



KAYTECH CASE STUDY

SOLVING WATER INGRESS CHALLENGES WITH A FLODRAIN® SYSTEM: A COST-EFFECTIVE SOLUTION

GEOSYNTHETICS USED

Flo-Drain®: System used to address water ingress challenges.



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PROJECT DESCRIPTION

A client's property, situated at the bottom of an estate, faced significant challenges related to water ingress. The property was located on a steep slope, making it susceptible to water runoff from the entire estate, coupled with a high water table underground. This combination of factors led to water infiltrating the structure walls of the client's property, posing a serious issue that needed to be addressed promptly and effectively.

A BETTER SOLUTION

To tackle the water ingress problem effectively, our team implemented a comprehensive solution that involved the installation of the Flo-Drain® system. Given the challenging terrain and high water table, this solution required meticulous planning and execution.

- 1. System Installation:** The Flo-Drain® system was installed 2.4 meters underground to ensure that water did not flow underneath the drain and into the structure. A 70-meter trench was excavated across the upper section of the property to accommodate the Flo-Drain®.
- 2. Filtering Mechanism:** To enhance the performance of the Flo-Drain® system, a 100mm layer of river sand was installed as a secondary filter on the upstream side of the bidim®. This separation layer effectively separated the in-situ backfill material from the bidim®, preventing any potential clogging issues and ensuring the system's long-term functionality.
- 3. Local Labor Utilisation:** A significant advantage of this project was the utilisation of local labor for the installation of the Flo-Drain® system. With guidance and training from Kaytech, a team of six individuals from the community was able to quickly and easily install the system. This not only reduced labor costs but also contributed to local skill development and employment opportunities, demonstrating the project's commitment to sustainability and community involvement.

In conclusion, the implementation of the Flo-Drain® system effectively addressed the water ingress challenges faced by a client at their property. The project showcased the benefits of employing innovative drainage solutions tailored to the specific needs of the terrain while also fostering community engagement and local skill development. By successfully mitigating the water infiltration issue and promoting sustainable practices, this project serves as a model for addressing similar challenges in sloped and water-prone areas.



Statistics

Labour Team

A local team of 6 individuals successfully installed the Flo-Drain® system.

Cost Savings

Utilizing local labor significantly reduced labor costs and contributed to community development.

Completion Time

Flo-Drain® installation was completed in just 1 week, highlighting the efficiency of the project execution.