**THE WEST** 

## **ARCHITECT SNEWSPAPER** 9.25.2013

WWW.ARCHPAPER.COM IF IT MATTERS, WE TELL YOU

\$3.95



in downtown Seattle has gone through a dramatic revision since its last iteration in May. The 3 million-square-foot project,

NBBJ's design of Amazon's new headquarters which is sited in The Emerald City's Denny Triangle area and South Lake Union neighborhood, will still be made up of three large towers surrounded by smaller buildings.

But the central element—three large glass domes—has been given a dramatic facelift. NBBJ calls the domes, located on the scheme's Block 19. continued on page 5



LOS ANGELES BEGINS PROCESS OF REVAMPING PERSHING SQUARE

Jose Huizar announced the formation of a 21-member task force to help re-imagine Pershing Square, the beleaguered central park in the middle of downtown. The group architecture experts,

In early September, Los Angeles councilman Above: Ground view of one of Gensler's hypothetical designs for Pershing Square.

> includes local residents, design and continued on page 6

PERMIT AD ,elebnale OIA9 **JDAISO4 SU** OTS TASA9

New York, NY 10007 21 Murray St., 5th Floor The Architect's Mewspaper



On August 28, Los Angeles City Council passed a new mural ordinance, legalizing public art on most private buildings after a 2002 moratorium had banned them for over a decade. The continued on page 2

SAN FRANCISCO OPENS NEW SECTION OF BAY BRIDGE

When the Loma Prieta earthquake collapsed a section of the San Francisco-Oakland Bay Bridge 24 years agoa portion of the upper deck buckled, killing one person—California officials deemed the eastern span of the 1936 steel cantilevered continued on page 7

PETERSEN AUTOMOTIVE MUSEUM REVEALS RADICAL MAKEOVER

## NEED FOR SPEED

Not to be outdone by LACMA, located across the street, LA's Petersen Automotive Museum in August released the final design for a facelift that promises, according to officials, to transform continued on page 3



WHY'S MASONIC **MUSEUM** 

SPECIALISSUE: LANDSCAPE

LANDSCAPE ARCHITECTS ARE EMPLOYING CITIES BE MORE RESILIENT IN THE FACE OF CLIMATE CHANGE. SEE

NEW DIGS FOR NOAA IN SD

**NEVER BUILT'S** OPTIMISM

03 EAVESDROP

17 CALENDAR 20 MARKETPLACE

Diana Darling

William Menking

Alan G. Brake

Sam Lubell

**Aaron Seward** 

**Dustin Koda** 

Branden Klayko

Nicole Anderson

Emily Hooper

Susan Kramer

ASSISTANT MARKETING MANAGER

Adriana Echandi ACCOUNT EXECUTIVES

Lynn Backalenick

Marcia Renert

Ronni Tan

**Agathe Dorel** Elizabeth Fazzare Amanda Gruen

Nicholas Miller Stella Rahman

Se Hee An

YOSH ASATO/ JAMES BRASUELL / NATE BERG / KENNETH CALDWELL / JENNIFER CATERINO / TIM CULVAHOUSE / JOANNE FURIO / MARISSA GLUCK / GREG GOLDIN / L.J. GORDON / GUNNAR HAND / ALAN HESS / AMARA HOLSTEIN / CARREN JAO / SAM HALL KAPLAN / JULIE KIM / LYDIA LEE/ ERIC LUM / ALLISON MILIONIS / JOHN PARMAN / JOHN PASTIER / TIBBY ROTHMAN / DIRK SUTRO / GREG TOWNSEND / ALISSA WALKER / MICHAEL WEBB / BETH WEINSTEIN

FRANCES ANDERTON / STEVE CASTELLANOS / NEIL DENARI / BETTI SUE HERTZ / BROOKE HODGE / CRAIG HODGETTS / WALTER HOOD / KIMBERLI MEYER / JOHN PARMAN / SIMON SADLER / ROGER SHERMAN / WILLIAM STOUT / WARREN TECHENTIN / HENRY URBACH

GENERAL INFORMATION: INFO@ARCHPAPER.COM EDITORIAL: EDITOR@ARCHPAPER.COM ADVERTISING: DDARLING@ARCHPAPER.COM SUBSCRIPTION: SUBSCRIBE@ARCHPAPER.COM REPRINTS: REPRINTS@PARSINTL.COM

In October Frank Gehry's Disney Hall turns 10, and it's an exciting anniversary. The dazzling building has become an international icon for the city, and for its revitalized downtown. It also remains a wonderful place to attend a concert, as most who have gone can attest. But in many ways it represents what's still wrong with LA's approach to building and planning.

While it pushes up against the sidewalk, the hall still stands relatively aloof from its surroundings on Grand Avenue, adding little besides its fantastic form to the streetscape, which ten years later still feels empty and alien. Its raised rear park is a hidden gem, but there's no such luck in front of the building, where visitors are greeted with hot sun, glare, and a rather unfriendly grand stair. And the hall stands on a street that to this day does not welcome pedestrians. It lacks appropriate green space, shade, and small-scale activity needed to make this a true destination outside of concert time. Disney's one street-side restaurant, Patina, is only for the very richest, via reservation, and there are few places (outside of the new Grand Park down the street) to entice lingering or street life nearby. Hopefully the addition of the Broad next door will add to the interest, but unless the area around it is addressed it will just become another empty monument.

In celebrating this anniversary we need to embrace the kind of architectural innovation that Disney Hall represents, but demand equal urban innovation around it. A building—no matter how stunningis not just an object, and that's something that always needs to be considered. And a street—even one lined with world-class museumsis not an object either.

There are many other buildings in Los Angeles with similar dichotomies between architectural splendor and urban misfortune. Morphosis' Caltrans building down the street is a marvel, but its courtyard is often empty and the zone around it does not promote civic life. While a new master plan may change this, for now, though Union Station is one of the finest buildings in the country, it remains locked off by roads on all sides, like a moat. The Department of Water and Power, while one of my favorite buildings in the city, certainly doesn't promote walking along its perimeter. It's all about drive in and drive out.

In so many other cities modernist monuments stand aloof from their surroundings, standing tall amid windswept plazas and busy thoroughfares. New buildings can't repeat these mistakes.

In contrast to Disney, Gehry's Guggenheim Bilbao is more successful urbanistically because the plazas around it encourage thousands to linger, and the city has developed an urban experience around it through bridges, walkways, and cafes, that ask you to come for more than just the building. Renzo Piano's buildings at LACMA are not his best work, but the urban spaces around them have been intelligently activated with a restaurant, a bar, a plaza, and large-scale art installations.

In the next decade we need to ensure that world-class buildings continue to go up. But also that world-class urban life goes up around them. sam lubell





WALL ART continued from front page law, say some, could bring about a resurgence in the already-popular art form in the city.

"It's a big victory and we're thrilled," said Isabel Rojas-Williams, Executive Director of the Mural Conservancy of Los Angeles. The group has been protecting the city's murals and muralists since 1987. "We're hoping Los Angeles will again become the mural capital of the world," she added.

The earlier ban stemmed from the city's desire to keep sign companies from advertising in unorthodox locations. Murals got dragged into that conversation, explained Rojas-Williams.

"Murals and signs are two different things." she said. "We got into this horrendous mess when the city made the mistake of putting them together.'

The new ordinance, which officially takes effect this fall, will not allow muralists to start painting right away. They will need to go through a permitting process with the city's Department of Cultural Affairs, including a 45-day waiting period, a hearing with the neighborhood council, and a fee of \$60. Murals will need to meet regulations mandating, for example, that they not measure taller than 100 feet, and that they contain no commercial messages

The regulations, said Tanner Blackman, planning director for councilman Jose Huizar, a strong supporter of the ordinance and one of its authors, will be content-neutral. As long as an artwork meets regulations (and follow laws for decency) it will be permitted.

"It's basic property rights. We have to take the good with the bad with the ugly Otherwise we're telling people what they should look at."

For the time being, murals will not be allowed on the surfaces of single-family residences, but a few council members are looking to obtain exceptions in mural-rich communities. Murals painted before the ordinance is passed will be grandfathered in.

As to those who question the value of such murals, Rojas-Williams is quick to remonstrate. "They are an open book that tells the story of a community," she said. They provide cultural tourism, provide jobs, and help cultures connect with each other.

"The times are changing," said Blackman, who notes that murals, which were once hated in many neighborhoods, are now even coveted by developers. "We're poised to see a wave of new murals and a flowering of mural culture." SL

STRENGTHS AND WEAKNESSES SYMBOLIZES LA'S 10, AT DISNEY HALL,



## PUT A LID ON

Freeway and rail yard capping projects have been used in cities across the country to re-stitch neighborhoods and correct connectivity problems. Projects like Millennium Park in Chicago and the Olympic Sculpture Park in Seattle have also been remarkable economic and cultural generators for their respective cities. In recent years, several proposals have been floated for freeway cap parks in Los Angeles with barely any traction. Until now. In late September, LA City Council voted to have various city departments (including planning and engineering) partner with nonprofit Friends of Park 101 to raise funds for a park that would bridge the 101 Freeway, connecting Downtown's Civic Center with Olvera Street and Union Station. Possible grants could come from local, state, and federal sources. It's still a long way from happening, but it could be transformative for LA's core.

# EAVESDROP> THE EDITORS

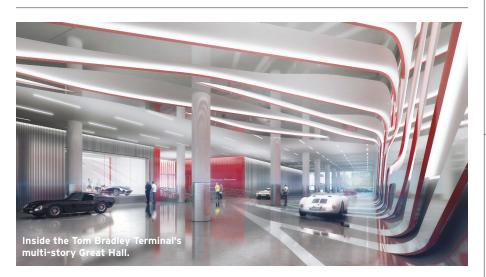
## WHO NEEDS AN OSCAR?

California Senator Barbara Boxer has won many accolades over the years, to be sure. But none has been quite like the honor she was bestowed this month: National Asphalt Legislator of the Year, according to the National Asphalt Pavement Association (NAPA). The group said it was particularly impressed with her role in the passage of MAP-21, the \$105 billion 2012 Surface Transportation Funding Bill. NAPA Board of Directors Chairman John Keating pointed to Boxer's ignoring of "naysayers who said a bill would never pass." To be fair the bill provided for billions in mass transit funding, but nonetheless Boxer has helped the state refurbish hundreds of miles of roads, and even build quite a few new ones. Not exactly a claim to fame in our transit-friendly design world. Ahem, don't tell Elon Musk.

## NEVER BUILT, THE VIP PARTY

We at Eavesdrop don't like to toot our own horn, but sometimes we can't help ourselves. So we have to point out the scene for the late July opening of Never Built Los Angeles, co-curated by our very own Sam Lubell. The event looked more like a Hollywood club opening than an exhibition opening, with a line that snaked around the corner and angry would-be partygoers trying to convince the bouncer (a.k.a. the fire marshal) to let them in. We especially love the description by AN contributor Guy Horton, here writing for KCRW's blog: "The line of black clothing wrapped around the corner and kept going, reaching all the way down to a stretch of houses where local residents nervously peeked out to see what was going on. Cars were pulling all sorts of questionable maneuvers on Wilshire and adjacent streets as distracted, anxious architects hustled for parking. People were walking in from blocks away as if drawn from some invisible force. At any moment I was expecting police helicopters to appear overhead. That would have made my night complete."

SEND BACKHOES AND BOTTLE SERVICE TO EAVESDROP@ARCHPAPER.COM



NEED FOR SPEED continued from front page the facility on Museum Row into "one of the most significant and unforgettable structures in Los Angeles." Moreover, they claim the makeover will lift the Petersen into the ranks of "world-class" museums.

The ribbon-patterned, LED-illuminated stainless steel facade treatment Kohn Pedersen Fox Associates (KPF) have come up with is indeed radically transformative. It would turn the near-windowless former department store that the museum has called home since 1992 into a larger-thanlife statement on the corner of Fairfax and Wilshire.

The original building, which will be hidden underneath KPF's facade, was designed by Los Angeles architect Welton Becket in 1962. Becket is perhaps best known for his design of the Capitol Records Building. According to the museum, the renovation, which includes an extensive redesign of existing galleries and 15,000 square feet in additional gallery space, will not significantly alter the original Becket building's base. In terms of a facade treatment, however, it is a completely new direction, and gives Diller Scofidio + Renfro's "veil" for the Broad Museum, currently underway downtown, a run for its money.

But is this enough to bring new visitors

and increase repeat visits by 60 percent. as the museum hopes? The Petersen has been criticized for selling off a number of its rare automobiles to raise money for the renovation. On Sunday, Peter Mullin, chairman of the museum's board, said the \$10 million raised from the sale of cars would be used to enhance the collection and the galleries. A separate capital campaign will fund the facade. The budget for the total renovation could go as high as \$20 million. GUY HORTON



> CONNIE AND TED'S 8171 Santa Monica Blvd. West Hollywood Tel: 323-848-CRAB

ESTAURAN

 $\propto$ 

OPEN>

West Hollywood is one of the least likely places in the world to see a New England-style clam shack. So when the architects at (fer) studio got a commission from the owners of popular seafood restaurant Providence to design one they changed things up a bit. Built in the shell of the old Silver Spoon restaurant, a beloved local diner that had seen better days, the restaurant still has a New England nautical theme, but it is all California.

A giant, arching, cantilevered wood framed red canopy billows out from the restaurant like a sail or even a shell. From the street, diners ascend a path up to the dining porch, filled with suspended red "boats" that house heating and LED lighting. The interior can be seen through a curving "S" shaped glass wall. Inside, old school elements like letter board menus, pinned order tags, exposed exhaust systems, and hanging metal lights invoking lobster traps are offset with a bright red palette, warm wood finishes, lots of natural light, and a curving bar that makes its way through nearly the entire space. sL

> Agave Series LANDSCAPE CONTAINERS

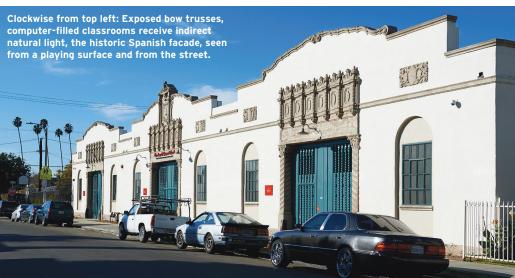


3 sizes available High-strength, 6000+ PSI concrete Endless color options



www.KornegayDesign.com | 877.252.6323







The Jane B. Fisner Middle School is the latest chapter in a success story for Camino Nuevo Charter Academy, a community-based association that has combined idealism and a firm grasp of practicalities in educating children in LA's immigrant communities. Like Green Dot and other non-profits, it offers a free alternative to failing public schools. In 1999. Camino Nuevo hired Daly Genik Architects to create their first school from an empty mini mall in MacArthur Park, and the firm has extended the

Burlington Campus three times since Princeton But they got their start then For their seventh school Camino Nuevo selected Frederick Fisher and Partners (FFP) which had never before designed a school but offered experience in costefficient renovation. The school, named for the Jane Fisner Foundation, is located in Harvard Heights, a historic neighborhood just west of downtown.

FFP is best known for its art spaces, most recently an addition to the Colby Museum in Maine and college buildings from Otis to

doing low-budget loft conversions renaissance of downtown I A by thirty years. So they responded enthusiastically to the challenge of turning a 1920s PacBell service facility into a creative environment, as they had with the Bergamot Station tram depot. The building is an LA Historic-Cultural Monument and its windowless cement plaster portals were left untouched. The raw interior, with its concrete floor,

for artists who anticipated the recent walls and cast stone Churrigueresque



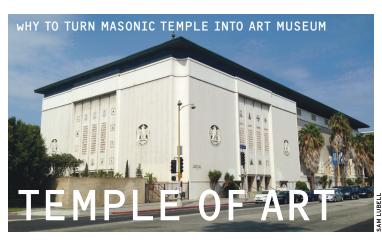
exposed brick walls, and bow truss roof vaults was divided with minimal white walls that enclose nine classrooms, an assembly hall, computer library, learning lab. administrative offices and service spaces. The former service yard became a playground.

Seismic reinforcement was a priority, and much of the budget was invested in a structural steel frame that exceeds the usual requirements for historic structures. Roof openings bathe the interior in natural light and are supplemented by industrial light fittings. Broad corridors run around three sides and down the middle, feeding into the assembly hall, which can be separately accessed for community events after hours. Bowed wood slats conceal the insulation inside the roof vault incorporate sprinklers and muffle noise. Cable travs are bracketed to corridor walls for easy maintenance of the extensive wiring.

The whole job was brought in for the surprisingly low figure of \$225 per square foot. But the sensitivity of FFP's interventions lift the spirits of teachers and students. It helps that this is a solidly built historic

structure with interiors far loftier than those of new-built schools. It's already a local landmark that is well loved by the community. For Fisher, it has the same creative potential as a loft for tech startups in Santa Monica or SOMA Found materials are accented with tones of red and green, and the whole space is a subtle play of light, shade, and varied textures

"We believe our buildings should contribute to community pride and support a collective culture of learning," said Philip Lance, president of Pueblo Nuevo Development, and co-founder of Camino Nuevo. "Hiring talented design architects that embrace this philosophy is essential to a successful partnership." In contrast to the LAUSD, a Gulliver constrained by a net of bureaucratic procedures and regulations, the charter schools encourage creative freedom for designers and teachers alike. Some have failed, but that is the price of experimentation. Walking around Jane Eisner and watching the attentive faces of its students restores one's faith in the promise of free education. MICHAEL WEBB



Eli Broad isn't the only philanthropist containing the building's theater. building a new Los Angeles art museum. Last month, Maurice and Paul Marciano, the founders of fashion company Guess, announced floors. that they will open a new museum for their 1,000-piece contemporary art collection inside a Scottish Rite Masonic Temple on Wilshire Boulevard.

The adaptive reuse project, designed by Culver City firm wHY, will contain 90,000 square feet of exhibition space, including a double-height, 15,000-square-foot grand hall in the room once

Smaller galleries and "project rooms" commissioned to specific artists, will be located on upper

many of the quirky interior details of the austere, four-story temple, including deco chandeliers and Egyptian-inspired ornamentation, like eagle and pyramid etchings. Legendary LA artist and architect Millard Sheets designed the longvacant structure. wHY will punch skylights and light wells into the north side of the building and add

an outdoor sculpture gallery.

"This will launch the Marciano's into the next level," said wHY principal Kulapat Yantrasast. It will also help launch wHY, which has wHY will maintain the facade and built houses in LA but no major civic buildings there. The firm's largest commission to-date is the Speed Art Museum in Louisville, Kentucky, wHY is also building the new studio arts hall for Pomona College, which should be open by the end of next year.

The Marciano project is scheduled for completion in 2015.



Three towers will surround the glass and steel spheres (above); the structure's patterns will evoke those of soccer balls (below).

MUTANT MESSAGE continued from front page

"conjoined Catalan spheres." With a frame of white painted steel, the new design has moved beyond traditional cross-hatching, and now references the pentagons of a soccer ball. The forms are expanded and pushed to create an irregular pattern that evokes a combination of starfish and the petals of a flower. The domes are designed to house office space within a greenhouse setting; tall enough for trees to grow to maturity, the interior will be planted with flora from around the world.

NBBJ decreased the height of the domes to provide more daylight as well as more viable retail offerings on the lower level. The architects also expanded the neighboring public park, increasing seating and landscaping. An additional covered walkway provides protection during the soggy winter months.

If completed, Amazon's campus would be the largest development in Seattle's history. Its three elements—Block 14 to the south, Block 19 to the west, and Block 20 to the north—each include a tower of up to 37 stories tall surrounded by smaller buildings connected by sky bridges.

Block 14, the first phase in the three-phase project, is currently under construction. An office tower, a 2,000-seat auditorium, as well as retail space and more than 1,000 underground parking spots is anticipated to open in 2015, filling a lot that was previously parking and a building occupied by the Sixth Avenue Inn. Two buildings on the remaining two blocks will also be demolished, including the King Kat Theater on Block 19 and Toyota of Seattle on Block 20. Completion of phase two is projected for 2016 and phase three in 2017. The design of the three-block headquarters is expected to meet LEED Gold standards.

The city's next Downtown Design Review meeting, which will weigh the redesign and subsequent changes, is scheduled for the beginning of October. ARIEL ROSENSTOCK



## UNVEILED

## SUNSET-LA CIENEGA

Local developer CIM and the city of West Hollywood have finally come to an agreement over the once-stalled project formerly known as Sunset Millennium. Located in the center of West Hollywood's entertainment and retail district, the project's first phase was completed years ago. Phase two, which occupies the parcels east and west of La Cienega on Sunset, was supposed to begin in 2008. Now called SunsetlLa Cienega, the four-tower megaprojectconsisting of residential, retail, and hotel components-will take over the south side of Sunset Boulevard, where the Tiffany Theater, the Peterson Building, and other mid-century buildings now stand. Demolition of those structures has already begun.

In their place will rise two ten-story hotel towers and two eight-story residential towers. SOM designed the hotels, while the residential towers were a team effort by SOM and Lorcan O'Herlihy Architects (LOHA). Both schemes feature buildings that are set back and slightly rotated to form large entries and view corridors. On either side of La Cienega, the towers are unified by ground floor retail and integrate public terraces with gardens and outdoor amenities designed by landscape architecture firm Mia Lehrer + Associates. LOHA, which has worked on several housing. projects in West Hollywood, has also been given the green light on a twenty-unit mixed-use complex off San Vicente. GH

Architect: SOM, Lorcan O'Herlihy Architects Location: West Hollywood Client: CIM Completion: TBA







Three towers will surround the glass and steel spheres (above); the structure's patterns will evoke those of soccer balls (below).

MUTANT MESSAGE continued from front page

"conjoined Catalan spheres." With a frame of white painted steel, the new design has moved beyond traditional cross-hatching, and now references the pentagons of a soccer ball. The forms are expanded and pushed to create an irregular pattern that evokes a combination of starfish and the petals of a flower. The domes are designed to house office space within a greenhouse setting; tall enough for trees to grow to maturity, the interior will be planted with flora from around the world.

NBBJ decreased the height of the domes to provide more daylight as well as more viable retail offerings on the lower level. The architects also expanded the neighboring public park, increasing seating and landscaping. An additional covered walkway provides protection during the soggy winter months.

If completed, Amazon's campus would be the largest development in Seattle's history. Its three elements—Block 14 to the south, Block 19 to the west, and Block 20 to the north—each include a tower of up to 37 stories tall surrounded by smaller buildings connected by sky bridges.

Block 14, the first phase in the three-phase project, is currently under construction. An office tower, a 2,000-seat auditorium, as well as retail space and more than 1,000 underground parking spots is anticipated to open in 2015, filling a lot that was previously parking and a building occupied by the Sixth Avenue Inn. Two buildings on the remaining two blocks will also be demolished, including the King Kat Theater on Block 19 and Toyota of Seattle on Block 20. Completion of phase two is projected for 2016 and phase three in 2017. The design of the three-block headquarters is expected to meet LEED Gold standards.

The city's next Downtown Design Review meeting, which will weigh the redesign and subsequent changes, is scheduled for the beginning of October. ARIEL ROSENSTOCK



## UNVEILED

## SUNSET-LA CIENEGA

Local developer CIM and the city of West Hollywood have finally come to an agreement over the once-stalled project formerly known as Sunset Millennium. Located in the center of West Hollywood's entertainment and retail district, the project's first phase was completed years ago. Phase two, which occupies the parcels east and west of La Cienega on Sunset, was supposed to begin in 2008. Now called SunsetlLa Cienega, the four-tower megaprojectconsisting of residential, retail, and hotel components-will take over the south side of Sunset Boulevard, where the Tiffany Theater, the Peterson Building, and other mid-century buildings now stand. Demolition of those structures has already begun.

In their place will rise two ten-story hotel towers and two eight-story residential towers. SOM designed the hotels, while the residential towers were a team effort by SOM and Lorcan O'Herlihy Architects (LOHA). Both schemes feature buildings that are set back and slightly rotated to form large entries and view corridors. On either side of La Cienega, the towers are unified by ground floor retail and integrate public terraces with gardens and outdoor amenities designed by landscape architecture firm Mia Lehrer + Associates. LOHA, which has worked on several housing. projects in West Hollywood, has also been given the green light on a twenty-unit mixed-use complex off San Vicente. GH

Architect: SOM, Lorcan O'Herlihy Architects Location: West Hollywood Client: CIM Completion: TBA









Gensler's research images for Pershing Square at night (above) and during the day (below).

SQUARE DANCE continued from

front page business people, and government officials. Huizar said he hoped they could bring "a widerange of ideas and perspectives to the discussion." They also have to develop an agenda and a timeline, and figure out how to fund the project.

The park has undergone several iterations during its more than 150-year history. Its last redesign, in 1994 by Ricardo Legoretta and Laurie Olin, has not weathered well. Its off-putting hard spaces, its disconnection from the rest of the city, and its dated postmodern design have led many to the opinion that it needs to be replaced.

According to Huizar's planning director, Tanner Blackman, one possible funding source for the park could be seed money from downtown developments' community improvement funds. Other such funds were anticipated from the company AEG, related to its Downtown Stadium plans, but since those are very uncertain so is the money.

Huizar said he thought the task

force's discussions and ideas would be vital in "recapturing the magic [Pershing Square] once held as a significant and important gathering place for all Angelenos." Designers on the task force include Gensler's Brian Glodney, NBBJ's Rick Poulos, and former city planning director Gail Goldberg, who now leads the Urban Land Institute's Los Angeles chapter.

To help kick off the discussion (and shed light on the square's possibilities) Gensler shared its ideas for the square, which it developed over the last year as part of its company-wide "Town Square" research and design project. The goal of that effort is to "reconsider the role of public open space in cities."

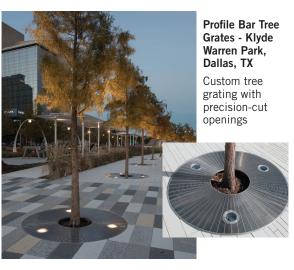
Their studies weighed a dizzying amount of data informing a possible redesign, including program, orientation, shading, circulation, and visual accessibility. But Gensler pointed out that their plan was just an in-house dry run. The firm did not survey the many potential users, a study that would be reserved for the final version of the park. Of course, there's no telling who will be undertaking the design at that point.

"It's a starting point," said Gensler principal Li Wen. "We'd love to test this model with the park's stakeholders," added Glodney. **s**L

## We can help your ideas become part of the North American landscape.

## Or just about anywhere else for that matter.







Landscape Architects are turning to Hendrick Architectural Products for cutting edge metal solutions to their landscape designs. Whether it's super strong Profile Bar, custom Perforation or Fabrication, Hendrick can do it all. Contact us today to explore endless possibilities!

Trench & Drain Grating • Fountain Covers • Tree Grates • Perforated Panels & Cladding • Walkways & Ramps • Signage • Art & Sculpture • Site Amenities



Visit our website for more products and applications!











LIFE SPAN continued from front page truss bridge seismically unsound. A new bridge connecting San Francisco and the East Bay was necessary. After 11 years of construction and several major traffic closures, the new 10-lane eastern stretch of the bridge opened on Labor Dav.

In 1998, state officials put together a panel to vote on the best design option to replace the 2.2-mile damaged eastern portion of Interstate I-80 running from Yerba Buena Island to Oakland. Forgoing a basic solution, the majority voted in favor of five lanes each, are flanked a self-anchored suspension bridge, designed by San Francisco based Donald MacDonald Architects and New York engineering firm Weidlinger Associates. The winning concept's dominant feature is the single 525foot-tall tower that supports the span.

"We slightly tapered the shafts of the tower so as to appear parallel to one another in the approach, and to keep a rhythm and lightness, said Donald MacDonald, A

pentagon theme was woven shafts bound together throughout, in the legs of the with shear link beams to towers and the piers below, he said.

"The bridge is white, inspired by Oakland's container cranes," explained hundred-sixty concrete piles MacDonald. "Cities and bridges can brand themselves through color." The Golden Gate Bridge, cloaked in orange, comes to mind.

The eastern span is actually two bridges: a 1.2-mile concrete skyway and the suspension span, with its single loop cable system and tower. The sideby-side decks, containing by shoulders. There is a temporary pedestrian and bike path on the right side of the eastbound roadway.

T.Y. Lin International Group and Moffatt and Nichol **Engineers** completed MacDonald's and Weidlinger's vision. The bridge—which lies between the Hayward Fault to the east and the San Andreas Fault to the west-is designed to ride an dollars. earthquake like a wave. The tower includes four steel

absorb seismic movement. Hinge pipe beams allow sections of the crossing to expand and contort. Onesupport the skyway. The original crossing featured a timber pile system.

Light poles installed with more than 48,000 LEDs line the bridge, requiring about 50 percent less energy than the original lighting scheme. The LEDs have a long lifespan of 10 to 15 years, and are angled to prevent glare and minimize light pollution.

The project was not without its challenges. Originally estimated as a four-year, \$1.6 billion job, the bridge became one of the most A joint venture comprising expensive projects in California as the price of steel and concrete rapidly rose, mostly due to the building boom in China. In the end, the bridge cost \$6.4 billion, with the overrun funded by a 2007 \$1 toll increase and state gas tax

> The bridge may be open but the work is not yet finished. Broken anchor bolts in the seismic stabilizers that were temporarily repaired with concrete saddles will get a final repair by this December. It will take nine months to remove most of the original eastern span and up to three years to completely demolish it. Some portions will be kept for the historical record, others will be recycled or sold for scrap.

> After the original eastern span is removed, construction crews will permanently install a bike and pedestrian path, extending it to Yerba Buena Island. They will also replace a temporary ramp connecting the island to the eastern span. Both projects will be completed in 2015. AR

the **ELEMENTS** are **SIMPLE** ...

the POSSIBILITIES are ENDLESS!





www.greenscreen.com

800.450.3494







Walking through the streets of Venice, it is fun to explore how home styles have evolved over the years, from rough-aroundthe-edges bungalows to understated modern, unusual post modern, and sleek contemporary concoctions. The home of architects Frank Clementi and Julie Smith-Clementi, located on one of the area's lovely walk streets, showcases several of these changes under a single roof.

The Clementis, who are principals at local and folded dark metal. firm Rios Clementi Hale Studios, began work on the house in 1996, converting the small, dilapidated 1920s shack into a light-filled, modern, twostory edifice with a butterfly roof. The project was brought to life through creative uses of inexpensive materials, like angular lap siding, reclaimed maple boards, discontinued tile, patterned plastic laminate,



Time marched on, and the couple recently finished an addition that includes renovations and updates to the existing house, a new garage and master bedroom, and a 3,400-square-foot garden, which the couple now shares with Julie's mother, who bought the house next door.

The oasis-like yard is a stunner, with new planters, lines of garden vegetables, a wide selection of flowering plants, and a massive magnolia tree that serves as the centerpiece. Clementi calls the tree the property's "unspoken hero." So the first step in the renovation was to better connect the home to the outdoor space. The architects installed new sliding glass doors, window walls, and (second story) clerestories, and enhanced diagonal view corridors and the sense of openness. The couple moved and opened the kitchen to the rear deck, fitting it with a built-in banquette and with sleek white cabinetry.

The biggest change was the addition of a new back structure, which stands out the second you approach the home. On its first floor is a masonry garage. The bedroom space above in every way feels like a tree house. On the exterior a jagged arrangement of 4-by-12 Douglas Fir planks are imbedded into the CMU to form a sculptural skin that supports the weight of the ceiling above and provides seismic resistance.

"Once we were about hiding the structure; now we're about exposing it," said Frank Clementi of his different approaches to the home over the years. "It's now about honesty, not slight of hand."

The look of this composition has been nicknamed "French fries" and the "wood basket" by neighbors, who at first seemed worried about the plans but now have come around, said Clementi. The wood planks and the tree house feel were loosely inspired by that "hero" tree in the yard. which is clearly visible from up there.

Inside, the room is clad in plywood, including a 7-foot-tall plywood headboard. and it has a cork floor and Douglas Fir window frames. The tall wood exterior planks provide privacy, but also let in natural light and air. Window walls and sliding glass doors bring in more, particularly from the room's outdoor balcony. The space also contains walk in closets, a bathroom, a hanging fireplace, and hanging wood bookshelves. Connecting this structure to the main house is a bridge containing a bedroom and an open family room, adding to the sense of flow throughout the house.

A lot of the subsequent changes to the house, said Clementi, came not just from moving away from modernism (a process he calls "urban natural selection"), but from living at the house and "figuring out what was happening." He added, "You really get an undeniable sense of what the site is and community is. We were lucky." sL







GOULD EVANS-DESIGNED FISHERIES SCIENCE CENTER OPENS IN LA JOLLA

## SWIM WITH THE FISHES

The National Oceanic and Atmospheric Administration (NOAA) Fisheries Service realized 15 years ago that its beloved campus in La Jolla would soon be fish food. Coastal erosion was undermining the building's foundation. NOAA selected Kansas City-based Gould Evans (along with local partner Delawie) to design a new facility, which secured \$74 million in federal stimulus money for its "shovel-ready" status. Those funds kick-started construction on the project, the Southwest Fisheries Science Center (SWFSC), which recently opened just up the hill from NOAA's previous headquarters.

The new facility hasn't disappointed the NOAA team, which was hoping to recreate the charms of its old home, where breezeways and central courtyards facilitated an open and collaborative research culture. The building's orientation to the coast and tiered massing open beautiful views and create a variety of outdoor collaborative spaces, all centering around a large courtyard on the building's second level.

Gould Evans multiplied outdoor spaces by shifting the orientation of each of the building's floors, opening unique gathering places on each floor. The heat island effect created by the additional roof space is offset with lush, green roof landscaping beautifully arranged with native San Diego and coastal chaparral plants like Shaw Agave and Deer Grass. The facility's open spaces frame the topography of La Jolla Canyon, a deep cut in the ocean floor just off the coast that



The Science Center nestles into the ground just a few feet from the ocean (above); A green roof doubles as a courtyard (below).

makes La Jolla the ideal location for fishery science. The site also required a lot of excavation to sink two of the building's five-stories below grade, maintaining view corridors and matching the low-rise context of the area.

The building is clad with Colton Concrete (mixed locally to match the buildings in the surrounding UCSD campus community) and terracotta louvers that keep the interior spaces cool and provide a durable presence on the exterior.

Before anyone adds the SWFSC to San Diego's pantheon of architectural attractions headlined by the Salk Institute. located just a few clicks north up the coast—the equally abundant presence of stucco and the fact that the building's best aspects, like its courtvard, are hard to see from the street. leave the building several leagues below its famous neighbor.

What makes the building most fascinating is the work of the human beings inside. SWFSC studies mammals and fish of every size, shape, and color all over the world. A sample of the work happening on its new campus: California Cetacean and ecosystem assessment surveys, development and testing of Autonomous Underwater Vehicle and Remotely Operated Vehicles, species breeding for population augmentation, and large animal necropsy.

The facility's visible three stories hide its most impressive structure: a 528,000-gallon water tank, engineered to heat and cool water between 25 and two degrees Celsius. No other tank of that size can be controlled to such a wide temperature spectrum. The building housing the tank stands 72 feet tall by 102 feet wide and 62 feet deep, and the tank includes nine observation ports on two decks.

For the foreseeable future, curious visitors have about as much chance of gaining access to the SWFSC as they have of getting an invitation to Willie Wonka's Chocolate Factory—Golden Tickets are only allowed for scientists who work on campus, and NOAA has yet to develop programs for bringing the public inside. All scienceminded Californians should hope the SWFSC's door is opened to a wider audience as soon as possible. JAMES BRASUELL





Visit lightshowwest.com for show details and FREE registration!

Non-exhibiting suppliers/manufacturers will be charged a \$150 entry fee during online registration/\$175 at the doo Non-sponsoring lighting-agency reps will not be admitted.





© LightShowEvent | #LSW2013













A range of landscaping products to help with stormwater management. By Emily Hooper





## FASTWALL **TREEBOX**

TreeBox's vertical green cladding panel is made from recycled polypropylene with a waterproof barrier along a solid back panel. Measuring just under 11 feet squared, each panel weighs 34 pounds empty and can support 150 pounds—including a saturated substrate when attached to a vertical surface via galvanized steel support rails. Easiwall absorbs 35 to 40 percent of soil volume in moisture Its modular design is scalable to most building dimensions

## 2 HYBRID GREEN ROOF SYSTEM **LIVEROOF**

This modular roofing system features Moisture Portal technology and hidden tray lips that connect the roots of each vegetation unit for even water and nutrient distribution across the entire system. In times of excess precipitation, drain channels disperse water at seven gallons per minute for each linear foot. LiveRoof features mature grasses and perennials for a monolithic appearance, but with modular benefits for maintenance and ease of installation. It comes with a 20-year module warranty.

## 3 SILVA CELL DEEPROOT

The Silva Cell modular containment system transfers above-grade loads to a compacted sub-base. Increased root space serves as an on-site storm water management system and can hold up to 2 inches of storm water. Each 48-by-24-by-16inch frame features approximately 92 percer void space for ample soil distribution and can accommodate underground utilities. Recently specified to support 33 Maples at Toronto's Sugar Beach, landscape architect Marc Hallé reported that the trees "look they are on steroids.

## 4 ECOPRIORA UNILOCK

Multiple shapes and colors are available in Unilock's new permeable pavers thanks to the introduction of new face mix technology. The rectangular and square pavers—large and small—feature tight joint tolerances compliant with ADA regulation. The pavers also support rapid storm water infiltration and they are strong enough to support commercial vehicular traffic.

## ENKA RETAIN & DRAIN **BONAR**

Enka Retain & Drain combines effective green roof drainage while promoting root health by retaining requisite moisture. Water retention material is constructed from 100 percent postindustrial recycled nonwoven polypropylene that is designed to hold 15 times its weight in water and conforms to irregular surfaces and offsets. The drainage core is made up of 40 percent post-industrial recycled polypropylene filaments entangled in a square waffle pattern that creates an open flow path for water.

## 6 RAINSTORE3 INVISIBLE **STRUCTURES**

Constructed from injection-molded plastic. Rainstore panels are suitable for Stormwater storage and retention systems in driving areas and parking lots. Thirtysix vertical columns in each 40-by-40-by-4-inch unit store up to a total of 25 gallons of water, and can be stacked up to 24 high, accommodating more storage than chambers and pipes over a smaller surface area. Its open design also supports exfiltration of stormwater along the bottom and sides of the chamber.

## invisiblestructures.com

## 7 FPDM GEOMEMBRANE **FIRESTONE** BUILDING **PRODUCTS**

Suitable for critical containment jobs or decorative water features, **EPDM** Geomembrane is a flexible, easily installable water barrier for constructed wetlands. agricultural ponds, reservoirs, and lands features. A variety of panel sizes can be specified and, with 300 percent elongation potential, the product can conform to irregular shapes and contours It is compatible with Firestone's QuickSeam Tape for seamless connections. It is also safe for fish and wildlife.

## firestonebpco.com

## **8 HOG** RAINWATERHOG

This 50-gallon storage tank can be connected vertically or horizontally to other HOGs for increased storage capacity. Constructed from a 14-inch thick, foodgrade plastic resin, the HOG can contain potable water as easily as irrigation or emergency stores. The cistern's outlet is located on the floor of the tank rather than the side for easier access. Designed in Australia for warmer climates, it can withstand temperatures between 22 degrees and 140 degrees Fahrenheit, thanks to a UV8 stabilizer mixed into the resin.

rainwaterhog.com

treebox.co.uk

liveroof.com

deeproot.com

unilock.com

bonar.com



## UNVEILED

## STANFORD UNIVERSITY WINDHOVER CONTEMPLATIVE CENTER

Construction recently started on a new spiritual retreat at Stanford University. The project, designed by San Francisco firm Aidlin Darling Design, is set amid a private garden and adjacent a natural oak grove.

Principals Joshua Aidlin and David Darling based their design for the 4,000square-foot center on a series of largescale paintings known as the Windhover Series by the late artist and Stanford studio arts professor Nathan Oliveira. Prior to his death in 2010. Oliveira had envisioned a space where Stanford students, faculty, and staff could escape the busy campus.

The building is conceived as a long, transparent bar that connects to adjacent gardens, including what are being called "meditative interventions" and a circular "walking meditation" area. Near the midpoint of the linear scheme, the building opens up to form a landscaped courtyard with wooden benches and water features.

Water is an important element of the design, providing ambient sound throughout to aid meditation, and culminating in a large reflecting pool at the south end to accent the surrounding oak grove.

The building, designed together with Andrea Cochran Landscape Architecture, interweaves landscape and water through and around the large rooms that will house Oliveira's paintings. In these main rooms, louvered skylights will bathe rammed earth walls and wood surfaces in natural light. GH

Architect: Aidlin Darling Design Location: Palo Alto, CA



## **USE THE FORCE, GEORGE**

Three proposals were presented on September 16 for a new cultural facility at San Francisco's Crissy Field, just downhill from the Presidio's main post. First George Lucas shared plans for a new 95,000-square-foot museum, designed to show off his vast collection of digital art. The Golden Gate National Parks Conservancy has proposed "Presidio Exchange," designed by EHDD, consisting of a reused building and several public gathering spaces. The third proposal, designed by WRNS Studios, is called "The Bridge," a 120,000-square-foot science and nature center. Lucas proposed paying for his proposal out of his own pocket, while the other two need to raise funds. No timeline has been set for a winner The New York Times has, however, reported tension between Lucas and the Presidio Trust. Lucas first proposed his museum in 2009.

## PARK HAPPY IN LOS ANGELES

Another major park has opened in the Los Angeles region on the heels of downtown's Grand Park, by Rios Clementi Hale Studios. It's the \$42.3 million, 6.2-acre Tongva Park in Santa Monica, designed by James Corner Field Operations. The name honors the Tongva Tribe, the area's earliest known inhabitants. The hilly park is located on the site of the former Rand Company headquarters. It features observation decks, walkways, large lawns, picnic areas, and shell-like sculptural canopies, to name just a few elements.

## REM'S DREAMS DASHED IN SANTA MONICA?

In July it looked like Rem Koolhaas was about to land his first large-scale commission in Los Angeles with The Plaza at Santa Monica, a mega-mixed-use complex that was slated to go up on a city-owned parcel at Fourth and Arizona streets. But in early September, the city council voted almost unanimously against the recommendation, citing concerns over a lack of affordable housing. Adding insult to injury, city council also asked Metropolitan's competitor, Related California-whose team consists of BIG, Koning Eizenberg, and Rios Clementi Hale-to revise its proposal. So, although it's not over for Rem just yet, it's no longer a sure thing. While the council is hoping to see reworked proposals in three months, no firm date has been set for the teams to present.



## Assistant or Associate Professor, Architectural Technology and Design

The GSD is committed to strengthening its research and teaching in technologies and computation in design and construction. One or more assistant or associate professor positions are available beginning in academic year 2013-2014 for persons qualified to offer graduate-level instruction in environmental technologies, materials, sustainable design, building construction, or computation and visualization for professional, post-professional, and doctoral candidates at the GSD.

Additional qualifications for all areas include a master's or a doctoral degree; previous teaching experience in a design school/graduate professional program in architecture and/or architecture-related discipline strongly encouraged; ability to advise post-professional students; strong record of publications, with evidence of future impact in the field of technology in design.

Applications will be considered starting on August 1, 2013 but will continue to be accepted well after that date. Full details about this position and the application process can be found at http://www.gsd.harvard.edu/#/#/information-for/faculty/open-facultypositions.html

## THE WORLD'S SLIMMEST SIGHTLINES.

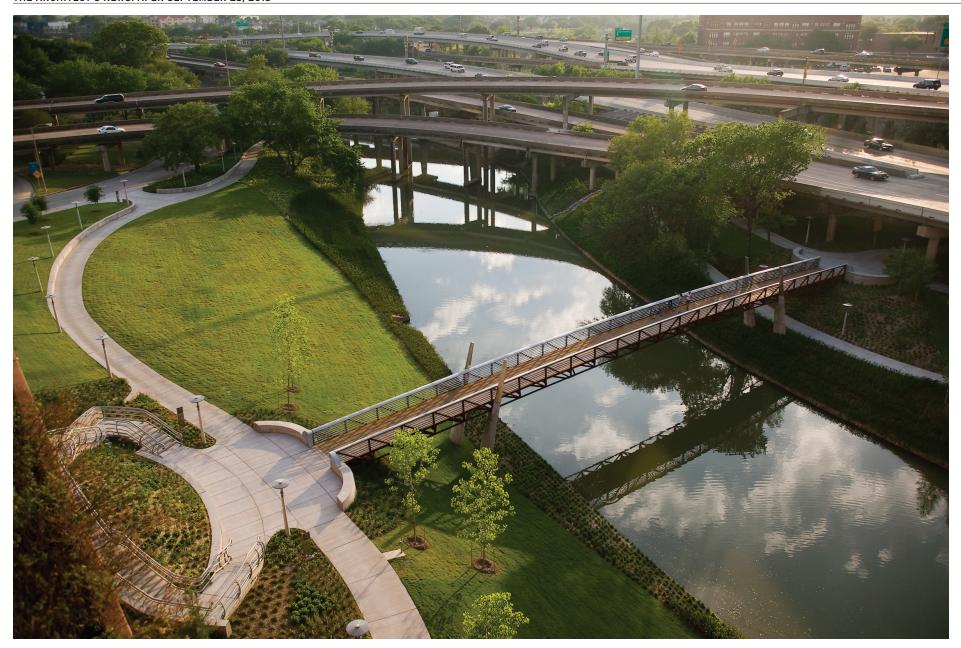


The 3/4" profile Vitrocsa sliding glass wall system. Absolutely nothing else compares. Proven and tested since 1993, with over 25,000 Vitrocsa units installed in over 20 countries.

GOLDBRECHT USA INC. 5701 BUCKINGHAM PARKWAY UNIT C CULVER CITY, CA 90230 PHONE: 310 988 4455 www.vitrocsaUSA.com

**VITROCSA** 





## THE NUANCED APPROACH

JOHN GENDALL CROSSES THE COUNTRY IN SEARCH OF LANDCAPE PROJECTS THAT SEEK TO MAKE CITIES MORE RESILIENT TO INUNDATION BY STORMWATER. HE FINDS THAT DESIGNERS FROM COAST TO COAST ARE BREAKING THROUGH THE OLD DISTINCTION BETWEEN GREY AND GREEN INFRASTRUCTURE TO ESTABLISH STRATEGIES THAT APPLY A MIX OF THE TWO.

surge-water out of its subway system when news headlines began to trumpet how best to ride out the next big storm—"NYC Sea Barrier: Its Time Has Come" or "Saving New York by Going Green"—leaving the impression that infrastructure could be neatly categorized into opposite kinds: grey vs. green or hard vs. soft. The thread that bound everything together was the promise of a more "resilient" New York. But the menacing irony here is that these kinds of easy dualisms have a lot to do with getting us to our present state of vulnerability in the first place. When the U.S. looks like a schoolroom map-blue for water, green for land, Mississippi River as a winding line, and barrier islands stretching out along the coast-it seems perfectly reasonable to build public housing on the Rockaways, industrial parks along the Gulf

New York was still pumping Sandy's Coast, and cities in the Mississippi delta. In reality, though, coastlines are not lines at all, but zones of negotiation between land and sea, barrier islands are on the move (briskly so, on geological terms), and the delta is an impossible-todistinguish mixture of water and land and everything in between. The climate-related risks we now face don't hew to any dualisms. Floodwaters overwhelm dykes and dunes alike. Tornados and wildfires are blindly indiscriminate. And heat waves are just that: waves that lack clear boundary in space and time. It follows, then, that the strategies used to render our communities resilient from these risks must also emerge from this kind of nuance.

> There are compelling guides in place. In On The Water: Palisade Bay, for example, pioneering research by structural engineer Guy Nordenson, with Catherine Seavitt, a land

scape architect, and Adam Yarinsky, an architect, allowed the team to propose coastal planning strategies in the New York/New Jersey harbor that hybridized land and sea, hard and soft.

Leaving aside the question about whether it is caused by humans, there can be no doubt that sea levels are rising and that extreme climate events are happening more intensively and more regularly, so cities around the U.S. are planning for these events. For Houston. which trails only New Orleans as the city with the most repetitive flood claims in the U.S., developing a resilient urban design is of paramount concern. There, the SWA Group designed a 23-acre park along what had been the neglected banks of Buffalo Bayou, and, in the process, created a zone where green and grey become indistinguishable. Built to withstand

the collateral damage incurred by those natural events, its planted slopes weave the waterway back into the urban experience as a strip of recreational space at the center of Houston.

Important though these measures are, rivers can't be understood as isolated strips of water. As SWA Group CEO Kevin Shanley put it, "you don't solve flooding issues by fixing the river." Floods, after all, are the result of actions across entire watersheds. With this in mind, Shanley and SWA are working with regional agencies and municipalities to advocate for low-impact development as a way to increase permeability across the entire watershed. Since climate events don't follow jurisdictional boundaries, resilience measures need to transcend those borders, too, knowing that cities in a region

flooding and engineered to mitigate are linked to a similar set of risks. Urban design policies by each municipality in a watershedeven those that are politically and materially distinct-effect the others. "If a watershed is not yet urbanized, it could take days or weeks for water to reach the river," explained Shanley. "But if you have a situation like Houston, where a lot of it is urbanized, that process takes hours or minutes.

This was a lesson learned the hard way by Cedar Rapids, Iowa, when, in 2008, the Cedar River flooded, causing extensive damage across the city from floodwaters that crested over 30 feet. The Boston-based planning and design firm Sasaki developed a multi-phase redevelopment plan aimed not only at recovery, but also at preventing the kind of devastation seen in 2008. "Our focus was on understanding the relationship





Above and facing page: SWA Group's Buffalo Bayou Promenade created recreational areas along the waterway and incorporated flood mitigation infrastructure.

Below: In addition to material infrastructure, Sasaki Associates' plan for Cedar Rapids includes communication networks across the watershed region.

of the community with the natural environment," explained Sasaki principal Jason Hellendrung, which meant treating the site not as a defined, physical entity, but rather as a diverse community of people within a watershed region. "By now, it's pretty clearly understood that hard systems can fail," said Hellendrung, so by calling for a 220-acre greenway along the river that incorporates infrastructure ranging from hard to soft, Sasaki designed the kind of overlapping systems that resilience demands. The project also highlights the need to consider interventions beyond the material. For months, Sasaki worked closely with community members and organizations to tailor its response to Cedar Rapids. And part of the redevelopment plan that ensued includes communication networks for flood warnings and plans to cooperate more closely with municipalities across the

"Resiliency needs to be nuanced," said Lisa Switkin, Managing Director of James Corner Field Operations. "On one hand, it is robust and persistent, and on the other, it's yielding and adaptive. It's all about finding the right balance for this mix."

watershed region.

She is setting out to strike this balance in Brooklyn's Greenpoint neighborhood, where the firm is currently at work on a 22-acre waterfront site. Though the park will serve as a front-line defense against storm surges, it is a task it will carry out covertly, as it functions primarily as a place for Greenpoint residents to do the things people do in a park. "After Sandy, 'resilience' has become a buzzword," she warned. "But it's completely embedded into the concept of landscape architecture, since we look at both soft systems and hard systems, and since we always take a long view in considering time."

The design includes plenty of

grey. On the edge closest to the river, a concrete armor wall provides a hard barrier against pre-Sandy 100-year flood projections, while ribbons of precast concrete retaining walls offer second-, third-and fourth-line defenses within the park itself, and concrete-paved walkways are fastened to the site. But the park's section could double as a diagram for the so-called

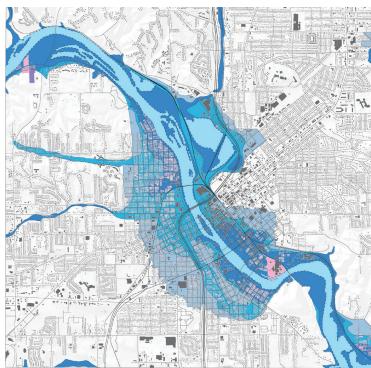
grey- and green-infrastructure integration. The broad promenade is divided into linear bands, a marbling of concrete walkways and planted strips. The retaining walls double as seating and also act to hem in raised planters. Not only do these bands allow the designers to hybridize green and grey into a cohesive system, they also make it possible to terrace the waterfront,

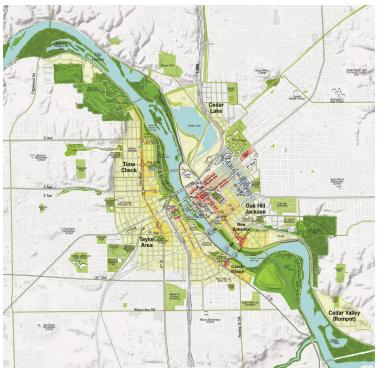
leaving the edge along the adjacent community—and the vaults for the park's electrical systems—well above the new 100-year flood levels.

"Rather than thinking of this as a singular bulkhead—as a strict edge where water and land meet—we are proposing a series of terraces that can be inundated and flooded," said Switkin.

For its Crane Cove Park design

in San Francisco, AECOM faced a similar challenge, complicated by the fact that the site included historic buildings protected by preservation registers. This delicate arrangement highlights the fact that resiliency measures can't be considered singularly and need to become integrated into the full range of design considerations—historic preservations, yes, but







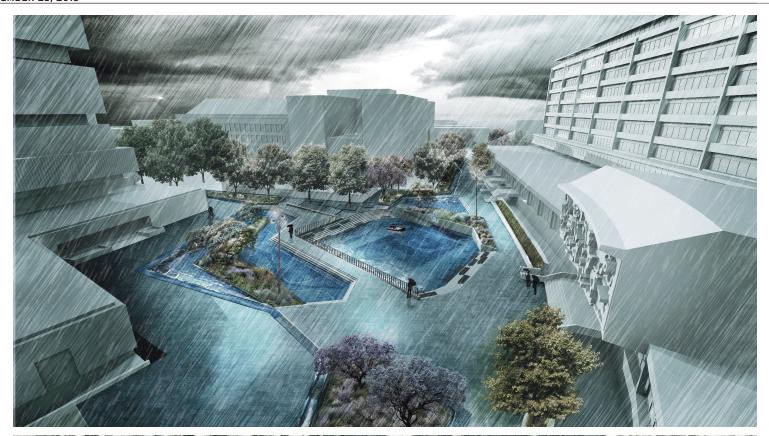
also livability, real estate, and environment. In this case, to raise the site would be to compromise the historicity of these structures, but to leave the grading in place would leave the entire site vulnerable to high waters. AECOM found a third way by modifying the topography through a series of cuts-and-fills. This way, the designers opened up areas in the site for floodwaters to fill. "We are embracing the fact that the park will flood during certain events," said AECOM principal Alma du Solier. This will largely happen along the former ship-building slipways, where historic keel blocks will be repurposed as park amenities, but designed to be easily forklifted to higher ground as sea levels rise. "In essence," said du Solier, "the project itself becomes a kind of levee for these historic buildings."

Even the Dutch, who are routinely touted as the "grey infrastructuralists" par excellence, are beginning to break down their own status quo. "Pumping out water and building higher dykes just isn't feasible in the long run," said Tracy Metz, author of Sweet & Salt: Water and the Dutch. Citing a regulation that mandates any new housing to set aside 10 percent of the site to water, she said "now, the priority is to incorporate water into already dense urban conditions."

"People love water, so the challenge is to create these spaces that work as a safety measure, but also as places for people to enjoy," she said, pointing to the de Urbanisten-designed Watersquare project, in Rotterdam, which creates a sunken urban plaza doubling as a catchment system to manage excess water in the event of flooding.

Any design for resilience needs to carefully manage public perceptions of safety. Levees are often faulted for creating a false sense of security (and justifying risky real estate development) while the promises made by soft systems in urban contexts needs to be more fully studied. "This is a discussion that needs nuance-and a lot of rigorous scientific research," said Shanley. "If you're talking about adding dunes as surge protection, and you're looking at a surge of 10, 15, 20 feet, plus the wave action on top of that, dunes are like seaweed. All of the energy in this water is in the upper zones, so it's going to just flow right over," he said, citing undergoing research at Houston's Center for Severe Storm Prediction, Education, and Evacuation from Disasters. Rather than beating the drums for a seawall or promising to save New York by going green, designers with organizations like these ought to be doubling down. with justified urgency, to understand exactly what those systems mean across given regions.

This kind of research-intensive design work is now being undertaken with Rebuild By Design, a





**Above:** De Urbanisten's Watersquare project in Rotterdam is a sunken urban plaza that doubles as a catchment system to manage stormwater.

**Below and opposite page, bottom:** AECOM's Crane Cove Park in San Francisco is designed to flood, absorbing the brunt of a storm surge and protecting the populated area beyond

competition sponsored by the U.S. Department of Housing and Urban Design (HUD), in collaboration with the Rockefeller Foundation, that aims, first, to undertake analyses of the entire Sandy-affected region, then to propose a range of design concepts on various scales that can be implemented by municipalities as needed. By organizing it in this way, HUD managed to cut across the types of partitions that would otherwise hamper resilience strategies. Teams, for example, include designers, planners, engineers, scientists,

geographers, hydrologists, and policy experts. The scale of inquiry ranges from the building detail to entire ecosystems, sites can include dense urban areas and small communities, and, in an important step, it creates a jurisdictional venue that crosses state and city lines to treat the risk of storm surges as the regional issue that it is.

It also brings world-class, sitespecific research to vulnerable communities that might otherwise lack the resources to carry out that type of work. "You can never get







**Left:** James Corner Field Operations' Greenpoint Waterfront Park acts as a frontline of defense against storm surge and as a public outdoor space.

100 percent protection from every risk, but we can first understand the risks and tailor solutions to particular risks at specific locations," said Dan Zarrilli, New York City's Director of Resiliency. "There is a false dichotomy between hard and soft. Obviously, you wouldn't build dunes off Lower Manhattan because of the geology and ecology of that place, but in the Rockaways, yes, absolutely."

The big objective for resilience design, regardless of risk, is to short-circuit the entire list of false dichotomies, beginning with hard and soft, but including river and watershed, shore and sea, urban and rural, and natural and built. This will require a radical reorientation in the way projects are designed and carried out. Disciplines will need to collaborate in unprecedented ways—not by making vapid claims to "interdisciplinarity," but by assembling committed teams of scientists, engineers, economists, planners and designers. And political borders need to be understood not as boundaries, but as sites of

sharing and exchange.

There is a worrisome historical precedent to be found in the sustainability challenge popularized over the last decade. Though significant strides have been taken toward increasing energy efficiency in buildings and cities, many of the real possibilities for fundamental change have been hampered by the lure of a buzzword. Now is the time to imagine just what resilience can be, before it risks devolving into the kind prescribed solutions that can have such a stultifying effect on design. Before someone goes out to coin an acronym for resilience— LEED is taken, SEED, too, so REED seems a likely choice—let's agree that the scope of resilience transcends any checklist, and it ought to be approached differently, in manner with the projects above. JOHN GENDALL IS A NEW YORK-BASED WRITER WHO TEACHES AT PRATT INSTITUTE.





## WHERE DESIGN INTERSECTS MODERN LIFESTYLE

October 3-6, 2013

The Barker Hangar | Santa Monica, California

Thurs — Trade & Media Preview: 2-6 PM | Opening Night Party: 6:30-10 PM Fri-Sun — Open to the Trade and Public | Fri-Sat: 12-8 PM, Sun: 12-7 PM

Exhibits from leading and emerging design brands | Design seminars & workshops Thursday-Friday trade programming | Book signings & special events Opening night party to benefit Heal the Bay (separate ticket required)

Program highlights geared for the design trade:

Thursday, October 3

12:30-3:30 PM | Taking Care of Business, presented by The Leaders of Design Council

3:30-4:30 PM | Effective Project Management Skills for the Design Professional, presented by ASID Los Angeles

Friday, October 4

12:30-1:30 PM | Architecture Inside Out: Architecturally Inspired **Products with Form and Function** 

2-3 PM | The Future of Residential Technology & Design, presented by The Architect's Newspaper

3:30-4:30 PM | Elements of the Perfect Beach House, presented by Coastal Living Magazine

5-6 PM | Renovating a Modernist Masterpiece: Improving Upon the Spirit of the Greats

Design trade receive complimentary admission with pre-registration by Sept. 27. Visit westedgedesignfair.com for details.

CHARITY PARTNER:



SUPPORTING PARTNERS:







MEDIA PARTNERS:









ARCHITECTS























Volkmann Reading Room, **Environmental Design Library** 210 Wurster Hall Berkeley, CA ced.berkeley.edu

SYMPOSIUM Leed Green Associate Training

9:00 p.m. 475 Brannan St. San Francisco

LECTURE The Architect's Forum (2LUs)

6:00 p.m. AIA San Francisco 130 Sutter St. San Francisco aiasf.org

EXHIBITION CLOSING Selected Thesis Exhibition:

2013 Gehry Prize & Thesis Winners

Southern California Institute of Architects SCI-Arc Gallery 960 East Third St. Los Angeles sciarc.edu

SAN FRANCISCO

FRIDAY 27 CONFERENCE

**Monterey Design Conference:** Where the Discussion of **Design Unfolds** 

Asilomar Conference Grounds 800 Asilomar Blvd. Pacific Grove, CA aialb-sb.org

SYMPOSIUM **Adaptive Metropolis** University of California, Berkeley

112 Wurster Hall, Berkeley, CA

SATURDAY 28 **EVENT** 

**Habitat For Humanity: Build Day** 8:30 p.m. 9507 Eades Ave., Oakland

OCTOBER

aiaeb.org

TUESDAY 1 SYMPOSIUM

2014: What's Next For Housing In SF? 12:30 p.m. SPUR Urban Center 654 Mission St., San Francisco

EXHIBITION OPENING

**Grand Reductions:** 10 Diagrams That **Shaped City Planning** 6:00 p.m. SPUR San Jose 76 South First St., San Jose spur.org

WEDNESDAY 2 LECTURES

Drawing in the Digital Age 12:30 p.m. SPUR Urban Center 654 Mission St. San Francisco spur.org

The Unbuilt Landscape and the Afterlife of Architecture

6:00 p.m. University of California, Berkeley 112 Wurster Hall Berkeley, CA aiasf.org

THURSDAY 3

If You Unbuild It, **They Will Come** 6:00 p.m. SPUR Urban Center 654 Mission St. San Francisco spur.org

SATURDAY 5

EXHIBITION OPENING Room To Live

MOCA 250 South Grand Ave. Los Angeles moca.org

TUESDAY 8 SYMPOSIUM

**Urban Eco District** Development 12:30 p.m.

SPUR Urban Center 654 Mission Str. San Francisco

BArch

MArch

MAAD

**EVENTS Green Roofs For Healthier Cities** 

6:00 p.m. SPUR Urban Center 654 Mission St. San Francisco spur.org

**Buildings at Risk** Bonaventure Hotel 404 South Figueroa St. Los Angeles aiasf.org

SUNDAY 13 TOUR

3 Centuries of Downtown

Architecture: Late 19th, 20th, and early 21st Century 10:30 a.m.

American Institute of Architects, LA Pershing Square Los Angeles aialosangeles.org

EXHIBITION OPENING

In Focus: Architecture The J. Paul Getty Museum The Getty Center 1200 Getty Center Dr. Los Angeles getty.edu

WEDNESDAY 16 **LECTURE** 

Radiant Systems: HVAC Design, Energy Assessment and Architectural Implications 9:00 a.m.

Pacific Energy Center 851 Howard St., San Francisco

NATIONAL GEOGRAPHIC'S "GREATEST PHOTOGRAPHS OF THE AMERICAN WEST" Jordan Schnitzer Museum of Art 1430 Johnson Lane, Eugene, Oregon September 27 to December 31

Throughout its 125-year history, National Geographic has been home to some of the highest quality photojournalism in the world, captivating its audiences with powerful and spectacular imagery. This fall, the Jordan Schnitzer Museum of the University of Oregon will be displaying the magazine's greatest photographs of the American West; a region that has long captivated photographers. The exhibition opens with a free public reception on September 27, at 6:00 p.m., and will run through to December 31. Included are photographs by Sam Abell, Ansel Adams, William Albert, and many other renowned photographers. The exhibition is organized into four sections, each focusing on various aspects of the American West and its significance to the country's national identity. From spectacular rock formations to cowboys and Native Americans, this exhibition draws from the significant holdings of the National Geographic Archive. "The American West" was organized with the National Museum of Wildlife Art of the United States and Museums West.

FOLLOW US AT WWW.ARCHPAPER.COM, TWITTER.COM/ARCHPAPER, AND FACEBOOK.COM/ARCHPAPER

## CALIFORNIA COLLEGE OF THE ARTS NAAB-ACCREDITED PROGRAMS IN ARCHITECTURE Accepting applications for fall 2014



DESIGN MUSEUM>LOS ANGELES



## **NEVER** BUT ANGELES

JULY 28-OCTOBER 13

A+D Architecture and Design Museum > Los Angeles 6032 Wilshire Blvd. Los Angeles, CA 90036 323-932-9393 / aplusd.org

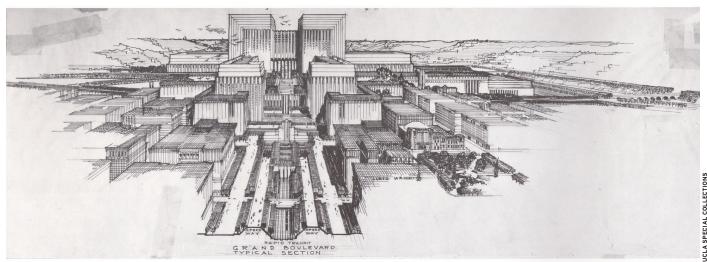
AECOM CLIVE WILKINSON architects

ALL COAST









## What If?

Never Built: Los Angeles A+D Museum 6032 Wilshire Boulevard Los Angeles, California Through October 13

For an exhibition about architectural projects that never broke ground, there's something rather cheery about *Never Built: Los Angeles*, on view at the A+D Museum through October 13. Outside, an oversized lenticular facade is a shade of yellow that shouts Southern California—it's all citrus groves and sunshine. A billboard-sized image of the Cadillac-like Goodell Monorail is frozen

mid-zoom along Wilshire Boulevard. Inside, a map of the Los Angeles Basin stretches out across the gallery floor. Sam Lubell and Greg Goldin have brought together a selection of unrealized works, many of which, if built, had the potential to change our understanding of the city. For the curators "what if" is not a lament, per se, but rather a celebration of speculative possibilities and a challenge to the present status quo.

"The message of these unrealized projects is one of not only regret but also optimism... We see that our city clearly still holds its original promise—that there remains unfinished space here to transform and build," writes Thom Mayne in his forward to the impressive *Never Built* catalog. And that's the thing about LA, its endless urban fabric still inspires a kind of starry-eyed hope in the possible among Pritzker Prize

winning denizens, even though according to the latest census it is the densest city in the nation. Where once the civic landscape begged to be filled with new construction, now it teases.

Never Built divides into a few categories: buildings, master plans, parks, follies, and transportation schemes, with works illustrated via models, drawings, renderings, and, in the case of Lloyd Wright's Twentieth-Century Metropolitan Catholic Cathedral (1931), Legos—neatly accommodated by an exhibition design by Clive Wilkinson Architects.

The scope of potential projects for inclusion at first seems as vast as LA's sprawl; Lubell and Goldin mindfully narrowed the checklist to works in the civic realm. Notably, the single-family residence, the city's most famous piece of architectural cultural production, barely makes an appearance.

Lloyd Wright, Civic Center Proposal, 1925

Architecture media is currently awash in speculative design, those projects that digitally render fictional futures with the same technique as fact. As such, there is little expectation for proposals to manifest outside the screen and to encourage a larger public debate. Although unconstructed, the designs in Never Built are not exercises in fantasy or "paper architecture" polemics. The wall texts and the catalog make clear again and again, these are commissions that failed fruition for any number for reasons city hall sputtering, developer nerves, political gamesmanship, overreaching scope, financial ruin. The proverbial noir to LA's perennial sunshine.

Still, some of the works are more suitable to imagination than implementation. There are the numerous people mover, automatic vehicle, and monorail schemes. But it's Pereira and Luckman's mammoth plan for Los Angeles International Airport that truly captured the enormous mid-century mythos of flight. Watercolor illustrations depict a central terminal topped in a three-story-high glass dome. According to the curators, the cost of air conditioning killed the scheme.

Then, consider the towers: There is the 1,290-foot-tall dream cocked up by William H. Evans, the Tower of Civilization for the Los Angeles World's Fair, Jean Nouvel's 45-story Green Blade condos proposed for Century City in 2008, and, at 50-story-tall, Welton Becket's Century City Theme Building (1963) for Alcoa would have dwarfed the modest office buildings that were built as part of the master plan. continued on page 19



## **BIG MAN ON CAMPUS**

Modernist Maverick: The Architecture of William L. Pereira Nevada Museum of Art 160 West Liberty Street, Reno Through Oct 13

Labeling William Pereira as a maverick is the first surprise in the current exhibit on his architecture at Reno's Nevada Museum of Art.

"Maverick" is usually reserved for brilliant loners who stray far from the herd. Pereira, on the other hand, was featured on the cover of *Time*, designed indelible urban landmarks like the LAX Theme Building, the Los Angeles County Museum of Art, and

San Francisco's Transamerica pyramid, and worked in the heart of California's public and private establishments. Yet the architect-planner that emerges from this exceptional exhibit is clearly well ahead of the herd.

This exhibit is long overdue. It's an embarrassment that no Los Angeles museum took on this task. But Nevada Museum of Art Executive Director David Walker (formerly

with Art Center College of Design) saw the opportunity when he met Pereira's son Bill in Reno. The Museum and curator Colin Robertson have achieved a balance of new information for scholars and a lively exhibit design for laypeople that ranks with the best of the Getty's recent Pacific Standard Time Presents exhibits.

Not exhaustive, the exhibit focuses on five projects that capture the broad strokes of Pereira's multi-faceted career. They include his own house in Hancock Park, but also the plan of an entire new town and university in Irvine, California, which addressed the shortcomings of garden-variety suburbia. He could create singular riveting architectural statements (such as San Francisco's Transamerica pyramid and the reversepyramid of UC San Diego's Geisel Library), and yet the planner in him was always compelled to integrate these icon-landmarks with their surroundings. And in Pereira's farsighted early concepts for LAX (with thenpartner Charles Luckman, implemented with joint collaborators Welton Becket Associates and Paul R. Williams), the technological complexities of jet travel are blended with a truly modern public architecture.

So Pereira is not just a conventional corporate architect at the beck and call of industry. In each of these projects he uses his confident insider status to push back boundaries. A trip to Reno to see the exhibit is made entirely worthwhile by the original black plastic model of the unbuilt 1,000-foottall ABC headquarters in Manhattan, which became an early study for the Transamerica pyramid. Its asymmetrical play of office floors and elevator cores, of served and servant spaces, explain how Pereira was pushing

modernism forward at a critical time in its history.

Pereira's innovations become clear in the accessible exhibition design by Nikolaus Hafermaas and UEBERSEE. Many architecture exhibits induce fatigue in the average visitor by relying on stylized models and obscure drawings. Hafermaas avoids this by highlighting specific details that bring the architecture alive. Pereira's sense of expansive cinematic space (after all, he won an Oscar for special effects in 1942 for Cecil B. DeMille's "Rean the Wild Wind") is tangibly conveyed in a series of openings cut into the exhibit's partitions. These widescreen windows combine a wide shot of the entire exhibit with focused close ups of key exhibits. The experience of jet travel proposed by Pereira and Luckman for LAX in the early 1950s (well before jet travel was common) blends electronics with architecture in such details as a hand-held device to keep travelers updated on their flights-essentially a smart phone.

Key to this accessibility is the inclusion of art, mostly commissioned for the installation. Several artists stretch and reimagine Pereira's forms, iconography, and concepts in ways that that give us new perspectives on the architecture—literally. The Transamerica pyramid, a form almost too well known, is made startlingly fresh by Ball-Nogues Studio's stunning four-story model rendered in ball chains and hanging upside down in the museum's open stairwell. Deborah Aschheim's luminous white plastic models reinvigorate the modern sculpted shapes of the Theme Building and a preliminary Transamerica Tower design, while her drawings of the UC Irvine campus in the continued on page 19



WHAT IF? continued from page 18 Or Anthony Lumsden of DMJM's beachfront scheme for Pacific Ocean Park Development (1969), commissioned by real estate developer and rancher John "Jack" Morehart, proposed a 600-room cylindrical hotel rising from the Pacific. As with the Theme Building, Carlos Diniz evocatively illustrated the project in black and white. Here on the coast, the renderer added in breaking waves and seagulls. Lubell and Goldin give the backstory in the Never Built catalog, chronicling the back-and-forth posturing of Morehart, the Santa Monica Redevelopment Agency, and the city of Los Angeles over four years that resulted in the acquisition of the 20-acre parcel for what is now the public beach.

Of course, there are the projects that seem to blaze a utopian trail only to end in tears. Such is Robert Alexander and Richard Neutra's housing plan, Elysian Park Heights (1958). The scheme for Chavez Ravine, then home to a Mexican-American community, is a reformist vision with a socialist heart that nods to the modernist Weissenhof Settlement. The progressive

plan to transform the "slum" was met with anti-public housing opposition, which ultimately gave way to one of the biggest social injustices in the city's history: the controversial razing of the original village and the construction of Dodger Stadium. The curators don't pull punches, but the works, while treated thematically, are also treated neutrally. In a city like Los Angeles, political history is always the elephant in the room. But by including Elysian Park Heights, they introduce the possibility for a smaller, more reactive show with a tighter checklist.

"Something about the innate beauty of the hills, the ocean, and the pellucid air combined with an uneasy feeling of upheaval-fed by earthquakes, drenching rains, and scourging fires—aroused architects' daring impulses in this caldera of ceaseless striving," reads Lubell and Goldin's catalog essay entitled City of Illusions. "Daring impulses" invokes images of grand formalist gestures, but perhaps the most daring of Never Built's proposals are the most mundane and infrastructural. As the City of Los Angeles continues to build its Metro Line, the show features subway and elevated rail systems dating back to the 1930s. But it is the Olmsted Brothers and Bartholomew map of Parks. Playgrounds, and Beaches for the Los Angeles Region from 1930 that breaks hearts. The lacy green filigree of green spaces and preserves across the city was proposed as a barrier to unmitigated urban growth. It's the promise of "not building" that Angelenos are still waiting to be fulfilled.

MIMI ZEIGER IS AN LA-BASED WRITER AND CRITIC. BIG MAN ON CAMPUS continued from page 18 throes of 1960s student rebellion undermine the conventional screed that Pereira produced futuristically lifeless designs.

Of course, Pereira's accomplishments go beyond these five buildings. There were innovations in modern urban recreational venues (Marineland of the Pacific), retail architecture (several superb Robinsons department stores), and modern communications facilities (CBS Television City). These and others are represented in a timeline that graphically links major themes in his life and work, as well as providing in-depth material via icons that link to further material through visitors' smart phones.

With LACMA proposing to demolish its original Pereira campus, we've seen attempts to downplay his significance. This exhibit demonstrates what little justification there is for that opinion. The Pereira shown here was an innovator, a builder, a doer, often visionary, and certainly a major shaper of modern twentieth century cities.

Modernist Maverick clearly establishes, with fresh and needed scholarship, that Pereira was a major architect. Above all, Modernist Maverick is a ringing reminder that we don't know everything we think we do about the history of modern architecture. Though the Nevada Museum of Art may be on the outer fringes of the San Francisco–Los Angeles museum axis, it has produced an extraordinarily important exhibit and catalog.

ALAN HESS IS THE ARCHITECTURE CRITIC FOR THE SAN JOSE MERCURY NEWS.







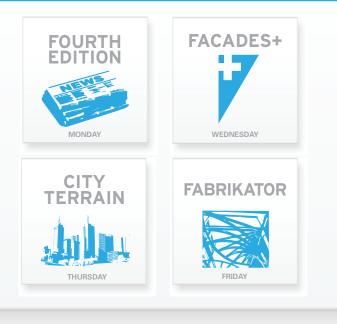
Esto www.esto.com

As you prepare to photograph your new projects call us to learn more about our cost-effective options for sharing with consultants, suppliers and others.

914 698 4060



WANT TO MAKE AN IMPRESSION? HOW ABOUT A COUPLE MILLION!



CALL US FOR NEWSLETTER SPONSORSHIP OPPORTUNITIES - 212.966.0630



Save 10% on your festival pass when you quote ARCHINEWS

→ Follow @worldarchfest

f World Architecture Festival

in World Architecture Festival

Email: info@worldarchitecturefestival.com

Call: +44 (0)20 3033 2034

ounder partner











Co-located with







worldarchitecturefestival.com

## SUBSCRIBE

**WEST COAST ARCHITECTURE AND DESIGN** 

WWW.ARCHPAPER.COM

FREE

and Architectural

\*Must provide RA number or firm letterhead

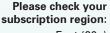
\*\*Must provide copy of valid student I.D.

for Architects

Designers

## SIGN TODAY!

The Architect's Newspaper, The West's only architecture and design tabloid is the place for news, projects, products, gossip and more



East (20x)

West (12x) Midwest (11x)

Midwest/West Rates:

\*Architectural Designers FREE!

1 year \$29

2 years \$56

\*\*Student \$19

## **East Rates:**

\*Architectural Designers FREE!

1 year \$39

2 years \$69.95

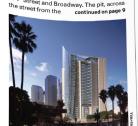
\*\*Student \$25

# ARCHITECT SNEWSPAR



SHOT DOWN BY CA SUPREME COURT, DISSOLVED BY GUV

Back from the Dead



CALIFORNIA REDEVELOPMENT: 1945-2012







PIER WON

WHO YOU GONNA C

To subscribe, mail this form with a check payable to: The Architect's Newspaper, LLC.

The Architect's Newspaper 21 Murray St., 5th Floor New York, NY 10007

or fax the bottom half of this page to 212-966-0633

or visit us online at www.archpaper.com

Name	Date	
Company		
oompan,		
Address		
City/State/Zip Code		
Email	Phone	
RA License Number		
Credit Card Number	Exp. Date	
Credit Card Nulliber	EXp. Date	
SIGNATURE REQUIRED		

INDUSTRY
----------

- Academic
- Architecture Construction
- Design
- Engineering
- ☐ Government
- ☐ Interior Design ■ Landscape Architect
- ☐ Planning/
- Urban Design
- Real Estate/
- Developer
- Other

## **JOB FUNCTION**

- Architect
  - Designer

  - Intern
  - Managing Partner
  - □ Project Manager
  - Student ☐ Other

- Academic

- □ Draftperson
- Firm Owner
- ☐ Government

- ☐ Technical Staff

## ☐ Under \$500,000

FIRM INCOME

- ☐ \$500,000 to 1 million
- ☐ \$1 to 5 million
- ☐ +\$5 million

## **EMPLOYEES**

- \_ 1–4
- □ 10–19
- □ 20–49
- □ 50–99
- 100-249
- 250-499

OR SUBSCRIBE AT ARCHPAPER.COM/SUBSCRIBE





## TREMBLING DEVELOPMENT

A recent controversy at LA's mixed-use Millennium Hollywood development has focused eves on a topic not usually considered sexy: earthquake zoning. After recently gaining city council approval, Millennium Hollywood's developers have been asked to trench their site to ensure that it does not sit astride the Hollywood Fault, a location that could jeopardize its feasibility. (A company spokesperson told AN that this plan was always in the works). The results are still forthcoming.

AN talked to California
State Geologist John Parish—
chief administrator of the
California Geological Survey—
about Millennium Hollywood,
the successes and challenges of
earthquake zoning in the region,
and just how much of the state's
development lies on precarious
ground. Parish, who provides
geological expertise to the
government and several state
agencies, has held his position
since 2005.

The Architect's Newspaper: What is your involvement with Millennium Hollywood? John Parish: Under the AlquistPriolo fault zoning act (which was passed in 1971 after a particularly destructive earthquake that destroyed several buildings) we are mandated to zone active surface faults in the state. The Hollywood fault was on our list coming up at the beginning of 2014. Our office in LA was reading the papers and saw that this project appeared to lie on or near the Hollywood fault. This was just before the LA city council was going to vote on it. We sent a letter to city council saying that we were going to do a survey in the next few months and that we might be able to help. We were going to do it any way and we upped our schedule by six to eight months to provide them with more information. We won't be doing the trenching. The [developer] will do the site investigation.

## Do projects always need to trench to see if they're on or near a fault?

Any time we zone an active surface fault it's a state law that it becomes a mandatory zone of investigation. We have placed zones around 5,000 surface miles in the state in 30 counties and

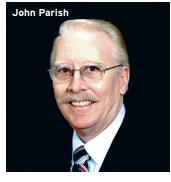
105 cities. We are still in the process of doing that. So if a developer decides to develop he looks at the planning department's maps and they will indicate where the zones are. Then the proponent has to do a study.

Structures meant for human occupancy cannot be built atop the surface traits of an active fault. If you can't prove the absence of fault traces, you must be 50 feet from any known trace.

Millennium Hollywood is a case where the city had zoned the area 25 years ago. It was coming on our radar because it hadn't been looked at for some time. We will soon zone the area around the Hollywood fault. It's highly likely that the Millennium project will lie within the mandatory zone of investigation for the Hollywood fault.

## How does a developer know if their project is on a fault?

A developer can find it on a California fault activity map. That's on our web site and it's also in hard copy. It's a statewide map. If you're anywhere near these active faults it's prudent to take a look to do a study there.



Is your fault map up to date?
It's very up to date. We've mapped over 15,000 surface faults throughout California. There are about 5,000 miles that we deem active. They're all over the state. We're the most seismically active zone in the country.

## t seems like much of that is in urban areas?

I put it to people that we've got the largest population of any state, 38 million people. And we've put 25 million of those people on top of the shakiest ground in the United States. It's very important that we get these zones out there and that people be aware of them as they're building.

## What has held up your earthquake zoning?

The zoning is continuously being done. We have a notoriously poorly funded state mandate, but we work on these as fast as we can. The zoning has been held up by a lack of funding. Otherwise we would have had the Hollywood fault zoned years ago.

## Will this information be a stumbling block to development?

It's not meant to be a stumbling block. Most faults in LA are sub-surface, meaning a lot of ground will be shaking. What the law is concerned with is only those straddling the surface rupture of a fault. It's not meant to deter development. It's meant to help in the wise planning of development so those developments will be safe in the long term, and so that we don't have any nightmares.

## Does Hollywood development seem particularly at risk?

There are undoubtedly buildings there that straddle the fault. Most were built prior to the zoning act. When it comes time to refurbish them, if the refurbishment costs more than 50 percent of the cost of the structure, then it must be torn down. In the long term the act is meant to clear buildings off of active surface zones. No one can push them out. They don't have to do anything until it's time to do a renovation.

Are there major buildings currently sitting on fault lines?

I wouldn't be surprised if there are. We won't know until we put the zoning down. Even if there are no major buildings there are certainly a lot of buildings.

## What faults have you zoned in Los Angeles?

We've zoned the Newport-Inglewood Fault Zone and the Raymond Fault zone. A great deal of LA has been done. What is left to be done are the Santa Monica Fault and the Hollywood Fault. Building owners can do a detailed fault study of the location of their building and find out if they can renovate. If their building is on top of one of the surface splays then they'll have to do a lot of rethinking.

Once we get the zoning finished then a developer can pretty well guess how many buildings there are within the zone. The only way to know for sure is if there are trenches dug to see if they are sitting on one of those traces.

## Is trenching costly?

It's not terribly costly, no. In relation to the investment made it's a small amount. It depends where the trench is, and how much would need to be torn up. I'd say from \$50,000 to \$100,000.

## When will the zoning of Los Angeles be done?

Depending on the budgets, I'm guessing it will be done in five or six years. There is no direct fund for the Alquist-Priolo Act. The state's been in a fiscal bind for some time. We're always looking for new ways to fund that. We keep trying.

## Are there examples of developers not being aware of faults under their buildings?

Most of the time people follow seismic issues very well. Local planning departments have our maps at their offices. They always check their locations in the context of the zones. They've been very good at that. Lots of developers know what they're getting into.

## How is enforcement carried out?

There's no state enforcement. It's a state law but it's enforced at the local jurisdictions.

## What else should owners of buildings know?

There's an awful lot of literature. Other than checking with the planning department, checking with local universities and hiring geological consultants might save them an awful lot of regret. We haven't got all the faults mapped and a lot of local consultants have information that might be beneficial. In California that's the prudent thing to do. This ain't Kansas.



The premier conference on high-performance building enclosures.

SIGN UP TODAY at facadesplus.com

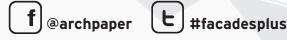


## CHICAGO October 24 + 25,2013 AT THE ICONIC IIT CAMPUS

NYC APRIL
NYC APRIL

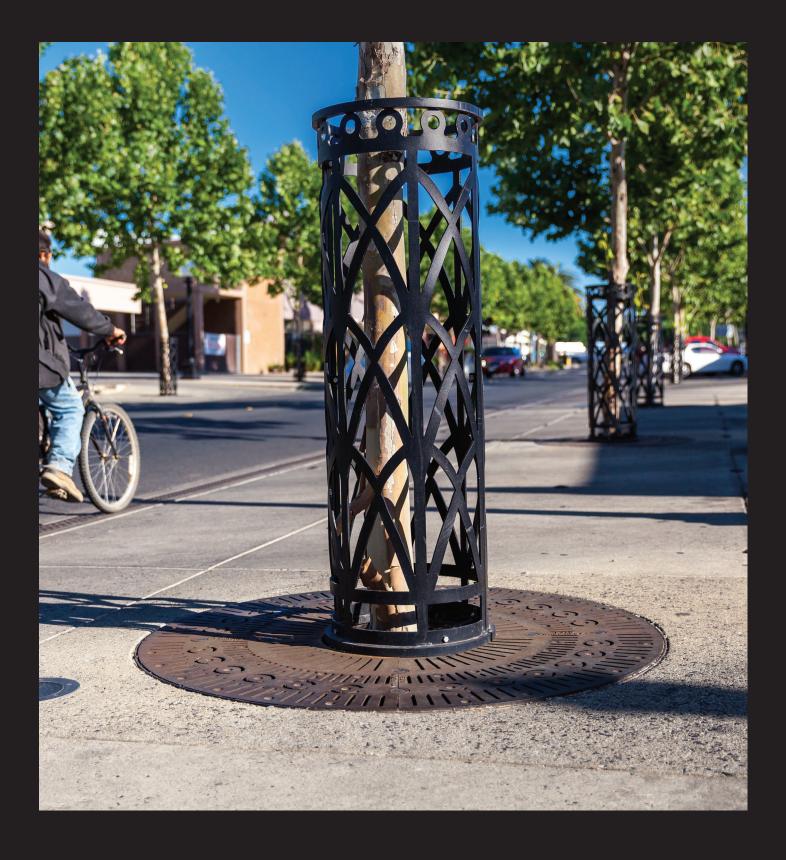
Partner with us in one or more cities! Join these sponsors in presenting your products and services to an elite group of the AEC community in an intimate setting.







Style your surroundings with timeless and appealing streetscape products.



Learn more at ejco.com or call 800 626 4653