

## Expert Judging Criteria



**Judging ID Number:** 02EJ-C \_\_\_\_\_

**Team Number of Entry** 02-01 \_\_\_\_\_

**Design Category of Entry:** Green Streets \_\_\_\_\_

**Judges' Comments:** The site plan provided a comprehensive vision for 6<sup>th</sup> street by integrating together placemaking and stormwater management features into an attractive thoroughfare that would enhance community revitalization and livability with an tree-lined, meandering boulevard feel . The plan provided conceptual design drawings for LID features, plant selections, estimated cost, and hydrologic analysis.

Altogether, the site design provides is an improved enhanced over the conventional site plan, with LID features well-placed for both stormwater management function and eye-pleasing aesthetics.

---

---

---

Total Points Accumulated: 76 out of 100

## Expert Judging Criteria

- How well does this site conserve natural resources that provide natural functions associated with controlling and filtering storm water?

The placement of large swaths of green spaces on alternating sides of the street – rather than a thinner continuous strip on either side as in the conventional plan – gives more space for tree roots and plantings, and larger infiltration area. The plan explicitly included vegetated features such as bioretention and flow-thru planters to optimize the filtration of pollutants that can be achieved through natural function, and cited native species at least for the grasses, and noted the species recommended, and included the importance of high habitat value plants. For each LID feature type, a plant species palette was provided with consideration to hardiness, drought-tolerance, and local availability.

\_\_\_10\_\_\_ of 10 points

- How well does this site use decentralized, small-scale landscape features and LID Integrated Management Practices (IMP) working as a system to:
  - Reduce the amount of runoff by mimicking the natural hydrologic function of the site and matching pre-development hydrology?

The site plan estimated the quantity of runoff using HEC-HMS 3.5 model. The results indicate lower flow rates and volumes for the 100-year flow event for the proposed LID scenario relative to natural and existing conditions. This result was achievable due to the variety and distribution of LID features throughout the site.

\_\_10\_\_\_ of 10 points

- Minimize the use of and/or reduce the size of pipe and other centralized control and treatment infrastructure?

The site proposes to provide sufficient storage and reuse options to eliminate all inlets and piping along 6<sup>th</sup> St. Additionally although not mentioned explicitly, the project objective of treating the 1 inch storm event on site has the potential of decreasing downstream treatment costs.

\_\_8\_\_\_ of 10 points

- How well does this site minimize and disconnect impervious surfaces, lengthen time of concentration and promote bio-filtration of runoff to improve the quality of storm water leaving the site?

The site does a great job of incorporating LID features in various locations to collect runoff from buildings, streets, and sidewalks, with placement for optimum visual enjoyment of the plantings. The site design calls for repaving the streets with a crown in order to direct flow towards the curb which have curb cuts leading towards bioretention medians. These interventions disconnect impervious areas and decrease the time of concentration.

\_\_10\_\_\_ of 10 points

- How well does this site minimize or eliminate the use of potable water resources needed for irrigation and where practical provide for the reuse of rainwater?

The plant palette includes vegetation that does not require additional irrigation thus minimizing the needs for potable water. The plan proposes that the water supply for the canal be sourced from treated stormwater, saving the use of potable. By keeping the stream small and within rock walls, it minimizes the potential for children to play in the water which otherwise might require the water to be disinfected for contact use.

Total Points Accumulated: \_\_\_76\_\_\_ out of 100

## Expert Judging Criteria

\_\_9\_\_ of 10 points

- How well does this site use enhanced quality of life values and reduced maintenance costs inherent in LID practices to increase marketability of the development and long-term property values?

The vision statement for the plan presented a case for livability by greatly enhancing with sinuous green swaths and slightly curving street. The vision statement could have been more firmly pronounced through the report, but the presence of the details of the LID features provided a clear understanding for experienced designers. The serpentine pathway for the streets helps to create pockets for stormwater management as well as serving as a traffic calming feature. The maintenance benefits could have been more thoroughly discussed, but maintenance was combined with landscaping by having the LID features prominent and integrated.

\_\_6\_\_ of 10 points

- How well does this site correctly identify current codes that prohibit the construction or implementation of your prescribed LID techniques?

There was no mention of codes.

\_\_0\_\_ of 15 points

- How well does this site address the aspects of your area of expertise in architecture, landscape architecture, hydrology/hydraulics/civil engineering, stormwater quality, or planning/development/consulting?

The site comprehensively addresses both water quantity and quality concerns.

\_\_9\_\_ of 10 points

- How well do the teams's submitted materials address grammar, editing, appearance, and verbiage?

\_\_5\_\_ of 5 points

- Does the team's design adequately compare the costs of LID versus conventional design? Is their design a better investment, in your opinion, than the conventional design?

The proposal provided a breakdown of costs comparing the conventional to LID design plan. Although the LID plan removed the need for pipes and inlets, the costs were replaced by the additional need for culverts to transfer the canal flow underneath the streets. These additional costs should have been duly noted in the conventional design plan also since the canal is not likely to run the entire stretch of 6<sup>th</sup> street aboveground unless it were closed to cross-streets, so that is not an extra cost for LID probably. The larger expanses of green on alternating sides of the road were particularly attractive from an LID perspective, presenting more opportunity for infiltration. The meandering small stream with stone walls similar to Centennial Park provides an actively engaging central feature with the continuity of theme from the Park. This design is better and more attractive design than the conventional design, emphasizing natural features and aesthetics in a functional design.

\_\_9\_\_ of 10 points

Total Points Accumulated: \_\_76\_\_ out of 100