

CURRICULUM VITAE

KAREN JODAS

Director: Savannah Environmental (Pty) Ltd
Environmental Scientist (MSc, Pr.Sci.Nat)

SKILLS BASE AND CORE COMPETENCIES

- Eleven (11) years experience in the environmental management and assessment field
- Nine (9) years experience in Project Management
- Project management of large environmental assessment & environmental management projects
- Experienced in the identification & assessment of potential environmental impacts & benefits
- Experienced in the development of practical & achievable mitigation measures & management plans, and evaluation of risk
- Experienced in the formulation of environmental strategy, policy & guidelines
- Working knowledge of environmental planning processes, policies, regulatory frameworks & legislation
- Experienced in the compilation and review of the reports in accordance with all relevant environmental legislation
- Wide range of experience for public and private sector projects - completed more than 50 environmental projects for a wide variety of Clients
- Experienced in undertaking public participation processes for a variety of projects
- Completed projects in all nine Provinces of South Africa, as well as Zambia and Lesotho
- *Specialisation:* Strategic environmental assessment and advice; Project Management and co-ordination of environmental projects; Environmental Management; Environmental Impact Assessment; Integration of environmental studies and environmental processes into larger engineering-based projects and ensuring compliance to legislation and guidelines; Hydrology and Water Management; General Ecology
- Registered Professional Natural Scientist (Registration No 400106/99)

TERTIARY EDUCATION

B.Sc Earth Sciences, majoring in Geography and Zoology, *Rhodes University, Grahamstown*, 1993

B.Sc Honours in Geography (in Environmental Water Management), *Rhodes University, Grahamstown*, 1994. Major subjects included Water Resources Management, Streams Ecology, Fluvial Geomorphology and Geographic Information Systems.

M.Sc in Geography (Geomorphology), *Rhodes University, Grahamstown*, 1996

Water Quality Management, *Potchefstroom University*, 1998

Environmental Law Course, *Aldo Leopold Institute*, 2002

EMPLOYMENT HISTORY

Nov 2006 – present: Savannah Environmental (Pty) Ltd: Director; Environmental Scientist

Oct 1997 – Oct 2005: Bohlweki Environmental (Pty) Ltd: Associate, Environmental Scientist

SELECTED RELEVANT PROJECT EXPERIENCE

- EIA and EMP for the proposed wind energy facility and associated infrastructure at a site within the Western Cape (Eskom Generation) – project management & report compilation
- Development of a comprehensive site-specific EMP for the construction and operation of the Eskom Braamhoek Integration Project, Free State and KwaZulu-Natal Provinces (Eskom Transmission) - project management & report compilation
- EIA and EMP for the proposed Steelpoort Integration Project, Mpumalanga & Limpopo Provinces (Eskom Transmission) – report compilation
- Environmental Scoping Study for a new coal-fired power station in the Lephalale area, Limpopo Province (Eskom Generation) – report compilation
- Detailed Environmental Scoping Study & public participation for the proposed Capacity Increase Project at Arnot Power Station, Mpumalanga Province (Eskom Generation) - report compilation
- Numerous EIAs for various electricity sector projects (generation, transmission & distribution) in all nine provinces of South Africa

CURRICULUM VITAE

JO-ANNE THOMAS

Director: Savannah Environmental (Pty) Ltd
Environmental Scientist

SKILLS BASE AND CORE COMPETENCIES

- Ten (10) years experience in the environmental field
- Experienced in project management for a range of projects
- Experienced in the identification and assessment of potential negative environmental impacts and benefits through the review and manipulation of data
- Experienced in the identification of practical and achievable mitigation and management measures and the development of appropriate management plans
- Experienced in the compilation and review of environmental reports in accordance with relevant environmental legislative requirements
- Experienced in the formulation of environmental policies, strategies and guidelines
- Experienced in undertaking public participation processes for a variety of projects
- Experienced in providing strategic environmental advice to a wide variety of clients both in the public and private sectors
- Working knowledge of environmental planning processes, policies, regulatory frameworks and legislation
- Registered Professional Natural Scientist (Registration No 400024/00)

TERTIARY EDUCATION

B.Sc Earth Sciences, *University of the Witwatersrand, Johannesburg, 1993*

B.Sc Honours in Botany, *University of the Witwatersrand, Johannesburg, 1994*

M.Sc in Botany, *University of the Witwatersrand, Johannesburg, 1996*

EMPLOYMENT HISTORY

Nov 2006 – present: Savannah Environmental (Pty) Ltd: Director; Environmental Scientist

Oct 1997 – Oct 2005: Bohlweki Environmental (Pty) Ltd: Environmental Scientist

SELECTED RELEVANT PROJECT EXPERIENCE

- EIA and EMP for the proposed Steelpoort Integration Project, Mpumalanga & Limpopo Provinces (for Eskom Transmission)) – project management & report compilation
- EIA and EMP for the proposed wind energy facility and associated infrastructure at a site within the Western Cape (for Eskom Generation)) – report compilation
- Development of a comprehensive site-specific EMP for the construction and operation of the Eskom Braamhoek Integration Project, Free State and KwaZulu-Natal Provinces - project management & report compilation
- EIA and EMP for the proposed Open Cycle Gas Turbine (OCGT) Power Station and associated 400 kV Transmission lines and substation at Atlantis, Western Cape Province - project management & report compilation
- Environmental Scoping Study for a new coal-fired power station in the Lephalale area, Limpopo Province – report compilation
- Detailed Environmental Scoping Study & public participation for the proposed Capacity Increase Project at Arnot Power Station, Mpumalanga Province
- Numerous EIAs for various electricity sector projects (generation, transmission & distribution) in all nine provinces of South Africa

CURRICULUM VITAE

NICHOLAS ALEXANDER HELME

Nick Helme Botanical Surveys
Specialist Botanical Consultant

SKILLS BASE AND CORE COMPETENCIES

- Sixteen (16) years experience in the botanical field
- Ten (10) years experience as a specialist botanist
- Over 650 botanical assessments of proposed development sites (golfcourses, housing estates, quarries; roads; powerlines; powerstations; borrow pits) in localities as far afield as Plettenberg Bay, Knysna, Agulhas, Bot River, Hermanus, Stellenbosch, Durbanville, Hopefield, Piketberg, Saldanha, Lamberts Bay, Brand se Baai, and Namaqualand.
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TERTIARY EDUCATION

BSc (Honours) - Botany. University of Cape Town, Rondebosch, South Africa. Graduated 1990

EMPLOYMENT HISTORY

1997 – present: Nick Helme Botanical Surveys - Specialist Botanical Consultant

January 1998 – Dec 2001: Full-time associate with Doug Jeffery Environmental Consultants

May - September 1997: Freelance botanist for Doug Jeffery Environmental Consultants

May 1993 - July 1996: Biodiversity Assessment in the Tropics

1991 – 1992: Conservation Researcher, Botanical Society of South Africa

SELECTED RELEVANT PROJECT EXPERIENCE

- Assessment of proposed Ibubhesi natural gas project in area south of Groen River mouth, Namakwaland
- Scoping and Impact Assessment for proposed new Eskom powerline from Alexander Bay to Vredendal
- Assessment of new Eskom OCGT Atlantis site
- Assessment of proposed Bound for Gold mineral sands exploration program on the west coast south of Brand se Baai
- Fine Scale vegetation mapping project in NW Sandveld
- Scoping and Impact Assessment of Eskom OCGT Mossel Bay site
- Impact Assessment of proposed Namakwa Sands expansion project, Brand se Baai
- Assessment for new Eskom Omega substation
- Vegetation survey of proposed Namakwa Sands heavy mineral sands expansion project at Brand se Baai and Koekenaap MSP
- Vegetation survey and IA on upgrading of Lamberts Bay - Elands Bay road
- Vegetation survey for Eskom Cape Strengthening Program from Luckhoff to Cape Town
- Recent (2003) contributions to the new Vegetation Map of South Africa (National Botanical Institute)
- Second author of new Red Data Book list of South African Proteaceae
- Compiled a Fine Scale Conservation Plan for the Slanghoek Valley, Worcester (in collaboration with CapeNature and Dept. Agriculture)
- First author of vegetation component of Fine Scale Vegetation Mapping projects in Saldanha, NW Sandveld, Bokkeveld escarpment, and Upper Breede river valleys (CapeNature)

CURRICULUM VITAE
PIETER LE FRAS NORTIER MOUTON

University of Stellenbosch, Department of Botany & Zoology
Associate Professor in Zoology (Vertebrate Ecology)

SKILLS BASE AND CORE COMPETENCIES

- Twenty-two (22) years experience in the zoology field
- Specialist member of environmental impact assessment team for numerous EIAs throughout South Africa
- Author/co-author of 77 publications in peer-reviewed journals, and 17 scientific reports.
- Author/co-author of 21 contributions at international symposia and 66 at national symposia
- Member of the Herpetological Association of Africa
- Member of the Zoological Society of Southern Africa
- Member of the International Society of Vertebrate Morphologists

TERTIARY EDUCATION

B.Sc. (Zoology and Botany as major subjects) cum laude, 1977, University of Stellenbosch
Honours (Zoology) cum laude, 1978, University of Stellenbosch
M.Sc (Zoology) cum laude, 1980, University of Stellenbosch
Ph.D. (Zoology), 1986, University of Stellenbosch

EMPLOYMENT HISTORY

Associate Professor, Department of Zoology, University of Stellenbosch, 1999-present
Senior Lecturer, Department of Zoology, University of Stellenbosch, 1997-1998
Senior Curator, J. Ellerman Museum, University of Stellenbosch, 1985-1996
Curator, J. Ellerman Museum, University of Stellenbosch, 1981-1985

SELECTED RELEVANT PROJECT EXPERIENCE

- Baseline faunal survey for Trans Hex Mining along Lower Orange River, September 2000. Faunal survey EIA – Saldanha Steel plant, 1996. Reptile specialist
- Alpha Saldanha Cement Project, Environmental Impact Assessment, 1997. Reptile specialist
- N1 N2 Protea Parkways Toll Road project: Scoping study, May 2000. Terrestrial fauna specialist
- Proposed development of farm Trekoskraal no. 104, district Vredenburg: Reptile survey, 2002
- Proposed extension of Namakwa Sands mine site at Brand se Baai: Faunal survey
- Proposed initial diamond mining by NDC Mining Company PTY) LTD in the Vredendal District. Reptile and small mammal impact assessment, 2004.
- Proposed Upgrading of the Gansbaai to Bredasdorp Road: Environmental Impact Assessment for Terrestrial Fauna. 2004
- Namakwa Sands EMPR amendment, specialist study report on fauna. 2005

CURRICULUM VITAE

ANDREW ROBERT JENKINS

Endangered Wildlife Trust

Researcher & EIA Consultant, Power Lines Group

SKILLS BASE AND CORE COMPETENCIES

- A research biologist, specializing in raptor ecology and demography
- Extensive experience of bird:power infrastructure interactions and avifaunal EIA work.

TERTIARY EDUCATION

1989-1998: MSc upgraded to PhD, Percy FitzPatrick Institute, University of Cape Town.

1988: BSc Hons in Zoology, University of Natal, Pietermaritzburg, with distinction.

1984-1987: BSc, University of Natal, Pietermaritzburg, majoring in Zoology and African & Experimental Zoology.

SELECTED RELEVANT PROJECT EXPERIENCE

January 2003-Present: Retained by various agencies to do EIA work for development projects in the Western Cape as an avian specialist, including at least one Eskom transmission line and five distribution lines.

January 2003-2004: Retained to design and oversee monitoring of impacts on avifauna of the Eskom Demonstration Wind Farm facility at Klipheuwel, W Cape.

April 2001-2004: Produced initial scoping report and conducted subsequent monitoring of the potential impact of the proposed Darling Demonstration Wind Farm facility on the local avifauna.

September 1996, August 1997, August 2000: Part of ornithological team subcontracted by Afridev Consultants to survey the birds of the Katse Basin, Lesotho: phase 1A of the Lesotho Highlands Water Scheme.

EMPLOYMENT HISTORY

September 2007: Employed as research scientist by the Industries Partnership Programme of the Endangered Wildlife Trust. Specific brief is to consolidate and strengthen existing research, and initiate new research initiatives, in the field of wildlife/power line interactions.

March 2002-February 2007: Employed as research scientist at FitzPatrick Institute, UCT, managing the *Western Cape Raptor Research Programme*, and overseeing various raptor-based projects, including a collaboration with Eskom to reduce the incidence of line faults associated with large eagle nests on transmission pylons in the Karoo.

November 1998–December 2000: Employed as postgraduate research fellow at the FitzPatrick Institute, UCT, working on various projects concerning the biology of predation.

CURRICULUM VITAE

JONATHAN JAMES SMALLIE

Endangered Wildlife Trust

Field Biologist

SKILLS BASE AND CORE COMPETENCIES

- Eight (8) years experience in the field of avifaunal interactions with various electrical infrastructure, including one other generation EIA, ten transmission and approximately 30 distribution EIAs
- Conduct investigations, impact assessments, studies, research on wildlife interactions with power line infrastructure and wildlife hazards at airports.
- Completed a 5-day training course on High Voltage Regulations (modules 1 to 10)– Southern Region (conducted by Eskom)
- Trained on, and authorised for, live line installation of Bird Flappers

TERTIARY EDUCATION

BSC – Agriculture (Hons), *University of the Natal - Pietermaritzburg*

SELECTED RELEVANT PROJECT EXPERIENCE

- Bird Impact Assessment Studies for:
 - * Proposed Concentrating Solar Plant, in the Northern Cape Province
 - * Existing & proposed transmission power lines throughout South Africa, including:
 - Eros – Neptune – Grassridge 400kV line
 - Hydra-Gamma 765kV line
 - Hydra-Droerivier 1,2 & 3 400kV lines
 - * Existing & proposed sub-transmission power lines throughout South Africa, including:
 - Danskraal – Bloukrans 275kV line
 - Marathon-Prairie 275kV line
 - Bulgerivier 132kV line
 - Dalkeith-Jackal Creek 132kV line
 - Ottawa-Tongaat 132kV
 - VAAL Vresap 88kV line
 - Arthursview Modderkuil 88kV
- Bird mortality investigations & other studies:
 - * Investigation into rotating Bird Flapper saga – Aberdeen 22kV
 - * Investigation of in excess of 80 separate incidents of bird mortalities on power line networks from August 1999 to present
 - * Investigation of bird mortalities at 3 separate substations
 - * Special investigation into faulting on various power lines, including Ariadne-Eros 132kV line, Tutuka-Pegasus 275kV line, Geluk-Hendrina 22kV line and Camden Chivelston 400kV line
- Research projects:
 - * Southern Region Proactive GIS Blue Crane collision project

CURRICULUM VITAE

PETER MARK ILLGNER

Specialist Consultant: Biogeography, Geomorphology, Landscape Sensitivity Mapping (e.g. Present Ecological State, Ecological Processes), Wetlands

SKILLS BASE AND CORE COMPETENCIES

- More than 15 years experience in the specialist biogeography and geomorphology field
- Provided a wide range of specialist input into various EIA processes for projects throughout South Africa
- Participated in earth and/or biological science related field work within Botswana, Malawi, Mozambique, Namibia (lower Orange River), South Africa, Zimbabwe and the southern oceans

TERTIARY EDUCATION

2004 - PhD (Entomology) Rhodes University

1995 - MSc (Geography) (Distinction) Rhodes University

1992 - BSc (Hons) (Geography) Rhodes University

1991 - BSc (Hons) (Geology) University of Port Elizabeth

1990 - BSc University of Port Elizabeth

EMPLOYMENT HISTORY

1993 – present: independent researcher and specialist consultant

SELECTED RELEVANT PROJECT EXPERIENCE

- MSc thesis entitled "The Morphology and Sedimentology of Two Unconsolidated Quaternary Debris Slope Deposits in the Alexandria District, Cape Province".
- Input into 'The Geomorphology of the Eastern Cape: South Africa' (Ch 4)
- Desktop geomorphological assessment of a site selected for the location of a stormwater outfall - Coega Industrial Development Zone, 2007
- Geomorphological Assessment of proposed weirs on the Orange and Vaal rivers, 2006
- A Geological and Geomorphological Assessment of the proposed Mercury-Ferrum-Garona Transmission line, 2006
- Geological and Geomorphological Overview of the Mbotyi Area, 2005

CURRICULUM VITAE

MARK STEPHEN RYNHOUD

*Director: Geological and Environmental Services (GES)
Engineering and Environmental Geologist*

SKILLS BASE AND CORE COMPETENCIES

- Eleven (11) years experience in the engineering and environmental geology field
- Experienced in undertaking general engineering geological, geological, and environmental consulting studies throughout South Africa
- Compilation of over 500 engineering geological and environmental reports on a wide range of engineering geological and environmental consulting parameters
- Registered Professional Natural Scientist (Registration No 400118/96)
- Associate Member of the Geological Society of South Africa (GSSA)
- Associate Member of the Association of Engineering Geologists (AEG)
- Associate Member of the South African Institute for Engineering Geologists (SAIEG)

TERTIARY EDUCATION

BSc (Geol) University of Port Elizabeth (1991)
BSc (Hons) University of Port Elizabeth (1993)

EMPLOYMENT HISTORY

Oct 2004 - present: Engineering and Environmental Geologist, Geological and Environmental Services (GES)
Jan 1998 - 2004: Engineering and Environmental Geologist, Bopite Engineering Geologists CC and Blue Horizon Environmental Consulting, Port Elizabeth, South Africa
Jan 1997 - Dec 1998: Geologist / Engineering Geologist, Ninham Shand Consulting Engineers, Cape Town
1994 - 1996: Scientific Officer (Regional Geologist), Council for Geoscience (ex-Geological Survey), Port Elizabeth Regional Office
1992 - 1994: Technician (Grade II), Geology Department, University of Port Elizabeth

SELECTED RELEVANT PROJECT EXPERIENCE

- The urban and rural mapping of the Border-Ciskei region between Port Alfred, Bisho, and East London, in 1:10 000 and 1:50 000 scales
- Preliminary 1:10 000 scale mapping and report compilation for the development of the proposed Coega Harbour Development Zone, Algoa Bay
- Structural geological investigation of the Moregrove Quartzite Quarry, Cotswold, Port Elizabeth
- Slope stability field work and compilation of stereographic representations of the structural condition of a quartzitic sandstone road cutting along the N1 in the Du Toits Kloof area for Ninham Shand Consulting Engineers
- Engineering geological investigation for the AWRM project in the Engcobo area
- Environmental and engineering geological investigations for Blue Horizon Consulting for new road alignments at The Haven and Coffee Bay in the Transkei
- Geotechnical investigations for the AWRM projects in the (a) Blue Crane Route and (b) Amahlati Local Municipalities
- Environmental investigation in the coastal headland bypass dunefield near Cape St Francis for the establishment of an off-road route

CURRICULUM VITAE

GARRY PATERSON

Institute for Soil, Climate and Water: Agricultural Research Unit

Senior Soil Scientist

SKILLS BASE AND CORE COMPETENCIES

- Twenty-six (26) years experience in soil classification and mapping
- Immediate past President of the Soil Science Society of South Africa
- Member of both the South African Soil Classification Working Group, as well as the South African Soil Surveyors Organisation
- Has been responsible for approximately 150 soil surveys and other investigations, including for agricultural potential, State of the Environment reporting and environmental impact assessments
- Fields of speciality and competence include Soil classification and mapping; Soil interpretations; Soil survey project management; Environmental assessment; Soil survey and land capability course presentation; and Ground penetrating radar
- Registered Professional Natural Scientist (Registration No 400463/04)

TERTIARY EDUCATION

BSc (Hons) Geography, 1980, University of Strathclyde, Glasgow, Scotland

MSc (Soil Science) cum laude, 1998, University of Pretoria

EMPLOYMENT HISTORY

1992-present: Senior Soil Scientist: ARC-Institute for Soil, Climate & Water

1987-1992: Senior Soil Scientist: Soil and Irrigation Research Institute, Pretoria

1981-1987: Soil Scientist: Soil and Irrigation Research Institute, Pretoria

SELECTED RELEVANT PROJECT EXPERIENCE

- Soil survey investigations at: Roodeplaat, Kathu, Steelpoort River, Palala River, Zeekoegat (Roodeplaat), Limpopo River, Lydenburg, Kendal, Clewer Sand (Witbank), Botha Sand (Witbank), Balmoral Colliery, Bafokeng (Rustenburg), Towoomba (Warmbaths), Hoefeld Stene (Middelburg), Quality Bricks (Witbank), Visagie Sand (Middelburg), Rosslyn, Coalbrook (Sasolburg), Stewart Coal (Delmas), Forzando Coal (Hendrina), Vaalgro (Vereeniging), Ratanda (Heidelberg), Elspark (Boksburg), Thornccliffe Mine (Steelpoort), Jan Smuts Quarry (Boksburg), Ennerdale (Phase I & II), Thokoza, North Riding, Natalspruit (Alberton), Arnot, Kroondal (Phase I & II), Ga-Rankuwa, Hartebeespoort Dam, Kosmos, Assen, Grasmere, Magalies Moot (Pretoria), Valpre (Paulpietersburg), Cargo Carriers (Sasolburg), Waterval (Rustenburg), Rayton, Bronkhorstspuit, Zwavelpoort (Pretoria), Pietersburg, Trojan Mine (Steelpoort), Platinum Highway (Rustenburg), Moutse, Centurion, Salique (Klaserie), Northam, Greenside Colliery (Witbank), South Deep Mine (Westonaria), Bank Colliery, Steelpoort Platinum, Gautrain Route (Pta/Jbg), Rietspruit Mine (Ogies), Potgietersrus Platinum, Atok Mine (Lebowa), Blue Ridge Mine (Groblersdal), Ngodwana, Estancia (Breyton), Twickenham Mine (Steelpoort), Marikana

CURRICULUM VITAE PHILIP JOHN HOBBS

*CSIR Environmentek: Water Resources Competence Area of the Natural Resources and Environment (NRE) Operational Unit
Research Hydrogeologist*

SKILLS BASE AND CORE COMPETENCIES

- Twenty eight (28) years experience in the geological and hydrogeological field
- Experience covers a wide range of groundwater studies across a broad spectrum of geological and hydrogeological environments.
- Experience in the exploration and development of groundwater resources for water supply purposes at local (domestic) and municipal (bulk) scale, the evaluation and assessment of land use activities such as waste disposal, industrial, mining and residential development on the groundwater environment, and the mapping of groundwater resources at regional scale.
- Experience in various geological and geohydrological environments including Archaean granite and Bushveld Complex rocks, much of the Transvaal Supergroup (including the dolomites) and Karoo Supergroup strata, and Tertiary and Quaternary sediments comprising alluvial sediments and coastal limestone and aeolian deposits
- Registered as an Earth Scientist with the South African Council for Natural Scientific Professions (SACNASP) (Registration no. 400020/93)

TERTIARY EDUCATION

BSc (Hons) cum laude (Geohydrology), University of the Orange Free State, 1979

BSc (Geology, Geography), University of Stellenbosch, 1977

EMPLOYMENT HISTORY

October 2004 –present: CSIR Environmentek, Cape Water Programme (Groundwater Specialist)

Jun 2001 - Oct 2004: Hobbs Consulting / Term consultancy with DWAF's RDM Directorate

Oct 2000 - May 2001: VSA Earth Resource Consultants (PTY) Ltd

Jun 1994 – Sept 2000: VSA GeoConsultants (PTY) Ltd (Director)

Feb 1992 - May 1994: Groundwater Consulting Services cc. (Principal Hydrogeologist)

Aug 1988 - Jan 1992: Watermeyer Legge Piesold & Uhlmann (Senior Hydrogeologist)

Jan 1978 - Jul 1988: Directorate Geohydrology, Dept. Water Affairs and Forestry (Hydrologist)

SELECTED RELEVANT PROJECT EXPERIENCE

- Intermediate groundwater Reserve determination for quaternary catchments A21A and A21B
- Assist the DWAFs Directorate: Resource Directed Measures with all aspects of preliminary groundwater Reserve determinations in terms of sections 14(1)(b) and 17(1) of the National Water Act (Act No. 36 of 1998)
- Various groundwater risk assessments associated with on-site sanitation and other municipal, industrial and agricultural waste disposal facilities, as well as with residential development
- Comprehensive assessment of geohydro-environmental impacts associated with coal mining next to the Vaal River near Sasolburg, Free State Province
- Prepare water environment monitoring reports for ISO14001 audit purposes on behalf of Sigma Colliery, Sasolburg
- Undertake numerous EIA/EMPR-related impact assessments of the groundwater environment in regard to various proposed developments

CURRICULUM VITAE

TIMOTHY HART

UCT Archaeology, Archaeology Contracts Office (ACO)

Archaeologist and General Heritage Practitioner

SKILLS BASE AND CORE COMPETENCIES

- Twenty (20) years experience in the archaeology and heritage specialist field
- Experienced in undertaking Archaeological assessments, Heritage Impact Assessments, Heritage Conservation Planning. ASAPA accredited for pre-colonial archaeology, colonial period, rock art, industrial archaeology, coastal archaeology, grave relocation
- Led and completed over 400 projects throughout the country ranging from minor assessments to participating as a specialist in a number of substantial EIA's as well as international research projects
- Professional member (no 50) Association of Southern African Professional Archaeologists (ASAPA)
- Principal Investigator, cultural resources management section (ASAPA)
- Professional member in specialist and generalist categories Association of Heritage Assessment Professionals
- Founder member of Association of Heritage Assessment Professionals
- Founder member and secretary CRM section ASAPA (1995)
- Council member (1995 – 2000) ASAPA
- Built environment and landscape committee member (2004-2007) Heritage Western Cape (provincial compliance authority for heritage)
- Honorary member of 2 historical associations.

TERTIARY EDUCATION

- Bachelor of Arts in Archaeology and Psychology
- BA Honours in archaeology
- MA in Archaeology

SELECTED RELEVANT PROJECT EXPERIENCE

- Development of a heritage management plan and ongoing annual mitigation for the De Beers Namaqualand Mines Division
- Heritage management for Namakwa Sands and other west coast and Northern Cape mining firms
- Specialist Specialist consultant – Eskom's Kudu Integration project (identifying transmission line routes across Namaqualand)
- Specialist consultant – Eskom's Atantis Open Cycle Gas Turbine project
- Specialist consultant – Nuclear 1
- Specialist consultant - PBMR
- Contracted by University of Stanford to set up and participate in Duinefontein Archaeological Research project, Koeberg Nuclear Power Station
- Specialist consultant – Department of Water Affairs raising of Clanwilliam Dam project
- Specialist consultant to De Beers Namaqualand Mines (multiple projects since 1995)

CURRICULUM VITAE

ADRIAN W.D. JONGENS

Jongens Keet Associates
Noise Specialist

SKILLS BASE AND CORE COMPETENCIES

- Thirty-six (36) years experience in the environmental noise and transportation noise specialist field
- Conducted numerous studies and submitted reports and recommendations to government departments, defence institutions, local authorities, local & international industries and private bodies relating to noise & vibration control, building and architectural acoustics, community noise, environmental noise and transportation noise throughout sub-Saharan Africa
- Experienced in all aspects relating to building & architectural acoustics, noise & vibration control, community & environmental noise and noise management policy formulation
- Experienced in the measurement, analysis and control of noise from machines and industrial processes
- Experienced in undertaking specialist investigations in accordance with the EIA Regulations & other relevant legislation
- Registered with the Engineering Council of South Africa
- Member of the South African Institute of Electrical Engineers
- Member of the Nederlands Akoestisch Genootschap
- Member SABS technical committee for Acoustics & Noise Abatement
- Author and co-author of more than 40 research publications

TERTIARY EDUCATION

B.Sc. (Electrical Engineering) University of Cape Town (1971)

M.Sc. (Electrical Engineering) University of Cape Town (1993)

SELECTED RELEVANT PROJECT EXPERIENCE

- Abridged list of previous contracts relating to the present study:
 - * Royal Dutch Shell oil refinery, Rotterdam, The Netherlands
 - * Pretoria Portland Cement limestone mine, Eastern Cape
 - * Rand Refinery, Germiston, Transvaal
 - * Natal Portland Cement Simuma cement factory, Oribi Gorge, Natal
 - * Anglo Alpha limestone mine and cement factory, Saldanha, Cape
 - * Maputo Steel mill and slurry pipeline from Phalaborwa to Maputo
 - * Kudu gas power plant, Oranjemund, Namibia
 - * Saldanha Steel Plant, Saldanha, Cape
 - * African Portland Cement factory & mines, Otjiwarango, Namibia
 - * De Beers diamond mines, Cullinan
 - * Bellville South Waste Disposal site
 - * Landfill alternative site investigations at Atlantis and Kalbaskraal
 - * Eskom Open Cycle Gas Turbine plants at Atlantis and Mossel Bay

CURRICULUM VITAE

MARK PINDER

Arup (Pty) Ltd

Associate Engineer

SKILLS BASE AND CORE COMPETENCIES

- Eighteen (18) years experience, specialising in infrastructure and transportation planning
- Twelve (12) experience in the Cape Metropolitan Area with the last 7 years in the Blaauwberg area
- Professional Engineer, Engineering, Council of South Africa (ECSA)
- MSAICE
- Experience in the following fields:
 - * Roads - Conceptual planning, design and construction supervision; Asset Management, rehabilitation and maintenance; Upgrading existing infrastructure
 - * Transportation & Traffic - Road network classification; Transportation planning; Traffic engineering (Traffic Impact Assessments and Statements); Access Management, Bicycle & Pedestrian Network; Planning; Outdoor Advertising & Signage; Economic evaluation of new road projects
 - * Development Facilitation - Site development plans; Public private partnerships; Development Contributions (BICL's); Land use applications
 - * Urban and Rural Infrastructure - Services for new residential and commercial developments; Development corridor studies; Public Transport infrastructure
 - * Public Transport Infrastructure - Public Transport Interchanges, Bus Stop planning and placement

TERTIARY EDUCATION

B Sc (Civil) University of Cape Town, 1985,

Graduate Diploma in Civil Engineering (GDE), 1998

SELECTED RELEVANT PROJECT EXPERIENCE

- A review of the Metropolitan Road Network (Class 1, 2& 3 routes) in Table View North Structure Plan and in the vicinity of the N7/M12 Interchange
- Koeberg Road Management Strategy
- Blaauwberg Road Management Strategy
- Review and assessment of Traffic Impact Assessments (TIA's) for Parklands, Sunningdale, Big Bay, Century City and Royal Ascot
- A wide range of TIAs for the private developers, schools, commercial developments etc.
- Access management on all roads
- Blaauwberg Bicycle Master Plan
- Evaluation of Bill Board and other Outdoor Advertising Signage and the Traffic Impact Assessments associated with it

CURRICULUM VITAE

LOURENS MARTINUS DU PLESSIS

MetroGIS (Pty) Ltd

Visual Assessment and Geographic Information Systems specialist

SKILLS BASE AND CORE COMPETENCIES

- Seventeen (17) years experience in the application of Geographical Information Systems (GIS) in Environmental Planning and Management
- Extensive practical knowledge in spatial analysis, environmental modelling and digital mapping, and applies this knowledge in various scientific fields and disciplines
- Experience in applying GIS expertise in Environmental Impact Assessments, State of the Environment Reports and Environmental Management Plans
- Familiar with the "Guidelines for Involving Visual and Aesthetic Specialists in EIA Processes" (Provincial Government of the Western Cape: Department of Environmental Affairs and Development Planning) and utilises the principles and recommendations stated therein to successfully undertake visual impact assessments

TERTIARY EDUCATION

BA (University of Pretoria) Geography and Anthropology (Majors), 1993

EMPLOYMENT HISTORY

Nov 1999 – present: MetroGIS, Director / Project Manager

Oct 1997 – Oct 1999: GISBS (Geographic Information Systems Business Solutions - Q Data Consulting), Project Manager

April 1990 – Sept 1997: GisLAB CC (Geographic Information Systems Laboratory - University of Pretoria), Member / Project Manager

SELECTED RELEVANT PROJECT EXPERIENCE

- 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
 - * Matimba B proposed coal-fired power station
 - * Zeus to Mercury transmission line (comparative viewshed analyses)
 - * Mercury-Ferrum-Garona transmission line integration
 - * Mmamabula (Botswana) transmission line and power station viewshed analyses 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
 - * Concentrating Solar Power (CSP) plant
- Environmental Impact Assessments (EIA) the utilisation of GIS based systems to determine and manage environmental impacts. Various projects all over South Africa

CURRICULUM VITAE MICHAEL FABRICIUS

The Journey

International Tourism Consultant

SKILLS BASE AND CORE COMPETENCIES

- More than 15 years experience in tourism management
- Experience in providing strategic tourism management solutions to governments, private corporations, tourism destinations and development agencies at international, national, provincial/regional and local level
- Expertise in policy formulation; strategy facilitation, formulation and planning; training and capacity building; positioning, branding strategy and brand development; marketing strategy formulation, execution and campaigns; project feasibility, impact assessments, planning and execution; community based tourism development; institutional design and re-engineering; tourism information systems and services; and market research, analysis and segmentation

TERTIARY EDUCATION

BA (1983) – University Free State, (UFS), South Africa.

HED (Higher Education Diploma) (1983) - University Free State, (UFS), South Africa

BA (hons) (cum laude) (1985) – Urban & economic Geography - University Free State (UFS), South Africa.

MA (1988) – Urban & Economic Geography – University of Port Elizabeth (UPE), South Africa.

PhD (1996) – Geography - Thesis: "A partnership approach to socio-economic impact management" - University of Port Elizabeth (UPE)

MBL (4-year Master of Business Leadership) (cum laude) (2001) – University of South Africa (UNISA) School of Business Leadership. Final year Thesis: "Competitive strategies for Tourism Destinations".

EMPLOYMENT HISTORY

Prior to establishing tourism a consultancy practice in 2004 he served, among others, as Director of Domestic Tourism of South African Tourism, Chief Director of Tourism in the national Department of Environmental Affairs and Tourism and CEO of the Western Cape Tourism Board, where he was responsible for coordinating tourism management and marketing across the Western Cape Province

SELECTED RELEVANT PROJECT EXPERIENCE

- Conducting an Institutional and Legislative Review of the Northern Cape Tourism Authority for the Northern Cape Provincial Government
- Formulating a White Paper on Tourism and implementation Plan for the Northern Cape Provincial Government
- Planning and managing a tactical marketing campaign of the Cape Winelands for the Winelands District Municipality
- Conducting a mentoring programme for tourism managers and staff of the Cape Winelands District Municipality
- Producing a Handbook on Tourism Destination Management on behalf of UNWTO in association with TEAM
- Consultant for the World Tourism Organization as facilitator for WTO seminars on tourism destination management and positioning in Madrid (regular multi-country practicum), Indonesia (Bali), Ethiopia, Philippines, Seychelles, Nigeria, South Africa, etc.

CURRICULUM VITAE

TONY BARBOUR

Environmental Consultant and Researcher

SKILLS BASE AND CORE COMPETENCIES

- Eighteen (18) years experience in the field of environmental management
- Undertaken in the region of 20 SIAs throughout South Africa
- Author of the Guidelines for Social Impact Assessments for EIAs commissioned by the Department of Environmental Affairs and Development Planning (DEA&DP) in the Western Cape
- Developed SIA Guidelines for the Department of Water Affairs and Forestry
- Work experience in South Africa, Namibia, Botswana, Zambia, Lesotho and Swaziland

TERTIARY EDUCATION

BSc (Geology and Economics) Rhodes, 1984

BEcon (Hons) Rhodes, 1985

MSc (Environmental Science) University of Cape Town, 1992

EMPLOYMENT HISTORY

Private Consultant: November 2004-current.

University of Cape Town: August 1996-October 2004

Environmental Evaluation Unit (EEU), University of Cape Town. Senior Environmental Consultant and Researcher.

1991-1996: Ninham Shand Consulting (Cape Town). Senior Environmental Scientist.

1996-August 2000: Steffen, Robertson and Kirsten (SRK Consulting) – Associate Director, Manager Environmental Section, SRK Consulting, Cape Town.

Lecturing: 1990-current

- University of Cape Town: Environmental Economics, Social Impact Assessment, Strategic Environmental Assessment and Environmental Impact Assessment.
- Cape Technikon: Environmental Economics and Waste Management.
- Peninsula Technikon: Environmental Economics and Waste Management.

SELECTED RELEVANT PROJECT EXPERIENCE

- Social Assessment for Darling Wind Farm, Western Cape, South Africa (2001 – 2002)
- Portnet Saldanha, Western Cape, SA. EIA for the expansion of a bulk iron ore export facility at the Port of Saldanha (2000)
- Social Assessment for road up-grade between Gansbaai and Bredadorp, Southern Cape (2005).
- Social Assessment Zeekoevlei Golf Estate, Somerset West, Western Cape (2005)
- Social Assessment Silwersand Golf and Resort Estate, Robertson, Western Cape (2003).
- Social Assessment for Valkenberg East Site, Cape Town (2003)
- Development of Social Impact Assessment Guidelines for the Western Cape DEA&DP (2006)
- Social Assessment for Riversonderend Road By-pass (1991)
- Internal Review Consultant for Golder Associates on Namakwa Sands Heavy Mineral Mining EIA, Western Cape (current)
- Review of EIA for Zeekoevlei Golf Course Estate, Somerset West, Western Cape (2005);
- Review of EIA for Oostenberg Waste Transfer Station, Brackenfell, Western Cape (2004);
- Review of EIA for N7 Road Up-grade, Clanwilliam, Western Cape (2002)

CURRICULUM VITAE

JONATHAN CROWTHER

Environmental Scientist

CCA Environmental (PTY) Ltd

SKILLS BASE AND CORE COMPETENCIES

- Twenty (20) years experience in the environmental management field
- Experience in the management, review and undertaking of environmental studies for various development projects throughout South Africa
- Registered Professional Natural Scientist – Environmental Scientist
- Certified as an Environmental Practitioner with the ICB
- Member of International Association for Impact Assessment
- Past President of IAIAAsa
- Past member of IAIAAsa Western Cape Branch
- Member of ICB Certification Committee
- Member of Institute of Waste Management

TERTIARY EDUCATION

Bachelor of Science (Honours) Geology, Rhodes University, 1983

MSc Environmental Science, University of Cape Town, 1988

EMPLOYMENT HISTORY

April 2004 – Present: Managing Director, CCA Environmental (Pty) Ltd, Cape Town

1993 – March 2004: Partner, Crowther Campbell & Associates, Cape Town

1992 – 1993: Knight Hall Hendry & Associates, Cape Town

1990 – 1991: Barrie Fielder Engineering Geologists, London, U.K.

1988 – 1990: Knight Hall Hendry & Associates, Durban

1987 – 1988: Division of Earth, Marine and Atmospheric Science and Technology (Ematek), CSIR, Stellenbosch

1984 – 1986: Mining Corporation, Pretoria

SELECTED RELEVANT PROJECT EXPERIENCE

- Project manager for the EIA for the proposed Ibhubesi Gas project and related infrastructure, West Coast, South Africa. 2006 – current
- Project management for the EIA and EMP for the proposed South Coast Gas Development project in Petroleum Block 9 off the coast of South Africa. 2004 – present
- Project management for the EIA, EMP and ECO for the upgrading of the road between Gansbaai and Bredasdorp. 2005 – present
- Project management of the EIA for the processing and disposal of Sulphur produced at the Milnerton Oil refinery. 2001- 2002
- Scoping Study, Construction EMP and Operation EMP for the rezoning and development of Farm Rondeberg Flats, No. 116 , West Coast. 1999 – 2000
- EIA for the proposed development of the Melkbosstrand golf village, Melkbosstrand. 1997
- Process facilitation of the EIA for the proposed extension of the SFF Association oil loading at Saldanha Bay. 1995