PROJECT CASE STUDY

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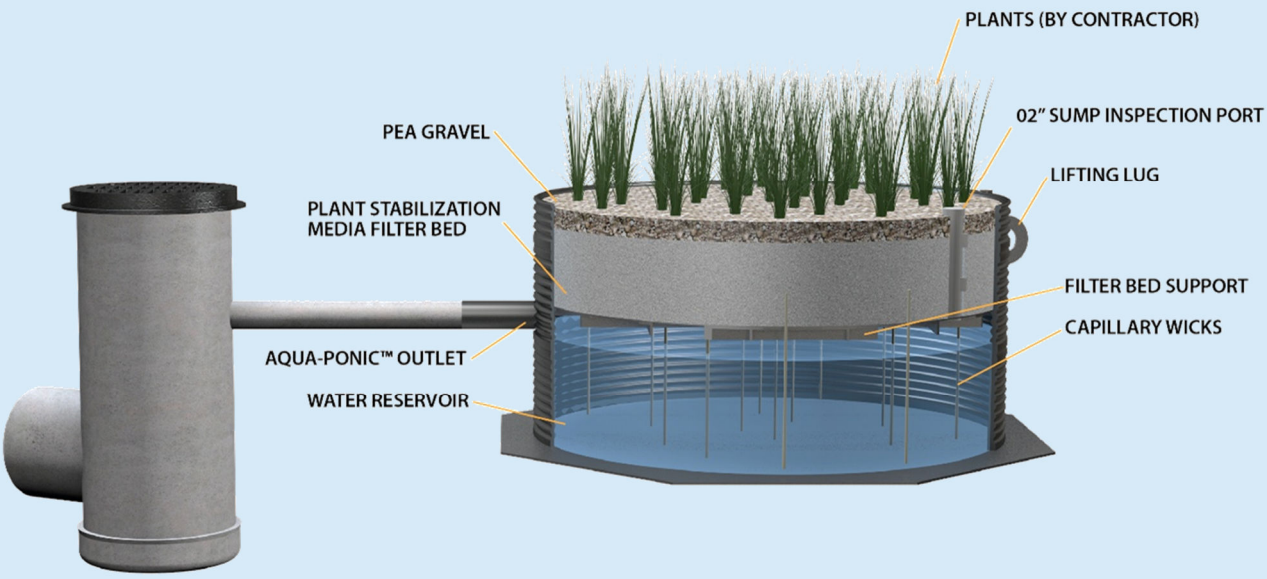

Phase I Redevelopment: TAC Pal Logistics Center

Aqua-Ponic • Palmyra, NJ • May 2022

PRODUCT / SOLUTION
Aqua-Ponic™

CONSULTING ENGINEER
Hammer Engineering
Point Pleasant, NJ

CONTRACTOR
Pillari Brothers Construction Corp
Farmingdale, NJ

THE PROBLEM

Bordered by Pennsauken Creek, the Delaware River, and Route 73, the Route 73 South Redevelopment Area in Palmyra, NJ, was ready for redevelopment. During Phase I, the TAC Pal Logistics Center proposed five larger dual concrete chamber stormwater filters. These units came with high cost, long lead times, and logistics obstacles.

OUR APPROACH

Working with the Contractor, AquaShield proposed a design philosophy switch from centralized stormwater treatment to decentralized NJDEP Certified Green Infrastructure treatment devices. Through those discussions, the design was changed to install eleven (11) AP-11 units.

THE OUTCOME

Utilizing a divider island, drainage was diverted to a series of curb cuts, that allowed runoff to surface discharge to Aqua-Ponic units and overflow structures. The change not only reduced construction costs, but improved construction given the Polymer Coated Steel (PCS) units did not require cranes and additional logistics to deliver and install.

Installed Aqua-Ponic™

PROJECT PHOTO GALLERY

Cost Efficient Transport

Built from Polymer Coated Steel, multiple units can be delivered simultaneously, with the media already installed and ready for plug-and-play installation.

Complete Stormwater Treatment

A proprietary media bed provides filtration and plant stabilization. A built-in wicking system supplies vegetation with water and nutrients during dry conditions, no supplemental irrigation needed.

Simplified Design

By only requiring 1-1/8" of driving head and having a set flow rate per unit, the Aqua-Ponic can easily be combined with high-flow bypass to simplify the design and specification process.

Nature-based Technology

Designed to complement Low Impact Development (LID) practices, Aqua-Ponic fits seamlessly into plazas, streetscapes, and parking lots where large-scale bioswales aren't feasible.