

**Infiltration Tank
Flood Mitigation**

Project Location Paine, Metropolitan Region, Chile

Project Details: INFILTRATION TRENCHES HP DATA CENTER CHILE

Completion Date 2011

Client

Ignacio Hurtado Construction Limited

Principal

Hewlett Packard Chile

Catchment Area:

21,496 m² includes roofs and pavements

Module Type

Deca Module (10 High) with 4 small panels (4.32 x 0.41 x 0.685 meters each module 10 high).

Quantity Installed

560 Atlantis 10 high modules

Total volume:

679.43 m³

Useful dimensions

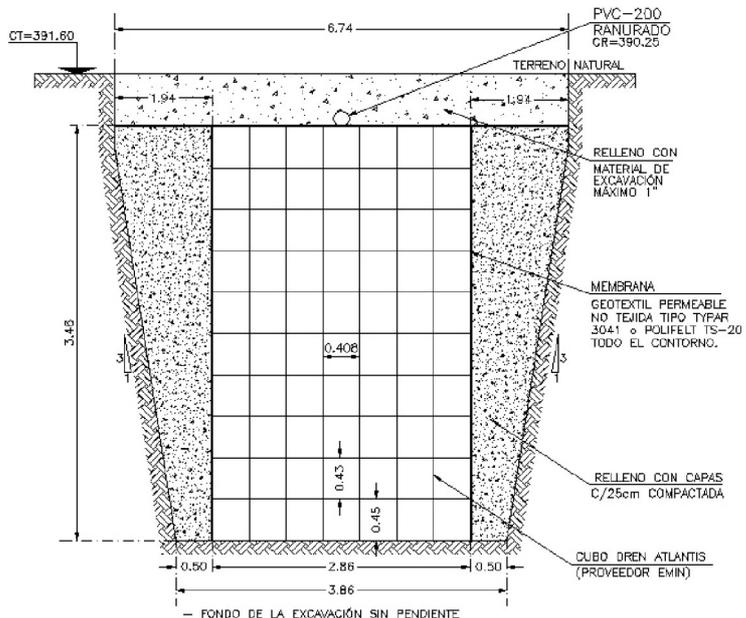
Infiltration Trench
4.32 m high, 2.87 meters wide and 54.8 meters long.

Consultant

IRH Consulting Engineers Limited.

Lifting of modules

13.63 m³ with a total of 575.12 kg (42.17 kg per m³ of modules).



Flood Mitigation



The challenge: The construction of HP Data Center involved a total catchment area (including roofs and ground surface) of 21,496 m², for which HRI Consulting Engineers Ltd would design an infiltration trench that could store stormwater and infiltrate the required volume of water generated by a return period of 10 years in an area of vehicle traffic.

Solution: Consulting Engineers Ltd. IRH considered the Atlantis water system for its features of large water storage (95% void) and resistance (26 t/m²) to store and infiltrate the flow generated for the design precipitation event in the spaces under the area of movement of trucks and vehicles, considering an appropriate safety factor to these loads.

