Green Infrastructure & Stormwater Management CASE STUDY

Garvanza Park Stormwater BMP Project

Location: 240 E. Meridian Street, Los Angeles, CA Client: City of Los Angeles Design Firm(s): North East Trees Landscape architect/Project contact: Kathleen McKernin, ASLA, Director of Design and Planning Email: <u>kathleen@northeasttrees.org</u> ASLA Chapter: Southern California

Project Specifications

Project Description: A large storm drain passes under Garvanza Park that carries all the water draining from the hilly neighborhood above it directly to the Arroyo Seco. Typically, this urban



rainwater runoff carrying oil and other pollutants from the streets travels to the Los Angeles River and finally empties into the ocean.

The Garvanza Park Stormwater Best Management Practices (BMP) Project will use an innovative belowground system to capture and clean over a million gallons of stormwater runoff at a time. The system will divert runoff into two large cisterns installed under the park. Water

collected in one chamber will be allowed to infiltrate into the soil, replenishing the groundwater reserves. The other chamber will store water to irrigate the park's large lawn areas during the dry months.

asla.org/stormwater

Project Type:

Open space - park A retrofit of an existing property

Design features: Bioretention facility

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

Impervious area managed: greater than 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? Water savings: when the park area excavated for BMP units is restored, water efficient landscaping and irrigation will be installed.

Cost & Jobs Analysis

Estimated Cost of Stormwater Project: \$1,000,000-\$5,000,000 (Public funding: State, local)

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: Not applicable. Our non-profit organization initiated this project in partnership with a municipal agency for the purpose of diverting, treating, and re-using stormwater.

Cost impact of conserving green/open space for stormwater management over traditional site design/site development approaches (grey infrastructure)? Not applicable. Our non-profit organization initiated this project in partnership with a municipal agency for the purpose of diverting, treating, and re-using stormwater.

Number of jobs created: Over 30

Job hours devoted to project:

Planning and Design: 2,800 Construction: 6,760 Annual Maintenance: 770

Performance Measures

Stormwater reduction performance analysis:

Water quality improvements will capture and retain 70 percent of all storm events, equivalent to the runoff generated from a 0.5-inch storm event, and the "first flush" portion of larger storms.

Community & economic benefits that have resulted from the project: Garvanza Park is a popular local park that will be beautified and made more sustainable via this project.

Additional Information

Links to images: <u>http://northeasttrees.wordpress.com/2011/01/14/garvanza-park-stormwater-bmp-project/</u>

http://northeasttrees.wordpress.com/2011/03/29/garvanza-park-bmp-update/ http://www.northeasttrees.org/GarvanzaPark.html