



October 2008

Volume 2, Issue 4

In this issue:

- Overview of the new Sustainable Land Development Club (p. 1)
- A homebuilder brings the American Dream to many across the Mid-Atlantic (p. 2)
- Firms bring innovation to big city developments (p. 3)
- Tysons Corner Center mall expands (p. 4)

Land Development Design Initiative, Inc. • www.iddi.net • PO Box 6002, McLean, VA 22101 • Phone: (540) 231-8935 • Fax: (540) 231-7532 • E-mail: dymond@vt.edu



It's October in Blacksburg, and that means with every passing day the leaves become a little more colorful and discussion surrounding Hokie football becomes a little more intense. It also means that we're fully immersed in the fall semester. This finds freshmen adapting to their new life away from home, while seniors polish their resumes for the campus' various career fairs. The fall 2008 semester is quickly shaping up to be the busiest time ever for the LDDI! The Curriculum and Course Enhancement Committee continues to push forward with its

development of two new, three-credit courses (Sustainable Land Development and Introduction to Land Development Design). The Practitioner Involvement Committee remains active in spreading the word about LDDI at the regional and national scale. LDDI's Research and Technology Transfer arm is pursuing a number of grant opportunities in an ongoing effort to establish Virginia Tech as the leader in Land Development Design education and research. With so many different things going on with the Initiative, Kevin and I face the daunting task of staying on top of it all. But, with the enduring support of our sponsoring firms and volunteers, these challenges are being met with enthusiasm and excitement.

In this issue of LDDI Bridges, you can read about some of the people that make LDDI successful, as well as the exciting projects being taken on by our sponsoring firms. As always, I hope you enjoy this issue of our newsletter and let me know how we can continue to make it better. Also, be sure to check out our website at www.iddi.net.

*Best wishes for a great fall, and GO HOKIES!
Dr. Randy Dymond, PE, VT LDDI Coordinator*

Students Start Sustainable Land Development Club

by Kelly Shayne Young

This semester, a group of CEE students has taken the initiative to start a Sustainable Land Development Club at Virginia Tech. Seniors Tyson Catlett and Yuri Chandler are serving as the club's co-presidents, and have recruited, to date, 15 of their fellow students to get the club up and running. The focus of the club is to bring together students who have an interest in sustainability as it relates to the land

development field. The club's faculty advisor, Kevin Young, says he is impressed with the effort being put forth by the students, and feels that a club of this nature will provide students with great networking and educational opportunities.

The club held its first meeting in early September. During this meeting, students

expressed their visions for the club, including field trips, guest speakers, and social outings. When asked why he wanted to take on the task of starting the club, in addition to his full course load, Tyson replied, "Once I realized the excitement outside of

the classroom, the effort from mentors and land development

professionals, and the purpose of the LDDI, it was a very easy decision to commit." If you have questions about the club, or wish to offer your support, you may contact Tyson at bcatle86@vt.edu or Yuri at yhand04@vt.edu.



Seniors Tyson Catlett (left) and Yuri Chandler are co-presidents of the new Sustainable Land Development Club.

LDDI Bridges is a publication of Virginia Tech's Land Development Design Initiative

Editors:

Kelly Shayne Young
ksyoung@vt.edu

Kevin Young
keyoung@vt.edu



“You should never be afraid to ask for help if you don’t know how to do something. When you learn from others and from your own mistakes, you will be recognized as a value to both the project and the process.” - Bryan Stevenson, AES Consulting Engineers Project Manager



“I knew when we first discussed the LDDI that there was a ‘sleeping giant’ of professionals who would embrace the program. All we had to do was ask.” - Robert Jansen, Vice President of Land Development for KB Home’s Mid-Atlantic Division

Career Spotlight: Bryan W. Stevenson

Heading the LDDI’s outreach efforts

by Kelly Shayne Young

With twelve years of professional experience under his belt, Project Manager Bryan Stevenson attributes much of his professional success to efficiency, attention to detail, and good, old fashioned listening.

Hailing from Pittsburgh, Pa., Bryan has spent the past five years as a project manager for AES Consulting Engineers and currently serves in the firm’s Fredericksburg office. A 1996 graduate of Virginia Tech, his engineering education gave him the focus and respect for the industry necessary to begin a career in land development.

In his time at AES, Bryan has managed an assortment of projects, including commercial, office, residential single family, residential townhomes, and industrial development, as well as roadway design. He is currently working on a redevelopment project of a blighted neighborhood that was razed 30 years ago. The design process has included researching the old neighborhood layout and separating the stormwater and sanitary in an old combined sewer system.

Bryan believes that in order to complete a successful project, “it is important to listen to the needs and desires of your client, understand the purpose of the project, do your research, and pay attention to detail.” He also believes in asking for help when it’s needed.

As the Chair of LDDI’s Outreach Committee, Bryan has enjoyed spreading the message and purpose of the Virginia Tech initiative in which he’s become a true believer. “I think the involvement from the private industry and government is a great experience for the students,” says Bryan. “The energy of the people involved with the program (students, professors, and practitioners) is tremendous.”

When Bryan isn’t busy with work, he enjoys sports (especially college football) and spending time with his wife, Heidi, and his two children, Nate and Jackie. Some of you former Hokies may actually recognize Bryan’s voice— as a student, he was a jazz DJ for Virginia Tech’s radio station, WUVT.

Who We Are: Robert Jansen, KB Home

Robert Jansen is Vice President of Land Development for KB Home’s Mid-Atlantic Division and has spent the last 21 years in the residential development and homebuilding industry. He has served on the LDDI Advisory Board since its inception and has taken an active role in the Practitioner Involvement Committee.

What attracts you to civil and environmental engineering (CEE)?

I feel I’m a problem solver and I enjoy helping to improve the quality of life for people. As a homebuilder, I’m thrilled to be a part of producing environmentally friendly communities so people can experience the American Dream of home ownership and have an enjoyable community in which to raise their families.

What are the highlights of your professional career?

Professionally I’ve had the good fortune to collaborate on some of the largest residential Planned Unit Developments (PUDs) in the Washington Metropolitan Area. I also always enjoyed the practical academic courses as a student and concentrated heavily in the geodetic and surveying coursework offered at Tech, through which I was able to work on

real world engineering and surveying projects.

What motivated you to become involved with the LDDI?

My motivation is to give back to the university, college, and department that enabled me to achieve the success I’ve had and to help enhance the land development profession. It’s also very exciting to be involved in a program that is unique and new to the academic community.

What do you think are the strengths of this program?

I feel the greatest strength is the passion and enthusiasm of the academic and professional participants. We are blessed to have both Randy Dymond and Kevin Young represent us in the university community.

What are your hobbies/interests?

My greatest devotion is my family: my wife of 26 years, Anne, and our son, Michael, who is a senior at Tech. I have dedicated this stage of my life to giving back, through LDDI and Tech’s student chapter of Engineers without Borders, and by continuing the work of my father-in-law, who founded numerous charitable projects throughout the world.

Balzer Boosts Richmond Retail

edited by Kelly Shayne Young

As the final stage of the redevelopment of Busy Street in Richmond, Va., the Courthouse Place shops provide much needed retail space to the area adjacent to Chesterfield Town Center Mall. The shops include two main anchor tenants (Dunkin Donuts and Shackelford's Seafood Restaurant), as well as smaller retail space for non-chain tenants. Balzer & Associates provided site engineering, transportation engineering, and construction management services, in addition to coordination with the project architect and structural engineers.

With such a long and narrow site, designing a retail building with full traffic circulation around the structure proved challenging. "In addition," explains Project Manager Christopher Shust, "the narrowness of the site made it difficult to ensure the proper parking distributions were met across the various tenant spaces in the building."

The shape of the site was not the only obstacle; the site was also unable to accommodate a gravity sewer, despite the fact that it is located in the midst of a larger

commercial development. As a result, the design and construction of a sewer pump station was required. In order to make the pump station cost effective for the development, an agreement was made for an adjacent retail building to share in the design and construction costs.

Balzer had to address a major drainage channel that transected the site and served as the primary drainage outfall for a larger commercial shopping center. In order to develop the Courthouse Place shops, the channel was relocated along the perimeter of the site and a concrete channel was designed to meet the conveyance requirements for the upstream drainage areas.

Area residents are quite pleased with the high architectural standard that has been maintained while providing the desired retail space. With the addition of the new Courthouse Place shops, two vacant and overgrown residences were replaced with an attractive, pedestrian scale retail development.



The relative narrowness of the site made it challenging to ensure the proper parking distributions were met across the various tenant spaces.

Bohler Enhances Capitol Riverfront with 55 M Street Development

edited by Kelly Shayne Young

Situated near the Washington Nationals' new baseball stadium, the Capitol Riverfront is one of Washington DC's most prominent future destinations for urban life and entertainment. Bohler Engineering provided numerous services for Monument Realty's 55 M Street development as part of this growing community. These included site survey and design, stormwater management, drainage system design, water and sewer system design, and roadway design.

This new Ballpark District development will provide 100,000 square feet of retail space, 275,000 square feet of office space, a 196-room boutique hotel, and 330 residential units. "The Monument Realty project is being built over an existing Metro Station and with three stories of subsurface parking," explains Project Manager Dan Duke. "The unique positioning, existing infrastructure, and urban aspects of the site required flexibility and creativity in design."

Incorporating Leadership in Energy and Environmental Design (LEED) and Low Impact Development (LID) practices, this project utilizes a green roof to reduce runoff and improve water quality. Bohler worked with the Landscape Architect to design the public space to enhance pedestrian activity and utilize planting areas for bio-retention. This particular approach was very unique; the team worked with the District of Columbia extensively for review and approval of this system.

The development of 55 M Street was highlighted by the intense collaboration of all parties involved to meet the deadline of opening day for the Nationals' baseball season. In the midst of changing priorities and strict deadlines, the entire Bohler Engineering team succeeded in the timely completion of the design and is proud to be part of this project that will improve the quality of life for many DC residents.



55 M Street is a highly visible project, due to its proximity to the new Nationals' stadium and the critical role the Metro plays in providing transportation to the area. It has been very well received by the public.

Virginia Tech

The Via Department of
Civil and
Environmental
Engineering

Thank you to our sponsors!

The sponsorships of our business partners are an essential component to the success of LDDI. We thank the following firms for their generous support:

PLATINUM:

*AES Consulting Engineers ▪
Balzer & Associates, Inc. ▪
Bohler Engineering ▪
Bowman Consulting ▪ Burgess
& Niple ▪ Draper Aden
Associates ▪ ESP Associates,
P.A. ▪ Kimley-Horn & Associ-
ates, Inc. ▪ Patton Harris Rust
& Associates*

GOLD:

*Anderson & Associates, Inc. ▪
christopher consultants, ltd. ▪
Dewberry ▪ Fairfax County ▪
J2 Engineers Inc. ▪ Koontz-
Bryant, PC ▪ McKim & Creed ▪
Paciulli Simmons &
Associates, Ltd. ▪ Tri-Tek
Engineering ▪ Vanasse Han-
gen Brustlin Inc.*

SILVER:

*American Infrastructure ▪
Greenhorne & O'Mara ▪
Wetland Studies and
Solutions Inc.*

LDDI Bridges October 2008

PHR+A Embraces Tysons Corner Center Mall Challenge

edited by Kelly Shayne Young

With more than 300 shops and restaurants, the Tysons Corner Center mall was one of the first fully enclosed, climate-controlled shopping centers in the greater Washington area. Patton Harris Rust & Associates (PHR+A) is providing site feasibility, parking analyses, and infrastructure design for the expansion of approximately 345,000 GSF of commercial space at the existing regional center in Fairfax County, Virginia.

This expansion is the first of four planned phases and includes a new 23 story hotel, 26 story residential tower, an 18 story office tower, and a new Metro Pavilion – all clustered near the new Tyson's Metro Station on Route 123 / Chain Bridge Road.

An extremely challenging project, Project Manager Robert Munse, PE explains the difficulty of undertaking such an expansion in this extremely populated location. "For this expansion, we have to employ innovative urban design in a jurisdiction that is not fluent in the implementation of this concept," says Munse. "We have to also coordinate with concurrent and adjacent infrastructure projects and on-going mall activities, as well as maintain customer safety during on-site construction activities."

The citizens and stakeholders in the Tyson's area have been enthusiastic but concerned about the project. Through

extensive outreach by the owners and development team, new environmental standards, pedestrian enhancements and a transportation demand management (TDM) program have addressed most concerns.

This expansion brings new and exciting features to local residents and visitors. An inter-connected second story plaza level will bring new retail stores and outdoor amenities to the mall complex. Initial improvements include a new shared use path for pedestrian and bicycles adjacent to I-495, road improvements, new bus bays widening to the Westpark Bridge over Route 123, and financial contributions to parks, schools, and shuttle buses. Additions also include turn lanes on the ring road, garage speed ramps, and bus access options to a future rail station.



PHR+A provides innovative engineering solutions to achieve an urban mixed-use development within the active and vibrant Tysons Corner Center mall.

Show Your LDDI Pride— LDDI Polo Shirts!

Are you interested in spreading the word and showing your support for the LDDI to professional colleagues? If so, what better way to catch their attention than by *wearing* the LDDI logo!? We are now offering a high quality, white, 100% pima cotton pique polo featuring the LDDI logo embroidered on the left chest. Suitable for professional or casual wear, these shirts are a great way to spark the interest of your industry peers who may have not yet heard of our efforts. These shirts may be purchased for \$30 each (shipping included). If you are interested in purchasing one or more of these shirts, please send a check or money order made payable to "LDDI, Inc." to the following :

Via Department of Civil and Environmental Engineering at Virginia Tech
Attention: Kevin Young
200 Patton Hall
Blacksburg, VA 24061

Be sure to specify the size shirt(s) you would like (small, medium, large, extra large).