

Vaulted Artistry 'In designing Hance For over a century, Acme Brick has received architects' ringing endorsement on academic buildings across a wide variety of scales and purposes. Through changing attitudes about design, increased demands for flexibility. and calls for LEED accountability, architects return to locally sourced, thermally effective, minimally wasteful hard-fired clay brick. Contact your friendly local Acme Brick representative for knowledgable help selecting

a time-tested natural.

From the earth, for the earth. LEED-accredited engineers and full-service support

Chapel, we honored the Spanish Renaissance brick architecture of the campus, yet infused it with new elements from the full realm of the style, as brick uniquely allows. We tweaked percentages in Acme Brick's venerable University Blend, then turned dark units on end and recessed them in a distinctive ermine pattern. For the campanario, brick worked especially well to convey mass through fourfoot-long barrel vaults." — Al York, AIA, principal, McKinney/York Architects, Austin

T

Kent R. Hance Chapel Texas Tech University, Lubbock McKinney/York Architects, Austin Western Builders, Amarillo Llano Masonry, Lubbock



HANDCRAFTED

Marvin Picture Windows Marvin Outswing French Door with Ashley Norton PVD Handle Marvin Casement with Satin Nickel folding handle All products IZ rated, pine interiors

AN INSPIRED DESIGN DESERVES CUSTOM DETAILS.

At Marvin, we take pride in the craftsmanship put into every window and door. We are committed to creating distinctive, beautiful products that continually elevate the standard of quality and innovation. Built on a foundation of values passed on through four generations, our windows and doors are an investment you will value for many years to come.



SHOWCASING MARVIN WINDOWS AND DOORS email: marvininfo@BuildWithBMC.com 800-888-3667 | www.BuildWithBMC.com



See how Marvin can transform your home at MARVIN.COM





BURY

WE'RE THE PEOPLE WHO TURN POTENTIAL INTO PROGRESS

Offering a full suite of services including engineering, landscape architecture, and planning.

WWW.BURYINC.COM **f y** in

TEXAS | ARIZONA | FLORIDA

Contents

Texas Architect

Articles 7

Editor's Note
8
Contributors
10
Of Note

21 Calendar

22

Recognition **26**

Paperwork

28 Products

Resiliency

31Essay: Architecture of Space*Brantley Hightower, AIA***35**

Essay: Traffic in Reverse Engineering Kevin W. Sloan

87

Profile: Kathleen English, FAIA Waterways Canan Yetmen

93

Trends and Marketplace

96 Backpage

Featured Projects

40 Designing for Ageing *Ingrid Spencer*

48

New Scenes in America Deserta Jack Murphy, Assoc. AIA

56

A Living Building in North Texas Margaret Sledge, AIA

62

Raw and Synthetic Bruno Juricic, Gabriel Esquivel, and Stephen Caffey

68

Curtain Wall Call Jen Wong

78

From the Beach to the Bay *Catherine Gavin*

82

Rehabilitation and Recovery Ben Koush

More Online

■ texasarchitects.org Castano House



14 Texas Architects Elevated to Fellowship in 2015

<u>65</u> 02

Profile



Open House













RESOURCES UNI-MIX® INTEGRAL CONCRETE COLOR, PERMA-CAST® SIERRA STAIN": Butterfield Color, Inc.

BUTTERFIEL

Engineered Concrete Performance

-

The architect specified Butterfield Color[®] Uni-Mix[®] Integral Concrete Color and Perma-Cast[®] Sierra Stain[™]. Approximately 20,500 square feet of decorative concrete was used throughout the project.



PROJECT Children's Garden at the Morton Arboretum Landscape architect Hitchcock Design Group construction manager Featherstone, Inc. concrete contractor Elliot Construction Corp. concrete staining subcontractor Designing Concrete



Texas Society of Architects

March/April 2015 Volume 65, Number 2

The Official Publication of the Texas Society of Architects (Texas Architect) Texas Architect (ISSN: 0040-4179) is published six times per year. The Texas Society of Architects is the state component of the American Institute of Architects (AIA). Copyright 2015 by the Texas Society of Architects.

Catherine Gavin Editor

editor@texasarchitects.org

Pentagram Austin Art Direction

Katherine Hoyt Assistant Editor and Copy Editor

Elizabeth Hackler Designer and Assistant Publisher elizabeth@texasarchitects.org

Monica Cavazos Mendez Assistant Editor monica@texasarchitects.org

Contributing Editors

Lawrence Connolly, AIA, Austin: Stephen Fox, Houston: Val Glitsch, FAIA, Houston: J. Brantley Hightower, AIA, San Antonio: Greg Ibañez, FAIA, Fort Worth: Max Levy, FAIA, Dallas: Michael Malone, AIA, Dallas; Ed Soltero, AIA, ElPaso: Bryce A. Weigand, FAIA, Dallas; Frank Welch, FAIA, Dallas: Willis Winters, FAIA, Dallas

> Krys D'Antonio Sales Leader kdantoni@naylor.com 503 908 1181

Charlotte Friedley Communications & Advertising Specialist charlotte@texasarchitects.org

> Delia Gray Circulation Manager delia@texasarchitects.org

James T. Perry Executive Vice President and CEO

Texas Architects Publications Committee

Audrey Maxwell, AIA, Dallas (chair); Eurico R. Francisco, AIA, University Park; Sam Garcia, AIA, McAllen; Craig Kinney, AIA, San Angelo; Murray Legge, FAIA, Austin; Alexis McKinney, AIA, Houston; Jack Murphy, Assoc. AIA, Austin; Bart Shaw, AIA, Fort Worth; Ronnie Self, Houston; Margaret Sledge, AIA, San Antonio; Ron Stelmarski, AIA, Dallas; AI York, AIA, Austin

Texas Architects Board of Directors

Michael Malone, AIA, Dallas, President; Paul Bielamowicz, AIA, Austin, President-elect and Vice President; Fernando Brave, FAIA, Houston, Vice President; Donna Kacmar, FAIA, Houston, Vice President; Mike McGlone, AIA, San Antonio, Vice President; Adam Reed, AIA, San Antonio, Vice President; Darren Heine, AIA, Brenham, Secretary; James Williams II, AIA, Amarillo, Treasurer; Adam Gates, Assoc. AIA, San Antonio, Associate Member Director; Barrie Scardino Bradley, Public Member Director; Elizabeth Danze, FAIA, Austin, Education Member Director; Elizabeth Danze, FAIA, Fort Worth, AIA Regional Director; Daniel Hart, AIA, Midland, AIA Regional Director; Chris Hudson, AIA, Houston, AIA Regional Director; Bill Noonan, AIA, Abilene Chapter; Jay Bingham, AIA, Amarillo Chapter; Richard Weiss, AIA, Austin Chapter; Elizabeth Price, AIA, Brazos Chapter; Connie Rivera, AIA, Corpus Christi Chapter; Sean Garman, AIA, Dallas Chapter; Carl Daniel J.r., AIA, El Paso Chapter; Matt Green, AIA, Fort Worth Chapter; Perry Seeberger Jr., AIA, Houston Chapter; Christopher Collins, AIA, LRG Vchapter; Mart K. Lubbock Chapter; AIA, Roberts, AIA, Northeast Texas Chapter; Lowell Tacker, AIA, San Antonio Chapter; Philip Long, AIA, Southeast Texas Chapter; Jane Kittner, AIA, Waco Chapter; Kenneth Dowdy, AIA, Wichita Falis Chapter

Printed in the U.S.A. Periodicals postage paid at Austin, Texas, and additional mailing offices. Postmaster: Send address changes to *Texas Architect*, 500 Chicon Street, Austin, Texas 78702. Reproduction of editorial content without written permission is prohibited. Contact Circulation Manager for reprint information. Use of names and images of products and services in either editorial or advertising does not constitute an endorsement by the Texas Society of Architects or AIA, nor does comment necessarily reflect an official opinion of either organization. *Texas Architect* is indexed by the Avery Index of Architects.

Editor's Note



"Sugarfree" is made of a biodegradable thermoplastic cast in digitally fabricated molds. Designed and fabricated by Igor Siddiqui, the project will be on display at thinkEAST.

Edible Architecture

by Catherine Gavin

ustin's Fusebox calls itself an "idea engine," and over the past 11 years the organization has brought hundreds of artists together for its 12-day spring festival. This year, Fusebox is taking on place-making and collaboration amongst artists, architects, developers, and city planners to re-imagine a 24-acre former industrial site in East Austin. The project, thinkEAST Living Charrette to Shape a New Creative Community, received a sizeable grant from ArtPlace America to realize a "pop-up" festival April 1–12. The event will bring people to the site and raise awareness about the largescale development planned for the area.

The idea is to model a "vibrant, creative, mixed-use community of the future." Ron Berry, Fusebox artistic director, describes the project as an extension of their Free Range Art initiative. "We believe that exciting things arise when you encounter ideas and perspectives outside of your immediate sphere," he says. "Working with architects and planners is exciting, and in many ways, it is a natural/organic fit for us."

Participating architects and collaborators include Division of Wonder, Igor Siddiqui, Jen Wong, Richard DeVarga, TBG Partners, and Thoughtbarn. Each of the projects focuses on design innovation and community building, with Siddiqui's collaboration with Wong being the most adventurous: The pair is working with local chefs to create an exhibition of edible building materials for the event.

"Construction materials and edible ingredients are ordinarily viewed as distinct substances. Rather than focusing on their differences, we are looking for commonalities between them," say Siddiqui and Wong. "At the forefront of material innovation are efforts by designers to not only use new materials, but also design them from scratch. Such innovations are frequently an outcome of the convergence of high and low technologies, and these designers aspire to produce materials that are as highly customizable as they are sustainable. Natural polymers, organic masonry, microbial cellulose, mineral-based 3-D prints, gums, and rubbers not only represent potential alternatives to more conventional materials, but also consist of ingredients that are nontoxic and effectively edible."

A small-scale take on the broad topic of resiliency, the project exemplifies how thinking out of the box can change even the most basic elements of architecture.

Contributors



Ingrid Spencer is an Austin-based writer and a contributing editor to Architectural Record. Last fall, she organized the first annual Creek Show to bring attention to the rehabilitation of Austin's Waller Creek. Read Spencer's article about designing for the ageing on page 40.



Jen Wong is a regular contributor to TA. She enjoys being director of the University Co-op Materials Lab at UT Austin and encourages all design enthusiasts to check out the lab's 27,000+ samples, which make up the largest academic collection of its kind. Read her article about highperformance curtain walls on page 68.



Canan Yetmen is an Austin-based writer who is celebrating 20 years of hanging around the architectural profession and has no plans to stop any time soon. Read her article about Houston-based architect Kathleen English, FAIA, on page 87.



David Heymann, FAIA is an architect, a contributing writer for Places Journal, and the Harwell Hamilton Harris Regents Professor at The University of Texas at Austin School of Architecture. His book of short stories about a young architect struggling with clients' problematic wishes, "My Beautiful City Austin," was recently published by John Hardy Publishers (www. davidheymannauthor.com). Read his thoughts on Austin's growing pains on page 15.



Jack Murphy, Assoc. **AIA** is currently a designer with Baldridge Architects in Austin and a contributing editor to BI (bipublications. com). He received his Bachelor of Science in Architectural Design from MIT, where he completed a semester on exchange at TU Delft. Read his review of the Land Arts of the American Southwest program on page 48.



Rita Catinella Orrell is our products editor. She has been writing about design for over 18 years, covering architecture, interior design, home furnishings, kitchen and bath design, and building products. She was the products editor for Architectural Record for 14 years and was the founding editor of SNAP, a quarterly building products magazine. She currently writes about product design at www.designythings. com and www.architectstoybox.com. Check out her selection of highperformance cladding materials featured on page 28.

Brantley Hightower, AIA, is the founder of HiWorks in San Antonio. He is also the official chauffeur of Tinker Bell. His book, "The Courthouses of Central Texas," will be published by The University of Texas Press in April and his essay on the architecture of space appears on page 31.



Kevin W. Sloan is the founding principal of Kevin Sloan Studio in Dallas and a Clinical Professor in the University of Texas at Arlington School of Architecture. Read his article about transportation initiatives in Dallas on page 35.



t Summit

COACH 1974-2012 D 1098-208 ONAL CHAMPIONSHIPS

Denver Union Station, Denver, CO Prest[®] Brick







Where Concrete and Imagination Meet.

Hanover® has participated in the development of concrete pavers for over 40 years, as they became an integral part of architectural design. From green roofs and rooftop pools to on-grade entrance ways and driveways, Hanover® can provide the highest quality unit paver for your next project.



Of Note



"Citizen Culture: Artists and Architects Shape Policy" includes a model of Michael Maltzan Architecture's Star Apartments, a shelter for downtown Los Angeles' homeless community.

Art, Politics, and Architecture on View in El Paso

The Stanlee and Gerald Rubin Center for the Visual Arts at The University of Texas at El Paso examines the relationship between art and politics in the exhibition "Citizen Culture: Artists and Architects Shape Policy." The show, which runs through April 25, features work of artists, architects, designers, and creative thinkers who have shaped public policy using design-oriented strategies. Such familiar names to architects as Teddy Cruz of San Diego and Michael Maltzan, FAIA, of Los Angeles are presented with the former mayor of Bogotá, Colombia, Antanas Mockus, Cuban-born artist Tania Bruguera, and the Argentine collective Ala Plástica — to name just a few participants — to investigate how artists are working with governments, NGOs, legislators, and advocates to create change.

The projects featured explore art and activism through photographs, architectural models, drawings, videos, and performances and have either changed laws or seek legal and policy changes through their realization. Organized by Lucía Sanromán, the exhibition culls successful work from across the Americas. Artists working for social change in Chicago, Los Angeles, and Oakland in the U.S.; Bogotá and Medellín in Colombia; and La Plata in Argentina are represented.

Kerry Doyle, director of the Rubin Center, notes that the exhibition showcases new practices in visual arts while also opening up a dialogue



Boral Building Products

Austin: 512.997.9955 Carrollton: 972.245.1542 College Station: 979.690.5330 Henderson: 903.655.2099 Houston: 281.442.8400

Build something great[™]

boralbuildingproducts.com

Brick Stone EIFS and Stucco Hardscapes





Need timber framing?



From outdoor living spaces to 20,000 sq. ft. frames.

FIBREBOND | 800.824.2614 | 1300 Davenport Drive | Minden, LA 71055 | www.fibrebond.com

877-680-1680 | texastimberframes.com 613 Highway 46 East | Boerne, TX 78006



studioOutside



Landscape Architecture and Urban Design 214 954 7160 www.studiooutside.us





Top row Work by Ala Plástica and Suzanne Lacy looks at ecological and civil rights issues. Middle row Projects from Colombia include "The Medellín Diagram" and materials by Antanas Mockus.

Bottom clockwise from left Ala Plástica and Tamms Year Ten focus on political action as a result of creative intervention.











about those practices in the local community. "Citizen Culture looks at a very strong practice in recent contemporary art of artists and architects who want their work to have impact beyond the gallery walls and are making pieces that are meant to effect positive change in society," Doyle commented. He argues that the work is especially relevant for El Paso because the artists are dealing with issues concerning immigration, prison reform, the environment, and increasingly polarized relationships between the police and youth of color.

"We hope that the installation will provoke conversation and debate about the role of artists as citizens and change-makers, both locally and internationally," said Doyle. He also stresses that the installations differ from typical exhibitions and require time to view and understand. "The work on display will be challenging to viewers who expect art to serve an ornamental role," said Doyle. The projects document actions and are often materials that are either used to organize an event or left behind afterward. For Doyle, the exhibition is important as a "record of artistic involvement in the political and social sphere and as documentation of the unique role an artist can have in leading change on issues of political and social importance."



Design actualized.

Multiple-panel pocketing doors with flush sill detailing, large fully engineered window walls, and extensive trim.

By Duratherm.



T-I

-11

Architectural Windows and Doors www.durathermwindow.com (800) 996-5558

> Metaform Studio Architects Photo © Atelier Wong

My Middle-Aged City

by David Heymann, FAIA

Since the biological paradigm that explains cities as entities remains in vogue, here is my biological analogy for the city of Austin. Get ready for hyperbolic overstatement.

Once blessed with a golden youth, and since then — having had that youthful image reinforced often enough by its many admirers — spared the crisis of having to figure out how that charm might continue once the blush wore off (perhaps the question was never even raised), Austin has grown into a somewhat lazy and troubling adult, with some unpromising habits (*Yeah*, *I'm thinking I really want to be an Event City* ...).

Reader, I suspect you once knew someone just like that — effortless, natural, spontaneous, open, and rare. Someone who, unburdened of the indignities of childhood, was perhaps also exempted from many character-building endeavors, unlike their less fortunately endowed but more industrious older, larger, and altogether less comely siblings, Dallas and Houston. (Can't speak for the eldest, San Antonio, whom I never knew well.) Austin was, without even trying, just so stupefyingly attractive!

Well, at least appealing enough to be forgiven almost anything — anything, just so you could keep hanging around, including a tendency not to think too much. Austin's capacity for thought, though, would have been hard to judge honestly. At some point, it didn't matter what Austin had in its head, or what came out in words, because your ears were blinded too, and anything within the city limits just sounded like music. So, yeah: Austin was once the envy of everyone, the light in the eyes of teachers and parents, including let's just admit it — your parents, too.

But now, the protective cloak of youth has been withdrawn. If the consequences of adolescence were not overly harsh (though did our teen really have to flush *Las Manitas* just to make a stupid point about who's in control?), they also did not bring any transformation towards fullness: Those same years were more generous to Dallas and Houston. Though little ageing (read: "decline") has taken place, a pudgy truth is evident. There is a noticeable widening (*Wait, I'm the 11th largest WHAT in America?*); an uneven densening of the middle (*Some of that is new core muscle, dude!*); sudden unwanted hair in problematic locations (*Not my fault! Those oddly sprouting towers are a side effect of my Capitol view corridor inoculation!*); a marked hardening of the arteries

PHOTOS BY DAVID HEYMANN, FAIA





Above View of downtown Austin in 2014 from the hike and bike trail. Left The 2015 downtown skyline is full of cranes.

slowing the circulatory metabolism (*Not fair; that's genetic! And I'm getting a stent in my MoPac.*); and the beginnings of a patchy, beige blemishing (*Okay, I got that from going to a lot of cheap hotels.*). The parts that once stood proudly naked in the light of day? The outlines are mostly still there, just harder to see.

To be fair, many of the physical changes were inevitable, so they can't be held to account. And, really, our once-golden child is still beautiful, our memory's image unassailable and secure — unless, of course, you're looking with a cold, hard eye: "Oh my God! Where did those endless cellulite suburbs come from?" No, what makes these changes sad is that we suddenly fear our Austin is not truly equipped to cope with the challenges they portend. Why not? Well, it could be that we've been soft parents, unwilling to let go, to demand something more. Better not go there. Easier to blame the child: "Why, Austin, are you so *under-motivated*? For crying out loud, SAN ANGELO has an art museum?" How lazy is Austin? You can't tell. At a distance, you suspect really lazy; up close, you just can't (*I have an idea: Instead of this stupid discussion, let's go out for breakfast tacos!*) find the occasion to confront it.

Of Note



Of course, when Austin was young it was precisely this laziness everyone admired. Back then, though, the term used was "grace." So maybe "lazy" is the wrong word. Maybe no one and nothing is to blame, and no excuses are necessary.* Maybe exhibiting effort is the very antithesis of Austin's identity. And Austinites have made some substantial efforts — thank you, Save Our Springs and Balcones Canyonlands! Thank you, Waller Creek Conservancy! I don't mean to dismiss the efforts of the many individual cells, and the occasional smart-growthing limb or organ, doing their part. But the collective being does not seem to be making many long-term commitments for getting, for example, denser (Light rail? Tried it, but I'm not going to need that for a LONG time ...), or older (What do you mean? It's bright enough at night now so anyone can get around ...), or more mature (Hey, look! I'm an F-I track!), or just deeper. I mean, do we really have to continue celebrating the gentrification of East Austin?

Let me put it to you this way. Imagine that all of Camp Mabry's desirable open land became available, right there in the middle of town, right now. Do you think it would become Austin's Central Park? Or do you think Austin would zone it single family and shopping mall? You and I both know the answer (*We could use the money to pay for all our buddies to come stay!*) We're not to the point where we're worrying about some dark act of self-hatred, like completely poisoning Barton Springs. But man, there are a lot of friends (of the creeks, of the parks, of the pools, of the schools, of the libraries, of affordable housing, etc., etc., etc.) having to stage a lot of interventions (and thank you, friends of ...).

Saddest of all is the constant need to be reassured of specialness, of coolness, of weirdness. Don't fear, Austin! If you're worried people no longer think you're weird, then you are no longer weird. You're just middle-aged. ■

*Here, though, is my excuse! Even though it's now larger than San Francisco, Austin isn't really a city. It's a *town*. Unlike actual marketplace cities, Austin's economy was artificially fueled by the State government and the University during its long age of charm. It never had a real labor hierarchy, an industrial base, or, in percentages, a class and race structure that resembled other cities' (still true today), and no boom and bust cycles, aside from real estate (often affected by the economic circumstances of those investing from real cities). Moreover, given its specific physical configuration, it was always impossible to infrastructure — as everyone who tries to drive across town east-west knows. So for all those years, Austin slumbered, Rip-van-Winkle-like, avoiding the eye of Sauron.

Why did its population explode over the last 20-plus years? Probably because of people and corporations (wanting more people) looking for cities to live in that didn't have the baggage of most cities. Which people and corporations? Those that depended on the digital uncoupling of where you work and where you live — a demographic that arose parallel to an increasing concentration of wealth. Without underlying change to the city, Austin's population has doubled in 20 years, precisely because its not-city charm has made it a place where many want to live and, given new technological possibilities, *can*. Austin has attracted free wealth and mobile industry, and it is not looking back, except, of course, to admire itself.

Here is the telling detail about Austin. Almost everyone who lives here will say Austin was great when they got here, but that it has gotten worse since. It doesn't matter if they've been here five or 15 or 50 years. Worse. That's not true of Dallas and Houston, both of which are strivers. *Texas Architect* asked me to write about whether I think Austin has gotten worse because of growth. Here's my answer: *Almost everyone's Austin has always gotten worse because of growth.* That's what makes it Austin.

RESOURCE DESIGN

LAND PLANNING • URBAN DESIGN LANDSCAPE ARCHITECTURE

Sustainable site solutions + award-winning design

ResourceDesignAustin.com





Texas Society of Architects

2015 Design Awards Call for Entries

The program recognizes projects by architects practicing in Texas to promote public interest in design excellence.

Entry Deadline 9 April 2015

www.texasarchitects.org/designawards



Your Master Source for Marvin Windows and Doors

For more information, please visit one of these BMC Window Centers.

Austin 11212 Metric Blvd., Suite 300 Austin 78758 512-977-7440

Corpus Christi 800-698-6618

Dallas/Coppell 425 Airline Drive, Suite 200 Coppell 75019 972-304-1200 800-888-3667

Fort Worth 4455 Camp Bowie Rd., #110 Fort Worth 76107 817-737-8877 800-955-9667

Fredericksburg/Kerrville 603 FM 2093, Suite 1103 Tivydale Business Park Fredericksburg 78624 830-990-5717

Houston 16002 Tomball Pkwy. Houston 77086 281-440-9090 800-934-3502

McAllen/Brownsville/Laredo 800-698-6618

San Antonio 814 Arion Pkwy., #109 San Antonio 78216 210-494-8889 800-698-6618

West Texas 800-955-9667

Shreveport 800-888-3667



Of Note





PAVILLION 1 EVAPORATIVE COOLING 2 SHADE PROTECTION 3 STACK VENTILATION 4 THERMAL MASS HEAT STORAGE 5 CROSS VENTILATION

B3 Plot Cultural Pavilion

The RTKL Dallas office has committed to performance-driven design and was honored by the 2014 Re-Thinking the Future Sustainability Awards late last year. The proposal for the B3 Plot Cultural Pavilion won the First Award in the Public Buildings Concept category. The design, which tackled a large multiuse project to be built in Dubai, proposed the removal of a planned tower, with distribution of the eliminated units across two other proposed structures, and the creation of a cultural pavilion in its place.

A giant shade structure, passive systems complement the building's form, which is inspired by traditional Bedouin tents, to minimize solar heat gain. Shallow pools of water at the base provide evaporative cooling, creating a micro-climate that couples with the stack ventilation and double-skin system, where the primary passive strategies are employed. The building combines cultural traditions with modern technologies to meet the needs of a growing neighborhood. ■



DOUBLE UP ON DURABILITY WITH NEW REYNOBOND® NC DOUBLE SHEET



Reynobond NC coil-coated panels offer a 30-year finish warranty

Now you can get all the benefits of Reynobond aluminum composite material (ACM) in a double sheet. Reynobond NC panels enable you to marry the flatness and stiffness of ACM with the dent resistance and recyclability of sheet metal. This combination, along with a 30-year finish warranty, is unmatched in the industry. Reynobond NC panels really step up to the plate. Learn more at **reynobond.com/NC**.







2015 Design Awards Call for Entries

This program recognizes outstanding architectural and urban design projects by architects practicing in Texas to promote public interest in design excellence.

Entry Deadline 9 April 2015



www.texasarchitects.org/designawards

Of Note

Anna Collette: Gathering Ground

Anna Collette's photographs of toppled trees capture the record-breaking 2013 flood of Austin's Onion Creek that ravaged the nearby neighborhoods. The stark, barren images of the dry creek bed are strong statements about the rapid destruction floods bring and their long-term effects even after the water has long disappeared. The City of Austin's Watershed Protection Department is now buying out all properties within the boundaries of the creek's floodplain. Most of the homes were built in the 1970s before the area was determined to be in the path of dangerous flooding. Earlier floods in 1998 and 2001 were the first to cause major damage to the area.

The images were on view at the Courtyard Gallery at The University of Texas at Austin earlier this winter.







Calendar



Ballroom Marfa: Sam Falls March 13 ballroommarfa.org

Ballroom Marfa presents an exhibition of new work by artist Sam Falls opening March 13. The exhibition confronts the legacy of Minimalism in Marfa, creating a critical dialogue around sculpture, preservation, landscape, and Marfa's singular art historical landscape.



Field Constructs Design Competition Entries Due April 1

www.fieldconstructs.org

Field Constructs invites emerging designers, architects, landscape architects, and artists to submit proposals for a juried competition, which will result in funded temporary installations to be sited at the Circle Acres Nature Preserve in Austin.

Texas Society of Architects 2015 Design Awards Entries Due April 9

www.texasarchitects.org

The Texas Society of Architects Design Awards program recognizes outstanding architectural and urban design projects by architects practicing in Texas to promote public interest in design excellence.

National Architecture Week 2015

April 12–18

www.aia.org

National Architecture Week showcases the innovative and talented architects who have made positive contributions to our communities and society in general. It is held annually around the birthday of our nation's first president-architect, Thomas Jefferson.

Recognition

2014 AIA San Antonio Design Awards

The 2014 AIA San Antonio Design Awards were selected from among 65 entries. In addition to built projects, the awards also honored unbuilt work and student projects. Jurors for the awards included David Baker, FAIA, of San Francisco-based David Baker Architects; Joan M. Soranno, FAIA, with HGA in Minneapolis; and Victor F. "Trey" Trahan, III, FAIA, of New Orleans-based Trahan Architects.











Honor Awards

- 1 Dixon Water Foundation Josey Pavilion, Decatur Lake|Flato Architects
- 2 The Gourd Overland Partners

Merit Awards

- 3 Phil Hardberger Urban Ecology Center Lake|Flato Architects
- 4 Condon Residence Poteet Architects
- 5 Alta House Tobin Smith Architect
- 6 Hughes Warehouse Adaptive Reuse Overland Partners



Chelsey Berg, Assoc. AIA Member Since 2013 Adam Gates, Assoc. AIA Member Since 2011 Bernard Jester, Assoc. AIA Member Since 2013 Beth Mosenthal, Assoc. AIA Member Since 2011 Brian Ballok, Assoc. AIA Member Since 2013

Free Membership and Convention Registration for New Grads^{*}

Design the career you want. Join us at the American Institute of Architects when you graduate and receive complimentary membership for up to 18 months, plus free Convention registration.

* Some restrictions apply. Go to www.aia.org/join_grad to learn more.



Get the details. www.aia.org/join_grad



2015 Honor Awards Call for Nominations

These awards recognize exceptional members, firms, individuals, and organizations for outstanding achievements in support of the profession of architecture, the built environment, and the quality of life in Texas.

Submission Deadline 15 June 2015

www.texasarchitects.org/honorawards











Unbuilt Awards

Honor Award

- 7 Fire Training Center at the First Responders Academy
 - Alamo Architects

Merit Award

8 San Pedro Creek Feasibility Study Muñoz & Company

Student Honor Award

9 Name 6 Prototype Motel Rodrigo Gorgazzi, Assoc. AIA

AIA Committee on the Environment Award (COTE)

10 Hughes Warehouse Adaptive Reuse Overland Partners

Mayor's Choice Award

11 Our Lady of the Lake University's Main Building Restoration Muñoz & Company

Twenty-Five-Year Award

12 Hilton Palacio del Rio Hotel Cerna & Garza Architects





Paperwork

Heron Creek Restroom

Mell Lawrence Architects

Located along the running trail of Lady Bird Lake in Austin, the new Heron Creek Restroom facility responds to the unique conditions of its environment. The buildings are a simple composition of raw steel and concrete that will patina over time. Subtle shifts in geometry differentiate the structures and give them a sense of personality. Large steel plates suspended on a light frame form the building shell. Grounded concrete walls enclose the buildings and are recessed to create porches beneath the steel. The open-air construction is indestructible and enduring but maintains a sense of playfulness. The textured board-form concrete accentuates the passage of shadows across its surface, and the steel frame inside draws the eye up toward openings in the roof that allow for a view of the tree canopy and sky. $\blacksquare \boxdot$





Above The Heron Creek Restroom facility will be complete this spring. Left The concrete and steel pavilions will require minimal maintenance.



Archinect.com/jobs

The most popular architecture job board in the USA

30% job ad discount for Texas-based employers using coupon code TX-ARCH





LOOK AGAIN.

ARTISAN MASONRY STONE VENEERS™ BY OLDCASTLE®

The premier full depth, structural veneer, that looks so natural you'll need to look twice.

artisanveneers.com



Jewell Concrete Products 400 Jewell Drive Waco, TX 76712 800-792-3216

@2013 Oldeastic, All Rights Reserved, ART13-000

Products

by Rita Catinella Orrell

There is more than one way to skin a building, and these new options — from engineered bark siding to a terra-cotta tile rainscreen — show the range of cladding solutions currently on the market for residential and commercial projects.





The Exploration Tower welcome center at Port Canaveral, designed by GWWO Architects in Baltimore, opened in November 2013 as an integral part of Florida's Space Coast and Canaveral Cove revitalization. The seven-story, sail-shaped structure showcases the first use of Valspar's Kameleon Color mica coating, applied to Firestone Metal Products UNA-CLAD metal wall panels by Linetec, one of the nation's largest finishers of architectural aluminum. Covered by a clear coat also applied by Linetec, the color-changing paint gives the building a shimmering, iridescent exterior.



Engineered Bark Siding SmartBark barkclad.com

BarkClad's SmartBark engineered bark siding offers the distinct look of natural bark cladding without the maintenance. Available in four varieties — Poplar, Sourwood, Walnut, and American Chestnut — SmartBark is made of a wood-free, poly-blend that is resistant to weather and rot and comes with a 30-year limited warranty. The siding has an R-value of 4.7 per inch and comes in a variety of shake sizes and colors. It can be used on exterior and interior surfaces as siding, or on porches, decks, or accents inside the home.



Acetylated Wood Accoya accoya.com The city of Kelowna, the largest Canadian city east of Vancouver, opened a new marina in the summer of 2013. Although the Canadian-based firm Kasian Architecture wanted a natural wood look for the marina building's facades, they knew even tropical hardwood and local softwoods would be susceptible to rot in the local climate. Accoya wood was specified for the siding, trim, and louvers on the retail/services structures and the visitor comfort station (shown). The modified wood is resistant to extreme weather conditions and carries a 50-year above-ground and 25-year belowgrade or submerged/ freshwater warranty.



Last year, Telling

Argeton Terracotta Tile Telling Architectural Systems tellingarchitectural.com

Architectural Systems announced the North American availability of in-house, custom glazing for its Argeton terra-cotta tile rainscreen cladding, which was developed in Germany more than 20 years ago. Many terra-cotta suppliers rely on third-party providers, particularly for specialty glazes, but Rhode Island-based Telling claims to produce custom colors and glazes in an array of options not available from competitors. The glazing process was first developed for the Randall Children's Hospital, in Portland, Ore., designed by ZGF. All parties liked it so much, Telling decided to commercialize it as a standard product.



UNA-CLAD Delta Concealed Fastener Panels Firestone Building Products Company firestonebpco.com

Firestone has expanded its UNA-CLAD Delta concealed fastener panels to include perforated profiles. The Delta Series, an established highperformance cladding line already available in 11 concealed fastener profiles, now offers seven different perforated patterns with varying hole sizes in both 20-gauge steel and .040-inch aluminum. Designed to be a decorative accent to a commercial or industrial building, the panels can be used on the interior or exterior of a facility. Steel options are recommended for interior use.

Intercept Modular Metal Panel System Centria centriaperformance.com

Centria's Intercept modular metal panel system — available in aluminum, zinc, and copper can be fabricated in various sizes and shapes as well as custom designs. The modular rainscreen metal panel system offers an economical solution for complex panel applications such as formed corners, wing walls, soffits, fasciae, and curved radial wall sections. Two Intercept panel systems are available: V-Trac panel is a closed true rainscreen that offers continuous venting at every horizontal panel reveal, while the Entrye is a closed joint back ventilated rainscreen design.



DESIGN THAT MOVES

- These doors open and close with just the push of a finger
- Pocket doors available in Aluminum and Aluminum Clad Wood in three or four panel configurations
- Bi-Fold available in Aluminum three, four, five or six panel configurations
- Seamlessly integrate with the other Milgard windows and patio doors

Contact: Curtis Davis, Milgard Texas Architectural Representative Phone: 214-300-5671 Email: curtisdavis@milgard.com Web: milgard.com/texasarchitect



Builder /// READERS CHOICE 2013 Builders' Choice "Favorite Product"







Clearly the best.



©2014 Milgard Manufacturing, In



Architecture of Space

by Brantley Hightower, AIA

The story goes that the first word spoken on the surface of another world was the name of a Texas city. After successfully landing on the Moon on July 20, 1969, Neil Armstrong used standard radio protocol to announce to whom he was speaking before communicating his intended message when he said, "Houston, Tranquility Base here. The Eagle has landed."

Unfortunately for Texas, in truth, it was the guy standing next to Armstrong who uttered the first, admittedly somewhat less poetic words a few seconds earlier. It was Buzz Aldrin's job to announce when a sensor light turned on to indicate that their lander had made contact with the surface of the moon. Thus, the first words spoken on the Moon were actually, "Contact light."

Even so, Texas has played an outsized role in the space program for nearly as long as the program has existed. On September 19, 1961

- a mere four months after Alan Shepard became the first American in space - NASA announced that 1,000 acres of flat, undeveloped pasture some 20 miles southeast of Houston would become the home of the new Manned Spacecraft Center, the epicenter of the vast technological effort to send astronauts to the Moon. If this seems like an odd choice, recalling the political realities of the time gives this scenario much more validity. When President John F. Kennedy gave his May 25, 1961 speech before Congress stating that the nation should "commit itself to achieving the goal, before this decade is out, of landing a man on the Moon," seated behind him were Vice President Lyndon Johnson and Speaker of the House Sam Rayburn - both powerful Texans with vast political influence. The fact that Texas Representative Albert Thomas chaired the House Appropriations Committee and Texas Representative Olin Teague headed the subcommittee on Manned Space Flight helped ensure that NASA's new facility would be located in the Lone Star State.

The Manned Spacecraft Center (now the Johnson Space Center) was originally located in an undeveloped corner of Harris County. The City of Clear Lake has grown around it.

Much has been said about the Herculean engineering effort that made the Moon landings possible, but relatively little has been said of the similarly ambitious architectural effort required to construct the facilities to support such a mission. In the months that followed Kennedy's announcement, NASA began interviewing architectural teams to design its new facility in Houston. Eventually, Pereira & Luckman of Los Angeles was chosen to lead the design effort. Known at the time for designing the suitably sci-fi Theme Building at Los Angeles International Airport, the firm was given less than two months to plan the entire facility. Working continually through the Thanksgiving, Christmas, and New Year's holidays, they presented master architectural and engineering plans to NASA on January 3, 1962. Construction began a mere three months later.

To meet an ambitious construction schedule, repetitive details and prefabricated concrete building panels were used throughout the campus. The resulting 49-building campus was not especially noteworthy from an aesthetic standpoint, but the rigor and efficiency of the facility do reflect the mindset of the U.S. space program in the 1960s.

By early 1964, the first NASA employees had already relocated their offices to the new facility, and by the end of the year, some 2,700 individuals were working on the campus in an all-out effort to reach the Moon by 1969 — an effort that ultimately proved to be successful.

The simple numbering system used to identify the buildings on campus belied the extraordinary facilities they contained. Building 5 housed the simulators that astronauts used to train for their missions. Building 32 housed the Space Environmental Simulation Laboratory, a large vacuum chamber 55 ft wide and 90 ft tall, used to test hardware in conditions similar to those found in space. Building 30 housed the Mission Operations Control Room, the "mission

2015 Studio Awards Call for Entries

These awards recognize unbuilt projects demonstrating innovation and excellence in design. Real or theoretical projects that go beyond the boundaries of architecture by addressing current critical issues are encouraged.

Entry Deadline 5 June 2015

www.texasarchitects.org/studioawards





Essay



Left SpaceX currently has launch facilities in California and Florida but is building a third facility in South Texas.

Right top and bottom

The Johnson Space Center contains several nondescript administrative buildings that make extensive use of quickly assembled precast concrete panels. A concrete brisesoleil shades the entry lobby of Building 30.



control" who listened in on Aldrin and Armstrong as they spoke their first words from the surface of the Moon.

Renamed the Johnson Space Center in 1973, the complex has continued to act as the center of America's manned spaceflight efforts, even though it is no longer the only space facility in Texas. Many private aerospace contractors have established themselves in the state to support NASA's activities. In addition, deregulation of spaceflight at the end of the 20th century has allowed for the development in the 21st century of commercial entities with the stated goal of making spaceflight more affordable. Several of these companies have chosen to locate in Texas to take advantage

of both the skills of its workforce and its vast swaths of undeveloped land.

Blue Origin, for example, which was established in 2000 by Amazon.com founder Jeff Bezos, operates a test facility in far West Texas near Van Horn. Space Exploration Technologies Corporation (SpaceX) likewise maintains an even more sizable development and test facility outside of McGregor, Texas near Waco. In addition to testing the rocket engines it manufactures, the McGregor site has recently been the location of a dramatic series of tests to see whether it is feasible for a spent fuel stage to land under its own power.

More significantly, in September of 2014, SpaceX began construction on a new commercial launch facility on Boca Chica Beach at the southern tip of the state near Brownsville. Texas lured SpaceX not through political influence but by \$15.3 million in publicly funded incentives and the passage of a law that allowed the adjacent public beach to be closed on launch dates.

Although the exact design of the facility has yet to be publicly released, it will no doubt be more engineering than architecture. Still, it will provide yet another instance of how space exploration has left its mark on the built landscape of Texas. The first launches are expected to begin in 2016.

Brantley Hightower, AIA, is principal of HiWorks in San Antonio.



killyphotography.com to learn more

EXHIBIT WITH US

SHOWCASE AT THE LARGEST ARCHITECTURAL PRODUCTS EXPO IN THE SOUTHWEST! 76th Annual Convention and Design Expo 5–6 November 2015 Kay Bailey Hutchison Convention Center Dallas

Reserve your space today at texasarchitects.org/exhibitors.

Tod Stehling, Expo & Development Director tod@texasarchitects.org

Texas Society of Architects


The proposal by the OMA-led team for the 2013 Connected City Challenge included indepth traffic studies and proposals for Dallas.

Traffic in Reverse Engineering

by Kevin W. Sloan

In 1919, a young Army lieutenant, Dwight David Eisenhower, commanded a "truck train" from Washington, D.C. to Oakland, Calif. known as the Transcontinental Motor Convoy. The expedition took two months, destroyed 88 bridges and nine of the convoy's own vehicles en route, and 21 soldiers were put in hospital. Today, anyone can drive the same 3,000 miles in three days, thanks to former President Eisenhower's 1956 implementation of the National System of Interstate Defense Highways.

Eisenhower originally intended to route the interstates around city centers. Elements that would have preserved the neighborhoods, financial districts, and the pre-motorcar scale of a city unfortunately were disregarded by opportunistic governors and mayors who successfully lobbied to redirect the high-speed motorways all the way downtown.

Instead of a real estate boom for America's downtowns, the impact was universally negative, even catastrophic in some instances. The colonial centers in Boston, Philadelphia, and New York were eviscerated by elevated highways, and the burgeoning downtowns of Texas courthouse cities such as Dallas, Fort Worth, Austin, Houston, and San Antonio were sliced, diced, and then drained economically by the unbridled suburban growth that followed the highways.

However, two decades of rediscovering urbanization in Texas have given rise to innovative proposals to alter the inner-city freeways in Dallas. A proposal by the Office for Metropolitan Architecture (OMA) for the 2013 Connected City Challenge is potentially a model for Dallas and other North American cities.

Mobility In Chain (MIC), a world-recognized Italian traffic-planning firm from Milan, was a key collaborator and part of the OMA-led team that included Mia Lehrer Associates of Los Angeles, Kevin Sloan Studio in Dallas, and RDWI Engineering of Canada. Although the Connected City Design Challenge focused on the urbanization of a despoiled 47-acre area between downtown and the future Trinity River Park, OMA began with a Wide Area Traffic Analysis that examined the entire DFW metro. Although intended to underpin architectural concepts for the immediate problem, the analysis produced significant facts with far-reaching potential.

Eighty percent of the traffic that currently flows through the Dallas inner ring of interstates bypasses downtown. For the remaining 20 percent of the traffic going to downtown, virtually every possible ramp connection from the mile-and-ahalf diameter loop to a city street is offered via broad, real-estate-consuming cloverleafs.

The vehicular flow on the inner-Dallas loop is further congested by an unintended regional pattern. Motorists needing to move across Dallas — east/west, or counter to the radial highways will frequently avoid the time-consuming choice for stop-and-go surface streets, and instead, take a

Essay

Top *Traffic* patterns situated within Dallas' existing Loop 12 and Interstate 635 corridors can be improved upon to provide more direct and faster access to distinct areas of the city and its suburbs.

Bottom The OMA proposal is based on an improved set of concentric highways that eliminate cloverleafs and redirect traffic away from the downtown streets.

slingshot-like route into and around downtown to the exit nearest their destination.

The OMA plan for Dallas is directed at these two characteristics. First, it strategically "prunes" a selection of inner-loop cloverleafs to recover urban land potential. Next, it remaps the "slingshot" maneuver in the opposite direction — away from downtown — toward a new and improved route that would be situated within the existing right-of-way of state highway Loop 12. Although novel for DFW, the same approach is already being implemented or else exists in other MIC projects for Rome, Moscow, Munich, and Washington, D.C. This "reverse engineering" offers compelling advantages.

As the Loop 12 system develops, the existing highways can be incrementally downsized by removing lanes, repurposing existing lanes for high-occupancy vehicles, and creating new light rail lines or environmental reconstructions. In the final iteration, entire highways could be removed and replaced with new parks and/or tree-lined surface avenues lined with walkable urban spaces. Also, compared with the conventional economic benefits predicted to follow from adding more lanes to existing highways - as currently demonstrated in Dallas by the so-called "Horseshoe" mega-project for I-35 and I-30 - the economic stimulus effect of the OMA plan is actually greater, given the construction of the new Loop 12 route as well as all the construction and real estate enhancement of transforming interstates into urbanism. Furthermore, travel time and distance diagrams demonstrate the concept is as efficient and convenient as the status quo.





Top Working with Mobility In Chain (MIC), the OMA team outlined the inefficiencies of current traffic patterns, noting primarily that the outer highway loops are underused.

Bottom The OMA proposal avoids using the central ring closest to downtown and creates a more efficient flow in the outer suburbs.

The concept could assist in another freewayrelated debate in Dallas, one that proposes to simply tear out the elevated segment of the inner loop known as Highway 345. This proposal, made by the impassioned group "A New Dallas," is driven by ideology versus empirical information. The OMA plan could satisfy all sides of this debate with a rationale that is lacking, to transform 345 productively.

The OMA scheme also sheds an alternative light on a ten-year debate about routing a new high-speed tollway through the Trinity River levees and future park plans. At the October 29, 2014 public presentation of the OMA plan, the first question from the audience commented that no mention was made of this tollway. Jason Long, an OMA partner and design leader for the Connected City team, along with Shohei Shigamatsu, head of OMA's New York office, coolly replied: "Well, the analysis is pretty clear. You [Dallas] don't really need it."

During a 2012 lecture at the University of Texas at Arlington, Columbia University Professor Kenneth Frampton characterized the predicament of cities like Dallas. "This era may not benefit from utopian mega-forms, urban experiments, or the 'make no small plans' thinking of the 19th century, but rather from strategies that can compensate and adjust the realities of the unprecedented/unplanned mega-city." The highway proposals for Dallas may have the potential to get traffic moving in the right direction.

Kevin W. Sloan is a landscape architect in Dallas.

Cutting Edge On Campus

Architects have shaped the University of Texas at Austin campus with Texas Quarries cut limestone for nearly a century. Our familiar ashlar coursing and fossils greet students at the inspiring Student Center. Likewise, smooth cream limestone a few blocks away frames the signature corner of a leading-edge science research building. A warm orange blend of Acme Brick

Student Activity Center University of Texas at Austin

architects Overland Partners Architects San Antonio WTW Architects, Pittsburgh associate architect

> general contractor SpawGlass, Austin

masonry contractor P and S Masonry, Hamilton TX

> material Texas Quarries Cordova Shell Limestone

contrasts richly with the limestone, continuing an honored campus design tradition. Our materials provide architects natural green building choices. These projects earned the first LEED Gold certifications at the university. Acme Brick sources local clays and fires brick in energy-efficient kilns. Texas Quarries cuts stone directly from the earth, crafts it with light energy use, and ships from central Texas. We continue to operate our own quarries. In fact, the highest-quality limestone in our 85-year history–the lush warmth of Cordova Cream, and the distinctive Cordova Shell–is now emerging from our Cedar Park facility. Our stone collection is growing, too. To learn more and stay on the cutting edge, call your Texas Quarries or Acme Brick representative.







Fexas

Duarries

512.258.1474

From the earth, for the earth.

LEED-accredited engineers and full-service support



Norman Hackerman Building University of Texas at Austin

architects CO Architects, Los Angeles executive/design architect Taniguchi Architects, Austin associate architect

general contractor The Beck Group, Austin

masonry contractor P and S Masonry, Hamilton TX

materials

Texas Quarries Cordova Cream Limestone Acme Brick Denton Mingle Modular Velour







Open House



Designing for Ageing

by Ingrid Spencer

Project Bouldin Creek Ranch, Austin
Clients Richard and Susanna Finnell
Architect Finn Design Build
Design Team Alex Finnell, Assoc. AIA; Dan Fields
Photographer Kimberly Davis

Most grandparents and parents look forward to a phone call and a visit from their grown grandkids and kids now and then, but when your son has architectural training, asking him to design a house for you seems like a reasonable request. Richard and Susanna Finnell had traveled the world and lived in some interesting places — including a seven-level grain elevator in Washington — but in 2011 they were ready to roost in a central, urban location that would address Susanna's mobility issues and provide private but connected space for Richard's mother, now 97, and her live-in caretaker. Their son, Alex Finnell, Assoc. AIA, had just started his firm Finn Design Build, and was eager to collaborate with his first clients. Modern, efficient, LEED Platinum certified, and full of natural light and access to the outdoors, the house shows how architecture can address fundamental problems of ageing with dignity and a high quality of life.

A recent report from the Joint Center for Housing Studies at Harvard University on housing America's older adult population calls affordable,

Open House



accessible, and well-located housing central to the well-being of a growing ageing population. The report warns that, while most adults say they would strongly prefer to stay in their homes as they age, many houses and communities in the U.S. are not set up to meet the needs of the elderly and less mobile. The Finnells' house, just half a mile south of downtown Austin, addresses the Harvard report's concerns, adding an elegant, universally designed home to a vibrant urban neighborhood.

The empty lot was large and flat enough to allow a 3,600-sf house on one level, a 2,900-sf portion of which is conditioned. From the street, board-formed concrete forms a head-height wall that shelters a courtyard and

"The house has everything it needs in a way that comes together beautifully."

creates an edge leading visitors around to the front door. A porthole opening and a fountain that slides out of the courtyard into the xeriscaped front yard soften the courtyard's appearance from the street, while maintaining safe and functional privacy within. "Less like a prison and more like a secret garden," says Alex. It's this balance of severity and lightness — natural and constructed — that contributes to the project's success. The courtyard leads to a semi-detached carport and garage, clad in painted steel with concealed fasteners. This material appears on the east and west facades (50 percent of the house) to buffer against heat build-up from direct sun exposure. "A hard candy metal sleeve," Alex calls it, into which softer glass, wood, and stucco cladding are carved.

The concrete extends into the double-height foyer and to the open kitchen. Here, the house begins to feel like an airy refuge, with ceiling heights in the kitchen and entry at just under 15 feet. The roof pitches across the width of the entire building, so ceiling heights vary in other parts of the house. Bathrooms and corridors are more intimately scaled, with ceiling heights dropping to eight feet.

The kitchen and living room, with white oak cabinetry dividing living from dining areas, are the central meeting point between two private wings, one for Richard and Susanna and the other for Richard's mother and her caretaker. One wing is tailored to the Finnells' needs, with an office area open to views of the 5,000-sf backyard and pool. Concrete floors will function well whenever a wheelchair is required, but Susanna admits if she could do it again she'd choose radiant heat in the floors, which are cold in winter. "They do keep the house cool in the summer, though," she adds. A geothermal HVAC system with metal ducts was chosen to reduce friction in the air supply system. Also attuned to present and future mobility issues is the bathroom, featuring a masterfully crafted walk-in shower with operable skylight, a sand-blasted handrail that doubles as a towel rack, and a carved wooden platform more sculpture than shower seat.



Opening spread The LEED Platinum certified house is both efficient and low maintenance.

Opposite page Durable materials on the interior include exposed concrete in the entry and kitchen and white oak cabinetry.

This page clockwise

from top Solar panels on the roof, a 2,500-gallon rainwater collection system, and native plants all contribute to the home's efficiency. Windows are placed strategically for privacy, light, and views, with operable windows in every room.

Following spread *The bathrooms maximize accessibility without sacrificing design details.*







E

- SITE/FLOOR PLAN 1 ENTRY 2 KITCHEN 3 DINING 4 LIVING 5 GUEST ROOM 6 MOTHER-IN-LAW'S ROOM 7 CARETAKER'S ROOM 8 GARAGE 9 STORAGE 10 LAUNDRY 11 MECHANICAL 12 MASTER BEDROOM 13 CLOSET 14 SOUTHWEST COURTYARD 15 POOL 16 GARDEN 17 RAINWATER CISTERN 18 NORTHEAST COURTYARD 19 FOUNTAIN



With backyard and courtyard, the house has some 6,000 sf of outdoor space, all skillfully xeriscaped by Austin landscape design company D-Crain. A 2,500-gallon rainwater collection system irrigates. All the bedrooms have access to the outdoors via sliding glass doors, and the nonagenarian's wing has access to the courtyard through the caregiver's room. With its separate entrance and mini-kitchen, that suite is set up as an independent apartment.

Richard and Susanna speak easily of the design's success, revealing that they each gave Alex three adjectives to strive for — Susanna's were peaceful, airy, and elegant, while Richard's were serene, simple, and stunning. Speaking frankly about the trade-offs involved with ageing in place vs. institutional living, the couple considered the expense of caregivers and the constant fear of falls. Building a house from the ground up is expensive too, even if your son is the architect. But they have zero regrets. "The house has everything it needs in a way that comes together beautifully," says Susanna.

With several similar projects on the boards, Alex is acquiring a reputation as an ageing-in-place expert. "I see a trend with older people finding themselves wanting to leave the suburbs to live centrally in a house that will accommodate their mobility issues now or in the future." Another trend Alex says he sees is that of retirement-aged folks wanting small add-ons or separate



cottages designed on their grown children's property. "There is a desire to be closer to family in a walkable neighborhood."

Richard and Susanna don't mind being part of this trend. "I would say that my mother thinks the last few years in this house have been the best of

Richard and Susanna speak easily of the design's success, revealing that they each gave Alex three adjectives to strive for — Susanna's were peaceful, airy, and elegant, while Richard's were serene, simple, and stunning.

her latter life," says Richard. "She loves the access to her grandchildren; the house accommodates her limitations well; and the situation allows us to give her the care she needs without having her go to an institution. I'm happy we had this chance to give back to her."

Ingrid Spencer is an Austin-based writer.





ARTISAN MASONRY STONE VENEERS™ BY OLDCASTLE®

The premier full depth, structural veneer, that looks so natural you'll need to look twice. Experience modern innovation coupled with masonry's timeless beauty and durability. Full depth veneers deliver value to any project by combining energy efficiency and design freedom.

For more information, visit artisanveneers.com



Jewell Concrete Products 400 Jewell Drive Waco, TX 76712 800-792-3216

Resiliency

Last year, Dallas accepted the 2014 100 Resilient City Challenge agreeing to tackle ageing infrastructure, chronic energy shortages, flooding, infrastructure failure, and terrorism. As a variety of campaigns are encouraging a more holistic approach to architecture that embraces technology under the umbrella of resiliency, this issue looks at how efforts in theory and practice are taking different approaches to the topic.



48

New Scenes in America Deserta

Land Arts of the American Southwest Chris Taylor, Texas Tech University College of Architecture Jack Murphy, Assoc. AIA

56

A Living Building in North Texas Lake|Flato Architects Margaret Sledge, AIA

62

Raw and Synthetic Design Research Lab, Texas A&M University College of Architecture Bruno Juricic, Gabriel Esquivel, and Stephen Caffey

68

Curtain Wall Call

BG Group Place Pickard Chilton 609 Main at Texas Pickard Chilton Capitol Tower Gensler Jen Wong



New Scenes in America Deserta

by Jack Murphy, Assoc. AIA

The images shown here attempt to capture Land Arts of the American West at Texas Tech University, an interdisciplinary course within the College of Architecture led by architect Chris Taylor. The program is a self-described "semester abroad in our backyard," where students directly engage with land art, ambiguously corralled by Taylor as "anything humans do in the landscape." The group visits a range of sites, from essential art destinations — Spiral Jetty, Sun Tunnels, The Lightning Field, Double Negative, Roden Crater, the Chinati Foundation — to active indigenous settlements, archaeological sites, military bases, research outposts, mines, and natural formations. It is a wide-eyed, sunburnt trip that explores how we alter the land around us.

The Land Arts program began with Bill Gilbert, an artist and professor at the University of New Mexico, Albuquerque, who led its inaugural expedition in 2000. Taylor, after finishing his Master of Architecture at Harvard, met Gilbert while living in New Mexico in the early 1990s. Beginning in



2002, Taylor established a joint Land Arts program with Gilbert while teaching at The University of Texas at Austin. Since 2008, Taylor has led his outfit independently at Texas Tech University (TTU). Gilbert's program remains ongoing, as well; a reference for the collaboration's early years is their eponymous book, published in 2009 by The University of Texas Press.

Taylor's program logs about 6,000 miles on two month-long trips. Students, between five and ten, are packed tightly into two vans — one for bodies, one for gear. The first tour moves quickly, looping up and around Utah's Great Salt Lake before descending through Nevada and across northern Arizona and New Mexico back to Lubbock. The second, slower jaunt stays farther south, as fall temperatures drop, and typically runs through southern New Mexico and Arizona and returns via Marfa.

Land Arts voyagers camp for the trip's duration; they cook and clean together, sharpening the skills needed to survive on the road and in the backcountry. The group also works through a course reader to add context to the outings. The surroundings and the readings together impact the students as they make responsive, site-based works. Because of the program's open framework, the scale and scope of projects are left to each individual. Project media vary, from a series of out-of-place basketball hoops, to a deployable tetrahedronal tepee, to experiments on the Bonneville Salt Flats. Back at TTU, the "third journey" begins as students prepare finished pieces — sculptures, objects, mixed media works, photographs, videos, drawings, texts — for final reviews in December. A more formal annual exhibition is realized in the following April.

Along the way, field guests join the group: Matthew Coolidge of the Center for Land Use Interpretation, Lucy Lippard, Joan Jonas, Ann Reynolds, William L. Fox, Nichole Wiedemann, Barry Lopez, among others. Some experts help decode the landscape at hand, while others share their own work — sometimes projected onto the side of the van in a nocturnal lecture — and dialogue directly with students. With the program's active schedule, Taylor summarizes his role as a choreographer, introducing





ideas and staging frameworks but leaving interpretation to the individual primacy of experience and reflection.

Taylor is serious about the transdisciplinary nature of his endeavor. While the course is formatted to fit within the graduate architecture studio sequence at TTU, participants regularly come from other disciplines — some are artists, art historians, designers, and poets — or are temporary students from other institutions. Some are between undergraduate and graduate degrees, and use the course to focus their vision for future achievements. The communal format injects a diversity of voices into the adventure, and aids in understanding the layered ecologies witnessed.

The architectural implications of the program are essential to the course's impact. Land Arts offers a meta-architectural experience, an opportunity to zoom out and see the context within which architecture exists. Taylor comments that this type of landscape understanding is critical for those shaping the built environment. He encourages architects to extend "lines of force" into and out of the discipline, in an effort to clarify, respectively, how societal priorities affect the profession and how architects can, in turn, participate in culture. To this end, Land Arts fosters an appreciation for the holistic interconnection between the knotted worlds of nature and culture, with the goal of cultivating practitioners who will operate in that hybrid world with sensitivity to its realities. It provides a framework for understanding the existential conditions that make architecture possible, and at that fundamental level the program's benefits are most strongly evident.

This influence shines brightly in the attitudes of Land Arts alumni, who emerge from the experience with heightened self-confidence and a unique body of work. Alumni cite the importance of on-site observation and note that their critical thinking skills were significantly sharper after the program. Adrian Larriva, who participated in 2009 and served as a program assistant in 2011, reflects that the course made him a "multivalent individual," in addition to a better designer. Bradley Wilson (2010) still carries with him the out-of-the-box modes of "education, investigation, and curiosity" that Land Arts instills. Celeste Martinez (2011), now completing her Master of Architecture degree at the Rhode Island School of Design, says Michael Heizer's "Double Negative" made her question how her own work will impact a site: "Will it/should it stand the test of time?" she asks.

For these designers, Chris Taylor is most interested not in the work they made during the semester, but in the work they will realize ten years from now, once the experience has been fully absorbed. This cyclic process of observation, synthesis, and creation summarizes the slow work of making culture. And, now, continued insight into our environment — natural and built, together — grows increasingly important. The Land Arts of the American West program aids in this ongoing search. Taylor wisely notes, "The more people we can have looking at the landscape with a complex understanding and dealing with it in deep ways, the better."

This year's Land Arts of the American West exhibition is open April 3 through May 1, 2015, at the Louis Hopkins Underwood Center for the Arts, in Lubbock. Receptions will be held on the start and end dates as part of the First Friday Art Trail.

The Land Arts program figures prominently in a new feature documentary by filmmaker Sam Wainwright Douglas, who previously directed "Citizen Architect: Samuel Mockbee and the Spirit of the Rural Studio." The film is scheduled to be released in 2016.

Jack Murphy, Assoc. AIA, is a designer at Baldridge Architects in Austin.









1 Jose Villanueva working in the Great Salt Lake Desert, Wendover, Utah; September 18, 2009. 2 "Tetrahedron Teepee" by Bradley Wilson, Center for Land Use Interpretation, Wendover, Utah; September 14, 2010. **3** Stephen Wollkind and Adrian Larriva at the Very Large Array, Plains of San Agustin, N.M.; September 29, 2009. 4 Tour of Judd Foundation with Upe Flueckiger and Clifton Ellis, Marfa, Texas; October 18, 2009. 5 Tent assembly, Twin Buttes, N.M.; August 26, 2011. 6 Eric Simpson overlook-

ing Pueblo Bonito, Chaco Canyon, N.M.; September 1, 2014.









7 Sun Tunnels by Nancy Holt, Box Elder County, Utah; September 10, 2014. 8 "Spiral Jetty" by Robert Smithson, Rozel Point, Utah; September 9, 2014. **9** Bonneville Salt Flats, Wendover, Utah; September 13, 2014. **10** "Salt Flat Broadcast" by Eric Simpson, Bonneville Salt Flats, Utah; September 13, 2014. **11** David Gregor of PORKNew Orleans on Mormon Mesa, Clark County, Nev.; September 19, 2014. **12** Michael Norris' field note book, Cabinetlandia, N.M.; October 4, 2014.

















A Living Building in North Texas

by Margaret Sledge, AIA

Project Dixon Water Foundation Josey Pavilion, Decatur
Client Dixon Water Foundation
Architect Lake|Flato Architects
Design Team Robert Harris, FAIA; Tenna Florian, AIA; Cotton Estes; Corey Squire; Jacqueline Fisher; Hellen Awino
Photographer Casey Dunn Photography

Fifteen miles outside Decatur is an unassuming, low-slung pavilion with sloped gable roofs. With its simple material palette and geometries, the building recedes into the flat terrain and swaying grasses, subtly but deliberately connecting visitors with the landscape. Windows facilitate the connection: A meeting room's smaller apertures are cut low to accommodate seated viewers, while kitchen windows invite visitors to stand at the counter. A generous gathering space opens to a courtyard with a large live oak tree on the east; on the west, a porch takes advantage of an expansive view of the prairie.

The Betty and Clint Josey Pavilion is the newest education center of the Dixon Water Foundation, which supports, promotes, and educates the

On our ranches, we use cattle to restore the land and create healthier watersheds. A Living Building brings those goals to life in another way.

public about water conservation in Texas through ecologically sound land management. On its ranches, the Foundation's grazing techniques create resilient landscapes by encouraging vigorous plant growth and enhancing soil quality, allowing rainwater to replenish aquifers and rivers. In contrast to modern ranching techniques that tend to diminish biodiversity and degrade soil quality, these methods of land management restore health to local ecosystems.

The Josey Pavilion was designed to achieve Living Building Challenge certification, developed by the International Living Future Institute (ILFI)



to promote environmentally responsible building design. Going beyond other building certification systems, the LBC requires the built environment not only to do no harm to its natural environment, but to improve its health, through seven performance categories, or "Petals." The certification was a natural fit for the Dixon Water Foundation's new pavilion. Robert Potts, president and CEO of the foundation, notes, "On our ranches, we use cattle to restore the land and create healthier watersheds. A Living Building brings those goals to life in another way."

LBC certification embodies the foundation's mission and helps it reach a wider audience; the Josey Pavilion is expected to be the first certified Living Building in Texas. Through attention to the siting of the structure, its energy and water use, material selection, indoor environmental quality, and other metrics, an LBC building must demonstrate throughout a oneyear period that it meets performance criteria. October 2015 marks the end of the Josey Pavilion's performance year.

Project architect Tenna Florian, AIA, identifies the pavilion's siting as an important determinant of its environmental performance and visitor experience. The Foundation had a conservation easement of 1.8 acres on the ranch, a fairly limited buildable area containing two significant live oak trees. The design team chose to place the building around one of the trees, forming a protected courtyard. The program elements sit under two equal roof volumes that pull apart to accommodate a large, shared gutter. The kitchen, restrooms, and "herbarium," which houses resource materials and functions as a smaller meeting room, are arranged along the northern edge of the courtyard. A flexible, open gathering space defines the southern structure. The configuration takes advantage of summer breezes from the southeast to cool the courtyard, which is protected from northwest winter winds by solid building elements and slatted doors. Low cupolas contribute daylight to interior spaces and enhance the effects of natural ventilation by increasing airflow. The building relies purely on these passive strategies for both heating and cooling.

The walls supporting the roof over the gathering space open completely to the outdoors in milder weather: On the north and south facades, wood slat doors open to the sides, while glass doors, protected by large overhangs on the east and west facades, pivot open, connecting the interior to the live oak courtyard and the prairie. Ceiling fans boost the cooling effects of natural breezes. In colder months, the slat doors close against winds; their openness factor is between 30 and 40 percent, emulating the wind-blocking effect of a tree canopy.

The same ethic that drives the overall design, with its strong connection to ground plane and grasslands, led the architects, just like early ranchers, to source materials locally and treat waste as a resource. A low-energy-use profile, smart siting, and no air conditioning, combined with a Solar PV array, mean the building is predicted to use less energy than it consumes



Opening spread The Josey Pavilion aspires to be the first Living Building in Texas.

Opposite page A generous gathering area looks east onto a live oak tree and protected courtyard. **Right** The low-slung gable roofs emphasize a strong connection to ground plane and prairie.



SITE/FLOOR PLAN 1 ENTRY WALK 2 HERBARIUM 3 STORAGE 4 KITCHEN 5 PAVILION 6 WATER CISTERN



Top *The simple material palette complements the landscape views.*

Right *Rainwater collection is displayed prominently at the entry to the Pavilion.*

Opposite page top and bottom *Every detail is carefully considered for resiliency: Materials are left untreated to weather naturally over time, and the concrete stem wall holds wood members off the ground, protecting them from rot.*







"There is a difference between appreciating nature and respecting nature. The Living Building Challenge and the Josey Pavilion do both."

on an annual basis. Rainwater is harvested from all roofs and collected in a 13,000-gallon steel tank, or displayed prominently at the entrance to the pavilion in a concrete basin. This rainwater provides all non-potable uses on the site; an existing well drawing from the aquifer directly below the site provides all potable water. Wastewater is funneled to an on-site wastewater treatment system, or constructed wetland, which cleans the water before returning it to the landscape to filter through the ground to water the prairie and replenish the aquifer. The system eliminates the typical groundwater pollution problems associated with septic systems found in this soil type.

Reclaimed sinker longleaf pine siding, as well as framing members and steel plate connectors, are left untreated and allowed to rust and age over time, protected by generous overhangs. This decision was as much about minimizing short-term maintenance as it was about satisfying requirements of the LBC, which prohibits a list of harmful toxins including those found in anti-corrosion coatings and concrete additives.

For Florian, the building would hardly be different had it not been designed to meet LBC requirements. Its siting, geometries, and material palette would have been the same, and responsible water use and treatment would have been a priority. She emphasizes that the biggest hurdle in the design of this project was the process of creating highly proscriptive architectural specifications to avoid chemicals prohibited by the LBC. (The Declare List, administered by the International Living Future Institute, offers tremendous help to design teams selecting compliant building materials.)

The LBC aims to "recognize the need for beauty as a precursor to caring enough to preserve, conserve, and serve the greater good." Beauty, difficult to measure, is the aspect of the built environment we find the most rewarding, and the one that makes us want to spend time in a place over and over again. The fact that one of the foundation staff has moved her office into the herbarium at the pavilion, foregoing air conditioning in the process, delights Florian. Corey Squire, who assisted with much of the documentation for the LBC, notes, "There is a difference between appreciating nature and respecting nature. The Living Building Challenge and the Josey Pavilion do both."

Margaret Sledge, AIA, is an architect at Lake|Flato Architects in San Antonio. (She did not work on this project.)

Raw and Synthetic

by Bruno Juricic, Gabriel Esquivel, and Stephen Caffey







The concept of the unnatural, post-traumatic dimensions of contemporary ecology in architecture can be framed only as an opening, a bridge between the human world of categories and the independent real world. Ultimately, this opening generates different positions and choices about what architecture really is, what its objects are, and what its manners of cognition are.

One of the main objectives of the Design Research Lab at the Texas A&M University College of Architecture is to show that, beyond a binary realism-idealism "switch," some epistemological mixtures are necessary to obtain a full understanding of contemporary design speculation in architecture. The question is whether ecology and architecture can act without subjecting their specificities to inimical means and ends. In this respect, architecture has been too interested in a paradigm of flows and circulation and has paid too little attention to the status of the object. Thus, the Lab explores the idea that design is productively considered from the point of view of contemporary speculative realism as well as object-oriented philosophy.

The 1960s and '70s define a period when, through the ethos of installation art, architecture embraced a notion of environment as ecosystem, and consequently sought to establish connections that built on this analogy. The Lab explores this legacy in recent architectural speculation that aspires to treat environment as "eco-logics," in a new way: Instead of progressing incrementally and predictably from previously held tenets of architecture, eco-logics draws on a universal account of matter — matter as information, an account enabled by computation. Thus, geological, climatic, biotic, technological, aesthetic, and even psychic factors are mobilized as contributors to a "proto/e/co/logical" posture toward the environment.

RAW AND SYNTHETIC E/CO/LOGICS

In 2002, Nobel-Prize-winning chemist Paul Crutzen published an article in the journal Nature arguing that we had entered a new phase of natural history, a new geologic epoch called the "Anthropocene," or "the recent age of man." According to Crutzen and ecologist Eugene Stoermer, the Anthropocene is defined as a period when human alterations of the environment have begun to surpass natural disasters such as earthquakes and volcanoes. It means that the human mark will endure in the geologic record long after our cities have crumbled; in other words, humankind is becoming a geological force. Pursuing this path of understanding — the man-made world as a geological phenomenon — the Lab explores ecology as a denaturalized material ecology rather than as an authentic balance of nature.

The Lab makes two fundamental assumptions: First, it assumes that contemporary thinking no longer pits natural against artificial forces — no longer divides the world into the two conditions explained in Claude



Opening spread and

this page Lyly Huyen, Adrian Martinez, and Stefani Johnson use generated patterns to exacerbate the object as a way of testing limitations of the digital medium. The group argues that a projection of the pattern onto a surface distorts depth perception and material understanding, while surface articulation distorts the graphic.





Steven Hewett, Belinda Wood, and Ricardo Gonzalez investigate the character of line work in their project Field of Objects. Lévi-Strauss' book "The Raw and the Cooked"; second, as argued by Bernard Rudofsky's "Architecture without Architects" (published in 1964 and known as the manifesto for an architecture outside the hegemony of Western thought), the Lab acknowledges the exoticization of the primitive. The homeopathic and uncritical definition of humanness is already boiled off, or "cooked," by the traffic of global capital.

Thus, rather than acting from a position of idealization with regard to nature, the Lab conceives a certain resilience between the agency of form and the purpose of architecture, within a condition that is already denaturalized. To restate, the Lab studies design issues in the wake of the contemporary trend in philosophy known as speculative realism.

The connection between architecture — a practical and literally material discipline — and philosophy is perhaps not obvious at first glance. However, if we observe that architecture deals with building the world in which man is (or dwells), while philosophy deals with the being of man in this world, then their connection can be recognized as profound.

SPECULATIVE REALISM

Speculative realism is in no way a homogeneous philosophical orientation, but is primarily an umbrella notion that gathers a group of philosophers whose only strict shared position is a reaction against a "correlationist consensus" and the anthropocentrism of contemporary continental philosophy and theory; as well, they desire to affirm the autonomy of reality.

In contrast to such relative notions of subject as that involved in the Doppler shift, speculative realism attempts to develop a precise "subject" mode that is appropriate for science, a mode of "being" that avoids the oversimplified agency of the phenomenological subject, to embrace the critique of the metaphysics of presence proposed by Peter Eisenman, FAIA. Basically, Eisenman's critique is nothing more than a meditation on the possibility of the autonomy of form. In our attempt to outline an ontological system that is of interest to the discipline, we use Eisenman's ideas to begin developing a formal logic (based on a linguistic model) that is capable, through its material and discursive agency, of displacing the centeredness of the human subject within architecture.

In other words, Eisenman reformulates architecture from a kind of epistemology of what the bare necessity of architecture is, what he calls "autonomy." In this regard, Eisenman is still embedded in the Colin Rowe-Rudolf Wittkower formalist project. However, the notion of autonomy calls for what he refers to as *persistencies* in architecture, which we will call resiliency. What Eisenman meant to say is that architecture somehow, by its origin, re-inscribes the centeredness of "being." (Part of architecture's problem is that it cannot help but re-center the subject.) So, if there is going to be an architecture that is truly post-humanist, it needs to question its axiomatic treatment of subjectivity and should do so by putting the metaphysics of presence in crisis.

THE LAB

The Lab attempts to make resiliency a philosophical attitude and performs multiple functions of agency. We announce perceptual and systemic instability, defy cognition, and declare autonomy. Though produced by humans, these objects resist the anthropocentric mandate that the laws of nature must conform to the limitations of human cognition and human perception. Bound by forces unknown and unknowable (though partially accessible through the algorithmic apparatus), they break the rules of both grounding and un-grounding through a mutually constitutive and mutually catalytic pairing of the raw and the synthetic.

As ontic specimens, some of the objects explore, imply, and/or defy certain conditions and characteristics, like "torsional porosities"; "nemat-spaces" (Ben Woodard); posture (via Gilles Deleuze); the raw and the synthetic (via Lévi-Strauss); the anonymities of the scientific image; reticulations; and geometric (in)fidelities high and low. In their unanimous dissolution of the hegemony of the anthropocentric, these objects reify the questioning of the subject such that viewer-objects undergo (rather than undertake) aesthetic detachments, drawn to moments of indeterminacy in surfaces and voids. In those objects in which the voids, the perforations, and the porosities serve as determinants, primary conditions are preserved, as the tunnels, canals, and nemat-spaces subvert rather than facilitate interiority, protecting the object from contamination (Quentin Meillassoux).

Simultaneously revealing and obscuring the unforeseen unseen, these objects read as scriptural accounts of architectural and algorithmic resiliency — truth as an unintelligible and incomprehensible collection of surface ambiguities with no resting place or un-grounding. What emerges in these objects is ultimately (and perhaps unintentionally on the part of the Lab participants) a renunciation of the hierarchies and polarities that constitute the fallacies of the Anthropocene (Negarestani, Parsani).

While a culture of resistance reaches its highest density in the struggle for a real sense of architecture, we must not think, as is often asserted, that the resistance of these positions, discourses, or groups is only rejection and opposition to what comes from outside: social, political, and technological regimes. Resistance comes about because the subordinate group believes that what comes out of the cultural context under the guise of obviously fictitious constructs must not be accepted, at any price. In many cases, however, the resistance is combined with the complicity of the other — groups are appropriated and assimilated without sacrificing the specifics of their culture. Ours is the claim for a move to a speculative realist position and a motion from the autonomous to the resilient.

Bruno Juricic, Gabriel Esquivel, and Stephen Caffey all teach the Design Research Lab at Texas A&M.



Curtain Wall Call

by Jen Wong

Project BG Group Place, Houston
Client Hines
Architect Pickard Chilton (Design Architect) and Kendall/Heaton Associates (Architect of Record)
Design Team Pickard Chilton: Jon Pickard, FAIA; William D, Chilton, FAIA; Brett Spearman, AIA; Yen-Ming Lee; Justin Cochran; Jonathan Aprati; Russell Wilson, AIA; Kendall/Heaton Associates: Laurence C. Burns, Jr., AIA; Thomas Milholland, AIA; Luis Amador; Candy Feuer
Photographers Peter Aaron/OTTO and Joe Aker
Project 609 Main at Texas, Houston

Client Hines Architect Pickard Chilton Design Team Jon Pickard, FAIA; William D. Chilton FAIA; Mohamad Hafez; Russell S. Wilson, AIA; Andrew J. Swartzell; Karl B. Hennig; Kathleen L. Maciejko; Taylor Montgomery Photographer Joe Aker; Renderer Steelblue

Project Capitol Tower, Houston Client Skanska USA Commercial Development Architect Gensler

Design Team James Furr, FAIA; Craig Taylor, AIA; David Epstein, AIA; Kristopher Stuart, AIA; Rives Taylor, FAIA; Hal Sharp, AIA; Stephanie Burritt; David Alderete; Andres Angel, AIA; Philip Baraldi; Luis Santi-Merayo; Kelly Nicholas; Luis Santi; Suvarna Gupta; Joy Hughes; Andrew Loreman; Jennifer Marshall; Greg Quintero, AIA

C an a 500-ft-tall glass box in Houston possibly be a good idea? The recent expansion of high-rise office buildings in the Central Business District says yes. Spanning a three-block radius in the heart of downtown, three towers — BG Group Place and 609 Main at Texas, both designed by Pickard Chilton, and Capitol Tower by Gensler — are leading a new era of construction in the Bayou City. The Class A office buildings, all of which will be LEED-CS certified, are among the first to incorporate recent innovations in curtain wall technology, leading Houston's skyline into the 21st century at long last.

Thanks to a boom in the Texas economy, tower cranes have once again overtaken the city. According to Transwestern's Trendlines report, in the third quarter of 2014 there were 17.1 million sf of office space under construction in Houston, topping 13 million sf in the San Francisco Bay area, and 9 million sf in New York City. This period of growth comes after a 15-year dearth in downtown development following the recession of the late 1980s' energy bust. Currently, 23 of Houston's 25 tallest buildings were built in the 1970s or 1980s, with the remaining two built after 2000 (including BG Group Place, which holds the 15th spot).

Rather than aim for height records, BG Group Place, 609 Main, and Capitol Tower are making a statement with their all-in embrace of the

Previous spread

Continuous horizontal sunshades create a homogenous texture along the curving facades of BG Group Place. The pearlescent white coating of the aluminum fins reflects daylight and brightens the building's appearance. **This page** A recessed sky garden on the 39th floor is carved from the singular volume of the tower. **Opposite page** *The acute* pointed volumes of the tower corners were inspired by nearby Pennzoil Place and create a unique experience for the corner offices.




all-glass curtain wall. The glimmering new facades, composed of increasingly complex curves and angles, stand in contrast to the punched window elevations of their predecessors.

"The curtain wall is one of the most significant design elements of a building," said Kristopher Stuart, AIA, of Gensler. "It is the outward expression of the building's design along with its architectural geometry." Since its advent in the late 19th century, the curtain wall has juggled a desire for transparency and views with the conflicting realities of thermal performance and comfort. The glass tower has long been the architect's dream, but a successful building envelope must address a multitude of aesthetic and performative issues: economy of material resources, control of solar heat gain and heat loss, optimization of daylight, minimization of glare, and inspired composition.

Recently, developments in glazing technology have allowed for maximization of glass in high-performance curtain wall systems. Commonly utilized technologies include multi-pane insulating glass units (IGUs), secondary treatments such as reflective- or low-emissivity (low-e) coatings and application of ceramic fritting, the use of non-glare films, and double-wall construction. While thermal performance and cost of glass may never achieve the level of opaque cladding, the gap is narrowing. It is now possible to design an all-glass curtain wall with previously unheard-of U-values of 0.30 or less, a number that continues to go down.

In addition to improvements in building envelope performance, there have been developments in form-making and fabrication strategies as

well. According to Jon Pickard, FAIA, of Pickard Chilton, "The ability of curtain wall manufacturers to more thoroughly consider the design threedimensionally using the latest software has allowed us to create buildings which are not simply four-sided boxes." He added, "The continued development of unitized curtain wall systems has allowed for a higher degree of precision for both the assembly and installation of the curtain wall."

Completed in 2011, BG Group Place was the first high-rise in Texas to earn a LEED-CS Platinum rating. The 46-floor building, located at 811 Main Street, is characterized by a textured, curving tower with a recessed sky garden carved from the upper facade. To protect the building from Houston's harsh summer sun and intense climate, Pickard Chilton applied two solar shading strategies. Horizontal sunshades of pearlescent white aluminum and ceramic fritted glass protect the gently curving northeast and southwest facades. Equally spaced at two per floor, the sunshades are installed at ceiling and desk height at a slight angle to direct away water and maximize views out. Vertical glass fins spaced 5 ft apart protect the northwestern facade from the low setting sun and extend the entire 630-ft height of the building along Main Street. The sunshades serve an aesthetic purpose as well. "This homogeneous sheath of shading," said Pickard, "makes the tower appear as a singular form and emphasizes the cut that is created for the sky garden floors. The horizontals sweep the length of the building, emphasizing the curve of the facade."



Three years after the completion of BG Group Place, construction began on another office building designed by Pickard Chilton for Hines. Located just two blocks east, 609 Main will stand at 48 stories when completed in late 2016. Advancements in BIM software and unitized curtain wall manufacturing allowed for increased geometric complexity. The resulting building design is prismatic, featuring multiple folded faces, a dramatic sloping roof, and column-less glass corners. Another development present at 609 Main is the lower solar heat gain coefficient of the glass, which allowed for minimization of the external shading strategy for more open views. Here, a lattice of brushed stainless steel tubes along the broad faces and vertical blades on the narrow faces serve a function somewhere between shading and ornament.





Opposite page

609 Main, also designed by Pickard Chilton, features a faceted facade and utilizes a more efficient low-e glass. The folded surfaces resulted in parallelogram mullions, atypical glass panels and roller shade sizes, and unique glass panels made possible by advances in BIM and unitized curtain wall manufacturing.

This page

A hybrid HVAC system provides under-floor air to main interior spaces while also utilizing overhead air diffusers at the perimeter, allowing for 5-ft by 10-ft vision glass panels and a slimmer plenum.



Capitol Tower, designed by Gensler for Skanska USA, will be the newest of the three office towers when completed in spring of 2017. The design of the 35-story rectilinear volume of the tower is broken by the insertion of a slender "shard of glass" volume that dissolves the north corner and extends above the roofline. Extruded aluminum blades attached to the vertical mullions provide solar shading at 10-ft intervals on the northeast facade and at 5-ft intervals on the remaining three. Solar modeling showed that deep profiles of the blades would enhance performance. In the interest of conserving material resources and cutting costs, the architects achieved an 11-in depth by setting 8-in-deep blades three inches off the face of the glass. "It's a very elegant facade that is smart, efficient, and cost-effective," said Stuart.

The three towers employ similar strategies using low-e double pane IGUs protected by stationary external shading devices. Although these buildings represent the current forefront of curtain wall technology in Houston, there are many exciting new developments to come. Future curtain wall innovations could arise from current development of transparent insulation materials, self-cleaning coatings and thermal films, dynamic facade elements, electrochromic and suspended-particle smart windows, transparent solar cell glazing, phase change materials that absorb and release energy, high-pressure laminate substitutes for glass, and structural glazing that could merge frame and lite into a single component for an entirely transparent facade.

But must we go all glass, just because we can? Though the notion is dazzling, we need to keep in mind issues of material conservation. Building facades typically have a shelf life of 30 to 40 years, and many current secondary glass processes render the material unrecyclable. Durability and reuse, in addition to development of other exciting facade materials such as ceramics and engineered woods, should be examined in tandem. As cities become increasingly vertical, curtain walls will continue to take on the thrilling task of addressing crucial architectural issues of performance, aesthetics, value, and occupant well-being through the lens of both material efficiency and ingenuity.

Jen Wong is director and curator of the University Co-op Materials Lab at The University of Texas at Austin.



Opposite page

Clear, low-iron glass allows for maximum transparency in the street level lobby of Capitol Tower, while dual-pane insulating glass with a light gray outer lite and low-e coating is used in the tower.

This page

All three towers span a three-block area in the central business district, with easy access to Houston's light rail and underground tunnel systems. An important trend that unifies the projects is connectivity and activation of the buildings at street level.

Field Constructs Design Competition (FCDC) seeks to foster cutting-edge innovation through works that actively engage with natural and cultural factors specific to Austin, Texas and its surrounding region. The competition will result in the realization of up to eight funded commissions, selected by a jury of leading figures in architecture, design, and art.

ENTRIES DUE

1 April 2015 fieldconstructs.org

JURORS

Benjamin Ball, Ball-Nogues Studio, Los Angeles

Eva Franch i Gilabert, Storefront for Art and Architecture, New York

John Grade, Artist, Seattle

Virginia San Fratello, Rael San Fratello, Oakland

Jason Sowell, The University of Texas at Austin School of Architecture, Austin

Ingrid Spencer, Contributing Editor Architectural Record, Austin



Portfolio: Landscape

HOTO COURTESY STUDIO OUTSIDE LA

The Gulf Coast has been ravaged by hurricanes and tropical storms, altering the landscape in dramatic ways. Planning for ongoing climatic changes in the region requires flexibility and a deep understanding of the breadth of possibilities.

78

From the Beach to the Bay

Studio Outside Landscape Architects with Overland Partners *Catherine Gavin*

82

Rehabilitation and Recovery

Design Workshop Landscape Architects and Reed Hilderbrand Landscape Architects with Lake|Flato Architects Ben Koush

From the Beach to the Bay

By Catherine Gavin

Galveston Island State Park is shrinking: Scientists predict that the landmass will decrease 22 percent over the next 50 years due to rising sea levels and beach erosion, transforming much of what is dry land into open water or marsh. The park is the only contiguous beach-to-bay stretch of land on the island. It is 2,000 acres and welcomes over 350,000 visitors annually, despite the fact that Hurricane Ike destroyed the majority of the park facilities in 2008. With a Texas Parks & Wildlife Department-approved master plan in hand, Studio Outside Landscape Architects, in collaboration with Overland Partners, is gearing up to rehabilitate the landscape, establish new infrastructure, and build new park facilities with a flexible approach that

will accommodate the predicted ecological shifts for years to come.

"We wanted to give a voice to the land," says Andrew Duggan of Studio Outside. "The environment drove the plan both horizontally and vertically." The park, which enjoys 1.5 miles of uninterrupted beach, was once defined by tall grass prairie within a larger coastal prairie and marsh-ecological region. Years of cattle grazing on the property during its days as the Lazy Z Ranch in the mid-20th century, however, altered the landscape and only remnants of the prairie remain. After the family arranged for the state to the take over the property in 1975, a two-lane highway was built to better connect the western tip of the island with downtown Galveston, effectively separating the beach and the bay areas of the park. At that time, new park facilities were constructed, many of them situated in environmentally sensitive zones.

Tropical storms and hurricanes then did their part to ensure the erosion of the beach and the elimination of the sand dunes to such a degree that a Dunes Renewal Project was implemented in 1998. The site, which has a grade change of only five feet from the shore to the historic height of the dunes, encompasses a variety of habitats and intertwined

"It is outmoded to think we can win the battle with our changing environment. The site is not static. It will never stay the same, and the whole purpose is to plan for change."

systems, which are becoming increasingly rare on the island. Continued residential development of the western end of the island has surrounded the park, and resultant pressures on the ecological stability are both immediate and long term.









Opposite page Galveston Island State Park attracts visitors throughout the year and is one of the most successful parks in the state system. Left The bay side of the park offers opportunities for water activities and bird-watching.

Interview with Overland Partners' James Shelton, AIA

How do the proposed Discovery Center, cabins, and other architectural features respond to the flexibility of the master plan for Galveston Island State Park?

Historically, the buildings on the site were designed to be extremely strong and resist the storm surge and the weather. Ultimately, they didn't fare well. You can't fight Mother Nature, no matter how hard you try. What we did, instead, was work with the land, with the storm surge, and with natural elements in general. Along with the team of engineers, we lifted the building up 20 ft to clear large wave action and events. We also made a purposeful decision to put the Discovery Center, as well as the cabins, on an edge between water and land, and used the positioning of the structures as a tool to measure the changes as a result of sea-level rise, the subsidence of the ground, and the coastal dynamics of the barrier islands. It's such an important issue, but I think it's one that's lost on many people. We wanted to call attention to it. This is also why we put the Discovery Center on the bay side, not the beach side: We wanted to get people to that side of the island to understand this relationship between the two sides of the park.

We also divided the site vertically into three sections. The lowest level contains things that could be flooded, like pathways and some overlooks; a mid-level defined by contained walkways and connecting pieces raises visitors' views; and the occupied buildings are positioned above 20 ft. All of those pieces come together at the Discovery Center. The Texas Parks & Wildlife Department required a 50-100 year life span for the structure. The Center was designed to work with the hurricane events and with the storms, but in the design there are some sacrificial pieces — places that can be flooded. During a really high surge, these areas and some of the walkways would probably go away but could be easily rebuilt. The major systems and occupied space, however, remain free and clear of the expected high surges.

Can you talk about Overland Partners' collaboration with Studio Outside Landscape Architects?

Both of our offices are very similar and very collaborative, so from the earliest charrette we were all involved. Many times the Overland team would comment on landscape, and the Studio Outside team would comment on the architecture, so there was really a lot of back and forth. We worked together closely on the mapping and understanding of the dynamics of the site, as well as on the building programming, the connected networks of paths, and how those elements would best come together.

What did you find most challenging during the planning and design phases?

The greatest challenge was understanding the dynamic aspects of the site, including the ecosystem and ecology. The landform is constantly moving and the urban development is also encroaching on both sides of the park. It is the last piece of land that is still continuous throughout the whole transect of the island from beach to bay — so understanding how to maximize that was critical. We used Center's high elevation as a launching point to understand what activities could be programmed throughout the site and how visitors would experience the park. It was also important to position the buildings carefully so that they wouldn't feel like they're in an urban environment. Secondarily, building consensus with all parties involved was a big challenge.



Top left and right A map shows the projected sea level rise over the next 50 years from the white to the yellow dashed lines. On the second map, areas of increased environmental sensitivity are shown in darker shades of red. **Right** The master plan calls for specific nodes of activity linked by paths and elevated boardwalks.



Following a robust research and planning phase, Studio Outside and Overland identified ecologically sensitive zones and built a program around the projections for island subsidence, sea level rise, hurricanes, and even negative sand migration effects of the Houston Ship Channel. Park facilities will be anchored by the proposed Discovery Center, which will be placed on the bay side where long views of the entire property will help visitors understand the diversity of the site. Paths, boardwalks, and elevated campsites will allow for flexibility as the site changes, and will even provide teaching tools documenting the evolution of the landscape. Nodes of activity will be concentrated on the beach, leaving large areas of the bay side and the eastern end of the park to be rehabilitated as a natural zones.

The philosophy of anticipating change, creating flexible areas with expendable materials, and building for resiliency is new. Studio Outside is quick to note that the former Brutalist park facilities were grounded in an ideology that they could and would withstand the elements — even in the most powerful hurricane-force winds and waters. "It is outmoded to think we can win the battle with our changing environment," notes Duggan. "The site is not static. It will never stay the same, and the whole purpose is to plan for change."

Catherine Gavin is editor of Texas Architect.



SKT ELEV ATED tte

Top A watercolor of thebay illustrates the proposedlocation of the new Dis-covery Center.Left Sketches showdistinct heights for plannedpark facilities.

TRANSITION ZONE ... COMMENTER LANGE ANCHOP



Rehabilitation and Recovery

by Ben Koush

After the double whammy of Hurricane Ike in 2008 and the great Texas drought of 2011, the unthinkable happened in Houston's Memorial Park: Half of the trees died. An urban woodland covering 1,503 acres in the heart of the city was suddenly a wasteland.

This catastrophe prompted the Houston Arboretum and Nature Center, established in 1951 on 155 acres in the southwest quadrant of Memorial Park, to commission a new master plan in 2012. Its intent was to understand how such a disaster could have occurred and how to prevent another one in the future. A large multidisciplinary team led by Steven Spears and and Rebecca Leonard of Design Workshop, an Austin-based landscape architecture, planning, and urban design firm, in collaboration with Reed Hilderbrand Landscape Architecture, conducted extensive forensic research to determine the cause of mortality. What they found was intriguing.

According to their reports, the natural state of Memorial Park (and, by extension, much of

Houston) was mostly prairie and savannah, with riparian and woodland ecosystems restricted to the bayou banks. Before Anglo-American settlement, a combination of droughts, grazing, and fires maintained equilibrium between these biomes. By the beginning of the 20th century this system was disrupted when wild, grazing herds were killed off, natural fires were quickly extinguished, and even drought was mitigated by artificial irrigation. Trees and fast-growing underbrush, many species of which included such non-native and invasive species as yaupon, cherry laurel, Chinese tallow, poison ivy, and grapevines, proliferated beyond their former boundaries. Prairie grasses, now in shade, retreated. The change was rapid and profound. When Memorial Park was established in 1925, contemporary newspaper accounts reported breathlessly on Houston's "forest playground," not its "prairie playground."

The study leading up to the master plan's proposals analyzed historical accounts, soil conditions, drainage patterns, and the subtle





Opposite page The master plan proposal for the Houston Arboretum and Nature Center combines fingers of woodland and intersecting prairies across the site. **This page top and bottom** The site is currently in a state of crisis due to the 50 percent canopy mortality rate after Hurricane Ike in 2008 and the drought of 2011.





Clockwise from top left A mixture of raised and at-grade paths is planned for the ravine display areas. Raised boardwalk paths will meander through bog areas. Preliminary concepts illustrate the possibility of soft, lowcut grasses demarcating ephemeral paths throughout the prairie areas.



micro-topography that modulated even the flattest areas of the site. It concluded that the areas of highest canopy mortality were in zones where former prairie land had been colonized by forest. These areas began at the edge of the riparian zone, along Buffalo Bayou, which forms the arboretum's southern edge, and extended to the north and easternmost boundaries of the site. The shock of hurricane and extreme drought in close succession was in reality a long-overdue, natural resetting of the local ecology: What modern Houstonians had postponed for over a century was undone in this 36-month period.

The new master plan seeks to educate Houstonians about the region's historical natural environment by recreating the delicate interplay of ecosystems formerly occurring across the arboretum's site. To achieve this, its main effort is to reestablish a significant prairie and savannah component. Prior to the drought, 30 percent of the site was riparian, 65 percent was woodland, and a mere 3.5 percent was prairie. The new landscape design proposes a more evenly balanced mixture of 31 percent riparian, 26 percent woodland, and 40 percent prairie and savannah. The riparian areas along Buffalo Bayou and a ravine at the northwest corner of the site will remain mostly within their current boundaries. The biggest change will be on the remaining two thirds of the site, where a series of long, narrow "fingers" of woodland will intersect the new prairie and savannah.

This woodland corridor scheme was selected over two other options - prairie clearings in a continuous woodland and groves of woodland in a continuous prairie - for practical and aesthetic reasons. The corridors provide the longest boundaries between ecosystems. These transitional areas, which blend characteristics of their adjacent biomes, are called ecotones and provide vital animal habitats and foraging areas. The fluid arrangement of the woodland corridors also corresponds to the areas where mature forest trees survived beyond the historic woodland zone. Visually, according to Spears, these corridors will create long and controlled views of prairie and forest, which will allow for greater spatial richness across the site.

Complementing the new landscape will be new buildings and a reconfigured trail system through the arboretum. Lake|Flato Architects of San Antonio designed a new visitor center and



Above Maps illustrate the landscape rehabilitation: The top row shows the canopy coverage in 2007 and the decline of the trees in 2012. The second row identifies areas of planned clearing and resetting, and the bottom row shows planned regrowth in 2024 and 2044.

a separate education center, incorporating the existing visitor's building designed by Houston architect Hugo V. Neuhaus, Jr. in 1968 near Woodway Drive. These new buildings, long and thin, are equipped with luxuriously large covered porches and overhanging roofs. A more discreet maintenance and bus parking facility will be located to the south of the public buildings off the 610 Loop side of the site. The trails will highlight the different ecosystems as they thread through the site with a mixture of gradelevel paths and raised boardwalks.

The multiphase reconfiguration of the arboretum will require decades to complete, with a maturation period of some 30 years. In the meantime, especially during the first phases, the arboretum will look like a battlefield as dead trees are pulled down, undesirable species are culled, and the land is prepared for new plants.

While it is clear that something has to be done to address the crisis situation in the arboretum, the creative destruction necessary to implement the master plan gives rise to some questions. With both grazing herds and natural fires permanently removed as ecological balancing factors, what kind of historical authenticity can the site truly maintain? What lessons will visitors ultimately come away with by viewing a site whose newly "natural" appearance must first be created, then maintained, by significant human intervention? Considering that the site has not existed in its pre-human state for many generations, might it be of value to address this new and changed condition, rather than to reintroduce ecosystems, however historically significant, that cannot exist independently under today's environmental conditions? Finally, how does going back to a pre-urban state address the future of the environment in a modern city like Houston during a period of what will likely be rapidly-changing climatic conditions? The key to the success of the master plan, it seems, will be how it navigates away from the pull of an easy nostalgia to avoid becoming a fictionalized, landscape version of a Colonial Williamsburg. The educational program of the arboretum should clearly acknowledge that, while the newly reinstalled ecosystems are an artifice, their lessons of sustainability, resource management, and conservation remain ever compelling.

Ben Koush is an architect in Houston.







YOUR IDEA, OUR INGENUITY

What is old can be new again. This is what the owners of 20 Greenway Plaza desired as they redeveloped the property and reintroduced it to the marketplace. Acacia was engaged to create the look of warm wood panels on balconies, stairs and escalators in this classic 10 level office tower. Acacia also manufactured twin backlit Modular Arts feature walls, numerous locations of brilliant green backpainted glass and an elaborate and engaging security



desk. The most breathtaking feature was a 4 story elevator shaft clad with the same warm wood panels, thousands of feet of custom stainless steel trim and bright white Interlam dimensional panels.

Team members like Tom Smith review Acacia drawings and carefully coordinate with other plant processes. Tom is a Master Craftsmen who works hard every day to deliver quality, tightly controlled products. Tom plays a significant role in our cross training program, a key element in building the depth of knowledge and ability within the Acacia team.

When we can help you with your big idea, call 877-565-5995 select option #1 or visit us online at WWW.ACACIAORIGINALS.COM.

Profile



Waterways

by Canan Yetmen

Kathleen English, FAIA, talks about bioswales the way others might talk about a nice deck or flagstone patio. For her, it is the must-have landscape feature. Long interested in sustainable design, English in recent years turned her professional focus toward the often-complex hydrology and water issues surrounding build-

By the time the site design is set, it's already too late to maximize LID principles. ings. As a longtime Houstonian, she saw how the lack of water as well as its periodic overabundance affected the city and

development in it. She wondered how design could accommodate rapid rainfalls and the city's notorious flash flooding in a more effective way, while maybe hanging on to more of the precious resource in the process.

"Many architects striving to create green buildings place them on sites in very conventional ways," argues English. "These early site design decisions lead to traditional drainage solutions and stormwater management. By the time the site design is set, it's already too late to maximize LID principles" She has become an outspoken advocate for Low Impact Development (LID), in an environment firmly stacked against changing the status quo. "For LID to work, the site plan must address how water is moved through the site, and that involves collaboration between civil engineers, architects, and landscape architects, as well as attention to building codes and regulations," she says. And although few seem to share her passion, English is convinced that things can, and will, change.

With few established processes in place, English turned the firm English & Associates' parking lot in Houston's historic Sixth Ward into a LID laboratory. She set a goal to accommodate four inches of rain in one hour without introducing any water into the storm drains. Installing a 15,000gallon rainwater storage system under the parking lot paving, she integrated a pump and irrigation

Profile





tubing on the surface. Water flows through gravel filters, engineered soils, and plant materials and is cleaned of contaminants. The project reduced the site's need for city water to zero and earned recognition from the EPA as a national best practices case study for rainwater collection. It set English on a course to educate others — architects, civil engineers, municipalities — about the potential to manage stormwater through architecture.

English introduced several of her own research-based concepts into her work with Harris County on the Evelyn Meador Branch Library. The previous building had been flooded and completely destroyed by Hurricane Ike. "Here was an opportunity to ask, 'What does resilience mean when we build in an ecosystem this close to the coast?'" she says. In response, the project included newly



Opening page Kathleen English, FAIA, is pictured atop the bioswale in the garden of her Houston home. Opposite page top and bottom The Evelyn Meador Branch Library, completed in 2011, is the first project owned by Harris County to have integrated stormwater management. The library's water filtration system has a capacity of 100,000 gallons for irrigation alone, negating additional water needs not only in dry months, but all year. This page top and bottom The driveway of English's West University Place home covers a solar-powered rainwater collecting tank. English tested new materials and systems that allow for high flow rates without clogging, even with Houston's high-clay-content soils.



constructed wetlands — the dominant ecosystem of the area prior to human intervention — rain gardens and bioswales, as well as more than 30,000 gallons of rainwater detention and nearly 75,000 gallons of rainwater retention. The site requires no additional water for irrigation, earned a LEED Gold certification, and is the first county-owned building to feature integrated stormwater management.

Next, English turned her sights to her own house. "I wanted to know how far we could push it, how much water we could store on a conventional residential site," she recalled. She installed pervious cover and a rainwater collection tank under the driveway and a bioswale alongside. She tested a solar-powered pump system and new materials and assemblies. She examined how a lower-cost, graded filter soil/gravel mix can maintain higher water flow rates, and she is in the process of fabricating and installing a modular green wall (with her neighbor's blessing). There was much DIY-ing of the labor, and English and her husband treated themselves to his-and-hers rainwater collection tanks — but, she noted, it turns out you can store a large amount of water on even a tight residential site.

Now English is working on how a community like hers — West University Place — could incentivize and implement this kind of project on a larger scale. For now, she is encountering the usual resistance from municipal clients more interested in a political solution that checks the requisite boxes than a meaningful one. She admits it requires a fundamental shift in thinking, but English is willing to keep up the fight.

"My goal is to continue to politely wave the LID banner," she says, understanding that allowing natural systems to do what they do is harder to budget for and to predict. "But we need to get over that," she adds.

Her success in Harris County has already begun to show a way forward. Through her involvement with the Houston Land and Water Sustainability Forum (HLWSF), English helped create Harris County's first guidelines for LID. She secured funding for the nation's first-ofits-kind LID design competition and helped HLWSF push for legislation that requires all new state-owned buildings over 10,000 sf in Texas to incorporate rainwater collection systems. Even with so many firsts to her name, English presses ahead, sharing her knowledge and, very often, answering questions no one has thought to ask.

Canan Yetmen is an Austin-based writer.

THANK YOU CHRIS NOACK, AIA FOR TWO YEARS OF GREAT SERVICE AS TAC CHAIRMAN!

SINCERELY, 2015 TAC TRUSTEES



Texas Architects Committee

Bouldin Creek Ranch, Austin

Contractor Finn Design Build

Consultants LEEDS CERTIFICATION: Contects; INTERIOR DESIGN: Anne Breux Design Studio; LANDSCAPE DESIGN: D-Crain Landscape Design & Construction

Resources PAINT: Sherwin Williams "ProMar Zero VOC"; wood CABINET FINISH WATER-BASED "AGUALENTE": ML Campbell (Wurth Louis & Co.); SLIDING GLASS DOORS: Arcadia (Alamo Glass); WINDOWS: Gerkin (Rhino Austin): COUNTERTOPS: Silestone and Caesarstone; APPLIANCES: Miele; 2,500-GALLON RAINWATER COL-LECTION TANK: BlueScope (Innovative Water Solutions); TROUGH DRAINS - LINEAR DRAIN: Quick Drain USA (Ferguson); FIXTURES: Hansgrohe; BOSCH GEOTHERMAL: Bosch (American Geothermal Systems); LUTRON RADIORA: Lutron (Bell & McCoy); SOLAR PANELS - PV WITH MICROINVERTERS: Lumos, Lighthouse Solar

Project Dixon Water Foundation Josey Pavilion, Decatur

Contractor Lincoln Builders

Consultants MEP ENGINEER: TLC Engineering for Architecture; **STRUCTURAL ENGINEER:** Datum Engineers; **CIVIL ENGINEER:** Biohabitats

Resources SAND AND PEA GRAVEL/CRUSHED LIMESTONE: Hanson Aggregates; FLYASH: Headwaters; PORTLAND CEMENT: Southern Star; TUBE STEEL: Atlas Tube; STEEL: Gerdau; STEEL TUBING: Independence Tubing; COUNTERTOPS: Nicholson Metal Fabricators: MISC. STEEL SHAPES: Nucor Steel: SINKER PINE: Urban Woods: ESC ERAMING LUMBER / PLYWOOD DECKING: Roy O' Martin: MDF BOARD: Sierra Pine: INSULATION: Owens-Corning: BUILDING WRAP: Dupont: ROOFING UNDERLAYMENT/LIQUID APPLIED WATERPROOFING MEMBRAIN: Grace Construction Products: METAL ROOFING: Majestic Steel USA: WINDOW: RAM Windows; MISC. DOOR HARDWARE: RockWood Mfg.; GLASS: PPG; CLAY ADD MIXTURES - PLASTER PLUS. PRIMER SAND. PIGMENTS: American Clay; GYPSUM: American Gypsum; CERAMIC WALL TILES: Interceramic: PAINT: Southern Diversified: SIGNAGE: Gemini; PLUMBING - FIXTURES: sink: Elkay USA; PLUMBING -FIXTURES: various: Zurn Industries China & Brass; FAN: Big Ass Fan: SOLAR INVERTER CONTROL PANEL: Fronius: AMPHENOL SOLAR CONNECTOR: Helios: PHOTOVOLTAIC COLLECTOR PANELS: Silicon Energy

609 Main at Texas, Houston

Contractor Harvey Builders

Consultants ARCHITECT OF RECORD: Kendall/Heaton Associates; STRUCTURAL ENGINEER: Cardno Haynes Whaley; MECHANICAL ENGINEER: ME Engineers; CIVIL ENGINEER: Walter P Moore; ELEVATOR CONSULTANT: Persohn/Hahn Associates; PARKING PLANNING CONSULTANT: HWA Parking; GEOTECH/MATE-RIAL TESTING AND INSPECTIONS: PSI; LANDSCAPE ARCHITECT: The Office of James Burnett: LIGHTING CONSULTANT: Illume/ M-E Engineers; WINDOW-WASHING CONSULTANT: C.S. Caulkins Co.: WIND ENGINEERING CONSULTANT: RWDI: LEED CONSULTANT: Integrated Environmental Solutions: SECURITY CONSULTANT/ BUILDING MANAGEMENT AND CONTROLS CONSULTANT: HMA Consulting: BUILDING ENVELOPE CONSULTANT: Curtain Wall Design and Consulting: GRAPHICS AND WAYFINDING CONSULTANT: DG Studios; ACOUSTICAL CONSULTANT: Cerami & Associates COMMISSIONING CONSULTANT: Command Commissioning: WATER FEATURE CONSULTANT: Fluidity Design Consultants; STONE CONSULTANT: ISCS: PERMIT CONSULTANT: Landers Consulting: INTERIOR ARCHITECT (FITNESS AND CONFERENCE CENTERS): HOK; FITNESS CENTER CONSULTANT: The Risher Companies; IT/AV CONSULTANT: Cerami & Associates

Resources concrete: Argos Ready Mix; STRUCTURAL STEEL FRAMING: USA; INTERIOR ARCHITECTURAL WOODWORK: Brochstein's; HOT FLUID-APPLIED RUBBERIZED ASPHALT WATERPROOF-ING/GARDEN ROOF ASSEMBLY: American Hydrotech (FW Walton); GLAZED ALUMINUM CURTAIN WALLS: Harmon.; GLAZED TENSION WALLS GLASS AND GLAZING: Novum Structures; FLUSH WOOD DOORS: OshKosh Door Co. (Century Builders Hardware); DRY-WALL: Drake Interiors; INTERIOR PAINT: R&M Company; CERAMIC TILE:Cangelosi FlooringArchitectural Flooring TerrazzoSouthern Tile Acoustical CeilingsBaker Drywall Specialties: Fast Track Specialties; EXTERIOR BUILDING MAINTENANCE EQUIPMENT: Tractel; ROLLER WINDOW SHADES: Solarfective (Architectural Fabrics); ELECTRIC ELEVATORS/HYDRAULIC ELEVATORS/ESCALATORS: Schindler; FIRE SUPPRESSION: Casteel Automatic Fire Protection; PLUMBING/HEATING, VENTILATING, AND AIR CONDITIONING (HVAC): TD Industries; INTEGRATED AUTOMATION: Opentech; ELECTRICAL/ELECTRONIC SAFETY AND SECURITY: FSG; ARCHI-TECTURAL CONCRETE PAVERS: Hanover Architectural Products; UTILITIES: Total Site

Capitol Tower, Houston

Contractor Skanska USA Building

Consultants civil engineer/structural engineer/ PARKING: Walter P Moore; **MEP ENGINEER**: Wylie Consulting Engineers; **LANDSCAPE ARCHITECT**: Office of James Burnett; **SECURITY/BMCS/INTEGRATION**: HMA Consulting; **LIGHTING** CONSULTANT: One Lux Studio; GRAPHICS CONSULTANT: D|G Studios; FAÇADE MAINTENANCE: Lerch Bates; GEOTECHNICAL ENGINEER: Ulrich Engineers

Resources COLUMN COVERS, BEAM WRAPS, AND METAL PANELS: Gordon Interior Specialties Division (Specified Interiors): STRUCTURAL GLASS RAILING: C.R. Laurence; GLAZED ALUMINUM CURTAIN WALLS: Viracon: TILING: Stonepeak (American Tile & Stone), Leonardo Ceramica (Stone Source), Emser Tile & Natural Stone, Daltile, Interceramic: ACOUSTICAL PANEL CEIL-INGS: Armstrong; SUSPENDED WOOD CEILINGS: Architectural Components Group (Specified Components): RESILIENT BASE AND ACCESSORIES: Johnsonite: RESILIENT TILE FLOORING: Roppe Flooring (Professional Flooring Supply); PORTLAND CEMENT TERRAZZO FLOORING: Texas Terrazzo Contractors Association; TILE CARPETING: Mohawk Group, Shaw Contract Group; OPAOUE DECORATIVE GLASS: Fuller Pheonix; WALL COVERINGS: Maharam; EXTERIOR PAINTING/INTERIOR PAINTING: Benjamin Moore: TOILET COMPARTMENTS: Venesta; STONE COUNTERTOPS: Stone Source; SIMULATED STONE COUNTERTOPS: Silestone (The Kip Co. and CS Gulf Coast)



Advertiser's Index

86

..... 1, 17

95

. 4

Acacia Originals 877 565 5995 www.acaciaoriginals.com

Acme Brick IFC, 38-39 817 332 4101 bseidel@brick.com www.brick.com

Blackson Brick BC 214 855 5051 info@blacksonbrick.com www.blacksonbrick.com

Boothe Concrete 512 454 1641 chris@bootheconcrete.com www.bootheconcrete.com

Bury 512 328 0011 kclark@buryinc.com www,buryinc.com Butterfield Color 630 906 1980 keith@butterfieldcolor.com www.butterfieldcolor.com

..... 17

27

CJG Engineering 713 780 3345 bgardner@cjgengineers.com www.cjgengineers.com

Deacero 800 332 2376 www.deacero.com

 Hunt & Joiner
 93

 214 760 7000
 93

 sdial@h-jinc.com
 93

Jewell Concrete Products (Oldcastle Architectural Products Group) 27. 46 800 792 3216 jim.Paluch@oldcastle.com www.oldcastle.com 214 871 7010 mpeterman@lafp.com www.lafp.com MEGALITH CADD Services 93 905 473 4090 vj@megalith.net www.caddservices.net Milgard Windows & Doors 30

800 645 4273 www.milgard.com

Petersen Aluminum IBC 800 722 2523 jsnyder@petersenmail.com www.pac-clad.com

Resource Design 512 850 9075 info@resourcedesignaustin.com www.resourcedesignaustin.com

...... 17

94

Schuler Shook 214 747 8300 dallas@schulershook.com www.schulershook.com Studio Outside 214 934 7160 www.studiooutside.com

 Texas Timber Frames
 12

 210 698 6156
 www.texastimberframes.com

... 12

Wrightson, Johnson, Haddon & Williams

972 934 3700 sfalcone@wjhw.com www.wjhw.com





Tex-Fab 2015: Plasticity

The University of Houston Gerald D. Hines College of Architecture will host the TEX-FAB 2015 event March 26–29. The theme Plasticity initiated in the recent competition will be expanded upon with a new series of workshops and lectures. An exhibition will feature the winning project "Plastic Stereotomy" by Justin Diles along with projects by the other finalists. A symposium will kick off with a keynote lecture by Ronald Rael, a leading voice in the expanding use of alternative materials in 3-D printing and construction. Bill Kreysler of Kreysler & Associates, the fabrication partner for "Plastic Stereotomy," will lead a series of talks on the topic of plasticity.



O'Neil Ford's Little Chapel in the Woods on the campus of Texas Woman's University was one of the many tours during this year's Design Conference.

Texas Society of Architects 2015 Design Conference: CRAFT

The Fourth Annual Texas Society of Architects Design Conference took place the last weekend in February. The conference explored craft — the art and science of how materials come together to make architecture — and its influence on architecture over the course of the last three centuries.

The weekend was a success as a somewhat intimate group of 60 architects toured Denton where they enjoyed several of O'Neil Ford's early works, including the Little Chapel in the Woods on the campus of Texas Woman's University (1939), where keynote speaker Dr. Kathryn O'Rourke gave a lecture on the role of craft in Ford's long career. Tom Kundig, FAIA, of Olson Kundig Architects was the second keynote speaker. He gave a lecture on his unique take on 21st century craft in the beautiful setting of the Denton County Courthouse, which was built by Wesley Clark Dodson in 1896. The third keynote speaker, David Salmela, FAIA, of Salmela Architect discussed his Midwestern understanding of craft at the recently completed Betty and Clint Josey Pavilion, designed by Lake|Flato Architects — the building aims to be the first in Texas to meet the Living Building Challenge. The conference wrapped up with a panel discussion with the two keynote speakers led by Max Levy, FAIA.

HUNT & JOINER, INC. Consulting Structural Engineers DALLAS: 214-760-7000 www.h-jinc.com

AUSTIN: 512-358-8788

www.h-jinc.com 800-434-3170

Registered in all 48 continental states

Innovative structural engineering solutions for over 50 years

Group Structural Engineers, Inc.

GSEI welcomes Rene Avila, PE Principal rene@groupstructural.com

3626 North Hall Street, Suite 810 Dallas, TX 75219 214.397.0455 MBE & HUB www.groupstructural.com





Trends of the Trade

YORK METAL FABRICATORS, INC.

Custom Ornamental Railing Systems Stainless – Aluminum – Brass – Glass



Creative custom fabricated ornamental railings for over 50 years.

www.yorkmetal.com - 800.255.4703 - Oklahoma City, OK



Building Better Schools.

Ritchie Reid Technical Manager

ritchie.reid@fibrebond.com www.fibrebond.com 1300 Davenport Drive Minden, LA 71055 O 318.371.6364 C 318.347.2592

THEATRE PLANNERS LIGHTING DESIGNERS Schuler Shook

Chicago Minneapolis Dallas

schulershook.com



Field Constructs Design Competition Entries Due April

Field Constructs Design Competition (FCDC) invites emerging designers, architects, landscape architects, and artists to submit proposals for temporary installations to be sited at the Circle Acres Nature Preserve in Austin, Texas. The international competition will result in the construction of up to five of the entries submitted, which will be selected by a jury of leading figures in architecture, design, and art. The completed installations will open to the public on November 14, 2015 as part of a week-long event series that will promote design and community programming at the site.

The final February 15 registration deadline coincides with the deadline for project entries: April 1.

Competition jurors include:

- Benjamin Ball, Principal, Ball-Nogues Studio, Los Angeles, CA
- Eva Franch, Director, Storefront for Art and Architecture, New York, NY
- John Grade, Artist, Seattle, WA
- Virginia San Fratello, Rael San Fratello/ Emerging Objects, San Francisco, CA
- Jason Sowell, Associate Professor, The University of Texas at Austin, Austin, TX
- Ingrid Spencer, Contributing Editor, Architectural Record, Austin, TX

For more information, see www.fieldconstructs.org.

AIA Dallas Presents: 2B An Architect

AIA Dallas invites all high school sophomores through seniors in North Texas to 2B An Architect. This one day event features a career fair and a panel discussion comprised of practicing architects, interns, current students, and professors. Future architecture students are able to ask questions, receive first-hand information on what it takes to become an architect and learn the specifics on how each university's architectural program is uniquely different. Students gain knowledge on the path an architecture student takes upon graduating college, internship development requirements, the licensing process, and the professional practice. University representatives from architectural schools in and around Texas will have exhibit tables and provide information about their programs as well as display student work, handouts, or other features to engage students.

2B An Architect will occur Saturday, March 7, from 12 p.m. to 5 p.m. at the Latino Cultural Center. The Latino Cultural Center is located at 2600 Live Oak Street, Dallas, TX 75204.







Backpage



Top MF Architecture'sHill Country Apothecarybrings a contemporarydesign sensibility to astrip mall pharmacy.Bottom left and rightThe supergraphic shelfhelps maximize naturallight in the interior, andthe large glazed panelsallow the light to filter intothe lab.





Hill Country Apothecary

F Architecture has reinvented a strip mall storefront, redefining expectations for drugstores with the Hill Country Apothecary project. The full-service pharmacy combines an old-world service culture with a contemporary look. Located in Lakeway, a small town on Lake Travis outside of Austin, Hill Country Apothecary is a retail pharmacy coupled with an on-site lab where prescriptions and natural medicines are "hand-crafted." It also features an in-store juice bar with fresh drinks. Clean sustainable finishes with an abundance of natural light dominate the design. A supergraphic shelf, made of steel, aluminum, and poplar wood says "pharmacy" and runs the length and height of the storefront, addressing the shop's needs for bold branding and accessible product display.

As part of the Apothecary's new identity, the existing drive-through carport was repurposed as an outside seating area, providing shade and vegetation — a place to enjoy a drink or meet informally with a pharmacist. The result is a whole new way to experience the usually mundane process of picking up a prescription.

native colors & fluid curves

The Cherokee Nation's new Casino Ramona stands in the Oklahoma town where the first commercial oil well was drilled in 1897. "The curved building form relates to the fluidity of oil, while breaking down the general rectangular floor plan to create a more appealing look from the highway."



- Selser Schaefer Architects

- Achieve your vision with PAC-CLAD® metal wall panels.

 - Reveal detail could not be roll-formed; rather, 10-ft lengths of the reveal were fabricated and then saw cut in the field to the radius required for the project.
 - PAC-CLAD finishes on steel and aluminum meet the requirements of LEED, ENERGY STAR and CRRC standard, and are backed by a 20-year non-prorated finish warranty.



Cherokee Casino Ramona in Ramona, OK Owner: Cherokee Nation Entertainment; Architect: Selser Schaefer Architects; Contractor: RMZ Builders Installer: Abbco Roofing; Profiles: Perforated Flush Panel, Flush Panel, PAC Precision Series HWP, 7.2 Panel, 7/8" Corrugated, Flat Sheet; Colors: Colonial Red, custom Bright Red, Copper Penny, Slate Gray







Civic Bond

Subtly shimmering dark brick anchors the design of a suburban courthouse complex with cost-effective clarity of form. Architects chose stack-bond brick to provide the public an assurance of stability and strength in both construction and justice. Blackson Brick's incomparable collection includes dozens of manufacturers and thousands of masonry options, providing you the inspiring palette you need, in both full-bed and thin-set variations. For smart selection, quality, and responsive, knowledgable service across the Southwest, architects **Build Better with Blackson Brick**.

"We combined brick with glass to project security, while expressing transparency to the public. The Ebony velour brick allowed us to pull in the context of the government district. We liked that its reflective sheen created a balance between the light and dark volumes of the building. The streamlined stack bond is simple and durable, and directs visitors to the main entry. Blackson Brick was helpful and attentive without fail, from product selection after conceptual design to mock-ups and construction. Our client suggested more government centers with the same successful approach."

– Fernando J. Andrade, AIA, Principal Robert C. Croysdale, AIA, LEED AP BD+C GSR Andrade Architects

Dallas County Government Center Grand Prairie TX GSR Andrade Architects Dallas Andrade-Harper Dallas Wilks Masonry Aledo TX

Cloud Ceramics Ebony Velour Modular



Build Green, Build Better: Blackson Brick.



