JFPS Projects

&

SERVICES

(JFPS)

COMPANY PROFILE

Established

2007
Company Details

JFPS Projects

CK2007/029490/23

COMPANY PROFILE

2015

OFFICE DETAILS

PHYSICAL ADDRESS: 33 Joubert Street
Middelburg
Mpumalanga
1050

POSTAL ADDRESS: P. O. BOX 5286
MIDDELBURG
1050

TEL: 013-243 4465
FAX: 086-762 4433

DIRECTORS:

Johan Coetzee: 082 047 1691
E-mail: jfps@telkomsa.net
EXECUTIVE SUMMARY:

The document comprises a detailed company profile of JFPS Projects, which includes curriculum vitae of the principals, office capacity, experience and availability.

JFPS Projects was founded by Johan Coetzee in 2007 with years of experience in the Heavy Industry and Project Management and Engineering Designs.

This dynamic team consists of people with vast experience and is involved in various projects.

These people have been involved for over Thirty years in the Heavy Industry and have completed various projects for companies successfully.

JFPS Projects is a Division of Jcd Projects which is involved in the Fire Industry and close links with Jcd Projects and Johan Coetzee is a Director in both companies.

Jcd Projects specialize in all type of engineering design, Project Management and Turnkey projects to suit their clients.

JFPS Projects is the involved in various types of projects as seen from the list below and wish to be of support for your company and its shareholders:

List of key personnel:

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Johan Coetzee</td>
<td>Director</td>
</tr>
<tr>
<td>Bill Corder</td>
<td>Project Manager</td>
</tr>
<tr>
<td>Philip van Staden</td>
<td>Design/Project manager Structures and Civils (Pr. Eng.)</td>
</tr>
<tr>
<td>Rod Partridge</td>
<td>Technical Manager Instrumentation</td>
</tr>
<tr>
<td>Rudolph Marais</td>
<td>Technician Instrumentation</td>
</tr>
<tr>
<td>Eddy van Veen</td>
<td>A.S.I.B. Technical advisor</td>
</tr>
<tr>
<td>Hugh Fourie</td>
<td>Senior Draughtsman</td>
</tr>
<tr>
<td>Anton Koch</td>
<td>Draughtsman</td>
</tr>
<tr>
<td>Eddie Freckleton</td>
<td>Construction/Site Manager</td>
</tr>
<tr>
<td>Hannes Meyer</td>
<td>Construction Manager</td>
</tr>
<tr>
<td>Sydwell Mhalangu</td>
<td>Technician</td>
</tr>
</tbody>
</table>
**JFPS Projects Involvement**

JFPS Projects was involved in the following projects doing the designs, planning and control and commissioning of the projects.

- MMC Nelspruit Filtration Plant R26m
- MFC Ladle Mixer R18m
- MFC Sampling Station R750k
- MFC Crushing and screening plant - MRP R2.5m
- MFC screening Plant R850k
- Kalell mills and silo Middelburg R2.3m
- Tubatse Screening Plant R3.4m
- Effluent Treatment Plant at Ferrometals R19.2m
- MMC Nelspruit Residue Plant R26m
- MMC Pilot Plant R12.6m
- Middelburg Technochrome Granulation Station R5.1m
- Ferrometals P&S Plant Upgrade R72m
- Warden Villiers road R130m
- IHM Empangeni R7.2bn
- Tubatse Ferrochrome Pelletizing & Sintering Plant R350m
- MTC Open Arc Furnace Rebuild R21.5m
- CDR Furnace Rebuild R63m
- MTC Furnace “B” Rebuild R7.6m
- MTC Furnace “C” Rebuild R22.3m
- Highveld Steel & Vanadium Larox filter plant R22.5m
- Vanchem Barren Treatment Plant R65m
- Highveld Steel & Vanadium Pipe gantries R2.5m
- MFC M$ 70MVA Dc Arc Furnace R650m
- Mogaly Alloys 10MVA Dc Arc Furnace feed system R8.5m
<table>
<thead>
<tr>
<th>Project Description</th>
<th>Cost</th>
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</thead>
<tbody>
<tr>
<td>Vanadium Slag Crushing and Milling Plant</td>
<td>R90m</td>
</tr>
<tr>
<td>Barren Treatment Plant</td>
<td>R85m</td>
</tr>
<tr>
<td>Raw Materials handling system upgrade projects</td>
<td>R55m</td>
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<tr>
<td>Kiln 2 Mechanical Rebuild</td>
<td>R32.5m</td>
</tr>
<tr>
<td>Spectrographic Laboratories upgrade project</td>
<td>R20m</td>
</tr>
<tr>
<td>Briquetting Plant</td>
<td>R7.1m</td>
</tr>
<tr>
<td>22 kV Electrical Distribution Network Upgrade</td>
<td>R7m</td>
</tr>
<tr>
<td>Pelletizing Plant Upgrade</td>
<td>R5.5m</td>
</tr>
<tr>
<td>Middleburg Ferrochrome</td>
<td>Open Arc Furnace Rebuild</td>
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<tr>
<td>Witbank Ferrometals</td>
<td>Sinter Plant</td>
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<tr>
<td>Witbank Ferrometals</td>
<td>Effluent Treatment Plant</td>
</tr>
<tr>
<td>Witbank Ferrometals</td>
<td>Furnace 4 &amp; 5 Upgrade</td>
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<tr>
<td>IHM Empangeni</td>
<td>Ilmintite Plant Design</td>
</tr>
<tr>
<td>Middelburg Ferrochrome</td>
<td>Raw Material Store Design</td>
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<tr>
<td>Delta Mine</td>
<td>Coal Mine Design</td>
</tr>
<tr>
<td>MMC Nelspruit</td>
<td>Effluent Treatment Plant</td>
</tr>
<tr>
<td>Middelburg Ferrochrome</td>
<td>Ladle Mixer</td>
</tr>
<tr>
<td>Middelburg Ferrochrome</td>
<td>Brake Neck Trailer</td>
</tr>
<tr>
<td>Middelburg Ferrochrome</td>
<td>Sampling Station</td>
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<td>Middelburg Ferrochrome</td>
<td>Final Product Plant</td>
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<tr>
<td>Tubatse Ferrochrome</td>
<td>Break &amp; Stack Plant</td>
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<tr>
<td>Middelburg Ferrochrome</td>
<td>Screen House</td>
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<tr>
<td>Middelburg Ferrochrome</td>
<td>Screen Systems</td>
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<tr>
<td>Eastern Chrome Mine</td>
<td>Cotton Trailers</td>
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<tr>
<td>Marble Hall</td>
<td>Avmin Cobalt plant</td>
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<tr>
<td>Omega Project</td>
<td>Solidification Plant</td>
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<tr>
<td>Silicon Smelter</td>
<td></td>
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</tbody>
</table>
Manganese Metal Company
Middelburg Ferrochrome
Bank Mine
Zambezi Project (Zambia)
Ferroalloys Feasibility Study
Middelburg Ferrochrome
Ferrometals Feasibility Study
Ferroalloys
MMC Nelspruit
MMC Nelspruit
MMC Nelspruit
Middelburg Ferrochrome
Middelburg Ferrochrome
Ferrometals
SA Chrome
Middelburg Ferrochrome
Middelburg Ferrochrome
Plant
Kimpe Project
Kalell Mill
Tubatse
Ferrometals
Middelburg Techno Chrome
Middelburg Techno Chrome
Middelburg Techno Chrome
Middelburg Techno Chrome
HSVC Larox
Filtration Plant
Material Separation Plant
Silo Structures
Slag Dumps Road Design
Furnace 6
Furnace A
Furnace 7
Sinter Plant
Residue Plant
Pilot Plant
Calciner Plant
30T Dust Trailer
Granulation Station
Pelletizing and Sintering
Filter System
Crushing and screening plant
Crushing and Screening
Copper and Gold Extraction
Design Mills and Silo
Screening Plant
Effluent Treatment Plant
Open Arc & Furnace Rebuild
CDR Furnace Rebuild
Furnace “B” Rebuild
Furnace “C” Rebuild
Filtration plant
M4 Furnace Technochrome  DC Arc Furnace  
Matla power station  Slurry Handling System  
Middelburg Ferrochrome  M4 DC Arc Furnace  
Mogaly Alloys  10MVA DC Arc Furnace  
Stuart Coal  Project Manager – Coal Plant  
Douglas Middleburg Optimization (DMO Project)  Project Manager  
Fire design & Implementation (DMO Project)  Project Manager  

Current Studies and Projects

Mogale Alloys CLU Converter Pre-feasibility study  R160m  
BRI Furnace, Caster and Rolling Mill Pre-feasibility Study  R187m  
Ruby Creek Resources 300t/h Feasibility Study – Tanzania  R165m  
BHP Billiton  R148m
Curriculum Vitae of Key Personnel

CURRICULUM VITAE

JOHAN COETZEE

HOME ADDRESS
45 ROGGEVELD STREET
AERORAND
MIDDELBURG
MPUMALANGA
1050

TELEPHONE
013 245 2108

CELPHONE
082 047 1691

WORK ADDRESS
PO. Box 5286
MIDDELBURG
MPUMALANGA
1050

FIRST NAMES
JOHANNES GERHARDUS

SURNAME
COETZEE

IDENTITY NUMBER
610504 5120 004

DATE OF BIRTH
4 MAY 1961

MARITAL STATUS
MARRIED

DRIVERS LICENSE
CODE 8

NATIONALITY
RSA CITIZEN

HOME LANGUAGE
AFRIKAANS

OTHER LANGUAGES
ENGLISH
QUALIFICATIONS

STANDARD 10

- Afrikaans
- English
- Mathematics
- Technical drawings
- Engineering Science
- Metal Work

Mechanical & Electrical Technical Diplomas

N4

- Engineering Science
- Industrial Electronics
- Industrial Instrumentation
- Mathematics
- Electronics
- Mechanotechnics

N5

- Power Machines
- Strength of Materials
- Mechanotechnics
- Electrotechnics

N6

- Strength of Materials
- Control Systems
- Mechanotechnics
- Power Machines
- Electrotechnics

Project Management Diploma 1991 (Executive Education) (XPM)/10-2670

- Project Objectives
- Technical Objectives
- Quality Objectives
- Feasibility Studies
- Scope of Works
- Organizational Structure
- Project Planning
- Project Progress Control
- Cash Flows
- Expenditure Control
- Communication and co-ordination

**Supervisory Development Program** *(University of Pretoria)*

- Marketing Management
- Purchasing Management
- Industrial Relations
- Individual Behaviour
- Business Economics
- Finance
- Production Management
- Human Resources
- Principle Management
- Leadership

**Paradigm System Technology**

- Hands on Introduction
- Task Planning
- Rotable Management
- Network Management
- Work In Progress Management

**Reliability Centered Maintenance**

- Introduction Reliability Centered Maintenance
- Problem & gathering of information
- Failure assessment
- Consequence assessment
- Failure Prevention
- Task Frequencies
- Maintenance schedules
- Implementation of RCM.

**Complimentary studies**

- Binnington Copeland & Associates – FIDIC Workshop
- World Class Project Controls - Marwillcor Project Control Services
- Anglo American – NEC Contract Workshop
- Instrument Mechanician, Industrial
- Project Management Course
- SAP Maintenance, Projects & general HR Modules (PA, PD, HL)
- Dowding Reynolds & Associates, HT Protection course
- Siemens- Extensive Programmable Logic Controller (PLC)
- Adroit- Basic and Advanced SCADA system configuration

**Surveying**

- Basic surveying Course
- Surveying for Engineers
- Elementary Surveying
- Advance Surveying

**AutoCAD**

- AutoCAD R14
- AutoCAD 2008
- AutoCAD 2010
- AutoCad 2013
- Micro Stations

**Projects**

- Projects 2003
- Projects 2007
- Projects 2010

**Industrial Courses Attended**

- Mainpack
- S.S.T.C
- MOSACT Course
- OSHACT Course
- First Aid Course (Advance)
- Reliability Centered Maintenance - 2
- Microsoft Office
- Interpersonal Communications
- SKF Bearing Course
- Quality Circle Leader Course
- Industrial Relations
- Vibration Analyses
- Mahle Filtration Course
- Weir Pump Course
- M&B Pump Course
- Communication About Performance
- Advance Hydraulic Course
- Vickers Hydraulic System
• Denison Hydraulic Systems
• Installation of Hydraulic Systems
• Repair and Maintenance of Hydraulic systems
• Pump & Pipe Installation Design.

Various Companies International Courses Attended

• Electro Hydraulics
• Rexroth Hydraulics Systems
• Vickers Hydraulic Systems
• Hydac Filtration
• Pall Filtration System.

Career History

Since I started to work I have gained experience in the following disciplines:

• Instrumentation
• Electronics
• Breakdown Maintenance
• Planned Maintenance
• Allen Bradley PLC’s
• Couplings and Bearings
• Chain & Gearbox drives
• AC & DC Motors
• Welding
• Laser Alignment
• Pumps – Hydraulic & water
• Panel Wiring
• Conveyor Belts
• Steam Boilers – HFO/TAR & Gas Fired
• Mechanical Designs
• Civil Designs
• Structural Design
• Electronic and Instrumentation Plant designs
• Vibration Analyses
• Supervisory Experience
• Cad Draughting
• Project Management

Employment History

<table>
<thead>
<tr>
<th>Employer</th>
<th>Start date</th>
<th>Resign date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self Employed</td>
<td>01/11/1996</td>
<td>Current</td>
</tr>
<tr>
<td>Columbus Stainless</td>
<td>04/11/1988</td>
<td>30/10/1996</td>
</tr>
<tr>
<td>Foskor Phalaborwa</td>
<td>28/03/1988</td>
<td>03/11/1988</td>
</tr>
</tbody>
</table>
Career Experience and Responsibilities during employment


In September 1996 I resigned and started my own company and during this time I was involved in various projects or designs.

- Recruitment and supply to the client all required Ad-Hoc project staff to full fill short and long term staffing needs on the current projects being executed.
- EPCM Projects for clients.
- Responsibilities and involvement for the above mentioned projects ranges from leading and directing conceptual, pre- and feasibility studies through to compiling the required documentation to obtain board approval and project execution phase.
- Responsible for total portfolio management and project management of multi-disciplined teams during the execution phase of the project(s) including contract management (FIDIC & NEC), construction management, financial management, quality management, operational readiness, training and recruitment of operational personnel and system integration into current operations throughout various contract types (EPCM, (LSTK)Lump Sum Turnkey and Engineering design contracts)
- Responsible for facilitating all design phases with the chosen design house and to obtain and align with the client’s requirements.
- External and internal interfacing with various consultants, design engineers and service departments related to the project design verification and process guarantees and equipment selection.
- Responsible for overseeing total procurement of system equipment, including compiling of various tender documentation, tender adjudication, contract negotiation, contract management and capital control of expenditure per contract.
- Enforcing compliance to the Occupational Safety Act and Construction Regulations throughout the execution of all the capital projects under my control (Currently > 250 contractors involved in the construction phases)
- Design and Draughting services
- Performing end user / stakeholder management functions.

I was involved in projects doing the designs, planning and control Project management and commissioning of the projects.

Columbus Stainless (28/03/1988 to 03/11/1988)

I started to work as a Drawing office Section Leader at Columbus Stainless.

I was responsible for the drawing office personnel reporting to me.

In total eight draughtsman were reporting to me
During this time we executed several projects from project design, coordination to commissioning and hand over to the engineers.

I left the project office and was signed on as a senior Mechanical Technician in the plant.

Training in various areas was done to familiar me with the plant:

<table>
<thead>
<tr>
<th>Area</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Millwright</td>
<td>2 months</td>
</tr>
<tr>
<td>Electricians</td>
<td>2 months</td>
</tr>
<tr>
<td>Instrumentation</td>
<td>2 months</td>
</tr>
<tr>
<td>Production</td>
<td>2 months</td>
</tr>
</tbody>
</table>

At the Hotmill I was responsible for day-to-day troubleshooting and the evaluation of such problems and the correction thereof.

The upgrading of existing plant with new technologies that is available.

The planning of maintenance for the plant on shutdowns.

During the construction phase of the new Columbus plant I was the project leader on the Hotmill section. I was responsible for signing of all the project documentation pertaining to the plant section.

I was overseeing the installations of the Rougher Mill, Steckel Mill, and Reheat furnace #5, Downcoiler, Batch Anneal, Buildings and overhead Cranes.

I was Responsible for all the hydraulic systems installed and commission thereof. A total of 42 servos and 14 double proportional valves formed part of the hydraulic installation.

Main Areas of commissioning:
- #5 Furnace
- Rougher Mill
- Steckel Mill
- Down coiler
- 66” Dividing Shear and stacker unit
- Coil Inspection line
- Batch Anneal plant

The following gear lubrication systems were installed and commissioned:
• Rougher Mill gear lubrication
• Steckel mill gear lubrication
• 66" Dividing shear gear lubrication

The following MORGOIL systems were also commissioned:

• Rougher mill MORGOIL system.
• Steckel mill MORGOIL systems.

The following pneumatic system were also installed and commissioned:

• All plant air control systems
• Instrument air systems
• Steckel mill servo control system
• Steckel furnace gates
• Down coiler pinch rolls with high pressure servo controls 1.6Mpa.

Safety and schedules

• All the preventative maintenance schedules were drawn up and checked before implementing.
• All the safety lockout system were designed and implemented while commissioning the plant.

Job Description – Maintenance Manager- Hotmill

Paterson Grade - 5

Responsibilities

The management of the Steckel mill and Rollshop and the related activities such as:

• Day-to-day maintenance
• Preventative maintenance schedules
• Shutdown planning
• Shutdowns
• Budget and control thereof
• Personnel and relevant issues
• Management meetings

• The identification of the need for new designs and modifications to existing plant and machinery and the establishment of the parameters and the scope of such work.
• The technical evaluation of the work to be done.
• The administration, control, coordinating and directing of the technical functions within the mills.
• The identification of the technical problems and the provisions of multi-disciplinary technical interface management, by the initiation, coordination and expediting of corrective action to resolve such problems in liaison other parties on the technical aspect of work as a necessity.
• The establishment of work priorities and the liaison with senior management personnel to implement – force changes – corrective action to resolve any problems.
To ensure the availability of manpower, equipment and for the timeous and successful completion of jobs.

To ensure that all safety requirements during design or modifications of the mill are met in accordance with the machinery and occupational safety act.

Attend all customer meetings with personnel to ensure good quality product through the mill.

Liaise with a wide spectrum of suppliers to ensure correct equipment.

The monitoring of the mills and equipment to predict any possible failures.

Timeous repairs of Rotable equipment.

The updating of all modifications to any parts or items in the plant.

The operation of the planning department in the execution of planned maintenance, maintenance schedules, shutdown schedules and planning as required.

**Foskor Phalaborwa (28/03/1988 to 03/11/1988)**

On March 28 1988, I joined Foskor.

Foskor had a plant expansion of R40m. We design new section of the plants, done the cost estimating and project coordination of the designs done.

I designed and commission several pump stations, substations, and water utilities during the time at Foskor.

**Highveld Steel & Vanadium (18/03/1983 to 28/03/1988)**

I start to work at Highveld Steel & Vanadium Corporation, Witbank.

Due to the experience gained I was transferred to the plant while doing my apprenticeship. I had a section of my own as there was a shortage of artisans and report directly to the Senior Technician.

In November 1983 the walking beam water skids broke and I was in charge of the repairs, changes and commissioning of a new water monitoring system. It took six consecutive weeks.

On 6 March 1984 I was transferred to the project department to become a draughtsman.

On 13&14/08/1994 I successfully completed my Trade Test at Olifantsfontein, JHB.

I studied mechanical and structure design and was actively working as a draughtsman.

During this time I was involved in Mine Surveying and Civil designs.
**Iscor Pta Works (05/01/1982 to 17/03/2008)**

In 1982 I started working at Iscor Pretoria as Instrumentation apprentice.

The following courses was attended and passed:

<table>
<thead>
<tr>
<th>Course</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fitting</td>
<td>3 Months</td>
</tr>
<tr>
<td>Welding</td>
<td>3 Months</td>
</tr>
<tr>
<td>Electrical</td>
<td>3 Months</td>
</tr>
<tr>
<td>Basic Electronics</td>
<td>3 Months</td>
</tr>
<tr>
<td>Advance Electronics</td>
<td>4 Months</td>
</tr>
<tr>
<td>Instrumentation</td>
<td>10 Months</td>
</tr>
</tbody>
</table>
CURRICULUM VITAE

BILL W CORDER

Last Position  Senior Project Manager

Qualifications  Higher National Diplomas in Mechanical, Electrical and Production Engineering (now Industrial Engineering)

Including all Institutional fellowship endorsements and C. E. I Part Π, MIEE, MIMech. E., MSAIE (Ex. I. Prod. E)

Languages  English

Summary of Experience

Bill has at least 30 years’ experience in mineral extraction including Gold, Platinum, Chrome, Nickel, Diamonds, Petrocemical and Platinum refinery projects which included on-going experience in fields of design, management and construction.

Employment History

2006 - 2010  Project Manager and subsequently Senior Project Manager at DRA Mineral Processing – Two major projects, Nickel and Coal.

Team leader for the Mmambula (coal) project estimate.

2003 – 2005  AMS Project Manager for the CIP Project at PMR Rustenburg

2002 - 2003  Casthouse Package Lead Engineer – BHP Billiton’s Hillside 3 Aluminium Smelter Project

2000 – 2002  Lead Project Engineer and Project Manager – Murray & Roberts Engineering Solutions

1990 – 2000  Project Manager - JCI Projects

1988 - 1990  Engineering Co-ordinator - Foster Wheeler

1986 - 1988  Lead Mechanical Project Engineer – JCI Projects

1985 - 1986  Engineering – Co-ordinator – Foster Wheeler

1984 - 1985  Mechanical Engineer – Van Eck & Lurie

1982 - 1984  Assistant Project Manager – EMS

1976 - 1982  Lead Mechanical Engineer - Bechtel International
1971 - 1974  Project Engineer – Simon Carves (Africa) Limited
1967 - 1969  Design Engineer - Reyrolle-Parsons Limited SA

Experience:

**Dowding Raynard and Associates (DRA) Mineral Projects 2006-2010**

Senior Project Manager – Overseeing the project manager and team and letting major contracts for the Douglas Middleburg Optimisation Greenfields coal project. The scope included the main coal washing and handling processing plant, a complete in-plant conveyor system with fire detection and protection and laboratory installations – Plant throughput 700,000 tpm. Project value R1.1bn

Mmamabula Project Estimate: Between the two projects described here a comprehensive estimate and presentation to the Mmamabula clients (Bon Terra and CIC Inc.) was completed for this massive Botswanan coal mining project. Scope included the Mining Box Cut design with conveyors and mechanised underground and surface transportation equipment, infrastructure and civils, a coal processing plant, a complete electrical design and distribution system (SLD) and an overall fire protection system. The associated power station was not part of this estimate scope.

Project Manager - Green fields Nickel processing project at Nkomati near Machadasdorp -100,000 tpm, Value R300m

**Anglo Management Services 2003 to 2006**

Anglo Platinum Project Manager – Capacity Increase Project at the Precious Metal Refinery, Rustenburg,

Duties: Responsible for overseeing and reviewing the Bateman expansion design and construction of the new plant, design and implementation of a Special Air Cleaning Project for burnt waste, an insurance replacement fibre glass project replacing the entire original refineries plant draught ducting systems and scrubbers and the design and implementation of the new plant and SX buildings Fire Detection and Protection Systems.

Casthouse Package Engineer – BHP Billiton New Aluminium Smelter Hillside 3 Project at Richards Bay.

Duties: Responsible for Co-ordinating all the engineering for the complete Cast House and Water Plant Value: R240 m.

JCI Projects / Murray & Roberts Engineering Solutions Oct 2000 – August 2002

Lead Design Project Manager – South Deep 220 000 TPM Gold Plant

Duties: Responsible for the Processing Plant design except for the Gold Room. Scope included all in plant mechanical and piping design, with purchasing of equipment material and electrical and instrument coordination and for a new R300m Gold Plant at South Deep. After CBE compilation and approval project start was January 2001. Cold Commissioning began in March 2002. The concentrator was successfully commissioned by June 2002. Client waived the performance test.

JCI Projects – April 1999 – Sept 2000

Project Engineer

Duties: Assistant to Project Manager in developing the scope and design of a Diamond Mine in Lesotho – Letsing Diamonds. The mining would have followed the existing diamond pipe locations and Tailings area whilst the extraction plant would be grass roots. All the design engineering was completed but funding to start the project was unavailable.

Value: + R120 m.


Project Manager

Duties: Responsible for development of a build-own-and-operate pyrometallurgical patented process plant associated with recovery of iron and zinc from waste electric arc furnace dust. Value: R 36 m. The client was the JCI Projects CEO.

Project : Electric Arc Furnace Dust Technology Development Project.
JCI Projects Jun 1998 - Mar 1999

Project Manager

REGM Millsite CIP Carousel 200, 000 TPM Conversion of an existing gold batch leach process. Essentially the project design and capital expenditure had to be cost effective relative to the available gold grades and gold price with quick implementation.

Scope: Process design, detailed engineering, procurement, construction and commissioning.

Value: R 8 m


Project Manager

Joel Gold Mine 150, 000 TPM Plant Expansion. Additional mill and associated mineral extraction process equipment. The plant scope was the CIL conversion of the existing plant operations.

Engineering scope: Detailed engineering for all disciplines, procurement, and construction and commissioning.

Value: R 58 m

JCI Projects Division Mar 1997 - Jul 1997

Project Manager

Water Treatment Plant

Duties: Process requirements dictated an alteration for on-going test work associated with the main plant built in 1996. Value ± R0,56m

Project: Gyp-Cix Conversion.

JCI Projects Nov 1995 – March 1997

Project Mechanical Engineer

Gecamines Project

Duties: Responsible for the detailed technical definition with commissioning of a ± R25m Sulphur Smelter plant at Shituru works near Likasi in the DRC. This proved to be a technically successful project. In addition, the supply of equipment and spares associated with Gecamines Rehabilitation programme to Kolwezi and Luilu Cobalt / Copper Plant. Overall total value ± R140m

Project: Gecamines Rehabilitation Project, Zaire.
**JCI Projects Feb 1996 - Aug 1996**

Project Manager

Water Treatment Plant

Duties: Design and construction of a mine water desalination plant. The plant was commissioned at one of Anglo’s Collieries. Value ± R2.7m

Project: Gyp-Cix Demonstration Plant.

**JCI Projects Mar 1995 - Oct 1995**

Project Mechanical Engineer

Chrome Plant Uprate

Duties: Detailed technical definition for the main U/G chrome project CBE. Design, supervision of construction and commissioning of a chrome spirals extraction plant installed at CMI Works, Lydenburg. The new plant was supplied with chrome ore fed from a new open cast mine originated by JCI Projects.

Thorncliffe Chrome Project

**JCI Projects / Amplats - May 1994 - Feb 1995**

Lead Mechanical Engineer

Duties: Responsible for auditing the smelter management personnel for maintenance aspects and safety requirements. Preparing presentations and documents for the necessary budgeting requirements and the progressive project execution of approved votes. Value ± R25m.

Project: Waterval Smelter - Rustenburg

**JCI Projects - Aug 1993 - March 1994**

Engineering Manager

Duties: Responsible for management of engineering design of a permanent pebble crushing installation associated with primary milling. Assistance with construction and finally commissioning and handover. Value ± R11m.

Project: Potgietersrus Platinum’s Limited - In-circuit crushing

PPP - Completion of last phase of main Project including outstanding construction work, commissioning items and hand over documentation.

Lead Project Mechanical and Piping Engineer - PPRust

Duties: Detailed technical definition for areas: milling, flotation, return dam water, tailings handling, O/L piping and pipe racks, reagent distribution including the supply of major equipment, in addition, the administration of mechanical and piping erection contracts. Value 350m - 90,000TPM

Project: Potgietersrus Platinum Project

JCI Projects May 1990 – Feb 1991

Project Manager

Duties: Design and manage PMR modifications including supervision of construction. Value ± R15m.

Project: PMR Optimisation Project

Foster Wheeler - Oct 1988 - Apr 1990

Overall Project Engineering Co-ordinator

Duties: Co-ordination of all F.W. disciplines and Lurgi process information for the detailed engineering under F.W. Project Manager for the MossGas Petrochemical project.

Value ± R500m.

Project: Lurgi/Foster Wheeler Reformer Project, Mossel Bay.

JCI Projects - Sept 1986 - Sept 1988

Lead Mechanical Project Engineer

Duties: Detailed technical definition for the majority of the P.G.M. refinery process including specialised equipment. Member of commissioning team.

Project: SAREF Project, Rustenburg. (Precious Metal Refineries).

Project Value R550m

Foster Wheeler - March 1985 - July 1986

Senior Project Engineer

Duties: A turnkey project for the installation of a new plant handling a plastic microsphere product.

Value ± R2m.
Project: Sasol 1 Explosives.
Senior Project Engineer
Duties: Responsible for major modifications to the medium and heavy wax plant under supervision of the project manager. The scope included design with supervision of construction. Member of commissioning team.

Project: Sasol 1 Medium / Heavy Wax Distillation Plants.

Van Eck & Lurie - 1984 - 1985 (3 Months)
Mechanical Engineer
Duties: Construction, planning and supervision at WAGM for the installation of ROM sampling equipment and plant maintenance shutdowns.

EMS - 1982 – 1984
Mechanical Engineer
Duties: Detailed technical definition including site construction supervision at Valindaba. From design of pressure vessels to systems commissioning during the “dirty condition” phase of a uranium collection area.

Pelindaba Greenside Project. Value R 1 billion.

Lead Mechanical Engineer
Member of project team for Black Mountain Project. Value ± R130m.
Randfontein GM Uranium and Gold extraction. Value ± R150m.
PMC major extension. Value R180m.

Mechanical Design Engineer
Duties: Pilot plant design, Pelindaba. Also member of feasibility study team for uranium enrichment separation process at Valindaba.

Project Engineer
Duties: Acid plant design and commissioning – 450 t/m plant at Bosveld Kunsmis. Water and sewerage purification plant design, tendering and commissioning.

**Bechtel International (London) - 1969 – 1971**

Piping Engineer

Duties: Member of stress analysis team for piping design of oil refinery projects.

**Reyrolle-Parsons Limited (SA) - 1967 – 1969**

Design Engineer

Duties: Electro-mechanical mining switchgear design.

**AEI LIMITED, London - 1959 – 1967**

Apprenticeship for Electro / Mechanical Design Draughtsman

Duties: 5 year factory / offices apprenticeship. A comprehensive apprenticeship in mechanical and electrical engineering with a period of further experience at the company. Completed electrical, mechanical and production engineering HNC’s during apprenticeship.
CURRICULUM VITAE

PHILIP van STADEN (Pr. Eng.)

Name: Philippus Rudolf van Staden (Philip)
ID Number: 5912285025004

QUALIFICATIONS:

1979-1985: B. Eng. (Civil) (Pretoria)

SUBJECTS:

Planning Techniques
Law of contracts
Construction Equipment
Personnel management
Statistical methods
Project management A (Formal management systems, economic development plans, economic analysis, tender strategy, quantities, estimation of prices, cashflow planning.)
Project management B (Execution, management and control, documentation, risk management, quality control.
Measuring and evaluating, cost control, subcontractors, administrative procedures) Accounting

1989-1991: Subjects for M. Eng.:

Engineering Geology A
Engineering Geology B
Foundation Engineering
Pavement Design
Stabilisation and Compaction
Hydraulic design.

Thesis is outstanding for M.Eng

1988: Registered with ECSA as Pr. Eng. (No. 890462)

2005: Registered as Professional Construction Project Manager (Pr. CPM) with SACPCMP (No D/913/2005)

2000: Enrolled in Master's Degree Programme (Environmental Management) at Free State University. Coursework completed, thesis outstanding.
Specialises in Environmental Impact Assessment and Conservation Management

EXPERIENCE:

Checking of bridge plans
Design of geometry and drainage N4 Nelspruit to Komatipoort
Design of structures N1 Warmbaths to Nylstroom

1988-1990: KEEVE STEYN INC.
Assistant Resident Engineer on Warden to Villiers toll route.
(Contract Value R 60 million)
**1990-1993:** Campbell de Korte Thornburn du Toit and Prinsloo.

Manager of Pietersburg office:

- Design of Tonga Road (R20 Million)

- Preliminary design of Adriaanskop regional water supply scheme for Lebowa: (R70 million estimates)

Started Middelburg office:

- Design and construction of 20 km low standard roads for Kangwane (R2 mil)

- Design and construction of 0.5 megaliter reservoir with 20 km pipeline for Lebowa government (R1.2 million using labour intensive methods)

- Project management to 2400 site and service stands for the Highveld RSC using IDT money. (R20 million)

- Design and construction of complete infrastructure to 400 of above stands (R1.3 million)

**1993:**

WEYERS BOTHA AND HUBEE:

- Resident Engineer on four contracts:
  1) Civil services, roads and stormwater for Atteridgeville Council: (R2.7 M)
  2) Upgrading of main stormwater culvert and jacking of culvert underneath two railway lines for Atteridgeville (R3.5 million)
  3) New culvert under Church street with associated concrete open channel for Pretoria city council: (R1.2 million)
  4) Civil infrastructure including roads, stormwater, sewerage reticulation, water reticulation and sewer pump station to Morelettapark ext. 30 for SANLAM properties (R1.8 million)

**1994-**

PHILIP VAN STADEN CONSULTING (CC):
Civil Design to 21 schools for Dept. of Education, including multi storey buildings and foundation work.

Design of two mezzanine floors (steel structures) for ESCOM Hendrina Power Station.

Survey and report on station drainage, including ash drains, for ESCOM Hendrina Power Station.

Design and supervision of civil services and roads to low cost housing development for Bowburn Properties.

Survey and geotechnical investigation to school sites for Dept. of Education and Training.

EMPR’s for Stuart Coal, Leeufontein mine, Dover Colliery, Golfview Colliery and Wesselton Colliery, including some infrastructure design.

Design of steel structures, sometimes associated with elementary building design for various smaller clients.

Survey and report including photographic record on the condition of all existing structures within 5km radius of ZAID Colliery, Ogies.

Concept, design and construction of specialised precast concrete work for FerroServe and Columbus Stainless in a joint venture with Sharp Civil and Steel Construction.

Design of recycle systems for septic tank effluent to toilets and urinals at schools for Dept. of Education.

Design of tipping station for FerroServe at Columbus Stainless, Middelburg. (Heavy industrial Civils) (R2 Million)

Design of 30 000 ton silo as well as 16t/hour mill for Kalell Grain Holdings, Middelburg. Total value R7 Million.

Design of bulk water supply to Makola and Two-line for Highveld District Council, (R0,5 million)

Design of Civil Services to 1000 stands in eMbalenhle ext. 11, Secunda, for Caresja Developments. (R 7 Million)

Design of 12 km bulk water supply, 2 pressure tanks and a 1 Ml reservoir for ESCOM at Newcastle. (R 4 million)
Realignment of streets as well as rehabilitation of streets for ESCOM at Newcastle. (R 1,5 million)

Design/upgrading of internal water reticulation, Kilbarchan (400 stands) (R 1,5 million)

2002:
Construction supervision (Resident engineer) on R 30 million rehabilitation and reseal for VKE engineers. (Sasolburg bypass)

Design check for Jcd Projects Larox filter plant MMC Plant – R33m.

2003:
Construction supervision (Resident engineer) on R 5.5 million bridge construction for SNA engineers. (Nakop River Bridge for Namibia Roads Authority)

Environmental Impact Assessment on 60 km roads project for Copad engineers (Northwest province).

2004:
Construction Supervision (Resident Engineer) on R 35 million railway construction for R & H Railway Consultants. (Realignment at Beeshoek mine, Postmasburg). Civil and electrical contract. 5 km railway line inclusive 2 Rail over Road Bridges

2005:
Design, tenders, project management and construction supervision for plant and railway siding drainage project, Assmang Beeshoek mine. R 12 million.

Construction supervision (resident engineer) on reconstruction of 4.7 km of Gamagara pipeline for Assmang Beeshoek mine/DWAF, R 10 million civils and R 6 Million electrical/mechanical (Two contracts).

Checking of Jcd Projects designs – Larox filter house R20.5m Contract value for Johan Coetzee.

2006:
Construction supervision (resident engineer) on Sishen Expansion Project (SEP) rail infrastructure construction.

Railway consultants. (R12 Million). 4.5 km Rail construction as well as road over rail bridge.

Also at this time I was appointed construction manager for Kumba’s proposed Sishen South Iron Ore mine and spent a number of months part-time in the Pretoria office. Project was delayed and I continued with other works.

2007
Construction supervision on 4 contracts
Railway embankment and structures including post tensioned railway over road bridge, R45 million (Khumani Mine) export siding (9 km)

Structures for conveyor crossings of existing roads and railway infrastructure Khumani Mine, R 20 million

Mine Haul roads R 40 million

Platelaying and OHTE to export siding (R 25 million)

2008: Construction Manager (North Section, Groblershoop office) for Hatch-Mott Macdonald-Goba joint venture for Transnet Projects on Northern half of Iron Ore Export Railway line Capacity Increase project (R 240 Million)

Design of various small industrial and business structures for Hutton Construction, R 1 million total

Design of access road junction onto provincial road for new mine. (R 1 million)

Design of structures for crusher plant for Strauss Civils (R 2.5 Million)

Design of intersection R325/R385 provincial roads outside Postmasburg. R 8 Million.

2008: Continued Professional Development (CPD) Courses:

- Two full day introduction to NEC Contract presented by Andrew Baird

- Two full day NEC road show encompassing:
  - Understanding Roles and responsibilities
  - What is the function of the activity schedule
  - How do I assess Defined Cost
  - Presented by Peter Cousins

- 5 Day Course Safety and Risk Management (Anglo American / BHP)

2009: Construction manager on infrastructure portion of new Sishen South Iron ore mine for Kumba Resources.
2010: Project management on haulroads, drainage, & some heavy civils for Assmang’s Khumani mine.

Project Management for Northern Cape Dept. of Public Works, Roads & Transport, New Hospital.

Investigation, design and documentation for 22 km road rehabilitation (Nababeep to Concordia) for Northern Cape Dept. of Roads, Transport & Public Works

2011: CPD Courses:

- Two day CIDB by Binnington Copeland
- Two day Advanced Excel by CESA
CURRICULUM VITAE

WILLEM PRETORIUS (Bsc. Ing. Met.)

Personal Details:
Date of Birth: 20/7/1959
Nationality: South African
Marital Status: Married
Personal Profile: Currently on early pension

Key Skills:
- Operating Chrome furnaces
- Budget control
- Open door management style
- Wide range of metallurgical skills
- Motivating people
- Safety first approach
- Prioritizing duties
- Commissioning furnaces and equipment

Key Achievements:
- Part of a commissioning team for Chrome direct reduction plant
- Increased production levels of Low carbon Ferrochrome plant
- Rebuilt open arc smelter
- Partial rebuild of submerged arc furnaces.
- Designed and commissioned crushing plant
Employment History

1/1/1981 to 30/5/1989   Iscor

Student and engineer in training

Key Responsibilities:
- Studies and projects

1/6/89  to 1/6/1994   Samancor

Production engineer

Key Responsibilities:
- Commissioning CDR plant
- Daily production
- Safety, health and HR issues

1/7/1994  to 15/8/2007   Samancor

Production Supt

Key Responsibilities:
- Production of Low Carbon Ferrochrome
- Worked with Japanese company (SDK and Marubeni) to form new company Middelburg Techno Chrome
- Designed and commissioned new slag smelter and crusher plant as well as a milling plant to produce specialized high chrome products (welding rods)
16/8/2007 to 28/2/2009 Samancor

Technical superintendent.

Key Responsibilities:

- Plant improvements
- Started idea generating campaign in company

1/3/2009 to 15/12/2011 Samancor

- Production Supt
- Key Responsibilities:
  - Production of charge chrome
  - Safety, Health and HR issues
  - Budget control
  - Forecasting production figures and compiling budgets
  - Education and Training

Qualifications:

BSc Ing Met at PU vir CHO

MDP at University of Pretoria

Training Courses: Various safety courses

Project management

Black belt problem solving

Professional Memberships: None
Larox Filter MMC Building – Turnkey Project

Larox Filter Plants – Turnkey Project
BHP Billiton Crushing and Screening – Turnkey Project

Crushing and Screening – Turnkey Project
BHP Billiton Effluent Treatment Plant – Turnkey Project

BHP Billiton MCC – Turnkey Project