

Maputla Aaron Moliboea

Address: [unit 10, Hillside Flats, Church St, Rondebosch Cape Town, 7700] | Phone number: [078 026 4246] | Email: [mlbaar001@myuct.ac.za]

Personal Info

- Date of birth: 20 November 1991
- ID number and Passport number (respectively): 037245142129, RS014117
- Gender: Male
- Home Language: Sesotho
- Other languages: English, Tswana, Pedi, Isizulu, IsiXhosa,

Education:

- **Tertiary institution:** University of Cape Town
- **Major:** BSc Eng. Civil Engineering

Key skills

Transportation:

- Traffic Impact Studies
- Integrated Transport Plans
- Public Transport Plans
- Non-motorized Transport Planning
- Public Transportation
- Traffic Engineering
- Transportation Planning
- Traffic Modelling
- Geometric Design
- Public Transport Facility Design

Structures:

- Steel Design
- Concrete Design
- Full structural Design

Water:

- Design of Pipe Systems, Pump Selection
- Hydraulic Structures (flumes, weirs, spillways etc)
- Engineering Hydrology
- Design of Water Reticulation, Sewage and Storm Water Systems
- Water Treatment and Wastewater Treatment

Other skills:

- Surveying
- Geotechnical Engineering Design
- Design through Environmental Assessment and Management
- Project Management

Relevant Software Packages And Other Utilities Used

Software Package	Level of Proficiency	What I can do with Package
AutoCAD Civil 3D, InfraWorks,	Excellent	<ul style="list-style-type: none"> - Do a full geometric design - Produce geometric drawings
SIDRA, PTV VISSUM, VISSIM and VISTRO	Excellent	<ul style="list-style-type: none"> - Produce a full transport analysis and model
AutoCAD,	Excellent	<ul style="list-style-type: none"> - Water Reticulation, Sanitation and Storm Water System drawings - Structural Engineering drawings - Plans for Waste Water and Water Treatment Plants - General drawings associated with maps or construction
ArcGIS	Excellent	Measurement of: <ul style="list-style-type: none"> - Location - Elevation - Hydrology (Rainfall) - Population density - Distance and Area measurement - etc
Prokon and Prokon SUMO (for 3D analysis), Autodesk Rivert	Excellent	to design and analyze structural elements such as; <ul style="list-style-type: none"> - Frames - Beams - Columns and Slabs
Surveying	Excellent	do surveying using <ul style="list-style-type: none"> - Tacheometry - Total Station Theodolite (TST)

		- A dumpy level.
Microsoft Word, Excel and Powerpoint	Excellent	- Technical Report Writing, Result preparation and presentation (respectively):
Epanet	Excellent	- to analyze water reticulation networks
Google Sketchup, Lumion 7	Excellent	- To produce animated models of projects

University Leadership, Clubs and Societies joined:

- South African Space Association (SASA-UCT)
- Engineers Without Borders (EWB)
- Lesotho Students Association
- Acts Kolbe Catholic Society

Relevant Work Experience

Design Office Experience

Company: SMEC South Africa

BQ533 (Project): **Proposed New Northern Cape University in Kimberley, South Africa**

Client: New Universities Task Team

Period: 03/01/2017 - present

Description: Traffic Impact and Mobility Study which included Operational as well as Infrastructure Planning

Project Value: ZAR 1 m

Role: Student Engineer

Responsibility: One of only two new universities to be planned since the first democratic elections in 1994, the NC University will be spatially integrated into the existing fabric of the city. I was involved in the mobility study which included operational as well as infrastructure planning for parking, NMT, normal traffic, public transport and institutional support.

BQ562(Project): **Bains Lodge Parking Review**

Client: Bains Lodge

Period: 28th November 2016 – 3rd January 2017

Description: Review and analyze Bains lodge parking in order to assess its sufficiency and account for irregularities in the pavement.

Project value:

Role: Student Engineer

Responsibility: I was involved in assessing the parking space at Bains lodge by doing a site investigation and then compiling a report for the client.

BQ562 (Project): **Dr. Belcher Road Safety Audit**
Client: Mangaung Metro Municipality
Period: 5th November 2016 – 15th December 2017
Description: To carry out a safety investigation research on Dr. Belcher road and provide recommendations to minimize road traffic accidents, fatalities, damages and to ensure optimum performance of Dr. Belcher corridor and assisted in compiling the final Report.

Project value:
Role: Student Engineer
Responsibility: I was assigned to go to site to carry out traffic counts that were used to analyze the capacity and LOS of the various sections of the road as well as do analysis of the data on Microsoft excel. I was also involved in doing research on traffic calming measures which were then later incorporated in the report.

Construction Site work

Client: Sanral
Period: 1st February 2017 – 01 March 2017
Description: Periodic Maintenance of N6 national Road.
Project Value: -
Role: Student Engineer
Responsibility: I worked under the Assistant Resident Engineer and carried out the various tasks such as: checking and supervising traffic accommodation, preparing site diaries, Site instructions, Site memos, recording the weather and helping with monthly payment certificates

Referees:

Roan Ackerman Section Manager of Roads and Traffic department at SMEC BLOEMFONTEIN (Tel: +27 51 411 8713)
Johan Opperman Roads and Highways Resident Engineer from SMEC BLOEMFONTEIN (Tel: 051 411 8700)
Nthoana Klaars Roads and Highways Assistant Resident Engineer from SMEC BLOEMFONTEIN

AVAILABLE FOR WORK:

FROM: 10th December 2017 -