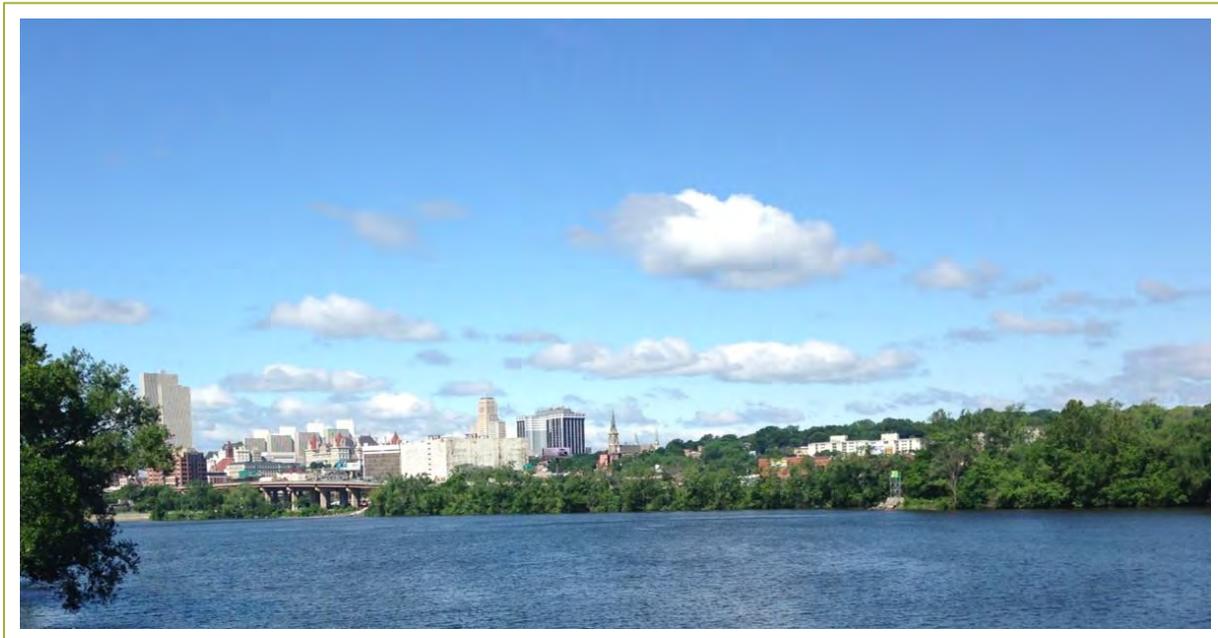


Capital District Regional Planning Commission
ALBANY POOL COMMUNITIES LTCP
STORMWATER IN-LIEU FEES AND CREDIT BANKING FEASIBILITY
RFP# 2015-002



PROPOSAL | NOVEMBER 2015

SUBMITTED BY



112 Spring Street, Suite 305
Saratoga Springs, NY 12866

151 South Main Street, Suite 200
New City, NY 10956

www.behanplanning.com

IN ASSOCIATION WITH:



November 20, 2015

Martin Daley, Project Director
Capital District Regional Planning Commission
One Park Place, Suite 102
Albany, New York 12205



**RE: Albany Pool Communities Green Infrastructure
Stormwater In-Lieu Fees and Stormwater Retention Credit Banking
Combined Sewer Overflow Long Term Control Plan – RFP #2015-002**

Dear Mr. Daley,

On behalf of the Behan Planning and Design team, I am pleased to submit our proposal for this important green infrastructure planning project. Our team members have been working on leading-edge green infrastructure projects from local and regional plans across New York State to elements of long-term control plans in New York City, Philadelphia, and other model programs. Our team is experienced in the planning, analysis, implementation and legal considerations of this effort, and look forward to assisting CDRPC and your client communities on this initiative.

Behan Planning and Design will lead the consulting team, bringing our extensive experience in multi-community environmental planning projects. We are a national award-winning planning and landscape architecture design firm and a state-certified WBE and DBE with offices located in Saratoga Springs and New City, New York that has extensive green infrastructure planning, design, and municipal code experience. We are very familiar with leading-edge programs such as Washington, D.C.'s stormwater regulations and how those drive creative aspects such as in-lieu fee structure and off-site banking and credit systems.

Joining our team will be **eDesign Dynamics** (EDD), an environmental engineering firm specializing in low impact development, water resources and ecosystem restoration. EDD distinguishes themselves by emphasizing sustainable solutions in solving conventional engineering problems. At the larger scale, they work with municipalities and not-for-profits to plan, design, and implement green infrastructure solutions in a myriad of settings, from city-wide sewershed planning to housing projects. EDD also works with architects and developers at the building scale to manage, harvest, and recycle stormwater and wastewater.

Also joining our team is **Bond, Schoeneck and King**, led by attorney Robert Feller. Mr. Feller has expertise in stormwater and wastewater management rules and regulations, zoning and municipal law, and infrastructure finance. He will be supporting the project with legal research on municipal regulatory authority, consideration of incentive options and creative financing alternatives.

We look forward to discussing our proposal with you at your convenience. Please feel free to call me or John Behan at (518) 583-4335 any time to discuss our proposal in greater detail.

Truly yours,

A handwritten signature in cursive script that reads "Cynthia Behan".

Cynthia A. Behan, RLA, Principal

TABLE OF CONTENTS

<i>Cover Letter</i>	<i>i</i>
Part I: Proposal Form.....	3
Part II: Qualifications/Experience.....	5
Part III: References.....	47
Part IV: Plan Implementation.....	50
Part V: Cost Proposal.....	56
Part VI: MWBE Policy Forms.....	57

PART I: PROPOSAL FORM

PROPOSAL FORM COVER SHEET

PROPSOAL IDENTIFICATION:

Title: **ALBANY POOL COMMUNITIES GREEN INFRASTRUCTURE STORMWATER IN-LIEU FEES AND STORMWATER RETENTION CREDIT BANKING FEASIBILITY STUDY COMBINED SEWER OVERFLOW LONG TERM CONTROL PLAN**

RFP Number: **2015-002**

Communication concerning this Proposal shall be addressed to:

Cynthia Behan

Behan Associates Landscape Architecture, DPC (dba Behan Planning and Design)

112 Spring Street, Suite 305

Saratoga Springs, NY 12866

Phone: 518-583-4335

Email: cbehan@behanplanning.com

PROPOSAL SUBMITTED TO:

Martin Daley
Project Director
Capital District Regional Planning Commission
One Park Place, Suite 102
Albany, NY 12205

1. The undersigned applicant proposes and agrees, if this Proposal is accepted, to enter into a contract with the Albany Water Board to complete all work as specified or indicated in the contract documents for the contract price and within the contract time indicated in this Proposal and in accordance with the contract documents.
2. Applicant accepts all of the terms and conditions of the Instructions to applicants. This Proposals may remain open for ninety (90) days after the day of Proposal opening. Applicant will sign the contract and submit any other documents required by the contract documents within fifteen (15) days after receipt of the contract.
3. The following documents are attached to and made a condition of this Proposals:
 - a) Cost Proposal
 - b) Acknowledgement by Applicant
 - c) MWBE Requirements

Applicant Name: John Behan, Secretary, Behan Associates Landscape Architecture DPC

Date: Nov 19, 2015

Applicant Signature: _____



ACKNOWLEDGMENT BY SUBMITTER

If Individual or Individuals:

STATE OF _____)
COUNTY OF _____) SS.:

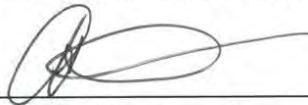
On this _____ day of _____, 2015, before me personally appeared _____ to me known and known to me to be the same person(s) described in and who executed the within instrument, and he (or they severally) acknowledged to me that he (or they) executed the same.

Notary Public, State of _____
Qualified in _____
Commission Expires _____

If Corporation:

STATE OF New York)
COUNTY OF Saratoga) SS.:

On this _____ day of _____, 2015, before me personally appeared John Behan to me known, who, being by me sworn, did say that he resides at (give address) 70 White Street, Saratoga; that he is the (give title) Secretary of the (name of corporation) Behan Planning and Design, the corporation described in and which executed the above instrument; that he knows the seal of the corporation, and that the seal affixed to the instrument is such corporate seal; that it was so affixed by order of the board of directors of the corporation, and that he signed his name thereto by like order.



ALISA M. DALTON Notary Public, State of _____
Notary Public, State of New York
Qualified in Saratoga and Albany)
Registration # 5073177
My Commission Expires 2/18/19 Commission Expires _____

If Partnership:

STATE OF _____)
COUNTY OF _____) SS.:

On this _____ day of _____, 2012, before me personally came _____, to me known to be the individual who executed the foregoing, and who, being duly sworn, did depose and say that he/she is a partner of the firm of _____ and that he/she has the authority to sign the same, and acknowledged that he/she executed the same as the act and deed of said partnership.

Notary Public, State of _____
Qualified in _____
Commission Expires _____

PART II: QUALIFICATIONS/EXPERIENCE



Proposal for: Albany Pool Communities Green Infrastructure Planning Project
Stormwater In-Lieu Fees & Credit Banking
RFP#2015-002
City of Albany, NY

Firm/Legal Name: Behan Associates Landscape Architecture, DPC
dba Behan Planning and Design

Saratoga Springs Office:
112 Spring Street, Suite 305
Saratoga Springs, NY 12866

New City Office:
151 South Main Street
New City, NY 10956

Contacts: Cynthia Behan, RLA, Principal
John Behan, AICP, Principal-of-Planning and Project Manager

Phone: (518) 583-4335

Fax: (518) 583-6970

Email: jbehan@behanplanning.com

Web: www.behanplanning.com



Downtown Saratoga Springs, NY (left). Our headquarters, located at 112 Spring Street (right).

Behan Planning and Design is a nationally-recognized community planning and landscape architecture design firm with offices in Saratoga Springs and New City, New York. Founded in 1994 by the firm’s principal partners Cynthia A. Behan, RLA and John J. Behan, AICP, the firm’s professionals are dedicated to building strong client partnerships with areas of expertise in Landscape Architecture, Community Planning, and Design.



Our firm enjoys a great track record with over 100 plans being implemented into successful projects. Many of our projects integrate downtown and waterfront revitalization for historic cities, and have ranged from large regional comprehensive plans to the complete re-design of over one mile of streetscape in the hamlet of New City, NY.



Our staff has a strong background in green infrastructure planning and design as well as land-banking programs for green infrastructure and natural resources conservation. We have also worked with each of the communities in the Albany Pool.

Our company is a state designated women-owned business enterprise (**WBE**) and state-certified disadvantage business enterprise (**DBE**), officially registered as a design professional corporation (DPC) Behan Associates, Landscape Architecture, D.P.C. Our firm has experienced a moderate growth over the years with a diverse client base primarily composed of local and regional governments, though we often work with developers, community organizations, not-for-profits, public and private institutions and construction contractors.

Behan Planning and Design will have the staff available to allocate for this project. Staff workload is evaluated each week to ensure that our clients are getting the attention and services needed to complete the work to your satisfaction in the time allotted. Please refer the resume section to view our staffs’ overall capabilities and experience.



Selected Awards and Recognitions (Received by Behan Planning and Design and our clients)



- Upstate New York Chapter of the American Society of Landscape Architects: 2014 Merit Award of Achievement for Built Design, South Main Streetscape, New City, Town of Clarkstown, NY
- Great Places in America: 2014 Neighborhoods – Arbor Hill, Albany, NY from American Planning Association – Arbor Hill Neighborhood Plan
- Upstate New York Chapter of the American Planning Association: 2013 Planning Excellence Award, Town of Dryden – Varna Community Development Plan
- NY Planning Federation: 2012 Pomeroy Award for Innovative Zoning, Pittsford, NY
- Upstate New York Chapter of the American Planning Association: 2009 Planning Excellence Award for Implementation – Skaneateles Lake Watershed Protection Program
- American Planning Association National Award for Planning for the Town of Pittsford’s “Greenprint™ for the Future” initiative.
- Upstate New York Chapter of the American Planning Association Award for the County of Albany Hudson River Waterfront Strategy.
- Governor’s Award for Excellence to the Town of Pittsford for its waterfront planning and revitalization, and other cooperative projects.
- Upstate New York Chapter of the American Planning Association’s “Outstanding Planning Award” for guiding local land use towards “smart growth” in the Town of Milton.
- New York State Association of Realtors Award for Smart Growth Excellence to the Town of Clifton Park for its environmental and growth planning initiative.

QUALIFICATIONS AND EXPERIENCE

Green Infrastructure Experience



Although specific project examples have been included later in this proposal, below is a partial listing of zoning and code writing projects we have conducted for our municipal clients over the years that have included green infrastructure elements.

TOWN OF BEEKMAN, NY – Comprehensive Plan and Generic EIS and Open Space Plan and Open Space Conservation Bond

TOWN OF BIG FLATS, NY – Architectural Design Guidelines & Zoning Updates

CITY OF BURLINGTON, VT - Comprehensive Development Ordinance and Design Guidelines

TOWN OF CHESTER, NH – Zoning Update

TOWN OF CLARKSTOWN, NY - New City Form-Based Zoning Code and Design Guidelines, Streetscape Revitalization including road diet and extensive street tree/landscaping.

TOWN OF CLARKSTOWN, NY – West Nyack Zoning Update and Design Guidelines

TOWN OF CLIFTON PARK, NY – Form-Based Zoning Code

TOWN OF DRYDEN, NY – Zoning Revision and Design Guidelines

TOWN OF EAST GREENBUSH, NY – Comprehensive Land Use Plan, Comprehensive Zoning Amendment, Amenities Plan and Hampton Lake Road/Path Retrofit Design

TOWN OF GUILDERLAND, NY – Comprehensive Plan & Implementation Services, Rural Guilderland Plan, Zoning and Design Guidelines.

TOWN OF HALFMOON, NY - Town Center Master Plan and Greenway Corridor Plan

TOWN OF LERAY, NY - Comprehensive Plan and Design Guidelines

TOWN OF LONDONDERRY, NH - Master Plan Update and Zoning Revision

TOWN OF MILTON, NY - Comprehensive Plan and Generic EIS, Comprehensive Zoning Code Update, Rural Conservation Development Design Guidelines, Town Center Design Guidelines

TOWN OF PITTSFORD, NY – Town Comprehensive Plan Update, Greenprint, Open Space Conservation Incentive Zoning, Monroe Avenue Design Guidelines, Erie Canal Design Guidelines

TOWN OF PITTSFORD, NY – Residential Neighborhood Zoning and Design Guidelines

VILLAGE OF RHINEBECK, NY – Comprehensive Zoning Code Revision

TOWN OF WALLKILL, NY - Comprehensive Plan Update, Zoning Revision, Farmland Protection Plan, Wetland and Watercourse Code and Design Guidelines



Before and after photos of streetscape Improvement project to capture and collect stormwater runoff.

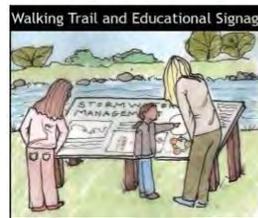
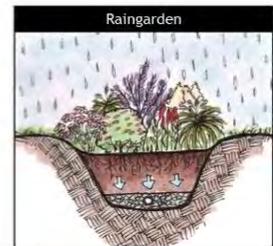
These codes have included green infrastructure elements such as: Reduction of impervious surfaces; Shared/reduced parking; Street trees and landscaping standards; Stream corridor and wetland protection; Vegetation swales and open drainage channels; Open space incentives and management; Land conservation incentives and financing; and street retrofit design concepts.

West Nyack Hamlet Center Flood Protection and Wetland Restoration Green Infrastructure Project

Town of Clarkstown, NY

Behan Planning and Design developed an environmental/wetland habitat restoration and flood protection plan measures at and around the West Nyack Hamlet Green Park for the Town of Clarkstown. Funded in part with a \$1.0 million grant under the Green Innovative Grant Program from New York State Environmental Facilities Corporation, the project will include a sediment basin and a constructed wetland/preserved wetland stormwater management system to reduce flooding and improve water quality; a walking trail with educational signage; a permeable parking lot; invasive species removal; naturalizing channeled streams; Red Maple hardwood swamp preservation/ restoration; and park improvements including a new playground, picnic areas and landscaping.

Our company worked in partnership with our subconsultants, H2M and Land Use Inc.. The constructed wetland plan follows the criteria in the stormwater design manual for a shallow wetland including maximizing the internal flow path and maximizing the microtopography. The project will result in a created and restored shallow wetland complex that will transform a compromised and neglected area into a naturalized wetland complex that will provide significantly enhanced water quality treatment, improve stormwater management, increase biodiversity, and serve as an environmental educational resource for current and future generations.



Central Nyack Stormwater Detention Basin

Town of Clarkstown, New York



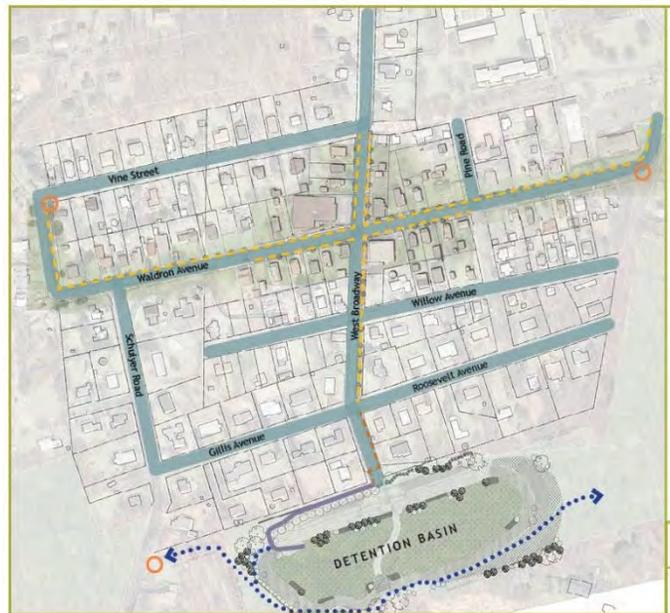
Behan Planning and Design saw this project, which is first and foremost a stormwater control measure, as an opportunity to reintroduce wetland species and a natural ecosystem balance in a newly constructed site. McLaren Engineering was responsible for the site engineering, while Behan Planning and Design was responsible for developing a planting design and coordinating on-site elements such as fencing and a trail that passes through the site.



Native species were utilized throughout the project site to enhance the visual experience both up close along the trail as well as in the distance along the woodland edges and within the basin. As the site matures in the coming years it will fit into its surroundings with a touch of enhanced beauty for trail users to appreciate.



Behan Planning and Design was involved in both plant material selection and installation oversight as well as construction administration during the period of establishment. In collaboration with the recreation department, a trail was maintained on the outskirts of the basin giving users an opportunity to see the basin operate during all seasons. The trail, maintained by a separate group of community members, is a link to Buttermilk Falls and a trail system that encompasses the entire Rockland region.



New Paltz Hasbrouck Park Stream Daylighting

New Paltz, NY



Behan Planning and Design assisted the Village of New Paltz and SUNY New Paltz with obtaining grant funding and the subsequent design of a stream daylighting project at Peace Park. The stream channel, which had formerly been buried and piped beneath the sidewalk for many years, had since deteriorated and collapsed. The Village consulting engineer Brinnier and Larios investigated different repair options, including replacing the existing pipes and sidewalk in place, or constructing a new rip-rap stream channel along the sidewalk, which was viewed as a potential safety hazard to college students and pedestrians.

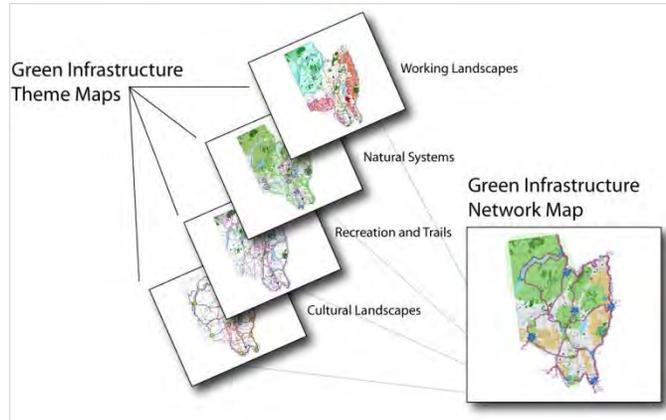
Behan Planning and Design working with the engineer convinced the Village to instead pursue a more sensitive stream daylighting option which would incorporate the stream as a natural design feature within Peace Park. The design included a small waterfall cascading down over locally-sourced stones, with small pools and a footbridge. Construction was completed in 2013.



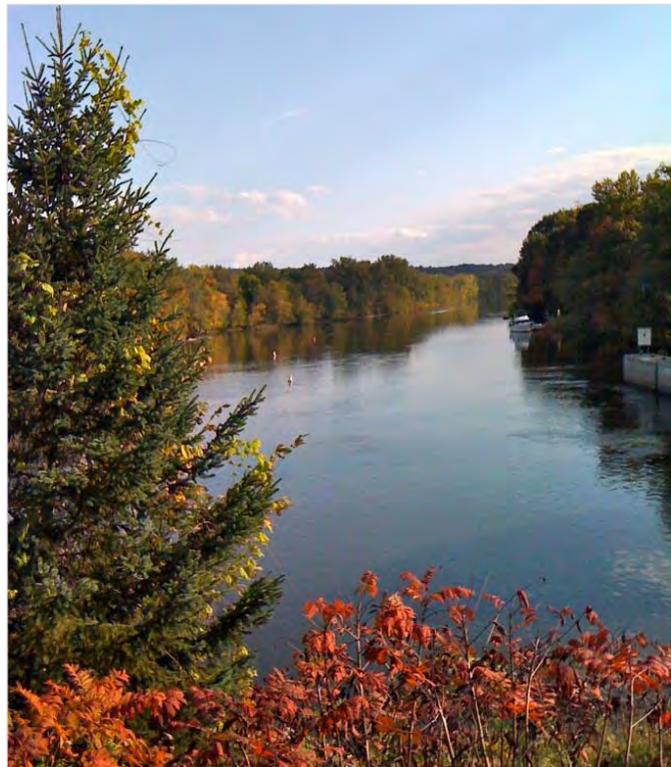
Green Infrastructure Plan for Saratoga County Saratoga County, New York



Behan Planning and Design, in partnership with American Farmland Trust and Dodson Associates, assisted Saratoga County in developing the first county-wide comprehensive green infrastructure plan in the state. This regional plan identifies the county's most important resources and details a strategy for their conservation. The plan was created with extensive input from county residents and officials and was adopted by the board of supervisors in November 2006.



Green infrastructure is an important component of the regional economy. The plan's vision for Saratoga County's green infrastructure includes a connected system of ecologically-important areas and a balance of economic development centers. It includes large blocks of working farmlands such as the one that extends along the Hudson River from Moreau to Stillwater. It also includes concentrated areas of historic and cultural resources, such as the Saratoga National Historic Park and the Village of Ballston Spa. The plan calls for a system of trails, parks and greenways that are linked together by green infrastructure gateways.



The plan has been an important catalyst for local communities, many of which have already taken steps to implement regional concepts such as trails and farmland protection at the local level.



North Elba Athletic Field and Site Improvements Town of North Elba, NY



Behan Planning was contracted to do design work and prepare bid documents for a new athletic field and related site improvements in the Town of North Elba. The proposed design includes a new field that will serve as both a vendor area during larger tournaments and a youth lacrosse and soccer field during the majority of the season. Proposed improvements include grading and drainage solutions, such as drywells, that will better allow stormwater to infiltrate into the ground.

In addition, future phases include a revised gravel parking lot layout and grass parking areas will enable the site to achieve better parking efficiency during high-capacity events, and a new fence will improve security by controlling access points. Landscape plantings will help to enhance entryways and raingardens areas, shade a large parking lot, and screen views of the nearby landfill. Behan Planning and Design's expertise in site planning enables the town to achieve their design goals of expanding their athletic facility while also improving security, increasing parking capacity, and generally enhancing the user experience. The first phase of the project is planned for completion in 2015.



Hudson River Waterfront Strategy

County of Albany, New York

Gold Award: American Planning Association, New York Upstate Chapter, 2000 Outstanding Planning Project Award for Comprehensive Planning

The Hudson River Waterfront Strategy is a cooperative intermunicipal vision for Albany County's waterfront designed to further public and private investments. The strategy documents the county's waterfront resources, and identifies a vision for enhanced use of the waterfront through a public participation process. The strategy is currently being implemented through an intermunicipal committee. Behan Planning and Design prepared the intermunicipal cooperative planning agreement that was adopted unanimously by the cities of Albany, Watervliet, and Cohoes, The Villages of Menands and Green Island, and the Towns of Colonie and Green Island.

The strategy provides goals and objectives, guiding principles, recommendations and an implementation component to guide the work of the waterfront advisory committee in realizing the vision. It recognizes that by reconnecting to the river, each waterfront community's history is celebrated and enjoyment of the river is enhanced. Key accomplishments include:

- Improvements and expansion of the riverfront bike-hike path
- Creation and enhancements to riverfront parks and public access to the Hudson and Mohawk rivers
- Waterfront economic development projects including boat building, power generation, restaurants and residential
- Waterfront and land conservation and habitat protection



King's Bend Park Master Plan

Town of Pittsford, New York

This facility is the newest park in the Town of Pittsford. The park, designed as an enhancement of a regional storm water management facility features two enclosed pavilions. Open lawns, shaded areas, picnic facilities, walkways, playground facilities and park benches are all located alongside the north and south ponds. Cynthia Behan, landscape architect, in partnership with Behan Planning and Design created a master plan for this park, working closely with town staff and the town consulting engineer, Erdman Anthony. The park was constructed by town crews along with professional building contractors.



Regional Stormwater Management Facility: Pond serves double duty as a popular community park.



Stormwater management and recreation benefits a wide spectrum of the public.

QUALIFICATIONS/EXPERIENCE



eDesign Dynamics

Brooklyn Waterfront Greenway Green Infrastructure Design Guidelines Brooklyn, NY

Project Summary:

eDesign Dynamics (EDD) served as the engineering and green infrastructure consultant for the development of design guidelines for the 14-mile Brooklyn Greenway. These guidelines provided alternatives for the Greenway to serve as the backbone for a stormwater network that diverts stormwater from the combined sewer system. In addition to stormwater management, the design guidelines and strategies focused on providing a coherent expression for Greenway development while addressing a range of issues including: climate change, rising sea levels, water quality, and coastal habitat enhancements. Finally, case studies were prepared for Red Hook and Sunset Park that consisted of bioswales, rain gardens, vegetated conveyance swales, wetlands, and storm surge barriers.

Services:

Feasibility Study
Stormwater Management
Green Infrastructure

Client/Project Partners:

WE Design
Brooklyn Greenway Initiative
NYS Environmental Protection Fund

Reference:

Tricia Martin (WE Design)
347-236-0142

Status:

Completed

Subcontract Value:

\$34,900



Stormwater management Tiers on West St. in Greenpoint
(Figure Credit: WE Design)



eDesign Dynamics

City of Newburgh Green Infrastructure Feasibility Report Newburgh, NY

Project Summary:

eDesign Dynamics (EDD), in partnership with Hudson River Sloop Clearwater (Clearwater) and the Quassaick Creek Watershed Alliance (QCWA), performed a Green Infrastructure (GI) feasibility study under funding and guidance from the New England Interstate Water Pollution Control Commission (NEIWPCC) and the New York State Department of Environmental Conservation (NYSDEC) Hudson River Estuary Program (HREP). The purpose of the grant and the study was to provide educational outreach to community and municipal stakeholders regarding the feasibility and benefits of GI and generate fundable conceptual designs for specific GI interventions. EDD, Clearwater, and QCWA worked with the City of Newburgh to address local water quality concerns, the federal Clean Water Act, Combined Sewer Overflows (CSOs), natural hydrologic systems, and to assess community benefits from potential GI interventions. These interventions were developed to complement the City's draft Long Term Control Plan (LTCP), regular and on-going road reconstruction work, and future land use planning.

Services:

- Feasibility Study
- Stormwater Planning
- Green Infrastructure Design & Cost Estimating
- Site Assessment
- GIS Analysis

Client Reference:

Michael Jennings
New England Interstate Water Pollution Control Commission (NEIWPCC)
T: 978.349.2508

Project Partners:

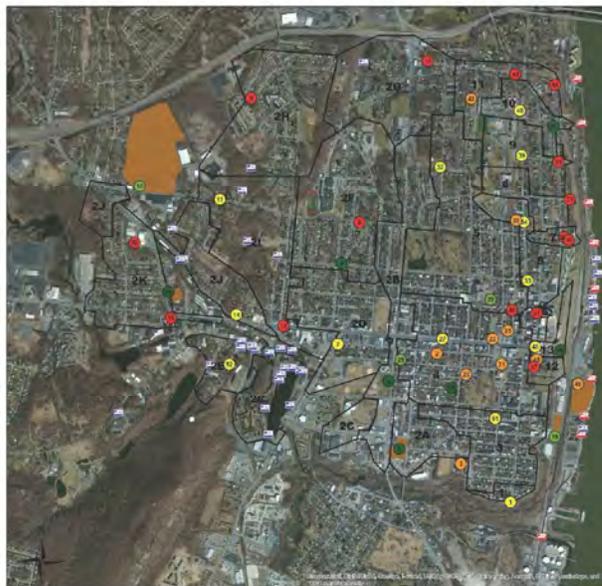
Hudson River Sloop Clearwater
Quassaick Creek Watershed Alliance

Status:

Completed

Total Value:

\$47,298



- | | | | |
|---------------|--|----------------|----------------------------|
| Legend | Proposed GI | Outfall | Regulator Districts |
| | GI on Government Property | CSO/SEED | Regulator District |
| | GI on Private Property | STORM | Stormfield |
| | Open Spaces / Parks Adjacent to Impervious Areas | | |
| | Right-of-Way GI | | |
| | Strategic Separation | | |

Potential Locations for GI practices throughout Newburgh



Conceptual Plan for Terraced Bioretention System



eDesign Dynamics

Stormwater Best Management Practices New York City's Sustainable Stormwater Management Plan

Project Summary:

eDesign Dynamics (EDD) worked with the New York City Economic Development Corporation and HDR, Inc. to develop a database of best management practices (BMPs) for New York City's sustainable stormwater plan. EDD conducted a literature review of "fast track" BMPs as identified by the Mayor's Office of Long Term Planning and Sustainability. Literature reviews included peer reviewed published sources found using Web of Science and other high level academic/engineering search engines. The seven BMPs targeted included vegetated streets, tree pits, continuous trenches, permeable pavement, blue roofs, green roofs and rainwater harvesting.

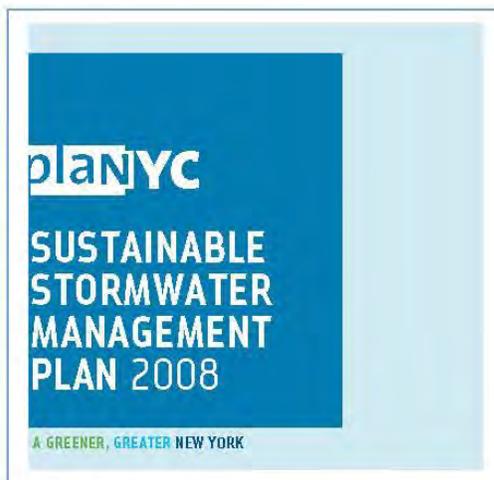
EDD focused its research on three key attributes: applicability; stormwater performance; and non-stormwater management and benefits. Performance data from existing BMP installations and publications were interpreted specifically for adaptation to the types of street geometry, climate, and density of infrastructure prevalent in New York City. EDD's findings were used to assist in developing the 2008 PLANYC Sustainable Stormwater Management Plan.

Services:

Stormwater/ wastewater management planning
Sustainable master planning
Feasibility studies
Design guidelines

Client:

NYC Mayor's Office of Long Term Planning and Sustainability
New York City Economic Development Corporation
HDR, Inc



*New York City's Stormwater Management Plan
Illustration credits: The City of New York*



Combined Sewers in the Five Boroughs of New York City

338 west 39th street, 10th flr. new york, ny 10018 office: +1.646.688.3113 fax: +1.646.688.3664 www.edesigndynamics.com



eDesign Dynamics

Stormwater Regulatory Consultant Services Philadelphia, PA

Project Summary:

eDesign Dynamics (EDD) is part of a team of consultants, led by AKRF, that is assisting the Philadelphia Water Department (PWD) in expanding their existing stormwater management regulations. EDD's role in the team is to integrate results of technical analyses, peer city research, and past experience to assist PWD in improving existing processes and developing potential frameworks for incentive-based programs. As part of the team, EDD will also be providing feasibility analysis of incentive-based programs and assist PWD in developing eligibility criteria for such programs. Collectively, the team's proposed regulations are being designed to meet the regulatory responsibilities mandated by the Pennsylvania Department of Environmental Protection and will be incorporated into the revised PWD Stormwater Management Guidance Manual.

Services:

Feasibility Analysis
Design Guidelines
Stormwater Management Incentive Strategies
Cost/Benefit Analysis

Client:

Philadelphia Water Department (PWD)

Project Partners:

AKRF, EKO Asset Management Partners, Hazen and Sawyer, Herrera, Meliora Design

Reference:

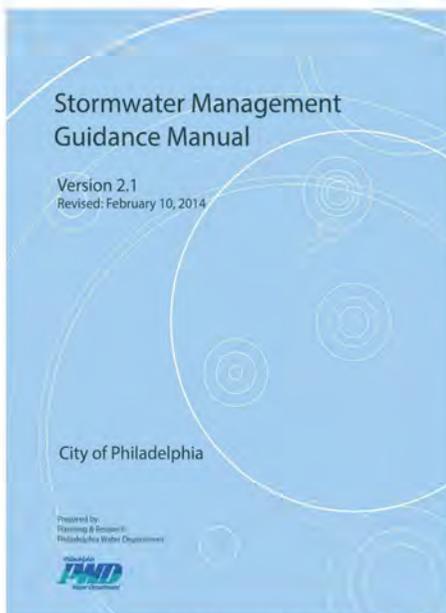
Rodman Ritchie (AKRF)
856.797.9930

Status:

Ongoing

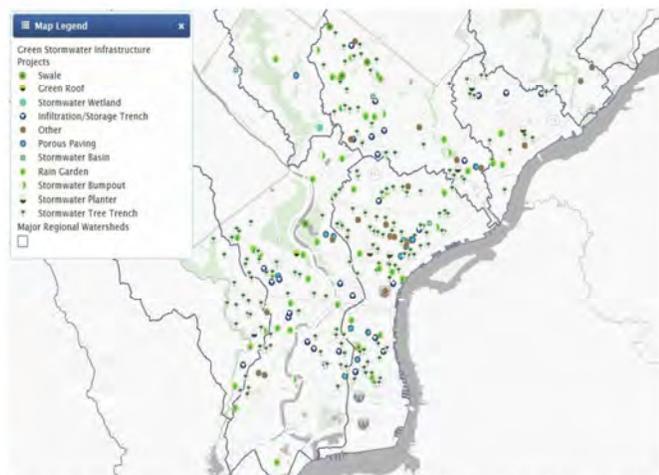
Subcontract Value:

\$24,930



As part of a team, EDD is assisting PWD in updating its Stormwater Management Regulations

Illustration Credits: Philadelphia Water Department



Map of Green Stormwater Infrastructure Projects in Philadelphia, as of Fall 2014

338 west 39th street, 10th fl. new york, ny 10018 office: +1.646.688.3113 fax: +1.646.688.3664 www.edesigndynamics.com



eDesign Dynamics

**6th Street Green Corridor
Gowanus Canal, Brooklyn**

Project Summary:

eDesign Dynamics (EDD) served as the water resources engineer and design consultant to the Gowanus Canal Conservancy (GCC) for the creation of several connected strings of curbside stormwater bioswales adjacent to the Gowanus Canal. The project’s core purpose was to reduce stormwater flows to the combined sewer system through infiltration and evapotranspiration, reducing combined sewer overflow (CSO). The project created a green corridor of bioswales within the public right-of-way, connecting the residential neighborhoods of recently re-zoned 4th Avenue and areas further to the east, and the banks of the Gowanus Canal. A large portion of runoff from the impervious street and sidewalk surfaces is diverted and retained within the depressed curbside bioswales. The bioswales will reduce CSO volumes and floatable debris, promote the filtration of stormwater through soil media, increase the retention and detention capacity of the Gowanus Canal watershed, and directly remove pollutants. EDD will also be working with Drexel University on post construction monitoring.

Services:

Combined Sewer Overflow (CSO) Abatement
Stormwater Management and Treatment
Hydrologic and Hydraulic Modeling
Site Assessment and Design

Client Reference:

John McLaughlin
Director, Office of Ecological Services
NYC Dept. of Environmental Protection
T: 718.595.4458

Project Partners:

Gowanus Canal
Conservancy, Drexel
University

Status:

Completed

Total Value:

\$874,000



Bioswales with subsurface connections



Project Location



Water entering bioswale through curb cut opening

402 west 40th street, new york, ny 10018 office: +1.646.688.3113 fax: +1.646.688.3664 www.edesigndynamics.com



eDesign Dynamics

**Green Infrastructure Design
Astor Place/Cooper Square, NYC**

Project Summary:

EDD served as the stormwater management consultant to WXY architecture + urban design and the NYC Economic Development Corporation (NYCEDC) for the design of green infrastructure (GI) in the Astor Place/Cooper Square area (APCS) in downtown Manhattan. While many cities have started to combine GI with conventional systems, GI at APCS combines the stormwater challenges of ultra-urban conditions with the programming of competing interests.

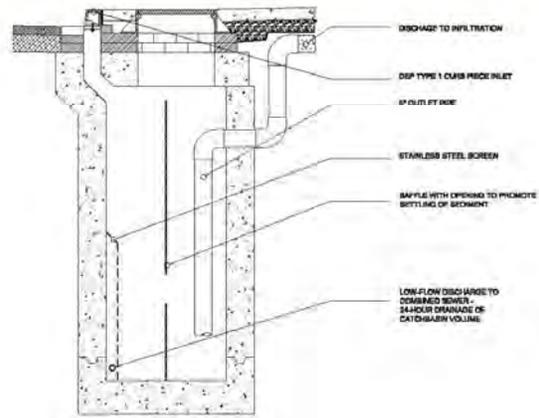
Stormwater passes through a series of planting beds and tree pits prior to reaching hydrologically connected gravel storage areas installed below the sidewalk. EDD sized the storage beds on a catchment by catchment basis to be of sufficient volume to store one inch of rainfall reaching the street and sidewalk, and with sufficient surface area to infiltrate the one-inch storm in 48 hours.

Services:

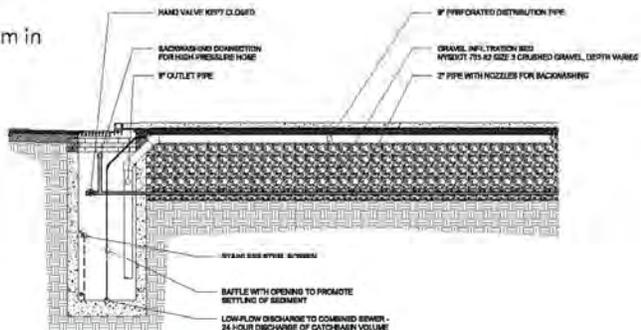
Stormwater Management and Treatment
Green Infrastructure Design
Hydrologic Analysis and Modeling

Client / Partner:

W X Y architecture + urban design
Quennell Rothschild & Partners, LLP



False Catchbasin Detail



Gravel Infiltration Bed Detail



Birds Eye View of Astor Place/Cooper Square

402 west 40th street, new york, ny 10018 office: +1.646.688.3113 fax: +1.646.688.3664 www.edesigndynamics.com



eDesign Dynamics

Preliminary Green Infrastructure Assessment using LIDRA Bethlehem, PA

Project Summary:

eDesign Dynamics (EDD) worked with T&M Associates (T&M) and Wilkes University to examine the benefits and costs of Green Infrastructure (GI) in Bethlehem, PA. EDD performed a GIS analysis of Bethlehem, PA and broke down land parcels into four types and streets into three types, which were then incorporated into the Low Impact Development Rapid Assessment (LIDRA) tool. The LIDRA tool was presented to a group of engineering students from Wilkes University at a highly engaging workshop, during which students first performed a field visit of different parcel and street types and then inputted various GI interventions for each parcel and street type into the LIDRA tool. Following the workshop, EDD produced a report on the Preliminary Assessment of the Benefits of Green Infrastructure in the City of Bethlehem, based on various LIDRA outputs.

Services:

- Feasibility Study
- Stormwater Planning
- Green Infrastructure Design
- Cost Estimating
- Site Assessment

Client/Project Partners:

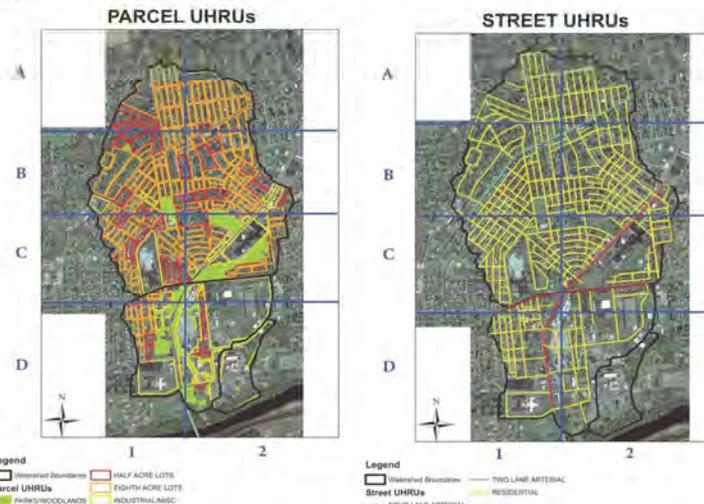
- T&M Associates
- Wilkes University

Status:

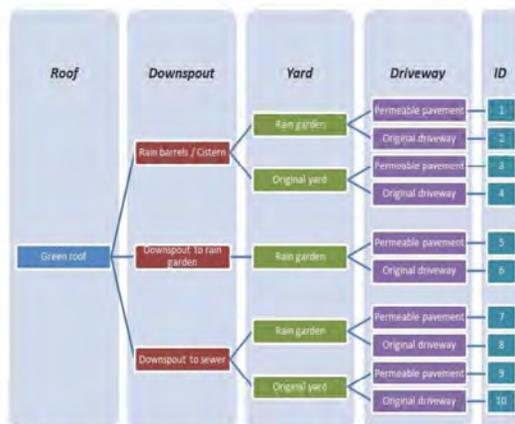
Completed

Total Value:

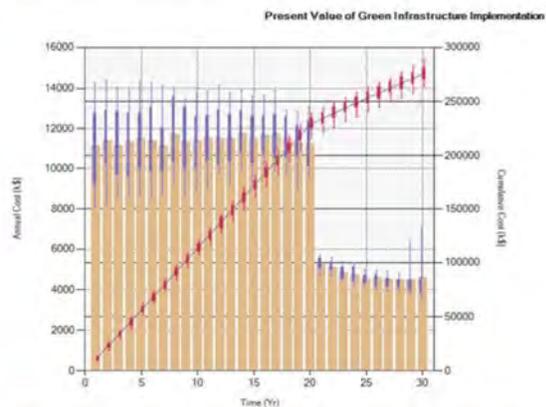
\$7,500



Designation of Parcel and Street Types, also referred to as Urban Hydrologic Response Units ("UHRUs")



Ten Possible GI Configurations for Parcel UHRUs



Implementation costs over a thirty year period for industrial parcel UHRUs, based on GI Configuration #8 and a 5% Annual Adoption Rate

402 west 40th street, new york, ny 10018 office: +1.646.688.3113 fax: +1.646.688.3664 www.edesigndynamics.com



eDesign Dynamics

Coney Island Creek Tidal Barrier and Wetlands Feasibility Study Brooklyn, NY

Project Summary:

eDesign Dynamics (EDD) serves as a subconsultant to ARCADIS on the Coney Island Creek Tidal Barrier Feasibility Study project for the New York City Economic Development Corporation (NYCEDC). This project seeks to evaluate integrated hydrological management strategies to prevent and mitigate upland flooding around the Creek while improving waterfront open space, strengthening connections between neighborhoods, and supporting local economic development. EDD's role has included collecting and reviewing relevant drainage information, including locations and functioning of all stormwater outfalls and CSO points. EDD will also be involved in identifying infrastructure required to support open space improvements and adjacent development, such as stormwater, sanitary sewers, and domestic water infrastructure.

Services:

Hydrologic Plan Review
Stormwater Planning
GIS Analysis
Habitat Assessment

Status:

Ongoing

Subcontract Value:

\$40,000

Client/Project Partners:

New York City Economic Development Corporation (NYCEDC)
ARCADIS
HDR
AKRF
Mathews Nielsen Landscape Architects
Local Office Landscape Architecture
HR&A Advisors
Starr Whitehouse Landscape Architects and Planners
Beyer Blinder Belle Architects & Planners
Ocean and Coastal Consultants



Image Credit: NYCEDC

402 west 40th street, new york, ny 10018 office: +1.646.688.3113 fax: +1.646.688.3664 www.edesigndynamics.com



**Low Impact Development Study for Long-term CSO Control Plan
Gowanus Canal Watershed, Brooklyn, NY**

Project Summary:

eDesign Dynamics (EDD) conducted a study to assess the potential of incorporating low impact development (LID) systems as a means of minimizing combined sewer overflows (CSOs) in New York City. Building from preliminary work in the Gowanus Canal Watershed, EDD examined the cost-effectiveness of LID systems such as green roofs, porous pavement, and rainwater harvesting and reuse systems.

An analytical method developed by EDD utilizes data on rainfall and CSO discharges to estimate the reductions achievable through phased introduction of LID into the sewershed. The study validated previous work with field infiltration testing, structural analysis of ten buildings to support green roofs, a public willingness to pay survey, and an assessment of actual LID installation costs at sites in the watershed. Stormwater Management Modeling was used to investigate various LID implementation scenarios in the pilot Brooklyn sewershed.

Services:

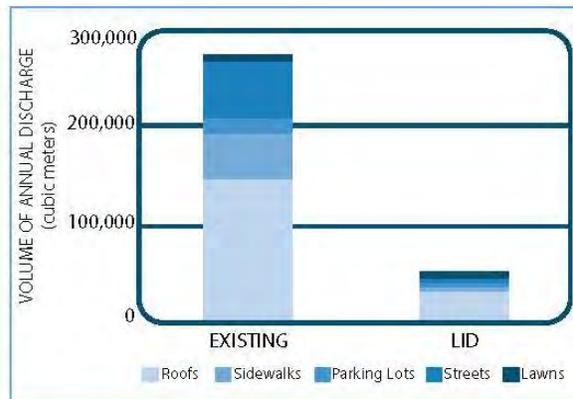
- Survey design
- Infiltration testing
- Hydrologic analysis
- Hydrologic modeling
- Life-cycle analysis
- Policy analysis

Client:

New York City Dept. of Environmental Protection



Photo of Gowanus Canal



Comparison of Existing and LID Measures



eDesign Dynamics

Public School Playgrounds - Green Infrastructure Design and Construction New York City, NY

Project Summary:

The Trust for Public Land commissioned SiteWorks Landscape Architecture and EDD to generate designs for the reconstruction of over twenty New York City Public School playgrounds. The schools were selected based on their locations within the NYCDEP's Combined Sewer Priority Watersheds and on individual school need. Green infrastructure components are integrated with playground amenities: rain gardens, augmented tree pits, planters, and an innovative use of synthetic turf fields to filter and infiltrate runoff. After reconstruction, each playground will self-mitigate the first one inch of rainfall, with zero discharge to the City's combined sewers. The playground designs were made in collaboration with the children attending each school under the instruction and guidance of SiteWorks. Students learned about combined sewer overflows, the hydrological cycle, natural water filtration and groundwater recharge, in addition to participating in the layout and design of playground features.

Client Reference:

Mary Alice Lee
Director, NYC Playground Program
The Trust for Public Land
T: 212.677.7171

Clients/Project Partners:

SiteWorks Landscape
Architecture, School
Construction Authority,
NYC Dept. of Environmental

Services:

Combined Sewer Overflow (CSO) Abatement
Green Infrastructure Design and Construction
Hydrologic and Hydraulic Modeling

Status:

Ongoing

Subcontract Value:

\$400,000



Rain garden at JHS65



Synthetic turf field with sub-surface storage at JHS162



Stormwater trees with permeable pavers at JHS157

402 west 40th street, new york, ny 10018 office: +1.646.688.3113 fax: +1.646.688.3664 www.edesigndynamics.com



eDesign Dynamics

**Rebuild by Design:
Hunts Point Lifelines**

Project Summary:

eDesign Dynamics (EDD) served as the water resources and ecology consultant on the multidisciplinary team led by PennDesign/OLIN. The project entailed initial feasibility and conceptual design for protecting the Hunts Point neighborhood of The Bronx, New York from storm surge while simultaneously providing amenities for a historically underserved community. The team’s work was one of six winners of Rebuild by Design, a competition initiated by President Barack Obama’s Hurricane Sandy Rebuilding Task Force launched by the United States Department of Housing and Urban Development (HUD). To propose an extensive strategic plan to protect the Bronx community of Hunts Point, the team engaged stakeholders and developed a detailed and comprehensive resilient design to protect the Food Distribution Center (FDC), which serves 22 million people in the region, and a municipal wastewater treatment plant serving 648,000 residents. EDD models demonstrated effective flood prevention behind an Integrated Flood Protection System (IFPS). Treatment wetlands, conveyance pipes, and open channels were designed to manage stormwater runoff resulting from the extreme event caused by simultaneous storm surge (Super Storm Sandy) with severe inland flooding (Hurricane Irene). EDD modeled inland flooding created by the 100-year, 24-hour rainfall event occurring during the 100-year storm surge at high tide with 31 inches of anticipated sea level rise (SLR) by the year 2050. EDD also proposed salt marsh creation and sub-tidal enhancements at suitable locations around the peninsula, contributing to the development of a project that is self-mitigating under current regulatory conditions.

Services:

Stormwater management planning
Hydrologic and Hydraulic modeling
Ecological Restoration

Client:

United States Department of Housing and Urban Development

Project Partners:

PennDesign, OLIN, HR&A Advisors, Level Infrastructure, Barretto Bay Strategies, Buro Happold, McLaren Engineering Group, Philip Habib & Associates

Status:

Ongoing

Total Value:

\$20,000,000



Proposed treatment wetlands, based on various storm scenarios



A protective greenway levee shields the FDC from storm surge, while treatment wetlands manage stormwater flows from the upper watershed



Ecological restoration along the shoreline will restore habitat and simultaneously dissipate wave energy resulting from storm surge

Illustration credits: HUNTS POINT LIFELINES, PennDesign/OLIN

338 west 39th street, 10th flr. new york, ny 10018 office: +1.646.688.3113 fax: +1.646.688.3664 www.edesigndynamics.com



eDesign Dynamics

Greenstreets: Stormwater Capture Throughout New York City

Project Summary:

EDD's President, Franco Montalto, acts as an advisor on stormwater capture for the New York City Parks & Recreation Greenstreets Program. Work has included designing and implementing monitoring systems and providing design guidance (specifically on stormwater management) for Greenstreets in the Bronx, Manhattan, and Queens. In the Bronx, Franco design the inlet structure and stormwater distribution pipes for the Greenstreet at Sagamore Street and Cruger Avenue. Franco also focused much of his efforts on four Greenstreets (Furmanville Avenue and 80th Street, Queens; Nashville Boulevard and 116th Avenue, Queens; Colfax Street and Murdoch Avenue, Queens; and also Sagamore and Cruger, Bronx) which were designed with intensive monitoring systems to document performance including climate stations, inlet flumes, weighing lysimeters, soil moisture/temperature probes, evaporation pans, and canopy interception equipment.

Services:

Consult to NYC Greenstreets Program on stormwater capture

Client:

New York City Department of Parks and Recreation, Greenstreets



Before



After

Before and After Images Courtesy of http://www.nycgovparks.org/sub_about/planyc/greenstreets.html



Greenstreet at 110th Street and Amsterdam Avenue

402 west 40th street, new york, ny 10018 office: +1.646.688.3113 fax: +1.646.688.3664 www.edesigndynamics.com

QUALIFICATIONS/EXPERIENCE



Firm Experience with SPDES, NPDES Permit Negotiations in General

Bond Schoeneck & King has one of the largest environmental practice groups in upstate New York. The attorneys in the practice group handle a wide variety of matters related to the Clean Water Act/ ECL Article 17 and permitting under those statutes. Invariably, these matters involve negotiation of permit terms on behalf of public or private clients and/or representation of those clients in administrative or judicial proceedings. Bond attorneys represent clients on SPDES/NPDES enforcement matters and provide counsel on all aspects of litigation in both the administrative and judicial settings.

Bond attorneys represent or have recently represented four county sewer districts (Albany, Erie, Oneida and Orange); local government permittees and permittees in the private sector (the more prominent ones include Schenectady International; Chemical Waste Management; US Salt; and Photocircuits). The firm represented several municipal and private clients in applications for SPDES permits or SPDES permit modifications arising out of the implementation of the New York City Watershed Memorandum of Agreement. In addition, prior to Mr. Feller joining the firm, he served for over eight years as Assistant Commissioner at DEC where he drafted decisions in a number of significant SPDES cases (e.g. the modification of the SPDES permit for the WWTP serving the City of Niagara Falls and for fourteen WWTPs serving New York City).

Attorneys in the practice group have handled a wide variance of SPDES/NPDES permitting issues including those involving CSOs, SSOs, industrial pretreatment, TMDLs and water quality based effluent limits, sewer moratoriums, and stormwater discharges.

Attorneys in the practice group maintain currency in the field through participation in a number of organizations including the environmental law section of the New York State Bar; AWMA and NYWEA. Mr. Feller serves on the government affairs committee of NYWEA and has been involved in working with that group on many wet weather issues that impact SPDES permitting.

Firm Experience Related To Combined Sewer Overflow Long Term Control Plans

Robert Feller is the attorney in Bond's environmental practice group that has the most experience in this area. The following is a summary of his experience related to CSO, LTCPs and related wet weather issues. The section also discusses experience related to advising on municipal cooperative arrangements in the area of wastewater management.

Robert H. Feller

Mr. Feller represented the Albany County Sewer District (ACSD) in its dispute with the DEC regarding a significant amendment to the SPDES permits for both of its WWTPs, including terms related to the CSOs its system experiences. On a substantive level, the dispute involved questions concerning the need to disinfect the effluent discharge; effluent limits, including several water

quality based limits; responsibility for CSOs (as between the ACSD and member municipalities); and the implementation schedule for several CWA requirements. Mr. Feller was able to work with the DEC to negotiate acceptable terms to the permit modification in a highly cost effective manner. Ultimately, an expensive hearing was avoided and the SPDES permits were issued on acceptable terms to the ACSD.

Mr. Feller represented two of the eight Erie County Sewer Districts (ECSD) also in a dispute with the DEC over proposed permit modifications for three separate WWTPs serving those districts. The sewer systems serving the three plants have SSOs and there were a variety of SPDES compliance issues during wet weather events. The dispute also involved effluent discharge limits, terms related to control of SSOs and the ability of the districts to phase out the smallest of the three plants and redirect the flow to the largest plant. One of the most significant issues related to the DEC's proposal to require the Capacity, Management, Operation and Maintenance (CMOM) program for the WWTPs and their associated sewer systems. Once again, Mr. Feller was able to counsel the ECSD effectively and the disputes were resolved in a highly cost-effective way on acceptable terms to the ECSD.

Prior to entering private practice, Mr. Feller served as an Assistant Commissioner for the DEC. In that capacity, he was the sole or principal author of every decision issued by the agency after hearing. Many of these cases involved questions under the CWA. Significant for this RFQ, Mr. Feller oversaw the hearings involving the proposed modifications to the SPDES permits for the fourteen WWTPs that are operated by the New York City Department of Environmental Protection. The hearings were held in the mid-nineties and prominently featured proposals to address CSOs at the City plants at the very time that EPA was developing its principal CSO guidance documents.

Mr. Feller has been heavily involved in other aspects of addressing wet weather flows. He was retained by the Central New York Regional Planning Commission under a contract funding by DEC to draft a document that would identify ways in which local government could fund its responsibilities under the MS4 program. That document is available at [http://www.dec.ny.gov/docs/water_pdf/funddocdraft\(1\).pdf](http://www.dec.ny.gov/docs/water_pdf/funddocdraft(1).pdf). In a related effort, Mr. Feller was the legal advisor to a consulting team retained by Erie and Niagara Counties to study the feasibility of creating a regional storm water utility district.

Mr. Feller also has experience working on intermunicipal agreements related to wastewater and stormwater. He was retained by Albany County to negotiate and draft the inter-municipal agreement that serves as the governance charter for the Albany County Stormwater Coalition. He is currently under contract with the Orange County Sewer District to analyze the existing governance structure and to negotiate a revised governance agreement that will create a single body representing the County, the municipalities in the sewer district and those that are currently being served by contract.

RESUMES

CYNTHIA A. BEHAN, RLA

PRESIDENT – LANDSCAPE ARCHITECT

NYS License #001152

NYS Certified Woman-Owned Business Enterprise (WBE) and
Disadvantaged Business Enterprise (DBE)



Ms. Behan is a landscape architect licensed to practice by the New York State Education Department as well as a certified WBE/DBE providing landscape architectural planning and design services. Over the years, Ms. Behan's experience has included the full spectrum of practice from master planning to designing commercial projects, parks, trails, waterfront and other recreational planning and design commissions. More recently she has completed streetscape and park design work through the construction document phase. She brings her background in biology and ecology and understanding of plant materials into her practice at the site, neighborhood, and community scale.

EDUCATION

University of Massachusetts, Amherst, MA,
Master of Landscape Architecture, May
1983

University of Massachusetts, Dartmouth,
MA, Bachelor of Science: Biology, June
1977

PROFESSIONAL EXPERIENCE

Landscape Architect and Open Space
Planner, Independent Practice, Saratoga
Springs, NY, 1989-Present

Project Director, Saratoga Springs Open
Space Project (Saratoga PLAN), 1991 -
1998

Landscape Architect and Project
Manager, Gerow Associates, Saratoga
Springs, NY, 1988-1989

Land Planner, Landscape Architect and
Project Manager, Greenmeadow Golf
Club and Development Company,
Hudson, NH, 1987-1988

Landscape Architect and Project
Manager, Urban Design Associates,
Bedford, NH, 1985-1987

Planner in Community Development
Division, City of Nashua, NH, 1984-1985

PROFESSIONAL AFFILIATIONS

ASLA America Society of Landscape
Architecture

PROJECT EXPERIENCE

COMPREHENSIVE PLANNING, ZONING & DESIGN GUIDELINES

TOWN OF CLARKSTOWN, NY - West Nyack Zoning Update

TOWN OF CLIFTON PARK, NY - Open Space Plan

TOWN OF CLIFTON PARK, NY - Land Conservation Plan and Generic
Environmental Impact Statement

TOWN OF MALTA, NY - Affordable Housing Study

TOWN OF PITTSFORD, NY - Resource Inventory and Evaluation System

TOWN OF PITTSFORD, NY - Greenprint for Pittsford's Future

TOWN OF PITTSFORD, NY - Monroe Avenue Commercial Design Guidelines
and Corridor Management

TOWN OF PITTSFORD, NY - Monroe Avenue Transition Zone Design
Guidelines

TOWN OF PITTSFORD, NY - South of the Thruway Comprehensive Plan
Update and Zoning

TOWN OF WALLKILL, NY - Design Guidelines for Conservation Subdivision
Regulations

NEIGHBORHOOD REVITALIZATION & MASTER PLANS

CITY OF ALBANY, NY - Arbor Hill Neighborhood Plan

CITY OF ALBANY, NY - Upper New Scotland Avenue / Krumkill Road
Neighborhood Plan

TOWN OF BEEKMAN, NY - Town Center Park Master Plan

TOWN OF CLARKSTOWN, NY - New City Vision Plan

TOWN OF CLARKSTOWN, NY - West Nyack Vision Plan

TOWN OF CLARKSTOWN, NY - West Nyack Revitalization Design

TOWN OF CLARKSTOWN, NY - Central Nyack Drainage Project

TOWN OF CLARKSTOWN, NY - Central Nyack Streetscape Design

TOWN OF CLERMONT, NY - Hamlet District and Route 9 Corridor Area Plan

TOWN OF CLIFTON PARK, NY - Town Center Master Plan (Capital District
Transportation Committee)

VILLAGE OF COPENHAGEN, NY - Downtown Community Design Plan

TOWN OF DRYDEN, NY - Varna Community Development Plan

TOWN OF GUILDERLAND, NY - Neighborhood Master Plan for the
Guilderland Center Hamlet. (Capital District Transportation
Committee)

CYNTHIA A. BEHAN, RLA

CONTINUED

PROJECT EXPERIENCE, continued

NEIGHBORHOOD REVITALIZATION & MASTER PLANS, CONT.

TOWN OF HALFMOON, NY - TOWN CENTER MASTER PLAN
TOWN OF LONDONDERRY, NH - MASTER PLAN UPDATE AND ZONING,
TOWN CENTER VISION PLAN
TOWN OF MILTON, NY - TOWN CENTER MASTER PLAN
TOWN & VILLAGE OF PITTSFORD, NY - ERIE CANAL MASTER PLAN AND
LWRP
TOWN OF PITTSFORD, NY - ERIE CANAL PARK MASTER PLAN
RENSSELAER COUNTY, NY - BON ACRE HAMLET NEO-TRADITIONAL
VILLAGE MASTER PLAN
TOWN AND VILLAGE OF TUPPER LAKE, NY - REVITALIZATION STRATEGY
AND ACTION PLAN
TOWN OF WESTFIELD, NY - STREETSCAPE REVITALIZATION FEASIBILITY
STUDY

TRANSPORTATION & CORRIDOR PLANNING

TOWNS OF GUILDERLAND/PRINCETOWN, NY - Route 20 Land Use and
Transportation Study (Capital District Transportation Committee)
TOWN OF MOREAU, NY - Exit 17 / Route 9 Corridor Land Use and
Transportation Study
CITY OF SARATOGA SPRINGS, NY - Weibel Avenue-Gilbert Road Study,
(Capital District Transportation Committee)

PARKS, TRAILS & RECREATION

ALBANY ROWING CENTER - Community Boathouse Study, Albany, NY
TOWN OF MILTON, NY - Recreation and Open Space Plan
VILLAGE OF POTSDAM, NY - Raquette River Recreation Program
CITY OF SARATOGA SPRINGS, NY - Waterfront Park Programming and
Feasibility Study
CITY OF SARATOGA SPRINGS, NY - Open Space Planning and Land
Acquisition
FRIENDS OF SARATOGA BATTLEFIELD - Wilkinson Trail Improvements,
Stillwater, NY (National Park Service, Saratoga National Historic
Park)

DESIGN

CITY OF ALBANY, NY - Landscape Design Services for Albany Public Libraries
(Dormitory Authority of the State of New York)
TOWN OF CHESTER, NY - Pottersville Streetscape Enhancements
TOWN OF CHESTER, NY - Chestertown Streetscape Enhancements
TOWN OF CLARKSTOWN, NY - Congers Road Streetscape Revitalization
TOWN OF CLARKSTOWN, NY - South Main Streetscape Revitalization
TOWN OF CLARKSTOWN, NY - Central Nyack Drainage Project
TOWN OF CLARKSTOWN, NY - Central Nyack Streetscape Revitalization
TOWN OF CLIFTON PARK, NY - Town Center Gateway Median
PRIVATE CLIENT, MILTON, NY - Conservation Subdivision Design
TOWN OF WESTFIELD, NY - Barcelona Harbor Pier Improvements
PRIVATE CLIENT, WINDHAM, NY - Land Development Feasibility Study

JOHN J. BEHAN, AICP

PRINCIPAL - PLANNING



John J. Behan has been a planner for over 25 years and has earned a reputation for the ability to guide a community in its vision to a workable solution. Mr. Behan's work, which he considers creative collaborations with his clients and their constituencies, has been recognized with several national planning and conservation awards. His professional practice emphasizes turning knowledge into action and includes public involvement as integral to successful land and community planning initiatives. His experience includes environmental reviews under NEPA, SEQR, and MEPA, comprehensive planning at a municipal, multi-community, and regional scale, waterfront revitalization, greenway and open space, and resource conservation planning, grant writing, and economic development planning projects.

EDUCATION

University of Massachusetts, Amherst, MA,
Master of Regional Planning, February,
1983, Emphasis in recreation and natural
resource management and economic
development planning

State University of New York, Plattsburgh,
NY, Bachelor of Arts, Environmental
Science, cum laude, 1979

Syracuse University, Syracuse, NY, Liberal
Arts studies, 1976

PROFESSIONAL EXPERIENCE

Principal, Behan Planning and Design,
Saratoga Springs, New York, 1994-
Present

Adjunct Professor, State University of New
York, Albany, New York, 1993-Present

Senior Planner, Principal, The Saratoga
Associates, Saratoga Springs, New York,
1987-1994

Community Development Planner, Senior
Planner, and Deputy Planning
Coordinator, City of Fitchburg, Fitchburg,
Massachusetts, 1983-1987

Research Assistant and Editor, Water
Resources Research Institute, University of
Massachusetts, Amherst, Massachusetts,
1980-1983

PROFESSIONAL AFFILIATIONS

American Institute of Certified Planners
American Planning Association
New York Planning Federation
Land Trust Alliance of New York

PROJECT EXPERIENCE

COMPREHENSIVE PLANNING, ZONING & DESIGN GUIDELINES

TOWN OF AMHERST, NY - Traditional Neighborhood Zoning project

TOWN OF BEEKMAN, NY - Comprehensive Plan and Generic EIS

TOWN OF BENNINGTON, NY - Zoning Review

TOWN OF BIG FLATS, NY - Architectural Design Guidelines & Zoning
Updates

CITY OF BURLINGTON, VT - Comprehensive Zoning Ordinance Revision

TOWN OF CANANDAIGUA, NY - Special Zoning District Creation and
Generic EIS

TOWN AND VILLAGE OF CAZENOVIA, NY - Cazenovia Area Planning Project

TOWN OF CHESTER, NH - Zoning Update

TOWN OF CLARKSTOWN, NY - New City Form-Based Zoning Code

TOWN OF CLARKSTOWN, NY - West Nyack Zoning Update

TOWN OF CLIFTON PARK, NY - Form-Based Zoning Code

TOWN OF CLIFTON PARK, NY - Land Conservation Plan and Generic EIS
(subconsultant)

TOWN OF DRYDEN, NY - Zoning Revision and Design Guidelines

TOWN OF EAST GREENBUSH, NY - Comprehensive Land Use Plan
(subconsultant)

TOWN OF GUILDERLAND, NY - Comprehensive Plan & Implementation
Services

TOWN OF HALFMOON, NY - Town Center Master Plan

TOWN OF HALFMOON, NY - Comprehensive Plan Presentation on "Livable
Communities" (subconsultant)

TOWN OF LERAY, NY - Comprehensive Plan and Design Guidelines
(subconsultant)

TOWN OF LONDONDERRY, NH - Master Plan Update and Zoning, Town
Center Vision Plan

TOWN OF MILTON, NY - Comprehensive Plan and Generic EIS

TOWN OF PITTSFORD, NY - Town Comprehensive Plan Update

TOWN OF PITTSFORD, NY - South of the Thruway Comprehensive Plan
Update and Zoning

TOWN OF PITTSFORD, NY - Update to the Comprehensive Plan and Zoning
Code

TOWN OF PITTSFORD, NY - Residential Neighborhood Zoning and Design
Guidelines

VILLAGE OF RHINEBECK, NY - Revised Zoning Code

JOHN J. BEHAN, AICP

CONTINUED

NATIONAL AWARDS

National Award for Planning. The American Planning Association, Chicago, IL and Washington, DC. For The Pittsford Greenprint Initiative, by John J. Behan, AICP for the Town of Pittsford, NY.

Waterfront Planning. The Waterfront Center, Washington, DC, for Horizons Action Plan for Erie County Waterfront, by The Saratoga Associates, John Behan, Project Manager.

DuPont Greenway Award. The National Geographic Society, The Conservation Fund, Washington DC, and Arlington, VA, for the Upper Hudson Greenway and the Salmon River Greenway, by The Saratoga Associates, John Behan, Project Manager.

SPEAKING ENGAGEMENTS

New York State Association of Towns. (2009), *Creative Community Land Use Tools: Incentive Zoning and Transfer of Development Rights (TDR)*

North Country Local Government Conference, 20th Anniversary Gathering (Watertown, 2009), Design Guidelines: What they are and How to use them?

Saratoga County Planning Conference (Saratoga, 2009), *Creative Community Land Use Tools: Incentive Zoning and Transfer of Development Rights (TDR)*

New York State Government Finance Officers Association, Special Training Workshop (2008), *Successful Grant Proposals: Getting Ahead of the Game*

New York State Metropolitan Planning Organization (Niagara Falls, 2008), *Transportation Drives Land Use*

New York State Department of Transportation, *Transportation in the Regional Landscape (2007), Community involvement is a contact sport*

Planning for a Future for Farms: In Rensselaer, Saratoga, & Washington Counties (2006), *Fiscal Impact Model for a Community*

PROJECT EXPERIENCE, continued

COMPREHENSIVE PLANNING, ZONING & DESIGN GUIDELINES, CONT.

TOWN OF ROSENDALE, NY - Planning and Zoning Services
TOWN OF WALLKILL, NY - Comprehensive Zoning Amendments
TOWN OF WALLKILL, NY - Comprehensive Plan Update and Zoning Revision
TOWN OF WALLKILL & CITY OF MIDDLETOWN, NY - Natural Hazard Mitigation Plan
VILLAGE OF WILLIAMSVILLE, NY - Comprehensive Plan

NEIGHBORHOOD REVITALIZATION & MASTER PLANS

CITY OF ALBANY, NY - Arbor Hill Neighborhood Plan
CITY OF ALBANY, NY - Upper New Scotland Avenue – Krumkill Road Neighborhood Plan
ALBANY COUNTY, NY - Hudson River Waterfront Strategy
TOWN OF BEEKMAN, NY - Town Center Park Master Plan
TOWN OF CLARKSTOWN, NY - New City Vision Plan
TOWN OF CLARKSTOWN, NY - West Nyack Vision Plan
TOWN OF CLERMONT, NY - Clermont Hamlet Vision Plan
TOWN OF CLIFTON PARK, NY – Town Center Master Plan (Capital District Transportation Committee)
VILLAGE OF COPENHAGEN, NY - Downtown Community Design Plan
CITY OF FITCHBURG, NY - Lower Main Street Revitalization
TOWN OF GUILDERLAND, NY – Guilderland Hamlet Neighborhood Plan (Capital District Transportation Committee)
TOWN OF GUILDERLAND, NY - Neighborhood Master Plan for the Guilderland Center Hamlet (Capital District Transportation Committee)
TOWN OF HALFMOON, NY - Town Center Master Plan
TOWN OF MALTA, NY - Affordable Housing Study
TOWN OF MILTON, NY - Town Center Master Plan
RENSSELAER COUNTY, NY - Bon Acre Hamlet
CITY OF SCHENECTADY, NY – Hamilton Hill Housing and Neighborhood Revitalization Strategy (The Community Builders, Inc)
CITY OF WATERTOWN, NY - East Side Neighborhood Improvement District

TRANSPORTATION & CORRIDOR PLANNING

CITY OF ALBANY, NY - Upper New Scotland Avenue / Krumkill Road Neighborhood Plan
TOWN OF CANANDAIGUA, NY – Southern Corridor Study: Development, Transportation and Conservation Strategy
TOWN OF CLERMONT, NY - Hamlet District and Route 9 Corridor Area Plan
TOWN OF EAST GREENBUSH, NY - Route 4 Corridor Study (Capital District Transportation Committee)(subconsultant)
TOWNS OF GUILDERLAND/PRINCETOWN, NY - Route 20 Land Use and Transportation Study (Capital District Transportation Committee)
CITY OF SARATOGA SPRINGS, NY – Weibel Avenue-Gilbert Road Study (Capital District Transportation Committee)
CITY OF SARATOGA SPRINGS, NY - Lake Avenue Country Gateway: Vision and Recommendations (Capital District Transportation Committee)
ULSTER COUNTY, NY – New Paltz Intermodal Feasibility Study

RICHARD R. HOPKINS III, P.E.**PRINCIPAL**

New York State P.E. License #088312



Mr. Hopkins is a licensed professional Engineer with 14 years of experience as a senior project engineer, municipal engineer and project manager. Mr. Hopkins' public works experience includes complete street and highway design, stormwater, water, sewer, and utility corridors. A diverse range of private sector projects range from residential subdivisions to commercial and institutional site plans. His experience includes all aspects of the evolution of a project from conceptual layout, hydrologic and hydraulic design and stormwater mitigation, grading design, sanitary sewer, water main distribution design and testing, and project permitting and entitlements. Mr. Hopkins has a strong background in construction management and administration and field representation providing engineering oversight. As a Project Manager, Mr. Hopkins, has been responsible for all aspects of projects including technical design, scheduling, scope, and budget management.

EDUCATION

University of Hartford, Hartford, Connecticut, Bachelors of Science Civil Engineering, 2001

PROFESSIONAL REGISTRATIONS

Professional Engineer (P.E.), New York State

PROFESSIONAL EXPERIENCE

Principal, Behan Planning and Design, Clarkstown, New York, 2014-Present

Associate, Maser Consulting, P.A. Chestnut Ridge, New York, 2004-2014

Project Engineer, Graves Engineering, Inc, Worcester, MA, 2001-2004

PROFESSIONAL AFFILIATIONS

American Society of Civil Engineers

New York State Society of Professional Engineers

Rockland County Municipal Planning Federation, Planning Board and Zoning Board Certification

PROJECT EXPERIENCE**MUNICIPAL PROJECT DESIGN**

TOWN OF CLARKSTOWN, NY – Congers Road Streetscape Design
 TOWN OF CLARKSTOWN, NY – South Main Street Streetscape Design
 TOWN OF CLARKSTOWN, NY – Kevin Landau Park Design
 TOWN OF CLARKSTOWN, NY – West Nyack Park Design
 TOWN OF HAVERSTRAW, NY – Bowline Point Park Improvements*
 TOWN OF HAVERSTRAW, NY – Woodridge Drive Stream Restoration*
 TOWN OF HAVERSTRAW, NY – Moorea Court Drainage Improvements*
 TOWN OF HAVERSTRAW, NY – Haverstraw Roads Infrastructure Improvements*
 TOWN OF HAVERSTRAW, NY – Town Hall Site Reconstruction*
 COUNTY OF ROCKLAND, NY – Dutch Gardens Park Design*

MUNICIPAL ENGINEERING CONSULTING SERVICES*

TOWN OF HAVERSTRAW, NY – Encore Palisades Engineering Review
 TOWN OF HAVERSTRAW, NY – Lawless Subdivision Engineering Review
 TOWN OF HAVERSTRAW, NY – Cumberland Farms Engineering Review
 TOWN OF HAVERSTRAW, NY – C & M Seafood Engineering Review
 TOWN OF HAVERSTRAW, NY – Commerce Bank Engineering Review
 TOWN OF HAVERSTRAW, NY – Route 202 Retail Engineering Review
 TOWN OF HAVERSTRAW, NY – Helmke Subdivision Engineering Review
 TOWN OF HAVERSTRAW, NY – Palisades Gardens Engineering Review
 TOWN OF HAVERSTRAW, NY – Lund Subdivision Engineering Review
 TOWN OF HAVERSTRAW, NY – Cayot Subdivision Engineering Review
 TOWN OF HAVERSTRAW, NY – Barr Labs Engineering Review
 TOWN OF HAVERSTRAW, NY – Haverstraw Marina Engineering Review
 TOWN OF HAVERSTRAW, NY – Rosman Center Engineering Review
 TOWN OF HAVERSTRAW, NY – United Water Desalination Pilot Plant Design Review
 TOWN OF HAVERSTRAW, NY – United Water Desalination Main Plant Design Review
 TOWN OF ORANGETOWN, NY – Engineering Review Services
 TOWN OF PATTERSON, NY – Engineering Review Services

RICHARD R. HOPKINS III, P.E.

CONTINUED

SPEAKING ENGAGEMENTS

Guest Speaker: Clarkstown Chamber of Commerce, 2014 New York

PUBLISHED WORKS

Association of Towns of the State of New York, Talk of the Towns & Topics, September 2013

Landscape Architect and Specifier News, August 2013

PROJECT EXPERIENCE, continued**CONSTRUCTION ADMINISTRATION SERVICES***

TOWN OF CLARKSTOWN, NY – Congers Road Streetscape Design
 TOWN OF CLARKSTOWN, NY – South Main Street Streetscape Design
 TOWN OF CLARKSTOWN, NY - Kevin Landau Park Design
 TOWN OF CLARKSTOWN, NY - Central Nyack Streetscape Revitalization
 TOWN OF CORTLANDT, NY – Valeria Subdivision
 TOWN OF CORTLANDT, NY – Jerome Dr. and Rita Dr. Watermain Installation
 TOWN OF HAVERSTRAW, NY – Bowline Point Park Improvements
 TOWN OF HAVERSTRAW, NY – Town Hall Site Reconstruction
 TOWN OF HAVERSTRAW, NY – Moorea Court Drainage Improvements
 TOWN OF HAVERSTRAW, NY – Hoey Circle Drainage Improvements
 TOWN OF HAVERSTRAW, NY – Woodridge Drive Stream Restoration

PRIVATE CLIENT CONSULTING SERVICES*

STATE FARM INSURANCE – Engineering Evaluation of Claims

RESIDENTIAL DESIGN*

WALSKI SUBDIVISION
 HIGHVIEW HILLS ESTATES
 KETTLEBROOK LOFTS
 OAK RIDGE CONDOMINIUMS
 ROLLING MEADOWS SUBDIVISION
 ESPLANADE SENIOR CITIZENS CENTER

COMMERCIAL DESIGN*

O'CONNORS RESTAURANT
 VILLAGE SQUARE
 TUFTS VETERINARY SCHOOL
 ECOTARIUM WILDLIFE EDUCATION FACILITY
 O.T. DELIVERIES SHIPPING AND STORAGE
 COPASSO VEHICLE SERVICE
 COPTIC CHURCH
 SRI RANGANATHA TEMPLE
 CONGREGATION MORDECHAI MIKVAH AND TEMPLE
 WIDE WORLD OF CARS FERRARI AND MASERATI DEALERSHIP
 CENTRAL PLUMBING RETAIL AND DISTRIBUTION
 MIKVAH EXPANSION
 PARSHEGIAN SHOPPING CENTER
 GARRISON INSTITUTE
 ORANGETOWN HISTORICAL MUSEUM AND ARCHIVES

*Projects with previous employer

MICHAEL B. ALLEN
SENIOR ASSOCIATE – URBAN PLANNER



As a degreed architect, Mr. Allen has worked for noted international firms including Skidmore Owings Merrill, P.C. in London; Einhorn Yaffee Prescott, A/E, P.C. in Albany, N.Y.; as well as preservation architects Badger & Associates in Manchester, VT. With a strong personal interest in community revitalization and land use planning projects, Mr. Allen began his independent planning consulting practice in 2002 with the formation of Bailliere Consulting where he was Principal until joining Behan Planning and Design. His areas of expertise include land use planning, zoning code updates, development reviews and the creation of illustrated design standards and form-based zoning codes. Mr. Allen currently serves on the Village of Round Lake Zoning Board, and previously served on the Planning Board of his hometown in Dorset, VT before moving to New York State.

EDUCATION

Syracuse University, Syracuse, New York,
 Bachelor of Architecture, Syracuse
 University School of Architecture, 1993

PROFESSIONAL EXPERIENCE

Senior Planner, Behan Planning and
 Design, Saratoga Springs, New York,
 2007-Present

Principal, Bailliere Consulting, Saratoga
 Springs, New York, 2002-2007

Project Architect/Project Manager,
 Einhorn Yaffee Prescott, A/E, Albany, New
 York, 2000-2002

Project Architect, Foit-Albert Associates,
 Albany, New York, 1999-2000

Architect, O'Connor & March Architects,
 Albany, NY, 1997-1999

Designer, Brandt-Poost Architects, East
 Greenbush, NY, 1995-1997

Draftsman, Badger & Associates,
 Manchester, Vermont, 1993-1994

Draftsman, Skidmore Owings Merrill, P.C.,
 London, England, 1991

PROFESSIONAL AFFILIATIONS

American Planning Association
 New York Planning Federation
 American Institute of Architects

PROJECT EXPERIENCE

COMPREHENSIVE PLANNING, ZONING & DESIGN GUIDELINES

TOWN OF AMHERST, NY - Traditional Neighborhood Zoning Project
 TOWN OF BENNINGTON, VT - Commercial Corridor Design Guidelines
 TOWN OF CLARKSTOWN, NY - Form-Based Zoning Code
 TOWN OF CLARKSTOWN, NY - New City Hamlet Design Guidelines
 TOWN OF CLARKSTOWN, NY - West Nyack Hamlet Zoning
 TOWN OF CLIFTON PARK, NY - Form-Based Zoning Code
 TOWN OF EAST GREENBUSH, NY - East Greenbush Amenities Plan
 TOWN OF EAST GREENBUSH, NY - Comprehensive Zoning Update
 TOWN OF EAST GREENBUSH, NY - PDD & Conservation Subdivision
 Development Reviews
 TOWN OF EAST GREENBUSH, NY - Comprehensive Land Use Plan
 CITY OF KINGSTON, NY - Midtown Design Standards
 CITY OF KINGSTON, NY - Rondout Creek Zoning Update & Design
 Guidelines
 TOWN OF MANCHESTER, VT - Build Out Analysis
 TOWN OF MONTGOMERY, NY - Zoning and Land Use Update
 VILLAGE OF NEW PALTZ, NY - Zoning Update
 VILLAGE OF NORTH BENNINGTON, VT - Design Guidelines
 TOWN OF PITTSFORD, NY - Residential Neighborhood Zoning and Design
 Guidelines
 TOWN OF ROSENDALE, NY - Zoning Review and Update
 TOWN OF WALKKILL, NY - Comprehensive Plan
 TOWN OF WALKKILL, NY - Comprehensive Zoning Amendments
 TOWN OF WALKKILL, NY - Zoning Update
 TOWN OF WALKKILL & CITY OF MIDDLETOWN, NY - Natural Hazard
 Mitigation Plan
 TOWN OF WALKKILL, NY - Farmland Protection Plan
 TOWN OF WALKKILL, NY - Conservation Subdivision Regulations & Design
 Guidelines

MICHAEL B. ALLEN**CONTINUED****SPEAKING ENGAGEMENTS**

Guest Speaker: NY Association of Town's Conference, 2013 New York City

Guest Speaker: Saratoga County Planning Conference, 2013, Saratoga Springs, NY

Guest Speaker: NY Association of Town's Conference, 2011 New York City

Guest Speaker: NY Planning Federation Conference, 2011 Albany, NY

Guest Speaker: NY Association of Town's Conference, 2011 Syracuse, NY

Guest Speaker: Vermont Historic Preservation Conference, Bennington, VT

Guest Speaker: Saratoga Springs Preservation Foundation, Saratoga Springs, NY

Guest Speaker: Community Workshop on Design Guidelines, Saratoga Springs, NY

COMMUNITY SERVICE

Zoning Board, Village of Round Lake, NY

Volunteer, Rebuild Prattsville, NY

Planning Board, Town of Dorset, VT

PROJECT EXPERIENCE, continued**NEIGHBORHOOD REVITALIZATION & MASTER PLANS**

TOWN OF CLARKSTOWN, NY - New City Vision Plan

TOWN OF CLARKSTOWN, NY - West Nyack Vision Plan

TOWN OF CLARKSTOWN, NY - South Main Streetscape Revitalization

TOWN OF CLARKSTOWN, NY - Congers Road Streetscape Revitalization

TOWN OF CLIFTON PARK, NY - Town Center Master Plan

TOWN OF PITTSFORD, NY - Erie Canal Park Master Plan

TRANSPORTATION & CORRIDOR PLANNING

TOWN OF MANCHESTER, VT - Route 30 Corridor Improvements Study

TOWN OF MOREAU, NY - Exit 17 / Route 9 Corridor Land Use and Transportation Study

ULSTER COUNTY, NY - New Paltz Intermodal Feasibility Study

DESIGN

TOWN OF CLARKSTOWN, NY - Congers Road Streetscape Revitalization

TOWN OF CLARKSTOWN, NY - South Main Streetscape Revitalization

TOWN OF CLARKSTOWN, NY - Kevin Landau Park Design

TOWN OF CLARKSTOWN, NY - Central Nyack Drainage Project

TOWN OF CLARKSTOWN, NY - Central Nyack Streetscape Revitalization

TOWN OF CLIFTON PARK, NY - Town Center Gateway Median

DEVELOPMENT REVIEW

TOWN OF BENNINGTON, VT - Development Project Review Services

TOWN OF CLARKSTOWN, NY - Development Project Review Services

TOWN OF EAST GREENBUSH, NY - PDD & Conservation Subdivision Development Reviews

TOWN OF WALLKILL, NY - Development Project Review Services

CITY OF KINGSTON, NY - Development Project Review Services

KARA E. SMITH

LANDSCAPE DESIGNER / PLANNER



Kara Smith has experience in planting/garden design and construction oversight, bicycle and pedestrian facility design, as well as community revitalization projects. She has overseen the planning and facilitation of community meetings, as well as the organization of volunteers to produce a project within the project's timeframe and budget. Her knowledge base also includes marketing and writing, cost estimations, material specifications, and proficiency in numerous computer programs including AutoCAD, InDesign, Illustrator, Photoshop and Sketchup.

EDUCATION

Cornell University, BSLA, Bachelors of Landscape Architecture, May 2010

National University of Ireland, Galway, Geography concentration, Spring 2009

PROFESSIONAL EXPERIENCE

Landscape Designer and Land Planner, Behan Planning and Design, 2011-Present

Cornell Community Partnership Intern, Cayuga Waterfront Trail, Ithaca, NY, 2009-2010

Technical Specialist, BioNova Natural Pools, Hackettstown, NJ, June 2010-November 2011

Sales Associate, Wheatfield Nursery, Centre Hall, PA, March 2011-October 2011

Design Intern, Pennsylvania Downtown Center, Bradford, PA, Summer 2008

PROFESSIONAL AFFILIATIONS

ASLA America Society of Landscape Architecture

PROJECT EXPERIENCE

NEIGHBORHOOD REVITALIZATION & MASTER PLANS

TOWN OF CLAY, NY – Clay Brownfield Opportunities Area Nomination Study

TOWN OF CLARKSTOWN, NY – West Nyack Drainage and Revitalization Strategy

TOWN OF CLIFTON PARK, NY – Form-Based Zoning Code

TOWN OF WESTFIELD, NY – Barcelona Harbor Pier Improvements

PARKS, RECREATION, AND TRAILS

CORNELL COMMUNITY PARTNERSHIP – Cayuga Waterfront Trail

TOWN OF EAST GREENBUSH, NY – Hampton Lake Loop Path Feasibility Study

TOWN OF EAST GREENBUSH, NY – East Greenbush Amenities Plan

CITY OF EDMONTON, CANADA – Borden Park Natural Swimming Pool Feasibility Study

TOWN OF NEW PALTZ, NY – Peace Park Design and Hasbrouck Drainage Improvements

ROCKLAND COUNTY, NY – Dutch Gardens Linkage

VILLAGE OF TUPPER LAKE, NY – Tupper Lake Waterfront Playground

PENNSYLVANIA DOWNTOWN CENTER – Bradford Community Garden

DESIGN

TOWN OF CLARKSTOWN, NY – South Main Streetscape Revitalization

TOWN OF CLARKSTOWN, NY – Central Nyack Streetscape Revitalization

TOWN OF CLIFTON PARK, NY – Clifton Park Gateway Design

TOWN OF CHESTER, NY – Chestertown Streetscape Enhancements

TOWN OF WESTFIELD, NY – Streetscape Revitalization Feasibility Study



402 West 40th Street
 New York, NY 10018
 Office: +1 646.688.3113
 Fax: +1 646.688.3664
 www.eDesignDynamics.com

Eric Rothstein

Managing Partner

EMPLOYMENT HISTORY:

2007-Present | **Managing Partner, eDesign Dynamics | NY, NY**

- Project director focused on ecological restorations, green buildings, and storm and wastewater master planning.
- Hydrologic modeler for restoration design and rainwater re-use projects. Hydraulic designer for in-building mechanical systems.
- Ecosystem restorator specializing in the design of sustainable fresh water wetlands, salt marshes, meadows, and forests in the urban and post-industrial environment. Design work involves hydrologic modeling, substrate selection, reference site analysis, target species assessment, plant selection, monitoring programs, and community involvement.

2005-2007 | **Vice President, Great Eastern Ecology, Inc. | NY, NY**

- Project managed design and construction of ecological restorations, sediment and erosion control, and storm water management. Project work for the Soil and Water Conservation District, Bridgestone/Firestone, New York City, and several private clients.
- Master planned ecological, hydrology, storm water management and soil components for large scale developments. Project work included Brooklyn Bridge Park, Brooklyn, New York, Arverne East, Queens, New York, and Sands Point, Nassau County.
- Project directed ecological, stormwater, and sediment and erosion control evaluations and assessments. Project work included ecological risk assessments, hydrologic modeling, wetland delineations, soil studies, ground water monitoring, tidal analysis, plant surveys, faunal surveys, and sediment and erosion control analysis.
- Educational programming focused on natural resource protection, sediment and erosion control, and storm water management. Project work included a seminar series at Columbia University, lecture series for construction contractors and government construction managers, and tours of urban ecological restorations for professional organizations and landscape architecture firms.

1998-2005 | **Project Manager, Natural Resources Group, Department of Parks and Recreation | NY, NY**

- Project managed ecological restorations including salt marshes, fresh water wetlands, grasslands, and forests. Tasks included grant writing, budget development and management, preparation of bid documents, design preparation, construction oversight, and organizing post-construction monitoring protocol.
- Reviewed, commented on, and modified agency and interagency design projects throughout NYC that altered water quality and quantity in natural areas. Projects included the design of fresh water wetland treatment systems for stormwater, a water treatment plant, bridges and roadways, ecological restoration / mitigation projects, dredging projects, composting facilities, housing and retail developments, schools, golf courses, ball fields and other recreation facilities.

1995-1996 | **Environmental Consultant, Environmental Science Associates | San Francisco, CA**

- Evaluated numerous project sites and prepared hydrology, hydrogeology, water quality, seismology, and geology assessments for environmental impact reports and statements in compliance with the California Environmental Quality Act and the National Environmental Protection Act. Projects included the proposed development of airport extensions, a mine, residential housing, a water treatment plant, industrial area extensions, landfill extensions, and a ground water injection system.

EDUCATION:

- M.S. in Soil and Water Engineering / Hydrogeology, Minor in Soil Science.
The Department of Agricultural and Biological Engineering, Cornell University, Ithaca, NY, 1995
- B.S. from the Department of Agricultural Engineering.
Emphasis in Soil and Water Engineering / Hydrology, University of Wisconsin, Madison, WI, 1993
- U.S. Army Corps of Engineers Wetland Delineation Certification Training Program, successful completion, 1995



402 West 40th Street
New York, NY 10018
Office: +1 646.688.3113
Fax: +1 646.688.3664

Email: fmontalto@edesigndynamics.com
www.edesigndynamics.com

Franco Montalto, P.E., Ph.D.

Civil/Environmental Engineer and Hydrologist

EMPLOYMENT HISTORY:

CURRENT EMPLOYMENT

2007-Present | **Assistant Professor** | **Drexel University, Department of Civil, Architectural, and Environmental Engineering** | **Philadelphia, PA**

- Teach courses in hydrology, hydraulics, wastewater, stormwater, and sustainability. Currently supervising four PhD students on externally funded research projects in urban ec hydrology. Involves field studies, modeling, and extensive cross-disciplinary research and collaboration.

2002-Present | **Founder and President** | **eDesign Dynamics** | **NY, NY**

- Supervise the design, engineering, analysis, business development, research and planning activities for environmental design and analysis firm based in New York City. Current projects are in the field of green infrastructure and low impact development system planning and design, ecological restoration, including also some work with alternative energy systems.

ECOLOGICAL RESTORATION PROJECT EXAMPLES:

- **Indian Lake Restoration.** Conducted an existing and proposed condition water budget considering all hydrologic inputs and outputs to the lake. Established ecological justification for the hydraulic retention time sought in the lake restoration plan. Designed overflow spillways and other hydraulic infrastructure (Bronx, NY, The Louis Berger Group, NYC Parks & Recreation)
- **NRCS Goose Pond Wetland Reserve Project.** Supervised continuous and event driven modeling of existing and proposed hydrology using HEC-HMS. Participated in the design of water level control structures, earthen embankments, primary and auxiliary spillways for large pond restoration project. (Green Co, IN., The Louis Berger Group, USDA-NRCS).
- **Reconstruction of Randall's and Ward's Island Southwestern Shoreline.** Analyzed and provided recommendations on potential freshwater inputs to a restored freshwater wetland. (The Louis Berger Group, Randall's Island Sports Foundation, NYC Parks Dept Natural Resources Group)
- **Restoration of Mill Creek Marsh.** Developed final engineering and hydrologic designs for the restoration of a 139-acre salt marsh. Prepared construction bid documents and plans, coordinated pre- and post- construction monitoring, and construction QA/QC. (Secaucus, NJ), as Wetlands Engineer at the NJ Meadowlands Commission)

EDUCATION:

- Ph.D., Environmental Engineering and Soil Physics. Cornell University, 2003
- M.S., Environmental Engineering. Cornell University, 2001
- B.S., Civil Engineering. Cooper Union, 1995

PROFESSIONAL CERTIFICATION:

- New York State Professional Engineer
- Commonwealth of Pennsylvania Professional Engineer

PROFESSIONAL MEMBERSHIPS:

- American Geophysical Union
- American Society of Civil Engineers
- Water Environment Federation
- The Association of Environmental Engineering and Science Professors



338 West 39th Street, 10th Floor
New York, NY 10018
Office: +1 646.688.3113
Fax: +1 646.688.3664
www.eDesignDynamics.com

Ian Lipsky

Engineering Hydrologist

EMPLOYMENT HISTORY:

2007-Present | **Engineering Hydrologist, eDesign Dynamics | NY, NY**

- Specializes in modeling, assessment, and design of complex hydrological conditions for stormwater management planning, potable water conservation, and water reuse systems.
- Leads modeling effort for the design of green infrastructure systems throughout New York City, including right-of-way bioswales, constructed wetlands and rainwater harvesting systems.
- Directs design teams in developing and promoting the use of innovative GI design practices, including detention-based bioswales and integrating rainwater harvesting.

2005-2007 | **Hydrogeologist, Great Eastern Ecology, Inc. | NY, NY**

- Hydrogeologist involved with treatment wetlands design, wetlands delineation, ecological risk assessments, remedial planning and design, spill response, permitting, environmental assessments, groundwater monitoring.

2001-2005 | **Owner, Quiet Storm Coffeehouse | Pittsburgh, PA**

- Renovated former nuisance bar and opened coffeehouse, restaurant and music venue in blighted neighborhood of Pittsburgh. Oversaw all operations of business from inception to sale in 2005. Worked intimately with neighborhood organizations and arts institutions in establishing community networks and development strategies.

1999-2000 | **WEG Engineering | Pittsburgh, PA**

- Design and Permitting of numerous environmental projects including above ground storage tanks, UST removal, contaminated soil and groundwater treatment and removal, municipal wastewater, road and culvert construction.

1998 | **Master's Thesis | Cochabamba, Bolivia**

- Master's Thesis research in small irrigation systems, water harvesting, irrigated land use. Worked with indigenous NGO in Andean villages to assist in irrigation system mapping with GIS and remote sensing.



EDUCATION:

- Masters Program in Hydrogeology.
The Department of Agricultural and Biological Engineering, Cornell University, Ithaca, NY, 1996-1998
- B.S. in Engineering.
Concentration in Energy and Environmental Engineering. Graduated Cum Laude.
The Cooper Union for the Advancement of Science and Art, New York, NY, 1991-1995
- B.A. in Latin American Studies
University of Pennsylvania, Philadelphia, PA, 1981-1986
- OSHA 40-hour Hazmat and Confined Space Entry Training, successful completion, 2000



338 West 39th Street, 10th Floor
New York, NY 10018
Office: +1 646.688.3113
Fax: +1 646.688.3664
www.eDesignDynamics.com

Theo Barbagianis

Project Engineer

EMPLOYMENT HISTORY:

2012-Present | **Project Engineer, eDesign Dynamics | NY, NY**

- Provide technical support including hydrologic/hydraulic modeling, water budgeting, site analyses, and construction documentation for the design of green infrastructure projects.

2011-2012 | **Graduate Research Student, City College of New York | NY, NY**

- Participated in research analyzing the changes in pollutant effluent concentrations from wastewater treatment plants in the Contiguous United States between 1984 and 2004.
- Designed a sustainable storm-water management system for a proposed development in Orange County, NY requiring only infiltration ponds and swales.
- Used Water Budget Models to determine that snowmelt in snow-dominated regions was not occurring earlier in 2005, relative to 1965.

2009-2010 | **Associate Project Manager, NYC Department of Environmental Protection | Queens, NY**

- Managed the complete upgrade of pumping stations totaling over \$1,000,000 throughout New York City, including writing specifications, projecting cost and time schedules, holding walkthroughs with Contractors, reviewing shop drawings and bids, supervising construction, and holding final inspections.
- Managed the construction of emergency work including the installation of sluice gates in interceptors and the replacement of failing pumps at pumping stations.
- Coordinated inter-agency meetings to ensure implementation of projects in Collections Engineering Section.

2007-2009 | **Assistant Environmental Engineer, NYC Department of Environmental Protection | Queens, NY**

- Held positions of increasing responsibility related to the design of civil, sanitary and mechanical projects within the NYC Collection Facilities system, including rerouting pipes and installing main sewage pumps (MSPs), sump pumps, ventilation fans, hot water heaters and hatch doors.
- Participated in the Supervisory Control and Data Acquisition (SCADA) of regulators and pumping stations to monitor and prevent combined sewer overflows (CSOs) during dry weather events.
- Engaged in research and investigation related to collection system upgrades.



EDUCATION:

- M.E. in Civil Engineering
Concentration in Environmental Engineering
The City University of New York - City College, New York, NY 2010-2012
- B.S. in Chemical Engineering
Concentration in Environmental Engineering
University of Southern California, Los Angeles, CA 2002-2005
- New York Intern Engineer (EIT) - Certificate #084998

**Robert H. Feller**

Mr. Feller is a member of the firm's Environmental and Energy Practice Group and is based in the Albany office. His principal areas of expertise include water pollution, SEQRA and environmental impact review, real estate development, including the remediation and redevelopment of brownfields, and municipal law.

He has a special expertise in the field of stormwater pollution having drafted the manual for local financing of the new MS4 program. He represents three county sewer districts and has addressed a variety of issues related to wet weather flows.

Of particular relevance to this RFP, Mr. Feller was retained by the Central New York Regional Planning Commission to draft a guidance manual for municipalities on the options for financing the local share of the MS4 program. The study includes financing charges as a general municipal charge, as part of an improvement district and as a municipal improvement. Research was also performed on financing through private funding sources such as fees imposed on developers however, that work is not reflected in the final product as funding for the project was insufficient.

Mr. Feller was part of a consulting team that conducted a study for Erie and Niagara Counties to consider the feasibility of establishing a stormwater utility district for those municipalities. He was responsible for the legal portion of the study and examined the legality of user fees and other administrative and financing mechanisms.

Mr. Feller also advises municipal clients on the establishment of special assessments, benefit assessments and user fees in the context of many municipal improvements and services, He has advised on the imposition of the in-lieu recreation fee authorized under New York law for residential developments and is currently supporting litigation for a private client challenging an aspect of the fee imposed by the Town of Malta in Saratoga County.

He has advised clients on the use of SEQRA mitigation fees and the distinction under New York law between mitigation fees and impact fees.

Finally, he has advised clients on various off-site mitigation programs, some of which permit the establishment and exchange of mitigation credits that are held by a mitigation bank or other similar entity. These programs include the Federal Army Corps of Engineers Wetland Program; the DEC offset requirements established under its Visual Impact Policy; the EPA Clean Air Act Non-Attainment Area Offset Program / Emission Reduction Credits; and market based transfer of development rights (TDR) programs.

Prior to joining the firm, Mr. Feller served in several capacities at the DEC, including Assistant Commissioner; Assistant Counsel for Energy; Assistant Counsel for Solid and Hazardous Waste. For over eight years, he was the sole or principal author of every agency decision issued after administrative hearing and was the confidential counsel to the Commissioner.

Mr. Feller is listed in the Best Lawyers in America under the categories of Environmental Law and Litigation-Environmental. For upstate New York, he is listed in Super Lawyers in the categories of Land Use/Zoning; Environmental Law and Environmental Litigation. He has received an AV rating from Martindale-Hubbell.

CONTRACT AUTHORIZATION



John J. Behan AICP, Principal, and/or Cynthia Behan, Principal, are authorized to bind the firm to a contract with CDRPC. The Proposal provided by Behan Associates Landscape Architecture, DPC constitutes an irrevocable offer for a period of ninety (90) after the opening of Proposal.

PART III: REFERENCES



REFERENCES

Town of Clarkstown, NY

Central Nyack Detention Basin

CONTACT: Joe Simoes, Town Planner
Town of Clarkstown, NY
(845) 639-2070
j.simoes@clarkstown.org

Town of Clarkstown, NY

West Nyack Hamlet Revitalization Green Infrastructure

CONTACT: Ed Lettre, Public Works Administrator
Town of Clarkstown, NY
(845) 639-2071
e.lettre@clarkstown.org

Town of Pittsford, NY

King's Bend Park Master Plan

CONTACT: Greg Duane, Finance Director
Town of Pittsford
(585) 248-6225
gduane@townofpittsford.org



REFERENCES

Brooklyn, NY

Brooklyn Waterfront Greenway Infrastructure Design Guidelines

CONTACT: Tricia Martin (WE Design)
Brooklyn Greenway Initiative NYS Environmental Protection Plan
(347) 236-0142

Brooklyn, NY

6th Street Green Corridor

CONTACT: John McLaughlin, Director
Office of Ecological Services, NYC Dept. of Environmental Protection
(718) 595-44584

Newburgh, NY

City of Newburgh Green Infrastructure Feasibility Report

CONTACT: Michael Jennings
New England Interstate Water Pollution Control Commission
(978) 349-25081



REFERENCES

CONTACT: Richard J. Lyons, P.E., Executive Director
Albany County Sewer District
(518) 447-1610
Richard.Lyons@albanycounty.com

CONTACT: Joseph L. Fiegl, P.E., Deputy Commissioner
Erie County Div. of Sewerage Management
(716) 858-7537
Joseph.fiegl@erie.gov

CONTACT: Nancy Heinzen, Stormwater Program Coordinator
Stormwater Coalition of Albany County
(518) 447-5645
nheinzen@albanycounty.com

PART IV: PLAN IMPLEMENTATION

Project Understanding and Approach

From the project outset, it will be important to determine whether or not these participating municipalities have the authority to implement the in-lieu fees or credit banking proposed as part of this work. Because there could be significant adverse financial consequences if a fee or credit banking system were held invalid, most municipalities would seek a high degree of confidence in the legality of these approaches before implementing them. If the study concludes they lack the authority, or if the authority is ambiguous, it may be appropriate to draft either a request for an opinion of the State Comptroller or proposed state legislation which enables it.

In addition, many of the pool communities represent a combination of CSO and non-CSO areas. It may be difficult or highly inefficient to establish one system for the community that is applied only in the CSO areas and another system in the non-CSO areas. If the suggested systems are applied uniformly across the whole municipality, then in addition to the legal authority to implement the program, the community must also address consistency of program with the requirements of the MS4 permit as that would need to be met in non-CSO areas. Furthermore, some consideration of the minimum geographic area required to make the banking program feasible would need to be examined.

The Behan Planning and Design team recognizes the opportunity to create more cost-effective approaches to mitigating stormwater impacts on CSO systems and we have been a strong voice in advancing these creative measures for financing and developing projects and stormwater retention and treatment systems that provide multiple benefits.

Our team of planners, attorneys and zoning experts, engineers, landscape architects and green infrastructure design professionals look forward to working closely with their APC's existing team of consultants and CDRPC and county/local staff to make this initiative most productive in terms of beneficially impacting water quality while making the communities better places to live through attractive green infrastructure solutions. We recognize the challenges of working in an urban environment—both from a physical and an economic perspective.

We recognize that the Albany Pool communities have particular needs, financing and other limitations, as well as some unique opportunities. Our process of stakeholder engagement will draw out these and other aspects of the feasibility study so we can craft our findings and recommendations toward advancing a workable plan for creating a more efficient system of stormwater management.

Finally, the key project staff from Behan Planning and Design, and our partners, eDesign Dynamics and Bond, Schoeneck & King are each known and respected in the field as innovators with capability to see the big-picture while recognizing the design, engineering, and legal/financial details that are critical to long-term feasibility and success of any green infrastructure project. Toward that end, our team has included a “watershed planning” approach in our scope of work, where, with the support of the existing consulting team to the APC, we would analyze and consider this effort in context of the various land cover patterns, soil conditions and stormwater pollution/CSO problems in the major sub watersheds as described in the LTCP to inform prioritizing GI projects. We intend on inspiring the partners to become highly engaged and interested throughout the process to ensure a successful result.

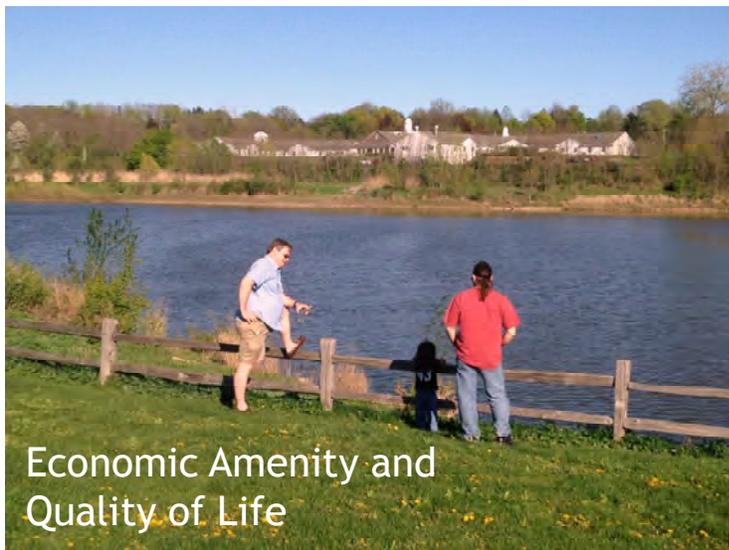
Scope and Approach

Task 1. Stormwater In-Lieu Fees

Complete on-site mitigation of addressing the water quality and quantity requirements of stormwater management is sometimes not possible and/or not cost-effective, especially in highly constrained urban environments—which is the setting of a large part of the Albany Pool Communities. Offering an in-lieu fee option creates an opportunity to address stormwater management more appropriately on a watershed/CSO sewershed basis. Further, an in-lieu fee structure could encourage more efficient consolidation of stormwater management/treatment systems that could offer multiple benefits as well as reduced per-unit maintenance cost.

Task 1.1 Research Stormwater ILF By Other Communities.

Our team research will include identifying similar programs in other states beyond New York to see how these may have been implemented. We understand a few communities such as the City of Rochester have provided for in-lieu fees but these efforts are relatively young and not yet fully vetted. In terms of stormwater user fees, we are familiar with the City of Ithaca's approach as they have implemented a stormwater utility fee system which was recently adopted which can be informative for this effort in the Capital region. As we look at these and other New York State-based examples, we will also explore more fully developed regulatory and initiative-based programs, such as the Washington, D.C., approach and the degree to which these approaches are feasible or recommended for the unique setting of the Albany Pool Communities and document these in a succinct technical memorandum including copies of appropriate reference materials.



This regional stormwater management facility in the east branch of the Irondequoit Creek watershed in Pittsford, NY provides multiple benefits—stormwater detention and treatment, wildlife habitat, park and recreation site and as an quality of life amenity to nearby neighborhoods .

Task 1.2 Analysis of Regulatory Authority:

Our team will conduct research to determine if the municipalities have the legal authority to implement the in-lieu fees, and how these approaches may or may not be consistent with the DEC's MS4 permit requirements. In New York State, the in-lieu fee is widely applied for parkland requirements in subdivision development and is authorized as such explicitly in state law. Such explicit authorization is not as clear for stormwater management fees. In the event that the legal determination is unclear, we would

propose that our team draft a request to the New York State Comptroller to provide a legal opinion/determination on the matter.

Task 1.3 Determine Scope and Fee of ILF Program.

The in-lieu fee program needs to consider the financial aspects and technical feasibility of designing, building, and maintaining multi-user or “regional” stormwater retention/treatment systems including a reasonable estimate of per unit costs. Our approach to this aspect will be to develop a hypothetical “concept program” and treatment system. We will create a user fee model and test the model to understand its sensitivity to costs, timing of capital payments (bonding/financing), and maintenance requirements. We will consider and discuss with the APC representatives and other regulatory representatives at the state level regarding the benefits and potential pitfalls of this concept program which will help define the critical issues to be addressed in advancing such a concept toward addressing the CSO mitigation needs of the region.



Behan Planning and Design team members are each known and respected in the field as innovators with capability to see the big-picture.

Task 1.4 and 1.5 (Combined) Analysis of Regional and Local Capacity and Identification of Barriers and Propose Strategies, Steps to ILF Program. Through the process of stakeholder involvement, working with the APC communities, consulting team and staff, and understanding the requirements of program management from other regions, we will describe the criteria and capabilities required to develop and manage such a system—recognizing that much of the work and management requirements are not that different from managing traditional treatment systems—but with the added aspect of creating new systems in a relatively young field. Our team will provide an unbiased assessment of the local capacity and document the nature of new/additional technical needs and requirements to support such a program.

Our report will include documentation of the barriers to implementing and ILF program and recommended approaches toward addressing and resolving those barriers. We recognize at the outset some of these issues and questions include:

1. To what extent are in-lieu fees permitted and if not, what options exist to address this key issue?
2. Can a cost-effective system be created where the costs to construct can be matched with the in-lieu fees?
3. How/whether maintenance costs can be addressed?
4. What is the likelihood of utilization of an in-lieu fee system and is the use potentially sufficient to justify implementation.

Final report will include a summary of our major findings, graphics, preliminary financial analysis, and our team’s recommendations toward the feasibility of advancing an in-lieu fee program.



Image Credit: NYCEDC

Stormwater retention credit banking can facilitate the development of more attractive green infrastructure approaches that can add value and improve the quality of life in urban environments.

Task 2. Stormwater Retention Credit Banking.

Task 2.1 Analysis of Regulatory Authority.

Our team will conduct research to determine if the municipalities have the legal authority to implement the credit banking system, and how these approaches may or may not be consistent with the DEC’s MS4 permit requirements. In the event that the legal determination is unclear, we would propose that our team draft a request to the State Comptroller to provide a legal opinion/determination on the matter.

Task 2.2 Identify Areas of Different Development Pressure. The Behan Planning and Design team will gather and analyze existing data in concert with CDRPC and the Albany Pool Communities and create conceptual map of areas of development pressure. A set of mapping criteria will be established including development trends, access to transportation and other infrastructure, proximity to growth generators (employment centers, natural and cultural amenities, etc.). The map will be reviewed with the client group and fine-tuned sufficient for the purposes of this study.

Task 2.3 and 2.4 (Combined) Identify Areas of High and Low GI Value and here Cap and Trade ILF Program May Work. Our team will prepare a draft set of mapping criteria based upon our experience in developing green infrastructure as well as integration of local knowledge and

experience from the APC. This task will include the background research into conditions in the APC and review of materials prepared as part of the APC's effort to address wet weather issues. The Behan Planning and Design team will conduct site visits, review the LTCP, and identify other greening initiatives that have been proposed or implemented in the APC. In collaboration with NYSDEC and CDRPC/APC staff, Behan Planning and Design will review the land use and land cover conditions in each of the major sub watersheds in the APC and other applicable information from the long term control plan to identify opportunities for watershed-scale stormwater management projects. eDesign Dynamics (EDD) will lead a study of existing site conditions which will include identification of brownfield sites, identification of other locations for implementation of green infrastructure, an assessment of native and disturbed soils within these areas, and an evaluation of habitat conditions, gaps in continuity, and ecosystem health.

The team will make every effort to include stakeholders in each of these assessments. It is intended that any environmental data will be collected from existing documents provided by stakeholders. Using this data and conversations with representatives from the APC, our team will recommend an approach for implementation of the Cap and Trade and In-Lieu Fee program in terms of:

- Local capacity/local interest perspective on the concept.
- Potential demand for the program
- Identification of areas with natural and physical characteristics of supporting a regional facility
- Feasibility (conceptual) of development of such a facility(ies)

Task 2.5 Develop Financial Assessment of Program. The financial assessment will consider the findings of each of the prior tasks. A conceptual framework for this task would include:

- a. Demand for in-lieu fee approach/utilization of off-site mitigation
- b. Supply/Opportunities to construct off-site/regional retention sites
- c. Costs and revenues (capital and O&M)
- d. Financing feasibility
- e. Banking/trading organizational structures/options (municipal, land trust, for-profit, etc.)
- f. Credit process: certification, lifespan, credit timing for trading/banking, geographic scope.

Charlotte, North Carolina – Case Study

A 2010 study from the Nicholas Institute for Environmental Policy Solutions quoted a comment by Daryl Hammock, Charlotte's stormwater manager, on the cost difference between on-site and off-site mitigation: "On one three-acre urban site, the costs for underground stormwater treatment were estimated to be about \$700,000. By allowing [developers] to pay a fee, in this case, \$180,000, everyone was happy. The city is able to take \$180,000 and treat a much larger area—approximately 18 acres—for the same cost."

Task 2.6 Identify Barriers and Propose Strategies, Steps to Credit Banking Program. The process outlined above will flush out both the barriers and opportunities to managing a credit program. Our team will propose strategies that can be advanced to overcome the identified barriers and take advantage of the benefits that a credit/banking system can provide and we will outline the next steps to advance the concept further toward implementation.

Potential Additional Tasks

Recognizing that the research, analysis, and input from stakeholders may present opportunities to advance or implement some of the green infrastructure element of the LTFC, our team has thought about some potential opportunities for additional services that would benefit the program. We could provide these or similar services as determined by CDRPC at either the hourly rates or as a negotiated fixed fee.

1. Investigation in the use of stormwater utility districts.
2. Investigation in the use of using a user-fee structure.
3. Provide outlines for inter-municipal agreements to address storm water issues near municipal boundaries.
4. Grant application to fund refinement/implementation activities and/or construction of demonstration project(s).



Watershed-based green infrastructure at an appropriate location and scale can often function more efficiently, cost-effectively and can be more easily maintained than a large number of smaller individual projects.

PART V: COST PROPOSAL

Capital District Regional Planning Commission									
ALBANY POOL COMMUNITIES - STORMWATER IN-LIEU FEES AND CREDIT BANKING									
Proposed Budget	Behan Planning and Design				eDesign Dynamic	BSK			
	Cynthia A. Behan	John J. Behan	Michael Allen	Kara Smith	Montalto, Rothstein, Lipsk	Barbagianis, Shih, Renner	Robert Feller	Hours	Task Total
Billing Rate	\$160	\$160	\$130	\$95	\$155	\$100	\$200		
TASK 1 - Stormwater In-Lieu Fees									
Task 1.1 - Research Stormwater ILF By Other Communities	6	9	5	6				26	\$3,620
Task 1.2 - Analysis of Regulatory Authority	5	12	5	6	4		40	72	\$12,560
Task 1.3 - Determine Scope and Fee of ILF Program	6	15	5	7	5	6		44	\$6,050
Task 1.4 & 1.5 - Analysis of Regional and Local Capacity and Identification of Barriers and Propose Strategies, Steps to ILF Program	5	20	10	10	8	8	10	71	\$10,290
TASK 2 - Stormwater Retention Credit Banking									
Task 2.1 - Analysis of Regulatory Authority		10	6	5			40	61	\$10,855
Task 2.2 - Identify Areas of Different Development Pressure	4	8	5	6	10	10		43	\$5,690
Task 2.3 & 2.4 - Identify Areas of High and Low GI Value and here Cap and Trade ILF Program May Work	4	35	10	7	8	8		72	\$10,245
Task 2.5 - Develop Financial Assessment of Program	5	30	10	8	8	6		67	\$9,500
Task 2.6 - Identify Barriers and Propose Strategies, Steps to Credit Banking Program	6	8	6	6			10	36	\$5,590
Total hours	41	147	62	61	43	38	100	492	\$74,400
Per person cost	\$6,560	\$23,520	\$8,060	\$5,795	\$6,665	\$3,800	\$20,000		
								Expenses	\$600
								Project Total	\$75,000

PART VI

MWBE Utilization Forms

New York State Department Of Environmental Conservation

Division of Management and Budget Services - Minority and Women's Business Program

625 Broadway, 10th Floor, Albany, New York 12233-5028

Phone: 518.402.9240 Fax: 518.402.9023

Website: www.dec.ny.gov Email: MWBE@dec.ny.gov



Version 5.0

Consultant / Contractor Detailed M/WBE-EEO Utilization Plan

Contractor Name:	BEHAN ASSOCIATES LANDSCAPE ARCHITECTURE, D.P.C.				
NYSDEC Contract No:	2015002	Contractor Federal ID:	461575375		
Contract Start Date:		Contract End Date:		Date Submitted:	11/20/2015
Contractor Address:	112 SPRING STREET, SUITE 305				
City:	SARATOGA SPRINGS	State:	New York	Zip Code	12866
Contractor E-mail:	mallen@behanplanning.com		Contractor Phone Number:	(518) 583-4335	

Contract Type:	Services / Technologies	
Project Goals Based on:	Upstate New York	<u>Downstate Counties</u> Nassau, Suffolk, Dutchess, Orange, Putnam, Rockland Sullivan, Ulster, Westchester, Bronx, Kings, New York Queens, Richmond
Project County:	Albany	
Authorized Representative Name:	CYNTHIA BEHAN, RLA	
Authorized Representative Title:	PRESIDENT	

M/WBE Contract Summary	%	Amount	EEO Contract Summary	%	No of Employees
1. NYSDEC Contract Amount	(A)	\$50,000.00	7. Total Employees in this project	100 %	8
2. Recipient Share (If Applicable)	(B)	\$25,000.00	8. Total Goal -Minority Employees %	15	1.2
3. Total Project Amount (A + B) *	100 %	\$75,000.00	9. Total Goal - Female Employees %	15	1.2
4. MBE Project Goal %	15.	\$11,250.00	10. EEO Combined Totals %	30	2.4
5. WBE Project Goal %	15.	\$11,250.00			
6. M/WBE Total %	30	\$22,500.00			

* - Goals apply to Total Project Amount

Please note: The overall goal for MWBE Participation is 30%. 15% MBE and 15% WBE is a suggested starting point, however, the actual participation between MBE and WBE may vary depending on statewide availability.

Section II - EEO Information: In order to achieve the EEO Goals, Minorities and Females are expected to be employed in the following job categories. Please provide breakdown of **Minority and Female Employees assigned to this project only**. If the EEO goals are not met, please provide an explanation in the comments area.

Job Categories	Total Count of Minority Employees	Breakdown of Total Count of Minority Employees by Gender		Breakdown of Total Count of Minority Employees by Ethnicity				
		Male	Female	African American	Asian	Native American	Hispanic	White
Officials/Managers								
Professionals	8	6	2		1			7
Technicians								
Sales Workers								
Office/Clerical								
Craftsman								
Laborers								
Service / Workers								
Totals	8	6	2		1			7

Comments:

Please don't remove previous comments

Please note that Behan Planning and Design, the prime consultant for this project (not subconsultant) is a certified WBE/DBE firm. A majority of the project work and budget is scheduled to be completed by this prime WBE firm.

Section III - M/WBE Information: In order to achieve the M/WBE Goals, New York State Certified Minority/Women-owned firms are expected to participate in the following manner:

Important: If there is no M/WBE Vendor participation, please provide brief summary of Good Faith Efforts in the comments section on page 2. Do not enter NA or NONE in Vendor Name.

M/WBE Vendor Name	Federal ID	Vendor Status	Subcontract Amount	Start Date	End Date	Payment Date	Work Description
BEHAN ASSOCIATES LANDSCAPE ARCHITECTURE, DPC	461575375	WBE	\$50,000.00				Planning and Landscape Architecture
	Total Subcontract Amount		\$50,000.00				

By printing name below, Contractor: 1.Certifies that the above information is true and complete as of this date. 2. If required, will provide Good Faith Effort documentation to NYSDEC.

Important: Please don't attach this form manually to E-Mail, instead Click "Submit by E-mail" button to send form via E-Mail.

Authorized Representative Signature (Print Name)

JOHN BEHAN

FOR NYSDEC MWBE UNIT USE ONLY

Approved By:

Approved Date: