

#### **Personal Details**

| Date of Birth  | 15 June 1975             |
|--|--------------------------|
| Nationality, Race  | British, Black African   |
| Gender   | Male                     |
| No. of Years' Experience Post First Relevant Qualification | 22 years                 |
| No. of Years' Experience Post<br>Professional Registration | 16 years                 |
| Current Employer   | GA Environment (Pty) Ltd |
| <b>Current Position</b>                                    | Executive                |

## **Professional Registrations**

| Institution, Country   | Classification, Membership Number                               | Year |
|--|---|------|
| Environmental Assessment<br>Practitioners Association of<br>South Africa (EAPASA)                      | Registered Environmental Assessment Practitioner (EAP)          | 2020 |
| Institute of Directors in South Africa (IoDSA)   | Member<br>Membership number: 38855075                           | 2016 |
| South African Council for<br>Natural Scientific Professions<br>(SACNASP), South Africa                 | Professional Natural Scientist:<br>Membership number: 400135/05 | 2005 |
| South African Chapter,<br>International Association of<br>Impact Assessment, South<br>Africa (IAIA-sa) | Membership number: 6385   | 2007 |
| South African Association of Botanists, South Africa   | Member  | 2000 |
| British Ecological Society,<br>United Kingdom (BES)  | Member  | 2000 |

#### **Academic Qualifications**

| Institution, Country                          | Degree / Diploma  | Year |
|---|---|------|
| University of the Witwatersrand, South Africa | Master of Science: Animal, Plant & Environmental Sciences | 2002 |
| University of Nigeria                         | Bachelor of Science (Honours): Botany & Chemistry         | 1999 |

## **Training**

| Service Provider                                  | Type of Training                                   | Year |
|---|--|------|
| Legislative Compliance<br>Specialists             | Legal Liability in OHS Act, 85 of 1993             | 2019 |
| South African Certification and Auditing Services | Certificate in ISO 9001:2008 Implementation Module | 2015 |



| Service Provider  | Type of Training                                 | Year |
|---|--|------|
| Steam Legal Compliance<br>Solutions                       | Certificate in Construction Regulations          | 2015 |
| Green Building Council of South Africa (GBCSA)            | Green Building Professional Accreditation Course | 2013 |
| International Association for Public Participation (IAP2) | Public Participation – Foundation Course         | 2007 |
| University of Pretoria                                    | Wetland Delineation, Rehabilitation & Management | 2005 |

#### **Languages and Proficiency (Excellent/Good/Fair)**

| Name of Language | Speak      | Read       | Write      |
|------------------|------------|------------|------------|
| English          | Excellent  | Excellent  | Excellent  |
| Spanish          | Proficient | Proficient | Proficient |

#### **Countries of Work Experience**

- South Africa
- Swaziland
- Lesotho
- Nigeria

#### **Overview**

Mr Woghiren has twenty-two years' experience in the Environmental Management discipline. He has been registered as a Professional Natural Scientist (Ecological Scientist) a legal requirement for professional consulting in natural science in South Africa, since 2005. He registered as an Environmental Assessment Practitioners (EAP) in 2020 with the Environmental Assessment Practitioners Association of South Africa, the sole registration authority appointed by the Minister in terms of Section 24H of NEMA. He has also been a member of the British Ecological Society since 2000. He completed his MSc in 2002 at the University of the Witwatersrand, where he investigated the nutrient dynamics of a savanna (bushveld) in the Kruger National Park in the SAFARI 2000 research programme. He has extensive experience in applying various integrated environmental management tools, such as Strategic Environmental Assessments, Environmental Impact Assessments, and Environmental Management Programmes. His technical experience ranges from terrestrial ecology, wetland ecology, delineation, rehabilitation and management, integrated environmental reporting, integrated sustainability reporting, biodiversity mapping and planning to environmental policy formulation and climate change adaptation and mitigation strategies.

He has been responsible for assessments of a large number of projects in various sectors involving waste, water, wetland resources, mixed-use urban developments, linear infrastructure (roads, railways, ports, power lines, pipelines, etc.), and mining operations. He has led multidisciplinary teams on several projects in South Africa and several countries in the SADC region since 2002. Since January 2018 he has been the Executive and Lead Environment Scientist at GA Environment, where he is responsible for technical peer review and business development among others.

One of his more prestigious roles has been to lead a team of Safety, Health, Environment and Quality Management (SHEQ) auditors for the Advance Infrastructure of Phase 2 of the Lesotho Highlands Development Authority (LHDA).





#### **Previous Positions Held**

| Duration     | Employer, Country  | Position   |
|--------------|--|--|
| 2013 to Date | GA Environment (Pty) Ltd, South Africa                                     | Executive & Lead Environmental Assessment Practitioner/Scientist   |
| 2012         | GladAfrica Holdings (Pty) Ltd, South Africa                                | Director: Environmental Management & Board Member                  |
| 2010 to 2012 | Tholoana Sustainable Development & Environmental Consultants, South Africa | Managing Member  |
| 2008 to 2009 | Strategic Environmental Focus,<br>South Africa                             | Branch Manager & Lead Environmental Scientist                      |
| 2007 to 2008 | Strategic Environmental Focus,<br>South Africa                             | Project Leader/ Senior<br>Environmental Assessment<br>Practitioner |
| 2002 to 2006 | Strategic Environmental Focus,<br>South Africa                             | Terrestrial Ecologist/EAP  |
| 2001         | PD Naidoo & Associates, South Africa                                       | Environmental Assistant  |
| 1994 to 1998 | Uhere University Centre, Nigeria   | Assistant Director   |

## **Current and Completed Projects in the Last Ten Years**

## **Road Development Projects**

| Project Name: Proposed C<br>Water Use Authorisation) | onstruction of the   | SANRAL R573 M          | loloto Road (EA, Mining Permit and |  |
|--|--|------------------------|------------------------------------|--|
| Client   | KBK Engineers  |                        |                                    |  |
| Project Description                                  | <ul> <li>Upgrading of the R573 (Stormvoel to Baviaanspoort Road)</li> <li>Construction of the PWV2 between Kameeldrift Police Station and the N1/N4 Interchange</li> <li>Environmental Authorisation Process for the mining of four Quarries along the R573 Moloto Road</li> </ul> |                        |                                    |  |
| <b>Contract Number</b>                               | NRA P.002-023-2  | NRA P.002-023-2017/ENV |                                    |  |
| Position Held/Role                                   | Project Lead   |                        |                                    |  |
| Project Value  | R1 138 782.60  |                        |                                    |  |
| <b>Project Start Date</b>                            | December 2016  |                        |                                    |  |
| <b>Project End Date</b>                              | November 2021  |                        |                                    |  |
| Location   | Pretoria   |                        |                                    |  |
| Tasks or Activities Performed/ Key Responsibilities  | <ul> <li>Contract Management</li> <li>Ensuring project progress in line with client requirements</li> <li>Overseeing project team</li> </ul>   |                        |                                    |  |
| Reference Name                                       | Landline No.   | Cell Phone No.         | E-mail Address                     |  |
| Martin Boonstra                                      | 012 348 1822   | 082 322 8688           | martinb@kbkengineers.co.za         |  |





| Project Name: Lesotho Hi                                  | ghlands Water Pr   | oject Phase II Adv   | ance Infrastructure            |  |
|---|--|--|--------------------------------|--|
| Client  | Lesotho Highlan  | Lesotho Highlands Development Authority (LHDA)   |                                |  |
| Project Description                                       | a dam, transfer  | SHEQ audits for Phase II of the LHWP, which comprises the construction of a dam, transfer tunnel, advance infrastructure (including roads and major bridges), and associated environmental, health, and social studies |                                |  |
| Position Held/Role  | Project Director   |  |                                |  |
| Project Value   | Multi-billion Ma   | Multi-billion Maloti/Rand bi-national project  |                                |  |
| <b>Project Start Date</b>                                 | September 2018   | September 2018   |                                |  |
| <b>Project End Date</b>                                   | September 2021   |  |                                |  |
| Location  | Lesotho  |  |                                |  |
| Tasks or Activities<br>Performed/ Key<br>Responsibilities | <ul> <li>Contract Management</li> <li>Ensuring project progress in line with client requirements</li> <li>Overseeing project team</li> </ul> |  |                                |  |
| Reference Name  | Landline No.   | Cell Phone No.   | E-mail Address                 |  |
| Melissa Moffett   | +266 22 246<br>000   | +27 82 571<br>4842   | Melissa.moffett@lhwp2pmu.co.ls |  |

| Project Name: South Afric                           | an National Road   | s Agency Limited   | (SANRAL) N2 Project |  |
|---|--|--|---------------------|--|
| Client  | South African National Roads Agency (SANRAL)   |  |                     |  |
| Project Description                                 | ·  | Special maintenance (restoration and asphalt overlay) on National Route 2 section 2 between Gordon's Bay T-junction (km 8.618) to Houwhoek (km 38.392) |                     |  |
| Contract number                                     | NRA N.002-020-   | 2017/19  |                     |  |
| Position Held/Role                                  | Project Lead   |  |                     |  |
| Project Value                                       | R141 500 000   | R141 500 000   |                     |  |
| <b>Project Start Date</b>                           | May 2018   | May 2018   |                     |  |
| <b>Project End Date</b>                             | June 2019  |  |                     |  |
| Location  | Grabouw, Western Cape  |  |                     |  |
| Tasks or Activities Performed/ Key Responsibilities | <ul> <li>Contract Management</li> <li>Ensuring project progress in line with client requirements</li> <li>Overseeing project team</li> </ul> |  |                     |  |
| Reference Name                                      | Landline No.   | Cell Phone No.   | E-mail Address      |  |
| T Massingue   | 021 957 4600   |  |                     |  |

| Project Name: Mangau<br>Province, South Africa | ng Metropolitan Municipality Integrated Public Transport Network, Free State   |
|--|--|
| Client   | Mangaung Metropolitan Municipality   |
| Project Description                            | Environmental impact assessments, Water Use Licenses and Provision of environmental advisory on Resource Utilisation, Sustainability and Climate Change Resilience for the planning and construction phases of the Integrated Public Transport Network of the Mangaung Metro |
| Position Held/Role                             | Work Stream Leader & Principal Scientist: Environment & Sustainability   |
| <b>Project Start Date</b>                      | June 2015  |
| <b>Project End Date</b>                        | Ongoing  |





| Location                   | Bloemfontein, Thaba 'Nchu, Botshabelo, Mangaung  |
|----------------------------|--|
| <b>Tasks or Activities</b> | Analysing various routes and options for the feeder routes and trunk routes  |
| Performed/ Key             | to determine likely compliance requirements; overseeing the impact   |
| Responsibilities           | assessments and water use authorisations; developing an appropriate Framework for mainstreaming sustainability in the infrastructure and operational aspects of the network. Developing a Sustainability Action Plan with specific objectives and targets in line with Municipal Climate Change Strategy; Review and assessment of financial provisions for sustainability, and investigating alternative propulsion fuel types for the buses, and facilitation of workshops with officials, compiling and reviewing monthly progress reports of the Work Stream, etc. |

| Project Name: Wonderbo                              | oom Intermodal F                                   | acility, City of Tsh   | vane, Pretoria, South Africa |  |
|---|--|--|------------------------------|--|
| Client  | City of Tshwane                                    | City of Tshwane  |                              |  |
| <b>Project Description</b>                          | Construction of                                    | Construction of a Bus Rapid Transit  |                              |  |
| Position Held/Role                                  | Project Leader                                     |  |                              |  |
| Project Value                                       | R117 million                                       | R117 million   |                              |  |
| <b>Project Start Date</b>                           | July 2017  |  |                              |  |
| <b>Project End Date</b>                             | June 2019  | June 2019  |                              |  |
| Location  | Wonderboom,  | Pretoria   |                              |  |
| Tasks or Activities Performed/ Key Responsibilities | <ul><li>Contract Ma</li><li>Ensuring pro</li></ul> | <ul> <li>Environmental Management and Occupational Health and Safety services</li> <li>Contract Management</li> <li>Ensuring project progress in line with client requirements</li> <li>Overseeing project team</li> </ul> |                              |  |
| Reference Name                                      | Landline No.                                       | Cell Phone No.   | E-mail Address               |  |
| Sphelele Dlamini                                    |  | 073 394 7335   | spheleled@tshwane.gov.za     |  |

| Project Name: Denneboom Intermodal Facility, City of Tshwane, Pretoria, South Africa |   |                  |  |  |
|--|---|------------------|--|--|
| Client   | City of Tshwane   |                  |  |  |
| <b>Project Description</b>   | Construction of a   | a Tshwane Rapid  | Transit Route: Line 2C between         |  |
|  | Watloo/Simon V  | ermooten Interse | ection and Denneboom along Zasm Street |  |
| Position Held/Role   | Project Lead  | Project Lead     |  |  |
| Project Value  | R92 million   |                  |  |  |
| <b>Project Start Date</b>  | July 2017   |                  |  |  |
| <b>Project End Date</b>  | June 2019   |                  |  |  |
| Location   | Mamelodi/Watloo in Pretoria   |                  |  |  |
| Tasks or Activities Performed/ Key   | Environmental Management and Occupational Health and Safety services  |                  |  |  |
| Responsibilities   | <ul> <li>Contract Management</li> <li>Ensuring project progress in line with client requirements</li> </ul> |                  |  |  |
| Deference Name   | Overseeing project team   |                  |  |  |
| Reference Name   | Landline No.  | Cell Phone No.   | E-mail Address                         |  |
| Pitso J. Likano  | 012 358 6269  | 072 524 5663     | pitsol@tshwane.gov.za                  |  |



| Project Name: Environmer<br>Province, South Africa | ntal Impact Assessment of the Menlyn Roads Upgrade in Pretoria, Gauteng               |
|--|---|
| Client   | South African National Roads Agency Ltd and City of Tshwane Metropolitan Municipality |
| <b>Project Description</b>                         | Environmental impact assessment of the Menlyn roads upgrade in Pretoria               |
| Location   | Gauteng, South Africa   |
| Project Start Date                                 | September 2006  |
| Project End Date                                   | December 2008   |

#### **Basic Assessments, Environmental Impact Assessments and Water Use Licences**

| Project Name: Volsoorus Ext 9 Social Housing, City of Ekurhuleni, Gauteng Province, South Africa |  |  |  |
|--|--|--|--|
| Client   | Human Settlements Department: Ekurhuleni Metropolitan Municipality   |  |  |
| Project Description  | GA Environment was appointed by the Human Settlements Department of Ekurhuleni Metropolitan Municipality to conduct a basic assessment process for the proposed development. The purpose of a basic assessment is to determine significant impacts early in the project cycle so that recommendations can be built into the design and cost-benefit analysis without causing major delays or increased design costs. |  |  |
| Position Held/Role   | Lead Environmental Assessment Practitioner   |  |  |
| Location   | Vosloorus, Gauteng   |  |  |
| <b>Project Start Date</b>  | September 2015   |  |  |
| Project End Date   | December 2016  |  |  |

| Project Name: Basic As<br>Rehabilitation Project | sessment and Water Use Licence Application for the Centurion Lake  |
|--|--|
| Client   | City of Tshwane Metropolitan Municipality  |
| Project Description                              | Proposed construction of a system of wetlands, silt traps and litter traps for<br>the rehabilitation of the lower Hennops River and the Upper Kaalspruit<br>system |
| Position Held/Role                               | Lead Environmental Assessment Practitioner   |
| Location   | Tshwane, South Africa  |
| <b>Project Start Date</b>                        | September 2012   |
| Project End Date                                 | December 2015  |

| Project Name: Water Use Licence for the Apies River Berm and Rehabilitation Project |  |  |
|---|--|--|
| Client  | City of Tshwane Metropolitan Municipality                                  |  |
| <b>Project Description</b>  | Proposed construction of two berms along the reach of the Apies River from |  |
|   | the K8 Rosslyn Bridge to the Wonderboom junction for flood management      |  |
|   | and stormwater attenuation along the Apies River                           |  |
| Position Held/Role  | Lead Environmental Assessment Practitioner                                 |  |
| Location  | Tshwane, South Africa  |  |
| <b>Project Start Date</b>   | January 2013   |  |
| Project End Date  | October 2013   |  |



| Project Name: Four Enviro  | nmental Impact Assessments for the Development of Solar-powered   |
|--|---|
|  | ts in the Rustenburg, North West Province   |
| Client   | nxG Energy cc.  |
| Project Description  | Roles included project technical advisory and leadership of project team, financial control, programme management and client liaison for over 480MW of power generation projects.                         |
| Position Held/Role   | Project Leader  |
| Location   | North West Province, South Africa   |
| Project Start Date   | May 2012  |
| Project End Date   | September 2012  |
| Project Name: Basic Assess<br>Tshwane, Gauteng Provinc   | sment Process for Vermeulen Point Hills Mixed-use Development, City of<br>se, South Africa.   |
| Client   | MMI Holdings (Pty) Ltd on behalf of Department of Local Government & Housing.   |
| Project Description  | Basic Assessment Process for Vermeulen Point Hills mixed-use development  |
| Position Held/Role   | Project Manager   |
| Location   | Tshwane, South Africa   |
| Project Start Date   | May 2011  |
| Project End Date   | December 2011   |
|  | Extension 5, Mogale City, Gauteng Province  |
| Client   | MMI Holdings (Pty) Ltd on behalf of Department of Local Government & Housing.   |
| Project Description  | Munsieville Extension 5, Mogale City  |
| Position Held/Role   | Project Manager/Environmental Control Officer   |
| Location   | Gauteng, South Africa   |
| Project Start Date   | July 2011   |
| Project End Date   | December 2011   |
|  | wnships Programme Strategic Environmental input on 20 Poorest<br>Wards in Gauteng for the Office of the Premier   |
| Client   | MMI Holdings (Pty) Ltd on behalf of Matlong Consortium  |
| Project Description  | Priority townships programme strategic environmental input on 20 poorest townships and 50 poorest wards in Gauteng for the office of the Premier – MMI Holdings (Pty) Ltd on behalf of Matlong Consortium |
| Position Held/Role   | Project Manager & Environmental Scientist   |
| Location   | Gauteng, South Africa   |
| Project Start Date   | September 2015  |
| Project End Date   | December 2016   |
| The state of the s | Extension 5: ROD Amendment and Environmental Management   |
| Programme, Mogale City, (  | Gauteng Province  |





| Project Description | Munsieville Extension 5: ROD amendment and environmental management programme, Mogale City |
|---------------------|--|
| Position Held/Role  | Project Manager & Environmental Control Officer  |
| Location            | Gauteng, South Africa  |
| Project Start Date  | September 2015   |
| Project End Date    | December 2016  |

| Project Name: Environmental Impact Assessment Process for Avianto Estates |   |  |
|---|---|--|
| Client  | D'Oliveira Developments (Pty) Ltd.  |  |
| Project Description   | A 260ha mixed-use development incorporating housing for LSM groups 1 to 10 in Mogale City, Gauteng Province, South Africa. Project successfully completed with an environmental authorisation in July 2012. |  |
| Position Held/Role  | Project Manager & Lead Environmental Assessment Practitioner  |  |
| Project Start date  | July 2012   |  |
| Location  | Gauteng, South Africa   |  |
| Project Start Date  | September 2015  |  |
| Project End Date  | December 2016   |  |

| Project Name: Environr<br>River's Arch | nental Impact Assessment and Water Use Licence Application for Stone |
|--|--|
| Client                                 | Thaba Ya Batswana Eco-tourism (Pty) Ltd                              |
| <b>Project Description</b>             | A proposed 89ha sixed-use development in Johannesburg.               |
| Position Held/Role                     | Project Director & Environmental Assessment Practitioner             |
| Location                               | Gauteng, South Africa  |
| Project Start Date                     | September 2015   |
| <b>Project End Date</b>                | December 2016  |

# Project Name: Basic Assessment Process for Orient Hills Mixed Land Use Development Mogale City, Gauteng Province, South Africa

| Client              | Acquion Global Projects (Netherlands based client)                               |
|---------------------|--|
| Project Description | Basic assessment process for Orient Hills mixed land use development Mogale City |
| Position Held/Role  | Project Manager  |
| Location            | Gauteng, South Africa  |
| Project Start Date  | September 2015   |
| Project End Date    | December 2016  |

| Project Name: ROD Amendment: Westgate Park Extension 9 |   |  |
|--|---|--|
| Client   | Bagale Consulting   |  |
| <b>Project Description</b>                             | Upgrading and formalisation of Princess Plot Informal Settlement into affordable housing with mixed use typologies. |  |
| Position Held/Role                                     | Project Manager   |  |
| Project date   | Successfully completed in 2012  |  |



| Location                  | Gauteng, South Africa |
|---------------------------|-----------------------|
| <b>Project Start Date</b> | September 2015        |
| Project End Date          | December 2016         |

| Project Name: Compilation of Scoping Report for a Mixed-use Development on William Nicol, Hurlingham, Gauteng Province, South Africa. |  |
|---|--|
| Client  | RPP Developments (Pty) Ltd   |
| Project Description   | Compilation of scoping report for a mixed-use development on William Nicol, Hurlingham |
| Position Held/Role  | Project Manager  |
| Location  | Gauteng, South Africa  |
| Project Start Date  | October 2002   |
| Project End Date  | June 2003  |

| Project Name: Basic Assessment for the Upgrading of Internal Roads and Stormwater Management      |
|---|
| Infrastructure in the Northern Areas of Pretoria: in Moretele/Kekana Gardens, Mandela Village and |
| Stinkwater  |

| Julikwatei                |   |
|---------------------------|---|
| Client                    | City of Tshwane Metropolitan Municipality   |
| Position Held/Role        | Principal Environmental Assessment Practitioner   |
| Project Description       | Basic assessment for the upgrading of internal roads and stormwater management infrastructure in the northern areas of Pretoria: in Moretele/Kekana Gardens, Mandela Village and Stinkwater |
| Project Value             | R368 768 377, 59  |
| <b>Project Start Date</b> | April 2014  |
| <b>Project End Date</b>   | April 2015  |
| Location                  | Gauteng, South Africa   |
| Tasks or Activities       | Basic assessments   |
| Performed/ Key            | Water use license application   |
| Responsibilities          | <ul> <li>Coordination and management of specialist studies and public participation processes</li> </ul>  |

#### **Environmental (ECO) and Health and Safety Auditing**

| • •                        | ,   |  |
|----------------------------|---|--|
| Project Name: Germist      | Project Name: Germiston Fire Station Social Housing (Phase 1 and 2) |  |
| Client                     | Human Settlements Department: Ekurhuleni Metropolitan Municipality  |  |
| <b>Project Description</b> | Germiston fire station social housing (phase 1 and 2)               |  |
| Position Held/Role         | Project Leader  |  |
| <b>Project Start Date</b>  | January 2016  |  |
| Project End Date           | January 2018  |  |
| Location                   | Germiston, South Africa   |  |
| <b>Tasks or Activities</b> | Ensuring project progress in line with client requirements          |  |
| Performed/ Key             | Overseeing project team   |  |
| Responsibilities           |   |  |

| Project Name: Delville Social Housing Development (122 units) |  |
|---|--|
| Client  | Human Settlements Department: Ekurhuleni Metropolitan Municipality |
| <b>Project Description</b>                                    | Delville Social Housing development (122 units)                    |
| Position Held/Role  | Project Leader   |





| Project Start Date      | January 2016   |
|-------------------------|--|
| <b>Project End Date</b> | April 2017   |
| Location                | Germiston, South Africa                                    |
| Tasks or Activities     | Ensuring project progress in line with client requirements |
| Performed/ Key          | Overseeing project team                                    |
| Responsibilities        |  |

| Project Name: Palm Ridge Ext 9 Serviced Stands Programme (1350 erven) |  |
|---|--|
| Client  | Human Settlements Department: Ekurhuleni Metropolitan Municipality |
| <b>Project Description</b>  | Palm Ridge Ext 9 serviced stands programme (1350 erven)            |
| Position Held/Role  | Project Leader   |
| <b>Project Start Date</b>   | October 2015   |
| <b>Project End Date</b>   | June 2021  |
| Location  | Alberton, South Africa   |
| Tasks or Activities   | Ensuring project progress in line with client requirements         |
| Performed/ Key  | Overseeing project team  |
| Responsibilities  |  |

| Project Name: Balmoral Ext 4 Serviced Stands Programme (1089 erven) |  |
|---|--|
| Client  | Human Settlements Department: Ekurhuleni Metropolitan Municipality |
| <b>Project Description</b>  | Balmoral Ext 4 serviced stands programme (1089 erven)              |
| Position Held/Role  | Project Leader   |
| <b>Project Start Date</b>   | June 2016  |
| <b>Project End Date</b>   | January 2021   |
| Location  | Boksburg, Gauteng  |
| Tasks or Activities   | Ensuring project progress in line with Client requirements         |
| Performed/ Key  | Overseeing Project team  |
| Responsibilities  |  |

| Project Name: Chief Albert Luthuli Ext 4 Serviced Stands Programme (326 erven) |  |
|--|--|
| Client   | Human Settlements Department: Ekurhuleni Metropolitan Municipality |
| <b>Project Description</b>   | Chief Albert Luthuli Ext 4 serviced stands programme (326 erven)   |
| Position Held/Role   | Project Leader   |
| <b>Project Start Date</b>  | June 2016  |
| <b>Project End Date</b>  | April 2017   |
| Location   | Chief Albert Luthuli, Gauteng                                      |
| Tasks or Activities  | Ensuring project progress in line with Client requirements         |
| Performed/ Key   | Overseeing Project team  |
| Responsibilities   |  |

| Project Name: Mckenzieville Ext 2 Serviced Stands Programme |  |
|---|--|
| Client  | Human Settlements Department: Ekurhuleni Metropolitan Municipality |
| <b>Project Description</b>                                  | Mckenzieville Ext 2 serviced stands programme                      |
| Position Held/Role  | Project Leader   |
| <b>Project Start Date</b>                                   | June 2016  |
| <b>Project End Date</b>                                     | April 2017   |
| Location  | Nigel, South Africa  |





| Tasks or Activities Performed/ Key Responsibilities | <ul> <li>Ensuring project progress in line with Client requirements</li> <li>Overseeing Project team</li> </ul> |
|---|---|
| <b>Project Name: Develop</b>                        | ment of Moleleki Ext. 2   |
| Client  | Human Settlements Department: Ekurhuleni Metropolitan Municipality  |
| <b>Project Description</b>                          | Development of Moleleki Ext. 2  |
| Position Held/Role                                  | Project Leader  |
| <b>Project Start Date</b>                           | May 2017  |
| <b>Project End Date</b>                             | February 2018   |
| Location  | Katlehong, South Africa   |
| Tasks or Activities                                 | Ensuring project progress in line with Client requirements  |
| Performed/ Key Responsibilities                     | Overseeing Project team   |

#### **Climate Change Mitigation & Adaptation Experience**

| <b>Project Name: Municipal</b> | Response to Clim   | ate Change: Natio  | nal Climate Change Response Policy |  |
|--------------------------------|--|--|------------------------------------|--|
| (March 2009)                   |  |  |                                    |  |
| Client                         | City of Johannesburg (COJ) on behalf of the South African Local Government     |  |                                    |  |
|                                | Association (SA  | LGA)   |                                    |  |
| <b>Project Description</b>     | Municipal respo  | onse to climate cha  | ange                               |  |
|                                | National Climat  | e Change Respons   | se Policy                          |  |
| Position Held/Role             | Project Leader   | & Technical Peer I   | Reviewer                           |  |
| <b>Project Start Date</b>      | 2009   | 2009   |                                    |  |
| <b>Project End Date</b>        | 2009   | 2009   |                                    |  |
| Location                       | Gauteng, South   | Gauteng, South Africa  |                                    |  |
| <b>Tasks or Activities</b>     | Preparation and  | Preparation and technical peer review of final discussion document for the |                                    |  |
| Performed/ Key                 | 2009 National Climate Change Response Policy development summit,               |  |                                    |  |
| Responsibilities               | Gallagher Convention Centre, Midrand, 3-6 March 2009). Coordination of         |  |                                    |  |
|                                | Municipal workshops in 7 of the country's 9 provinces, to collate and report   |  |                                    |  |
|                                | on their activities in response to climate change, in preparation for National |  |                                    |  |
|                                | Indaba in East London (July 2009).   |  |                                    |  |
| Reference Name                 | Landline No.   | Cell Phone No.   | E-mail Address                     |  |
| Ms Linda Manyuchi              |  | 083 528 1772   |                                    |  |
| (former Director: Energy       |  |  |                                    |  |
| & Climate Change CoJ)          |  |  |                                    |  |

| Project Name: City of Johannesburg Climate Change Strategy, 2009 |                       |   |                    |  |
|--|-----------------------|---|--------------------|--|
| Client   | City of Johanne       | City of Johannesburg (COJ) Directorate: Energy & Climate Change |                    |  |
| <b>Project Description</b>                                       | City of Johanne       | sburg Climate Cha   | nge Strategy, 2009 |  |
| Position Held/Role   | Project Leader 8      | Project Leader & Technical Peer Reviewer                        |                    |  |
| <b>Project Start Date</b>  | March 2009            |   |                    |  |
| <b>Project End Date</b>  | July 2009             |   |                    |  |
| Location   | Gauteng, South Africa |   |                    |  |
| Reference Name   | Landline No.          | Landline No. Cell Phone No. E-mail Address                      |                    |  |
| Ms Linda Manyuchi  | 083 528 1772          |   |                    |  |
| (former Director: Energy   |                       |   |                    |  |
| & Climate Change)  |                       |   |                    |  |



| Project Name: United Nations Convention on Climate Change (UNFCCC) |                                     |   |  |  |
|--|-------------------------------------|---|--|--|
| Client   |                                     | South African National Biodiversity Institute on behalf of the Department of Environmental Affairs.   |  |  |
| <b>Project Description</b>   | Preparation of t                    | Preparation of the 2 <sup>nd</sup> National Communication. Contributing author  |  |  |
| Position Held/Role   | _                                   | Contributing authors for preliminary chapter; attendance of preparatory workshops in Cape Town, preliminary contributions as consultants and coauthors. |  |  |
| <b>Project Start Date</b>  | August 2009                         |   |  |  |
| <b>Project End Date</b>  | October 2009                        |   |  |  |
| Location   | Cape Town, South Africa             |   |  |  |
| Reference Name   | Landline No.                        | Landline No. Cell Phone No. E-mail Address  |  |  |
| Dr Brian Matlana   | 072 383 8197 b.matlana@sanbi.org.za |   |  |  |

#### **Large-Scale Infrastructure - Various processes**

|                            | Project Name: University of Cameroun II (Soa Campus) Proposed Construction of Student |  |  |
|----------------------------|---|--|--|
| Accommodation and Soc      | cial Housing in 5 Cities in Cameroon  |  |  |
| Client                     | 4 Degrees South (Pty) Ltd on behalf of the Government of Cameroun                     |  |  |
| <b>Project Description</b> | University of Cameroun II (Soa Campus) proposed construction of student               |  |  |
|                            | accommodation and social housing in 5 cities in Cameroon                              |  |  |
| Position Held/Role         | Principal Environmental Assessment Practitioner                                       |  |  |
| <b>Project Start Date</b>  | March 2014  |  |  |
| <b>Project End Date</b>    | October 2014  |  |  |
| Location                   | Cameroon  |  |  |
| Tasks or Activities        | Environmental feasibility assessments for bankable feasibility                        |  |  |
| Performed/ Key             |   |  |  |
| Responsibilities           |   |  |  |

| Project Name: Environmental and Social Impact Assessment for the Proposed Tourel Building |   |  |
|---|---|--|
| Complex, a 35-storey Co   | mplex in Yaoundé, Cameroun  |  |
| Client  | Umnombo Consortium Partners (Pty) Ltd on behalf of ARSEL and the          |  |
|   | Government of Cameroun  |  |
| <b>Project Description</b>  | Environmental and Social Impact Assessment for the proposed Tourel        |  |
|   | Building Complex, a 35-storey complex in Yaoundé, Cameroun                |  |
| Position Held/Role  | Principal Environmental Assessment Practitioner                           |  |
| Project Value   | US\$127 million   |  |
| <b>Project Start Date</b>   | March 2014  |  |
| <b>Project End Date</b>   | October 2014  |  |
| Location  | Cameroon  |  |
| Tasks or Activities   | Leading the team for specialists undertaking the Environmental and Social |  |
| Performed/ Key  | Impact Assessment as per the World Bank Guidelines                        |  |
| Responsibilities  |   |  |

| Project Name: Proposed Lueven petroleum Storage and Fractionation Unit |  |  |
|--|--|--|
| Client   | Lueven Terminals (Pty) Ltd.                              |  |
| <b>Project Description</b>   | Proposed Lueven petroleum storage and fractionation unit |  |
| Position Held/Role   | Lead EAP   |  |
| Location   | North West, South Africa                                 |  |
| <b>Project Start Date</b>  | September 2012   |  |



| Project End Date                   | June 2013  |  |                            |  |
|------------------------------------|--|--|----------------------------|--|
| <b>Project Name: Four Strate</b>   | egic Environmental Assessments to support the Electrical Network Master      |  |                            |  |
| Plans of the Western Cape          | Peninsula, Margate, Kwa  | Zulu-Natal, Pretoria Area  | and the Central Region     |  |
| Client                             | NETGroup Solutions on behalf of Eskom Distribution                           |  |                            |  |
| Project Description                | Four strategic environme   | ental assessments to suppo   | ort the Electrical Network |  |
|                                    | Master Plans of the W  | estern Cape Peninsula, I   | Margate, KwaZulu-Natal,    |  |
|                                    | Pretoria area and the Cer  | ntral Region.  |                            |  |
| Position Held/Role                 | Project Leader   |  |                            |  |
| Location                           | South Africa   |  |                            |  |
| Tasks or Activities                | Role included project te   | echnical advisory and lead   | dership of project team,   |  |
| Performed/ Key                     | financial control, progran   | nme management and clie  | ent liaison.               |  |
| Responsibilities                   |  |  |                            |  |
| <b>Project Start Date</b>          | March 2008   |  |                            |  |
| <b>Project End Date</b>            | September 2009   |  |                            |  |
| Project Name: Environme            | ntal Impact Assessment of  | the Expansion of the Sish  | nen-Saldanha Iron Ore      |  |
| <b>Export Handling Facility at</b> |  |  |                            |  |
| Client                             | Dr Max Clark, Transnet P   | rojects  |                            |  |
| Project Description                | Environmental impact as  | sessment of the expansio   | n of the Sishen-Saldanha   |  |
|                                    | Iron Ore Export Handling   | Facility at Saldanha Bay   |                            |  |
| Position Held/Role                 | Project Manager/Environ  | nmental Scientist  |                            |  |
| Tasks or Activities                | Andrew managed the pro   | oject from August 2005 ar  | nd later continued on the  |  |
| Performed/ Key                     | core team of Environmental Assessment Practitioners. Roles included          |  |                            |  |
| Responsibilities                   |  | environmental process management and quality control reviewing,                |                            |  |
|                                    | specialist coordination,   | client liaison, etc. The p   | roject was managed by      |  |
|                                    | Transnet Projects, which is the capital expenditure arm of Transnet Limited. |  |                            |  |
| Location                           | Western Cape, South Africa   |  |                            |  |
| Project Start Date                 | September 2005   |  |                            |  |
| Project End Date                   | January 2009   |  |                            |  |
| <b>Project Name: The Develo</b>    | pment of a Biodiversity Fr   | amework and Strategy fo  | r the City of Tshwane      |  |
| Metropolitan Municipality          | , Gauteng, South Africa  |  |                            |  |
| Client                             | City of Tshwane Metropolitan Municipality                                    |  |                            |  |
| <b>Project Description</b>         | The development of a biodiversity framework and strategy for the City of     |  |                            |  |
|                                    | Tshwane Metropolitan Municipality  |  |                            |  |
| Position Held/Role                 | Project Manager  |  |                            |  |
| Location                           | Gauteng, South Africa  |  |                            |  |
| Tasks or Activities                |  | roject from its inception ι  |                            |  |
| Performed/ Key                     | included biodiversity planning, managing the strategy development process,   |  |                            |  |
| Responsibilities                   | ' ' '  | quality control, specialist coordination, client liaison, etc. The project was |                            |  |
|                                    | managed by Ms Adri Venter, Acting General Manager: Environmental             |  |                            |  |
|                                    | Management.  |  |                            |  |
| Project Start Date                 | March 2007   |  |                            |  |
| Project End Date                   | August 2007  |  |                            |  |
| Reference Name                     | Landline No.   | Cell Phone No.   | E-mail Address             |  |
| Ms Adri Venter                     |  | 082 372 8186   |                            |  |

Project Name: For the Environmental Impact Statement and Environmental Management of Issues Surrounding the Pearls of Umhlanga Development, Umhlanga Rocks, Kwa-Zulu Natal



| Client  | Mr Trevor Botsis, Pearls of Umhlanga Pty Ltd   |  |
|---|--|--|
| <b>Project Description</b>                          | Environmental impact statement and environmental management of issues surrounding the Pearls of Umhlanga Development, Umhlanga Rocks |  |
| Position Held/Role                                  | Project Manager  |  |
| Tasks or Activities Performed/ Key Responsibilities | Tasks entailed managing a technical team tasked with assessing environmental concerns and public issues raised on the development.   |  |
| Location  | Kwa-Zulu Natal, South Africa   |  |

| Project Name: Extended Scoping Exercise and Report Compilation for the Proposed Formalisation of |  |  |
|--|--|--|
| the Sonop to Segwaelane  | e Road, Brits, North West Province, South Africa   |  |
| Client   | Arup (Pty) Ltd   |  |
| Project Description  | Extended scoping exercise and report compilation for the proposed formalisation of the Sonop to Segwaelane Road, Brits |  |
| Position Held/Role   | Project Manager  |  |
| Location   | North West Province, South Africa  |  |
| <b>Project Start Date</b>  | September 2015   |  |
| <b>Project End Date</b>  | December 2016  |  |

| Project Name: Environmental Impact Assessment for the Vaal River Eastern Sub-system Augmentation Project (VRESAP) |   |  |
|---|---|--|
| Client  | Trans-Caledon Tunnel Authority  |  |
| Project Description   | A 116km bulk water pipeline, with associated infrastructure between Gauteng and Mpumalanga Provinces, South Africa. Project was completed in 4-months; voted Project of the Year (Engineering News, December 9-15, 2005). |  |
| Position Held/Role  | Senior Environmental Manager  |  |
| Location  | Gauteng and Mpumalanga, South Africa  |  |
| <b>Project Start Date</b>   | Febaruary 2005  |  |
| <b>Project End Date</b>   | May 2005  |  |

# Waste related projects (incorporating Basic Assessments and Environmental Impact Assessments and Waste Management planning)

| Project Name: Licensin                                    | g of Various Waste Disposal Facilities in the KwaZulu Natal Province   |
|---|--|
| Client  | City of Tshwane  |
| <b>Project Description</b>                                | Review and finalisation of the Integrated Waste Management Plan for the City of Tshwane  |
| Position Held/Role  | Project Director & Reviewer  |
| <b>Project Start Date</b>                                 | April 2018   |
| <b>Project End Date</b>                                   | June 2019  |
| Location  | Pretoria   |
| Tasks or Activities<br>Performed/ Key<br>Responsibilities | Analysing waste projections, resource allocation and organisational structures for waste management, review and assessment of financial provisions for waste management, waste stream analysis, and alternative treatment options, facilitation of workshops with officials, updating Integrated Waste Management Plan, etc. |



| Project Name: Licensing of Various Waste Disposal Facilities in the KwaZulu Natal Province |  |  |
|--|--|--|
| Client   | Department of Environmental Affairs  |  |
| <b>Project Description</b>   | Licensing of various waste disposal facilities in the KwaZulu Natal Province         |  |
| Position Held/Role   | Project Leader   |  |
| <b>Project Start Date</b>  | August 2017  |  |
| Project End Date   | August 2018  |  |
| Location   | KwaZulu Natal, South Africa  |  |
| Tasks or Activities  | Ensuring project progress in line with client requirements for the Waste             |  |
| Performed/ Key   | Management Licences for the decommissioning of the eMadlangeni,                      |  |
| Responsibilities   | Shakaville and uMzimkhulu Landfills as well as the operation of the Mkhuze Landfill. |  |

| Project Name: Licensing of Various Waste Disposal Facilities in the Mpumalanga, North West and Northern Cape Province |  |  |
|---|--|--|
| Client  | Department of Environmental Affairs  |  |
| <b>Project Description</b>  | Licensing of various waste disposal facilities in the Mpumalanga, North West |  |
|   | and Northern Cape Province   |  |
| Position Held/Role  | Project Leader   |  |
| <b>Project Start Date</b>   | June 2015  |  |
| <b>Project End Date</b>   | June 2017  |  |
| Location  | Mpumalanga, North West and Northern Cape Province, South Africa              |  |
| Tasks or Activities   | Ensuring project progress in line with Client requirements for the           |  |
| Performed/ Key  | Waste Management Licence Applications for 17 landfill sites in the           |  |
| Responsibilities  | Northern Cape Province as well as an additional 3 sites within the           |  |
|   | Mpumalanga and 6 in the North West Provinces                                 |  |
|   | Overseeing Project team  |  |

#### **Electricity Infrastructure – various processes**

| Project Name: Comparative Environmental Assessment of the Proposed Upgrade from 400kV to 765kV of the Mercury-Perseus Transmission Power Line (±285km) in the Free State Province, South Africa |   |  |
|---|---|--|
| Client  | Eskom Transmission Land & Rights  |  |
| Project Description   | Comparative environmental assessment of the proposed upgrade from 400kV to 765kV of the Mercury-Perseus Transmission power line (±285km) in the Free State Province |  |
| Position Held/Role  | Project Manager   |  |

|                           | 400kV to 765kV of the Mercury-Perseus Transmission power line (±285km) |
|---------------------------|--|
|                           | in the Free State Province   |
| Position Held/Role        | Project Manager  |
| Location                  | Free State Province, South Africa                                      |
| <b>Project Start Date</b> | September 2008   |
| <b>Project End Date</b>   | December 2008  |
|                           |  |

# Project Name: Construction Environmental Management Plan for the proposed Mercury-Perseus 765kV Transmission power line, Free State Province, South Africa

| Client                     | Eskom Transmission Land & Rights                                     |
|----------------------------|--|
| <b>Project Description</b> | Construction Environmental Management Plan for the proposed Mercury- |
|                            | Perseus 765kV Transmission power line, Free State Province           |
| Position Held/Role         | Project Manager  |
| Location                   | Free State Province, South Africa                                    |
| Project Start Date         | June 2008  |



| Project End Date             | September 2008  |
|------------------------------|---|
| Project Name: Environme      | ntal Impact Assessment for the Mercury-Perseus 400 kV Transmission          |
| power line (±285km) in the   | e Free State Province, South Africa   |
| Client                       | Eskom Transmission Land & Rights  |
| <b>Project Description</b>   | Environmental Impact Assessment for the Mercury-Perseus 400 kV              |
|                              | Transmission power line (±285km) in the Free State Province                 |
| Position Held/Role           | Environmental Manager   |
| Location                     | Free State Province, South Africa   |
| Project Start Date           | January 2003  |
| Project End Date             | June 2003   |
| •                            | 5 Projects: 3 EIAs, 7 Scoping Studies and 5 Exemptions, Required as part of |
|                              | oard 400 kV Integration Phase II  |
| Client                       | Swaziland Electricity Board   |
| <b>Project Description</b>   | Project included route planning and determination with surveys across       |
|                              | various towns and city centres in Swaziland.                                |
| Position Held/Role           | Project Manager/ Ecological Scientist                                       |
| Location                     | Swaziland   |
| Project Start Date           | August 2005   |
| Project End Date             | December 2007   |
| Project Name: For the Exte   | ended Scoping Process and Compilation of a Scoping Report for a 33 kV       |
| Distribution Line in Mulde   | rsdrift, Krugersdorp, Gauteng Province, South Africa                        |
| Client                       | Mogale City Local Municipality  |
| <b>Project Description</b>   | For the extended scoping process and compilation of a scoping report for a  |
|                              | 33 kV Distribution line in Muldersdrift, Krugersdorp                        |
| Position Held/Role           | Project Manager   |
| Location                     | Gauteng, South Africa   |
| Project Start Date           | 2003  |
| Project End Date             | 2004  |
| •                            | relopment of an Environmental Management Plan for the Construction of a     |
| 33 kV Distribution Line in I | Muldersdrift, Krugersdorp, Gauteng Province, South Africa                   |
| Client                       | Mogale City Local Municipality  |
| <b>Project Description</b>   | For the development of an Environmental Management Plan for the             |
|                              | construction of a 33 kV Distribution line in Muldersdrift, Krugersdorp,     |
| Position Held/Role           | Project Manager   |
| Location                     | Gauteng, South Africa   |
| Project Start Date           | 2003  |
| Project End Date             | 2004  |
|                              | ent of an Environmental Management Plan for the Chamdor – Factoria 33kV     |
| Power Line, Gauteng Prov     |   |
| Client                       | Mogale City Local Municipality  |
| Project Description          | Development of an environmental management plan for the Chamdor –           |
| B 111 1115                   | Factoria 33kV power line  |
| Position Held/Role           | Project Manager   |
| Location                     | Gauteng, South Africa   |
| Project Start Date           | 2004  |
| Project End Date             | 2004  |



| Project Name: A Scoping    | Exercise and Report Compilation for Doornfontein Filling Station             |  |
|----------------------------|--|--|
| Client                     | Oleum (Pty) Ltd  |  |
| <b>Project Description</b> | A scoping exercise and report compilation for Doornfontein Filling Station.  |  |
| Position Held/Role         | Environmental Manager  |  |
| Location                   | Johannesburg, South Africa   |  |
| <b>Project Start Date</b>  | September 2003   |  |
| <b>Project End Date</b>    | December 2003  |  |
| Project Name: An Extend    | ded Scoping Exercise and Report Compilation for Pick n Pay's Proposed Retail |  |
| Centre in Hurlingham, G    | auteng Province, South Africa  |  |
| Client                     | Abland (Pty) Ltd   |  |
| <b>Project Description</b> | An extended scoping exercise and report compilation for Pick n Pay's         |  |
|                            | proposed retail centre in Hurlingham   |  |
| Position Held/Role         | Project Manager  |  |
| Location                   | Gauteng, South Africa  |  |
| Project Start Date         | October 2002   |  |
| Project End Date           | June 2003  |  |
| Project Name: An Enviro    | nmental Impact Assessment for the Proposed Spencer-Tabor 275 kV              |  |
| Transmission Power Line    | e (±85km) in Limpopo Province, South Africa                                  |  |
| Client                     | Ms Mamokete Mafumo, Eskom Transmission Land & Rights                         |  |
| <b>Project Description</b> | An environmental impact assessment for the proposed Spencer-Tabor            |  |
|                            | 275 kV transmission power line (±85km) in Limpopo Province                   |  |
| Position Held/Role         | Project Manager  |  |
| Location                   | Limpopo Province, South Africa   |  |
| Project Start Date         | September 2007   |  |
| Project End Date           | June 2008  |  |
| Project Name: For the In   | itial Environmental Evaluation (IEE) of the Proposed Co-generation Power     |  |
| Plant at the Ubombo Su     | gar Factory, Big Bend, Swaziland   |  |
| Client                     | Mr Eckard Lucht, Illovo Sugar Ltd  |  |
| <b>Project Description</b> | The Initial Environmental Evaluation (IEE) of the proposed Co-generation     |  |
|                            | Power Plant at the Ubombo Sugar Factory, Big Bend, Swaziland.                |  |
| Position Held/Role         | Project Manager  |  |
| Location                   | Swaziland  |  |
| Project Start Date         | September 2007   |  |
| Project End Date           | April 2008   |  |
|                            |  |  |

#### **Conservation Management**

| Project Name: Proclamation of 2 Municipal Nature Reserves: Klipriviersberg and Kloofendal in terms of the National Environmental Management: Protected Areas Act, 2003 (Act No. 57 of 2003) |   |              |  |
|---|---|--------------|--|
| Client  | City of Johannesburg: Environmental and Infrastructure Servi                | ces          |  |
|   | Department  |              |  |
| <b>Project Description</b>  | Proclamation of 2 Municipal nature reserves: Klipriviersberg and Kloofendal |              |  |
|   | in terms of the National Environmental Management: Protected Areas          | <b>\</b> ct, |  |
|   | 2003 (Act No. 57 of 2003).  |              |  |
| Position Held/Role  | Project Leader  |              |  |
| Project Value   | R955 320.00   |              |  |
| Project Start Date  | January 2014  |              |  |





| December 2014  | 1   |   |
|----------------|---|---|
| Conservation m | anagement and a                                 | dvisory; compilation of management                        |
|                |   |   |
| Gauteng, South | Gauteng, South Africa                           |   |
| Landline No.   | Cell Phone No.                                  | E-mail Address  |
| 011 587 4277   | 071 854 7694                                    | tendamudzimum@joburg.org.za                               |
|                | Conservation mplans Gauteng, South Landline No. | plans  Gauteng, South Africa  Landline No. Cell Phone No. |

| Project Name: Securing of Gauteng Biodiversity Priority Sites – Strategic Biodiversity Management and Consulting Services |  |  |
|---|--|--|
| Client  | South African National Biodiversity Institute (SANBI) and GDARD  |  |
| Project Description   | Securing of Gauteng biodiversity priority sites — strategic biodiversity management and consulting services. This project entailed conducting all the due diligence and processes required to formally proclaim over 21 conservation areas as Protected Areas in terms of the National Environmental Management Biodiversity Act, (Act No. 57 of 2003) |  |
| Position Held/Role  | Project Manager  |  |
| Tasks or Activities Performed/ Key Responsibilities   | <ul> <li>Conservation management and advisory</li> <li>Stakeholder engagement</li> <li>Consultation and management proclamation process</li> </ul>   |  |
| Location  | Gauteng, South Africa  |  |
| Project Start Date  | May 2010   |  |
| <b>Project End Date</b>   | May 2012   |  |

#### **Specialist Ecological Input**

| Specialist Ecological III   | y a c  |  |
|---|--|--|
| Project Name: Biodiversity and Habitat Assessment, with Sensitivity Mapping Utilising GIS for the |  |  |
| State of the Environment Report (SoER) of West Rand District Municipality (as well as its Four    |  |  |
| Constituent Local Municipalities, including the Cradle of Humankind World Heritage Site)          |  |  |
| Client  | West Rand District Municipality  |  |
| <b>Project Description</b>  | Compiled the habitat and biodiversity section of final SoER for publication in |  |
|   | the DEAT-approved Publikit format.   |  |
| Location  | South Africa   |  |
| <b>Project Start Date</b>   | 2003   |  |
| Project End Date  | 2004   |  |

| Project Name: An Ecological Scan for Various Distribution Lines as Part of the Swaziland Electricity |  |  |
|--|--|--|
| Board 400 kV Integration Phase II  |  |  |
| Client   | NETGroup on behalf of Swaziland Electricity Board                          |  |
| <b>Project Description</b>   | An ecological scan for various distribution lines as part of the Swaziland |  |
|  | Electricity Board 400 kV Integration Phase II.                             |  |
| Location   | Swaziland  |  |
| <b>Project Start Date</b>  | September 2005   |  |
| <b>Project End Date</b>  | December 2005  |  |

Project Name: Biodiversity and Habitat Assessment, with Sensitivity Mapping as part of a State of the Environment Report (SoER) for the Sedibeng District Municipality

Client Sedibeng District Municipality



| <b>Project Description</b>    | Compiled the habitat and biodiversity section of final SoER for the DEAT     |
|-------------------------------|--|
|                               | approved Publikit format.  |
| Location                      | Sedibeng, South Africa   |
| Project Start Date            | September 2005   |
| Project End Date              | January 2006   |
| Project Name: Ecological      | Assessment and Sensitivity Mapping, utilising GIS as a Mapping Tool, for the |
| N1/R21 Quadrant within        | Gauteng  |
| Client                        | GDARD, then known as Gauteng Department of Agriculture, Conservation,        |
|                               | Environment and Land Affairs - GDACEL  |
| <b>Project Description</b>    | Ecological assessment and sensitivity mapping, utilising GIS as a mapping    |
|                               | tool, for the N1/R21 Quadrant within Gauteng                                 |
| Location                      | Gauteng, South Africa  |
| Project Start Date            | September 2003   |
| Project End Date              | May 2004   |
| Project Name: Vegetation      | n Assessment including Sampling and Sensitivity Mapping utilising GIS for    |
| <b>Proposed Platinum Mine</b> | North of Pilanesberg National Park, Rooderand                                |
| Client                        | Anglo Platinum   |
| <b>Project Description</b>    | Vegetation assessment including sampling and sensitivity mapping utilising   |
|                               | GIS for proposed platinum mine north of Pilanesberg National Park,           |
|                               | Rooderand  |
| Location                      | South Africa   |
| Project Start Date            | September 2005   |
| Project End Date              | December 2005  |
| Project Name: Vegetation      | n Assessment including Sampling and Sensitivity Mapping utilising GIS for    |
| Proposed Boekenhoutklo        | oof Clay Quarry adjacent to the Southern Slopes of the Magaliesberg          |
| Protected Natural Enviro      | nment  |
| Client                        | Ceramic Industries   |
| <b>Project Description</b>    | Vegetation assessment including sampling and sensitivity mapping utilising   |
|                               | GIS for proposed Boekenhoutkloof Clay Quarry adjacent to the southern        |
|                               | slopes of the Magaliesberg Protected Natural Environment.                    |
| Location                      | South Africa   |
| Project Start Date            | September 2005   |
| Project End Date              | December 2005  |
| Project Name: Vegetation      | n Assessment and Sensitivity Mapping utilising GIS for the State of the      |
| Environment Report for I      | Mogale City Local Municipality (a total area of 110 000 hectares)            |
| Client                        | Mogale City Local Municipality   |
| Project Description           | Compiled habitat and biodiversity section of final SoER.                     |
| Role                          | Terrestrial Ecologist  |
| Location                      | Gauteng, South Africa  |
| Project Start Date            | October 2002   |
| Project End Date              | February 2003  |
| Project Name: Vegetation      | n Sensitivity Mapping as part of an Ecological Status Quo Report for the     |
| Ekurhuleni Local Municip      |  |
|                               |  |

Plan Associates, on behalf of Ekurhuleni Local Municipality

Client



| <b>Project Description</b>  | Vegetation sensitivity mapping as part of an ecological status quo report for  |
|---|--|
|   | the Ekurhuleni Local Municipality.   |
| Location  | Ekurhuleni, South Africa   |
| <b>Project Start Date</b>   | September 2006   |
| Project End Date  | December 2006  |
| <b>Project Name: Vegetation</b>   | Scan at the Site for the Proposed Establishment of Montana extension 77  |
| on Portion 28 of the Farm   | Hartebeestfontein 324-JR, Pretoria, Gauteng  |
| Client  | Sinoville Flats West (Pty) Ltd   |
| <b>Project Description</b>  | A vegetation scan at the site for the proposed establishment of Montana  |
|   | extension 77 on portion 28 of the farm Hartebeestfontein 324-JR, Pretoria,   |
|   | Gauteng - Sinoville Flats West (Pty) Ltd.  |
| Location  | Pretoria, South Africa   |
| Project Start Date  | August 2004  |
| Project End Date  | December 2004  |
| Project Name: Vegetation Assessment at the Site for the Proposed Allens Nek Extension 49 on   |  |
| Portions 12 and 13 of the   | Farm Klipdrift 121 JR, Gauteng   |
| Client  | African Resource Consulting  |
| <b>Project Description</b>  | A vegetation assessment at the site for the proposed Allens Nek extension  |
|   | 49 on portions 12 and 13 of the farm Klipdrift 121 JR, Gauteng – African   |
|   | Resource Consulting.   |
| Location  | Gauteng, South Africa  |
| Project Start Date  | September 2004   |
| Project End Date  | December 2004  |
| Project Liiu Date   | December 2004  |
| Project Name: Vegetation  | Scan of the Site for Proposed the Winterveldt Reconstruction &   |
| Project Name: Vegetation<br>Redevelopment Programm  | Scan of the Site for Proposed the Winterveldt Reconstruction & me (Phases 1 and 2), North West   |
| Project Name: Vegetation<br>Redevelopment Programm<br>Client  | Scan of the Site for Proposed the Winterveldt Reconstruction & me (Phases 1 and 2), North West  Malukele Luthuli & Associates  |
| Project Name: Vegetation<br>Redevelopment Programm  | Scan of the Site for Proposed the Winterveldt Reconstruction & me (Phases 1 and 2), North West  Malukele Luthuli & Associates  A vegetation scan of the site for proposed the Winterveldt Reconstruction &   |
| Project Name: Vegetation<br>Redevelopment Programm<br>Client  | Scan of the Site for Proposed the Winterveldt Reconstruction & me (Phases 1 and 2), North West  Malukele Luthuli & Associates  A vegetation scan of the site for proposed the Winterveldt Reconstruction & Redevelopment Programme (Phases 1 and 2), North West - Malukele Luthuli   |
| Project Name: Vegetation<br>Redevelopment Programm<br>Client<br>Project Description   | Scan of the Site for Proposed the Winterveldt Reconstruction & me (Phases 1 and 2), North West  Malukele Luthuli & Associates  A vegetation scan of the site for proposed the Winterveldt Reconstruction & Redevelopment Programme (Phases 1 and 2), North West - Malukele Luthuli & Associates.   |
| Project Name: Vegetation Redevelopment Programm Client Project Description Location   | Scan of the Site for Proposed the Winterveldt Reconstruction & me (Phases 1 and 2), North West  Malukele Luthuli & Associates  A vegetation scan of the site for proposed the Winterveldt Reconstruction & Redevelopment Programme (Phases 1 and 2), North West - Malukele Luthuli & Associates.  North West Province, South Africa  |
| Project Name: Vegetation Redevelopment Programm Client Project Description  Location Project Start Date   | Scan of the Site for Proposed the Winterveldt Reconstruction & me (Phases 1 and 2), North West  Malukele Luthuli & Associates  A vegetation scan of the site for proposed the Winterveldt Reconstruction & Redevelopment Programme (Phases 1 and 2), North West - Malukele Luthuli & Associates.  North West Province, South Africa  January 2004  |
| Project Name: Vegetation Redevelopment Programm Client Project Description  Location Project Start Date Project End Date  | Scan of the Site for Proposed the Winterveldt Reconstruction & me (Phases 1 and 2), North West  Malukele Luthuli & Associates  A vegetation scan of the site for proposed the Winterveldt Reconstruction & Redevelopment Programme (Phases 1 and 2), North West - Malukele Luthuli & Associates.  North West Province, South Africa  January 2004  March 2004  |
| Project Name: Vegetation Redevelopment Programm Client Project Description  Location Project Start Date Project End Date  Project Name: Several Fau   | Scan of the Site for Proposed the Winterveldt Reconstruction & me (Phases 1 and 2), North West  Malukele Luthuli & Associates  A vegetation scan of the site for proposed the Winterveldt Reconstruction & Redevelopment Programme (Phases 1 and 2), North West - Malukele Luthuli & Associates.  North West Province, South Africa  January 2004  March 2004  Inal and Floral Red Data Studies for Various Projects   |
| Project Name: Vegetation Redevelopment Programs Client Project Description  Location Project Start Date Project End Date  Project Name: Several Fau Client  | Scan of the Site for Proposed the Winterveldt Reconstruction & me (Phases 1 and 2), North West  Malukele Luthuli & Associates  A vegetation scan of the site for proposed the Winterveldt Reconstruction & Redevelopment Programme (Phases 1 and 2), North West - Malukele Luthuli & Associates.  North West Province, South Africa  January 2004  March 2004  unal and Floral Red Data Studies for Various Projects  Mogale City Local Municipality   |
| Project Name: Vegetation Redevelopment Programm Client Project Description  Location Project Start Date Project End Date  Project Name: Several Fau Client Project Description  | Scan of the Site for Proposed the Winterveldt Reconstruction & me (Phases 1 and 2), North West  Malukele Luthuli & Associates  A vegetation scan of the site for proposed the Winterveldt Reconstruction & Redevelopment Programme (Phases 1 and 2), North West - Malukele Luthuli & Associates.  North West Province, South Africa  January 2004  March 2004  March 2004  Inal and Floral Red Data Studies for Various Projects  Mogale City Local Municipality  Several Faunal and Floral Red Data Studies for various projects  |
| Project Name: Vegetation Redevelopment Programs Client Project Description  Location Project Start Date Project End Date  Project Name: Several Fau Client Project Description Location   | Scan of the Site for Proposed the Winterveldt Reconstruction & me (Phases 1 and 2), North West  Malukele Luthuli & Associates  A vegetation scan of the site for proposed the Winterveldt Reconstruction & Redevelopment Programme (Phases 1 and 2), North West - Malukele Luthuli & Associates.  North West Province, South Africa  January 2004  March 2004  Inal and Floral Red Data Studies for Various Projects  Mogale City Local Municipality  Several Faunal and Floral Red Data Studies for various projects  Gauteng, South Africa   |
| Project Name: Vegetation Redevelopment Programs Client Project Description  Location Project Start Date Project End Date  Project Name: Several Fau Client Project Description Location Project Start Date  | Scan of the Site for Proposed the Winterveldt Reconstruction & me (Phases 1 and 2), North West  Malukele Luthuli & Associates  A vegetation scan of the site for proposed the Winterveldt Reconstruction & Redevelopment Programme (Phases 1 and 2), North West - Malukele Luthuli & Associates.  North West Province, South Africa  January 2004  March 2004  March 2004  Mand Floral Red Data Studies for Various Projects  Mogale City Local Municipality  Several Faunal and Floral Red Data Studies for various projects  Gauteng, South Africa  late 2004  |
| Project Name: Vegetation Redevelopment Programs Client Project Description  Location Project Start Date Project End Date  Project Name: Several Fau Client Project Description Location Project Start Date Project Description Location Project Start Date Project Start Date   | Scan of the Site for Proposed the Winterveldt Reconstruction & me (Phases 1 and 2), North West  Malukele Luthuli & Associates  A vegetation scan of the site for proposed the Winterveldt Reconstruction & Redevelopment Programme (Phases 1 and 2), North West - Malukele Luthuli & Associates.  North West Province, South Africa  January 2004  March 2004  March 2004  Mand Floral Red Data Studies for Various Projects  Mogale City Local Municipality  Several Faunal and Floral Red Data Studies for various projects  Gauteng, South Africa  late 2004  December 2005   |
| Project Name: Vegetation Redevelopment Programs Client Project Description  Location Project Start Date Project End Date  Project Name: Several Fau Client Project Description Location Project Start Date Project Start Date Project Name: Vegetation  | Scan of the Site for Proposed the Winterveldt Reconstruction & me (Phases 1 and 2), North West  Malukele Luthuli & Associates  A vegetation scan of the site for proposed the Winterveldt Reconstruction & Redevelopment Programme (Phases 1 and 2), North West - Malukele Luthuli & Associates.  North West Province, South Africa  January 2004  March 2004  March 2004  Magale City Local Municipality  Several Faunal and Floral Red Data Studies for Various Projects  Gauteng, South Africa  late 2004  December 2005  Scan at the Site for the Proposed Vlakfontein Golf Estate on the Farm   |
| Project Name: Vegetation Redevelopment Programs Client Project Description  Location Project Start Date Project End Date  Project Name: Several Fau Client Project Description Location Project Start Date Project Description Location Project Start Date Project Start Date   | Scan of the Site for Proposed the Winterveldt Reconstruction & me (Phases 1 and 2), North West  Malukele Luthuli & Associates  A vegetation scan of the site for proposed the Winterveldt Reconstruction & Redevelopment Programme (Phases 1 and 2), North West - Malukele Luthuli & Associates.  North West Province, South Africa  January 2004  March 2004  Inal and Floral Red Data Studies for Various Projects  Mogale City Local Municipality  Several Faunal and Floral Red Data Studies for various projects  Gauteng, South Africa  late 2004  December 2005  Scan at the Site for the Proposed Vlakfontein Golf Estate on the Farm  |
| Project Name: Vegetation Redevelopment Programs Client Project Description  Location Project Start Date Project End Date  Project Name: Several Fau Client Project Description Location Project Start Date Project Start Date Project Name: Vegetation Vlakfontein 30 JR, Gauten Client   | Scan of the Site for Proposed the Winterveldt Reconstruction & me (Phases 1 and 2), North West  Malukele Luthuli & Associates  A vegetation scan of the site for proposed the Winterveldt Reconstruction & Redevelopment Programme (Phases 1 and 2), North West - Malukele Luthuli & Associates.  North West Province, South Africa  January 2004  March 2004  Inal and Floral Red Data Studies for Various Projects  Mogale City Local Municipality  Several Faunal and Floral Red Data Studies for various projects  Gauteng, South Africa  late 2004  December 2005  Scan at the Site for the Proposed Vlakfontein Golf Estate on the Farm g  Sixbar Trading 667 cc   |
| Project Name: Vegetation Redevelopment Programs Client Project Description  Location Project Start Date Project End Date  Project Name: Several Fau Client Project Description Location Project Start Date Project Start Date Project Name: Vegetation Vlakfontein 30 JR, Gauten  | Scan of the Site for Proposed the Winterveldt Reconstruction & me (Phases 1 and 2), North West  Malukele Luthuli & Associates  A vegetation scan of the site for proposed the Winterveldt Reconstruction & Redevelopment Programme (Phases 1 and 2), North West - Malukele Luthuli & Associates.  North West Province, South Africa  January 2004  March 2004  March 2004  Mogale City Local Municipality  Several Faunal and Floral Red Data Studies for Various Projects  Gauteng, South Africa  late 2004  December 2005  Scan at the Site for the Proposed Vlakfontein Golf Estate on the Farm g  Sixbar Trading 667 cc  A vegetation scan at the site for the proposed Vlakfontein Golf Estate on the   |
| Project Name: Vegetation Redevelopment Programs Client Project Description  Location Project Start Date Project End Date  Project Name: Several Fau Client Project Description Location Project Start Date Project Start Date Project Name: Vegetation Vlakfontein 30 JR, Gauten Client   | Scan of the Site for Proposed the Winterveldt Reconstruction & me (Phases 1 and 2), North West  Malukele Luthuli & Associates  A vegetation scan of the site for proposed the Winterveldt Reconstruction & Redevelopment Programme (Phases 1 and 2), North West - Malukele Luthuli & Associates.  North West Province, South Africa  January 2004  March 2004  Inal and Floral Red Data Studies for Various Projects  Mogale City Local Municipality  Several Faunal and Floral Red Data Studies for various projects  Gauteng, South Africa  late 2004  December 2005  Scan at the Site for the Proposed Vlakfontein Golf Estate on the Farm g  Sixbar Trading 667 cc  A vegetation scan at the site for the proposed Vlakfontein Golf Estate on the farm Vlakfontein 30 JR, Gauteng                        |
| Project Name: Vegetation Redevelopment Programs Client Project Description  Location Project Start Date Project End Date  Project Name: Several Fau Client Project Description Location Project Start Date Project Start Date Project Name: Vegetation Vlakfontein 30 JR, Gauten Client Project Description   | Scan of the Site for Proposed the Winterveldt Reconstruction & me (Phases 1 and 2), North West  Malukele Luthuli & Associates  A vegetation scan of the site for proposed the Winterveldt Reconstruction & Redevelopment Programme (Phases 1 and 2), North West - Malukele Luthuli & Associates.  North West Province, South Africa  January 2004  March 2004  March 2004  Mogale City Local Municipality  Several Faunal and Floral Red Data Studies for Various Projects  Gauteng, South Africa  late 2004  December 2005  Scan at the Site for the Proposed Vlakfontein Golf Estate on the Farm g  Sixbar Trading 667 cc  A vegetation scan at the site for the proposed Vlakfontein Golf Estate on the   |
| Project Name: Vegetation Redevelopment Programs Client Project Description  Location Project Start Date Project End Date  Project Name: Several Fau Client Project Description Location Project Start Date Project End Date  Project Name: Vegetation Vlakfontein 30 JR, Gauten Client Project Description  Location | Scan of the Site for Proposed the Winterveldt Reconstruction & me (Phases 1 and 2), North West  Malukele Luthuli & Associates  A vegetation scan of the site for proposed the Winterveldt Reconstruction & Redevelopment Programme (Phases 1 and 2), North West - Malukele Luthuli & Associates.  North West Province, South Africa  January 2004  March 2004  Inal and Floral Red Data Studies for Various Projects  Mogale City Local Municipality  Several Faunal and Floral Red Data Studies for various projects  Gauteng, South Africa  late 2004  December 2005  Scan at the Site for the Proposed Vlakfontein Golf Estate on the Farm g  Sixbar Trading 667 cc  A vegetation scan at the site for the proposed Vlakfontein Golf Estate on the farm Vlakfontein 30 JR, Gauteng  Gauteng, South Africa |



| Project Name: Ecological Assessment for a Proposed Residential Development within the Bronberg, |   |  |
|---|---|--|
| Pretoria area   |   |  |
| Client  | Dr Nick Anderson  |  |
| Project Description   | An ecological assessment for a proposed residential development within the Bronberg, Pretoria area.                     |  |
| Location  | Pretoria, South Africa  |  |
| Project Start Date  | September 2005  |  |
| Project End Date  | December 2005   |  |
| Project Name: Ecological Scan for the Proposed Formalisation of the Sonop to Segwaelane Road,   |   |  |
| Brits, North West   |   |  |
| Client  | Arup (Pty) Ltd.   |  |
| Project Description   | An ecological scan for the proposed formalisation of the Sonop to Segwaelane Road, Brits, North West.                   |  |
| Location  | North West Province, South Africa   |  |
| Project Start Date  | September 2003  |  |
| Project End Date  | December 2003   |  |
| Project Name: Ecological Assessment for a Proposed Bush Lodge on the Farm Waterval 267 KQ,      |   |  |
| within Marakele Park Pty Ltd, Lephalele, Limpopo Province, South Africa                         |   |  |
| Client  | Marakele Park Pty Ltd   |  |
| <b>Project Description</b>  | An ecological assessment for a proposed Bush Lodge on the farm Waterval 267 KQ, within Marakele Park Pty Ltd, Lephalele |  |
| Location  | Limpopo Province, South Africa  |  |
| Project Start Date  | March 2005  |  |
| Project End Date  | December 2005   |  |

#### **Teaching Experience**

- Teaching assistant: and Tutor University of the Witwatersrand (Wits) 2000 2002. Tasks included:
  - Teaching Botany and Zoology courses to College of Science 1st years.
  - Fieldtrips with 1st and 2nd year students involving vegetation sampling and identification, in the Witwatersrand National Botanical Gardens.
  - o Teaching laboratory experiments in Plant Physiology, Zoology and Botany.
- Presented a four-part series of lectures to 2nd and 4th year students (about 40–50 in total) in the School of Civil and Environmental Engineering on Environmental Impact Assessment and Environmental Management Plans. The lectures included other components of Integrated Environmental Management (June 2004).
- Received a commendatory letter, which is only awarded to the best Teaching Assistants in recognition of their invaluable role as mentors for undergraduate students.



#### **Publications, Papers and Conferences**

- Special British Ecological Society and Institute of Ecological and Environmental Management Symposium on Ecological Impact Assessments: Science and Best Practice, Bath Spa University: 11-12th July 2006.
- Biogeochemistry: the cycling of nutrients. In The Kruger Experience: Ecology and Management of Savanna Heterogeneity, Du Toit, J.T., Biggs, H.C. & Rogers, K.H. (eds.) Island Press, USA (2003) (Coauthored with Robert Scholes, Mary Scholes, and Luanne Otter).
- Elemental interactions and constraints on root symbiont functioning. In: SCOPE 61 Interactions of the Major Biogeochemical Cycles: Global Change and Human Impacts, edited by J.M. Melillo, C. B. Field and B. Moldan. Special paper submitted to the Scientific Committee on Problems of the Environment (SCOPE) Rapid Assessment Project Workshop on Element Interactions, 7-11 October 2002, Karolinum, Charles University, Prague. Published in 2003, Island Press, Washington USA (Coauthored with Mary Scholes).
- Soil nitrogen dynamics of the savanna flux site at Skukuza, Kruger National Park: EOS validation from a biogeochemical perspective. Paper presented at the 27th Annual Conference of the South African Association of Botanists, 14-17 January 2001, Rand Afrikaans University, Johannesburg.