

A University. A Town. A Place to Call Home.

BY GAIL GREET HANNAH

On October 4-6, 2016, an invited group of landscape architecture professionals and students gathered at Virginia Polytechnic Institute and State University in Blacksburg, Virginia for a fast-paced charrette that its creator and sponsor, Landscape Forms, calls Xtreme LA (Extreme Landscape Architecture.)

The eighth in a series organized and funded by the company, the event was co-sponsored by The Landscape Architecture Foundation and hosted by the Landscape Architecture Program, School of Architecture + Design at Virginia Tech. Xtreme LA is designed to bring a critical mass of creative power to bear on an important landscape architecture challenge in a short, intense period of time. Participants included 17 young landscape architects from across the US and Canada identified by their firms as future leaders, 17 students from the university's graduate and undergraduate landscape architecture program, and two award-winning

professionals, Lisa Delplace, Principal/CEO, Oehme, van Sweden and Paul Kissinger, Principal, EDSA, who served as mentors.

The charrette addressed growth and sustainability in a small city that is home to a large university with which it shares permeable boundaries and intertwined interests. Virginia Tech plans to add 5,000 new undergraduates to its 31,000-student body over the next several years and, with no room for dorm construction on campus, is looking to the town to provide developer-built housing. Blacksburg, like many US college towns, has become a highly desirable place to live. In addition to university students, faculty, and support staff, increasing numbers of young professionals, families, and retirees are being drawn to the city by the natural beauty of the area and the quality of life. As a result, the city is expected to add a total of 11,000 more residents by the early 2020s. The need for new housing and infrastructure is pressing, smart development is crucial, and the stakes are high.

The issues we have in Blacksburg are issues that affect communities all across the country and the world.

Terry Clements, Professor and Chair of the Landscape Architecture Program, School of Architecture + Design, Virginia Tech

While new development will take place in the city of Blacksburg, Virginia Tech has skin in the game. What happens in the city is key to two initiatives that are critical to the university's own work and impact: Intelligent Infrastructure for Human-Centered Communities, which considers design and planning around all the factors — social, technical, economic, cultural and political — that support sustained and adaptive human community; and Resilient/Sustainable/Thriving Earth Systems, which is rooted in Virginia Tech's innovative research and education on

food, water, and other natural resources and their importance for social stability and public well being. The city of Blacksburg shares many of these values. Local government leaders have rejected several proposals for market-driven housing schemes that did not meet their community-development based aspirations to be a demographically diverse, mixed use, sustainable city. Now the city and university are collaborating to identify creative solutions that look beyond older planning models.

THE XTREME CHALLENGE

Identify broad goals and objectives for a future-oriented, planning-based approach to housing development that envision how a mixed-use, livable, walkable, and sustainable community might look and work; and propose typologies and planning concepts for housing targeted to students, families and retirees, with landscapes that enhance and connect them.

That was the challenge. Xtreme LA participants were directed to two potential redevelopment sites. The first, a vacant 13-acre former middle school site sits fenced and unused at the edge of downtown. Bordered by Main Street on the south, it is abutted by residential neighborhoods on the north, east and west. The second, a larger site adjacent to the Virginia Tech campus known as the Houston/Green Street Neighborhood, currently contains older housing targeted to students, including several apartment buildings and small bungalow-type residences that could be demolished to accommodate new development with greater density and amenity. This area is bordered on the east by Huckleberry Trail, part of a regional rail-to-trail project, and is separated from the campus on the west by Stadium Woods, a small stand of first-growth forest that is one of the few remaining in Southwest Virginia.

44 Hours Start to Finish

At a reception and dinner on the evening of arrival, Kirt Martin, Landscape Forms Vice President of Design and Marketing, welcomed guests and thanked the professional leaders for offering their valuable time and expertise. "Landscape Forms is so proud to support Xtreme LA events and we are excited to have you all here," he said. "The faculty, the students and the energy make Virginia Tech an inspiring place for me personally. Our thanks to the university for hosting us and to you for taking part." Kona Gray, President of the Board of the Landscape Architecture Foundation (LAF), encouraged participants to dig into the work ahead. Team mentors Lisa Delplace and Paul Kissinger discussed some of their favorite projects, and LAF Program Director, Jenn Low, introduced the 10 One Planet Principles to be used as guides for the charrette and provided an overview of the organization's Landscape Performance Series.

On the morning of working Day 1 the group toured the town and returned to Virginia Tech's landscape architecture studio to brainstorm and develop consensus around big issues. Themes emerged: the need for greater connectivity within and between areas of the city, for more green space in the neighborhoods where people live, for housing options that address the needs of all demographic groups with more diversity and less rigid separation, for pedestrian and bicycle friendly streets, and for protection and better use of ecological resources. Small self-selected groups set out to do preliminary work: mapping zoning

districts and residential densities, compiling descriptions of existing parks and open spaces, and plotting bus stops within short walks of key destinations. They identified watersheds and circulation patterns, and created a timeline of key markers in Blacksburg history, including the creation in 1872 of a 16-square grid for the city that created a planning geometry and the transformation, starting in the 1960s, of Virginia Tech from a military boarding school to a large world-class university with a significant presence in the city.

Findings shared, the entire group divided at random into two 17-person teams each containing a mix of professionals and students and each focused on one of the targeted sites. In the ensuing 24 hours the teams developed and refined concepts, designed solutions, created plans, and delivered a combined presentation at a public meeting with Q&A attended by city and university representatives. This report provides illustrated highlights of that presentation.

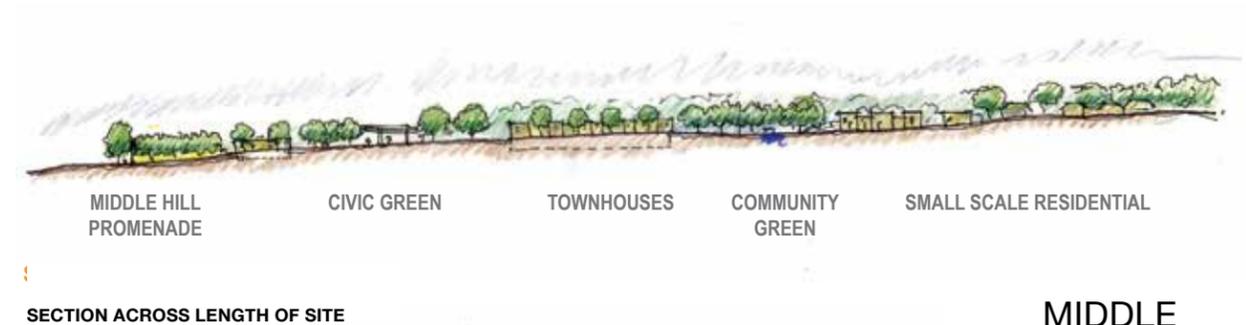
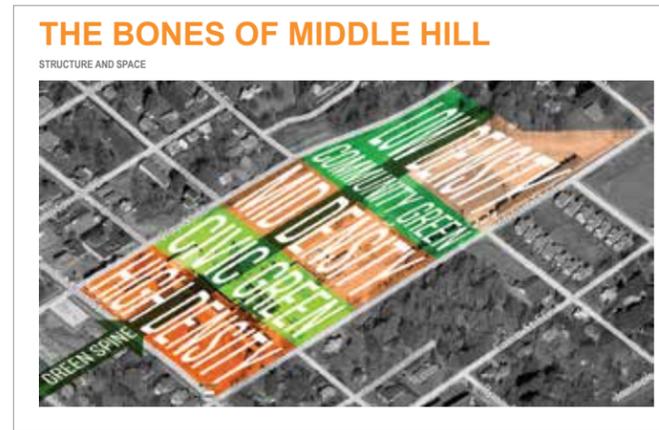


MIDDLE HILL

“We asked, ‘What kind of place do you want Blacksburg to be?’ The ideas we present are meant as a springboard and a means of engaging the voices in your community.”

Britton Jones, Coen + Partners

Team One named the former middle school site Middle Hill to signify its central location and potential as a hinge between the town and the university, declaring it “... a new community on a hill in the middle of the city of Blacksburg.” Their proposals for activating the site and connecting it to the city were driven by three goals: to promote a more diverse, multigenerational place to live; to provide “meaningful” open spaces where people can enjoy the natural environment while keeping in touch with what’s going on in their community; and to create a vibrant urban experience that encourages people to walk and bike, connects Main Street with new housing and a nearby church and school, and supports local businesses. They based the physical framework of the site on the city’s original 16-grid square and proposed creation of three significant open spaces. A Civic Green serves as an urban park for all city residents. The team proposed programming for this space including community gardens, playgrounds that use topography to enhance the play experience, and four-season outdoor activities. A Community Green provides open space for the residential community immediately around it. A Green Spine originating at a ceremonial entry on Main Street runs south to north through the site, drawing people in and connecting new development with the downtown. Several streets on the city grid are carried all the way through the site, while others partially penetrate to serve residential areas. The team recommended and showed examples of curb-less “streets for people” designed to accommodate pedestrians, bikes and cars, and promote street-level social and retail activity.



MIDDLE HILL
Linking the project with a green spine



Mixing It Up

The proposed housing scheme for Middle Hill includes multiple housing types: high-density mixed-use structures along Main Street with retail below and apartments above, a mixture of high and medium density housing on the interior, medium density live/work residences on a side street, and low-density residential development on the north. The stated objective was to encourage demographic diversity across the site and within housing types and to gracefully integrate new development with the existing built landscape. Densities loosen up and “feather down” from Main Street to the opposite end of the site, and buildings vary in character to remain “in conversation” with existing structures. High-density buildings on Main are targeted to a mix of occupants, from students to senior citizens. Three-story flats facing the civic green are conceived as affordable apartments primarily, but not exclusively, for students with outdoor amenities such as barbecues in the space behind. Townhouses facing Eheart Street on the eastern edge are planned with young professionals and downsizing retirees in mind, while live/work spaces on Clay Street along the western perimeter would provide suitable accommodations for craftspeople, artists and entrepreneurs while activating the sidewalk and creating places for new business ventures. The concentration of single-family homes at Middle Hills’ north end is designed to be in friendly relation to an existing neighborhood of similar type.

Topography Creates Opportunity

Middle Hill’s topography influenced schemes for both green and built infrastructure. In-flowing water from neighboring areas is pulled through the site and captured in the community green to create an ecologically-based open space that offers recreational and educational opportunities. Bioswales integrated into streetscapes provide green amenity and manage storm water. And the team capitalized on the elevation of the Middle Hill site, which drops down at the edges to adjacent roadways, with plans for a 400 to 500-car parking lot under the elevation on the west side.

THE CRADLE

“This site is a highly developed area with many property owners and vested interests situated between two ecologically sensitive areas. The question for us was how to preserve ecological values while growing the Blacksburg community.”

Sara Harrell,
PhD. Student in Landscape Architecture, Virginia Tech

Team 2 named its site of concentration The Cradle to reflect its bowl shape, through which all of the water from the larger site flows, and its importance as a place for protecting and nurturing ecological values. In contrast to undeveloped Middle Hill, The Cradle is built out with a random mix of low apartment buildings, single-family residences and parcels of vacant land, many of which have become ad-hoc parking lots. Its location between Stadium Woods on the west and the Huckleberry Trail on the east gives it particular ecological significance, while its proximity to university sports fields on one side of the forest and the concentration of student residences immediately on the other turns a several-block area into a hub of tailgating activity on eight football weekends every fall season. The team’s core objective was to achieve a residential community that integrates with Blacksburg’s urban fabric while saving the ecology of the forest, and it, too, set three goals. The first aims to Reinforce/Create Connectivity by increasing the visibility of existing thoroughfares, creating more safe and engaging pedestrian experiences, and softening the boundaries between the site, the forest and the trail. The second, to Provide Multi-Generational Housing, focuses on introducing higher density development that accentuates existing urban character and targets areas for future open spaces. The third, to Increase Community Green Space, proposes re-purposing existing underutilized lots as green spaces, and reinforcing the green edges of the site.

MIDDLE HILL - STUDENT LIVING AND AMENITIES



20 units per acre
Outdoor spaces for gathering, relaxing and eating, framed by the building
Fruit trees and edible plants to promote urban agriculture
Units included semi-private decks and patios that engage main space

THE CRADLE - SITE INFRASTRUCTURE AND GREEN SPACE



Linking the Forest and the Trail

The team proposed land use interventions designed to preserve the residential zone at the north end of the site, increase open space toward the south, give each open space a unique identity, and leverage the ecological and social value of Stadium Forest and Huckleberry Trail. To facilitate these, it developed a two-phased plan that could be implemented as properties become available. The remedial phase calls for creating primary access through the center of the site along Center Street, transforming secondary roadways and dead ends into green streets, acquiring vacant lots and large parking areas and transforming them into multi-use open spaces, and extending Stadium Forest and the Huckleberry Trail into the site along its edges. The landscape connectivity phase closes the loop, connecting the forest with the trail and open spaces with each other to create a network of ecological and social flows through the site. In this phase streets would be transitioned from asphalt to green as they approach the forest to reduce the compaction footprint of impermeable surfaces on the old growth forest and allow it to become more a part of the neighborhood. Pedestrian activity in Stadium Woods would be limited to two targeted entry points with formalized pathways or boardwalks through the forest to mitigate ecological impact.

Grandmothers Tailgate, Too

Concern about the risks to the health of the forest from excessively heavy foot traffic on game weekends led the team to propose that current “stadium culture” in the area adjacent to Stadium Woods (an area with a large student population) be transitioned over time to some of the new green spaces created on formerly vacant property. Students agreed, noting that many people in the Blacksburg community, including families and older residents, participate in the social activities around Virginia Tech sports and that other less ecologically fragile locations in more demographically diverse areas could also serve the purpose.

Open Space Identity



Remedial Phase



Landscape Connectivity Phase



SIDEWALK VEGETATION / BIOREMEDIATION PUBLIC R.O.W. VEGETATION / BIOREMEDIATION SIDEWALK

Typical Vehicular Street Section

Smart and Dense/Loose and Low

The team utilized the natural character of the Cradle as a guide for residential development. Its proposals introduce higher density development on the western edge of the site immediately adjacent to the forest and in the interior core, with lower density housing on the north, west and south sides. For the area closest to Stadium Woods it proposes decreased lot size and increased building footprints with two and three-story apartment buildings suitable for students and others seeking affordable rents. This “smart and dense” development would free up land between structures for use as shared green spaces. This approach is applied in other targeted areas as well. On the north, east and south sides, proposed housing density progresses from single-family houses on the edges to townhouses and apartment buildings toward the center and low point of the site. Situating higher density buildings and water retention infrastructure on the slopes of the bowl allows low-lying areas to be used as shared green space. Building taller structures on sloping ground serves to minimize the visual impact of their height on surrounding neighborhoods. Within these high-density areas, green streets with their permeable surfaces would manage rainwater and bioswales would act as ponds, collecting storm water and preventing flooding on low ground. The overall scheme for preserving the Old Town residential neighborhood in the north and easing densities from existing neighborhoods on the edges to the Cradle center provides a gentle transition to neighboring areas and allows development on this complex site to evolve over time.



**GOAL 1:
REINFORCE / CREATE CONNECTIVITY**



**GOAL 2:
PROVIDE MULTI-GENERATIONAL HOUSING**



Example of proposed high density residential development with shared green space



Proposed approach and entry to Stadium Woods via new green street



Existing entry to Stadium Woods from adjacent residential neighborhood



Merging Density, Topography and Canopy

“We are going to be leveraging your hard thinking and good ideas. We intend to share your work with town and campus leaders as well as people generally in need of knowing more of landscape architecture practices as well as overlaps and collaborations with other disciplines. Landscape architecture needs to exercise its voice. The work that we do is important – environmentally, economically, socially and culturally.”

Terry Clements

“It has been an incredible experience to work with such talented students and young professionals. I am leaving Blacksburg exhausted, exhilarated, and proud to be a landscape architect.”

Lisa Delplace

“It’s been invigorating to work with students and young professionals and see your passion and excitement. You are the next leaders, and we do have a voice as landscape architects. We can make a difference.”

Paul Kissinger

Following the team presentations Kirt Martin brought the proceedings to a close. “I would like to thank all of you for your participation in Xtreme LA. In addition to being an impressive exercise in collaboration and thought leadership, it was also a tremendous pleasure to meet and get to know you. We value landscape architecture and are pleased and privileged to support the profession of which you are the future.” He asked that participants continue the conversation and stay connected via a LinkedIn group for Xtreme LA alumni that Landscape Forms has in development.

Professionals and students took a bow, exchanged numbers with new friends and headed home. The event was over but the work makes its way into the world.

Postscript

Soon after the Xtreme LA event ended, a representative of the Middle Hill site was in the studio photographing the posted work to share with the firm hired to develop a plan. Members of the Town Council remarked that the scheme was similar to what they are hoping to ‘push’ for development of the site, and inquired about developing an internship with the town council to help them and town residents visualize possibilities.

The Cradle plan was shared with a firm currently discussing this area with the town and town manager. They were impressed with the initial sensitivity the proposal brought to a neighborhood with complex land ownership issues and lack of immediate connections to either the town or the campus.

2016 Xtreme LA Co-Hosts

Kirt Martin

Vice President Design and Marketing
Landscape Forms

Terry Clements

Professor and Chair of the
Landscape Architecture Program,
School of Architecture + Design,
Virginia Polytechnic Institute and State University

Kona Gray

President of the Board
Landscape Architecture Foundation

2016 Xtreme LA Team Leaders

Lisa E. Delplace

Principal/CEO, *Oehme, van Sweden*

Paul Kissinger

Principal, *ESDA*, Ft. Lauderdale, FL

Professional Participation

Fred Besancon	<i>Spurlock</i>
Jean-Pierre Casillas	<i>Ten Eyck Landscape Architects</i>
Marlise Eguchi	<i>IBI Group</i>
Ryan Goodstein	<i>MKW</i>
Ngan Han	<i>Stantec</i>
Byron Hubbard	<i>Dix.Hite + Partners</i>
Britton Jones	<i>Coen + Partners</i>
Oliver Kiley	<i>SmithGroupJJR</i>
Chad Lothamer	<i>MKSK</i>
Jeffrey Mis	<i>LandDesign</i>
Jenny Qualls	<i>HOK</i>
Andrea Sandoval	<i>Perkins+Will</i>
Michael Saltarella	<i>Michael Van Valkenburgh Associates</i>
Eduardo Santamaria	<i>Andropogon</i>
Khyati Saraf	<i>Future Green Studio</i>
Matthew Strange	<i>Hoerr Schaudt Landscape Architects</i>
Annie Varma	<i>Lee and Associates</i>

Virginia Tech Student Participation

Tara Allentuck	Jill Miller
Elena Alves	Joe Niland
Ariel Barrientos	Nick Proctor
Mary Cadwallender	Sevda Ozturk Sari
Austin Chase	Aline Soares Souza de Souza
Lauren Delbridge	Carlin Tacey
Sara Harrell	Sherry Wang
Nick Henry	Gen Zhong
Alex Jones	

**TEAM
LEADER
BIOS****Lisa E. Delplace**

Principal/CEO, Oehme, van Sweden

Lisa E. Delplace has over 28 years of professional experience. Her extensive knowledge of ecological processes and her commitment to their artistic execution result in a strong, sculptural relationship between architecture and landscape that is evident in her body of work. Ms. Delplace is responsible for the planning, design, and execution of many of the firm's commissions, which range from urban corridors, monumental civic spaces and public gardens to estates and urban residences. Her significant works include key revitalization efforts in Washington, DC in mixed-use developments on Capitol Hill, the West End, and Southwest neighborhoods. She is leading the effort to implement innovative outdoor spaces at the new DC Water Headquarters, part of the development boom along the Anacostia Riverfront. At Chicago Botanic Garden in Glencoe, IL, Ms. Delplace is responsible for the design of the Kleinman Family Cove, the Science Campus Master Plan, the Daniel F. and Ada L. Rice Plant Conservation Science Center, and the third in a series of pedestrian bridges. Recent accomplishments include rooftop terraces, green roofs, green walls, and green screens for the Capitol View Conference Center and a multi-unit condominium building in Washington, DC; a residence in Portland, OR; and the Plant Conservation Science Center at Chicago Botanic Garden. She holds a Master's of Landscape Architecture from the University of Michigan and a Bachelor of Science in Park Planning and Design from Michigan State University.

Paul Kissinger

Principal, ESDA, Ft. Lauderdale, FL

Since joining the firm in 1989, EDSA Principal Paul Kissinger has exhibited steadfast passion and stellar leadership in every facet of his career. At the heart of the many professional accolades, he received his induction as a Fellow in the American Society of Landscape Architects (ASLA) in the category of design works, which clearly demonstrates his perseverance and commitment to excellence. Kissinger embraces innovation as a way of life, viewing technology, non-complacency and sustainability at the forefront of every project. His global project experience includes the revitalization of communities, restoration of urban waterfronts, reinvigoration of resort developments, implementation of multi-modal transportation corridors and large scale recreational planning. Most importantly, at the foundation of Kissinger's altruistic approach is a focus not only on the overall goal, but on the impact it engenders. He strives to create a better world by improving the quality of life of others within the industry, his immediate community, and throughout every project in which he is entrusted. Some of his most notable works include the Valletta Waterfront in Malta, Emirati Housing in Abu Dhabi, Montage Resort on Royal Island, Bahamas, Kissimmee Save Our Rivers in Florida, and the Owensboro Riverfront in Kentucky. Kissinger attended Kansas State University where he earned a Master's of Landscape Architecture and University of Michigan where he received his Bachelor of Science in Natural Resources.

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