

Sergei Kiewiet sergei@motionengineers.co.za www.motionengineers.co.za

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| Personal Details | POSITION: Managing Director |
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| | NAME OF FIRM: Motion Consulting Engineers (Pty) Ltd |
| | SPECIALISATION: Transport Engineer |
| | DATE OF BIRTH: 30 December 1987 |
| | NATIONALITY: South African |
| | • YEAR EXPERIENCE: 13 |

| Professional Profile | Sergei Kiewiet is a qualified Transport Engineer with 13 years of experience, specializing in transportation engineering and planning. |
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| | Key experience includes: |
| | Transport planning |
| | Non-motorized transport planning |
| | Transport Impact Assessments |
| | Transport strategies |
| | Parking studies and strategies |
| | Traffic engineering |
| | Public transport |

| Memberships of | • | Engineering Council of South Africa: candidate engineer: 201250506 |
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| Professional | • | South African Institution of Civil Engineers: 2009383 |
| Associations | | |

| Education | BSc Engineering (Civil Engineering) University of Cape Town, 2009 |
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| Work History | Transport Engineer with GIBB Engineering and Architecture from March 2010 to December 2019 Local: Western Cape, Eastern Cape, Kwa-Zulu Natal, and Gauteng International: Botswana, Rwanda, Tanzania, Zambia, and Ivory Coast |

| Key Experience | PROJECT HISTORY |
|----------------|--|
| | Some of the projects that I have been involved in are listed below by type |
| | of experience. My involvement in these projects is described. A detailed |
| | list of all projects that I have been involved in can be provided upon |
| | request. |
| | Project start and end dates are given to the best of my recollection and reflect the period of my involvement in the project. Where the day or month is unknown, the day is assumed to be the first, and the month is assumed to be January. |
| | PROJECT NAME: PROFESSIONAL SERVICES IN RESPECT OF INTEGRATED PUBLIC TRANSPORT SERVICES: INDUSTRY TRANSITION AND TRANSFORMATION |
| | START DATE: 01/07/2022 |
| | END DATE: Current |
| | CLIENT: Pegasys (for City of Cape Town) |
| | SUMMARY: Public transport survey design and data collection specialist |
| | Identifying the effectiveness of GABS and MBT routes for MyCiTi Phase 2A Determining the total number of unique operators/operating licenses per Region per Association Identifying MBT operators who are eligible for shares based on their route description Generating of route maps on QGIS Survey design (drafting the scope of works for the survey plan) Generating an operators list who are eligible for participation in Phase 2A per Region per Association Determining the market share Data review Updating of data |
| | TRANSPORT IMPACT ASSESSMENTS |
| | PROJECT NAME: MUTUAL PARK TRAFFIC IMPACT ASSESSMENT |
| | START DATE: 01/10/2022 |
| | END DATE: 01/04/2023 |
| | CLIENT: Neil Schwartz Town Planning (Pty) Ltd |
| | SUMMARY: Mutual Park Development in Pinelands |
| | Site Visit to measure sight distances, access spacing, CWC width, etc. Design input to the Site Development Plan (SDP) |

| Identification of mitigating measures and preparation of high-level concept designs Preparation of TIA report |
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| PROJECT NAME: BEACONVALE RETAIL CENTRE TRAFFIC IMPACT ASSESSMENT |
| START DATE: 01/05/2022 |
| END DATE: 01/01/2023 |
| CLIENT: FPG Holdings (Pty) Ltd |
| SUMMARY: Proposed retail centre development |
| Site Visit to measure sight distances, access spacing, CWC width, etc. Review of Site Development Plan (SDP) Identification of mitigating measures and preparation of high-level concept designs Determination of traffic impact on road network Preparation of TIA report and parking departure motivation report |
| PROJECT NAME: WESTGATE CROSSING TRAFFIC IMPACT ASSESSMENT |
| START DATE: 01/02/2022 |
| END DATE: 01/07/2022 |
| CLIENT: TTIN Properties (Pty) Ltd |
| SUMMARY: Proposed Westgate Crossing Shopping Centre development |
| Site Visit to measure sight distances, access spacing, CWC width, etc. Design input to the Site Development Plan (SDP) Identification of mitigating measures and preparation of high-level concept designs Preparation of TIA report |
| PROJECT NAME: CONSTANTIA VILLAGE TRAFFIC IMPACT ASSESSMENT |
| START DATE: 01/04/2022 |
| END DATE: 01/06/2022 |
| CLIENT: Growth Point Properties |
| SUMMARY: Proposed expansion of the Constantia Village Shopping Centre |
| Site Visit to measure sight distances, access spacing, CWC width, etc. Design input to the Site Development Plan (SDP) Identification of mitigating measures and preparation of high-level concept designs Preparation of TIA report |
| PROJECT NAME: STANHOPE TRAFFIC IMPACT ASSESSMENT |
| START DATE: 01/02/2022 |

END DATE: 01/12/2022

CLIENT: Aria Property Group (Pty) Ltd

SUMMARY: Proposed residential development of Stanhope on Erf 169815, Claremont

- Site Visit to measure sight distances, access spacing, CWC width, etc.
- Design input to the Site Development Plan (SDP)
- Identification of mitigating measures and preparation of high-level concept designs
- Preparation of TIA report

PROJECT NAME: MILNERTON HIGH-LEVEL TRAFFIC IMPACT ASSESSMENT

START DATE: 23/08/2021

END DATE: 24/10/2021

CLIENT: Herculine Becker

SUMMARY: Preparation of a TIA to support a high-level transport impact assessment for the hypothetical scenario.

- Site Visit to measure sight distances, access spacing, CWC width etc.
- Design input to the Site Development Plan (SDP)
- Identification of mitigating measures and preparation of high-level concept designs
- Preparation of TIA report

PROJECT NAME: SPIRIT REVELATION CHURCH TRAFFIC IMPACT ASSESSMENT

START DATE: 01/10/2021

END DATE: 01/11/2021

CLIENT: Spirit Revelation Church

SUMMARY: Assist with regularising of the existing church at Erf 169890

- Site Visit to measure sight distances, access spacing, CWC width, etc.
- Design input to the Site Development Plan (SDP)
- Identification of mitigating measures and preparation of high-level concept designs
- Preparation of TIA report

PROJECT NAME: KIGALI INTERNATIONAL BUSINESS CENTRE TRAFFIC IMPACT ASSESSMENT

START DATE: 01/07/2020

END DATE: 01/05/2021

CLIENT: SSH Design (Pty) Ltd

SUMMARY: Kigali International Financial Business Square Development

- Mixed-use development including a hotel, offices, conference centre, restaurants, and retail
- Design input to porte cochere, access control, and deliveries

| Person trip generation model and capacity analysis to determine road network upgrades |
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| PROJECT NAME: TYGERBERG HOSPITAL DEVELOPMENT FRAMEWORK: TRANSPORT IMPACT ASSESSMENT |
| START DATE: 01/05/2015 |
| END DATE: 01/12/2017 |
| CLIENT: City of Cape Town |
| SUMMARY: |
| Identification of external road network upgrades for three |
| development options |
| Design input to the development road network layout |
| PROJECT NAME: KAPTEINSKLIP PRECINCT AND MNANDI COASTAL NODE: |
| DEVELOPMENT FRAMEWORK: TRANSPORT IMPACT ASSESSMENT |
| START DATE: 01/01/2013 |
| END DATE: 01/06/2015 |
| CLIENT: City of Cape Town |
| SUMMARY: |
| Input to internal road network layout, non-motorized transport, and public transport facilities |
| Assessment of impact on traffic of proposed development |
| PROJECT NAME: TRANSPORT IMPACT ASSESSMENT FOR THE PROPOSED NEW DURBAN PORT PASSENGER TERMINAL START DATE: 01/09/2011 END DATE: 01/07/2015 CLIENT: Transnet National Ports Authority SUMMARY: Determination of bespoke trip generation rates for passenger terminal Assessment of traffic impact and development of appropriate |
| intersection upgrades |
| Transport Road Layout drawings |
| TRANSPORT IMPACT STATEMENT |
| PROJECT NAME: TABLE BAY COLD STORAGE TRAFFIC IMPACT STATEMENT |
| START DATE: 01/07/2023 |
| END DATE: 01/09/2023 |
| CLIENT: Abland (Pty) Ltd |
| SUMMARY: Proposed development of Erven 16885-RE, 155371, and 17747, Paarden Eiland. |
| Site Visit to measure sight distances, access spacing, CWC width, etc. Design input to the Site Development Plan (SDP) |

- Identification of mitigating measures and preparation of high-level concept designs
- Review of the TIS report

PROJECT NAME: NETTLETON ROAD TRAFFIC ENGINEERING STUDY

START DATE: 01/04/2023

END DATE: 01/08/2023

CLIENT: OVERVUE (Pty) Ltd

SUMMARY: Traffic Engineering Study to investigate patterns and sources of traffic along Nettleton Road, Clifton.

• Review of TIS report

PROJECT NAME: BLUE DOWNS SHOPPING CENTRE

START DATE: 01/04/2023

END DATE: 01/06/2023

CLIENT: FPG Properties

SUMMARY: Proposed new drive-thru restaurants and shopping centre revamp.

- Site Visit to measure sight distances, access spacing, CWC width etc.
- Design input to the Site Development Plan (SDP)
- Identification of mitigating measures and preparation of high-level concept designs
- Preparation of TIS report

PROJECT NAME: ERF 11 ATLANTIC HILLS TRAFFIC IMPACT STATEMENT

START DATE: 01/05/2022

END DATE: 01/12/2022

CLIENT: Equites Property Fund

SUMMARY: Proposed expansion of development on Erf 11, Atlantic Hills.

- Site Visit to measure sight distances, access spacing, CWC width etc.
- Design input to the Site Development Plan (SDP)
- Identification of mitigating measures and preparation of high-level concept designs
- Review of TIS report

PROJECT NAME: DURBANVILLE RETAIL CENTRE TRAFFIC IMPACT STATEMENT

START DATE: 01/07/2022

END DATE: 01/11/2022

CLIENT: Rosa Parks (Pty) Ltd

| SUMMARY: Proposed retail centre on Erf 15760, Durbanville. |
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| Site Visit to measure sight distances, access spacing, CWC width etc. Design input to the Site Development Plan (SDP) Identification of mitigating measures and preparation of high-level concept designs Preparation of TIS report |
| PROJECT NAME: SANBURY SQUARE TRAFFIC IMPACT STATEMENT |
| START DATE: 01/02/2022 |
| END DATE: 01/12/2022 |
| CLIENT: TTIN Properties (Pty) Ltd |
| SUMMARY: Proposed development of a private hospital on Erf 10447 at the corner of Sanbury Road and Baden Powell Drive, Eerste River. |
| Site Visit to measure sight distances, access spacing, CWC width etc. Design input to the Site Development Plan (SDP) Identification of mitigating measures and preparation of high-level concept designs Preparation of TIS report |
| PROJECT NAME: ARTEM CENTRE TRAFFIC IMPACT STATEMENT |
| START DATE: 01/04/2022 |
| END DATE: 01/07/2022 |
| CLIENT: Zeus Property Company |
| SUMMARY: Proposed reduction to the existing storage area |
| Site Visit to measure sight distances, access spacing, CWC width etc. Design input to the Site Development Plan (SDP) Identification of mitigating measures and preparation of high-level concept designs Review of TIS report |
| PROJECT NAME: FARM 787, WELTEVREDEN VALLEY TRAFFIC IMPACT STATEMENT |
| START DATE: 01/06/2022 |
| END DATE: 01/07/2022 |
| CLIENT: PRIVATE |
| SUMMARY: Proposed mixed-use development of farm 787 |
| Site Visit to measure sight distances, access spacing, CWC width etc. Design input to the Site Development Plan (SDP) Identification of mitigating measures and preparation of high-level concept designs Preparation of TIS report |

PROJECT NAME: BO-KAAP TRADING FACILITY TRAFFIC IMPACT STATEMENT

START DATE: 01/02/2022

END DATE: 01/06/2022

CLIENT: Violence Protection through Urban Upgrading

SUMMARY: Proposed Trading Facility

- Site Visit to measure sight distances, access spacing, CWC width etc.
- Design input to the Site Development Plan (SDP)
- Identification of mitigating measures and preparation of high-level concept designs
- Preparation of TIS report

PROJECT NAME: KINKLE WAY TRAFFIC IMPACT STATEMENT

START DATE: 01/11/2021

END DATE: 01/01/2022

CLIENT: Dragonfly Property Developments (Pty) Ltd

SUMMARY: Proposed residential development of Erf 55760, 57246, 55703, 55767, and 55702 Newlands

- Site Visit to measure sight distances, access spacing, CWC width etc.
- Design input to the Site Development Plan (SDP)
- Identification of mitigating measures and preparation of high-level concept designs
- Preparation of TIS report

PROJECT NAME: SANBURY SQUARE FILLING STATION TRAFFIC IMPACT STATEMENT

START DATE: 01/11/2021

END DATE: 01/01/2022

CLIENT: TTIN Properties (Pty) Ltd

SUMMARY: Proposed filling station development on Erf 5541, Eerste River

- Site Visit to measure sight distances, access spacing, CWC width etc.
- Design input to the Site Development Plan (SDP)
- Identification of mitigating measures and preparation of high-level concept designs
- Review of TIS report

PROJECT NAME: 2 DIXTON ROAD TRAFFIC IMPACT STATEMENT

START DATE: 01/08/2021

END DATE: 01/09/2021

CLIENT: Shofar Cape Town

| SUMMARY: Proposed development at Erf 28173, 2 Dixton Road, Observatory. |
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| Site Visit to measure sight distances, access spacing, CWC width, etc. Design input to the Site Development Plan (SDP) Identification of mitigating measures and preparation of high-level concept designs Review of the TIS report |
| NON-MOTORISED TRANSPORT |
| PROJECT NAME: SWARTLAND NON-MOTORISED TRANSPORT MASTERPLAN START DATE: 01/05/2019 END DATE: 01/03/2020 CLIENT: Pegasys SUMMARY: Project management and client liaison Site visits, route selection, and classification, project prioritization |
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| PROJECT NAME: FEASIBILITY STUDIES AND CONCEPTUAL DESIGNS FOR CITYWIDE NON-MOTORISED TRANSPORT HOTSPOT LOCATIONS ALONG AND ACROSS RAILWAY LINES START DATE: 01/01/2016 END DATE: 01/07/2019 CLIENT: City of Cape Town SUMMARY: Project management and client liaison Input to the development of methodology used to investigate |
| Hotspots and appraise pedestrian bridges as interventions |
| PROJECT NAME: REVIEW AND UPDATE OF THE CITY OF CAPE TOWN'S NON-MOTORISED TRANSPORT NETWORK PLAN START DATE: 01/01/2016 END DATE: 01/07/2017 CLIENT: City of Cape Town SUMMARY: |
| Project management and client liaison |
| Engagement with internal stakeholdersIdentifying new routes and prioritizing routes for implementation |
| PROJECT NAME: TRAFFIC ENGINEERING SUPPORT TO THE CITY OF CAPE TOWN: CENTRAL REGION START DATE: 01/01/2012 END DATE: 01/07/2015 CLIENT: City of Cape Town |
| SUMMARY: |

| | Project management and client liaison |
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| • | Numerous investigations: setting of speed limits, traffic calming for |
| | speeding and "rat-running", one-way conversions, assessment o |
| | billboard and tourism signage applications |
| • | Application of the Road Traffic Signs Manual |
| TRA | NSPORT PLANNING |
| | DJECT NAME: FEASIBILITY STUDY FOR BLUE DOWNS - PROPOSED RAI |
| СС | RRIDOR: ROUTE DETERMINATION, ROUTE COORDINATION, STATION |
| LO | CATION, STATION, AND ENVIRONS INVESTIGATION |
| STA | RT DATE: 01/01/2015 |
| ENI | D DATE: 01/08/2016 |
| CLI | ENT: PRASA |
| SU/ | MMARY: |
| • | Positioning pedestrian bridges |
| • | Input on station positions considering integration of road-based |
| | transport |
| • | Input on railway line vertical and horizontal alignments |
| • | Passenger demand estimation |
| | Input to system implementation phasing |
| <u>PA</u> | Input to system implementation phasing |
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| De de ap | EXEMPE STUDIES remination of suitable parking ratios for land uses as part of nume velopment applications over the past decade for low-cost housin artment blocks, shopping centers, and offices among others. |
| De de ap PRC | EXING STUDIES remination of suitable parking ratios for land uses as part of nume velopment applications over the past decade for low-cost housin artment blocks, shopping centers, and offices among others. DJECT NAME: WORCESTER CBD TRANSPORT MASTERPLAN RT DATE: 01/07/2010 |
| De de ap PRC STA ENI | EXING STUDIES remination of suitable parking ratios for land uses as part of nume velopment applications over the past decade for low-cost housin artment blocks, shopping centers, and offices among others. DJECT NAME: WORCESTER CBD TRANSPORT MASTERPLAN RT DATE: 01/07/2010 D DATE: 01/08/2010 |
| De de ap PRC STA ENI CLI | EXEMPE STUDIES remination of suitable parking ratios for land uses as part of numeric velopment applications over the past decade for low-cost housing artment blocks, shopping centers, and offices among others. DJECT NAME: WORCESTER CBD TRANSPORT MASTERPLAN RT DATE: 01/07/2010 D DATE: 01/08/2010 ENT: Breede Valley Municipality |
| De de ap PRC STA ENI CLI | EXEMPENDIES Termination of suitable parking ratios for land uses as part of numerical velopment applications over the past decade for low-cost housing artment blocks, shopping centers, and offices among others. DJECT NAME: WORCESTER CBD TRANSPORT MASTERPLAN RT DATE: 01/07/2010 D DATE: 01/08/2010 ENT: Breede Valley Municipality AMARY: |
| De de ap PRC STA ENI CLI | EXING STUDIES remination of suitable parking ratios for land uses as part of nume velopment applications over the past decade for low-cost housin artment blocks, shopping centers, and offices among others. DJECT NAME: WORCESTER CBD TRANSPORT MASTERPLAN RT DATE: 01/07/2010 DATE: 01/08/2010 ENT: Breede Valley Municipality AMARY: Coordination parking utilization and turnover studies of on-street |
| De de ap PR STA ENI CLI SU/ | EXING STUDIES remination of suitable parking ratios for land uses as part of numerical velopment applications over the past decade for low-cost housing artment blocks, shopping centers, and offices among others. DJECT NAME: WORCESTER CBD TRANSPORT MASTERPLAN RT DATE: 01/07/2010 D DATE: 01/08/2010 ENT: Breede Valley Municipality AMARY: Coordination parking utilization and turnover studies of on-street off-street parking |
| De de ap PRC STA ENI CLI SUA | EXING STUDIES remination of suitable parking ratios for land uses as part of nume velopment applications over the past decade for low-cost housin artment blocks, shopping centers, and offices among others. DJECT NAME: WORCESTER CBD TRANSPORT MASTERPLAN RT DATE: 01/07/2010 DATE: 01/08/2010 ENT: Breede Valley Municipality AMARY: Coordination parking utilization and turnover studies of on-street |
| De de ap PRC STA ENI CLI SU/ • | EXING STUDIES remination of suitable parking ratios for land uses as part of numerical velopment applications over the past decade for low-cost housing artment blocks, shopping centers, and offices among others. DJECT NAME: WORCESTER CBD TRANSPORT MASTERPLAN RT DATE: 01/07/2010 D DATE: 01/08/2010 ENT: Breede Valley Municipality MMARY: Coordination parking utilization and turnover studies of on-street off-street parking Analysis of survey data |
| De de ap PRC STA ENI CLI SU/ • • | RKING STUDIES remination of suitable parking ratios for land uses as part of numerications over the past decade for low-cost housing artment blocks, shopping centers, and offices among others. DJECT NAME: WORCESTER CBD TRANSPORT MASTERPLAN RT DATE: 01/07/2010 D DATE: 01/08/2010 ENT: Breede Valley Municipality AMARY: Coordination parking utilization and turnover studies of on-street off-street parking Analysis of survey data |
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START DATE: 01/01/2016 END DATE: 01/07/2017

| CLIENT: City of Cape Town |
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| SUMMARY: |
| Project management and client liaison |
| Stakeholder engagement |
| Development of vision, objectives, and strategies |
| PROJECT NAME: CITY OF CAPE TOWN'S METERED TAXI |
| RATIONALISATION STRATEGY |
| START DATE: 01/10/2013 |
| END DATE: 01/07/2015 |
| CLIENT: City of Cape Town |
| SUMMARY: |
| Coordinating metered taxi rank surveys and analyzing data to |
| determine the use of ranks and the extent of illegal operations |
| • Liaison with the metered taxi industry (operators and meter installers) |
| and public and private stakeholders (e.g. V&A Waterfront |
| PUBLIC TRANSPORT INTERCHANGE / TAXI RANK DESIGN |
| Determining the number of loading aisles and berths, holding bays, and |
| vehicle and pedestrian circulation for the following two projects. |
| PROJECT NAME: FRANSCHHOEK TAXI RANK |
| START DATE: 01/02/2019 |
| END DATE: 01/08/2019 |
| CLIENT: Stellenbosch Municipality |
| PROJECT NAME: KAPTEINSKLIP RAILWAY STATION AS PART OF KAPTEINSKLI |
| PRECINCT AND MNANDI COASTAL NODE: DEVELOPMENT FRAMEWORK |
| (see above for project details) |

| Publications | Feasibility Studies of Interventions to Address the Informal Pedestrian |
|--------------|---|
| and Papers | Crossing of Railway Lines. South African Transport Conference, 2019 |

| References | Andrew Bulman, PrEng Email: andrew@urbaneq.co.za Cell: +27 72 293 8079 |
|------------|---|
| | Pravanya Pillay, PrEng Email: pravanyap@gmail.com Cell: +27 84 478 0079 |