

## **FOR MEDIA RELEASE**

1. The Saron Wastewater Treatment Works was an old system, built, adapted and partially upgraded over many years. Some unit processes have reached the end of their design life. It was necessary to upgrade the Saron WWTW due to the age of existing works, growth in the town's population as well as the fact that the works needed to comply with the new effluent quality licence conditions as issued by the Department of Water and Sanitation.

2. The works at Saron comprised of the following:

2.1. The construction of five new maturation ponds with a combined capacity of 3960m<sup>3</sup>

2.2. The refurbishment of two existing primary ponds to be used as anoxic/aerobic waste activated sludge digestion dams.

2.3. Construction of a new inlet structure with mechanical screen and washer compactor

2.4. Construction of a new biological reactor and pipework

2.5. Alterations of the existing waste activated sludge pumping station and new pumping station for the backwash water from the maturation ponds

2.6. Construction of a new composting storage slab

2.7. Refurbishment of six existing sludge drying beds and HDPE lining thereof

2.8. Construction of new roads as well as the upgrading of existing roads

2.9. New buildings: Office building, guard house, MCC building, Lime dosing building and store room

2.10. Construction of new fencing around the WWTW

2.11. Upgrade of the supply and reticulation of electrical services of the WWTW

2.12. Installation of all interconnecting pipework

2.13. The construction of a new HDPE lined overflow dam at the main pumping station including fencing

2.14. A new dedicated bulk electrical Eskom overhead supply to the WWTW.

3. The works at Gouda comprised of the following:

3.1. The construction of a new balancing dam with a capacity of 7000m<sup>3</sup> and pipework.

4. Saron WWTW was upgraded from a nominal flow of 800kℓ/day to 1,5Mℓ/day with a maximum pump flow rate of 108ℓ/s from the existing pumping station. The pumped flow will allow for a peak wet weather flow of up to 4Mℓ/day.

5. Gouda WWTW was not upgraded with regards to the flow capacity, however, the storage capacity was increased by 7000m<sup>3</sup>

6. The project had to comply with the National Water Act, 1998 (Act No. 36 of 1998).

7. The tendered amount for the contract was **R 45 457 061-90 (VAT inclusive)**. The scope of work was reduced when the contractor was appointed due to the limited available budget. The decision of the Bid Adjudication Committee stated that the Contractor must be appointed for the reduced amount of **R 40 327 061-90 (VAT inclusive)**, but that a Variation Order be generated to construct the full scope of work should additional funding become available. The additional funding was attained and a Variation Order was issued to the contractor. The final cost for the contract was **R 45 457 061-90 (VAT inclusive)**.

8. The project commenced on 7 September 2015 and the initial completion date was

17 March 2017. The project was completed on 30 June 2017 after the Variation Order was implemented.

9. The following challenges had to be dealt with during the construction:

9.1 Time taken by Eskom to install the electrical supply delayed the completion of the on-site electrical work. Continuous liaison with Eskom was required to mitigate any delays.

9.2 Deep excavations in restricted areas posed a problem and additional safety measures had to be taken to ensure the safety of the workers.

9.3 The political unrest by the local community of Saron.

9.4 The time taken to identify existing services made it challenging to manage the project to ensure that the progress was maintained.

9.5 The treatment works needed to remain operational during construction and the project had to be carefully planned and phased to ensure treatment continued throughout the construction contract.

10. The following is seen as successes during the construction:

10.1. The project created new jobs for the local communities of Gouda and Saron, albeit of a temporary nature.

10.2. The upgrades increased the capacity of the treatment works, improved the treatment process and will result in a better quality effluent being released into the environment.

10.3. The overall quality of the completed work was of a high standard.

10.4. The project was completed within the allocated time and within the budget.

**11. The professional team for the project was:**

**Niel Lyners & Associates**

**Exeo Khokela Civil Engineering Contractors (Pty) Ltd**

**Safe Working Practice**

**Guillaume Nel Environmental Consultants**

