

Since 1994, development in urban and rural areas has increased immensely which have impacted on the population and infrastructure in South Africa. More people require public transport or private vehicles to perform their daily tasks to sustain their living habits. With the increasing number of vehicles and pedestrians on our streets, surveyors need to be more vigilant on how they go about their survey tasks. Ensuring that the safety of their assistants, instruments and themselves are always kept at a high standard. Furthermore ensuring that the public's safety is not jeopardized due to lack of visible and clear warning signs.

This article will focus on educating the public on the basic safety attire and precautions that surveyors and their teams should adhere to whilst conducting any survey task. Key points on how motorists and pedestrians should be more vigilant when approaching these risky areas will be discussed. From this we will conclude with how the public can be made aware of and assist with ensuring that there are minimum incidents occurring whilst surveyors conduct their tasks.



Corporate events, construction sites, public places, business places, schools, and heritage sites are some of the areas that safety should be a number one priority but is being taken lightly. Unless strict instructions and rules are put into place most of these environments lack the proper standards of safety protocols. In the surveying industry the lack of safety awareness could be the down fall of the company and/or business.

Rules and Regulations

With reference to the *Occupational Health and Safety (OHS) Act, Act No. 85 of 1993* and the *South African Road Traffic Signs Manual*, surveyors need to adhere to and be familiar with these acts that protect and guide them when working on public roads. These rules should also be applied to everyday surveys to ensure consistency with quality of safety protocols. The public can obtain these documents online to understand what the surveyor is required to do in order to provide a safe working environment for both their colleagues and the public.

www.labour.gov.za www.arivealive.co.za

THE SURVEY TEAM

Reconnaissance

Generally surveyors are required to conduct a reconnaissance before any task is performed. On any road a surveyor would observe the level of traffic flow and pedestrian volume in the time frame that they wish to work. Peak time at any busy intersection would be considered a high risk period. Their job would be much more strenuous as the safety of co-workers and the public needs to be prioritized amongst the survey tasks which need to be performed.

The surveyor would usually setup instruments, warning signals and barricades before peak time to avoid controlling high flow of vehicles. Once all warning signals are in place, the public will be notified of the work being undertaken in that area. If the job requires them to occupy a certain space for a short period of time, E.g. a Week, notification boards would be in place prior to work commencing.

Survey Vehicle

Points that are extracted from the Act that should be noted are as follows:

- All survey vehicles shall be equipped with a sign on the back of the vehicle displaying "survey vehicle".
- Except for the high visibility vehicle, no survey vehicle shall be parked on the Road Surface or on the Road Shoulder.

According to the THM11 (Technical Methods for Highways) all survey vehicles should display roof mounted rotating or flashing amber lights at all times. With this, motorists and pedestrians can identify that there are road works taking place within that area.

Page 2 of 7

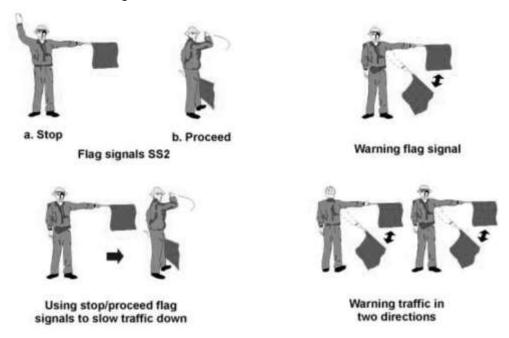
Dress Code

Everyone on the team should be noticed and protected by their clothing. Reflector jackets/vest, safety boots, sun hats, sun glasses, safety gloves are a few of the essential items that should be found on any member of the team.



Traffic Control

It is important to alert motorists by using flag signals. This will help with continuous traffic flow and avoid confusion. Below are some of the signals that an assistant will demonstrate to motorists.



Below is an example of a survey taking place along a roadside. As seen the surveyor and assistant is protected by the traffic cones. An assistant also guides traffic since half the lane is closed.



If necessary, City Police or The eThekwini Roads & Stormwater Department can be requested to assist with traffic control. For Freeways and Provisional Roads, The South African National Roads Authority Limited (SANRAL) and The KwaZulu-Natal Department of Transport (KZN DOT) respectively can be contacted.



Motorists are generally ignorant of road work signals after driving for a while, looking at nothing but the road ahead of them. At times they do not follow the rules of the road or follow the instructions of the flagger or signs. This could cause major roadside injuries to the driver, worker and any bystander.



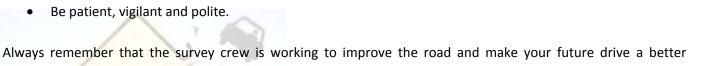
The main causes of roadside deaths and injuries are:

- Speeding traffic.
- Inadequate sign posting and lighting.
- Drivers are distracted by cellphones.
- Drivers failing to notice signs or flaggers indicating that they should slow down or come to a stop.
- Drivers acting at the last second to force themselves into the next lane. If the other driver doesn't let them in, they enter the work zone which endangers the lives of workers.

Motorists can help create a safe environment for everyone by:

- Observe warning and caution signs.
- Turn on your head lights to make your vehicle more visible.
- Avoid abrupt driving manoeuvres.
- Always be aware that vehicles ahead of you may stop unexpectedly.
- Maintain a safe following distance.
- Obey road crew flaggers.
- Drivers should not wait until the last minute to merge to the correct lane.
- Use your indicator when merging.
- Stay alert for aggressive drivers.
- Be patient, vigilant and polite.

experience.







THE PEDESTRIAN



As surveyors we spend the majority of our time working amongst bystanders. Many individuals are intrigued by the work that we do and want to ask questions. The surveyor is always willing to educate and inform the public of the work that is occurring however this could impact on many safety issues such as:

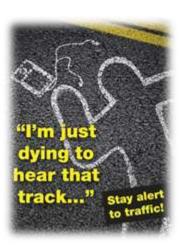
- The surveyor being distracted with the conversation taking place.
- The pedestrian can cause an obstruction on the roadside for motorists.
- The pedestrian can cause interruptions in the survey which could lead to errors.
- The surveyor and assistants also are at risk of being injured.

Pedestrians can also cause unnecessary injuries unconsciously by not being observant of their surroundings. They could be distracted by cellphones, music, eating, reading, day dreaming etc.

Pedestrians are advised to:

- Wait until the surveyor is done with their work then approach with any questions.
- Pay attention to warning signs.
- Be aware of their surroundings.
- Don't walk and talk on the cellphone.
- Don't let music take your attention away from the sound of oncoming vehicles, hooting or sirens.







CONCLUSION

Most members of the public view workers in the road as an inconvenience, but they should rather look at them as a service. Road and maintenance workers are doing their best to minimize motorist inconvenience. We at the municipality have to ensure that the quality of road safety is of a high standard. We improve the quality by:

- Educating new workers on how to manoeuvre around and safeguard equipment on site.
- Managers will ensure that new employees are prepared to work in all types of traffic.
- Use protective gear.
- Reflective clothing is also very crucial.
- Training will be implemented to ensure that workers know how to setup a safe working zone.
- Workers will be reminded to remain vigilant and alert.

This is just a brief guide on how to conduct oneself when approaching any work zone. There will always be a risk, however the odds can be more favourable.