viridian landscape studio

Enough stormwater runoff is captured per year (when planted at 40% tree canopy with appropriate soil volume) to fill 2,419 Olympic-sized swimming pools!



Prototypical Sections: Proposed High Density Thoroughlare with Parking Lot

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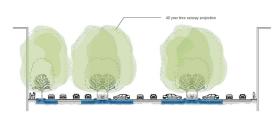
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15 planted atternwater avails

15 planted atternwater avails

Tree canopy 5 years

Prototypical Sections: Proposed High Density Thoroughlare with Parking Lot



Tree canopy 40 years

Allegheny Riverfront Vision Plan

Most of the ecology is missing from the Allegheny Riverfront; therefore, redefining Pittsburgh into a city of functioning ecosystems is critical to its longterm health.

and natural areas.

The goal for the ecological portion of the Allegheny Vision Plan is to plan for a river-oriented community based on a regenerative agenda that is strategic by nature and builds on the area's strengths; considering green space a new and primary type of infrastructure. Working with the Urban Redevelopment Authority and Perkins Eastman Architects, Viridian and CH2MHill Engineers asked the question: How can we restore the hydrologic cycle and create a healthy river while redeveloping our riverfront? Viridian and CH2MHill's goal for ecological planning is based on the fundamental ideal of restoration ecology: restore the hydrologic cycle by capturing the rain and restoring soils and vegetative cover. The Vision Plan illustrates planning and ecological goals, metrics and policy changes necessary to make Pittsburgh an economically viable green city. It does this by taking a portion of the built land surfaces and integrating stormwater management (via green infrastructure)

within the features & by incorporating vegetative elements into our stormwater management techniques.

Through restoration, rehabilitation and redevelopment, the Vision Plan seeks to allow the rainfall to follow the natural pathways into the soil mantle that has been paved over for the past century. These pathways will occur in every green island and tree corridor created, blending the form of the new communities with the varied functions they provide: commerce, habitat, and transit.

Through understanding the hydrologic cycle Viridian's goal is to create cities that: meet the requirements of the Clean Water Act consent decrees; provide substantive changes to air quality, heat-island effect and open space; and deliver exceptional quality of life to residents.

Location: Pittsburgh, Pennsylvania

Client: Urban Redevelopment Authority

Size: 1260 acres
Cost: Not disclosed
Status: Completed 2011