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Your ref:

**ECOLEGES ENVIRONMENTAL CONSULTANTS**  
3 Generaal Street  
Machadodorp  
1170

14 March 2022

**Attention:** Mr. J Bowers

Sir,

**SOVENTIX UNILEVER SOLAR PV PROJECT**  
**TRAFFIC ASSESSMENT AND GENERAL REPORT**

Infratech projects (Pty) Ltd was appointed by Ecoleges Environmental Consultants to conduct a desktop traffic impact assessment for the proposed 3.6 MW solar energy installation for the Unilever Factory on 3.8ha of land adjacent to the Unilever factory site in Boksburg East, City of Ekurhuleni, Gauteng.

The Environmental authorisation process's screening report does not explicitly require a Traffic Impact Assessment. However, the City of Ekurhuleni did indicate that a traffic assessment should be conducted to assess vehicles accessing the site and the impact that it may have on the nearby schools.

The proposed site of works for the solar installation is located on vacant land adjacent to the Unilever factory. The land is bordered by St. Dominic's Road to the South, Kruger Street to the west, vacant land to the East, and a railway line to the North. St Dominic's school for girls is located directly opposite the Unilever Solar farm site. The school consists of a pre-school, primary school, and senior school combined on the same premises and has a total of approx. 1,000 pupils and 50 teachers.

Other schools in the area are Voortrekker high school, located 500m west of the site, and Boksburg High school, being 1,000m Southwest of the site. The latter is considered insignificant in terms of the potential impact of the site on the school traffic.

Voortrekker high school is located in close proximity to the site. Still, it is considered not to be impacted in terms of traffic flow compared to the St Dominic's school for girls being directly adjacent to the site. Traffic flow to Voortrekker high school is mainly via Trichardt Road through Voortrekker Road, and traffic from the North will make use of Railway Road feeding into Trichardt Road.

The only school potentially impacted is St Dominic's school for girls. Access to the School is from Kruger Street, with access to Kruger Street being from Commissioner Road and Leeuwpoot Street to the South. Leeuwpoot Street is the main arterial, and both Kruger Street and Commissioner Road joins directly onto Leeuwpoot Street to form the main access routes. Leeuwpoot Street is a dual carriageway with dedicated turning lanes into Kruger Street.

Access to the school from the North is via Campbell Road and Railway Street into Kruger Street.

Traffic flow under normal nonpeak conditions is generally good, and modelled travel times from both a Northernly and Southernly direction to the site shows acceptable travel times. From South Street (2.8km west of St Dominic's school), the average travel time is 5 – 6 minutes. From Paul Smit Road, Ravenswood, (3.3km North of St Dominic's school), the average travel time is 4 minutes.

The traffic situation varies drastically between regular travel times and peak traffic times. The peak traffic to schools is generally considered very congested for the period 06:45 am to 07:45 am. This peak morning traffic is generated mainly by the transport of pupils to the school. The same principle applies to the end-of-school-day pupil collections from 13:00 to 13:45. This mid-day traffic peak volume is generally considered lower than the morning peak hour as the mid-day peak does not coincide with a workforce commuter peak. After school, extramural events also reduced this peak traffic from the school volume over time.

The potential impact to be generated by the 3.6 MW solar energy installation for the Unilever Factory is two-fold, consisting of:

- a) traffic generated during construction and,
- b) traffic generated during the regular operation of the solar farm post commissioning of the solar energy farm.

It can be expected that the following aspects can possibly impact the traffic in the immediate vicinity of the site:

During the construction period:

- Site establishment period (1 week)
- Commuting of labour to and from the site
- Delivery of material to the site

Operation and maintenance period:

- Daily visits to the site
- General maintenance on a weekly basis or as per maintenance requirements

The project's construction phase may impact the traffic in the area but can be successfully mitigated. The site establishment period usually is relatively short and will not severely impact the traffic. Material delivery times should be restricted to allow delivery only during off-peak traffic periods and avoid delivery during the mid-day pupil collection period.

Commuting labour typically makes use of public transport. The number of labourers is considered limited and will have a negligible impact on the peak traffic flow.

According to TMH17, the development falls under the Industrial Area (Park) land use which includes industries that do not generally provide services directly to the general public. Therefore, Trip generation during the project's regular operation and maintenance phase will, in all likelihood, be limited to a maximum of 5 trips per day and expected to be during the off-peak time of day. No impact is expected.

In general, it can be stated that the traffic impact generated as a result of the development of the 3.6 MW solar energy installation for the Unilever Factory will be very limited given the expected activities and the proposed mitigation measures.

Yours faithfully,

A handwritten signature in black ink, appearing to read 'M Venter', is written over a horizontal line.

**M VENTER**

For Infratech Projects (Pty)Ltd