

Rethinking a lot . . . a parking lot

by Clare Howard

Les Cohen firmly believes part of the solution to Peoria's combined sewer overflow problem lies in rethinking the notion of parking lot.

He recently replaced the old asphalt lot at his building at 428 SW Washington Street with a permeable paved surface.

"This is Peoria's only 100 percent permeable paver parking lot in the downtown area," Cohen said, standing on the brick/umber/sienna colored surface. "No water from this lot ends up in the storm sewer system."

Peoria is facing a mandate from the U.S. Environmental Protection Agency to cease dumping raw sewage into the Illinois River, a phenomenon that happens when combined sewers are filled with storm water. Measures that reduce storm water from entering the combined sewer system, such as well designed permeable paver surfaces, leaves more capacity for sewage. Currently, the city is dumping about 160 million gallons a year of sewage into the river.



Several clients walk into CrossFit Peoria, 428 SW Washington St., as Les Cohen, left, and Chris Joos discuss vegetation for the planters bordering this new permeable paver parking lot. Cohen said he selected the color of the paver surface to match the bricks used for the 1930's building that once housed Larkin Service Station. The color of pavers defining the parking spots was selected to match limestone on the building façade. Cohen selected a graphite colored paver to define the border of the lot. One of the deep-rooted plants he and Joos are discussing for the bordering vegetation is Karl Foerster reed grass.

Cohen's new lot has been designed and constructed to take 8 inches of rain a day without saturation, said Chris Joos, owner of Joos Lawnsapes that installed the parking lot.

"I am so done with asphalt," said Cohen who cited problems with asphalt's petroleum, pollution, maintenance and runoff problems.

Asphalt also adds to the heat trapped over cities. The permeable lot at 428 SW Washington Street will actually cool the surface of the lot and the surrounding air because a detention pond under the surface traps water that cools as it evaporates.

Cohen also had a permeable paver lot installed at his company's West Lake Shopping Center. That lot was installed to replace an asphalt lot that was connected to the storm sewer system. Cohen's new downtown lot is not connected to the sewer system.

"This downtown lot is an important example for storm water management, especially since this area is so close to the Illinois River," he said.

The cost of the lot was \$34,000, he said. He has received no assistance in covering that cost, he said, despite the mitigation this construction provides for the overflow problem.

Joos said he's currently talking with about five property owners in the area who are considering permeable parking lots.

"Considering Peoria's CSO problem, we should have 100 projects in the works," Joos said.

He is expecting the manufacturer of the paver system, Belgard, to schedule a demonstration in the near future of the lot's permeability by dumping several fire trucks of water on the lot and measuring the water filtering through the system.