



WATER DEMAND MANAGEMENT PLAN

1. INTRODUCTION

- 1.1. The WATER DEMAND MANAGEMENT PLAN (“PLAN”) provides enforceable conditions for water use management at WELEGELEGEN ESTATE that are based on the George Municipality water demand strategy.
- 1.2. These conditions are incorporated into and/or referenced to in the ARCHITECTURAL GUIDELINES as well as in the CONSTITUTION and the CONDUCT RULES.
- 1.3. The PLAN also provides non-enforceable suggestions that will be promoted and encouraged by the WELGELEGEN HOMEOWNERS ASSOCIATION (“WHOA”) by incorporating them in the CONDUCT RULES. Implementation of this water demand management plan is the responsibility of the architectural team, estate management, the residential contractors and the home owners.

2. OBLIGATION

- 2.1. Each Member and the WHOA must develop and implement a water demand management plan for the activity, with the aim of minimizing water use within WELEGELEGEN ESTATE.
- 2.2. The PLAN is required to incorporate the George Municipality water demand management strategy, as amended from time to time as well as to address the inter alia:
 - 2.2.1. Guidelines for water saving measures at the service level and at the residential level.
 - 2.2.2. The design and installation of water saving measures, devices and landscaping design.
- 2.3. The George water demand management strategy promotes:
 - the use of rain collected water;
 - water efficient fittings;
 - user information;
 - water recycling;
 - leakage repair.

3. ENFORCED WATER SAVING MEASURES AT RESIDENTIAL LEVEL

The following measures must be implemented at the residential construction level:

- 3.1. All toilets installed need to have dual flushing (water saver) options.
- 3.2. All hot water pipes must be insulated in order to avoid wasting water while waiting for the water to heat up.
- 3.3. All showerheads installed must be ultra-low-flow version.

- 3.4. All irrigation systems are required to have low-flow sprinkler heads, efficient system design and layout in order to maximize efficiency while reducing the volume of water used.
- 3.5. All irrigation system timers need to be set for the correct time required to efficiently water the garden without spraying water for unnecessary additional time.
- 3.6. All water used to irrigate gardens must be obtained from the water that is collected in the mandatory rain water tanks.
- 3.7. Watering during the day results in high levels of evaporation. Irrigation/ watering of gardens is only permitted during the following times in order to prevent water loss through evaporation:
 - 3.7.1. Summer (September till March) 18:00 – 06:00
 - 3.7.2. Winter (April till August) 17:00 – 07:00
- 3.8. Swimming pools utilize large volumes of water and have high rates of evaporation. The use of swimming pool covers will be required for all pool owners. Covers are required to be used whenever the pool is not in use.
- 3.9. 80% of plants included in the garden need to be locally indigenous. The WHOA will have the right to instruct a homeowner to remove non-indigenous plants in the case of excessive water use for irrigation. Home owners must be encouraged to grow indigenous gardens which do not have to be irrigated.

4. ENFORCED WATER SAVING MEASURES AT SERVICE INFRASTRUCTURE LEVEL

The following measures must be implemented at the service infrastructure level:

- 4.1. All individual homes as well as estate buildings must be equipped with rainwater collection tanks (min 5000 liters). The outdoor water connection points should be supplied through rainwater wherever possible. This water can be used for washing of cars and is the only water permitted for the watering of gardens.
- 4.2. Water budgeting must be done during the design process as it is essential to develop a water budget and commission the water distribution system as part of the overall building commissioning process.
- 4.3. Metering of all individual residences must be installed. With un-metered service leaks go undetected; there is no accountability and no incentive to save.
- 4.4. Water conservation reminders must be sent to all residences on a monthly basis for the first 6 months, and a water conservation information notice board must be constructed in a place that is visible and accessible to all residences.

5. TIME FRAMES FOR IMPLEMENTATION

- 5.1. The technical specifications during the construction phase have already been considered as part of the design.
- 5.2. Home owners on taking transfer of each of the particular erven will receive the requirements in terms of water demand management.
- 5.3. Home owners will be responsible to ensure that the relevant requirements are implemented into their planning phase.
- 5.4. The WHOA will, when reviewing plans, ensure that water demand is sufficiently addressed.