Head Office, Pretoria

Tel: +27 (0)12 844 0306 info@techso.co.za

Box 35, Mark Shuttleworth Street, The Innovation Hub

Suite L11, The Enterprise Building Mark Shuttleworth Street, The Innovation Hub, Pretoria, Gauteng, South Africa Cape Town

Tel: +27 (0)21 557 7730 info@techso.co.za

PostNet Suite #31, Private Bag X3, Bloubergrant, 7443. South Africa

3 Arauna Road Brackenfell Cape Town, Western Cape, South Africa



My Ref: TJ1813 17 August 2021

Holland & Associates Environmental Consultants PO Box 31108 Tokai 7966

Attention Ms. Nicole Holland

Dear Madam

Traffic Specialist Confirmation for the Highlands Central Wind Energy Facility (WEF): Proposed Amendments to the Environmental Authorisation (DFFE REF: 14/12/16/3/3/1/1958): Addendum to the Traffic Impact Assessment dated 4 September 2018

Your Terms of Reference dated 12 June 2020, and updates to the Terms of Reference dated 15 December 2020, refer.

The relevant Traffic Assessment Specialist Report dated 4 September 2018, for the Highlands WEF, assessed Highlands Central WEF with 14 Wind Turbines, and associated infrastructure.

#### 1 PROPOSED AMENDMENT

It is noted that Highlands Central Wind Energy Facility (RF) (Pty) Ltd wish to increase the maximum dimensions of the Wind Turbine Generators (WTG's) for the Highlands Central Wind Energy Facility (WEF), in order to align to current international WTG models. Other amendments are also proposed, including for example, the addition of a Battery Energy Storage System (BESS), and are outlined below.

The approved number of Wind Turbines is 12 and the proposed amendment is for up to 10 Wind Turbines (see Table 1 below).

Table 1: Highlands Central WEF: Proposed amendments to the project description

Component	Approved	Proposed amendment
Number of turbines:	Up to 12 turbines	Up to 10 turbines
Generation capacity of the WEF	Up to 72 MW	No change
Generation capacity per turbine	Up to 6 MW	Remove generation capacity per turbine
Rotor / blade diameters:	Maximum of 150 m	Maximum of 175 m
Hub height	Up to 135 m	Up to <u>180 m</u>
Tip height	Up to 200 m	Up to <u>267.5 m</u>
Foundation Size:	up to approximately 25 m x 25 m in total and up to 5 m deep per turbine	up to approximately 35 m x 35 m in total and up to 7 m deep per turbine
Hard Stand area per turbine:	5000 m <sup>2</sup>	6000 m <sup>2</sup>
Battery Storage	N/A (Not currently included in project description)	Battery storage technology adjacent to the substation on the temporary laydown area (with a footprint of approximately 1 ha, and a height of approximately 8 m).
Length of internal roads	Approximately 50 km	Approximately 45 m

In addition, the following amendments are proposed:

- Slight adjustments to the turbine positions in the preliminary approved layout are proposed, in order to minimise wake effects, as well as to avoid the proposed new blade length extending into areas identified as highly sensitive for birds and bats.
- Refinement to the proposed access roads layout (due to amendments to turbine positions and the reduction in the number of turbines at the WEF).
- Rotation of the Highlands Central WEF Substation yard, to fit the proposed amended road layout.
- The proposed Battery Energy Storage System (BESS), adjacent to the substation (on the temporary laydown area), would have a footprint of approximately 1 ha, and a height of approximately 8 m.
- Correction of an editorial error in the project title on page 1 of the EA and Condition 1, where reference is made to 70 MW instead of 72 MW.

According to the Applicant, the proposed amendments will not result in an increase in the size of the approved development footprint for the project. (In this regard, the final EIA Report indicated that: "The Proposed development site is approximately 10 000 hectares. This is the total area covered, in which all six components will be located. The actual infrastructure footprint will be around 1% of this for the Highlands Central WEF". The final EIA Report indicated that: "Typically, in wind energy facilities, the amount of surface area covered by turbines and associated infrastructure such as roads is less than 1% of the total site. The footprint of the facility is estimated at 41 ha". The development footprint with the proposed amendments would be approximately 39 ha<sup>1</sup>).

<sup>&</sup>lt;sup>1</sup> Note: The estimated 41 ha development footprint for the authorized project includes the access roads that go through Highlands North WEF to reach the Highlands Central WEF. The approximately 39 ha development footprint estimated for the proposed amendment has been estimated on the same principle, i.e. the 39 ha includes the access road that goes through Highlands North WEF to reach the Highlands Central WEF. Therefore, if all three WEFs are constructed, the total footprint of the combined WEFs would be smaller than the sum of all three individual WEFs (given that sections of access roads would be shared).

The proposed amended Wind Turbine layout, and associated infrastructure (including road layout) is shown in the image below.

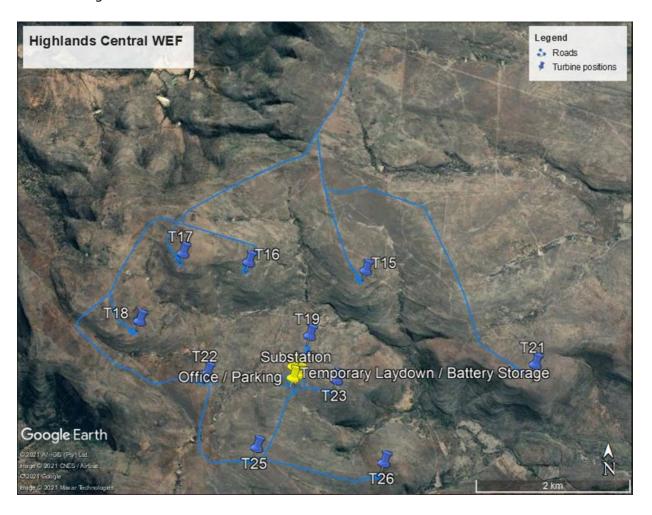


Figure 1 – Highlands Central WEF Proposed Amended Layout

#### 2 ASSESSMENT

The above (proposed amended) layout that differs from the Assessed Layout (dated 2018/05/25) as considered in the Traffic Assessment of 4 September 2018 is noted and is acceptable from a traffic impact perspective.

The Highlands Central WEF with 10 Wind Turbines and associated infrastructure would generate an insignificant increase in the average number of trips per day on the road network than the originally proposed WEF comprising 14 Wind Turbines for Highlands Central WEF as evaluated in the 2018 Traffic Specialist Report, and likewise compared to the approved WEF with 12 Wind Turbines, due to increase in Turbine size with larger foundations and inclusion of a Battery Energy Storage System.

The advantages of the proposed amendments are:

• There will be fewer super-load vehicle trips on the road network transporting Wind Turbine components to site.

The disadvantages of the proposed amendments are:

• Wind turbine components to be transported to site will have increased mass and spatial dimensions (i.e. longer Wind Turbine blades).

#### **3 ENVIRONMENTAL IMPACTS**

The following impacts were identified for the project lifecycle in the Traffic Assessment dated 4 September 2018:

- » Construction:
  - \* Traffic Flow
  - \* Route Constraints
  - \* Minor Road Degradation
  - \* Minor Road Dust
  - \* Intersection Safety
- » Operations:
  - \* Route Constraints
- » Decommissioning:
  - » Minor Road Degradation
  - » Minor Road Dust
- » Cumulative:
  - \* Route Constraints

It is confirmed that the proposed Amendments to the EA for the Highlands Central WEF do not impact on the 4 September 2018 Traffic Specialist Report findings and recommendations. Accordingly, the proposed impact assessment ratings for the proposed amended Highlands Central WEF are unchanged from the original Traffic Assessment and are shown in the Tables below for completeness.

# 3.1 Construction

# **Highlands Central WEF Table – Construction – Traffic Flow**

Impact Phase: Construction								
Potenti	ial impact de	escription:	Traffic conge	estion, imped	dance to traffic	flow due to incr	ease in traffic	
volumes	volumes.							
	Intensity	Extent	Duration	Status	Probability	Significance	Confidence	
Without Mitigation	Medium	Medium	Low	Negative	Medium	Medium	Medium	
With Mitigation	Medium	Medium	Low	Negative	Low	Low	Medium	
Can the	impact be re	eversed?	Yes					
Will the impact cause No irreplaceable loss of resources?								
Can the impact be avoided, Yes, manage and mitigate traffic managed or mitigated?								
Mitigatio	Mitigation measures to reduce risk or enhance opportunities:							

Mitigation measures to reduce risk or enhance opportunities:

Obtain and adhere to a Transport Management Plan to:

- Ensure safe transport of materials, equipment, etc. to site;
- · Optimise route selection and time of travel;
- Co-ordinate traffic law-enforcement and transport to site.

Rationale for scoring as shown in the table above.

**Extent**: Medium due to vehicle travel on National and Regional Routes in the Eastern Cape only.

**Duration**: Low due to build period less than 5 years. **Intensity**: Medium due to risk of serious crashes.

# **Highlands Central WEF Table - Construction - Route Constraints**

# **Impact Phase: Construction**

**Potential impact description:** Constraints for large vehicles en-route to site could result in unacceptable traffic impact (safety and congestion). Abnormally long, low or high vehicles will experience constraints along the chosen route, i.e. inadequate space to accommodate turning movements at some intersection and interchange ramps, N10 Olifantskop Pass horizontal alignment inadequate for very long vehicles (transporting turbine blades), low rail over road bridge at Cookhouse with road in a vertical dip, restricted turning space on R63 in Somerset East, low speed road design on minor roads could be problematic for very low vehicles, no suitable roads on-site to access Wind Turbine locations.

	Intensity	Extent	Duration	Status	Probability	Significance	Confidence
Without	High	Medium	Low	Negative	High	Medium	High
Mitigation	riigii	ricalani	LOW	Negative	ingii	ricalani	ingii
With	Low	Medium	Low	Negative	Low	Low	High
Mitigation	LOW	ricalani	LOW	Negative	LOW	LOW	ingii
Can the im	pact be reve	rsed?	Yes				
Will the im	pact cause irr	eplaceable	No				
loss of reso	ources?						
Can the	impact be	avoided,	Yes, impacts can be managed and mitigated				
managed o	r mitigated?						

Mitigation measures to reduce risk or enhance opportunities:

Prepare a Transport Management Plan to:

- Ensure safe transport of materials, equipment, etc. to site;
- · Optimise route selection and time of travel;
- Co-ordinate traffic law-enforcement and transport to site;
- Design on-site roads to facilitate access to laydown areas, substations and wind turbines;
- Conduct a dry-run prior to implementation of the Transport Management Plan.

Rationale for scoring as shown in the table above.

**Extent**: Medium due to vehicle travel on National and Regional Routes in the Eastern Cape only.

**Duration**: Low due to build period less than 5 years.

# Highlands Central WEF Table - Construction - Minor Road Degradation

# **Impact Phase: Construction**

**Potential impact description:** Deterioration of gravel Minor Roads. Additional heavy traffic on Minor roads could degrade the existing road pavement.

	Intensity	Extent	Duration	Status	Probability	Significance	Confidence
Without Mitigation	Medium	Low	Low	Negative	Medium	Medium	Medium
With Mitigation	Low	Low	Low	Negative	Low	Low	Medium
Can the im	Can the impact be reversed?						
Will the irreplaceab	e impact le loss of res		No				
Can the managed o	impact be or mitigated?	· · · · · · · · · · · · · · · · ·	Yes, im	pacts can be	managed and	l mitigated	

Mitigation measures to reduce risk or enhance opportunities:

Carry out regular maintenance of the road to ensure that its condition is maintained or improved:

- Document condition of gravel roads prior to construction.
- Upgrade gravel roads to suitable condition for proposed construction vehicles.
- Ensure that the minor road is left in a better condition post-construction.

Rationale for scoring as shown in the table above.

**Extent**: Low due to vehicle travel on two Minor Roads only.

**Duration**: Low due to build period less than 5 years.

**Intensity**: Medium due to risk of serious damage and injury crashes. Low due to risk of minor damage crashes.

# **Highlands Central WEF Table - Construction - Minor Road Dust**

Impact Ph	Impact Phase: Construction						
Potential	impact des	cription: Ad	dditional traf	fic on grave	l Minor Roads	will result in m	ore dust that
reduces vis	ibility and in	creases pote	ential for cra	shes on the	Minor Roads.		
	Intensity	Extent	Duration	Status	Probability	Significance	Confidence
Without Mitigation	High	Low	Low	Negative	Medium	Medium	Medium
With Mitigation	Low	Low	Low	Negative	Low	Low	Medium
Can the im	pact be reve	rsed?	Yes				
Will the imp	oact cause in	replaceable	No				
loss of reso	urces?						
Can the impact be avoided, Yes, impacts can be managed and mitigated managed or mitigated?							
Mitigation r	Mitigation measures to reduce risk or enhance opportunities:						

Post speed restriction signage for construction vehicles on minor roads.

Rationale for scoring as shown in the table above.

Reduce travel speed on gravel road to reduce dust:

**Extent**: Low due to dust risk only on Minor Roads. **Duration**: Low due to build period less than 5 years.

# Highlands Central WEF Table - Construction - Intersection Road Safety

Impact Ph	nase: Const	ruction						
Potential	Potential impact description: Additional traffic at the Minor Road M00412 intersection with the R63							
increases c	increases chances of vehicle crashes.							
	Intensity	Extent	Duration	Status	Probability	Significance	Confidence	
Without Mitigation	High	Low	Low	Negative	Medium	Medium	Medium	
With Mitigation	High	Low	Low	Negative	Low	Low	Medium	
Can the im	pact be reve	rsed?	Yes	Yes				
Will the imp	pact cause in	replaceable	No	No				
loss of reso	ources?							
Can the impact be avoided, Yes, impacts can be managed and mitigated managed or mitigated?								

Mitigation measures to reduce risk or enhance opportunities:

Alert motorists to construction traffic at the access:

- Place warning construction vehicle signage on the R63 on each approach to Minor Road M00412.
- Ensure that all construction vehicles are roadworthy
- Ensure that all construction vehicles have appropriate drivers licence.

Rationale for scoring as shown in the table above.

Extent: Low due to single site location at intersection of R63 and Minor Road MN00412

**Duration**: Low due to build period less than 5 years.

**Intensity**: High due to risk of fatal crashes.

# 3.2 Operations

# **Highlands Central WEF Table - Operations - Route Constraints**

#### **Impact Phase: Operations**

**Potential impact description:** Constraints for large maintenance related vehicles en-route to site could result in unacceptable traffic impact (safety and congestion). Abnormally long, low or high vehicles will experience constraints along the chosen route, i.e. inadequate space to accommodate turning movements at some intersection and interchange ramps, Olifantskop pass horizontal alignment inadequate for very long vehicles (transporting turbine blades), restricted turning space on R63 in Somerset East, low rail over road bridge at Cookhouse with road in a vertical dip, low speed road design on minor roads could be problematic for very low vehicles.

	Intensity	Extent	Duration	Status	Probability	Significance	Confidence
Without Mitigation	High	Medium	Low	Negative	Medium	Medium	High
With Mitigation	Low	Medium	Low	Negative	Low	Low	High
Can the im	Can the impact be reversed?						
Will the im	pact cause i	rreplaceable	No				
loss of reso	ources?						
Can the managed o	impact be or mitigated?	· · · · · · · · · · · · · · · · ·	Yes, imp	oacts can be m	anaged and m	itigated	

Mitigation measures to reduce risk or enhance opportunities:

Refer to Transport Management Plan to:

- Ensure safe transport of materials, equipment, etc. to site;
- Optimise route selection and time of travel;
- Co-ordinate traffic law-enforcement and transport to site.

Rationale for scoring as shown in the table above.

**Extent**: Medium due to vehicle travel on National and Regional Routes in the Eastern Cape only.

**Duration**: Low due to build period less than 5 years.

# 3.3 Decommissioning

# Highlands Central WEF Table - Decommissioning - Minor Road Degradation

# **Impact Phase: Decommissioning**

**Potential impact description:** Deterioration of gravel Minor Roads. Additional heavy traffic on Minor roads could degrade the existing road pavement.

	Intensi	Exte	Durati	Status	Probabili	Significan	Confiden
	ty	nt	on		ty	ce	ce
Without Mitigati on	Medium	Low	Low	Negati ve	Medium	Medium	Medium
With Mitigati on	Low	Low	Low	Negati ve	Low	Low	Medium
Can the i	mpact be reve	rsed?	Yes				
	he impact able loss of res		No				
Can the managed	impact be or mitigated?	,	Yes, impa	acts can be m	anaged and mit	igated	

Mitigation measures to reduce risk or enhance opportunities:

Carry out regular maintenance of the road to ensure that its condition is maintained or improved:

- Document condition of gravel roads prior to construction.
- Upgrade gravel roads to suitable condition for proposed construction vehicles.
- Ensure that the minor road is left in a better condition post-construction.

Rationale for scoring as shown in the table above.

**Extent**: Low due to vehicle travel on two Minor Roads only.

**Duration**: Low due to build period less than 5 years.

Intensity: Medium due to risk of serious crashes. Low due to risk of minor damage crashes.

# Highlands Central WEF Table - Decommissioning - Minor Road Dust

# **Impact Phase: Decommissioning**

**Potential impact description:** Additional traffic on gravel Minor Roads will result in more dust, that reduces visibility and increases potential for crashes on the Minor Roads.

	Intensity	Extent	Duration	Status	Probability	Significance	Confidence
Without Mitigation	High	Low	Low	Negative	Medium	Medium	Medium
With Mitigation	Low	Low	Low	Negative	Low	Low	Medium
Can the im	Can the impact be reversed?						
Will the irreplaceab	e impact le loss of res		No				
Can the managed o	impact be or mitigated?		Yes, im	pacts can be m	nanaged and n	nitigated	

Mitigation measures to reduce risk or enhance opportunities:

Reduce travel speed on gravel road to reduce dust:

• Post speed restriction signage for construction vehicles on minor roads.

Rationale for scoring as shown in the table above.

**Extent**: Low due to dust risk only on Minor Roads. **Duration**: Low due to build period less than 5 years.

# 3.4 Cumulative Impacts

The Table below shows a list of similar projects within 35 km radius of the Highlands Central WEF, as considered in the Traffic Assessment Specialist Report dated 4 September 2018.

DEA_REF	PROJ_TITLE	APP_RECEIV	TECHNOLOGY	MEGAWATT	PROJ_STATU
12/12/20/2361	Proposed Construction Of A 10mw Photovoltaic (Pv) Solar Farm In Pearston, Blue Crane Route Municipality, Eastern Cape Province	2011/07/21	Solar PV	10	Approved
12/12/20/2635	The Construction Of A Second 10 Mw Photovoltaic Solar Farm In Pearston In The Blue Crane Route Municipality, Erf 468- Portion Of The Pearson Municipal Commonage, Eastern Cape Province	2011/11/01	Solar PV	55	Approved
12/12/20/2657	Proposed Construction And Operation Of A 55MW Photovolytaic Solar Farm And Associated Infrastructure On Portion 2 Of The Farm Kraan Vogel Kuil No.50, Pearston, Eastern Cape Province	2013/07/16	Solar PV	55	Approved
14/12/16/3/3/2/372	Proposed Middleton wind energyproject Blue Crane Route Municipality Eastern Cape province	2013/01/25	Onshore Wind	140	In process
12/12/20/2657/AM1	Proposed Construction And Operation Of A 55MW Photovolytaic Solar Farm And Associated Infrastructure On Portion 2 Of The Farm Kraan Vogel Kuil No.50, Pearston, Eastern Cape Province	2013/07/16	No Technology	55	Approved
12/12/20/2657/AM2	Proposed Construction And Operation Of A 55MW Photovolytaic Solar Farm And Associated Infrastructure On Portion 2 Of The Farm Kraan Vogel Kuil No.50, Pearston, Eastern Cape Province	2016/03/29	No Technology	55	Approved

**Note:** Highlands North WEF and Highlands South WEF are excluded from the Table. They are discussed below.

The Highlands North WEF and Highlands South WEF and their associated infrastructure are not expected to generate a significant number of trips.

From the table above, all approved projects are in the Pearston Area. It could be assumed that these projects might be completed before the Highlands Central WEF is approved and constructed, judging by the approvals process timelines.

As a worst-case scenario, it is assumed that all these developments could be constructed simultaneously. It is possible that this could coincide with the Highlands Central WEF abnormal load trips to site, along the N2 and N10.

These cumulative impacts are considered below.

# **Highlands Central WEF Table - Cumulative - Route Constraints**

# **Impact Phase: Construction**

**Potential impact description:** Constraints for large vehicles en-route to site could result in unacceptable traffic impact (safety and congestion). Abnormally long, low or high vehicles will experience constraints along the chosen route, i.e. inadequate space to accommodate turning movements at some intersection and interchange ramps, N10 Olifantskop Pass horizontal alignment inadequate for very long vehicles (transporting turbine blades).

	Intensity	Extent	Duration	Status	Probability	Significance	Confidence
Without Mitigation	High	Medium	Low	Negative	High	Medium	High
With Mitigation	Low	Medium	Low	Negative	Low	Low	High
Can the im	Can the impact be reversed?						
Will the im loss of reso	•	rreplaceable	No				
Can the managed o	impact bor mitigated?	e avoided,	Yes, impacts can be managed and mitigated				

Mitigation measures to reduce risk or enhance opportunities:

Prepare a Transport Management Plan to:

- Where possible co-ordinate safe transport of materials, equipment, etc. to site, most particularly through the N10 Olifantskop Pass;
- Co-ordinate traffic law-enforcement and transport to site.

Rationale for scoring as shown in the table above.

**Extent**: Medium due to vehicle travel on National and Regional Routes in the Eastern Cape only.

**Duration**: Low due to build period less than 5 years.

# 4 CONCLUSION

The proposed amendments to the Environmental Authorisation do not trigger any new impact to the traffic and transportation on site and to and from, and no further recommendations or mitigation measures to those outlined in the Traffic Assessment dated 4 September 2018 are required. The proposed amendments therefore will not result in any significant increased level or change in the nature of traffic impacts. Based on the further assessment and original Traffic Specialist Report, the amendment can be granted to the applicant.

Yours Sincerely

Stephen Fautley

# **Annexure A – Site Verification Report**

I hereby confirm that the site sensitivity verification as per the Traffic Specialist Report by Techso (Pty) Ltd, dated 4 September 2018 for the Highlands Central WEF has been undertaken through the use of:

- (a) a desk top analysis, using satellite imagery (google earth). This was to determine site and route spatial aspects / conditions;
- (b) a preliminary on-site inspection. This was conducted on 26 July 2018 to assess possible routes to site and to gain insight to possible issues and constraints along the various routes, from Ngqura (also known as Coega) Harbour (point of origin in South Africa for Wind Turbine components) to the proposed Highlands Central WEF site (destination), and to assess the roadside and site environment from a transport (route capacity and road safety) perspective.
- (c) other available and relevant information was also sourced, such as South African National Road Authority Limited (SANRAL) Traffic Count Database. This was done to obtain background traffic flows required in assessment of traffic impact on road capacity, from origin to destination, for the transport of Wind Turbine components.

The development of the Highlands Central WEF and associated infrastructure would not have undue detrimental impact on traffic, further statements and mitigation measures as assessed are recorded in the Traffic Specialist Report dated 4 September 2018.

# **Annexure B - Curriculum Vitae**

CURRICULUM VITAE STEPHEN FAUTLEY

Surname Fautley

Christian names Stephen Mark
Identity number 6107 1551 75 083
Date of Birth 15 July 1961
Nationality South African
Profession Traffic Engineer

Years' experience 34

# **KEY QUALIFICATIONS**

Stephen Fautley Stephen is a traffic engineering technologist with over 30 years of experience in traffic and transportation engineering. He has completed the Transportation Planning and Study Methodology course and the Highway Capacity course at the University of Stellenbosch. Stephen has been involved with civil, traffic and transportation engineering for ten (10) years at Provincial Government of the Western Cape, 18 months with Kantey and Templer Consulting Engineers and 10 years at local authority/city level and joined Techso in August 2008

Countries of work experience include South Africa, Namibia and Mozambique.

### **CAREER SUMMARY**

2008 – Date	Senior Transportation Engineer, Techso
2006 – 2008	Regional Head, Traffic Impact Assessments and Development Control, City of Cape Town
1998 – 2006:	Principal Technician: Traffic Engineering, City of Cape Town
1997 – 1998:	Senior Technician, Kantey and Templer
1995 – 1996:	Chief Industrial Technician, Urban Transportation: Provincial Government: Western Cape
1994 – 1995:	Chief Industrial Technician Regional Services: Provincial Government: Western Cape
1993 – 1994:	Chief Industrial Technician: Mapping and Proclamations: Provincial Government: Western
	Cape
1986- 1992:	Principal Industrial and (1986 -1991) Industrial Technician: Geometric Design: Provincial
	Administration: Western Cape

#### PROFESSIONAL EXPERIENCE

### Key Experience

- Transportation Planning
- Traffic Engineering
- Road Safety Audits

**Development of Public Transport Safety Plan** (2017 – 2018) – Input to rail safety section in the development of a public transport safety plan serving as one of the implementations plans in support of the National Road Safety Strategy 2016-2020 that is aligned with the goals and targets of both the UN Decade of Action and the National Development Plan, 2030.

**Transport Impact Statement for Erf 22 at 109 Kloof Road in Bantry Bay** (2017) – Technical investigation into Erf 22, Bantry Bay driveway and garage accessibility from Kloof Road. Assessment of traffic safety and legal access rights. Made presentation to legal representative for the client for court case.

Assessment of Road Safety Risk and Enforcement Measures (2015 – 2017) - Assess data provided by TMT. Identify sites that could benefit from SME Cameras. Conduct research and provide insight to the road safety issues. Draft reports for following municipalities motivating for the placement of SME cameras, for Director of Public Prosecutions approval

· uPhongola Municipality

- · Msunduzi Municipality
- · Ubehlebezwe Municipality
- · Mandeni Municipality
- · Hibiscus Municipality
- · Howick Municipality
- · Ethekweni Municipality

Contract 24G/2009/10 IRT AFC - City of Cape Town - Integrated Rapid Transport - sub-consultant review and design of intersection and traffic signals for Cape Town Integrated Rapid Transport (2009)

**PV Solar Plant at ACSA George** - Traffic Impact Statement for the proposed PV Solar Plant at Airport Company South Africa (ACSA) George Airport (2015). The report dealt with building in the Road Building Line (Roads and Ribbon Development Act, Act 21 of 1940) and also included assessment of Hazardous Solar Glare Analysis impact on Road Users.

City of Cape Town - Integrated Rapid Transit Phase 1B — Conduct Stage 3 Road Safety Audits on a number of sites as below (2015):

- · Koeberg Road / Royal Road Intersection in Maitland
- Koeberg Road / Loxton Road Intersection in Milnerton
- Koeberg Road / Boundary Road Intersection in Milnerton
- Koeberg Road / Ysterplaat Primary School in Ysterplaat
- Koeberg Road / Section Street Intersection in Brooklyn

City of Cape Town - Integrated Rapid Transit Phase 1B - Conduct a Stage 3 Road Safety Audit on R27 Reversible Bus Lane (2016).

City of Cape Town - Integrated Rapid Transit Phase 1B - Conduct Stage 6 Road Safety Audits (Road Safety Appraisals) on a number of sites as below (2018):

- Koeberg Road / Royal Road Intersection in Maitland
- Koeberg Road / Loxton Road Intersection in Milnerton
- Koeberg Road / Boundary Road Intersection in Milnerton
- Koeberg Road / Ysterplaat Primary School in Ysterplaat
- Koeberg Road / Section Street Intersection in Brooklyn

SANRAL Project No. NRA: N.001-290-2017/1F for the rehabilitation of National Route 1 Section 29 from Masekwaspoort (km 27.80) to km 70 in Limpopo - SANRAL - Conduct a Stage 6 (Appraisal) Road Safety Audit (2017)

SANRAL Project No. NRA: N.001-290-2017/1F for the rehabilitation of National Route 1 Section 29 from Masekwaspoort (km 27.80) to km 70 in Limpopo - SANRAL - Conduct a Stage 1 (Prelim Design) Road Safety Audit (2018)

**Outdoor Advertising Applications** – Provided input and assistance to client applications for outdoor advertising signage on sites as below (2017):

- Application for 3rd Party Billboard Sign on Erven 24622 & 24623, Maitland
- Application for 3rd party flat sign on Erf 10118, 50 Riebeeck St, Cape Town
- Application for 3rd Party Billboard on Erf 2849 Brackenfell High School

**Traffic Management Plan - R21/2 in Gauteng - SANRAL -** compile a Traffic Management Plan for the proposed closure of the national road R21 north and southbound between km 0.00 at the R562 Olifantsfontein interchange and km 12.8 at the M31 Nellmapius interchange for the maintenance of overhead power lines (2017).

**Traffic Engineering Specialist Reports for Environmental Impact Assessments**: Input to Various Environmental Impact Assessment (residential developments, solar, wind renewable energy plants, power stations, mines, industrial sites). These include Environmental Risk Impact Assessment from a traffic and transportation perspective (2016 to date).

Paulputs CSP Project near Pofadder

- Farm Scuitdrift 426 near Augrabies, Northern Cape
- Noupoort CSP Northern Cape Desktop traffic study
- CCGT power plant in Richards Bay Traffic Scoping Report
- 100 MW Orkney Solar Farm, Northern Cape
- · Castle (Mulilo) Tower Batching Plant near De Aar
- Mutso Coal Power Plant near Makhado in Limpopo Province
- · Paulputs Wind Energy Farm near Pofadder
- Solar PV Plant in Wildebeestekuil in NorthWest Province
- Solar PV Plant in Leeuwbosch in North West Province
- Highlands Wind Energy Farm in Somerset East

**Outdoor Advertising Signage Audit** - Audit of 3<sup>rd</sup> party advertising signage encroachment in road reserve in Cape Town CBD, and key roads in Bellville, Parow Goodwood, Woodstock, Salt River and Sea Point (June 2015 – Dec 2015)

**TIA for Prime Ministers Offices in Windhoek** - Develop a PTV Transportation Model and compile Traffic Impact Statement (TIA) for the proposed Prime Minister office in Windhoek (Feb 2013 – April 2013)

The Nest Student Housing (570 beds) - Compile Traffic Impact Assessment Report for the proposed student residence (and commercial shops) on Erf 31993 in Rondebosch. (Feb 2014 – June 2014)

Campuskey Student Housing (536 beds) - Compile Traffic Impact Assessment Report for the proposed student residence in Rondebosch. (July 2016 – Sept 2016)

Rhodes Square Student Housing (600 beds) - Compile Traffic Impact Assessment Report for the proposed student residence (for various design proposals) on Erf 31990 in Mowbray and propose new traffic signal timing (Jan 2016 – May 2016)

**Traffic Impact Assessment for PMR 189 / PMR 205 intersection in Paarl -** Assessed Non-motorised Transport, Public Transport activity and conduct traffic counts and vehicle delay studies to determine warrants for traffic signal installation and compile TIA. (Feb 2016 – April 2016)

**TIA** and **Traffic Eng Input to Netcare Hospital and Gym** — June 2016Provide traffic engineering input to building parking, access, ramps, etc. and compile Traffic Impact Assessment reports for the new Netcare Hospital (and Gym) located in the City of Cape Town. Assess City Precinct network trips and traffic impact and City precinct traffic signal upgrading requirements. (Jan 2014 – June 2016)

**Traffic Impact Assessment for PMR 189 Paarl** - Compile Traffic Impact Assessment evaluating various signalised and unsignalized intersection on PMR 189 in Paarl area in view of a substantially large Val da Vie residential development and other recently approved developments in the area. The TIA viewed collective development impact over an extended period of time, as requested by the WCG. (May 2017 - June 2017)

TIS Panorama Primary School in Riversdale – Compile Traffic Impact Statement (TIS) for redevelopment of school considering park, access, traffic and scholar safety on roads around the school (July 2017 to Sept 2017)

Jones Pre-School Somerset West - Compile TIS considering parking and traffic impact on traffic signals and access for development application for private pre-school (Sept 2017 – Nov 2017)

Wallacedene EHP incremental Development Area Housing - Compile TIS – Wallacedene EHP (Emergency Housing Project in Wallacedene) for 318 units (Jan 2018 - May 2018)

**Drakenstein UISP Housing** - Compile TIS and Traffic Engineering Services – Drakenstein Upgrade of Informal Settlements Programme (UISP) in Paarl for 654 units (May 2018 – Nov 2018)

TIS for Erf 2326 in Table View - Compile TIS considering scholar NMT safety, parking and traffic impact in area surrounding site and Table View Primary School in support of application for consent use for Early Childhood Development Centre. (March 2019 – May 2019)

**TIA for Charlesville Residential Housing** - Undertook traffic counts, intersection analysis, and compiled TIA. (Oct 2019 – Dec 2019)

TIS for rezoning Erf 5236 Strand - Compile TIS considering parking and traffic impact for rezoning application for mixed use in Urban Environment (Feb 2019 – March 2019)

Traffic Specialist Study for Environmental Impact Basic Assessment – Azalea Residential Flats on Erf 46 and Erf 47 in Bantry Bay - Compile Traffic Specialist Report as input to Basic Assessment for Environmental Impact Assessment application (July 2020 – Aug 2020)

Symphony Way UISP Housing Tender 201C/2016/17 - Symphony Way UISP (Upgrading Informal Settlement Programme) Housing in Philippi for 3000 units. Provide traffic engineering input to road planning and Site Development Framework, undertook Traffic counts, compile TIA considering traffic, propose traffic signal design and intersection upgrading for 7 intersections, consider NMT, public transport and road safety for the project. (Aug 2018 – Dec 2020)

Stage 6 Road Safety Appraisal – NMT Paul Roux - Road Safety Audit Team Leader - Conduct Road Safety Appraisal for the improvement of pedestrian facilities on National Route 5 Section 3 Paul Roux as input to the road design. (Nov 2020 – Jan 2021)

Traffic Impact Assessment for PMR 191 / Val de Vie Access Link Road intersection in Paarl - Assessed background traffic studies, determine appropriate growth factors, undertook intersection analysis for signals and traffic roundabout configurations for various horizon years, recommend intersection design. (Feb 2021)

#### **Other**

City of Cape Town Multi-Function Transport Management Centre (2011) - Development of a Facility Management Plan for the City of Cape Town Transport Management Centre. This included facility safety and security measures and protocols.

**City of Cape Town Multi-Function Electricity Headquarters** (2013) - Development of a Facility Management Plan for the City of Cape Town Electricity Headquarters. This included facility safety and security measures and protocols.

**Traffic Impact Assessments and Traffic Impact Statements** (2009 – date) - Commercial and Residential Developments, Schools, Gym, Hospital, Service Stations, Sand-mines, Housing developments. Many of these projects include traffic engineering and road safety aspects.

#### ACADEMIC QUALIFICATIONS

1989 National Higher Diploma (Civil Engineering), Cape Technikon, South Africa

#### PROFESSIONAL ASSOCIATIONS

Engineering Council of South Africa (ECSA) (Professional Engineer No. 200270171) South African Institution for Civil Engineering (Member - 201500599)

# English Excellent Excellent Fluent Mr SM Fautley Name of Expert Signature Mriting Speaking Excellent Fluent 05/03/2021 Date

# **Annexure C – Specialist Declaration**



DETAILS OF THE SPECIALIST, DECLARATION OF INTEREST AND UNDERTAKING UNDER OATH

	(For official use only)	
File Reference Number:		
NEAS Reference Number:	DEA/EIA/	
Date Received:		

Application for authorisation in terms of the National Environmental Management Act, Act No. 107 of 1998, as amended and the Environmental Impact Assessment (EIA) Regulations, 2014, as amended (the Regulations)

#### PROJECT TITLE

PROPOSED HIGHLANDS CENTRAL WIND ENERGY FACILITY AND ASSOCIATED INFRASTRUCTURE NEAR SOMERSET EAST IN THE EASTERN CAPE PROVINCE: APPLICATION FOR AMENDMENT OF THE ENVIRONMENTAL AUTHORISATION

#### Kindly note the following:

- This form must always be used for applications that must be subjected to Basic Assessment or Scoping & Environmental Impact Reporting where this Department is the Competent Authority.
- This form is current as of 01 September 2018. It is the responsibility of the Applicant / Environmental Assessment
  Practitioner (EAP) to ascertain whether subsequent versions of the form have been published or produced by the
  Competent Authority. The latest available Departmental templates are available at
  https://www.environment.gov.za/documents/forms.
- A copy of this form containing original signatures must be appended to all Draft and Final Reports submitted to the department for consideration.
- All documentation delivered to the physical address contained in this form must be delivered during the official Departmental Officer Hours which is visible on the Departmental gate.
- All EIA related documents (includes application forms, reports or any EIA related submissions) that are faxed; emailed; delivered to Security or placed in the Departmental Tender Box will not be accepted, only hardcopy submissions are accepted.

#### **Departmental Details**

#### Postal address:

Department of Environmental Affairs

Attention: Chief Director: Integrated Environmental Authorisations

Private Bag X447

Pretoria 0001

### Physical address:

Department of Environmental Affairs

Attention: Chief Director: Integrated Environmental Authorisations

Environment House 473 Steve Biko Road

Arcadia

Queries must be directed to the Directorate: Coordination, Strategic Planning and Support at:

Email: EIAAdmin@environment.gov.za

#### SPECIALIST INFORMATION

Specialist Company Name:	Techso (Pty) Ltd				
B-BBEE	Contribution level (indicate 1 to 8 or non-compliant)	2	Percentage Procurement recognition	18	
Specialist name:	Stephen Fautley				
Specialist Qualifications:	National Higher Diploma				
Professional affiliation/registration:	Engineering Council of South Africa (ECSA) 200270171				
Physical address:	13 Riverside Drive, Milnerton				
Postal address:	Interview to a financial control of the control of				
Postal code:	7441	Ce	H: 084	13007722	
Telephone:	021 - 5577730	Fa	x: -		
E-mail:	steve@techso.co.za				

2	DECLADATION	I DV THE	CDECIAL	CT
6.	DECLARATION	A DI IUE	SPECIAL	3

,Stephen Mark Fautley	, declare that
-----------------------	----------------

- I act as the independent specialist in this application;
- I will perform the work relating to the application in an objective manner, even if this results in views and findings
  that are not favourable to the applicant;
- I declare that there are no circumstances that may compromise my objectivity in performing such work;
- I have expertise in conducting the specialist report relevant to this application, including knowledge of the Act,
   Regulations and any guidelines that have relevance to the proposed activity;
- I will comply with the Act, Regulations and all other applicable legislation;
- . I have no, and will not engage in, conflicting interests in the undertaking of the activity;
- I undertake to disclose to the applicant and the competent authority all material information in my possession that
  reasonably has or may have the potential of influencing any decision to be taken with respect to the application by
  the competent authority; and the objectivity of any report, plan or document to be prepared by myself for
  submission to the competent authority;
- all the particulars furnished by me in this form are true and correct; and
- I realise that a false declaration is an offence in terms of regulation 48 and is punishable in terms of section 24F of the Act.

Signature of the Specialist

Techso (Pty) Ltd

Name of Company:

24 May 2021

Date

Details of Specialist, Declaration and Undertaking Under Oath

Page 2 of 3

3.	UNDERTAKING UNDER OATH/ AFFIRMATION	
1,	Stephen Mark Fautiey, swear	under oath / affirm that all the information
I,Stephen Mark Fautley, swear under oath / affirm that all the informatio submitted or to be submitted for the purposes of this application is true and correct.		
Signa	ture of the Specialist	
Techs	o (Pty) Ltd	
Name	of Company	
	24 May 2021	
Date	Del	
Signat	ture of the Commissioner of Oaths 24/5-/202/	
Date	24/5-/2021	
A	Pauline Fautley Commissioner of Oaths (RSA) Locounting Officer A0651439 Ld: 13 Riverside Drive, Milnerton, 7441	
Details	of Specialist, Declaration and Undertaking Under Oath	