AquaVault

Planting for arid and semi-arid landscapes.

An integrated planting system combining planting-pit design, a protective biofilm cover, Herbafertil substrate and targeted irrigation around the root ball.

The design objective

Create a more stable below-ground environment for tree establishment, with less evaporative water loss and protection from root-ball overheating.

How the elements work together

The protective cover limits evaporation. The planting-pit arrangement is designed to interrupt capillary salt rise. Moisture retention and directed irrigation support root development and the soil microbiome.

System components

Planting pit and stable root-ball support; protective biofilm cover; Herbafertil substrate units; irrigation delivery and accessible connections. The public Resource Island illustration explains the overall relationship.

Design inputs

Local planting stock and root-ball size; soil profile and salinity; irrigation-water quality and availability; drainage; finished levels; maintenance access and responsibility.

Pilot and handover

Agree the installation record and a comparison planting. Record irrigation volume, survival, root-ball moisture and temperature, salinity where relevant, and canopy development. Define the monitoring period before installation.

The public concept section explains the system; it is not a construction detail or a substitute for the project specification.