Project Cost Savings Through Sustainable Sites

by Charles Rulick with contributors listed below

Understanding Benefits/Savings

* **Increased developable land**
* **Ability to utilize smaller sites**
* **Enhanced green space**
* **Reduced deep excavation cost**
* **Reduced heat island effect**
  = exterior shopper comfort and temperatures around buildings
  = reduced operating expenses
* **LEED points**

LEED Silver to Gold for less - not more.

Traditional shopping center formats are prime candidates for today's high performance site infrastructure techniques. Landscaping, irrigation, curb and gutter, parking fields, catch basins, storm water pipes and retention/detention facilities can account for up to 18% of total project costs. By integrating these systems to manage water as a resource, a development site can benefit from reduced irrigation and long-term water costs, increased developable land, reduced heat island effect, enhanced aesthetics and shopper experience, and reduced need for traditional storm water management systems.

A traditional shopping center may consist of up to one hundred acres of land, of which 75% is usually impervious. Treating water opportunistically rather than as waste can yield multi-faceted returns. The faster water enters the ground in relation to where it falls the cheaper the solution.

Understanding Cost

Why pay for something that doesn't add to shopper experience, increase rent or long-term value? It is suggested that alternative approaches to storm water management can achieve up to 20% cost savings on components of site infrastructure. Many "green" techniques are associated with systems and approaches that add to the initial cost but provide longer-term return on investment. **High performance infrastructure is about saving money and achieving triple-bottom line returns today.**

LEED

Up to 14 points exist within the Sustainable Sites section. Only 8 points are required to go from Certified to Silver and 13 points from Silver to Gold.

Cost/Benefit Analysis

The greatest part of utilizing high performance infrastructure in a shopping center environment is the ROI calculation. ROI is achieved day one.

Geographical and Size Constraints

While these techniques are appropriate for most climates and locations, it is important to consider the uniqueness of each development site (soils, hydrology, topography, etc).

REDUCE PROJECT COSTS
HEDGE AGAINST WATER QUALITY REGULATION
BE GREEN - SPEND LESS - TODAY!

Contributors

FOREST CITY

U.S. GREEN BUILDING COUNCIL USGBC

CAHILL ASSOCIATES

[nev-u-non] Nevue | Ngan Associates

Walmart Realty

William McDonough + Partners
Architecture and Community Design

CLEMSON UNIVERSITY Richard H. Pennell Center for Real Estate Development