

## Green Infrastructure & Stormwater Management CASE STUDY

## **Pioneer Trail Roundabout**

Location: Truckee, CA
Client: Town Of Truckee

**Design Firm(s):** L+P DesignWorks, Eastern Sierra Engineering **Landscape architect/Project contact:** John P. Pruyn, ASLA

Email: <u>ipp@lpdesignworks.com</u>
ASLA Chapter: Northern California

## **Project Specifications**

**Project Description**: Traffic calming combined with bike trails, LID and native landscape.

#### **Project Type:**

Transportation corridor/streetscape

Part of a new development

**Design features**: Bioretention facility and bioswale.

This project was designed to meet the following specific requirements or mandates: Not applicable

Impervious area managed: 5,000 sq/ft to 1 acre

Amount of existing green space/open space conserved or preserved for managing stormwater on site: 5,000 sq/ft to 1 acre

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? The value acheved is less water run off, more infiltration, less damage to our streams and rivers from concentrated run off.

## **Cost & Jobs Analysis**

**Estimated Cost of Stormwater Project:** \$100,000-\$500,000 (Public funding: State, local - Caltrans grant for the bike trails, funded by the Town of Truckee)

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**Related Information:** The entire project was in the range of \$2.5 mil.

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 significantly

Cost impact of conserving green/open space for stormwater management over traditional site design/site development approaches (grey infrastructure)? Slightly increased. RE did not follow the plans as originally indicated and we needed to retrofit the grading during the installation of the landscape.

Number of jobs created: Not available

#### Job hours devoted to project:

Planning and Design: Not available Construction: 8 months for total project

Annual Maintenance: 40 hours

#### **Performance Measures**

Stormwater reduction performance analysis:

We design to the 20-year, 1-hour storm event.

Community & economic benefits that have resulted from the project: Connectivity to the surrounding nieghborhoods, access to the new Recreation center,

### **Additional Information**

This was a very involved process with many side benifits to the community. At the center of the project is a roundabout 120' in diameter, bike paths, stormwater management and landscape. Would love the chance to discuss it.



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