

**PROFESSIONAL VALUE-DRIVEN ENGINEERING SOLUTIONS**

**ELECTRICAL, ELECTRONIC, MECHANICAL AND STATUTORY ENGINEERS  
PROJECT MANAGERS | ENERGY CONSULTANTS**

Member of



## Banks



## Education Institutions



## Government Institutions



## Private Companies



solutions  
 efficiency specialists  
 experienced team programs service delivery  
 performance driven

# DFR PHILOSOPHY

industry leaders ethics  
 consulting professional  
 electronic development  
 skills trust results operating standard  
 knowledge generation  
 power generators

At DFR Engineers, impeccable ethics and professionalism are an operating standard. They are derived from a business ethos founded on trust and personalized service, and our belief that total professionalism is required in our interactions with all our stakeholders.

DFR Engineers value knowledge and knowledge generation, and have an active and established internal skills development and training program. This ensures that the knowledge and experience of our senior engineers will not be lost, but is handed down to the next generation to develop further. We are committed to the principles of broad based Black Economic Empowerment and are currently a Level 2 (two) B-BBEE compliant company.

## OUR SERVICES

Founded in 1998, DFR Engineers is a dynamic and experienced electrical-, electronic-, mechanical engineering consultancy with the capacity to provide comprehensive and value driven design and project management services.

Our dedicated and professional team of engineering specialists have built a reputation for providing viable, durable and cost-effective solutions to meet challenging project requirements throughout Africa.

### Key strengths:

- Engineering consultancy with the flexibility to deliver unique solutions in projects across Africa and beyond.
- Extensive experience in the design and management of large and medium projects.
- Excellent references and strong relationships with our clients.
- Remaining at the forefront of technology in our industry and; passionate about Engineering and value the pursuit of knowledge.
- Consistently meeting the challenge of tough projects and compressed construction programmes.
- Provide innovative and targeted solutions to ensure on-time delivery, quality results and cost-effective solutions.



## Electrical

- Electrical reticulation and transmission
- Industrial, commercial, roads, retail, banking, education and mining design solutions
- Energy Management
- Emergency Power Generators
- Electrical network design
- Uninterrupted power systems
- Earthing and Lightning Protection
- Medium Voltage Networks
- Automation and Control centres
- Network interfacing
- Security and Flood Lighting
- Maintenance Contracts
- Refurbishing existing installations
- Telecommunication infrastructure
- Statutory compliance assessments and designs
- Urban development
- Green building application & designs



## Mechanical

- Heating Ventilation and Air Conditioning Design (HVAC)
- Central heating and centralized hot water generation
- Boiler installation and steam distribution
- Lifts and escalators
- Materials, waste handling and conveying systems
- Pumping installations and fluid reticulation for mechanical equipment
- Energy efficiency and energy management of Mechanical Installations
- Environmental impact assessments and management of mechanical installations
- Wet services and Design
- Fire and Rational Security



asset tracking  
statutory advisory services  
mechanical engineers  
energy optimisation lifts and escalators  
network interfacing security systems  
electrical engineering fire designs  
**Established in  
1998**  
energy management control engineering  
industrial automation conveying systems  
electronic training project management  
power generators mechanical installations

## MEMBERSHIPS



Private Security Industry Regulatory Authority





## Electronic

- Fire detection and evacuation
- Security systems, including CCTV, access and egress control
- Audio, sound, public address, sound masking and conferencing systems
- Time and attendance systems
- Asset Tracking
- Telemetry and SCADA management systems
- Gas extinguishing systems



## Client Support Services

- Compilation of operational client support services, procedures and risk mitigation
- Maintenance and service level agreements
- Specialised training and seminars
- Third party integration
- Logistical management
- Statutory advisory services



## Energy Solutions

DFR Engineers aim to be the preferred provider of value-driven engineering solutions to clients across diverse industries. We will achieve this by creating effective partnerships, employing state of the art systems and technology, and utilizing our extensive experience and industry knowledge to deliver complete engineering solutions.

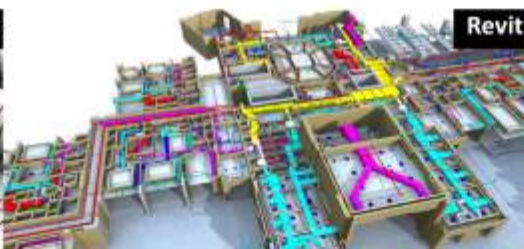
Recent services include:

- EPC and EPCM facilitation and Project Development
- Energy auditing and usage reduction including subsidized energy audits through the PSEE programme
- Renewable Energy: Solar PV systems, bio-gas, solar water heating, cogeneration, waste heat recovery system
- Project Management
- Statutory Compliance relating to the OHSA, building regulations, SANS, ISO and IEC codes
- Client's Engineering Services



## Software

Revit software is currently the preferred modeling software of DFR Engineers. This software is specifically designed for building information modeling (BIM), which enables multiple team members to access and update the project simultaneously. Revit enable us to do multidisciplinary designs in one model, including architectural design, mechanical, electrical and plumbing services as well as structural engineering. DFR Engineers uses this software as a tool to implement effective designs.



## RECENT PROJECTS

### Mintek – HVAC services

DFR was appointed for the investigation of the current chilled water plant as well as the design and project management for a new solution for the comprising five buildings between six and thirteen stories totaling 33000m<sup>2</sup>.

### BMW Rosslyn – HVAC

Our Engineers were responsible for the design and implementation of a hot air extraction system for BMW assembly plant in Rosslyn.

### Fish-hoek mall – Lifts

DFR Engineers are currently designing a new lift solution for the Fish Hoek Town Square in the Western Cape. The existing lift will be replaced by a new wheelchair friendly lift as an alternative solution to the existing escalator and stairs.

### SAPS Western Cape – Stand By Plants

DFR Engineers was appointed by DPW on behalf of the South African Police Service to design and commission containerized emergency plants at twenty one police stations throughout the Western Cape Region.

### Sita – Cooling Towers

Sita numerous data center consist of 2785m<sup>2</sup> whitespace which is cooled by a chilled water plant and need to be upgraded to a cooling capacity of 1500W/m<sup>2</sup>. DFR Engineers were appointed to design and implement the replacement of the AVG Cooling Towers.

### Lesedi & Letsatsi – Solar PV

In partnership with Lonjas Tecnologia, assumed the role of owner's engineer for the design, implementation, installation and commissioning of the capacitor banks. Lesedi and Letsatsi are both 75MW fixed solar PV plants located in the Free State and Northern Cape respectively. The plants were constructed with Monocrystalline panels and were commissioned.

### Sita – Generators

DFR currently act as the Electrical Engineers for SITA at the Centurion Data Centre. The project scope involves the upgrade and refurbishment of the generator plant at the data center. The current installation comprises four 1200 kVA plants.



### Total Namibia – Generators

DFR Engineers were appointed by Total Namibia for the design and replacement of backup generator sets at various Total filling stations in Namibia.



### Sinoville Coner

DFR was appointed as mechanical and wet services engineer for the new shopping complex in Sinoville, Gauteng.



### Lion Match Company – Generators

Our engineers were tasked to design and implement a 3mVa 11kV standby generator plant including the substation building and bulk underground fuel tanks.



### PSEE – Energy Audit Specialists

DFR was appointed as energy consultants by the national business initiative (NBI) for the energy audit and efficiency improvements on various factories, including AFRIT, Tiger Brands baby unit, Tiger Brands jam unit, Zanogen and Tensile Rubber. This private sector energy efficiency initiative is a nonprofit process whereby a panel of selected professionals will advise industrial and commercial clients.



### Union buildings – Lifts

This project included the replacement and refurbishment of existing lifts at the union buildings located in Pretoria. A total of four passenger lifts –and two goods delivery lifts are being replaced and the historical lifts upgraded to latest statutory standards.



### 102 Lesotho Clinics

DFR Engineers were appointed by Trencon/Building World Joint Venture as electrical and mechanical engineering consultants for the design, procurement and construction supervision of a Clinic Building comprising of a main building, 5 staff houses, TB/HIV waiting ward, Labour waiting ward, and a general hall. The design aspect was quite complex as PV power had to be utilized in the mountain regions without Grid electricity.

### Nigeria Office Block – Security Consultancy

DFR Engineers have been appointed as the security consultants for the new 16 story Dangote Head office project in Lagos, Nigeria. The elite project is currently in the inception stage and is due for completion in 2018.

### CBL – Building services

The central bank of Lesotho is being extended and DFR Engineers were appointed as the electrical, electronic and mechanical and fire engineers on this project. The new 15 000m<sup>2</sup> building consists of seven stories comprising office space, boardrooms, security rooms and an auditorium.

### Salvokop – Reticulation

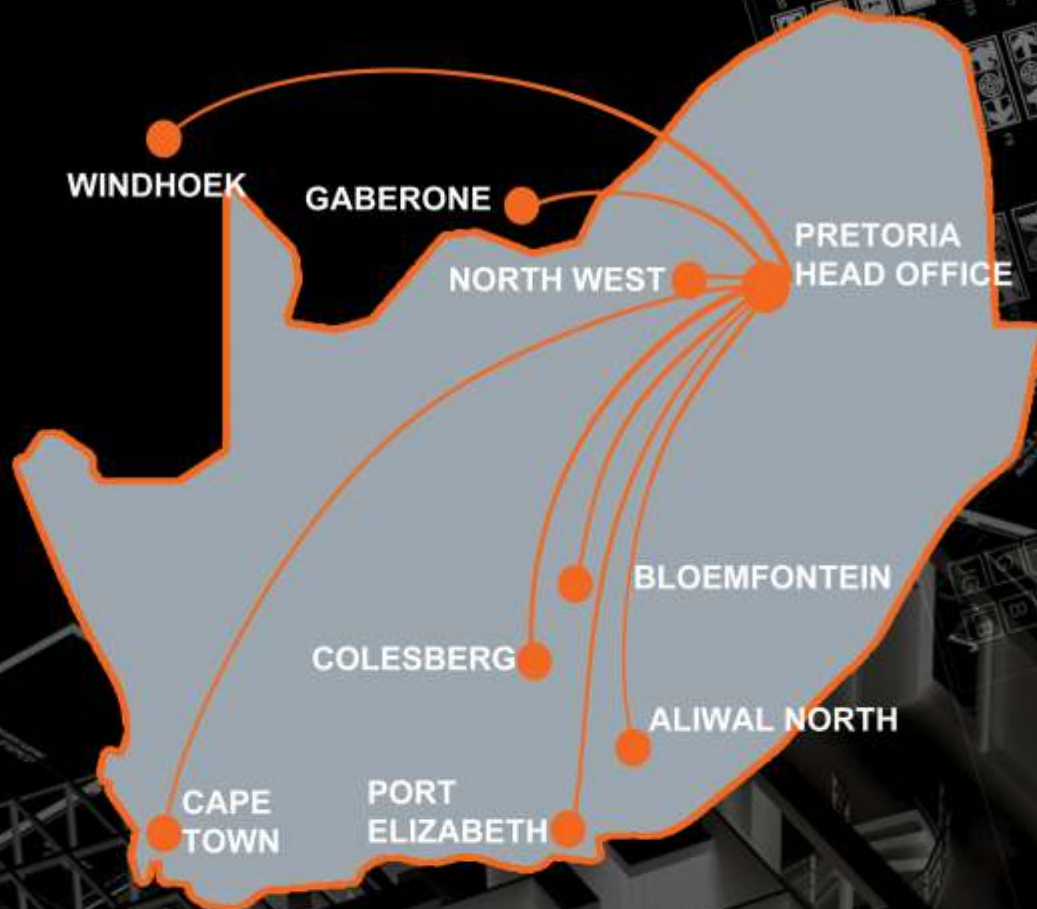
DFR were appointed as the Electrical Consulting Engineers for the statutory upgrade of the Radio Tech Official Quarters at Salvokop. The project is currently underway with the anticipated practical completion June 2017.

### JDA – Building services

One of our newest endeavors is the appointment as Electrical and Mechanical Engineering Consultant for Johannesburg Metro's newest BRT Bus Depot. This massive development to be completed July 2018 will handle a fleet of 154 busses daily.

### Cofimvaba District Offices

DFR Engineers were appointed as Electrical and Mechanical engineers by the Department of Public Works - Eastern Cape for the design development, procurement and construction of these departmental offices of Department of Education.



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