

DDC

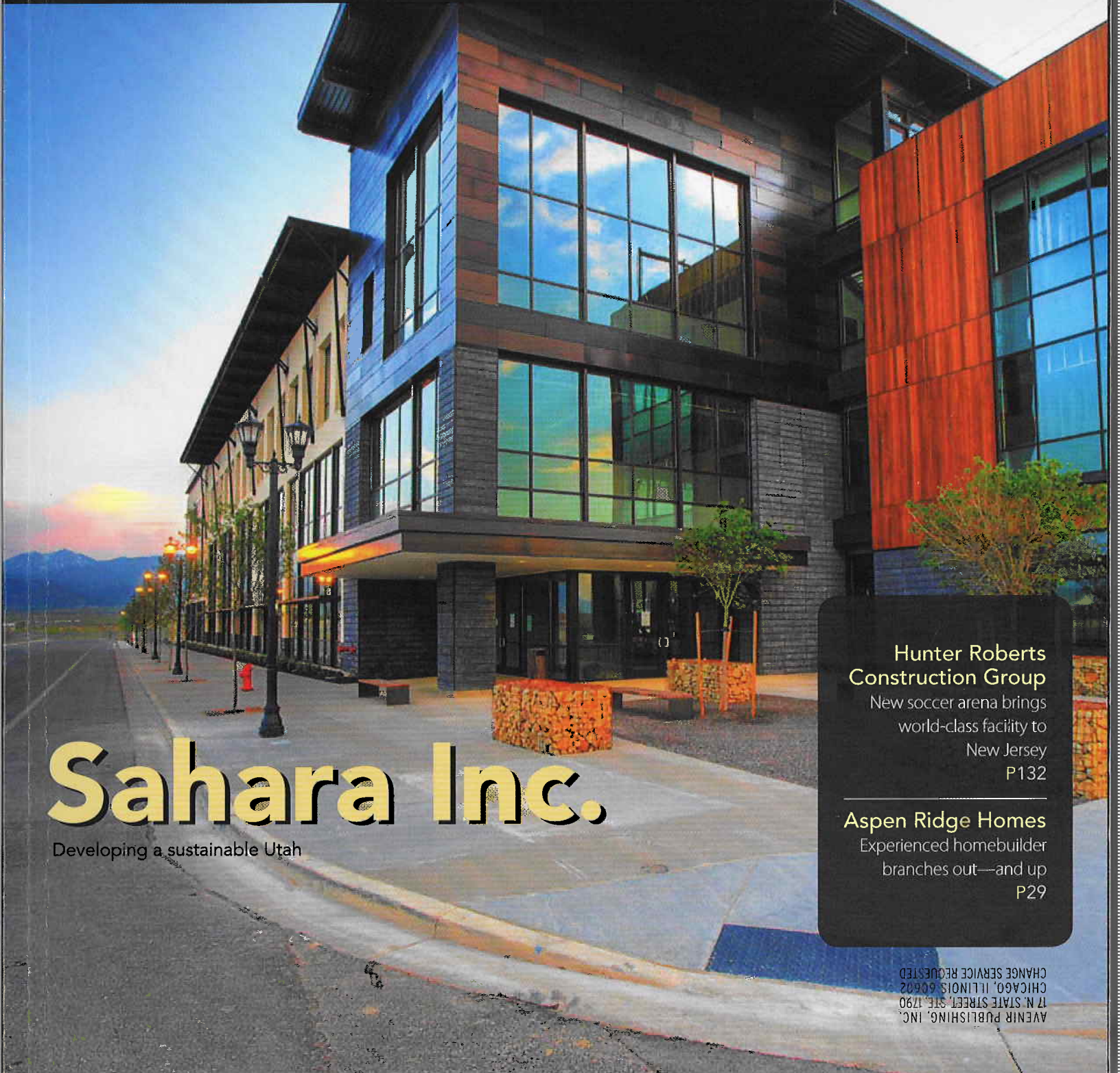
DESIGN

DEVELOP

CONSTRUCT

JOURNAL

NORTH AMERICA'S RESOURCE FOR BUILDING AND REAL ESTATE PROFESSIONALS



Sahara Inc.

Developing a sustainable Utah

Hunter Roberts Construction Group

New soccer arena brings world-class facility to New Jersey
P132

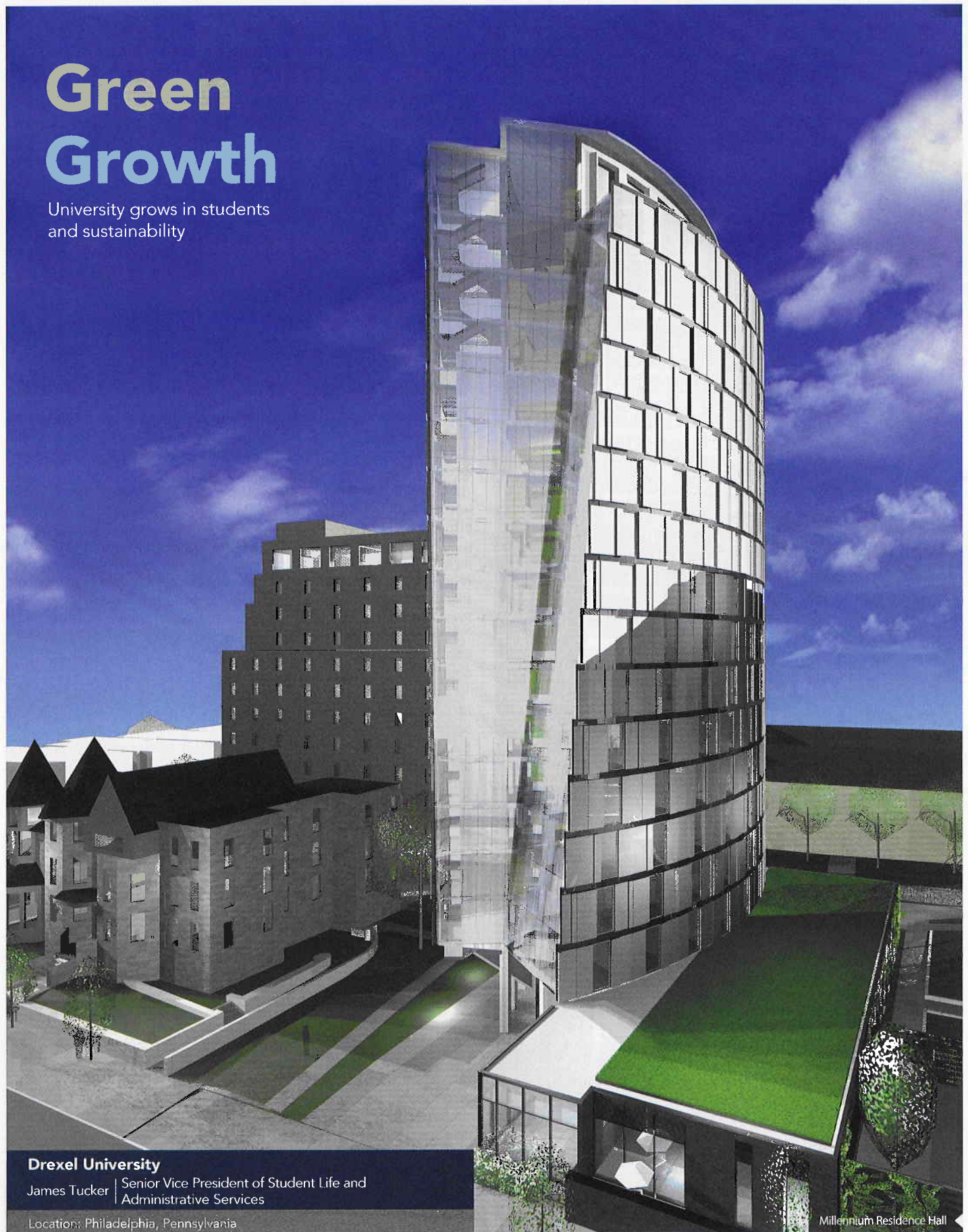
Aspen Ridge Homes

Experienced homebuilder branches out—and up
P29

AVENIR PUBLISHING, INC.
17 N. STATE STREET, STE. 1790
CHICAGO, ILLINOIS 60602
CHANGE SERVICE REQUESTED

Green Growth

University grows in students
and sustainability



Drexel University

James Tucker | Senior Vice President of Student Life and
Administrative Services

Location: Philadelphia, Pennsylvania

Millennium Residence Hall





Not long ago, Drexel University in Philadelphia, Pennsylvania, was a smaller school, with 9,000 undergraduate and graduate students. This year, the student population is closing in on 22,000.

There's no doubting that Drexel is in a growth mode, but the university is taking the time and care to ensure that the growth is efficient and responsible.

"We are currently in a five-year, \$400 million Master Plan and we have targeted each project to meet all the energy efficiencies that are required by building codes, but also to include sustainable components that make sense to us economically," says James Tucker, Senior Vice President of Student Life and Administrative Services for Drexel.

The Master Plan calls for the creation of 12 buildings overall. Currently, the Master Plan is just getting underway with four new buildings and two major additions under construction.

Innovation comes with the territory at Drexel. The university was founded in 1891 by Anthony J. Drexel as the Drexel Institute of Art, Science and Industry with a focus on practical arts and sciences for all backgrounds. The university continued to offer a variety of educational opportunities, eventually transforming into a top-ranking national leader in cooperative education.

"Our co-op program entails students working in the community, in their trade, while going to school at the same time," says Tucker. Over the course of five years, students split their time between quarters in the classroom and quarters working in the industry their degree is in. "It helps you afford your education as well because you get paid while you're working. Some places may consider that an internship; for us, it's cooperative education."

Drexel has stood at the forefront of other innovations over the years as well. In 1983, it became the first university to require all entering students to have computers. In 2000, it became the first fully wireless campus and two years later the university introduced the first mobile web portal service for students.

THE GREEN GLOBES

The newest innovation permeating campus throughout the Master Plan is sustainability—an innovation that really begins with Tucker and the university's Vice President of Facilities, Robert Francis.

"Both Bob and myself have come to Drexel after working at a number of other institutions," explains Tucker. "Our experience dates back to before the movement was called green but was simply about energy efficiency."

At their previous universities, Tucker and Francis accrued a number of awards for their energy-efficiency initiatives over the course of 30-plus years. Before coming to Drexel, both men worked on LEED-

certified buildings. However, when it came to LEED, the certification often ended up more expensive than the universities could afford.

"Here at Drexel, I'd like to put more money into the buildings instead of the awards process, so we looked into Green Globes and decided to adopt that program for all new buildings and renovations," says Tucker.

Similar to LEED, the Green Globes system is an environmental design and building management tool to assess sustainable components. Designs intended to meet the program's standards are analyzed and even put online for anybody to see and critique. In other words, the process is self-reported and the data can be checked affordably.

The low cost coupled with the university's growth has allowed Drexel to expand greatly while other universities have not. "Most universities have ceased construction, but we are going to be growing probably over one million square feet in the next few years," says Tucker. Drexel spans more than four million square feet currently.

PLAN UNDERWAY

Despite switching comprehensively to the Green Globes system, one building at Drexel is aiming for LEED Silver certification, as the decision was made long before the switch. The \$69 million Integrated Sciences Building is anticipated for completion in 2011.

Breaking ground on the science building heralded the beginning of the current Master Plan. The five-story, 130,000-square-foot building will be the home of 39 research and teaching laboratories. Upon entering, visitors will be introduced to a four-story, 70-foot tall by 20-foot wide biofilter wall. The wall will be comprised of vegetation local to Pennsylvania and will filter the air in the building, cooling it in the summer and adding humidity in the winter.

"We try to feature innovative, sustainable components in every project in the Master Plan," explains Tucker.

Another example is the new recreation center, an 84,000-square-foot building slated for completion later this year. The rec center will feature an integrated glass façade and skylights to eliminate the use of electric lights in 87 percent of the interior occupied space during the day.

The upcoming 17-story, 115,000-square-foot Millennium Residence Hall will incorporate a 3,000-square-foot green roof. Other project-specific green components include Evergreen cooling systems at One Drexel Plaza, recycled synthetic turf on the Buckley Recreational Field, heat recovery and ice storage cooling systems at the Bossone Research Enterprise Center and brownfield redevelopment for Drexel Park. Across campus, green initiatives include wind power for 30 percent of total electrical usage, green cleaning projects, extensive recycling and a bike-sharing program. It's no wonder The Princeton Review gave Drexel a green rating of 98 on a scale that only goes up to 99.

"I'm a businessperson when it comes down to it and most of the green stuff, if you're reasonable with it, makes economical sense," says Tucker.

Drexel proudly boasts one of the lowest rates of carbon emissions among comprehensive universities and its current growth does not appear to be changing that. From biofilter walls to basic recycling, Drexel is a green juggernaut. **DC**

EWINGCOLE

EwingCole believes the campus environment is instrumental for recruiting and retaining exceptional students, faculty, and staff. Every project is an ensemble of its surroundings reinforcing the sense of campus community. As a leader in both sports and sustainable design, EwingCole identifies unique opportunities to create a facility that has a lighter footprint on our natural environment while exciting your community.

DIMITRI J. VERVERELLI INC.

The Paul Peck Alumni Center (Frank Furness, Architect circa 1876), Kelly Hall 2007 Renovations, and the N. 33rd Street Underground Steam Utility Piping Replacement and Upgrades demonstrate examples of adaptive reuse, sustainability, and energy conservation projects where Dimitri J. Ververelli, Inc. provided Engineering Services from conception through construction to promulgate the Drexel Green Initiative toward a more Sustainable Community.

EWING COLE

Sports & Entertainment

The Armory Athletic and Convocation Center

Architects Engineers Interior Designers Planners
www.ewingcole.com

DIMITRI J. VERVERELLI INC.
CONSULTING ENGINEERS
PHILADELPHIA, PENNSYLVANIA

TRADITION, PASSION, INNOVATION SINCE 1964

Drexel
UNIVERSITY

DJVI PARTNERS WITH
DREXEL UNIVERSITY
TO ACCOMPLISH THE VISIONS OF
DR. CONSTANTINE PAPADAKIS FOR
LEADERSHIP IN SUSTAINABILITY

PHONE: 215-496-0000 EMAIL: JAVERV@DJVINC.COM