TOWARDS THE IDEAL ROUNDABOUT DESIGN

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ABSTRACT

In South Africa, the use of the modern roundabout as an alternative form of intersection control is gaining popularity with road authorities and developers. The Western Cape Government: Department of Roads and Public Works (WCG: DoT) has engaged in an investigation and drafting of a Roundabout document.

This document is divided into three volumes, where Volume 1 presents an evaluation of international standards and best practice, including their research done, as well as information and some statistics regarding 37 roundabouts evaluated in the Western Cape. Volume 2 provides a planning document for determining the appropriateness of a roundabout as an alternative form of intersection control, and Principles and Requirements for such an intersection. Volume 3 will follow, which will be a design guidelines for the design of modern roundabouts in the Western Cape, and hopefully the rest of South Africa.

The purpose of this paper is to provide you with an insight in the proposed requirements for the design and evaluation of roundabouts in the Western Cape. This is called Principles and Requirements. All of these elements considered are focused at the provision of a safe and consistent design.

The goal, beyond this paper, is to provide a tool for evaluation of a roundabout as alternative form of intersection control, as well as a set of design guidelines that can be used not only in the Western Cape, but also in the rest of South Africa. It will hopefully lead to more consistent and safe designs, and road users becoming used to roundabout standards.