



October 2009

Volume 3, Issue 4

In this issue:

- Alumnus makes sizable donation to LDDI (p. 1)
- LDDI graduate and advisory board member reflect on their recent experiences (p. 2)
- New developments for both southwest and northern Virginia (p. 3)
- LDDI to debut new course in the Spring (p. 4)

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It's late October, and on the Virginia Tech campus that means three things – the fall foliage becomes more breathtaking with each passing day, mornings are getting COLD, and Hokie football is on everyone's minds. While it seems like just yesterday that many of us were gathering on campus for LDDI's summer General Membership meeting, we're already more than halfway through the fall semester! With the help of mentors from LDDI's sponsoring firms, I'm guiding a group of seniors through CEE 4274, "Land Development Design." For the second consecutive semester Meredith Jones is teaching CEE 4264, "Sustainable Land Development." Meanwhile, Kevin Young has his hands full with a brand new three-credit junior-level course titled "Introduction to Land Development Design." Without a doubt, this is the busiest time in LDDI's three-year history!

This newsletter highlights some of the happenings since LDDI's summer meeting, including a generous donation from a 1962 alumnus, LDDI's football tailgate, and the development of a new course titled "Municipal Engineering." Like past newsletters, this issue also showcases exciting projects from some of our sponsoring firms, and spotlights the people who help make LDDI a continued success.

LDDI publishes this newsletter with the goal of keeping you up to date on all of the exciting happenings with LDDI. I welcome your feedback on any aspect of LDDI; please feel free to contact me!

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

Mr. Bell's Gift Helps Civil Engineering Students

by Albert Raboteau, Development Writer - Virginia Tech

A Virginia Tech civil engineering alumnus who founded a land development firm in Tennessee has made a generous commitment to support the Land Development Design Initiative at his alma mater.

"I think the concept they have [for LDDI] is absolutely fantastic," says Julian Bell '62, who recently made a sizeable gift to the program.

Bell says his career shows how students can benefit from learning what it takes to work in land development from top professionals in the industry -- an opportunity LDDI provides.

The DuPont Company hired Bell out of college. He soon learned the company demanded skills that were well beyond the technical ones taught in traditional engineering programs.

"The first year I was with DuPont I was strictly doing engineering, but then they gave us a ton of business work to learn -- how to get return on capital, how to justify projects, estimating, cost control," Bell recalls. "They broadened my horizons."

Bell left DuPont in the late 1960s to work for the City of Chattanooga, Tenn. He founded his own company in 1975. Since then, Bell Development has created 26 subdivisions, containing 4,100 home sites, in the Chattanooga-Hamilton County region.

Bell says a former client's words have always stuck with him: "You're not designing roads; you're designing lots and locations for subdivisions and communities."

Bell had been out of school for years by the time he heard that. But his support of LDDI helps ensure that tomorrow's civil engineers won't have to wait that long to get similar insights from developers.

LDDI Bridges

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

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“Of all the lessons learned and talents I’ve acquired, the most important have been determination, a desire to continue learning, and the ability to ask questions.” - Erika Seelenbinder, VHB Project Engineer

LDDI Graduates in the Industry: Erika Seelenbinder

VHB Project Engineer

by Kelly Shayne Young

Since her junior year in high school, Erika Seelenbinder has had an interest in the land development industry. After serving as an intern for a few summers, Erika began her full time employment with Vanasse Hangen Brustlin, Inc. (VHB) after earning her B.S. in Civil and Environmental Engineering from Virginia Tech in 2008.

During her time at Virginia Tech, Erika took advantage of the opportunities created by the Land Development Design Initiative (LDDI). “LDDI was a great way for me to create relationships with other students, faculty, and professionals who are enthusiastic about what they do,” explains Seelenbinder. “The CEE 4274 Land Development Design course not only emphasizes how to digest a project and its different technical aspects as a whole, but it also allows students to create the problems to be solved instead of having the problems

explicitly given to them. The CEE 4984 Sustainable Land Development Seminar was a great way to see different practices and the new trends in the industry.”

While at VHB, many of the land development projects she has worked on have been institutional, and Erika has learned a great deal about grading, erosion and sediment control, water and sewer design, and stormwater modeling, as well as site selection LEED credits. “I’ve learned to take a step back, look at the overall picture, and ask a lot of questions,” she says. “Many times there are multiple ways to do things, and although they might yield different results, they may all be correct.”

Although she misses the small town atmosphere of Blacksburg and being able to walk everywhere, Erika enjoys being so close to the beach and still manages to find time to practice her photography and painting.



“My passion is for mentoring the next generation toward a complete understanding of the real estate design and development industry and how the application of their skills can shape the world in which others will live for generations to come.” - Mark Huffman, Partner of Blackwood Development Company, Inc.

Who We Are: Mark Huffman, Blackwood Development

Each issue of *LDDI Bridges* focuses on Advisory Board members who make LDDI happen.

Mark is currently a partner in Blackwood Development Company, Inc. in Richmond, Va. and serves on LDDI’s advisory board.

What is your specialty within the civil engineering field?

As an undergraduate, my concentration was in geotechnical and hydraulic engineering. As a land development engineer and commercial developer, I have forged an understanding of a broad set of disciplines including engineering, construction, finance and real estate law.

What attracts you to land development?

Every day the people and the projects are different, the skill set required to be successful is diverse, and at the end of the day others will live, work and play in the projects I help to create.

Please mention the highlights of your academic/professional career?

My career has afforded me opportunities to be a part of designing a large spectrum of residential, commercial, and public works projects; write trade journal articles and serve as an expert witness; and to be involved in acquiring and developing commercial projects for PepsiCo, Yum Brands, Trammell Crow Company, Regency Centers and Blackwood Development Company. One particular project which was special to me was the 48-

hour rebuild (yes, the building is still standing!) of a Taco Bell in Compton, CA which had been severely damaged as a result of activities following the Rodney King trial verdict in 1992.

What motivated you to become involved with the LDDI?

The educational and vocational foundation provided to me by the Civil Engineering program at Virginia Tech was exceptional. Upon entering the land development profession, however, I learned that I was lacking a full grasp as to how the various civil engineering disciplines came together to form a complete project.

What do you think are the strengths of this program?

The strengths of this program are self-evident in the students who have completed the LDDI curriculum. The final presentations offered by these students demonstrate both breadth and depth in the skills of land development design, not to mention the great qualities that come from just being a Hokie!

What are your hobbies/interests?

Along with serving as development partner for Blackwood Development, Mark also serves as and enjoys his roles of husband, father, church lay leader, outdoorsman, and guitar man.

Balzer Brings Exclusive Golf Course to Southwest Virginia

edited by Kelly Shayne Young

Situated on 190 acres in Roanoke County, Virginia, Ballyhack Golf Club promises to become one of the nation's most breathtaking, exclusive golf retreats. Balzer & Associates, Inc. provided civil, geotechnical, structural, and environmental engineering services, as well as construction management assistance for the development of this 18-hole championship course.

With the expectation of becoming a national destination golf course, careful consideration was given for the property's dramatic topography and natural surroundings. Unique solutions to storm water management and erosion control were developed to allow for the construction of the course in close proximity to environmental resources.

The biggest challenges revolved around developing an erosion control plan and finding an appropriate location for the irrigation pond. "During the development of this golf course, it became apparent that the final design would be a moving target," explains Project Manager Sean Horne. "The

golf course architect Lester George worked hand in hand with the contractor, Landscapes Unlimited, and Balzer and Associates, Inc. to continually update the erosion control requirements as the project moved forward."

The development of the irrigation pond was another major hurdle. Originally designed to be an online pond, local environmental review staff expressed their preference for the pond to be off line. The design team accepted this challenge in part to set an example of how environmental review staff and developers can work together to better serve the environment. The result was a 3.5 million gallon pond that accepts drainage from one of the larger drainage areas of the site and is supplemented by wells.

From the 70-foot elevation changes to the 150-yard wide fairways, Ballyhack is destined to provide its members with a memorable golfing experience and raise the standards of modern golf course development.



Two more phases of the subdivision slated for development consist of approximately 50 lots, a clubhouse, and 12 additional cabins.

Bohler Turns Stonewall Shops Vision into Reality

edited by Kelly Shayne Young

When Regency Centers approached Wegmans, a family-owned, 72-store supermarket chain, to be its anchor grocery store in Gainesville's Shops at Stonewall, it was with the promise that the store would open its doors earlier than at an alternate location that was being considered. Regency enlisted Bohler Engineering as the civil engineering firm to make that promise a reality.

Despite having initiated the design process later than its competitor at the alternate site, Bohler was able to design the site and expedite the approvals more efficiently and effectively than the competitor and in a time frame that secured Regency's contract with Wegmans. The

140,000 sq. ft. store in Gainesville, Va. includes the Market Café, which offers indoor and outdoor seating and restaurant-quality foods such as hot panini sandwiches, Asian cuisine, and freshly-made sushi, pizza, and subs, as well as fresh seafood in bar that seats twelve.

Bohler and Regency continue to have a beneficial working relationship and went on to complete the 36-acre commercial retail development with approximately 310,000 square feet of floor space, national junior anchors, small shops, and restaurant pads. The design also included a vertical realignment for Rt. 29 northbound and a major intersection at Rt. 29 and Old Carolina Road.



Located in Gainesville, Va., the Shops at Stonewall consists of 27 stores, restaurants, banks, and specialty shops.

LDDI and SLDC Host Football Tailgate

by Kevin Young

Virginia Tech

The Via Department of
Civil and
Environmental
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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:

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Inc. ▪ Wetland Studies and
Solutions Inc.*

On September 26th, prior to Virginia Tech's showdown against longtime rival Miami, LDDI and the Sustainable Land Development Club (SLDC) hosted their second annual football tailgate. Though the weather looked like the Miami football team wasn't the only "hurricane" in town, Mother Nature couldn't dampen the spirits of those who attended. Students and land development professionals enjoyed tasty treats from Due South BBQ and Cabin Cookies while eagerly awaiting the afternoon showdown in the ACC's Coastal Division.

The fall football tailgate has become one of LDDI's hallmark events, and provides yet another great opportunity for students and practitioners to meet and mingle. LDDI would like to thank the following firms for their sponsorship of this year's event:

- Anderson & Associates, Inc.
- Balzer & Associates, Inc.
- Bohler Engineering
- Bowman Consulting
- Draper Aden Associates
- J2 Engineers

Students attending the event were given t-shirts featuring these firms' logos on the back and "LDDI" and "SLDC" on the front. The maroon t-shirts coincided with the game's "Maroon Effect" – a school spirit tradition started during the 2005 football season.

Following the tailgate, many attendees headed to the stadium while others opted to watch the game in a warmer, dryer environment. Wet or dry, every Hokie had a smile on their face later that evening as Virginia Tech dismantled the 'Canes 31-7.



Event attendees move inside Patton Hall to grab some food and escape the rain

Municipal Engineering Course to be Offered Spring 2010

by Kevin Young

During the spring 2010 semester, LDDI will debut a brand new, three-credit course titled "Municipal Engineering." The course is intended to provide students with an understanding of the field of municipal engineering and the important role of the municipal engineer in planning and managing large public projects, as well as operating and maintaining public infrastructure and services. The course will also discuss the process by which private development is planned and regulated by municipalities.

The class is being developed and taught by Jimmie Jenkins and Adele Schirmer. Mr. Jenkins currently serves as Director of the Department of Public Works and Environmental Services for Fairfax County. Mrs. Schirmer is the Director of the Engineering and GIS Department for the Town of Blacksburg. Together, they bring a wealth of municipal engineering experience to the classroom.

When asked about his motivation for developing and teaching such a course, Mr. Jenkins replied, "I see this as an opportunity to give back to the profession which has been very good to me. I am really looking forward to the interaction with the students and to an understanding of how they view the profession, as well as what they want to accomplish in the future." Jenkins further added, "we will be discussing the many challenges being faced in municipal engineering and how we carry out the many day to day activities needed to keep our society going, like trash disposal, wastewater treatment, water treatment, building inspections, and facility construction."