



andropogon

THE LANDSCAPE ARCHITECTURE FIRM AWARD 2018



MORRIS ARBORETUM AT THE UNIVERSITY OF PENNSYLVANIA, 1985

“Master planning is a commitment to a process, not an individual product. Andropogon Associates brings to the planning process an understanding of the complex and changing needs of an institution and a rare sensitivity to environmental issues. They produce imaginative designs that tell a story and are able to chart a clear course of action for institutional development.”

Dr. William M. Klein, Former Director
Morris Arboretum



NIKKO KIRIFURI RESORT, 1998

“When it comes to innovative site technology and design aesthetics, Andropogon is unsurpassed.”

Robert Venturi, Venturi Scott Brown Associates

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ASLA Medal Nominations
c/o Terry Poltrack
636 Eye Street, NW Washington, DC 20001-3736

RE: ASLA FIRM OF THE YEAR AWARD

January 30, 2018

Dear Executive Committee Members and Board of Trustees,

I am honored to nominate Andropogon for the 2018 Landscape Architecture Firm Award.

Andropogon has been a model of sound ecologically-based landscape architectural practice for over forty years. The firm formed soon after I graduated and began my career as a landscape architect, and I have avidly followed their work since that time.

They are out in front, experimenting with ideas, applying observation as well as knowledge about natural systems to shape and advance an aesthetic specific to each special place, yet always bringing the natural processes of a site to the fore.

They share their knowledge with practitioners; I recall Carol Franklin talking at a Virginia ASLA conference many years ago, bringing focus to the issue of invasive species and the necessity for landscape architects to take responsibility for changing the market and for educating clients, eliminating invasives from our plant lists. This was in addition to early examples of the use of green infrastructure to manage drainage and stormwater collection and treatment.

They are thought-leaders. Many of the standards and processes that the early leaders of Andropogon endorsed are now prominent in landscape architectural practice. It is important to recognize that Andropogon was one of the first, if not the first, firms to take an ecological and natural systems approach to all of their projects. The firm has continued to be a leader in performance-based landscape architecture for the past forty years, developing metrics and modeling, focusing on long-term sustainability of their projects.

Andropogon has accomplished a body of distinguished work through ongoing team-work and collaboration within the firm and as part of integrated teams of allied professionals and scientists. Their designs are of the highest caliber, beautiful, functional, engaging and meaningful. The firm continues to evolve, to be leaders in landscape performance, and to freely share their expertise and knowledge through professional and public engagement.

Andropogon is deserving of this recognition, and I highly recommend that the ASLA Board of Trustees take this opportunity to acknowledge the long-term leadership and dedication of this outstanding group of dynamic professionals.



Vaughn B. Rinner, PLA, FASLA, SITES AP
Immediate Past President
American Society of Landscape Architects



WASHINGTON NATIONAL CATHEDRAL, PILGRIMAGE PATH, 1995

Andropogon History

“Wherever the landscape has been disturbed, Andropogon is one of the first field grasses to colonize the ground, providing a self-sustaining cover for the gradual return of our native forests.

The economy and elegance with which these grassy meadows heal the wounded landscape aptly describes Andropogon’s goal in ecological planning and design, to weave together the landscape of humans and nature for the benefit of both.”

In 1975, four students from the University of Pennsylvania—Carol Franklin, Colin Franklin, Leslie Sauer, and Rolf Sauer—founded a landscape architecture firm rooted in the ecological principles espoused by Ian McHarg. They named their firm Andropogon, after a pioneer species of field grass. For over forty years, the firm has expanded the impact of landscape architecture through its ecological planning, research, and design interventions. Now led by principals José Almiñana, Yaki Miodovnik, and Thomas Amoroso, Andropogon continues to promote the role of the landscape architect as a key partner in solving complex environmental issues and improving the quality of life for our communities. These goals are demonstrated by the firm's sustained commitment to ecological design at every scale and for every site; by fostering transdisciplinary collaborations; through advocacy for evidence-based, comprehensive water management policies; and by promoting dialogue, standards, writings, and research to quantify and improve landscape performance now and in the future.

Expanding the IMPACT of landscape architecture through a sustained commitment to ecological design at every scale and for every site

Andropogon views every site as an opportunity to improve ecological health by reestablishing and enhancing the processes necessary to sustain natural systems. These processes encompass the complex interrelationships between terrain, water, vegetation, fauna (including humans), and climate. No landscape, no matter how derelict or developed, is untouched by these processes. From the beginning, Andropogon's work has championed the value of design that promotes ecosystem services for all sites, from the botanical gardens at the Morris and Crosby Arboreta, to the waste landscape of Fresh Kills landfill, to disrupted landscapes, such as the gas pipeline construction at Loantaka Brook Reservation. This legacy continues with the firm's recent work, including the Kroc Corps Community Center, which transformed a brownfield in an underserved Philadelphia neighborhood into a vibrant community and urban agriculture center, and the recently opened Bartram's Mile, where former industrial sites now boast a multi-use riverfront trail and outdoor plaza that connect West Philadelphia communities to the Schuylkill River.

These projects illustrate how Andropogon's early pioneering ecological design work in parks and gardens outside the city now informs high-performance landscape design in the urban realm. The firm's work has shown how landscape architects can positively impact the quality

of life in our cities by promoting ecosystem services in all aspects of urban life. Habitat can be created with native plant communities in small parks as shown at Shoemaker Green at the University of Pennsylvania, along streets at the early 26th Street Gateway in Philadelphia, and on green roofs as demonstrated at the SUNY-ESF Gateway Center in Syracuse and the U.S. Coast Guard Headquarters in Washington, DC. Aging infrastructure in our cities can be aided by high-performance landscapes that capture and reuse rainwater, waste water, and process water, as proven by the performance of Sidwell Friends School in Washington, DC, the Phipps Conservatory Center for Sustainable Landscapes in Pittsburgh, and the Lubert Plaza at Thomas Jefferson University in Philadelphia.

Expanding the IMPACT of landscape architecture through transdisciplinary collaborations

Andropogon has always embraced transdisciplinary collaboration as essential for the development of a truly sustainable approach to landscape architecture. Through partnering with academic and professional organizations, including the Landscape Architecture Foundation, the firm has tested new performance-based rating systems and advanced time-tested, sustainable strategies with its built work. The firm has promoted the blurring of boundaries between landscape architects and soil scientists, civil and water quality engineers, ecologists, agriculturists, arborists, geomorphologists, social scientists, architects, community builders, economists and others. Andropogon's work has given expression to the complex web of relationships knit together by natural processes.

Andropogon pioneered the collaborative, community-based restoration of the native eastern forests, informed by the study of climate, hydrology, soil, plants, and animals, as embodied in Leslie Sauer's *The Once and Future Forest* (1998). The firm also developed innovative technologies by working with progressive engineers, such as Meliora Environmental Design. Together, Meliora and Andropogon designed the porous paving for the Morris Arboretum's parking lot, installed in 1990, and recently developed a one-water management reuse system for the Stroud Water Research Center. One of the firm's iconic landscapes is the constructed wetlands in the courtyard of Sidwell Friends School, an integrated system treating wastewater for both building and landscape, which required collaboration between civil and water engineers, wetland ecologists, and school faculty. Sidwell's terraced wetlands give form to the natural treatment processes of water moving through the landscape, while also providing a living laboratory for the students and teachers.

Expanding the IMPACT of landscape architecture through **advocacy for evidence-based, comprehensive water management policies**

From its earliest work, Andropogon has advocated for progressive policies that treat water as an invaluable natural resource, integrating innovative water management strategies in its sustainable planning and site design. In recent years, the firm has seen how evidence-based design with proven performance can impact water policy.

Andropogon's design and landscape performance monitoring of Shoemaker Green is advancing Philadelphia's stormwater policies. Through data collection during a rigorous, five-year research study, scientists, graduate students, maintenance staff, and Andropogon's in-house researchers demonstrated that the landscape manages more than three times the rainwater volume required by local regulations, thanks to soil storage and evapotranspiration. These findings have led the Philadelphia Water Department to recognize the capacity of soil and plants to manage rainwater as landscape integrated systems.

Andropogon has embraced the integrated, transdisciplinary One-Water resource management approach to site design with the goal of breaking down barriers to the implementation of new site development strategies. The Pennsylvania Department of Environmental Protection has allowed treated wastewater as irrigation based on Andropogon's work at the Phipps Conservatory Center for Sustainable Landscapes, which is built on an urban brownfield. By demonstrating consistent high water quality, the Center is now allowed to harvest its excess treated wastewater to irrigate the Center's grounds, while still meeting all the project's net positive water requirements. Andropogon anticipates that this project will set a precedent for other municipalities.

To push this agenda, Andropogon recently designed the Stroud Water Research Center's Moorehead Environmental Complex to collect data regarding rainwater capture and decentralized waste water management with the ultimate objective of promoting policy changes at the state-level in Pennsylvania. At the Complex, rainwater is collected, treated, and monitored for water quality in order to reuse it as potable water and for research experiments. Over time, through proven performance, this innovative landscape, which mimics pre-development forested conditions, could impact future development throughout the state and beyond.

Expanding the IMPACT of landscape architecture through **the promotion of dialogue, standards, writings, and research to quantify and improve landscape performance now and in the future**

Andropogon's landscape architects have consistently shared their knowledge with the next generation of landscape architects, as well as the broader community, through publications and teaching. Today this commitment is formalized in the Integrative Research Department, which rigorously measures the performance of its past and present landscape interventions. The team actively engages in original research that spans the physical and social sciences, often in collaboration with academic researchers. Their work informs future projects and is disseminated through a variety of communications.

Andropogon has long been invested in the development of standardized rating systems and the verification of performance for regenerative landscapes. Since 2005, Andropogon has been instrumental in the development of the Sustainable SITES Initiative (SITES). Andropogon was a key part of the initial SITES Technical Core Committee and later designed three landscapes under the SITES pilot program: Shoemaker Green in Philadelphia, Phipps Conservatory's Center for Sustainable Landscapes in Pittsburgh, and the U.S. Botanic Garden's Bartholdi Park in Washington, DC.

In addition, Andropogon has successfully implemented two, fully-certified projects through the integrated design process and post-occupancy verification required by the Living Building Challenge: the Center for Sustainable Landscapes and the Alice Ferguson Foundation Living Building Education Center. Through this work and ongoing projects at Georgia Tech, in Atlanta, Andropogon is proving that landscape architects are central to the design of truly regenerative development.

In 2017, Andropogon authored a white paper on the feasibility of developing Site Commissioning for the U.S. General Services Administration, which adopted SITES standards for new development in 2016. The white paper found that verifying landscape performance benchmarks through Site Commissioning could become an effective management tool, protecting the government's investment in sustainable land development with innovative practices in site design, construction, and management. Through these activities, Andropogon continues to help clients and designers understand, quantify, and verify the benefits derived from the ecosystem services provided by healthy, high-performance landscapes.



UNIVERSITY OF PENNSYLVANIA, SHOEMAKER GREEN, 2015

Selected Achievements

“For a company to stay in business for forty years is a substantial accomplishment. To perform at the very highest levels of its field and to provide global leadership over that entire period is simply remarkable. Our profession owes a debt of gratitude for the pioneering work of Andropogon and for the firm’s commitment to ecological design. They have proven to us all that great work can meet the highest standards of environmental and cultural performance and at the same time be extraordinarily beautiful!”

Kurt Culbertson, FASLA
Chairman and CEO, Design Workshop

selected awards

AMERICAN SOCIETY OF LANDSCAPE ARCHITECTS

Shoemaker Green at the University of Pennsylvania
Honor Award for Research, 2016
Honor Award for General Design, 2014

Metropolitan Paradise, The Struggle for Nature in the City: Philadelphia's Wissahickon Valley, 1620-2020 by Carol Franklin
Honor Award in Communications, 2011

Morris Arboretum of the University of Pennsylvania
Strategic Master Plan
Landmark Award, 2004
Centennial Medallion, 1999

Nikko Kirifuri Resort, Japan
Landscape Master Plan
Merit Award in Design, 2001

Once and Future Forest by Leslie Sauer
Merit Award in Communications, 2000

Crosby Arboretum
Centennial Medallion, 1999
Honor Award in Master Planning, 1991
Honor Award in Landscape Design, 1991

Colonial Parkway Cultural Landscape Report
Merit Award, 1998

ASLA REGIONAL CHAPTERS

Clemson University ICAR Technology Neighborhood 1 Plaza, with Seamon Whiteside
Honor Award in General Design from the Tri-State ASLA, 2014

Gateway Center Green Roof at SUNY ESF, with Architerra
Merit Award in General Design from ASLA NY, 2014

Salvation Army, Kroc Community Center, with MGA Partners
Honor Award in General Design from ASLA PA/DE, 2013
People's Choice Award from ASLA PA/DE, 2013

St. Elizabeth's West Campus Landscape Integration Plan
Merit Award in Analysis & Planning from ASLA PA/DE, 2013

King's College Circle Precinct, University of Toronto
Regional Merit Award from the Canadian Society of Landscape Architects, 2005

Fallingwater Landscape Master Plan
Merit Award in Analysis & Planning from ASLA PA/DE, 2002

Hartley Farms, New Jersey
Merit Award from the New Jersey Chapter of the ASLA NJ, 1992

AIA COTE TOP TEN

Center for Sustainable Landscapes at Phipps Conservatory and Botanical Gardens, with The Design Alliance, 2016

J. Craig Venter Institute, with ZGF Architects, 2016

Gateway Center Green Roof at SUNY ESF, with Architerra, 2014

Sculpture Building at Yale University, with KiernanTimberlake, 2008

Center for Art & Science at Cambridge School of Weston, with Architerra, 2008

Sidwell Friends Middle School, with KieranTimberlake, 2007

Philadelphia Forensic Science Center, with Croxton Collaborative, 2006

Cusano Environmental Education Center at the John Heinz National Wildlife Refuge, with Susan Maxman Partners, 2003

Adam Joseph Lewis Center for Environmental Studies at Oberlin College, 2002

AIA REGIONAL CHAPTERS

Kohler Environmental Center at Choate Rosemary Hall, with Robert A.M. Stern Architects
Honor Award from the AIA NY Committee on the Environment, 2014

Karabots Pavilion at the Franklin Institute, with SaylorGregg Architects, now a Studio of JacobsWyper
Honor Award from AIA Philadelphia, 2014

Gateway Center Green Roof at SUNY ESF, with Architerra
Design Award Citation and Excelsior Award for Public Architecture from AIA New York State, 2014
Sustainable Design Award from Boston Society of Architects, 2013

King's College Circle Precinct at the University of Toronto
Honorable Mention for Toronto Architecture and Urban Design Award, 2005

Sterling Divinity Quadrangle at Yale University
Design Award from AIA Connecticut, 2003

26th Street Gateway Project, Center City, Philadelphia
Design Excellence Award from AIA Philadelphia, 1995

SOCIETY FOR COLLEGE AND UNIVERSITY PLANNING

Temple University Health Sciences Campus Framework Plan, with Payette
Merit Award for Excellence in Planning for an Existing Campus, 2016

Kline Fitness and Squash Center at Dickinson College with Cannon Design
Merit Award for Excellence in Architecture for Building Additions, 2015

Gateway Center Green Roof at SUNY ESF, with Architerra
Honor Award for Excellence in Architecture for a New Building, 2014

Shoemaker Green at the University of Pennsylvania
Merit Award for Excellence in Landscape Architecture-General Design, 2014

Drexel University Campus Master Plan, with Goody Clancy
Honor Award in Excellence in Planning for an Existing Campus, 2012

OTHER NATIONAL RECOGNITION

Gateway Center Green Roof at SUNY ESF, with Architerra
Land Ethics Award of Merit from Bowman's Hill Wildflower Preserve, 2016

Horticultural Center at the Morris Arboretum, with Overland Partners
American Architecture Award from the European Centre for Architecture Art Design and Urban Studies and The Chicago Athenaeum Museum, 2012

Stapleton Redevelopment Plan
Outstanding Comprehensive Planning Award from the American Planning Association, 1996

University of Pennsylvania Landscape Plan
Design Excellence Award from the Foundation for Architecture, 1989

high performance landscapes

LIVING BUILDING CHALLENGE PROJECTS

Phipps Conservatory, Center for Sustainable Landscapes, Pittsburgh, PA, Living Building Challenge Fully Certified, with The Design Alliance

Potomac Watershed Study Center, Alice Ferguson Foundation, Accokeek, MD, Living Building Challenge Certified, with Re:Vision Architects

Global Flora Collection Greenhouse, Wellesley College, Wellesley, MA - Designed to meet The Living Building Challenge Standard, with Kennedy & Violich Architecture

Living Building Challenge Building, Georgia Tech, Atlanta, GA - Designed to meet The Living Building Challenge Standard, with Lord Aeck Sargent and Miller Hull Partnership

SUSTAINABLE SITES INITIATIVE PROJECTS

Phipps Conservatory, Center for Sustainable Landscapes, Pittsburgh, PA, Four-star rated certification, with The Design Alliance

Bartholdi Park, United States Botanic Garden, Washington, DC, Pilot Project, with EwingCole

Shoemaker Green, University of Pennsylvania, Philadelphia, PA, Two-star rated certification

selected publications

Carol Franklin and José Almiñana. (2016). Creative Fitting: Toward Designing the City as Nature. *Nature and Cities: The Ecological Imperative in Urban Design and Planning*. Cambridge, MA: Lincoln Institute of Land Policy. ASLA's Best Books of 2016.

Lauren Mandel, Emily McCoy and Toby Liss. (2016, Fall). Reference Community: Adapting Native Plants to North American Green Roofs. *Journal of Green Building*. 15-36.

Lauren Mandel and Emily McCoy. (2016, February). Woodland Restoration: 30 Years Later. *Arnoldia*. 32-42.

Emily McCoy. (2014, Nov/Dec). Wet Lab. *Spaces*. 11-12.

Leslie Jones Sauer. (1998). *The Once and Future Forest: A Guide to Forest Restoration Strategies*. Island Press.

Carol Franklin. (1997). Fostering the Living Landscape. In George F. Thompson & Frederick R. Steiner (eds.), *Ecological Design and Planning*, (263-292). New York: John Wiley & Sons, Inc.



Andropogon Founders: Colin Franklin, Carol Franklin, Rolf Sauer, and Leslie Sauer, at Morris Arboretum, 1976



Yaki Miodovnik at Nikko Kirifuri Resort, 1996



Tom Amoroso, Emily McCoy, José Almiñana, Dan Sharp, and Todd Montgomery, at Morris Arboretum, 2012

Biographies

“Many of my former students practice ecological design and planning. The Philadelphia landscape architects of Andropogon have perhaps taken ecological design the furthest.”

Ian McHarg
A Quest for Life, 1996



JOSÉ M. ALMIÑANA
PLA, FASLA, LEED AP, SITES AP
PRINCIPAL

José joined Andropogon in 1983 and has been a principal since 1995. Trained as both a landscape architect and architect, his collaborative work endeavors to achieve the highest possible performance with the least amount of resources, by seeking to find the synthesis of site, process, and purpose. His design approach is based on systems thinking, aiming to unearth the unique nested ecologies of 'place' that are capable of rendering fitted solutions that foster the capacity of any site and landscape to provide ecosystem services. His groundbreaking projects, public service, and trans-disciplinary collaborations have been instrumental in the development of industry-wide standards and landscape performance metrics, which have positioned landscape architects at the core of the sustainability movement. José and his colleagues at Andropogon are advocating for robust, post-construction monitoring and adaptive management programs that are critical to making sure our designs perform as intended. He was the recipient of the ASLA President's Medal in 2010 and was elected to the ASLA Council of Fellows the same year.

"We must recognize the transformative capacity of our profession, that is, we are symbionts, and like any other species, we modify the environment and the environment modifies us. We must then aspire to design to sustain the life supporting processes, and design like it matters... like all life forms matter."

José Almiñana



YAKI MIODOVNIK
PLA, ASLA, CLSA
PRINCIPAL

Yaki joined Andropogon in 1985 and has been a principal since 1996. Inspired by his knowledge of science and technology, and a deep commitment to ecological design, Yaki frequently directs projects involving unusual or difficult environmental challenges. He has a special ability to bring together the diverse people, from client to contractor, needed to realize a complex project. Yaki's design solutions recognize the landscape as a living system to be restored and sustained. His work frequently demonstrates new techniques that incorporate solutions in stormwater management, alternative wastewater treatment, habitat restoration, and utilization of the landscape as green infrastructure within evocative landscapes. In academic projects, he has promoted using the landscape as an extension of the traditional classroom experience, finding creating ways to infuse nature into the learning process.

"We strive to create places that, through design, tell the story of their own making, with strong roots in history, culture, social beliefs and above all, in nature."

Yaki Miodovnik



THOMAS AMOROSO

PLA, ASLA
PRINCIPAL

Tom joined Andropogon in 2006 and has been a principal since 2014. Trained as a landscape architect with over 20 years of practice, Thomas has developed a robust skillset in innovative design and construction solutions. With a passion for ecological design and reshaping the urban environment, Thomas's focus has been on the creation of dynamic and lasting landscapes that are both beautiful and performance based. Thomas has directed a variety of projects, from urban campuses and parks to SITES -certified projects. Thomas co-chairs the Advisory Committee for Temple University's BSLA program and is a guest juror/lecturer for local programs such as the University of Pennsylvania, Penn State University, and Temple University where he earned his Bachelor of Science in Landscape Architecture degree.

“As Landscape Architects, we have a tremendous responsibility to create design solutions that strike a balance between our clients programmatic needs and what a given site can support from an environmental standpoint. We draw our design inspiration from a thorough understanding of a sites’ natural systems, research, innovative design solutions, and our firm’s forty plus years of practice in creating landscapes that are beautiful, functional, and lasting” ”

Tom Amoroso



EMILY McCOY

PLA, ASLA, SITES AP
ASSOCIATE PRINCIPAL

Emily has a comprehensive background in design, ecology, and horticulture that enables her to intricately weave together art and science within the sphere of landscape architecture. She is passionate about exposing the beauty of ecological processes within the everyday lives of people with the hopes of inspiring appreciation of the processes that sustain our quality of life. As Director of Integrative Research, Emily leads a rigorous review of Andropogon's past and present landscape interventions in order to integrate the best scientific knowledge and the most effective design solutions into future projects. Emily is an adjunct professor at NC State University, where she teaches and researches landscape performance, and is a member of the LAF Education committee.

“There is still much more to learn from ongoing monitoring, but clearly, we must adapt our communication and collaboration channels between maintenance, monitoring, and design to demand more out of our landscapes. Monitoring built work does not have to be costly—it mostly requires a desire for the feedback. We must push ourselves to continually ask questions and seek answers—not just design and walk away.”

Emily McCoy



MARTIN TROTMAN
PLA, ASLA, LEED AP
ASSOCIATE PRINCIPAL

Martin joined Andropogon in 1993, bringing to the firm a wealth of technical knowledge in design and implementation. He has managed a variety of projects, from campus master planning to construction, and has overseen construction documentation, specification preparation, and construction review for many of the firm's most complex site development projects. As the firm's Technical Manager, Martin develops procedures and policies regarding project quality management for all of Andropogon's projects. He has practiced professionally for more than 40 years in the Philadelphia area. The projects listed below highlight some of the key projects that Martin has worked on with Andropogon.

"One who asks Martin is a fool for five minutes, but one who does not ask Martin is a fool forever."

Andropogon Proverb



CHRIS MENDEL
PLA, ASLA
ASSOCIATE PRINCIPAL

Chris's landscape design and environmental planning work is grounded in Andropogon's core mission to "weave together the landscapes of humans and nature for the benefit of all." Andropogon's deep ethical stance regarding land use and environmental stewardship is what guides Chris's work professionally and personally.

Chris has a strong understanding of the economic life of a capital project. To him, economics (a system of interconnected participants trading wealth, works, and commodities) is strikingly similar to ecology (the exchange of energy and mass between biotic and abiotic participants). This view has helped clients and partners, who might be new to sustainable design thinking, to understand the long-term goals of our landscape designs and their trade-offs with short-term efforts.

Chris, like so many at Andropogon, also volunteers his skills and passions in local community gardens, school planning, and various environmental education missions in the region.

"Sustainability is not a dismissible aspect of a project; it's an acknowledgement of our connections and our responsibilities to one another. It's a world view and a way of life."

Chris Mendel



DARREN DAMONE

PLA, ASLA

ASSOCIATE PRINCIPAL

Darren's passion for design and early experience as an instructor at an environmental education center in the Hudson Valley region of New York inspired him to pursue a career in ecological design, combining his strong design sensibility with his commitment to environmental advocacy. In his professional practice, he has been involved in a wide range of projects varied in both scope and scale. His experiences have taught him that the most successful projects stem from collaborative project teams with open-minded approaches, letting the site tell its story; and perusing design solution which are rooted in systems-based thinking.

“Andropogon was founded, exists, and will persist because of the people that gravitate to it. Our culture of environmental stewardship and social justice allows me to facilitate change with meaning and purpose. I have been fortunate enough to participate in projects that leverage scientific rigor, astute design, and cultural relevance to achieve solutions that positively impact the quality of the environment we live in.”

Darren Damone

team members

JASON CURTIS, PLA, ASLA, LEED AP, SITES AP - Associate

ELIZABETH HAMILL, PLA, ASLA, LEED AP - Associate

KENNETH GIGNAC, PLA, ASLA, LEED AP BD + C - Associate

BEN MONETTE, PLA, ASLA, LEED AP - Senior Landscape Architect

LAUREN MANDEL, PLA, ASLA - Integrative Researcher & Landscape Architect

JOHN COLLINS - Senior Designer

TODD MONTGOMERY - Landscape Designer

MARTHA EBERLE - Landscape Designer

MICHELLE JORDAN - Landscape Designer

CHAO YANG - Landscape Designer

LE CINDY XU - Landscape Designer

HANNA GOLD - Landscape Designer

ERIC THOMAS - Landscape Planner & GIS Technician

LORETTA DESVERNINE - Senior Graphic Designer

LORI AUMENT - Marketing Lead

THOMAS PETRIK - Controller

PAUL LANG - Assistant Controller



THOMAS JEFFERSON UNIVERSITY, LUBERT PLAZA, 2008

Selected Projects

“The Lubert Plaza has redefined the core of the campus. It’s the most loved and well-used space anywhere on the campus because it creates a welcoming, nurturing, and secure urban environment.”

Ronald E. Bowlan, Senior Vice President,
Facilities & Campus Planning,
Thomas Jefferson University



STAPLETON TODAY
Image courtesy of Forest City Development

STAPLETON DEVELOPMENT CORPORATION, MASTER PLAN, 1996



Open space master development plan

Expanding the impact of green stormwater infrastructure

“Place First!” sets into motion Andropogon’s processes for revealing the underlying stories that motivate and inform design thinking and the testing of innovative strategies required to solve non-traditional project situations and lead to the making of beautiful resilient landscapes...

...Their passion and commitment to sustainable and resilient landscape design energizes our students, faculties, and yes, fellow practitioners to solve the “ordinary” and the most pressing design challenges of our times and beyond.

Andropogon’s 40-year legacy of accountable game changing evidence-based practices continues to validate, inspire, and lead the profession of landscape architecture.

Gene Bressler, FALSA, Professor and Department Head of Landscape Architecture, North Carolina State University



CROSBY ARBORETUM, 1999



Before



During Construction / Prescribed Fire

Expanding the impact of landmark public landscapes

“It is ecological design at its best, a model for other practitioners to emulate.”

Landscape Architecture Magazine, November 1991, on Crosby Arboretum

OPERATIONAL LANDSCAPE PLAN

FRESH KILLS LANDFILL City of New York Department of Sanitation Staten Island, New York

Prepared for
SCS Engineers
2 Crossfield Avenue, Suite 422
West Nyack NY 10994

Prepared by
Andropogon Associates, Ltd.

June 1990



Architects, Landscape Architects & Planners (215) 487-0700 Fax: (215) 483-7520

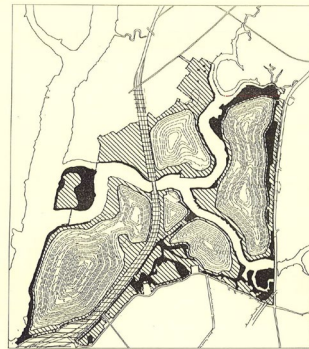
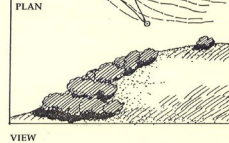
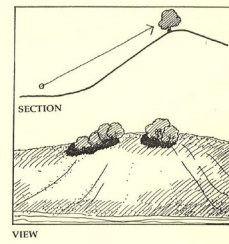


EXHIBIT 1. PRINCIPAL LAND TYPES - FRESH KILLS LANDFILL
August 1989, 1:50,000
The major land types including the Landfill areas, wetlands, and the remaining surrounding land within the E.O. 1191 property line additional maps for further details of the Landfill and surrounding land.

Operational Landscape Plan

4

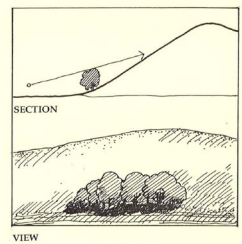
a. SUMMIT
Planting on ridge breaks up outline and provides scale comparison, which reduces the apparent size of the Landfill mound.



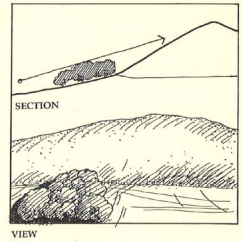
Operational Landscape Plan

9

a. BASE OF MOUND
Planting at the base of the mound reduces the apparent height of the mound and provides scale.

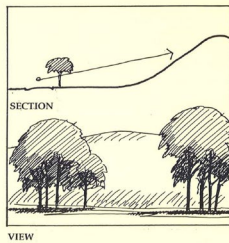
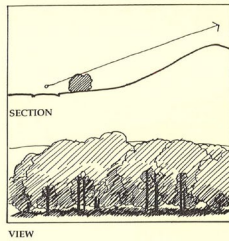


b. ADJACENT LAND
Planting close to the Landfill mound toe on adjacent land provides similar advantages to base planting and also helps disguise the artificial mound shape, blending it into the general landscape.



Operational Landscape Plan

10

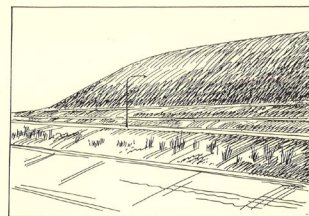


a. BUFFERS
Continuous planting close to a viewpoint, such as a road, can almost completely screen a mound for a minimal investment.

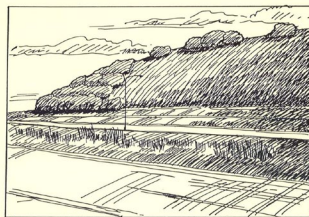
b. FRAMED VIEWS
For a more visually interesting and natural effect, roadside plantings can be intermittent, giving framed glimpses of the mounds, breaking up the massive scale of the Landfill.

Operational Landscape Plan

11



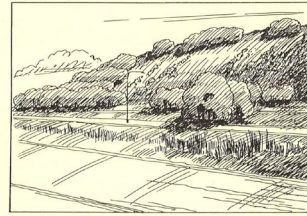
a. Typical Landfill mound along Route 440.



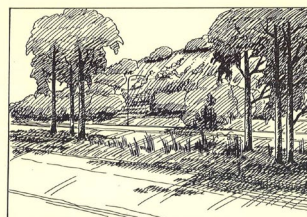
b. Landfill mound with planting on sloping ridge and summit camouflages the geometry of the Landfill's slope in the distance.

Operational Landscape Plan

12



a. Landfill plantings at the toe and on the enhanced high-visibility slopes upgrade the middleground views.



b. Additional plantings along the Route 440 right-of-way creates a foreground and completes the visual transformation of the Landfill's appearance.

Operational Landscape Plan

13

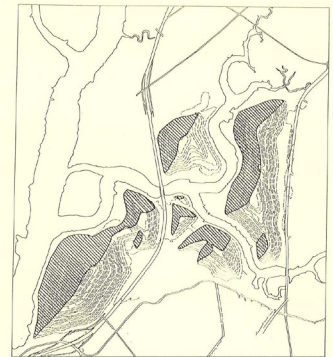


EXHIBIT 7. SHADED RELIEF: MID MORNING - FRESH KILLS LANDFILL
August 1989, 1:50,000
The shaded relief map emphasizes the basic form of the Landfill mounds and their essential artificiality, as does the view along Route 440 from the base with no vegetation in the foreground.

Operational Landscape Plan

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FRESH KILLS LANDFILL OPERATIONAL LANDSCAPE PLAN, 1990



Expanding the impact of landfill reclamation

"... there are also images of hope: the Fresh Kills landfill on Staten Island, the world's largest, 40 years from now - as verdant field covered with trees, ferns and blueberries."

New York Times, June 14, 1990
on exhibit *Garbage Out Front: A New Era of Public Design*



SUNY ESF, GATEWAY CENTER, 2013



Expanding the impact of native plant communities

“Andropogon was a valuable team member for our institution on two projects. In both instances they worked closely with us to integrate institutional sustainability goals, including robust stormwater management and novel ecosystems. Our mutual interest in research advancing the profession was most notably manifest in the highly successful Gateway Center green roof, utilizing several rare and previously untested native species. Their work has helped transform our campus landscape to better reflect our mission and values.”

Timothy Toland, Associate Professor, SUNY - EFS



AVALON PARK AND PRESERVE, 2001 TO PRESENT



Expanding the impact of **public - private partnerships**

“Time and time again, visitors to Avalon tell the staff what an incredible gift the park has been to the community. ... we wanted to create a beautiful place where people from the local community could stroll, contemplate and enjoy their natural world in a serene and tranquil atmosphere. Avalon has far exceeded all of these goals. The natural beauty of the park is a source of inspiration, peace, laughter and healing for all those that visit. It is a place where all visitors, young and old, are free to create and contemplate their own journeys.”

Client Statement



SIDWELL FRIENDS SCHOOL, 2001 TO PRESENT



Expanding the impact of learning landscapes

“Let this be a testament to who we are and what we believe. If the next generation is going to be the planet’s last line of defense, the least we can do is prepare them in an environment that values the environment.”

Bruce Stewart,
Headmaster of Sidwell Friends Middle School



PHIPPS CONSERVATORY, CENTER FOR SUSTAINABLE LANDSCAPES, 2012



Expanding the impact of sustainable rating systems

“The project reclaimed a brownfield site and created an ecological regeneration of a blighted site, all on one of the most difficult sites on the whole campus. The building connects the inside and outside, demonstrating how to live in harmony with nature.”

AIA COTE Top Ten Projects, Jury Comments, 2016



PENN RELAYS
Image courtesy of B. Doherty

UNIVERSITY OF PENNSYLVANIA, SHOEMAKER GREEN, 2012



Expanding the impact of landscape performance research

“Andropogon’s ecological sophistication and holistic approach is evident in the final form of the work: a profoundly beautiful and fitting campus space. Shoemaker Green has transformed an underused and under appreciated corner of the campus into a harmonious merger of people and place, of history and emergence, and of function with ecological restoration.”

David Hollenberg, AIA, University Architect,
University of Pennsylvania



DREXEL UNIVERSITY, PERELMAN PLAZA AND KORMAN QUADRANGLE, 2017



Expanding the impact of campus as public space

“By immersing students in the life of the city flowing through campus, the plan deepens experiential education and engagement in society’s great problems. It breaks new ground in conceiving the campus as an urban district, enriched through its overlaps with its city,”

Robert Francis,
Vice President of Drexel University



What does this document recommend?

Front-end investment in high-quality facility planning, design, and construction, to achieve long-lasting facilities with reduced, long-term operational and replacement expenditures, improved worker productivity, and lower risk for liability and insurance claims.

Adopt an inclusive project development process (in which owner, designer, contractor, site manager, and commissioning agent work collaboratively) beginning during the planning / pre-design phase, to establish owner's triple bottom line benefits, craft performance goals, enhance team integration, and ensure buy-in.

Leverage ecosystem services by designing and managing site systems that further performance goals (e.g. habitat biodiversity and resilience), while recognizing that the performance of one system may affect the measurable performance of another.

Launch a 3-year pilot program, inclusive of diverse facility types and geographies, to test and fine-tune GSA's site commissioning process.

Split site maintenance into two phases: "early-stage management" to accommodate intensive care during plant establishment (years 0-2 after construction), followed by less intensive "long-term management." Finance the former with the facility's capital budget and the latter with the operational budget.

Anticipate performance trajectories to factor predictable changes in dynamic, living systems over time, particularly when integrated building / site systems drive a facility's operational performance.

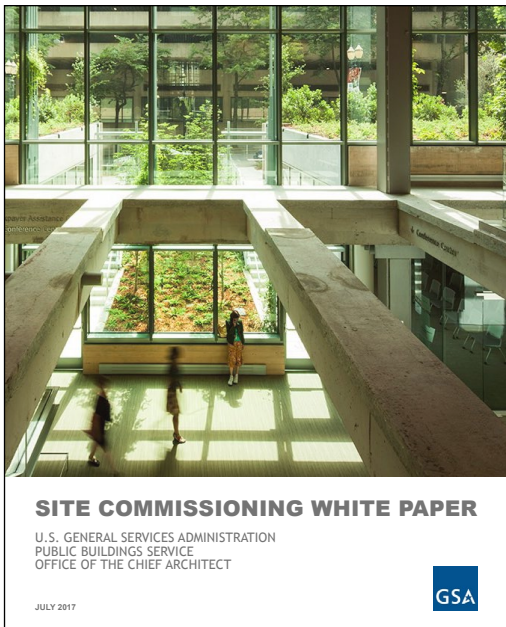
Create an agency-wide information feedback loop that manages risk by improving GSA's land development and management processes, given the agency's build-to-own model.

Confirm true costs and benefits associated with site commissioning's added development and operations costs, and the agency's tangible and intangible benefits at the facility and regional scale.

Embrace a long-term outlook that accommodates fiscal fluctuation; climatic variability; programmatic flexibility, assessment, and adaption; and the time associated with creating an industry.

Image credit: D. Nystedt photographer, Andropogon Associates

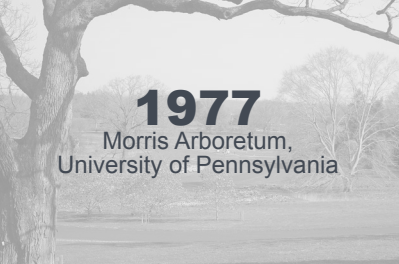
U.S. GENERAL SERVICES ADMINISTRATION, SITE COMMISSIONING WHITE PAPER, 2017



Expanding the impact of policy

“[Andropogon’s] team conducted themselves to the highest standards from both an administrative and research perspective, producing an outstanding, world-class research report by any professional standard... [The White Paper] very thoughtfully aggregated and contextualized many disparate GSA policies and procedures and utilized those resources to justify all recommendations for pursuit of this policy vehicle.”

Christian Gabriel, PLA, ASLA,
National Design Director-Landscape Architecture
U.S. General Services Administration



1977
Morris Arboretum,
University of Pennsylvania



1982
Manitoga



1982
Loantaka Brook Restoration



1991
Crosby Arboretum



1996
Stapleton Development
Corporation



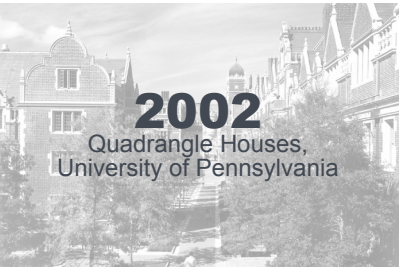
1998
Nikko Kirifuri Resort



2001
Avalon Park and Preserve



2002
Washington National Cathedral



2002
Quadrangle Houses,
University of Pennsylvania



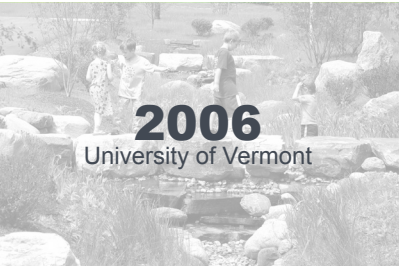
2003
Lewes Canal and Waterfront Park



2004
University of Toronto



2005
Sidwell Friends School



2006
University of Vermont



2007
Lubert Plaza,
Thomas Jefferson University



2010
Kroc Community Center



2012
Center for Sustainable
Landscapes



2012
Shoemaker Green,
University of Pennsylvania



2013
Gateway Center, SUNY ESF



2015
U.S. Coast Guard Headquarters,
General Services Administration



2016
Perelman Plaza,
Drexel University



2016
University City Science Center



2017
Cohon Fitness Center,
Carnegie Mellon University



2017
Bartram's Mile



2018
Washington University Medical
Center

endropogon

stay tuned



2018
40th Street Trolley
Portal Gardens



2019
University of Mississippi
STEM Building



2019
Georgia Tech
Living Building Challenge



2020
Avalon Park and Preserve
Shore Farm