



Morris Arboretum “Out on a Limb Tree Adventure”

Philadelphia, Pennsylvania

Weaving like a spider web throughout the verdant canopy of the Morris Arboretum, the hot-dip galvanized steel walkways of the “Out on a Limb Tree Adventure” provide a pathway to the treetops for nature enthusiasts. Located just outside of Philadelphia, the exhibit was developed to give visitors a bird’s eye view of the forest.

Consisting of a 450-foot long canopy walk constructed around a 250 year-old chestnut oak tree, the hot-dip galvanized steel structure overlooks the steeply sloped woods of the Wissahickon Valley. In keeping with the bird’s eye theme, visitors can walk into a human-sized birds’ nest constructed of galvanized steel and interwoven with branches hovering at a daring 80 feet above the forest floor.

The specifiers originally considered painting the project for corrosion protection, but after considering the life cycle cost savings of a maintenance-free hot-dip galvanized steel corrosion protection system, the choice was obvious. In the forest environment, galvanized steel has a life expectancy of 75+ years before requiring any type of maintenance, making it ideal for this complicated structure.

The architect, in consideration of the natural environment of the arboretum, wanted to specify a sustainable structure that would add to the greenness of the trees, rather than detract from it. The structure is comprised of lightweight, recyclable galvanized steel and wood, which required less space than concrete foundations, decreasing the risk of damaging the trees and their roots. Utilizing a galvanized steel frame design also allows the owners to easily modify the structure should something happen to one of the surrounding trees.

With an aggressive schedule for completion, time was of the essence. The quick turnaround of the pieces – some taking less than a day – and cooperation of the designers, fabricators, and galvanizer, helped keep the project on schedule. A total of 155 tons of steel was galvanized, including walkways, framing, handrails, canopy, tube steel supports, tower structures, and even the life size “nest” structure.

Upon completion, the specifiers had no doubt the contrast of the glinting galvanized steel amidst the lush, green forest would attract many visitors curious to see the 92-acre view from the expansive canopy platform. Thanks to the durable, sustainable protection of hot-dip galvanized steel, the Tree Adventure will remain an attractive, structurally safe and environmentally friendly web through the canopy.

Galvanizer

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