



# Green Infrastructure & Stormwater Management CASE STUDY

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## Entrance Road Extension and Parking Facility

**Location:** Thompson Park, Lincroft, NJ

**Client:** Monmouth County Park System

**Design Firm(s):** French and Parrello Associates

**Landscape architect/Project contact:** Richard Pillar , ASLA - Landscape Architect, Heng Chin – Engineer, Monmouth County Park System

**Email:** [rpillar@monmouthcountyparks.com](mailto:rpillar@monmouthcountyparks.com)

**ASLA Chapter:** New Jersey

### Project Specifications

**Project Description:** Construction of stormwater management system for ground water recharge, filtration of runoff from the construction of a new park roadway extension and 100-car parking lot. Measures included two planted bioretention basins, shallow grassed infiltration areas, large perforated underground hdpe plastic piping system connecting the various infiltration and bioretention basins.

**Project Type:**

Open space - park

Part of a new development

**Design features:** Bioretention facility, rain garden, bioswale, porous pavers, curb cuts, and stormwater piping for groundwater recharge.

**This project was designed to meet the following specific requirements or mandates:**

State statute

**Impervious area managed:** 1 acre to 5 acres

**Amount of existing green space/open space conserved or preserved for managing stormwater on site:** 1 acre to 5 acres

**The regulatory environment and regulator was** supportive of the project.

**Did the client request that other factors be considered, such as energy savings, usable green space, or property value enhancements?** Concept planning was prepared by park staff to ensure least impact for use of site as well as blending into surrounding features.

### Cost & Jobs Analysis

**Estimated Cost of Stormwater Project:** \$50,000-\$100,000 (Public funding: Local, county capital funds)

**Was a green vs. grey cost analysis performed?** No

**Cost impact of conserving green/open space to the overall costs of the site design/development project:** Being located within an existing park site, no affect on costs.

**Cost impact of conserving green/open space for stormwater management over traditional site design/site development approaches (grey infrastructure)?** Did not influence costs.

**Number of jobs created:** Pubic Bid Construction Project - 6 jobs est.

#### Job hours devoted to project:

Planning and Design: 600

Construction: 2880

Annual Maintenance: 40

### Performance Measures

#### Stormwater reduction performance analysis:

100% of 2 to 150-year storm retained onsite and dispursed by groundwater recharge and infiltration.

**Community & economic benefits that have resulted from the project:** Being integral to a park, economic and similar benefits are not produce. Benefits are more associated with park enhancement for patrons usage and safety as well as providing new habitat for wildlife, insects in the bioswale/rain garden areas.

### Additional Information

**Links to images:** No link available. Contact Rich Pillar by email for images - [rpillar@monmouthcountyparks.com](mailto:rpillar@monmouthcountyparks.com)