

The Steel Yard

Providence, Rhode Island, U.S.A.

Once a significant industrial center, Providence, Rhode Island's "Industrial Valley" began to suffer in the 1970's and 1980's as investment became increasingly focused on downtown commercial districts and residential neighborhoods, rather than in areas for industrial production. Olneyville, one of Providence's oldest and poorest neighborhoods, has many abandoned industrial buildings where informal artist "squatters" congregate.

When Olneyville's Providence Steel and Iron went out of business in 2001, the property was purchased by Nick Bauta and Clay Rockefeller who formed a new non-profit called The Steel Yard. The new owners believed that rather than demolishing the existing structures, the property could be re-purposed as a community space for local artists. The renovated Steel Yard draws on the neighborhood's history, embracing the grittiness inherent to the abandoned property, while providing a model for sustainable re-development.

The park, which is a community hub for industrial arts education, workforce training, small-scale manufacturing, contains different kinds of spaces. A large central space, known as "the carpet," is for large events such as car rallies and farmer's markets. This space is framed by secondary metalwork spaces which include a foundry and an artist studio. Other smaller spaces include storage for materials and art pieces.

The site was classified as a brownfield because of lead paint found on site. Highly contaminated soil was extracted as required by environmental remediation standards. The remaining contaminated soil was treated on-site with a binder to reduce soil disturbance. A cap of 12 inches of clean fill or pavement was then used across the entire site.

While the park needed some paved spaces for

metalwork, permeable surfaces were also woven into the design where possible. The central paved plane, "the carpet," is woven with heavy and light-duty pavements, impermeable and pervious materials, and built over the existing soil.

Given the park is part of the Narragansett Bay watershed, storing and filtering stormwater locally was a priority. Through a system of bio-swales and permeable surfaces, the new Steel Yard infiltrates 90 percent of annual rainfall, more or less eliminating the need for a new connection to the community's sewers.

To sustainably manage stormwater while also ensuring that contaminated soil did not leach into the neighborhood, the team needed to build a series of "moats" that direct infiltration and control the volume of stormwater being held. These moats are found at the edge of the carpet and help to reconcile the grade changes. They are filled with water-loving plants that filter stormwater and prevent erosion of the swales.

Sustainable materials were incorporated throughout. In contrast to many toxic materials used in conventional playground, Woodland Discovery Playground uses recycled athletic shoe material as a surface for several play areas and recycled boot material as a soft landing under several playrooms. These surface materials are not only recycled, but they are also permeable and allow stormwater to soak into the ground, feeding the surrounding tree groves.

Native pioneer and volunteer species were introduced across the Steel Yard with the expectation that they would re-colonize the industrial site while also preserving the previously abandoned site's gritty look and feel – that of a natural oasis in a primarily industrial context. This planting strategy also established vegetation across much of the previously-impermeable site without conflicting with new metalworking areas or

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event spaces.

Project Resources

LANDSCAPE ARCHITECT

Klopher Martin Design Group

CLIENT

The Steel Yard

Executive Director: Drake Patton

Co Founders: Nick Bauta and Clay Rockefeller

Board Chair: Peter Gill Case

CIVIL ENGINEERING + PERMITTING

Morris Beacon Design

EA Engineering, Science & Technology

STRUCTURAL ENGINEERING

Structures Workshop, Inc.

GENERAL CONTRACTOR

Catalano Construction

LANDSCAPE CONTRACTOR

MON

VOLUNTEER PLANTING DAY PARTNER

Groundwork Providence + 2020 Trees Program