CASE STUDY

PROJECT NAME
Victor Hernández Building Elderly Housing
Aguadilla, Puerto Rico

SYSTEM SPECIFICATIONS
6,000 GPD passive combined treatment and dispersal system

INFILTRATOR PRODUCTS USED
Advanced Enviro-Septic® (AES) combined treatment and dispersal system
Presby Maze® septic tank insert

INSTALLATION DATE
2021

CONTRACTOR
Sani-Plant
Trujillo Alto, Puerto Rico

OWNER
City of Aguadilla, Puerto Rico

INFILTRATOR
water technologies
4 Business Park Road, Old Saybrook, CT 06475
(800) 221-4436 • info@infiltratorwater.com

Combined Treatment and Dispersal Wastewater Treatment System Replaces Failed Conventional System at Elderly Housing Facility in Puerto Rico

OVERVIEW
The Victor Hernández Building Elderly Housing facility in Aguadilla, Puerto Rico, had a failed onsite septic system in poor soils that needed to be pumped to a holding tank weekly. With a limited budget for operations and maintenance and wastewater constituents typical of a project of this type, the situation made clear the need for a better solution with technology that offered a higher level of treatment to protect and preserve the permeability of the soil.

CHALLENGE
Limited area available for a new system and ongoing maintenance expenses were both challenges that steered project designers toward a passive treatment system requiring minimal ongoing maintenance and associated costs. The small footprint of the system was compatible with the land available and was economical to install and maintain. Also, key to the system selection was the need for superior treatment of the building's wastewater due to challenging wastewater typical of these types of facilities.

SYSTEM DESIGN
Following thorough review of the project, Sani-Plant of Trujillo Alto, PR, selected a NSF 40 and BNQ Certified, Advanced Enviro-Septic (AES) combined treatment and dispersal system. A 6,000 GPD system was designed with an additional septic tank that included a Presby Maze septic insert to increase the retention of the waste to allow greater efficiency in the primary treatment. Because of the AES system's rigorously tested capability for high level treatment, the system needed a treatment and dispersal footprint of only 5,609 square feet (39 ½ feet x 142 feet) with an application rate of 1.07 GDP/ft^2. Also, the project required only 2,600 feet of AES pipe in a butterfly configuration with eight serial sections. This saved the facility a significant amount of space. Additionally, by installing a passive CTD system with a proven record for exceeding required treatment levels and a reduced footprint, the Victor Hernández Building saved significant short- and long-term costs.