Hospice of Wake County
Raleigh, NC
Rain Harvesting

The 50,000 gallon cistern, buried under the originally permitted detention pond, is an innovative design for sustainability. Cooper Linton, VP Marketing and Business Development for the Wake County Hospice supported the expansive project, which is designed to capture, treat, and re-use rainwater for irrigation to the grounds and gardens at the Hospice. The cistern is constructed of modular blocks called "rain tanks" and are capable of handling an H-20 vehicle load. The media filter over the tanks is Stalite recycled expanded slate fines to infiltrate and treat the stormwater at a rate higher than traditional bioretention media. The system will greatly reduce runoff volumes and reduce water consumption for irrigation.

The system is set to maintain infiltrate holding level 8"+ below surface grade for grass viability.
Note the contrast between the color of the runoff in the pond before it has been filtered and the clear water in the bottle, after it has been filtered through the Stalite fines.