

TERMS OF REFERENCE FOR A SOLICITED WRC PROJECT

KEY STRATEGIC AREA **Water Use, Wastewater Resources and Sanitation Futures**

THRUST **1. WATER SENSITIVE AND RESILIENT SETTLEMENTS**

PROGRAMME ***Programme 2: Sustainable drainage futures***

TITLE **Demonstration of the development of a WSD plans for four case study municipalities from category B and C.**

Objectives Using the Water Sensitive Design Framework and Guidelines developed both locally and internationally to date, develop WSD plans for four Municipalities

General

In 2013 The Water Research Commission initiated the Water Sensitive Design Lighthouse. The purpose of this lighthouse was to develop a critical mass of knowledge around the integration of planning activities for the adoption of more integrated and sustainable solutions using the water sensitive design (settlements) lens for urban, peri-urban and rural environments. Thus, in South Africa, WSD is defined as management of the country's water resources through the integration of various disciplines of engineering, social, economic and environmental sciences, whilst recognizing water as a scarce, finite and vulnerable resource and an economic good. Water and the principles of Water Sensitive Design is seen as enablers which could move South African institutions closer to meeting the developmental goals as set out in the National Development Plan and the objectives of the Water For Growth and Development, National Water Resource Strategy and Climate Change strategy.

In 2014 the WRC released the first Framework document "**Water Sensitive Urban Design (WSUD) for South Africa: Framework and guidelines**" which promotes the cyclic approach to planning of water services for communities and with communities in a holistic and resource efficient manner. The report has taken the water management transition states paradigm proposed by Brown et al. (2009), which was based on a developed world and framed the design principles within the context of South Africa's transition to Water Sensitive Cities and Settlements: "**Two history's, one future**".

Since then the WRC has regularly on an annual basis to date has been doing a number of training and capacity building program to get the sector and sector professionals orientated towards using and adopting the WSD framework. The take up and adoption has been slow, in an environment entrenched with conventional supply/demand technocratic approaches. The recent

hydroclimate realities which has faced the sector and country has prompted the need to look at a new way of planning and that is where the opportunity of WSD has emerged.

While the big metros are beginning to engage with this process, with Cape Town fully integrating the WSD concept in its future water strategy, followed by City of Jhb and other, small towns and cities in catchments reaching stress have not transitioned to looking at water management in a different way. This, this small research initiative is aimed at stimulating greater interest in small to medium municipalities in the country.

Specific

The specific objectives are:

- Undertake a scoping exercise to identify 4 potential Municipalities and establish their support for this study.
- Undertake a detail Water Sensitive Planning exercise with Municipal actors and key affected parties
- Develop a high level Water Sensitive Plan with strategies and interventions which will build water security for the municipalities:
 - Must cover water mix opportunities
 - Must cover behavioral interventions
 - Must cover policy and institutional changes.

Expected outcomes and impacts:

- 4 WSD Reports
- Strategy for rollout
- Position paper
- Capture experience and lessons in a final report.

Lighthouse:

- Water-Energy-Food Nexus
- Climate Change

Impact Areas:

- Water and the Economy; Water and the Environment; Water and Society

Knowledge Tree

- Sustainable Development Solutions

Time Frame: 3 years

Total Funds Available: R1 500 000.00 inclusive of VAT. (2023 – 600k, 2024- 700k, 2025 – 300k)