Name of Firm: ILISO Consulting (Pty) Ltd

Name of Staff: MARTIN VAN VEELEN (DR)

**Profession:** Civil Engineer and Environmental Assessment Practitioner

Date of Birth: 3 May 1952

Nationality: South African

Membership in Professional Societies: President of the South African Institute of Civil Engineers (SAICE); Professional Engineer (Reg. No. 800333); Certified Environmental Assessment Practitioner; Fellow of the South African Institution of Civil Engineers; Member of the South African Society of Aquatic Scientists; Member of the International Water Association; Member of the Water Institute of South Africa.

#### **KEY QUALIFICATIONS**

A total of 36 years' experience in engineering, environmental management and project management, in water and infrastructure related projects. Extensive experience in water quality, especially water quality management, water quality monitoring and water quality assessment.

#### Design:

Design of a 13 km pipeline in KaNgwane.

#### Construction:

Construction of the Kilburn Dam and associated works, Tugela-Vaal Pumped Storage Scheme.

#### Hydraulics:

Backwater calculation of 30 km of the Nkomati River for a proposed dam at Tonga and on the Lomati River for the Driekoppies Dam.

# Management:

Head of the Sub-directorate Water Quality Studies at the Hydrological Research Institute, Department of Water Affairs and Forestry, Manager of the Water Quality and Environment Group at BKS Incorporated, Director at Iliso Consulting, responsible for the Environmental Management and Water Resource Management Division.

# Academic:

External examiner for two MSc Theses on water quality.

#### **EDUCATION:**

PhD in Aquatic Health, Rand Afrikaans University 2003 M Eng (Water Utilization), University of Pretoria 1983 BSc (Eng) (Hons) (Water Utilization), University of Pretoria 1977 BSc Eng Civ., University of Pretoria 1976

# EXPERIENCE RECORD: ILISO Consulting (Pty) Ltd August 2005 to present Director

• Project Team Leader for the Environmental Impact Assessment for the **Kobong pumped** storage scheme off the Katse Dam and 65km transmission line in Lesotho.

Fair

- Sustainable Transport, Environmental Screening and Stakeholder Consultation for the Gauteng Integrated Transportation Masterplan 2035
- Gautrain Rapid Rail Link amendment applications for the Technopark, Zonkiziwe, TBM section, Remainder of Tunnel, Technopark 2 Viaduct 6 (Salvokop area) sections of the route. (Client Bombela. June present, +\_ R2 000 000-00).
- Audit team leader for the internal audit to assess the adequacy and effectiveness of the South African Department of Water Affair's system of internal controls in operations targeting risk areas, identifying, evaluating and assessing the probability of the risk occurring and the impact in the event that the risk should occur. The evaluation of controls encompasses Safeguarding assets, Compliance with policies and laws, Accomplishment of goals and objectives, Reliability and integrity of information and Economical and efficient use of resources (SCARE). The audit includes dams and Wastewater Treatment Works.
- Team Leader for a project for the Department of Water Affairs to identify and address illegal irrigation water use in the Vaal River Catchment.
- Assessment of the impacts of groundwater draw down and release of tunnel drainage water to natural environment for the Gautrain project.
- Deputy Team Leader and Water Quality Specialist for the Reconciliation Study for the Olifants (Mpumalanga) River Catchment.
- Team Leader for the Resource Protection section for the review of the **National Water Resource Strategy.**
- Water quality assessment of the Outiniqua River Catchment, Great Marico River Catchment, Zeekoegat WWTW EIA and Groot Letaba River
- Gautrain Tunnel drainage water discharge impact assessment study.
- Provincial Leader for the electronic drinking water quality management system.
- Team Leader for the feasibility study for a new regional waste water treatment works (150 MI/day) for the Sedibeng District Municipality.
- Team leader for developing an Environmental Management Framework for the Midvaal Municipality.
- Team Leader for the development of a water allocation plan for the **Mhlathuze River** Catchment.
- Team Leader for the feasibility study for a proposed pipeline from the **Chobe River to the** south of Botswana (1.9m diameter, 580 km).
- Specialist water quality advisor for the proposed new Mooi-Umgeni Water Transfer Scheme.
- Team Leader for the environmental impact assessment for the proposed new Mosetse Dam in Botswana.

**Previous Employment** 

Company	Period	Position
BKS (Pty) Ltd, Pretoria	March 1993 to July 2005	Director
Department of Water Affairs and Forestry	1989 to 1992	Deputy Chief Engineer
Department of Water Affairs and Forestry	1985 to 1988	Senior Engineer
Department of Water Affairs and Forestry	1983 to 1985	Engineer
Chunnett Fourie & Partners	1980 to 1983	Engineer
Department of Water Affairs, Pretoria	1978 to 1980	Assistant Engineer
University of Pretoria	1977	Junior Lecturer

	Speak	Read	Write
English	Excellent	Excellent	Excellent
Afrikaans	Excellent	Excellent	Excellent
Dutch	Excellent	Excellent	Good
German	Good	Good	

#### **CURRICULUM VITAE – T CALMEYER**

Name of firm: ILISO Consulting Environmental (Pty) Ltd

Name of Staff: **CALMEYER T** 

Profession: **Environmental Assessment Practitioner** 

Date of Birth: 18 August 1967

Nationality: South African

# **Membership in Professional Societies:**

President of the South Africa affiliate of the International Association of Impact Assessment,

Certified with the ICB as an Environmental Assessment Practitioner,
Member of: the International Association of Impact Assessment (IAIA), the IAIA Training and
Professional Development Committee, the South African Environmental Law Association,
South African National Committee on Large Dams (No 2-110), the Olifants River Forum and
the International Association of Public Participation

#### **KEY QUALIFICATIONS:**

Terry has a Masters degree in Environment and Society and over twenty years of experience, which includes all aspects of Integrated Environmental Management, Public Participation, Project Management and tertiary education in the Environmental Management Field.

#### **EDUCATION:**

MA (Environment and Society) University of Pretoria (with distinction) 2003 BA Hons (Geography with specialisation in Environmental Analysis and Management), University of Pretoria (with distinction) 1999 Diploma in Bookkeeping, Damelin 1995

BA, Majoring in Development Administration and Geography, UNISA 1993

#### ADDITIONAL COURSES

•	Carbon Emission Reduction Expert Course (ISO 14064-2) (Canadian Sta	ndards
	Association Education and Training) – 10- 13 March 2013, Johannesburg	2013
•	S21(c) and (i) Water Uses - Comprehensive Training (DWA Directorate:	Water
	Abstraction and Instream Use – 27 to 28 November 2012)	2012
•	Sustainability Assessment, IAIAsa 2011 (A Morrison-Saunders and J Pope)	2011
•	Cumulative Impacts Assessment, Ghana IAIA09 (B Ross & L Canter)	2009
•	Environmental Risk and Impact Assessment, Rhodes University	2006
•	Project Management (Compu-Tutor)	2000

#### **EXPERIENCE RECORD:**

ILISO Consulting (Pty) Ltd - August 2005 to September 2012 Technical Director ILISO Consulting Environmental Management (Pty) Ltd - October 2012 to present -**Director** 

- Presentation at the Parliamentary Portfolio Committee on Water and the Environment's Public Hearing on the efficacy of South Africa's EIA Regime. July 2013.
- Environmental Impact Assessment and Environmental Management Plans for:
  - Groot Letaba River Water Resources Development Project Environmental Impact Assessment -proposed new large dam and bulk water supply infrastructure (pipelines and reservoirs). (January 2007 to December 2012).

- Kobong pumped storage scheme off the Katse Dam and 65km transmission line in Lesotho.
- upgrading and extension of the Baviaanspoort and Zeekoigat Wastewater Treatment Works for the City of Tshwane (2011) and the Khutsong and Kokosi WWTW
- TCTA's Komati Water Supply Augmentation Project (KWSAP). 2010.
- Eskom 765kV Majuba-Umfolozi Transmission Power Line Project Manager
- 150km Umfolozi-Empangeni 765kV Transmission line and substation

# Public Participation Task Leader for :

- Eskom's Applications for Postponement of, and Exemption from, the Minimum Emissions Standards for 21 of Eskom's Coal and Liquid Fuel-Fired Power Stations.
- Gautrain Initial Works EMP
- Eskom Medupi Integration project

#### • Environmental Assessment Practitioner for:

- the finalisation of the Environmental Management Plans, Baseline Studies, authorisation of borrow areas, Water Use Licence Applications and assistance with environmental compliance aspects of the implementation of the **Mooi Mgeni Transfer Scheme Phase 2**. February 2009 ongoing.
- Dam Safety Rehabilitation Project Support to DWAF responsible for review and management of environmental issues related to the implementation of construction activities for the rehabilitation of dams in order to comply with dam safety requirements.
- Department of Water Affairs and Forestry Olifants River Water Resources
  development Project Phase 2A Support to DWAF responsible for management of
  environmental and social aspects related to the implementation of construction
  activities for the de Hoop Dam and related road realignments and flow gauging weirs.
- Relief lecturer external examiner, exam moderator and guest lecturer at various tertiary institutions.

# BKS (Pty) Ltd - August 1997 to July 2005 - Associate Scientist (since 2002)

• Olifants River Water Resource Development Project – Part of Project Management and Co-ordination Team. Specifically responsible for the Public Participation aspects (2003 – 2005).

Anderson Consulting, Pretoria - November 1995 to January 1997 - User Support Eastern Suburbs Computing - August 1993 to August 1998 *ad hoc -* Office Administrator

Snoak

Read

Write.

Consultburo - March 1989 to March 1993 - GIS Operator

	Opcuit	rtoud	*******
English	Excellent	Excellent	Excellent
Afrikaans	Good	Good	Good

#### CURRICULUM VITAE – L MURUVEN

### **Experience record:**

Name of Firm: ILISO Consulting (Pty) Ltd

Name of Staff: Lea Muruven (Mrs)

**Profession:** Environmental scientist

**Date of Birth:** 11 September 1983

Nationality: South African and French

#### **KEY QUALIFICATIONS**

Lea September is an Environmental Assessment Practitioner with Masters degrees in Environmental Management and Political Science. She has over four years experience in impact assessment and environmental management and has been responsible for conducting Environmental Impact Assessments, Environmental Management Programmes, public participation processes, as well as high level environmental screenings for a variety of projects in the energy, water, transport and industrial sectors. Lea has a good understanding of the laws and regulations relating to air quality, water, biodiversity, heritage, and waste management in South Africa.

#### PROFESSIONAL REGISTRATIONS AND MEMBERSHIPS

Member of the South African Affiliate of the International Association for Impact Assessors Environmental Assessment Practitioner Association of South Africa (EAPASA): Registered as a founding member.

#### **EDUCATION**:

Master Environmental Management, University of North West, 2012
MA (Political Science), University of the Witwatersrand, 2010
BA Hons (Political Science), University of the Witwatersrand, 2007
BA (Political Science and International Relations) Université Lyon 3 (France), 2006
Matric, 2001

#### **SHORT COURSES AND SEMINARS**

Integrating HIV and gender into Environmental Assessment, SAIEA/UNDP, 2013 National Biodiversity Offsets Workshop, DEA/EWT, 2013

Technical and Business Report Writing, CESA School of Consulting Engineering, 2012 Environmental Management Systems (EMS), Centre for Environmental Management, North West University, 2011

Wastewater treatment, Water Institute of Southern Africa, Pretoria, 2011

# **EXPERIENCE RECORD:**

ILISO Consulting (Pty) Ltd February 2009 to present

#### **Experience record:**

#### **Environmental Scientist**

- Lesotho Highlands Water Project: EIA for an underground 1200 MW pumped storage scheme on the Katse Dam Reservoir. Responsible for drafting an Environmental Impact Assessment Report and project administration.
- **Gautrain project**: responsible for drafting an Environmental Impact Assessment Report as part of an application for rectification.
- **Limpopo Rail Plan Phase 2**: responsible for the environmental screening of new rail options in the Limpopo Province.
- **Eskom Komati Power Station**: S24G application for rectification. Responsible for drafting an Environmental Management Programme and conducting the public participation process.
- Naledi station intersite precinct: lead environmental assessment practitioner.
- Emalahleni drinking water pipeline project: responsible for drafting an impact assessment report and Environmental Management Plan as part of an application for environmental authorisation for a water pipeline in Mpumalanga Province.
- City of Johannesburg State of the Rivers Report: Water quality assessment study for the City of Johannesburg. Responsible for data integration and analysis, and preparation of report.
- Komati Water Scheme Augmentation Project: responsible for conducting the Public Participation Process and maintaining the Stakeholder database as part of an amendment application.
- **Gautrain project**: assisted in the drafting of technical reports regarding the discharge of tunnel drainage water.
- Development of a Reconciliation Strategy for the Olifants River Water Supply System: Assistance with the environmental screening of project options.
- **80 000 tons/yr Galvanizing complex** in the Coega Industrial Development Zone: assistance in the EIA process, including public participation tasks, relations with authorities, drafting of scoping and EIA reports and EMP.
- Addressing illegal water use in the Vaal River system: project administration.

#### INTERNSHIPS AND SHORT ASSIGNMENTS

French Development Bank (AFD)

September – December 2006

Drafting of a report on public transport in South Africa.

# Mandat International, Geneva (Switzerland)

July – August 2004

Reporter for UN conferences in Geneva, drafting of a report on civil society.

	Speak	Read	Write
English	Excellent	Excellent	Excellent
French	Excellent	Excellent	Excellent
Spanish	Good	Good	Good
IsiZulu	Basic	Basic	Basic

Name of firm: ILISO Consulting (Pty) Ltd

Name of Staff: Dalhuijsen Kim

**Profession**: Junior Environmental Scientist

Date of Birth: 28 February 1989

Nationality: The Netherlands

### **Membership in Professional Societies:**

Member of the South African Affiliation of the International Association of Impact Assessment (IAIA)

#### **KEY QUALIFICATIONS:**

**Kim Dalhuijsen** is a Junior Environmental Scientist with a Bsc (Hons) from the University of the Witwatersrand in Zoology and Environmental Sciences.

Kim has an Honours degree in Zoology and Environmental Sciences from the University of the Witwatersrand. She has been involved in many different environmental projects throughout her studies and has knowledge of various water, Environmental and Zoological aspects. She has been responsible for drafting impact assessment reports and Environmental Management Programmes, and assisting with public participation processes. Kim has a good understanding of the laws and regulations relating to air quality, water, biodiversity, heritage, and waste management in South Africa. She is a member of the South African Affiliate of the International Association for Impact Assessors.

# **EDUCATION**:

BSc Hons (Zoology), University of the Witwatersrand 2012 Bsc (Zoology, Environmental Sciences), University of the Witwatersrand 2011

#### **EXPERIENCE RECORD:**

ILISO Consulting (Pty) Ltd February 2013 to present Junior Environmental Scientist

- Assistant Environmental Scientist for the Environmental Impact Assessment for the De Beers Pass Section of the N3. July 2013 ongoing.
- Assistant with the Public Participation Process for Hatfield Masterplan. Public Participation Process. June 2013 ongoing
- Assistant with the Public Participation Process for Eskom Exemption and Postponement of Air Emission Licence Application. Public Participation Process. May 2013 ongoing.
- Environmental Assessment Practitioner for Eskom Vierfontien to Wawiepark 22 kV
   Transmission line refurbishing. Specialist study co-ordination and Water Use License Application. May 2013 ongoing.

- Environmental Assessment Practitioner for Eskom Hendrina to Gumeni sub-stations
   400 kV Powerline. Co-ordination of Heritage and Ecological issues. April 2013 September 2013.
- Junior Environmental Scientist for the **Hartbeespoort Waste Charge Discharge System**. March 2013 ongoing.
- Assistant with the Public Participation Process for City of Tshwane's Bus Rapid Transit Line 1 from Pretoria Station to Rainbow Junction. April 2013 ongoing.
- Assistant with the Public Participation Process for City of Tshwane's Bus Rapid Transit Line 2 from Pretoria Central to Menlyn via Hatfield. Public Participation Process. March 2013 ongoing.

	Speak	Read	Write
English	Excellent	Excellent	Excellent
Afrikaans	Good	Average	Average
Dutch	Average	Poor	Poor

#### **Experience record:**

Name of firm: ILISO Consulting (Pty) Ltd

Name of Staff: Joseph Masilela

**Profession**: Technical Assistant

**Date of Birth**: 10 December 1977

Nationality: South African

Membership in Professional Societies: SABTACO

#### **KEY QUALIFICATIONS:**

Joseph Masilela has eight years experience in office administration. Joseph also does Community liaison work: arranging meetings, facilitating community workshops; meeting with traditional authorities, assisting on all project related work. In particular the Greater Western Highveld Municipality Sibambisene Consumer Awareness Campaign and Eskom Transmission EIA and Addressing Illegal Water Use in the Vaal River System projects. Joseph assists with secretarial functions for projects; maintaining attendance registers and databases for all projects. He has also gained experience in this time while working for an environmental engineering company on a variety of projects that required field work and data input into AutoCAD programmes.

#### **EDUCATION:**

Diploma Finance and Accounting (Birnam Business College)

Certificate Frontline Telephone Etiquette (SA TeleLINK Training)

Certificate Fundamental Concepts for Computing (Witwatersrand Technikon)

2007

March 2006

2007

# EXPERIENCE RECORD: ILISO Consulting (Pty) Ltd July 2010 to present Technical Assistant

- Vaal River System Addressing Illegal Water Use Project Management.
- BRT Assisting with secretarial functions, maintaining attendance registers and database.
- Naledi Intersite Precinct Assisting with secretarial functions, maintaining attendance registers and database.

# Karin Bowler Enterprises December 2004 to June 2010 Community Liaison Officer and Office Administrator

- All office administration: Monthly financial administration on Pastel accounting system.
- · Compiling and issuing monthly invoices in Excel.
- Community liaison work: arranging meetings, facilitating community workshops; meeting with tribal authorities, assisting on all project related work. In particular the Greater Western Highveld Municipality Sibambisene Consumer Awareness Campaign and Eskom Transmission EIA projects
- Assisting with secretarial functions for projects; maintaining attendance registers and databases for all projects. Currently, these databasis accommodate up to 1000 individuals at a time on any given project. Community Liaison Officer on four DWAF dam construction

projects (Acornhoek, Mashashane, Molepo and Nsami Dams) This involves attending regular meetings with community and labour representatives to determine social issues and report these to DWAF.

# Pbai (SA) March 2004 to November 2004 Technical Assistant

- Elders Strip Mining project ElA Hydrological Study Field work and input of data into Autocad programme.
- Bethlehem Floodline determination Liebenbergsvlei river Field work.
- Hennops River Flood management field work.
- Fourways Surburban town development EIA assistance with dissemination of public documents.
- Greater Western Highveld Municipality Sibambisene Project as a field co-ordinator and assistant to the Social Survey Team.

	Speak	Read	Write
English	Excellent	Excellent	Excellent
Afrikaans	Average	Average	Average
Ndebele	Excellent	Excellent	Excellent
Zulu	Good	Good	Average
Tswana	Good	Average	Fair

Name of firm: ILISO Consulting Environmental (Pty) Ltd

Name of Staff: Ndomupei Dhemba

**Profession**: Environmental Scientist

Date of birth: 15 April 1982

Nationality: Zimbabwean

**Specialisation:** Geo-Information and Earth Observation for Natural Resources Management

#### **KEY EXPERIENCE**

**Ndomupei Dhemba** is a GIS and Remote Sensing specialist with a Masters degree in GIS and Remote Sensing for Environmental Management. She has experience in environmental management particularly in incorporating GIS and Remote Sensing tools in Environmental Impact Assessment, environmental audits and natural resource inventories. She has been involved in a number of EIA programmes as a Biodiversity and GIS & Remote Sensing Specialist in Zimbabwe, Tanzania and now South Africa. She has also worked with rural communities in the promotion of rural development through the sustainable utilization of Natural Resources through group projects, capacity building and EIAs of these projects. She is conversant with ArcGIS, ERDAS, ILWIS, Planet GIS and ENVI. She also has had experience in public participation and research particularly in the promotion of the use of remote sensing and GIS for biodiversity assessment. She also has experience in Environmental Authorisations, particularly in environmental amendment applications and registration and licencing of water user process according to the National Water Act, 1998 (Act 36 of 1998). She has also been involved in water quality assessments for a number projects. Five years working experience in environmental management projects.

Key experience is in the, Amendment Authorisations, Natural Resources Management, Biodiversity Management, GIS and Remote Sensing, EIA, Water Use Licence Applications, Public Participation Process

#### EDUCATION:

Masters (Geo-information for NRM), ITC, Enschede The Netherlands, 2007 BSc Hons (Environmental Science), NUST, Bulawayo, Zimbabwe, 2005

# ILISO Consulting (Pty) Ltd February 2008 to present

### **Environmental Scientist**

- GIS Specialist in a number of projects including Molopo Nossob, Groot Letaba, Midvaal, Eskom (Majuba-Umfolozi, Medupi Mokopane), Tshwane Flood Management (Rosslyn, Kaalplaasspruit, Hennops River), Nelson Mandela Sewer Master Plan (Port Elizabeth),
- Water Use license Application for the Jukskei River Embankment Protection Project,
- Water Use Application for the Soshanguve HH-JJ Link Road Project,
- Assist in Zambezi Chobe Human Geography Specialist Studies and Routing
- Review and evaluation of Water Use License applications,

- Assist in The Gautrain Rapid Rail Link Public Participation Process,
- Compilation of the Gautrain Rapid Rail Link Supporting Information document for the Technopark area,
- Environmental Screening for the Boekenhoutskloof Airstrip development,
- Assist in EIA for the Mafube Local Municipality,
- Compile a Water Quality Assessment Reports for the Marico River Catchment, Greater Bloemfontein Area and the Olifants River System

# 2007-2007 ITC PROJECTS IN BAGAMOYO TANZANIA

**Member of the Biodiversity experts' team**: Responsible for carrying out the biodiversity assessment of the Ruvu north forest reserve in Tanzania using GIS and Remote Sensing as part of an EIA process. Other responsibilities were to assess the changes in vegetation cover in the area and to carry out an assessment of the forest as a biodiversity area

#### 2006-2007 OVERSEAS PURSUING MASTERS DEGREE

Obtained a first class degree in Geo-information for Natural Resources Management at the International Institute for Geo-Information and Earth Observation (The Netherlands)

# 2005 to 2006 WORLD CONSERVATION UNION Regional Office, Harare, Zimbabwe

**Ecologist:** Was under the Zambezi River basin project responsible for collecting livelihood data from the communities, creating the database for the project information and analysing the data. Was also responsible for the biodiversity analysis of the area, carrying out environmental audits and environmental inventories

#### 2003-2004 SOUTHERN ALLIANCE FOR INDIGENOUS RESOURCES, Harare, Zimbabwe

Assistant Ecologist worked under 5 of the projects that were run by the Research and Development section at SAFIRE during the industrial internship period. Main responsibilities included carrying out environmental audits and inventories, livelihood analysis, environmental impact assessments of the projects, Landcover and landuse mapping, biodiversity assessments and database development for the projects. Other duties included the setting up of agroforestry areas in the project areas, promoting permaculture and environmental education.

	Speak	Read	Written
English	Excellent	Excellent	Excellent
Shona	Excellent	Excellent	Excellent

Name of Firm: ILISO Consulting (Pty) Ltd

Name of Staff: Nadine Duncan (Mrs)

**Profession:** Environmental scientist

Date of Birth: 12 November 1981

Nationality: South African

#### **KEY QUALIFICATIONS**

Nadine Duncan is an Environmental Assessment Practitioner with an Honours degree in Geography and currently completing a Masters degree in Environmental Management. She has experience in impact assessment and environmental management and has been responsible for conducting Environmental Impact Assessments, Environmental Management Programmes, public participation processes, open space planning and Environmental Management Frameworks. Nadine has a good understanding of the laws and regulations relating to air quality, water, biodiversity, heritage, and waste management in South Africa..

#### **EDUCATION**:

Master Environmental Management (MSc), University of Pretoria, ongoing ISO 14001 lead auditor certification course, University of Pretoria, 2008 FSC – Forest managing auditing course, University of Pretoria, 2008 BSc (Hons) Geography, University of Pretoria, 2007 BSc (Landscape Architecture), University of Pretoria, 2005

# EXPERIENCE RECORD: ILISO Consulting (Pty) Ltd May 2012 to present Environmental Scientist

- Gauteng 25 Year Integrated Transport Master Plan: Environmental Management Framework (EMF) as part of the development of a transport system for Gauteng over the next 25 years. Responsible for drafting Sustainable Transport Reports and project administration.
- Gauteng Green Transport Policy: Transport Policy for the Department of Roads and Transport. Responsible for drafting of a Policy document and project administration.
- Komati Power Station project: S24G Rectification Application for the Komati Power Station. Responsible for the drafting of an Environmental Assessment Report and project administration.
- Duvha Power Station Water Use Licence Review: Water Use licence Review for the Duvha Power Station. Responsible for data integration and analysis, and preparation of Review Report.

Self- employed (Contract work) July 2010 – May 2012

• K142 Gautrans Route

Determination: EIA for the new K142 Gautrans Route Determination in Lanasia Gauteng.

Responsible for report compilation and project administration.

# Local Open Space Plan for Mabopane and Winterveldt – City of Tshwane: Local Open space planning for the Mabopane. Responsible for drafting of technical reports, administration and graphic work;

- Local Open Space Plan for Ga-Rankuwa
   — City of Tshwane: Local Open space planning for the Ga-Rankuwa. Responsible for drafting of technical reports, administration and graphic work.
- Long-term management plan for CoT cemeteries: Management Plan for cemeteries in for the City of Tshwane. Assisted in the drafting of technical reports, administration and graphic work.
- Sabie River project: BA for the proposed bridge and road infrastructure development in Hazyview, Mpumalanga. Responsible for the facilitation and management of the public participation process, Geographic Information System and data Management, drafting of a Water Use license application and Mining permit application, report compilation and administration.
- Weltevreden Rand Water pipeline project: BA for the proposed Rand Water pipeline.
   Responsible for the facilitation and management of the public participation process,
   Geographic Information System and data Management, report compilation and administration.
- Gezina pipeline project ECO:
   Environmental auditing for the Gezina water pipeline. Responsible for report compilation and administration.

# Cave Klapwijk and Associates February 2005 – July 2010

Middelburg Eastern Bypass EIA,
 Mpumalanga: EIA for the new eastern bypass in Middelburg Mpumalanga. Project leader,
 facilitation and management of the public participation process, Geographic Information
 System and data Management, report compilation and administration.

Klipgat Stormwater EIA, NW Province: EIA for the upgrading of stormwater infrastructure for the Klipgat Towship. Responsibilities - Project leader, facilitation and management of the public participation process, Geographic Information System and data Management, report compilation and administration.

DWAF Dams Environmental
 Consulting, Limpopo and NW Province: Environmental consulting for the upgrading of nine dams in Limpopo and North West Province. Assistant Environmental Control Officer, Permit application, report compilation and administration.

Roodeplaat Water Supply Scheme: Environmental Management Programme for the Roodeplaat Water Supply Scheme. Project management and amendment of the EMP. Responsible for report compilation and administration.

Sedgefield Sand Mine, Western
Cape: EA and EMPR for the Sedgefield Sand Mine. Responsible for Geographic Information

System and data Management, report compilation and administration.

Tugela Plaza Asphalt Plant BA,

**Kwazulu-Natal**: BA for the Tugela Plaza Asphalt Plant. Responsible for the Atmospheric Pollution Permit application, facilitation and management of the public participation process, Geographic Information System and data Management, report compilation and administration.

Eskom Nuclear Power Station VIA,

**Western Cape**: Visual Impact Assessment for the Eskom Nuclear Power Station. Responsible for the Geographic Information System management, report compilation, administration and graphics

- Sani Pass VIA: Visual Impact Assessment of the Sani Pass. Responsible for Geographic Information System management, report compilation, administration and graphics.
- Moatize Power Station VIA, Moatize, Mozambique: Visual Impact Assessment of the Moatize power station. Responsible for Geographic Information System management, report compilation, administration and graphics.

	Write	Speak	Read
English	Excellent	Excellent	Excellent
Afrikaans	Excellent	Excellent	Excellent

#### **Experience record:**

Name of firm: ILISO Consulting (Pty) Ltd

Name of Staff: Sandhisha Jay Narain

**Profession**: Environmental Consultant

Date of Birth: 2 March 1985

Nationality: South African

#### **KEY QUALIFICATIONS:**

Sandhisha Jay Narain (SJN) is an Environmental Consultant with a Honours degree in Environmental Management. She has over 5 years onsite Environmental Management and Environmental Compliance Auditing and Monitoring experience. Sandhisha has been involved in the implementation of the Environmental Management Plan for the Moses Mabhida Stadium, compliance monitoring of Transnet's' New Multi Purpose Pipeline Project and was project based at the Spring Grove Dam as the Environmental Monitor. Sandhisha is also an accredited Green Star SA Professional and is knowledgeable in the functioning of ISO 14001 Environmental Management Systems.

#### **EDUCATION:**

BSS (Hons) Geography and Environmental Management, University of KZN	2007
BSS Geography and Environmental Management, University of KZN	2006
SHORT COURSES	
Green Star SA Accredited Professional, Green Building Council of South Africa	2010
ISO 14001 Auditing, Mafuta Auditing and Consulting	2009
ISO 14001 Awareness training, Mafuta Auditing and Consulting	2009
Hazardous Identification and Risk Assessment (H.I.R.A)	2009

# EXPERIENCE RECORD: ILISO Consulting (Pty) Ltd April 2011 to present Environmental Monitor

- Monitoring and verifying that the EMP and project Specification is adhered
- Assisting the Engineer in finding environmentally responsible solutions to problems
- Monitor implementation of ISO 14001
- Reviewing and providing comment for approval of construction and environmental method statements:
- Reviewing and commenting on the Contractor's environmental monitoring data submissions.
- Reviewing and commenting on ECO reports
- Review of Contractors documentation
- Compiling a weekly and Monthly Environmental and safety report for submission to the RE and Client.
- Non-conformance reporting
- Mentor to an Environmental Intern

# Environmental Impact Management Services November 2009-March 2011 Environmental Control Officer (ECO) Transnet New Multi Purpose Pipeline Project

- Monitoring and verifying that the EMP and RoD is adhered to at all times.
- Monitoring and verifying that environmental impacts are kept to a minimum during the construction phases of the project.
- Assisting the Contractor in finding environmentally responsible solutions to problems.
- Conduct and compile daily and weekly environmental audits and audit Reports
- Non-conformance reporting.

# Group Five April 2008-October 2009 Environmental Control Officer (ECO) Moses Mabhida

- Management of the environmental activities of the Contractor
- Management of Environmental team onsite
- Ensuring that environmental awareness training is implemented as specified through the environmental training needs analysis
- Assisting the Contractor in finding environmentally responsible solutions to problems by compiling management plans and method statements to ensure environmental impacts are kept to a minimum.
- Inspect the site to ensure adherence to the EMP.
- Conduct and Compile internal monthly Environmental Audits and Audit Reports.
- Ensuring that site remained compliant to the companies ISO 14001 certification
- Liaise with the construction team on issues related to implementation of and compliance with the EMP
- Maintain a record of environmental incidents as well as corrective and preventive actions taken.

# Group Five March 2009

# **Environmental Supervisor at the Warwick Triangle Viaduct**

- Implementation of EMP on site.
- Liaising with construction team regarding mandatory requirements.
- Drafting of Management Plans & relevant Method Statements.
- Establishing a paper recycling initiative onsite

#### LANGUAGES:

	Speak	Read	Write
English	Excellent	Excellent	Excellent

# <u>ACHIEVEMENTS</u>

 Selected to write an Essay for The World Sociology Congress publication, held in Durban, July 2006

# **Experience record:**

• Member of Golden Key Honours Society, which recognises students who graduate in the top 15% of their faculty

# **Curriculum Vitae (CV)**

1. Proposed Position: Aquatic Ecologist

**2. Name of Firm** : Scientific Aquatic Services

**3. Name of Staff**: Stephen van Staden (Managing Member)

**4. Date of Birth**: 13 July 1979

5. Nationality: South African

# 6. Educational qualifications:

B.Sc. Zoology Geography and Environmental management Honours, Zoology (aquatic health) M.Sc Environmental management

**7.** Professional qualifications [Indicate societies, honours, publications etc.]:

Registered Professional Natural Scientist (ecological sciences). Accredited River Health practitioner by the South African River Health Program Member of the South African Soil Surveyors Association. Member of the Guateng Wetland Forum

# 8. Countries of Work Experience:

South Africa, DRC, Ghana, Liberia, Tanzania Lesotho, Mozambique, Guinea Bissau Botswana and Angola.

- **9.** Relevant Experience: [Actual duties performed and level of responsibility held, locations, dates and durations of the assignment, starting with the latest.]:
  - 2001 Student assistant Zoology: ecology.
  - 2002 Assistant on Jukskei Environmental Management Framework (Nemai Consulting);
  - **2002** March-August Junior Consultant (Holgate and Associates environmental consultants)

Responsibilities: Report writing, Water resource management, Terrestrial ecological overviews, biomonitoring, Scoping reports, EMP's Visual assessments GIS

- 2002 August Co-project leader EMP for the temporary use of the Wanderers Sports Club for the World Summit on Sustainable Development
- 2002/3 September 2002 December 2003 EcoSat Environmental Services group Responsibilities: Manager of monitoring department, project management, Specialist assessments in terrestrial, wetland and aquatic ecology Water specialist consultant including biomonitoring, physical and chemical monitoring, remote data acquisition. Dust particulate monitoring and project management for several mines. Management of a team of 4 staff.
- 2003 July 2003-July 2004 Co-Founding member of Scientific Fishery Services CC.

Fishery enhancement, stream management, stocking management, fishery feasibility studies, legal compliance.

2003 October 2003- Current. Founding member of Scientific Aquatic Services CC. Environmental resource management, specialising in aquatic, water resource, wetland and terrestrial resource assessment, management and monitoring.

# 10. Summary of project experience:

Stephen Van Staden has experience on well over 1000 environmental assessment projects with specific mention of aquatic and wetland ecological studies as well as terrestrial ecological assessments. Stephen has a professional career spanning more than 10 years, of which almost ten years have been as the owner and Managing member of Scientific Aquatic Services and the project manager on most projects undertaken by the company.

# **Development compliance studies**

- Project co-leader for the development of the EMP for the use of the Wanderers stadium for the Ubuntu village for the World Summit on Sustainable Development (WSSD)
- > Environmental control officer for Eskom for the construction of an 86Km 400KV power line in the Rustenburg Region
- Numerous EIA and EIA exemption applications for township developments throughout Gauteng
- Numerous EIA applications as part of the Development Facilitation Act requirements
- ➤ Environmental Impact Assessment for the extension of mining rights for a Platinum mine in the Rustenburg area by Lonmin Platinum
- ➤ EIA Exemption application for a proposed biodiesel refinery in Chamdor
- Compilation of a Environmental Impact Assessment as part of the Bankable Feasibility Study process for proposed mining of a gold deposit in the Lofa province, Liberia
- ➤ Environmental Impact Assessment for the development of a Chrome Recovery Plant at the Two Rivers Platinum Mine in the Limpopo province, South Africa
- Compilation of a Environmental Impact Assessment as part of the Bankable Feasibility Study process for the Mooihoek Chrome Mine in the Limpopo province, South Africa
- ➤ Environmental Impact assessment for the Project Geniland, mixed use development, Lumbumbashe in the Democtratic Republic of congo
- Mine closure plan for the Vlakfontein Nickel Mine in the North West Province

#### Specialist studies and project management

- ➤ Development of a zero discharge strategy and associated risk, gap and cost benefit analyses for the Lonmin Platinum group
- > Development of a computerised water balance monitoring and management tool for the management of Lonmin Platinum process and purchased water.
- > The compilation of the annual water monitoring and management program for the Lonmin Platinum group of mines.
- > The compilation of the annual water monitoring and management program for the Aquarius Platinum Everest Platinum mine.
- Analyses of ground water for potable use on a small diamond mine in the North West Province.
- Project management and overview of various soil and land capability studies for residential, industrial and mining developments
- ➤ The design of a stream diversion of a tributary of the Olifants River for a proposed opencast coal mine.

- Waste rock dump design for a gold mine in the North West province
- Numerous wetland delineation and function studies in the North west, Gauteng and Mpumalanga Kwa-Zulu Natal provinces, South Africa
- ➤ Hartebeespoort Dam Littoral and Shoreline PES and rehabilitation plan as par tof the Harties Metsi a me prograom.
- > Development of rehabilitation principles and guidelines for the Crocodile West Marico Catchment, DWAF North West.

#### Aquatic and water quality monitoring and compliance reporting

- Development of the Resource quality Objective framework for Water Use licensing in the Crocodile West Marico Water management Area for DWA
- Development of the Resource Quality Objectives for the Local Authorities in the Upper Crocodile West Marico Water management Area for DWA
- > Development of the 2010 State Of the Rivers Report for the City of Johannesburg
- > Development of an annual report detailing the results of the Lonmin Platinum groups water monitoring program
- > Development of an annual report detailing the results of the Everest Platinum Mine water monitoring program
- > Initiation and management of a physical, chemical and biological monitoring program, President Steyn Gold Mine Welkom
- > Aquatic biomonitoring programs for several Xstrata Alloys Mines and Smelters
- > Aquatic biomonitoring programs for several Anglo Platinum Mines
- > Aquatic biomonitoring programs for African Rainbow Minerals Mines
- > Aquatic biomonitoring programs for several Assmang Chrome Operations
- > Aquatic biomonitoring programs for Petra Diamonds
- > Aquatic biomonitoring programs for several coal mining operations including Shanduka resources and COAL.
- > Aquatic biomonitoring programs for several Gold mining operations
- > Aquatic biomonitoring programs for several mining operations for various minerals including iron ore, and small platinum and chrome mining operations
- > Aquatic biomonitoring program for the Valpre bottled water plant (Coca Cola south Africa)
- > Aquatic biomonitoring program for industrial clients in the paper production and energy generation industries
- > Aquatic biomonitoring programs for the City of Tshwane for all their Waste Water Treatment Works
- Aquatic biomonitoring programs for the greater Rustenburg municipality for all their Waste Water Treatment Works
- > Baseline aquatic ecological assessments for numerous mining developments.
- > Baseline aquatic ecological assessments for numerous residential commercial and industrial developments.
- Baseline aquatic ecological assessments in southern, central and west Africa for commercial and mining developments including gold, diamond, copper and phosphate mining projects.

## Wetland delineation and wetland function assessment

- > Wetland biodiversity studies for three copper mines on the copper belt in the Democratic Republic of the Congo.
- Wetland biodiversity studies for proposed mining projects in Guinea Bissau, Liberia and Angola in West Africa
- Terrestrial and wetland biodiversity studies for developments in the mining industry.
- > Terrestrial and wetland biodiversity studies for developments in the residential commercial and industrial sectors throughout South Africa

- Development of wetland riparian resource protection measures for the Hartbeespoort Dam as part of the Harties Metsi A Me integrated biological remediation program.
- Priority wetland mammal species studies for numerous residential, commercial, industrial and mining developments throughout South Africa.

# Terrestrial ecological studies and biodiversity studies

- > Development of a biodiversity offset plan for Xstrata Alloys Rustenburg Operations
- ➤ Biodiversity Action plans for Numerous mining operations of Anglo Platinum throughout south Africa in line with the NEMBA requirements
- ➤ Biodiversity Action plans for Numerous mining operations of Assmang Chrome throughout south Africa in line with the NEMBA requirements
- ➤ Biodiversity Action plans for Numerous mining operations of Xstrata Alloys and Mining throughout south Africa in line with the NEMBA requirements
- ➤ Biodiversity Action plan for the Nkomati nickel and Chrome Mine Joint Venture
- ➤ Terrestrial and wetland biodiversity studies for three copper mines on the copperbelt in the Democratic Republic of the Congo.
- > Terrestrial and wetland biodiversity studies for proposed mining projects in Guinea Bissau, Liberia and Angola in West Africa
- Numerous terrestrial ecological assessments for proposed Platinum mining projects
- Numerous terrestrial ecological assessments for proposed Coal mining projects
- Numerous terrestrial ecological assessments for proposed residential and commercial property developments throughout most of South Africa and in particular Gautteng and Mpumalanga
- > Specialist Giant bullfrog (*Pyxicephalus adspersus*) studies for several proposed residential and commercial development projects in Gauteng, South Africa
- > Specialist Marsh sylph (*Metisella mininx*) studies for several proposed residential and commercial development projects in Gauteng, South Africa
- Project management of several Red data bird studies with special mention of African grass owl (Tyto capensis)
- Project management of several studies for Red Data Listed Scorpions, spiders and beetles for proposed residential and commercial development projects in Gauteng, South Africa.
- Project management and site specific assessment on numerous terrestrial ecological surveys including numerous studies in the Johannesburg-Pretoria area, Witbank area, and the Vredefort dome complex.
- ➤ Biodiversity assessments of estuarine areas in the Kwa-zulu natal and Eastern cape provinces South Africa.
- Impact assessment of a spill event on a commercial maize farm including soil impact assessments

# Fisheries management studies

- > Tamryn Manor (Pty.) Ltd. Still water fishery initiation, enhancement and management
- Verlorenkloof Estate fishery management strategising, fishery enhancement and financial planning and stocking strategy
- Mooifontein fishery management strategising, fishery enhancement and stocking programs
- Wickams retreat management strategising
- Gregg Brackenridge management strategising and stream recalibration design and stocking strategy
- ➤ Eljira Farm baseline fishery study compared against DWAF 1996 aquaculture and aquatic ecosystem guidelines

#### **Experience In Africa**

- Ecological aspcts of the development of the mine closure plan for the Tulawaka Gold Mine Tanzania
- Baseline faunal, floral and aquatic assessments for the Kinsenda Copper Mine south of Lubumbashi, DRC
- Baseline faunal, floral and aquatic assessments for the proposed Lubembe Copper Mine south of Lubumbashi, DRC
- Baseline floral and aquatic assessments for the Lonshi Copper Mine south of Lubumbashi, DRC
- ➤ Baseline faunal, floral and aquatic assessments for a proposed new township development in Takoradi, Ghana (3000ha)
- ➤ Baseline faunal, floral and aquatic assessments for a proposed new township development near Accra, Ghana (3000ha)
- ➤ Baseline faunal, floral and aquatic assessments for a proposed new township development near Lubumbashi, DRC (4000ha)
- ➤ Baseline faunal and floral assessment for the proposed Project Alto Cuilo Diamond Mine in Angola (est 10 000 ha)
- ➤ Baseline faunal and floral and soil mapping assessment for the Limpopo Lipadi Game and Wilderness reserve, Botswana. (60 000 ha)
- ➤ Baseline faunal and floral assessment and soil typing for the proposed GB phosphate Mining Project, Guinea Bissau, West Africa. (Est 20 000 ha)
- Baseline faunal and floral assessment for the proposed Mano River resources Gold Project, Liberia West Africa (est 5000 ha)
- ▶ Biomass estimation for a timber and agricultural development in Northern Mozambique.
- **11. Languages** [indicate first Language and for each other language indicate proficiency: good, fair, or poor in speaking, reading, and writing]:

English – First Language Afrikaans – Fluent in speaking, reading and writing

STEPHEN VAN STADEN		11-07-2012
	Date:	
[Signature of staff member]		Day/Month/Year

#### **CURRICULUM VITAE – M Klapwijk**

Name of firm: Bapela Cave Klapwijk

Name of Staff: Klapwijk M

**Profession**: Landscape Architect and Environmental Assessment Practitioner

Date of Birth:9 June 1954Nationality:South African

# **Membership in Professional Societies:**

Registered: South African Council for Landscape Architecture (SACLAP) Member: Institute of Landscape Architects of South Africa (ILASA).

Member: American Society of Landscape Architects (ASLA).

Member: International Association of Impact Assessors (SA) (IAIA-SA).

Associate: Institute of Waste Management.

#### **KEY QUALIFICATIONS:**

Menno has a Bachelor is Science in Landscape Architecture from the Texas A&M university and completed a course in Environmental Planning and Management from the UCT Graduate School of Business. He has 31 years of experience and has been an external examiner for the masters programme at the University of Pretoria since 1985. He specialises in Visual Impact Assessment.

#### **EDUCATION:**

1983: B.Sc. (Landscape Architecture) Texas A&M University, USA.

1986: Environmental Impact Assessment, Graduate School of Business, University of Cape

Town.

# **ADVISORY POSITIONS**

Executive Central Council Member (Institute of Landscape Architects of South Africa) (1986-1991).

Council member - Council for the Built Environment (CBE)

Elected member of the Board of Control for Landscape Architects of South Africa (BOCLASA now SACLAP)

City Council of Pretoria, ILASA representative on CCP Town Planning and Aesthetics Committee (1987 - 2001).

External Examiner, Department of Landscape Architecture, University of Pretoria (1985 - present).

CSIR panel of experts to assist in the development of visual impact guidelines for the Western Cape

# **VIA PEER REVIEWER**

Shell Ultra City, Johannesburg for CSIR

- Alpha Cement Factory, Saldanha for Mark Wood Consultants
- Coega IDZ and Harbour, Port Elizabeth for African Environmental Solutions
- Eskom Ariadne Venus 765 kV Transmission Line VIA for Baagi Environmental

#### **EDITORIAL BOARDS**

- Environmental Planning and Management (EMP) Journal
- Landscape SA Journal

#### **EXPERIENCE RECORD:**

Thirty one years as landscape architect and environmental planner in the United States of America, Namibia, Botswana, Lesotho, Swaziland, Mozambique, Angola and South Africa

1989 - present: Bapela Cave Klapwijk / Cave Klapwijk and Associates, Pretoria - Principal

1988 - 1989: Plan Associates, Pretoria – Associate, Senior Landscape Architect.

1983 - 1988: Chris Mulder Associates Inc., Pretoria - Senior Landscape Architect

1982 - 1983: Austin and Landphair (SHWC), Landscape Architects, College Station, Texas.

#### **Zeerust Solar Park**

Client: Sharples Environmental Services for RE Capital 2

Visual Impact Assessment of a proposed solar energy park near Zeerust in the North West Province.

#### **Aggeneys Solar Park**

Client: Solar Capital (Pty) Ltd

Visual Impact Assessment of a proposed solar energy park near Aggeneys in the Northern Cape.

#### N3 De Beers Pass

Client: N3TC for SANRAL

Visual Impact Assessment of the proposed De Beers Pass alignment and alternatives from Keeversfontein to Warden.

# Sani Pass Upgrade

Client: Arcus Gibb for Department of Transport

Visual Impact Assessment of the proposed upgrade of Phase 2 from the Border Control Post to the summit

#### **N2 Wild Coast Toll Highway**

Client: CCA Environmental for SANRAL

Visual Impact Assessment of the proposed Toll Road along the Wild Coast of Transkei from Durban to East London.

# N-3 Toll Road, Cedara (Kwazulu Natal) to Heidelberg (Gauteng)

Client: N-3 Toll Concession Ltd

Visual impact assessment of the N-3 upgrade from Cedara to Heidelberg and the proposed De Beers Pass

Eskom Venus-Sigma-Hector Ariadne 765kV/400kV transmission line and Substations

Client: ACER (Africa) for Eskom

Visual Impact Assessment of the proposed transmission line from from the Venus Substation (near Colenso/Estcourt) to the Hector Substation south east of Pietermaritzburg via the proposed Sigma Substation.

#### NMPP Distribution Lines to Terminal 2 and Pump Stations 1, 3 and 5

Client: ACER (Africa) for Transnet

Visual Impact Assessment of the proposed distribution lines to supply power to the Terminal 2 near Nigel and to the pump station 1 near Amanzimtoti, Pump Station 3 near Pietermaritzburg and Pump Station 5 near Ladysmith

#### Eskom Ariadne – Eros 400kv / 132kV multi-circuit transmission line

Client: ACER (Africa) for Eskom

Visual Impact Assessment of the proposed transmission line from from the Ariadne Substation (near Pietermaritzburg) to the vicinity of Oribi Substation (near Port Shepstone) and the continuation of a single circuit 400kV transmission line to the Eros Substation (near Harding)

#### Moatize Power Station. Mozambique

Client: Golder for Vale

Visual Impact Assessment of the proposed power station to be developed near the Moatize coal mine near Tete

# Majuba – Venus 765 KV transmission Line

Client: ACER (Africa) for Eskom

Visual impact Assessment for a 765kV transmission line (205km) from the Majuba Substation near Amersfoort to the Venus Substation near Estcourt.

#### **New Multi-Products Pipeline (NMPP)**

Client: Zitholele Consulting for Transnet

Visual impact Assessment of three fuel terminal sites and eight pump stations located between Heidelberg and Durban.

# Holcim Cement / Eskom 88kV Distribution Line

Client: Mark wood Consultants for Eskom

A Visual Impact Assessment of the proposed Eskom 88kV Distribution Line upgrade linking into the Holcim Cement / Eskom Switchyard and Substation, Roodepoort.

# Umfolozi Empangeni 765 KV transmission Line and Substation

Client: BKS Engineers for Eskom

Visual impact Assessment for a 765kV transmission line (150km) from the Umfolozi Substation near Ulundi to the proposed Empangeni Substation near Empangeni.

## **Gamma Grassridge 765 KV transmission Line and Gamma Substation**

Client: ACER(Africa) for Eskom

Visual impact Assessment for a double 765kV transmission line from the Grassridge Substation near Port Elizabeth to the Gamma Substation near Victoria West (310km). A separate VIA study was prepared for the Gamma Substation as part of this commission.

# Mmamabula 400 kV Transmission Line and Power Station

Client: Digby Wells and Associates

Visual impact assessment for a 400kV transmissions line from Madinare near Selebi-Phikwe to the CIC Mmamabula coal mine and power station near Mokane, south east of Mahalapye.

Study included an assessment of the mine and power plant

# **West Coast Combined Cycle Gas Turbine Power Plant (CCGT)**

Client: EON Solutions Africa for Eskom

Visual assessment of three siting options in the Saldanha / Cape West Coast area for a natural gas powered power station

#### **Zeus – Mercury – Perseus 765 kV Transmission Line**

Client: Margen Industrial Services for Eskom

Visual impact assessment for two 765 kV transmission lines from the Zeus Substation near Charl Cilliers (Mpumalanga) to the Perseus Substation near Dealesville (Freestate) and an alternative route from Zeus to the Mercury Substation near Orkney in North West Province

#### Eskom Braamhoek-Venus 400kV Transmission Line

Client: PBA International for Eskom

Visual impact assessment of three alternative lines from the Venus substation to the proposed Braamhoek substation near the de Beer's Pass, turn-ins and three alternative substation positions

# De Hoop Dam and Pipeline Sekhukuneland

Client: ACER/CSIR for the Department Of Water Affairs and Forestry

Visual impact assessment for dam on the Steelpoort River and the infrastructure for a pipeline from the dam to the Olifantspoort Weir on the Olifants River

#### **ESKOM Apollo-Dinaledi 400kV Transmission Line**

Client: Eskom

Visual impact assessment of three alternative routes for a 400kV transmission line through the Rietvlei Nature Reserve

#### **ESKOM Eros-Neptune-Grassridge765 kV Transmission Line**

Client: Eyethu Engineers for Eskom

Visual impact assessment for 650 km 765kV transmission line from Kokstad to Port Elizabeth. The assessment included 5 alternative routes

#### **ESKOM Pegasus-Umfolozi Transmission Line**

Client: Procon Environmental Technologies for Eskom

Visual impact assessment for two proposed 400kV transmission line routes (approximately 100 km) from Dundee to Umfolozi north east of Ulundi.

#### **ESKOM Wind Turbines, Cape Town**

Client: Eskom

Visual impact Assessment for two proposed wind turbines sites near Koeberg, Cape Town

ESKOM Beta (Bloemfontein) to Delphi (Queenstown) Transmission Line

Client: P D Naidoo for Eskom

Visual impact assessment for two proposed 400kV transmission line routes (approximately 350 km) from Bloemfontein to Queenstown.

# **ESKOM Cape Strengthening Project (Luckhof-Koeberg)**

Client: P D Naidoo for Eskom

Visual impact assessment for two proposed 765 kV transmission line routes (approximately 850 km), including several sub-stations, capacitor stations and switching stations.

# Tugela Water Project, Kwazulu Natal

Client: Institute of Natural Resources for the Department of Water

Affairs and Forestry.

Visual impact assessment of the proposed Jana and Mielietuin Dams

and the pipeline / canal conveyencies.

## **Delportshoop Tower Mast, Delportshoop, Northern Cape**

Client: Vodacom

Visual impact assessment of a 55 m tower on the Vaalbos National Park

# Maputo Steel Project, Maputo, Mozambique

Client: IDC

Visual impact assessment for alternative site in vicinity of the Maputo harbour

### Ga-Pila Village, Potgietersrus, Northern Province

Client: AMPLATS

Visual impact assessment of the potential visual impacts of the relocation of the Ga-Pila Village to the Sterkwater Farm.

# East London Cement Plant and Quarry, East London

Client: Blue Circle Cement

Visual impact assessment for proposed cement plant and quarry in the Berlin and Kidd's

Beach areas of East London.

## Pom Pom Camp, Okavango, Botswana

Client: Ker and Downey

Visual impact assessment of and management plan for existing luxury Pom Pom Camp on the

banks of the Okavango swamps.

# Mozal ALUSAF Visual Impact Assessment, Maputo, Mozambique

Client: CSIR for ALUSAF

Visual impact assessment for proposed aluminium smelter and associated works in the

Maputo Area.

#### Sigma Colliery Road Diversion, Sasolburg

Client: Sasol Coal

Visual impact assessment of diverting the provincial S1080 road around the new extensions

of the Sigma Colliery open cast mine.

# Botswana Photographic Safaris, Okavango & Chobe regions, Botswana

Client: Accord Business Developments

Visual simulations of proposed tented camps for a tender proposal for a game area lease.

# Manganese Metals Co. Visual Impact Assessment, Nelspruit

Client: Manganese Metals Co.

Visual impact assessment for proposed processing by-products landfill.

## ISCOR Heavy Minerals, Richards Bay/Empangeni

Client: ISCOR

Visual impact assessment for proposed heavy mineral smelter.

# Saldanha Steel Project, Saldanha

Client: CSIR for ISCOR

Visual proposed within impact assessment iron ore smelter the Saldanha/Langebaan/Vredenburg area.

# **ALUSAF Visual Impact Assessment, Richards Bay**

Client: Environmental Evaluation Unit for ALUSAF

VIA of three potential sites for large industrial plant in Richards Bay.

# Sandringham Visual Impact Assessment, Johannesburg

Client: Environmental Evaluation Unit for City Council of Johannesburg

VIA of and amelioration measures for major transmission line through Sandringham residential area.

	Speak	Read	Write
English	Excellent	Excellent	Excellent
Afrikaans	Good	Good	Good

#### **CURRICULUM VITAE – W MULLINS**

Name of firm: Mosaka Economic Consultants cc. t/a Conningarth

**Economists** 

Name of Staff: MULLINS, WILLIAM

**Profession**: Economic Researcher

**Date of Birth**: 19 March 1945

Nationality: South African

#### **KEY QUALIFICATIONS:**

Mr Mullins' leadership qualities make him a natural choice as a project team leader. His extensive experience in the agricultural field means that he is involved in most projects in this field, as well as in impact studies on rivers. William has also worked in specialist fields like the SKA Telescope study, Nuclear1 EIA study, and impact studies for Eskom and number of mine related EIA studies. Mr Mullins has extensive experience with water related studies. William has a BSc degree that he obtained at the University of Free State in 1967.

#### **EDUCATION:**

UED, University of Free State, Bloemfontein, South Africa, 1968. BSc, University of Free State, Bloemfontein, South Africa, 1967.

#### **EXPERIENCE RECORD:**

# Mosaka Economic Consultants cc. t/a Conningarth Economists – 2008 – current, Senior Economist

- Economic growth and development strategies for regions and sub-regions in the RSA.
- Sectoral economic analysis.
- Various cost-benefit analysis studies, also irrigation projects.
- Environmental impact studies and policy analysis.

# Conningarth Economists – January 1998 to present – Economic Researcher

• Consulting with clients to developing macroeconomic models, cost-benefit analyses and report writing.

#### Farmer – 1976-1999:

	Speak	Read	Write
English	Excellent	Excellent	Excellent
Afrikaans	Excellent	Excellent	Excellent

CURRICULUM VITAE RA PULLEN

Name of Staff: PULLEN, RA
Profession: Civil Engineer
Date of Birth: 2 December 1939
Nationality: South African

**Membership in Professional Societies:** 

Hon FSAICE, MSABI

Fellow, South African Academy of Engineering

#### **KEY QUALIFICATIONS:**

In 1969 Mr Pullen joined the Department of Water Affairs and Forestry (DWAF) where he spent 12 years in planning water resource development projects, as Resident Engineer on a major construction site and in the technical aspects of water rights in SA. He played a major role in the conception of the Thukela-Vaal Project, and was responsible for much of the construction phase. His interest in flood hydrology enabled him to investigate a number of major storms and flood events in the 1970's and 1980's.

After a year as Senior Planner in the Physical Planning Branch of the then Office of the Prime Minister he went into private practice and joined a consulting engineering firm in 1982. His experience in consulting engineering, now covering 29 years, has been primarily in the fields of water resource evaluation and development, hydraulic engineering, environmental management and institutional arrangements. He was the Technical Editor of the first major policy document published by DWAF in 1986 entitled *Management of the Water Resources of the RSA*. This was followed by an appointment as Project Leader of a team of specialists appointed to review the flood management policy in South Africa.

He has been Project Manager and Study Leader of numerous water resource development assignments in South Africa, usually leading to Feasibility Studies and recommendations for implementation. The Feasibility Study, followed by a Decision Support Phase, of the proposed Thukela Water Project in KwaZulu-Natal which was completed in 2004, is an example of such an assignment. He is now Project Coordinator for Post Feasibility Bridging Studies of development proposals on the Groot Letaba River, Limpopo Province.

His interest in and experience with environmental management issues led to his significant roles in managing various Reserve determination assignments and Environmental Impact Assessments (Groot Letaba, Luvuvhu and Thukela Rivers in Limpopo and KwaZulu-Natal) and to the implementation of social components of Environmental Management Plans. Important examples of the last-mentioned are the Relocation Action Plan for Nandoni Dam near Thohoyandou (465 households, 1000 graves, four archaeological sites and 2100 subsistence farmers) and the relocation of about 130 graves and ten archaeological sites at De Hoop Dam in the Steelpoort River, both in Limpopo. He is responsible for managing implementation of the Environmental Management aspects associated with construction of Spring Grove Dam in the Mooi River, KwaZulu-Natal.

His recent experience outside South Africa includes being Task Leader for institutional aspects of a Stormwater Drainage Master Plan for Kampala, Uganda and Team Leader for institutional aspects for the design of a Regional Water Authority in the Central-North Region of Mozambique. **Education:** 

BSc(Eng), University of Witwatersrand, South Africa	1961
MSc(Eng), University of Witwatersrand, South Africa	1970
MBL, UNISA, Pretoria	1978

#### **EMPLOYMENT RECORD**

# Self Employed Independent Consultant, Pretoria January 2010 to date – Consultant

• Contracted to BKS (Pty)Ltd for the completion of various current assignments.

CURRICULUM VITAE RA PULLEN

• Authorization, planning, design and construction oversight of private small dams and weirs.

#### BKS (Pty) Ltd, Pretoria

1997 to 2002 - Director and Managing Director of Water and Power Business Unit

2002 to 2006 - Managing Director and Deputy CEO BKS (Pty) Ltd

2006 to 2008 - Head: Water and Power Business Unit

2008 to 2009 - Senior Specialist: Water Engineering

• Groot Letaba River Water Resource Development Project (GLeWaP) Post Feasibility Bridging Studies (Department of Water Affairs and Forestry)

Project Coordinator for technical, environmental, public involvement, economic and institutional investigations to provide critical decision-support information leading to implementation (2006-2010, 8 man-months).

- Relocation of heritage Resources at De Hoop Dam (Department of Water Affairs and Forestry)
  - Project Leader for relocation of graves and rescue of archaeological sites at De Hoop Dam in the Steelpoort River (2005-2008, 6 man-months)
- Relocation Action Plan for Nandoni Dam (Department of Water Affairs and Forestry)
  Project Leader for implementing the Relocation Action Plan including relocation of 465 households, 2100 subsistence farmers, 1000 graves and 4 archaeological sites. (1999-2005, 18 man-months).
- Thukela Water Project (Department of Water Affairs and Forestry)
   Leader of the Project Management Team for a Feasibility Study of the proposed Thukela
   Water Project comprising two major dams and 230 km of aqueducts (1999 2002, 9 manmonths).
- Luvuvhu River Water Resource Development Feasibility Study (Department of Water Affairs and Forestry)
  - Project Leader for a full Feasibility Study leading to a decision to construct Nandoni Dam, including development of an action plan to mitigate impacts on the socio-economy (1997-1999, 12 man-months).
- Groot Letaba River Feasibility Study (Department of Water Affairs and Forestry)
  Director responsible for a Feasibility Study of two major dams and resource management proposals (1996-1997, 4 man-months).
- Water Law Review (Department of Water Affairs and Forestry)
  Member of Task Team concerning Integrated Water Resource Planning and Management (1996-1997, 1 man-month).
- Policy Proposals for Irrigated Agriculture in South Africa (Water Research Commission)
   Member of Task Team preparing policy proposals (1996, 1 man-month)

#### Consultburo (Ptv) Ltd. 1985 – 1997

Chief Executive Officer and Director responsible for water resources, irrigation and environmental management.

Steffen Robertson and Kirsten Inc (Pretoria), 1982 – 1985, Director

Office of the Prime Minister, 1981, Senior Planner, Physical Planning Branch

Department of Water Affairs, 1969 – 1980, Principal Engineer and Assistant Chief

**Engineer, Planning and Construction Divisions** 

Hydrological Research Unit, University of the Witwatersrand, 1963 – 1969, Research Engineer

Prof JEB Jennings, 1962 – 1963, Research Assistant

Languages:

	<u>Speaking</u>	<u>Reading</u>	<u>Writing</u>
English	Excellent	Excellent	Excellent
Afrikaans	Excellent	Excellent	Excellent

Name of firm: Dr Neville Bews & Associates

Name of Staff: Bews Neville

Profession: Social Scientist

Date of Birth:

Nationality: South African

# **Membership in Professional Societies:**

- International Association For Impact Assessment South Africa
- Business Ethics Network of Africa (BEN-Africa).
- South African Sociological Society.
- Extra-Departmental Research Associate Department Sociological University of Johannesburg.

#### **KEY QUALIFICATIONS:**

Dr Neville Bews is a senior social scientist and human resource professional with 36 years' experience. He consults in the fields of Social Impact Assessments and research, and human resource management. He has worked on a number of large infrastructure, mining and water resource projects. He at times lectures at both the Universities of Pretoria and Johannesburg and is a Senior Fellow in the Centre for Sociological Research, Department of Sociology, University of Johannesburg.

#### **EDUCATION:**

B.A. (Soc), University of South Africa, 1980 B.A. (Soc) (Hons), University of South Africa, 1984 The Henley Post Graduate Certificate in Management, Henley Management College, United Kingdom M.A. (Cum Laude), Rand Afrikaans University, 1999 D. Litt. et Phil., Rand Afrikaans University, 2000

#### **EXPERIENCE RECORD:**

Dr Neville Bews & Associates 2001 – current Social Impact Assessment consultant

S A Eagle Company Ltd 1992 - 2001 Employee Relations Manager

Status Management Services 1986 – 1992 Human Resources Consultant

City of Johannesburg 1977 - 1986 Professional Officer - Human Resources

# Social Impact Assessments and Research Projects.

Some of the projects include;

- The Gautrain Rapid Rail Link SIA Bohlweki Environmental (Pty) Ltd;
- Australian South African sports development programme impact University of Johannesburg;
- Kumba Resources Sishen South Project Bohlweki Environmental (Pty) Ltd;
- The United Nations Office on Drugs and Crime Evaluation of a Centre for Violence Against Women in Upington;
- Exxaro Resources Ltd SIAs at Leeuwpan Coal Mine Delmas, Glen Douglas Dolomite Mine Henely-on-Klip, Grootegeluk Open Cast Coal Mine;
- South African National Road Agency Limited Social Impact of tolling the Gauteng Highway System;
- South African National Road Agency Limited Social Impact of the N2 Wild Coast Toll Highway;
- University of Johannesburg Research into research outputs of the University;
- Waterfall Wedge housing and business development in Midrand Gauteng Felehetsa Environmental (Pty) Ltd;
- SIA for the Environmental Management Plan for Sedibeng District Municipality Felehetsa Environmental (Pty) Ltd;
- Exxaro Resources Limited Social and Labour Plan for the Belfast Project;
- Golder Associates Africa (Pty) Ltd SIA for the Transnet New Multi-Product Pipeline (Commercial Farmers);
- Golder Associates Africa (Pty) Ltd SIA for the Proposed Vale Moatize Power Plant Project in Mozambique;
- Kumba Resources Limited SIA for the Proposed Dingleton Resettlement Project at Sishen Iron Ore Mine;
- Gold Fields West Wits Project EcoPartners (Pty) Ltd;
- Exxaro Resources Limited Belfast Project;
- Eskom Holdings Limited's Proposed Ubertas 88/11kV Substation KV3 Engineers;
- Golder Associates Africa (Pty) Ltd SIA reviews for Kuka Aerial Ropeway Project and the Anglo Coal proposed Waterberg Gas 37-spot coalbed methane (CBM) bulk yield test project;
- N3 Toll Concession (Pty) Ltd N3 Toll Road Route Location Initiative Tugela Plaza to Warden;
- Eskom's Nuclear 1 Power Plant assessed with the SIA on behalf of Arcus GIBB Engineering & Science;
- Mokolo and Crocodile River (West) Water Augmentation Project (MCWAP) Nemai Consulting on behalf of the Trans Caledonian Water Authority and the Department of Water Affairs;
- Proposed 150MW Photovoltaic Power Plant and Associated Infrastructure Kalahari Survey Solutions cc on behalf of Italgest Energy (Pty) Ltd.
- Eskom Holdings Limited, Transmission Division's Neptune-Poseidon 400kV Power Line – Nemai Consulting;
- Ncwabeni Off-Channel Storage Dam for security of water supply in Umzumbe, KwaZulu-Natal;
- Social Impact assessment for Eskom Holdings Limited, Transmission Division, Forskor-Mernsky 275kV±130km Powerline and Associated Substation Works in Limpopo Province;
- Social impact assessment for the proposed infilling of the Model Yacht Pond at Blue Lagoon, Stiebel Place, Durban;

# **CURRICULUM VITAE - N BEWS**

- ABC Prieska Solar Project; Proposed 75 MWp Photovoltaic Power Plant and its associated infrastructure on a portion of the remaining extent of ERF 1 Prieska, Northern Cape;
- Sekoko Wayland Iron Ore, Molemole Local Municipalities in Limpopo Province;
- Langpan Chrome Mine, Thabazimbi, Limpopo.

	Speak	Read	Write
English	Excellent	Excellent	Excellent

#### **Experience record:**

Name of firm: eThembeni Cultural Heritage

Name of Staff: Len van Schalkwyk

**Profession**: Archaeologist

Date of Birth: 07 July 1959

Nationality: South African

#### **Membership in Professional Societies:**

Association of Southern African Professional Archaeologists (ASAPA)

ASAPA Council Member - Cultural Resources Management Portfolio (CRM): 2011-2013

ASAPA CRM Section - listed as Principal Investigator

Amafa aKwaZulu-Natali accredited heritage practitioner

South African Heritage Resources Agency's Archaeological Permit Advisory Committee (2004)

South African member of International Scientific Committee for Archaeological

Management, elected by ICOMOS-SA Executive (1999 - 2000)

Provincial Representative: South African World Heritage Convention Committee (1998 - 2000)

Southern African Museums Association (1984 -1999) SABTACO

#### **KEY QUALIFICATIONS:**

Mr van Schalkwyk has 25 years of professional experience as a practising archaeologist and heritage resource manager in South Africa, Botswana and Mozambique. His research interests have focussed on the Iron Age of southern Africa, while his management specialisations are heritage impact assessments, community liaison and ancestral grave management.

Mr van Schalkwyk's key heritage management, tourist guide training and research initiatives include:

- Principal Investigator survey and excavation of heritage resources in Richards Bay Minerals' concession areas, KwaZulu-Natal, including oral history recording programme with traditional wisdom keepers to ensure appropriate mitigation. Procedures regarding discovery, retrieval and re-interment of human remains negotiated satisfactorily.
- Member of Ministerial Monuments Task Group committee to formulate KwaZulu-Natal Heritage Act No 10 of 1997.
- Implementation of the cultural resources management plan for the uKhahlamba Drakensberg Park (CURE), focussing on rock art management.
- ICOMOS (SA) observer for uKhahlamba Drakensberg Park World Heritage Site assessment.
- Maloti / Drakensberg Transfrontier Conservation and Development Area project for the Global Environment Facility of the World Bank.
- Mnweni Valley cultural landscape management, northern uKhahlamba / Drakensberg cultural tourist guide training, development of integrated land use and cultural heritage management plan, co-ordination of displays for interpretive centre

- Reichenau Mission, southern uKhahlamba / Drakensberg cultural tourist guide training; permaculture design workshop, compilation of infrastructural development plan with local community, including establishment of a community Trust, upgrade of access roads, building restoration, skills training and empowerment.
- Specialist report on coastal zone management of KwaZulu-Natal for Environmental Evaluation Unit of the University of Cape Town.
- Lead consultant cultural resources assessment of uThukela Water Scheme for Department of Water Affairs and Forestry and Institute of Natural Resources.
- Heritage Practitioner on revised N2 (S) Toll Road EIA report for CCA Environmental Consulting Services.
- Heritage Practitioner on Xolobeni Mining Application (Pondoland) for Ground Water Consulting.
- Fencing and stabilisation of excavated deposits at Border Cave, Ingwavuma district, KZN.
- Curation and stabilisation of excavated MSA deposits at Sibudu Cave for the ACACIA Project, University of Witwatersrand.
- Co-Director of research project with University of Manitoba, Canada on Early Iron Age of KwaZulu-Natal at Ndondondwane. Fieldwork and analysis ongoing.
- Excavation of middens at King Shaka's KwaBulawayo iKhanda in collaboration with Gavin Whitelaw (Natal Museum).
- Co-Director, Isandlwana Archaeological Project, with Glasgow University Archaeology Research Division.
- Cultural heritage management of greater Chobe Conservation area in Botswana production of policy document for submission to World Wildlife Fund.

Mr van Schalkwyk has completed more than 900 heritage impact assessments and specialist studies in southern Africa particularly South Africa, Botswana and Mozambique. Please refer to the eThembeni company profile for a recent selection of projects.

Mr van Schalkwyk's community liaison experience includes:

- Dube and Mkhwanase communities cultural heritage and ancestral graves management for Richards Bay Mining.
- Mbonambi and Sokhulu communities negotiated mitigation and future practice regarding exposure of human remains by Richards Bay Minerals' mining activities on ancestral lands.
- Bhekeshowe Traditional Authority investigated feasibility of developing King Shaka's KwaBulawayo site as a tourist destination.
- Khovokeni and Mvutshane communities at Kosi Bay investigated feasibility of declaring Tsonga fish traps as significant cultural landscape.
- Communities affected by Paris Dam negotiation of appropriate mitigation for exhumation and reinterment of ancestral graves.
- Mngomezulu Traditional Authority negotiated management of Border Cave archaeological site.
- Nxamalala and Bhengu Traditional Authorities investigated declaration of archaeological conservancy in lower uThukela River Basin.
- Mpungose Traditional Authority negotiated extended boundaries of Ondini Historical Reserve.
- Mangwebuthanani Traditional Authority negotiated establishment of Isandlwana Historical Reserve.

#### **EDUCATION:**

#### **EXPERIENCE RECORD:**

# **December 2000 to present**

Partner in eThembeni Cultural Heritage, an independent organisation specialising in heritage impact assessments, ancestral grave management and integrated environmental management.

#### November 1996 to December 2000

Assistant Director (Research, Professional Services and Compliance) of Amafa aKwaZulu-Natali, in charge of ten professional and administrative staff, including archaeologists, anthropologists, architects and database managers.

#### November 1992 to October 1996

Archaeologist with the KwaZulu Monuments Council and Principal Professional Officer (Research Division) in charge of six professional and administrative staff. Responsible for Museum and Interpretive Centre co-ordination in KwaZulu-Natal.

# February 1986 to October 1992

Professional Officer and officer-in-charge at Ondini Museum in Ulundi with KwaZulu Monuments Council, responsible for supervising archaeological excavations and reconstruction of King Cetshwayo's Ondini Royal Residence; management of Historical Reserve and Nguni cattle herd; development of Ondini Museum and its tourist facility and provincial site interpretation.

# **July 1983 to January 1986**

Field Director of Early Iron Age archaeological research project in lower uThukela Valley. December 1978 to June 1983

Ranger / Naturalist in Kruger National Park.

December 1977 to February 1978

Field Research Assistant in Hluhluwe / iMfolozi Game Reserve.

	Speak	Read	Write
English	Excellent	Excellent	Excellent
Afrikaans	Excellent	Excellent	Excellent
Zulu	Good	Poor	Poor

#### **CURRICULUM VITAE – J CROSS**

Name of firm: Mervyn Taback Incorporated

Name of Staff: **CROSS J** 

Profession: Practicing Attorney – Environmental, Health and Safety Law

Date of Birth: 24 February 1972

Nationality: South African

# **Membership in Professional Societies:**

Member of the Law Society of the Northern Provinces. International Association of Impact Assessment.

Institute of Waste Management of Southern Africa.

#### **KEY QUALIFICATIONS:**

James has a Masters degree in environmental and constitutional law and over 15 years of experience, which includes all aspects of legal interpretation of statutes pertaining to Safety, Health and Environmental ("SHE") law.

#### **EDUCATION:**

- BA (Law), University of Stellenbosch (1990 1993)
- LLB, University of Stellenbosch (1994 1995)
- LLM, University of Stellenbosch (1996 1997)
- Rated as Leading in South Africa in the field of environmental Law by PLC Which Lawyer, a rating agency based in the United Kingdom
- Admitted as a practicing attorney during May 1997

#### **ADDITIONAL COURSES**

Diploma in Corporate Law - Rand Afrikaans University (RAU) / University of Johannesburg -(With Distinction) (2000) Best Student Award – Academic achievement

#### **EXPERIENCE RECORD:**

# Safety, Health and Environmental (SHE) Legal Interpretation and Opinion

- Extensive experience in the legal interpretation of statutes pertaining to SHE and administrative law;
- Legal interpretation and opinion is rendered subject to attorney and client privilege and therefore a list of clients is not provided. However, SHE-legal interpretation and opinion has been provided to numerous companies operating within the mining and industrial sectors, property development companies, environmental assessment practitioners and multi-disciplinary consultant/engineering companies:
- Representation of mining and heavy industrial companies regarding water law and in particular historical water rights, access to water, drafting of water use agreements and representation of clients at the SA Water Tribunal;
- Preparation of numerous appeals in accordance with environmental legislation;
- Assistance to clients within the waste sector on government policy and initiatives

- as well as legal requirements pertaining to waste licensing;
- Undertaking of various environmental-legal requirements assessments for clients in the pre-feasibility, feasibility and implementation phases of construction and expansion projects within the mining and heavy industrial sectors;
- Responsible for the drafting of the environmental-legal section of the Guideline for the Rehabilitation of Mined Land published by the Chamber of Mines;
- Responsible for the drafting of the environmental-legal section titled: Policy and Legislative Overview – Management and Protection of Karst and Cave in the Cradle of Humankind World Heritage Site, a project managed by the IUCN South Africa Office:
- Principal author of volume 19 of the Integrated Environmental Management Information Series published by the erstwhile Department of Environmental Affairs and Tourism now Department of Environmental Affairs titled: Environmental Assessment of International Agreements;
- Acted as an environmental-legal adviser to the Innovation Hub Management Company (Pty) Ltd, which is a Gauteng Province Blue IQ initiative;
- Instructed by SANParks as the principal drafter of the Knysna National Lake Areas Regulations published and promulgated in terms of the National Environmental Management: Protected Areas Act 57 of 2003;

# > Specialist Review and Project Management

 Specialist and environmental-legal review of impact management reports for consultant clients within the context of Environmental Impact Assessment (EIA) procedures associated with construction of infrastructure, waste disposal site establishment, operation and closure, undertaking of Scheduled Processes and change of land use.

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# **EMPLOYMENT EXPERIENCE**

- Director: Cameron Cross Incorporated (June 2002 to 1 March 2013)
- Associate: Moolmans Attorneys Incorporated (2000 2002)
- Legal Advisor: Environmental Law Deloitte Legal (2001)

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	Opeak	Neau	VVIIIC
English	Excellent	Excellent	Excellent
Afrikaans	Excellent	Excellent	Excellent