

Arch 464
ECS
Spring 2015

Name _____

Quiz #2

"Agua Pico and Daylight Too"



All photos and drawings: Architectural Record March 2015.

The facade's perforated-metal paneling derives its pattern from a topography map of the park. Inviting views out but not in, these screens veil the staff room and automated book-sorting system. Portals similar to ATMs allow for easy book return. Steel poles out front support canvas canopies, lighting, and bike racks.

For this problem you are the water use consultant for Koning Eizenberg Architects, who have designed a branch library for Santa Monica, CA. The completed building is sited in a park with the potential to control stormwater and to celebrate it. Your role is to suggest green, educational, and poetic alternatives for water use and treatment throughout the building and on the site.

Context. The site is amid three underperforming ethnic residential neighborhoods in otherwise affluent Santa Monica, which has a mild coastal climate with about 16 inches of rain each year, most falling Dec through Mar. The building is connected to city water supply and sewers.

Description. See more at: <http://archrecord.construction.com/projects/Building_types_study/civic/2015/1503-Pico-Branch-Library-Koning-Eizenberg.asp?bts=CB#sthash.Jrzf89bl.dpuf>

READ THE ENTIRE QUIZ BEFORE YOU BEGIN!

Pico Branch Library Santa Monica, CA

Food for Thought: An inventive new library, in a park with a greenmarket, aims to be a beacon for a challenged community.

The Pico Branch Library, a recent work by Koning Eizenberg (KE), is the first new public library branch in Santa Monica, CA, in nearly 60 years. Its modest predecessor, originally a storefront operation, left the Pico area in 1956, creating what many locals considered a growing void. But by the time Santa Monica addressed that need, decades of transformative digital technologies, as well as neighborhood changes, made the project an unexpected opportunity: a chance to rethink what a 21st-century library could be—particularly as it relates to this community's distinctive character.

Set within the 9.5-acre Virginia Avenue Park, the site lies “at the heart of an underachieving area with the lowest high school performance in the city,” says KE principal Julie Eizenberg. “Clearly, this library needed to reengage the community.” The broad challenges were already familiar to her firm, which had created the park in 2006, with landscape architects Spurlock Poirier. Not merely a venue for recreation and a weekly farmers' market, their green space offered common ground for neighborhood pockets of contrasting urban densities, housing typologies, and ethnicities (among them Latino, African-American, and Japanese). “Creating this library was a very community-driven process,” says Eizenberg.

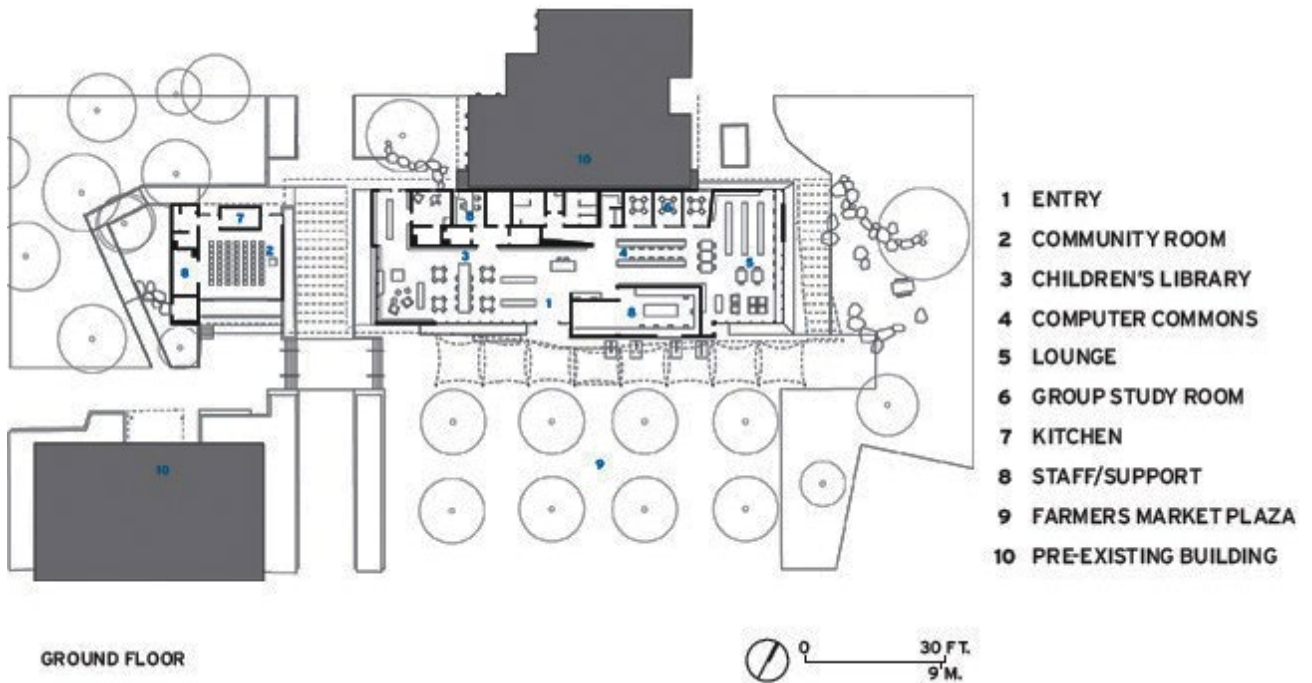
Through a series of open public meetings, supplemented by a survey, the city sought neighborhood input on the programming, design, and precise location. Naturally, viewpoints diverged. There were appeals to make the design “culturally specific to a particular group,” recalls KE principal Nathan Bishop, “but we convinced them that a culturally universal approach would be more inclusive, encouraging all different people to take on the library as their own.” Even the siting within the park was a point of debate. The city initially favored a prominent position on the boulevard bordering the park, but the architects made a persuasive case for a pavilion-like library near its center. “Not building along an edge,” Bishop points out, “meant not privileging one neighborhood over another.”

Visually light and transparent, the resulting 8,700-square-foot “park pavilion” has the openness of a community living room. From outside, its exuberantly curvy roof edge and fluttering apple-green canopy are a tip-off: this is no stifling, rule-ridden library. Inside, a single reading room extends from children's to adults' areas, under a sculptural, faceted ceiling. Its rolling peaks and occasional daylight scoops punctuate key spots such as the entry area. With all the airflow ducts tucked beneath a raised floor, and round vents underfoot, the ceiling is free for pure expressive form (integrating only sprinklers and flush LED lighting.) Expanses of glass across the steel moment-frame building evoke the open-air feeling of a park gazebo—yet no blinds are necessary. Deep, stuccoed eaves, continuous with the ceiling planes, provide all-day shading. The facets overhead, lined in acoustic-absorbent plaster, deflect and dampen noise, achieving remarkable quiet even amid abundant activity. “Particularly with municipal projects,” says Eizenberg, “you have to be inventive about getting each element to perform multiple roles.”

In front of the \$9.7 million facility, galvanized-steel poles support the canvas canopy while integrating outdoor lighting, plus custom bike racks. And the roofline undulations are not merely eye-catching: they harvest rainwater for the library's toilets. The project, which includes a freestanding 1,200-square-foot community room, is on track for LEED Platinum certification. Though a fire road separates the two structures, a steel trellis connects them overhead, checkered with PV panels that generate the complex's electricity. Beyond sustainability (and the ubiquity of computers and electronic offerings), the library's most 21st-century aspect is the absence of a circulation desk. An automated book-sorting system—a big budget item, at \$187,000—innovatively frees up librarians to roam the reading room and interact with visitors. A modest information podium, supplanting the traditional hierarchy of a bulky circulation desk, trades old-school rigidity for a more laid-back atmosphere. With ATM-like portals, the sorting system relies on self-checkouts and returns, minimizing staff input. Since opening last spring, the Pico Branch has logged over 100,000 borrowed items, with more than 84,000 visits and nearly 1,200 new library cards issued. “I don't know how much credit we can take for this,” says Eizenberg, “but we love hearing about families coming for the entire day for park-and-library outings—or the kid who just doesn't want to leave.”

—Sarah Amelar, AR March 2015

Size: 8,700 square feet Construction Cost: \$7.2 million Project Cost: \$9.7 million Completion: April 2014



Looking Northwest, a PV-studded trellis connects the library to its freestanding community room.

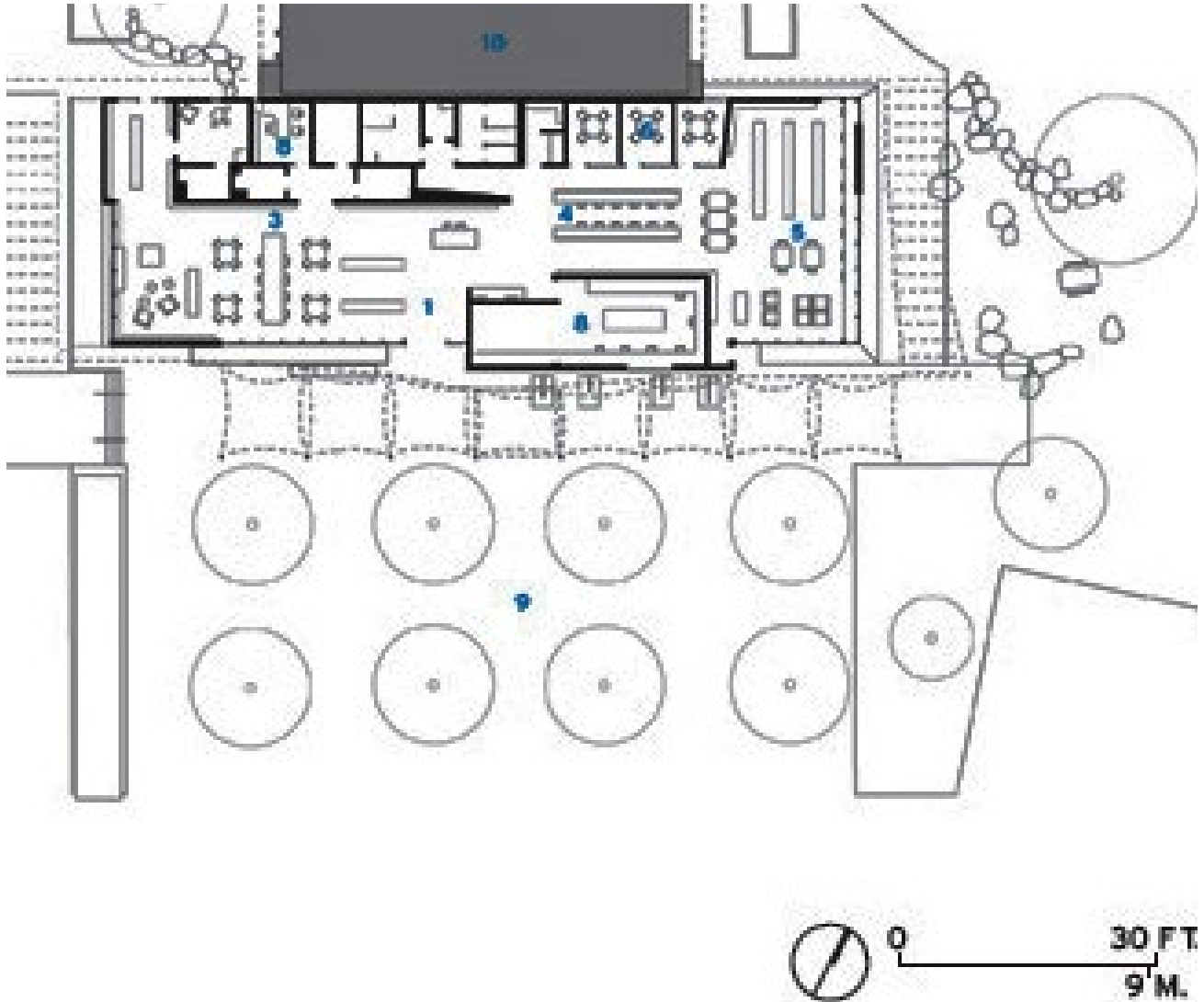


Deep overhangs, trellises, and awnings shade the reading room, allowing for expanses of glass that open the interior to daylight and immersive park views.

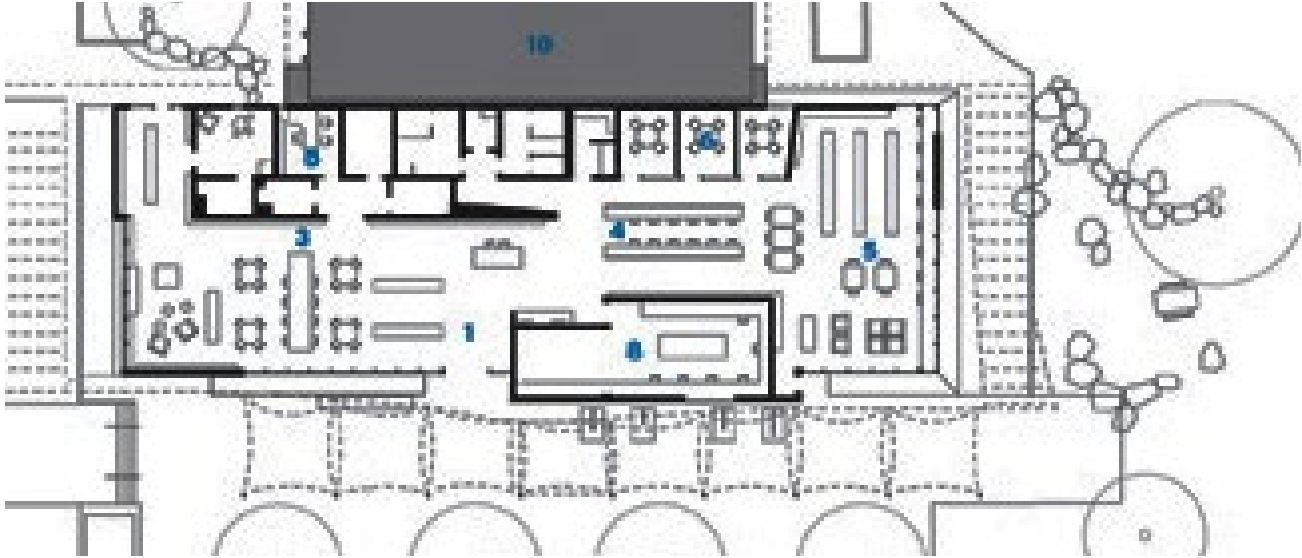


Through glassy facades, the Pico Branch engages both the wooded park and weekly farmers' market. Here, the architects' green awnings echo the vendors' tent-like stalls.

- 3 pts. 1. **Describe two** strategies the architects could have planned to employ (but didn't or wasn't mentioned) and one that was employed and mentioned to manage stormwater. Use the floor and site plan below to **show** how each impacts the site plan. **Critique each** for its merits, aesthetics, and limitations on this site.



- 4 pts. 2. **Describe two options** the architects could have planned to employ (but didn't; they followed code) to demonstrate alternative means to deal with black water. On the typical plan below show where each would be located in the building. **Critique each** for its merits, aesthetics, and limitations in this building and **explain** your choice of the better of the two options.



- 3 pts. 3. Review question. Based on the building description and photos below, critique the electric and daylighting scheme employed in the library. Critique three aspects of the lighting design, either positive or negative.



Clerestory light scoops punctuate the sculptural ceiling.



The reading room's faceted ceiling of noise-deflecting plaster is embedded with LED lighting.