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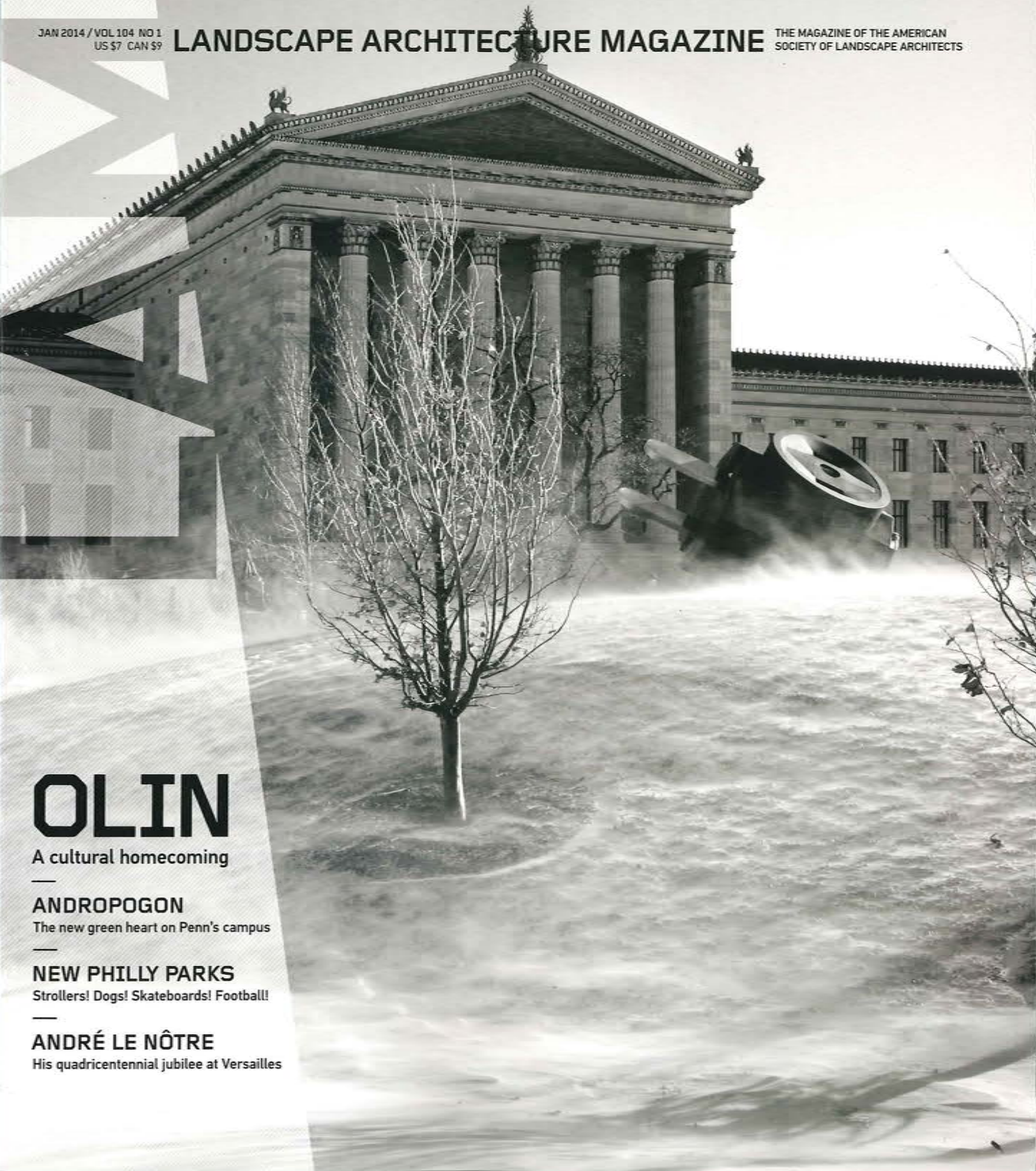


OLIN
A cultural homecoming

—

ANDROPOGON
The new green heart on Penn's campus

—

NEW PHILLY PARKS
Strollers! Dogs! Skateboards! Football!

—

ANDRÉ LE NÔTRE
His quadricentennial jubilee at Versailles


ANDROPOGON ASSOCIATES

RIGHT
Andropogon's design for Shoemaker Green made subtle use of the cramped plaza and awkward sight lines in front of the much-loved Franklin Field and the Palestra sports facilities.

You can still see how it used to be on the old Palestra Green at the University of Pennsylvania. If you were unlucky enough to be a student hurrying along Locust and Smith Walks, the main east–west axis through the campus, crossing the hectic 33rd Street intersection would bring you up short against a retaining wall with some uncertain hedging and an awkwardly placed war memorial on the southwest corner of the site. If you ever came to see a game at the regal 19th-century Franklin Field or the 1927 Palestra, or, even worse, to participate in the celebrated Penn Relays, you'd have to navigate around these barriers and maybe a few 18-wheelers with their satellite setups before being shunted off into the narrow pathways to the right or left of the tennis courts that took up nearly the entire plaza. Thanks to the now-outdated Google maps, you can relive the experience of being squeezed along with hundreds of other spectators around the edges of the plaza's chain-link fence as you tried to find an entrance, or ticket window, or a place to sit, or just a way to get out. "It wasn't," as David Hollenberg, Penn's university architect and a lecturer in the historic preservation program, candidly described it, "a polite forecourt."

Hollenberg can afford to be frank now. The site that was cluttered with dump trucks and students all jockeying for space in which to move has been transformed by Andropogon Associates into a welcoming lawn, one that handily complements the disparate building scales. Once a cramped plaza that struggled to accommodate multiple student activities and circulation patterns on a tiny site, it's now a hardworking green space that successfully allows all of the historic uses, plus several new ones. And that's just aboveground.

RUNNING IN PLACE

A NEW COMMONS AT PENN WORKS HARDER FOR THE CAMPUS AND THE CITY.

BY JENNIFER REUT

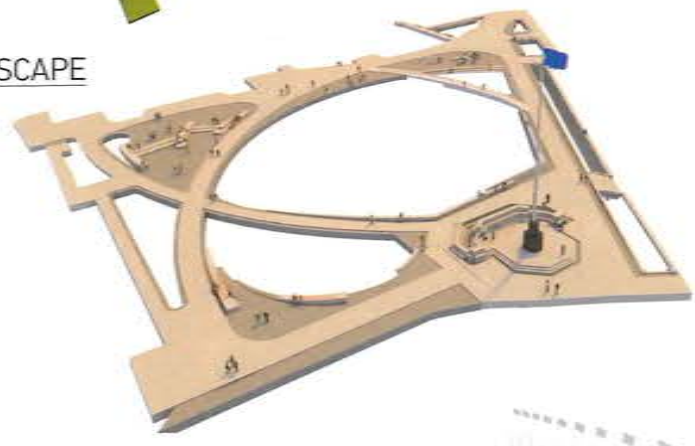
The design of the new space, now called Shoemaker Green, is straightforward on the surface. Andropogon pulled out the six tennis courts and installed a semicircular lawn with rain gardens, curtailed by wide arcs of precisely graded retaining walls and elegantly detailed pedestrian paths. Granite cobblestones around the tree trenches allow for drainage, while asphalt unipavers direct the traffic around the site. Wood inserts warm the granite benches, and a scattering of café tables and chairs offers a hiatus in what is essentially a stealth rotary for human circulation.

The small space can host as many as 75,000 students during the Penn Relays, and there are circulation patterns and building entrances that had to be sensibly orchestrated to accommodate the students going to class as well as the hordes jamming the doors for sporting events. It's the kind of programmed space that has to absorb large and small bursts of students and spectators as well as daily use, while retaining something of its character and sense of place.

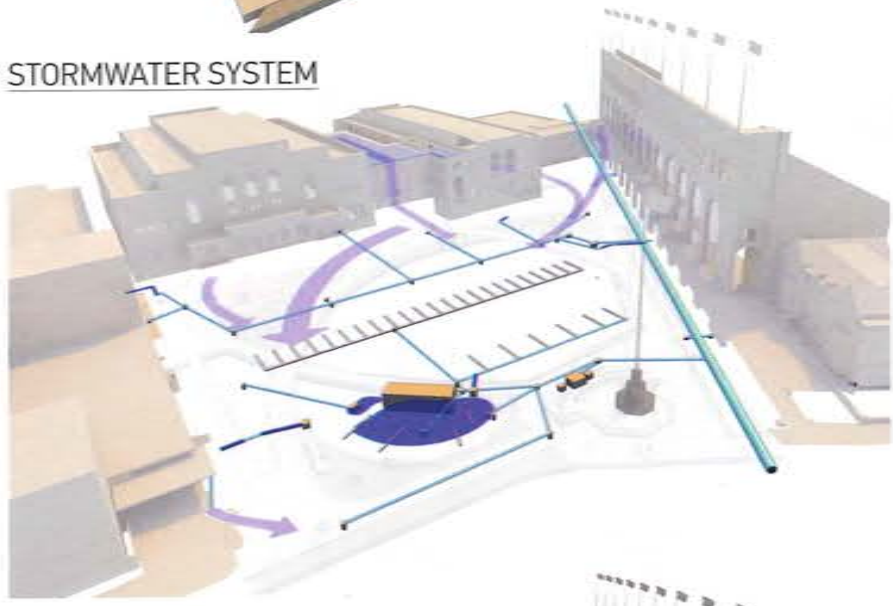
Shoemaker Green is a good example of what landscape architects traditionally have done so well: Take difficult or overlooked spaces and, in a few thoughtful moves, turn them into nodes of human activity and efficient motion. Shoemaker also does what landscape architecture is increasingly called on to do in public space: manage stormwater, produce data on resource use, create microhabitats, and make environments where people feel enrolled through a collaborative design process. Wedged between two brick-clad sports facilities, a midcentury math and physics building, and a busy road, Shoemaker also has to contend with Tod Williams and Billie Tsien's much-lauded Skirkanich Hall across the road as well as various campus administration buildings. That's a lot of heavy lifting for the relatively tiny 3.75-acre site.

VEGETATION

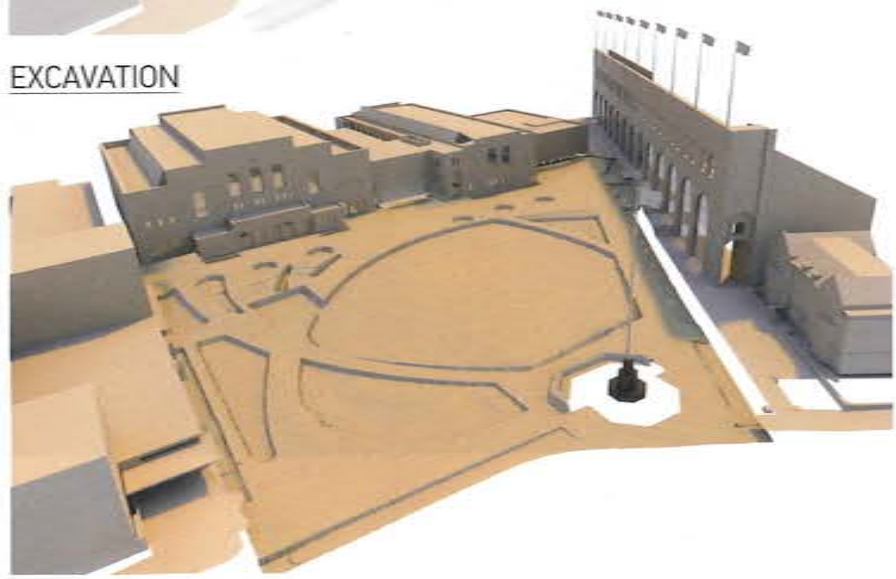
HARDSCAPE



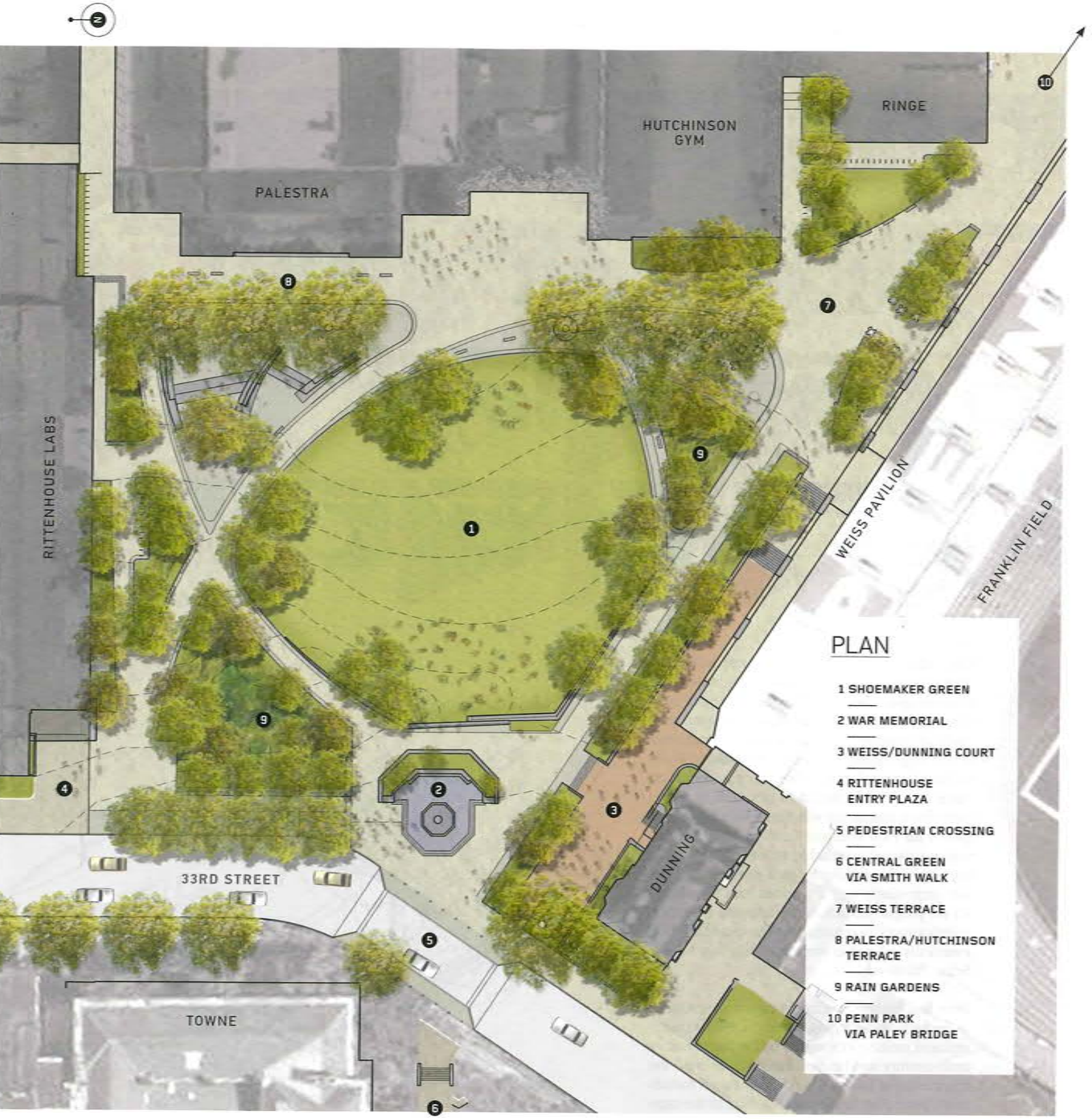
STORMWATER SYSTEM

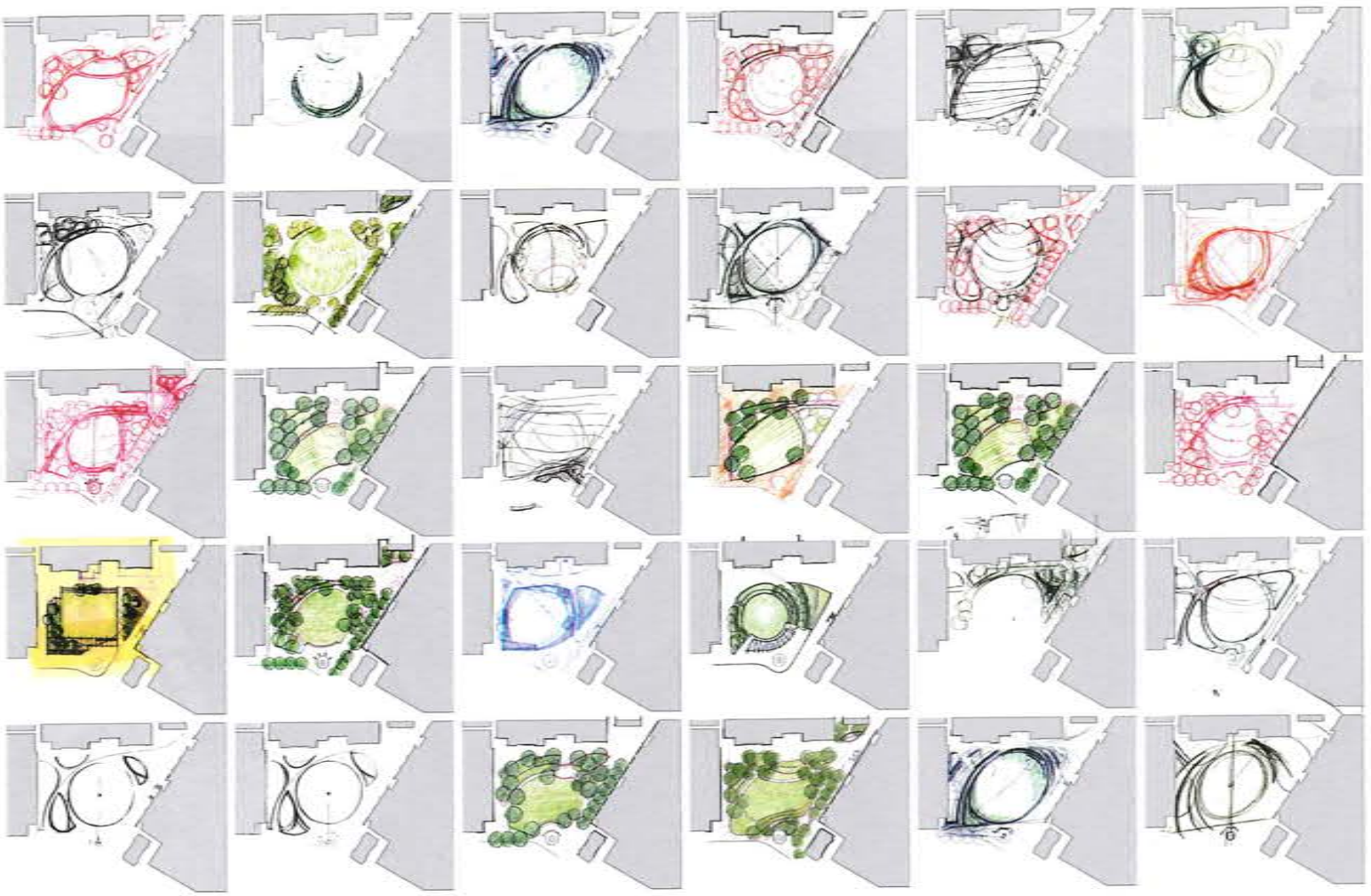


EXCAVATION

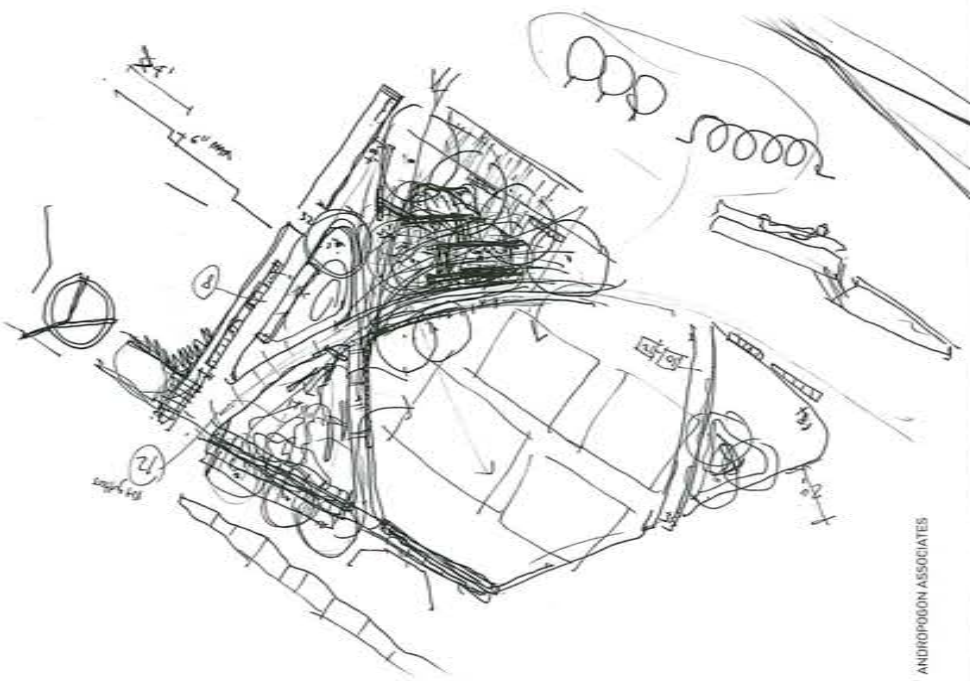


ANDROPOGON ASSOCIATES, THIS PAGE AND OPPOSITE


HUTCHINSON GYM
RINGE
PALESTRA
RITTENHOUSE LABS
WEISS PAVILION
FRANKLIN FIELD
DUNNING
33RD STREET
TOWNE
PLAN
1 SHOEMAKER GREEN
2 WAR MEMORIAL
3 WEISS/DUNNING COURT
4 RITTENHOUSE ENTRY PLAZA
5 PEDESTRIAN CROSSING
6 CENTRAL GREEN VIA SMITH WALK
7 WEISS TERRACE
8 PALESTRA/HUTCHINSON TERRACE
9 RAIN GARDENS
10 PENN PARK VIA PALEY BRIDGE



On a blustery day, I toured the site with José Almiñana, FASLA, and Thomas Amoroso of Andropogon. We walked from the south side of campus, where the university's hospital and medical complex have established a clamorous, active edge, along the serene Woodland Walk to Penn's central green. The campus design at Penn is defined by its urban situation, and perhaps this accounts for why there wasn't a formal plan until Paul Philippe Cret's in 1913. On the way, we passed a veritable gallery of fine buildings by major architects, each distinct in form but surprisingly well integrated into the whole. As we progressed across the campus, I became quietly aware of a common design vocabulary that eventually relaxed as we moved east toward the Schuylkill River.



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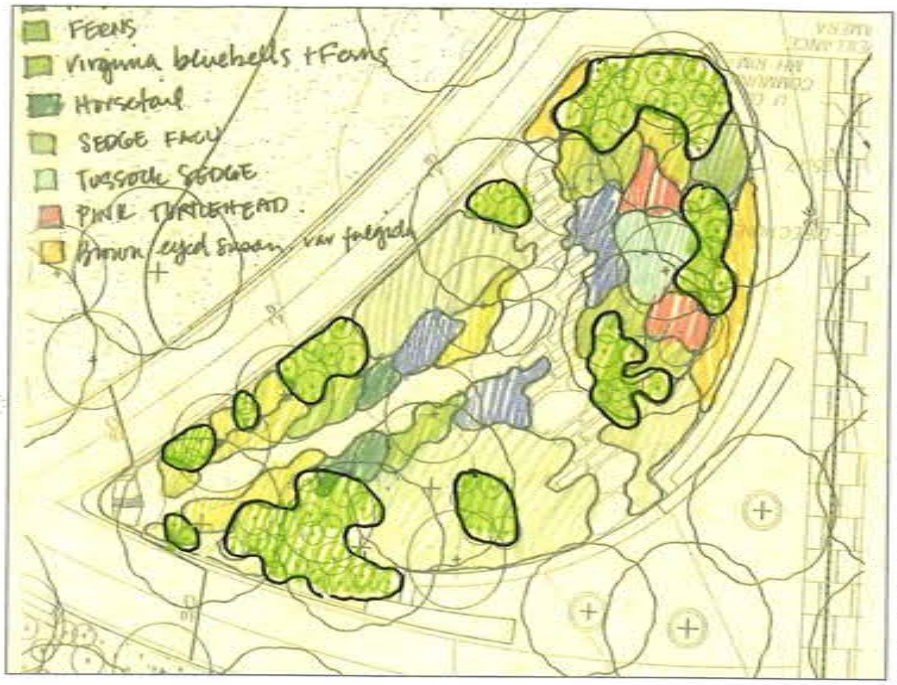
Penn had this site in mind for passive green space as far back as the 1970s, when the tennis courts replaced parking lots, which had replaced earlier 20th-century row houses, but it wasn't until the completion of Michael Van Valkenburgh Associates's Penn Park on the eastern edge of the cam-



ABOVE
The rain gardens were planted with a mix of plants that are native to the Piedmont and Coastal Plain ecoregions and were procured within 150 miles of Philadelphia.

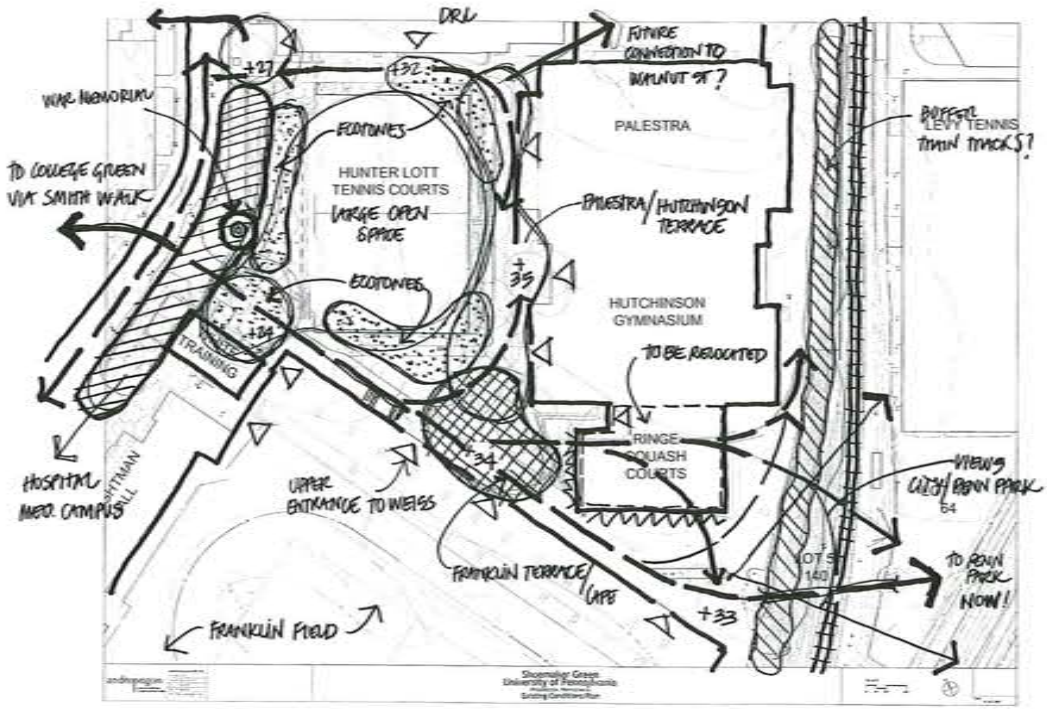
OPPOSITE TOP AND BOTTOM
Complex circulation patterns demanded a number of approaches to the design's spatial concepts.

pus that the space that would be Shoemaker could take shape as part of a larger whole. Now students can follow green pathways from the Locust Walk through the central green to Shoemaker to Penn Park, with its views beyond to the Schuylkill. It's an example of an effective long-term greening strategy in an urban context that many large cities are still trying to accomplish.

Penn's central green is an important touchstone for Shoemaker Green, and many students walk through it on their way to Shoemaker. Formally known as Blanche Levy Park, the central green is bounded by some of the school's most venerated design icons, including College Hall, Van Pelt Library, Fisher Fine Arts Library, and Meyerson Hall, home of the Penn School of Design. It's an important psychological and physical link to Shoemaker Green, but also to Andropogon's deep history on the Penn campus.

Like many urban universities and colleges, Penn contracted after World War II, closing off street access and showing the city and its citizens its unwelcoming architectural backside. But by the 1970s, Penn was under pressure to unify its various colleges and diversify its student body. Peter Shepheard, then-dean of Penn's Graduate School of Fine Arts, oversaw a landscape development plan along with the faculty of the department of fine arts including Laurie Olin, FASLA, and Robert Hanna; and founding members of Andropogon Carol Franklin, FASLA, Colin Franklin, FASLA, and Leslie and Rolf Sauer, among others. The 1977 plan was notable for opening up the borders of the Penn campus to the urban neighborhoods and for

EXISTING CONDITIONS PLAN



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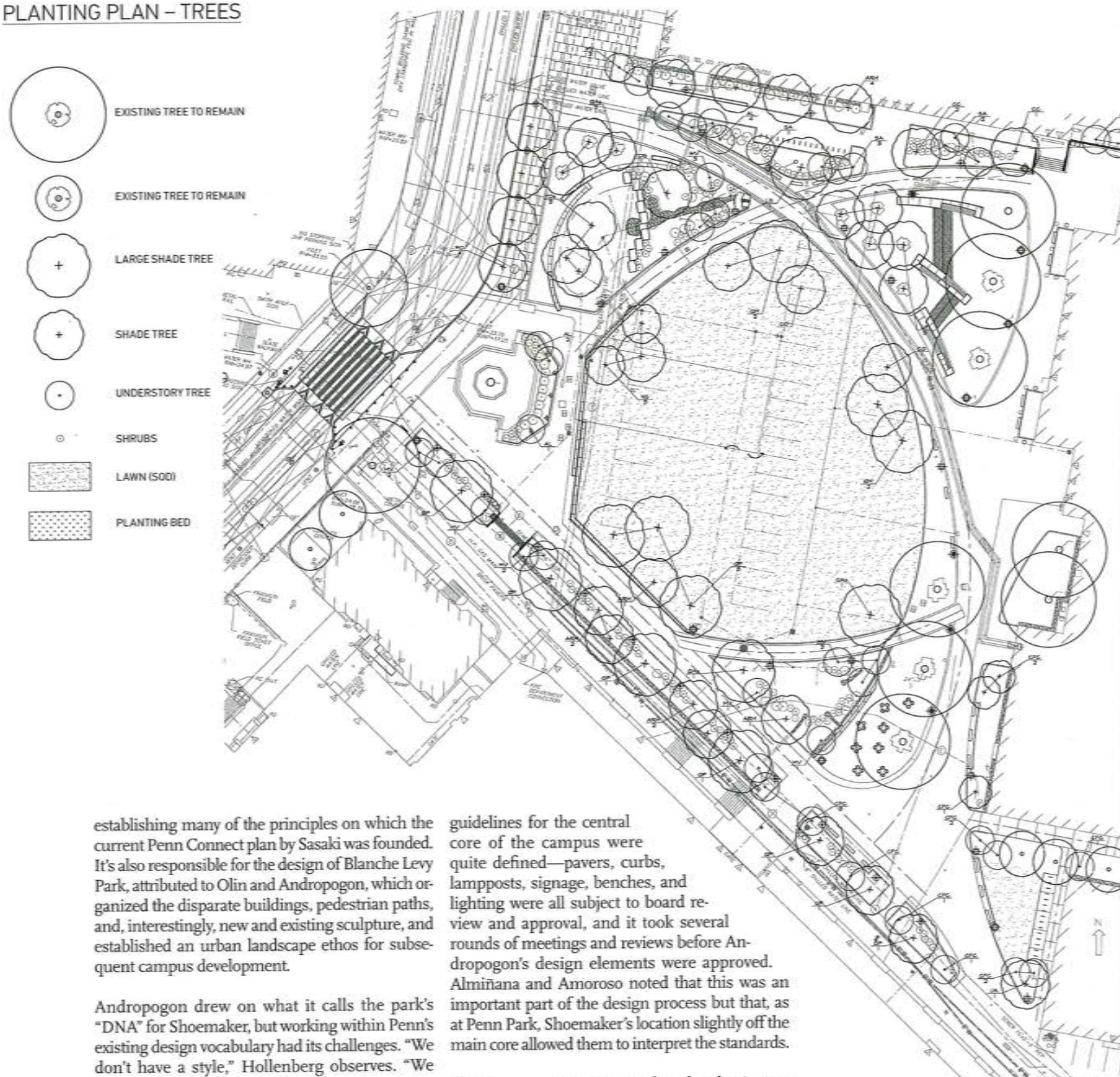
PLANTING PLAN – TREES



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establishing many of the principles on which the current Penn Connect plan by Sasaki was founded. It's also responsible for the design of Blanche Levy Park, attributed to Olin and Andropogon, which organized the disparate buildings, pedestrian paths, and, interestingly, new and existing sculpture, and established an urban landscape ethos for subsequent campus development.

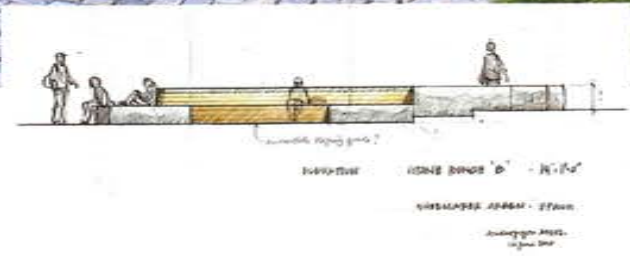
Andropogon drew on what it calls the park's "DNA" for Shoemaker, but working within Penn's existing design vocabulary had its challenges. "We don't have a style," Hollenberg observes. "We have a tradition of doing the best contemporary architecture, and the landscape ties it all together. A set of landscape standards is given—furniture, planting, materials—and they're actually more specific than for architecture." Penn has a diverse architectural vocabulary, but the landscape design guidelines for the central core of the campus were quite defined—pavers, curbs, lampposts, signage, benches, and lighting were all subject to board review and approval, and it took several rounds of meetings and reviews before Andropogon's design elements were approved. Almiñana and Amoroso noted that this was an important part of the design process but that, as at Penn Park, Shoemaker's location slightly off the main core allowed them to interpret the standards.

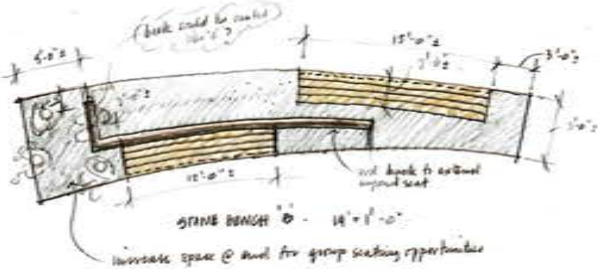
Walking around the site, it's clear that they're particularly proud of the benches, which deviate from the campus's standard freestanding park benches. Almiñana had long admired the wide, low granite walls in front of the design school, which had been immediately adopted by students as seating and

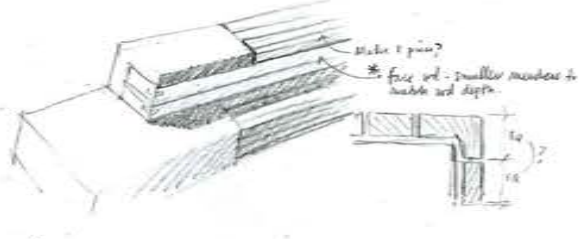
LEFT
Shoemaker Green is part of a series of linked green spaces and walks that stretch from the western edge of campus to Penn Park.

BELOW
New trees join the existing London plane trees in front of the Palestra.

ANDROPOGON ASSOCIATES, TOP; BARRETT DOHERTY, BOTTOM







meeting areas, and he interpreted them for Shoemaker. Here, similar forms, with black locust wood inserts, work both as retaining walls that reconcile the site's 4 percent grade change and as elements that shape the central green.

Although it isn't apparent during the day, one of the biggest departures at Shoemaker from Penn's traditional landscape elements is the lighting design. Much of the sports activity in the Palestra and at Franklin Field takes place at night, and with the addition of a new library commons in Franklin Field, the designers had to think about ways to make the space usable and safe at night. Andropogon worked with Linnaea Tillett of Tillett Lighting Design, who quickly recognized that Shoemaker was as much a place that students pass through as it was a destination, and focused the design accordingly. Tillett describes the approach as "much more about realizing the particular ways that you navigate than creating an overall glow." The lighting, like the landscape design, had to

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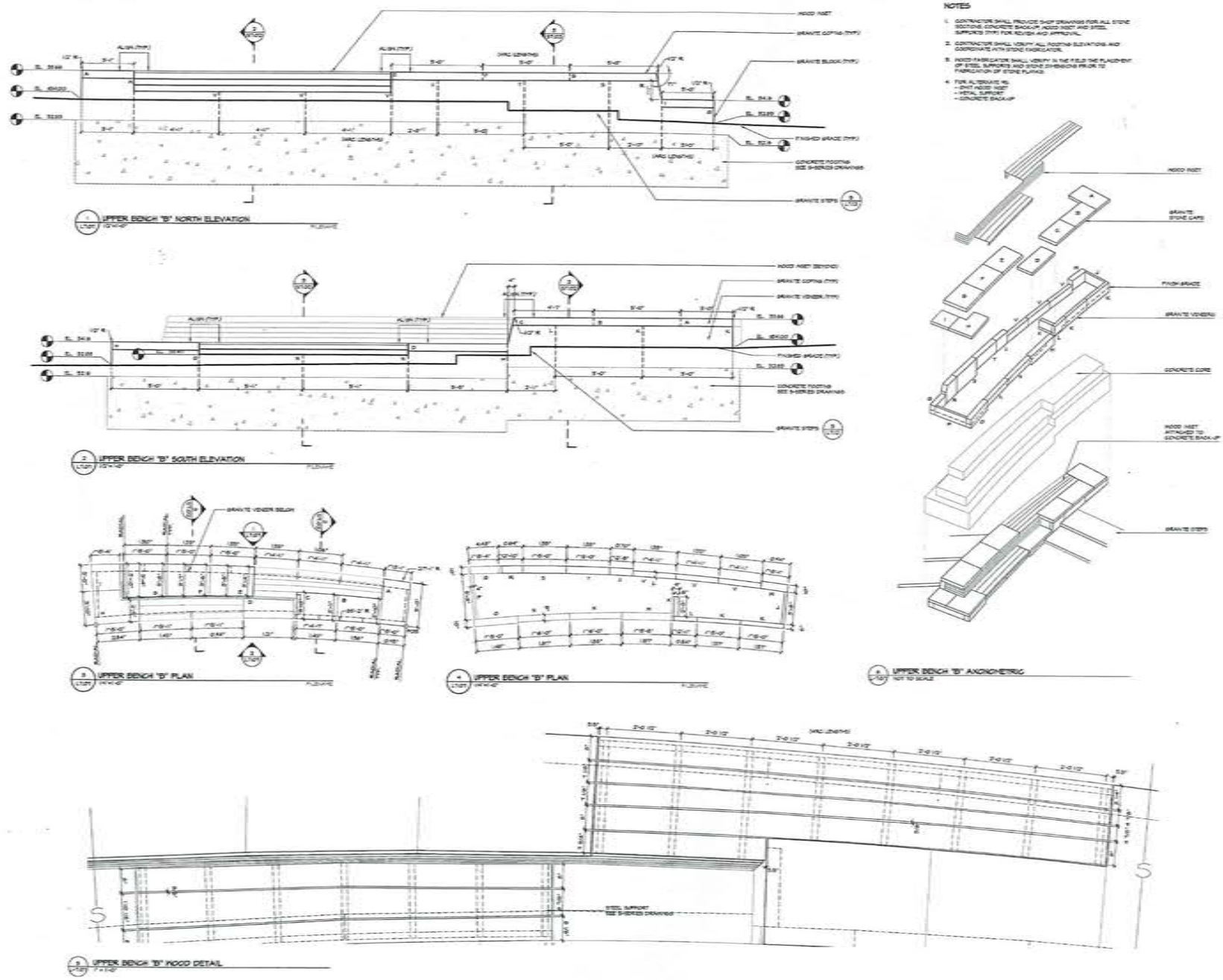
BENCH DETAILS



ANDROPOGON ASSOCIATES

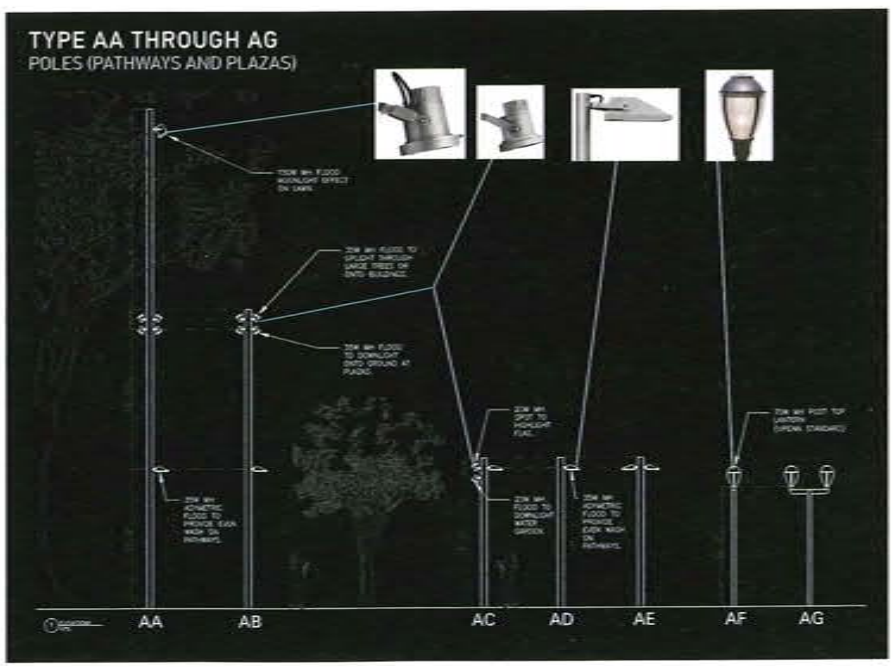
OPPOSITE TOP
Granite and black locust wood benches were placed where they could receive the most late afternoon sunlight in winter.

OPPOSITE BOTTOM
Early concepts for the granite benches referenced the wall seating in front of Penn's School of Design.

establish a middle ground between the typical urban street with mixed lights and the campus's 19th-century-style street furniture, while being sensitive to the ecological impact of light and providing a sense of safety.

The design brief from Penn had asked that Shoemaker be envisioned as a setting for the buildings, a "showcase for some of Penn's most impressive historic architecture." Tillett also relit the architecture that surrounded Shoemaker Green, "softening the buildings to take it down a notch—more of a smooth wash," as Alex Pappas Kalber, a Tillett Lighting senior designer, explains. Tillett adds: "You feel the architecture now; you feel like you're in a place." Much of the lighting designers' process was in developing the visual concepts for the lighting design, but they also had a full-size light pole mocked up and installed on the site by Andropogon.

Critics who assess the space from a purely formal perspective are missing an important part of the story, akin to looking at a car but not driving it. Penn's vision of Shoemaker Green as a campus green space may have been long in the planning,



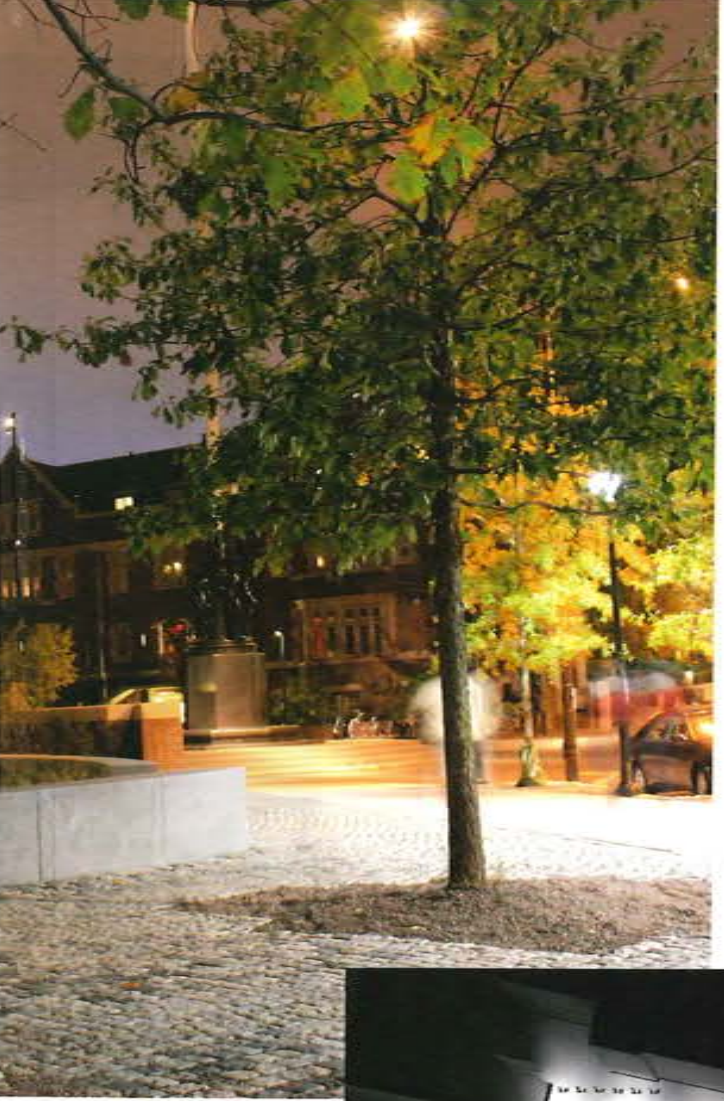
TODD MONTGOMERY, TOP; TILLETT LIGHTING DESIGN, INC., BOTTOM

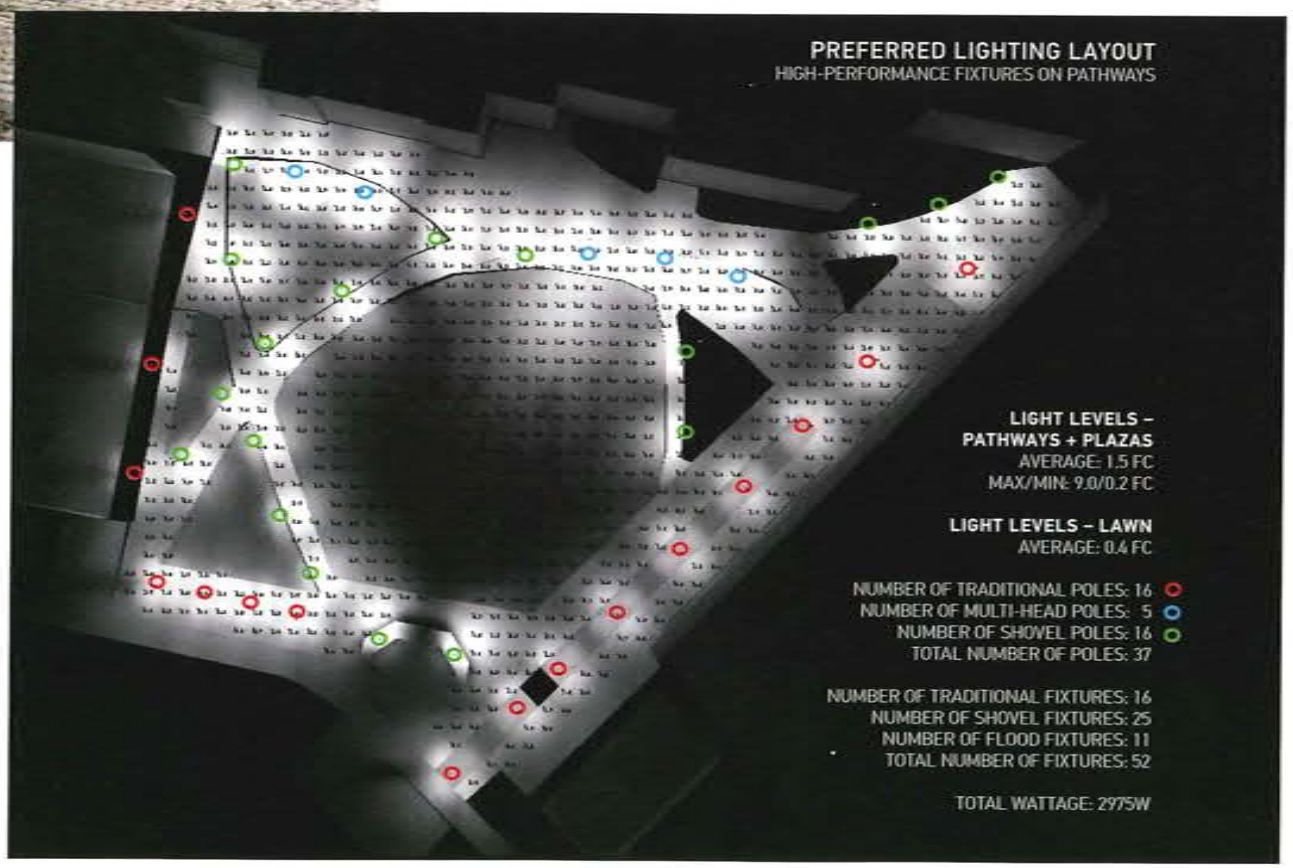
but it was Andropogon that brought up the idea of making it a pilot site in the Sustainable Sites Initiative, a joint partnership of the American Society of Landscape Architects, the Lady Bird Johnson Wildflower Center at the University of Texas at Austin, and the United States Botanic Garden. With a lot of firms competing for the project, Andropogon introduced the idea early in the interview process. "Shoemaker had the right ingredients, particularly on the process side," Almiñana says. With two SITES pilots completed and one under way, Andropogon has been invested in contributing to the early phases of SITES. "It's a pilot, and influence flows both ways, and we wanted it to be successful," Amoroso says.

As you come upon 33rd Street from the central green, you can feel the way the sudden grade change dumps students into the street, and it's not hard to imagine that a rush of stormwater

would turn the whole place into a bathtub. Runoff from the surrounding rooftops would also have to be managed on the site, and sufficient irrigation and recycled materials and soil for new planting would have to fit below grade. Andropogon reconfigured the crosswalk to make it safer for students and dug a huge soil trench along 33rd Street to accommodate the new plantings and rain gardens at the plaza's western edge. Morris Arboretum, one of the country's oldest arboretums, aided Andropogon in managing the existing London plane trees that were retained in the new design and in selecting new species for the site, including *Quercus bicolor* (swamp white oak), *Taxodium distichum* (bald cyress, in the rain garden), *Quercus phellos* (willow oak), and *Carya ovata* (shagbark hickory).

Managing and testing water coming into and off the site is a specialty of Shoemaker Green's design. Below grade, sensors were installed to monitor soil moisture and aid irrigation, along





RIGHT
Lighting was designed to hug the pathways and guide people through the site.

OPPOSITE TOP
Shoemaker's new lighting design illuminated the architectural facades to give them a "wash" of light and showcase their historic features.

OPPOSITE BOTTOM
Some of the light poles considered for Shoemaker Green.

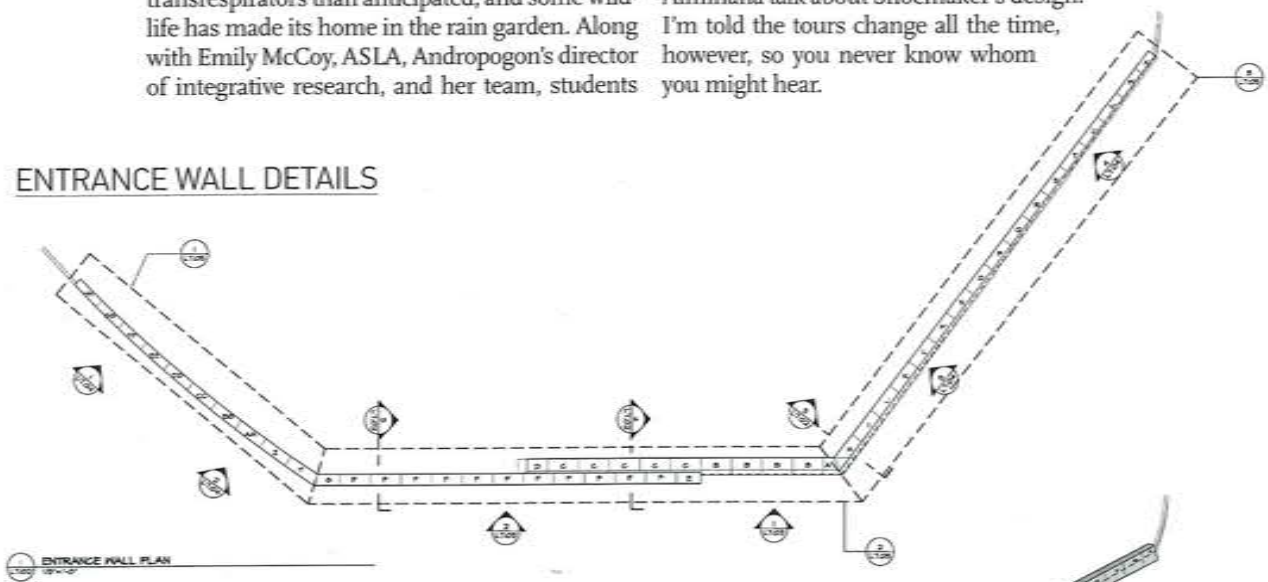
TILLETT LIGHTING DESIGN, INC.

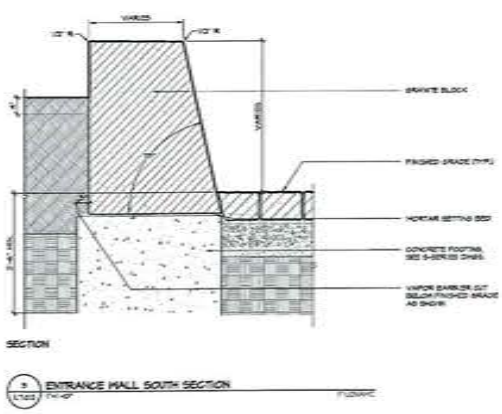
with tensiometers to record soil saturation after a rain. Water samples are taken at each end of the system to assess water quality coming in and going out and to measure exactly how much water is leaving the site—when and if that ever happens. So far, none has. "There's a lot of capacity for the site to manage water on top of water quality improvement—it's a true system-based design," Amoroso says.

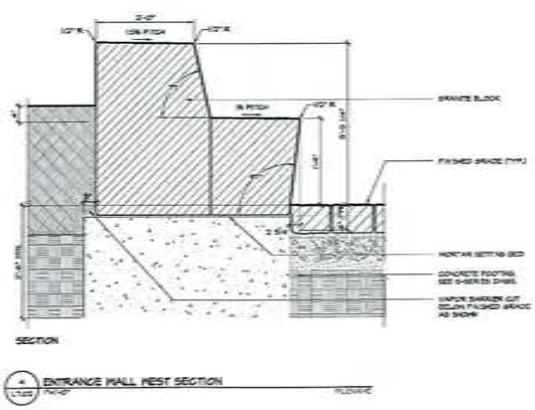
The deep substrata design has paid off. Monitoring is showing that new trees are more productive transrespirators than anticipated, and some wildlife has made its home in the rain garden. Along with Emily McCoy, ASLA, Andropogon's director of integrative research, and her team, students from Penn's earth and environmental science department now monitor water and soil quality at Shoemaker. The site is part of the earth and environmental sciences curriculum, providing student commitment to long-term monitoring and data collection over the coming years.

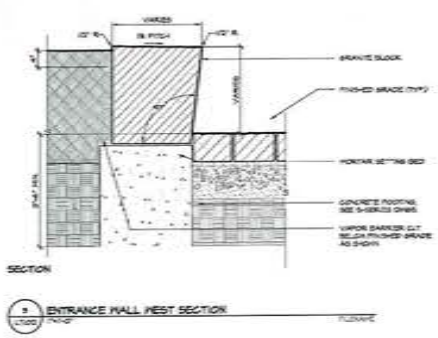
It's successful redesign that doesn't really call attention to itself, but you can find out what Shoemaker does if you're interested. Discreet signs near the rain garden invite visitors to follow a tour by smartphone, where they can hear Almiñana talk about Shoemaker's design. I'm told the tours change all the time, however, so you never know whom you might hear.

ENTRANCE WALL DETAILS









ABOVE
Pitched granite retaining walls balanced the site's 4 percent slope.

ANDROPOGON ASSOCIATES, TOP AND OPPOSITE

At the end of our own tour, the sky had turned a deep ash gray and the wind whipped down 33rd Street, carrying a taste of the coming winter. Shoemaker Green, tucked away and momentarily quiet, hosted only a few students in this late afternoon hour. Through gaps between buildings, you can glimpse tantalizing views of the city, and it's not hard to envision how the university center will soon shift here, making Penn Park and Shoemaker Green important gateways. In a college setting, where the student body turns over every four years, it won't be long before most students don't remember how it used to be. And that's okay. Part of what makes a place successful is that you can't imagine what it was like before it was there. ●

Project Credits

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