

Town of Holden Beach

Stormwater Management / Cost of Service /
Utility Rate Studies





January 19, 2023

Heather Finnell, Town Clerk
Town of Holden Beach
110 Rothschild Street
Holden Beach, NC 28462

RE: Statement of Qualifications
Stormwater Management / Cost of Service / Utility Rate Studies

Dear Heather:

We understand that bringing on an engineering firm to lead and facilitate the development of a comprehensive stormwater feasibility study, cost of service, and rate study associated with a Stormwater Management Plan for the Town will directly improve the quality of life and safety of your residents. McGill Associates, PA (McGill) has worked with communities throughout North Carolina to provide reliable and practical stormwater management, cost of service, and utility rate studies. Our team has a deep understanding of coastal stormwater and CAMA regulations, both of which will be vital in addressing the Town's unique needs. We are confident in our capabilities to perform responsive, high-quality professional services to accomplish the scope and objectives for this project. Please consider the following relevant points demonstrated within our Statement of Qualifications:

- **Commitment to the Town:** With 39 years of successful service to local municipalities, McGill understands your local needs relative to funding and the completion of studies and capital improvement projects. We appreciate prior work assignments for the Town of Holden Beach and remain committed to helping with your future successes. Our staff has a unique familiarity with the Town of Holden Beach given some of our lifelong residencies nearby, and we are determined to serve you well.
- **Unique Qualifications:** McGill's professionals have extensive experience in hydrologic and hydraulic modeling, including one-dimensional and two-dimensional predictive models, such as HEC-HMS, HEC-RAS, and SWMM. We utilize these models to support surface water management system analyses, dam design and safety analyses, risk assessment, innovative and alternative flood protection solutions, stormwater network data collection and inventory, and stormwater management systems design.
- **Practical Approach:** McGill will complete stormwater management, cost of service, and utility rate studies that address the specific needs of the Town of Holden Beach, utilizing past assessment and planning knowledge effectively, while also recognizing unique system attributes. McGill team members have the background, experience, and necessary resources to ensure this project is completed on time and within budget. We will assess your stormwater system methodically, utilizing existing conditions, plans, knowledge, and operational understanding to better guide our approach for developing improvement recommendations.

McGill's team will provide the specific expertise that you need for this project and will work seamlessly with Town staff and partners to support project goals. Please reach out if you have any questions during review of this submittal. You may contact me at michael.norton@mcgillassociates.com or 910.755.5872. Thank you for your consideration.

Sincerely,
MCGILL ASSOCIATES, PA

A handwritten signature in black ink, appearing to read 'Michael Norton'.

MICHAEL NORTON, PE
Principal / Shallotte Office Manager

Firm Overview



Contact

Michael Norton, PE

Principal / Shallotte Office Manager
michael.norton@mcgillassociates.com

Office Locations



Local Office:

712 Village Road SW, Suite 103, Shallotte, NC 28470
910.755.5872

How We're Different

McGill serves public and private clients throughout the Southeast. The range and depth of McGill's expertise includes a wide spectrum of engineering services, land planning and recreation, as well as consulting services.

Our foundation is built on creating comprehensive solutions in a personal way. Collaboration is the key to our success and clients are an integral part of every project at McGill. By building lasting relationships with communities, we understand our clients' visions and project goals. Our dedicated project team focuses on delivering a customized solution for each unique community.

We help our clients identify challenges, formulate responsive solutions, and manage successful project completion. Through partnership, we shape the best results for each client and community.

What We Do



Water Resources



Civil Engineering



Consulting Services



Environmental



Land Planning and Recreation



Water and Wastewater



Solid Waste



Electrical Engineering



Mechanical, Electrical, and Plumbing



Construction Administration

At a Glance

Legal Name: McGill Associates, PA

Incorporated / Year: 1984

Business Type: Corporation

Employee Count: 146

01 | Objectives

The Town funds its stormwater program from the general fund, but is looking for a reliable and dedicated stormwater funding source by evaluating a local stormwater utility for planning, programming, and coordinating future stormwater infrastructure in the community. A stormwater utility can provide a source of funding that is equitable, adequate, and sustainable.

Important to the utility is developing an understanding of the existing stormwater system, deficiencies, and needs. A Comprehensive Stormwater Master Plan provides the Town this information. In addition, by identifying future needs, the Stormwater Management Plan allows the Town to proactively plan and budget for capital projects.

Communication

We tailor our communication to the project and client's preference. At project initiation, McGill will establish the point of contact, preferred form of communication, and frequency of updates.



Project Understanding

It is our understanding that the Town of Holden Beach is seeking professional stormwater management and consulting services to perform a comprehensive study to evaluate the feasibility of developing a Stormwater Management Plan. The study includes an assessment of the existing condition of the Town's stormwater system, stormwater modeling and watershed management, and feasibility of stormwater utilities to address the specific needs of the Town. The environmental conditions of the island community of Holden Beach presents unique challenges in managing stormwater runoff given the limited surface discharge opportunities, even from within public rights-of-way. Ponding water within roadway areas following rain events cannot always be managed through permanent piping to low point outlets. Though the Town can respond to emergent events, such as hurricanes, with temporary pumping measures, the more frequent rain events that still cause flooding must be handled otherwise.

Project Approach

Based on this understanding, we anticipate the following steps in development of a Stormwater Management Plan:

- Mapping and assessment of the system (location, condition, and material)
- Assessing the conveyance capacity
- Identifying current and potential trouble areas
- Evaluating alternatives and recommending solutions for each area
- Preparing a Stormwater Management Plan document, that will include prioritizing the recommended solutions
- Providing an evaluation of the feasibility of implementing a stormwater utility



Inventory of Existing Stormwater Infrastructure

McGill will prepare a stormwater infrastructure inventory that will be mapped and cataloged in a GIS database. We view the creation and management of this information as a key component of our work effort. Our team will be heavily involved with Town staff in the planning, acquisition, processing, analysis, and dissemination of geospatial data to ensure that the consistency, integrity, and overall quality of the data is maintained throughout the data lifecycle and duration of the project.

Data Collection

The field collection of system data can be one of the more costly aspects of any stormwater assessment and management program. We have developed two distinct levels of inventory data collection, allowing the Town to customize the project scope to fit its budgetary and program needs.

1. The first, and most cost-effective, data collection technique involves the collection of field data with consumer-level mapping grade equipment, in lieu of survey-grade equipment. We have developed project-specific workflows for similar projects that allow us to use handheld tablets with integrated, sub-meter GPS capability (EOS Arrow 100 units) to facilitate fast and efficient data collection, giving field personnel the ability to collect data in true geodatabase format.
2. A second, though more costly, alternative available to the Town is to collect location data of the stormwater infrastructure through traditional surveying techniques. Reserving the use of survey-grade data collection for use in targeted problem areas can reduce study costs, while still achieving the project goals. By providing the Town with options to customize the data collection process to fit its needs, we can provide a study that is tailored to address your specific needs, while leveraging limited budgets towards project implementation.

Mapping

In either case, we propose to use the industry-standard GIS platform, Environmental Systems Research Institute, Inc. (Esri) ArcGIS software to create and modify databases and analyze the field data to ensure the required accuracy is met. Our key technical team members are proficient in GIS and all work will be under the supervision of our certified GIS professional (GISP) team lead.

During the mapping phase of the Town's stormwater infrastructure, our staff will conduct a visual inspection of each stormwater feature. We will evaluate any piping, inlets, headwalls, or other structures — including open channels and swales within the study area — for a general condition assessment, with detailed data recorded for the type of component, size, configuration, material, approximate utilization age, condition, and apparent functionality.

Areas of piping concern identified by the mapping and assessment crew, or as identified by the Town staff, will be included on a prioritized list of segments considered for further evaluation using closed-circuit television (CCTV) (video inspection). McGill maintains relationships with numerous specialized companies that can provide not only video inspection services, but can also provide more high-tech methodologies, such as acoustic or laser analyses of pipe conditions. McGill has extensive experience reviewing the data gathered during these detailed surveys. We will provide the Town with a detailed analysis of any video or other detailed data gathered during the project. Major drainage channels or pipes and areas of specific concern for the Town will be surveyed for accurate hydrologic and hydraulic modeling and capacity analysis.

Assessing the Conveyance Capacity

McGill will perform a capacity analysis on the stormwater system through both hydrologic and hydraulic modeling. These modeling results will be used to approximate the existing hydrology and hydraulic conditions within the Town. The results will allow the Town to validate known problems or deficiencies in existing stormwater systems and identify the extent of risk these deficiencies present.



Hydrologic and Hydraulic Modeling

We will analyze the current conditions using the most appropriate hydraulic model for the situation. McGill engineers are well-versed with several hydrologic and hydraulic software packages, including StormCAD, SWMM, Hydroflow, and the United States Army Corps of Engineers' HEC-HMS and HEC-RAS models. We recommend dynamically modeling the stormwater conveyance to account for peak intensities and duration of rainfall events. This can be done by coupling HEC-HMS output hydrographs (hydrology) with an unsteady HEC-RAS model (hydraulics) or using a dynamic rainfall-runoff simulation model, such as SWMM. Our engineers have used both approaches on recent projects, including the City of Boiling Spring Lakes' study (HEC-HMS / HEC-RAS) and the City of Wilmington's Pirate Cove stormwater assessment (SWMM).

McGill can use available information from public agencies (e.g., LiDAR, land cover, soil) to develop a Town-specific hydrologic model, detailed, as needed, to capture critical stormwater areas. We will utilize SCS methodologies to determine curve numbers (CNs), time of concentrations (TOCs), and flow patterns. McGill will use aerial photos, soil maps, and zoning areas to determine the appropriate current and potential runoff parameters.

Our team will use the results from the field inventory to create a hydraulic analysis of the stormwater system and compare the hydraulic results to known information. For example, a major storm event can be simulated, and the model refined to mimic conditions in the field. Then, another storm will be simulated to validate the model. The model validation storms will be selected based on the desired level of services (i.e., storm intensity) and availability of data for use in the calibration.

Identifying Current and Future Areas of Concern

Once the model development is complete, we will simulate various design storm events to identify areas that do not meet the desired level of service (i.e. areas of concern [AOCs]). For each AOC, we will evaluate the current level of service provided by the existing drainage system, impacted structures, road closure, and limitation to emergency response.

A summary will be provided for each AOC and a target level of service will be set, in coordination with the Town, for the development of remedial alternatives.



Alternatives Evaluation

Using the results of the hydrologic and hydraulic modeling, McGill will prepare conceptual solutions to address the problems in the AOCs. These solutions will include not only the standard options, such as replacing, repairing, and extending pipes, culverts, channels, and conveyances to move the runoff downstream faster, but also innovative ideas, such as detention; restoration, enhancement, and stabilization; and stormwater management techniques that focus on maintaining the water balance and slowing down the runoff rate. All concepts will include water quantity and water quality options that holistically address stormwater.

Our team will work with the Town to evaluate different methodologies and will develop an evaluation or decision-making tool that is fair, objective, and defensible.

The proposed alternatives will be technically feasible, reliable, maintainable, environmentally acceptable, economically viable, and financially feasible (i.e., suitable for future capital improvement funding locally and through grant supported efforts). An alternative ranking matrix (example provided) will be developed in collaboration with the Town to objectively evaluate and compare the alternatives, including an opinion of probable construction cost.

Example Alternative Ranking Matrix

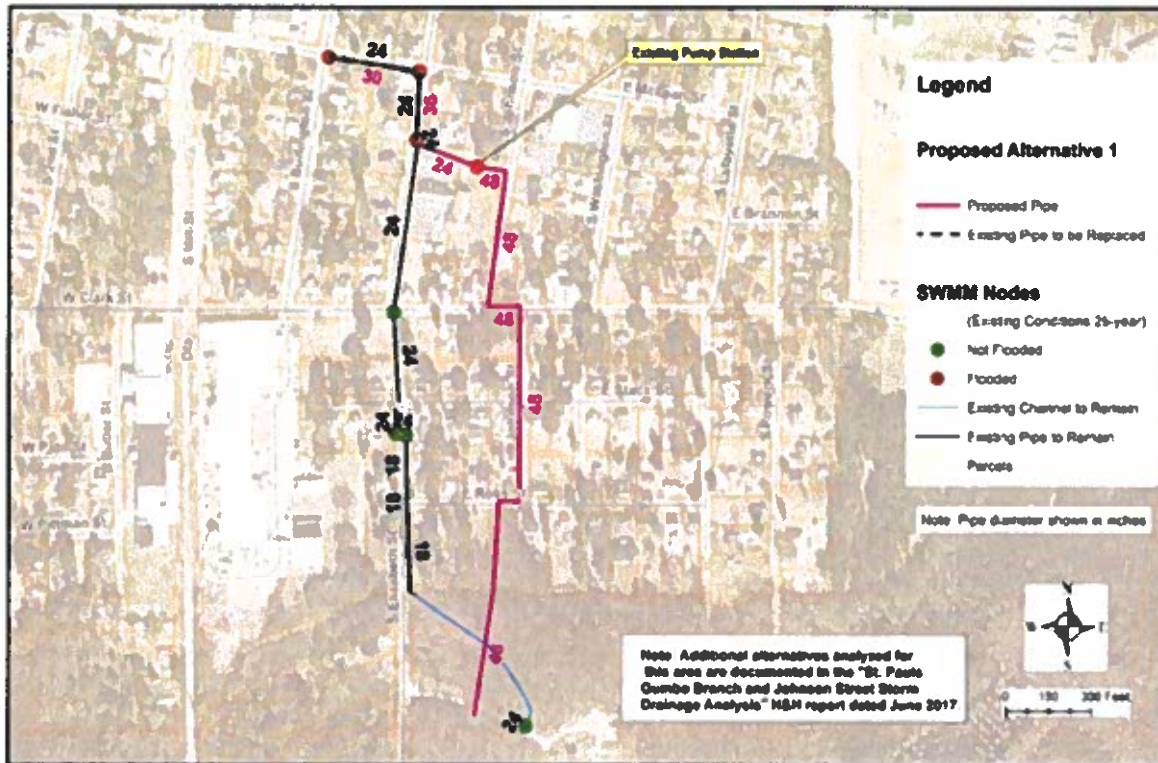
Location / Alternative	Flooding Improvements			Water Quality			Implementation			
	Road Flooding	Home Flooding	Yard Flooding	Erosion / Siltation	Water Quality Benefits	Maintenance Requirements	Cost of Implementation	Permittability	Land Acquisition	Public Acceptance
Points	0-5	0-5	0-5	0-5	0-5	0-5	0-5	0-5	0-5	0-5
Weight	5	3	1	1	1	2	3	2	1	1

We will develop a fact sheet for each recommended project that describes the issue of concern, recommended solution based on the ranking of the alternatives, its benefits, and cost.



Area C1 – Alternative 1

S. Elizabeth St. Drainage Improvements



PROBLEM

Areas around the Calvary Cornerstone Holiness Church and along Johnson Street and experience recurrent flooding. The Calvary Cornerstone Holiness Church and surrounding properties are at lower elevations of the surrounding topography with no drainage outlet (closed basin). This causes water naturally to flow into this area and flood frequently.

SOLUTION

The risk of flooding is reduced by upsizing the existing drainage system in the headwater areas and supplementing the existing drainage system along Elizabeth St. with a 48" RCP along S. Johnston St. The proposed 48" RCP starts from the vicinity of the existing pump and drains south into Big Marsh Swamp. In addition, the existing system near the Church would be connected to the proposed system via a 24" RCP to receive a portion of the runoff from the Elizabeth St. network and relieve pressure in the downstream existing system. Additional alternatives for this location were analyzed and documented in the "St. Pauls Gumbo Branch and Johnson Street Storm Drainage Analysis" report dated June 2017.

PROJECT BENEFITS

The primary benefit of this project would be to alleviate flooding in areas along Johnson Street, low spots around the Calvary Cornerstone Holiness Church, and along E McLean/S Elizabeth streets.

PROJECT CHALLENGES

- Disruption of traffic.
- Acquisition of properties for construction and drainage easement.
- Possible conflict with existing sewer system near the proposed stormwater outfall.

COST

"Estimated Construction Cost Range:
\$1,488,000 to \$1,603,000"

"Estimated Engineering, Surveying & Permitting
Cost Range:
\$150,000 to \$245,000"

"Estimated Project Cost Range:
\$1,638,000 to \$1,848,000"

Example fact sheet for project recommendation



Stormwater Management Plan

McGill will provide recommendations for phased implementation, based on priority, which can be used for planning and budgeting purposes. The implementation will account for interdependency between projects in the prioritization (e.g., if Project B is dependent on Project A, Project A will take precedence). McGill proposes to meet with the Town to review all conceptual options and select preferred solutions to include in the remediation plan. We will create an analysis process to support the prioritization of conceptual improvements, based on priorities identified by the Town.

McGill will develop a Stormwater Management Plan that includes a summary of all the tasks performed for this project, detailed data and results tables, digital copies of supporting GIS and modeling data, as well as a remediation plan on a prioritized implementation timeline. The plan will also include implementation costs and schedules for the prioritized stormwater improvement projects to assist the Town in capital improvement plans.

Evaluation of the Feasibility of Implementing a Stormwater Utility

The Town is considering the feasibility of implementing a local stormwater utility (SWU) for planning, programming, and coordinating future stormwater infrastructure in the community. A stormwater utility can provide a source of funding that is equitable, adequate, and sustainable.

- **Equitable:** Fees are linked to the degree of impact to the stormwater program.
- **Adequate:** Long-range planning allows the fee to be set at a level adequate to support the Town's stormwater program goals and objectives.
- **Sustainable:** Funds from stormwater utility fees are stable, predictable, and not subject to fluctuations associated with allocations from the general budget.

The main components in evaluating a stormwater utility are summarized in the following paragraphs. This evaluation requires close collaboration and knowledge of the Town, which McGill provides given our years of knowledge and assistance relative to stormwater matters on the island.

Setting Goals

Meet with Town staff to review the Town's financial policies and objectives for providing stormwater management services and ensure the Town's overall goals and objectives are met. Our team will collaborate with the Town to define desired stormwater policies, assess existing public works administrative support, develop a Capital Improvement Plan (CIP) based on the Stormwater Management Plan created as part of this project and Town knowledge, identify deferred and annual stormwater infrastructure maintenance, define the purpose and uses of the SWU revenues, and establish SWU planning time frames. These items will be discussed at the onset of the task and revisited throughout the evaluation to adapt the analysis, as needed.

System Metrics

Using the GIS data collected during the stormwater evaluation, CIP project recommendations, and the operational and maintenance cost gathered from the Town, we will develop priorities and scheduling to incorporate into the financial analysis model (described below). We will develop a projected SWU annual budget based on administration and staffing costs, programmed operations and maintenance (O&M) expenditures, prioritized CIP initiatives, and / or sinking fund(s).

Preliminary Financial Analysis

McGill will construct an Excel-based financial model to determine revenue requirements necessary to provide full cost recovery of anticipated SWU expenditures under several recommended implementation strategies. The model outputs will allow various SWU approaches to be evaluated for determination of financial feasibility.

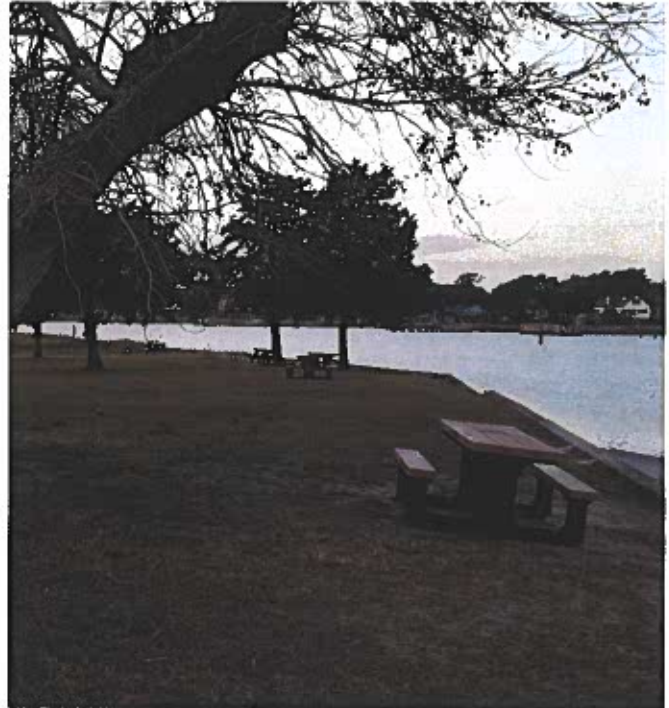
We will conduct a rates comparison with similar communities, state, and regional averages; explain options to account for the fees and expenditures; and discuss possible rate exemptions, including streets / highways, undeveloped land (non-agricultural / agricultural), public parks, government (federal, state, county, school districts), waterfront, and / or properties that do not discharge runoff to the Town's system.

We will develop preliminary rate structures to evaluate user charges and fees required to meet goals established above based on selected planning time frame (e.g., five- and ten-year).



Feasibility Report

We will prepare a document summarizing the analysis, findings, and recommendations for development of SWU. The document will also include an overview of a Stormwater Utility Implementation Plan for the Town. The plan will identify supporting ordinances and policies for SWU enforcement, anticipated administrative processes and support positions, required data coordination to support selected billing processes (software changes, hardware upgrades, programming, etc.), and preliminary SWU Enterprise Fund revenue split (e.g., administrative, improvements, maintenance, program development, etc.).



Project Management Approach

Our experience has led us to develop and embrace a standardized approach to project management. Your project manager stays in tune with every aspect of the project, as well as in touch with each person or team involved. McGill has standardized systems in place and tools to keep each aspect of the project on track.



Communication

Frequent team and client communications ensure effective management of project objectives.



Financial

Our highly trained managers use Deltek Vision software to track progress relative to scope and schedule.



Technical

McGill staff use cloud storage for all files, as well as the latest software programs for design.



Internal Expertise

Key subject matter staffing across the firm ensures ample resources in technical expertise to tackle assignments. Our in-house resources are able to address most issues encountered during the life of a project.

Project Schedule

McGill has many years of collective experience and a lengthy record of accurate project scheduling, effective cost control, quality work, and innovative design capabilities. We consistently plan and design projects within the client’s budget and schedule. Our internal procedures were established 39 years ago and have been evolving ever since to allow for successful development of project schedules and milestones. The actual project duration may be subject to change due to regulatory permitting review and approvals, as well as desired material procurement method.

Schedule									
Month	Feb	March	April	May	Jun	Jul	Aug	Sept	
Task									
Scope and existing data acquisition	█	█							
Inventory of existing stormwater		█	█	█	█	█			
Assessing the conveyance capacity					█	█	█		
Alternatives analysis and ranking							█		
Draft Stormwater Management Plan							█	█	
Final Stormwater Management Plan								█	
Feasibility of implementing a stormwater utility evaluation					█	█	█	█	█



Knowledge of Water Resources and Similar Projects

We regularly perform various water resources projects, including stormwater master planning, rate studies, flood studies, no-rise, open channel hydraulic analysis, and stormwater improvement analyses for communities across North Carolina. For example, we recently completed a Stormwater Management Plan for the Town of St. Pauls, which supported American Rescue Plan Act (ARPA) funding applications of \$5 million for stormwater improvement projects. Elements of the project included developing stage storage and rating curves, computing watershed parameters, collating rainfall data, determining peak inflow and outflow, preparing supporting data and calculations, compiling the final report, and summarizing the findings and recommendations.

Our professionals have extensive experience in hydrologic and hydraulic modeling, including one-dimensional and two-dimensional predictive models, such as HEC-HMS, HEC-RAS, and SWMM. We utilize these models to support surface water management system analyses, dam design and safety analyses, risk assessment, evaluating innovative and alternative flood protection solutions, stormwater network data collection and inventory, and stormwater management systems design.

Our team has developed multiple stormwater master plans, stormwater impact evaluations, and stormwater utility feasibility for communities throughout North Carolina. Our approach for this project will be tailored based on our deep understanding of the hydrology and hydraulics of coastal communities in North Carolina in general, and our long experience with the Town of Holden Beach in particular.

For the stormwater utility study, the evaluation entails both a technical approach as well as public and political engagement. McGill invests in a formal internal and external technical training program to continually improve our technical expertise and remain current with the latest industry developments. For example, our staff has attended training in various surface water models, streamflow statistical techniques and programs, ArcGIS, and other innovative stormwater management practices. Every year, we identify target areas of expertise and training opportunities for each staff member to attend.



References from Similar Projects and Similar Contracts in the Past 5 Years

City of Wilmington

Fred Royal, PE, CFM, Stormwater Manager
102 North Third Street
Wilmington, NC 28412
910.341.5818
fred.royal@wilmingtonnc.gov

On-Call Stormwater Assistance (Current)

Town of Sunset Beach

Lisa Anglin, Town Administrator / Town Clerk
700 Sunset Boulevard N
Sunset Beach, NC 28468
910.579.1840
langlin@sunsetbeachnc.gov

Stormwater Master Plan (2018)
On-Call Stormwater Services (Current)

Town of Calabash

Chuck Nance, Town Administrator
882 Persimmon Road
Calabash, NC 28467
910.579.6747
tacalabash@atmc.net

Saltaire Village Stormwater (2017)
ARPA Stormwater (2022)

Town of Hillsborough

Terry Hackett, Stormwater and Environmental Services Manager
101 East Orange Street
Hillsborough, NC 27278
919.732.1270
terry.hackett@hillsboroughnc.org

Cornwallis Hills Stormwater Impact Analysis (2022)

City of Boiling Spring Lakes

Gordon Hargrove, City Manager
9 East Boiling Spring Road
Boiling Spring Lakes, NC 28461
910.363.0025
ghargrove@cityofbsl.org

On-Call Stormwater Services (Current)

North Carolina Wildlife Resources Commission

Brad Kleinmaier, PE, Capital Project Coordinator
1751 Varsity Drive
Raleigh, NC 27606
919.707.0155
brad.kleinmaier@ncwildlife.org

Town of Ocean Isle Beach

Justin Whiteside, Planning Director and Assistant Town Administrator
111 Causeway Drive
Ocean Isle, NC 28469
910.579.3469
justin@oibgov.com

East 3rd Street Stormwater Modifications (2018)

On-Call Stormwater Services (Current)

Town of Leland

Niel Brooks, Assistant Town Manager
102 Town Hall Drive
Leland, NC 28451
910.332.4818
nbrooks@townofleland.com

Stormwater Ordinance Updates (2021)

On-Call Stormwater Services (Current)

Brunswick County Schools

Larry Smith, Chief Operations Officer
35 Referendum Drive
Bolivia, NC 28422
910.252.1062
ljsmith@bcswan.net

On-Call Stormwater Services (Current)

At a Glance

Legal Name: McGill Associates, PA

Incorporated / Year: 1984

Business Type: Corporation

Number of Offices: 7

Number of Employees: 146





NORTH CAROLINA

Department of the Secretary of State

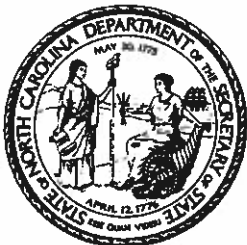
CERTIFICATE OF EXISTENCE (PROFESSIONAL CORPORATION)

I, ELAINE F. MARSHALL, Secretary of State of the State of North Carolina, do hereby certify that

MCGILL ASSOCIATES, P.A.

is a professional corporation duly incorporated under the laws of the State of North Carolina, having been incorporated on the 11th day of January, 1984, with its period of duration being Perpetual.

I FURTHER certify that the said corporation's articles of incorporation are not suspended for failure to comply with the Revenue Act of the State of North Carolina; that the said corporation is not administratively dissolved for failure to comply with the provisions of the North Carolina Business Corporation Act; that the said corporation's certificate of registration is not suspended or revoked by their licensing board; and that the said corporation has not filed articles of dissolution as of the date of this certificate.



Scan to verify online.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal at the City of Raleigh, this 29th day of September, 2022.

Elaine F. Marshall

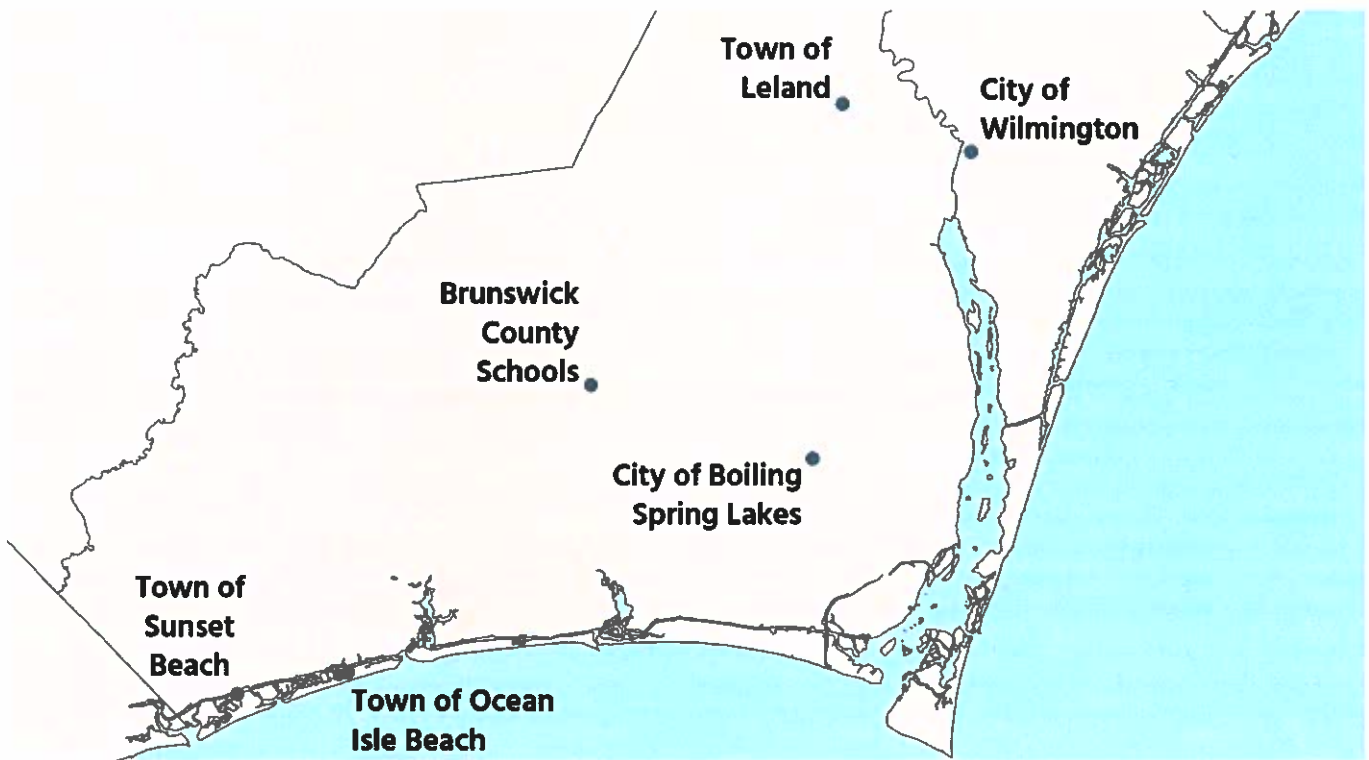
Secretary of State

Certification# 114349993-1 Reference# 19059958- Page: 1 of 1
Verify this certificate online at <https://www.sosnc.gov/verification>



Current Coastal On-Call Stormwater Management Services

McGill provides on-call and general services for a number of organizations in North Carolina. Below is an example listing of the coastal clients we currently provide Stormwater Management services for:



Stormwater and Drainage

The McGill stormwater team has many years of experience with a broad range of stormwater issues. Stormwater and drainage improvements for improving capture and carrying capacity of existing structures are often the most requested problems for local governments. Whether these are flood-driven, nuisance, or localized ponding, these issues are at the forefront and generate repeated complaints. Our team is well versed in stormwater management and treatment, including erosion control, stormwater BMPs, field monitoring, plans review, and reporting requirements. Our team has certified professionals in stormwater quality and erosion or sediment control.

Design and Permitting

Engineering design drawings, specifications, and engineer's opinion of probable construction costs will be prepared and submitted to the Town at design milestones, as applicable, depending on the complexity of the project. The design work will be performed in accordance with the Town's current AutoCAD standards and will be reviewed in accordance with McGill's QA / QC procedures. The key to the successful completion of drainage projects is to eliminate (or at least minimize) environmental, right-of-way, and utilities impacts.



Pointe West Stormwater

Town of Holden Beach

In 2021 McGill assisted the Town of Holden Beach with stormwater management issues within the public rights-of-way in the Pointe West community. A past permitted stormwater management system existed with intent of properly managing surface flows with future development in this area. McGill used present survey data to compare existing conditions with permitted plans and provided maintenance grading plans to help create a pattern of flow consistent with the underlying permit. Permit data was obtained from and reviewed with the North Carolina Department of Environmental Quality (NCDEQ) to ensure plan compliance.



Marker 55 Stormwater Improvements

Town of Holden Beach

In 2015 McGill's Shallotte office staff assisted the Marker 55 community in addressing stormwater management issues directly impacting flooding in and around the Town of Holden Beach public rights-of-way of Brunswick Avenue and High Point Street. Correspondence with Town representatives and the NCDEQ helped ensure underlying North Carolina stormwater permitting and public right-of-way matters were handled properly. Drainage improvements were designed to be both consistent with underlying permit plans and beneficial in reducing flooding impacts to properties.

Client Reference

Tim Evans
 Planning and Inspections
 Director
 110 Rothschild Street
 Holden Beach, NC 28462
 910.842.6488
 tevans@hbtownhall.com

Dates

2021 – 2021

Population

6,600

Project Highlights

- Private North Carolina permit in project area
- NCDEQ Stormwater Plan reviews
- Private and public overlap
- Limited piping allowance by permit
- Limited grading flexibility

Client Reference

Tim Evans
 Planning and Inspections
 Director
 110 Rothschild Street
 Holden Beach, NC 28462
 910.842.6488
 tevans@hbtownhall.com

Dates

2014 – 2015

Population

6,600

Project Highlights

- NCDEQ Stormwater Plan reviews
- Limited piping allowance by permit
- Limited grading flexibility





Client Reference

Dustin Graham
Public Works Director
700 Sunset Boulevard N
Sunset Beach, NC 28468
910.579.6297
dgraham@
sunsetbeachnc.gov

Dates

2016 – 2017

Population

4,270

Project Highlights

- Stormwater management plan development
- Stormwater drainage
- CIP development
- CCTV inspections

Stormwater Management Plan

Town of Sunset Beach

To address problems associated with the Town’s stormwater infrastructure and concerns over water quality, the Town retained McGill for the development of a Stormwater Management Plan. The project consisted of a survey and assessment of the existing stormwater drainage system to identify and map the locations, dimensions, capacity, and conditions of system components. The data was used to create a GIS database that includes all of this information, along with photos and inspection reports that can be updated in the field using tablets. Findings from the stormwater system study were used to develop a CIP, providing recommendations for stormwater drainage infrastructure projects.



Client Reference

Debra McNeil
Interim Town Manager
Post Office Box 364
St. Pauls, NC 28384
910.865.5164
debra@stpaulsnc.gov

Dates

2020 – 2021

Population

2,048

Project Highlights

- Holistic approach to alleviate flooding and manage Town stormwater
- Benefits households and businesses

Stormwater Management Plan

Town of St. Pauls

The Town of St. Pauls has been severely impacted by recurring stormwater flooding issues over the past few years. Stormwater also impacts the Town’s sewer system as infiltration and inflow of runoff that exceeds the stormwater conveyances, which causes treatment and capacity issues. McGill successfully assisted the Town in obtaining funding through the Golden LEAF Foundation to assess the existing stormwater system and develop an approach to flood mitigation. The results of this plan will be utilized to direct funds to areas that are identified as the highest priority.





Stormwater Management and Master Plan

Village of Pinehurst

McGill was selected by the Village of Pinehurst to assist in stormwater management and master planning with the goal of identifying effective stormwater strategies and developing supporting programs and funding mechanisms. Phase 1 focused on their stormwater program, including updating policies, ordinances, and regulations; reviewing stormwater work orders and complaints; public engagement; and post-construction stormwater maintenance requirements. Phase 2 focused on project planning and implementation, including developing conceptual plans and cost estimates, determining whether funding levels in the current five-year CIP were adequate, and evaluating alternate funding sources.

Client Reference

Mike Apke, PE
Public Services and Engineering Director
395 Magnolia Road
Pinehurst, NC 28374
910.295.1900
mapke@vopnc.org

Dates

2021 – 2022

Population

18,019

Project Highlights

- Stormwater master planning
- Stormwater project engineering design
- Cost estimation
- CIP



Pirate Cove Stormwater Study

City of Wilmington

The City of Wilmington requested that McGill provide professional engineering and surveying services to evaluate the capacity of drainage pipes and open channels within the Pirate Cove area. The study is based on a recently improved 48-inch reinforced concrete pipe (RCP) outfall of the stormwater network from Buccaneer Road. The City's goal is to alleviate flooding for a 25-year event. For the stormwater study, our team was responsible for data acquisition and site reconnaissance, surveying, hydrologic and hydraulic modeling, evaluation of existing condition flooding and level of service, and technical memorandum preparation. Our team is also assisting with permitting, bidding, and construction.

Client Reference

Fred Royal, PE CFM
Stormwater Manager
102 North Third Street
Wilmington, NC 28412
910.341.5818
fred.royal@wilmingtonnc.gov

Dates

2021 – 2022

Population

117,643

Project Highlights

- Goal to alleviate flooding for a 25-year event
- Data acquisition
- Site reconnaissance
- Hydrologic and hydraulic modeling
- Stormwater study





Flood Recovery Support

Town of Canton

On August 17, 2021, the Town of Canton was severely impacted by flooding caused by Tropical Storm Fred, causing tremendous damage to numerous areas. McGill was contracted to assist in the Town's transition from response to recovery and in building towards a stronger and more resilient future. McGill provided review and issuance of floodplain development permits, including administration and review of substantial damage determinations, repair permits, elevation certificates; no-rise / no-impact certifications; and floodplain variances. McGill also assisted the Town with recovery planning and coordination with the Federal Emergency Management Agency (FEMA) Public Assistance. McGill prepared a Recovery Plan for the Town to identify mitigation options and potential funding alternatives for multiple damaged public structures. McGill also provided design, permitting, and construction management for several infrastructure repair projects throughout the Town.



Cornwallis Hills Stormwater Impact Analysis

Town of Hillsborough

The Town of Hillsborough had investigated drainage concerns resulting from storm events in the Cornwallis Hills subdivision, following numerous complaints of nuisance flooding within the neighborhood. McGill worked with the Town in conducting field reconnaissance, reviewing flood complaints, evaluating the public stormwater infrastructure, and evaluating the suitability of retrofitting the existing dry detention basin to a created wetland. To isolate nuisance flooding mainly related to lot grading and resulting in complaints, the one-year inundation zones were mapped. Results were presented in public meetings to the community.

Client Reference

Nick Scheuer
Town Manager
58 Park Street
Canton, NC 28716
828.648.2363
nscheuer@cantonnc.com

Dates

2021 – 2022

Population

70,426

Project Highlights

- Flood recovery support
- Recovery and resilient plan
- Review and issuance of floodplain
- FEMA assistance
- Design
- Permitting
- Construction management

Client Reference

Terry Hackett
Stormwater and Environmental
Services Manager
101 East Orange Street
Hillsborough, NC 27278
919.732.1270
terry.hackett@
hillsboroughnc.org

Dates

2021 – 2022

Population

9,716

Project Highlights

- Review stormwater plan and complaints
- Evaluate public stormwater infrastructure and suitability
- Present results to the public



McGill's Experience with Asset Inventory and Assessment Projects

Our project team has extensive experience in public infrastructure inventory and assessment, including stormwater, water, and sanitary networks. Key to a successful Asset Inventory and Assessment (AIA) project is to prepare systematic approach and methodologies to meet the goals of the project. Over the years, our team has refined our approach based on previous projects to allow for efficient data collection, rigorous and prompt quality assurance and control, and flexibility to meet specific project and community needs. At the onset of the project, we convene with the Town to discuss:

1. Town's software requirements (typically esri ArcGIS online is used and requires minimal investment from the community)
2. Town's staff assigned to the project and how the various staff members will use the product, and
3. Available data (digital and hard copies) of the network to be mapped.

Following the meeting, we provide the Town with a geodatabase design for review that it needs the expectations of the project. The geodatabase template is then revised as needed based on input from the Town.

We leverage available data by importing / digitizing all records to develop a basemap to be used as a guide for field crew completing the mapping. Having a basemap provides for substantial field data

collection efficiency. All collected data are available live for review by the project engineer. We ensure the review is done promptly to identify any gaps and corrective measures needed early for the field crew to revisit the site. The live data collection and storage also allows for coordination between field crew and office staff if discrepancies and unidentified conditions are encountered.

Examples of infrastructure systems that we completed for various municipalities throughout North Carolina include:

1. Stormwater System, Town of Sunset Beach
2. Stormwater System, Town of St Pauls
3. Water and Sewer AIAs, Town of Shallotte
4. Water and Sewer AIAs, Town of Maxton
5. Water and Sewer AIAs, Town of Mount Olive
6. Water and Sewer AIAs, City of Oxford
7. Sewer AIA, Town of St. Pauls
8. Water and Sewer AIA, Town of Siler City
9. Sewer AIA, Town of Roseboro
10. Water and Sewer AIA, City of Lenoir
11. Water and Sewer AIA, Town of Hot Springs
12. Water AIA, Town of Canton
13. Water and Sewer AIA, Town of Bryson City

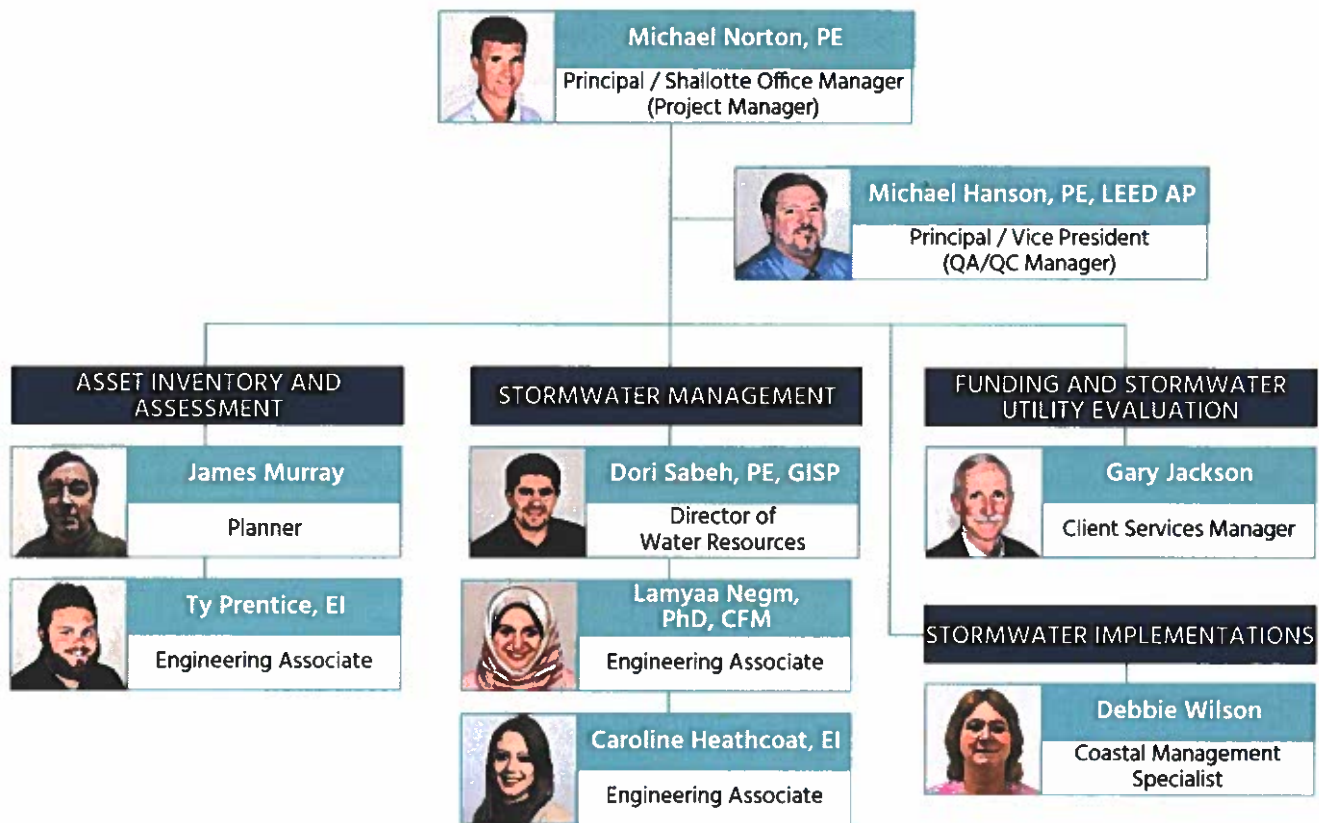


05 | Project Team Experience

Key Personnel

Team Overview

Our goal in assembling the proposed team shown below is to match individual and team qualifications with the expertise and experience appropriate for this project. Our Shallotte office professionals are uniquely familiar with the Town of Holden Beach and can respond to site investigative needs with a 15-minute drive. Our team leaders and design professionals have worked in NC coastal regions for decades and have an excellent understanding of unique stormwater permitting needs, as well as CAMA-related requirements that can affect permitting. McGill's team will respond comfortably to urgent project requests - we manage such urgencies regularly with our on-call client relationships, both locally and across our service territory. Not only do the key team members have the knowledge and experience necessary for this assignment, they are supported by a depth of additional personnel resources within our firm that help ensure tasks are not hindered should an unforeseen incident limit anyone during the project life cycle. We are able to combine local expertise and response capability with added depth in knowledge and resources to help ensure quality and efficiency.





Michael Hanson, PE, LEED AP

Principal / Vice President (QA/QC Manager)

Michael Hanson has more than 30 years of civil / water resources engineering experience. Many of his projects have involved grant acquisition, administration, and compliance assistance related to CDBG-DR, ARPA, CWMTF, EPA 319, FEMA, USDA, NFWF, RESTORE Act, and SWIM grants. Michael has directly assisted communities to manage projects funded via federal grants totaling over \$40 million and state grants totaling \$2.5 million. His planning experience includes watershed assessments, stormwater master planning, flood mapping, and hydrologic and hydraulic modeling. Michael's design experience includes projects related to wetland creation, regional flood control, stormwater pumping systems, and roadway drainage.

Education

BS, Civil Engineering, University of Florida

AAS, Pre-Engineering, Polk Community College

Specializations

- Coastal stormwater design and permitting
- Water resources engineering
- Grant administration
- Regional flood control
- Stormwater pumping systems
- Roadway drainage

Professional Licensure

PE: NC #030624 (plus 8 states); LEED AP: National #10445033

Related Experience

- Pirate Cove Stormwater Study, City of Wilmington
- On-Call Stormwater Services, City of Boiling Spring Lakes
- Stormwater Management Plan, Town of St. Pauls
- Stormwater Management and Master Plan, Village of Pinehurst
- Flood Recovery Support, Town of Canton
- 40th Street Flooding RCCP, Town of Sunset Beach



Michael Norton, PE

Principal / Shallotte Office Manager (Project Manager)

Michael Norton is a lifelong resident of Brunswick County, with more than 29 years of professional engineering experience along the Carolina coast in both the public utilities industry and private consulting sectors. He has extensive experience in project management, business planning, employee and contractor oversight, and cooperative efforts with regulatory, public, and private entities. Michael has been involved in coastal stormwater and erosion control project oversight since the mid-1990's. He has worked with the NC Department of Environmental Quality staff for this duration as well to help ensure projects are not only designed to function well, but also comply with regulatory intent and needs for environmental protection.

Education

MBA, East Carolina University

BS, Mechanical Engineering, North Carolina State University

Professional Association

- SESWA

Specializations

- Coastal stormwater design and permitting
- Project management
- Regulatory compliance and permitting

Professional Licensure

PE: NC #025856, SC #23041

Related Experience

- Pointe West Stormwater, Town of Holden Beach
- Marker 55 Stormwater, Holden Beach
- Stormwater Management Plan and CIP, Town of Sunset Beach
- 3rd and 4th Street Ext Stormwater, Town of Ocean Isle Beach
- Saltaire Village Stormwater, Town of Calabash





Education

BS, Business Administration,
East Carolina University

Specializations

- Utility modeling
- Regulatory plan review
- Site development
- Hydraulic modeling
- Site evaluations / assessments
- Technical reviews and documentation

James Murray

Planner

James Murray has over 17 years of experience working in the engineering and construction industry. He has worked on a variety of projects during that time, including plant expansions; water, sewer, and stormwater line projects; pumping stations; residential and commercial site development plan review; hydraulic modeling; and municipal petition programs for utility systems. James has witnessed the development of millions of linear feet of line, dozens of pumping stations, and hundreds of residential subdivisions and commercial sites. He believes that clear and honest communication is his most important skill set. He is adept in following plans and specs, as well as conducting cost / benefit analyses for the purposes of maintaining or adding value to projects.

Related Experience

- Town Creek Elementary Expansion Stormwater, Brunswick County Schools
- North Brunswick High School Pressbox Stormwater, Brunswick County Schools
- South Brunswick High School Pressbox Stormwater, Brunswick County Schools



Education

BS, Biological Engineering, North
Carolina State University

Specializations

- Coastal stormwater design and permitting
- Site and utility design / development
- AutoCAD
- GIS mapping
- Technical documentation

Ty Prentice, EI

Engineering Associate

Ty Prentice is well known for addressing projects from the client's perspective and ensuring that the finished result not only fulfills their technical specifications but also the overall vision. He has extensive experience working with coastal municipalities. Ty has been a key team member on projects for local governments, public schools, and industrial recycling sites. He is proficient in Microsoft Office, AutoCAD Civil 3D, and ArcGIS. Additionally, he is seasoned in all aspects of site design, including preliminary site layouts, stormwater, water and wastewater, and erosion control. Ty puts a great deal of emphasis on developing lasting relationships with our clients, and he is intentional on his mission to produce high-quality results for each and every community.

Professional Licensure

EI: NC #A-28959

Related Experience

- Town Center Park Stormwater, Town of Ocean Isle Beach
- Stormwater CIP Projects, Town of Sunset Beach
- Price Landing Park Stormwater, Town of Shallotte
- Bolivia Elementary Stacking Lane Stormwater, Brunswick County Schools





Education

MS, Civil and Environmental Engineering, University of South Florida

BS, Civil and Environmental Engineering, Saint Joseph University

Specializations

- Hydrologic and hydraulic modeling
- GIS mapping

Dori Sabeh, PE, GISP

Director of Water Resources

Dori Sabeh has extensive experience in various multi-disciplinary civil and water resources projects for the public and private sectors. His experience includes managing several high-profile projects, providing technical direction, and decision-making on complex projects. Dori's responsibilities have ranged from geographic information systems (GIS) mapping and analysis, stormwater master planning, to developing plans and design computations, to planning, coordinating, and directing task assignments among team members.

Professional Licensure

PE: NC #047183 (plus 10 states); GISP: National #67848;

Related Experience

- On-Call Stormwater Assistance, City of Wilmington
- Stormwater Management Plan, Town of St. Pauls
- Stormwater Management and Master Plan, Village of Pinehurst
- Cornwallis Hills Stormwater Impact Analysis, Town of Hillsborough
- Woodburn Drive Water Line Replacement, Town of Forest City
- 40th Street Flooding RCCP, Town of Sunset Beach



Education

PhD, Biological and Agricultural Engineering, North Carolina State University

BS, Civil Engineering, Mansoura University

Specializations

- Hydrologic and hydraulic modeling
- Water and sewer modeling
- Programming
- Mapping

Lamyaa Negm, PhD, CFM

Engineering Associate

Dr. Lamyaa Negm is a highly motivated, insightful environmental engineer with outstanding skills in hydrologic and agroecosystem modeling. She is experienced in programming, mapping, and data geoprocessing, as well as design, field instrumentation, and monitoring of soil-water best management practices. Lamyaa has advanced working knowledge of a wide spectrum of hydrodynamic and water quality models, programming languages, GIS, and data analysis and assimilation. She has published several articles related to agroecosystem modeling, groundwater management optimization for naturally poorly drained soils, and tools development for nitrogen credit trading. Lamyaa is adept in floodplain mapping and CLOMR and LOMR permitting, as well as industry related modeling including SWMM, HEC-MetVue, HEC-HMS, HEC-RAS, WaterGEMS and SewerGEMS.

Professional Licensure

CFM: NC #NC-21-0837

Related Experience

- Pirate's Cove Stormwater Study, City of Wilmington
- Wash Creek Area Stormwater Improvements, City of Hendersonville





Education

BS, Biological and Agricultural Engineering, North Carolina State University

Specializations

- Water and sewer modeling
- Programming
- Mapping

Caroline Heathcoat, EI

Engineering Associate

Caroline Heathcoat has experience in an array of hydrologic and hydraulic modeling, stormwater and flood management projects. She is adept in hydrology, water quality modeling, drainage, stormwater control measure (SCM) design, and wetland and stream restoration. Caroline is well versed in the use of AutoCAD, ArcGIS, and various specialty hydraulics software as applied to hydrology, water quality modeling, and drainage system design, such as HEC-HMS, HEC-RAS, SWMM, HY-8, and HydroCAD.

Professional Licensure

EI: NCEES #17-630-44

Related Experience

- Stormwater Management Plan, Town of St. Pauls
- Cornwallis Hills Stormwater Impact Analysis, Town of Hillsborough
- Pirate's Cove Stormwater Study, City of Wilmington
- Everett Creek Watershed Study, New Hanover County
- Wash Creek Stormwater Mapping, City of Hendersonville



Education

MPA, University of Kansas
BS, Business, Miami University of Ohio

Specializations

- Client services
- Funding
- Stormwater Evaluation

Gary Jackson

Client Services Manager

Gary Jackson brings 40 years of experience in city government, including community development, finance and capital planning, and management innovation. Gary retired as the Asheville City Manager in April of 2018, where he was responsible for 1,200 employees and an annual budget of \$175 million. Beginning his service to Asheville in 2005, Gary oversaw the development of an enhanced downtown that is now a focal point of the community and attracts a diversity of all age ranges and backgrounds. Asheville's downtown has a vibrant mix of land uses with strong retail, restaurants, offices, and hotels. He has particularly strong skills in developing, funding, and executing capital improvement programs. Gary understands the needs of downtown development and guiding plans to achieve successful plan implementation, facilitating the development of a consensus plan for community improvement, and working with elected officials in developing strategies to achieve community goals.

Related Experience

- Stormwater Utility Feasibility Study, City of Clinton



Education

BS, Environmental Studies,
University of North Carolina at
Wilmington

Specializations

- CAMA regulations and permitting
- Coastal land use evaluations
- CRC policies
- Wetland evaluations / delineations
- Regulatory compliance

Debbie Wilson

Coastal Management Specialist

Debbie Wilson joined McGill in 2020. She retired as District Manager of the NC Division of Coastal Management in 2019, following more than two decades in various related roles. As McGill's coastal management specialist, she brings a strong working knowledge of state and federal permitting programs, especially those related to coastal land and marine development activities. Debbie had oversight for implementation and enforcement of the Coastal Resources Commission's (CRC) rules and policies for coastal development pursuant to the NC Coastal Area Management Act (CAMA). Prior to working for the NC Division of Coastal Management, Debbie acted as the Assistant Chief Zoning Officer / CAMA Local Permit Officer for New Hanover County. She is well known for her leadership skills, results-oriented focus, and advanced technical skills in coastal management.

Related Experience

- AIWW Stormwater Outfall, Town of Sunset Beach
- 5th Street Drainage Outfall, Town of Sunset Beach
- Emergency Dock Facility, Town of Ocean Isle Beach
- 40th Street Flooding, Town of Sunset Beach
- Ferry Landing, Town of Ocean Isle Beach
- Focus Broadband Fiber Optic Routes, NC Coastal Counties
- Price Landing Park, Town of Shallotte



Client#: 1170972

70MCGILASS

ACORD

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
04/22/2022

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer any rights to the certificate holder in lieu of such endorsement(s).

PRODUCER McGriff Insurance Services 4777 Sharon Rd., 4th Floor Charlotte, NC 28210 704 954-3000	CONTACT INFO: NC Cert Team PHONE (A/C, No, Ext): 704 954-3000 FAX (A/C, No): 888-751-3197 EMAIL ADDRESS: NCCertificateTeam@mcgriff.com														
INSURED McGill Associates PA P.O. Box 2259 Asheville, NC 28802	INSURER(S) AFFORDING COVERAGE <table border="1"> <tr> <th>INSURER</th> <th>NAIC #</th> </tr> <tr> <td>INSURER A: Pennsylvania National Mutual Cas Ins Co</td> <td>14990</td> </tr> <tr> <td>INSURER B: Travelers Indemnity Company</td> <td>25658</td> </tr> <tr> <td>INSURER C: Penn National Security Insurance Co</td> <td>32441</td> </tr> <tr> <td>INSURER D:</td> <td></td> </tr> <tr> <td>INSURER E:</td> <td></td> </tr> <tr> <td>INSURER F:</td> <td></td> </tr> </table>	INSURER	NAIC #	INSURER A: Pennsylvania National Mutual Cas Ins Co	14990	INSURER B: Travelers Indemnity Company	25658	INSURER C: Penn National Security Insurance Co	32441	INSURER D:		INSURER E:		INSURER F:	
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INSURER D:															
INSURER E:															
INSURER F:															

COVERAGES **CERTIFICATE NUMBER:** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSTR	TYPE OF INSURANCE	ADDITIONAL	POLICY NO.	POLICY EFF	POLICY EXP	LIMITS
LTN		COVER		(MM/DD/YYYY)	(MM/DD/YYYY)	
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> SUBJECT <input type="checkbox"/> LOG OTHER:	X	AX90652915	04/23/2022	04/23/2023	EACH OCCURRENCE \$1,000,000 DAMAGE TO RENTED PREMISES (Per occurrence) \$50,000 MED EXP (Any one person) \$5,000 PERSONAL & ADV INJURY \$1,000,000 GENERAL AGGREGATE \$2,000,000 PRODUCTS - COMPROP AGG \$2,000,000
C	AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO OWNED AUTOS ONLY <input checked="" type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> NON-OWNED AUTOS ONLY	X	AX90652915	04/23/2022	04/23/2023	COMBINED SINGLE LIMIT (Per accident) \$1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$
A	<input checked="" type="checkbox"/> UMBRELLA LIAB <input type="checkbox"/> EXCESS LIAB <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> CLAIMS-MADE DED <input checked="" type="checkbox"/> RETENTION \$1,000		UL90652915	04/23/2022	04/23/2023	EACH OCCURRENCE \$5,000,000 AGGREGATE \$5,000,000
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE/OFFICER/EMBER EXCLUDED (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	X	UB9S3489772247G	01/23/2022	01/23/2023	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTHER EL EACH ACCIDENT \$1,000,000 EL DISEASE - EA EMPLOYEE \$1,000,000 EL DISEASE - POLICY LIMIT \$1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

**** Supplemental Name ****
 McGill Associates PA
 McGill Associates PA INC
 McGill Associates PSC
 (See Attached Descriptions)

CERTIFICATE HOLDER McGill Associates PA 55 Broad Street P.O. Box 2259 Asheville, NC 28802	CANCELLATION SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE <i>Ben Culp</i>
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07 | Stormwater Infrastructure Grant Money

Funding Assistance

McGill assists municipalities across North Carolina to secure funding for all types of projects at the state and federal level. Our experienced staff is well versed in managing multiple funding sources and navigating the complexities of project reporting and funding administration. We maintain excellent working relationships with the funding agencies that provide grant and loan funds for infrastructure projects, including local grant dollars from Coastal Area Management Act, North Carolina Division of Water Infrastructure (administers the Clean Water State Revolving Fund, Drinking Water State Revolving Fund, Asset Inventory and Assessments, and Community Development Block Grant funds), United States Department of Agriculture, Golden LEAF, Appalachian Regional Commission, Parks and Recreation Trust Fund, and Economic Development Administration.

Funding Totals Since 2012

Funding Type	Total Funded
Asset Inventory and Assessment (AIA)	\$5,285,000
Coastal Area Management Act (CAMA)	\$600,000
Community Development Block Grant (CDBG)	\$47,600,000
Clean Water Management Trust Fund (CWMTF)	\$14,521,000
Clean Water State Revolving Fund (CWSRF)	\$79,801,000
Drinking Water State Revolving Fund (DWSRF)	\$46,009,000
State Reserve Fund	\$9,479,000
North Carolina Commerce – Economic Development	\$1,304,000
Golden LEAF	\$820,000
Parks and Recreation Trust Fund (PARTF)	\$7,549,000
State Revolving Fund (SRF)	\$3,530,000
US Department of Agriculture Rural Development (USDA-RD)	\$46,152,000
American Rescue Plan Act (ARPA) and Other Grants	\$145,582,000
Funding Total	\$408,232,000

McGill has secured more than **\$408 million** in public funding for our clients in the past **10 years.**





McGill Associates, PA

712 Village Road SW, Suite 103, Charlotte, NC 28470

910.755.5872 | mcgillassociates.com

