



INFRASTRUCTURE PORTFOLIO

CAPABILITY STATEMENT





Our infrastructure portfolio at a glance

Our MPAMOT Africa infrastructure team provides innovative solutions to the challenges facing the built and infrastructure sector. With a 25-year legacy as a leading engineering and development consultancy with nearly 200 professional engineers, and specialists, we are often the service provider of choice for infrastructure engineering projects in Africa.

MPAMOT has been involved in the design, project management and construction monitoring of a range of flagship projects such as Lesotho Highlands Water Project Advanced Infrastructure, Soccer City, Cote d'Or Multi Sports Complex, Cradle of Humankind, Sappi Saiccor Project Vulindlela Expansion, Witwatersrand University Student accommodation, Department of Environmental Affairs head office, BMW head office, Port of Ngqura operational buildings, Nelson Mandela Children's Hospital, Netcare Milpark Hospital and Erand Water Tower, to name but a few.

As a consultancy with home-grown talent and global experience we draw on a range of skills and insights that provide innovative design solutions and enhance building performance through application of Green Building and sustainability principles.



Our portfolio of services

Delivering value through building and infrastructure development



Building and urban
infrastructure



Bulk civil services



Mechanical and
Electrical



Water and Waste
Water



Project, Programme,
and Construction
Management

Built environment

Water and Waste Water

Project, Programme, and Construction Management



Our MPAMOT infrastructure team has contributed to and led a wide range of flagship infrastructure projects on the continent. Our intervention on projects has long-lasting impacts on communities and society, promoting economic growth and advancing environmental sustainability and resilience outcomes.

We look forward to learning more about your project and exploring ways to assist you with infrastructure feasibility studies, designs, and project management solutions.



Shaun Ramsarup,
Infrastructure Portfolio Director
Email: shaunr@mpamot.com



Our infrastructure management team

Our highly experienced and diverse infrastructure team has both local homegrown insight, and global experience that enable us to drive a full one-stop-end-to-end service throughout the project lifecycle. Empowerment and skills transfer forms part of our ethos and we have seasoned engineers that provide project oversight, mentorship, and guidance on projects. Our young engineers, technicians and technologists are supported in their experiential learning journey, and we support our candidates working towards professional registration.



Mike Aldous
Green building and sustainability lead



Rob Bryant
Civil and building services lead



Erika Scheepers
Structures lead



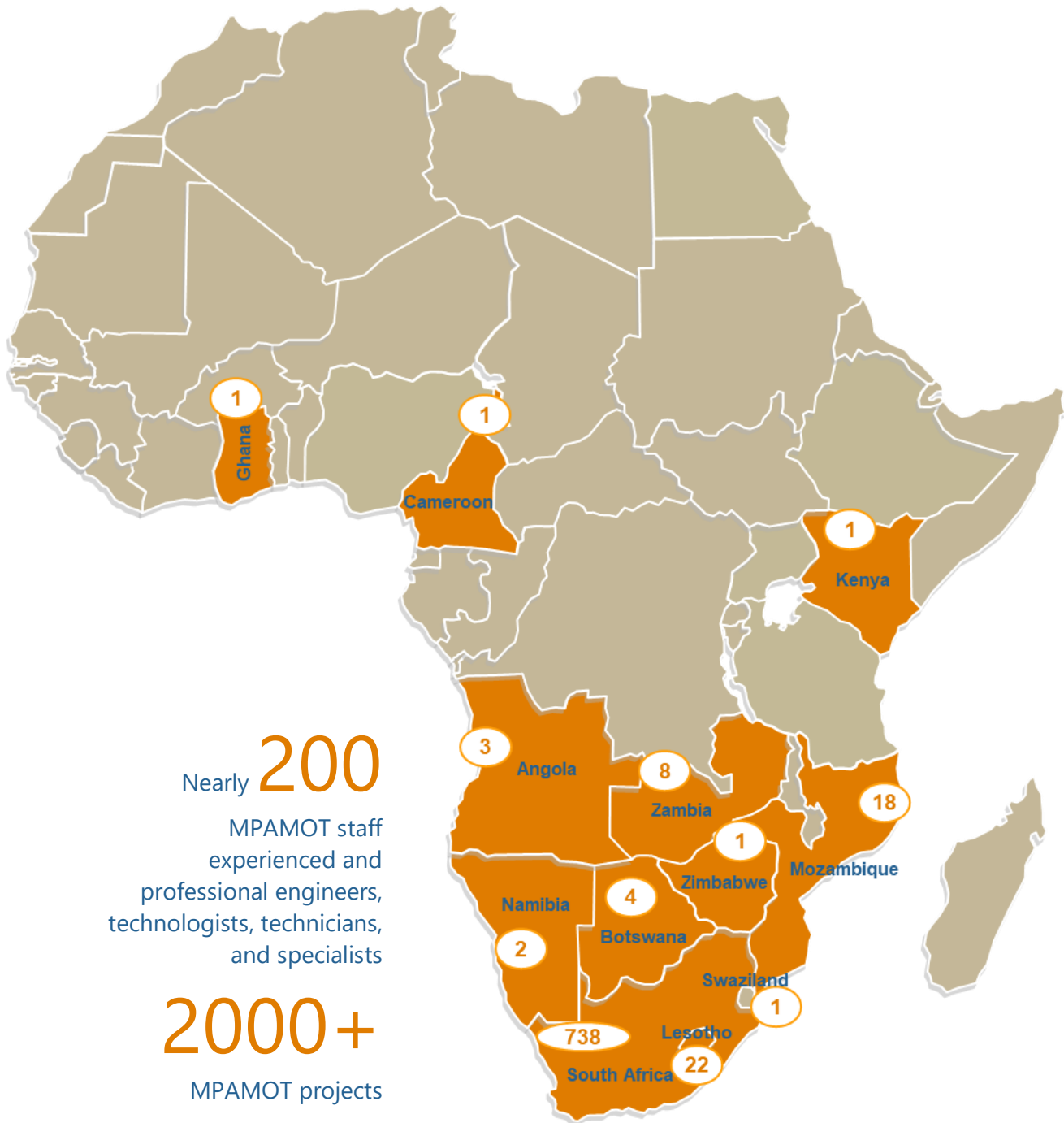
Dirk van Schalkwyk
Water and Waste Water lead



Vino Naicker
Project, programme, and construction management lead



Where our infrastructure team worked recently?

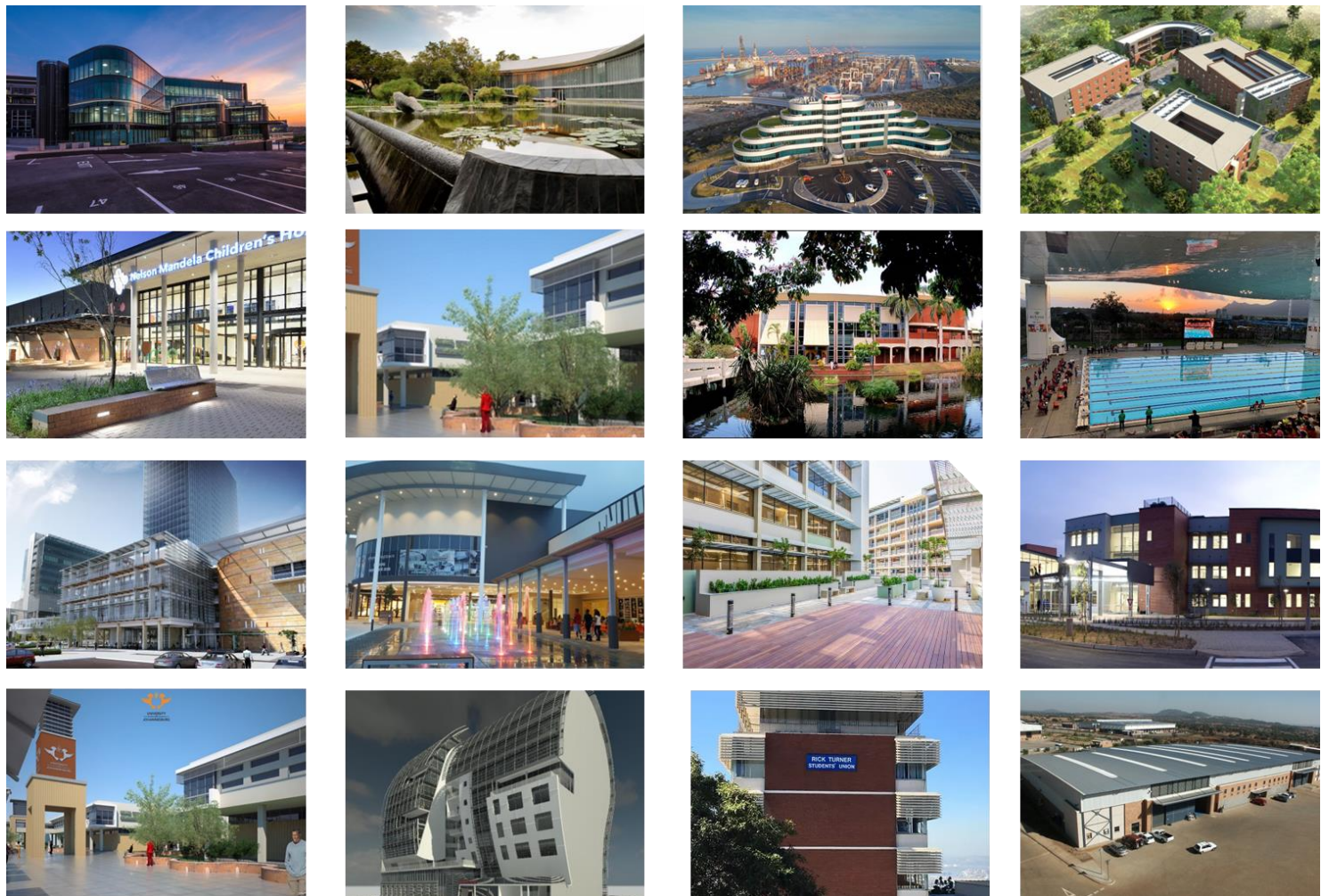



Global
networking partners



INFRASTRUCTURE PORTFOLIO

BUILT ENVIRONMENT





The Civil Engineering and Building Services division provides design, construction management, due diligence, and audits over a broad range of civil engineering projects covering commercial, residential and industrial developments, sport, bulk sanitation and water infrastructure.



What we offer

Our MPAMOT built environment team is instrumental in driving flagship infrastructure design and construction projects including the following:

- Airport infrastructure
- Commercial buildings
- Education institutions
- Factories and warehouses
- Hospitality infrastructure
- Hospitals
- Industrial parks
- Mining Infrastructure
- Residential developments
- Retail centers
- Stadium and sports facilities



Structural engineering

Our Structural team provide clients with cost effective design solutions tailored to the local climatic conditions. This includes but is not limited to the following:

- Briefing for and interpretation of wind tunnel test data
- Column and core axial shortening analysis
- Composite structures
- Concrete structures
- Dynamic analysis and performance assessment
- Floor superstructure analysis and design
- Foundation analysis and design
- Seismic analysis and design
- Structural steel
- Temporary and permanent site retention
- Wind load analysis and design



Mechanical engineering

Our mechanical engineering team focus on enhancing the mechanical solutions to minimise energy consumption on projects and provides the following services:

- Air conditioning systems
- Computational Fluid Dynamics (CFD) modelling
- Daylighting analysis
- General ventilation systems
- Natural ventilation
- Smoke control systems
- Stairwell/exit pressurisation
- Sustainability design development
- Thermal modelling



Electrical engineering

Our electrical engineering team ensures that facilities have reliable energy supply that ensures health, safety and operational efficiencies for our clients. This includes the following:

- Analysis and development of efficient power solutions
- Daylight analysis
- Energy efficient lighting systems
- Energy target and power quality issues review and recommendation
- IT and communications
- Renewable energy options
- Safeguard buildings from lightning strikes
- Security risk assessment
- Standby power applications



Educational infrastructure projects

These are some of our project highlights. More details are available upon request.



Project: WITS Junction Student Accommodation

Location: Gauteng, South Africa

Client: Wits University

Expertise: Building Structures

Role: Civil, Structural, Electrical, Mechanical, Traffic engineering



Project: UJ Soweto Campus

Location: Gauteng, South Africa

Client: University of Johannesburg

Expertise: Building Structures

Role: Civil, Structural, MEP, Fire and Sustainability



Project: Westville Campus: Repair of Corridors & Balustrade Walls at Building E & F

Location: KZN, South Africa

Client: University of KwaZulu-Natal

Expertise: Building Structures

Role: Design, construction monitoring and programme management



Project: Refurbishment of the Rick Turner Student Union Building
Location: KZN South Africa
Client: University of KwaZulu-Natal
Expertise: Building Structures
Role: Project Management
 Structural Engineering
 Civil Engineering



Project: Denis Shepstone Structural Rehabilitation
Location: KZN, South Africa
Client: University of KwaZulu-Natal
Expertise: Building Structures
Role: Project Management
 Structural Engineering
 Civil Engineering



Project: Maritime School of Excellence
Location: Kwa-Zulu Natal, South Africa
Client: DBSA
Expertise: PPCM
Role: Detailed design and construction monitoring



Project: DBSA KZN Storm damaged schools' programme
Location: Kwa-Zulu Natal, South Africa
Client: DBSA
Expertise: PPCM
Role: Although the primary focus was building refurbishment, the team did the project, programme, and construction management



Sports infrastructure projects



Project: Cote d'Or Multi-sports Complex
Location: Mauritius
Client: Mauritius Multisport Infrastructure Limited (MMIL)
Expertise: Multi-disciplinary sports stadium complex
Role: Civil; Traffic; Structural; MEP
Pedestrian Modelling, Geotechnical, Sports Design; Fire





Project: Soccer City
Location: Gauteng, South Africa
Client: South African Football Association
Expertise: Building Structures
Role: Civil and Structural Engineering Design and construction monitoring





Commercial building projects



Project: Dept. of Environmental Affairs Head Office
Client: DEA / Imvelo Consortium
Expertise: Engineering Design, Project, programme, and construction management
Role: Structural; Civil; MEP; Traffic, Environmental, Sustainability



Project: BMW Head Office South Africa
Location: Midrand, Gauteng, South Africa
Client: BMW South Africa Pty Ltd
Expertise: Building Structures
Role: Civil and Structural engineering design and project management



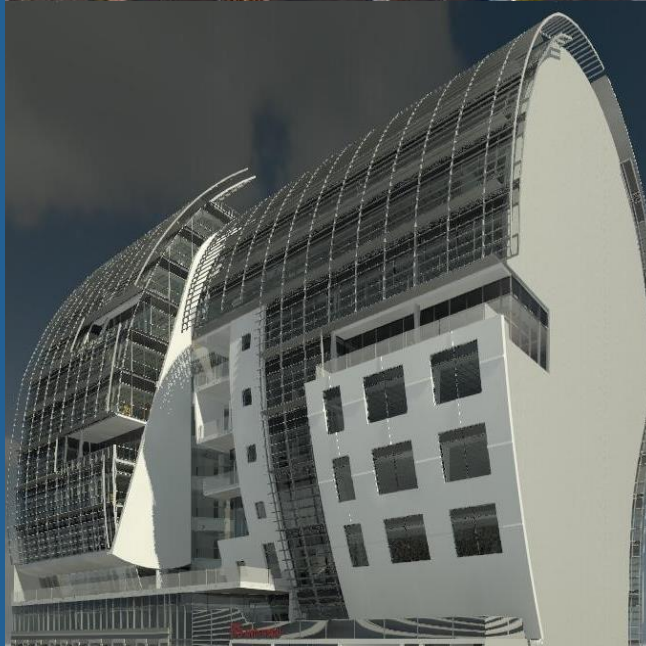
Project: PIC 72 Grayston Dr. Refurbishment
Location: Gauteng, South Africa
Client: Public Investment Corporation
Expertise: Building Structures
Role: Mechanical engineering



Project: National Library
Location: Gauteng, South Africa
Client: Department of Public Works
Expertise: Building Structures
Role: Design, construction monitoring and programme management



Project: Port of Ngqura – Operational Buildings
Location: Port of Ngqura, Port Elizabeth, South Africa
Client: Transnet
Expertise: Building Structures
Role: Structural; Civil; MEP; Environmental, Project Management, Sustainability



Project: 85 Anderson Street
Location: Johannesburg CBD
Location: Gauteng, South Africa
Client: Department of Public Works
Expertise: Building Structures
Role: Structural Engineering



Project: SARS Office
Location: Gauteng, South Africa
Client: Kagiso Intraprop
Expertise: Multi-disciplinary with mechanical and electrical
Role: Structural, civil, mechanical, and electrical engineering



Industrial infrastructure projects



Project: Sappi Saiccor Project
Vulindlela Expansion
Location: Umkomaas, Kwazulu
Natal, South Africa
Client: SAPPI
Expertise: Building Structures
Role: Civil and structural
engineering for heavy
foundation industrial
buildings, pipe, and utility
bridges and MCC and
transformer buildings.
Associated mechanical fire
protection, HVAC, LP/Earthing
and electrical engineering
services.



Project: Kathu Industrial Park
Location: Kathu, South Africa
Client: Anglo American
Expertise: Building Structures
Role: Feasibility, Advisory, Civil,
Structural, MEP Design
Services, and Project
Management



Project: Automotive Industrial
Supplier Park
Location: Rosslyn, Pretoria,
South Africa
Client: Automotive & Industrial
Holdings (AIH)
Expertise: Building Structures
Role: Feasibility; Civils Services,
Structural, Transport



Healthcare infrastructure projects



Project: Netcare Pinehaven
Private Hospital
Location: Johannesburg, South
Africa
Client: Netcare Properties
Expertise: Building Structures
Role: Civil and structural
engineering



Project: Nelson Mandela
Children's Hospital
Location: Pretoria, South Africa
Client: Nelson Mandela
Children's Hospital
Expertise: Building Structures
Role: Structural and Civil
engineering



Project: Netcare Milpark
Hospital New Medical Block
Location: Johannesburg, South
Africa
Client: Netcare
Expertise: Building Structures
Role: Civil and Structural
engineering



Retail and hospitality infrastructure projects



Project: ICC Phase II
Location: Cape Town, South Africa
Client: Cape Town International Convention Centre
Expertise: Building Structures
Role: Design and implementation of electrical engineering services



Project: Liberty Midlands Mall
Location: Pietermaritzburg, South Africa
Client: Liberty
Expertise: Building Structures
Role: Civil and structural engineering



Social Development



Project: Kosovo Residential development

Location: Cape Town, South Africa

Client: Department of Social Development, Western Cape

Expertise: Building Structures

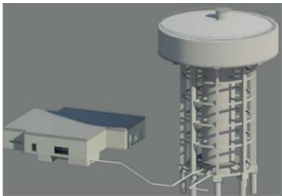
Role: Civil and structural engineering





INFRASTRUCTURE PORTFOLIO

WATER AND WASTE WATER





Water and Waste Water engineering

The Water and Sanitation Division engages in projects ranging from municipal infrastructure and systems analysis to water management and audits. The division makes use of the latest design software to assist in the design and analysis process. The division is responsible for all 6 stages of the project cycle from inception to close-out. This includes the investigation, planning, design, and implementation of water and sanitation systems, from treatment to bulk and reticulation distribution networks.

Our Water and Waste Water engineering services includes the following:

- Dams
- Hydrological studies
- Pipelines
- Pumpstations
- Reservoirs and water towers
- Recycling and re-use
- Water and Waste Water treatment
- Water quality assessments
- Water retaining structures



Water and Waste Water infrastructure projects



Project: Design Build of Metolong Water Treatment Works
Location: Maseru, Kingdom of Lesotho
Client: CMC/Botjheng Joint Venture (Italy & South Africa)
Expertise: Water and Waste Water
Role: Water and Waste Water plant design, Process design, civil and structural design, construction monitoring



Project: Botswana North South Carrier Bulk Water Supply Pipeline
Location: Moraiane to Palapye, Botswana
Client: Botswana Ministry of Minerals, Energy and Water Resources
Expertise: Water and Waste Water
Role: Bulk water pipeline design



Project: Design of Internal water supply and sewer reticulation,
Location: Gauteng, South Africa
Client: Western Cape Government Department of Human Settlements
Expertise: Water and Waste Water
Role: Design of Internal water supply and sewer reticulation, portions of street lighting and electrical supply



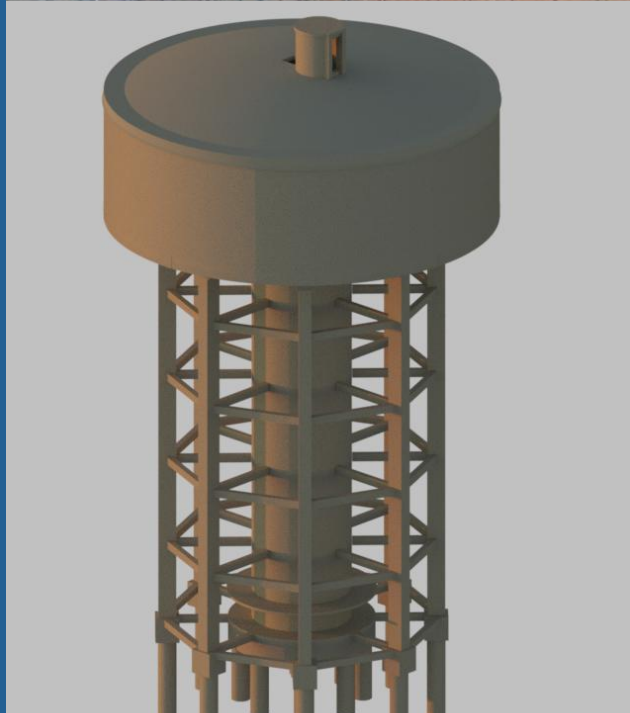
Project: Water and Sanitation
Project: Repairing
Baviaanspoort Prisons Wet
Services and Structural
Buildings.

Location: Gauteng, South
Africa

Client: Department of Public
Works

Expertise: Expertise: Water and
Waste Water

Role: Water network design,
construction monitoring and
programme management.



Project: Erand Tower

Location: Gauteng, South Africa

Client: Johannesburg Water SOC
Ltd

Expertise: Water and Waste
Water

Role: Services Rendered: Project
Management. Civil, structural,
mechanical, electrical and
telemetry design. Site monitoring
and contract Management.



Project: Jabulani Water upgrading

Location: Gauteng, South Africa

Client: Johannesburg Water

Expertise: Water and Waste Water

Role: Project management, design
and construction, and construction
monitoring



Project: Victoria Falls water treatment works
Location: Zimbabwe
Client: Victoria Falls Municipality
Expertise: Water and Waste Water
Role: Design, construction monitoring and programme management



Project: Refurbishment of Digesters 1 and 2
Location: Gauteng, South Africa
Client: Knight Piésold (Pty) Ltd (for Johannesburg Water SOC Ltd)
Expertise: Water and Waste Water
Role: Design, construction monitoring and programme management

Project: 1238 - Parktown Reservoir Relining & Civil Works Upgrade
Location: Johannesburg northern suburbs, Parktown, Gauteng, South Africa
Client: Johannesburg Water SOC Ltd
Expertise: Expertise: Water and Waste Water
Role: Design, construction monitoring and programme management



Project: Metolong Water Treatment Works
Location: Maseru, Lesotho
Client: CMC / Botjheng JV
Millennium Challenge Account
Expertise: Expertise: Water and Waste Water
Role: Design, construction monitoring and programme management



Project: Design & Construction Supervision of Infrastructure in the ETOSHA National Park, Namibia
Location: Ombika, Okaukuejo, Galton Gate and Olifantsrus
Client: MCA Namibia
Expertise: Water and Waste Water
Role: Architectural design
 Structural Design
 Water resourcing
 Reverse Osmosis water treatment technology
 Solid waste treatment
 Wastewater treatment
 Detailed design
 Tender Documentation
 Procurement
 Contract administration
 Construction Monitoring





Project: Greater Mthonjaneni Bulk Water Supply
Location: Mthonjaneni Local Municipality
Client: King Cetshwayo District Municipality
Expertise: Water and Waste Water
Role: Design, construction monitoring and programme



Project: Goreangab Water Reclamation Plant
Location: Windhoek, Namibia
Client: City of Windhoek
Expertise: Water and Waste Water
Role: Design, construction monitoring and programme management



Project: Jozini-Ingwavuma Bulk Water Supply Scheme
Location: Kwa-Zulu Natal, South Africa
Client: Mhlathuze Water
Expertise: Water and Waste Water
Role: Design, construction monitoring and programme management



Project: Design Building of Metolong Water in Lesotho Maseru
Location: Maseru, Kingdom of Lesotho
Client: Design Building of Metolong Water in Lesotho Maseru
Expertise: Water and Waste Water
Role: Design, construction monitoring and programme management



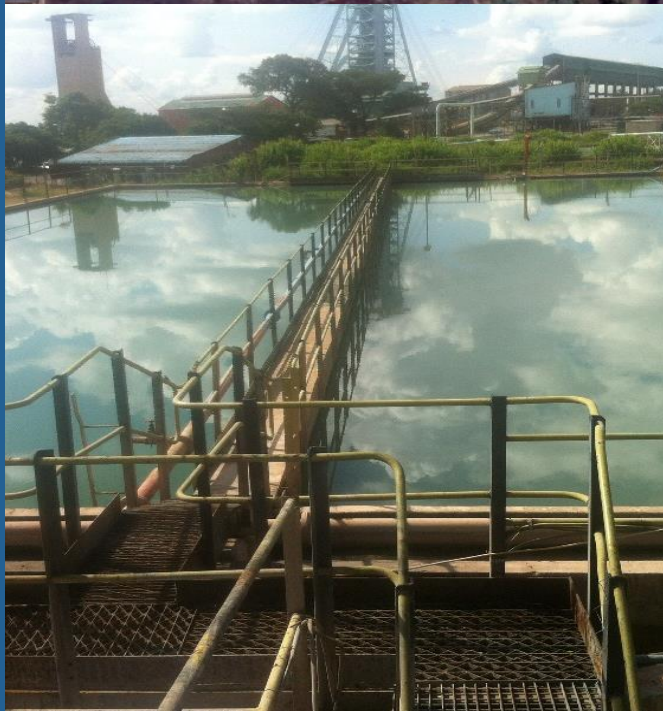
Project: Mjejane Bulk Water Supply
Location: Hectorspruit / Mjejane, South Africa
Client: Nkomazi Municipality
Expertise: Water and Waste Water
Role: Design, construction monitoring and programme management



Project: Nandoni Water Treatment Works
Location: Thoyandou, Limpopo
Client: Department of Water Affairs
Expertise: Water and Waste Water
Role: Design, construction monitoring and programme management



Project: Waterval and Hartebeestfontein Wastewater Care Works – Hydraulic and treatment capacity study
Location: Gauteng, South Africa
Client: East Rand Water Care Company
Expertise: Water and Waste Water
Role: Process and hydraulic modelling and optimisation of the plants to determine the capacity of the works. The report was used to apply for a rerating of the plants with the Department of Water and Sanitation.



Project: Technical Assistance to the Zambia Water and Sanitation project
Location: Chingola, Zambia
Client: European Investment Bank through Mulonga Water & Sanitation Company
Expertise: Water and Waste Water
Role: Design, construction



Project: Design and Construction Supervision of the Towns Water Supply
Location: Maseru, Lesotho
Client: WASCO
Expertise: Water and Waste Water
Role: Design, construction monitoring and programme management



INFRASTRUCTURE PORTFOLIO

ELECTRICAL AND MECHANICAL





Project: Newtown Phase 2.1 and 2.3
Location: Johannesburg, Gauteng, South Africa
Client: East Rand Water Care Company
Expertise: Electrical and mechanical
Role: Design, project management and monitoring



Project: Cradle of Human Kind
Location: Sterkfontein Caves, Gauteng, South Africa
Client: Department of Tourism
Expertise: Electrical and mechanical
Role: Design, project management and monitoring



Project: New head office
 Earnest and Young
Location: Maputo, South Africa
Client: Earnest and Young
Expertise: Electrical and mechanical
Role: Design, project management and monitoring



Project: Nelson Mandela Bridge
Location: Johannesburg, Gauteng, South Africa
Client: Transnet
Expertise: Electrical and mechanical
Role: Design, project management and monitoring



Project: New showroom
Location: Johannesburg, Gauteng, South Africa
Client: Nissan
Expertise: Electrical and mechanical
Role: Design, project management and monitoring



Project: Milpark Apartments
Location: Johannesburg, Gauteng, South Africa
Client: Pace Properties
Expertise: Electrical and mechanical
Role: Design, project management and monitoring



Project: New Bridge over the Umbeluzi
Location: Mozambique
Client: Government of Mozambique
Expertise: Electrical and mechanical
Role: Design, project management and monitoring



Project: Mary Fitzgerald Square
Location: Johannesburg, Gauteng
Client: City of Johannesburg
Expertise: Electrical and mechanical
Role: Design, project management and monitoring



INFRASTRUCTURE PORTFOLIO

PROJECT, PROGRAMME AND CONSTRUCTION MANAGEMENT





Why MPAMOT?

Business management and innovation

MPAMOT Group drives innovation and operational efficiency through implementation of world-class business management system, resulting in alignment of group and subsidiary operations, and positioning MPAMOT Group to scale and grow operations in Africa.

MPAMOT (Pty) Ltd has selected Deltek Vantagepoint and Deltek Talent in the Cloud. MPAMOT partnered with Silversoft South Africa to implement the Deltek tailor-made business management suite for the MPAMOT group and subsidiaries. This drives innovation and streamlined business processes for the group and subsidiaries through the implementation of an industry leading business management system.

This allowed us the align and optimise group and subsidiary business systems that will streamline and drive workplace efficiency, promote organisational collaboration, information storage, and simplify decision making, through a single industry-focused business management suite that delivers best practice for Consulting Engineers.

This promotes organisational collaboration throughout their excellent talent pool, and ultimately increase efficiency. Allowing MPAMOT to achieve its ultimate strategic goal. MPAMOT will enhance innovation by utilising leading cloud technology to automate and enhance the entire project lifecycle. Similarly, it optimised service delivery, people engagement, project, and operations management, further cementing the firm's reputation for being an innovator in the consulting engineering industry.







Project, Programme Management and Construction monitoring

MPAMOT manages the entire process from prefeasibility stage, to planning, engineering design, procurement, construction monitoring, and post-construction assessments. Our team of professional engineers and project managers provide innovative designs, while considering traffic planning to improve access and ease congestions. We enhance operational efficiencies, provide cost effective long- term solutions, and manage health, safety, and sustainability on each project.

Products and services: Construction monitoring

The level of service and the degree of monitoring required will also vary in proportion to the size and complexity of the development. In each case we consult with clients to assist them to select a range of services that are best suited for their needs. As part of our Construction Monitoring services, we typically provide:



Statutory compliance

Monitoring of compliance with statutory requirements e.g. obtaining and maintaining consents, permits and approval and complying with their respective requirements.



Environmental compliance

Monitoring compliance with environmental licences and their respective conditions.



Health and safety

Monitoring compliance with statutory health and safety requirements and associated method statements as specified / agreed prior to financial close.



Developer organisational and key staff changes

Monitoring changes to changes to the Developer organisational structure and changes to key staff and supply chain.



Developer project management systems

Monitoring Development implementation and compliance with project management systems and their alignment with widely recognised good industry practices.



Construction costs and programmes

Monitoring the progress of works against budgeted cost and scheduled programme / milestones. Reviewing and opining on time and cost to complete tests.



Design and construction quality

Monitoring the compliance of design practices applied with good industry practices, assessing the quality assurance systems and their implementation and the opining on the alignment of the actual works with the design.



Milestone completion and withdrawal request certification

Opining on the achievement of milestones and certifying withdrawal requests raised by the concessionaire.



Contracts

Assisting with the interpretation of technical matters in contractual documentation and advising on amendments.



Disputes

Providing expert technical advice in respect of disputes that arise between parties during construction.



Tests on completion

Witnessing the implementation of tests on completion.



Project, programme management and construction monitoring



Project: Lesotho Highlands Water Project Advanced Infrastructure
Location: East Highlands (Katse and Polihali), Lesotho
Client: Lesotho Highlands Development Authority (LHDA)
Expertise: Project, programme management and construction monitoring
Role: Professional Services for Planning, Design and Construction Supervision of Project Housing and Associated Infrastructure



Project: Lesotho Highlands Water Project Polihali Dam
Location: East Highlands (Katse and Polihali), Lesotho
Client: Lesotho Highlands Development Authority (LHDA)
Expertise: Project, programme management and construction monitoring
Role: Professional Services for Planning, Design and Construction Supervision of Polihali Dam



Project: Kusile Water Treatment Works
Location: Mpumalanga, South Africa
Client: Eskom
Expertise: Project, programme management and construction monitoring
Role: Design, Engineering, Manufacturing, Supply, Quality, Commissioning



Project: Village Housing Polihali Dam

Location: East Highlands (Katse and Polihali), Lesotho

Client: Lesotho Highlands Development Authority (LHDA)

Expertise: Project, programme management and construction monitoring

Role:

Professional Services for Planning, Design and Construction Supervision of Polihali Dam



Project: Village Lodge Polihali Dam

Location: East Highlands (Katse and Polihali), Lesotho

Client: Lesotho Highlands Development Authority (LHDA)

Expertise: Project, programme management and construction monitoring

Role:

Professional Services for Planning, Design and Construction Supervision of Polihali Dam





Contact us

We welcome your comments, thoughts and suggestions on how we can partner to increase our value to all our stakeholders. Contact us by email, phone or follow us on social media.

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