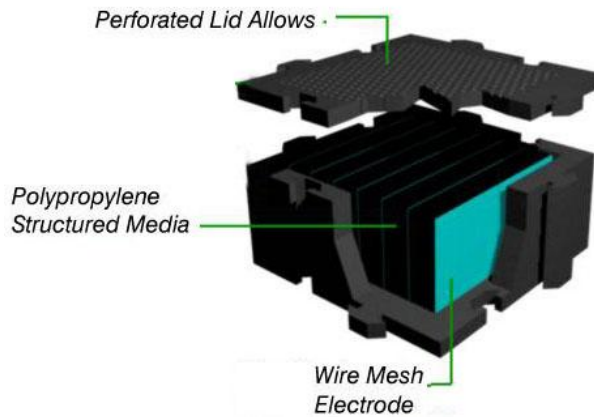


## Generalized Modular Unit



- Utilizes super-absorbant polymer for storm water retention
- Wire mesh electrode allows water flow and provides low level electrical current to the cells
- Perforated Lid Provides Support for Poursous Surfaces or Stand-Alone Operation
- Modular design provides versitility and simplifies installation

## Case Study: Skokie

- Based on NOAA data, average 2-year, 1-hour storm delivers 13,425,000 cubic feet (100,419,000 gallons) in Skokie
- The fully implemented system can retain up to 12,926,000 cubic feet (96,687,000 gallons)
- 96% of storm water retained, or about 21% of total daily flow for NSWRP (450 MGD)



## Impact

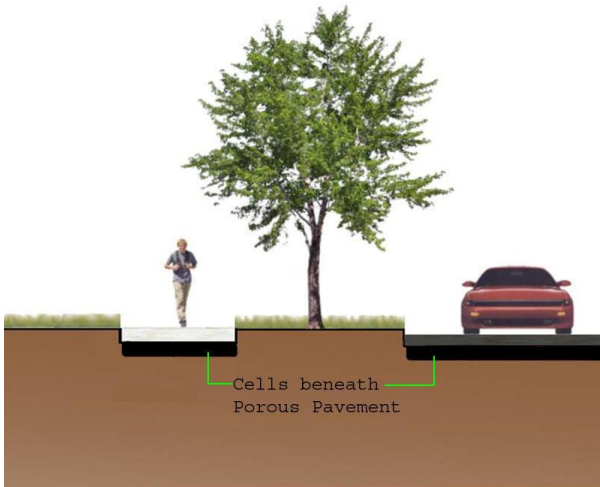
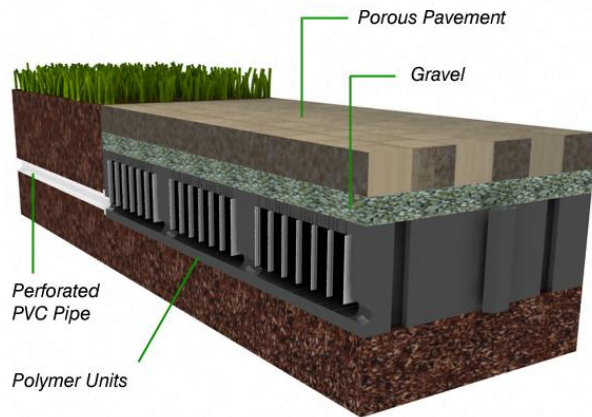
- Distributed design minimizes impact if individual parts fail
- Controlled release has possible 'urban irrigation' applications
- Distributed suterranian volume leaves open space and does not require large pits for tanks

## Design Adaptations

- Cells may be filled with a thermally activated compound
- Pouch cell for mobile water retention

## Application Diagrams

*Residential Sidewalk Application:*



## The Team

Shawn Shoulders

Sarah Johnson

Chance Lebron

William Lewis

James Myers

Karol Rybaltowski

Nan Wang

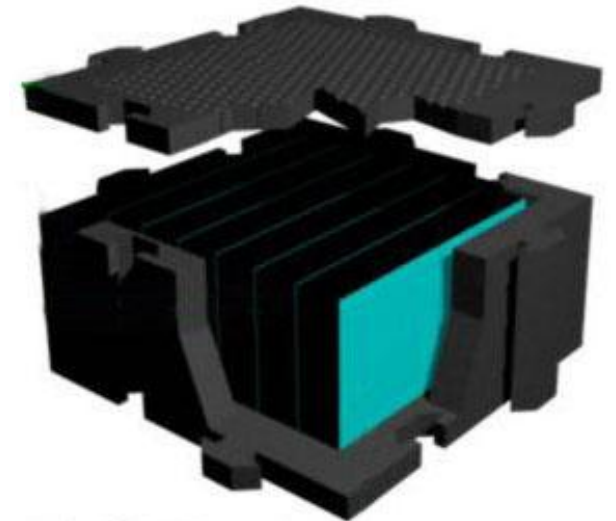
Gregory Weipert

Helen Yeung

## IPRO 312

## Active Porous Pavement System

## for Storm Water Control



Please print double sided....with the headings  
aligned at the same edge, front and back will be  
used as a tri-fold Thank you

-Shawn Shoulders