

# Utah Construction & Design

November 2018

## Glass Act

MACU's sparkling new HQ features a custom-built curtain wall system designed for optimum style and function.

### Also:

New \$164 M Layton Hospital  
SL City & County Building  
ACEC Utah Awards

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On the cover: Mountain America Credit Union's new 11-story headquarters is the tallest building in Sandy City. (photo by Dana Sohm)



**MACU HQ Dazzles South End of SL Valley**

Been on I-15 through the southern end of the Salt Lake Valley lately?

If not, you haven't seen the new 11-story, 327,000 SF Mountain America Credit Union (MACU) headquarters, an impossible-to-miss, modern high-rise in Sandy City's Cairns District (think downtown). What sets this building apart is its glass curtain wall system, a dynamic, one-of-a-kind exterior that rivals any glass building in the state, or elsewhere, for that matter.

The 106,000 SF unitized curtain wall system was designed by Salt Lake-based Steel Encounters, Inc. (along with international firm Euro-façade Tech), fabricated by Steel Encounters, and manufactured by Oldcastle Building Envelope.

The four-sided structural glazed system required no exterior metal, allowing the glass to read more 'flat and true', offering ultimate reflectivity, the ability to mitigate glare and heat gain, while reducing noise from highway traffic on I-15. All of those were critical factors in meeting – even exceeding – the owner's requirements.

I took a tour of the building in December with architects Marbe Agee and Amber Lake of method studio, along with Chris Tapia with MACU, and it is indeed a mind blower! Panoramic views from the upper floors, and exterior views from even the innermost core areas. Most employee workstations are located on perimeters, with offices toward the middle. Top executives on the top floor have nice offices, but only President/CEO Sterling Nielsen has the proverbial 'corner office' on the 11th floor – as well he should, being the leader of the second largest credit union in Utah (ranked in the Top 20 in the U.S.) with a reported \$7.5 billion in assets, 740,000 members, and 90-plus branches.

It's amazing to see the level of detail designers put into so many seemingly minute details – well, minute to the average person who doesn't consider columns integrated into corners before final drywall is done, support backs on chairs lining up with window mullions so as to not obscure clean lines and views, cabinets with trash bins having the base attached, and many other fine details that came about via thorough extensive client interviews and surveys during programming phase.

It's a building worth seeing up close, and no doubt many will get that opportunity given its location next to Hale Center Theatre (MACU is graciously sharing its mammoth 1,743-stall above-ground parking structure (after normal business hours) with the theater patrons, and the local community in general. MACU's cafeteria is definitely worth checking out, a space with a variety of hip seating options for future Millennial and Gen Z workforces (Agee pointed out that an estimated 20% of the workforce will be Gen Z by 2020).

This issue of UC&D (you're getting a double dose of our publication to close out an extraordinarily busy and productive 2018, so enjoy the early year reading!) also looks at the timeless Salt Lake City and County Building restoration, as well as Intermountain Healthcare's newest \$164 million hospital in Layton. Other content includes ACEC Utah's annual awards, AIA Utah's new headquarters in downtown Salt Lake, Construction Law, and Design Trends in the resort/hospitality market.

Regards,



Bradley Fullmer



**UC&D**

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# Resort/Hospitality Design: It's All About Amenities

By Kathryn Thompson and John M. Shirley

The Park City/Deer Valley market has been exceptionally vibrant in recent years, and with the start of each new project, the inevitable question is, "What are the current A/E/C trends in the hospitality market?"

The answers can be as endless as the patterns found in snowflakes. In spite of changing trends, the reason we all retreat to the mountains remains constant – it's the innate pull to connect with the majesty of nature.



Think Architecture designed this resort home in Ketchum, Idaho with a spacious great room featuring incredible mountain views and optimum natural daylight in the space. (images courtesy Think)



Kathryn Thompson John M. Shirley

Resorts are placing the emphasis on experiences that enhance that outdoor connection, developing warm and inviting outdoor spaces for all ages. These spaces are designed as landing zones from the mountain after trail running, hiking, biking and skiing. Urban trails are important in that they provide a beautiful landscaped path for the stroll into town for an incredible dining or shopping experience.

Amenities remain a primary focus for resort hospitality – and owners in these upscale markets are willing to go the extra mile to ensure their resort offers something unique, something no one else has. These spaces are designed to facilitate gathering and socializing of large groups, bringing people together to reconnect and relax. Amenities for children are also a big attraction; from billiards and foosball to bowling and splash pads, owners understand the value of catering to entire families and the influence of youth. Adult amenities are luxurious and well thought out, with trends focusing on hip lounge/bar spaces, plush spas and state-of-the-art fitness rooms, the ultimate way to wind down after a hard day shredding the slopes, as skiing is the primary draw for out-of-town visitors.



A cozy fire place highlights this supremely comfortable space, and is often a staple component around which patios and other inviting outdoor spaces are designed.

Interior designs often center around cozy fireplaces, and some spaces incorporate the use of ski equipment into designs, displayed like trophies in well-designed millwork features. The connection of the interior and exterior spaces through movable glass walls is another growing trend.

Many current design aesthetics have moved from mountain rustic style to more of a mountain contemporary style, where modern lines, flat ceilings and exposed steel have replaced the timber trusses and rough sawn tongue-and-groove wood ceilings. The interiors have subdued and tonal colors with interesting textures, creating a spa like feel in their personal environment. The openness of the spaces and the simplification of design elements around the windows and doors allow the eye to be drawn to the exquisite views and mountain scenery.

Resorts are to be just that, a place to retreat from the stresses of life, find one's self, reconnect with family and friends, and enjoy the tranquility and beauty of nature.

Design plays a key role in how people enjoy the resort, and our primary goal as architects is to ensure that each project fits the style the owner. ■

Kathryn Thompson is Director of Interior Design at Murray-based Think Architecture and has more than 25 years of interior design experience. She has designed many custom homes in the Park City area, along with the Lodges at Deer Valley Resort.

John M. Shirley is a Principal at Think Architect with a wealth of experience in the hospitality market (Stein Eriksen Residences & Lodge; Goldner Hirsch Inn renovation; Utah Olympic Park Athlete Housing, The Grand Lodge, Hotel Park City, Silver Star, etc.).

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# The Problem with Sole-Source Specifications

By Jason Robinson and Jason Dutson

If you've been in the construction business for any time at all, chances are you've seen the recent uptick in the number of manufacturer-driven specifications — where manufacturers collaborate with designers and specification writers to incorporate their products into construction specifications.

This process, known as “sole-sourcing,” is strictly forbidden in public contracts, except in narrow circumstances, and while legal in the realm of private contracts, should be avoided. Sole-sourcing stifles competition, drives up owners' costs, and exposes designers and specification writers to unnecessary liability.

The justification given for sole-sourcing products is often that the products

themselves, or the vendors supplying the products are the only suitors capable of meeting the project requirements, technical or otherwise. Despite this, however, the impact of sole-sourcing is that owners, contractors, and suppliers are often faced with procuring products at higher costs due to lack of competition.

In recent years, municipal, state, and federal procurement laws have increased protections against sole-sourcing products in public contracts. The laws generally require public owners to follow competitive procurement procedures to promote competitive bidding practices and avoid mismanagement of public funds, collusion, and corruption. To accomplish this purpose, procurement laws require public entities and



Jason Robinson

Jason Dutson

their design representatives to prepare bid specifications that identify specific product characteristics and technical requirements instead of brand names or manufacturers. These laws encourage healthy competition and promote economic development while still giving designers and spec writers freedom to specify products that achieve

their design's intended purpose.

All too often, however, designers and spec writers lack specific knowledge about the products they're specifying. In these instances, they delegate the role of writing specifications to trusted manufacturers who welcome the opportunity to draft their customer's product specifications. Herein lies the problem.

Manufacturers don't draft specifications that encourage competition. Instead, they're motivated to specify their own products, leaving bidding contractors without other viable options from which to purchase or install the specified products. Although in some cases manufacturers unashamedly specify their own product names in specifications, they most often employ a more subtle approach, disguising a sole-source product specification as performance-based. Thus avoiding any appearance of bad behavior or impropriety. In either case, both approaches constitute sole-sourcing, and where open competition is eliminated, everyone else pays the price.

In the context of public contracts, if designers adopt manufacturer-driven sole-source specifications without verifying compliance with local and national procurement laws, they invite unnecessary legal exposure. If you're skeptical, spend a few minutes investigating on the internet and you'll find a host of legal disputes arising out of sole-source specifications. Although the legal outcome of these disputes differ, there's no refuting the liability imposed on public owners and their design representatives who incorporate—without adequate justification—sole-source specifications in their contracts.

An architecture firm in New York discovered this when it designed an athletic field for a public university. The architect drafted narrow specifications that favored one type of field turf material. During the project's bidding phase, the artificial turf supplier, Chenango, who was awarded the bid, sued the architect for requiring a very specific type of turf material that it could not furnish.

Chenango discovered the disguised sole-source specification when it delivered its turf product submittal to the architect for approval and was rejected because the product did not meet specifications. Although the specifications appeared >>

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## → Construction Law

at first glance to meet fair procurement requirements, Chenango discovered that the field turf material specified in the project documents could only be furnished by one supplier, Chenango's competitor.

Because Chenango was not an approved vendor and could not provide the specified product, the general contractor terminated Chenango's contract and ultimately hired Chenango's competitor. Chenango filed suit, complaining that the architecture firm colluded with Chenango's competitor when it drafted specifications that mirrored its competitor's proprietary turf product, thus eliminating all other potential turf suppliers—including Chenango—from furnishing the turf material. The trial court dismissed Chenango's case, but Chenango appealed and the appellate court reversed the trial court's decision, concluding that Chenango may be entitled to recover damages from the architect. The court expressed concern that the architect "narrowly drafted" specifications that favored Chenango's competitor. The court also expressed concern because Chenango's product was successfully used for identical purposes on numerous other professional and collegiate sports facilities.

With the recent uptick in manufacturer-driven specifications, the court's concern in Chenango is more real than ever. Contractors and suppliers submitting bids on public projects are increasingly discovering more and more manufacturer-driven specifications containing sole-source products. In many cases, contractors and suppliers don't even discover the lack of available alternatives until bidding is complete and their proposals are rejected. Or even worse, until their contracts are terminated because they failed to supply the specified product, or an "approved equal."

Whether a designer is preparing public or private bid specifications, caution should be taken to ensure that contracts promote healthy competition among contractors and suppliers. This approach not only promotes a robust construction economy where everyone benefits, but it also protects against liability.

To avoid liability in the public realm, design representatives should determine whether public owners require unique

products that warrant the application of sole-source specifications. If so, designers should research whether less restrictive specifications will satisfy the owner's needs. If necessary, contact multiple vendors to determine whether there are other available products that meet the owner's needs. Finally, if a restrictive specification is warranted on a public project, document sole-source exceptions in writing and

consider publishing them for public notice.

*Chenango Construction v. Hughes Associates, 128 A.D.3d 1150, 8 N.Y.S.3d 724 (2015). Id. ■*

*Jason H. Robinson and Jason N. Dutson are attorneys at the law firm of Babcock Scott & Babcock in Salt Lake City, where they represent contractors and design professionals in a broad range of construction-related legal matters.*

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The \$55 million renovation of the Crocker Science Center required new shear walls tailored to control expected seismic drifts, so unreinforced masonry walls could meet life safety requirement. (photos courtesy Reveley Engineers)

# 2019 ACEC Excellence in Engineering Awards

Reaveley earns coveted 'Grand Conceptor' award for structural design of Crocker Science Building at the U of U.

PROJECT	AWARD	ENGINEERING FIRM
Crocker Science Center	Grand Conceptor	Reaveley Engineers
Jordan River Pedestrian Bridge	Grand	Stanley Consultants
Jordan Valley WTP Reservoir	Honor	Bowen Collins & Assoc.
I-15; Brigham Rd. to Dixie Dr.	Honor	Horrocks Engineers
I-15 NB, 106th South Interchange	Honor	Michael Baker International
NW Quadrant Drainage MP	Merit	Psomas
Farmington High School	Merit	CRS Engineers
Canyon Corners	Merit	Psomas
Rocket Express Car Wash	Merit	Benchmark Engineering

The 126,000 SF Crocker Science Center is an excellent example of adaptive re-use of a historic structure with a 'Performance-Based' seismic design.

Nine projects were recognized by the Utah chapter of American Consulting Engineers Council (ACEC Utah) during its recent 2019 Excellence in Engineering competition, led by the Crocker Science Center at the University of Utah, which was re-dedicated in April and earned 'Grand Conceptor' honors.

This year saw two Grand awards, three Honor awards, and four Merit awards. The list includes a diverse mix of buildings



and key infrastructure projects (highway, water, and bridge).

## GRAND CONCEPTOR AWARD

**Crocker Science Center at the University of Utah**

Owner: State of Utah – DFCM

Architect: EDA Architects

GC: Okland Construction

Civil: PSOMAS

Electrical: Spectrum Engineers

Mechanical: Colvin Engineering

Structural: Reveley Engineers

This \$55 million renovation/seismic upgrade of the historic Crocker Science Center is a structural engineering marvel, giving new life to one of the true jewels in the President's Circle, the George Thomas Building, which was originally built in 1935 and served as the former home to the U's Library and the Utah Museum of Natural History.

This is an excellent example of adaptive re-use of a historic structure with a 'Performance-Based' seismic design that bridges the gap between the new addition and the existing structure, a four-story,

126,000 SF building that increased overall space more than 50,000 SF while keeping the shell intact.

Engineering studies revealed a fundamentally flawed geometry that did not lend itself to satisfactory performance to earthquake forces, as the geometry of the U-shaped configuration does not perform well seismically. The T-shaped addition made the building nearly square, and with a more regular footprint.

An advanced nonlinear computer model of the existing building and soil properties allowed for calibration of new concrete shear walls to meet established performance goals. New shear walls were tailored to control expected seismic drifts so unreinforced masonry walls could meet life safety requirements. The center is home to the Henry Eyring Center for Cell and Genome Science and the U's Center for Science and Math Education. Notable architectural elements, including the iconic grand central staircase and vaulted reading room, were left intact, a nod to the skills of past master craftsmen. >>

**GRAND AWARD**

**Jordan River Pedestrian Bridge and Trail**

**Owner:** Salt Lake City  
**GC:** Gerber Construction  
**Civil:** Stanley Consultants  
**Structural:** Stanley Consultants

The new Jordan River Pedestrian Bridge creates the link that joins a network of over 100 miles of paved trails from Ogden to Provo, making it the longest continuous, multi-use urban trail network

west of the Mississippi River.

The tied arch bridge is the only one of its kind in the state and at 1,200 feet long and 30 feet high, is unusually long, stretching 280 feet with no center support. The 14-foot-wide bridge spans three active rail lines, which added to the complexity of the project, and was completed in an efficient 8-month period. Lightweight foam fill was used to shore up poor soil conditions, and piles were driven into

the ground vs. drilling to mitigate waste material.

**HONOR AWARD**

**Jordan Valley WTP Finished Reservoir**

**Owner:** JWCD  
**GC:** Alder Construction  
**Civil:** Bowen Collins & Assoc.

This new 12.5 MG (million gallon) reservoir for Jordan Valley Water Conservancy District required construction of a new inlet valve vault for flow control from the 90-inch effluent pipeline, and connections to the existing 78-inch JA-2 and the Southwest Aqueduct transmission lines.

**HONOR AWARD**

**I-15; Brigham Road to Dixie Drive**

The I-15; Brigham Road to Dixie Drive project widened approximately one mile of I-15 that was experiencing delays and safety issues due to insufficient merging distances between two high-volume interchanges. The project focused on accommodating travel demands through 2040 with new auxiliary lanes and replacing structures over the Virgin River with bridges wide enough to add future lanes with minimal impacts to traffic. Crucial design considerations included preserving critical habitat within the Virgin River floodplain for threatened and endangered species while also protecting new infrastructure.

**HONOR AWARD**

**I-15, 106th South Interchange**

**Owner:** UDOT  
**GC:** Granite Construction  
**Civil:** Michael Baker International  
**Structural:** Michael Baker International  
**Geotech:** Gerhart-Cole  
**ATMS; Signals; PI:** HW Lochner  
**Subsurface Utilities:** UMS  
**Survey; ROW:** Meridian

Designers reduced a planned 300 ft. underpass structure – with significant utility impacts, water table risks, and grade tie-in problems – to a 183 ft., three-sided box underpass structure. This new underpass provided I-15 northbound off-ramp traffic with a free-flow movement onto a heavily used frontage road that

significantly reduced traffic congestion at the intersection and mitigated critical challenges the concept posed. The CM/GC team researched Accelerated Bridge Construction options and designed and executed a lateral slide solution, constructing the structure off-line and sliding it into place in a matter of hours. This method reduced six months of lane closures, shifts, and traffic delays to a short 16-day closure of the busy interchange.

**MERIT AWARD**

**Canyon Corners Development**

**Owner:** CenterCal Properties  
**Architect:** CSHQA  
**GC:** Layton Construction  
**Civil:** Psomas  
**Electrical:** GSL Electric  
**Mechanical:** KHI Mechanical  
**Structural:** Structural Edge Engineering  
 Whole Foods Market  
**Architect:** CSHQA  
**GC:** Engineered Structures Inc.  
**Civil:** Psomas  
**Electrical:** CSHQA  
**Mechanical:** CSHQA  
**Structural:** Structural Edge Engineering

Located at Kimball Junction in Summit County, this site added new retail, housing and dining to this development, including the flagship 40,000 SF Whole Foods Market and its modern, eclectic feel. Psomas was able to develop an innovative design for the project that allowed for transitional grading to keep the site accessible.

Vehicle routing along with a pedestrian path system allows accessibility, and connects the bus stop on Landmark through the site and to the multi-use trail along I-80. This was accomplished by excavating into the hillside and burying the building into the hill, some 25 vertical feet at the southeast corner.

**MERIT AWARD**

**Northwest Quadrant Drainage Master Plan**

**Owner:** State of Utah – DFCM  
**Civil:** Psomas

The development of the Utah State Correctional Facility provides the City a unique opportunity to plan and direct development in the northwest quadrant



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(Clockwise, from top left): Canyon Corners Development; Rocket Express Car Wash; Farmington High School; I-15; Brigham Road to Dixie Drive. (courtesy ACEC Utah)



before it occurs. As a result of this development and potential accelerated private development growth, Psomas evaluated and proposed drainage mitigation measures for full build out of the approximately 8,126-acre study area. The study area is bordered by the International Center on the east, I-80 on the south, the Goggin Drain on the north and Salt Lake City limits and the Great Salt Lake on the west.

**MERIT AWARD**  
**Farmington High School**

**Owner:** Davis County School District  
**Architect:** VCBO Architecture  
**GC:** Hogan & Associates  
**Civil:** CRS Engineers  
**Electrical:** Envision Engineering  
**Mechanical:** Van Boerum & Frank Assoc.  
**Structural:** Calder Richards

This new \$75.8 million state-of-the-art high school sits on a nearly 60-acre campus, and CRS designed the infrastructure for this important community project. Located less than one mile from Farmington Bay on the Great Salt Lake, drainage was a key issue for this 405,000 SF project, made more complex by the high water table and an extremely flat parcel (less than 1% slope). This was one of the more challenging aspects of the civil/site design due to myriad athletic fields, parking lots, six post-tensioned concrete tennis courts, the football stadium, and the adjacent \$6.5 million District Bus Compound. CRS also upgraded

**MERIT AWARD**  
**Rocket Express Car Wash**

**Architect:** Howa Design  
**Civil:** Benchmark Engineering

**Landscape Design:** PKJ Design  
**GC:** Badham Construction

**Subcontractors:**  
Erosion Control Services, Reynolds Excavation, Harper Precast, Jones Drilling and Shoring.

This \$6.1 million project required the use of different high-water elevations for detention facilities to contain on-site stormwater, since retaining walls were used to accommodate the long structure of the car wash on site. A reclaimed water system will help minimize water usage, saving thousands of gallons annually. Six separate reclaimed tanks hold 3,000 gallons of water each, with 80% of used water being reclaimed. The project is noted as the 'world's longest' tunnel car wash, which required the addition of a right-turn lane per UDOT requirements. ■

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UTAH CONSTRUCTION & DESIGN MAGAZINE

# Creative Design Solutions a Hallmark on New \$164 Million Layton Hospital

As the project grew from an ambulatory care center into a comprehensive five-story, 310,000 SF hospital, it required design team members to work in unison on notable changes in project scope and budget.

By Brittany Punjabi



The state-of-the-art, \$164 million, 310,000 sq. ft., five-story Intermountain Layton Hospital, that almost wasn't a hospital. (Photos by Jared Kenitzer, Spectrum Engineers)

Intermountain Healthcare's newest hospital — the \$164 million Intermountain Layton Hospital in Davis County — almost wasn't a hospital. The project started out as the ambulatory care center, but grew into a full-blown five-story, 310,000 SF hospital when Intermountain re-assessed community needs.

"The shift took place as the [Ambulatory Care Center] headed into construction documents," said Corey Cracroft, Sr. Project Manager for Intermountain Healthcare. "We had to put

the brakes on and almost start over."

When the scope changed so drastically, so did the stress level. The design team had to return to the drawing board while keeping the original schedule. This unique challenge required the team to work more collaboratively than ever.

"We worked together to come up with creative solutions to implement the hospital design," said Roger Phillips, a Principal with Salt Lake-based architecture firm HKS. "We had to include all parts and pieces while planning for future growth."

When the scope changed, Jacobsen Construction of Salt Lake had already been selected as the contractor. This allowed all parties to attend design meetings. Drew Watkins, Sr. Project Manager at Jacobsen, said that once construction started the CDs came out in bid packages because design was still happening.

"Attending design meetings gave us the opportunity to be ahead of the game," Watkins said.

In addition to the scope changing, this project presented other challenges like »

**“We worked together to come up with creative solutions to implement the hospital design,”**

**– Roger Phillips  
HKS**

getting power to the site, which required coordinating with Rocky Mountain Power to bring a circuit across the railroad. Moreover, Cracroft added that soil conditions weren't ideal for construction, due to the water table being 15-16 feet down, requiring extensive soil stabilization.

“To create a useable soil foundation, we used rammed aggregates,” Cracroft said. “This involved drilling down 80 feet below the lowest footings and ramming earth in aggregate to compact it.”

This method not only made the soil buildable, but guards against liquification. Mark Harris, Principal Structural Engineer with Reaveley Engineers of Salt Lake said that utilizing this method also allowed for higher bearing pressure and ultimately a larger column load in one spot. Without the rammed aggregate pier system, the buildings could have had some unwanted settling and future issues with the foundation. Plus, this system can reduce the amount of potential settlement in the event of an earthquake.

Once foundational issues were settled, the next goal was getting the clinic online

one year prior to the completion of the hospital. With the scope shift putting pressure on the schedule, meeting this deadline was an extra challenge. Electrically, this included Spectrum Engineers' team temporarily setting up rooms so the distributed antenna system (DAS) would work and a portion of the data center, located within the hospital, could be accessed prior to the completion of the hospital. Furthermore, the central utility plant feeds all of the buildings, so the commissioning authorities at TBCx had the challenge of bringing things online at different times.

“The machine for cooling is pretty large and doesn't like that it's only loaded up 10 percent. It needs to go faster,” said Ray Dodd, President/Principal Commissioning Authority of Salt Lake-based TBCx. “There were a lot of challenges when it came to bringing a portion online.”

With the clinic being open and the rest of the facility under construction, this presented some unforeseen challenges for the facilities management team, as well.

“We had to keep the Medical Office

Building up and going while following up on the construction projects,” Ryan Grant, Facility Manager, Intermountain Layton Hospital said. “Patients were also unaware of which side of the building to go to.”

Although this project included a number of challenges, the major success was how effectively the team worked together. The main focus of each design element was healing.

For the Intermountain Layton Hospital, this started with looking at the building through the patients' eyes while keeping the patient experience at the forefront. Everything from how they check-in to how they experience the room, with

accompanying sights and sounds, was factored into the project. One example is how the lighting is designed with comfort and well-being as the focus. This includes lighting that reduces glare and can be controlled in each room. Furthermore, the decorative lighting contributes to the patient experience with wayfinding as the goal. This includes spaces being lit so people know where seating is or where they can go to speak with hospital personnel.

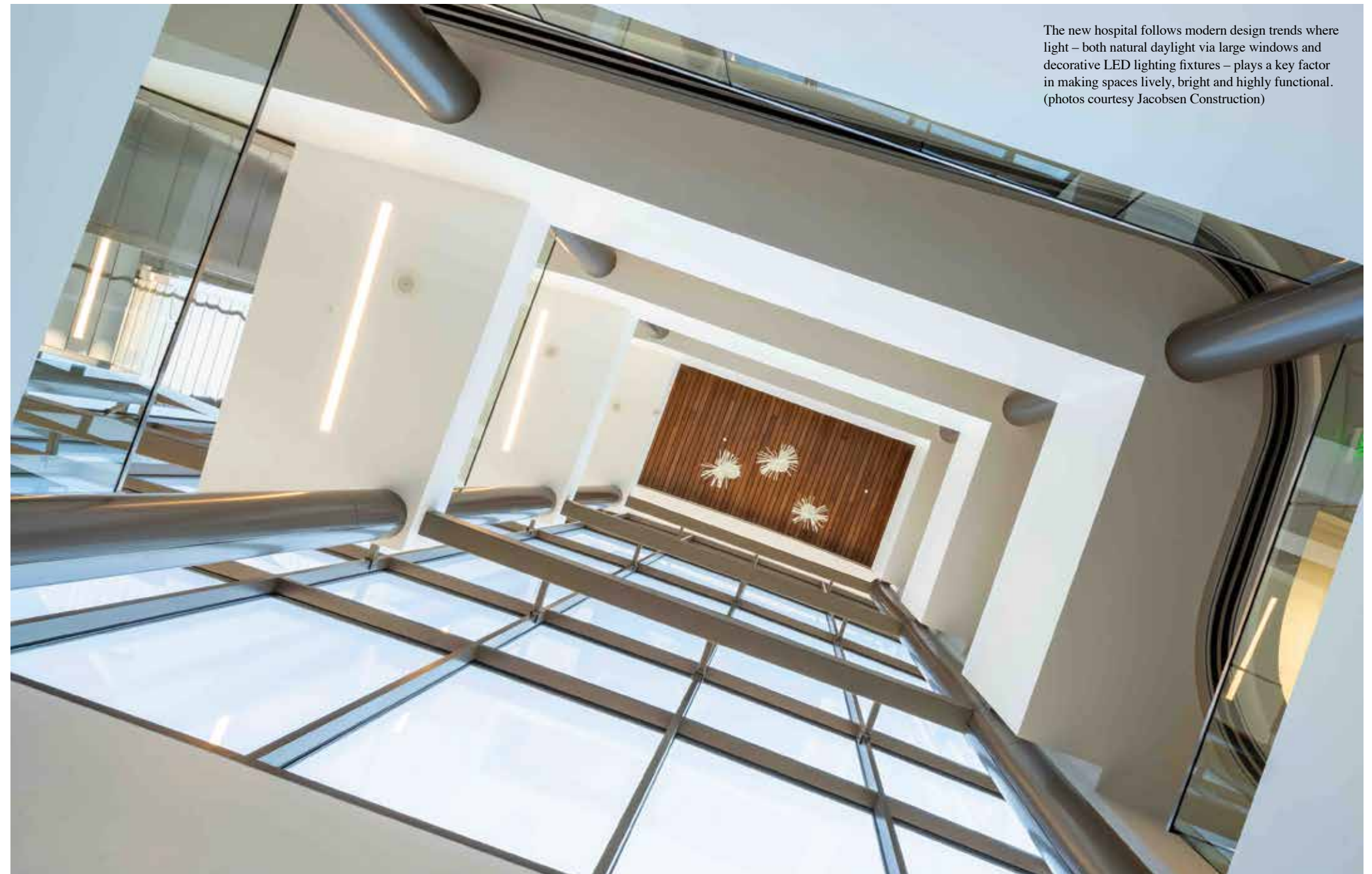
Additionally, the hospital was designed to maximize the amazing views of the Wasatch Mountains and features a giant class curtain wall at the east side. This allows patrons and staff to take advantage

of the views on all floors while bringing in natural light that filters throughout the building.

“The decorative lighting was designed so it looked great through the glass,” said Joseph “Jody” Good, III, Lighting Design Fellow for Spectrum. “We also took care to have the appropriate amount of light up, down and for way finding.”

To make this glass element and atrium a reality, the structural team incorporated extra steel into the structure. In addition to the glass wall, the team had to structurally engineer fairly elaborate canopies to give a sense of entry, weather protection and create the iconic Intermountain Healthcare look.

The new hospital follows modern design trends where light – both natural daylight via large windows and decorative LED lighting fixtures – plays a key factor in making spaces lively, bright and highly functional. (photos courtesy Jacobsen Construction)





are robust and can still function after a major event like an earthquake.”

Moment frames were also a great option when it came to the architecture because they gave a lot of flexibility to the layout and design of the space.

“We ended up with a primary structural frame that was economical, constructible and went up with very few problems,” added Harris.

Van Boerum & Frank Associates of Salt Lake designed all mechanical systems including the medical gas system, pure water, domestic water and steam systems. The mechanical system includes a central variable air volume (VAV) system. On the hospital, there are five air handlers in the penthouse on top of the tower and for the clinic building there are two air handlers in a small mechanical penthouse. One of the major successes of this project, mechanically, is that the facility has a water reduction of 35 percent in comparison to the code minimum and other hospitals.

“We put a lot of effort into making this [hospital] energy efficient,” said Scot Muir, Associate Principal with VBFA. “Our energy modeler was calculating it to be a 30.9% energy reduction compared to the code minimum.”

Additional sustainable measures include green sustainable low water-use landscaping, motion sensor lights and daylight sensors, all of which were implemented so Intermountain could manage resources responsibly. Additionally, exterior lighting fixtures were designed with good optical control, so lighting levels could be managed for safety and security, but also meet the stringent requirements of cut-off and energy usage. Each of these design elements contributed to the LEED® Silver certification.

In the central utility plant, Spectrum designed a state-of-the-art emergency distribution system that will keep the hospital running if there’s a power outage. The CUP features two 15 MW paralleled generators, a control system that communicates with the building management system and tells it which chillers and cooling towers can turn on before the emergency distribution system exceeds capacity.

“This design allows for the emergency system and BMS system to communicate and keep the hospital up and running during an outage,” said Johansen. “Furthermore, the hospital’s facilities team can remotely control the emergency distribution system

High-tech operating rooms and well-lit, functional administrative areas are critical design aspects of modern-day hospitals.



loads on the transfer switch and generators and can shed them remotely.”

Mechanically, the central plant utilized a series of newer concepts incorporating low-temperature condensing hot water boilers, that can run on both natural gas and back-up diesel, and smaller conventional steam boilers.

“A low-temp hot water design utilized the condensing boilers which allowed us to limit the amount of steam required which in turn enabled us to install smaller steam boilers,” said VBFA Principal Don Bradshaw. “In the past, large steam boilers were used, but now we’re using water boilers that are 95 percent efficient versus 84 percent for the steam boilers.”

To commission HVAC, plumbing, electrical, life safety, fire protection/suppression and alarm, lighting, security and building management systems, TBCx utilized an online commissioning process that allowed for the entire team — Intermountain facilities personnel and commissioning authorities — to keep track of the 3,000 pieces of equipment inside the facility and their installation process.

“Our mission is to have a successful project,” Dodd said. “We worked with the design team, contractor and facilities team

from day one so we could produce a better project.”

One unique aspect of healthcare facilities is that there’s a high risk when things don’t operate correctly. Because of the critical nature, the commissioning process is a rigorous one and includes a team of people, especially for the pull-the-plug test. The testing protocol begins by killing the power to the building. Then, individuals in each section of the building have a script, or checklist, they must complete to make sure that every plug and machine that needs to be on emergency power is on emergency power.

“Buildings are completely computer-controlled including medical gas, nurse call stations, emergency power, HVAC and lighting,” Dodd said. “TBCx makes sure that everything works as designed.”

The facility includes an emergency department, inpatient services including a women’s center, NICU, diagnostic imaging, surgery departments. A new clinic facility also houses Primary Children’s outpatient services. ■

*Brittany Punjabi serves as Marketing Communications Coordinator for Salt Lake-based Spectrum Engineers, managing the firm’s teaming efforts with architects, public relations, and social media platforms.*

**Intermountain Layton Hospital**  
 Cost: \$164 Million  
 Owner: Intermountain Healthcare  
 Architect: HKS  
 General Contractor: Jacobsen Construction  
 Civil: Great Basin Engineering  
 Electrical: Spectrum Engineers  
 Mechanical: Van Boerum & Frank Associates  
 Lighting: Spectrum Engineers  
 Structural: Reaveley Engineers  
 Landscape: E. A. Lyman, Landscape Architect  
 Mechanical Sub: CCI Mechanical; Koch  
 Electrical Sub: Rydalch Electric  
 Other Subcontractors: Sunroc Excavation; Miller Paving; Intermountain Landscape; SME Steel; JCC Concrete; Boswell Wasatch; Utah Tile & Roof; Robert I. Merrill; Steel Encounters; Pete King; Golder Acoustics; Diversified Flooring; ThyssenKrupp Elevators; Western Automatic Sprinklers

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# GLASS ACT

Mountain America Credit Union's sparkling new 11-story HQ features a dynamic, four-sided structural glazing system with ultra-reflectivity and excellent thermal and sound attenuation properties.

By Brad Fullmer

Glass reflectivity and sound attenuation properties were among the top client 'hot buttons'; a thicker glass manufactured locally in St. George by Viracon and a curtain wall system with no exterior metal helped produce a stunning final result. (exterior photos courtesy Dana Sohm)



**“We spent a fair amount of time on the glass question. The choice in glass has a significant impact on the comfort, noise levels, and efficiency of the building.”**

**- Sterling Nielsen, MACU President/CEO**



Several times during the course of the year, a notable construction project comes along that tends to attract a lot of visual attention, and lends itself to myriad discussions as it progresses through various construction phases, in part due to its sheer size and complexity, often coupled with a well-placed location along a major transportation artery.

The dazzling new corporate headquarters for Mountain America Credit Union (MACU) is just such a project, a 327,000 SF, 11-story tower in the heart of Sandy City’s ‘Cairns’ development revered for its dynamic glass exterior – a complex 106,000 SF unitized curtain wall system jointly designed by Salt Lake-based Steel Encounters, Inc. and international firm Euro-façade Tech, fabricated by Steel Encounters, and manufactured by Oldcastle Building Envelope.

According to Derek Losee, Vice President, Architectural Business Development for Steel Encounters, the system is a four-sided structural glazed system – meaning it required no exterior metal – which played a critical role in

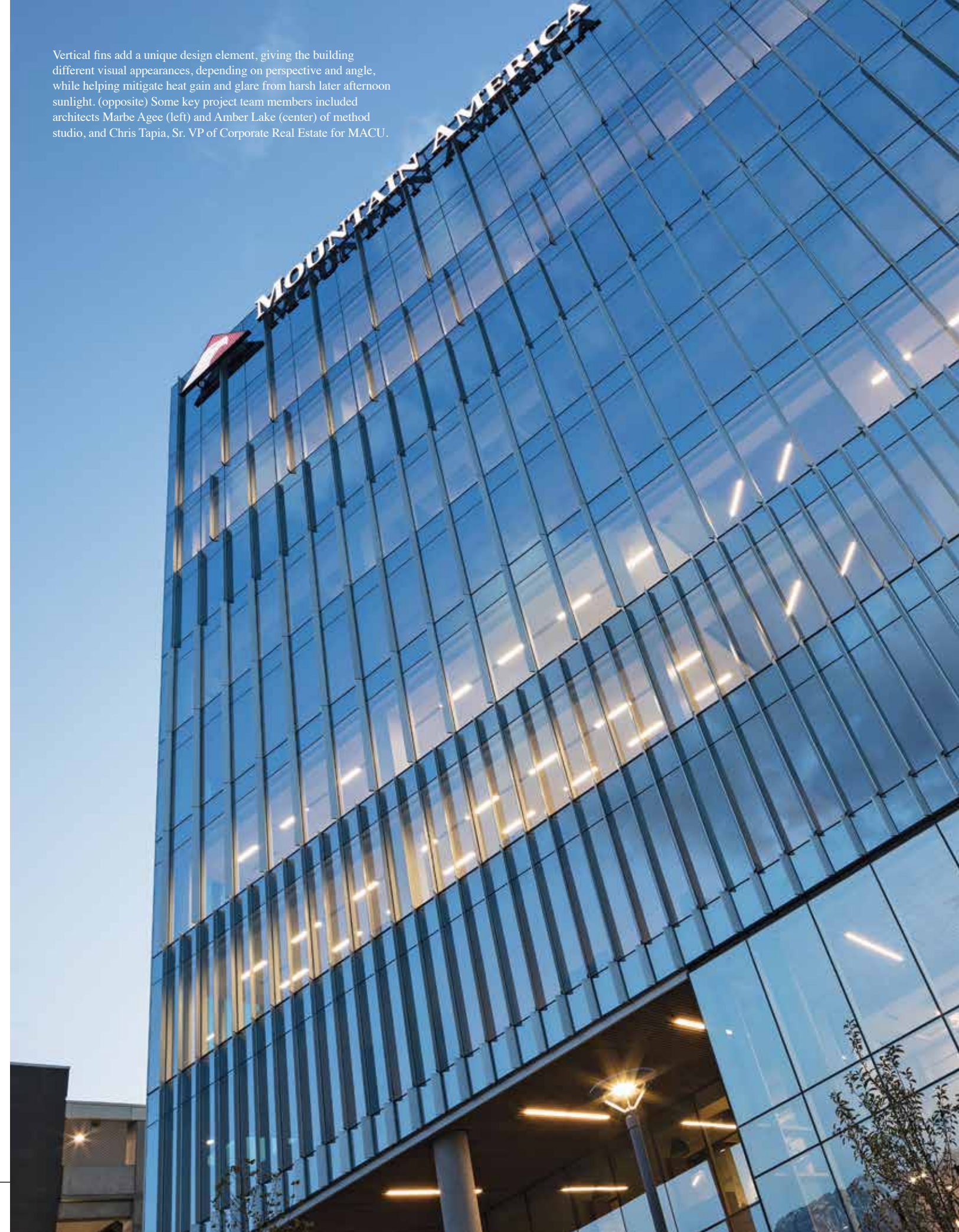
meeting the Owner’s desire for a glass exterior that “reads flat and true”, one that has ultra-reflectivity, while simultaneously mitigating harsh glares and heat gains during later afternoon hours, along with the constant din of highway traffic from adjacent I-15.

Fabricated by Viracon’s St. George plant, VRE1-38 glass panels were upsized from typical 6 mm (thick) exterior lite to 8 mm exterior lite, and the system (SE UW25, Clear Anodized) includes 12-inch angled vertical fins laid out in a unique pattern developed by the architectural team that changes the building’s appearance when approaching from different directions. The unitized system allowed crews to shave more than two months off the installation of the curtain wall, with interior finishes commencing at earlier stages compared to traditional site-built curtain wall.

The final result is a beauty to behold, prompting glowing reviews from MACU executives for its form and functionality.

“We spent a fair amount of time on the glass question,” said Sterling Nielsen (via email), MACU’s President/CEO (and >>

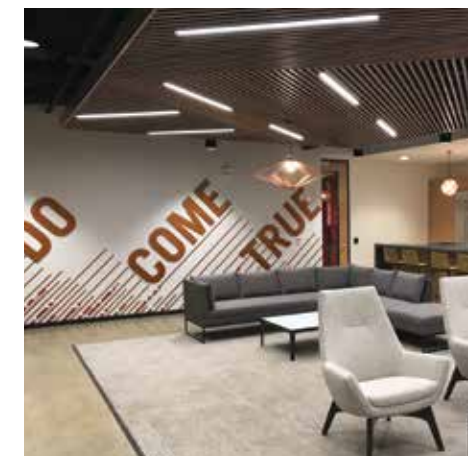
Vertical fins add a unique design element, giving the building different visual appearances, depending on perspective and angle, while helping mitigate heat gain and glare from harsh later afternoon sunlight. (opposite) Some key project team members included architects Marbe Agee (left) and Amber Lake (center) of method studio, and Chris Tapia, Sr. VP of Corporate Real Estate for MACU.







(opposite) Designers made excellent use of MACU branding and culture throughout the 327,000 SF building, with corporate mottos and sayings prevalent in key public spaces.



recipient of a 2018 Titan Award from the Sandy Area Chamber of Commerce), noting that once the project went from a leased building to an owner-occupied building “upgrading the glass was a natural choice given the change in use. The choice in glass has a significant impact on the comfort, noise levels, and efficiency of the building.”

“Designing a high-rise structure in an area where there aren’t many, and being one of the tallest buildings outside Salt Lake City (it’s the tallest building in Sandy at 134 feet, 12 feet taller than Jordan Commons Office Tower), that was very exciting,” said Brian Milman, Partner-in-Charge for San Francisco-based WRNS Studio, which designed the building’s shell. “Frankly, we had not used that type of glass before so it was new for us. When you go with a glass with more reflectivity, it needs to be flatter, so the thicker glass... helped maintain the flatter façade, and also helped with acoustics. It was a challenge to create a simple building that didn’t have a lot of articulation, but felt

sophisticated and elegant and connected to the envelope. That was a consideration with the shape and rotation of the fins as it goes up the building.”

“Noise and sun glare were our top two items, along with heat gain associated with the sun,” said Chris Tapia, Sr. Vice President of Corporate Real Estate for MACU. “We’ve had some issues with all of the above in other corporate buildings, so we needed to address those concerns. We did beef up the glass, both in thickness and UV coating, to help mitigate those, and it helps with disruption of sound waves from the freeway. When you’re in the parking structure and step into the building, you notice a big difference regarding noise level.”

**DESIGNING AROUND EMPLOYEE NEEDS**

Achieving a world-class final result with both form and function of any project requires designers to engage with company executives across all departments to find out their most critical

needs, and then filter through the wants.

To that end, Salt Lake-based method studio (interior architect) conducted thorough surveys and interviews during conceptual design and programming phases, figuring out how to mingle key design and branding elements – an essential part of MACU’s mission and overall work culture – with functionality that centered open, flowing spaces, while maintaining optimum security throughout the spacious building (each floor is nearly 30,000 SF).

Designers were cognizant about daylighting and views to the outside being available to literally every employee working in the building, to the point of envisioning various floor layouts and where offices and workstations would be situated.

“MACU cared about getting it right,” said Marbe Agee, Principal-in-Charge for method studio, “so we spent a bit longer on conceptual design, even going to the point of having 3D renderings of spaces to make sure we got it right. As we walked floors,

we considered views as the layouts were being done on the floor, and that there was daylight and views for everyone.”

“We met with every single department and a lot of different people to get the right feedback,” said Amber Lake, Project Manager for method. “We had them fill out questionnaires about their space and needs, then created a matrix and adjacency chart based on that information, so we knew exactly who sat next to each other and how the departments operate.”

“This was one area where method really shined,” added Tapia. “We had never performed these exercises with our team to the depth method took it. They truly evaluated how we were working with each other. We got (employees’) perception of what they wanted the space to be, and then also observed them to see how they’re actually working. Sometimes there is a delta between those two. I can’t speak enough to method’s ability to dive into our company and get a true understanding of how we work.”

**OPTIMUM STYLE, QUALITY IN DETAILS**

Mountain America will occupy eight of the 11 floors (the firm is currently negotiating to lease floors 5-7, just over 89,000 SF). Tapia said there are currently 650 employees in the building, with another 300-plus set to migrate over during the first quarter of 2019.

There is only one corner office in the entire building (Nielsen’s office on the 11th floor), and all floors have a layout with workstations on the perimeter and offices at the core (albeit with all glass walls/doors to ensure daylight/views).

The ground floor of the building is highlighted by a two-story lobby with a beautiful 400 SF ‘living wall’ and a spacious cafeteria with a fun variety of seating options. Trendy PH Artichoke lamps (circa 1958) by Louis Poulsen adorn the space, as does a custom-made, suspended, vented wood ceiling that plays into theme of the ‘Cairns Café’.

Having multiple seating options and spaces to gather on all levels is part of

the movement to placate the Millennial generation workforce, although Agee pointed out that Fortune magazine recently stated the Gen Z generation (1997 to present) will account for 20% of the workforce by 2020. So having a cool place to work is vital to attracting the cream of the crop from these young generations.

“One of the goals centers on recruitment and retention (of employees),” said Agee, “so we asked ‘what message are you trying to convey of your space, and to whom?’ Workers are shoppers. You want to give them a compelling set of work styles and types, and have a broad appeal generationally.”

“The building was designed for all workers to enjoy,” said Nielsen, who along with Tapia and two others comprised MACU’s primary decision-making team. “We made extensive use of different workspaces including ‘huddles’ (small rooms for 2-4 people) with varied furniture configurations, walking workstations, sit/stand desks, recreation rooms, a >>

(clockwise from top left): Stylish benches were designed as cool overflow seating options in conference rooms; a 400 SF living wall adorns the main lobby; the cafeteria is hip and modern, highlighted by 'artichoke lamps' from the late 50's by Louis Poulson.



fitness facility and a café. I enjoy seeing employees work in different ways and enjoy the new environment. We see far greater teamwork and collaboration because of the changes.”

MACU branding is notable on all levels of the building, with prominent motivational words and phrases adorning hallways and gathering spaces. Different metals (bronze, copper, silver, etc.) are used to help with wayfinding, and rooms are playfully named around a National Parks theme. Materials were chosen not only for style but long-term durability, and quality was enforced on the most minute of details. Agee pointed out various details – like a heavier gage wall base, columns that are integrated into corners before being taped and mudded, support backs on innovative conference room benches lining up perfectly with window mullions – as

things most people won't notice, but that speak to the level of detail and quality put into this building.

“I don't know that a lot of people may notice some of these details,” Agee said, “but it's that type of thing where you walk into a space...and the space just feels really good.”

Lake relayed a story about driving south on I-15 at night, and being riveted at how the lights on each level are aligned, creating that symmetry that architects crave.

“You can look at the building when you're on the freeway at night and all the lights line up on every level,” said Lake. “It was important to us to make that happen.”

The building is aiming for LEED Silver certification, and features LED lighting, a VRF (variable refrigerant flow) mechanical system, and high-tech window shades that



raise/lower automatically via solar rooftop sensors to control heat gain/glare, along with other modern sustainable features.

Structurally, designers from Salt Lake-based BHB Structural Engineers considered several options before choosing a concrete over metal floor deck supported by a gravity steel frame. Wind and seismic forces are resisted by concrete shear walls strategically located around stair and elevator cores, a solution that offered the best economy while maximizing flexibility in the occupied spaces.

The parking structure – the second largest above-ground structure in the state with more than 1,700 stalls – is constructed with concrete post-tensioned slabs and beams. A series of galvanized angles is attached to the parking exterior to support the exterior metal panel cladding and the large video board on the southwest corner

of the parking structure.

Two other unique design aspects included cantilevered floor plates at levels two and three to minimize structure and create the outdoor patio on the west side of level three, and use of an elevated walkway between levels one and two to provide a protected means of egress without occupying valuable floor space on the first floor.

Tapia praised the architectural firms for their ability to work together, and construction crews for finishing the project in a timely fashion.

“Once we got into the thick of the collaboration, I was very impressed with the ability of both firms to take feedback from the other firm. We never came across any territorial issues.” ■

#### MOUNTAIN AMERICA CREDIT UNION

**Location:** Sandy  
**Start/Completion:** October 2017  
 September 2018  
**Cost:** Undisclosed  
**Owner:** MACU  
**Developer:** Gardner Company

#### DESIGN TEAM

**Architect (Shell):** WRNS Studio  
**Architect (Core; Interiors):** method studio  
**Civil:** Ensign Engineering  
**Electrical:** Spectrum Engineers  
**Mechanical:** PVE  
**Structural:** BHB Structural Engineers

#### CONSTRUCTION TEAM

**GC:** Okland Construction, Inc.  
**Curtain Wall/Glazing:** Steel Encounters  
**Electrical:** Rydalch Electric  
**Plumbing:** Shamrock Plumbing  
**HVAC:** Atlas Mechanical  
**Earthwork:** Siri  
**Steel Fabrication:** GEM  
**Steel Erection:** Sure Steel  
**Rebar:** Gerdau  
**Concrete:** Okland; Peterson's  
**Masonry:** Allen's Masonry; RJ Masonry  
**Drywall:** CSI  
**Roofing:** UTR  
**Painting:** Grow Painting  
**Tile/Flooring:** Metro  
**Landscaping:** Intermountain Plantings  
**Waterproofing:** Waterproofing West  
**Ceiling:** Ceiling Systems



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AIA Utah's new downtown SLC office includes space for a downtown studio for the University of Utah's College of Architecture + Planning, the first partnership of its kind in the nation between an AIA chapter and a College of Architecture. (photos by Dana Sohm)



## AIA Utah Celebrates Opening of New Downtown HQ

3,300 SF space recreates historic section of old Ford Building on 400 West In Salt Lake City and will serve the prominent association well into the 20's.

By Brad Fullmer

The Utah chapter of the American Institute of Architects (AIA Utah) celebrated the opening of its new headquarters December 7 at 280 South 400 West in downtown Salt Lake City, a stone's throw from fabled Pioneer Park.

Designed by Salt Lake-based Blalock & Partners, the 3,300 SF space also includes a downtown studio for the University of Utah's College of Architecture + Planning (CA+P), the first alliance of this kind in the U.S. between an AIA chapter and a College of Architecture. Keith Diaz Moore, Dean of the CA+P, has been instrumental in working with AIA executives to build this

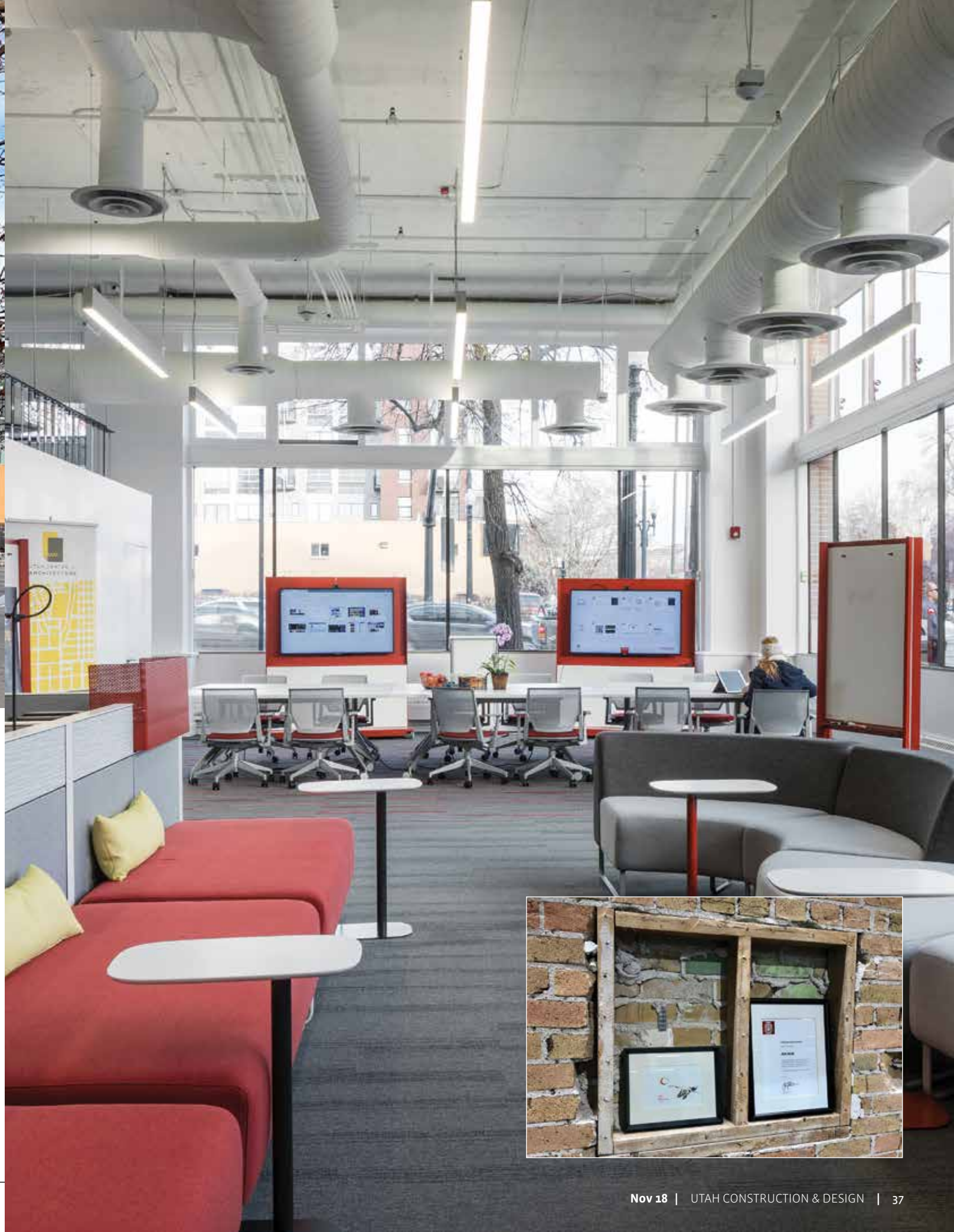
great relationship, and will serve as 2019 President of AIA Utah. Moore is thrilled at the AIA/CA+P alliance and envisions it being a major boon to architecture students.

"What this space will enable the college to do is have the students interface with the profession every day while they're studying, and to have their work critiqued by professionals and learn in a different way than what an internship provides," said Diaz Moore.

"I think it's going to be an exciting space, with lots of light coming through," said Jim Lohse, a Principal with Salt Lake-

based FFKR Architects and 2018 President of AIA Utah, emphasizing the chapter's goal of having a more lively space serve as a gathering place for architects, students, and the general public. "It's a place for people to come and hang out, have a cup of coffee, come together. It's for everybody."

Blalock & Partners worked with both organizations on placing the CA+P Studio within the footprint, a design studio for 15 graduate-level architecture students. The historic building presented a design challenge for the architectural team in that the building's restroom core and one exit/entry path was at a different elevation >>



Some of the AIA Utah executives who helped make the move to this new office possible included (left to right): Keith Diaz Moore, Dean of the U's CA+P and 2019 AIA Utah President; Peggy McDonough-Jan, MHTN President and 2017 AIA Utah President; Jim Lohse, Principal with FFKR Architects and 2018 AIA President.



than AIA's tenant space, said Kevin Blalock, firm President. The team incorporated an accessible path to mitigate the change in these levels.

The AIA's commitment to universal accessibility meant using a more dignified design than a typical stair/ADA lift, so the team conceived of the ramp as another occupiable space; a space that could function as gathering, display and social interaction, as well as moving people effortlessly from entry level to main building level. Programmatically, this "ramp" incorporates: a small break room & collaboration space; a gallery-type space for the AIA Utah to display projects and exhibits; informal classroom space for CA+P to have critiques and studio reviews.

Utilizing the building's natural historic qualities was a given, Blalock added, allowing designers to expose previously covered up massive concrete columns and unique column caps (with large exposed aggregate), and exposing an old brick wall with great character.

"The building has a lot of history, it's got the proverbial 'great bones', a lot of natural light, it's a high volume space," said Blalock. "Our attempt was to clean up the uses and changes over the last 100 years...and try to strip it down to the original character of the building. Respect it, pay a sense of homage to what it used to be (an automobile showroom in that particular corner).

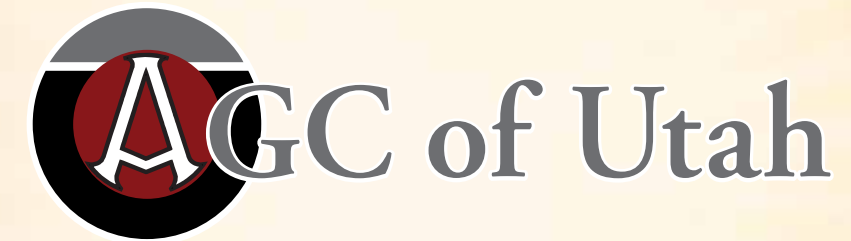
"We wanted to expose the natural character and original aesthetic, without any window dressing to cover it up," Blalock added. "In the brick wall there were some openings we thought were cool – it spoke to the evolution of the building overall." >>



photo by Dana Sohm, Sohm Fotografix

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“I think It’s going to be an exciting space, with lots of light coming through. It’s a place for people to come and hang out, have a cup of coffee, come together. It’s for everybody.”

- Jim Lohse,  
2018 AIA Utah President



Budget constraints of the approximately \$350,000 project required the use of more pedestrian, off-the-shelf products and materials, which the design team crafted in a more refined and expressive way. In lieu of traditional, framed glass openings, the CA+P Studio is enclosed by walls fitted with acrylic panels and charcoal-colored felt “fins”. The ¾” thick acrylic panels are of varying widths and of varying levels of transparency (translucent white, sandblasted and clear), which provide changing sightlines into and out of the CA+P Studio space. The felt fins create a rhythm of movement within the space and serve to absorb sound between the two primary occupants.

This same acrylic was used as a “veil” to create both separation from and connectivity to the AIA’s primary space and the occupied “gallery ramp”. Here, the architects used vertical 6” wide by 11’ tall strips of the acrylic with each one anchored at a slightly different angle. The result creates a vibrant pattern of varied views, shifting reflections and implied movement, while still allowing visual connection for the AIA staff to the north entry. The gallery ramp is clad in the same felt product, which ties it to the CA+P enclosure walls, and relates to the AIA’s carpet color, yet allows the ramp its own identity while also aiding



Architects from Salt Lake-based Blalock & Partners stripped the interior to its historic roots, uncovering an old brick wall with great character and utilizing this unique concrete column with an exposed aggregate column cap.

in display and sound absorption.

The location near Pioneer Park will also offer AIA Utah members opportunities to engage with the local community, helping improve the image of the neighborhood in general, noted as a haven for the homeless.

“Community issues are important to us – homelessness, education to the underprivileged. It’s about how architects can be part of the conversation,” said

Peggy McDonough-Jan, President of Salt Lake-based MHTN Architects and Past President of AIA Utah. It was an exciting project, a rallying point for us. Even though it was a lot of time, it was worth it. We now have a place that is a national example. There are other (AIA) chapters that will be looking at this space.”

“If we activate this space It will help Pioneer Park,” insists Diaz Moore. “It having meetings, and this idea to have conversations about the built environment and engage in the local community. We think this shared space will be a catalyst for that change.”

Lohse praised the design team, Moore’s team at CA+P, AIA’s executive committee, and general contractor Entelen Design-Build of Sandy, for working together in a rather quick timeline. Lohse said AIA Utah had an agreement in place to lease another building, but the deal fell through unexpectedly. But the Ford Building space became available in March, and ultimately became a better arrangement for both the immediate and long-term future.

“It took a lot of extra time for this group over the course of a normal year - I didn’t think I’d be putting in this much time,” said Lohse. “But our location is awesome, and we’ll get our name on the window soon.” ■

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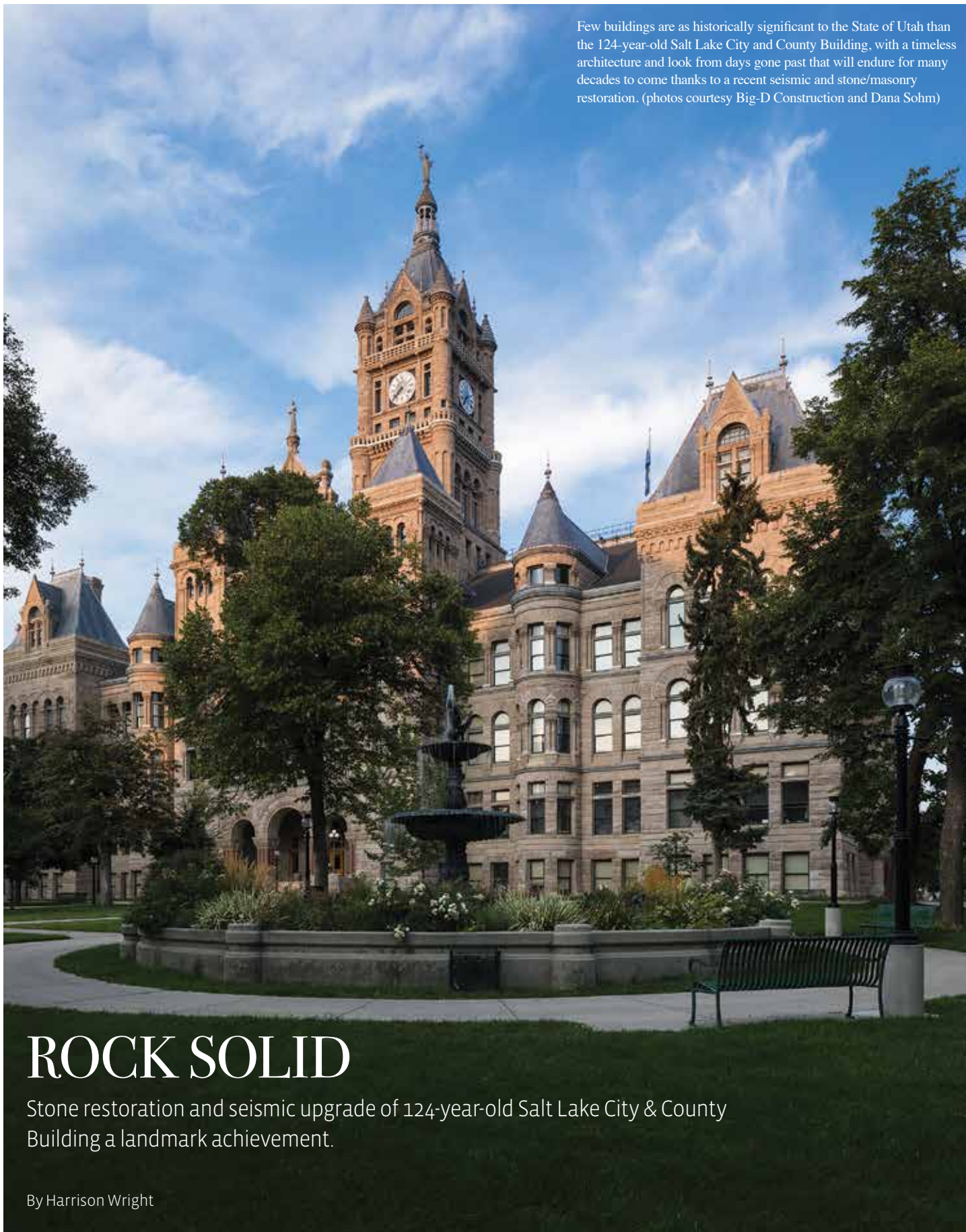
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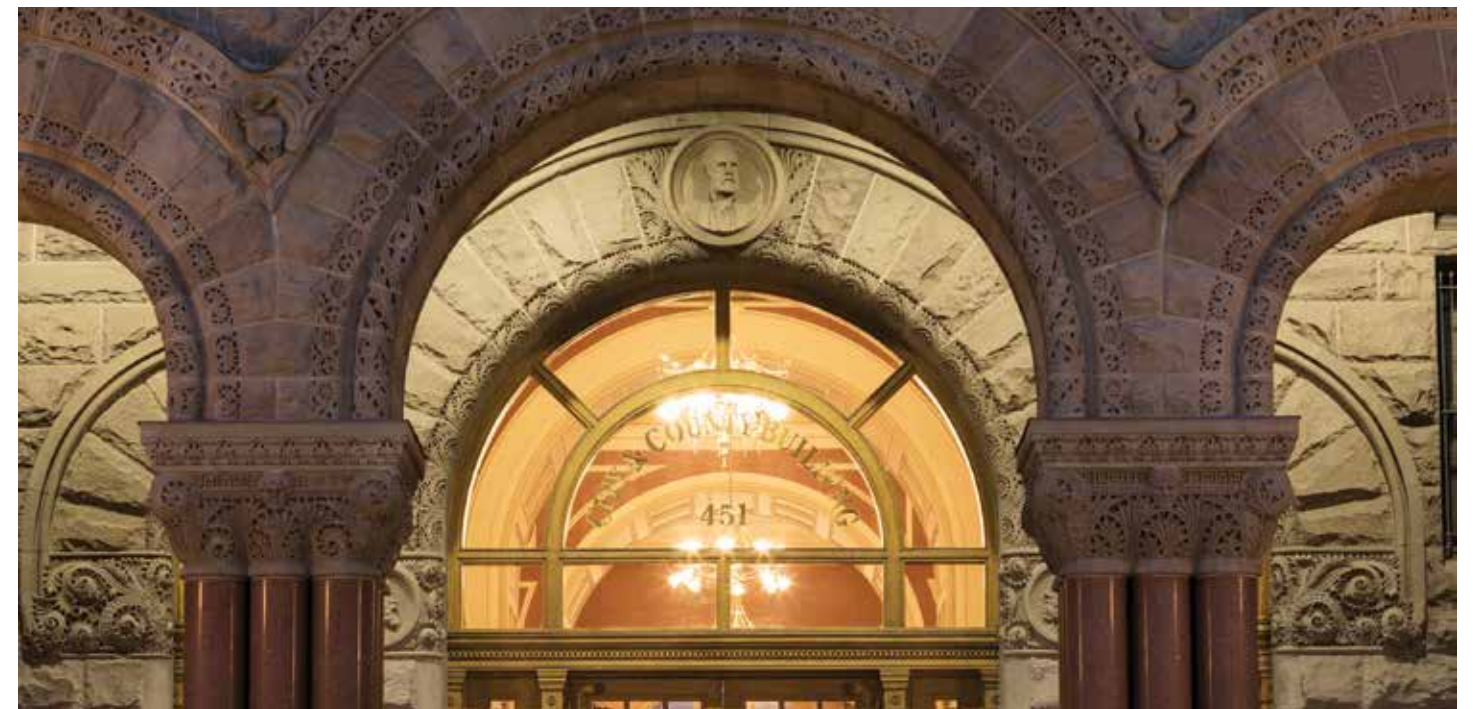
Few buildings are as historically significant to the State of Utah than the 124-year-old Salt Lake City and County Building, with a timeless architecture and look from days gone past that will endure for many decades to come thanks to a recent seismic and stone/masonry restoration. (photos courtesy Big-D Construction and Dana Sohm)



# ROCK SOLID

Stone restoration and seismic upgrade of 124-year-old Salt Lake City & County Building a landmark achievement.

By Harrison Wright



**F**ew projects can rival the long-time cultural significance of the Salt Lake City & County Building, a historic masterpiece originally completed in 1894 and one of the most important buildings constructed in the Beehive State.

So the completion earlier this year of a \$10 million stone restoration and seismic upgrade by Salt Lake-base Big-D Construction is noteworthy, ensuring that this timeless, classic structure will be around for another 125 years, serving many future generations of Utah residents.

The two-year-long project (originally slated as a three-year project; Big-D was able to knock a year off the initial schedule) included improving the seismic base isolation system (originally installed in 1988-89) by making the building's foundation more flexible and able to shift up to 16 inches by constructing a concrete and steel receiving system supporting the 447 base isolators.

According to Kevin Pilny, Big-D Project Superintendent, crews performed admirably over a labor-intensive, eight-month stretch

working underneath the building in ultra-tight crawl spaces around the base isolators, ranging from 18 inches to a maximum height of 4.5 feet. Crews from Salt Lake-based demolition firm Grant Mackay took out the existing structural stone, and workers from Big-D replaced it with more than 500 CY of concrete poured amidst a network of 16 tons of structural steel elements.

"It was very difficult working conditions for eight months – it's very hard working in between the base isolators," said Pilny, with crews referring to the >>

## Salt Lake City & County Building

area as “the dungeon” from the outset. “We had to demo out all the old stone and then drill in (steel) rebar into the existing matte slab and utilize smaller, reinforced concrete elements. It was very complex.”

The masonry restoration was equally challenging on many fronts, Pilny added, beginning with an intricate scaffolding system that was supported by a custom-design steel frame. He said it required crews to take windows out of the basement of the building, so steel beams could be positioned to support the weight of the scaffolding.

Crews from Abstract Masonry of Salt Lake replaced original Kyune sandstone (quarried around Price, Utah) that was sloughing off – up to four tons of material – and replaced it with Ohio Berea sandstone that was an excellent match in color and texture. More than 15 tons of sandstone was brought in, and 300 individual decorative pieces of masonry were replaced, including several striking pieces that were hand carved by master masonry craftsman Jeff Eakle of Abstract.

Pilny said the masonry work was hands down among the finest work he’s ever seen, with an extraordinary level of skill that went into fine details that can only be appreciated with an up-close inspection.

“You just don’t see that level of craftsmanship on new projects, so it’s great to see it on this building,” Pilny said.


One of the more interesting aspects is that Eakle worked with local paleontologists at the Natural History Museum of Utah to create two carvings of a Kosmocerotops dinosaur – a species discovered at Grand Staircase in Escalante.

Big-D crews also replaced many of the windows on the building, improved some balcony area spaces, and upgraded various plumbing, electrical, and irrigation systems. ■

### Salt Lake City & County Building Stone Restoration & Seismic Upgrades

Owner: Salt Lake City  
 Architect: VCBO Architecture  
 GC: Big-D Construction  
 Structural: Reaveley Engineers  
 Masonry: Abstract Masonry  
 Electrical Sub: PowerHouse Electric

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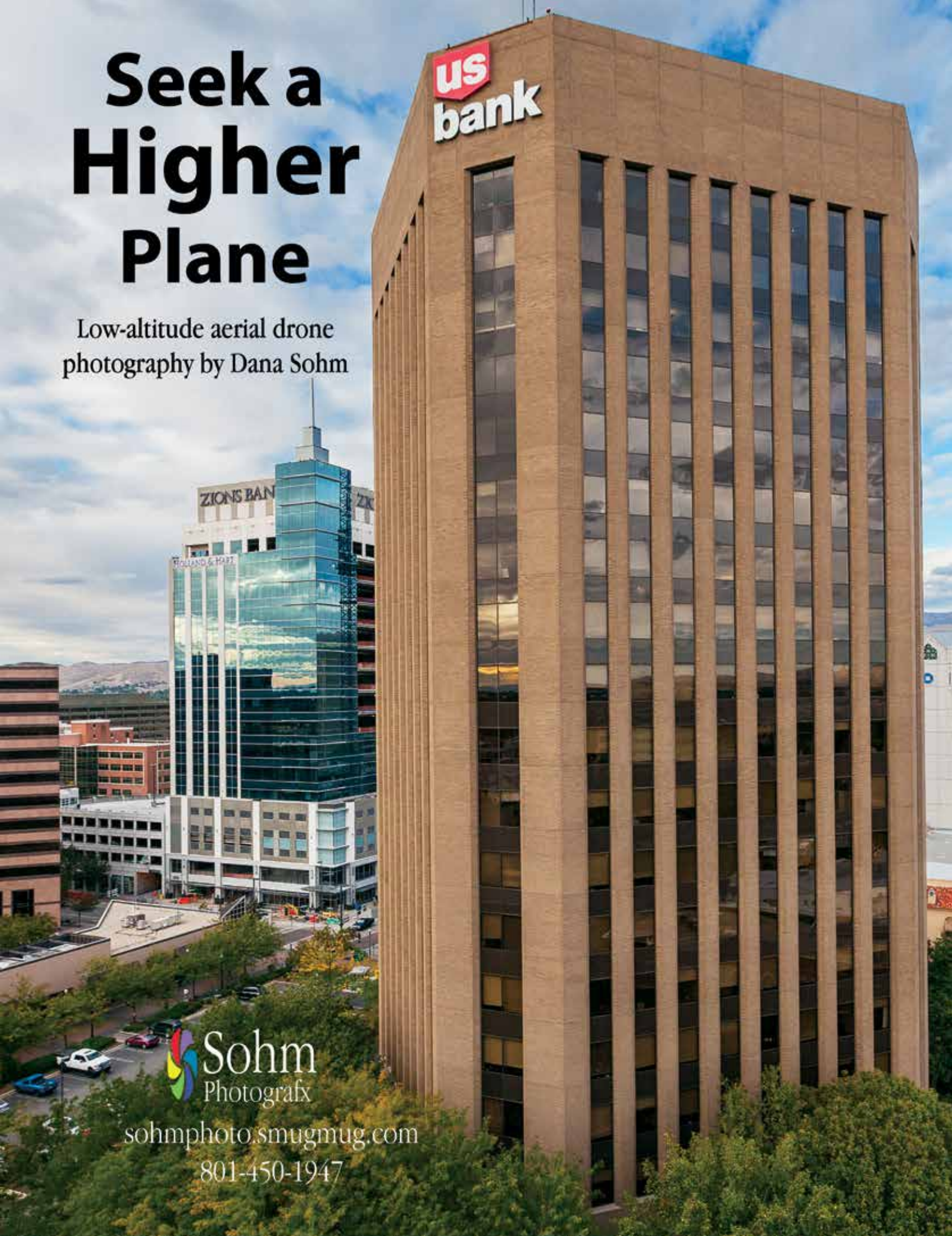


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