

In general, there is a lack of full-scale, outdoor, real-world porous pavement studies with system replicates. More studies of porous pavement operating in its intended use (parking lot, roadway, etc.) with climatic events, regular use, and maintenance effects, are necessary. The Urban Watershed Management Branch has installed a full-scale 110-space porous pavement parking lot that is instrumented and monitored for a number of water quantity and quality parameters. Monitoring will be conducted on side-by-side porous asphalt, porous concrete, and permeable interlocking concrete paver systems. There are three parking rows, each one a different porous pavement type; the driving lanes are conventional asphalt. The porous pavement parking areas have sections lined with an impermeable liner in order to collect the porous pavement effluent and sections that allow the effluent to infiltrate into the underlying soil. Each monitored parking row has four impermeable and five permeable sections which will allow for statistical analyses of collected data. The parameters that will be monitored include: volume, solids, microorganisms, nutrients, metals, and semi-volatile organic compounds.