

# **The Land Development Design Initiative (LDDI)**

## **2012 Annual Report**



**LAND DEVELOPMENT  
DESIGN INITIATIVE**

## Program Coordinator's Message

I hope you enjoy reading this Annual Report of the Land Development Design Initiative at Virginia Tech as much as we've enjoyed putting it together! Reflecting on the growth and excitement of the program brings a sense of wonder and fulfillment to Kevin and myself, as well as all the hard working LDDI Advisory Board Members and others who give freely of their time and energy to the program.

From where we started a scant six years ago to where we are today has been a rewarding journey, a story of a collaborative vision to improve the land development design profession from the ground up. We've had two primary missions during this period, dramatically improving our educational offerings and involving professionals into the university experience of our students. I believe we're succeeding, with your help. In a quote attributed to Emerson and others, "Do not follow where the path may lead, go instead where there is no path and leave a trail."

That's what we've been doing, leaving a trail, moving forward into uncharted territory while building this program. I've been asked to present our LDDI model of success at conferences and in faculty meetings as the word of our innovative program has spread.

Within this report, you'll read about this past year's events and course improvements. We've been working hard on making sure our students are ready to be productive on day one. With all the practitioner interaction we collectively provide, they are good at forming relationships on a professional level. You'll also read about our vision for the future and our need for sustaining the program over the long term; we are making a difference and can't afford to let the program lapse due to a lagging economy. On that note, you may notice that our sponsorship drive has been strong, with the number of sponsors growing again this year. We've just introduced a new "Diamond" level of Corporate Sponsorship and have a number of new benefits for Corporate and Individual Donors.

If you are not already involved in LDDI, I encourage you to seriously think about it. We'd love to have your input. We've outlined numerous ways to get involved at the end of this report, so jump in; the water's great!

Best regards,



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## Platinum Corporate Sponsors

In our 2011-12 fiscal year, Platinum Corporate Sponsors contributed over \$65,000 to LDDI. The following section highlights each of these corporate sponsors and their involvement with LDDI.

### Accumark Subsurface Utility Services

Accumark Subsurface Utility Services was founded in 1994 as a certified small business. The firm now has a total of eight offices located in five states. Accumark provides their clients with accurate and reliable underground utility information, location, and mapping.



Accumark has been a sponsor of LDDI since 2011. Craig Martin, President and co-founder is currently serving on the LDDI Advisory Board.

### AES Consulting Engineers

AES Consulting Engineers was founded in 1980, and has since grown to have four offices in central and eastern Virginia. They offer services in Civil Site Design, Landscape Architecture, Surveying, Land Planning, and Public Utilities Design.



AES Consulting Engineers has been a sponsor of LDDI since 2007. Mark Richardson, Office Manager of the Williamsburg office, currently serves on the LDDI Advisory Board.



### Balzer and Associates, Inc.

Balzer and Associates, Inc. was founded in 1967, and currently has four offices in central and western Virginia. They offer multi-disciplinary services including engineering, architecture, land surveying, and landscape architecture.

Balzer and Associates has been a sponsor of LDDI since 2007. Tommy Balzer, Executive Vice President, and Cameron Palmore, Vice President, are currently serving on the LDDI Advisory Board.

## Bohler Engineering

Bohler Engineering was founded in 1981 with a small office in New Jersey, and today, they have 13 offices in 7 states along the East coast. They offer services in Civil Engineering, Landscape Architecture, Land Surveying, Environmental Consulting, and LEED & LID Civil Design Consulting.



Bohler Engineering has been a sponsor of LDDI since 2007. Ginger Greunke, Recruiting Manager from the Sterling, VA office, is currently serving as the Outreach Committee Co-Chair on the LDDI Advisory Board.

## Bowman Consulting

Bowman Consulting was founded in 1995, and has been recognized as one of the fastest-growing consulting firms with 14 offices in 4 states in the Mid-Atlantic region and Arizona. They offer services in Civil Engineering, Planning, Landscape Architecture, Surveying, Environmental Consulting, Transportation, and more.



Bowman Consulting has been a sponsor of LDDI since 2007. Roy Waugh, Principal from the

Chantilly, VA office, currently serves as the Practitioner Involvement Committee Chair on the LDDI Advisory Board.

## christopher consultants

christopher consultants, ltd.(ccl) was founded in 1982 and is a full-service civil engineering, land planning, surveying, and landscape architecture firm. The firm is organized as a corporation in the Commonwealth of Virginia and is designated a Small Business Enterprise by the Commonwealth's Department of Minority Business Enterprises. The firm's work is organized into the following divisions: Public, Land Development, Surveying, Special Services, Maryland, and Corporate Services.



christopher consultants has been a sponsor of LDDI since 2007. Charlie Yowell, Senior Engineer from the Manassas, VA office currently serves as the Outreach Committee Co-Chair on the LDDI Advisory Board.



### Clark Nexsen

During more than eight decades since its inception, Clark Nexsen has planned and designed a wide variety of projects. With nine offices located in three states and the District of Columbia, the firm offers complete architectural and engineering services from project inception through

completion of construction. The firm is committed to designing highly efficient buildings and systems.

Clark Nexsen has been a sponsor of LDDI since 2011. Greg Deubler, Senior Engineer in the Norfolk, VA office currently serves on the LDDI Advisory Board.

### Dewberry

Dewberry was established in 1956 with an office in Arlington, and has grown over the past 55 years to have more than 40 locations in 18 states. They offer architecture, consulting, and a variety of engineering services.



Dewberry has been a sponsor of LDDI since 2007. Robert "Skip" Notte, Associate Vice President and Office Manager of the Charlotte, NC office is currently serving as Vice Chair on the LDDI Advisory Board.

### Draper Aden Associates

Draper Aden Associates was founded in 1972 with an office in Blacksburg, and now has 4 offices located across Virginia. They are a full service consulting engineering firm offering services in site planning and engineering, sustainable design, utilities engineering, and more.



Draper Aden Associates has been a sponsor of LDDI since 2007. Firm president and CEO Jeff Lighthiser is currently serving as the Chair of the LDDI Advisory Board.



JANSEN LAND CONSULTING

### **Jansen Land Consulting, LLC**

Jansen Land Consulting, LLC was founded in 2008 with an office located in Falls Church, Virginia. They provide development management services for land acquisition due diligence, land entitlement, land development, and bond release.

Jansen Land Consulting has been a sponsor of LDDI since 2010. Bob Jansen, President, is currently serving on the LDDI Advisory Board.

### **Filterra Bioretention Systems**

Filterra Bioretention Systems was developed by its parent company, Americast, in 2000. Americast is an independently-owned precast concrete and reinforced concrete pipe manufacturer, offering a broad range of products and services throughout the U.S. For the past 15 years, Americast has been in the forefront of designing, manufacturing and distributing various sanitary and stormwater treatment systems to meet their clients' regulatory requirements. From that experience, Filterra Bioretention Systems was developed and has quickly become recognized as a state-of-the-art stormwater solution in advanced bioretention treatment technology.

Filterra has been a sponsor of LDDI since 2011.



### **Kimley-Horn and Associates, Inc.**

Kimley-Horn and Associates, Inc. was founded in 1967 with offices in North Carolina, and over the past 45 years has grown to include over 65 offices in 17 states. They provide an array of engineering and land planning service including transportation, water resources, land development, and more.

Kimley-Horn and Associates has been a sponsor of LDDI since 2007. Derrick Cave, Principal and Senior Vice President from the Vero Beach, FL office is currently serving on the LDDI Advisory Board.



## Land Design Consultants

Founded nearly a quarter of a century ago, Land Design Consultants is committed to the principles of value, service, community, and to providing unparalleled service to their clients. The firm is headquartered in Woodbridge, Virginia and provides land planning, surveying, and engineering services.

Land Design Consultants has been a sponsor of LDDI since 2011.



## 2011-2012 General Membership Meetings

Over the past year, LDDI hosted two General Membership meetings. These meetings provide an opportunity to bring our industry partners up to speed on the status of the LDDI program, campus activities inside and outside of the classroom, and immediate and long-term visions for the program. The meetings also provide a wide range of opportunities for industry professionals to become involved with LDDI. In an effort to increase practitioner turnout, both of this year's meetings were held off campus, one in Richmond and one in northern Virginia.

On Friday, July 22<sup>nd</sup>, 2011, LDDI hosted a meeting at the Professional Insurance Agents facility in Richmond. One unique aspect of this meeting was a panel comprised of current students, recent graduates of the LDDI program, and former students who are now working in the land development field. Members of the panel shared their impressions of the program and also addressed questions from the audience. Homebuilders Association of Virginia (HBAV) CEO Michael Toalson attended the meeting and spoke on legislative issues currently impacting the land development field.

On Friday, January 13th, 2012, LDDI hosted its annual winter General Membership meeting at the Fairfax County Government Center. The meeting was one of the largest of its kind to date, with more than 50 attendees representing the academic, consulting engineering, and development communities. Also attending were representatives from several local governments as well as product and service vendors. One of the highlights of the day was guest speaker Brendan Owens, VP for LEED Technical Development of the U.S. Green Building Council, who spoke on the continuing evolution of the LEED program efforts on green buildings and communities.



HBAV CEO Michael Toalson speaks at the July 22<sup>nd</sup>, 2011 meeting in Richmond.

## 2011-2012 Financial Summary

During the 2011-2012 fiscal year, LDDI collected revenue of approximately \$110,000 through its corporate sponsorship program and individual donor campaign. While this revenue figure is down significantly from previous years, we remain thrilled with the financial support of our corporate and individual donors during these difficult economic times. These funds were used to directly support LDDI activities inside and outside of the classroom. The following describes some of LDDI's major expense categories to which this revenue was directed.

*Instructor Compensation:* Of the seven LDDI courses offered each year at Virginia Tech, the University provides financial support for only three. Private donations to LDDI provide instructor compensation for the remaining four.

*Program Expenses:* Program expenses include support for LDDI's student club, including field trips, travel to service project locations, and social gatherings. This expense category also includes event catering for LDDI general membership and outreach meetings, publication of the *LDDI Bridges* quarterly newsletter, and funding of the LDDI student internship program.

*Operations Expenses:* Operations expenses include general overhead costs such as postage, printing and copying, website development and maintenance, telecommunications, and University Foundation fees.

*Travel and Meetings:* LDDI has traditionally hosted two general membership meetings each year. This year, LDDI "brought the show to you" through four regional outreach meetings held across the state. Outreach efforts such as these comprise a critical part of LDDI's efforts to ensure continued practitioner participation in the program.

*Student Support:* To date, LDDI has administered a total of ten \$2,000 scholarships. Eligibility for these scholarships is restricted to students who have completed or are enrolled in certain LDDI courses. This expense category also provides for a total of 10 high performance "loaner" computers that are made available to student design teams in CEE 4274 – Land Development Design.

## Endowment and Long Term Program Sustainability

One of the current major, immediate goals of the LDDI program is to establish an endowment. The principal reason to establish such an endowment is to ensure the long-term sustainability of the program. LDDI has achieved remarkable results since its inception, funded solely by the financial contributions of our generous corporate sponsors and individual donors. While this is one model to operate such a program, recent economic trends have revealed this can be a risky approach to sustain longevity. The establishment of an endowment will assure necessary operating capital in good and bad economic times.

The program's current goal is to establish an endowment in the range of 3 to 5 million dollars. At a rate of 5% this would yield \$150,000 to \$250,000 operating revenue annually to the

program. Such funds could be used to endow a professorship within the program, supplement the operating costs of the program or enable the program to begin to pursue research opportunities within the field of land development. Regardless of how the funds may be used in one or multiple areas, the endowment would entrench the program solidly within the Via Department of Civil and Environmental Engineering at Virginia Tech.

Our Advisory Board members have met and will continue to meet with endowment candidates to accomplish this endowment goal. Endowment may come from one individual, one company or a consortium of multiple businesses and individuals. The feedback we've received thus far from our initial meetings is that the fragile economy is the only impediment to one or more individuals or groups from establishing the endowment. We will continue to pursue meeting with as many individuals as possible to get the word out about this important measure. We welcome input and ideas also from you the general membership of LDDI.

## Program Goals and Strategic Planning

Author Napoleon Hill wrote, "First comes thought; then *organization* of that thought, into ideas and plans; then transformation of those plans into reality." What began six years ago as simply a collection of lofty thoughts and ideas has grown into a comprehensive undergraduate curriculum that is now benefitting not only students, but the entire land development industry. As Hill postulated, the transformation of those initial thoughts into tangible outcomes did not occur without organization and planning. The primary means by which LDDI's Advisory Board organizes, prioritizes, and achieves program goals is through its Strategic Plan. The first LDDI strategic plan was crafted over four years ago, and has since that time evolved considerably into two distinct components: goals and action items. The "big picture" goals represented in LDDI's current strategic plan are as follows:

1. Maintain awareness of land development as a career opportunity for undergraduate students
2. Continue to improve the educational experience in the land development area
3. Increase opportunities for practitioners to interact with students
4. Provide for the sustainability of the program
5. Solicit and promote interdepartmental collaboration and university support

In support of these program goals, a collection of detailed action items comprise the remainder of the document. The LDDI Advisory Board conducts a formal review of the strategic plan during its April and October meetings, as well as periodically throughout the year. During these meetings, the status of each action item is critically reviewed and items that have been completed are removed from the plan, while those that are either ongoing or not yet begun are evaluated and organized by priority and feasibility. Presentation of the strategic plan is a focal point of LDDI's winter and summer general membership meetings. If you would like to review this dynamic document that serves as the LDDI program roadmap, please email a request to Kevin Young at [keyoung@vt.edu](mailto:keyoung@vt.edu).

## Curriculum and Course Enhancement

Prior to creation of LDDI, students at Virginia Tech had only one land development design course offering available to them (CEE 4274, Land Development Design). Due to the efforts of LDDI, there are now a total of six different course offerings in land development design, with seven course offerings each academic year. The six individual courses comprise the most comprehensive undergraduate land development design program in the country. As a direct result of LDDI's efforts over the past six years it is without question that the 2012 crop of Virginia Tech CEE graduates has the best foundation for a career in land development design of any students Virginia Tech has ever produced. Of the seven land development course offered at Virginia Tech each year, the University provides financial support for only three. The remaining courses are funded through LDDI's corporate sponsorship program and individual donations to the program. On behalf of the students benefitting from these courses, LDDI wishes to thank all of our business partners and individual donors!

The following section briefly summarizes these courses, including forthcoming, major changes to CEE 4284 (Advanced Land Development Design).

### Introduction to Land Development (CEE 3274)

During the 2011-12 academic year, CEE 3274 was offered during both the fall and spring semesters. In total, the two offerings saw a combined enrollment of more than 200 students!

The course is intended to introduce CEE students to a wide range of topics in the field of land development design. These topics include governmental roles and basic engineering principles underlying the land development process. Students get an overview of transportation, hydrology, utility design, and erosion and sediment control as it relates to a land development project. In conjunction with these topics, students are exposed to GIS and Civil 3D as tools to communicate and facilitate design. Additionally, the course covers a diversity of non-engineering topics including planning, landscapes, neighborhood dynamics, finance, and sustainability.

### Land Development Design (CEE 4274)

CEE 4274 offering remains tremendously popular among students despite its heavy workload! Offered in both the fall and spring semesters, a total of 47 students took CEE 4274 during the 2011-12 academic year. Beginning in the fall 2006 semester, and facilitated through LDDI, students taking CEE 4274 have been paired with a professional engineer who serves as their mentor throughout the entirety of a semester long design project. LDDI would like to thank the following firms for their time and energy to serve as mentors to CEE 4274 students this year:



Greg May (Jansen Land Consulting) delivers a guest lecture to CEE 3274 students

Bohler Engineering  
 Clark Nexsen  
 Dewberry  
 Draper Aden Associates  
 Gay & Neel

Land Design Consultants  
 Tri-Tek Engineering  
 Rinker Design Associates  
 Urban, Ltd.  
 Kimley-Horn & Associates

### **Municipal Engineering (CEE 4254)**

During the spring 2010 semester, LDDI introduced a new course titled Municipal Engineering. Co-taught by Adele Schirmer (Town of Blacksburg) and Jimmie Jenkins (Fairfax County – retired), the course focused on familiarizing students with the role of the municipal engineer, and the important relationship that exists between municipal engineers and the land development industry. The development of a new course is an evolutionary process, and following the completion of the 2010 course Adele Schirmer, James Patteson, and Randy Dymond critically evaluated the offering and began looking at ways to improve the course. The 2012 spring semester course reflected a number of changes implemented over the past year and a half, including inviting 15 guest speakers and having 6 municipal engineering mentors work directly with students on projects. Commenting on the revised course, Fairfax County Director of Public Works and Environmental Services and LDDI Advisory Board member James Patteson stated, “this course is an opportunity for students to learn about the role of local public works departments and municipal engineers in building, maintaining, and operating public utilities such as water and wastewater systems and public infrastructure, which are the life blood of any community.” 19 students were enrolled in the spring 2012 offering of CEE 4254. Many thanks to Adele Schirmer for leading the instruction of this class! Municipal Engineering will be offered every other spring semester, alternated with Advanced Land Development Design (CEE 4284).

### **Sustainable Land Development (CEE 4264)**

Sustainable Land Development was first offered during the spring 2008 semester as a one credit seminar and has since been expanded to a three credit course. This academic year, for the first time, the course was offered during both the fall and spring semesters. The fall offering was taught by local engineer Meredith Jones whose firm specializes in sustainable development projects while the spring offering was taught by LDDI Coordinator Dr. Randy Dymond. While enrollment in the course is restricted to only those students with senior standing, students from *any* major may enroll. This arrangement introduces various perspectives to classroom discussion and better prepares students for their careers where they will inevitably cross paths with professionals from a myriad of academic backgrounds. The Sustainable Land Development course focuses on the developed site’s long term sustainability and preservation of the pre-development quality of its environment. Specific topics include site selection and linkage; neighborhood pattern and design, development impacts on water, air, and soil; microclimate; industrial ecology and materials; energy; and incentive driven sustainability efforts. The course also introduces students to third party site evaluation methods including Leadership in Energy and Environmental Design for Neighborhood Development (LEED ND) and Earthcraft Communities. Students visit development projects employing innovative, sustainable design features. A total of 74 students took CEE 4264 during the 2011-12 academic year.

## Advanced Land Development Design (CEE 4284)

With the development and continual improvement of CEE 3274 over the past three years, much of the fundamental material necessary for students to become successful land development engineers is now being introduced during their junior year. This has had a “ripple effect” throughout the LDDI curriculum, allowing instructors to now introduce new and more advanced subject matter in CEE 4274 and CEE 4284. Historically, 4284 has focused on site grading and ADA requirements, storm sewer design and basin routing, and erosion and sediment control. Students are now being introduced to these subjects in CEE 3274 and again, in the context of a design project, in CEE 4274. Because of this, the Curriculum and Course Enhancement Committee is currently undertaking a substantial overhaul of CEE 4284, discussing what new material to include in its 2013 offering. Some of the items presently being discussed include:

- Stormwater quantity issues, including channel velocity/energy requirements set forth in the new Virginia DCR regulations
- Stormwater quality treatment, including
  - Low Impact Development strategies and design of structural BMPs
  - Selection and installation of proprietary BMPs
  - Virginia’s “Runoff Reduction Method”
- Site selection, due diligence and project entitlements
- The design-build process
- Infill development and development challenges in urban environments
- Security issues in certain developments

Previous offerings of CEE 4284 have been taught by three different practitioner teams from Balzer & Associates, Draper Aden Associates, and Kimley-Horn & Associates. LDDI wishes to thank these three firms for their commitment to LDDI! During a recent course review, the committee has discussed including a developer as one of the instructors for the 2013 spring offering. This will provide another perspective for the students, and continue to reinforce the aspects of cost and yield in the development process.

Course and Curriculum Committee Chair Cameron Palmore (Balzer & Associates) commented, “this coming spring semester will be another gratifying installment of 4284 for the instructors. It is extremely satisfying to see the students so eager to learn on Friday nights and Saturday mornings when there are so many other things going on in Blacksburg. The committee and LDDI Advisory Board look forward to another exciting semester of enhancing the educational experience of the students.”

## Geotechnics for Land Development (CEE 4544)

First offered in 2008, the Geotechnics for Land Development course focuses exclusively on geotechnical issues as they pertain to land development projects. Topics include foundations, soil stability, geotextiles, and retaining walls. This course is taught once each academic year by Dr. Joe Dove. 23 students were enrolled in CEE 4544 in the spring semester.

## Student Impressions of the LDDI Program

The core mission of LDDI is to produce civil and environmental engineering graduates who are not only aware of the career opportunities in land development, but prepared to hit the ground running in this exciting field. The following are testimonials from students currently enrolled in the LDDI curriculum and former students who have graduated and are now working in land development.

*"Last school year (2011-2012) I took Introduction to Land Development (CEE 3274) and Land Development Design (CEE 4274). These two classes have provided me with a solid foundation. They introduced new terms and practices that I believe are essential in the engineering profession. The intro class supplied me with the knowledge that I needed in order to successfully prepare a set of site development plans, which was required for the subsequent design class. Some fundamentals that were introduced include VDOT, VDH, VDEQ, and DCR requirements, local governmental regulations, design techniques, and an overall grasp of how everything, from sewer lines to water lines to stormwater management, has a role in our society. When the time comes for me to begin my career as a professional engineer, I will be confident in my design decisions because of the concepts that were introduced to me in these classes."* - Julie Trumpoldt, rising senior, Vice President of the Sustainable Land Development Club

*"I graduated from Virginia Tech in the spring of 2008 and went through the Land Development Design courses during my time there. While taking these courses and working on current projects, I truly felt like I was getting real work experience. Looking back four years later, I have fully realized how much these courses offered by Virginia Tech jump started my career into becoming a project manager and understanding all aspects of working in the field of Land Development. I feel that the mentorship I received from working professionals provided me an edge over students graduating from other universities by providing me with real life knowledge of how projects progress in the development world, and not just a classroom education. The Land Development Design courses offered by Virginia Tech were a tremendous aid in the early stages of my career by allowing me to talk with and gain knowledge from real project managers."* – Kyle Bollinger, VT CEE '08, Project Manager with LDDI 2013 Diamond Sponsor Kimley-Horn and Associates

*"LDDI has done a great job preparing me for the position I presently hold, most notably in the qualitative aspect of land development. I am conversational in most topics related to land development and have even offered design suggestions for various projects based on material I was exposed to in advanced courses such as Sustainable Land Development (CEE 4264) and Land Development Design (CEE 4274)." - Kevin Cox, VT CEE '12, Engineer with LDDI 2013Diamond Sponsor Bowman Consulting*

*"The networking opportunities and the connection to alumni that LDDI provides definitely help students to obtain jobs and internships. Last year, I took Introduction to Land Development (CEE 3274) and Land Development Design (CEE 4274). The two classes prepared me for the type of work that I am now doing at my internship. After completing the classes, I felt like I understood what a set of site development plans should look like and how to use tools such as Civil 3D to develop those plans."* - Jessica Hekl, rising senior, President of the Sustainable Land Development Club, intern with LDDI Gold Sponsor William H. Gordon Associates

*"I am a member of the VHB land development team in Tysons and I use concepts that I learned in the design class (CEE 4274) every single day. On top of that, it was my CEE 4274 mentor that recommended me and forwarded my resume to the supervisor who hired me in my current position. Land development design is what I wanted to do, and because of the LDDI program, I am doing just that...." – Tim Smith, VT CEE '10, Engineer with LDDI Silver Sponsor Vanasse Hangen Brustlin*

## Practitioner Involvement

The major objective of LDDI's Practitioner Involvement Committee (PIC) is to develop a strong and sustainable relationship between all sectors of the land development profession and the students within the Via Department of Civil and Environmental Engineering. This involvement is to help students prepare for a career in the land development design profession. The following describes some of the PIC-supported activities during the 2011-12 academic year.

### Career Nights

This year, LDDI and the Sustainable Land Development Club (SLDC) continued their tradition of hosting a "Land Development Career Night" on the eve of the Civil & Environmental Engineering career fair. Multiple representatives from nine firms attended both the fall and spring career nights and, as always, student turnout was exceptional. These information sessions serve two important purposes. First, they provide a means of further communicating to students the various roles of the land development engineer and the career opportunities available in the land development design field. Second, they allow students to meet and mingle with prospective employers in a casual, relaxed setting immediately prior to the often stressful environment of the career fair. The career nights were held at the Hokie House, and many of the practitioner attendees enjoyed the opportunity to revisit one of their old haunts from their time at Virginia Tech.



Darren Conner (Dewberry) chats with a group of CEE students at the fall 2011 Land Development Career Night

## Football Viewing Party

When fall rolls around, few things in the Hokie community take priority over football. Looking to capitalize on the passionate Virginia Tech fan base to further its mission to bring students together with industry professionals, last fall LDDI hosted a football viewing party for the Hokies' Thursday night showdown against Georgia Tech. The event was held at Bull & Bones restaurant in Blacksburg and was very well attended by CEE students and land development professionals, some of whom made the trip to Blacksburg all the way from Hampton Roads and northern Virginia!



*Students and practitioners enjoy Virginia Tech's victory over the Georgia Tech Yellow Jackets*

## Student Club Activities

Now in its fourth year of existence, the Sustainable Land Development Club (SLDC) continues to grow and attract new members. The club brings together CEE students who share a common interest in land development design and issues of sustainability. This year was the Club's most active to date, with members enjoying a number of social and educational activities. In early September, the club toured Phase II of the Virginia Tech Corporate Research Center. While visiting the 90+ acre site, the students saw large-scale grading activities, installation of utilities, and a number of different ESC practices. Later that month, students were treated to a special seminar on sustainable land development delivered by nationally-recognized architect Jon Eisen (The Eisen Group). Throughout the year, the club worked on three different service projects for Camp Alta Mons in Shawsville, VA. These projects included the design of an RV campground and various land planning and analysis for the 840 acre non-profit camp. In April, the club along with LDDI hosted a guest lecture by Brendan Owens (VP for LEED Technical Development – U.S. Green Building Council). Owens spoke on the evolution of the LEED programs. But, as the old adage says, "all work and no play makes Jack a dull boy!" To escape the rigors of student life, Club members entered flag football, softball, and water polo teams in Virginia Tech's intramural sports league. LDDI covered the registration fees for the teams.



*SLDC members meet with Camp Alta Mons officials to discuss service project opportunities*

## Student Club Officers

Since it was first established in the fall 2009 semester, the LDDI-sponsored Sustainable Land Development Club has enjoyed the membership of some very impressive students. Many of these students are now making their presence felt in the professional world, while one former club president is representing the Hokie nation as a graduate student at Stanford University. At this time, LDDI would like to recognize its outgoing 2011-12 officers: President James Serbinski, and Vice Presidents Wes Mize, Logan Baird, and Kelley O'Such. We wish these graduating seniors and graduate students the best of luck as they embark on the careers.

Beginning in the fall 2012 semester, rising senior Jessica Hekl will assume the role of club president. Jessica has already completed LDDI's junior-level course the senior design course, CEE 4274. Jessica has applied for admission into an accelerated Master's degree program, and intends to focus her studies in courses related to land development and water resources. Asked about her vision for the club, she says, "I want to continue the close ties between the students interested in land development and the LDDI sponsoring firms. These relationships are a great way for students to find out more about potential careers in land development and also gain inspiration from the accomplishments of alumni."



Rising senior Jessica Hekl is anxious to continue growing the SLDC

To lend your support and ideas to the Club, contact Jessica at: [jessieh@vt.edu](mailto:jessieh@vt.edu)

## Outreach Committee Update

The major objectives of LDDI's Outreach Committee are: 1) to promote the field of land development engineering to students and encourage their participation and support; and 2) to promote the Land Development Design Initiative to land development professionals and encourage their participation and support of the program. This year, a major focus of the Outreach Committee has been to improve and expand upon LDDI's online presence.

## Website Revisions

During 2011-12, the Outreach Committee worked tirelessly to make major improvements to the LDDI website. In making these modifications, our goal was to make the website both appealing and useful to students and practitioners. Students are able to now easily find information about LDDI courses,

The revised LDDI website now features the same template as other Virginia Tech sites

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upcoming events, career opportunities, and interesting land development projects. Diamond, Platinum, and Gold level sponsors of LDDI may access a student resume bank on the new website, as well as showcase projects that their firms have worked on. We hope you'll visit the new LDDI website at <http://www.lddi.cee.vt.edu>.

### Social Media

To grasp the importance of social media in today's society, one need not look any further than its lofty initial offering when Facebook went public in 2012. Recognizing the role social media now plays in all of our lives, LDDI expanded its footprint in this realm during 2011-12. Becoming a "friend" of LDDI on Facebook and joining our group on LinkedIn is a great way to stay up to speed on recent happenings and upcoming events.



Search "Virginia Tech Land Development Design Initiative (LDDI)"



Search "LDDI-Virginia Tech CEE Land Development Students and Alumni"

### How to Get Involved with LDDI

To continue the success and sustainability of the Land Development Design Initiative, both time and money is needed from the industry. You and your company can get involved by becoming a sponsor, becoming a general member, or donating your time by serving on a committee or helping with course offerings.

### Corporate and Individual Sponsorship

LDDI currently has 30 corporate sponsors and an additional 16 individual sponsors. There are four levels of annual corporate sponsorship and five levels of annual individual sponsorship. Please visit our website ([www.lddi.cee.vt.edu](http://www.lddi.cee.vt.edu)) for a complete listing of benefits associated with LDDI sponsorship.

### General Membership

Since its earliest beginnings LDDI has depended heavily on the volunteer efforts of its general membership to achieve program goals. The past six years have seen LDDI grow to become a nationally recognized leader in undergraduate land development design education. Despite the program's rapid growth, LDDI continues to embrace an organic, grass roots operational model. This model relies on the participation of industry professionals who sincerely believe in LDDI's mission. There are currently more than 350 general members of LDDI who attend semi-annual meetings, both on-campus and at locations across the state. During these meetings, these general members contribute ideas for practitioner involvement, courses, and other aspects of the program.

## Committees

The LDDI Advisory Board is broken into three committees for the purpose of guiding in the program in these main areas.

The **Course and Curriculum Committee** focuses on developing the land development design curriculum, individual coursework, and other student help materials. The committee's primary objective is to prepare students for a career in the land development design profession. Over the past six years, this committee has generated four new courses including Introduction to Land Development, Sustainable Land Development, Municipal Engineering, and Advanced Land Development. If you would like to become involved in the Course and Curriculum Committee, please contact the Committee Chair, Cameron Palmore at [cpalmore@balzer.cc](mailto:cpalmore@balzer.cc).

The **Practitioner Involvement Committee** focuses on developing a strong and sustainable relationship between all sectors of the land development profession and students at Virginia Tech. This involvement includes student mentoring, providing networking opportunities, and support for the Sustainable Land Development Club. If you would like to become involved in the Practitioner Involvement Committee, please contact the Committee Chair, Roy Waugh at [rwaugh@bowmanconsulting.com](mailto:rwaugh@bowmanconsulting.com).

The **Outreach Committee** focuses on promoting the field of land development to students and promoting the Land Development Design Initiative to the land development professionals and encourages their participation and support of the program. This includes maintaining the website, organizing out-of-town meetings, publications, and more. If you would like to become involved in the Outreach Committee, please contact either of the Committee Co-Chairs, Ginger Greunke at [ggreunke@bohlereng.com](mailto:ggreunke@bohlereng.com) or Charlie Yowell at [charlesyowell@ccl-eng.com](mailto:charlesyowell@ccl-eng.com).

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