



Green Infrastructure

United States Environmental Protection Agency - Region 6

2014 EPA Region 6 Green Infrastructure and Low Impact Development Poster Competition



1st Place

Birnamwood Drive LID Roadway Project, Harris County, Texas, Harris County Public Infrastructure Department, Nick Russo and Alisa Max, P.E.

Harris County recently completed construction on a roadway project that is the first roadway in Texas to utilize Low Impact Development techniques for stormwater management. The roadway's drainage system combines natural and engineered components to eliminate off-site stormwater detention. The native grasses filter rainfall, recharge groundwater and also reduce maintenance.

2nd Place

GI Design and Construction for Timber Creek High School, Tom Rutledge, Teague Nall and Perkins and Don McChesney, City of Fort Worth

This project is at Timber Creek High School, Keller Independent School District in the City of Fort Worth. It is one of the first City of Fort Worth stormwater credit projects. The design and construction incorporated GI/LID elements to conserve water, help with flood mitigation, and provide runoff management. Through these practices, pollutants are reduced from entering local waterways.

3rd Place

From Grey to Green: The Versatility of Green Roof Technology in Transportation Infrastructure, Rudraksha Jhaveri, Associate/Landscape Designer, Mahan Rykiel Associates

This project installed and maintained a vegetated track system on a commuter light rail in Maryland demonstrating how infrastructure can be transformed from grey to green through retrofitting. Such projects demonstrate the potential for stormwater mitigation in retrofitted infrastructure, reducing heat island effect, providing community green space and an aesthetic treatment. Local citizens believe increased green space of the light rail enhanced their quality of life.

First Place Photos

Birnamwood Drive LID Roadway Project, Harris County, Texas, Harris County Public Infrastructure Department



photos by Harris County Public Infrastructure Department



Harris County's recently completed 6.8 mile roadway project is the first roadway in Texas to utilize LID techniques.

Student Award

Design, Construction and Performance of Low Impact Development in North Texas, Michelle Wood Ramirez, Fouad Jaber, Texas A&M University

This project evaluated urban stormwater best management practices (BMPs) in a typical urban watershed in the Dallas-Fort Worth area. The objectives were to design, construct and demonstrate the effectiveness of green building infrastructure at the Texas A&M AgriLife Research and Extension Center in Dallas. The five LID BMPs targeted in this project were permeable pavements, bio-retention area, rainwater harvesting, green roofs, and detention ponds. Reduction in both volumes and pollutants concentration were recorded for all BMPs.

People's Choice Award

Santa Fe Water Conservation/Stormwater Demonstration Median, David Pike, Public Works Projects Administrator, City of Santa Fe Public Works Department, Streets & Drainage Division, Storm Water

The City of Santa Fe transformed a 640 square foot median located at St. Michaels Drive and Calle Lorca in Santa Fe, New Mexico. The project goal was to show how minimal changes in design and minimal investment can make a significant difference in stormwater flow and assist in retention of rainwater to be used as irrigation on public owned medians. The median was constructed using recycled materials. The total labor hours to construct were 86 hours and the cost of material was \$280.00. The design, removal, installation time was less than one week. The initial storm water surge capacity is 750 gallons with total capacity of 1,200 gallons.

The Poster Competition's objective is to learn, showcase and recognize Green Infrastructure and Low Impact Development efforts in EPA Region 6.

