

Greening Richmond Public Libraries

IMPROVING THE HEALTH OF THE JAMES RIVER BY REDUCING STORMWATER POLLUTION

East End Branch

Project Description

The site is located in the East End of Richmond in Church Hill. The property is an extremely urban location on busy North 25th Street. Soil infiltration values are assumed very poor as the native soil is not accessible until demolition occurs. Litter and salt from winter road applications are prevalent and North 25th Street is infamous for vehicular accidents involving cars mounting the sidewalks. Despite these challenges this location creates the opportunity to filter very large volumes of runoff while detaining stormwater to absorb what quantities may be taken up by limited infiltration and the evapotranspiration of trees.

The purpose of the project is to develop a series of bioretention basins designed to Virginia Department of Environmental Quality standards to infiltrate storm water discharge from a portion of the roof, sidewalks, and roads; significantly reduce stormwater runoff from the parking lot by installing pervious pavers, reduce the heat island effect on the southern side of the building with shade trellises and trees, install a city bike share station, protect pedestrians with bollards and a designated drop off area, as well as develop an ecologically responsible miniature park that can be used as an educational tool. Impervious area and most non-native species will be removed with native plants added for shade, wildlife habitat, and other ecosystems services. The project strives to become a model of sustainable site development with educational components accomplished through the use of an interpretive sign, special library programs, and community involvement and support. The design was informed by public charettes and the collaborative project management effort of Richmond Public Library staff, RVAH2O, The James River Association, and Four Winds Design.

This project is funded by a 319H grant from the Virginia Department of Environmental Quality (\$100,000.00), the City of Richmond Department of Public Utilities – Stormwater Utility (\$50,000.00), the City of Richmond (amount TBD to cover pervious pavers and bike share station), and supported by staff hours from The James River Association and RVAH2O with service donations from Four Winds Design.

Construction is scheduled to begin in October of 2022. Phase Two will encompass the paver parking lot in early 2023. Demolition and site infrastructure, bioretention basins, irrigation, trellises, sign, trash cans, pavers will all be accomplished with an independent contractor. Volunteers like you will install the plants and mulch; come sweat it out with the best of them in early December.

Maintenance Analysis

All maintenance of RPL properties is performed by an independent contractor managed by RPL staff. The site improvements at Westover Hills Branch Library, which were completed in phases from 2014-2019, has served as maintenance testing grounds and pilot project. Site-specific manuals for each property have been created and are included as a separate attachment.