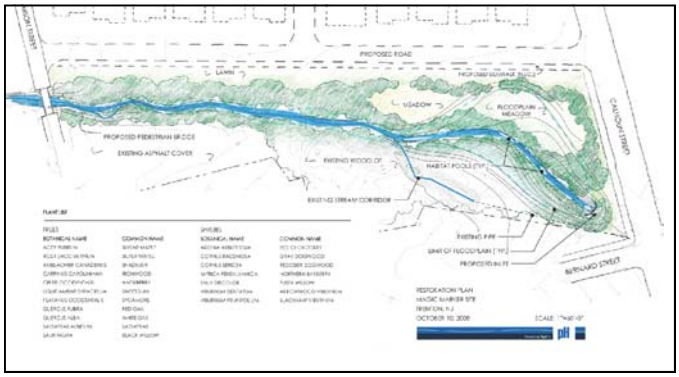
Trenton Stream Daylighting and Floodplain Creation

Trenton, NJ

Princeton Hydro was secured by the City of Trenton to restore a stream as part of a larger urban revitalization and brownfield redevelopment project. The city has taken ownership of the former Magic Marker factory site and other properties adjacent to the stream to build affordable housing and create urban greenspace. The stream, Petty's Run, suffers all the common urban afflictions: a narrow road crossing that floods over routinely, 250 feet piped underground, contaminated soils on both sides and heavy debris and litter throughout.

Princeton Hydro has developed a design that addresses the range of issues and constraints. Heavy debris and the concrete remains of earlier development will be removed from the channel. The upstream road crossing will be removed and replaced with a pedestrian crossing. Channel dimensions will be designed to accommodate higher flows and eliminate street level flooding. In addition, the downstream 250-foot piped section will be daylighted and a small adjacent floodplain meadow will be created. While adding habitat value and accommodating flooding, the area will also serve as aesthetic public open space with a walking trail linked to the nearby housing development.

The stream will be redirected from contaminated areas and failing banks will be stabilized. In the daylighted reach, a series of pool-riffle features using native shale will be installed to make the necessary drops in elevation. Princeton Hydro is working with NJ DEP and the City of Trenton to finalize the design and acquire the required permits. Construction is expected to begin in Summer 2009.

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