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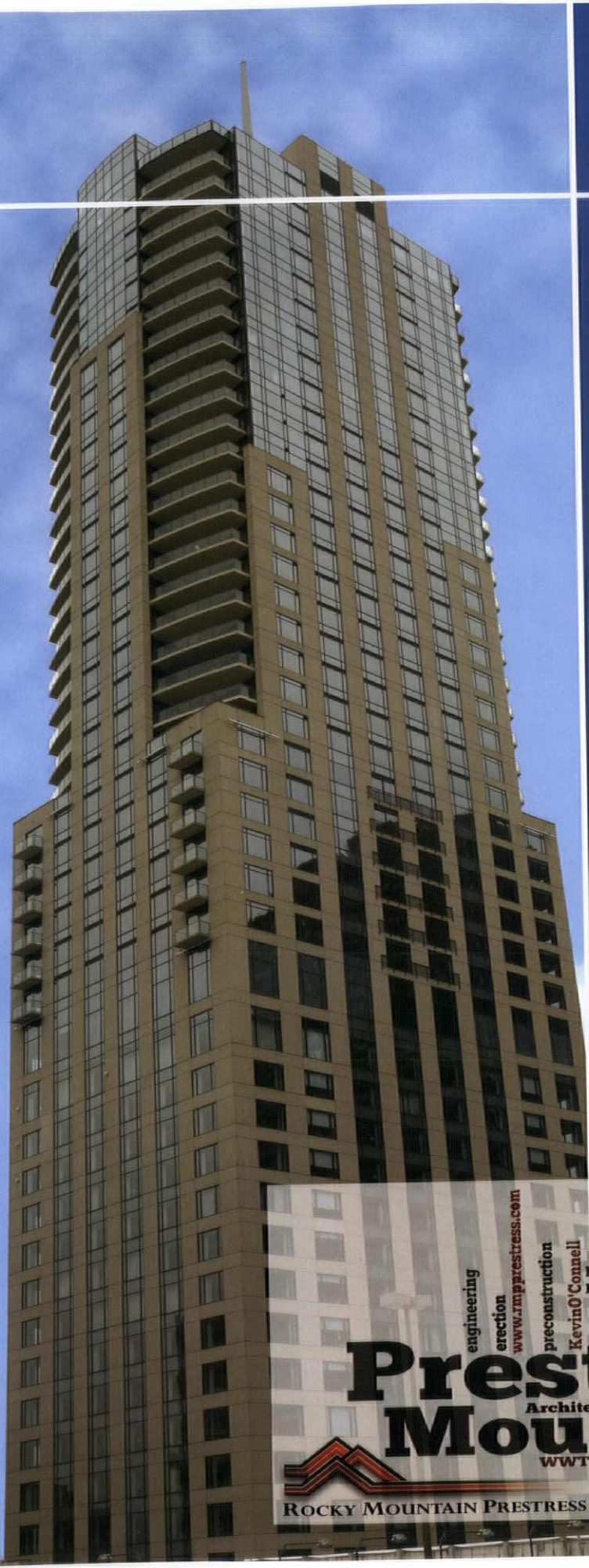
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On the Cover:  
The Windcatcher House — a design-build project completed by graduate students in the Design-Build Program at the University of Colorado Denver's College of Architecture and Planning. Located outside Bluff, Utah, in the Navajo Nation, this 1,100-square-foot structure uses passive ventilation and rammed-earth walls for temperature control.

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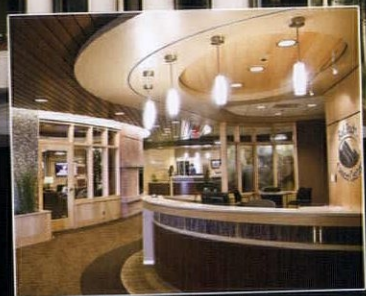
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Nan Anderson, AIA, LEED AP, and Dave Anderson, AIA, LEED AP

Anderson Hallas Architects, PC's (formerly Andrews & Anderson) principals, **Nan Anderson, AIA, LEED AP**, and **Dave Anderson, AIA, LEED AP**, were recipients of a Colorado Preservation, Inc. (CPI) 2011 State Honor Award. Founded in 1984, CPI is Colorado's premier historic preservation organization.

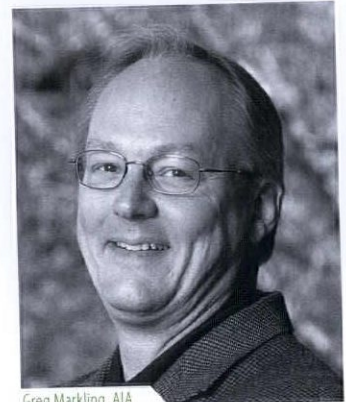
For decades, Nan and Dave have helped clients overcome challenges inherent to historic preservation by sharing their assimilated knowledge of the field. The guiding philosophy of their approach has always been to foster the sympathetic relationship between historic preservation and sustainable design.

The Associated General Contractors (AGC) New Mexico Building Branch recently bestowed a Best Buildings Award to Barker Rinker Seacat Architecture (Denver); Steve Newby Architects and Associates, Inc. (Las Cruces, N.M.); and the project's construction manager and general contractor, Jaynes Corporation (Albuquerque, N.M.), for the **Las Cruces Regional Recreation and Aquatic Center**. Best Buildings Award nominees are judged by peers in the general contracting sector on the

complexity of the construction process, as well as challenges such as budget, site constraints, schedule and project delivery method.

**Greg Markling, AIA**, of MOA ARCHITECTURE (Denver), has been elected to the position of president-elect for the Construction Specifications Institute (CSI) National Office. Greg will serve as CSI's president beginning in July 2012 for its fiscal year 2013. CSI is a professional association representing participants in the design and construction industry, focused on communicating building information through the establishment of standards, formats and effective practice tools and providing education and certification programs for design and construction professionals.

AIA Colorado South Board of Directors member **Tim Stroh, AIA**, of Source Architechnology Systems (Colorado Springs, Colo.), was presented with two community design awards from the Partnership for Community Design (PCD). For more than 20 years, PCD's mission has been to enhance the appearance and livability of the Colorado Springs area through cooperative initiatives, which establish long-range design goals, preserve existing amenities, promote public

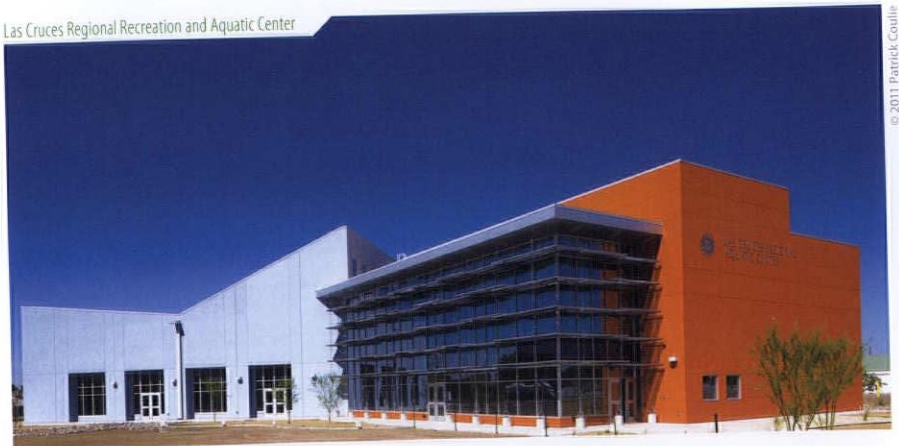


Greg Markling, AIA

awareness and implement projects that demonstrate a quality community. Tim's winning projects include the McWilliams House and the Red Rock Canyon Open Air Pavilion.

*Submit your exciting news to the Member News section of Architect Colorado. This member-only news area provides a forum for exciting developments occurring at Colorado firms and in the professional experiences of individual members. Although the sections will not include employment announcements (i.e., new hires, moves, etc.), any other exciting news that AIA Colorado members have to share will be considered, including but not limited to awards, project announcements, project updates, special achievements, milestones and community-service work.*

Las Cruces Regional Recreation and Aquatic Center



*“Remember what you have seen,  
because everything forgotten  
returns to the circling winds.”*

— excerpt from Navajo wind chant





# The Way of the Wind

Architecture Students Merge  
Culture and Functionality  
with the Windcatcher House  
*by Michael Adkins*

The desert wind is a constant presence in the Navajo Nation — a 26,000-square-mile semi-autonomous territory stretching from southeast Utah into northeast Arizona and northwest New Mexico. The wind has played a key role in the culture of the Navajo for hundreds of years, from the stories of creation itself to modern-day prayers and healing ceremonies.





When graduate students in the Design-Build Program at the University of Colorado Denver's (UC Denver) College of Architecture and Planning (CAP) began work on a special field project to benefit a Navajo family, this concept was reflected in the final design of the Windcatcher House — a dwelling that marries the Navajo's spiritual significance of wind, home and hearth with the realities of living on the harsh desert plains.

*“Even after the semester was over and the grades were in, the students were still spending their free time going down to the jobsite and working on it.”* — Rick Sommerfeld

### Forging a Partnership

The Windcatcher House was the first collaboration between UC Denver's CAP and DesignBuildBLUFF, a non-profit organization based out of Bluff, Utah, that builds environmentally sustainable homes in the Navajo Nation. DesignBuildBLUFF's projects all involve work by graduate architecture students in the field, where they design a home for a Navajo family and then build it themselves.

Hank Louis, AIA, founder of DesignBuildBLUFF, said his organization has been working with the University of Utah for more than 11 years, but UC Denver was his first attempt to work with a different school. “I knew they had a large, excellent architecture department, so I thought the collaboration might make sense for both of

us,” Louis said regarding what motivated him to reach out to the university. “I'd been thinking that we could set up something with schools in the Four Corners region, and Colorado was my first call.”

At the time Louis placed that call, the leaders of UC Denver's Design-Build Program were independently contemplating the creation of an immersive design-build program for graduate students in Central America — but when Louis outlined his proposal in 2010, “They jumped on it,” he recalled.

### The Project Process

In its inaugural year at UC Denver, 22 graduate students signed up to participate during the summer semester. These students were in complete control of the project, from selecting which home to build and creating the design that the team would follow to physically constructing the finished product. And they had to work almost entirely with donations and free items to stay within a budget of approximately \$4,000 to \$5,000.

The students chose to work with Maxine Begay and her 10-year-old son, Maurice, as their client family. According to Rick Sommerfeld, senior instructor at UC Denver and associate chair of the College of Architecture and Planning, Begay was chosen because the students enjoyed her hands-on approach. “She wanted to be really heavily involved in the project, and the students wanted that interaction,” Sommerfeld said. “They really wanted her feedback all along the way. And she gave it — she was on-site almost every day, and she included the students in many of the spiritual rituals of the Navajo tradition.”

The family's culture played a major role in the final design chosen by the students, which was created by the team of Mark Olsen, AIAS, and George Kincaid. “We spoke with the client about many aspects of her culture that were very important in what she wanted, including the orientation of the house to the east, which is a sacred tradition involving inviting the morning light into the home,” Olsen noted. “We also needed to respect the *hogan*, or the home's central hearth.”

At the same time, Olsen and Kincaid's design had to address the practical difficulties of the site, including the summer heat, without the conveniences many modern architects take for granted. “Since access to power and water were limited on-site, we had to passively heat and cool the house,” Olsen added.

These stringent requirements flow together in the finished Windcatcher House — a 1,100-square-foot structure influenced by such disparate sources as the Egyptian architect Hassan Chaffi, Persian architecture and the ancient art of rammed-earth construction.

## Windcatcher House

**Design-Build Team:** Graduate students in the Design-Build Program at the University of Colorado Denver College of Architecture and Planning (UC Denver CAP)

**Advisors:** Hank Louis, AIA, DesignBuildBLUFF; and Rick Sommerfeld and Rob Pyatt, UC Denver CAP

**Location:** Navajo Nation reservation, outside Bluff, Utah

**Scope:** 1,100 square feet

**Function:** Family home

**Owner:** Maxine Begay

an open floor plan with minimal obstructions to further encourage good air flow."

The house also includes two rammed-earth walls on its southern and western sides, primarily designed to control the home's temperature. "Since the primary concern was dealing with the hot summers, we chose to thermally break the walls, rather than going with a solid mass," Olsen stated. "There's a 2-inch-thick piece of insulation sandwiched between two large masses. During construction, we would often eat lunch on the northern side of the rammed-earth walls, because it was a good 20 degrees cooler than the southern side — it was almost cold!"

### The Winds of Change

The Windcatcher House has proven to be a tremendous success for UC Denver and DesignBuildBLUFF, having already won two awards in TreeHugger's Best of Green Awards: Design and Architecture 2011 Competition for Best Student Architecture Work and Readers' Choice for Best Student Architecture Work. It has also prompted the two programs to start the process on two more homes in the Navajo Nation.

But Sommerfeld pointed out another facet of the project that most impressed him: "Even after the semester was over and the grades were in, the students were still spending their free time going down to the jobsite and working on it," he said. "That, to me, is remarkable."

For Louis, honing students like these into dedicated architects experienced and knowledgeable in the importance of fieldwork is the whole point of the program

Work began on the house in May 2010, with substantial completion in December.

Merging the cultural significance of the *hogan* with the idea of passive ventilation, Olsen said the Windcatcher House's main clerestory tower makes the house's cooling processes — not to mention its name — possible. "The wetted media in the tower cools the air and makes it more dense, which makes it fall through the tower," he explained. "The height lets the air build up speed to be distributed throughout the house without the need for a blower, and we went with



— and a point that the Windcatcher House has driven home. “These students have had experience working in the studio atmosphere, finding hypothetical solutions to hypothetical problems,” he said. “But now, they have the confidence that comes from solving real problems out in the field. They’ve seen problems they couldn’t possibly have anticipated in a studio and learned how to move quickly to address these issues. That really gives them a leg up on the other intern architects — taking the wheel and really solving those problems.”

And that experience is an asset that Olsen, who graduated in May and is moving back to his native Texas to seek a position as an intern architect, intends to take advantage of. “It’s not every day that you see a student coming out of a graduate program with so much real-life experience,” he said. “The Windcatcher House was such an incredible opportunity for all of us, and I feel really confident in the experience I’ve gained and in applying that experience going forward.” ●

## A Closer Look at the Design-Build Program at the University of Colorado Denver’s College of Architecture and Planning

The University of Colorado Denver’s College of Architecture and Planning was formed in 1992 through a merger of the University of Colorado Boulder’s College of Environmental Design and the University of Colorado Denver’s School of Architecture and Planning. The college’s Design-Build Program was created by Phil Gallegos in the mid-1990s for graduate students as an addition to the master’s degree program in architectural design. Sommerfeld unofficially took over the reins of the Design-Build Program when Gallegos left for the University of Mexico.

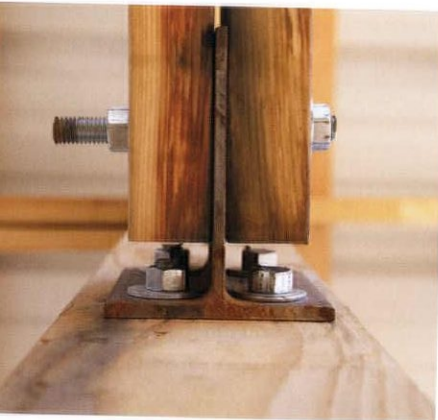
for cities throughout Colorado, Sommerfeld noted. In 2004, the program participated in a major renovation of the Boulder Museum of Contemporary Art, which Sommerfeld and his colleague Rob Pyatt oversaw. Students working on that project gutted and rebuilt the museum to take advantage of natural lighting.

Other notable projects have included:

- Two outdoor classrooms for Feed Denver (2010)
- The Windcatcher House (2010 – see main article)
- Shade structure and seating for the Community Athletic Soccer Association (2011)

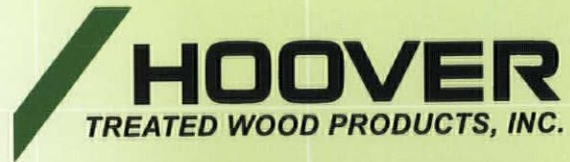
The experience graduate students gain from participating in the actual building of their designs is invaluable, Sommerfeld emphasized. “They get a better appreciation for the carpenters and other trades people who will ultimately be building their designs,” he said. “They understand the craftsmanship and attention to detail that’s needed to complete the job. It’s very different than what they’re used to in architecture. A single detail they draw may involve three or four different trades in order to really create it. We want the students to realize that each person on a jobsite depends on the person who comes before.”

Ultimately, Sommerfeld said, a major part of the program’s fieldwork is taking students out of the studio and helping them appreciate the sites on which their projects are built. “We want to get them outside, understanding their site’s fluctuating temperatures and adjusting their designs in order to take advantage of the site’s conditions, rather than just designing in spite of them,” he explained. “If a building doesn’t accommodate the site, that building has a problem. We want them to understand that they’re not designing in a vacuum.”



Typically, about 25 to 30 UC Denver graduate students each year attain certification in the design-build method in addition to their master’s degrees, Sommerfeld said. He added that there are additional students involved in the program who take one or two classes but do not attain full certification.

These students have traditionally spent spring semesters designing picnic shelters and shade pavilions



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# Growing Together

▲ View looking west down Iowa Avenue from Main Street. The Green Market anchors the spot where Main Street meets the south edge of the new Memorial Park. It is a general store for town residents but also marks the south end of the commercial and tourist district. In addition to selling farmers' produce, the market has food stalls, butchers, bakers and a cafe. Food stands and cafe seating spill out onto the sidewalk and give life to the urban edges of the new Memorial Park.

**Greensburg Green  
Neighborhoods Models  
Eco-Conscious  
Community Living**  
*by Alexandria Lopez*

In 1943, Abraham Maslow published *A Theory of Human Motivation*, which posits that humans are intrinsically driven to fulfill needs ranging from the mundane to the lofty. Structured like a pyramid, Maslow positioned the need for belonging directly above physiological and safety needs, indicating that a sense of community is essential for psychological health. Maslow's hierarchy of needs would go on to become one of the most famous theories in the history of psychology. Despite Maslow's findings, however, as modern Americans, we have largely ignored the call of community on our lives, often considering its importance only when disaster strikes.

In May 2007, Greensburg, Kan., was hit by an EF5 tornado, leveling more than 90 percent of the city. In the tragedy's aftermath, Greensburg opted to rebuild as a "green town." The announcement sparked the interest of Michael Tavel,

to meet with Daniel Wallach, executive director of Greensburg GreenTown, a 501(c)(3) nonprofit organization dedicated to the town's rebuilding project.

Tavel was intrigued from the initial meeting. "When I visited Greensburg

were examples of multi-family housing that was sustainable." Sensing that something critical was missing, Wallach asked if Tavel could do a project about alternatives to the single-family unit that addressed other aspects of the community, specifically nontraditional families, children and seniors.

After returning to Denver, Tavel assembled a team of six volunteers to assist him with the pro bono project proposed by Wallach. Team members included architects Owen Beard and Dan Benjamin, AIA; architect and urban designer Ignacio Correa-Ortiz, AIA; landscape architect and urban designer David Kahn; and intern architects Ida Chou and Eric Watson, Assoc. AIA. "We all learned from each other and brought new ideas to the table," Tavel noted. "All of the team members were equal participants."

Benjamin, Chou and Correa-Ortiz became involved with the project through Hyperform Design Co-op, Inc., where Executive Director Tim Gessler, AIA, was interested in partnering with Tavel on a green project.



Greensburg is a farming town on the high plains of south central Kansas. Its population was 1,400 persons at the time it was devastated by a tornado in May 2007. Greensburg is being rebuilt as a model green town, with green jobs, green infrastructure and a culture of stewardship.

AIA, founder of Michael Tavel Architects in Denver. "I specialize in sustainable town planning, and I wanted to see if there was some way I could contribute my expertise," he explained. In November 2009, Tavel traveled to Kansas

GreenTown, Daniel told me that they'd gotten lots of public funding to rebuild the city infrastructure and some public buildings to a high green standard. They had examples of green single-family homes, but what they *didn't* have



▲ The community garden, greenhouse and farmyard support the growing of local healthy food. A 4-H club is encouraged to team with interested community members in managing the farm as a Community Supported Agriculture (CSA) project. Food can be snacked on by kids while they play, consumed by families on the block or sold at the Green Market on Main Street.

◀ The Senior Cottage is for folks who like to sit on the porch and be part of the action. A 900-square-foot, one-bedroom home with an accessible bedroom, this home is small enough to be easy to maintain but has a basement, making it suitable for small families or for guests. Seniors in the Green Village can partake in the work of the community or keep to themselves. There are neighbors nearby who know them if they are ever in need.

Along with three team members, Hyperform Design Co-op also provided the project team with support and meeting space. The team collaborated on the development now known as Greensburg Green Neighborhoods from January until July 2010.

Greensburg Green Neighborhoods was designed with community in mind. "It's a replicable, scalable idea that has many elements woven into it that make it truly sustainable and beneficial for a community," Wallach remarked. The project's design — encompassing public vegetable gardens and fruit groves, as well as playgrounds, common green spaces and shared buildings — supports community life by encouraging individuals to work collectively to be good stewards of natural resources. "What I think is special about the project is that it expresses an intelligent relationship with the landscape, climate and

culture," Gessler explained, referring to Greensburg Green Neighborhoods as a vital teaching tool for other communities. "The architecture and planning inform a healthy way of life."

While designing the project, the team placed particular emphasis on exposing children to locally grown,

gives children the chance to enjoy outdoor activity in a safe environment surrounded by community gardens. "The neighborhood's design helps children participate in the growing of food and appreciate it," Tavel explained.

As the population ages, homes that allow senior citizens to remain self-sufficient will increase in popularity. "Seniors today want interesting places to live," Tavel remarked. "They need to be able to age in their homes with the support of their neighbors." By designing small-scale, ground-level dwellings nestled in a vibrant community with spaces dedicated to their

needs and care, the project team hopes to alleviate senior citizens' potential concerns regarding independent living.

While smaller homes and numerous shared spaces facilitate community living, they also serve to decrease energy demands. The dwellings will use pas-

*"Greensburg Green Neighborhoods emphasizes a strong connection of the indoors to the outdoors and treats the outdoors of a house like an outdoor room."* — Michael Tavel, AIA

healthy food and connecting senior citizens to their neighbors. In many cities, children snack on overprocessed offerings from the local convenience store, and green space for play has been razed to build a strip mall. Greensburg Green Neighborhoods





sive solar construction to maximize natural shade and light. Building on the passive design, the team plans to erect net-zero-energy passive houses, which will produce more energy than they consume. Though these home design techniques will significantly reduce the project's carbon footprint, the community's stress on outdoor living will also help people acclimate to each season's temperature, reducing their demands on the thermostat. "Greensburg Green Neighborhoods emphasizes a strong connection of the indoors to the outdoors and treats the outdoors of a house like an outdoor room," Tavel said, noting that the yards will be modeled after small courtyards and that each dwelling will have a usable, amply scaled porch.

By incorporating replicable design concepts into their community planning, Greensburg Green Neighborhoods has strong potential to serve as a template for other towns, though its future realization in Greensburg remains uncertain. "We are a convenience-based society," Wallach noted. "Innovation and new ideas can be difficult to root because we are creatures wired to follow the path of least resistance. When you have a model, people are much more likely to embrace it and integrate it into their own lives."

Greensburg Green Neighborhoods respects and encourages the reciprocal link between sustainability and community life. "There's some very basic relationships between architecture and the environment that have gone by the wayside in the past century or so," Gessler explained. "We rely a lot on mechanical systems now, and, in the United States, we disperse ourselves, and that facilitates an isolationism. Greensburg Green Neighborhoods reveals the possibilities of living together as a community as opposed to being isolated in a single-family suburban house where you can essentially live your entire life without talking to your neighbor." ●



▲ Gardens and kids everywhere — even on Main Street.

► The Green Yards contain convenient and usable outdoor spaces and amenities: child's play areas, vegetable gardens, outdoor dining areas, front porches that act like living rooms, places for drying laundry, hives for pollinating bees and the compost bin. Shade trees keeps the porch spaces and house cool. Fruit trees provide seasonal snacks.



## Functional, Friendly Design

The Greensburg Green Neighborhoods project comprises three unique living sites: Green Village, Green Yards and Green Market. Below are just a few of the community's other features:

### Green Village

- Housing units ranging in size from 800 to 2,000 square feet
- 4,000-square-foot community building
- 900-square-foot guesthouse for visitors
- 1,400-square-foot Eldercare center and clinic
- Community gardens, fruit groves and a greenhouse

### Green Yards

- Modular homes averaging 1,700 square feet that are passively designed and net-zero-energy
- Individual vegetable gardens and outdoor living spaces
- Street tree rain gardens
- Outdoor clotheslines to reduce energy demands
- Compost areas and pollinating bees

### Green Market

- 21,600-square-foot building that encompasses a farmer's market, a community garden, commercial space and living spaces
- Located in the heart of Greensburg and designed to blend with surrounding buildings
- Ideal for residents who wish to travel by foot throughout town



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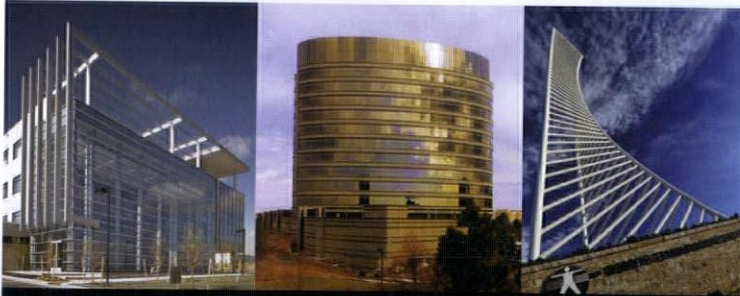
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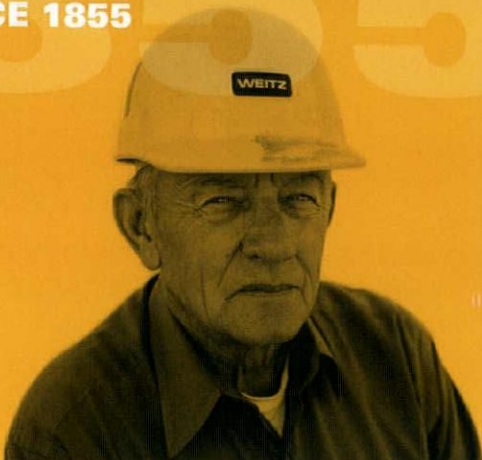
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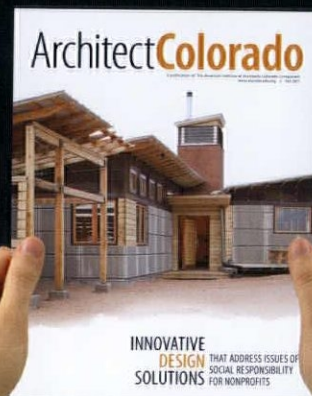


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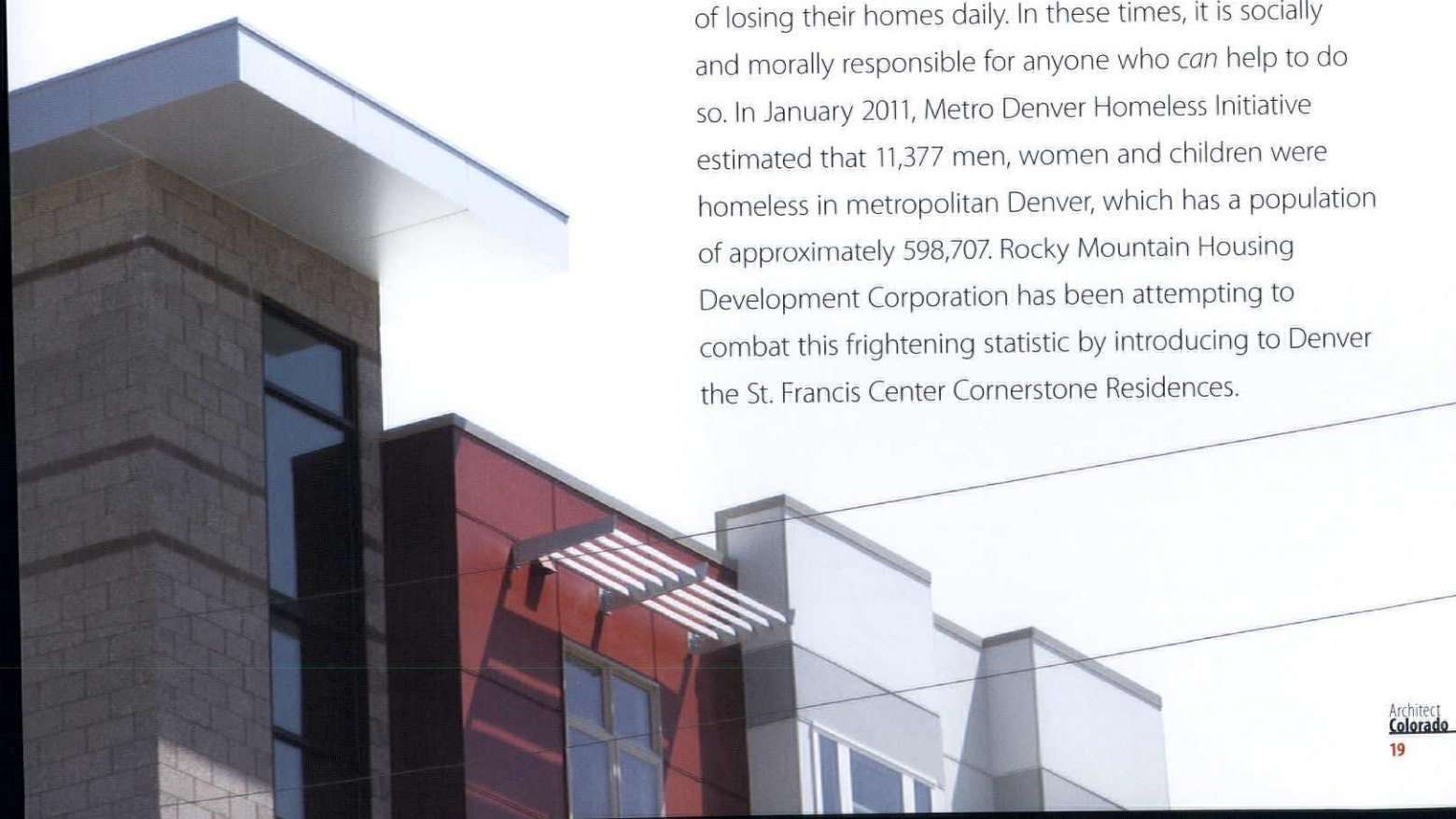


# Responsible Design

## A New Approach for Affordable Housing

*by Deanna Strange*

Americans have been plagued in the past decade with a recession that has been equated with the Great Depression — a period that broke the wills of every social class and brought the nation into a new era. Unemployment rates are high, foreclosures have become commonplace, and homes still aren't selling. These facts confront the average citizen every day, and escaping the news isn't always a possibility. Many people struggle with the possibility of losing their homes daily. In these times, it is socially and morally responsible for anyone who *can* help to do so. In January 2011, Metro Denver Homeless Initiative estimated that 11,377 men, women and children were homeless in metropolitan Denver, which has a population of approximately 598,707. Rocky Mountain Housing Development Corporation has been attempting to combat this frightening statistic by introducing to Denver the St. Francis Center Cornerstone Residences.





The concept of the Cornerstone Residences was developed with the hope of creating something better than a homeless shelter or a housing project. Instead, Cornerstone would be a home for its residents, rather than just a place to sleep and find shelter. "It was the goal of our client to create a facility that restored the dignity of the homeless and to give them a sense of home and pride in their surroundings," explained Gary Prager, AIA, principal in charge with VTBS Architects. "One of the things we wanted to do was to give them a facility that does not look like the 'projects.'"

Part of that effort involved location. Cornerstone is situated in a historic area of Denver that has been trying to create a new identity. "We have for-sale units right across the street and other market-rate units around it," Prager pointed out. "We wanted the residents to feel that they were part of the community."

While a homeless shelter tends to be more of a dormitory, Cornerstone offers individual units to its residents, more akin to apartments. "It is a transitional facility to help the homeless who may have low-paying jobs and would otherwise be living on the streets," Prager said. Cornerstone offers units for rent as well as setting aside units for the chronically homeless. "It allows residents to transition from the streets to something they can afford in the near future."

The journey to build these facilities was not an easy one. Prager had worked closely with the client on a number of projects in the past 20 years, so he was happy to intervene when needed. "Another design was already in place, and the client called to tell us the design wasn't efficient and the budget wasn't the best," Prager recalled. "We were able to step in and take the design from 40 to 51 units and adjust the budget."

## St. Francis Cornerstone Residence

**Architect:** VTBS Architects

**Location:** Denver

**Construction Cost:** \$13.5 million

**Scope:** 41,750 square feet

**Function:** Affordable housing

**Owner:** Rocky Mountain Housing Development Corporation

Unlike a typical apartment complex, Cornerstone is a nonprofit housing complex, so the budget and financing had to be approached more meticulously. "The funding is a complex package of sources, including an allocation of federal low-income tax credits, which are sold to an investor; and national, state and local funds reserved for nonprofits who build affordable housing," said Joyce Alms-Ransford, executive director with Rocky Mountain Housing Development Corporation.

Despite the tight funds, Prager succeeded in keeping the budget intact without disrupting the integrity of the building process. "Building a nonprofit should never affect design," he stated. "Being creative and using the proper amount of resources for the design shouldn't be impacted by the budget if it is carefully coordinated."

Part of finding funding was in the sustainability of the building and surroundings. For example, the parking area was able to be greatly reduced because of Cornerstone's proximity to public transportation. The facility also boasts a rooftop garden, solar shading in specific areas, low-E glass for windows, all ENERGY STAR appliances and sustainable building materials. While LEED was never a goal for the project, the developer recognized that the importance of environmental consciousness would be twofold for Cornerstone

*"We needed to keep operating costs down, and we always try to be sustainable. It's really using the basics for sustainability."* — Gary Prager, AIA

— for environmental responsibility and for increasing funding. "Everything is energy efficient," Prager said. "We needed to keep operating costs down, and we always try to be sustainable. It's really using the basics for sustainability."

Contrary to that, Cornerstone strives to bring residents more than just the basics of living. It offers various services for the community, such as a clinic and an





*“With the economy the way it is, there is a need for affordable housing, and it is important for us to provide quality designs.”* — Gary Prager, AIA



employment office, and for the residents, it provides a technology room that teaches computer classes, a fitness room, a TV room, kitchenettes in units and several other social spaces. Prager also insisted on the importance of security and safety for the residents.

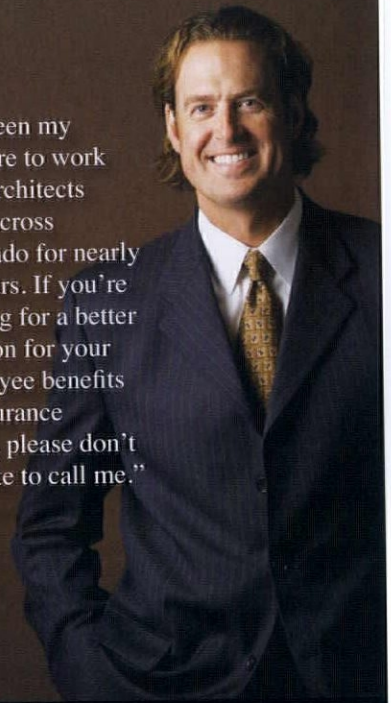
Achieving security in this 41,750-square-foot facility required forethought, rather than a more retroactive plan consisting of security cameras and metal detectors. "I tried to make passive observation possible," Prager said. This meant designing without blind corners and places for people to hide, considering places for spontaneous socialization and making it easier for neighbors to look out for one another.

Understanding a project of this nature is not something every firm can hope to do. It requires compassion and responsibility and a willingness to forgo a larger paycheck for the greater cause. "VTBS likes working with nonprofits because we believe in their missions. It's in our nature to give back to the community, and one way we can do that is to do it at no cost," Prager said. "With the economy the way it is, there is a need for affordable housing, and it is important for us to provide quality designs."

Prager continued, saying that he has devoted much of his life to creating projects of this importance. He said of Cornerstone and future facilities like it, "It's not just a place to live — it's also a place to grow. It's a place for the residents to achieve their goals." ●



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## Newton House

Office 527

Michael Piché, AIA

**Location:** Denver

**Scope:** Full architectural services – addition

**Project Start:** 2011

Like many neighborhoods experiencing rapid periods of change, modernization and development, issues of how to integrate contemporary thoughts, aesthetics and living patterns can create intense debate. However, this polemic discussion also opens opportunities for new exploration. The Newton House seeks to engage the dichotomies of modernism versus historical preservation and residential versus commercial through both form and color.

The Newton House will be a renovation and expansion of a Victorian residence in the Highlands neighborhood of Denver. The clients, who are avid art collectors, needed more space, more natural light and a greater connection to the outdoors. Their program included an elevated guest studio, a living room, an office, a mud room and a garage. The house incorporates multiple private outdoor garden spaces, including a green roof on the upper terrace.

The existing house is located on the threshold of a busy, vibrant urban center and a quiet, historic residential neighborhood. By weaving a modern concrete, glass and steel structure around and through the existing house, the essence of the existing house remains intact but is still unified with its modern addition. It also allows areas to be reconfigured to meet contemporary needs.



## Mental Health Partners 3305 South Broadway

Studio Collaborative Inc.

Joy Spatz, AIA; Derek Soule, AIA; Jay McFarland, Assoc. AIA

**Location:** Boulder, Colo.

**Budget:** \$10.5 million

**Project Completion:** Fourth quarter 2012 (targeted)

Mental Health Partners (MHP) is a private, nonprofit organization that serves individuals and families affected by mental illness. The project's main focus was to provide MHP with the highest density achievable on its property, allowing it to realize its revolutionary recovery model integrating a total-person approach for clients. This new wellness center will enable MHP to expand its service offerings, including education and wellness classes.

The challenge of the project involves integration of the unique site constraints, including FEMA floodplain design requirements, city zoning requirements and MHP's program. This building is designed to withstand a 100-year flood, which means the main portion of the building resides above the floodplain elevation. The underground parking garage enables the building size to be expanded.

Raising the building above the floodplain pushes the building height up to the maximum within the city's zoning requirements. To avoid short floor-to-floor heights, the team opted for a two-story building (versus three) with generous ceiling heights to allow for a beneficial amount of daylight and views of the foothills. Visually connecting the floors is a large two-story atrium containing a grand staircase.

The two-story building did force the team into using large floor plates that covered a significant portion of the site, so creating an exterior space was important. The team was able to create a slightly elevated plaza over the south edge of the underground parking garage.

The design is inspired by nature, as it serves to add balance for MHP's clients. The site includes a contemplation garden and is connected to nature with the expansive use of glass, natural materials and outdoor spaces.





## Colorado Army National Guard Windsor Readiness Center

RB+B Architects, Inc.

Corky Bradley, AIA, LEED AP; Rebecca Spears, AIA, LEED AP; Derek Young, AIA, LEED AP

**Construction Manager/General Contractor:** Adolfsen & Peterson Construction

**Location:** Windsor, Colo.

**Client:** State of Colorado, Department of Military and Veterans Affairs

**Scope:** Full architectural design services, complete building and site design, as well as a master plan

**Budget:** \$8.9 million

**Project Completion:** September 2012 (projected)

Still in design, the new Colorado Army National Guard (COARNG) Windsor Readiness Center will house the 1157th Forward Support Company (FSC) of the COARNG. The 17-acre site will include a primary facility with an assembly hall, classrooms, a learning center, a kitchen with serving line, an administration area, a break room, separate unit equipment and individual equipment storage, vehicle maintenance training bays, con-

trolled waste, flammable materials storage, weapons vaults, a physical-fitness area and restrooms. Supporting facilities include military vehicle parking, access roads, personnel-owned vehicle parking, loading platform and a vehicle wash bay. Physical security measures are incorporated into the design, including maximum standoff distances from roads, property lines, parking areas and vehicle unloading areas.

The existing architectural context of the readiness center site is defined by the Great Western Industrial Park development. Many industrial buildings have been built in the area during the past several years, such as Hexcel, the Front Range Energy ethanol plant, Vestas wind blades and Owens-Illinois, Inc. glass. These facilities are all large industrial buildings planned to respond to their function as opposed to any overall design guidelines. However, the large-scale massing; substantial materials, such as concrete and steel; and forms responding to usage all begin to develop a vocabulary for the development.

Sustainable features include proper orientation, daylighting used throughout, a high-performance building envelope, a ground-source heat-exchange HVAC system and planning for future photovoltaic arrays. The project is targeting LEED Silver/ Gold certification.



## AIA Colorado Is Moving in 2012

AIA Colorado is relocating its office to 303 East 17th Avenue in Denver and intends to occupy the new space in January 2012. AIA Colorado West member firm Studio B Architects (Aspen, Colo.) was selected as the design architect and architect of record. AIA Denver member firm Hutton Architecture Studio (Denver) will contribute to the development and implementation of sustainable strategies for the project. Other contributors include AIA Colorado professional affiliate members BCER Engineering Inc., 186 Lighting Design Group and Stonebridge Builders, among others. Visit [aiacolorado.org](http://aiacolorado.org) for updated information throughout the project.



A view at night of the Windcatcher House, which was featured in the article on page 8.

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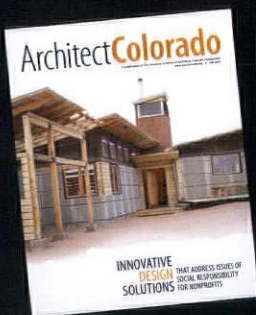
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