Name of the Company
Julian Raphasha and Associate Civil Consulting Engineers cc

Registration Number
2008/128683/23

Vat Number
4650251897

Management
Mr. M.J Raphasha
C.E.O & Directors: A. Phetla
V. Tshabalala

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Fax: +27–86-616-6500
Email: raphashamj@jr-associates.co.za

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Polokwane
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Fort Gale
Umtata
5100
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Company Overview

- Julian Raphasha and Associates Civil Consulting Engineers cc (JRACCE) is a black owned company that focuses on providing consulting services, project management and construction management in infrastructure developments.

- JRACCE has been conceived in the year 1998 when the CEO Mr. M.J Raphasha and other associates took a career in civil engineering. It is with the vision of being TODAY’S LEADERS IN ENGINEERING SOLUTION that the members of JRACCE have successfully completed various projects in South Africa, Mozambique, Tanzania, Swaziland, Ethiopia, Zambia and Nigeria under the auspices of other consulting engineering companies in South Africa.

- Having established a good engineering experience and with the need to take engineering to higher levels, it was concluded that the company that will take a lead in engineering solutions is required, then JRACCE was established in the year 2008.

- JRACCE bring excellent engineering solutions in all fields of civil engineering by providing the most safest and cost-effective designs, excellent project management to ensure on time delivery of various project and high class construction supervision and management to ensure that a well managed, designed project is carried out through to excellent construction practice.

- We embrace the culture of total quality management “value before the price” by giving all our clients value for their money in infrastructure development.
VISION, MISSION, QUALITY POLICY AND VALUES

OUR VISION

- Today’s leaders in engineering solutions.

OUR MISSION

- Taking Civil Engineering to the Higher level

OUR QUALITY POLICY

- We embrace the culture of Total Quality Management “value before the price” by giving all our clients value for their money.

OUR VALUES

- Innovation
- Excellence
- Honesty
- Integrity
- Reliability
- Openness
TRANSPORTATION AND ROAD INFRASTRUCTURES

JRACCE provide an excellent transportation engineering practices that include planning and designs you’re rural, urban and highway transportation infrastructure

We provide services in not excluding the following transportation infrastructures:

- Arrangement of aerial photography to assist in route planning
- Road condition surveys, studies and investigations
- Feasibility studies
- Detailed Geometric Design
  - Horizontal alignment
  - Vertical alignment
- Pavements Design
- Design of bridges and drainage structures
- Detail drawings and technical specifications
- Contract documentation
- Calculation and scheduling of quantities
- Detailed cost estimates
- Call tenders and tender evaluation

Recommendations to client on tender submissions:

- Contract administration and quality assurance management
- Certification of claims
- Handover certificate
- Provide As-Build drawing at project completion

JRACCE TAKE A LEAD IN MAKING YOUR TRANSPORTATION AND ROAD INFRASTRUCTURE PROJECT A SUCCESS
WATER ENGINEERING

JRACCE provide an excellent water engineering practices. JRACCE has very experienced water engineers, Technologist, technicians and CAD operators who assure our clients their water engineering solutions

- Water distribution systems and networks
- Community water reticulation
- Sewer reticulation
- Reservoirs and water towers
- Dams

STRUCTURAL ENGINEERING, INDUSTRIAL DEVELOPMENT PROJECTS, MINING INFRASTRUCTURE PROJECTS, RESIDENTIAL DEVELOPMENT AND POWER STATIONS INFRASTRUCTURE

JRACCE provide an excellent structural engineering practices that include designs new structures, structural assessments and upgrades existing building. JRACCE brings the experience of material science that covers a wide area of concrete, steel, composite etc. JRACCE has very experienced structural engineers, Technologist, technicians and CAD operators who assure our clients the most safest, economical and of great aesthetical appeal structural design.

We provide services in not excluding the following structures:

- High Rise Buildings for the following purposes
  - Commercial, Offices blocks and Residential
- Special Purpose Buildings
  - Educational, Recreational, Hospital and Health Care
- Shopping Centers
- Hotels and Resort Developments
- Car Parks
- Industrial Buildings and Warehouses
- Bridges Commercial low and high rise buildings
- Steel Structures

JRACCE TAKE A LEAD IN MAKING YOUR WATER AND STRUCTURAL ENGINEERING PROJECT A SUCCESS
BRIDGE STRUCTURES

JRACCE provide an excellent bridge designs solutions for rural roads, highways, pedestrians, pipe and Railways Bridge structure etc. We take pride in using our in-house capabilities with the support of excellent software’s to provide our clients with excellent engineering solutions in not excluding the following bridge structures:

- Pipe, Box and skew culverts.
- Rigid frame bridges.
- Tee beam and slab bridge decks.
- Composite bridges.
- Plate girders.
- Box girders
- Balanced Cantilever bridges.
- Steel trussed bridges.
- Pre-stressed Concrete bridges.
- Continuous bridges.
- Curved bridge decks.
- Bridge piers and abutments.
- Bridge bearings.
- Bridge foundation including piles.

BRIDGE DURABILITY

- Durability overview
- Monitoring and testing of structures
- Structural assessment and material, and repair methods
- Inspection, assessment and strengthening.

JRACCE TAKE A LEAD IN MAKING YOUR STRUCTURAL ENGINEERING PROJECT A SUCCESS
URBAN AND RURAL DEVELOPMENT

JRACCE provide an excellent service in urban and rural development. We take pride in using our in-house capabilities with the support of excellent software’s to provide our clients with excellent engineering solutions in not excluding the following:

- Community water reticulation
- Sewer reticulation
- Reservoirs and water towers
- Institutional and social development
- Housing

GEOTECHNICAL ENGINEERING

JRACCE provide an excellent geotechnical solution for all your deep and shallow foundations. We take pride in using our in-house capabilities with the support of excellent software’s to provide our clients with excellent engineering solutions in not excluding the following geotechnical engineering practice:

- Recommendation on soil testing method for specific site condition
- Determining your design and allowable bearing capacities
- Analysis the foundation settlements and their impact
- Recommendation of soil improvement
- Special footing design
- Mat Foundations
- Retaining walls design and stability checks
- Piles design

JRACCE TAKE A LEAD IN MAKING YOUR URBAN - RURAL DEVELOPMENT AND GEOTECHNICAL ENGINEERING PROJECT A SUCCESS
PROJECT MANAGEMENT AND CONSTRUCTION SUPERVISION

JRACCE provide high level project management by overseeing all aspects of activities in pursuit our client project goals, allocating resources, managing budgets, and coordinating overall effects to achieve our clients specific desired results.

We provide services in not excluding the following:

- Project Process Flow Diagrams
- Project Integration Management
- Project Scope Management
- Scope Planning, Defining, Verification and Control
- Project Time Management
- Definition, Sequencing, Resource Estimation, Activities & Duration Estimating,
- Schedule Development and Control
- Project Cost Management
- Cost Estimating, Budgeting and Cost Control
- Project Quality Management
- Quality Planning, Assurance and Control
- Project Resource Management
- Resource Planning, Development and Management
- Project Communication Management
- Information Distribution and Performance Reporting
- Project Risk Management
- Risk Management Planning
- Risk Identification
- Qualitative Risk Analysis
- Quantitative Risk Analysis
- Risk Monitoring and Control
- Project Procurement Management

JRACCE TAKE A LEAD IN MAKING YOUR PROJECT MANAGEMENT AND CONSTRUCTION SUPERVISION PROJECT A SUCCESS
ENVIRONMENTAL MANAGEMENT AND HEALTH AND SAFETY PROJECTS

JRACCE provide an excellent environmental management; we encourage our clients to comply with environmental regulations and recommendations. We have a clear knowledge and understanding of legislative requirements so we can assist with excellent environmental management. We offer the following services:

- Environmental impact assessments.
- Environmental monitoring.
- Environmental audits.
- Environmental risk assessment.
- Borrow pit application and closure with DME.
- Water license application with DWAF
- Waste management.
- Health and Safety plans.

JRACCE TAKE A LEAD IN MAKING YOUR ENVIRONMENTAL MANAGEMENT AND HEALTH AND SAFETY PROJECTS A SUCCESS
CURRICULUM VITAE OF SHAREHOLDER

Names: Magakantsha Julian
Surname: Raphasha
Profession: Professional Civil Engineering Technologist
Nationality: South African

Education:
- University of Surrey (UK)
  Msc in Bridge Engineering (Current)
- University of Pretoria
  BSc(Hons) Applied Science in Structural Technology
- E.N Corporate University
  Projects Management for Engineers
- Tshwane University of Technology
  BTech in Structural Engineering
- Technikon Northern Gauteng
  National Diploma in Civil Engineering
- Eagle Computer Training
  MS Projects

Membership in Professional Societies:
- American Concrete Institute (ACI)
- South African Institute of Civil Engineering (SAICE)
- Professional Civil Engineering Technologist (201070150) (ECSA)

Career Summary
Julian Raphasha is a Professional Civil Engineering Technologist; he spent most of his career with BKS (pty) Ltd Bridge Department as bridge Engineer Technologist where he was involved in the design and detailing of several steel and reinforced concrete structures throughout Africa.

Bridge and Structural Engineering
Julian take pride in being part of the design team that successfully completed in not excluding the following projects:
- Nelson Mandela Bridge in JOHANNESBURG, Gledhow Footbridge - DURBAN, Design and Build of Nangurukuru – Mbwemkuru Road at TANZANIA, Runway of Sikhuphe International Airport at SWAZILAND, Azezo – Metema Road upgrading project at ETHIOPA, Mhathuze Water Buoyant Effluent Disposal scheme pipe line from st2 to ps1- SOUTH AFRICA, Zesco roads upgrade – ZAMBIA, Tamburawa WTW - NIGERIA

Site Supervision
He was then appointed as Senior Engineer Technologist (Resident Engineer) for Eskom at Open Cycle Gas Turbine Mossel bay site where he was involved in the site supervision of the following structures: Gas turbine foundations and buildings, Double storey control building, Dams, Steel structure (Stores, Diesel generator building), Storm water, Access roads and culverts, Cable and pipe trenches, Fuel Tanks and structure, Fuel treatment and forwarding structures, Fire water tanks etc.

Consultant
Julian Raphasha joint BevServ (a coca-cola company) as a consultant where he carryout the design and detailing of steel structures (Warehouses, platforms, etc), Reinforced Concrete structures including office blocks, concrete buildings for mechanical and electrical equipments concrete hardstands etc.
### JRACCE Projects

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Client</th>
<th>Approximate Project Value</th>
<th>Role</th>
<th>Contact Person</th>
<th>Project Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>NW052/05B: UPGRADING OF ROADS D624.Z631 AND Z632 FROM BOSPLAS TO MAJAN ENG:PHASE 2</td>
<td>DEPARTMENT OF TRANSPORT, ROADS AND COMMUNITY SAFETY: NORTH WEST PROVENCE</td>
<td>R68 Million</td>
<td>Specialist Consultants</td>
<td>Mr H. Motsweni (vukafrica), +27 (0) 83 306 2139</td>
<td>Completed</td>
</tr>
<tr>
<td>NW052/05B: UPGRADING OF ROADS D624.Z631 AND Z632 FROM BOSPLAS TO MAJAN ENG:PHASE 2</td>
<td>DEPARTMENT OF TRANSPORT, ROADS AND COMMUNITY SAFETY: NORTH WEST PROVENCE</td>
<td>R24 Million</td>
<td>Specialist Consultants</td>
<td>Mr H. Motsweni (vukafrica), +27 (0) 83 306 2139</td>
<td>Completed</td>
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<tr>
<td>MMANKALA COMMERCIAL &amp; TECHNICAL SCHOOL</td>
<td>PUBLIC WORKS</td>
<td>R30 Million</td>
<td>Specialist Consultants</td>
<td>Leko Consulting, +27 (0) 82 570 5745</td>
<td>Completed</td>
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<tr>
<td>REPAIR AND RENOVATIONS OF STUDENT RESIDENCE</td>
<td>UNIVERSITY OF LIMPOPO</td>
<td>R8 Million</td>
<td>Principal Agent</td>
<td>Mr Modubi, +27(0) 82 200 5269</td>
<td>Completed</td>
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<tr>
<td>KWAGGASTROOM STATION UPGRADE</td>
<td>PASSENGER RAIL AGENCY OF SOUTH AFRICA</td>
<td>R22 Million</td>
<td>Civil and Structural Engineer</td>
<td>Ms J. Modipa, +27(0) 71 676 4308</td>
<td>Current</td>
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<tr>
<td>KWAGGASTROOM STATION UPGRADE PEDESTRIAN BRIDGE</td>
<td>INTERSITE PROPERTY MANAGEMENT SERVICE</td>
<td>R4 Million</td>
<td>Structure Engineer</td>
<td>Ms J. Modipa, +27(0) 71 676 4308</td>
<td>Current</td>
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<tr>
<td>INDUSTRIAL STRUCTURE MABOLTOB</td>
<td>POWERINPEX STRUCTURE &amp; LOGISTICS</td>
<td>R18 Million</td>
<td>Structure Design</td>
<td>Mr R. Richard</td>
<td>Current</td>
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</table>
PROJECTS DONE UNDER THE AUSPICES OF OTHER CONSULTING FIRM

BKS (PTY) LTD

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Client</th>
<th>Approximate Project Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>REHABILITATION OF DISTRICT ROAD 08001 NDABAKAZI (N2) TO TSOMO (R61)</td>
<td>Department of Roads and Public Works (province of the Eastern Cape)</td>
<td>R85 Million</td>
</tr>
<tr>
<td>BUOYANT EFFLUENT DISPOSAL SCHEME: CONSTRUCTION OF A PIPE BRIDGE ACROSS THE MZINGAZI CANAL</td>
<td>Mhlathuze Water</td>
<td>R2.1 Million</td>
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<tr>
<td>Gautrans bridge Inspection - South Africa</td>
<td>GAUTRANS</td>
<td>R0.64 Million</td>
</tr>
<tr>
<td>RUNWAY OF SIKHUPHE INTERNATIONAL AIRPORT - SWAZILAND</td>
<td>Swaziland Ministry of Economic Planning and Development</td>
<td>R115 Million</td>
</tr>
<tr>
<td>DESIGN AND BUILD OF NANGURUKURU to MBWEMKURU ROAD – TANZANIA</td>
<td>United Republic of Tanzania Ministry of works</td>
<td>R950 Million</td>
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<tr>
<td>GLEDHOW FOOTBRIDGE - Durban</td>
<td>S.A Rail Commuter Corporation</td>
<td>R4.40 Million</td>
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<tr>
<td>N1 GLEN LYON ZANDKRAAL South Africa</td>
<td>South African National Road Agency</td>
<td>R620 Million</td>
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</table>

ESKOM HOLDINGS LIMITED

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Client</th>
<th>Approximate Project Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mosselbay Gas Turbine South Africa</td>
<td>ESKOM - ETD</td>
<td>R2.2 Billion</td>
</tr>
<tr>
<td>Common Duct Repair</td>
<td>Eskom Holdings Limited Hendrina Power Station</td>
<td>R13.8 Million</td>
</tr>
<tr>
<td>Station road rehabilitation</td>
<td>Eskom Holdings Limited Hendrina Power Station</td>
<td>R2.5 Million</td>
</tr>
</tbody>
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BerServ a Coca-Cola Company

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Client</th>
<th>Approximate Project Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bloemfontein hardstand South Africa</td>
<td>Coca Cola Fortune</td>
<td>R2.5 Million</td>
</tr>
<tr>
<td>Polokwane upgrade South Africa</td>
<td>Coca Cola Fortune</td>
<td>R2.0 Million</td>
</tr>
<tr>
<td>Port Elizabeth Plant Upgrade South Africa</td>
<td>Coca Cola Fortune</td>
<td>R17.5 Million</td>
</tr>
<tr>
<td>Perseverance office block South Africa</td>
<td>Coca Cola Fortune</td>
<td>R25.0 Million</td>
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