

APPENDIX E
SPECIALISTS CVs

SOILS AND AGRICULTURAL POTENTIAL

Garry Paterson

Name: David Garry Paterson

Profession: Soil Scientist

Date of Birth: 25/08/1959

Employed by: ARC-Institute for Soil,
Climate & Water

Position in Firm: Senior Soil Scientist

Years with Firm: 25 yrs, 3 months

Nationality: RSA

HDI Status: White

PROFESSIONAL QUALIFICATIONS

Degrees: BSc (Hons) in Geography,
University of Strathclyde, Scotland,
1980; MSc (*cum laude*) in Soil Science,
University of Pretoria, 1998

Courses:

Course in Project Management
(University of Stellenbosch)
Course in Junior Personnel
Management (Dept of Agriculture)
Course in Handling of Grievances and
Complaints (Dept of Agriculture)
Course in Marketing (ARC-ISCW)
Course in National Qualifications
Framework Assessment, ARC-CO
Training Course in Ground Penetrating
Radar (GSSI, USA)

Professional Society Affiliations:

Practising Natural Scientist (Soil
Science; Past President, Soil Science
Society of South Africa; Registered
Natural Scientist (Soil Science),
400463/04

Languages:

English & Afrikaans (fluent); French &
Dutch (poor)

Countries of Work Experience:

South Africa

PROPOSED POSITION ON TEAM:

Senior Soil Scientist

KEY QUALIFICATIONS

See opposite

RELEVANT EXPERIENCE

Many soil investigations (>100), either
surveys or desk-top studies in all parts of
South Africa. Many for Bohlweki, SRK,
Eskom, other mines, etc

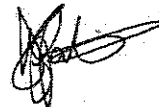
SUMMARY OF OTHER EXPERIENCE

With ARC-ISCW since 1981.

DECLARATION

I confirm that the above CV is an accurate
description of my experience and
qualifications and that, at the time of
signature, I am available and willing to
serve in the position indicated for me in the
Proposal for Consulting Services for the
VRESAP, for the durations and at the
locations indicated therein.

SIGNATURE:



DATE: April 2007

**GEOHYDROLOGY AND SURFACE WATER AND
DRAINAGE**

PERSONAL DETAILS

NAME: *Johannes van der Walt*
DATE OF BIRTH: *11 February 1971*
NATIONALITY: *South African*
MARRIED: *Single*

TITLE : **ENVIRONMENTAL SCIENTIST**

ACADEMIC QUALIFICATIONS

2006 MSc Geohydrology, Institute for Groundwater Studies, University of the Free state
2000 BL – Landscape Architecture, University of Pretoria
1994 BSc (Hons-Botany), University of Pretoria, Pretoria
1993 BSc (Geology & Botany), University of Pretoria, Pretoria

EMPLOYMENT HISTORY

2006 – present GCS (Pty) Ltd
Geohydrologist
2003 – 2005 Pulles Howard and de Lange Inc
Senior Scientist
2000 – 2003 BKS (Pty) Ltd
Environmental Scientist
2000 Lizelle Gregory Landscape Architects & Environmental Consultants
1997 Van Riet & Louw Landscape Architects
Part Time

EXPERIENCE:**GCS (PTY) Ltd (2006- present):**

- Compiling annual/quarterly/monthly monitoring reports on surface and groundwater quality aspects for various mining operations in South Africa.
- 3D numerical groundwater flow modelling using the PMWIN 5.1 Modflow software package.
- Compiling monthly dust monitoring reports for selected mining houses throughout South Africa
- Environmental due diligence investigations for mining closure
- Water supply geophysical investigations
- Hydro census investigations.

PHD Inc (2003–2005)

- The development of a Catchment Management Strategy (CMA) for the Schoonspruit and Koekemoerspruit Rivers in the Middle Vaal Catchment involving:
 - o Collecting and collating the catchment's hydrological data from various sources (mining houses, DWAF, Municipalities etc.).
 - o Compiling and updating a computerised Water and Salt Balance
 - o Identifying Impacts on the Water Quality and Quantity.
 - o Making recommendations with regard to the DWAF water quality monitoring programme.
 - o Identifying user requirements.
 - o Identifying and determination of future impacts.
 - o Making recommendations and Management Options.
- Risk Based Mining Closure Assessments for
 - o Village Main Reef (Johannesburg)
 - o Grootegeluk (Ellisras)
 - o Thabazimbi iron ore mine
 - o De Beers-Kimberley Mines
- International Best Practice Guidelines Report for Mining Closure (DWAF)
- Mining Subsidence Study (University of New Castle, UK)
- Environmental Screening Report: Huddle Park
- Visual Impact Assessment: Douglas Coal Mine
- Vanchem (vanadium plant):
 - o Developed a computerised Water & Salt Balance
 - o Daily timestep hydrological modelling undertaking the SCS modelling method.
 - o Developed a computerised stormwater run-off model implementing the rational Method.
 - o Compiled a Water Use and Reclamation Strategy Report.
- Habitat Integrity Assessment Report for the Upper Orange River
- Groundwater modelling reports for the Chloorkop and Wadeville landfill sites.
- Sand-Blyde Forestation Project Report
- GIS (Arcview 3.2)

BKS (Pty) Ltd (2000-2003):

- Environmental Management Plans (EMP's):
 - o Wastewater Treatment Works (WwTW)
 - o Infrastructure & pipelines installations
 - o Residential & rural developments
- Environmental Impact Assessment (EIA) – Scoping Reports:
 - o Upgrading of water purification works
 - o Residential & Rural Developments

- EIA Screening Reports for the Der Brochen Railway Development
- Rehabilitation Programme for the Lady Selborne residential development
- Groundwater Strategic Study for the Sekhukhune Municipal District
- Licensing in terms of Act 36 of the NWA for:
 - o Upgrading of WwTW
 - o General Water Use
- License Motivation Reports
- EIA-Scoping evaluations for DWAF

LANGUAGE PROFICIENCY

English and Afrikaans - speak, read and write

PERSONAL DETAILS

NAME: *André Pretorius*
DATE OF BIRTH: *26.04.1975*
NATIONALITY: *South African*
MARITAL STATUS: *Married*

MANAGER: ENGINEERING AND WATER USE UNIT

TITLE : HYDROLOGICAL ENGINEER

ACADEMIC QUALIFICATIONS

National Diploma (1999)	Technikon Free State (Bloemfontein) Civil Engineering
Baccalaureus Technologiae (2004)	Tswane University of Technology Civil Engineering – Environmental Engineering
Baccalaureus Technologiae	Tswane University of Technology Civil Engineering – Water Engineering (Pending 1 subject)

Current Studies:

BSc (Hons)(Appl. Sci.): Civil (Water Engineering)

COURSES AND WORKSHOPS ATTENDED

- Environmental Law for Environmental Managers
- GIS
- Establishment of Catchment Management Agencies
- WARMS- Registration
- Dam Control Course
- Wetland Delineation
- SAPWAT- Crop Water Use Calculations
- Design and Rehabilitation of Dams
- National Water Resources Strategy
- Establishment of Water User Associations
- Water Situation and Assessment Model (WSAM)
- Floods and Storm water
- Water Quality Orientation Course

- Waste Discharge and Disposal Course
- Agricultural and Urban Development
- State of the Environment Report
- Disaster Management Strategic Planning
- Water Resources Yield Model -IMS

EMPLOYMENT HISTORY

August 2005 – Present	Groundwater Consulting Services Hydrological Engineer
August 1999 – July 2005	Department of Water Affairs and Forestry Senior Technician
February 1997-July 1999	Drakensberg District Council Site Agent

RELEVANT EXPERIENCE

August 2005- current

Specialization: Hydrological Engineering

- Essakane JV (Burkina Faso) – Surface water aspects for pre-feasibility study including conceptual design for River Storage Dam.
- Bon-Jo-Ani Trout Estate: - Surface water aspects including yield and floodline determination
- Bryanston Country Club- Sandtrap and canal design
- Zincor – Surface Water Auditing
- Elizabeth Fry – Floodline Determination for ESKOM
- Transvaal Gold Mining Estates, Limited (Simmer and Jack Mining, Limited) – Floodline determination, hydrological report and water balance.
- Transvaal Gold Mining Estates, Limited (Simmer and Jack Mining, Limited) – Water Audit
- Transvaal Gold Mining Estates, Limited (Simmer and Jack Mining, Limited) – Floodline determination, hydrological report for the Elandsdrift mining expansions.
- Silicon Smelters – Storm Water Management Master Plan
- Silicon Smelters – Detailed Storm Water Designs for the Silica Fume Truck By-pass
- Dieter Brunner – Hydrological Calculations and sizing of culverts and a spillway
- Waterval Sewage Works – Hydrological Risk Assessment
- Vaalwater – Detailed Hydrological Analyses for Residential and Golf course development, including the determination of adequate capacities for water storage dams and floodline determination
- Entingweni Mine – Hydrological Analyses for Mining EMPR.
- Insurance Investigation for the flooding of Park Street with sewage
- Surface water resource evaluation for the Akanani Platinum Mine Project: Mogalakwena River Basin Study
- Surface water resource analyses for the Chapudi Coal Project
- Floodline calculations for the Elandsfontein Mining Project: Turnberry Projects
- Gauging weir design for the Two Rivers Platinum Mining Project.

- Insurance Reporting on the pumping design and system analyses for the Forzando North Box cut, regarding the possibility of flooding of the conveyor.
- Sudor Coal: Halfgewonnen River Diversion and conceptual designs for pollution control dams
- ESKOM: Project Lima, Hydrological inputs for the Environmental Impact Assessment
- TGME Simmer & Jack Mines: Sewage and storm water designs for the Frankfort Mining expansions
- Uitkomst Colliery: Conceptual designs for return water dams.

- prior GCS

Specialization: Hydrological Engineering, Water Resources Management

- Implementation of the National Water Act, 1998 (Act 36 of 1998) and National Water Resource Strategy.
- The implementation of the General Authorisations as well as Water Use License applications in terms of section 21 of the NWA, 1998.
- The evaluation of system designs (pumps and pipelines).
- Dam and spillway assessments.
- Flood-line determinations.
- Hydrological calculation and analysis.
- Evaluation of Environmental Impact Assessments (EIA's) and EMPR's.
- Site management plans.
- Water Balance's.
- Evaluation of mine closure applications.
- The implementation of Water Conservation and Demand Management principles.
- Calculation of crop water requirements in terms of the National Pricing Strategy (SAPWAT - irrigation).
- Dam safety inspections and the implementation of Sustainable Utilization Plans for departmental dams.
- Classification and Registration of privately owned dams in terms of Chapter 12 of the National Water Act, 1998 and Government Notice No 1559 of 25 July 1986.

Major Projects: 1997 - 2005

- Construction of Water Purification Plant
- Construction of Industrial Bulk water supply
- Construction of Subsurface drainage systems
- Involved with various Mines, Industries and the Agricultural sector with regards to Water Resource Management in the Olifants-, Inkomati- and Leeu/ Taaibosch Water Management Areas
- Part of the Driefontein Dam and Paddabaai Technical committees to address the remediation of soil, groundwater as well as surface water pollution within the Sasolburg area as a result of industrial activities.
- Part of soil- and groundwater remediation team where certain pollutants were identified (mercury and dense non- aqueous phase liquids) at certain industries in Sasolburg.
- Water Use License applications in terms of the National Water Act, 1998, for the following users:
 - New Largo Colliery- Water Abstraction
 - Concession Creek Dam- Barberton
 - Richmond Dam- Anglo Operations
 - Highland Gate Golf Course development – Water Abstraction
 - New Vaal Colliery- Maccauwvlei Expansions

- Sigma Colliery- Mooikraal Expansions
- Sasol Midland and SCI- Integrated License
- Assmang Chrome Machadodorp- Abstraction

Presentations 1999-2005

- Presented Hydrology, Environmental- as well as Dam Safety Legislation and Dams for the South African Irrigation Institute at the Nelspruit Agricultural College for Irrigation students (21 June 2004).
- Presented presentations on flood-line determinations/calculations and on freeboard within the Department of Water Affairs and Forestry: Gauteng Regional Office
- Presented Water Quality related issues at the Leeu Spruit / Taaibosch Spruit Forum
- Presented Water Quality related issues at the Barrage Reservoir Forum with regards to the Vaal Barrage.
- Presented Water Legislation and related topics at various farmer/ water user meetings in the Olifants and Inkomati Water Management Areas.

Countries Where Experience was gained

South Africa.

Language Proficiency

Afrikaans and English (Read, Write and Speak)

WETLANDS



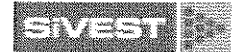
Present Appointment	Senior Environmental Planner: SiVEST Environmental Division
Date of Birth	22 June 1976
ID Number	7606225098083
Nationality	South African
Education	Greenside High School Johannesburg, South Africa Matriculated 1994. Full Colours Award for Academics, 1993. Distinctions for English, Latin, 1994.
Professional Qualifications	B.A. (Hons) (Geography and Environmental Studies) 1995-1998. Awards: Postgraduate Merit Award for outstanding marks, Certificate of First Class for Honours Year Coursework: Environmental Management, Geographical Information Systems (GIS-Idrisi) and Remote Sensing applications, Climatology, Rural and International Development Studies, History, Anthropology, English Literature. Honours Research Paper "GIS as a Social Technology" was published in the September 1999 issue of the South African Geographical Journal
Professional Registration	Member of the International Association of Impact Assessment (IAIASa)
Field of Specialisation	Water Resources; Hydroecological Impacts of Abstraction & Impoundment; Wetlands; Catchment Management Planning
Languages	English, Afrikaans and spoken Portuguese

SYNOPSIS

Paul has worked at SiVEST in the capacity of Senior Environmental Planner in the Environmental Division in Johannesburg since February 2005. During his time at SiVEST he has worked on a number of projects, including Strategic Environmental Assessments, Environmental Impact Assessments, Environmental Management Plans, and Environmental Auditing. He has completed specialist wetland assessment work on a number of projects.

Paul has worked previously for the Mondi Wetland Project, and has gained extensive experience of wetland delineation, wetland threat identification, and wetland restoration.

Paul has gained international environmental management. In addition to working in the USA as an intern for the US National Park Service, Paul worked in the UK for three years, and in this time worked in various regulatory risk assessment roles for both the Environment Agency in England and Wales and the Scottish Environment Protection Agency. In this time Paul gained excellent experience and skills relating to catchment management planning, hydro-ecological risk assessment, water resource regulation and stakeholder participation and involvement in water resources strategies.



Computer Training / Knowledge

- Successfully completed a training course on ArcGIS (ArcInfo 8.1) through GIMS (Geographic Information Management Systems – associates of ESRI in South Africa), October 2001.
- Proficient working knowledge of ArcView and ArcGIS software.
- Proficient in the use of MS Office Suite applications (Word, Excel, Access, Powerpoint).

PROFESSIONAL HISTORY

Feb 2005 to present time

Senior Environmentalist: SIVEST Environmental Division

Paul has acted as a project leader, managing the finances, and technical content of a number of projects. He is a senior staff member in the division.

ENVIRONMENTAL IMPACT ASSESSMENTS, ENVIRONMENTAL MANAGEMENT PLANS, ENVIRONMENTAL AUDITING

Filling Stations and other commercial developments

- Detailed Scoping Studies for Proposed Sasol / Exel Filling Stations at:
 - Mafikeng
 - Kimberley
 - Randfontein
 - Zwartkops Raceway - Pretoria
 - Vanderbijlpark (Riverside Boulevard)
 - Witbank (Highveld Mall)
- Environmental Auditing for the Emfuleni Mall (Vanderbijlpark)

Bush Lodges

- Detailed Scoping Study for new luxury camp at Ngala Private Game Reserve.
- Marataba Bush Lodge (Marakele National Park) Environmental Auditing
- Forum Homini Lodge (Cradle of Mankind) Environmental Auditing
- Auditing of new lodge – Timbavati Private Nature Reserve
- Letamo Estate (Cradle of Mankind) Environmental Auditing

Linear Infrastructure

- EIA studies for the proposed New Multi Products Pipeline (Petronet): Durban to Sasolburg

STRATEGIC ENVIRONMENTAL ASSESSMENTS & SPATIAL ENVIRONMENTAL PLANNING

- Clarens Area Strategic Environmental Assessment and micro Spatial Development Framework – spatial environmental assessment
- Gert Sibande Municipality Spatial Development Framework
- Ekurhuleni MM Region 10 – Local Spatial Development Framework – environmental aspects
- KwaDukuza Strategic Environmental Assessment

WATER-RELATED

Wetlands

- Wetland delineation and assessment for the Proposed NMPP Petronet Pipeline – Durban to Gauteng
- Development of a wetland inventory and wetland assessment for the

Greater Clarens Area Strategic Environmental Assessment.

- Wetland Delineation and Assessment for the EIA for the proposed luxury camp at Ngala Private Game Reserve
- Wetland Delineation and Assessment for the EIA for a proposed low density residential estate north of Diepsloot, Tshwane Metropolitan Municipality
- Wetland Functional Assessment for the Eskom Project Lima (proposed pump-storage scheme) in Mpumalanga.
- Identification of wetland strategic threats for the KwaDukuza Local Municipality Strategic Environmental Assessment
- Desktop wetland delineation and Identification of wetland strategic threats for the Rosetta Environmental Management Framework, KwaZulu-Natal Midlands
- Wetland Delineation at a community centre site in Cato Manor, Durban
- Wetland Delineation and Functional Assessment for the construction of a new road in Isipingo, Durban.
- Wetland Delineations at two sites at Carlos Rolfes Pan, Ekurhuleni.
- Wetland Assessment for a proposed Waste Disposal Site, Newcastle, KwaZulu-Natal

Hydromorphology

- Specialist restoration and ecological input to Montecasino Phase II Upgrade (design of Ecolink)
- Hydromorphological assessment of impact of outfall – proposed Rand Water Reservoir – Johannesburg.

PUBLIC PARTICIPATION

- Public Participation on a number of EIA projects
- Facilitation of Public Meetings for:
 - Exel Filling Station – Mafikeng
 - Sasol Filling Station - Kimberley

OTHER

- Tourism Impact Assessment – Eskom Matimba B Powerstation
- Amajuba Battlefields Development Plan

Oct 2003 - mid Dec 2004 **SCOTTISH ENVIRONMENT PROTECTION AGENCY Aberdeen, UK: Senior Water Resources Officer,**

Responsible for regulating abstraction and impoundment in the Highlands and Grampian Region of Scotland, and assisting with the development and implementation of new regulatory regimes related to the EU Water Framework Directive (WFD).

WATER RESOURCES REGULATORY AND POLICY DEVELOPMENT

- The development of internal abstraction technical guidance for use in the risk assessment of impacts of abstraction proposals across the whole of SEPA; & development of training provided to regulatory staff relating to the use of the guidance.
- Applying the requirements for protection of the water environment and sustainable water usage under the WFD to various different abstraction & impoundment consultations, primarily hydropower, public water supply consultations and other EIA consultations.
- Liaising with internal SEPA functions such as hydrology, hydrogeology and area environmental improvement and regulation teams to develop tools and work methodologies for instituting and implementing new regulatory regimes and impact assessment techniques.



- Responsible for external liaison with various water usage sectors to ensure that abstraction / impoundment activities are undertaken in a sustainable manner.
- Acquired a comprehensive working knowledge of the EIA process, having assessed a number of EIA consultations at screening, scoping and environmental assessment stages.

CATCHMENT MANAGEMENT PLANNING

- Project management of a pilot Water Resources Management Strategy in the Spey Catchment.

ABSTRACTION RISK ASSESSMENT

- Acquired an excellent working knowledge of the principles of abstraction / impoundment risk assessment and mitigation, and of best practice in environmental regulation.

HYDROPOWER

- Represented SEPA on the Scottish Hydropower Working Group, a UK government-led initiative for better regulation of the Scottish Hydropower industry.
- Acquired a comprehensive understanding of hydropower scheme dynamics, as well as an understanding of the ecological impacts of hydropower schemes, mitigation of hydropower impacts, & cost-benefit analysis techniques relating to development of hydropower schemes.

Sep 2002 to Oct 2003.

THE ENVIRONMENT AGENCY Ipswich, UK CAMS Officer

CATCHMENT MANAGEMENT PLANNING

Responsible for the delivery of the North Norfolk CAMS (Catchment Abstraction Management Strategy).

Responsibilities included:

- Undertaking technical work to assess the impacts of water abstraction in various hydrometric catchments within North Norfolk.
- Managing contributions from various Agency functions to ensure the delivery and completion of the project.
- Liaising with external stakeholders to ensure that the project took account of the needs of the environment, as well as the reasonable needs of all water users.
- Acquired an excellent understanding of the principles of catchment management and water resources management planning.
- Acquired experience of working in technical disciplines of hydrology and ecology.
- Acquired project management experience and experience of stakeholder involvement and consultation in the context of development of water resource strategies.

April 2002 – September 2002

THE ENVIRONMENT AGENCY Ipswich, UK ; Water Resources Licensing Officer,

WATER RESOURCES REGULATORY AND TECHNICAL ASSESSMENT

- Worked as a licensing officer in the water resources regulatory team in the eastern area of the Environment Agency's Anglian region.



- Responsible for assessing proposals to abstract water as part of the water abstraction licensing determination process. Conducted assessments of hydromorphological and ecological impacts of abstraction.
- Responsible for the management of a project to converge time-limited abstraction licenses in North Norfolk to a common end date in the context of the UK Habitats Regulations.
- Acquired experience of the water abstraction licensing system and underlying legislation in England, as well as in-depth knowledge of the EU Birds and Habitats Directives and the principles and stipulations contained within it.
- Gained a thorough understanding of the principles of environmental regulation, environmental risk assessment and requirements of protecting the water environment.

1998 – 1999, 2001

MONDI WETLANDS PROJECT – MWP (formerly the Rennies wetlands project) South Africa : Field Assistant and Survey Team Leader

WETLAND ASSESSMENT AND RESTORATION

- Participated in wetland surveys in 10 major river catchments in 6 South African provinces.
- Extensive field experience in wetland delineation, wetland threat identification, and wetland restoration.
- Undertook contract work with the Working for Water govt. Project (Northern Province) to survey and identify wetland rehabilitation sites in the Nyl and Mokolo River catchments, Feb-April 2001.
- As a wetland survey team leader trained and educated wetland survey participants about wetland conservation and impact assessment in the field.

Feb – Oct 2000

**NATURAL RESOURCES DIVISION AT GATEWAY NRA, NYC, USA
Volunteer Intern in the Division**

GIS

- Responsible for operating the Division's GIS system (ArcView 3.1, ArcInfo 7) and undertaking spatial analysis and creating maps for various park projects, primarily the JABERRT Project.

CONSERVATION AND ENVIRONMENTAL MANAGEMENT

- Participant and field assistant in various studies and projects related to the Jamaica Bay Ecosystem Restoration (JABERRT) Project (Fisheries seining and trawling, water quality testing, mammal surveys, GIS mapping of salt marshes).
- Responsible for undertaking a monitoring programme of wildlife habitation and recreational usage of various park beaches. Co-author of NPS Internal report concerning the study.

BIODIVERSITY

CURRICULUM VITAE

(abridged)

RIAAN A.J. ROBBESON (Pr.Sci.Nat.)

Personal Information

Name: **Riaan A. J. Robbeson**
 ID No.: **690413 5046 081**
 Citizenship: **South African**
 Address: **PO Box 77448**
Eldoglen
0171
 Cellular: **082 3765 933**
 Telephone **(012) 658 5579**
 email: **bathusi@lantic.net**

Highest education: **M.Sc. Botany (Ecology)**
 Affiliations: **South African Council for Natural Scientific Professions**
Botanical Scientist
Ecological Scientist
 Reg no: **400005/03**

Education

- Completed the degree B.Sc (1990);
- Main subjects: Botany and Zoology, additional subjects: Chemistry, Genetics and Geography;
- Completed the degree B.Sc. (Hons) at the University of Pretoria (1991);
- Subjects included Introductory Botany (Distinction), Plant Ecology (Distinction), Plant Physiology, Plant Morphology;
- Completed the degree M.Sc. (Plant Ecology) at the University of Pretoria (1994-1998) with Vegetation Science as main discipline; and
- Completed the diploma Visual Basic 6.0 Programming at UniSchool (University of Pretoria) in 1999 with distinction, course modules included:
 - *Procedures and Modular Design;*
 - *Decisions and Repetition;*
 - *Data Structures;*
 - *File Access and Control;*
 - *Database Management; and*
 - *Object Orientated Programming.*

Particular aspects of experience include:

- Intensive vegetation surveys and community classification for research purposes;
- Extensive vegetation surveys and site descriptions for EIA and EMPR purposes;
- Ecological assessments for areas earmarked for development;
- Compilation and implementation of scientific research- and bio-monitoring programmes; and
- Compilation and implementation of red data investigation programmes.

As Environmental Consultant, some projects and experience include:

- **Floristic Assessments & EIA's**
 - Vegetation Assessment & Red Data Flora Investigation of Willows 340JR, Pretoria
 - Floristic Assessment of Zwartkop ext 26, Pretoria
 - Vegetation sampling of Western complex for the purpose of impact assessment, Mpumalanga
 - Management Guidelines and Impact Assessment of Quelea control activities in wetlands, Free State Province
 - Floristic Impact Assessment of Waterval 306JQ, Rustenburg
 - Vegetation Impact Assessment of Balgarthan Colliery, Mpumalanga
 - Floristic Investigation of proposed development sites, Noupoot, Northern Cape
 - Vegetation Sampling of Tshwane municipal area, Tshwane
 - Floristic Assessment of Mayfair Ext 5, Daveyton, Mina Nawe Housing Development, Gauteng
 - Vegetation Impact Assessment of Brakfontein 399JR for Amberfield Development, Centurion
 - Vegetation sampling in the Kgalagadi Transfrontier Park, Botswana
 - Vegetation Impact Assessment in the Okavango Delta for the purpose of lodge development, Botswana
 - Vegetation Impact Assessment in the Okavango Delta for the purpose of hunting concession development, Botswana
 - Vegetation Impact Assessment for the purpose of lodge development, Mozambique
 - Vegetation classification and carrying capacity determination for game farm management, Gauteng
 - Vegetation classification and carrying capacity for game farm management, Ellisras
- **Floristic Scopings**
 - Vegetation Scoping Exercise for proposed mining areas, Brits
 - Vegetation Scoping Assessment of Portion 1219 of Hartebeespoort B 410
 - Vegetation Scoping Assessment of Portion 887 of Hartebeespoort C 419

Red Data Investigations

- Vegetation Assessment and red data plant species investigation of Paardeplaats 177IQ, Krugersdorp
 - Ecological Investigation and Red Data Investigation of Louwlandia exts 36, 37, 38 & 39, Centurion
 - Ecological Assessment and Red Data Investigation of Olievenhoutbosch exts 5, 44, 45 & 47, Midrand
 - Ecological Assessment and Red Data Investigation of Kosmosdal ext 13, Midrand
 - Red Data Plant Species Investigation for the proposed Rooodeplaats pipeline, Pretoria
 - Ecological Assessment & Red Data Investigation of Brakfontein 390JR, Centurion
 - Ecological Impact Assessment and red data investigation of Irene 5 o'clock development area, Pretoria
 - Ecological Impact Assessment and red data investigation of Brakfontein 419JR, Centurion
 - Red Data Plant Species Investigation of Brakfontein 399JR for Amberfield Development, Centurion
 - Vegetation Impact Assessment and red data plant species investigation of Olievenhoutbosch – proposed road development
- **Ecological Impact Assessments**
 - Ecological Impact Assessment of Wildebeestpan 178LQ, Ellisras
 - Ecological Impact Assessment of Teutfontein mining site, Mpumalanga
 - Ecological Impact Assessment of Aasvoëlkrans, Utrecht
 - Ecological Impact Assessment of Klipspruit, Utrecht
 - Ecological Assessment of Supplier Park, Pretoria, Blue IQ Initiative, Gauteng
 - Ecological Investigation of Calswald Estates, Midrand
 - Floristic & Faunal Assessment of Summerset ext 6, Midrand
- **Research & Other**
 - Assessment of fire damage to natural vegetation in selected parts of the Sabi Sand Private Reserve, Mpumalanga
 - Quantifying fire damage to natural vegetation in the Sabi Sand, Mpumalanga
 - Monitoring of vegetation of the Blesbokspruit, Gauteng
 - Vegetation survey for the purpose of remote (satellite) degradation modeling across Gauteng
 - Vegetation survey for the purpose of remote (satellite) degradation modeling across Mpumalanga
 - Compilation of resource database for the Dinokeng area - Blue IQ Initiative, Gauteng
 - Compilation of an alien and invasive plant species management programme, Limpopo

- The removal and relocation of plants with medicinal values from Calswald Estates, Midrand
 - Development and implementation of environmental and bio-monitoring programme for mining areas (1995 – current), Mpumalanga
 - Development and implementation of a visual and windbreak for siding, Mpumalanga
 - Rehabilitation Assessment of Noodhulp mining site, Mpumalanga
 - Vegetation structure analysis in the Chobe National Park, Botswana
- **Species Diversity Sampling**
 - Plant Species Diversity of Waterkloof 378JR, Gauteng
- **Floristic Assessments & GIS**
 - Map compilation and digitizing of vegetation units – VEGMAP compilation of the Grassland Biome, South Africa
 - GIS sampling and infrastructure mapping for Slangfontein, Limpopo Province

CURRICULUM VITAE

(abridged)

DEWALD KAMFFER (Pr.Sci.Nat.)

PROFILE:

Name: Dewald Kamffer
ID No.: 741217 5024 082
Citizenship: South African
Address: PO Box 72847
Lynnwood Ridge
0040
Cellular: 082 940 8708
Telephone: (012)365 2546
email: ecocheck@ee-sa.com
Highest education: M.Sc. Conservation Biology

Affiliation: South African Council for Natural Scientific Professions
Discipline: Zoological Scientist
Ecological Scientist
Reg no: 400204/05

KEY QUALIFICATIONS:

Pre-graduate courses attended included:

- Major subjects - Entomology and Zoology
- Chemistry, Genetics & Botany

Post-graduate research included:

- BSc Hons - Ecological implications of antlion anatomy; and
- MSc – Conservation Biology - The effects of the extensive habitat fragmentation of the Drakensberg escarpment region of Mpumalanga on the endemic taxa of the afro-montane grassland of the area.

Post-graduate research had a strong ecological influence, with the focus on practical conservation principles – birds, plants and invertebrates were studied in terms of ecological interactions and the effects of the abiotic environment on assemblage structures and relative abundances of the species involved.

EDUCATION:

- 1995 - BSc Entomology
- 1996 - BSc (Hons) Entomology
- 2004 - MSc Conservation Biology/Entomology

RELEVANT EXPERIENCE:

- EMPR – Teutfontein Opencast Mine
- EIA project manager – Residential development, Clubview
- EIA – Carlswald Development
- EMPR – Anglo American CBM mine, Ellisras
- Desktop study of fauna – area of 2429AB
- EIA – Brakspruit farm
- EMPR – Supplier Park, Rosslyn
- Granite mines, Brits
- EIA – Willows, Pretoria
- EMPR – Coalmines, Utrecht
- EMPR – Granite mine, Roossenekal.
- EIA – Residential development, Amandasig, Pretoria.
- EIA – Corporate development, Rosslyn, Pretoria.
- EIA – Proposed golf course and – estate, Dullstroom.
- EIA – Olienhoutbosch Road, Centurion.
- EIA – Irene Township Development.
- EIA – Cradle of Humankind – upgrading of infrastructure.
- EMPR – scoping – Granite mine, Brits.
- EIA - Golf estate, Sterrewag, Pretoria.
- EIA – ESKOM proposed 400 KV powerline from Port Elizabeth to Harding
- EIA – Proposed Development, Featherwood, Pretoria.
- EMPR – Supplier Park Phase 2, Rosslyn
- EIA - Proposed Residential Development, Brakfontein, Midrand
- EIA – Proposed Residential Development, Valley View, Midrand
- EIA – Proposed Irene Township Development Red Data Fauna study
- EIA – Proposed Bordeaux Residential Development, Pretoria
- EIA – Proposed Residential Development, Randjiesfontein, Midrand
- EIA – ESKOM proposed 400 KV powerline from Port Elizabeth to Harding: Phase 2
- EIA – Proposed Residential Development, Randjiesfontein, Midrand
- EIA – Proposed Bordeaux Residential Development, Pretoria – Red Data Fauna Study
- EIA - Proposed Residential Development, Brakfontein, Midrand – Red Data Fauna Study
- EIA – Olienhoutbosch Road, Centurion – Red Data Fauna Study
- EIA – Proposed expansion of the Sun City complex, North West Province.
- EIA – Residential development, Amandasig, Pretoria – Red Data Fauna Study.
- EIA – Maruladal proposed development – Avifaunal Assessment
- EIA – Louwlandia Project – Red Data Fauna Assessment
- EIA – Valley View Project – Red Data Fauna Assessment
- Research – Reitz Quelea Project – SASS Aquatic Assessment
- EIA – Amandasig Project – Red Data Fauna Assessment
- EIA – Ogies Project – Field Assistance
- EIA – Graigavon Bushbaby Project
- Environmental Audit – Frances Baard District Municipality

- EIA – Schoonoord Project
- EIA – Olienhoutbosch Extensions Project
- EIA – Witkoppen Bushbabies Project
- EIA – Heaven on earth Project
- Environmental Audit – BJF Game Ranch
- EIA – Amandasig Red Data Fauna 2 Project (EkoInfo CC) – 2004.
- EIA – Silverton Faunal Survey
- EIA – Lakenvlei Faunal Scoping
- EIA – Heaven-on-Earth
- EIA – North Riding
- EIA – Sterrewag Corridor
- EIA – Amorosa
- EIA – Cashan
- EIA – Modderfontein
- EIA – Greengate
- EIA – Impomelelo
- Simon Vermooten
- EIA - Paardeplaats Red Data
- EIA – Wallmanstal Scoping
- EMPR - Steelcoat pan
- EIA - Matimba B Power station
- EIA - Kololo Game Farm
- EIA – The Hills Road
- SEA – Klapperkop-Voortrekker Monument-Groenkloof Nature Reserve
- Research – Reitz Quelea Aquatic Invertebrate Assessment
- EMPR – Middelkraal Scoping
- EIA - Perseus-Hydra Power Line
- EIA – Kapama Lodge
- EIA – Elandsfontein
- EIA – Donkerhoek
- EIA – Zone of Integration
- EIA – Zuickerboschfontein
- EIA – De Rust
- EIA – Doornkraal
- EIA – Schurveberg

ARCHAEOLOGICAL AND HERITAGE

CURRICULUM VITAE
Johan Abraham van Schalkwyk

PERSONAL PARTICULARS

Date of birth: 14 April 1952
Identity number: 520414 5099 08 4
Marital status: Married; one daughter
Nationality: South African

CURRENT POSITION

Head of Research: National Cultural History Museum (Northern Flagship Institution)

CURRENT ADDRESS

Work:
P O Box 28088, Sunnyside, 0132
Tel: (012) 324 6082; Fax: (012) 328 5173; E-mail: johnny@nfi.org.za

ACADEMIC QUALIFICATIONS

BA. - 1976
BA. (Hons.) Archaeology - 1978 - (with distinction)
Post Graduate Diploma in Museum Science - 1979
BA. (Hons.) Anthropology - 1981 - (with distinction)
MA. Anthropology - 1985
D. Litt et Phil. (Anthropology) - 1996

NON ACADEMIC QUALIFICATIONS

Gencor Management Course - 1986
Gencor Management Course - Advance Course - 1987
12th HSRC-School in Research Methodology - July 1990
Dept. of Education and Training Management Course - June 1992
Social Assessment Professional Development Course - 1994
Integrated Environmental Management Course, UCT - 1994

EMPLOYMENT RECORD

1978 - present: National Cultural History Museum, Pretoria
1976 - 1977: Archaeology Department, University of Pretoria

PROFESSIONAL MEMBERSHIP

Member, Association for Anthropologists in Southern Africa
Member, South African Association of Archaeologists
Member, African Studies Association, Smithsonian Institute, Washington

PUBLICATIONS

Published more than fifty papers on topics relating to anthropology, archaeology, history and impact assessment in various scientific journals - a complete list can be supplied on request.

HERITAGE IMPACT ASSESSMENT

Did more than 500 impact assessments (archaeological, anthropological and social) for various departments and companies. Projects include roads, pipelines, powerlines, dams, mining, water purification works, historical landscapes, refuse dumps and urban developments.

PROFESSIONAL ACCREDITATION

Association for Southern African Professional Archaeologist: Principal Investigator for Iron Age, Colonial Period and Industrial Heritage. Membership no.: 164.

VISUAL

CURRICULUM VITAE

DAWIE VAN VUUREN (MANAGING DIRECTOR: METROGIS)

1. **NAME**

Isak Dawid Jansen van Vuuren (Dawie)

2. **EDUCATION & TRAINING**

2.1 **Academic Qualifications**

BA-Ed	1982	University of Pretoria
BA Hons. (Geogr.)	1988	UNISA
M (T&RP) (GIS-spec.)	1994	University of Pretoria

2.2 **Formal Training – GIS and Related Software**

Dbase-III Programming	1990	Private
Database Design	1991	University of Pretoria
Spatial Analysis (Regis)	1992	Computer Foundation
GIS System Manager (Regis)	1994	Computer Foundation
Dbase-IV	1995	Sage
AutoCAD Map	1996	Computer Foundation
ER Mapper	1998	AutoDesk
Remote Sensing Principles	1998	Silgraph
PlanetGIS	2000	PlanetGIS
ArcView	2001	Private
ArcGIS	2005	Private

2.3 **Self Study:**

Information Systems Design	1989 – 1994	(Part of Masters' Studies)
MS-Access Applications	1998 - 2000	
Remote Sensing	1999 - 2001	
Visual Basic	Ongoing	
MS SQL Server	Ongoing	
Internet Applications	Ongoing	

2.5 **Proposed Ph-D Studies**

Currently preparing a study proposal for Ph-D studies in specialised GIS applications.

3 **PROFESSIONAL AFFILIATION**

Member of GISSA

Registered with PLATO as Professional GIS Practitioner.

4. **CAREER & EXPERIENCE RECORD**

4.1 **Managing Director - Metro-GIS (Pty) Ltd: Sept 1995 - current:**

Field of Work:

- GIS: System Design & Implementation for Specialised Applications
- GIS Project Management
- Data Capturing
- Data transformation
- Data Management
- Database Programming
- Mapping
- Spatial Analysis & Modeling
- GIS Training & Education (Part-time lecturer at University of Pretoria)
- Project Management & Co-ordination

4.2 **GIS Manager**

Midrand Town Council: 1992-1995

Krugersdorp Town Council: 1995 (July-August)

Field of Work

- Responsible for developing and implementing GIS for the respective Town Councils.
- Functions:
 - System design
 - Database design
 - Data capturing
 - Data processing
 - Mapping
 - Training
 - Management

4.3 **Geographer**

Infraplan Town and Regional Planners: 1988 - 1992

Field of Work

- Town & regional planning
- GIS:
 - Database design & programming
 - Data capturing & Analysis
 - Map Composition

CURRICULUM VITAE LOURENS DU PLESSIS

Name : Lourens Martinus du Plessis
Date of Birth : 1969-11-13
Marital Status : Married
Profession/Specialisation : Geographer / Environmental GIS
Company : MetroGIS (Pty) Ltd
Years with Firm : 6 Years
Nationality : RSA
Position : Director / Project Manager
Years Experience : 16 years

KEY QUALIFICATIONS

Primary Function:

The application of computerised systems in environmental planning and management, impact assessments and spatial modeling.

Experience and Expertise

- Data Sourcing and Acquisition
- Data Capture
- Data Evaluation
- Data Conversion and Transfer
- GIS Database Development, Implementation and Maintenance
- Spatial Analysis (Visibility, Slope, Aspect, etc.)
- Digital Elevation Modeling
- Terrain Evaluation
- Image Processing
- Impact Assessment and Impact Management
- Environmental Management
- Decision Support Systems Interface Development
- Project Management
- Map Production, Display, Queries and Reporting
- Environmental Sciences Expertise
- Process Development

Technological (Software) Expertise

- Arc/Info and ArcGIS
- ArcView
- PlanetGIS
- Vistapro (Virtual Landscape Rendering Software)
- Various GIS Support Software Packages
- Range of Windows Standard Applications

AWARDS

Award: Best South African Environmental Technical Paper
Awarded for: National Environmental Potential Atlas (ENPAT National)
Awarded by: Environmental Planning Professions Interdisciplinary Committee (EPPIC)
Date: 1995

Award: Map Gallery Most Analytical Competition - 3rd Place
Awarded for: Environmental Potential Atlas for South Africa

Awarded by: Environmental Systems Research Institute (ESRI)
Date: 1997 International ESRI User Conference

Award: Best Cartographic Map Gallery Competition - 3rd Place
Awarded for: Environmental Potential Atlas for South Africa (Publication)
Awarded by: Environmental Systems Research Institute (ESRI)
Date: 1998 International ESRI User Conference

Award: QDC Performance Award
Awarded for: ENPAT Development
Awarded by: Q Data Consulting
Date: 1998

Award: Best South African Environmental Technical Paper
Awarded for: Environmental Potential Atlas for South Africa (Publication)
Awarded by: Environmental Planning Professions Interdisciplinary Committee (EPPIC)
Date: 1998

PUBLICATIONS

Name: Environmental Potential Atlas for South Africa
Authors: W. van Riet, J. van Rensburg, P. Claassen, L. du Plessis and T. van Viegen
Publisher: J.L. van Schaik
Date: 1997

Name: Pilanesberg Official Map and Park Guide
Authors: North-West Parks & Tourism Board and Jacana
Publisher: Jacana Media (Pty) Ltd
Date: 2001

Name: Lowveld and Kruger Guide
Authors: High Branching Team
Publisher: Jacana Media (Pty) Ltd
Date: 2004

EXPERIENCE RECORD

Employment Details

GisLAB CC (Geographic Information Systems Laboratory - University of Pretoria)
Period: 4/1990 - 9/1997
Position: Member / Project Manager

GISBS (Geographic Information Systems Business Solutions - Q Data Consulting)
Period: 10/1997 - 10/1999
Position: Project Manager

MetroGIS (Pty) Ltd
Period: 11/1999 - to date
Position: Director / Project Manager

EDUCATION

Qualifications

Degree: BA (University of Pretoria) Geography and Anthropology (Majors)
Other Subjects: Archaeology, Philosophy and Political Science

Date Received: 1993

PROJECT SUMMARY

(A brief description of some prominent and relevant projects)

Environmental Planning and Development Control Schemes for the Drakensberg Babangibone, Garden Castle and Cathkin Peak Development Nodes.

Environmental Potential Atlases (ENPAT) for South Africa (National), Provincial (1:250 000) and Metropolitan (1:50 000).

Environmental Management Frameworks (EMF) for South Africa at a provincial (1:250 000) scale.

Spatial Development Initiatives (SDI) for Lubombo SDI, Coega Industrial Development Zone, West Coast SDI and Wild Coast SDI.

EMF's (Digital Decision Support Systems) at local council scale for Hennops River, Centurion Municipal Area, Windhoek, the Alexandra Renewal Project, etc.

Gauteng Open Space Project (GOSP) GIS-based open space planning for the Gauteng Province.

Gauteng Communication Strategy (GAUCONS) environmental control zones to regulate the construction of telecommunication masts.

SEA (Strategic Environmental Assessments) for Faerie Glen Nature Reserve and Rustenburg Municipality (Priority Area 1).

Environmental Impact Assessments (EIA) the utilisation of GIS based systems to determine and manage environmental impacts. Various projects all over South Africa.

GIS services for the Limpopo National Park (Trans-frontier Peace Park) in Mozambique.

Visual Impact Assessments and Viewshed Analyses for various types of developments, including telecommunication structures, minings activities and tourism accommodation in National Parks and other environmentally sensitive areas. Some recent or current projects include:

- Proposed Atlantis Open Cycle Gas Turbine power station
- Kynoch Gypsum Tailings dam extension
- N1 Western Bypass Shell service station
- Coega regional hazardous waste processing facility
- Robinson Deep landfill extension
- Hazardous waste blending platform
- Mercury to Garona transmission line integration
- Matimba B proposed coal-fired power station

PROFESSIONAL AFFILIATIONS

None

LANGUAGES

Reading

Writing

Speaking

Afrikaans
English

Excellent
Excellent

Excellent
Excellent

Excellent
Excellent

MetroGIS (Pty)Ltd: List of Selected Projects



GIS: System Design & Development	
Municipal GIS:	
<i>Nelspruit Town Council - GIS design & implementation</i>	1999 - 2000
<i>Jeffreys Bay Municipality - GIS design & implementation</i>	1999 - 2000
<i>Theewaterskloof Integration of Digital Aerial Photography with existing GIS data</i>	2002
<i>Mogalakwena Municipality - GIS design & implementation</i>	2004-2005
<i>Tshwane Metropolitan Municipality: Outdoor Advertising Control System</i>	2003 - 2005
<i>Tshwane Metropolitan Municipality: Noise Zone Database and GIS Viewer</i>	2005-2006
Project Management:	
<i>CMIP: National Dept of Provincial and Local Government</i>	2000 - 2001
<i>CMIP - North West Dept of Developmental Planning, Local Government & Housing</i>	2001 - 2003
<i>GIS Basemap Update and Data Integration:- Greater Pretoria Metropolitan Council</i>	2001
Research Projects:	
<i>Maguga Dam Socio-Economic Study: Database Design and System Development for Data-Input and Statistical Reports</i>	2000
<i>Mbombela Business Survey: - Integrated Website Development</i>	2003
<i>Integrating GIS functions with DM Research Tools</i>	2005 - 2006
Specialised GIS Applications for Disaster Management	
<i>GIS Services - Y2K Disaster Management Center, National Department of Local Government</i>	1999 - 2000
<i>Disaster Management System: Bojanala District Municipality</i>	2004
<i>Disaster Management Plan: Hibiscus Local Municipality</i>	2005
<i>Disaster Management System for Metropolitan Municipalities</i>	2004-2006
<i>Tshwane Metropolitan Municipality.</i>	2005
<i>Nelson Mandela Bay Metropolitan Municipality.</i>	2006
<i>GIS Based Data Capturing Tool for Disaster Risk Assessment</i>	2006
<i>Amathole District Municipality</i>	
<i>National Pilot Project: Implementation of Disaster Management System</i>	2006
<i>Supply of Risk Assessment GIS Data for System Implementation at Amathole District Mun.</i>	
Specialised GIS Applications for Developmental Planning	
<i>Integrated Town Planning Scheme Management System</i>	
<i>Lethabong Metropolitan Substructure</i>	1998 - 1999
<i>Nelspruit Town Council</i>	1999
<i>Midrand Metropolitan Substructure</i>	2001
<i>Data Management System for Socio-Economic Surveys</i>	
<i>Maguga Dam Network - Swaziland</i>	2000
<i>Upgrading of Town Planning Scheme & Integration with GIS</i>	2002
<i>Lekwa Local Municipality</i>	
<i>Outdoor Advertising Control Scheme - Spatial Decision Support System</i>	2002
<i>Tshwane Metropolitan Municipality</i>	
<i>Updating and Integration of Town Planning Schemes</i>	2003
<i>Tshwane Metropolitan Municipality</i>	
<i>Vacant Land Audit & Data Integration</i>	2004
<i>Tshwane Metropolitan Municipality</i>	
Specialised GIS Applications for Environmental Management	

Environmental Management Framework & Decision Support Systems for:	
<i>Centurion Metropolitan Substructure</i>	2000
<i>Nelspruit Town Council</i>	2000
<i>Midrand Metropolitan Substructure</i>	2001
<i>Alexandra Renewal Project</i>	2001
<i>Rustenburg Municipality</i>	2003
<i>Loch Vaal</i>	2003
<i>Windhoek Town Council</i>	2004
<i>Ekurhuleni Metropolitan Municipality</i>	2004 - 2006
<i>Johannesburg Metropolitan Municipality</i>	2006
Environmental Management Plans	
Schmidtsdrift (new Diamond Corporation)	2003
Namaqualand Mining (De Beers)	2004
Gauteng Open Space Project (GOSP)	2000
<i>GIS-based open space planning</i>	
Gauteng Communications Network Study	2001 - 2002
<i>Spatial Analysis for the establishment of Control Zones</i>	
Gauteng Industrial Survey	2002 / 2003
<i>Establishment of buffer zones around noxious industries</i>	
Specialist Studies involving GIS	
Visual Impact Analysis for Cellphone Masts:- Siemens SA	1999 - 2000
Visual Impact & Shadow Analysis for a Gypsum Tailings Dam:- Jarrod Ball & Associates	2000
High Mast Viewshed Analysis:- Telkom SA	2001
GIS-based Location Analysis for International Carbon Sinks Project:- Nathan Associates	2001
Visual Impact Analysis for Open Cast Mining:- Newtown Landscape Architects	1999 - ongoing
Limpopo Transfrontier Park: KNP & Mozambique	2003
<i>GPS, GIS based aerial survey & Mapping</i>	
Coega Hazardous Waste Processing Facility	2004
<i>Visual Impact Assessment & Site Ranking</i>	
Visual Impact Assessment for a Power Station and Transmission Lines (Various)	2005-2006
Visual Impact Assessment for a Solar Thermal Plant, Northern Cape Province	2005-2006
Disaster Risk Assessment: Amathole District Municipality, Eastern Cape	2006
Visual Impact Assessment for a Transmission line. Mmamabula Energy Project, Botswana	2006
Special Maps for Publications	
The Important Bird Areas of South Africa	2000
<i>Avian Demography Unit</i>	
Kwazulu-Natal. A Celebration of Diversity	2001
<i>Jacana Publishers</i>	
Pilanesberg Official Park Guide	2002
<i>Jacana Publishers</i>	
Lowveld & Kruger Guide	2004
<i>Jacana Publishers</i>	
Garden Route Map Book	2005
<i>Jacana Publishers</i>	
Kruger National Park Shaded Relief Map and Photographic Guide	2006
<i>Andy Tinker, Photographer</i>	
Website Development incorporating GIS	
CMIP - National Dept of Provincial and Local Government	2001
CMIP - North West Dept of Developmental Planning, Local Government & Housing	2003
Mbombela Business Survey: - Integrated Website Development	2003

Swazi Extreme Adventure Race - Teams Progress Mapping: Experimental Website	2004
National Waste Management Information System	2005

GIS Based Data Products for Commercial Use	
"Growth Indicator" - indicating trends in spatial development in metropolitan areas	2000 - ongoing
"Development Initiatives" - indicating trends in spatial development in metropolitan areas	2004 - ongoing
"LandMap" - indicating Land Use for planning purposes	2004 - ongoing

NOISE

CURRICULUM VITAE

DEREK COSIJN

Personal Details:

Date of Birth: 13 December 1944

Nationality: South African

ID Number: 441213 5090 085

Contact Details: Telephone/Fax: (012) 460-4481

Cell phone: 082 600 6347

Address: 207 Albert Street, Waterkloof, Pretoria, 0181.

Summary of Key Qualifications and Experience:

I have 39 years of professional experience over a wide range of civil engineering, transportation planning, environmental and acoustic projects. I qualified as a civil engineer in 1967 and then studied further to obtain a post-graduate Diploma in Town Planning in 1974. I have worked in both the planning and construction aspects of the civil engineering profession gaining experience in road construction, road planning, transportation planning, traffic engineering, general environmental and environmental noise issues. Over the last 30 years I have focused on aspects of transportation planning with specific emphasis, *inter alia*, on environmental and noise management and control. I have worked on a wide spectrum of planning projects related to the transportation and development industry, with clients ranging from the National Department of Transport, provincial transportation/road authorities, provincial environmental authorities, the metropolitan authorities and many local councils to private organizations and consultants.

I have been actively involved in numerous environmental projects since 1975, when I worked in Canada for three years. My area of special expertise is environmental noise (acoustical engineering). The environmental projects have ranged through EIAs and noise impact assessments, policy formulation and guideline development.

In 2002 I started my own consultancy, Calyx Environmental cc, specialising in environmental and noise impact assessment. At the same time (Year 2001), I formed a partnership/working association with Jongens Keet Associates.

I am a professional engineer, registered with the Engineering Council of South Africa (ECSA), a Fellow of the South African Institution Civil Engineering, a Member of the Southern African Acoustics Institute, a member of the International Association for Impact Assessment (IAIA), South African Chapter and have also been certified as an Environmental Assessment Practitioner of South Africa.

Education:

- BSc (Civil) Engineering, University of the Witwatersrand, 1967
- Post graduate Diploma in Town Planning, University of the Witwatersrand, 1974
- Several short courses on various aspects of environmental management and noise control (listed later).

Experience:**1a. Partner, Jongens Keet Associates, (April 2001 – Present)**

As a partner with JKA, I have been responsible for the following projects:

- The Noise Management Programme for Centurion Town Council.
- Pier Café Noise Impact Assessment.
- Centurion Land Use Noise Zoning Data Base.
- N4 Toll Route: Toll Plaza Noise Impact Assessment.
- Gautrain Noise Impact Study.
- N17 Noise Impact Study.
- N1/N3 Buccleuch Interchange Noise Impact Assessment.
- N1 Noise Impact Assessment (Louis Trichardt).
- Waterhaven Clay Target Shooting Range Noise Impact Assessment.
- City of Tshwane Noise Management Policy.
- Road R50 Re-alignment (Delmas) Noise Impact Assessment.
- Road R513 (Cullinan) Noise Impact Assessment.
- Tutuka Power Station Coal Supply Railway Noise Impact Assessment.
- Majuba Power Station Coal Supply Railway Noise Impact Assessment.
- Gauteng Freeway Congestion SEA: Noise Impact Assessment.
- Usutu Coal Mine (Camden Power Station) Noise Impact Assessment.
- Olifants River Water Resources Development Project Noise Impact Assessment.
- Montecasino Phase 2 Development Noise Impact Assessment.
- Mercedes Workshops (Centurion) Noise (OH&S Act) Investigation.
- Cabanga Conference Centre Noise Impact Assessment.
- Road K139 (Derdepoort Link) Noise Impact Assessment.
- Samancor Middelburg Ferrochrome Plant Noise Impact Assessment.
- Impala Platinum (Springs) Oxygen Plant Noise Impact Assessment
- Gauteng Provincial Government Precinct (Johannesburg CBD) Noise Impact Study.
- Motaganeng Township Development Project (Burgersfort) Noise Impact Assessment.
- Olievenhoutsbosch Residential Township Noise Impact Assessment.
- Matimba B Power Station Alternative Site Assessment, Scoping and EIA (Noise Impact).
- Implats Springs Base Metals Refinery Expansion Noise Impact Assessment.
- KwaZulu Natal Peaking Power Plant Noise Impact Assessment.
- Mafube Mine - Arnot Power Station Conveyor Belt Noise Impact Assessment.
- Sishen South Iron Ore Mine Project Noise Impact Assessment.

- Staatsartillerie Road (Tshwane) Noise Impact Assessment.
- Olievenhoutbosch Township Noise Attenuation Barrier Design.
- Northern Golf Courses Estate Noise Impact Assessment.
- Rua Vista Township Noise Attenuation Barrier Design.
- Holcim Roodepoort Cement Factory Expansion Noise Impact Assessment
- Impala Rustenburg Platinum Mine #17 Shaft Noise Impact Assessment.
- Concentrating Solar Power Generation Plant (Upington) Noise Impact Assessment.
- N17 (Brakpan) Overlay Noise Impact Assessment.
- N1 Overlay Noise Impact Assessment at Matoks.
- Witbank (Kendal) Area Power Station Noise Impact Assessment.
- African Renaissance Township Development Noise Impact Assessment.
- Erasmia Ext 10 Township Noise Impact Assessment.
- Northern Free State Area Power Station Noise Impact Assessment.
- Veremo Mine (Roosenekal) Noise Impact Assessment.
- Newmarket Racecourse Redevelopment Noise Impact Assessment.
- Steelpoort Pumped Storage Scheme Noise Impact Assessment.
- Ruighoek Mine (Rustenburg) Noise Impact Assessment.
- Lethlakeng Calcrete Mine (Botswana) Noise Impact Assessment.
- Shebas Ridge Mine (Groblersdal) Noise Impact Assessment.

1b. Partner, Calyx Environmental cc, (April 2001 – Present)

As a partner with Calyx Environmental, I have been responsible for the following projects:

- Tambo Memorial Hospital Medical Waste Incinerator Environmental Scoping Study.
- Tembisa Hospital Medical Waste Incinerator Environmental Scoping Study.
- Medical Waste Incinerator Standard Operating, Maintenance and Safety Manual.
- Nietverdiend Police Station Upgrading: Environmental Issues.
- Morokweng Police Station Upgrading: Environmental Issues.
- Lwala Mine Traffic Environmental Impact Assessment.
- Mac-West Mine Noise Impact Assessment.
- Tutuka Power Station Coal Supply Railway Construction Traffic Impact Assessment.
- Majuba Power Station Coal Supply Railway Construction Traffic Impact Assessment.
- City of Tshwane Noise Zone Demarcation and Definition.
- NCP Chlorchem Expansion Traffic Environmental Assessment.

2. Associate, Booz Allen & Hamilton, (February 2000 – March 2001)

While working for BAHSA, I was responsible for the following projects:

- The development of Guidelines for the Environmental Management of Transportation Projects for the City Council of Pretoria.
- The Noise Management Programme for Centurion Town Council.
- The preparation of a Traffic Calming Policy for Kempton Park Town Council.

- Pretoria Defence Clay Target Shooting Club (Lyttelton) Noise Impact Study.
- Medical Waste Incinerator Environmental Scoping Study (preliminary assessment).

3. Associate, Stanway Edwards Ngomane Associates (Pty) Ltd, (1986-2000)

As an Associate with the firm, I was responsible for the project management and technical investigation of the following types of projects:

- *Environmental and Noise Management:*
 - Environmental impact assessment (EIA)
 - State of the environment reporting
 - Noise impact assessment studies
 - Noise management policy development
 - Outdoor advertising policy development
 - Transportation environmental management procedure formulation
 - Environmental management plans/programmes
 - Professional review of environmental reports.
- *Traffic Engineering and Transportation Planning*
 - General transportation analysis
 - Traffic impact studies
 - Parking and loading policy development
 - Traffic operation safety assessment
 - Road traffic management systems
 - Transportation demand management
 - Road hierarchy definition
 - Traffic calming
 - Road traffic sign policy development
 - Professional review of transportation investigation and research reports.

Specific projects were as follows:

- *General Environmental and Noise Related Projects*

N1 and N12 Freeway Noise Study (DoT); Noise Attenuation Barrier Evaluation Study (DoT); Costing Analysis of Freeway Traffic-generated-noise Attenuation Barriers (DoT); Pretoria Central Area Freeway/Light Rail Noise Evaluation; Sandown Mews Traffic Noise Impact; Inanda Access Road Noise Evaluation Study; Transportation Environmental Management Manual; Consultant to Centurion Town Council on Noise

Management; Samancor Mine Noise Zoning; MoAfrica Development- Noise and Air Pollution Assessment; Centurion Noise Management Policy; Springs' Outdoor Advertising Policy; Centurion Speed Hump Noise Evaluation; Rooihuiskraal Road / N14 Interchange Noise Impact Study; GPMC Road Environmental Assessment; Charles Street Corridor Noise Impact Study; Environmental Plan for the Khayalami Metropolitan Council's Integrated Transport Plan; and the following Environmental Impact Assessment (EIA) / Public Involvement Programme Co-ordination Projects:

- Melle Street-St Davids Place Road Link EIA;
 - Inanda-Wiggins Aqueduct EIA (Durban);
 - Granite Road (Fourways Boulevard) EIA (Sandton);
 - Rivonia Road/N1 Interchange EIA (Sandton); and
 - PWV9 - Environmental Evaluation of the Crossing Alternatives for the Daspoortrant.
- *Transportation Planning*

Vosloorus Transportation Study; N OFS Transportation Study; Vosloorus Road Modelling; Transportation Sketch Planning in ORMET (Daveyton, Duduza, Kwa-Thema, Tsakane, Tokoza, Wattville); Public Transport Evaluation in Springs/Kwa-Thema, Brakpan/Tsakane and Tembisa; Nellmapius Area Public Passenger Transport Needs Study (Pretoria).
 - *Road and Traffic Studies*

Ridge School Parking Study; DoT Road Traffic Management System; Road Network Management Study; Transportation Demand Management Guidelines; Road Network Planning in Tembisa, Springs, Midrand, Nigel and Brakpan; Harare Traffic Management Study; National Route 2/8X Operational Safety Assessment; Arterial Road K60 Needs Evaluation; various road and traffic safety assessments.
 - *Miscellaneous Projects and Activities*
 - ORMET Parking and Loading Policy Study.
 - South African Road Traffic Signs Manual, Volume 2 (responsible for drafting six Chapters).
 - Developed the "Guidelines for Public Participation in the Planning of Civil Engineering Projects" for SAICE.
 - Provided assistance to the Department of Transport for the setting up and running of their Road Traffic Management System.
 - CSRA/CUTA Working Group for Outdoor Advertising along Roads.
 - Traffic and Road Problem Identification System – Data Base for NDoT.
 - Presented short course on Integrated Environmental Management (IEM) and EIA to the Department of Civil Engineering, University of the Witwatersrand (1993).

4. Director, Gericke Construction, 1981-1986

I was the Director-in-Charge of the technical aspects of construction (projects were civil- and building-related).

5. Associate, De Leuw Cather Associates, 1971-1981 (inclusive of 3 years with De Leuw Cather Canada, now DELCAN)

I was the project manager on numerous projects related to geometric design of roads, traffic engineering, transportation and environmental issues during this period. Projects included:

- *General Environmental and Noise Related Projects*
 - Alberta Surface Transportation Noise Attenuation Study (Canada).
 - University of Alberta Area Transportation/Environmental Study (Edmonton, Canada)
 - Environmental aspects related to the basic planning of provincial and urban roads.
- *Transportation Planning*

Fort Saskatchewan Transportation Study (Alberta, Canada); St Albert SE Sector Transportation Study (Alberta, Canada); University of Alberta Area Transportation Study (Edmonton, Canada); Edmonton North West Industrial Area Rail Access Study.
- *Road and Traffic Studies*

Camrose Central Traffic and Parking Study (Alberta Canada); Planning of roads: PWV16, K110, K123, K126, Rivonia Road (Sandton) and Carse O'Gowrie Road (Parktown); Planning of several rural provincial roads; Numerous traffic impact studies; Parkmore Traffic Signals; Rivonia Road Traffic Signal Synchronisation Scheme; Modderfontein Parking Study; Benoni South Industrial Area Access Study.

Training Courses

The following environmental and noise management related training courses have been attended:

- Delcan in-house basic introduction to acoustics and transportation noise (Delcan/BBN/ LNG/ University of Calgary, 1976)
- Risk Assessment (IAIAsa 1998 Pre-Conference Course)
- IAIA and Poverty (IAIAsa 1999 Pre-Conference Course)
- Social Impact Assessment, Planning with People in Mind (IAIAsa 2000 Pre-Conference Course)
- A Practical Approach to Environmental Due Diligence in South Africa (IAIAsa 2000 Pre-Conference Course)
- Public Participation: from Theory to Practice (IAIAsa2000 Pre-Conference Course)

Chronological Work History:

1968-1971:	Site and Design Engineer	Roberts Construction
1971-1975:	Design/Traffic Engineer	De Leuw Cather & Associates Inc. (SA)
1975-1977:	Transportation/ Environmental Planner	De Leuw Cather (Canada)
1978-1981:	Associate	De Leuw Cather & Associates Inc. (SA)
1981-1986:	Director	F C Gericke (Pty) Ltd. Construction,
1986-1997:	Associate	Stanway Edwards Associates (Pty) Ltd
1997-2000:	Associate	Stanway Edwards Ngomane Associates (Pty) Ltd
2000-2001:	Associate	Booz·Allen & Hamilton (South Africa) Ltd
2001 to Present	Partner Partner	Jongens Keet Associates Calyx Environmental cc

Professional Affiliations:

- Registered Professional Engineer (Pr Eng) with the Engineering Council of South Africa
- Certified Environmental Assessment Practitioner of South Africa (EAPSA)
- Fellow of the South African Institution of Civil Engineering
- Member of the International Association of Impact Assessment (SA Chapter)
- Member of the Southern African Acoustics Institute.

Publications:

- Cosijn D, *Parking and Loading Policy for ORMET*. Annual Transportation Conference 1988.
- Cosijn D, *Road and Traffic Environmental Manual*. Annual Transportation Conference 1991.
- L Herhold and Cosijn D, *Growth Management and Transportation Planning - A Means to Restructure Our Urban Areas*. Annual Transportation Conference 1994. (#)
- Cosijn D, *Comprehensive Environmental Management of Transportation Projects*. SAICE Environmental Conference 1994.

- Cosijn D, *Transportation Demand Management - A Means for Relieving Congestion*. Annual Transportation Conference 1995.
- Cosijn D, *Severance as a Factor in Linear Transportation Facility Planning*. SAICE Environmental Conference 1996.
- Cosijn D, *Environmental Investigation of the Alternatives for the PWV9 Freeway Crossing of the Daspoortrant*. SAICE Environmental Conference 1999.
- Cosijn D and R Slater, *Summary of the Operational Safety Assessment of the National Route N2 Approaches to Knysna*. South African Transportation Conference, 1999.
- Cosijn D, *Transportation: Is the Environmental Message being Driven Home Successfully?* IAIAAsa2000 Conference.
- Cosijn D, *Environmental Noise: A Case for Sound Management*. IAIAAsa2001 Conference.
- Cosijn D and Van Niekerk JL, *Noise and Vibration Impact Assessment of the Gautrain High Speed Rail Link*. Southern African Transport Conference (SATC) 2003.
- Van Niekerk JL, Morgan JPL and Cosijn D, *Gautrain Tunnels: Surface Vibration and Ground-borne Noise*. Journal of the South African Institute of Mining and Metallurgy, Volume 104, No 4, May 2004. (#)

(#) - See Awards

Awards

1. The Paper Van Niekerk JL, Morgan JPL and Cosijn D, *Gautrain Tunnels: Surface Vibration and Ground-borne Noise*, Journal of the South African Institute of Mining and Metallurgy, Volume 104, No 4, May 2004 was awarded the Certificate of Merit (Alec Wilson Memorial Award) by the South African Institute of Mining and Metallurgy on 16 August 2006.
2. The Paper L Herhold and Cosijn D, *Growth Management and Transportation Planning - A Means to Restructure Our Urban Areas*, Annual Transportation Conference 1994 was selected as one of the best papers of the Conference. The authors were invited to a banquet hosted by and were presented to HRH Princess Anne.

Professional Activities

- | | |
|--------------|--|
| 1989 to 1993 | Member of convening committee for Annual Transportation Conference |
| 1991 to 1999 | Member of SAICE Transportation Division Committee |

1994 to 1999 Member of SAICE Environmental Division Committee

1994 Member of convening committee for SAICE Environmental Conference 1994

References:

Name: Mr Mark Freeman
Position: Director
Address: Bohlweki Environmental (Pty) Ltd
 PO Box 867
 GALLO MANOR, 2052
Tel.: (011) 798-6001
Fax: (011) 798-6005
Cell-phone: 082 554 4130

SOCIAL IMPACT ASSESSMENT

**MASTERQ RESEARCH
(Pty) Ltd
COMPANY PROFILE AND
DETAILS**

MasterQ Research was registered in February 2003. **Anita Bron** is the sole director of the company. When necessary, MasterQ Research involves specialists in related fields as associates or does capacity building in communities. For example, the company trained 30 field workers in the Western Highveld in Mpumalanga Province to conduct a survey to understand Knowledge Attitude and Practices regarding water and water related issues in the community. The training was conducted by a trainer fluent in the mother tongue of the trainees. The data gathering process was managed by a local service provider.

Anita attained her MA degree in Research Psychology at the University of Pretoria in 2000, and registered as research psychologist in 2001 (PS0073075). She completed her internship at the SABC in 1999 as a researcher for the research division, and stayed on to develop the education research department. She then joined De Facto where she gained more experience in client satisfaction surveys and product development.

As an independent consultant / director of MasterQ Research, she has established herself as a social scientist, focusing on Social Impact Assessments, Social Marketing Research and recently Monitoring and Evaluation. She is currently completing her MA degree in Social Impact Assessment at the University of Johannesburg. She has extensive experience in linear developments and power lines. Please refer to page 3 and 4 for a list of relevant projects she was/is involved in. She was responsible for the management and execution of these assessments.

MasterQ Research recently acquired the services of **Nonka Byker**. Nonka holds a 4-year Bachelors degree in Psychology from the University of Pretoria. She is currently registered with the Health Professions Council of South Africa (HPSCA) as a registered counsellor. She has extensive experience in the social development field, and has approximately 8 years experience in the areas such as public participation and Social Impact Assessments.

Apart from her experience in the social development field, Nonka is also a qualified Assessor within the ambit of the Health & Welfare SETA, and has limited experience (app. 2 years) within the HWSETA training field, as training material developer, facilitator and assessor.

MasterQ Research also regularly makes use of the services of **Suzanne Wessels**, who is an independent consultant. Suzanne is an experienced social researcher, and a specialist in HIV/AIDS programming, monitoring and evaluation and development issues. She has experience in managing large projects within the Health and Education Sector. Like Anita, she holds a Masters degree in Research Psychology from the University of Pretoria. She also completed an International Programme for Development Evaluation Training at Carleton University in Canada.

In the past few years Suzanne has been intensely involved in monitoring and evaluation as well as policy and programme development in the development sphere. Amongst others, she was a research manager on a project for South Africa's Independent Electoral Commission that monitored and evaluated the training of officers for South Africa's 2004 national elections. She also evaluated and assisted in finalising an HIV/AIDS Strategy for the Construction Industry in South Africa, a project that was conducted for the Department of Public Works. For this project a monitoring system was developed for programme implementation on site.

A **senior BEE** appointment will join MasterQ Research middle 2007. Because she has not yet resigned from her current company, it is not possible to share her detailed CV and personal details.

**Company Profile
Curriculum Vitae**

**MasterQ Research (Pty) Ltd
Anita Bron**

49 Muller Street, Yeoville
Cell: 082 780 580 1
e-mail: masterq@telkomsa.net

Director
Anita Bron
Postal address
49 Muller street
Yeoville
Johannesburg

Physical address
49 Muller street
Yeoville
Johannesburg

Contact numbers
Cell: 082 780 580 1
Tel/Fax: 011 487 3126
Company registration number
2003/002350/07

E-mail
masterq@telkomsa.net

VAT registration number
4370/207/67/4

	Anita Bron CV	
	PERSONAL DETAILS	

Date of birth	02 September 1969
Nationality	South African and Dutch
Language	Afrikaans and English

	OTHER INFO	
Membership of Professional societies	SA Monitoring and Evaluation Association	
Countries of work experience	South Africa and Africa: Analysis of data from Kenya, Uganda and Tanzania	
Qualifications	MA (Research Psychology) MA (Social Impact Assessment) – to be completed 2007	

	RESEARCH CAREER PROGRESSION	
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February 2003 – current	Director of MasterQ Research (Pty) Ltd
July 2001-January 2003	Independent Consultant Facilitate focus group discussions, manage research projects, design discussion guides and questionnaires, analyse and present qualitative and quantitative data, Social Impact Assessments
Apr 2000 – Jun 2001	De Facto as Research Executive Facilitate focus group discussions, manage research projects, design discussion guides and questionnaires, analyse and present qualitative and quantitative data
Jan 1999 – Apr 2000	SABC as Researcher Analyse quantitative audience data, prepare presentations, manage research projects, conduct internal customer satisfaction surveys

**PRIVATE CAPACITY
INVOLVEMENT**

- Guest Lecturer, Department of Business Management, University of Johannesburg
- Coaching

PROJECT INVOLVEMENT

Social and Socio-economic Impact Assessments

- Social and Labour Plan for the proposed Wesizwe mine (Project Manager: TWP Environmental Services).
- Social Impact Assessment for Project Lima, a proposed pumped storage scheme. (Client: Eskom; Project Manager: Bohlweki Environmental).
- Social Impact Assessment for the expansion of an Open Cycle Gas Turbine Power Plant at Atlantis (Client: Eskom; Project Manager: Bohlweki Environmental).
- Social Impact Assessment as part of the EIA for the proposed extension of the Majuba-Umfoloji 765kV Transmission Power Line (Client: Eskom; Project Manager: Iliso Consulting on behalf of BKS).
- Social Impact Assessment, including land-use and tourism impact assessments, for the construction and operation of Transmission Power Lines from the Botswana border to a new power station in the vicinity of Matimba B Power Station as part of the EIA for the Mmamabula Project (Client: Eskom; Project Manager: PBA International and Margen Industrial Services).
- Social Impact Assessment, including land-use and tourism impact assessments, for the construction and operation of Transmission Power Lines from Matimba B Power Station to Dinaledi sub station (Client: Eskom; Project Manager: PBA International and Margen Industrial Services).
- Social Impact Assessment, including land-use and tourism impact assessments, for the construction and operation of Transmission Power Lines from Matimba B power station to Marang sub station. (Client: Eskom; Project Manager: PBA International and Margen Industrial Services).
- Social Impact Assessment, focusing on socio-economic impacts, as part of the EIA for the proposed Hydra-Perseus and Beta-Perseus 765 kV Transmission Power Lines, including land use and tourism impact assessments (Client: Eskom; Project Manager: Arcus Gibb).
- Social Impact Assessment as part of the EIA for the proposed Gautrain Rapid Rail Link. Supplementary information for the Comparative Social Impact Assessment (Client: Bombela Consortium; Project Manager: Iliso Consulting).
- Social Impact Assessment as part of the EIA for the Lafarge West Rand Grinding Facility (Client: Lafarge SA; Project Manager: SRK Consulting).

- Social Impact Assessment as part of the EIA for the proposed Zeus-Perseus 765kV Transmission Power Line, including land use and tourism impact assessments (Client: Eskom; Project Manager: Margen Industrial Services).
- Social Impact Assessment as part of the EIA for the proposed Pelly-Babelegi 132kV Power Line (Client: Eskom; Project Manager: Margen Industrial Services/Pbai).
- Social Impact Assessment as part of the EIA for the proposed Majuba-Umfoloji 765kV Transmission Power Line (Client: Eskom; Project Manager: BKS).
- Social Impact Assessment as part of the EIA for the proposed Addis-Phoebus Power Line (Client: Eskom; Project Manager: Margen Industrial Services).
- Feasibility Study and Cost-Risk Analysis for Social Housing in the North West Province. Responsibilities: source data, final report compilation (Client: SHF; Project Manager: HMORC).
- Baseline socio-demographic study and literature research for the Social Impact Assessment of the proposed Pebblebed Modular Reactor at Koeberg (Client: Eskom; Project Manager: Afrosearch).
- Baseline socio-demographic study and literature research for the Social Impact Assessment of the proposed Pebblebed Modular Reactor Fuel Station at Pelindaba (Client: Eskom; Project Manager: Afrosearch).
- Baseline socio-demographic study for the socio-economic analysis of the Whalerock Coastal Reserve, Sanderlings and Fisherman's Village at Plettenberg Bay (Client: Amazing Estate; Project Manager: Afrosearch).
- Comparative data gathering for the Cosmo-City Township development (Client: VRE Engineers/Poltech/Alberton Town Council; Project Manager: Afrosearch).
- Assessment of claimed future usage of electricity and water amongst farmers in Mpumalanga. Responsibilities: interview and assist with mapping the results (Client: Eskom; Project Manager: Brand Baro-Matrix).

Tourism

- Dinokeng Database Survey. Audit and analysis of tourist destinations in Dinokeng, and their profiles. Responsibilities: interviewing, database design and development, statistical analysis (Client: DACEL; Project Manager: Ochre Communications and MasterQ Research).
- Measuring the success of the Dinokeng marketing campaign as perceived by product owners (three waves). Responsibilities: interviewing, data capturing, statistical analysis, report (Client: DACEL; Project Manager: Ochre Communications and MasterQ Research).
- Economic Impact Survey of the Dinokeng marketing campaign. Responsibilities: interviewing, data capturing, statistical analysis, report (Client: DACEL; Project Manager: Ochre Communications and MasterQ Research).
- Sport Tourism Economic Impact Survey. Responsibilities: statistical analysis, report. (Client: Gauteng Tourism Authority; Project Manager: HMORC).

- Assessing the feasibility of a Johannesburg CBD Tourism bus. Responsibilities: data capturing, statistical analysis, report (Client: DACEL; Project Manager: Ochre Communications and MasterQ Research).
- Assessing Eersterust Tourism Development Potential. Responsibilities: data capturing, statistical analysis, report (Client: DACEL; Project Manager: Ochre Communications and MasterQ Research).

Social Research

- **KAP survey** to inform the Consumer Use Reduction and Awareness Campaign for the Western Highveld. Responsibilities: manage the research process (from sampling to writing reports), train fieldworkers and field manager, assist with development of campaign material (Client: DWAF and Western Highveld Municipalities; Project Manager: Tlou and Matji Engineering and Management Services, PBAI).
- Human Capital Satisfaction Measurement Survey for City Power Johannesburg. Responsibilities: assist with questionnaire development, sampling, quantitative data capturing and analysis, draft report of quantitative results (Client: City Power; Project Manager: Hope Madikane-Otto research and Consulting - HMORC).

Marketing Research

- Internet Solutions. Data gathering for a client service satisfaction survey. Responsibilities: setting up interviews with and interviewing corporate clients (Client: IS; Project Manager: De Facto).
- Retail brand assessment for the proposed Eskom logo change amongst Agrelek, Industrelek, Elektroserve and Elektrowise customers. Responsibilities: focus group discussions, analyse the results and compile the research presentations and reports (Client: Eskom; Project Manager: Brand Baro-Matrix).
- Project Masene. Assessment of a proposed current affairs TV programme. Responsibilities: assist with qualitative data analysis (Client: SABC; Project Manager: Brand Baro-Matrix).
- Project Prism. Assessment of funeral cover advertisement material. Responsibilities: assist with qualitative analysis (Client: SABC; Project Manager: Brand Baro-Matrix).
- Project King Kong. Develop a thorough understanding of viewers' experience of DSTV. Responsibilities: assist with qualitative analysis and report (Client: MultiChoice; Project Manager: Qualitative Intelligence).
- Project Women. Understanding the relationship between women's body image and food. Responsibilities: depth interviews and projective technique analysis (Client: Kellogg's; Project Manager: De Facto).
- Ford B146. Concept assessment. Responsibilities: interviewing (Client: Ford Motor Company; Project Manager: De Facto).
- Observational study and change implementation of a shop environment. Responsibilities: observation, questionnaire design, analysis, report, change implementation (Client: SA Timber and Joinery Works; Project Manager: TacITTell).
- Feasibility study. Course assessment and feasibility of Woema Graphic Design's proposed courses. Responsibilities: questionnaire design, statistical analysis, report (Client: Woema Graphic Design; Project Manager: Anita Bron).

**J.W. (Nonka) Byker
CV****PERSONAL DETAILS**

Date of birth 4 September 1977

Nationality South African

Languages Afrikaans and English

EDUCATION

Qualifications B.Psych. (Pretoria)
NQF Assessor

Countries of work experience South Africa

Membership of Professional societies Health Professions Council of South Africa
PRC 0000396

KEY QUALIFICATIONS

Ms Byker holds a 4-year Bachelors degree in Psychology from the University of Pretoria. She is currently registered with the Health Professions Council of South Africa (HPSCA) as a registered counsellor. She has extensive experience in the social development field, and has approximately 8 years experience in areas such as public participation and Social Impact Assessments.

Apart from her experience in the social development field, Nonka is also a qualified Assessor within the ambit of the Health & Welfare SETA, and has limited experience (app. 2 years) within the HWSETA training field, as training material developer, facilitator and assessor.

WORK EXPERIENCE

January 2007 – current **MasterQ Research:** Research Executive

July 2004 – December 2007 Independent Consultant

February 1998 – June 2004 **Afrosearch:** Public Participation Consultant

April 1997 – January 1998 **Social Dimension:** Administrative Assistant

PROJECT EXPERIENCE**Social Impact Assessments**

- Social Impact Assessment for the proposed Mercury-Ferrum transmission power line (Client: Eskom Transmission, Project Manager: Bohlweki Environmental)
- Social Impact Assessment for the proposed Ferrum-Garona transmission power line (Client: Eskom Transmission, Project Manager: Bohlweki Environmental)
- Social Impact Assessment for the proposed Steelpoort Pumped Storage Scheme (Client: Eskom Generation, Project Manager: Bohlweki Environmental)
- Comparative Social Impact Assessment to determine housing options for construction workers on Project Phoenix (Client: Kumba Iron Ore)
- Selected chapters on the Social Impact Assessment for the Gautrain Rapid Rail Link (Client: Bombela Consortium, Project Managers: Fehletsa Environmental, Snyman Development Consultants).

Social & Labour Plans

- Social and Labour Plan for the proposed Wesizwe Platinum Mine (Client: Wesizwe Platinum Limited, Project Manager: TWP Mining Solutions)
- Assist with the information gathering for the Social and Labour Plan for the Beeshoek Mine (Client: Assmang Group, Project Manager: Afrosearch)
- Assist with the development and information gathering for the Social and Labour Plan for the Cullinan Diamond Mine (Client: De Beers, Project Manager: Snyman Development Consultants)

Public Participation Processes

- Public participation process for the exemption of an EIA for a residential development in Olympus (Client: EkoInfo, Project Manager: Snyman Development Consultants)
- Public participation process for the exemption of an EIA for a commercial/residential development in The Willows (Client: EkoInfo, Project Manager: Snyman Development Consultants)
- Small scale public involvement process on a game estate development in Scurveberg at the Hartbeespoort Dam (Client: EkoInfo)
- Assist with the public participation process for the Centurion section of the proposed Gautrain Rapid Rail Link (Client: Bombela Consortium, Project Managers: Fehletsa Environmental, Snyman Development Consultants).
- Public participation process for the exemption of an EIA for a residential development in Rayton (Client: EkoInfo, Project Manager: Snyman Development Consultants)
- Public participation process for the exemption of an EIA for a residential development in Rooihuiskraal (Client: EkoInfo, Project Manager: Snyman Development Consultants)

- Public participation process for the proposed Pebble Bed Modular Reactor in Koeberg, and associated fuel plant at Pelindaba (Client: Eskom Generation, Project Manager: Poltech)
- Public participation for the proposed Platinum Highway Project from the N1 to the Botswana Border (Client: Bakwena, Project Manager: Bohlweki Environmental)
- Public participation process for the Pretoria East Mobility Study (Menlyn Node): First and Second Phase (Client: City of Tshwane Metropolitan Municipality, Project Manger: Independent Consulting Engineers)
- Public participation process for the proposed C-Cut project in Cullinan (Client: De Beers, Project Manager: Bohlweki Environmental)
- Public participation process for the early warning system at the No. 7 Dam (Client: De Beers, Project Manager: Bohlweki Environmental)
- Public participation process for the proposed N4 Toll Road between Pretoria and the Mpumalanga Border (Client: South African National Roads Agency, Project Manager: Bohlweki Environmental)
- Public participation process for the proposed modal transfer facility in Pretoria North and the linking of Zambesi Drive and Rachel de Beer Street (Client: City of Tshwane Metropolitan Municipality, Project Manager: Afrosearch)
- Public participation process for the proposed development of the Wonderboom Airport (Client: City of Tshwane Metropolitan Municipality, Project Manager: Afrosearch)

Tourism

- Dinokeng Database Survey. (Client: DACEL; Project Manager: Ochre Communications and MasterQ Research).
- Measuring the success of the Dinokeng marketing campaign as perceived by product owners (three waves). Responsibilities: interviewing, data capturing (Client: DACEL; Project Manager: Ochre Communications and MasterQ Research).
- Sport Tourism Economic Impact Survey. Responsibilities: data capturing (Client: Gauteng Tourism Authority; Project Manager: HMORC).

Training Material Development

- Develop and facilitate an HIV/AIDS peer educator programme (Client: Limpopo Provincial Department of Agriculture, Project Manager: Africon)
- Develop and facilitate an HIV/AIDS peer educator training programme as part of an HIV/AIDS workplace programme (Client: Africon)
- Develop and facilitate HIV/AIDS information sessions for employees (Client: Africon)
- Develop and facilitate HIV/AIDS information sessions for managerial staff (Client: Africon)
- Develop and facilitate HIV/AIDS awareness training programmes as part of an overall learnership (Clients: Johannesburg Water & Ekurhuleni Metropolitan Municipality, Project Manager: Foundation for People Development)

Other

- Secretariat to the Stakeholder workshop for the development of Eerste Fabrieke, Mamelodi (Client: Den Haag Municipality (Holland), Project Manager: Afrosearch)
- Social scoping for the proposed development of Erasmuskloof x4, Pretoria (Client: City of Tshwane Metropolitan Municipality, Project Manager: Klapwijk and Associates)
- Secretariat to the Stakeholder workshop for the proposed Kruger-Gaza Transfrontier Park (Client: SANPARKS, Project Manager: Afrosearch)

TRAFFIC AND TRANSPORTATION



GOBA

A G BRISLIN Pr Eng

CURRICULUM VITAE

Proposed Position : Project Manager
Name of Firm : Goba (Pty) Ltd
Name of Staff Member : Adrian Grant Brislin
Profession : Traffic / Transportation Engineer
Date of Birth : 1964
Years with Firm : 9
Nationality : South African
Membership of Professional Societies : ECSA Professional Engineer, Registration No. 980355
Detailed Tasks Assigned : **Transportation Planning and Traffic Engineering**
Key Qualifications :

Mr Brislin has more than 17 years experience as a Traffic/Transportation Engineer. Mr Brislin's expertise lies in Transportation Planning and Traffic Engineering. He has extensive experience in traffic signal design and evaluation of traffic signal systems. Mr Brislin also has in-depth experience in the use of traffic/transportation models and software packages such as SATURN and EMME/2, as well as traffic evaluation software such as SIDRA, TRANSYT, SYNCHRO ,HCS and transport economic evaluation software such as HDM4.

Education : BSc Civil Engineering, University of the Witwatersrand, 1985
Graduate Diploma Traffic / Transportation Engineering, University of the Witwatersrand, 1991.

Employment Record:

(a) Positions held:

2005- Present Associate : Goba (Pty) Ltd
2001 – 2005 Associate : Goba Moahloli Keeve Steyn (Pty) Ltd
1999 – 2001 Associate : Keeve Steyn (Pty) Ltd
1997 – 1999 Senior Traffic Engineer – Keeve Steyn (Pty) Ltd
1996 - 1997 ASSOCIATE : STANWAY EDWARDS ASSOCIATES INC.
1988 – 1996 Traffic Engineer : Stanway Edwards Associates Inc.

(b) Professional Experience:

Traffic Studies :Traffic Impact Studies for Rezonings in Parktown, Bedfordview, Ennerdale, Sunninghill, Brescia House Convent, St. Stithians College, the Piazza Retail Centre, ABSA Towers North and N2/Nseleni Interchange. Organise and execute urban Roadside Interview Surveys in Bedfordview, N18 Corridor and Toll Plaza alternate routes. Evaluation of Toll Road attraction rate for Tolcon Toll Plazas. Management of Tolcon Traffic Monitoring Program. Traffic Signal optimisation using TRANSYT – Rietfontein Road, Boksburg, Hans Strijdom Drive – Randburg and Atterbury Road, Pretoria. Traffic Modelling Projects in Pretoria East, Rivonia, Verwoerdburg , Menlyn Precinct, City Deep IDZ traffic impact and Western CBD (Newtown)using SATURN. Traffic Signal Plan design and implementation for Johannesburg City Council Urban Traffic Control programme including major arterials and Public Transport Priority schemes in the C.B.D. Benoni PWV Route Investigation. Bus Priority (signal pre-emption) at traffic signals – Pilot Project, Johannesburg. M16 & M37 Traffic Signal Co-ordination, Modderfontein Interchange, Edenvale, Republic Road and Olievenhout Rd, Randburg, Golden Highway, Comaro Mooi link and Nelson Mandela Bridge and M1 Carr St interchange, Newtown using SYNCHRO. Environmental Traffic Impact Study for Matimba B and Atlantis Power Stations, Holcim Waste Blending Platform and Factory Expansion, Panbult Coal Mining operations.

Transportation Planning :

Economic Studies utilising HDM IV. Transportation Modelling of Melle Street Link Proposal; (MINITRAMP), SATURN Modelling for Modderfontein Regional Transport Study, Ellis Park Precinct Study, Centurion CBD, Edenvale CBD and PREMET (N1/N4 Study Area). Transportation/Transshipment Model for SA Maltsters using linear programming to evaluate the most efficient transport cost alternative site. Benefit Cost Analyses for Melle Street – Braamfontein; N18 Alternative Routes; Cost Apportionment Evaluation of Verwoerdburg Transportation Model using EMME2 suite; N3 Harrismith Bypass Economic Evaluation; Randburg Masterplan Update. N4 Maputo Corridor, Development of Roadside Interview Origin/Destination matrix information. Toll Road feasibility studies for N3 Heidelberg to Cedara, N2 Wild Coast, N10 Colchester to Cradock, N2 Tsitsikama , N17/N2 Springs to Piet Retief and N4 Maputo Corridor. N4 Platinum Toll Feasibility study and tender bid. N2 North Coast Empangeni to Pongola transport Study. Greater Ellis Park Transport Management Plan, Parking Provision Plan, Public Transport & Infrastructure Business Plan and precinct development Traffic Impact.

Traffic Safety:

Traffic safety evaluation of arterial road in Mondeor Road. Safety Auditor's Course 1998. Traffic Conflict Measuring techniques course 2001. La Lucia Office Park Pedestrian Investigation. N2 North Coast (Empangeni to Pongola) Road Safety Evaluation using the SA Road Safety Manual.

Geometric Design:

Randburg Masterplan Study – some future urban roads; Roadworks area signing design of N3 – Mooi River. Signalised intersection design for St. Stithian's College Traffic Impact Study, Piazza Retail Centre, Basement parking layout and circulation – ABSA Towers North. Access Control Layout and Roundabout design for Megawatt Park. Road Signage and Toll signage systems design for N4 Platinum Toll Highway. Road signage for Coega. Road signage for N10 Middelburg. Intersection design for Ellis Park Precinct for 2010.

Languages:

Language	Speaking	Reading	Writing
English	Excellent	Excellent	Excellent
Afrikaans	Excellent	Excellent	Excellent

Certification:

I, the undersigned, certify that to the best of my knowledge and belief, this data correctly describes me, my qualifications and my experience.

.....
Signature of Staff Member or authorized official from the firm

Date:
Day/Month/Year

TOURISM



CURRICULUM VITAE

David Blair

Present Appointment	Divisional Director: Environmental Division
Nationality	South African
ID Number	7204246244181
Education	Rhodes University
Professional Qualifications	BSc Zoology and Entomology BSc (Hons) Zoology Environmental Auditing –Short course. Pr.Sci.Nat (Ecological and Environmental Science)
Professional Registrations	Member of IAIAAsa, Certified by EAPSA as an Environmental Assessment Practitioner Member of the South African Council for Natural Scientific Professions (Reg.No. 400222/06 - 5/9/2006)
Field of Specialisation	Strategic Environmental Assessment, Ecotourism Planning, Impact Assessment, Auditing
Languages	English

Synopsis

David is based in the Johannesburg office in the capacity as Divisional Director of the Environmental Division. He previously headed the Environmental Planning Unit at Environmental Design Partnership/Resource Planning and Management (Botswana). He is accredited with EAPSA.

David has extensive experience in a variety of environmental projects. He has been involved in Strategic Environmental Assessments, due diligence surveys, Environmental Impact Assessments, Environmental Management Plans, Environmental Management Systems, Environmental Auditing and Eco-tourism Planning and Environmental Management Planning, as well as ISO 14000.

These skills have been applied in a variety of projects including game lodges, game reserves, housing, hotels, roads, abattoirs, communications masts, ports, filling stations, heavy industry.



CURRICULUM VITAE

David Blair

Professional History

Aug 2004 to date	SiVEST Environmental Division : Divisional Director
Aug 2000 to Aug 2004	SiVEST SA (Pty) Ltd – Environment and Planning Division Senior Environmental Planner
1998 – July 2000	Environmental Design Partnership Environmental Planner and Head of Environmental Planning Unit
1996 – 1998	Lodge Manager and Ranger Shamwari Game Reserve, Eastern Cape

ENVIRONMENTAL IMPACT ASSESSMENTS, ENVIRONMENTAL MANAGEMENT PLANS, ENVIRONMENTAL AUDITING, STRATEGIC ENVIRONMENTAL ASSESSMENTS, ENVIRONMENTAL MANAGEMENT SYSTEMS etc

Linear Infrastructure:

- EIA and EMP for the proposed 750km multi petroleum products pipeline from Durban to Gauteng/Mpumalanga – Petronet
- EIA for the Widening of Kudumatse Drive in Gaborone – Botswana Government.
- Detailed EIA and EMP for Mongu-Kalabo road in Western Province of Zambia.

Also see Transmission Line projects under “tourism”.

Industrial:

- EIA and EMP for Ferrowgrow Fertiliser Factory, Botswana. Process Projects/Botswana Development Corporation
- Detailed EIA and EMP for Sasol Oxidising Agent, Propylene Oxide and Propylene Glycol Ethers Plants – Sasol Solvents – Sasolburg
- Environmental guidelines for Woolworths meat processing plant – Bailey Inc.
- EIA and EMP for Ostrich Abbatoir – North of Gaborone – Botswana Development Corporation
- Numerous EIA's and EMP's for Sasol Filling Stations.
- Due Diligence Survey - Caterpillar Assembly Plant (Boksburg) - Caterpillar

Residential:

- Scoping Report, EMP for Krugersdorp Residential Development – Suikerbos Valley Investments
- Scoping Report and EMP for Residential Development in Kyalami -
- EIA for Residential Development Outside Gaborone – Wharic Construction
- EIA for the Development of a Casino and Hotel in Port Elizabeth Beachfront – Tsogo Sun
- EIA and EMP, and environmental auditing for Maputo Holiday Inn (Southern Sun Hotels), Mozambique
- Scoping Reports for Mmabatho and Camden Military Bases for proposed joint military and non-military use – Department of Public Works
- EIA for Location of Border Post and Entrance Gate for Kgalagadi Transfrontier Park between South Africa and Botswana – Peace Parks Foundation
- EIA and EMP for Philani Casino in East London – Thebe Properties, Gomo Leisure Resorts
- EMP, auditing, for Tsogo Sun, Emonti Casino, East London – Tsogo Sun.



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Commercial:

- EMS for Monte Casino Precinct – Tsogo Sun
- Preliminary EMS - Southern Sun Hotels
- Preliminary EMS for the Carlton Centre - Propnet
- EMP and Environmental Auditing for Vaal Mall. Red Tape Investments.
- EMP and auditing for Upgrading of Randburg Waterfront.
- EIA and EMP for Fairgrounds Office Park Development in Gaborone – Fairgrounds Development Co.
- Scoping Report and EMP for Umlazi Mega City Development, Durban – Mark II Projects.
- EIA for Longlands Farm Rural Development, Stellenbosch.
- EIA and EMP for Kensington Golf Course Development, Johannesburg

Tourism:

- Tourism Impact Assessment for Steelpoort Pump Storage Scheme. Eskom.
- Strategic Tourism Assessment as part of the SEA for the Kwadukuza Municipality
- Battlefields Development Plan – Amajuba Municipality
- Tourism Impact Assessment for Mercury – Garona Transmission Line. Eskom.
- Tourism Impact Assessment for Matimba B Powerstation. Eskom.
- EMP for operation of Letamo Estate.
- EMP and auditing for "White's Avoca Lodge" Timbavati Private Game Reserve.
- Environmental Auditing for Marataba Lodge, Marakele Game Reserve.
- Exemption Application and EMP for Forum Homini Lodge – Cradle of Humankind – Activate Architects/Definite Properties
- EIA and EMP for Ngala Camps – Timbavati Game Reserve – CC Africa
- Scoping Report, EMP and Rehabilitation Plan – Zuka Lodge – Zuka Game Reserve – Conservation Corporation Africa
- Exemption Application and EMP, and auditing for Exeter Game Lodges new camps and upgrading – Exeter Game Lodges, Sabie Sands Game Reserve
- EIA for Tsogo Sun Hotel and Casino Development in Pietersburg – Tsogo Sun.
- EIA and EMP for Klerksdorp Casino, Klerksdorp – Tusk Resorts.
- Strategic Environmental Assessment for Kgale Valley south of Gaborone – Wharic Construction.
- Exemption Application, EMP, for Nedbank Mountain Bike Trail – Cradle of Humankind – Cult Cycling.
- Light Impact Assessment/Visual Impact Assessment – Nkomasi Wilderness.
- Environmental Audit and EMP for illegal tourism development at Mtunzini – uThungulu Municipality.
- Exemption Application and EMP for Elephant Lodge, Klaserie Private Nature Reserve.
- Scoping Report for Makumu Lodge, Klaserie Private Nature Reserve.
- EIA, EMP and auditing for upgrading of Exeter Game Lodges – Exeter Game Lodge, Sabie Sands.
- Environmental Assessment & Rehabilitation Plan for Shangri-la Ecotourism Development. – Shangri-la Lodge



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- Strategic Environmental Impact Assessment for the proposed Etunzi Nature Reserve and related ecotourism development. - Uthungulu District Municipality
- Strategic Environmental Assessment of Klaserie Private Nature Reserve.
- Specialist input (tourism) on the West Rand State of the Environment Report – West Rand District Municipality.
- Northern Cape Tourism Development Strategy – Spatial and environmental input – Northern Cape Tourism.
- Tourism Development Strategy for the West Rand District Municipality - spatial and environmental planning aspects to this study.
- Tourism Concept Development Plan for Shashe-Limpopo Transfrontier Park/Mapungubwe – DBSA, DEAT
- Scoping Report for Health Hydro in the Natal Midlands – Private Client.
- Brand and Concept Design for Mapungubwe Tri-Frontier Park. Limpopo Investment Initiative.
- Prefeasibility and Development Concept For A 16 000ha Farm Near Pilgrim's Rest.
- Preparation of Expression of Interest for the development of ecotourism lodge sites in the Greater St Lucia Wetland Park.
- EIA for Development of Ecotourism Amenities at Bokaa Dam, near Gaborone

Policy:

- Gauteng IDP Environmental Toolkit – National Dept of Environmental Affairs & Tourism, Gauteng Dept of, Agriculture, Conservation and Environment

Other:

- His duties as member of the Kruger Centenary Advisory Committee included meetings with members of the committee, including members of the National Parks Board, for the planning of the centenary celebrations in 1999.
- Exemption Application, EMP, Environmental Committee Chairing, and specialist study coordination and interpretation for Phase 2 Monte Casino – Tsogo Sun.
- Preparation of Initial Environmental Management System for Southern Sun Hotels and Inns.

DUE DILIGENCE SURVEYS

ADDITIONAL PROJECTS

- **Scottish Trade International:**
Responsible for research in building up a database of interested parties through meetings and telephonic conversation, research with key players in the environmental field in S.A..
- Project leader and coordinator for development of a brand, logo and website for the Mapungubwe TriFrontier Park (www.trifrontierpark.com) for Trade and Investment Limpopo.