Landscape Architecture Design for Urban Brownfields

Case Study Bloomfield, NJ

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Innovative solutions for New Jersey’s urban communities for open space, resilience, and habitat issues.

The Center for Urban Environmental Sustainability (CUES) is a unique partnership between the departments of Environmental Sciences and Landscape Architecture at Rutgers University. This collaboration provides an opportunity to integrate the best science, engineering, and design capabilities in order to better address issues related to urban environmental sustainability in New Jersey.
Active community engagement
Collaborative research and design process
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Landscape Architecture:
Just private gardens and high end residential developments?
Landscape Architecture just for rich places?
Landscape Architecture is much more needed in NJ’s urban centers
Urban Extension needs to help!
Spring Brook Park – Bloomfield, NJ
Townhouse development was stopped
Borough acquired land
NJ Wetland Mitigation Council funding
Pro bono help to transform a brownfield into a wetland
open space, resilience, and habitat issues.
18-acre urban site with 
~10 feet of historic fill 
material (1920s – 1985)
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Contamination assessment 2005

Boswell, 2003-2006
V. Ottillio and Sons, processed debris, 2005
Property contamination investigation
USDA-NRCS (National Resources Conservation Service)
Ground Penetrating Radar – Human Transported Material, depth in feet
Helps to quantify fill removal and depth to groundwater
Graduate Independent Studies
Dean Janulis
Megan Collins
Jennifer Ryan
Megan Collins

Diverse wetland zones
Contaminated soil moved upland and capped
Soccer on clean fill cap

Inspired by the picturesque
Pooling water in wetlands
Dean Janulis

Diverse wetland zones
Contaminated soil moved upland and capped
Soccer on clean fill cap

Inspired by the engineered circle
Pond as central feature
Jennifer Ryan

Diverse wetland zones
Contaminated soil moved upland and capped
Soccer on clean fill cap

Bosque provides social space
rocks and logs playground
Lessons Learned

Difficult environmental situations offer ample design opportunities.

Students learned how Landscape Architecture can transform engineered sites into attractive environments.

Pro bono work can contribute to discourse and foster solutions but cannot solve underlying political conflicts.