

# inform

Architecture+Design

in the Mid-Atlantic

2014: number four

six dollars

**Inside:**  
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Consultants  
Directory

Brian MacKay-Lyons and the Resistance ■ Bristol's Big Bang ■ Caring for a Collection ■ Communities and Schools





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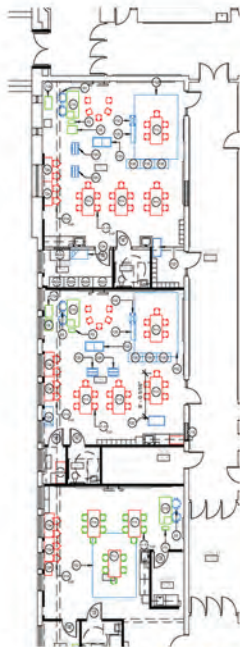
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## From the publisher

### Celebration and Collaboration

**F**all is here. The weather is cooler. The Virginia Society AIA has celebrated its 100th anniversary with a Centennial Luncheon, and the *Virginia Accord* symposium has explored the themes around which the Society will be focused as it marches into its second century.

The region has also launched new institutional and cultural sites that reflect our finding new ways of relating to the past. This issue of *Inform* brings you new work, from Bristol on the Virginia/Tennessee border to Falls Church, that reveals how new technology and new sensibilities capture, memorialize, use, or celebrate the past in contemporary ways.

Our cover article, on the **Birthplace of Country Music Museum**, is a story about reclaiming a historical moment that literally birthed one of the major musical movements of the past century. Architects Peyton Boyd, FAIA, and Michael Haslam, AIA, guided the architectural side of the program for more than a decade as a 1920s auto dealership was repurposed to celebrate the now-famous “Bristol Sessions” of 1927.

In Falls Church, Studio Twenty Seven Architecture helped guide the redevelopment of a highly valued **Easter Seals Child Development Center** when it lost its lease and was nearly forced out of town. An inspiring series of collaborations have saved the day as a derelict auto parts warehouse, spanning multiple jurisdictions and zoning regions, has emerged, redesigned and re-purposed, to provide a sensitive learning center for kids with serious challenges.

In another significant institutional move, the **George Washington University Collections and Conservation Center and The Textile Museum** has created a home for the storing, conservation, and exhibition of more than 19,000 textiles, spanning 5000 years of human history and six continents. Cooper Carry of Alexandria was the architect.

In Richmond, Moseley, VMDO, and BCWH provide the design for four new schools in the city’s Build a Better Richmond campaign, many with dual purposed school and community centers. Take a look at the program that has produced the first new schools in 15 years and the first new high school in 40.

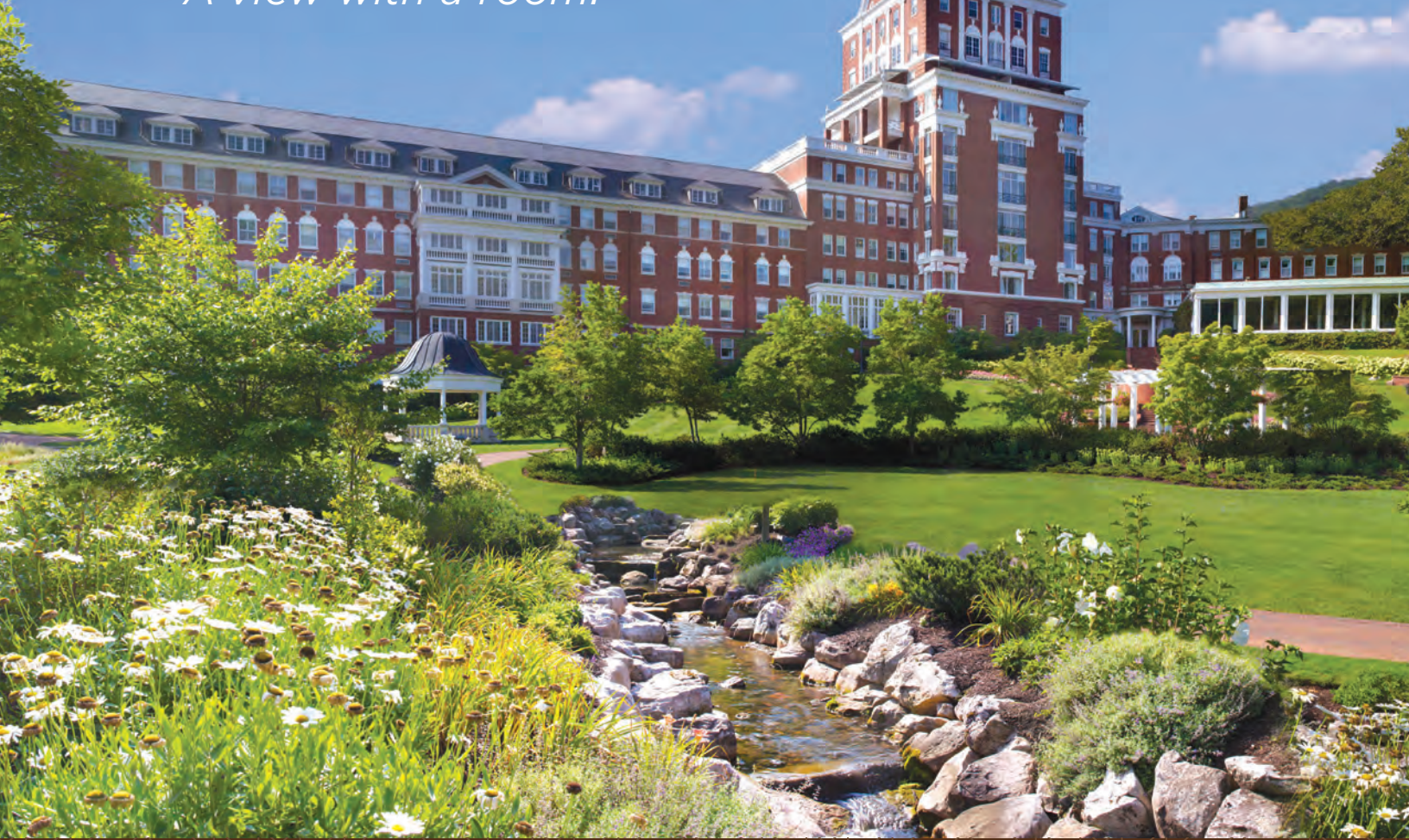
Rounding out the issue’s major coverage, David Neumann, FAIA, discusses the evolution of the campus at **The UVA College at Wise** that accompanied its transition from a two-year to a four-year liberal arts college. A combination of new master plan, new construction, and reworking of the original adapted county buildings of another era is crowned with the Sandridge Science Building which boasts UVA’s only LEED-Platinum rating.

Fall also brings the annual **Architecture Exchange East** to the mid-Atlantic region. In anticipation of Brian MacKay-Lyons’ **ArchEx** keynote address, don’t miss Marie and Keith Zawistowski’s interview with the well-known rebel on his assessment of architectural education, his long involvement in design-build as a teaching/learning strategy, and his resistance to the numbing effects of globalization.





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The Birthplace of Country Music Museum.

Photo by Fresh Air Photo.

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# Design Dialogue



## An interview with Brian MacKay-Lyons

*Brian MacKay-Lyons is the founding partner of MacKay-Lyons Sweetapple Architects, a professor at Dalhousie University, and the founder of Ghost Lab — the now legendary 2-week summer design/build program that took place on his family farm in Nova Scotia from 1994 to 2011. While relentlessly local, Brian's work has been recognized internationally with more than 100 awards, 300 publications, and 100 exhibitions. In 2012, the American Institute of Architects recognized the collective work and influence of Ghost with an Institute Honor Award for Architecture.*

From left to right:  
Ghost Lab campus  
from the Northeast.  
Ghost 1.  
MacKay-Lyons  
drawing in the sand.

*On August 22, 2014, Brian hopped off his tractor and wiped the diesel fuel off his hands to discuss architectural education with Keith and Marie Zawistowski, co-founders of the design/buildLAB at Virginia Tech and partners of OnSite Architecture. Here is an excerpt from their conversation:*

**Keith:** Your contributions to the discipline of architecture have been both in practice and in education. In 1994, you founded Ghost, an international laboratory that influenced generations of architects with its simplicity and affirmation of timeless architectural values of place and craft. It was a pretty bold move, and it seems for us like it was a direct reaction to your discontentment with academia and the way architects were being educated. Do you still feel that strongly about the state of architecture education and the profession?

**Brian:** Yeah, for sure! And it would still be a fair criticism of both, because I think both have a role in the education of architects. I felt like — and still feel like — the schools get flakier and flakier, and the practices become more and more philistine. Practice is becoming dominated by a corporate globalized culture, and the small firms are getting eaten up.

Practices have not been doing as good a job as they used to at the apprenticeship part of education. I think large corporate practice views young people as mobile capital, human capital. The idea that you take someone under your wing as an apprentice, the way Louis Sullivan took Frank Lloyd Wright, is not as strong as it used to be.

So I don't just blame the schools anymore. I started out

being pretty clear that I thought the schools were getting flaky. You know how it goes, the university culture forces people to get Ph. D.'s. So they get a Ph. D. and they are 45 years old and they have never seen a two-by-four. And the last thing they want the students to think or understand is that they don't know what a two-by-four is. So they have to call it some flaky name and hope that they never get found out.

Then those same faculty members choose the new faculty members in the school and the balance is tipped towards schools without practitioners, or schools where there is nothing behind the curtain, like in *The Wizard of Oz*.

**Keith:** So what do you think the education and the architect ought to look like?

**Brian:** Well, what I don't think it needs to look like is an all design/build curriculum. I guess I have also learned that it has its limitations, like everything. One reason that Ghost has taken this hiatus is because I realized that I was being insincere.

I believe an architect's role is not to be the builder. The architect's role — like a conductor's role in an orchestra — is



not to be the first violinist either. I learned at Ghost that because I'm not a builder, I would volunteer for really dumb jobs on the site like driving spikes or carrying lumber. It was only when I was doing something not very challenging craft wise that I had the distance from the coal face that I think an architect needs to have to be the architect. I also learned in practice that contractors aren't happier if you start to act like a builder and start telling them where to pile the lumber or how to do things. I found that what works best in the construction industry is, when the builder asks you a question, to say you don't know the answer. Then the builder can be the builder and their experience is then something you can learn from.

I think both in practice and education, the architect is like Chauncey Gardiner in the movie *Being There*, when he said "I like to watch." I think that is what architects do. They watch. So I think there is a romance around design/build that is a little bit misleading. However, I also think that it is really essential. Like in *The Fountain Head*, it's essential to have the experience of building in your education or in your practice. Rick Joy built the first six houses he did, but that was it.

The reason to have had the Ghost Lab is for architects to learn humility, so that they don't become the asshole architects on the site telling the builders what to do and not respecting them.

There are countless stories at Ghost. My favorite stories are when the architects and the people with Ph. D.'s and the engineers had it all wrong, and some guy who didn't even go to high school just makes them look really dumb. <all laugh> It is a wonderful experience.

So really Ghost was about humility. Realizing that builders are really smart in a different kind of way than us and that we would do well to listen.

**Marie:** You've written about the impact of Team 10 on your own intellectual development as an architect. You are also very close friends with architects such as Rick Joy, Marlon Blackwell, Tom Kundig, and Wendell Burnette. You guys visit each other's work, travel together, and even look in on each other's families. Do you consider yourselves a school of thought — a movement in architectural history?

**Brian:** You know, there's this book coming out called *Local Architecture*, which is Princeton Architectural Press's idea of how to take all of that and make a name for it that sells books. <all laugh> It's really called "building place, craft, and community." I think all of us think that there is a curriculum there.

Rick [Joy] asked "What is a curriculum for architecture today? What would it look like?" My temperament toward the timeless side of things and the fundamentals would be to say that there are 3 courses in the school of architecture: one is about place, one is about craft, and one is about community. You only need three courses; it could be the best school in the world ...

So the name of that book is really an idea about a curriculum. [...] Because in that conference that we had in our barn a couple of years ago, education, again, was the elephant in the room. Nobody was talking about it, while everybody was talking about it. Because we're all teachers, right? Ask me the question again, I had an answer.

**Keith:** Do you guys consider yourselves a school of thought? Are you a movement, the way that Team 10 was?

**Brian:** I don't know, maybe a little bit ... I know that sounds very egotistical and that is why I didn't just come out and say it.

**Marie:** But I said it.

**Brian:** Yeah, there you go! I forgot it, conveniently. Yes, about education, would be the answer. Peter Buchanan calls this group of people, which includes many others, "The Resistance." And maybe we will have an exhibition that will go around after the book comes out and Peter will be the curator, and we will call the exhibition "Resistance," just the idea of resistance. A resistance to the unwholesome break between the academy and practice, between the head and the hand, we're a school about that. We agree on that. The idea about where you find

your lessons, to be environmentally sustainable, we probably agree on all of that.

Mostly I think, to take Kenneth Frampton's position, the value of "Critical Regionalism" is in its resistance to the numbing effects of globalization, cultural globalization, which includes architecture and everything else. That's a school, yeah for sure, that's a school! We think of regionalism — and I hate the word, just like I hate the word sustainability, but we need a word. When you hear the word regionalism, people think conservative, parochial, provincial ... and what I like about the other, the view that we hold as a group, is this idea of resistance.

It's a critical position; it's a radical position. It's like saying I don't get it; I'm not buying it. I think it is a radical position, this position of "resistance," so maybe there is a school there.

*Keith Zawistowski was born in New Jersey, USA, and studied architecture at Virginia Tech. Marie Zawistowski was born in Paris, France, and studied architecture at the Ecole d'Architecture Paris Malaquais. They met at Auburn University's Rural Studio while working as students with Architect Sambo Mockbee to design and build a charity house for Lucy Harris and her family. They later traveled together to study traditional building practices in Ghana, West Africa, and have since married, established OnSite Architecture, and joined the faculty at Virginia Tech's School of Architecture + Design, where they co-founded and co-direct the design/buildLAB.*

*Keith and Marie strive to make buildings that are deeply rooted in the unique identity of people and place and which are economically, culturally, and environmentally sensitive. Their practice and their teaching have each been recognized with numerous regional, national and international awards, publications, and exhibitions.*

Read the full interview at [readinform.com](http://readinform.com).





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# Museum Medley

By Margaret Hancock

This fall, museums across the Mid-Atlantic laud the individual with one-man shows that zero in on technical mastery and stylistic exploration.

## ▼ Nasher Museum of Art — Durham, NC

[nasher.duke.edu](http://nasher.duke.edu)

Rauschenberg: Collecting & Connecting

On view through Jan. 11, 2015

Visitors to this show are greeted with one of Robert Rauschenberg's large sculptures, followed by smaller but no less dramatic examples of his oeuvre.

The diversity of the artist's media is on display

with separate galleries for black and white photographs, found material sculptures, and acclaimed collages. The Rauschenberg works are enhanced by the descriptive labels complete with quotes from the artist, his colleagues, and scholars, and by the presence of works curated from the Nasher collection that demonstrate his influence on others.



## ● Smithsonian American Art Museum — Washington, D.C.

[americanart.si.edu](http://americanart.si.edu)

Richard Estes' Realism

Oct. 10, 2014–Feb. 8, 2015

The Smithsonian features a comprehensive exhibition of the photorealist artist Richard Estes. The breadth of Estes's

work comes across in the 46 paintings that include rarely shown works held in private collections. Architecture runs throughout the show, with exterior and interior environments, cityscapes, landscapes, and portraits that include I.M. Pei in his National Gallery of Art East Building. No matter the subject, each painting demonstrates the sharp focus, sophisticated compositions, and startling realism Estes achieves within his works.



## ■ Chrysler Museum of Art — Norfolk, VA

[chrysler.org](http://chrysler.org)

Thomas Cole's Voyage of Life

Oct. 21, 2014–Jan. 18, 2015

The Chrysler Museum's newly expanded American art galleries host iconic paintings by American Hudson River School founder Thomas Cole. His celebrated

series *The Voyage of Life*, comprised of four monumental canvases of Childhood, Youth, Manhood, and Old Age, travelled from the Munson-Williams-Proctor Arts Institute in New York. These rarely loaned paintings hang alongside Cole's seldom-exhibited original drawings and preliminary studies, as well as the Chrysler's own Cole painting that is the largest single canvas he ever created. The show is a stellar grouping of works by this Romantic master and pioneer of American art.



## ◆ Muscarelle Museum of Art — Williamsburg, VA

[wm.edu/muscarelle](http://wm.edu/muscarelle)

Tree to Mountain: The Woodblock Prints of Toshi Yoshida

Oct. 16, 2014–Jan. 11, 2015

Toshi Yoshida was born into an artistic family and continually pushed the boundaries of the woodblock medium. This exhibition on William and Mary's campus demonstrates the artist's ability to employ a centuries-old technique for the creation of innovative, modern works of art. The dynamic prints capture the exquisite landscapes, flora, and fauna of Yoshida's extensive worldwide travel. This imagery for which the artist is revered, as well as a small selection of his father's (Hiroshi Yoshida, 1876–1950) artworks, comprise the exhibition — the first of its kind to celebrate the innovative printmaker.





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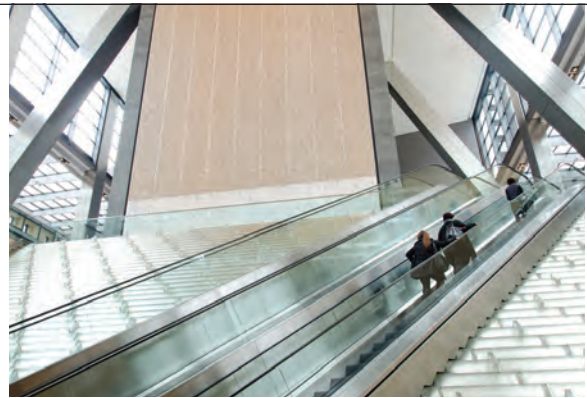
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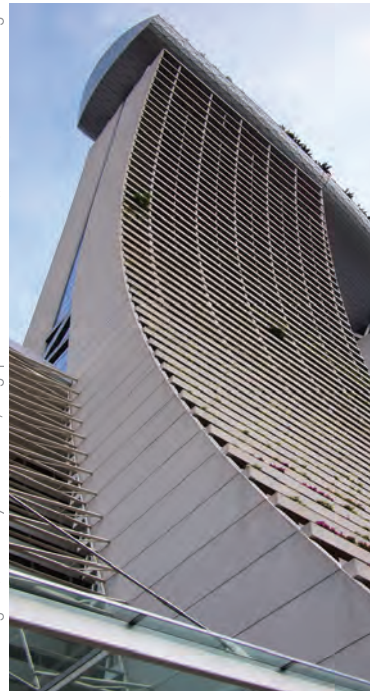
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# Scan2BIM

by Will Rourk

**A**s we have seen recently, laser scanning is now fast, affordable, and efficient for capturing your environment (see “Scan Your Horizons,” *Inform*, March 2012). A 3D laser scanner works by shooting a laser in all directions, and every surface that it hits becomes a point in 3D space on your computer. The data that a laser scanner provides has a huge potential to enhance your modeling workflow because it is an accurate representation of real space.

A laser scanner does not instantly produce a functional 3D model. It provides dimensional data of any subject it scans but only as a mass of points, or a point cloud. It takes some post-processing to make sense of this raw data and takes a real craftsman to

convert a point cloud into a true 3D object model. So how is 3D scanning practical, and how can you actually use scanning data? For the AEC design professions Building Information Modeling (BIM) just might be the answer.

BIM methods have been around for decades, but over the past few years BIM has become the standard for efficient organization of a design project. BIM transforms the 3D model into a graphical data space that unifies all of the team players involved. Each profession adds discipline-specific information to a single shared 3D model usually produced by some flavor of CAD software like Revit. 3D scanning data provides a true-to-life representation of existing conditions, and Scan to BIM is a method of incorporating this

data directly into a project BIM. It is an information layer that has real, measurable influence on a design. To illustrate how this works, we can look to professionals who are making active use of 3D scan data as an essential part of their design methods.

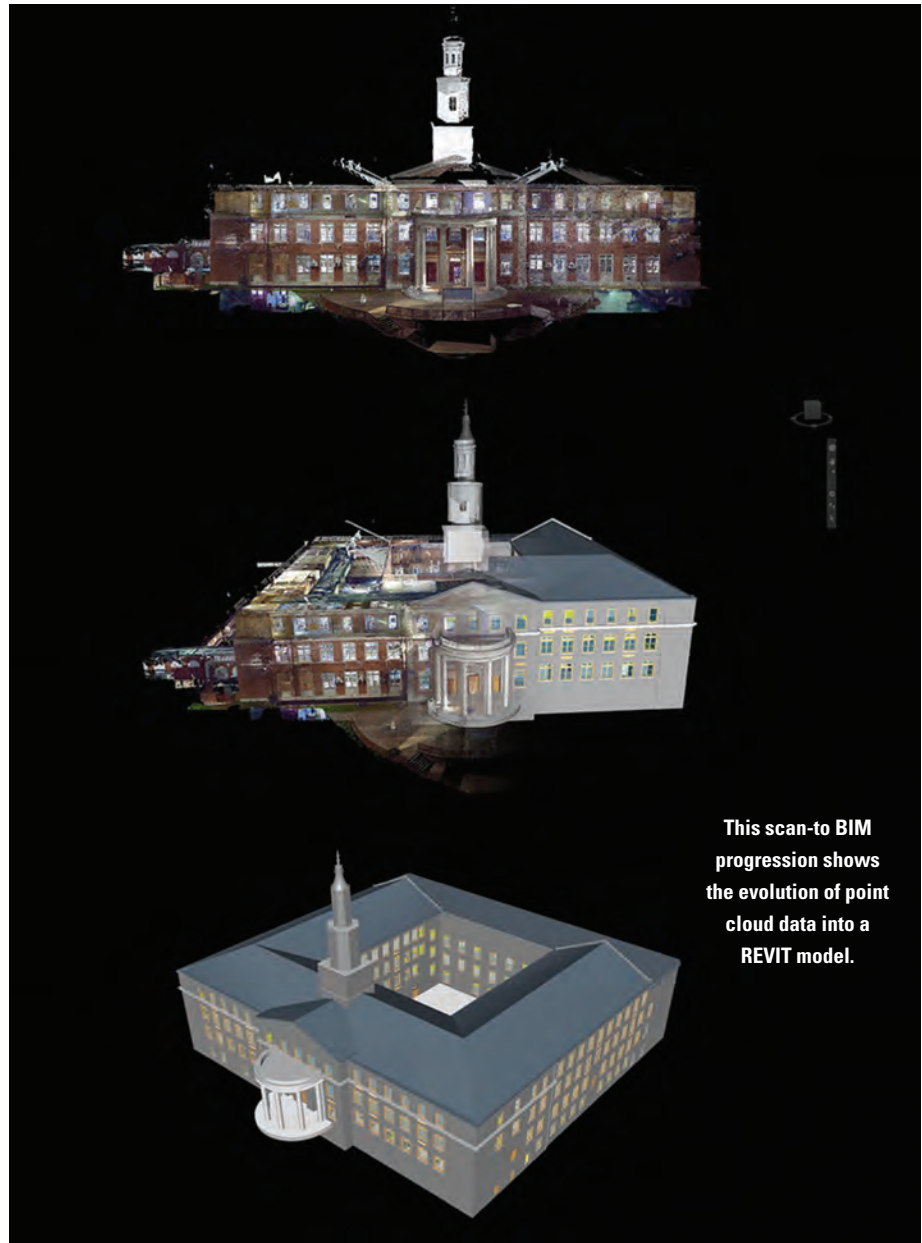
Draper Aden Associates is a Virginia-based engineering, surveying, and environmental-services firm that emphasizes the exploration of new technologies in their mission statement. Draper Aden’s Structural Engineering Division Manager, Dave Spriggs and its Director of Innovative Surveying Services, Bob Bonk, provide expertise in understanding how 3D scanning data has become the best tool in their design toolbox. 3D scan data is an essential part of their design deliverables. As Bob



explains, “We know with the scanner we’re getting true existing conditions. Once we have the point cloud we have the ability to run in different directions. And that can be simply pulling some dimensions or getting diameters from the point cloud and transferring that information over to a CAD drawing.” Dave points out the difference between a “traditional” BIM project and a Scan to BIM project. “When creating a BIM for an original design you have all sorts of artistic license to create the space, to define it any way you want within the BIM. But in a Scan to BIM project your BIM is essentially a report of the scan data of existing conditions. The mindset for a Scan to BIM project is going to be different. The objective is for your modelling to get the best representation of what the point cloud data is telling you.”

Take for example a job that involved structural analysis of a roof load. The client had a roof from which an extensive pipe system was being suspended. Drawings were extant for the building but not for the piping system, which had become a crowded, dense network of pipes over the years, and posed a potential hazard for the roof structure. Dave and Bob’s crew could manually draw up the plans for the piping system, but that would interrupt plant operations and could take weeks to accomplish. Instead they pulled out their Trimble TX-5 scanner and spent a little more than half of a day scanning the entire roof network, piping structure and all. Dave explains that the point cloud data from the scanner proved to be vital. “The nice thing about the 3D scanner is we had a whole selection of points for reconciling the structural framing to the piping so registering everything together was going to be easy to do. And that’s where the majority of the time was spent after scanning — identifying each of the pipe elements and figuring out how they were assembled. At that point we had two different BIMs, and we could bring them together and do a structural analysis based on the correlation of the pipe elements with the structural elements. You could see in 3D what was going on.”

When you do a 3D scan of a space, it is unlikely that you will get the one thing you are expecting. In fact you get more. For example, in the roof structure scan just referenced, Dave and Bob not only got the roof structural system and



**This scan-to BIM progression shows the evolution of point cloud data into a REVIT model.**

its attached piping system, but also the walls, the floor, and all of the contents of the room in which the scanner was located. You get more information than you ask for, and that’s a good thing. As Bob explains, “You can always go back to the point cloud data if your BIM is missing something and extract more if there are elements that weren’t previously modeled.”

The Draper Aden Associates team uses 3D scanning as a standard part of their workflow. Even when it is not specifically requested, they will scan anyway because of the value it brings to the efficient execution of a project. Plus it is cost effective and reduces a lot of time spent doing things manually. Scan data does not just occupy a single layer of BIM information either. Scan data can

continue to be captured over the lifetime of a building, and analysis of that data can show exactly how a building and its site changes over time. BIM makes sense of scan data because you’re using measured data. It is measurable data that captures the reality of your project.

**Read an expanded version of this article at [readinform.com](http://readinform.com).**



*Will Rourk is a media specialist with the Digital Media Lab at the University of Virginia*





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# ★ ON ★ THE ★ RECORD ★

IN BRISTOL, THE BIRTHPLACE OF COUNTRY MUSIC MUSEUM HONORS THE 'BIG BANG' OF 1927

*By J. Michael Welton*



**T**o the genuine country music aficionado, the twin cities of Bristol have long been regarded as home to the Holy Grail.

Today, Bristol is home to a new museum that celebrates the reasons why.

In 1927, the “Big Bang” of country music erupted here and spread across the nation’s airwaves like an aural sunburst. Now the Birthplace of Country Music Museum is amping up the effects of that seminal event and broadcasting them to a modern universe of appreciative eyes and ears.

It is housed, appropriately enough, inside a renovated 1920s Chrysler showroom in downtown Bristol, Va. The \$11 million restoration — its master plan and exhibits designed skillfully by Philadelphia’s StudioMUSarx, its architecture

guided patiently by Abingdon’s Peyton Boyd Architect PA — heralds the apotheosis of 10 days in the Roaring Twenties, when a gifted collection of musicians from the Virginia and Tennessee mountains recorded tunes for the first time ever.

“The impetus for the museum,” says Joe Nicholson, principal at StudioMUSarx, “was the compelling need to tell the story — to present the authentic musical heritage of the region as reflected by both the people and the place.”

The recordings became known as the Bristol Sessions. They took place on the Tennessee side of State Street, a few blocks southwest of the museum, inside a hat warehouse that is long gone. But the musical legacy of what was laid down there — part blues, part gospel, and part Scots-Irish fiddle tunes — permeates the new museum on the Virginia side of town.

Photos: Fresh Air Photo unless otherwise noted





The new museum cements Bristol's place in American cultural history, where previously only a mural and a historical marker remained as physical reminders of the 1927 recording sessions.



"It had to be about the music, because the music is the story," says architect Peyton Boyd, who began work on the project a decade ago.

The Bristol Sessions got started when Victor Records in New York green-lighted a trip by producer Ralph Peer down to this divided city in the heart of Appalachia. Taking the train, he brought with him a portable recording studio, then took out a newspaper ad offering musicians \$50 per recording session and set up shop on State Street.

"The music from the Bristol Sessions is much more sophisticated and complex than you'd think, with technology from the railroad, the microphone, and the radio," says Jessica Turner, museum director and head curator.

Musicians responded to Peer's ad by flooding into Bristol — their guitars, fiddles, banjos, dobros, and dulcimers in hand. Among them were the West Virginia Coon Hunters, the Blue Ridge Corn Shuckers, the Bull Mountain Moonshiners, and the only African American included in the sessions, El Watson.

The Carter Family was also on hand — including Mother Maybelle Carter and her harp guitar — as was Jimmie Rodgers. Thanks to the new technology, they in particular were destined to achieve a rarefied, mythical status in the pantheon of music history.

"It was a modern, industry-infused moment in time," Turner says.







The story of the historic 1927 Bristol Sessions unfolds in a series of sequential galleries.





The 1920s Chrysler showroom can still be read through the overlaid contemporary aesthetic.

**“It had to be about the music, because the music is the story,” says architect Peyton Boyd, who began work on the project a decade ago.**

The same could be said for the design and construction of the new museum. For the restoration of the donated 24,360 square-foot structure — a dirty, windowless box a decade ago — museum founders looked to Boyd for a design that respected its bones.

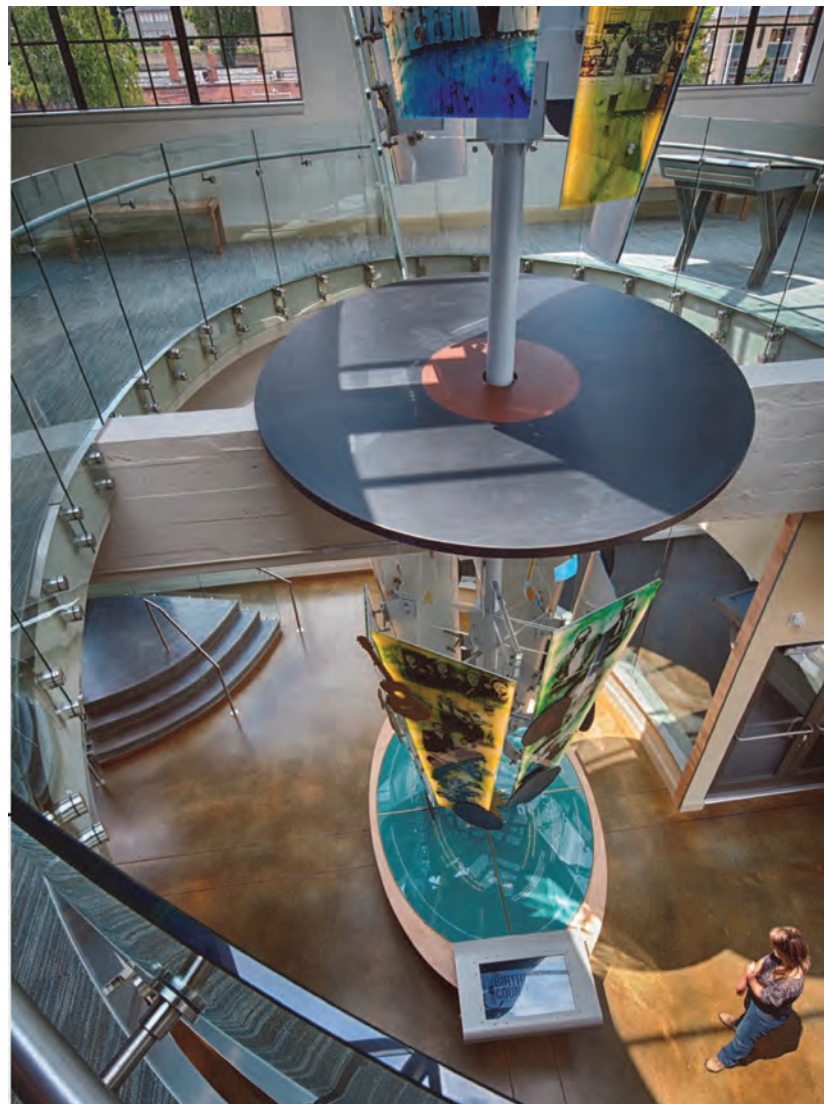
“We asked him to design a museum within the historic structure, and with limitations — about which walls you can change, which columns you can’t move, and which things are to be exposed,” she says. “We wanted him to understand the visual tone and the way we wanted to present ourselves, which was not hillbilly and not hokey.”

“Anytime you’re doing adaptive re-use, you need to maintain the integrity of the original site,” says Boyd. “The original still needs to be readable.”

A fundamental concern was satisfying requirements of state and federal preservation agencies that would qualify the project for rehabilitation tax credits. Other issues included giving the structure a detailed exterior that respected its past and contrasting that with an interior that’s rough in some places and smooth as a rosined bow in others.

“We overlaid a contemporary aesthetic that wasn’t part of the original, but was comfortable with it,” the architect says. “We had to decide what to cover up and what to leave industrial, allowing people to read the structure in the ceilings, beams, and grids of concrete joists and slabs.”

Boyd and his associate, project architect Michael Haslam, adjusted to working with a board of directors that changed membership often during the course of a decade. “It wasn’t as





though they gave us a design brief at the start of the process,” Haslam says. “Ideas were developed collaboratively over time.”

Still, their architecture, particularly on the museum’s expansive first floor, is commendable both for its welcoming feel and its sensitive attention to detail and materials. A street-level entry opens to a daylit lobby and a reception desk flanked to the left by a hallway leading to a 2,000 square-foot special exhibitions room. To the right are a gift shop and a passage to a rear lobby in front of a performance exhibition hall, which accommodates the museum’s educational component with 100 stadium-style seats and superb acoustics.

Materials used on the ground level are the same as those used to make many of the region’s musical instruments: native walnut, ash, and curly maple. The wood — 1,200 board feet of walnut, 2,500 of ash, and 750 of curly maple — is on the floors, the doors, the risers, and even in stacked horizontal bands six inches wide between aluminum beads, sometimes sheathing columns rising to the ceiling. Polished concrete floors are stained a distinctive golden tone in the main lobby.

In the middle of that lobby a thematic vertical sculpture pierces the ceiling above and continues up to the second floor, culminating in a series of symbolic shape notes at the rooftop skylight. At the first-floor horizontal base of the sculpture lies a tabletop map of Bristol. On the vertical component are six illuminated LED graphic panels with sound drivers that turn them into speakers on each floor. The first floor panels depict a number of the original musicians; the second floor features the history of Bristol.

The sculpture is only the beginning of exhibitions designed by Nicholson and StudioMUSarx. A walk up a broad stairway reveals a quilt mounted on a wall midway, stitched by the Tennessee/Virginia Chapter of the Embroidery Guild of America, which tells the story of the sessions.

A timeline on the second floor lobby wall parallels three tracks from 1860 to 1930: natural history, local history, and music. Context is revealed over hidden speakers: period recordings by Caruso ring out, and Lindbergh’s landing in Paris is announced with vigor.

“When you’re talking about developing a museum’s narrative, first there’s the architectural programming of the functional needs and how to allocate space for them,” says Nicholson. “But when you’re programming for exhibits, you allocate space to the big ideas found in the narrative, which in turn form a series of sequential galleries wherein the story unfolds.”

Indeed. To the right of the timeline is the museum’s automated orientation theater, its next showing announced on a digital clock as a departure time over a faux train station door. Inside, a 75-seat auditorium offers a 12-minute film called *Bound for Bristol*, narrated by John Carter Cash.

Film-goers exit through double doors to face a wall of 78 rpm discs, labeled with the names of Bristol Sessions musicians. Beyond lies a broad expanse of exhibits, with kiosks and a series of 10 mini-theaters, including a chapel that reveals the influence of faith on country music, a 1940s recording studio complete with period console and microphone, and a “Greasy Strings Theater,” dedicated to exploring musical techniques.

Stringed instruments abound. “We have some amazing artifacts on display, but there are fewer than other museums because it’s the story and music we’re focusing on, not the artifacts,” Turner says.







“Sure, it is true that the country music industry grew up and matured some 300 miles west, in Nashville. But it was born here 87 years ago, when 19 Appalachian acts tuned up their instruments for Ralph Peer, and recorded 76 trail-blazing works of art.”

There’s an Oscar Schmidt guitar once played and signed by Jimmie Rodgers, a mandolin played and signed by Bill Monroe, and a Fender banjo played and signed by Ralph Stanley. A series of Martin guitars are autographed by Chet Atkins, Johnny Cash, June Carter, George Jones, and Waylon Jennings. Clearly, it is the pedigree that counts here.

“There are five roles of a true museum: acquisition, conservation, studying the story and collections, interpretation, and finally the exhibition,” Nicholson says. “I’ve been doing this for 43 years now, and this is the culmination of everything I’ve experienced and learned from museums.”

The penultimate experience comes upon entering *The Unbroken Circle*, an immersion theater with a large curved screen set in an open space surrounded by crowd imagery. The effect is to immediately transport visitors into the realm of concert goers with performances, interviews, and documentary footage of artists like Jimmie Rodgers, Merle Haggard, Willie Nelson, Dolly Parton and Ricky Skaggs.

“It’s a kind of bombardment,” says Boyd. “The idea is to get people to dance, clap, and stamp their feet.”

And it works.

Sure, it is true that the country music industry grew up and matured some 300 miles west, in Nashville. But it was born here 87 years ago, when 19 Appalachian acts tuned up their instruments for Ralph Peer, and recorded 76 trail-blazing works of art.

Now those musicians have a place of their own — in a museum that resonates with their narrative.

*J. Michael Welton writes about architecture, art, and design for national and international publications. He also edits and publishes a digital design magazine at [www.architectsandartisans.com](http://www.architectsandartisans.com).*

**Project:** Birthplace of Country Music Museum

**Architect:** Peyton Boyd Architect PC

**Contractor:** BurWil Construction Company

**Exhibit Designers & Museum Planners:**

StudioMUSarx, LLC

**Exhibit Fabrication:** 1220 Exhibits, Inc.

(see ad on page 15)



# IN THE ZONE for children



**T**he city of Falls Church had a problem. It was renting surplus space to the Easter Seals Child Development Center of Northern Virginia, a much loved and utilized public/private social services program. Its growing public school system, however, needed that space.

The Center was the only facility serving very young children with special needs within ten miles of the Falls Church area. Ending its lease would mean losing an important community service, and the city was determined to keep the Center inside its borders. A combination of fast-thinking, altruism, innovative design, and collaboration allowed the Center to not only stay within the city, but to own a beautiful new facility.

*By Loren Bruce and Todd Ray, FAIA*





The site is pinched between an enclave of thriftily built 1950s shingle homes to the North, spotty strip development to the East, and a fizzled industrial investment of the 1960s and '70s along the southeast boundary.

James Snyder, Director of Planning and Development Services for the city of Falls Church, knew that keeping the Easter Seals Child Development Center in the city was imperative. An idea was hatched during a brainstorming session. “A contractor had purchased a property with an old building to relocate his headquarters,” Snyder explained, “but due to the turn in the economy, the project was never realized.” Snyder knew the contractor, John Bellingham of Monarc Construction. He thought Bellingham might be willing to part with the property if it was for a worthwhile cause.

Bringing Bellingham on board proved to be the easiest part of the process. Not only was he willing to sell the property at a price Easter Seals could afford, but he also offered to renovate the building on an expedited basis to meet the project’s very aggressive timeline. The obstacles to realizing this opportunity lay in the property itself.

The structure was a nearly

windowless, one-story, industrial warehouse built in 1973 to store auto parts. The site was a quilt of different jurisdictions and zoning overlays. While the area around it was ripe for development, the property itself languished, in part because of competing zoning prerogatives. Straddling the border of Falls Church and the county of Fairfax, the property was subject to the regulations of four different zoning districts — both commercial and residential. This created a problem: in three of the four zoning districts, the Child Development Center would be allowed by-right; however, the fourth district would require a special exception to allow this land use.


Thus it was fortuitous that Bellingham, the owner of the site, was a general contractor who had also made previous overtures to the local authorities to develop the property. When he first purchased the warehouse, Bellingham engaged Studio Twenty Seven Architecture to turn the building

into a net-zero, sustainably-designed headquarters for Monarc Construction. While this earlier effort was eventually shelved, it helped establish the relationships needed to expedite turning the property over to Easter Seals and permitting the new land use.

While the local Economic Development Authority created a \$3 million bond package to assist Easter Seals in obtaining financing for the project, John Bellingham re-engaged Studio Twenty Seven Architecture to create a new design for the warehouse. The development team needed to establish the financing, and achieve multiple special exceptions, variances, and approvals, all while creating and executing a design for a highly regulated facility. And, due to the sun-setting municipal lease in the old site, the new 14,000 square-foot child development center had to be completed in seven months.

To expedite the development, the two municipalities whose borders cut





The Center was built within the shell of an existing warehouse, qualifying the project for a number of tax incentives.

through the property had to act as one. Remarkably, both the city and the county agreed to a singular building permit review, inspection, and enforcement. The county agreed that since the largest portion of the site would be within the city boundaries, Falls Church should be the primary authorizing agency. The city agreed to keep Fairfax fully engaged and informed as the project proceeded. A shared realization that Easter Seals was a critical community asset helped foster this unified vision.

The obstacles to development continued. Zoning rules dictated that the property, due to its proposed use, had an intensive parking requirement. If stringently applied, almost 100 percent of the site would need to be paved for parking, but in order to make room for play areas, gardens, and onsite storm water management strategies, parking needed to be limited. Again, a multi-jurisdictional solution was found. The city and the county jointly maintained a parking lot adjacent to the site. They agreed to allow Easter Seals staff and visitors to use this parking area, and granted a variance. The site could be developed as envisioned.

That vision included many environmentally sustainable strategies. "The land development aspect of the Easter Seals development fit the definition of Low Impact Development (LID)," explains Karen White, the civil engineer on the project. The facility was built within the shell of the existing warehouse, allowing the development to receive tax incentives for adaptive reuse and waste reduction. An innovative storm-water management system retains and filters all storm water onsite without straining city facilities and potentially increasing pollution in area waterways.

Other sustainable strategies include pervious play areas, a migratory butterfly way-station, and an expeditionary learning garden that the children help maintain. This promotes therapeutic outdoor activities, learning, and environmental stewardship. Janis Schiff, Chair of the Board of Easter Seals Serving DC|MD|VA, shared that the staff are energized "to maximize our new facility" and are "delivering a 'save the planet' curriculum, to learn about the world through interaction with this sustainable building."

The new facility also generates much of its own energy. An extensive







photovoltaic array consisting of 168 PV panels capable of generating 45,000 kWh per year is installed on the roof. Bellingham purchased the system for the original renovation planned for the building, but it was never employed. In the process of turning over the building to Easter Seals, reselling this system proved to be out of the budget. Bellingham came up with a creative alternative, proposing a Power Purchase Agreement to operate the solar panels for Easter Seals and sell the energy back to the non-profit at a discount. The electrical power generated is sold to Dominion Virginia Power through a special “Solar Purchase Program.” Bellingham will then donate the full system to Easter Seals once the initial period is concluded. Now Easter Seals is using less energy while also reducing their overall operating cost.

Finally, the new facility also includes a geothermal field, which will eventually have the capacity to heat and cool the entire building. That is further down the road: the wells were placed during construction, but the required systems and connections proved to be too costly for the initial budget.

The Easter Seals development began giving back to the community



even before it was completed, providing an impetus for the city to make much needed public improvements. As part of the agreement to keep Easter Seals in Falls Church, the city allocated \$50,000 to provide sidewalks, street and safety lighting, and to repave the road leading to the facility.

The Easter Seals development is an example of how creative urban redevelopment, shared public and private vision, collaborative municipal efforts, and sustainable design can

coalesce to support critical community programs. Like many projects, it could not have been possible through the efforts of an individual; it took a collection of key players doing what they do best to realize the vision of this project.

**Project:** Easter Seals Child Development Center

**Architect:** Studio Twenty Seven Architecture

**Contractor:** Monarc Construction, Inc.

**Owner:** Easter Seals serving DC|MD|VA

**Landscape Architect/Civil Engineering:** Walter L. Phillips, Inc.





## City of Richmond Opens Four New Community-Centered Schools

*By Jennifer Pullinger*

In the span of three years, the city of Richmond will have four newly-constructed schools — the first spate of new school construction since 1999. Broad Rock and Oak Grove-Bellemeade Elementary Schools — both LEED Gold certified — opened in January 2013, followed by Martin Luther King, Jr. Middle School in January 2014. Huguenot High School is projected to open in January 2015.

The new schools are the outcome of a capital improvements initiative known as “Building the Best Richmond,” created to bring some much-needed enhancements to the system’s aging schools.

“A major goal of this building program was to begin updating education facilities by providing new, state-of-the-art education facilities and flexible, collaborative, technology-rich learning spaces for students and teachers,” says Stephen Halsey, AIA, vice president at Moseley Architects.

Richmond-based Moseley designed Huguenot High School, the first new high school to be built in the city in over 40 years. BCWH Architects, also in Richmond, designed the new Martin Luther King, Jr. Middle School, while VMDO Architects of Charlottesville designed the two new elementary schools. “What is unique about these

projects is that from the beginning, we felt like there was a certain need to identify commonalities from among all of the schools,” says Ken Thacker, AIA, principal and project architect at VMDO.

The new Oak Grove-Bellemeade Elementary School was constructed on the campus of the former Bellemeade Elementary, which sat on a 16 acre site a few blocks south of the old Oak Grove Elementary. “They all had similar circumstances in that they were to be new schools on existing school sites,” says Thacker. “Any time you’re doing that, you’re dealing with a very limited footprint, not only for the future building, but especially when





**Working with native plants, the landscape design embraced the native ecology of the Oak Grove-Bellemeade site.**

you consider that construction of the new building has to take place while an existing school remains in operation.”

VMDO designed both with a kit-of-parts approach featuring prototypical components like common spaces, classrooms groupings, an administrative suite, a library suite, and protected outdoor spaces, and arranged those components in unique ways to suit site constraints. Both schools are 90,000 gross square feet and designed to accommodate 650 students each.

“The Broad Rock project was a pretty straightforward replacement building built behind the existing school,” says Thacker. When the new school was ready to be moved into, the second phase of the project — tearing down the old building — commenced, and a new playfield was built in front. “That’s why Broad Rock is set way back from the street with a large green space in front of it. Logistically, that was really our only option given the existing building we had to work around,” he adds.

A significant aspect of “Building the Best Richmond” is its emphasis on shared community use of facilities. At Oak Grove-Bellemeade, VMDO repurposed the existing Bellemeade Community Center, weaving it into the overall design of the new elementary school so the campus developed into a true civic hub, rooting the school within the neighborhood in a more organic way.

“We came up with a concept for building a compact new school in between the existing Bellemeade School and the Bellemeade Community Center. Then we were able to tie it in with

exterior covered walks to make a path to the community center,” says Thacker. The community center already had a gymnasium, for example, which VMDO was able to add to and renovate, resulting in space efficiencies and shared uses among the school and community.

“It works not only during the school day, but really serves as a seven-day-a-week community center,” adds Thacker. “I think the city appreciated that schools these days can’t just function as physical silos that are only used as schools 8 a.m. to 3 p.m., Monday through Friday, nine months out of the year. This is an opportunity to take a community center that had similar schedule and physical constraints and make it a better place too.”

VMDO’s efforts to maximize use of each inch of the property at both sites is also reflected on the outside, as the entire campus has been transformed into a learning landscape. “We realized that on such tight, urban sites, we couldn’t afford to leave any portion of the campus untouched. We wanted to be intentional about how we created outdoor learning spaces,” says Thacker.

During the design process, the “school within a park” concept generated traction in particular at Oak Grove-Bellemeade, a site the community already considered a park, with its views to a rare, unspoiled woodland area and its adjacency to Goode’s Creek, which empties into the James River less than a mile away. “It was our job to improve the rest of the grounds in such a way that we ended up with a more engaging, more useful outdoor park space,” says Thacker.

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The safety and security of the school children was also a consideration in the design. “During the school day, an outer fence captures the majority of the campus and protects the school children, but also gives them access to the entirety of the campus,” says Thacker.

Both schools were designed with interior courtyards that maximize natural light inside the building, but can be closed off during non-school hours. “The problem with the courtyard is that it is somewhat secluded, and in an urban environment, bad things can happen in secluded spaces. So you will see at both schools an inner fence that closes off the interior courtyard at times when the campus is used as a park,” he says.

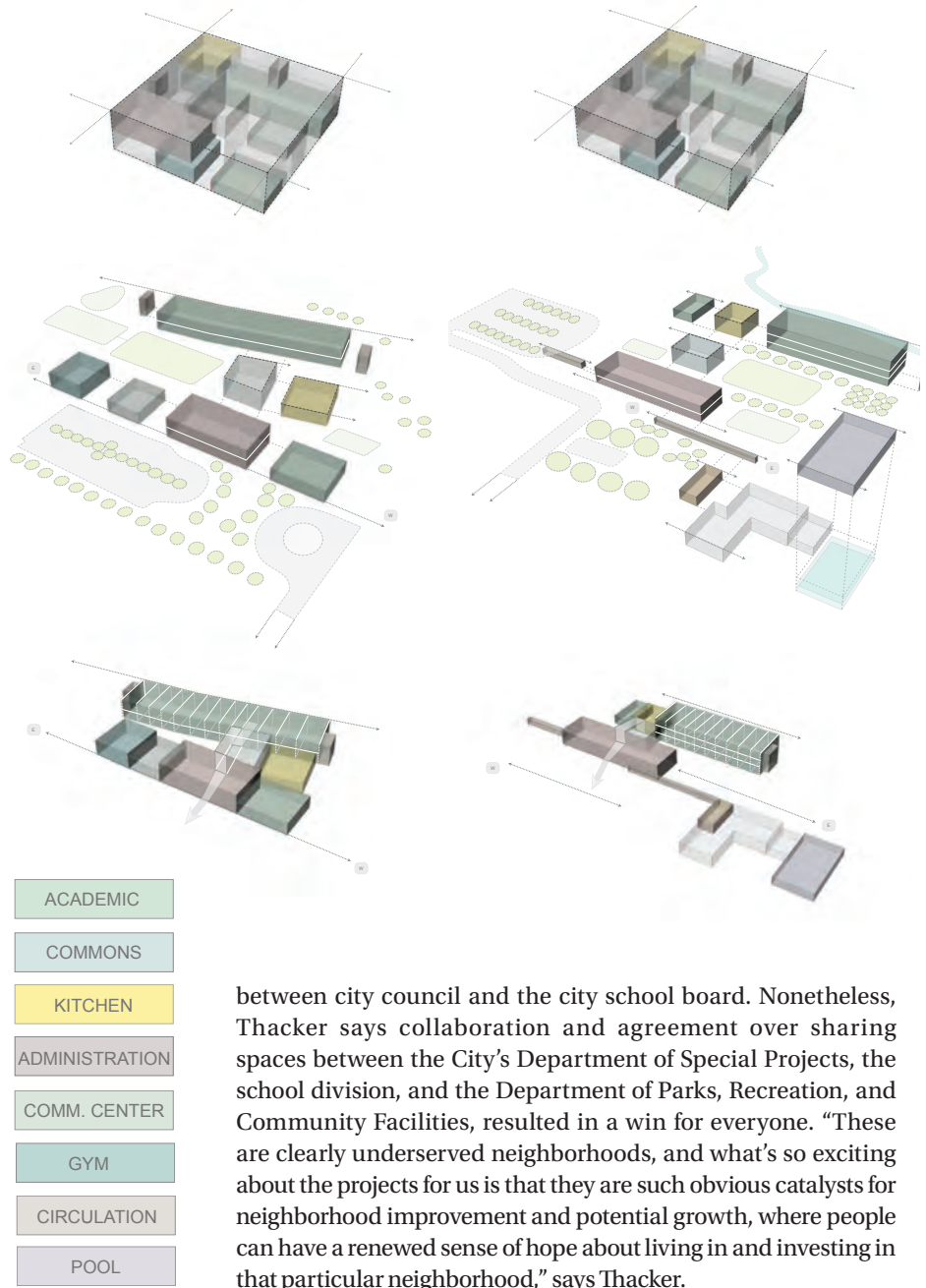
Much like Broad Rock and Oak Grove-Bellemeade Elementary, Martin Luther King, Jr. Middle School strengthens community ties through its design by providing resources and amenities to the public as a whole. “While a dedicated, city-operated community center was not included, the facility includes operational controls and layouts that maximize the opportunity for community use after hours,” says Charles W. Tilley, AIA, principal with BCWH. “In the planning stages, RPS [Richmond Public Schools] envisioned spaces for shared community use that offered places for performances, fitness, life-long learning, and gatherings. The auditorium, gymnasium, auxiliary gymnasium, community room, and cafeteria all are located for easily-secured after-hours use.”

Huguenot High School incorporates shared and community uses as well, with new facilities that can be used throughout the year. “The new school includes a 1,000-seat, state-of-the-art high school auditorium that can support a variety of community performances, a flexible forum space that can be used for community lectures and meetings, art spaces that could support youth or senior summer art programs, and athletic facilities that can be used for district and regional high school playoffs and other community sport leagues,” says Halsey. “A main pedestrian route immediately to the west of the building provides public access to many of these community functions.”

Although not unique to Richmond, there has historically been political tension

Although assembled from prototypical parts, each elementary school is configured to create a distinctive identity.

Courtesy: VMDO



between city council and the city school board. Nonetheless, Thacker says collaboration and agreement over sharing spaces between the City’s Department of Special Projects, the school division, and the Department of Parks, Recreation, and Community Facilities, resulted in a win for everyone. “These are clearly underserved neighborhoods, and what’s so exciting about the projects for us is that they are such obvious catalysts for neighborhood improvement and potential growth, where people can have a renewed sense of hope about living in and investing in that particular neighborhood,” says Thacker.



# Protecting Textiles:

## The George Washington University Collections and Conservation Center

By Catherine Gavin



Caring for a collection of more than 19,000 textiles representing five millennia of human civilization across six continents is no small task. And when George Washington University decided to join forces with the 100+ year-old Textile Museum to create an arts destination on its Foggy Bottom Campus, a new state-of-the-art conservation facility also made the bill. The highly anticipated building, designed by Alexandria-based Cooper Carry, is a conservator's dream that promises to ensure the longevity and expansion of the collection for years to come.

The \$13 million George Washington University Collections and Conservation Center was completed in November 2013 on the university's Virginia Science and Technology campus. A 55,000 square-foot facility, it includes 30,000 square-feet of additional space to be built out for future academic and research activities, and 22,000 square-feet dedicated to behind-the-scenes support for the George Washington University Museum and The Textile Museum.

Located on an 18.8-acre site, the LEED-Silver certified building connects to its context and succeeds in creating a multi-faceted approach to the protection and security of the collection. The building addresses both the predominance of

the automobile on the commuter campus and the university's efforts to establish a more walkable inner-campus. It is also a premier conservation outfit, representing the latest in museum lab and storage facilities. As the first new building completed on the university's Virginia Science and Technology Campus in ten years, the Collections and Conservation Center is an important statement of design and technology.

Last spring, as students, professors, and employees of the Science and Technology Campus toured the building, Bruce Baganz, president of The Textile Museum's Board of Trustees, noted: "This conservation and collection resource center is key to the museum, and to the museum adding richness in its scholarship, arts, and promotion of cultural understanding. Everyone associated with the George Washington University should be so proud." John Wetenhall, director of the GW University Museum and The Textile Museum, added: "It's an enormous enterprise, and this is really one of the best-equipped museum storage facilities in the country."

Inspired by the ancient, delicate woven patterns of the textiles, Cooper Carry's layered brick façades are united by paneled curtain walls. The entirely glazed entry, which is accessible from the pedestrian paths and the rear parking





Cushion cover, Ottoman, Istanbul, Turkey, 17th century. Silk, cotton, metallic-wrapped thread, 108.5 x 66 cm. The Textile Museum 1.54. Acquired by George Hewitt Myers in 1951.

Renee Comet.

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A number of strategies and system-redundancies were employed to protect the museum's collection of fragile textiles.







lot, unites the public and private wings of the structure. “The program was very clear from the beginning: there was to be a discreet conservation facility and an academic incubator,” said Lauren Perry Ford, AIA, senior associate and lead designer on the project for Cooper Carry. “Although, a loosely crafted campus master plan was in place, it was really the site and the programmatic drivers that determined the design.”

The 22,000-square-foot private conservation wing is a single story, and the public assembly and classroom spaces occupy the three-story wing. “It made sense to us to create a direct material connection to the textiles. They showed us rugs from Persia, beautiful quilts, and detailed garments from Asia,” said Ford. “We wanted to capture these textures, so we created a brick veneer defined by stitching and weaving patterns — it wraps the building like a quilt.” Three different brick colors are laid up in a push and pull manner. This approach is also carried over into the patchwork pattern of the curtain walls. The well-resolved façade and pristine lines of the interior spaces, however, give little hint of the intense mechanical and security demands of the program.

The straightforward bifurcated plan is highly organized to maximize efficiency of systems and people, and it is in the conservation wing where the technological marvels happen. Resiliency in case of a robbery or sudden loss of power, complete separation of clean and unclean areas, and entire control over

**The Conservation Lab is a state-of-the-art facility where both students and scholars can gain valuable insights and experience.**

temperatures and humidity levels were the primary drivers in the design of the lab and storage spaces. “The controls are extremely rigid,” noted Ford. “We implemented numerous redundant systems to eliminate any climatic variations.”

Protecting the collection begins with the site strategy and the building envelope. Studio 39 Landscape Architecture designed sufficient barriers to deter penetration of the building. These moves were supplemented by anti-blast measures to reinforce the façades in hopes of preventing unlawful attack or entry into the facility.

Passive strategies such as the layered building envelope and elimination of windows in the storage areas help maintain consistent temperatures and enable the conservation wing to remain cool in case of a loss of energy. “The envelope had to be robust,” said Ford. “We





supplemented the brick with rigid exterior insulation, an air barrier, and spray foam insulation in the spec cavity to control the interior temperature and humidity levels. We also beefed-up the roof of the conservation wing and did not place any penetrations above the labs and storage areas.” A generator provides power for up to 72 hours in case of any system failures. While under normal operating conditions, sophisticated mechanicals maintain optimum temperatures and humidity levels. “In a way, the project was very much like designing a bunker,” commented Ford.

Pest-control is one of the primary concerns for textile conservation, and the only way to ensure that all pests are eliminated prior to storage is through a process of rapid freezing. Conservators must expose textiles to extreme temperatures of -18°C to -20°C for 14 days, or -30°C for 3 days, to ensure that there is neither pest survival nor

possible infestation in the storage areas. The enormous walk-in freezer at the Collections and Conservation Center not only rapidly reaches these temperatures, but the spaces around it are also designed to maintain absolute separation between the clean and unclean areas. Sequencing from the processing area to the freezer, and then into the tall storage stacks or the conservation labs, is specifically orchestrated to protect the fragile materials.

The dye lab is a particular highlight of the new building. As the prep area for exhibitions, this is where the textiles are restored and preserved. “The dye and wet labs were opportunities for us to work very closely with the conservation team,” said Ford. “One of the larger rugs the team showed us measured about 17 feet by 27 feet, so we had this size in mind as we worked out the spaces.” Efficiency and ease in the workflow determined the placement

of the equipment and nearby work stations. In the wet lab, the floor is sloped with small curbs and drains so that the conservators can easily clean the rugs. In general, every room in the Collections and Conservation Center was specifically designed for the needs of the collections that will occupy it.

Despite the rigorous security and systems specifications for the Collections and Conservation Center, Copper Carry added a bit of transparency into the design: a workshop area, with a variety of display opportunities, looks out on to the entryway and the academic wing beyond. “We hope the staff will use this space to layout the collections,” said Ford. “It will also be an important space for the museum studies students to learn.” With a state-of-the-art facility at their fingertips, GW’s students will have rich opportunities to explore at the Collections and Conservation Center.



# Creating a Cohesive Campus

The UVA College at Wise

*By David J. Neuman, FAIA*

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**T**he UVA College at Wise, located in Southwest Virginia, was founded as Clinch Valley College in 1954 using two old county buildings. Since then, through purposeful planning and careful implementation, it has developed into a cohesive campus with an active 2,000+ student community.

The institution has undergone significant growth in the past 15 years in terms of changes to the physical campus, as well as its transformation from a two year pre-baccalaureate campus to a four year liberal arts college. That development has further enhanced its relationship with the University of Virginia.

These academic growth initiatives necessitated a thoughtful alignment of the physical plant in order to accommodate the changing needs of the students and faculty. Much of the success of the campus transformation is due to a collaborative effort with the main UVA administration in creating a manageable, strategic campus plan, that encouraged a holistic and sustainable approach to supporting the student community through the built and natural environment, as well as a commitment to LEED certified buildings, including UVA's only Platinum-level certification.

The UVA College at Wise utilized Virginia-based architecture and landscape firms. The first contemporary campus plan, completed by Thompson & Litton and Van Yahres Associates in 1997, was followed by architectural guidelines by VMDO Architects in 2000. These established the pattern, scale, and material palette that the Wise campus has rigorously followed. The Office of the Architect for the University completed the current, more detailed campus plan in 2006, and had overseen its implementation in a successful fashion to this day.







## Buildings that Create Community

The following buildings and landscapes have all contributed to making the UVA Wise campus the vibrant learning environment that it is today, all within the context of a reclaimed 'strip mine' site:

### 1. Bascom Slemple Student Center

VMDO Architects, 2003

### 2. Health and Wellness Center

Train & Partners, expected 2014

- Visually and physically bridges from bottom of the hill (main entry to campus) to top of the hill (primary academic buildings)
- Outdoor amphitheater space climbs the slope and creates gathering space
- Four-story atrium with central elevator/stairs ("The Tube")
- Uses: bookstore, dining facilities, activities/student office, post office, racquetball, gym, conferences, lounge, social activities

### 3. Smiddy Hall Renovation and Additions

Train & Partners Architects, 2011

(Original Construction: 1972)

- New IT facility was built to house the college's information technology offices
- New lobby with entry terrace
- Improved accessibility facilities
- Uses: central academic administration offices, classrooms, IT facility, and server room





#### 4. David J. Prior Convocation Center

VMDO Architects, 2011

- Arena seating for 3,000 for sporting events and 4,000 for convocation or concert events
- Largest single capital project in the college's history
- Provides large venue for community and regional events that support growth and economy
- Uses: basketball, concerts, conventions, entertainment, meetings

#### 5. Hunter J. Smith Dining Commons & Commonwealth Hall

Hanbury Evans Wright Vlattas + Company, 2010

- Careful massing to incorporate outdoor areas
- Orientation along major pedestrian spine
- Designed to handle future growth through pre-developed area of expansion
- Commonwealth Hall features 120 beds, study areas, a residence life director's apartment, recreational space, and a classroom
- Uses: dining hall, coffee shop, and social and entertainment space

#### 6. Gilliam Center for the Arts

Bushman Dreyfus Architects, 2009

- Covered arcade at main lawn
- Renovated and added to original theater building
- Provides centralized facilities for visual and performing arts
- Uses: black box theater, music facilities, art classrooms and gallery, and courtyard overlooking lake



7



6



5

### Major Landscape Elements to Connect Campus Districts

The varying topography at the UVA College at Wise necessitates innovative design strategies. Similarly, Thomas Jefferson struggled with landscape obstacles such as a sloping terrain and shallow bedrock when he designed the Academical Village. Jefferson integrated parterres to both accommodate the terrain and connect the buildings of the Academical Village. At the UVA College at Wise, the Stadium Walk was implemented to connect two major sections of the campus divided by a steep and narrow hill that prevented students from walking easily from one side of the campus to the other.

#### 7. Stadium Accessibility Walk

Hill Studio, 2012

- Pedestrian pathway, meeting ADA standards, from the residential and academic precinct of the main campus to the athletic precinct of the campus

#### 8. Main Entry Drive & Guest Parking

Hill Studio, 2008

- Provides distinctive entry to campus and establishes a strong axial relationship with the core of the campus, as well as providing parking for both the college community and visitors

#### 9. Crockett Hall Courtyard Transformation

Hill Studio, 2008

- This "sunken garden" courtyard was converted from a parking lot and reinforces the role of this area as the physical and symbolic center of campus



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## Integrating the Past; Building for the Future

Renovation of existing buildings and the creation of new structures has allowed the institution to incorporate sustainable practices and integrate purposeful design guidelines to carry the college forward into the 21st century. The Science Center addition and renovation transformed the original mid-century Science Building into a LEED Platinum, modern, state-of-the-art facility complete with laboratories, classrooms and office space. The new library will become the “landmark” structure of the central academic campus with some facilities available 24/7.

### 10. Leonard J. Sandridge, Jr. Science Center

Original Construction: c. 1963-65

Addition: VMDO 2002

Renovation: VMDO 2010

- Remote Zero-Net-Energy telescope facility and rooftop greenhouse
- Includes a vivarium which allows students and faculty to raise animals in a setting that simulates their natural environment
- Uses: labs, offices, classrooms, lounge space, atrium in connector between North and South Wings, bridge to Darden Hall

### 11. Crockett Hall

Mitchell-Matthews Architects, 2008

- One of two historic structures restored at the main entry to the campus
- Establishes a tangible tie to the history of the college
- Transformed from residential to office use
- Uses: Admissions, Financial Aid, Academic Advising, the Registrar's Office and the Cashier's Office

### 12. New Library

Cannon, expected July 2015

- Will allow the College to more than double its collection to 250,000 volumes
- Will provide approximately 600 seats for group and individual study, provide classrooms and media labs
- Will provide a 24-hour accessible pedestrian link between the College's upper and lower campuses
- Strategic location will enable the library to be a physical, programmatic, and symbolic link between the upper and lower campuses

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*Recent projects:* Riverside Internal Medicine, Newport News (HRACRE Award of Merit – Best Renovation/Historic Renovation); VIMS Seaside Hall, Wachapreague (HRACRE Award of Merit – Best Educational Building); LifeNet Health Institute of Regenerative Medicine, Virginia Beach (HRACRE Award of Merit – Best Research/Flex/Industrial Building); Williams Farm Recreation Center, Virginia Beach; Operation Smile Global Headquarters, Virginia Beach.

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Web: www.riggsward.com  
Contact: Brent Ward, Principal

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*Recent Projects:* University of Virginia – Rotunda Renovation Signage and Kiosk, Charlottesville; Woodrow Wilson Family Home, Columbia, S.C.; Roanoke Island Festival Park, Manteo, N.C.; Bethlehem Visitor Center, Bethlehem, Penn.; Atlanta History Center (in Development), Atlanta, Ga.

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**Architect:** Baskervill, Richmond  
**Project:** American Civil War Museum, Richmond

The American Civil War Museum brings to life the collective voices and stories of the nation's bloodiest war. The design blends traditional materials with contemporary lines to evoke the industrial nature of the area's history. Tel: 804.343.1010 / [www.baskervill.com](http://www.baskervill.com)

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**Architect:** Clark Nexsen  
**Project:** UNC School of the Arts New Library, Winston-Salem, N.C.

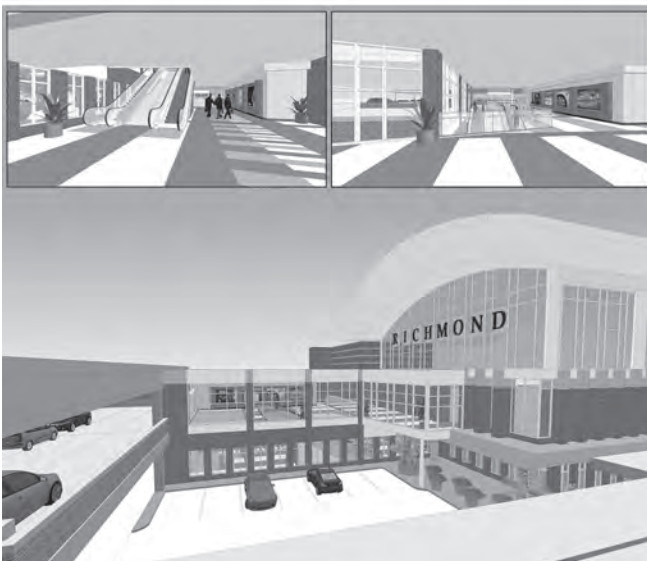
Situated at the highest point on campus, the new 72,000 sf library will create an architectural focal point and a social hub for UNC's campus. Tel: 919.828.1876 / [www.clarknexsen.com](http://www.clarknexsen.com)



**Architect:** Dewberry, Tulsa  
**Project:** Union Public Schools Tennis Center - Broken Arrow, Okla.

This two-story tennis center features eight tennis courts, seating for more than 150 spectators, a training room, coaches' offices, lockers, restrooms, and concessions area. Tel: 703.849.0100 / [www.dewberry.com](http://www.dewberry.com)





**Architect:** Gresham, Smith and Partners  
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**Project:** Starr Hill West, Charlottesville

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**Architect:** ODELL, Richmond  
**Project:** Chengde Media Park, Chengde, China

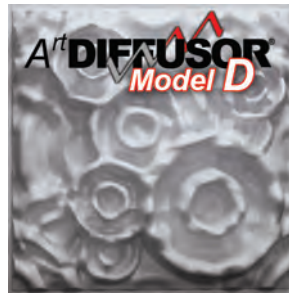
The Chengde Media Park is a dynamic entertainment center in the mountains outside of Beijing that includes 1,000,000 square meters of hotels, theaters, film studios, retail, restaurants, and commercial space. Tel: 804.287.8200 / [www.odell.com](http://www.odell.com)



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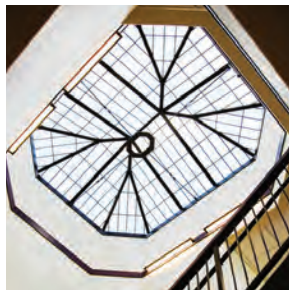
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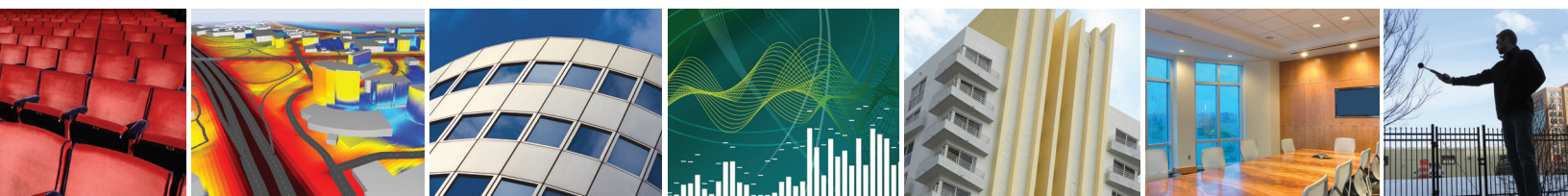
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Penn State Millenium Science Center.

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University of Scranton.

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