

**RFP UJ 08/2025: Supply, Installation and Commissioning of a Grey Water Recycling Plant for Magnolia and Moshate Heights Female Student Residences at the University of Johannesburg Auckland Park Kingsway (APK) Campus**

---

**1. SCOPE OF WORK**

The client for this project is the University of Johannesburg, represented by Sustainability and Utility Projects group attached the Office of the COO on behalf of the Senior Director: Campuses and the APK Campus Director.

The University of Johannesburg requires the installation of a greywater recycling solution for the Magnolia and Moshate Heights Female Student Residences at the APK Kingsway Campus situated on Kingsway Road, Auckland Park to address ongoing water interruption problems on the campus and should have the following features:

1. The solution should provide for
  - a. Equipment implementing a grey water harvesting of all bath / basin / shower wastewater according to required national water standards.
  - b. Adaptation of the current basin and shower effluent piping in the residence as required.
  - c. Adaptation of the toilet cistern supply piping as required.
  - d. Allow for a bypass supply from the municipal potable water to the toilet cistern flushing for use in the case of maintenance of the installed plant.
  - e. All necessary metering to allow for estimates of water savings and recycling performance.
  - f. Preferably allow for storage of the equivalent of 2 full days of grey water production by the residence.
  - g. Allowing for overflow / excess grey water in excess of the amount defined in point (f.) above to be transferred to the campus for use

in either other residence toilet flushing or campus car washing and irrigation use.

- h. The system should provide the capability of remote operation and monitoring applications.
  - i. Integration of the system controls/alarms into the campus Building Management System.
- 2. The solution should provide a complete grey water recycling and storage solution for Magnolia and Moshate Heights Ladies Residences at APK campus.
  - a. The residence accommodates +/- 250 students in an 11-storey building on the campus making use of dormitory style bathrooms that only have showers and hand basins.
  - b. The residence is a ladies' residence, and all toilets are pan types with only a minimal number of urinals in visitors spaces on the ground floor of the building. The urinals are not expected to be part of the grey water harvesting system.
  - c. There is substantial open ground space adjacent or in close proximity to the residence where the installation can be accommodated.
  - d. Supply, installation and commissioning of the electrical supply for the greywater plant feeding both Magnolia and Moshate Heights Female Residences from the nearest available UJ distribution boards that are adequately sized, including the Certificates of Compliance.
- 3. The proposed solution should further comply with the following additional requirements:
  - a. Be implemented in accordance with a best practice and a professionally signed off and designed solution is expected prior to installation by UJ technical and campus staff and consultants if required – this must include at Tender submission the necessary basic design drawings and P&ID drawings to enable proposal evaluation possible.
  - b. The provision of a minimum 12-month warranty and support guarantee period by the main supplier for all supplied equipment

- this includes items such as consumables e.g. filters and / or chemicals should they be included in the solution.
- c. The assurance of continued maintenance support, in the absence of other suppliers willing to support the installed solution, especially with regards to the chemical and / or process elements and / or motive power and control equipment required for the solution.
- d. A guarantee to maintain minimum spares holding levels in local storage - to ensure 12 months uninterrupted maintenance and support - for at least 5 years after installation.
- e. An explanation of how it is possible to swop out / remove units while operating - so that unscheduled maintenance requirements can be met - while not interrupting the use of the residence due to interruptions to the flushing of toilets and similar events.
- f. All documentation and training required for operational and maintenance staff - for UJ operational facilities management staff to be able to operate the installed plant - must be supplied by the successful proposer.

The Tender respondents will have to take into consideration, but they are not limited to, provision of the following and acting in accordance with the responsibilities indicated below if their proposal is accepted:

- a) Proposals are to include, but are not to be limited to, the assessment, design, supply, installation, commissioning of the necessary equipment, structures and control systems to enable the primary requirement of providing the full grey water solution to the residence specified on the APK Campus. The scope of work includes the supply, installation and commissioning of the electrical supply for the greywater plant feeding both Magnolia and Moshate Heights Female Student Residences from the nearest available UJ distribution boards that are adequately sized.
- b) The RFP respondents must provide indications of costs of certification and the necessary applications to local and national departments as well

as the cost of testing for the first year of operation. The selected supplier must provide full drawings - to the necessary standards for updating of APK Campus facilities documentation.

- c) The necessary applications documents to be submitted to the City of Johannesburg for Site Development Plan and Building Plan approvals related to the project are the responsibility of the selected supplier.
- d) The Tender respondents must provide an operational cost estimate based on the chemicals, filters and other consumable based on a peak usage demand per day.
- e) The Tender respondents should provide an indication of service and maintenance requirements for the proposed equipment as well as indications of annual costs to maintain the overall system - based on an assumed monthly and annual usage pattern.
- f) The Tender respondents must provide for the achieving of all certificates of compliance related to the total installation – including but not limited to electrical compliance certificates, plumbing compliance certificates, etc.
- g) Tender respondents must give an indication of the ability of their solution to allow for extensions or alterations that may be required to accommodate changes in usage.
- h) The Tender respondents must acknowledge that if they are successful that all work on UJ campuses must comply *fully* with the Occupational Health and Safety Act (Act 85 of 1993) and all sub-regulations in place at the time. All work is also to be carried out in accordance with the requirements set out in the SANS 10400 - National Building Regulations, and relevant SANS regulations, applicable to a project of this nature.
- i) The selected supplier to be responsible for site establishment. The UJ project team and the successful supplier to determine and agree on a secure site lay down area, which is reasonably close to Magnolia and Moshate Heights Ladies Student Residences.
- j) UJ will provide the successful supplier access to water and electricity connection and ablution facilities. Where not reasonably practicable, the successful supplier is to make provision for mobile ablution facilities for their employees. (Note: To be discussed at a site briefing).

- k) The selected supplier is responsible for ensuring secure storing of their equipment on site.
- l) The Greywater plant to be fenced with ClearVu fencing and necessary signage is to be provided.
- m) The proposal to make provision for re-instatement of the roadway (i.e. tar and/or paved) at all the areas where trenching is required for installation of the piping/electrical cabling.
- n) The successful supplier must be willing to enter into a JBCC Contract with specified UJ Amendments – a copy of which will be available to all suppliers attending the site briefing. Furthermore, if the supplier makes use of external consultants for any design development any agreement between themselves and the consultants must follow a standard PROCSA agreement which must be furnished to the UJ if requested.