ILLINOIS INSTITUTE OF TECHNOLOGY

IPRO 312 Active Porous Pavement System for Storm Water Control

Presented By: Sarah Johnson Shawn Shoulders IPRO RPROFESSIONAL PROJECTS PROGRAM What's our Problem? Combined Sewer Overflo Flooding Water Management

Goals

- Create a "plug and play" cell-based design incorporating hydro-gel technology, renewable energy sources and porous pavement.
- 2. Construct a working prototype.
- Compare and contrast our design with current technologies
- 4. Forecast the ecological/economic impact of our design on a Chicago-land neighborhood.



Team Organization

Team Leader:

Shawn Shoulders

Faculty Advisors:

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Sub-Team Leader:

Sub-Team Leader:

Sarah Johnson

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Design/Research:

Chance Lebron Karl Rybaltowski

Electrical:

Misha Chivasha James Meyers Nan Wang

Logistics/Admin:

Sarah Johnson Shawn Shoulders

Progress so far...

Identified case study for implementation projections.

Identified structural material for cell design.

 Created preliminary designs for cell structure and circuitry

Obstacles to date

Initial design process.

Acquiring the right information.

Circuitry design.

Flexibility of design.

Hurdles ahead...

Incorporating design into working prototype.

 Making accurate and realistic predictions about the impact of our system.