

CURRICULUM VITAE



Company Name	Lidwala Consulting Engineers (SA) (Pty) Ltd
Date of birth	Frank van der Kooy 16 August 1949
Profession	Environmental Scientist
Position	HOD and Manager
Start date with LIDWALA	2006- Permanent full-time staff member

Qualifications

- Diploma Agriculture – Potchefstroom, North West, 1969
 - National Diploma Landscape planning, Botany, Ecology, Soil science, Pretoria, 1975
 - Bachelor degree – Unisa, Pretoria, Sociology of City and Urban Planning, Ecology and Environmental studies, 1984
 - B(Hons) – Unisa, Pretoria, City of Urban Planning, Environmental, Ecology, 1986
 - Certificate in EIA Studies – U.C.T – Cape Town, 1988
 - MDP – Business Leadership-Unisa, Project, financial, operational and personnel management, 1992
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Affiliation and accreditation

- Registration as Botanical Technologist: South African Council for Natural Scientific Professions: Registration No: 300002/95
 - Registration as a Professional Environmental Scientist: South African Council for Natural Scientific Professions, since 2000, Registration No: 400126/00
 - Member of International Association for Impact Assessment (IAIA) from 1995.
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Specialities

- Environmental impact assessments (EIA)
- Strategic Environmental Assessment (SEA)
- Social Impact Assessment (SIA)
- Integrated Environmental Management (IEM)
- Environmental Management System (EMS)
- Land Functional Analyses (LFA) for rehabilitated land specific mines
- Biodiversity monitoring special technique developed specific for mining but applicable anywhere
- Mine closure plans
- Mine Environmental Management plans/programmes (EMPR)
- Prospecting and mining applications
- Mining – environmental monitoring, auditing, environmental liability (Quantum)
- Rehabilitation of denuded areas, botanical advice and plans
- Development feasibility studies
- Scoping documents for infrastructure and various other projects

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- Conflict Management
 - Public Participation
 - Natural resource management
 - Identification and design of pertinent and cost-effective mitigation measures and management programs
 - Monitoring and auditing protocols
 - Project Management
 - Infrastructure & Service related projects
 - Institutional & Social development
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Career summary

- 1971 to 1972 – **PRIVATE FIRM**, Environmental related work
 - 1973 to 1978 – **NATIONAL BOTANICAL GARDENS**, Pretoria – Environmental work, plant studies
 - 1978 to 1984 – **CAPE DEPARTMENT OF NATURE AND ENVIRONMENTAL CONSERVATION**, Jonkerhoek, Stellenbosh – Nature Conservation Officer – Evaluation of developments, rehabilitation projects, work on habitats, rare and endangered plants, Advisory bodies for development of Nature reserves
 - 1984 to 2000 – **ESKOM**, West Cape Region, Port Elizabeth, George and Head Office – Megawatt Park Johannesburg – Several positions held e.g. Environmental specialist, EIA practitioner, Environmental Manager for Distribution – development of EMS, various EMP's and EIA's for linear projects.
 - 2001 to 2006 – **AFRICAN EPA** – Environmental specialist and Office Manager – Feasibility study on residential development, Strategic Environmental Assessment, Water service development planning, environmental studies, prospecting and mining applications.
 - **2007 – 2011 - LIDWALA ENVIRONMENTAL PLANNING SERVICES (EPS)** – started Lidwala EPS company, shareholder, office manager and director.
 - **2011** – current **Lidwala EPS**, HOD and Manager.
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Work experience

MANAGEMENT, MONITORING AND CONTROL SYSTEMS:

- Linear EIA processes for Eskom Transmission lines throughout SA.
- EIA's for small enterprises
- Prieska feasibility study on Nature reserve and "Die Bos" Holiday resort
- Strategic Environmental Assessment; Bronberg, for DACEL to develop guidelines for future development. (Highly controversial with developers)
- Strategic Environmental Assessment; Rustenburg, phase I
- Strategic Environmental Assessment; Frances Baard District
- Several EIA's for Tshwane Municipality, roads and pipelines
- Mining EIA's, closure plans and liability analyses – Sishen Mine (Kumba – Anglo)
- Waste stream analyses for Kumba Resources (Sishen Mine (Kumba – Anglo)
- Mining and prospecting applications – Gemcore, Kimberley, West Coast
- Biodiversity monitoring protocol developed for Sishen mine, Anglo American
- Mining rehabilitation, monitoring and environmental audits; Elandslaagte mine and Diamondcore
- Road EIA processes for Kuruman District Municipality
- Environmental Management system development (EMS) for Eskom, Sedibeng and Lepelle water, proposals and software implementation.
- Louis Trichardt – Messina 132k V line
- Specifications for servitude clearing & EMP – construction

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- Economic and social strategic analyses – Southern Cape
- Environmental studies on problem areas, solutions and Environmental Management Plans
- Environmental audits
- Editor of “Tree Identification Guide”.
- Closure Risk Analysis and Risk Quantum for Mining Companies- Petradiamonds and Anglo Sishen
- EMPr for Mining Companies- Petradiamonds
- Social Labour Plan for Mining Companies- New Companies
- Closure Plans for Mining Companies- Anglo Sishen and Koffiefontein, Petradiamonds

OTHER RELEVANT EXPERIENCE

- Lecturer: University of the Free state; Environmental Legislation and Impact Assessment
- Lecturer: University of North West; Bed 3rd year students, environmental concepts and problems, the possible methodology to identify and solve critical ecological degradation
- Guest lecturer: University of Pretoria on environmental, regional and town planning legislation
- Courses; Environmental management, legislation and plant identification courses mainly for Eskom
- Speaker at IAIA international, Portugal, on public participation for successful development in a developing country
- Guest speaker; Utrecht University, Development within a developing country with meaningful Environmental consideration
- Netherlands Department of Water and Environmental Affairs; (Rykwaterstaat), their guest to different development projects
- Funds for development projects; European Development Bank; STOAS in the Netherlands
- Advisory to local municipalities; e.g Galeshewe open space (Sol Plaatjie municipality); Sol Plaatjie Kimberley municipality on environmental management systems and development strategies; Magareng (Warrenton) municipality on spatial development and infrastructure development; Dikgatlong (Barkley West) municipality on development strategy and project opportunities Phokwane (Hartswater) municipality, issues, development strategies and opportunities for projects.
- Presentations: Development scenarios and environmental impacts to:
Kimberley Business Forum
Various local municipalities
- Work groups and associations: Strategic Environmental Assessments;
- Environmental Planning Professions Interdisciplinary Committee for the Southern Cape on different projects
- International Association on Impact Assessment
- Development feasibility study for Development Bank of Southern Africa (DBSA);

Language capability

	Speaking	Reading	Writing
English	Excellent	Excellent	Excellent
Afrikaans	Excellent	Excellent	Excellent

Date

04 July 2013

Position: ENVIRONMENTAL PRACTITIONER

Name of Firm: LIDWALA CONSULTING ENGINEERS (SA) (PTY) LTD

Name of Staff: MARINUS AXEL BOON

Profession: ENVIRONMENTAL ASSESSMENT PRACTITIONER

Date of Birth: 15 October 1981

Years with Firm: 1 YEARS

Nationality: RSA

Work Experience: 10 Years (South Africa and Namibia)

Membership in Professional Societies:

- Member of the International Association of Impact Assessment of South Africa (IAIASA).
- Member of the South African Wetland Society (SAWS)

Detailed Tasks Assigned: Environmental Specialist

Key Qualifications:

- Integrated environmental management
- Environmental impact assessments
- Environmental management programmes and plans
- Environmental control and monitoring
- Environmental training
- Environmental auditing and compliance monitoring (Environmental Control Officer)
- Liaison with Landowners, Government and other Interested and Affected Parties
- Research
- Project management
- Environmental best practice

Roads

- Project Manager for the Basic Assessment, Environmental Management Programme and Integrated Water Use Licence Application (IWULA) for the Rehabilitation of National Route N11 Section 10 from Middelburg to Loskop Dam and Kranspoort Safety Improvement (HHO/SANRAL).
- Project Manager (current project) for the Replacement of culvert on provincial road P168-1 between Ermelo and Lothair, 8km from the N17 Environmental Management Plan and Water Use Licence Application

Electricity Sector

- Project Manager (current project) for the Environmental Impact Assessment of Weskusfleur Substation at Koeberg (Eskom).
- Project Manager (current project) for the Environmental Impact Assessment of the 1GW Siyathemba Solar Park near Prieska (CEF).
- Basic Assessment and Environmental Management Programme for the proposed Amandla Welanga Solar Energy Facility, Northern Cape (for Terra Solar).
- Basic Assessment and Environmental Management Programme for the proposed Dida Solar Energy Facility, Northern Cape (for Terra Solar).
- Basic Assessment and Environmental Management Programme for the proposed Inkululeko Solar Energy Facility, Northern Cape (for Terra Solar).
- Basic Assessment and Environmental Management Programme for the proposed Southern Cross Solar Energy

Facility, Northern Cape (for Tiquen Trading).

- Basic Assessment and Environmental Management Programme for the proposed Tutwa Solar Energy Facility, Northern Cape (for Flint Ridge Trading).
- Project team for the Tollie Solar Energy Facility, Northern Cape (for Terra Solar).

Mining Sector

- Project team for the Basic Assessment and Environmental Management Programme for the Expansion of the Ebenaezer Pit at the Koffiefontein Mine (for Koffiefontein Empowerment JV).
- Project team for the Inyanda Mine Kalbasfontein Expansion Project: EIA, EMP and IWULA (for Exxaro).
- Prospecting application in respect of Manganese and Iron Ore on Portion 5 of Farm Bermolli No. 583 and the remaining extent of the farm Sunnyside No. 542, Northern Cape (for Bravospace 273 CC)

Waste

- Project Manager (current project) for the Danielskuil Waste Site Environmental Impact Assessment (for MVD Kalahari/Kgatelopele Municipality).

Other Infrastructure

- Project Manager for the New University of Mpumalanga Environmental Impact Assessment Site Verification and EIA Implementation Plan (Department of Higher Education).
- Project Manager for the New University of the Northern Cape Environmental Impact Assessment Site Verification and EIA Implementation Plan (Department of Higher Education).

Training

- Provide training to ECO's for various projects (solar, pipeline and transmission projects).
- Conducted environmental awareness training on various projects for contractors and clients.

Environmental Control Projects

- Internship Environmental Control Officer for the construction of the Ankerlig Open Cycle Gas Turbine (OCGT) Power Station at Atlantis, Western Cape (ESKOM).
- Environmental Control Officer for the Uramin Trekkopje Mine Integration Project in Namibia. The project comprised the construction of 105 km of 220 kV, 132 kV transmission lines and four electrical substations (Trans Africa Projects).
- Environmental Control Officer for the Construction of Sterrekus (Omega) 765kV Electrical Substation and line turn-ins near Koeberg, Western Cape (ESKOM).
- Environmental Control Officer for the Longlands Estate Development, Vlottenberg, Stellenbosch (SLC Development Services).
- Environmental Control Officer which includes monthly compliance auditing for the Eerste River Integrated Housing Development on Erf 105 and 107 (SEF).
- Environmental Control Officer which includes monthly compliance auditing for the construction of the Sonkwasdrift water pipeline near Tulbagh (SEF).
- Environmental Officer for the provision of bulk infrastructure and road rehabilitation, Cape Point (SANPARKS).
- Environmental Officer which includes monthly compliance auditing for the construction of the MTN Hub in Worcester (SEF).
- Environmental Control Officer for the Emergency Salvage of the Seawin Sapphire, Melkbos, Western Cape. This included the full rehabilitation of the environmental sensitive dune ecosystem area, the handover of the area and the close out environmental report to the authorities (DEAT, DEA&DP and the City of Cape Town) of this first of its kind project in S.A (ALE).
- Management of Environmental Control Officers on various projects throughout South Africa.

Conferences

- Received an award for best written submission in the Hidden Talent section at the National Conference of International Association of Impact Assessment of South Africa (IAIASa) at the Wild Coast Sun 2011 (Showcased environmental best practice in Integrated Environmental Management for the project Salvage of the Seawin Sapphire).

Education:

- Nat. Dip. Nature Conservation obtained from the UNISA, 2008.
- B.Sc. Honours in Environmental Management obtained from the UNISA, 2012.

Short Courses:

- Environmental Law for Environmental Managers, North-West University (NWU), 2011
- ISO 14001: 2004 Lead Auditor Course (DQS German Association for Accreditation), 2010
- Tools for Wetland Assessment – Certificate of Competence, Rhodes University, 2012

Employment Record:

- July 2012 to date: **LIDWALA** – Environmental Professional
- March 2012 – June 2012: **Savannah Environmental** – Environmental Consultant
- July 2008 – February 2012: **NCC Environmental Services** – Environmental Manager
- July 2006 – June 2008: **Department of Environmental Affairs and Tourism (DEAT) MCM** – Senior Marine Conservation Officer (Environmental Protection Vessels and Compliance)
- November 2004 – June 2006: **Overstrand Municipality Environmental and Conservation Services** – Nature and Marine Conservation Officer
- November 2003 – October 2004: **Fraaien Veldt Safaris Game Farm** – Farm Manager

Languages:

	Speaking	Reading	Writing
Afrikaans	Excellent	Excellent	Excellent
English	Good	Good	Good

Name	Bongi Mhlanga
Nationality	South African
Identity Number	8711100389083
Date of Birth	10.11.1987
Valid Driver's License	B
Position	Environmental Practitioner

Qualifications

- National Diploma: Environmental Management: Cape Peninsula University of Technology
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Specialities

- Environmental Impact Assessments (EIA's)
 - Basic Assessments
 - Environmental Management Plans
 - Public Participation Process
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Career summary

- April 2011 - To date: Environmental Practitioner at **LIDWALA SA.**
 - January 2010 – April 2011: Environmental Assistant at **Strategic Environmental Focus**
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Work Experience

- Assisting with the Public participation process within Basic Assessments and Environmental Impact assessment as required by the National Environmental Management Act.
 - Other key experience areas are linked with compiling and conducting:
 - Basic Assessment Reports (BAR's)
 - Environmental Management Plans (EMP's)
 - Preparation of:
 - Notice of intents
 - Application forms for environmental authorization
 - Appeal letters for negative environmental authorization received
 - Authority follow up
 - Drafting of proposals
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Relevant Projects:

- Public participation practitioner for the Majuba Ash Dump EIA, Eskom, Mpumalanga.
- Public participation practitioner for the Tutuka Ash Dump EIA, Eskom, Mpumalanga.
- Public participation practitioner for the Hendrina Ash Dam EIA, Eskom, Mpumalanga.
- Public participation practitioner for the Tabor-Nzhelele 400 kV powerline EIA, Eskom, Limpopo
- Project Manager and Public participation practitioner for the Masibekela Bridge Basic Assessment, Mining Permits and Water Use Licenses, Department of Public Works, Roads and Transport, Mpumalanga.
- Public participation practitioner for the N11 Basic Assessment between Loskop Dam and Middelburg, SANRAL, Mpumalanga.
- Public participation practitioner for the Danielskuil waste site application for a new waste site and closure of the existing waste site, Northern Cape
- Public participation practitioner for the Exxaro new Box cut at Pegasus South, Inyanda Mine, Mpumalanga.
- Public participation practitioner for the Pretoria North Modal Interchange
- Public participation practitioner for the Eskom KDS Homestead 132Kv Powerline
- Public participation practitioner for the Avolon Cemetery Basic Assessment, Gauteng.
- Public participation practitioner for the Olifantsvlei Cemetery Basic Assessment
- Public participation practitioner for the Dunnottar Substation
- Public participation practitioner for the Pennyville Filling Station
- Public participation practitioner for the Kagiso Cemetery
- Public participation practitioner for the Willowglen Filling Station

CURRICULUM VITAE



Company Name	Lidwala Consulting Engineers
Date of birth	Moseketsi Mochesane
Nationality	13 October 1986
Position	South African
Start date with LIDWALA	Environmental Consultant
Relevant experience	02 January 2013
	currently in training

Qualifications

- BSc. Botany-2007, University of the Free State
 - BSc. (Hons.) Environmental Management (2011), University of South Africa
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Specialities

- Flora Studies
 - Biodiversity studies
 - Environmental Impact Assessments (EIA's)
 - Basic Assessments
 - Environmental Management Plans
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Work experience and responsibilities

- January 2013 to date: **LIDWALA CONSULTING ENGINEERS (ENVIRONMENTAL AND PLANNING SERVICES)**, (www.lidwala.com): Environmental Consultant
Responsibilities
 - ❖ Assisting team members with various projects as part of training
 - ❖ Assisted with the vegetation study and reporting for the Tabor-Nzhelele project
 - ❖ Vegetation study for the CEF solar park project
 - ❖ Researched and compiled report for extreme weather in South Africa for Teraco
 - ❖ Assisted with the drafting of adverts and background information documents
 - ❖ Researched and assisted in the compilation of a social impact assessment report for Exxaro, Majuba and Tutuka
 - ❖ Assisted in the compiling an EMPr for Koffiefontein Mine
 - ❖ Compiling of the scoping report for Weskusfleur substation project

- 2006 (July- December): **UNIVERSITY OF THE FREE STATE(DEPARTMENT OF BIOLOGY , ZOOLOGY AND BIODIVERSITY)**- student demonstrator
Responsibilities
 - ❖ Assisting first year students with performing the practical's
 - ❖ Scoring and rating the students

- 2007 :(January to December) **UNIVERSITY OF THE FREE STATE(DEPARTMENT OF BIOLOGY , ZOOLOGY AND BIODIVERSITY)** -lab assistant for a research study
Responsibilities
 - ❖ Collection and preparation of plant samples
 - ❖ Keeping the glass house in a pristine and preventing infestations
 - ❖ Performing the experiments as per protocol
 - ❖ Report writing and presentations

- May 2009- April 2010):**DEDET (PROVINCIAL OFFICE, MPUMALANGA)**- intern (environmental education)
- *Responsibilities*
 - ❖ Typing of office related documents
 - ❖ Presentations to schools and the public on environmental awareness
 - ❖ Running of school greening projects

Language capability

	Speaking	Reading	Writing
English	Good	Good	Good
South Sotho	Good	Good	Good
Zulu	Good	Good	Fair
Xhosa	Good	Fair	Fair
N Sotho	Good	Fair	Fair

Date

January 2013

CURRICULUM VITAE



Company Name	Lidwala Consulting Engineers
Date of birth	Lionel Skeffers 23 June 1986
Nationality	South African
Position	Administrative Assistant
Start date with LIDWALA	February 2007
Relevant experience	8 Years

Qualifications

- Senior Matric Certificate – 2004
 - NQF Level 4 Certificate on Local Economic Development – 2005
 - Office Administration certificate- Damelin 2009
 - National Certificate: Business Administration Services – NQF Level 3 (Currently studying)- CBM Training 2013
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Specialities

- Administrative Duties
 - General Public Participation Processes
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Career summary

- 2007 to date: **LIDWALA** www.lidwala.com
 - 2006: **CONSULTA RESEARCH** – Community cliental services
 - 2005/2006: **SIYATHEMBA MUNICIPALITY** – LED/IDP learner
-

Work experience

OTHER MANAGEMENT AND CONTROL SYSTEMS:

- Completing bid documents and database applications
- Translation of background information documents and adverts
- Handling general administration duties i.e. typing of letters, reports and filing of all the documents.
- Providing support in respect of faxing, binding, scanning and photocopying.
- Managing reception area i.e. answering telephone, screening & transferring calls, taking messages.

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- Receiving visitors and attending to them accordingly.
- Handling of petty cash float of office.
- Ordering stationery for the office staff. Purchasing groceries for office use.
- Maintaining office automations to ensure that are working accordingly.
- Coordinating events i.e. Refreshments, birthdays parties, office functions.
- Making appointments, arranging meetings, and making travel accommodation for Office Manager.
- Electronic Mail; Retrieving and forwarding e-mail.

Public Participation Experience

- Assistance with organizing Siyathemba Local Municipality IDP Review meetings 2005/2006.
- Assistance with Public Participation Process for the Proposed Tabor- Nzhelele 400 kV Powerline EIA project 2012/2013, Limpopo Province.
- Assistance with Public Participation Process for the Proposed 1 GW Siyathemba Solar Park EIA project 2013/2014, Northern Cape Province.
- Assistance with Public Participation Process for the Proposed Weskusfleur Sub-station EIA project 2013/2014, Western Cape Province.

Surveying Experience

- Assisting with Surveying work for Mine Closure Plans for Petra Diamonds Mines.

Language capability

	Speaking	Reading	Writing
English	Excellent	Excellent	Excellent
Afrikaans	Excellent	Excellent	Excellent

Date *July 2013*

CV's OF PROPOSED KEY STAFF

Proposed Position: GIS Technologist

Name of Firm: Lidwala Consulting Engineers SA (Pty) Ltd

Name of Staff: Katie Sassenberg

Profession: GIS Specialist

Date of Birth: 2 June 1972

Years with Firm: May 2009 - Present

Nationality: RSA

Membership in Professional Societies:

- GISc Technologist – The South African Council for Professional and technical Surveyors (PLATO)

Detailed Tasks Assigned: GIS Specialist

Key Qualifications:

- National Senior Certificate – Technical High School

Duties:

- Design and implementation of corporate GIS database
- Database design and administration
- Spatial data capture, analysis, maintenance and management of complex geodatabase systems
- Skills training

WORK EXPERIENCE

- Interrogation and management together with creating customized maps and map production I have heavily involved in creating Open Geospatial Consortium (OGC) compliant styled Layer Descriptor (SDL) schemes for the Web Map Service (WMS) element of the RAMS. Other responsibilities at Lidwala include website design, spatial data manipulation and integration. GIS project development and consultation regarding corporate GIS.
- At present I'm working on the Road Asset Management System (RAMS) for Mpumalanga Department of Roads and Transport, where I am involved with GIS data maintenance, interrogation and management together with creating customised maps and map production. I have also been heavily involved in creating Open Geospatial Consortium (OGC) compliant Styled Layer Descriptor (SLD) schemas for the Web Map Service (WMS) element of the RAMS. Other

responsibilities at Lidwala include website design, spatial data manipulation and integration, GIS project development and consultation regarding corporate GIS.

- For the TSB project, I was involved in creating the TSB database for verifying field information. Together with this, I created an ArcGIS data driven map project with automated summary tables for easy visualization of fields per Grower code. Using the Pongola GIS database, it becomes possible for example, to monitor areas under sugarcane, observe changes and demarcate development areas. GPS data can be imported into GIS for fast production of maps for mapping of small grower lots and field demarcation.
- Another project in which I am deeply involved at Lidwala is the Wetland delineation and riparian habitats within forestry plantations across Mpumalanga, Limpopo and Kwazulu-Natal. The essence of this project is to propose a structured wetland and riparian delineation procedure. Field methodology is outlined together with a supportive post-reporting process that includes spatial data (GPS and GIS) to accurately identify and delineate the spatial extent of wetland and riparian habitats with the intention of preventing past and future commercial afforestation in sensitive areas.
- For SAFCOL (South African Forestry Company Limited), I was part of a project team in developing a GIS to do a land capability study. The objective of the study was to determine the afforestation potential of available land in a buffer strip adjacent to SAFCOL's plantations; and to develop out grower scheme models to govern thereof. Analyses (financial & other) were conducted to determine the feasibility and most preferred structure to establish and manage the proposed out grower schemes.
- Another project that I was involved in for SAFCOL was a study to determine the most effective way to apply forestry waste for the production of green energy (electricity). For this project, we had to identify the different sources of forestry waste within a 100km radius from Sabie (Mpumalanga) and determine the quantity and availability thereof. We had to describe and motivate the methodology used to identify sources and estimate volumes of waste. A cost analysis was conducted to determine if a delivered cost per ton for forestry waste over a 100km radius was feasible.
- When working for EnviroGIS, I was a consulting GIS Technician for York Timbers, Komatiland Forest and SAFCOL. At these respective companies I was part of a team in developing client corporate geodatabases making use of ArcSDE, Oracle and ArcIMS. After implementing the GIS, I was responsible for the maintenance of the implemented corporate GIS. In addition to this I also did forestry and environmental research, customized mapping as well as spatial analysis utilizing raster, vector and field data.

- For SAFCOL, I was involved in a timber flow project and was responsible for the collection, analysis and categorization of industry and field data relating to fiber-flow from Provinces areas and catchments to the processing plants. I was further involved in the development of a model based on these data to draw required information (to calculate the current standing volume, and also the current available volume).
- While working at NetGroup I was involved in the Emalahleni Local Municipality feasibility study regarding a utilities network where I had to gather and combine existing hardcopy data, field data and electronic data to compile a turnkey feasibility GIS. Another project done by NetGroup was an Mbombela land use management (spatial framework) system for local municipalities. I was part of a team that created the spatial database and was responsible for the management of existing and field data and the development of new datasets.

Courses Attended:

- Document Writing course, Gauteng IIRTraining
- Time Management course, Nelspruit Kundiza training and consulting
- IDRISI Spatial Analyses, Randburg In-house training
- ArcIMS course, Midrand ESRI
- ArcView 9 course, Midrand GIMS
- Caddie Professional course, Midrand Advanced Computer Solutions (Pty) Ltd
- Caddie course, Midrand Advanced Computer Solutions (Pty) Ltd

Education:

- National Senior Certificate – Technical High School

Employment Record:

- May 2009 – Present: Lidwala Consulting Engineers (Pty) Ltd: GIS Technologist
- Aug 2005 – May 2009: Envirogis Pty Ltd: GIS Technician
- May 1996 – Aug 2005: NetGroup SA (Pty) Ltd: GIS Technician
- Jan 1992 – May 1996: Bird Machines (Pty) Ltd: Mechanical Draughts person
- Jan 1990 – June 1991: Keeve Steyn Civil Engineers: Civil Draughts person

Languages:

	Speaking	Reading	Writing
English	Excellent	Excellent	Excellent
Afrikaans	Excellent	Excellent	Excellent

CURRICULUM VITAE



Company	Lidwala Consulting Engineers
Name	ALFRED MARCO ANTONIO RASPI
Date of birth	13-06-1958
Nationality	South African
Profession	Professional Technologist
Position	Director (Professional Technologist)
Start date with LIDWALA	December 2004
Relevant experience	30 Years

Qualifications

- National Diploma for Technicians (Civil), Wits Technicon, 1980
 - National Higher Diploma in Technology (Civil), Wits Technicon, 1985
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Affiliation and accreditation

- Professional Technologist, 1992 No 9270046
 - Member of S.A.I.C.E 841829
 - Imesa, R3036
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Specialities

- Civil Engineering
 - Design and Construction Supervision
 - Geometric Road Design and Analysis
 - Township Infrastructure
 - Project Management
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Career summary

- 2004 to date: **LIDWALA** www.lidwala.com – Director based in Gauteng Province, SA
- 1989 to 2004: **POTGIETER, HATTINGH & RASPI inc** - Director
- 1978 to 1989: **KSI** – Senior Technologist

Project experience

DESIGN OF CIVIL INFRASTRUCTURE

- Upgrading of raw Bloemhof Water Abstraction Works (Dr Ruth S Mompoti District Municipality) (R15 million)
- Upgrading of Soweto Water Infrastructure (Johannesburg Water SOC Ltd) (R7 million)
- Design of H40 steel pipeline of 1400mm and 1000mm ND, (*Rand Water*) (R 140 million)
- Design of Payneville Ext 1, 1115 residential erven, (*Ekurhuleni Metropolitan Municipality Department of Housing*) (R 36 million)
- Upgrading of Bloemhof Water Treatment Works, Feasibility study and Preliminary design,(*Dr Ruth S Mompoti District Municipality*) (R125 million)
- Investigation of adequacy of water treatment, waste water and reticulation in Delpark, Botleng, eloff and Sundra (*Victor Khanye Local Municipality*) (R 0.3 million)
- Design of the water borne sewer network for Nkonjaneni township (*Mkhondo Local Municipality*) (R10 million)
- Design and project management Spitskop Village Steelpoort (*Bluezone Group*) (R115 million)
- Investigation for the upgrading of the Bloemhof Water Purification works (*Dr. Ruth S. Mompoti*) (R12 million)
- Design of Civil Infrastructure for Vaal De Grace Golf Estate – Parys (*Dreyprops*) (R12 million)
- Design and Project Management Rand Airport, Airport Park Ext. 4 Light Industrial Development (Rand Airport Holdings) (R6 million)
- Design and Project Management for the Upgrading and Replacement of Sewer (*Alexandra*) (R12 million)
- Review of the sewer network upgrading requirements for the Greater Alexandra Area (*Jhb Water*) (R6 million)
- Upgrading of bulk and collector sewers in the Greater Alexandra Area (*Jhb Water*) (R4,8 million)
- Design of infrastructure for Hydepark Ext. 120 (*PECA Construction*) (R3,5 million)
- Project management and design of bulk earthworks and civil infrastructure for Illovo apartments (*PECA Construction*) (R15 million)
- Project management and design of infrastructure Cedar Creek Township Phase I and II (*ABSA Devco*) (R20 million)
- Project management and design of infrastructure for Needwood Ext. 4 Township (*ABSA Devco*) (R3,5 million)
- Project management and design of infrastructure for Maroeladal Ext. 11 Township (*ABSA Devco*) (R3 million)
- Project management and design of infrastructure for Needwood Township (*ABSA Devco/ Needwood (Pty) Ltd*) (± R3 million)
- Project management and design of infrastructure for Maroeladal Ext. 13 (*ABSA Devco/ Needwood (Pty) Ltd*) (R2 million)
- Outfall sewer for Maroeladal Ext. (*Needwood (Pty) Ltd*)
- Bulk infrastructure master planning for the northern areas of the Western MLC (*Western Metropolitan Local Council*) (± R10 million)
- Project management and design of infrastructure for Norton Park Retirement Village (*Genevan*)
- Project management and design of infrastructure for Pierre van Ryneveld Ext. 14 (*NBS Moreland*)
- Project management and design of infrastructure for Maroeladal Ext. 8 (*Needwood (Pty) Ltd*) (R10 million)
- Design of roads and services – Hartebeesfontein Ext. – Pretoria (*Rooiland Ontwikkelings (Pty) Ltd*)
- Design of roads and services for a retirement village – Norton Park Ext. 2 – Benoni (*Deomax Developers*)
- Design of streets and services for Wilgeheuwel Ext. 6 – Roodepoort (*B & N Developments*)
- Project management and design of roads and services for Noordwyk One Parklands Developers – Midrand (*Deomax Developers*)
- Design of roads and services for Duduza township with 1000 erven (*Deomax Developers*)
- Investigation of the relocation of 500mm diameter outfall sewer – Killarney Mall
- Hospital audits for Chris Hani Baragwanath Hospital and Coronationville Hospital
- Investigation for the upgrading of the existing water and sewer reticulation at Chris Hani Baragwanath Hospital (*Department of Transport & Public Works*) (R1 million)

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- Road rehabilitation investigation for Ontdekkers Road – Roodepoort (*WMLC*)
- Provision of Civil Engineering Services for Mindalore Ext. 7 (Residential 1 township) - (R15 Million)
- The Provision Of Civil Engineering Services for Needwood Extention 8 (CEDAR CREEK PHASE II) – (R15 million)
- Upgrading and Replacement of Sewers in Alexandra (Phase II) – (R3.5 million)

ROADS GEOMETRIC DESIGN

- R571-Detail geometric design for the rehabilitation of route R571 (*SANRAL*) (R 47 million)
- R35 – Rehabilitation of National Road 35 between Amersfoort & Morgenzon (R400 million)
- R33 – Reseal of National Road R33 between Carolina & Belfast (R120 million)
- Woestalleen NuCoal Transport Study (*BUC Project Management Services*) (R 15 million)
- Beverley Ext. 83 traffic report (*Southeby's International Realty*) (R8 000.00)
- Cedar Avenue and Cedar Avenue West intersection – Phase 2 upgrades (*Kantey & Templer*) (R 1.9 million)
- Intersection improvements (*Johannesburg Roads Agency*) (R 300 000.00)
- Addendum Report to the PWV5 basic planning for the deviation of the PWV5 as it's interface with Gautrans Rapid Rail system viaduct 4 (*Bombela Civils Joint Venture*)
- Detail Geometric Design for K103/N14 access interchange (*Bombela Civils Joint Venture*)
- Detail geometric design of permanent and temporary road deviations of SANRAL National Route N3 – Section 12 (Marlboro Interchange) to accommodate the Gautrain Rapid Rail Section DD4B (*Bombela Civils Joint Venture*) (±R60 million)
- Detail Geometric Design of permanent and temporary road deviations to accommodate the Gautrain Rapid Rail Link section DD4B in the City of Johannesburg and Ekurhuleni Metropolitan areas. (*Bombela Civils Joint Venture*) (± R40 million)
- Design Team coordination for highway and stormwater engineering aspects of the Gautrans Rapid rail Link section between Oliver Tambo International Airport and Marlborough Interchange (*Bombela Joint Venture Civils*)
- Geometric design of intersection upgrading Provincial Road D1027 and Cedar Avenue West (*Life Health Care Group*) (R2.5 million)
- Detail design of N2 between Nanaga Interchange and Colchester 45 km (*SANRAL*) (R80 million)
- Preliminary design of Peter Road (dual carriageway) between P126/1 and K72 Ruimsig. (*JRA*) (R14 million)
- Preliminary investigation and design of PWV 10/Metro Boulevard and associated access and system interchanges with the N1 and PWV 5 freeways (*JRA*)
- Detail design of provincial road 2572 Muldersdrif (*Gautrans*) (± R12 million)
- Geometric rehabilitation design for road P70/1 in the Fourways area (*Gautrans*) (± R12 million)
- Geometric rehabilitation for road D1027 in the Fourways area (*Gautrans*)(± R8 million)
- Road N10 between Cradock and Cookhouse (*Department of Transport*) (R22 million)
- Geometric design of upgrading of Uranium Road and D1027 intersection and Uranium Link Road (*Blue Dot Developments*) (R2 million)
- Detail design of various roads in Equatorial Guinea (*Equatorial Guinea Government*) (R20 million)
- Geometric design of improvements to Campbell and Elm Road intersection at Fourways (*JRA*) (R1,2 million)
- Geometric design of filling station access on provincial road D1027 at Dainfern (R2 million) (Gateside Garage)
- Design internal access road Roodeplaas Dam Nature Reserve (Department of Transport and Public Works) R1,8 mil
- Route location and basic planning of 30km of road between Giyani and Giant Reefs (*old Gazankulu Government*) (± R18 million)
- Geometric design of Kalahari road S50 from Vanzylsrus to Askham (*Department of Transport*)
- Design of roads for Kwanobuhle southern arterial – approximately 7km of dual carriageway road (*Kwanobuhle Municipality – consultants*)
- Preliminary Engineering Design for Peter Road from Hendrik Potgieter to Beyers Naude – Johannesburg Roads Agency

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STORMWATER ATTENUATION AND FLOODLINE ANALYSIS:

- Floodline analysis for township development- Erf 85 Kuruman- (*Worley Parsons*)
- Detail design of various stormwater interfaces for the Gautrans Rapid Rail system (*Bombela Civils Joint Venture*) (R30 million)
- Floodline analysis for township development – Wilgeheuwel ext. 26: Wilgespruit river Roodepoort
- Investigations for the upgrading of the existing stormwater reticulation at Chris Hani Baragwanath Hospital (*Department of Transport & Public Works*)
- Floodline analysis for township establishment Steelpoort Ext. 13 – Tubatse: (*Spitskop Village Properties (Pty) Ltd*) (R180 million)
- Floodline analysis for township establishment on Portion 2 of the farm Bothasfontein 408-JR: Jukskei River – (*Peca Construction*) (R130 million)
- Floodline analysis and stormwater attenuation dam design for township establishment of Needwood Ext. 5 and 8: (*ABSA DevCo*) (R30 million)
- Stormwater attenuation dam design and stormwater management: Hydepark Ext. 120: (*Les Rochers (Pty) Ltd*) (R6 million)
- Stormwater attenuation dam design and floodline analysis Maroeladal Ext. 8 – (*Needwood (Pty) Ltd*) (R10 million)

LABOUR-INTENSIVE CONSTRUCTION

- Project management, design and upgrading of the stormwater network (phases I and II) at Chris Hani Baragwanath Hospital using emerging contractors and labour-intensive construction methods (*Department of Transport & Public Works*) (R1,5 million)
- Design internal access road Roodeplaat Dam Nature Reserve (*Department of Transport and public Works*) (R1.8 million)
- Project management, design and upgrading of water and sewer network (phase II) at Chris Hani Baragwanath Hospital using emerging contractors and labour-intensive construction methods (*Department of Transport & Public Works*) (R4 million)
- Project management, design and upgrading of roads (phase IV) at Chris Hani Baragwanath Hospital using emerging contractors and labour-intensive construction methods (*Department of Transport & Public Works*) (R4 million)
- Project management, design and upgrading of water and sewer reticulation (phase I) at Chris Hani Baragwanath Hospital using emerging contractors and labour-intensive construction methods (*Department of Transport & Public Works*) (R2 million)

PAVEMENT MANAGEMENT SYSTEM

- Development of gravel roads management system software programme (*Johannesburg Roads Agency*)
- Pavement management investigation for Samancor
- Development of pavement management system software computer programme
- Development and implementation of a pavement management system for the Western metropolitan Local Council
- Development and implementation of a pavement management system for the Local council of Krugersdorp
- Design Engineer for the detail geometric layout design, storm water design, and final level design of converting an urban arterial to a car restriction zone (“Alberton Pedestrian Boulevard”), value of works \$2.5m, 1996

GEOTECHNICAL INVESTIGATIONS

- Geotechnical investigation for a proposed residential development on portion 78 and remainder of Portion 39 IQ Elandsvlei (*Futurescope Town and regional planners*)
- investigation for proposed light industrial commercial Development for Rand Airport (*Rand Airport Holdings (Pty) Ltd*)

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- Geotechnical investigation for a proposed residential development on remaining extent of portion 2 of the farm Bothasfontein 408-JR
- Geotechnical investigation for a proposed sectional title development on portions 1 and 2 of erf 197, Dunkeld West
- Geotechnical investigation for a proposed sectional title development on erf RE/821, Bryanston
- Geotechnical investigation for a proposed sectional title development on erf 337, Hydepark Ext. 39
- Geotechnical investigation for a proposed sectional title development on erven 149, 150 & 153 (Sutherland Avenue) Hurlingham
- Geotechnical investigation for a proposed sectional title development on erf RE/12/4668, Bryanston
- Geotechnical investigation for proposed sectional title development on erven 10, 11, 12 and 19, Illovo
- Geotechnical investigation and report for the proposed development of 18-hole golf course and residential estate on Vaal River Eiland in Parys (*Dreyprops*)

STRUCTURES

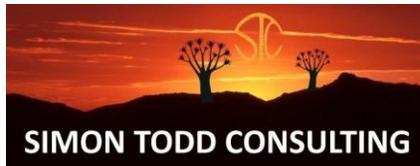
- Hydepark Ext 123 retaining wall designs- (*Les Rochers Developments Pty Ltd*) (1,5 million)
- New office extension Erf 276 Waterval Midrand (*Consolidated Power Projects*) (R1.5 million)
- Inandan Agricultural Holding 43 proposed new canteen facility and new offices (*Directech Africa*) (R0.2 million)
- SGS Lakefield diamond sorting facility (*SGS Lakefield Research Africa (Pty) Ltd*) (R 1 million)
- Design and Project Management of double storey Poelano High School complex (*Gauteng Department of Education*) (R6 million)
- Design of upgrading and renovation of three primary and one high school (*Gauteng Department of Education*) (R8 million)
- Design and Project Management of a multi-storey dwelling and access ramp in Linksfield Ridge (*Tribal Investments*) (R 6, 5 million)
- Design of a new kitchen complex at Chris Hani Baragwanath Hospital (*Department of Transport & Public Works*) (R8 million)

Language capability

	Speaking	Reading	Writing
English	Excellent	Excellent	Excellent
Afrikaans	Excellent	Excellent	Fair
Italian	Excellent	Excellent	Good

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SUMMARY OF EXPERTISE



Simon.Todd@3foxes.co.za

P.O.Box 71
Nieuwoudtville
8180
H: 027 218 1276
C: 082 3326 502

SIMON TODD

- Profession: Ecological Consultant
- Specialisation: Plant & Animal Ecology
- Years of Experience: 15 Years

Skills & Primary Competencies

- Research & description of ecological patterns & processes in Nama Karoo, Succulent Karoo, Thicket, Arid Grassland, Fynbos and Savannah Ecosystems.
- Ecological Impacts of land use on biodiversity
- Vegetation surveys & degradation assessment & mapping
- Long-term vegetation monitoring
- Faunal surveys & assessment.
- GIS & remote sensing

Tertiary Education:

- 1992-1994 – BSc (Botany & Zoology), University of Cape Town
- 1995 – BSc Hons, Cum Laude (Zoology) University of Natal
- 1996-1997- MSc, Cum Laude (Conservation Biology) University of Cape Town

Employment History

- 1997 – 1999 – Research Scientist (Contract) – South African National Biodiversity Institute
- 2000-2004 – Specialist Scientist (Contract) - South African National Biodiversity Institute
- 2004-2007 – Senior Scientist (Contract) – Plant Conservation Unit, Department of Botany, University of Cape Town
- 2007 Present – Senior Scientist (Associate) – Plant Conservation Unit, Department of Botany, University of Cape Town.

General Experience & Expertise

- Conducted a large number of fauna and flora specialist assessments distributed widely across South Africa. Projects have ranged in extent from <50 ha to more than 50 000 ha.
- Widely-recognized ecology specialist. Published numerous peer-reviewed scientific publications based on various ecological studies across the country. Past chairman of the Arid Zone Ecology Forum and current executive committee member.
- Extensive experience in the field and exceptional level of technical expertise, particularly with regards to GIS capabilities which is essential with regards to producing high-quality sensitivity maps for use in the design of final project layouts.
- Strong research background which has proved invaluable when working on several ecologically sensitive and potentially controversial sites containing some of the most threatened fauna in South Africa.
- Published numerous research reports as well as two book chapters and a large number of papers in leading scientific journals dealing primarily with human impacts on the vegetation and ecology of the arid and semi-arid parts of South Africa.
- Maintain several long-term vegetation monitoring projects distributed across Namaqualand and the karoo.
- Guest lecturer at two universities and have also served as an external examiner.
- Reviewed papers for more than 10 international ecological journals.
- Past chairman and current committee member of the Arid Zone Ecological Forum.
- SACNASP registered as a Professional Natural Scientist, (Ecology) No. 400425/11.

A selection of recent work is as follows:

Specialist Assessments:

Specialist Vegetation Assessment for EIA. The Proposed Commercial Concentrated Solar Power Tower Facility and Concentrated Photovoltaic Facility at Van Roois Vley Near Upington. WSP 2012.

Karoshhoek Grid Integration Infrastructure. Fauna & Flora Specialist Report for Basic Assessment. Specialist Report for Savannah Environmental. 2012.

Karoshhoek Solar Valley Development, Upington: Fauna & Flora Specialist Impact Assessment Report. Savannah Environmental. 2012.

Proposed Mainstream South Africa Springfontein Wind Energy Facility: Terrestrial Fauna & Flora Specialist Study for EIA. Savannah Environmental 2012.

Garob Wind Farm: Fauna & Flora Specialist Report for Impact Assessment. Savannah Environmental 2012.

Proposed Photovoltaic Solar Energy Facility on Konkoonsies, Northern Cape: Fauna & Flora Specialist Report for Impact Assessment. EScience Associates 2012.

Proposed Khoi-Sun Solar Facility. Fauna & Flora Specialist Report for Impact Assessment. Cape EAPrac 2012.

Suurwater 62, Boesmanland 75mw Solar Farm, Aggeneys. Fauna & Flora Specialist Report for Impact Assessment. Cape EAPrac 2012.

ESKOM 300MW Kleinsee Wind Energy Facility. Fauna Specialist Report For Impact Assessment. Savannah Environmental. 2012.

Project Blue Wind and Solar Energy Facility, Near Kliensee. Fauna Specialist Report For Impact Assessment. Savannah Environmental. 2012.

O’Kiep 3 PV Solar Energy Facility on a Site In O’kiep Near Springbok, Northern Cape Province. Fauna & Flora Specialist Report for Basic Assessment. Savannah Environmental 2012.

Photovoltaic Solar Energy Facility on Voëlklip, South of Springbok. Fauna & Flora Specialist Report for Basic Assessment. Savannah Environmental 2012.

Namaqua Photovoltaic Solar Energy Facility on a Site North of Kamieskroon. Fauna & Flora Specialist Report for Basic Assessment. Savannah Environmental 2012.

Rare Earth Separation Plant Near Vredendal, Western Cape Province. Fauna & Flora Specialist Report for Basic Assessment. Savannah Environmental 2012.

Inca Graafwater Photovoltaic Solar Energy Facility, Graafwater, Western Cape Province. Faunal Ecology Specialist Report for Impact Assessment. Savannah Environmental 2012.

Aberdeen Solar Facility. Fauna & Flora Specialist Report for Basic Assessment. Specialist Report for Savannah Environmental. 2012.

Venetia Solar Facility. Fauna & Flora Specialist Report for Basic Assessment. Specialist Report for Savannah Environmental. 2012.

Southern Cross Solar Energy Facility: Southern Farm 425. Fauna & Flora Specialist Report for Basic Assessment. Specialist Report for Savannah Environmental. 2012.

Tutwa Solar Energy Facility: Portion 4 of Narries 7. Fauna & Flora Specialist Report for Basic Assessment. Specialist Report for Savannah Environmental. 2012.

Valleydora Photovolataic Solar Power Plant, Free State. Fauna & Flora Specialist Report. CSIR, 2012.

Reddersburg Solar Facility - Fauna & Flora Specialist Assessment. CSIR, 2012.

Melkvlei Photovolataic Solar Power Plant. Fauna & Flora Specialist Report for Basic Assessment. Specialist report for ERM. 2012.

Ruinte Photovolataic Solar Power Plant. Fauna & Flora Specialist Report for Basic Assessment. Specialist report for ERM. 2012.

Genoegsaam Solar Park. Fauna & Flora Specialist Report for Basic Assessment. Specialist report for ERM. 2012.

Genoegsaam Solar Park. Fauna & Flora Specialist EIA Report. Specialist report for ERM. 2012.

Graspan Solar Facility. Fauna & Flora Specialist Report for Impact Assessment. Specialist report for ERM. 2012.

Olyven Kolk Solar Power Plant, Northern Cape: Botanical and Faunal Specialist Assessment. Specialist Report for Environmental Resources Management (ERM). 2011.

Klawer Wind Farm: Ecological and Biodiversity Assessment: Terrestrial Vertebrate Fauna & Botanical Specialist Study. Specialist Report for Environmental Resources Management. 2011.

Lambert’s Bay Wind Farm: Ecological and Biodiversity Assessment: Terrestrial Vertebrate Fauna & Botanical Specialist Study. Specialist Report for Environmental Resources Management. 2011.

Richtersveld Wind Farm: Ecological and Biodiversity Assessment: Terrestrial Vertebrate Fauna & Botanical Specialist Study. Specialist Report for Environmental Resources Management (ERM). 2011.

Roggeveld Wind Farm: Ecological and Biodiversity Assessment: Terrestrial Vertebrate Fauna & Botanical Specialist Study. Specialist Report for Environmental Resources Management (ERM). 2011.

Witberg Wind Farm: Ecological and Biodiversity Assessment: Terrestrial Vertebrate Fauna & Botanical Specialist Study. Specialist Report for Environmental Resources Management (ERM). 2011.

Skuitdrift Solar Facility. Fauna & Flora Specialist Report for Basic Assessment. Specialist Report for Cape EAPrac. 2012.

Khoi-Sun Solar Facility. Fauna & Flora Specialist Scoping Report. Specialist Report for Cape EAPrac. 2012.

Boesmanland Solar Farm. Fauna & Flora Specialist Scoping Study. Specialist Report for Cape EAPrac. 2012.

Bitterfontein Solar Plant - Fauna & Flora Specialist Assessment. Specialist Report for Cape EAPrac. 2012.

Beaufort West Solar Facility, Erf 7388 - Fauna & Flora Specialist Assessment. Specialist Report for Cape EAPrac. 2012.

Improvements to the Ou Kaapse Weg / Silvermine Road Intersection. Specialist Faunal Study For Basic Assessment. Khula Environmental Consultants, 2012.

Upgrading of Tourism Facilities at Goegap Nature Reserve. Specialist Ecological Assesment. Van Zyl Environmental Consultants. 2012.

Plant Sweeps on Portion 2 of the Farm Demaneng 546, Kuruman District, Northern Cape Province for SA Manganese. 2011.

Curriculum Vitae (CV)

1. **Position:** Owner / Director
 2. **Name of Firm:** Visual Resource Management Africa cc (www.vrma.co.za)
 3. **Name of Staff:** Stephen Stead
 4. **Date of Birth:** 9 June 1967
 5. **Nationality:** South African
 6. **Contact Details:**
Tel: +27 (0) 44 876 0020
Cell: +27 (0) 83 560 9911
Email: steve@vrma.co.za
-

7. Educational qualifications:

- University of Natal (Pietermaritzburg):
- Bachelor of Arts: Psychology and Geography
- Bachelor of Arts (Hons): Human Geography and Geographic Information Management Systems

8. Professional Accreditation

- Association of Professional Heritage Practitioners (APHP) Western Cape
 - Accredited VIA practitioner member of the Association (2011)

9. Association involvement:

- International Association of Impact Assessment (IAIA) South African Affiliate
 - Past President (2012 - 2013)
 - President (2012)
 - President-Elect (2011)
 - Conference Co-ordinator (2010)
 - National Executive Committee member (2009)
 - Southern Cape Chairperson (2008)

10. Conferences Attended:

- IAIAsa 2012
- IAIAsa 2011
- IAIA International 2011 (Mexico)
- IAIAsa 2010
- IAIAsa 2009
- IAIAsa 2007

11. Continued Professional Development:

- Integrating Sustainability with Environment Assessment in South Africa (IAIAsa Conference, 1 day)
- Achieving the full potential of SIA (Mexico, IAIA Conference, 2 days 2011)
- Researching and Assessing Heritage Resources Course (University of Cape Town, 5 days, 2009)

12. Countries of Work Experience:

- South Africa, Mozambique, Malawi, Lesotho, Kenya and Namibia

13. Relevant Experience:

Stephen gained six years of experience in the field of Geographic Information Systems mapping and spatial analysis working as a consultant for the KwaZulu-Natal Department of Health and then with an Environmental Impact Assessment company based in the Western Cape. In 2004 he set up the company Visual Resource Management Africa which specializes in visual resource management and

visual impact assessments in Africa. The company makes use of the well documented Visual Resource Management methodology developed by the Bureau of Land Management (USA) for assessing the suitability of landscape modifications. In association with ILASA qualified landscape architect Liesel Stokes, he has assessed of over 100 major landscape modifications through-out southern and eastern Africa. The business has been operating for eight years and has successfully established and retained a large client base throughout Southern Africa which include amongst other, Rio Tinto (Pty) Ltd, Bannerman (Pty) Ltd, Anglo Coal (Pty) Ltd, Eskom (Pty) Ltd, NamPower and Vale (Pty) Ltd, Ariva (Pty) Ltd, Harmony Gold (Pty) Ltd, Mellium Challenge Account (USA), Pretoria Portland Cement (Pty) Ltd

14. Languages:

- English – First Language
- Afrikaans – fair in speaking, reading and writing

15. Projects:

A list of **some** of the large scale projects that VRMA has assessed has been attached below with the client list indicated per project (Refer to www.vrma.co.za for a full list of projects undertaken).

YEAR	NAME	DESCRIPTION	CLIENT	LOCATION
2012	Afrisam Saldanha	Mine	AfriSAM	Saldana
2012	Ncondezi Power Station	Plant	Ncondezi Coal	Mozambique
2012	MET Housing Etosha Amended MCDM	Residential	Millennium Challenge	Namibia
2012	Kangnas Wind	Energy	Mainstream Renewable Power SA	N Cape
2012	Kangnas PV	Energy	Mainstream Renewable Power SA	N Cape
2012	Rossing Z20 Infrastructure Corridor	Infrastructure	Rio Tinto	Namibia
2012	MET Housing Etosha	Housing	MET	Namibia
2012	Qwale Mineral Sands	Mine	Base Resources	Kenya
2012	Houhoek Substation	Transmission	Eskom	Western Cape
2012	Bannerman Etango Mine Phase 2	Mining	Bannerman	Namibia
2012	Letseng Diamond Transmission Line Upgrade	Mine	Gem Diamonds	Lesotho
2012	Letseng Diamond Mine Project Kholo	Mine	Gem Diamonds	Lesotho
2012	Drennan PV	PV		Eastern Cape
2012	George Social Infrastructure	Analysis	George Municipal Area	George
2012	Lunsklip Windfarm	Windfarm	Bergwind	Stilbaai
2012	Hoodia Solar	PV expansion		Beaufort West
2012	Bitterfontein	Energy	WEPTeam	N Cape
2012	Bitterfontein slopes	Slopes Analysis	WEPTeam	N Cape
2012	Knysna Affordable Housing	Residential	Knysna Municipality	Knysna
2012	KAH Hornlee Project	Residential	Knysna Municipality	Knysna
2012	Kobong Hydro	Dam / Powerline	Lesotho Highlands Water	Lesotho
2012	Otjikoto Gold Mine	Mining	ASEC	Namibia
2012	Mozambique Gas Engine Power Plant	Plant	Sasol	Mozambique
2012	SAPPI Boiler Upgrade	Plant	SAPPI	Mpumalanga
2012	Upington CSP	solar Power	Sasol	Northern Cape
2012	Rossing Z20 Mine	Mining	Rio Tinto	Namibia
2012	Eastern Cape Mari-culture	Mari-culture	Department of Agriculture, forestry and Fisheries	Western Cape
2012	Ysermyn coal mine	Mine		Mpumalanga
2011	Vodacom Mast	Structure	Vodacom	Reichterbosch
2011	Weldon Kaya	Residential	Private	Plettenberg Bay
2011	Hornlee	Housing	ABSA	Knysna
2011	Erongo Uranium Rush SEA	SEA	SAIEA	Namibia
2011	Damkoppie	Residential	Private	Western Cape

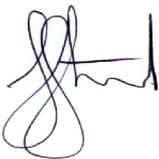
2011	Moquini Hotel	Structure	Costa Zeerva Developments	Western Cape
2011	Bon Accord Nickel Mine	Mine	African Nickel	Barbeton
2011	Rossing Uranium Mine Phase 2	Mining	Rio Tinto	Namibia
2011	Rossing South Board Meeting	Mining	Rio Tinto	Namibia
2011	Floating Liquefied Natural Gas Facility	Structure	PetroSA	Mossel Bay
2011	Khanyisa Power Station	Power Station	Anglo Coal	Western Cape
2011	PPC Rheebeek West Upgrade	Industrial	PPC	Western Cape
2011	Vale Moatize Railway 1	Mining_rail	VALE	Mozambique
2011	Vale Moatize Coal Mine	Mining_rail	VALE	Mozambique
2011	Vale Moatize Railway 2	Mining_rail	VALE	Mozambique
2011	Vale Moatize Railway 3	Mining_rail	VALE	Mozambique
2011	Vale Moatize Railway 4	Mining_rail	VALE	Mozambique
2011	Olwyn Kolk PV	Solar Power		Northern Cape
2011	Beaufort West Urban Edge	Mapping	Willem de Kock Planners	Beaufort West
2011	ERF 7288 PV	PV		Beaufort West
2011	Erf 7288 Beaufort West	Slopes		Beaufort West
2011	N2 Herolds Bay Residential	Residential	MMS Developers	Herolds Bay
2011	Southern Arterial	Road	George Municipality	George
2011	De Bakke Cell Phone Mast	Mast	Vodacom	Western Cape
2011	Ruitesbosch	Mast	Vodacom	Western Cape
2011	Wadrif Dam	Dam	Plett Municipality	Western Cape
2011	George Western Bypass	Road	George Municipal Area	George
2011	Gecko Namibia	Industrial	Vision Industrial Park	
2011	Hartenbos Quarry Extension	Mining	Onifin(Pty) Ltd	Mossel Bay
2011	Wadrif Dam	Dam	Plettenberg Municipality	Beaufort West
2011	Kathu CSP	Solar Power		Northern Cape
2011	Sasolburg CSP	Solar Power		Free State
2010	George Open Spaces System	George SDF	George Municipal Area	George
2010	Sedgefield Water Works	Structure	Knysna Municipality	Sedgefield
2010	George Visual Resource Management	George SDF	George Municipal Area	George
2010	George Municipality SDF	George SDF	George Municipal Area	George
2010	Green View Estates	Residential		Mossel Bay
2010	Wolwe Eiland Access Route	Road	Theo Ciliers	Victoria Bay
2010	Asazani Zinyoka UISP Housing	Residential	Mossel Bay Municipality	Mossel Bay
2010	MTN Lattice Hub Tower	Structure	MTN	George
2010	Destiny Africa	Residential	KDFM	George
2010	Farm Dwarsweg 260	Residential	Hoogkwaatier Landgoed	Great Brak
2010	Bantamsklip GIS Mapping	Mapping	Eskom	Western Cape
2010	Bantamsklip Transmission Revision	Transmission	Eskom	Eastern Cape
2010	le Grand Golf and Residential Estate	Residential	Private	George
2010	Ladywood Farm 437	Residential	Private	Plettenberg Bay
2010	Pezula Infill (Noetzie)	Residential	Pezula Golf Estate	Knysna
2010	Stonehouse Development	Residential	Private	Plettenberg Bay
2009	Eden Telecommunication Tower	Tower	Africon Engineering	George
2009	Walvis Bay Power Station	Structure	NamPower	Namibia.
2009	OCGT Power Plant Extension	Power Plant	Eskom	Mossel Bay
2009	Rossing Uranium Mine Phase 1	Mining	Rio Tinto	Namibia
2009	RUL Sulphur Handling Facility	Mining	Rio Tinto	Walvis Bay
2009	Boggomsbaai	Slopes	Private	Boggomsbaai
2009	Still Bay East	Mapping	DelPlan	SA, WC
2009	Bannerman Etango Uranium Mine	Mining	Bannerman	Namibia
2009	George Municipality Densification	George SDF	George Municipal Area	George
2009	Oudtshoorn Municipality SDF	Mapping	Oudtshoorn Municipality	Oudtshoorn
2009	Harmony Gold Mine	Mining	Harmony	Mpumalanga.
2009	Ryst Kuil/Riet Kuil Uranium Mine	Mining	Turgis	Beaufort West
2009	Trekkojpe Uranium Mine	Mining	Trekkojpe Uranium Mine	Namibia

2009	Calitzdorp Retirement Village	Residential	Pretorius Family Trust	Calitzdorp
2009	Wilderness Erf 2278	Residential	Albert Hanekom	Wilderness
2009	Wolwe Eiland Eco & Nature Estate	Residential	Theo Ciliers	Victoria Bay
2009	Zebra Clay Mine	Mining	Private	Zebra
2009	Fancourt Visualisation Modelling	Visualisation	Fancourt Golf Estate	George
2009	Erf 251 Damage Assessment	Residential	Private	Great Brak
2009	Lagoon Bay Lifestyle Estate	Residential	Lagoon Bay Estate	Glentana
2009	Lagoon Garden Estate	Residential	Dreamveldt	Great Brak
2009	Moquini Beach Hotel	Resort	Kostas Zervas	Mossel Bay
2009	Knysna River Reserve	Residential	Private	Knysna
2009	Paradyskloof Residential Estate	Residential	Private	Stellenbosch
2008	Trekkopje Desalination Plant	Structure	Trekkopje Uranium Mine	Namibia
2008	Hartenbos Landgoed Phase 2	Residential	Willem van Rensburg	Hartenbos
2008	Hartenbos River Park	Residential	Adlequelle	Hartenbos
2008	Hersham Security Village	Residential	Private	Great Brak
2008	Kaaimans Project	Residential	Fritz Fenter	Wilderness
2008	Kloofsig Development	Residential	Muller Murray Trust	Vleesbaai
2008	Rheebok Development Erf 252 Apeal	Residential	Farm Searles	Great Brak
2008	Riverhill Residential Estate	Residential	Theo Cilliers	Wilderness
2008	Camdeboo Estate	Resort	Private	Graaff Reinet
2008	Oasis Development	Residential	Private	Plettenberg Bay
2008	Outeniquabosch Safari Park	Residential	Private	Mossel Bay
2008	George Airport Radar Tower	Tower	ACSA	George
2008	Lakes Eco and Golf Estate	Residential	Private	Sedgefield
2008	Pinnacle Point Golf Estate	Residential	Private	Mossel Bay
2008	Paradise Coast	Residential	Private	Mossel Bay
2008	Fynboskruin Extention	Residential	Ballabarn Three	Sedgefield
2008	Gansevallei	Residential	Pieter Badenhorst	Plettenberg Bay
2008	Hanglip Golf and Residential Estate	Residential	Pieter Badenhorst	Plettenberg Bay
2008	Proposed Hotel Farm Gansevallei	Resort	Wendy Floyd Planners	Plettenberg Bay
2008	Uitzicht Development	Residential	Private	Knysna
2008	Hansmoeskraal	Slopes Analysis	Private	George
2008	Kruisfontein Infill	Mapping	SetPlan George	Knysna
2008	Mount View Tourist Distination	Mapping	SetPlan	Western Cape
2008	Welgevonden	Visualisation	SetPlan George	De Rust
2008	Pierpoint Nature Reserve	Residential	Private	Knysna
2008	West Dunes	Residential	Private	Knysna
1998	Greater Durban Informal Housing Analysis	GIS	Durban Municipality	Durban

Certification:

I confirm that the above CV is an accurate description of my experience and qualifications and that I am available to serve in the position indicated for me in the proposal for this project.

Yours faithfully,



Stephen Stead, Director

CURRICULUM VITAE

Name: Jonathan Michael Kaplan

Profession: Archaeologist

Date of Birth: 23-09-1961

Name of Company: Agency for Cultural Resource Management (ACRM)

Position: Director

Nationality: South African

ID Number: 6109235177089

Marital status: Married with two children

Languages:
First language: English
Other: Afrikaans

Contact details: 5 Stuart Road
Rondebosch
7700
Phone/Fax (021) 685 7589
Mobile 082 321 0172
E-mail acrm@waccess.co.za

Qualifications:

- MA (Archaeology) University of Cape Town, 1989.

Professional registration:

- Association of Southern African Professional Archaeologists (ASAPA).
- Registered consultant with the South African Heritage Resources Agency (SAHRA)
- Registered consultant with the Association of Heritage Assessment Practitioners (AHAP)

Publications:

- Sealy, J., Maggs, T., Jerardino, A. & Kaplan, J. 2004. Excavations at three shell middens at Melkbosstrand: variability among herder sites on Table Bay. South African Archaeological Bulletin 59:17-28.
- Kaplan, J. 1993. The state of archaeological information in the coastal zone from the Orange River to Ponta do Ouro. Report prepared for the Department of Environmental Affairs and Tourism. Agency for Cultural Resource Management.
- Kaplan, J. 1990. The Umhlatuzana Rock Shelter sequence: 100 000 years of Stone Age history. Natal Museum Journal of Humanities 2:1-94.
- Kaplan, J. 1989. 45 000 years of hunter-gatherer history at Umhlatuzana Rock Shelter: South African Archaeological Society Goodwin Series 6:7-16
- Kaplan, J. 1987. Settlement and Subsistence at Renbaan Cave. In Parkington, J. & Hall, M (Eds). Papers in the Prehistory of the Western Cape, South Africa. British Archaeological Reports International Series 332:237-261

Countries of work experience:

South Africa, Lesotho, Swaziland, Namibia, Botswana, Mozambique

Specialisations:

- Archaeological Impact Assessments
- Heritage Conservation Management Plans
- Heritage tourism
- Rock art recording and monitoring
- Excavation and data analysis
- Archaeological monitoring

Company profile:

Jonathan qualified with an MA in Archaeology in 1989 from the University of Cape Town. He has taken part in numerous Archaeological Impact Assessments (AIAs), specialising in Stone Age, rock art and herder studies. He has undertaken baseline studies on large infrastructure projects, including the Lesotho Highlands Water Project, Maguga Dam (Swaziland), Namibia/Botswana Water Transfer Project, Sasol/ACO Gas Pipeline (South Africa & Mozambique), Corridor Sands (Mozambique) and numerous utility projects for Eskom, the Department of Transport and Public Works, as well as coastal and inland surveys, research projects, catchment management studies, Conservation Management Plans and undertaken excavations of rock shelters and coastal shell middens. Since 2010, he has conducted baseline studies (Scoping and full EIA) on numerous alternative energy (wind and photo-voltaic) projects in the Western and Northern Cape Provinces.

ACRM has been registered since 1992.

Declaration:

I confirm that the above CV is an accurate description of my experience and qualifications.

A handwritten signature in black ink, consisting of a stylized 'J' followed by a series of loops and a long horizontal stroke.**Signature****Date:** 23 September, 2012

CIRRICULUM VITAE

A. B. Oosthuizen

Contact Particulars

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c/o ARC – PPRI
Private bag X5017
Stellenbosch
7599
Republic of South Africa

E-mail address: OosthuizenA@arc.agric.za

Tel: (021) 887 4690 **Cell:** 082 446 5892

Academic Qualifications

Nat. Diploma – Agricultural Extension Tshwane University of Technology
(Pretoria Technikon 1978)

Major Disciplines

Soil Science, Soil classification, Survey and Mapping
Geographical Information Systems (GIS)

Professional Status

Member of the Soil Science Society of South Africa

Fields of Speciality and Competence

Pedologist with experience in:

- detail and reconnaissance soil surveys (e.g. for irrigation planning, peri-urban development, farm planning and research purposes)
- soil survey interpretations (e.g. land suitability, agricultural potential)
- national land type survey (Western, Eastern and Northern Cape)
- Data capturing, editing and map productions using ArcGIS + ArcView