Capitol Hill Water Quality Project – the Swale on Yale

 Millions of gallons of stormwater run off the streets and sidewalks of Capitol Hill every year. This untreated water carries numerous pollutants like motor oil, pesticides, fertilizers, grease, paint, and heavy metals into Lake Union and ultimately Puget Sound.

Seattle Public Utilities (SPU) and Vulcan Inc. are partnering to change all of this. They are planning to construct a regional-scale biofiltration swale in an urban streetscape that will treat hundreds of millions of gallons of stormwater from about 435 acres of Capitol Hill streets and sidewalks. A series of four wide, flat-bottomed ditches planted with thick vegetation will reduce the speed of the runoff, allowing sediments and pollutants to settle out before going into a pipe that outfalls to Lake Union.

This distinctive project received the Seattle Design Commission’s “In the Works” award for its “collaborative and creative design process.” This is the first time the award has been given to a project that has not yet been constructed. The Commission applauded the collaborative partnership between many city departments (Seattle Public Utilities, Seattle City Light, and Seattle Department of Transportation) and Vulcan Inc., and recognized the team for going “…beyond what would have already been an ambitious, state-of-the-art infrastructure project, compounding its potential to enrich the public realm.”

Once completed, each swale will be approximately 270-feet long and ranging from 10.5 to 16.5-feet wide. These swales will be built along two blocks of Yale Avenue North and Pontius Avenue North. Apart from the swales the project includes:

- Diversion vault: A large underground tank to divert the stormwater into the biofiltration swales.
• Pretreatment: This equipment will be installed under Yale Avenue North to separate out large solids and trash.
• New storm drain pipes: Approximately 2000 feet of new pipes will be built to convey untreated stormwater into the diversion vault, the pretreatment, then the biofiltration swales, finally, the treated runoff will make its way into Lake Union.

Construction for the first phases began in April 2012 and will focus on the pipes, pretreatment installations, and diversion of the stormwater. The next phases will include the swales as well as restoration of the right-of-way alongside the private development. In three or four years the project will be completed with the installation of the remaining swales.

For more information on the project visit our website here.
(http://www.seattle.gov/util/About_SPU/Drainage_&_Sewer_System/Projects/SwaleOnYale/ProjectDetails/index.htm)