



MAP AFRICA  
CONSULTING

# BUILT ENVIRONMENT CONSULTANTS

**21**  
YEARS IN  
CONSULTING

[WWW.MAPAFRICA.CO.ZA](http://WWW.MAPAFRICA.CO.ZA)

# MAP AFRICA CONSULTING

MAP AFRICA Consulting Engineers was established in June 2001 and collectively boasts over 100 + years of experience between its core management staff.

Our team has extensive expertise to deliver projects in the fields of Civil Infrastructure, Structural, Water and Sanitation, Roads & Stormwater, Housing, Traffic & Transportation Engineering, Project Management, and Energy.

**21**  
YEARS IN  
CONSULTING



YEAR ESTABLISHED



PROJECTS COMPLETED



CONTRACTORS APPOINTED



NUMBER OF SITE OFFICES



Our responsibility as professionals will be to provide sound advice to our client and the consultant team to ensure that the project to be delivered complies with local and statutory rules and regulations and to also ensure that the project can be executed within the desired time frames and budgetary constraints.

In addition, we acknowledge the fact that projects generally have to be executed with minimum disruption to the operation of the ongoing processes and it is our intention to pay particular attention to this aspect during the design and execution phases of any project that we are involved with.



**WE INTEND ACHIEVING OUR OBJECTIVES BY :**

- Basing our designs on 'sound engineering principles'.
- Introducing 'innovative thinking, sound engineering and contractual and compliance principals' to arrive at solutions which prove challenging.
- Using new available technology to assist with planning and execution of tasks.
- Ensuring that specialist resources with the correct skills and competency are assigned to the relevant tasks.
- Value add experience gained on similar projects so as to provide the best advice and services.
- Implementing our 'Quality Management System' to all aspects of our tasks.


# OUR EXPERTS



**PRIBAN NARAINSAMY**  
Professional Engineer



**MARC NAIR**  
Professional Technical Engineer



**SIDESH SIRPUTH**  
Professional Technical Engineer



**BYRON XAVIER RAMAN**  
Professional Engineer

# MAIN MEMBERS

## PRIBAN NARAINSAMY

PR. ENG. ECSA, MSAICE

**Professional Engineer, Director Specialising in Civil & Structural Engineering.**

Priban is the nominated Office Principle with 27 years of industry experience and currently represents MAP AFRICA's technical team on multiple projects.

- Major Skills & Expertise
- Civil Design
  - Roads and Stormwater
  - Traffic and Transportation
  - Water and Sanitation
  - Project Management

Priban's portfolio extends to Business Development and IT.

## MARC NAIR

PR.TECH. ENG. ECSA, MSAICE, MIPET, MSAISC

**Professional Technologist, Director Specialising in Structural Engineering.**

Marc has extensive industry experience of over 32 years and is currently the Principal Engineer: Structures and represents MAP AFRICA's technical team on multiple projects.

- Major Skills & Expertise
- Structural Design
  - Civil Design
  - Quality Control
  - Project Management

Marc's portfolio extends to ISO and Quality Assurance & Accreditation.

## SIDESH SIRPUTH

PR.TECH. ENG. ECSA, MSAICE, MIPET, MSAISC,

**Professional Technologist, Director.**

Sidesh has over 20 years of industry experience and is currently the Principal Engineer: Civil Engineering and Transportation and represents MAP AFRICA's technical team on multiple projects. He is the Office Manager and heads up MAP AFRICA'S Johannesburg division.

- Major Skills & Expertise
- Municipal Infrastructure
  - Roads and Storm Water
  - Civil Engineering Design
  - Traffic and Transportation
  - Wet Services Engineering Design
  - Project Management
  - Specialist Services

Sidesh's portfolio extends to Business Development, and management of Tendering Department.

## BYRON XAVIER RAMAN

PR. ENG. ECSA, MSAICE

**Professional Engineer, Director Specialising in Civil & Structural Engineering and Project Management.**

Byron has extensive experience of over 10 years and is currently the Principal Engineer: Infrastructure and represents MAP AFRICA's technical team on multiple projects.

- Major Skills & Expertise
- Structural Design
  - Civil Design
  - Energy expertise
  - Project Management
  - Specialist Services

Byron's portfolio extends to Software, Human Resources and Marketing.



**25 MEMBERS**

**EXPERTS**  
CIVIL  
STRUCTURAL  
TRAFFIC & TRANSPORTATION  
WATER & SANITATION  
PROJECT MANAGEMENT  
SPECIALISTS

**SITE AND CONSTRUCTION STAFF**

**SPECIALIST SERVICES**



We shape our buildings,  
thereafter they shape us.  
– Winston Churchill



## OUR SERVICES



### HOUSING

Development of hostels, community residential units, low-cost housing and housing monitoring support.



### ROADS & STORMWATER

The undertaking of local, provincial, and national roads, sidewalks, bus/ taxi lay byes, carparks, pedestrian and vehicular/ rail bridges and culverts.



### STRUCTURAL

Design of major concrete works, multi-storey buildings, railway stations, institutional buildings, assessment and monitoring of structural repairs. This includes building, industrial and civil projects.



### TRAFFIC & TRANSPORT

Undertaking traffic and parking impact assessments, public transport and pedestrian plans, and transportation studies. This includes highways, railways, pavements, and traffic and transportation projects.



### WATER & SANITATION

Design of new reticulation, reservoirs, pump stations, technical support and non-revenue water management. Including water schemes, municipal systems, water purification works, and water resource development projects such as pipelines, pump stations, and catchment management studies.



### PROJECT MANAGEMENT

The management of the planning and physical construction process within the built environment from conception to completion, including management of related professional services and specialists.



### ENERGY

Professional services such as civil and structural design and design review consultants on wind, solar photovoltaic, solar power stations and biomass waste-to-energy renewable energy and clean water processes and technologies.

# FLAGSHIP PROJECTS

## New Durban High Court



Major internal upgrades were required at the Existing High Court building (heritage structure constructed in 1910), which involved careful planning in terms of creating openings for services in load-bearing elements and demolition of support walls.

The site is located in the Durban CBD, which posed a challenge in terms of the tight site constraints and logistics in terms of material supply and handling. Erection of the 2 tower cranes took careful planning, including shutting down of roads leading to the site to accommodate the mobile cranes, which lifted the tower cranes into position.

Timeous issue of design construction information took a dedicated team of 12 MAP AFRICA resources, (including professional engineers, technologists, technicians, draughtsmen, and site staff) working full time over the construction period to ensure no delays to the contractor.

### CLIENT: DEPARTMENT OF PUBLIC WORKS (NATIONAL) – DEPARTMENT OF JUSTICE

**Project Description:** This ‘Mega Project’ is made up of 4 major components, viz. construction of an off-site decanting facility to accommodate High Court operations during the 4½ year construction period, construction of the new four storey High Court building, construction of the new nine storey carpark & administration building and restoration of the existing High Court building. The latter three construction activities taking place on a single, tight site.

**Estimated Construction Value:** R 850M

**Professional Services Rendered:** Structural Engineering, Civil/ Infrastructure Engineering,

Wet Services Engineering, Resident Engineering.

**Engineering Feats and Challenges:** Excavation was required below the water table (@ 2.50m above MSL) in order to construct the foundations. This took careful planning and monitoring in terms of the de-watering exercise so as not to disturb the foundations of the existing high-rise buildings surrounding the site.



# FLAGSHIP PROJECTS

## Jika Joe CRU Housing Project



### CLIENT: GROUNDWORK – MSUNDUZI MUNICIPALITY

**Project Description:** The project entails the construction of approximately twenty-seven (27) new multiple storey Community Residential Units (CRU) within the Jika Joe Residential Area, Pietermaritzburg CBD and along the N3 route. This development will provide 1104 units and house approximately 5520 people.

**Estimated Construction Value:** R 500M

**Professional Services Rendered:** Structural Engineering & Civil/ Infrastructure Engineering.

**Engineering Feats and Challenges:**

- CRU rental policy in place that will assist towards providing the higher level of service for the beneficiaries of the development.
- Innovative flood plain mitigation.
- Severely poor geotechnical conditions with innovative and cost effective ground interventions.

## University of Zululand



### CLIENT: UNIVERSITY OF ZULULAND – DEPARTMENT OF HIGHER EDUCATION

**Project Description:** Multiple Infrastructure Projects. Planning and implementation.

**Estimated Construction Value:** R 900 M

**Professional Services Rendered:** Master Civil Infrastructure Planning, Civil, Structural, Project Management,

Traffic & Transportation, Energy & Specialist Services.

**Engineering Feats and Challenges:**

- Innovative designs and implementation due to constrained sites and aging infrastructure.
- Size and quantity of developments assigned to different teams and coordination thereof.
- Strict and tight time frames to be met in order to meet university enrollment demands.
- New state of the art infrastructure facilities.

# FLAGSHIP PROJECTS

## MSSL Global RSA Module



### CLIENT: MOTHERSONS GROUP

Engineering Ltd – India

Project Description: New factory.

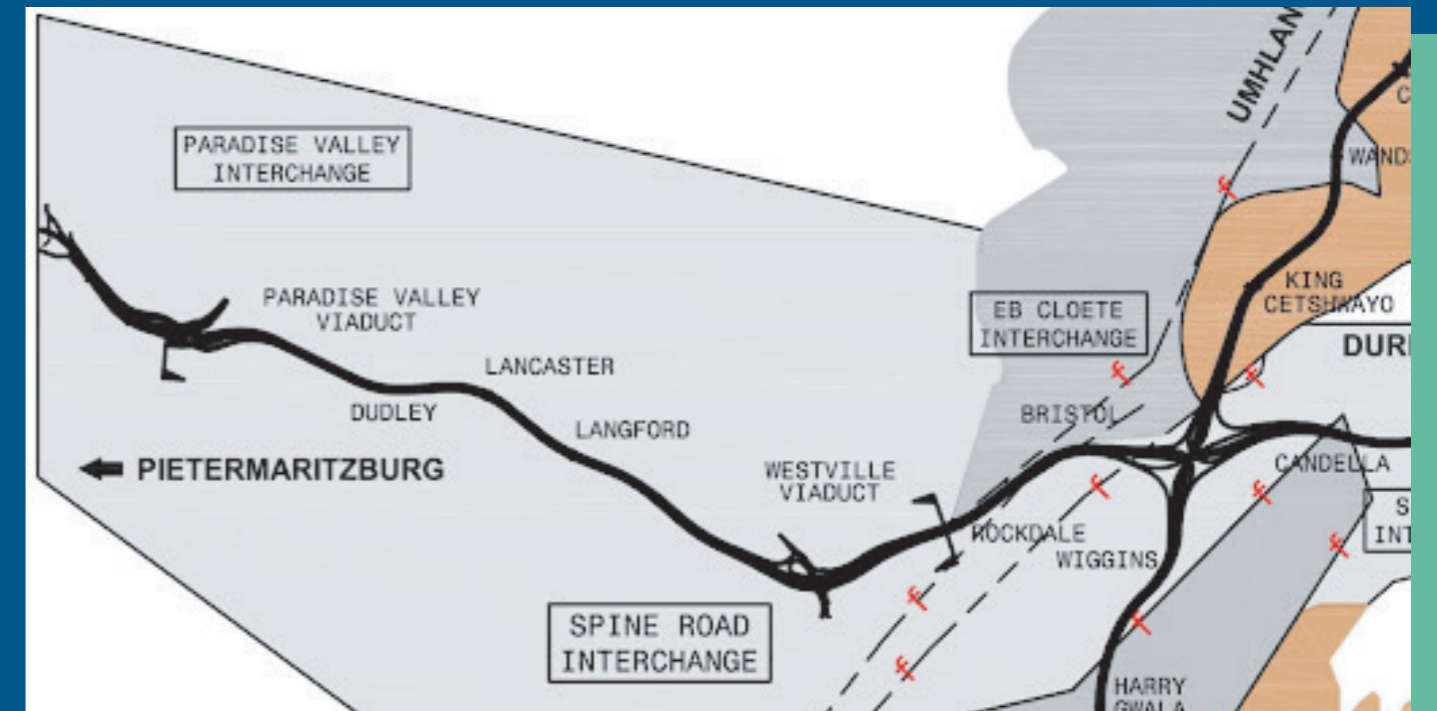
Estimated Construction Value: R 140 Million

Professional Services Rendered: Project Management, Structural Engineering, Civil Engineering, Services and Construction Monitoring.

Engineering Feats and Challenges:

- Severely poor geotechnical conditions with major ground improvements.
- Large complex lattice span structures.
- Extremely high crane loads.

# National Road Upgrade



### CLIENT: SANRAL

Project Description: Capacity Improvements on National Route 3, Section I, From Westville Viaduct (Km 11.80) To Paradise Valley Interchange (Km 17.54).

Estimated Construction Value: R 1.7 B

Professional Services Rendered: Civil, Structural and Traffic & Transportation Engineering and other Specialist Services. Design Review and Construction Monitoring.

Engineering Feats and Challenges:

- Innovative designs and implementation due to constrained sites and aging infrastructure.
- Size and quantity of developments assigned to different teams and coordination thereof.
- Strict and tight time frames to be met in order to meet University enrollment demands.
- New state of the art infrastructure facilities.



# OUR CLIENTS



“ Strive for perfection in everything you do. Take the best that exists and make it better. When it does not exist, design it. - Sir Henry Royce



Scientists investigate that which already is; Engineers create that which has never been.

- Albert Einstein

