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SIMPLY A NATURAL CHOICE

Designing a new dorm building at the University of South Alabama, TAG Architecture faced the challenge of creating a structure that would blend in with historical structures at the state's oldest university.

SAFE AND SECURE

Concrete frame construction allowed Goodwyn Mills and Cawood to design a new jail in Montgomery County that was cost effective and capable of withstanding tremendous wear and tear from its residents.

CREATING HARMONY BETWEEN OLD AND NEW

The old Montgomery Advertiser headquarters was transformed into the beautiful, new home of the County Commission and County Probate featuring new, stained concrete floors.

JH Partners of Huntsville selected concrete to house the MRI units in the Clearview Cancer Institute and to provide a pleasant interior environment for patients facing unpleasant chemotherapy treatments.

A DIFFERENT KIND OF VILLAGE

Pervious concrete pavement at Auburn University's Village Community demonstrates the school's desire to construct buildings which are sustainable and lessen their environmental footprint.

JUST WHAT THE DOCTOR ORDERED

Lambert Ezell Durham Architecture recommended concrete block and pavement to meet the demands of patients 365 days of per year at Med Plus. Six years after construction, the owner says the architect made the right choice.

ConcreteWorks is a publication of the Alabama Concrete Industries Association and features articles and photographs pertaining to product applications, educational opportunities, as well as innovative construction techniques impacting the industry.

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### A Natural Choice

Spring Hill College, located in historic Mobile, Al., is the oldest college in Alabama, and the third oldest Jesuit, Catholic college in the

United States. Generations of students have passed through its halls. Going hand in hand with academics, students at Spring Hill learn life lessons here. With more than 80 percent of students in a resident population at the school, young people experience their first taste of independence, and learn lessons of cooperation, friendship and community building within its residence halls.

Buildings are updated and added through the years to accommodate a growing student population. New structures must echo the beauty of the historic campus, while at their core providing

strength and longevity to stand up to an active and ever-changing body of residents. Almost exclusively, concrete answers the call for

these facilities.

The newest structure the campus is the Skip's Place Residence Hall, part of the Viragh Residence Complex. Constructed in 2007, the hall accommodates residents in double and singe rooms, featuring podstyle living arrangements with six to seven students living in each pod. The complex features study

areas, classrooms, laundry facilities, meeting rooms and common areas. The building was designed to complement Viragh Hall, which is located across a spacious courtyard, landscaped to include a stone sitting area and decorative concrete fountain.

The entire Skip's Place superstructure was constructed using cast-in-place concrete, which is used for most foundations and slabs on ground, as well as walls, beams, columns, floors and roofs, in addition to pavements and other infrastructure. Cast-in-place concrete offers long-term durability and structural support perfect for a high-traffic, high-impact facility like a residence hall. Concrete block is also used on the interior walls.

"The main concerns for this project was that the building would be durable, and also within their budget," explained Tom Kelly, construction manager with TAG Architects, which provided turnkey design and build services for this project. "Concrete was a natural choice to meet their goals. The owner wanted a building that would be a 50- to 100-year capacity. They need it to last that long and that's why concrete was chosen," he said. "Kids are bounding around, bouncing off the walls and all – it's a high traffic facility," he said with a chuckle. "Concrete can definitely hold up to that."

The use of concrete for the Skip's Place dorm also allowed the project to be completed in a timely manner, with construction completed in about one year. This helped to keep the college on track to house more young people as its student body continues to grow.

Because the building would need to complement the existing Viragh Residence Hall, and create the Viragh Residence Complex, there were a number of site challenges. These included working an active construction site in close proximity to the existing Viragh Hall dorm, accommodating traffic for student flow as well as traffic for construction workers and vehicles while maintaining safety. The design of the building also needed to complement the existing structure, and landscaping had to be designed to connect the two buildings in an aesthetically pleasing and functional way.

The older residence hall, Viragh Hall, was built about eight years ago, and both buildings were funded by the same donor, the late Albert P. "Skip" Viragh, a 1964 graduate of the college and former member of the college's Board of Trustees. Skip Viragh is the biggest benefactor in the college's history, having given more than \$13.5 million prior to his death in 2003. The buildings share a sightline and should communicate a sense of togetherness.

"When we designed the second phase of this residential complex, we basically made a big courtyard," said Cindy Klotz, AlA, a designer with TAG. "The buildings making up the new Skip's Place are separate and U-shaped, in a cluster, then they relate to the older building with some of the same elements, like columns, arches and colors," she said. "It's a historic campus, so they're sort of carrying that look on as well."

Although referred to as a courtyard, the green space between the two buildings is actually quite large, close to 200 yards across, a quad-style area designed to facilitate movement between the two residence halls, and activity in the green spaces between them. There are concrete walkways and a decorative masonry concrete fountain with some cast concrete and decorative concrete stone, which provides the look of river stones. Benches, a barbeque area and welcoming expanses of lawn encourage students to stroll and gather.

Viragh Hall houses freshmen students, while the new Skip's Place is mainly for upperclassmen. The Viragh Complex has become the most popular residence area for students, said John W. Kerr, director of communications and marketing for Spring Hill. These structures are keys to the Spring Hill college experience, he said.

"TAG has done a lot of work with the college over the years, so they understand the importance we place on the residence life for students, which helps them develop. We emphasize that as part of the Catholic Jesuit mission is preparing the students to be leaders for others," Kerr explained. "Student life experience is just as important as academic experiences. They go hand in hand. Students always refer to us as a community, which is very telling. A bond is formed with the place, and the location and environment here. It's very much a community oriented environment for students."

Kerr says students regularly revisit the Spring Hill College long after graduation. Many, like Viragh, actively support their alma mater for the rest of their lives. Thanks to the longevity and strength of concrete, the buildings will remain as long as their fond memories.

■ Wendi Lewis







#### SAFE AND SECURE

Built to house close to 700 inmates at any given time, the new Montgomery County Detention facility was constructed using millions of taxpayer dollars, so it had to be cost effective. It will hold hundreds of people in fairly close quarters, so it has to be safe. And because those people are prisoners, people arrested by the sheriff's office for everything from traffic offenses to theft and assault, it has to be strong and secure. According to Freddie Lynn, vice president/director of architecture at Goodwyn Mills & Caywood, Inc. (GMC), the Montgomery architectural firm hired for the job, only one material fully met the criteria on all three counts: concrete.

The Montgomery County Commission retained GMC to design additions and renovations to the Montgomery County Detention facility located in downtown Montgomery. GMC's design called for approximately 170,000 square feet of new construction across the street from the existing facility and approximately 18,000 square

feet of remodeled existing space. The project was completed in September 2009, and the county started moving inmates into it in October.

The need arose because the existing detention facility was bursting at the seams, holding almost twice as many inmates as it was originally intended to do. "Our main goal was to relieve the overcrowding while giving them room to grow as well," Lynn said. "Our design was one that allowed the county to maximize the use of the existing facility in conjunction with the new building; that's why we built the sky bridge."

Repurposing the original facility, which was built in the mid-1980's, was an integral aspect from the beginning of the project. The existing jail kitchen and laundry rooms underwent major renovations to accommodate the increased inmate population, and inmates can now be housed there in new ways. "The old structure can now hold



higher security prisoners, and it works out because that structure already contained the kind of single cells necessary for that," Lynn said.

To connect the two structures, a pedestrian bridge over McDonough Street was constructed, complete with an elevator and stairs. The new facility houses a 696-bed jail. The panelized steel cells are arranged in multi-level pods around a dayroom that is overlooked by a central control booth. A vehicular sally port, intake, transfer and release spaces, administration offices and master control, medical and command center spaces were incorporated into the design as well. The addition of the new building has made segregation of male and female prisoners simpler too.

The new construction was envisioned with future enlargement in mind. "We designed the building to allow room for expansion," Lynn said. "It is half of a mirror image. The same building could be repeated, and thus double in size of the facility."

The new building's entire structure is a poured in place concrete slab and beam system. "We went this way for maximum strength and sturdiness," Lynn said. "It enabled us to carry the loads and spans that the design required."

Durability was a major issue, as Lynn explained. "Concrete will stand up to the level of abuse that a facility of this type will receive.

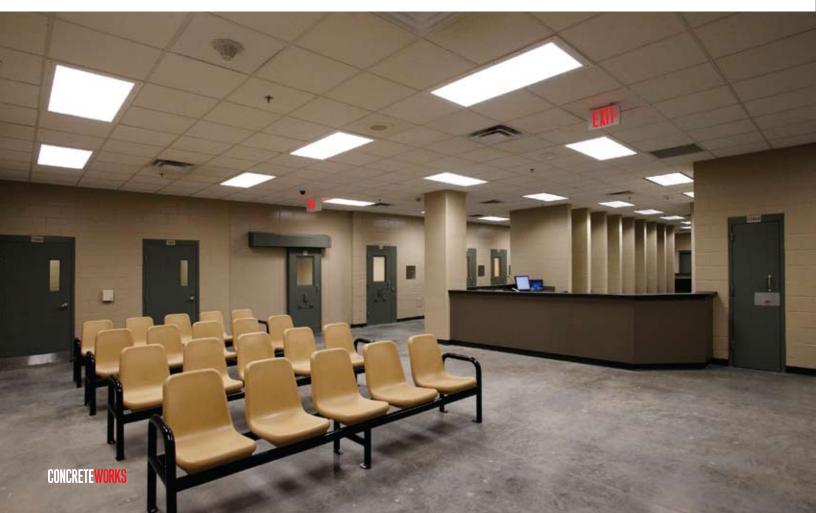
This is most high-abuse environment you can get, so concrete is a great choice," he said. "And because it is fireproof, it meant we didn't have to wrap and spray the whole structure. When you have to add other fire-proofing materials, things just don't hold up as well."

Larry Carter is a project manager for TCU Consulting in Montgomery, the firm hired by the county to oversee the project. He also praised concrete's strength and stressed its importance for this specific job. "The facility's functionality from a materials perspective is certainly meeting expectations. The county is very happy with the results," he said. "One reason we used concrete is its very secure nature. There's less likelihood of security breaches with concrete compared with a steel structure."

The new facility's exterior was designed to match the exterior of the old building, but to save money, GMC took a little different approach. "We wanted to complement the existing building, but we used lighter materials to cut costs a bit," Lynn said. "The metal skin was detailed to look like the precast concrete of the old building, but we did use actual precast concrete on the new building's first floor because it is so durable. It will hold up to being constantly touched." The stairway and elevator tower constructed at the original facility to connect with the bridge are all precast concrete too.

Concrete's durability played a role in another way. "Concrete





holds up so well during construction, in the weather and such, so we don't have to worry about damage or rust," Lynn said. "This was particularly key on this project because the entire frame and structure were concrete. Since the cells were pre-fabricated steel units that were slid in after construction, the structure had to be left open for a while. But we didn't have any problems doing that, thanks to concrete."

Concrete's natural fireproof status added to its appeal for this project. "We were able to get up to code with out adding additional materials," said Carter. "We're always concerned about safety, but this fact also allowed us to better fit our budget. The fire protection requirements of a facility with that occupancy level are high, and concrete made it easier to meet those requirements instead of using a fire-proofed structural steel system."

While GMC has worked with concrete structures many times in

the past, including the Renaissance Montgomery Hotel & Spa and the Convention Center in downtown Montgomery, the detention facility was the largest project of this kind designed by the firm. Lynn addressed the importance of skilled labor when working with poured in place concrete. "Proper care must be taken in the form work and the placement of the concrete," he said. "You need skilled labor, so when you peel the forms away, you're getting exactly what you expected."

Lynn offered his thoughts on what sets concrete apart from other building materials. "What we like is that it is an all in one material, and we're finding more and more of our clients appreciating the aesthetics of it too," he said. "It is extremely versatile. You can do stained floors, exposed concrete ceilings—People know it is strong, now they are starting to see that it can be really good looking too."

■ Jennifer Kornegay



## Creating Harmony BETWEEN Old New

The building that stands at the corner of Washington Avenue and Lawrence Street in downtown Montgomery has been a part of the landscape of Alabama's capital city since 1893, when it was constructed as a church. In 2002, when its most familiar recent resident, the Montgomery Advertiser newspaper, relocated to the burgeoning riverfront area, the building did not quickly find a new owner. As it remained vacant, longtime residents feared the structure would go the way of so many other long-empty properties and succumb to the wrecking ball.

But in 2007, City Councilman Dimitri Polizos went to bat for the historic building, convincing the Montgomery County Commission to renovate and expand the existing structure to create a new County Administrative Complex.

Today, the renovated building, which opened in early 2008, houses the County Commission administrative offices, conference room and the Commission Court. It also serves as a "one stop shop" for Montgomery County citizens, who can visit this central location to visit County Probate offices to pay taxes and purchase a variety of licenses and tags. Additionally, the new facility now houses the County Probate Archives.

2WR / HolmesWilkins Architects was selected to oversee the project. The firm was able to keep much of the existing structure because the "bones" of the building were made of concrete. When the Montgomery Advertiser purchased the Washington Avenue property in 1940, it had expanded and reinforced the existing building to house the gigantic press that would eventually run hundred of thousands of issues of the daily Alabama Journal (before this afternoon paper was discontinued in the early 1990s) and Montgomery Advertiser newspapers. The pressroom was constructed of reinforced concrete to hold the heavy press, as well as storage areas for the massive rolls of paper on which the publications were run each day.

"The biggest design challenge was working to unify an existing structure that had been added onto several times," said Natalie Fisher Toy, interior designer at 2WR / HolmesWilkins Architects. "Due to the many additions, the structure imposed limited ceiling heights and puzzling elevation changes on various floor levels. Another major challenge was manipulating ramps through existing column barriers to meet ADA standards," she said.

"What they did, during renovations, was they took that building and stripped it back to the concrete floors and the support walls,"



said Donnie Mims, County Administrator. "The only walls left were the walls needed to support the building. All the non-permanent walls were knocked out."

The 14-month project included \$12.5 million in renovations to the original 75,000 square feet of the existing building, plus \$2.5 million of new construction to add a 172-space parking deck adjacent to the new facilities. The renovation was rolled into the County's existing bond issue for a \$55 million expansion of the Montgomery County Detention Facility. The projects included acquisition and demolition of an existing Associated Press building at 116 S. McDonough Street and parking lot at 115 S. McDonough Street.

Montgomery County had actually purchased the old Advertiser building several years prior to the decision was made to renovate the structure, but was simply holding onto the building for its property. The building is located just across the street from the Courthouse Annex I building and in close proximity to the Montgomery County Courthouse and other annex buildings and County offices, so it made sense for the County to own that property as well.

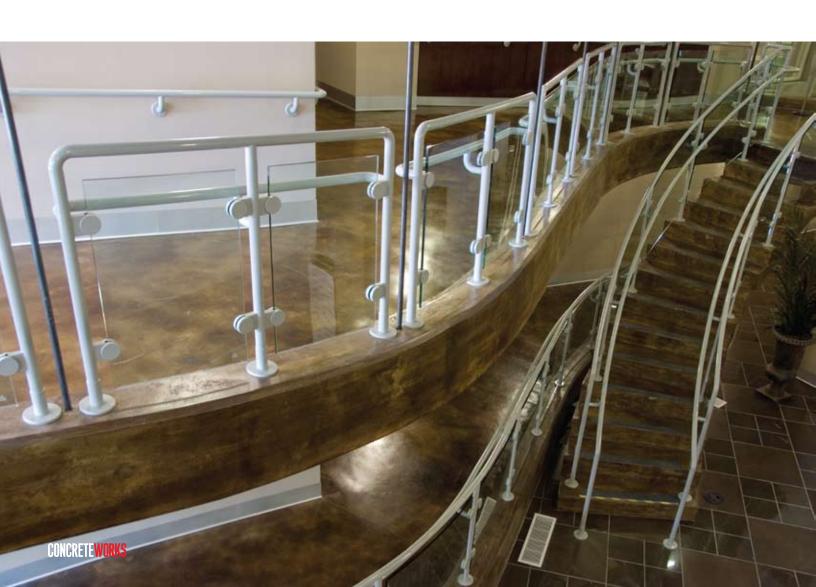
When the County approved plans for the detention facility expansion in 2007, Commissioner Polizos began to champion the idea of adding

to the bond issue to renovate the Advertiser building. Renovations would be less expensive than new construction, and moving County Commission facilities and other County license offices to that building would free up much-needed space in the Annex I building for the existing offices that were being crowded, he argued.

"I was the only one of the five (Commissioners) that wanted to keep that building," Polizos recalls. "I call that my project. I said, give me the opportunity to show you I could save you some money. Renovations can often be a lot less expensive than building new, and also a lot quicker than building new. Renovating the existing building provided a \$5 million savings to the County to keep it, renovate it and not tear it down," he said.

"The Montgomery County Courthouse Annex No. 3 began with a feasibility study that helped the client spatially plan for a 20-year growth period," Toy explained. "As a renovation project, the existing structure produced existing limitations to work around. However, the design goal was met with the use of demountable walls, signage, lighting, carpet, and millwork."

In addition to keeping most of the building's strong concrete structure, the architects also chose to incorporate the pressroom's



concrete floors into the design by utilizing a stained concrete technique that would transform the plain grey slabs into a striking and beautiful flooring, rather than covering the slabs with carpet or other less durable materials.

"Concrete floors conserve resources by functioning both as a foundation and a finished floor," Toy says. "In addition to conserving materials, concrete floors offer other environmental benefits...better energy efficiency and they help improve indoor air quality."

They also provide affordable and long-lasting beauty. "We wanted a smooth, highly reflective, high-luster floor material that would carry light deep into the interior," Toy said. "We wanted a floor material that that would surpass that of most floor covering materials, and we wanted a durable, low-maintenance floor that would handle heavy floor traffic. It will save money in the long run because you'll never have to rip out and replace a worn, damaged floor."

Staining is quickly gaining in popularity as the first choice for transforming concrete slabs. There are many choices that allow designers and builders to create unique finishes by combining colors and application techniques to existing floors. Concrete inherently provides a neutral tone that is a blank canvas for applying color, and its porous nature makes it a natural to absorb the various treatments. Most common is an acid-based stain that penetrates the surface of the concrete and works in conjunction with its natural elements. The stain slightly etches the concrete and becomes a permanent part of the concrete. As a result, stained concrete will not fade, chip, or peel. It is a natural way to create a beautiful finish that stands up perfectly to high-traffic areas – a perfect choice for a County building visited by hundreds of citizens on a daily basis.

Mims explains, "When you come in the Lawrence Street entrance and you are standing at the foot of the stairwell, that was the pressroom for the Advertiser, and that press was over two stories tall. All that concrete work was poured in there to form the new office structures when we renovated. It had been a big cavernous room that had been full of the press, which was huge. You have to envision how the floor was built through that pressroom. Now, it's hard to imagine that industrial workspace when you see the beautiful new entranceway."

An added benefit is the security the concrete structure provides for



the County Probate Archives, which are now housed where the huge rolls of paper used to be stored next to the presses. The Probate Archives hold all the historical documents and records, even before Montgomery was a county, back to when it was a territory in the new state of Alabama.

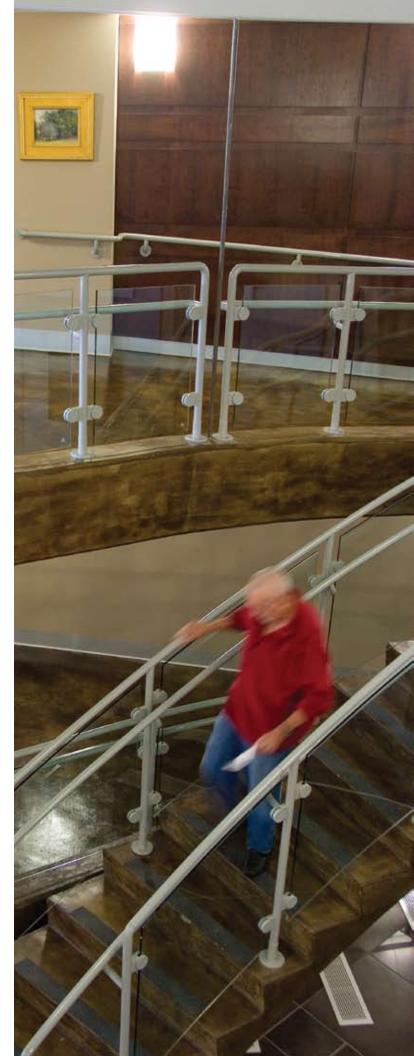
"That building was built like a battleship," Polizos said. "It's like a fortress in there, which makes it very secure for the archives that are housed there."

In addition to the renovations, the architects also created the design for the new parking deck structure that was constructed next to and adjacent to the building, in the area that used to be the Advertiser loading dock. This structure was created with additional concrete, using poured-in-place techniques to provide strength and longevity. The exterior brickwork on the new parking deck was designed to complement the existing historical building and add continuity to the building, so that it would function as one comprehensive structure.

"The most unique part of this design process is the final harmony between the old and the new elements of the building," Toy said. "The emotional ties to the history of the building are still present, but the new design features mask the emptiness of the previously abandoned building."

"I'm very pleased with the building," Polizos said. He considers the building his legacy, adding a new chapter to the site's long historic record. 

Wendi Lewis



# Strength and Comtout

The Clearview Cancer Institute has been offering comprehensive cancer care for more than 20 years from the most advanced cancer treatment facilities located in Northern Alabama. For many years, its

treatment facilities were based at Crestwood Medical Center Huntsville. In 2006. the Institute expanded, constructing a new, full-service cancer facility treatment the historic Russel Hill district. Clearview offers virtually every service and amenity possible in an outpatient setting, including radiation therapy, chemotherapy, an independent

laboratory and imaging center, along with a variety of outpatient procedures.

The new 175,000-square-foot \$24 million facility began construction in August 2004 and opened in October 2006, actually ahead of

schedule. Poured-in-place concrete was used for the building's foundation, concrete block was used in the construction of the building, and masonry for stairs. Concrete also was used for structural support

and construction throughout the building, and the site included concrete pavers and concrete retaining walls. Concrete was also an essential part of the construction of the facility's MRI suites.

"The benefits of concrete in general for construction are durability and strength, ease of construction and

structural capability," said Roger Cartwright, architect with Sherlock, Smith & Adams.

"Concrete is durable, long lasting, and it can be used both inside and outside the building," agrees Kristine A. Harding, AIA, president of JH Partners Architects and Interiors, based in Huntsville, which worked as an associate with lead design firm Sherlock, Smith & Adams on the project. "It is a good load-bearing structural element that is affordable."

To create the vaults containing the center's linear accelerators, architects used concrete with steel shielding to provide containment of the radiation that is used in the MRI process.

"Concrete is essential for linear accelerators because you have to have protection and concrete is a means to provide that protection," Cartwright explained. "In the case of creating an enclosure for linear accelerators, it's really the only material that makes sense and works, so it's a significant benefit."

"Concrete is self-supporting with the proper reinforcing and provides shielding as needed for radiation processes," added Harding. "Due to the levels of radiation, the thickness of concrete is 36 inches thick at the narrowest places and up to 6 feet thick in others. It is basically a poured-in-place concrete bunker on all sides – walls, roof and floor. In some cases lead lining is adequate for containing radiation, but the thickness of concrete also must achieve this, too. The manufacturer of the equipment gives us the specifications and a physicist checks the design."

Project developers used a process called surcharging to save time and prepare the site for the very heavy bays needed to hold the accelerators. This process also lessened the foundation cost.

"Where the linear accelerators are located, the weight of that concrete is significant," Cartwright said. "So after clearing the site and creating a pad for the building, we took excess dirt on the site and stacked it, and left it there while other processes were going on with the project, so when we were ready to construct the building we could remove the soil and put in the foundations for the vaults."

The new facility would meet all the state-of-the-art technical specifications, of course, but architects also paid special attention to the building's aesthetics, and the surrounding landscaping. They wanted the center to flow, to provide patients with a relaxing, intuitive environment, and they also added water features to add to the feeling of peace and tranquility.

"As cancer treatment has evolved, we find more and more treatment centers moving away from a hospital environment," explains Harding. "The frustration with parking and the fact that some patients spend a total of eight hours undergoing treatment really supports the concept of locating in a more restful and peaceful place. Our design brings the outside in at the lobby side, where patients and family will wait, and on the infusion side, where patients will sit for hours at a time undergoing their treatment."

The overall design was tailored to streamline the patient intake **CONCRETEWORKS** 

process and to make patients and their families feel welcome and comfortable. The unloading canopy is adjacent to a cascading water fountain and the welcoming "L" shaped building layout places the patient at the beginning of their clinic routine, the lab. From there, after waiting in a two-story reception space filled with large windows, artwork and comfortable seating, the patient proceeds to the adjacent oncology clinic and chemotherapy infusion areas, which look out the south side of the building over another water feature. Shelled space for other programs and expansion was also included.

"The goal for the design of this development is to provide cancer survivors a recovery place that feels like a home environment," says Harding. "The setting offers patients and their families the opportunity to enjoy the outdoors through gardens, plazas, roof terraces and a manmade lake. This patient friendly facility houses the latest cancer treatment technologies, including imaging, radiation and oncology services.

"One of the things that I enjoyed about this project and can be said about why I enjoy what I do is that you have someone as visionary as Dr. [Marshall] Schreeder (Chairman of the Cancer Committee) come along with a unique idea and we help him realize his vision," Harding said. "It is wonderful to visit the project and see people use it as you envisioned." 

Wendi Lewis







#### a different kind of VILLAGE

You've heard the old saying, "It takes a village to raise a child."

At Auburn University, they recently found out what it takes to raise

a village, constructing a residence hall project named The Village Community. Providing approximately 1,700 Auburn students and a few faculty members with new on-campus housing options in eight residence halls, The Village was completed in August 2009.

But this "village" is different from other such areas at Auburn thanks to its use of one of today's most innovative "green" building products, pervious concrete. "Auburn University is committed to becoming more sustainable and lessening its footprint," said Garrett Goodman, architect with Williams Blackstock, Inc., the firm that designed The Village. "Choosing to use pervious concrete was a simple, effective way to do that because it's porous and cuts

down on rain runoff, protecting water quality."

Pervious concrete was used for the parking lot areas up against

the buildings, as well as on service drives and the visitor parking area. But most of the residents use an existing parking lot a little bit away

from The Village—part of another ecofriendly initiative at the university. "The idea there was to get students walking and biking on campus more or using the bus system instead of driving their cars everywhere," Goodman said. The Village's design also incorporated a lot of green space.

While pervious concrete is more expensive in the outset when compared to asphalt, you don't have to invest as much in storm water drainage. "With flash flooding prevalent today, it makes sense to make the investment," Goodman said. "Somewhere down the line, it will get paid back."

A pervious concrete parking lot also requires less maintenance than asphalt but, does need to be cleaned

periodically. "Because it is a matrix, you have to clean it with a combination of vacuuming and introducing water to move mud and









any debris out," Goodman said.

Jeff Carrico, vice president of White-Spunner, the general contracting firm for the project, pointed to another aspect that makes pervious concrete so appealing. "We've worked with it quite a bit, and I think it's really a nice looking product," he said. "It's got a little different texture to it. I think that, in addition to the obvious environmental benefits, make it a great product. It's not difficult to work with either."

Goodman did stress the importance of installing the product correctly, but that's something he said is getting easier all the time, echoed Carrico. "The material does have specific installation methods, and you need to have someone certified to do it, but the specs are evolving," he said. "More and more information is surfacing on this technology, so there is a lot more awareness about the product and how to install it right."

As for durability, the strength of a pervious concrete parking lot matches that of any other concrete lot, according to Goodman. "It's still just as strong as other concrete lots, and when compared to asphalt, you reap a secondary 'green' benefit by not continually having to resurface your lot with an unsustainable product. Pervious concrete is just one of those things; it's not really flashy, but it really works."

And the pervious concrete is living up to expectations. "It works





beautifully," Goodman said. "It soaks up a lot of rain water, so it's been very successful."

It's no surprise that pervious concrete was a natural fit for an AU project since, according the Goodman, the university is home to some of the foremost experts on the material. "Auburn University leads the way in the use of pervious concrete," Goodman said. "Some of its professors are experts on it. They've already used it once, at the Arboretum. It's a good way to reflect back to what the architecture students at the university are working on."

David Roberson, facilities construction project manager for Auburn, agreed. "We're very happy with the results of the project, particularly the use of pervious concrete," he said. "We used it as a teaching tool by having some students from the building science, architecture and industrial design schools come out and watch as it was poured. Of course, we love the 'green' aspect; that was one of the main reasons we used it."

But pervious concrete wasn't the only form of concrete to find its way into The Village. Architectural pre-cast concrete was also utilized and to monumental effect. "We wanted to focus on each of the eight buildings individually," Goodman said, "and make a large statement at each entry, so they had a real sense of arrival. It was important that the students felt like their building had its own identity. Adding some details also let us keep in tune with the more historical buildings surrounding The Village. Because of the buildings' size, pre-cast concrete was the way to go to accomplish all of this."

Goodman explained that some of the major benefits of pre-cast concrete are its standardization and its cost-effectiveness. "Pre-cast gives you such good quality control, and it also provides a cost benefit, because it allowed us to put the buildings' skin on faster and get the buildings up quicker; it added a lot of efficiency."

That impact Goodman was reaching for can be seen in The Village's 16-foot arches. "They have a real presence, and the pre-cast panels were really the only option for them," he said. "You can't stack up individual pieces like that. Pre-cast is a very prominent way to show off what you can do with an affordable material like concrete."

The multiple uses of pervious and pre-cast concrete at The Village highlight concrete's versatility, but so do simpler applications—like sidewalks. "We tinted the concrete of all the new sidewalks at The Village to look a little aged," Goodman said. "We were able to give it some patina, which was nice. Now they blend into the rest of the campus instead of standing out as bright white and new. It's just one more way concrete allowed us the marry this project with what's around it." 

Jennifer Kornegay



### DOCTOR ORDERED

Concrete is often the product of choice when safety is a major goal. Strong and stable, concrete can provide a measure of confidence for project developers. But in a building project in Florence, Ala., concrete contributed to the safety factor in a different way.

The MedPlus Medical Clinic building was completed in 2003 to serve patients in need of primary care services. The walk-in clinic is a little over 10,000 square feet with eight exam rooms, x-ray and lab facilities, a large waiting room and an office area.

Drs. Charles Ferguson and Charles McGahey own the building and enlisted the expertise of local architectural firm Lambert Ezell Durham Architecture-Interior Design when they were in the planning stages. Split-face concrete block veneer was chosen for the building's exterior, and EIFS was used for ornamental features.

Calvin E. Durham, a partner at the firm, remembers the project well. "One reason we chose the concrete products we did is because they are more economical, and for the look we were trying to achieve, they fit the bill without breaking the budget," he said. "We wanted

the look to stay consistent with an existing MedPlus dental building nearby."

But the choice of concrete for the building's parking lot shows Durham's close attention to detail and to his clients' specific needs. Adjacent to the clinic, there is a 33-space parking lot divided into two areas, one for patients and one for employees. There is also room for a future expansion that could add 20 more spaces when needed. Durham decided on light, almost white, concrete for the parking lot. A few of the reasons behind the choice are readily apparent: concrete's strength and staying power. But the other reason is less obvious: reflectivity. Durham explained. "The lighter concrete will reflect more light and keep it brighter in the parking lot at night. With many patients coming in and out of the clinic after nightfall, the extra light adds another level of safety. This was important to the doctors."

Of course, a concrete parking lot will also hold up under the traffic better than asphalt and requires much less maintenance, since it won't have to constantly be repayed. That's something the doctors like too. "We've been very pleased with the building and the parking lot, both the style and the functionality," said Dr. Ferguson. "Particularly the concrete surfaced parking lot. We used asphalt in another clinic, and we have had some problems with it. The concrete surface is holding up great."

Durham echoed Dr. Ferguson's sentiment. "From an owner's standpoint, he won't have to think about his parking lot again,"

he said. The lighter concrete will also absorb less sunlight, keeping it cooler during the day and therefore avoid heat sinkage.

Durham stressed another benefit of choosing concrete for this job: cost effectiveness. "Using a concrete surface

for the parking lot allowed us to do an integral rolled curb, instead of forming the curbs separately," he said. "That cuts your labor costs right there, because they can be poured together. On the whole, a concrete parking lot can cost a little more on the front end, but over the life of building, it more than pays for itself with the decreased

maintenance."

Walt Daniel, vice president of Carbine Construction, the general contractor for the MedPlus project agreed. "An integral rolled curb is much quicker," he said. "You don't have to pour the curb separately and wait for it to set up."

Durham pointed to a few things to consider for when choosing a concrete surfaced lot. "The real key for doing a concrete surfaced

lot right is to make sure the control and expansion joints are done properly, and then it won't crack as often," he said.

And the integral curb brings the issue of durability to the table again. "When you have a formed concrete curb meeting an asphalt surface for

instance, it can become subject to erosion and other problematic issues," Durham said. "At the end of the day, a concrete lot with the integral curb is just more functional--and more attractive. It gives a seamless look."

The "look" was a factor when deciding on materials for the building





as well. Durahm outlined how the split face block veneer helped him give the building a warmer, more welcoming appearance. "We didn't want a plain block building; that would come off 'too sterile,' so given the limitations of our budget, the split face block veneer worked perfectly. And the EIFS accents allowed us to dress the building up a little, give it some more depth and a really nice finish." EIFS was used around the facia and around windows allowing the addition of some classical details.

Because it is open 12 hours a day, 365 days a year and set in a high-traffic area of town, Durham knew that the building would take a beating, so. Thanks to its sturdiness, the split face concrete block was again a natural choice. Its versatility played a role too. "We knew we wanted something for the building that would stand the test

of time while looking great," Durham said. "And the split face block veneer will do that."

The MedPlus Medical Clinic's story had a happy ending that's still going strong, five years later. "It was a very smooth project," Durham said. "The owner is happy with the look and function. Getting the budget and the desired aesthetic to meet is what we do on projects every day, and concrete really helped us do that on this one."

■ Jennifer Kornegay

