated rural environment with long travelling distances between service points.

The City provides all formal households, business properties and recognised informal settlements with access to a basic waste service, covering a total of 2 338 proclaimed areas and more than 145 informal areas. Waste removal services are provided consistently at least once a week. Waste is collected using a combination of kerbside household collection, business daily collection, bulk collection, and basic (plastic bags and communal skip collection) collection services in all the regions across Tshwane.

## Waste disposal sites

The City has four landfill sites that are managed according to the minimum requirements for waste disposal. These landfill sites are permitted and

operated according to the minimum requirements for waste disposal at landfills, as published by the former Department of Water Affairs and Forestry.

An air space assessment study covering all four active landfill sites was conducted in the 2018/19 financial year to determine the amount of space available against the current rate of landfill usage and as part of effective waste disposal management in the monitoring of landfill compliance in accordance with operating requirements.

Of importance, the lifespan of landfill sites is also dependent on the disposal rate and waste minimisation. The City is in the process of preparing for the extension of landfill site height to accommodate additional waste and extension of life. This is subject to approval by the Department of Water and Sanitation, as well as the Gauteng Department of Agriculture and Rural Development.

The City-compliant landfill sites – and their remaining lifespan, calculated as at 21 February 2019 – are listed below:

- Ga-Rankuwa – 13 years
- Hatherley – 12 years
- Bronkhorstspuit – 6 years
- Soshanguve – 13 years.

As can clearly be seen, this is of particular concern, yet is in no way unique to the City of Tshwane, with





eThekweni and Ekurhuleni the only metros in the country that have somewhat of a buffer in the lifespan of their landfills.

Further, it generally takes a municipality at least five years to obtain a waste licence, and an additional 12 months for the construction of a new landfill facility – without any public opposition to such a site. This clearly indicates the priority level that is required to ensure the City does not run of landfill airspace completely.

### Illegal dumping

In an effort to address illegal dumping challenges, the City allocated over R43 million in the 2019/20 financial year towards a strategy aimed at addressing this challenge. With regard to the illegal dumping strategy, the City undertook a massive illegal dumping clean-up drive, which included the following, among other interventions:

- the identification of illegal dumping hotspots and establishment of clean-up operations at these hotspots across Tshwane
- the allocation of equipment per region in Tshwane for intense clean-up of the dumped waste
- the implementation of rehabilitation measures at the hotspots
- law enforcement efforts through the issuing of infringement notices to those contravening illegal dumping practices.

### Environmental management

The City of Tshwane also takes its role as custodian of the environment very seriously and during the 2019/20 financial year, the City made commendable progress in the implementation of measures that promote effective environmental management. This is despite many challenges experienced that negatively impacted the full achievement of the desired results. Some of the critical milestones and results achieved include the following:

- The City planted a total of 433 fruit and shade trees in schools and road reserves, and some were donated to community projects to plant at their respective projects.
- The City's Youth Community Outreach Programme coordinators joined forces with 48 schools across Tshwane and conducted environmental audits. The programme raised awareness



during Wetland Day, Water Week, Water Month, Birding Month and Earth Hour celebrations.

- The City appointed a service provider (a multidisciplinary engineering and architecture company) to perform regular maintenance and calibrations on six of the ambient air quality monitoring stations in an effort to reduce the air pollution and improve air quality.
- Various awareness campaigns and outreach programmes were held within Tshwane in an effort to promote active participation and awareness on environmental-management-related matters.
- There was effective management of nature reserves and resorts, which recorded a reasonable number of visitors and contributed reasonably to the City's revenue.
- There were strides made in the management of cemeteries.

### Keeping a city clean

"We must safeguard our natural environment. We all have a responsibility to ensure that we protect our surroundings and maintain a clean living and working environment," said Executive Mayor Cllr Randall Williams during his 2021 State of the City Address.

The 2030 Agenda for Sustainable Development, adopted by all United Nations Member States in 2015, has at its core the 17 Sustainable Development Goals, which aim to improve the quality of life of all people, while tackling climate change, and protecting and preserving our environment.

Following this is among the reasons why Williams reintroduced the Tswelopele Clean-up Campaign, which seeks to ensure that the City spends time in different communities around Tshwane by joining activists and residents in cleaning up areas where illegal dumping or littering is prevalent.

The City's Environmental Management and Parks Division plays a critical role to ensure compliance with all the necessary laws and regulations to prevent any environmental degradation. "However, pollution of the City's public parks and open spaces has been a major concern," said Williams. "This is why we have introduced the innovative Adopt-a-Spot initiative, which will give the public the opportunity to adopt public open spaces for cleaning and beautification. The policy was adopted at the end of January 2021, and residents and business owners will now have the opportunity to join hands with the City to beautify our parks and public open spaces, providing clean and safe spaces for families to enjoy."

Preventing environmental degradation is a collective effort, and all of society's stakeholders have a part to play. "This why when we came into office in November 2020, we declared war on the scourge of illegal dumping across Tshwane. To date we





## The Adopt-a-Spot Programme

have cleaned and cleared close to 4 000 illegal dumping sites.

"We have also identified 671 hotspots where illegal dumping takes place on an almost daily basis. And here we need the eyes and ears of our residents to report illegal dumpers to the Tshwane Metro Police Department (TMPD) so that they can issue fines to offenders," Williams added.

To support these efforts, the Waste Management Services Division established a clear framework of cooperation with the TMPD for the reporting of illegal dumping and the enforcement of the Waste Management By-Law.

The Chief of Police has also issued a directive to all TMPD officers to enforce these by-laws without fear or favour, while City officials obtained an approved fine schedule from the Pretoria Magistrates' Court.

### Integrated planning

"It is important to note that if any municipality wants to manage its waste in a sustainable way, it needs a comprehensive plan that addresses every aspect of the waste management value chain. This is why I gave instruction to the Waste Management Services Division to finalise the City's Integrated Waste Management Plan (IWMP)," explained the Mayor.

The IWMP includes the following:

- acquiring additional landfill space (which is already at an advanced stage)
- revising the operational management of landfill and garden refuse transfer sites (which is almost complete)
- implementing a separation-at-source campaign
- promoting a recycling policy that shows how communities should recycle
- incorporating the informal sector, such as waste pickers, into the waste management stream
- identifying a site and capital budget request to establish a materials recycling facility.

"I am happy to announce that the first draft of the plan is already in circulation among City departments for comments and, once approved by Council, will set the City on a more sustainable waste management course," he announced. 🌱

The City of Tshwane's Adopt-a-Spot Programme is aimed at encouraging the public to take care of the environment by removing illegal dumping, cutting grass, removing alien vegetation and performing overall management and maintenance activities relating to parks and other public open spaces.

The objectives of the programme are to:

- encourage the public to take care of the environment by removing illegal dumping, cutting grass, removing alien vegetation and performing overall management and maintenance activities relating to parks and other public open spaces
- guide a programme to overcome the challenges of ecological degradation, illegal land use, illegal dumping, criminal activities and the lack of safety in public open spaces
- facilitate partnerships with active citizenry in enhancing the aesthetic and ecological functionality of Tshwane's public open spaces.

The programme is focused on underdeveloped, undeveloped or semi-developed municipal properties zoned as public open spaces. Only sites that are under the control and management of, or owned by, the City of Tshwane as municipal properties will be considered for adoption. The City must be of the opinion that the particular site is capable of being maintained through private funding. These sites include the following:

- illegal dumping sites zoned as public open spaces
- recreational parks and facilities
- rivers, wetlands, flood plains, ridges and mountains
- any dilapidated area zoned as public open space
- unused road reserves and servitudes
- other properties that the City may identify from time to time.

The Adopt-a-Spot Programme will allow members of the public to make use of, maintain and manage these public open spaces for a renewable period not exceeding two years and 11 months. The development of aesthetically pleasing, healthy and safe public landscapes, open spaces and recreational parks will ultimately benefit all members of the community.

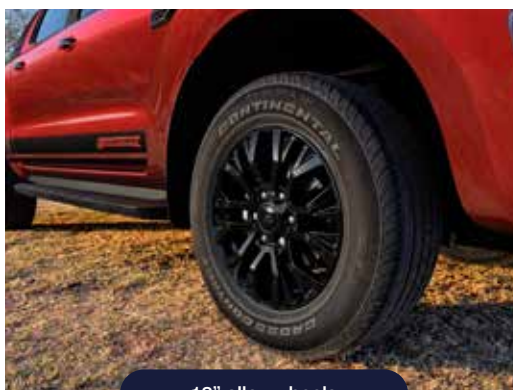




# Limited-edition Stormtrak now available



Power Roller Shutter



18" alloy wheels



Black mesh grille

The recently announced Ranger Stormtrak has made its debut in South Africa!

**T**he Ranger Stormtrak gains several outlandish design elements, including a striking black mesh grille with red inserts, black roof rails and 18-inch gloss black alloy wheels, among others.

The newcomer can be identified by the 3D Stormtrak logos on the front doors and rear tailgate in the model-specific Lucid Red colour. The Stormtrak is also available in Sea Grey, Frozen White and Blue Lightning.

The styling upgrades to the Stormtrak are matched with carefully considered convenience features to aid day-to-day practicality, including a Power Roller Shutter for the rear load compartment, which allows a customer to electronically open or close the protective shutter over the loadbox and provides a convenient method to securely stow cargo out of sight.

The intelligent Power Roller Shutter can be securely locked in any position and has also been designed with an anti-pinch feature to prevent injury or damage when contact is made with an object.

Adding further versatility is the adjustable bed divider kit that allows the owner to compartmentalise the cargo area, thus preventing goods from shifting around when driving. A drop-in bedliner provides a useful 12 V socket

for powering accessories such as a camping fridge.

## A premium cabin

Inside the cabin, you are greeted with luxury and attention to detail – including illuminated front scuff plates. The premium leather seats are replete with striking red stitching, which is also found throughout the leather-trimmed cabin, further enhancing the sporty ambience.

The premium level of standard features in the Stormtrak is exceptional, including the SYNC<sup>3</sup> infotainment system with embedded navigation, Apple CarPlay and Android Auto, as well as a USB charging port located in the rearview mirror for fitment of a dash cam.

The Stormtrak is equipped with Ford's FordPass functionality that allows owners to remotely access numerous vehicle features from their phone – such as remote and scheduled starts to either cool or heat the cabin, fuel level, tyre pressure and Vehicle Health Alerts, which can be sent directly to a smart device pre-empting service needs, allowing customers instant access to Ford's 24-hour emergency Roadside Assistance.

## Leading safety features


As standard is a list of innovative safety systems and driver aids, such as Adaptive Cruise Control with Forward Collision

Alert, Autonomous Emergency Braking, Lane Keeping Alert and Lane Keeping Aid, and Driver Alert System.

Safety is further aided by the fitment of LED headlamps as standard for improved safety when driving at night. Daytime visibility is also improved with the inclusion of the distinctive LED daytime running lights.

The new Stormtrak further inherits Ford's innovative Semi-Automatic Parallel Park Assist, that takes the hassle out of parallel parking by using ultrasonic sensors on the bumpers that search for parking spaces that are big enough to park the vehicle and alert the driver when a suitable spot is found. The vehicle is then steered into the slot using electric power-assisted steering and sensors. All the driver needs do is operate the accelerator and brake, and select the appropriate gear as prompted by Park Assist.

The Ranger Stormtrak is powered by Ford's 2.0-litre Bi-Turbo engine and is paired with an advanced 10-speed automatic transmission that delivers seamless shifts matched to responsive performance and impressive fuel economy.

The Ranger Stormtrak is priced at R790 300 for the 4x2 model, while the off-road ready 4x4 model costs R846 500. All prices include VAT. 

**Founded in 2003**

Multi-disciplinary infrastructure  
consulting company



**Our areas of  
expertise include:**

- Architecture
- Civil Engineering
- Electrical Engineering
- Mechanical Engineering
- Quantity Surveying
- Structural Engineering
- Town Planning



**DITLOU CONSULTING always strives to meet the following objectives:**

- To promote professional excellence through dedication and provision of innovative and appropriate solutions
- To continuously liaise with the client and beneficiary communities, ensuring their maximum participation and involvement in projects
- To transfer skills and impart knowledge to beneficiaries and communities within which the projects are undertaken
- To always complete our projects on budget and within project duration
- To conduct our business with honesty, integrity, respect, excellence, diligence, openness and fairness
- To have a well-balanced approach to development taking all relevant environmental aspects into consideration, which also seeks to protect, preserve and enhance the environment
- To treat all our suppliers fairly and professionally according to sound and legal business practices

**Affiliated to the following associations:**



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# Solving community problems, together

Ditlou Consulting was founded in 2003 as a consulting firm specialising in civil and structural engineering but has since evolved into a multi-disciplinary infrastructure consulting company.

**T**he company is led by CEO Otshepeng Ranamane and COO Poppy Nkambule, who are both professionally registered engineers with the Engineering Council of South Africa (ECSA). Under their leadership, the company boasts a dynamic team of highly qualified professionals, who are registered with their respective organisations, including ECSA, SACAP (South African Council for Architectural Profession), SACPCMP (South African Council for Project & Construction Management Professions), SACPLAN (South African Council for Planners), and SACQSP (South African Council for Quantity Surveying Profession).

## Solving problems

Ditlou Consulting's core purpose is to solve community problems – with a focus on improving the lives of South Africa's citizens through the provision of sound technical solutions. The company aims to uphold client satisfaction by ensuring that it provides the best-quality solutions, which are also cost-effective and delivered in a timely fashion with a positive attitude. Over the medium term, the company's goal

is to be regarded as the best firm in its field locally. Over the long term, this goal extends to Ditlou Consulting achieving the same feat internationally.

## Major clients

Some of the company's main clients are public sector clients ranging from metropolitan municipalities such as the City of Tshwane, City of Ekurhuleni, City of Johannesburg and its subsidiaries, to smaller local municipalities such as Midvaal Local Municipality, Madibeng Local Municipality, Moretele Local Municipality, Mogale City Local Municipality, Thembisile Hani Local Municipality, Maluti-a-Phofung Local Municipality, Nkangala District Municipality, and Thabazimbi Local Municipality.

Provincial government clients such as the Gauteng Department of Infrastructure Development (GDID) and the Gauteng Department of Roads & Transport (Gautrans) also form part of a large array of clients that the company serves.


## Notable projects

Ditlou Consulting has been involved in over 60 notable projects spanning

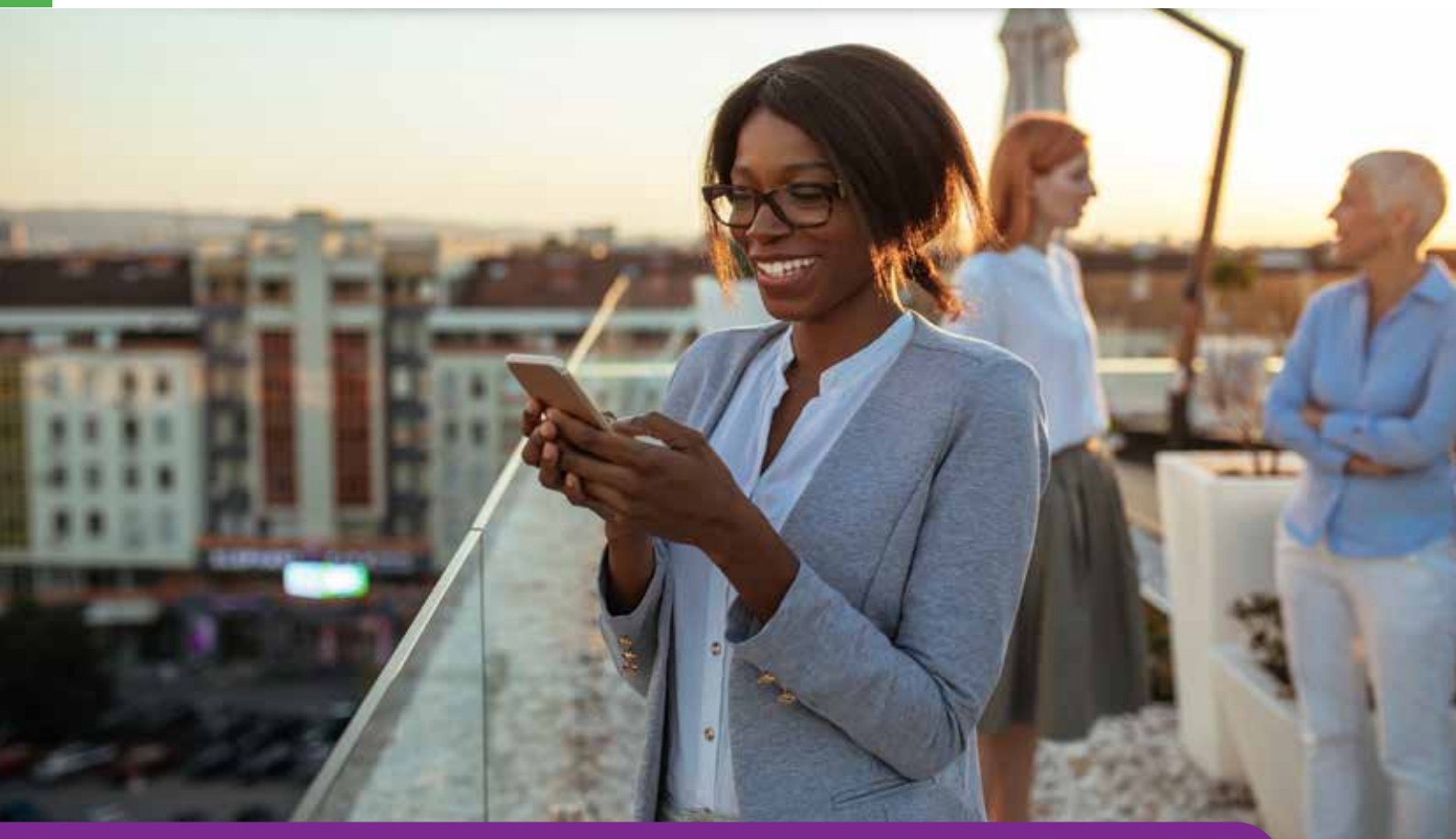
the breadth of the civil engineering field since it was founded. Currently, it is delivering work on a number of projects, with some of the most notable ones listed below.

For the Housing Company Tshwane, Ditlou is currently involved in the Social Housing Development at Chantelle Ext. 39, Pretoria, which is valued at R354 million. Also within the Tshwane region, work is being undertaken for the City on a Social Development Centre, which is being constructed in the Winterveldt area, at a project value of some R55 million.

Elsewhere in Gauteng, Ditlou is working on the implementation of the Legislature Building at Duduza Customer Care Centre for the City of Ekurhuleni. This project is valued at R37.5 million. In providing services for the Johannesburg Social Housing Company, Ditlou is involved in the R193 million de-densification of hostels and informal settlements at 2 077 Roosevelt Street in Alexandra, Region E.

On the province's West Rand, the firm is currently widening Robert Broom Drive in Krugersdorp for Mogale City Municipality. This second-phase project is valued at R18 million. 





## Creating a future-ready city

As the world moves towards the Fourth Industrial Revolution – and accompanying concepts and systems such as the internet of things and big data become the norm – it's vital for cities to improve their rate of operational digitalisation and ensure the provision of ICT services to their citizens.



**U**nder Executive Mayor Cllr Randall Williams, the use of technology to drive efficient processes in the City of Tshwane has been identified as a crucial deliverable. Adding to this is of course the advent of the Covid-19 pandemic, which has vastly accelerated the drive to digitalise as many functions as possible, in both the public and private sector.

### Automating city planning

This is why the City is set to launch the first phase of automating city planning functions. As an example, processes relating to land development applications are mainly manual, requiring customers to visit walk-in centres to submit and get feedback on applications. Sometimes a customer has to visit a walk-in centre at least three times to finalise the submission of an application,

with various activities performed at different counters and sometimes at different buildings.

In this regard, several land development application forms have been identified for automation on the e-Tshwane platform, which include rezoning applications, removal applications, amendment or suspension of title conditions, building applications and township establishment applications. The





automation of these processes will provide a new channel for customers to engage with the City, while streamlining and optimising applications and approval processes.

Furthermore, the automation will also enable data analytics to be performed with the view to further optimise the process by identifying any further inefficiencies and ensure the easy retrieval of applications and general tracking.

### It's paperless

The existing e-Tshwane platform has long been a secure, free online service that allows homeowners, companies, property managing agents and tenants to electronically interact with the City. The service offers ratepayers the ability to interact with the City via the internet.

### The City is in the process of automating certain city planning functions, with the idea of making repeated in-person visits to municipal offices a thing of the past

Registration is a simple, pain-free process and that provides immediate access to accounts and services. Once registered, users can upload meter readings, pay traffic fines, lodge queries, apply for services, view statements, and make payments for accounts from the comfort of their home or office. The e-Tshwane mobile site offers the added convenience of interacting via your mobile phone or tablet device.

The system electronically controls all referencing ensuring that rates payments are correctly allocated. The City of Tshwane is not alone in the challenges faced with manual entry of reference numbers in banking and third-party systems. A payment made

via an e-Tshwane payment method immediately reflects within e-Tshwane and provides proof of payment.

Of course, while there are a laundry list of benefits for the City's customers in using its e-Tshwane services, the City also benefits in the following ways:

- improved debt collections and reduced debtor days provide better funding to improve services
- improved account reconciliation reduces errors and costs
- faster query resolution
- reduction in costs related to the termination/reconnection of services caused by payment delays and errors in referencing
- reduced turnaround between distribution of bill and payment
- reduced bank charges and third-party service fees
- savings on postage and printing costs
- personnel cost savings, as staff are better utilised to offer proactive service to consumers
- updated and accurate information provided from ratepayers.

The City has additionally moved the registration process for its suppliers/vendors online to its e-procurement platform. Again, this offers numerous benefits on both sides of the coin, and helps vendors to remain compliant through the management of documentation that expires annually such as BBBEE and tax certificates.

### Wi-Fi programme

Coming back to delivering services to its citizens on the ground, the City

also continues to expand its Wi-Fi programme, popularly known as TshWi-Fi. In the current term of office, 665 new free TshWi-Fi zone sites have been installed. This programme continues to contribute to ensuring that there is connectedness among residents and enhanced access to digital services.

The City has also put strategies in place to expand the network over the next three years, and is introducing several new skills development features that will be available to Tshwane residents free of charge. It is envisioned that Tshwane will have full access to Wi-Fi by the end of this period.

In response to the great uptake among users, as well as the growth in demand and Covid-19-induced necessity for connectivity, the City decided to offer residents access to more data. It doubled the free access data allocation from 500 MB to 1 GB per person per day, at speeds of up to 15 Mbps, as well as uncapped access to research and educational sites.

As mentioned, there has been significant uptake of these services across Tshwane. The number of connected devices per month is over 184 000 – for which the data would have cost in the region of R27 million for all networks. In order to maintain this excellent service, the City appeals to its communities to continue to be guardians of this critical infrastructure by calling out and reporting any acts of vandalism that affect the availability of services. 📶





SIYAZI offers transport solutions to both the public and private sectors.

## CLIENTS:

- ▶ Municipalities
- ▶ Commercial developers
- ▶ Residential developers
- ▶ Transport operators (e.g. Taxi industry)



## SERVICES:

- ▶ Data surveys (electronically)
- ▶ Database analyses
- ▶ Geographical Information Systems (GIS) development
- ▶ Development planning
- ▶ Travel demand management and modelling
- ▶ Community service (conflict handling, mediation and facilitation)
- ▶ Training and capacity building
- ▶ Economic analysis, municipal finance
- ▶ Public transport management
- ▶ Policy and strategy development
- ▶ Development of cooperatives
- ▶ Development and implementation of route colour coding systems

## OFFICES IN:

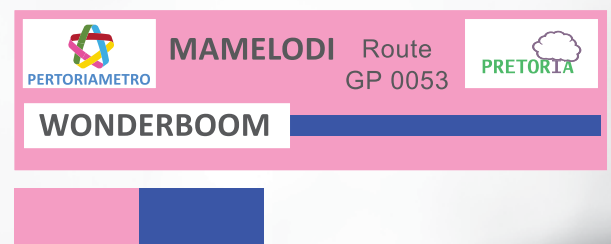
- ▶ Free State
- ▶ Gauteng
- ▶ KwaZulu-Natal
- ▶ Limpopo
- ▶ Mpumalanga
- ▶ North West

## COLOUR CODING SYSTEM

BEFORE



AFTER



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SIYAZI is a registered member of the Engineering Council of South Africa (ECSA).



## PUBLIC TRANSPORT PLANNING:

- ▶ Operating licence strategies (OLSs)
- ▶ Public transport plans
- ▶ Integrated transport plans:  
Freight, public transport (taxis, buses and private cars)
- ▶ Needs determination of users and operators
- ▶ System design
- ▶ Taxi rank and bus terminus design
- ▶ Taxi industry facilitation
- ▶ Taxi rank management strategies
- ▶ Determine transportation vision, goals and objectives on various spheres of government
- ▶ Policy development
- ▶ Modal integration strategies
- ▶ Taxi recapitalisation plans



## TRAFFIC ENGINEERING:

- ▶ Impact studies for developments such as shopping centres, filling stations and residential areas
- ▶ Setting and synchronisation of traffic lights
- ▶ Parking studies, including issues such as parking layout, parking demand and parking supply
- ▶ Designs for pedestrian and bicycle facilities

## COMMUNITY INVOLVEMENT:

- ▶ Academising empowerment of students
- ▶ Blankets for gogos



Rejoicing with Siyazi at an outreach event.



# Capacitating emergency and enforcement services

Making a city safer is strongly dependent on ensuring that the appropriate vehicles, facilities and manpower are in place to protect and save lives. In recent years, the City of Tshwane has made real progress in this regard.

**T**he creation of a safe and caring city is critical for municipalities wanting to attract investment and businesses. This requires equipping the relevant departments adequately so that they can enforce city by-laws and respond appropriately when tragedy strikes.

Over the last five years, the City of Tshwane has made significant investments into capacitating its Emergency Services Department. The department has procured 94 vehicles through the vehicle replacement programme.

## Specialised emergency vehicles

This includes a number of highly specialised vehicles, with some being

among the first of their kind in the country. These include the following:

- two specialised hazardous material and incident command vehicles
- two specialised ambulances, including a special infectious diseases unit and an intensive-care unit
- an aircraft rescue and firefighting vehicle for Wonderboom National Airport
- two armoured vehicles, including a fire engine and an ambulance
- 34 ambulances
- a multi-patient transporter
- 14 fire engines
- 16 rapid intervention vehicles with the capacity to perform rescues, and attend to vehicle and smaller fires
- a rope rescue vehicle
- a swift water rescue vehicle

- four double-cab bushfire vehicles
- nine response vehicles
- six utility vehicles.

The City's Emergency Services Department is at the forefront of responding to disasters and tragedies in the city. Whether they arise from flooding, fires, adverse weather conditions or car accidents, the emergency teams respond rapidly to ensure that Tshwane residents receive the support they need.

Beyond these significant vehicle acquisitions, the City has also made great progress towards the completion of the Mamelodi Fire Station. Unfortunately, vandalism that took place during June this year has delayed the official opening of the facility. However, the building is essentially complete and will



hopefully open its doors within the financial year. The fire station will provide significant support to the residents in the surrounding areas.

### TMPD

The Tshwane Metro Police Department (TMPD) is also at the forefront of helping to keep the city residents safe through by-law enforcement, traffic policing and crime prevention. Among Executive Mayor Cllr Randall Williams' key priorities when he took office was to secure and safeguard the inner city.

The functions of the TMPD are as follows:

- Providing visible policing in the form of pedestrian patrols, motorcycle patrols, bicycle patrols, motor vehicle patrols, equestrian patrols and canine patrols in order to reduce crime and enhance crime detection, traffic and by-law enforcement and surveillance.
- Regenerating the inner city by regulating parking spaces and improving parking bay management.
- Establishing a centralised, 24/7 command and control centre that functions as an interface between the public and applicable City departments.
- Preventing drug and alcohol abuse through a holistic and multidisciplinary approach with other safety and security partners, in order to integrate resources and implement a coordinated attack on the drivers of substance abuse.
- Preventing violence against women and children through the TMPD's educational and awareness initiatives. This will promote the rights enshrined in the Constitution in order to reduce gender-based violence in Tshwane.
- Strengthening intergovernmental relations to improve policing.

As a result of this administration's commitment, the City is set to launch the first dedicated Inner City Policing Unit in a major metropolitan city in the country. It has also secured a site for a satellite TMPD station, which will be based in the inner city and be supported by 100 TMPD officers. This is a massive achievement and progressive step for the City in terms of active crime prevention.

During the 2019/20 financial year, the following were executed the TMPD:

- A total of 560 road policing interventions were carried out.
- A total of 578 crime prevention interventions were held.
- A total of 431 by-law policing operations and interventions were executed to reduce by-law transgressions.
- A total of 410 crime prevention arrests were carried out.
- A total of 13 260 infringement notices were issued for road traffic and by-law offences in across the municipal area.
- More than 44 903 road traffic accidents were attended to.

### Keeping an eye on crime

With the implementation of digital surveillance systems becoming more widespread across the world's major cities, Tshwane has also followed suit. After all, it is a City committed to deploying technology to improve its processes and the lives of its citizens.

As such, the City is in the process of acquiring and implementing a CCTV network system in greater parts of Tshwane. The CCTV network system aims to capture and record all crime-related activities within the municipal area. The system includes computer monitors, uninterruptable power supply consoles, cameras and network infrastructure, and

will significantly strengthen the City's capabilities in terms of crime prevention. High-quality CCTV systems also provide invaluable evidence when perpetrators are caught on camera, which may make prosecution easier for the state's legal professionals. The entire CCTV project is valued at over R100 million. 📹





# Your one-stop engineering solutions provider

Tolplan is an independent South African management and engineering consultancy, with 39 years of experience. The Level 1 BBBEE company employs about 60 staff members in the fields of transportation, civil, electronic, electrical and industrial engineering, information technology, economic and financial modelling and analysis, accounting and management.

**W**e provide a comprehensive range of innovative and cost-effective engineering solutions, services and products to the South African National Roads Agency, metropolitan and local authorities, and private clients.

Our innovative approach to problem-solving is based on solid expertise across multiple disciplines and starts with a top-down systems approach.

## Transport planning and modelling, traffic engineering

Tolplan's team of transport engineers specialises in transport modelling and traffic simulation. Our experience spans from strategic transport modelling for the City of Tshwane's Road Master Plan to meso- and microsimulation models for the A Re Yeng bus routes, as well as the Hazeldean, Mooikloof, Brooklyn and Monavoni development areas. We have internationally recognised skills and experience with transport projects and the presentation of specialised software training courses in the DRC, Ghana, Greece, Lesotho, Mozambique, the UAE, Uganda and Zimbabwe.

## Multi-disciplinary engineering of road and related infrastructure

Tolplan planned, designed and supervised the implementation of more than 40 toll plazas over almost as many years. This included the infrastructure for the Gauteng Open Road Tolling project, which comprised 84 toll gantries across multi-lane freeways, 42 technical shelters and the associated motorway roadworks, a 20 000 m<sup>2</sup> central operations centre and 14 satellite centres. Our skills and experience include investigations into and the multi-

disciplinary design of upgrades and solutions for road infrastructure, bridges, street lighting, non-motorised transport and BRT provisioning.

## Project and contract management

Tolplan's service capability covers the complete project life cycle – from concept development to detailed design, financing, planning approvals and construction supervision for small- to large-scale projects. We have the capability to develop and manage specific solutions to ensure that clients' and stakeholders' needs are met. Project services can be delivered through several contract frameworks ranging from traditional 'designed by the employer' to EPCM models.

We have extensive experience in acting as agents for employers and our contract management skills include extensive knowledge of a range of standard conditions of contract. We often perform the roles of FIDIC engineers, Gold Book Employers' representatives, as well as CTROM, NEC, JBCC and GCC contract managers.

## Intelligent transport systems

Tolplan has successfully executed the planning, design, implementation and operations and maintenance stages of many intelligent transport system (ITS) projects. These systems include traffic control centres, advanced traffic management systems (APTMS), advanced traffic information systems (ATIS), real-time traffic logging and reporting, CCTV surveillance, incident detection and management, variable message signs (VMS), urban traffic control systems (UTC), bus rapid transit (BRT), and fibre-optic and other communication links.

## BRT planning, implementation and operations

Tolplan specialises in projects covering the whole BRT design, build, operate and maintain (DBOM) life cycle. Our extensive experience in this field encompasses feasibility studies, planning, integration, procurement (including drafting tender documents and technical specifications), implementation supervision, operations supervision and optimisation.

Our BRT expertise spans the typical workstreams and includes systems and operations for automated fare collection (AFC), account-based ticketing (ABT), advanced public transport management systems (APTMS), urban traffic control (UTC), and the integration of these and any other related aspects like stations, depots, communications, buses and control centres.

## Commissioning, operations and maintenance of transport infrastructure

The commissioning and operations of multi-disciplinary transport infrastructure projects are complex in nature, particularly where operational and integration planning is required, such as where ITS and/or BRT applications are involved.

Tolplan has excelled as a transport infrastructure designer, project manager and operations specialist since 1982, and possesses sound know-how and in-house expertise covering the full spectrum of disciplines involved. Services provided in this space include operational planning and ongoing management and integration planning, management and facilitation. 🌱



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We **unlock economic development opportunities** on behalf of communities and regions. We achieve this through end-to-end project conceptualisation and development. We also develop strategic economic development and infrastructure master plans.



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