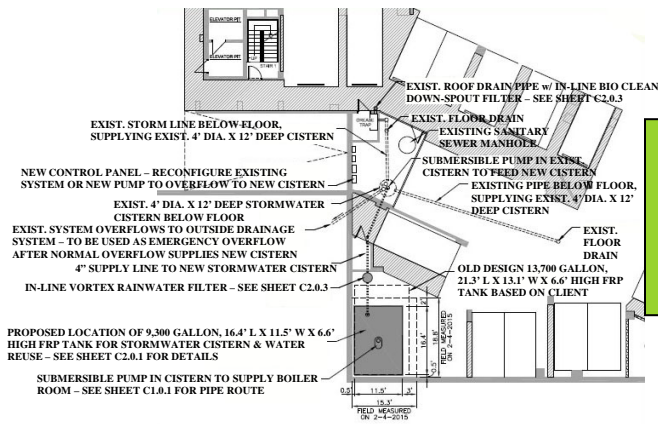
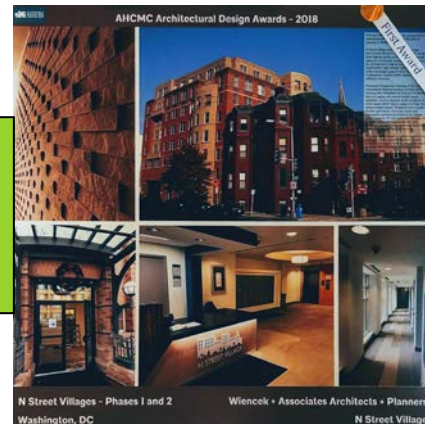


N. STREET VILLAGE

Washington, DC



Project was awarded the #1 Design Award at the 2018 Affordable Housing Conference of Montgomery County.



PROJECT DESCRIPTION

N. Street Village at the corner of 4th Street and N. Street is a community that helps woman in healing and recovery. As stated on their website “those with health or mental health problems, substance abuse or addiction, a history of trauma, a lack of educational and vocational opportunities, job loss or eviction, domestic violence, a criminal background or other barriers to employment, or functional illiteracy”.

Greening Urban, LLC (GU) performed an overall site stormwater management and water reuse analysis and design as part of the major renovation of N Street Village. The goal of GU’s effort for this project was to maximize saving money on water bills and stormwater management fees for this very worthy nonprofit organization.

Through site visits and historic drawings, and in close coordination with the owner and design team, GU determined that the best approach to meet the projects goal was to design a rainwater harvesting system to replenish the cooling tower on the roof of N Street Village.

Due to site / building constraints the only viable location for the rainwater harvesting cistern was to retrofit a storage space in the underground parking structure for N Street Village. This location had the benefit of being directly below the area of the roof that the cooling tower sits on and in close enough proximity of a mechanical room on the floor above that could house the water reuse treatment equipment associated with the harvesting system.

GU detailed a customized 13,200 gallon rectangular cistern that would fit in the existing storage room thus not effecting existing parking spaces in the garage. N Street Village roof’s stormwater was managed by an existing underground sump that pumped stormwater to the street during a rain event. The existing cistern and pump are below the level of the new cistern on the same level of structured underground parking. GU rerouted the existing roof leaders going to the existing cistern to the new cistern for reuse. Any overflow from the new cistern goes back to the existing cistern to be pumped to street.

The resulting rainwater harvesting system for N Street Village fit into the existing buildings infrastructure and saves millions of gallons of potable water costs for this wonderful non-profit association.

PRIME CONSULTANT/CLIENT:

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COMPLETION DATE:

2018