# WirginiaTech | LDD Bridges

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### In this issue:

• LDDI website gets a facelift (p. 1)

• A recent graduate and LDDI advisory board member reflect on the past and present (p. 2)

• Renovations at the National Cathedral School for Girls (p. 3)

• NFL team gets new summer training facilities (p. 3)

• LDDI, Inc. holds its inaugural golf fund raiser (p. 4)

### **LDDI Bridges**

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

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Greetings from Blacksburg, where we're now halfway through the fall 2014 semester. It's mid-October, and that means that our already beautiful campus is now bursting with vibrant fall foliage. Inside of the classroom, things are steadily rolling along. With the help of mentors from five of LDDI's sponsoring firms, I am leading a group of students through our senior Land Development Design course (CEE 4274). I am also teaching our Sustainable Land Development course (CEE 4264) which has an enrollment of 49 students. LDDI Assistant Coordinator Kevin Young is teaching our junior-level Introduction to Land

Development course (CEE 3274) which has an enrollment of 115 students, as well as CEE Measurements (CEE 2814) with an enrollment of 128 students. Outside of the classroom, LDDI continues put on numerous practitioner involvement events. On September 29<sup>th</sup>, for the 16<sup>th</sup> consecutive semester, LDDI hosted Land Development Career Night on the eve of the CEE Career Fair. On October 8<sup>th</sup>, LDDI, Inc. hosted its first annual golf fundraiser at the Potomac Shores Golf Course in Dumfries (you can read more about this tremendously successful event in this newsletter). On October 16<sup>th</sup>, LDDI hosted a football viewing party for Virginia Tech's game against the Pittsburgh Panthers. It's certainly been a busy semester thus far, but also quite exciting and rewarding!

I would like to point out that LDDI now enjoys the support of 39 corporate sponsors, the most ever in our eight year history. Among the 39 current sponsors, we would like to welcome the following new sponsors: Pulte Homes, Wiles Mensch Corporation, and Walter L. Phillips at the gold level, and Altizer, Hodges, & Varney, Froehling & Robertson, and Anderson & Associates at the silver level. LDDI publishes this newsletter to keep you up to date on the exciting happenings surrounding our unique efforts at Virginia Tech. I hope you enjoy reading it, and I welcome your feedback on how we can continue to grow and improve the program.

Dr. Randy Dymond, PE, VT LDDI Coordinator

## LDDI Website Gets a Facelift

For any organization to enjoy success in today's world, a strong online presence is essential. LDDI first launched its web page in 2007. Since that time, the site has evolved considerably to better meet the needs of LDDI students and industry partners. Recently, the site has undergone some rather significant changes and we invite and encourage you to take a look at: www.lddi.cee.vt.edu.

One notable, recent change is on our Project Showcases page. Here, interesting land development projects from LDDI sponsoring firms are featured. The page showcases a revolving Featured Project as well as various categories of different project types. Students and employers alike will be drawn to the Career Opportunities page, where students can upload their resume and gold and higher level sponsors have exclusive access to these resumes. The Courses & Curriculum page provides students with a roadmap of the LDDI curriculum, while the Sustainable Land Development Club link highlights some of the club's activities. While



by Kevin Young

The Project Showcases page now features a revolving featured project.

visiting the page, please take a look at the Corporate Sponsors and Individual Donors link to see the firms and individuals who provide monetary support to the program. We welcome your feedback on how we can continue to improve the site!

## LDDI Bridges October 2014



"LDDI's curriculum gives its students a broad knowledge base and an abundance of material to discuss when interviewing for jobs." - Christine Horner, Kimley-Horn and Associates Civil Site Analyst

## LDDI Graduates in the Industry: Christine Horner Kimley-Horn and Associates Civil Site Analyst

by Kelly Shayne Young

Former Hokie Christine Horner went from a small town in Pennsylvania to one of the nation's leading engineering firms. After graduating from Virginia Tech in May 2012 with a B.S. in civil engineering, she secured a position with Kimley-Horn and Associates in the firm's Northern Virginia office and currently serves as a civil site analyst.

While a student, Christine took advantage of LDDI's course offerings, namely Land Development Design and Sustainable Land Development. "These courses gave me a strong technical background upon which to build my professional career," she explains. "This technical understanding helped me to be proficient and support my team immediately upon starting work." Horner believes that the LDDI program has many benefits, one of which is the "opportunity for students to practice communicating their ideas and designs through final presentations and written deliverables; this allows students to take pride in their designs and hard work."

Since joining Kimley-Horn, Christine has embraced the challenge of transitioning from

student to practitioner and has realized that, in the real world, there may not be one correct answer. "The best solution has to balance client expectations, feasibility, and local requirements," says Horner. "Successful land development engineers are persistent in challenging situations; it is impossible to plan for every hiccup in a project and it is important to keep trying different alternatives until one is successful." She is currently working on a handful of eVgo electric vehicle car charging stations throughout the Northeast metropolitan areas (D.C., Philadelphia, N.Y., and Boston), which has allowed her to be at the forefront of this new technology and to see its impacts on the land development community.

When she is not at work, Christine enjoys playing beach volleyball, hiking, and exploring the D.C area. She also co-leads the Women's Leadership Group for the firm's Northern Virginia office by organizing events such as guest speakers and seminars.



"LDDI affords its students an in-depth look into the land development specialization and an opportunity to learn from industry experts." -Richard Street, Spotsylvania County Senior Environmental Engineer

## Who We Are: Richard Street– Spotsylvania County

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

Richard serves as Spotsylvania County's Senior Environmental Engineer and oversees all site plan reviews for ESC, SWM CBA, and FEMA. He is LDDI's newest advisory board member.

What is your specialty within the civil engineering field?

Stormwater management and shoreline protection and restoration.

What attracts you to land development? Mud and water.

Please mention the highlights of your career?

VDOT District Drainage Engineer where they sent me to Penn State for Civil Engineering and HEC RAS, FHWA scour analysis training. I trained in Rosgen Stream restoration and many other specialized areas, and I earned numerous certificates.

What motivated you to become involved with LDDI?

LDDI Coordinator Randy Dymond. His insight and energy are contagious and cannot be missed. He thinks outside of the box and has practical solutions to what appear to be insurmountable situations.

What do you think are the strengths of this program?

The complete team and contacts. They are all very good sources.

Could you please share a few of your personal hobbies and/or interests?

I currently spend a lot of time with my family, reading, and answering one question, why? That starts with finding the single common denominator that started the question in the first place.

Can you please share something unique about you?

I always try to make certain that everyone impacted by a decision is involved and understands all aspects of the situation. It is when we all understand everyone's sides that we can make a better decision.

## LDDI Bridges October 2014

## christopher consultants ltd. Provides Renovation Services at the National Cathedral School for Girls

The National Cathedral School for Girls, located on the Washington National Cathedral Close in northwest Washington, DC, is undergoing renovations to several buildings and the Woodley North courtyard. christopher consultants ltd., (christopher) is providing complete landscape architecture services for the redesign of the courtyard and the creation of a new centralized, secure entry portal.

Working closely with Hartman-Cox Architects, CAS Engineering, and the National Cathedral School, christopher's team developed a design for the 1.8-acre site that reflects the context of historic collegiate gothic architecture that surrounds three sides of the courtyard. christopher's concept focuses on creating "living classroom " spaces that incorporate learning opportunities into the landscape. Working with staff and students, educational priorities were identified such as the provision of multiple outdoor classroom spaces, physical representation of graphing and measurement, green technology demonstration areas and

edited by Kelly Shayne Young several expanses of landscaped or open garden plots for science activities.

Another living classroom element includes the redesign and replacement of an existing non-functional amphitheater, which consists of four levels of terraced seating and an overall seating capacity of 80-100 people. The new amphitheater and its large open floor area can be used as an outdoor classroom, performance space, and event facility. One of christopher's priorities was full accessibility of the entire project site. christopher also provided designs to make the pedestrian connection across Woodley Road, which bisects the campus, directly accessible for the first time.

christopher is part of a team that includes Hartman Cox Architects, CAS Engineering (civil), Thornton Tomasetti Group (structural), Allen & Shariff Engineering (MEP) and Forrester Construction (GC) on this project. The design development phase has been completed, and construction documents will be completed before the end of 2014.





Teachers, administrators, and students at the National Cathedral School for Girls will soon enjoy new learning spaces and facilities.

## Draper Aden Associates Brings Saints Training Facilities to the Greenbrier

On July 24, 2014, the New Orleans Saints arrived at The Greenbrier in White Sulphur Springs, West Virginia, to kick off their summer training camp. Draper Aden Associates worked with The Greenbrier and its project team to design and build three practice fields (two natural and one synthetic turf) and a 55,000-SF Athletic Training Center. Starting from a parcel of raw land, the fields had to be ready for play, site access and infrastructure installed, and the building approved for occupancy in just over four months.

Notwithstanding the challenges normally expected on such a fast-paced project, Draper Aden also faced some very dramatic site construction conditions. With over seventy-five feet of elevation change across the site and earthwork volumes exceeding ½ million cubic yards, careful planning and coordination were essential to allow the grading work to proceed simultaneously with facility design development. Planning and coordination of installation of site utilities were equally challenging, as these systems were among the first to be installed as the site was being prepared to

### edited by Kelly Shayne Young

accommodate the sports fields and building.

After the three-week training camp, Saints Head Coach Sean Payton expressed his satisfaction with the facilities, hinting that the Saints would return to the site beyond the two-year contract. In an interview with The Times-Picayune, Coach Payton specifically mentioned the success the team had with the artificial turf field during rainy days: "Our plan coming in was to practice if it was raining and if there was lightning we were going to delay it. This (artificial) surface gives us flexibility."

The Saints training fields and facilities were incorporated into an existing plan for a medical institution, clinic, medical office building, and athletic performance center. During the planning process for these projects, the Saints agreed to move their off -campus training camp facility to the resort. The remaining projects are currently in the design-build process and were adjusted to address the Saints facility needs and timeframe. Given the capacity crowds at most of the practices and the estimated \$10 million tourism impact for the region, the facilities are a hit for fans and players alike.





Draper Aden Associates designed and built new athletic fields and facilities to bring the New Orleans Saints' summer training camp to the Greenbrier luxury resort.

3

## Thank you

### to our corporate sponsors and individual donors!

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## LDDI Bridges October 2014

## LDDI, Inc. Holds Inaugural Golf Fundraiser

On Wednesday, October 8<sup>th</sup>, LDDI, Inc. hosted its inaugural golf fundraiser at the Potomac Shores Golf Course in Dumfries, VA. Event organizers could not have asked for a better day, with temperatures approaching 80 degrees and golfers basking in abundant sunshine. In total, 92 golfers registered for the event, and following a shotgun start teams competed in a "best ball" format. Proceeds from the event will be contributed to and used to advance efforts to grow the LDDI endowment fund.

Jim Bishoff (Principal, J2 Engineers) served as the primary tournament organizer, and LDDI, Inc. wishes to thank Jim for his hard work and tremendous organizational skills which led to the event being a huge success. Of his involvement with the tournament and LDDI, Inc., Jim said, "I was motivated to give something back to our industry and help students by

supporting the programs that LDDI provides in order to turn out more qualified and competent engineers. It Cardman (Bowman Consulting) was good to see a turnout from so many competing firms and clients in our industry enjoying the day with



Former LDDI student Michael lines up a put.

one another and supporting a great cause. I hope this event is a foundation for bigger things to come in LDDI, Inc. fundraising, including increasing awareness and sponsorship."

In addition to Jim, LDDI, Inc. would like to thank the following event sponsors:

- Dewberry (Tournament Sponsor)
- Bowman Consulting (Contest Sponsor)
- J2 Engineers (Contest Sponsor)
- Jansen Land Services (Contest Sponsor)
- GeoStructures (Hole Sponsor)
  - Pennoni (Hole Sponsor)



Team Bohler (Bob Harr, Heather Clements, Matt Destino, and Jessica Spina) take a break to pose for the camera.

Chris Schuster, David Maxwell, Dan Gradishar, and John Helms enjoy the gorgeous weather and beautiful course.

The team comprised of Marcus Davis, John Begert, Chris Champagne, and Matt Ranslem won first place shooting a 59, 13 under par for the day.

LDDI, Inc. plans to hold a similar tournament next year, and is currently looking at golf courses in the Williamsburg area for the next event. Keep a lookout for your invitation to play in the 2015 LDDI, Inc. golf tournament!

LDDI, Inc. is a 501(c)(3) organization, employer identification number 20-8828209.

by Kevin Young