

MR R SCHAAF - CV

Name : Robert Schaaf Pr Tech Eng

Date of Birth : 1984/08/18

Marital Status : Married

Profession/Specialisation : Structural Engineering

Nationality : South African

Years Experience : 13

Contact details : (c) 072 453 0249
(e) robbieschaaf1@gmail.com



KEY QUALIFICATIONS:

- Matriculated in 2002, Technical High School Kimberley.
 - National Diploma: Civil Engineering, 2007, Central University of Technology, Free State.
 - B.Tech: Civil Engineering (Transportation Engineering), 2009, Central University of Technology, Free State.
 - B.Tech: Civil Engineering (Structural Engineering), 2014, UNISA.
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COMPUTER LITERACY

- Microsoft Office (Word, Excel, Power point)
 - Microsoft Project Professional
 - PROKON – Structural analysis and design software
 - AutoCAD – Drafting software
 - AutoPADDS – Reinforced concrete detailing software
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PROFESSIONAL AFFILIATIONS:

- Engineering council of South Africa (ECSA)
Professional Engineering Technologist (Pr Tech Eng)
201570021
 - The South African Institution of Civil Engineering (SAICE)
Associate Member
2010085
 - National Home Builders Registration Council (NHBRC)
Registered competent person.
Registration/Bar code number: 3000213114
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EMPLOYMENT RECORD:

Mr. Schaaf is currently working as an engineering consultant for private Civil and Structural engineering firms mainly focussing on residential developments.

Mr. Schaaf was employed by Selatile Moloi Consulting Engineers on the 1st of June 2015 to end September 2016 and from January 2018 to June 2019. He was appointed as the head of the structural department providing innovative, cost effective engineering solutions to clients in the public and private sector. His experience extended from residential, commercial and industrial buildings to civil and water retaining structures covering all phases of the project execution from inception and concept to close out.

Mr Schaaf joined Aryx Consulting (Pty) Ltd at the start of October 2016 appointed in the position of senior structural technologist until December 2017.

Mr Schaaf was appointed by Africon, now Aurecon, for his experiential training in June 2006. After completing his experiential training, he received a permanent appointment and was employed by Aurecon for 9 years until May 2015. During his employment at Aurecon he gained vast experience in the design and detailing of structural steel and reinforced concrete structures as well as the construction supervision and quality control monitoring during the construction phase.

He is also involved as a part-time lecturer at the Central University of Technology, Free State since February 2008 to date, lecturing modules such as Structural analysis, Documentation, Project Management and Urban Planning and Design after hours. Mr. Schaaf is also currently the moderator for the Structural Analysis III module presented in the national diploma, civil engineering qualification by the Central University of Technology moderating quality and practice applicability of question papers.

MANAGEMENT EXPERIENCE

Mr Schaaf was also involved with mentorship training provided by Aurecon. Nominated as mentor for training young upcoming professionals, initiative provided by Aurecon.

At Selatile Moloi Consulting Mr Schaaf was appointed at head of the Structural department entailing that he had to manage human resources to achieve the desired deliverables on project. Managing, training and guiding junior structural engineers, technologists and technicians were part of his responsibility thus gaining experience in managing people, time and project budgets to successfully deliver projects to his clients.

EXPERIENCE RECORD:

Additions and alterations to FORD Manufacturing, Silverton Pretoria.

Design and detailing of new pits which entailed concrete retaining walls and foundations. Extensive communication with international stakeholders on design requirements and standards.

(February 2020 – Current)

Bloemwater extension of new offices.

Client – Bloemwater

Construction supervision of structural elements of the new double storey structure and consultation services during construction phase. Attending monthly progress meetings with Project Manager and Contractor.

(November 2019 – Current)

Emoyamed private hospital, Bloemfontein.

Design and detailing of structural elements for phase 2 consisting of concrete raft foundations, retaining walls and concrete first floor slabs over the operating theatres. Collaborating with other team members such as architects and quantity surveyors to meet project deadlines and deliverables within project budget.

(January 2020 – Current)

Multi-Purpose Community Centre in Vredefort, Free-State

Funder – SASOL

Client – Ngwathe Municipality

Project Value – R 9 million

Mr Schaaf provided full scope structural engineering services on the building comprising of offices, conference room, ablution facilities, storerooms and a 190m² multi-purpose hall. Mr Schaaf was intensively involved with the project from the onset and had inputs from concept to project close out.

(February 2018 – June 2019)

New Morena Tshohisi Primary School in Harrismith, Free State – Planning, designing and Construction administration.

Client – Department of Public Works and Infrastructure, Free State Province.

Project Value – R 52 million

Selatile Moloi Consortium was appointed by the client for the full scope of professional services for the planning, design and construction administration for the new school to accommodate 1000 learners. Mr Schaaf as part of the consortium was solely responsible for the structural engineering services of the project through all stages. Buildings mainly consisted of single storey structures covered with sheeted timber roofs except the school hall that was designed with steel roof trusses spanning 22m.

(December 2017 – Current)

Govan Mbeki Pump stations and sewer network, Mpumalanga – Detail design and drafting.

Funder – SASOL

Client – Govan Mbeki Municipality

Mr Schaaf joined the project team as the Structural engineering consultant. The project mainly involved submerged pump stations along the sewer network entailing the analysis and design of water retaining structures. His duties included the design and drafting of concrete water retaining walls and preparing reinforcing steel layouts with bending schedules. He also prepared the standard details for construction joints complete with PVC water stops.

(December 2017 – Current)

House Scheepers, Woodland Hills Wildlife estate Bloemfontein – Design, drawings and site supervision.

The Project entailed the extension of an existing residence by the addition of the first-floor balcony and an outside entertainment area. The modification posed several structural challenges as existing columns had to be removed and existing slabs propped during construction to create an open area with no obstruction/columns as per the Architects requirements. Mr Schaaf was solely responsible for the structural design, drawings, bending schedules and site supervision from the concept stage and discussions with the client to close out stage and completion certificate issued to the contractor.

(June 2017 – November 2017)

PACOFs – Investigation, inspection and certificate of stage

Conducting on site Structural inspections of temporary stages and structures for events in Fouriesburg and Zastron in the Free State prior to issuing the Structural Engineering compliance certificate for the temporary structures.

(January 2017 – December 2017)

Mooihawe retirement village

Performing duties of the principal agent on the private development as well as the structural engineering component of the works which involved detail design and reinforcing detailing of concrete elements, quality control inspections during construction phase and chairing weekly site meetings. Also, in charge of collaboration between professional consultants of other disciplines in the built environment.

(November 2016 – December 2017)

Mafikeng Government Office Precinct.

Involved with the preliminary design stage and responsible for the structural component of the scope of works which included a school, community clinic, taxi rank, office block and the Thusong centre which comprised of 8 buildings. Collaboration with the Architect in order to provide the QS with sufficient information/drawings indicating size and type of structural elements required to submit an accurate cost estimate to the client.

Rehobotswe Primary School in Bethlehem

Appointed as part of the ARS consortium responsible for the design phase structural scope of the works. The project comprised mainly of single storey buildings supported on strip foundations with timber roof trusses apart from the hall which required pad foundations and a structural steel roof spanning 22m between concrete ring beams.

Khumani mine – King and Parsons Shed, Kathu.

Project comprised of 2 new storage Sheds at Khumani mine in Kathu. Parsons Shed is 48x18x8m high and King Shed is 25x12x6m portal frame structures. He was solely responsible for the design and detailing of all structural elements on the project from concept to construction phase. Liaised with client for client specific requirements.

Zastron pump stations.

Design and detailing of 3m high concrete retaining walls for the submerged pump station. Also included the design and detailing of concrete plinths for pump support and a gantry beam with a load capacity of 1,2 ton.

Sol Plaatje University in Kimberley, Northern Cape (Phase 1).

Responsible for the design and preparing bending schedules for the concrete roof beams.

Magalies Water. Design and detailing of the structural elements of the Car port structure.

Racecourse Development. Design and detailing of the concrete valve chamber structures for the bulk water.

Platinum Village schools. Preliminary design of the school hall structure. Provide QS with info for cost estimation purposes.

Lesotho National Museum.

Responsible for the design and detailing of concrete retaining walls supported by piles and torsion beam on a unique curved building.

Extention of additional offices to the second floor of the Bram Fisher building for Mangaung Metro Municipality. Design of structural steel roof trusses and columns for the extension. Involved a site investigation to obtain info required for the extension. (August 2014)

Standard Bank Kuruman structural refurbishment. Designing and detailing of structural flat slab and steel columns as well as the design and detailing of a new lift shaft for the branch.

Hoopstad Waste Water Treatment Works. Responsible for the design and detailing of the walls of the Biological Reactor. Walls were 5m high and were based on the crack width design approach according to BS code. (March 2014 for 2 weeks)

North-Eastern Waste Water Treatment Works. Appointed as ER on the project to be involved with full time site supervision on the structural components of the works. Were exposed to large water retaining structures and the construction and specifications of the joints in water retaining structures that involved the placing of PVC water bars/waterstops to ensure structure is watertight. Stefanutti Stocks Civils KZN was the contractor appointed for construction and the value was R165 000 000. (February 2013 – June 2014)

Mmabatho nursing college. Involved with the preliminary structural design and the preparation of structural drawings for tender purposes which include foundation layout, surface bed layouts and concrete structural floor slabs with concrete column layouts. Valuable experienced were gained in terms of meeting and communicating with all disciplines (mechanical, electrical, civil, quantity surveyors and architects) involved with the project during the preliminary design stages. (February 2012)

First National Bank, structural modification of the Free State branches. Mainly responsible for investigation of existing structures where modifications are required and preparing reports for client on findings and recommendations. (October 2010 and ongoing)

Jacobsdal Sports and Recreational Centre. Design and detailing of the main stand roof structure and concrete foundations. (June 2011)

De Aar hospital. Design structural steel portal frames and preparing detail concrete foundation layout as well as structural steel layouts and details. (August 2011)

Extension to Marquard and Ficksburg water treatment works. Valuable experience gained in the design approach (crack width design) and detailing of water retaining structures. Compiling bending schedules and drafting reinforcing layout was also part of his duties. (Aug 2010 – Mar 2011)

Refurbishment of Canteens at Coca Cola Bloemfontein. He was involved with the site supervision during construction phase and attending project meetings. (October 2011 – December 2011)

18m High mast for Khumani mine. Detail structural analysis and structural steel design of the mast as well as detail construction drawings. (June 2011)

Kuruman prison, replacing boilers. Site investigation and recommendation due to loading modification of existing boilers to be replaced by bigger boilers. Also responsible for the design and detailing of concrete foundations and a new concrete coal bunker. (June 2010 – November 2010)

Coca Cola Bloemfontein extension to warehouse. Prepared drawings for concrete foundations and surface bed as well as steel drawing for columns and roof layout. Attending site meetings with principal agent and architect as well as site inspections. Examination of workshop drawings for steel portal frames was also his responsibility. (August 2010)

Hotazel school and Gamagara multipurpose community hall. Preliminary design which involved marking up architects drawing indicating column sizes, slab and surface-bed thicknesses as well as concrete beam depths. Providing information to the quantity surveyor for costing purposes. (July 2010)

Mantsopa Hospital, Ladybrand. Involved with is the design phase of the new Mantsopa Hospital in Ladybrand. He worked with the design team and his responsibilities included the design and detailing of retaining walls with a total length of 150m that is supported by torsion beams that was also analysed, designed and detailed by him. Structural steel roof trusses and concrete ring beams was designed and detailed by him. He was also involved with the part time site supervision, attending site and technical meetings and overseeing quality of work on site. The value of the project was in the order of R260 mil and the contractor appointed for the works was Group five. (February 2010)

Maseru Referral Hospital. Responsibilities include design and detailing of five concrete staircases and preparing detail surface bed drawings, design and detailing of a submerged concrete tank and retaining walls. The value of the project was in the order of R650 mil and the contractor on the project was Grinaker LTA. (January 2009)

Klerksdorp taxi rank. Re-design of pad foundations, prepare revised detail concrete drawing And compile bending schedule. Collecting information from steel manufacturers with regard to different types of roof sheeting and reporting back to project leader. (January 2010)

Free State Schools. Involved with the part time site supervisions and monitoring progress during construction phase of five schools in the Eastern Free State. Attending site and technical meetings with Architect, QS and Client. Storm water layout drawing was done by him.(April 2008)

Coca cola fortune plant extension (Bloemfontein). Working together with structural design team. Responsibilities include analysis, design and detailing of concrete columns, beams, first floor slabs and surface beds. Site supervision on structural elements was also his responsibility including attending site meetings with architect, quantity surveyor, project manager, contractor and client. Good experience was gained in structural steel design and detailing and construction monitoring. (September 2007)

Mafeteng sports complex (Lesotho). Terrain modelling, bulk earth work calculations for cut and fill and storm water drainage design. (August 2007)

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Thaba Nchu internal sewer. Site supervision and quality control. Activities and tests carried out on site included site survey to confirm invert levels of pipe and manholes, density tests on bedding and backfill material with dynamic cone penetrometer (DCP) as well as air pressure tests on pipe. (August 2007 – October 2007)

Refurbish and reconstruction of BFN airport. Design beams on the proposed car rental building. Experience gained in reinforcing steel inspections. (July 2007)

Matjhabeng Asset register and WSDP review. Responsible for field investigation and capturing data of the quality of sewer pump stations and waste water treatment plants. (November 2006 – December 2006)

Rehabilitation of roads and storm water in Viljoenskroon. Appointed as Resident Engineer on this project. Responsibilities included site supervision, keeping site diary, calculate quantities for payment certificates, attending site meetings with, contract re-estimates, updating as-built drawings, issue site instructions and conducting quality control checks. (April 2006 – November 2006).

ACHIEVEMENTS / AWARD:

- Best N. Dip student 2007 (CUT)
 - Best B. Tech student 2009 (CUT)
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CAREER ENHANCING COURSES

<u>Course title</u>	<u>Course Provider</u>
Anchor fixing and fastening technology	UPAT SA
Technical report writing workshop	Insite training
Soil reinforcement with geosynthetics	Kaytech
Essentials for successful concreting	Concrete Society of South Africa
The sustainable use of steel	South African Institute of Steel Construction
Prokon and Padds training	Aurecon in house training
AutoCAD training	Aurecon in house training
Construction Contracts: Principles, administration and management.	SAICE
IMESA central region meeting. Pay less exergy in your Energy	University Free State, Science and Engineering
Mastering South African Building Inspection	CEO John Graham of SAHITA, NABISA facilitated by CPD Africa
The future of concrete	AfriSam, Brendan Crony
Aluminium Zinc Technology roof sheeting	SAFAL steel

LANGUAGES

	Reading	Writing	Speaking
English	Excellent	Excellent	Fluent
Afrikaans	Excellent	Excellent	Fluent

REFERENCES

Mr. Barry de Klerk Pr Tech Eng
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Director
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barrydk@aryx.co.za

Mr. Anton Naude Pr Eng
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Director
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anton@aryx.co.za

Mr. Peter Graham Pr Tech Eng
Aurecon (Port Elizabeth)
Office manager
072 659 2173
Peter.Graham@aurecongroup.com

ANNEXURES

- National Diploma: Civil Engineering (CUT)
- Baccalaureus Technologiae: Civil Engineering (Transportation)(CUT)
- Baccalaureus Technologiae: Civil Engineering (Structural)(UNISA)
- Award: Best B.Tech Student
- Award: Best N.Dip Student
- SAICE certificate
- ECSA certificate: Pr Tech Eng
- NHBCRC Confirmation letter of competent person registration.

SENTRALE UNIVERSITEIT
VIR TEGNOLOGIE, VRYSTAAT



YUNIVESITHI E BOHARENG
YA THEKENOLOJI, FOREISTATA

Central University of
Technology, Free State

This is to certify that, all the requirements having been satisfied, the

NATIONAL DIPLOMA

ENGINEERING: CIVIL

has been conferred on

ROBERT SCHAAF
[840818 5088 08 2]

Gesertifiseer 'n ware afskrif van
die oorspronklike dokument.
Certified a true copy of the
original document.

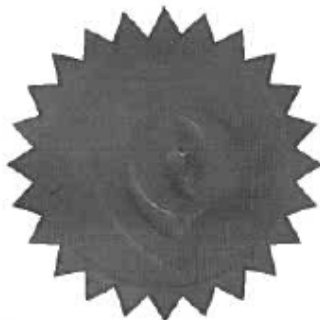


in terms of the SAQA Act (Act 58 of 1995) and the HE Act (Act 101 of 1997) together with all rights and privileges connected thereto

with effect from

2008-01-01

Principal and Vice-Chancellor



Registrar

Executive Dean

3776

No.

SENTRALE UNIVERSITEIT
VIR TEGNOLOGIE, VRYSTAAT



YUNIVESITHI E BOHARENG
YA THEKENOLOJI, FOREISTATA

Central University of
Technology, Free State

This is to certify that, all the requirements having been satisfied, the

BACCALAUREUS TECHNOLOGIAE

ENGINEERING: CIVIL

has been conferred on

ROBERT SCHAAF
[840818 5088 08 2]

in terms of the SAQA Act (Act 58 of 1995) and the HE Act (Act 101 of 1997) together with all rights and privileges connected thereto

with effect from

2009-07-01

Principal and Vice-Chancellor

**Ek sertifiseer dat hierdie
'n ware afskrif van die
Oorspronklike is.**

LOUIS VISSER
Kommissaris van die
Praktiserend Provinsier RSA
KRAMER WEDHAGEN & JOUBERT
A. Andreweits, 455, Bloemfontein, 9301

Registrar

Executive Dean

2488
No.



We certify that

ROBERT SCHAAF

*having complied with the requirements of the Higher Education Act
and the Institutional Statute, was admitted to the degree of*


BACCALAUREUS TECHNOLOGIAE

in Engineering: Civil

*at a congregation of the University
on 20 October 2014*



Vice Chancellor



University Registrar





Executive Dean

2BTECV50784757G04262









The South African Institution of Civil Engineering

This certifies that

Robert Schaaf

is duly elected as

Associate Member

Member no: 2010085

of

The South African
Institution of Civil Engineering

on

25 March 2010

Issued under the seal of the Institution
Under resolution of the Council


President


Executive Director



Engineering Council of South Africa



This is to
certify
that

Robert Schaaf

is registered as

Professional Engineering Technologist

in terms of the Engineering Profession Act, 2000
(Act No. 46 of 2000)

Date

15 January 2015

Registration
Number

201570021



President



Chief Executive Officer



**GAUTENG**

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PHYSICAL ADDRESS

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Randburg, 2125
Docex 96 Randburg

**ASSURING QUALITY HOMES**

28 September 2018

Mr R Schaaf

Selatile Moloi Consulting

To Whom It May Concern,

CONFIRMATION OF REGISTRATION

This letter serves to confirm that you (**Mr Robert Schaaf– ID:8408185088082**) is currently registered with the National Home Builders Registration Council as a Competent Person/Engineer. You are thus able to complete and sign off NHBRC enrolment documentation.

Your registration/barcode number is: **3000213114**. According to our records on your Professional Indemnity Insurance, the period of cover is currently stipulated as from **01/03/2018 to 28/02/2019** and is renewable every year (12 months)

Please liaise with the NHBRC should you require further clarity on the above.

Yours faithfully

Mr. Fred Wagenaar

National Technical & Inspectorate Manager



Council: Ms. Julieka Bayat (Acting Chairperson of Council) / Mr. Abbey Chikane / Mr. Alvin Rapea / Ms. Barbara Watson / Ms. Busiswe Nzo / Mr. Goolam Manack / Ms. Hlateleni Dlepu / Mr. Mziwonke Dlabantu (Chief Executive Officer) / Mr. Phetola Makgathe / Mr. Samuel Kotane / Mr. Themba Dlamini / Mr. Whitey Jacobs / Ms. Xoliswa Daku

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