









IVY HILL STORMWATER MITIGATION PROGRAM

WORK ORDER #09

RFQ NO. CMF-004 J04050



State of New Jersey, Department of the Treasury Division of Property Management & Construction 33 West State Street, 9th Floor, Plan Room P.O. Box 039 Trenton, New Jersey 08625-0039 ATTN: Christopher Geary, Assistant Deputy Director

RE: DPMC PROJECT #J0405-00, TERM CONTRACT CMF-004 Work Order No. 9 - DCA IVY HILL STORMWATER MITIGATION PROGRAMCONSTRUCTION MANAGEMENT FIRM

Dear Selection Committee,

Michael Baker International, Inc. (Michael Baker) is pleased to submit our proposal for Construction Management Firm (CMF services) for the Ivy Hill Stormwater Mitigation Program as identified in this RFP that include engagements involving oversight of design and construction for this stormwater management/resiliency project as designated by the Division of Property Management and Construction (DPMC), and as stated within the RFP documents.

During Michael Baker's more than 85 years of providing professional services, our approach to multi-tasked, multi-discipline assignments has proven to be highly successful. More specifically, Michael Baker brings forward over 35 years of experience working in New Jersey on some of the most important infrastructure projects in the State. This experience will directly benefit the State of New Jersey on this contract. The Michael Baker team will be capably managed by Peter Senus, PMP, NICET IV, as the Senior Project Manager. He has proven success coordinating with federal and state agencies by serving as Project Manager on multiple past DPMC work order assignments under the CMF 003 Hurricane Sandy and CMF 004 Resilient Communities Program throughout the region. To complement our strengths and to help meet the 25% SBE goal for the program, Michael Baker has teamed with our long-standing partner Roberts Engineering. This firm has multi-disciplinary construction and grant management capabilities with HUD CDBG-DR requirements, which allows Michael Baker to fully utilize their talents toward delivering a consistent, on-time, budget-conscious, quality project. The Michael Baker team is thoroughly familiar with assisting DPMC and DCA in administering federally-funded HUD CDBG-DR programs. Over the past nine (9) successful years, Michael Baker has been serving as the CMF for multiple CMF 003 & CMF 004 IDIQ work orders. In doing so, we have already developed a proven system to manage the tasks outlined in the scope of work. There will be no "learning curve" or "down-time" when dealing with Michael Baker. We have established professional relationships with Sam Viavattine and James Mooney, along with all their other great staff at DCA. We look forward to your favorable review of our proposal and the opportunity to work on this noteworthy program.

We have attached our cost proposal separately as requested. To establish our level of effort, we have developed an estimated Preliminary Program Schedule based on the information noted in the RFP and Addendum 1. We are very familiar with the required project phases and durations to meet the Program's guidelines, and the schedule presented on page 25 of this proposal will demonstrate this understanding. There are many factors however that could change this schedule once the Program starts and as more information becomes available. This should only be used as guide to demonstrate a potential path in meeting the Program's ultimate end date of September 2029 and as a cost estimation guide for our price proposal.

Sincerely,



FIRM/TEAM ORGANIZATION/SUBCONSULTANTS

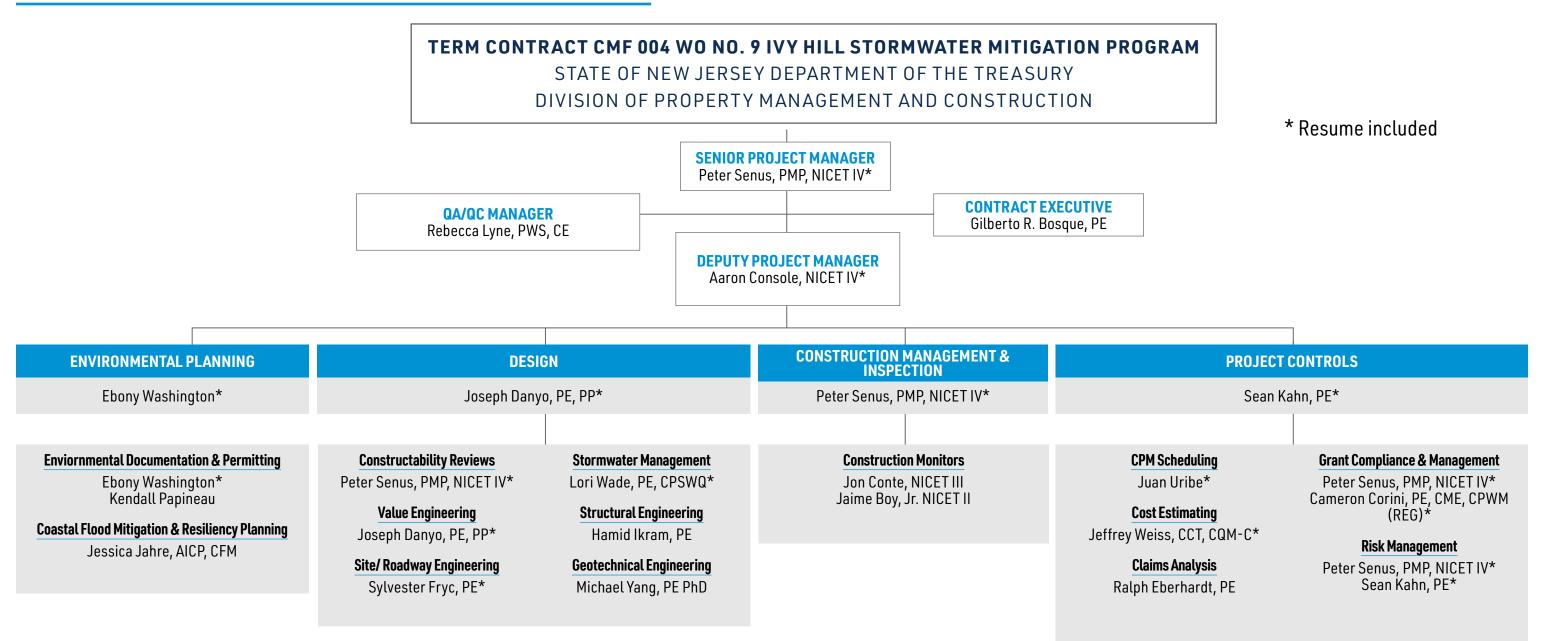
Michael Baker is a full-service construction management, planning, engineering, architecture, and information technology company that has been working in New Jersey with the local municipalities to become more resilient as a result of past, present, and future natural disasters and health pandemics. Most recently, we all experienced the devastating 2021 Hurricane IDA flooding that affected 12 New Jersey counties and was coupled with the ever-growing post health and financial impacts of the COVID-19 pandemic. New Jersey has been given multiple federal grants to help deal with the damaging lingering effects of these events as well as planning to the future to deal with new disasters and pandemics.





The Michael Baker team has all the required experience and will successfully navigate DPMC and DCA through the post-Hurricane IDA - Ivy Hill Stormwater Mitigation program.

RECOGNIZED EXPERTS ACROSS THE RANGE OF DISCIPLINES:



S U B C O N S U L T A N T S Roberts Engineering Group - SBE (REG)

RECOGNIZED EXPERTS ACROSS THE RANGE OF DISCIPLINES

PLANNING/NEPA PROCESS

Michael Baker's strengths begin with planning and concept development services aimed specifically at rebuilding communities with the resiliency to better withstand future events. Michael Baker understands that in the densely populated shores of New Jersey, urban planning practices must be married with coastal engineering fundamentals to make the communities safer while maintaining their thriving economies.

In New Jersey, Michael Baker has already completed a number of planning studies and initiatives that are leading towards stronger infrastructure development. Most recently, Michael Baker performed related work orders under DPMC's CMF 003/004 IDIQ for Construction



Management Services on Rebuild By Design and other NJDEP Flood Mitigation and Environmental infrastructure. Work orders from these IDIQ included the Resilient New Jersey Program and the Climate Ready NJ Program. Michael Baker has also completed a study for the Port Authority of New York and New Jersey (PANYNJ) to assess the vulnerability of their airports from coastal storms, sea level rise, and hydrological changes. Jersey City also enlisted the services of Michael Baker when they received a grant from Together North Jersey to develop storm surge protection solutions for the City. Michael Baker's coastal experts were asked to work with professors at Stevens Institute of Technology to develop visualizations for the flood control engineered concepts. The City relied on Michael Baker to develop context sensitive solutions and to prepare a white paper for next steps. In the white paper, Michael Baker emphasized the need for a benefit-cost analysis, data collection, increased coordination, and available funding sources.

As plans are developed and projects enter the design phase, the Michael Baker team has extensive capabilities and experience to navigate a project through the complex Local, State, and Federal environmental review and approval processes. The Michael Baker team has tremendous experience with National Environmental Policy Act (NEPA) documentation and permitting including the ability to complete the many technical studies that are involved in a comprehensive environmental review process as well as the experience and capability to manage and oversee the administration of the NEPA documentation and environmental permit approval processes. It is also understood that the Environmental Review (ER) process per 24 CFR 58 is the key to obtaining the AUGF (Authorization to Use Grant Funds) for these projects. We anticipate that this project will require an Environmental Assessment level of review based on similar projects. Since we are familiar on how to prepare an EA document to HUD's standards, we will verify this activity is completed by the Subrecipients accurately and confirm the environmental conditions are upheld throughout the duration of the program. Michael Baker understands that the environmental process is an iterative process that begins early in project scoping and continues through design and construction. Early identification of environmental resources, applicable regulations, and key stakeholders is a critical component of the process. Identifying project issues early allows adequate time to develop a plan and coordinate with the stakeholders to develop solutions that avoid, minimize, or mitigate adverse impacts while still satisfying the project purpose and need. This approach reliably helps avoid schedule delays and increased project costs caused by unanticipated project effects.

FINAL DESIGN

For over 30 years Michael Baker has been providing final design engineering services in New Jersey. Michael Baker provides full service capability with engineering expertise that is both locally respected and nationally recognized. We optimize our construction management project experience during the design phases of projects through performance of constructability reviews; construction phasing/sequencing; construction bid document reviews to eliminate error/omissions and discrepancies, and construction schedule and cost estimate reviews to verify that all factors (permit acquisition, long-lead procurements, regulatory review cycles, etc.) are included in the logic-based CPM schedules. Michael Baker's transportation, stormwater, and utility engineers will confirm that designs maintain the community's operations by addressing, most importantly, stormwater related impacts and future resiliency of existing infrastructure.

More recently and with very much relevance to this project, Michael Baker provided a comprehensive drainage study, design and construction administration services for the City of Newark for a combined sewer improvement along

the South Street and Adams Street corridor. This area suffered from frequent flooding that has stifled business growth, creating toxic environments from combined sewers, and causing property and personal damage, very similar to what is being experienced in the Ivy Hill District. Michael Baker studied the roadway drainage and overall drainage patterns of the network of ditches draining to Newark Bay. Following the study, alternatives were developed to separate the sewers in the most critical downstream areas and install green infrastructure to retain rainfall. Michael Baker also assisted the client with long-

term prioritization for future separation of sewers. The designs were coordinated with the Ironbound Community Corporation and incorporated the Green Streets Initiative as well as the Passaic Valley Sewerage Commission. For this analysis, Michael Baker utilized a two-dimensional modeling approach to model different hydrographs throughout the 500 acres of Newark. With the analysis, Michael Baker modeled over 20 miles of combined sewers. Additionally, Michael Baker conducted several field investigations examining the current condition of the ditches draining the area. The proposed design included replacing pipes, valves, site grading, pump station design and onsite construction inspection, and engineering services.



CONSTRUCTION MANAGEMENT/INSPECTION



Michael Baker provides construction management services for all the markets we serve. Our clients include federal, state, and local government agencies, as well as private sector clients. Our projects range in size and complexity, and include new or rehabilitation construction, traditional design-bid-build and design-build project deliveries. Most recently, Michael Baker has been DPMC's Construction Management Firm (CMF) for: CMF 003 W0 03 the Flood Hazard Reduction & Resiliency (FHRRR) Program, W0 15 the Atlantic City Resiliency Program (ACRP) and CMF 004 Resilient Communities Program (RCP). Michael Baker's construction experience includes facilities, pump stations, bulkheads, large outfall facilities, highways, bridges, infrastructure rehabilitation, freight and passenger railroads, transit facilities, airports and utilities, just to name a few. Michael Baker's professionals have the training, certifications, and support to manage the full spectrum of construction services to assure each client of a successful delivery. With experience in managing throughout the life cycle of the project, and through our implementation of Lessons Learned, Industry-Best Practices and CMMA-based CM Procedures, and Quality and Risk Management Processes, Michael Baker understands the importance of all aspects involved to successfully complete and deliver safely on time, on budget, and with the quality you demand.

Michael Baker's experienced construction inspection staff provides confirmation that the contractor is performing in accordance with the contract documents as well as confirming the contractor's progress. Michael Baker inspectors verify specified materials are incorporated into the project; assure proper documentation, including tracking of submittals and correspondence; review contractor progress payments and change orders; coordinate with the client and other local agencies such as DCA for code enforcement; integrate and coordinate on-site personnel, vendors, and subcontractors; coordinate material delivery to jobsites; manage movement of construction equipment around sites to provide a smooth flow throughout the schedule; review and analyze construction schedules; and perform final inspection and project close-out tasks.

Michael Baker produces detailed independent cost estimates for every change order and overall construction cost budget management, always maintaining focus on the client's priorities: time, budget, safety, and quality. Baker's comprehensive lifecycle approach utilizes a standard process to develop estimates, tracking trends and historical indexes, analyzing bids, and assessing the risks and probability of high-impact events and their influence on cost. Through a proactive cost engineering approach, this knowledge is used to identify and predict costs throughout the project. By managing and monitoring project costs from day one, we allow you to better plan, program, acquire, and manage your budget, while adding real value to your project. Michael Baker's breadth of resources, including affiliations with vendors and contractor associations, helps us better provide estimating services at any stage of the design and construction process, utilizing proven, documented, unit price databases, both internal and published. Escalation is managed through the use of multiple historical indices, monitoring current material and labor trends, and tracking industry market indicators. We also bring these resources to related services such as life cycle costing, value engineering, schedule recovery planning, and analysis of changes and claims.



Combined with our specialty subconsultant, the Michael Baker team has a very deep bench of construction and design professionals available to service this agreement.

EXPERIENCED PROGRAM MANAGEMENT LEADERSHIP

Michael Baker understands the need for a single vision when coordinating large scale infrastructure design services. As the CMF under the previous CMF 003/004 IDIQs, Michael Baker understands the challenges of multi-disciplined projects and the need for oversight.

Our Senior Project Manager, Peter Senus PMP, NICET IV, has served as the Senior Program Manager and assisted on several large and similar assignments recently:

- Program Manager NJDPMC/NJDEP CMF 003 WO 03 FHRRR Program
- Program Manager NJDPMC/DCA CMF 003 WO 15 Atlantic City Resiliency Program
- Program Manager NJDPMC/DCA Resilient Communities Program

Pete is only as good as his supporting team. Aaron Console, NICET IV, will resume his role as Deputy Project Manager and the day-to-day operation overseer. **Pete and Aaron have worked closely for years under the CMF 003/004 IDIQs and have developed a reputation as the "Go-To Team" for many assignments.** Together, they fine-tuned procedures for running many successful work orders and can carry this over seamlessly to this Work Order under the CMF 004 IDIQ.

In addition, our proposed Contract Executive, Gilberto Bosque, PE, has been servicing the design/construction industry for decades overseeing major infrastructure reconstruction in New Jersey and will bring this experience to bear on this assignment. The task in front of New Jersey now is complex and extremely challenging. Michael Baker is not only qualified to deliver solutions but is also qualified to coordinate this effort for the communities and the State as their Program Manager

and Construction Manager. Michael Baker appreciates the size and complexity of the scope of these projects and fully understands that they will require attentive coordination between the State, local government entities, design stakeholders, and federal stakeholders.

A TEAM THAT HAS WORKED TOGETHER SUCCESSFULLY

OUR SUBCONSULTANT



Michael Baker chose **Roberts Engineering Group** to assist with the Contractor Invoice Review task. Roberts Engineering Group, LLC is a Civil Engineering and Land Surveying firm located in Hamilton, NJ with a highly experienced staff that bring expertise, efficiency and state of the art services. Roberts Engineering Group, LLC is certified as a Small Business Enterprise (SBE) by the NJDPMC. Roberts Engineering Group, LLC currently serves under the appointment as

the Municipal Engineer for the Borough of Hightstown in Mercer County; the Borough of Roosevelt and Borough of Allentown in Monmouth County; and as Sewer Utility Engineer for the Township of Robbinsville. Additionally, they provide consulting services to the City of Brigantine, Township of Hamilton, Township of West Windsor, Ventor/Margate, and the City of New Brunswick. Their experience as a Muncipal Engineer for multiple clients will have them familiar with common general Municipal zoning and codes for land developments. Led by owner Carmela Roberts PE, CME, CPWM and Cameron Corini PE, CME, CPWM, will prove to be a valuable asset to the Team. They previously worked with Michael Baker under the CMF 003 W0 3 FHRRR program on a project in Brigantine, NJ. It was on this project they had to follow the strict HUD CDBG-DR requirements for contractor invoicing procedures. They are well versed in the statement of assurances requirements and how to prepare and review a contractor invoice that meets all the requirements from the HUD CDBG-DR requirements including Davis-Bacon, HUD-11 interviews, certified payroll reviews, prevailing wages, fringe backup documention and much more. More recently they are also on our team for the CMF 004 W0 1 & 2 Resilient Communitiuies Program.

As Municipal engineers for numerous clients as noted above and their specific role in this Program, assisting with HUD compliance reviews is a winning combination and makes them an excellent asset to the Program.

EXPERIENCE ON PROJECTS OF A SIMILAR SIZE AND NATURE

CMF EXPERIENCE ON CONTRACTS/PROJECTS OF A SIMILAR SIZE & NATURE

The Michael Baker team is thoroughly familiar and more importantly highly successful with assisting the DPMC with large scale Indefinite Delivery and Indefinite Quantity (IDIQ) contracts (i.e. CMF 003 W0 3, 4, 12 & 15 & CMF 004 W0 1 & 2) requiring construction management, resiliency planning and multidisciplined design support. For example, and most recently, Michael Baker was selected for the CMF 004 term agreement, that dealt with the catastrophic damage to New Jersey from Hurricane Ida. Michael Baker quickly proved that they were the "go to" team to not only navigate the complex

HUD CDBG grant requirements, but to be the State's eyes and ears on variety of projects that included large scale pump stations, emergency response buildings, 60" outfall pipes, bulkheads, building flood proofing, municipal stormwater upgrades, flood gates, and much more. **Michael Baker is the workshop that has the right tool for the right job.** Michael Baker knows it is not enough to just assist the DPMC in administering the programs, but to be the experts in all facets. Since our involvement with the previous CMF 003/CMF 004 IDIQs, we have developed all the manuals, standard operating procedures, and protocols to carry directly over into the Ivy Hill Mitigation work order with a seamless transition for potential projects under this program that might have already started or just gearing up. Michael Baker is ready RIGHT NOW to run with any assignment.



Michael Baker's successful oversight and involvement in a variety of construction and program management contracts provides a wealth of on-call task order expertise to execute successful assignments. Our clients select Michael Baker because of our logical approach to meeting project objectives in a cost-effective manner, while providing high-quality technical expertise from our full service Hamilton, New Jersey office supported by other Michael Baker offices and our subconsultants. A critical factor considered in assembling the Michael Baker team is a shared culture devoted to customer service and rapidly adapting to address client needs that change as a result of funding and/or schedule changes. A large part of our team's previous successes working together is a result of each individual firm's dedication to customer service.

Michael Baker creates value for our clients by delivering innovative and sustainable solutions for infrastructure and the



environment. We recognize that the execution of task order contract assignments requires a broad range of expertise and are confident that the depth of Michael Baker's resources, familiarity with governmental processes, and history of successfully working on similar projects in New Jersey and nationally will confirm that Michael Baker consistently provides outstanding support in the execution of even the most challenging assignments. Specific threads of good construction and project management are seen in each of Michael Baker's successes.

Among them are: active management of the project on behalf of the client; experienced leadership; knowledgeable and seasoned subject matter experts; experienced design, permitting and construction professionals; open, and honest communication among all involved in the day-to-day; timely decision making based on experience and prudent professional judgment; and a common goal to solve problems and keep the project moving to completion. The result invariably is a high-quality project completed on time and at a reasonable cost.

PROJECTS:

PROJECT: CMF 004 W0 #01 & 02 - RESILIENT COMMUNITIES PROGRAM (2024-PRESENT)

Location: Multiple Municipalities, New Jersey

Client: NJ Department of Property Management and Construction (DPMC)/ NJ Department of Environmental Protection (NJDEP/ NJ Department of Community Affairs (NJDCA) Michael Baker was selected as the CMF Program Manager for the Resilient Communities Program that would continue the efforts to protect vulnerable communities from the impacts of future storms along flood prone areas. There are a total of eleven projects involved in this current program: Greenwich Township - Municipal complex; Guttenberg - Flood control system improvements; Hudson County - Penhorn Creek Pump Station; North Arlington - Hybrid bulkhead, gabions, headwalls, and outfall pipes; Passaic - Pump station and detention basin; Carteret - Bio-retention facility; Flemington - Drainage system improvements; Irvington - Drainage system improvements; Kingwood - Emergency Service/Fire

facility; Manville - DPW and OEM facilities; and Sayreville - Pump station improvements.

Due to Michael Baker's extensive construction management and design experience with large multi-faceted construction and resiliency projects, our team was selected to assist the NJDCA with monitoring and oversight tasks for selected resiliency projects throughout north central New Jersey.

Key tasks include:

- Monthly Reporting
- Design Oversight
- Prepared Environmental Reviews (i.e. EA, CEST)
- Bidding/Procurement Reviews
- Contractor Deliverable Reviews
- Bi-weekly Field inspections
- Independent Cost Estimating
- Master Project Scheduling and Forecasting
- HUD Reporting and Compliance
- Contractor Recordkeeping Compliance Assistance
- Assist with Integrity Monitoring



Accountability for project submittals and issue resolution were diligently tracked and recorded to guard against delays and minimize the NJDCA's liability in the event of a claim. Michael Baker actively communicated with the NJDCA and tracking project correspondence from preconstruction through closeout by maintaining detailed logs and checklists that enable us to assign and track ball-in-court responsibility for Subrecipients and project deliverables. Michael Baker provided timely reviews of invoices and progress reports with proper record keeping to match pace with the Subrecipient's contractor deliverable submission schedule. These tasks were accomplished through the use of a "uniform" deliverable tracking system. The tracking system provided overall monitoring of all schedules, invoices, progress reports, HUD compliance forms and project closeout documentation. In addition to this mandatory tracking, Michael Baker offered more robust document management solutions. Michael Baker utilized the SIROMS Sharepoint Site as an electronic document library for this project. As such, Michael Baker understands the importance of confirming all record keeping are up-to-date with construction projects and contract milestones.

Under the Grant Program, Michael Baker will provide Independent Cost Estimates (ICEs) for Subrecipient contractor



agreement amendments (change orders). Performing ICEs is a primary example of providing the proper "checks and balances" for the local government contractor. Michael Baker's Licensed Professional Engineers have extensive experience preparing ICEs for all types of construction projects. Michael Baker uses a wide variety of estimating tools that includes comprehensive life-cycle analysis, tracking trends and historical indexes, bid analysis and assessing the risks and probability of high-impact events and their influence on cost.

Since the Grant Program is funded through the Federal Department of Housing and Urban Development (HUD), specialized compliance and monitoring, end-to-end policy development, on-site compliance training with Subrecipients, and operational

implementation are required. Michael Baker is experienced in HUD compliance monitoring and a thorough understanding of Federal Labor Standard regulations including Davis-Bacon and Related Acts, Hatch Act, and Section 3 to comply with HUD grant funding requirements. Michael Baker is utilizing an extensive compliance "toolbox" containing regulatory, operational, and financial processes for use on HUD-funded Community Development Block Grant Disaster



Recovery (CDBG-DR) programs. These templates are assisting in "quick start" program compliance.

PROJECT: CMF 003 W0#03 - CMF FOR FLOOD HAZARD RISK REDUCTION AND RESILIENCY GRANT PROGRAM (2016-PRESENT)

Location: Multiple Municipalities, New Jersey

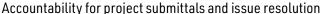
Client: NJDPMC/NJDEP/NJDCA

Michael Baker was selected as the CMF Program Manager for the Flood Hazard Risk Reduction and Resiliency Grant Program (Grant Program) for the State of New Jersey. Under this Grant Program, the NJDEP/DCA funded projects that would continue the efforts to protect vulnerable communities from the impacts of future storms along flood prone areas. There were a total of seven projects involved in the program: Wildwood NJ Pacific Ave. Pump Station & Outfall; N. Wildwood Hereford Inlet Pump Station; Atlantic City Baltic Ave. Phase II Pump Station; Brigantine 3 Pumps Stations; Belmar Lake Como Outfall Pipe; Spring Lake Wreck Pond Outfall

Pipe; and Little Ferry Losen Slote Tide Gate w/ Trash Rakes. Due to Michael Baker's extensive construction management and design experience with large multi-faceted construction and resiliency projects, our team was selected to assist the NJDEP with monitoring and oversight tasks for selected resiliency projects throughout coastal New Jersey.

Key tasks include:

- Monthly Reporting
- Design Oversight
- Bidding/Procurement Reviews
- Contractor Deliverable Reviews
- Bi-weekly Field inspections
- Independent Cost Estimating
- Master Project Scheduling and Forecasting
- HUD Reporting and Compliance
- Contractor Recordkeeping Compliance Assistance
- Assist with Integrity Monitoring



were diligently tracked and recorded to guard against delays and minimize the NJDEP's liability in the event of a claim. Michael actively communicated with the NJDEP and tracking project correspondence from preconstruction through closeout by maintaining detailed logs and checklists that enable us to assign and track ball-in-court responsibility for Subrecipients and project deliverables. Michael Baker provided timely reviews of invoices and progress reports with proper record keeping to match pace with the Subrecipient's contractor deliverable submission schedule. These tasks were accomplished through the use of a "uniform" deliverable tracking system. The tracking system provided overall monitoring of all



schedules, invoices, progress reports, HUD compliance forms and project closeout documentation. In addition to this mandatory tracking, Michael Baker offered more robust document management solutions. Michael Baker utilized the SIROMS SharePoint Site as an electronic document library for this project. As such, Michael Baker understands the importance of confirming all record keeping are up-to-date with construction projects and contract milestones.

Under the Grant Program, Michael Baker provided Independent Cost Estimates (ICEs) for Subrecipient contractor agreement amendments (change orders). Performing ICEs is a primary example of providing the proper "checks and balances" for the local government contractor. Michael Baker's Licensed Professional Engineers have extensive experience preparing ICEs for all types of construction



projects. Michael Baker uses a wide variety of estimating tools that includes comprehensive life-cycle analysis, tracking trends and historical indexes, bid analysis and assessing the risks and probability of high-impact events and their influence on cost.

Since the Grant Program is funded through the Federal Department of Housing and Urban Development (HUD), specialized compliance and monitoring, end-to-end policy development, on-site compliance training with Subrecipients, and operational implementation are required. Michael Baker is experienced in HUD compliance monitoring and a thorough understanding of Federal Labor Standard regulations including Davis-Bacon and Related Acts, Hatch Act, and Section 3 to comply with HUD grant funding requirements. Michael Baker is utilizing an extensive compliance "toolbox" containing regulatory, operational, and financial processes for use on HUD-funded Community Development Block Grant Disaster Recovery (CDBG-DR) programs. These templates are assisting in "quick start" program compliance.

PROJECT: CMF 003 W0#15 CMF FOR ATLANTIC CITY RESILIENCY PROGRAM (2020-PRESENT)

Location: Atlantic County, New Jersey

Client: NJDPMC/NJDCA

Michael Baker was selected as the Program Manager for the Atlantic City Resiliency Program for the State of New Jersey. Under this Hurricane Sandy CDBG-DR Grant Program, the NJDCA funded projects that will continue the efforts to protect vulnerable communities from the impacts of future storms along flood prone areas. There were a total of seven projects involved in the program: Traffic Signal Equipment Upgrades; City Hall Flood Proofing; Check Valve Replacements; Lower Chelsea Bulkheads; South Blvd. Bulkheads; Gardner's Basin Dredging & Bulkheads; and Chelsea and Ducktown Bulkhead projects.

Due to Michael Baker's extensive construction management and design experience with large multi-faceted construction and resiliency projects, our team was selected to assist the NJDCA with monitoring and oversight tasks for selected resiliency projects throughout coastal New Jersey.

Key tasks include:

- Monthly Reporting
- Design Oversight
- Bidding/Procurement Reviews
- Contractor Deliverable Reviews
- Bi-weekly Field inspection
- Independent Cost Estimating
- Master Project Scheduling and Forecasting
- HUD Reporting and Compliance
- Contractor Recordkeeping Compliance Assistance
- Assist with Integrity Monitoring



Accountability for project submittals and issue resolution were diligently tracked and recorded to guard against delays and minimize the NJDEP's liability in the event of a claim. Michael Baker actively communicated with the NJDEP and tracking project correspondence from preconstruction through closeout by maintaining detailed logs and checklists that enable us to assign and track ball-in-court responsibility for Subrecipients and project deliverables. Michael Baker provided timely reviews of invoices and progress reports with proper record keeping to match pace with the Subrecipient's contractor

deliverable submission schedule. These tasks were accomplished through the use of a "uniform" deliverable tracking system. The tracking system provided overall monitoring of all schedules, invoices, progress reports, HUD compliance forms and project closeout documentation. In addition to this mandatory tracking, Michael Baker offered more robust document management solutions. Michael Baker utilized the SIROMS Sharepoint Site as an electronic document library for this project. As such, Michael Baker understands the importance of confirming all record keeping are up-to-date with construction projects and contract milestones.

Under the Grant Program, Michael Baker provided Independent Cost Estimates (ICEs) for Subrecipient contractor agreement amendments (change orders).



Performing ICEs is a primary example of providing the proper "checks and balances" for the local government contractor. Michael Baker's Licensed Professional Engineers have extensive experience preparing ICEs for all types of construction projects. Michael Baker uses a wide variety of estimating tools that includes comprehensive life-cycle analysis, tracking trends and historical indexes, bid analysis and assessing the risks and probability of high-impact events and their influence on cost.

Since the Grant Program is funded through the Federal Department of Housing and Urban Development (HUD), specialized compliance and monitoring, end-to-end policy development, on-site compliance training with Subrecipients, and operational implementation are required. Michael Baker is experienced in HUD compliance monitoring and a thorough understanding of Federal Labor Standard regulations including Davis-Bacon and Related Acts, Hatch Act, and Section 3 to comply with HUD grant funding requirements. Michael Baker is utilizing an extensive compliance "toolbox" containing regulatory, operational, and financial processes for use on HUD-funded Community Development Block Grant Disaster Recovery (CDBG-DR) programs. These templates are assisting in "quick start" program compliance.

PROJECT: HOBOKEN SOUTHWEST **RESILIENCY PARK (2024-PRESENT)**

Location: City of Hoboken, New Jersey

Client: City of Hoboken

Program Budget: \$9 million

a robust public engagement process. Public input was used to develop alternative layouts for the project site, each maximizing the design and flood risk reduction potential. Through public feedback on these alternatives, a final design for the park was developed and construction documents were completed. The Southwest Resiliency Park Expansion will incorporate innovative, inclusive, and universally accessible play areas, active recreation, passive recreation, cultural/civic uses, landscapes, and urban design. The project will also complement the character of the surrounding neighborhood, including the existing Southwest Resiliency Park. The project will detain stormwater to further manage flooding in Southwest Hoboken. The Project will also incorporate multi-modal improvements on the streets surrounding the park so that access and circulation around the park are improved. Michael Baker's responsibilities for this project included full-time construction inspection/observation, bi-weekly construction meetings, daily inspection reports, daily material

Michael Baker is providing full-time construction management for the construction of Hoboken's Southwest Resiliency Park Expansion that will provide recreational amenities and will incorporate multiple innovative stormwater management measures. The Park Expansion will complement the existing Southwest Park (at Block 12) and will build upon the stakeholder feedback already received for the existing pop-up park at its location. The design for the Southwest Park Expansion, located at 57 Marshall Street/60 Harrison Street, was developed through



tracking, constructability and schedule reviews, general and effective communication between the City, Contractor, and applicable project stakeholders, shop drawing reviews, and community engagement.

PROJECT: HOBOKEN NORTHWEST RESILIENCY PARK (2019-2024)

Location: City of Hoboken, New Jersey

Client: City of Hoboken

Program Budget: \$47 million

Michael Baker provided full-time construction management for the construction of a 5.4-acre interactive urban park in the City of Hoboken, which incorporates sustainable design and extensive stormwater management features, including collection and storage of all stormwater runoff into an underground, one-milliongallon stormwater storage tank. As part of the project, Michael Baker oversaw extensive soil sampling and testing of the former industrial site, coordinate with local sewer authority for pump station construction, and manage construction of numerous park

features, including play equipment, building structures, athletic facilities, and other interactive features. Michael Baker performed utility coordination, supervise the construction of a stormwater sewer system, and manage the construction of a park building and community room. Additionally, it will oversee the attainment of SITES v2 sustainability certification, conduct public engagement, update the project website, and complete and submit all close-out documents.

The Northwest Resiliency Park sits on 5.4 acres of land that was previously used by the Henkel Chemical plant, which closed in 2001. Following Superstorm Sandy in 2012 the U.S. Department of Housing and Urban Development and the City's 2014 Green Infrastructure Strategic Plan identified the area as a potential flood management park. The site was remediated to EPA standards, capped in 2016, and used as a temporary pop-up park starting in 2017. The project calls for the implementation of several landscaped basins around the perimeter of the park, as well as stormwater basins under the basketball court and athletic field. The most significant component, located 25 feet underground, is a precast, one-million-gallon stormwater storage tank and retention system that combats flooding by storing and filtering rainwater. Michael Baker will supervise the installation of the tank and the supporting excavation system, which



is comprised of fully braced, 80-foot sheet piles and a perimeter of 700 linear feet. Approximately 30,000 cubic yards of excavation to subgrade will occur next, followed by the installation of 98 H-piles, dense-graded aggregate, a mud slab, and the tank. Throughout construction, substantial dewatering of groundwater will occur. Following construction of the tank, the site will be turned over to the local sewer authority, which will construct a pump station that will control the release of stored stormwater into the local stormwater network.

Since the area is a former industrial site that was remediated and capped earlier this decade, Michael Baker oversaw the removal of the current asphalt cap, monitor subsequent soil sampling by the contractor and the city's licensed site remediation professional, and supervise the installation of a new cap which will make up the finished park surface and include paved walkways, landscaped areas, athletics fields, and buildings. Michael Baker coordinated with major utilities for the relocation or removal of services, manage the construction of an extensive stormwater sewer system, and perform checks for proper grading, slopes, and adherence to construction details, oversaw the construction of a canopy area with two buildings that will form the gathering place for social activities and community events: a park building with a café and seating area and a community room. The park will also feature an interactive play fountain that will convert to an ice rink in the winter.

PROJECT: DELANCY STREET ROADWAY IMPROVEMENTS

Location: City of Newark, New Jersey

Client: City of Newark

Program Budget: \$5 million

The City of Newark proposed improvements to Delancy Street, a two-lane arterial roadway located in the southeastern Ironbound section of the City. The Delancy Street corridor extends east-west for 1.1 miles north and parallel to Interstate I-78 and crosses several branches of freight railroads. As a result of a lack of proper maintenance, extensive use by trucks, and apparent deficiencies and geometric constraints, Delancy Street is currently operating at an unacceptable level of service. These deficiencies contribute to low traffic throughput, inadequate radii entering and leaving

driveways, deficient radii of the road centerline creating unsafe conditions around curves, flat gradients, stormwater infiltration/inflow into the City's sewer systems, frequent roadway flooding due to clogged and inadequate drainage systems connecting to tidally influenced channels and canals, and generally poor pavement conditions. To address these

deficiencies and to implement the improvements, Michael Baker prepared roadway improvement final design documents in accordance with the City of Newark and NJDOT standards and specifications with the incorporation of Complete Streets design elements. Flat vertical geometry and clogged drainage systems are the key issues contributing to the poor pavement conditions. Evaluation of the existing stormwater collection system and the recommendations for the new system is critical. New improvements include widening of the road and extending an existing 4.5' x 9' concrete box culvert at a tidal creek crossing on either side of the road. The widening will require extension or replacement of storm sewer laterals along the project length. Michael Baker will supervise the cleaning of the sewers to clear catch basins of sediment and debris to make a better assessment of the existing condition of the sewer systems, so new recommendations can be made for extension or

replacement of the laterals. This sewer cleaning task will save significant cost and time in design as fewer assumptions will be made, and ultimately in construction, where conflicts and will be minimized. This project will be subject to the NJDEP Stormwater Management Rules (NJAC 7:8) regarding stormwater discharges. The NJDEP Stormwater Management Rules dictate that projects with greater than an acre of new land disturbance, or with an increase in impervious area of greater than 0.25 acre, must comply with the Rules. The Delancy Street project meets both of these criterion, and will be designed in accordance with the three (3) NJDEP Stormwater Management criteria, including: Stormwater Quantity Control, Water Quality Control, and Groundwater Recharge. Project activities also require approval under the NJDEP Waterfront Development Act, Freshwater Wetlands Protection Act, and Flood Hazard Area Control Act.



PROJECT: SOUTH STREET AND ADAMS STREET DRAINAGE IMPROVEMENTS

Location: City of Newark, New Jersey

Client: City of Newark

Program Budget: \$1.5 million

Michael Baker provided a comprehensive drainage study and design and construction administration services for the combined sewer overflow community of Ironbound surrounding the South and Adams Street corridor. The area suffered from frequent flooding that is stifling business growth, creating toxic environments from combined sewers, and causing property and personal damage. Michael Baker studied the roadway drainage and overall drainage patterns of the network of ditches draining to Newark Bay. Following the study, alternatives were developed to separate the sewers in the most critical downstream areas

and install green infrastructure to retain rainfall. Michael Baker also assisted the client with long-term prioritization for future separation of sewers. The designs were coordinated with the Ironbound Community Corporation and incorporated the Green Streets Initiative as well as the Passaic Valley Sewerage Commission. Design was completed in accordance with NJDEP regulations and Michael Baker assisted with the funding coordination for this project. For this analysis, Michael Baker utilized a two-dimensional modeling approach to model different hydrographs throughout the 500 acres

of Newark. With the analysis, Michael Baker modeled over 20 miles of combined sewers. Additionally, Michael Baker conducted several field investigations examining the current condition of the ditches draining the area. The proposed design included replacing pipes, valves, site grading, pump station design and onsite construction inspection and engineering services. Michael Baker was also responsible for installing storm water infrastructure (pump station, DIP Pipe, RCP Pipe, catch basins, manholes, and backflow preventers) at two site locations in the Ironbound Section of Newark, NJ. Michael Baker's responsibilities for this project included full-time construction inspection/observation, bi-weekly construction meetings, daily inspection reports, daily material tracking, constructability and schedule reviews, general and effective communication between the City, Contractor, and applicable project stakeholders, shop drawing reviews, and community engagement.



PROJECT: ROUTE 52 CAUSEWAY REPLACEMENT

Location: Ocean City and Somers Point, New

Jersey

Client: New Jersey Department of Transportation

Program Budget: \$400 million

Michael Baker led the effort for alternatives analysis, preliminary design, environmental services, final design, and construction support for this multi-faceted, 3-mile transportation improvement project over Great Egg Harbor in NJ. This Michael Baker design project is one of the largest projects undertaken by the New Jersey Department of Transportation (NJDOT), with a construction cost exceeding \$400M. The Route 52 Causeway is located in an environmentally sensitive area and provides a vital link between the two shore communities of Somers Point and Ocean City, NJ. The project consists of approximately 10,000 ft. of dual concrete

bridge structures (20,000' total) between high level, low level, and curved bridge alignment sections, which also includes a continuous 10' wide multi-use path on the bridge. The project also includes approximately 7,000 ft. of new and widened roadway construction.

The design included many complex structural features including continuous spliced girder designs, post-tensioned segmental concrete structures, cast-in-place post-tensioned continuous concrete structure, precast concrete elements, bulkheads and cofferdams in extreme tidal zones. In-depth analyses were performed for ship/vessel collisions, ice loadings, scour, and a site specific seismic response spectrum and seismic foundation stiffness matrix was developed. The subsurface exploration program included extensive lab testing of the soil properties leading to an optimal (shorter) pile length reducing construction costs and duration of pile driving activities. The project involved preparing bid documents for two alternative designs for each of Contracts A and B. Michael Baker further implemented an innovative strategy of preparing partial alternative design bid packages to save time and cost.



PROJECT: SCUDDER FALLS BRIDGE REPLACEMENT FINAL DESIGN SERVICES (2017-2022)

Location: Route 295 NJ/PA Border

Client: Delaware River Joint Toll Bridge

Commission

Program Budget: \$390 million



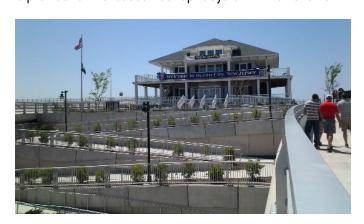
Michael Baker provided final design and post-design services for the Scudder Falls Bridge Replacement project. The existing four-lane bridge over the Delaware River was functionally obsolete and needed to be replaced to alleviate recurring current peak-period and emergency-incident traffic congestion and projected future traffic. Numerous commuter safety and operational upgrades were also needed at the bridge and adjoining highway segments and interchanges in both New Jersey and Pennsylvania.

The project involved replacement of the existing four-lane bridge with a twin-span structure carrying six lanes of through traffic (three in each direction), two auxiliary northbound lanes for entry/exit travel, and one auxiliary southbound lane for entry/exit travel. The project also included complete reconstruction of the deficient Route 29/175 interchange on the New Jersey side and reconfiguration of the Taylorsville Road interchange in Lower Makefield, Pennsylvania, to improve the safety and efficiency of the interchange. Two roundabouts were introduced on the New Jersey side to improve the efficiency and safety of the interchange. Their design followed Federal Highway Administration (FHWA) Roundabouts: An Informational Guide, and NCHRP 672. Roadway work also included widening of approximately 2 miles of I-95 on both approaches of the bridge. The effort included evaluation of existing guide rail and design of the appropriate roadside protection for the proposed improvements. A key element of the design is the roundabouts within the Route 29 Interchange.

Michael Baker's scope of work also included drainage upgrades and other improvements along the approach highway between the Route 29/175 interchange and Bear Tavern Road in New Jersey, and widening of the Pennsylvania approach highway between the Route 332 exit and the bridge by adding an additional lane in each direction. Michael Baker also designed a bicycle/pedestrian walkway connecting the recreational canal paths on both sides of the river. New bridge inside shoulders are sized to allow for future mass transit service. Michael Baker also designed a new all electronic tolling (AET) collection system in the southbound direction, consisting of high-speed E-ZPass tag readers and video cameras to identify license plates for purposes of collecting tolls by mail from motorists who do not have E-ZPass. Noise-abatement walls are designed along the approach roadways leading to and from the bridge.

Additionally, Michael Baker designed an intelligent transportation system (ITS) equipment building for the installation of the AET equipment. The building is sized to house the proposed AET system equipment with consideration for possible future equipment needs. Equipment housed in the toll building includes lane controller cabinets; E-ZPass reader equipment cabinets; and electrical, HVAC, generator control/monitoring, and network cabinets. The client currently uses a leased fiber optic system for connectivity between toll collection facilities. The provider of the leased fiber optic system will extend its

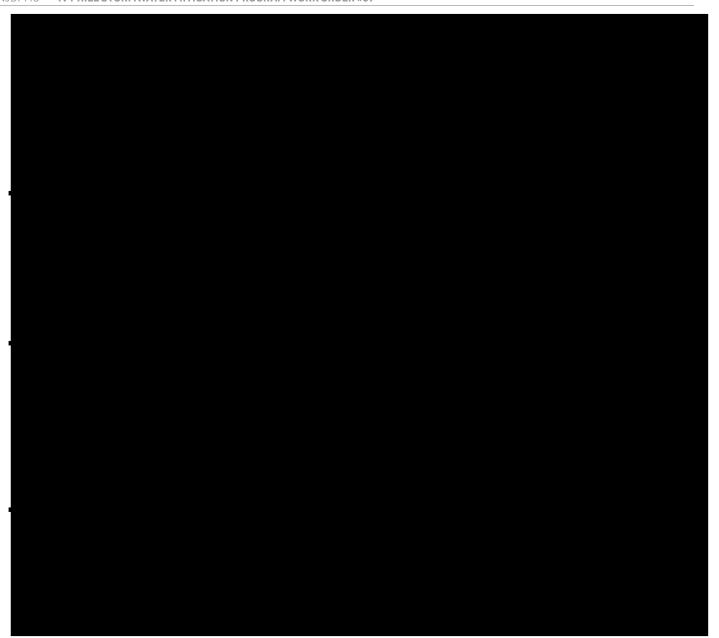
service to the new building. Space will be included in the toll equipment building for other leased communications systems for T1 connectivity, such as video surveillance systems, and for vendor demarcation and their associated equipment. A stand-by generator was provided to support the AET equipment and associated building systems in the event of power failure. The generator and automatic transfer switch is located adjacent to the toll equipment building in a secure, weatherproof enclosure. Annunciation for remote alarm monitoring is provided. The distribution system for the generator included an uninterruptible power supply (UPS) system to eliminate disruption in AET system service. The UPS maintains power during generator start-up.



PROJECT APPROACH TO SCOPE OF WORK



LESSONS LEARNED FORM PAST CMF WO'S



Throughout the Environmental Review Phase, Design Phase, and Construction Phase for a project of this magnitude, there is a large amount of coordination, scheduling, reviews, oversight, inspection, and cost considerations that need to be completed. The DPMC needs a skilled multi-disciplinary team of experienced professionals to rely upon for these tasks, paying close attention to quality, schedule, and costs. The CMF Consultant will be the DPMC's and assigned Project Director's (PD) representative and maintain their expectations and goals as the primary objective.

We know that the CMF consultant will be asked to take on assignments on short notice and provide the complete range of services needed by the DPMC and PD through the various phases of the project. The DPMC and PD need an experienced and capable consultant team that can maintain and monitor high-quality projects following the design standards and requirements while working with limited oversight by the assigned PD's staff. The Michael Baker team is well versed in these topics and possesses the technical experts needed to fulfill these requirements throughout the phases of the projects.

SERVICES PROVIDED BY THE CMF

Professional, Technical, Administrative, and Clerical services are provided throughout the phases of a project. In general, those services include:

- Scheduling and Organizing Progress Meetings
- Design Reviews



- Budget and Cost Reviews
- Agency Coordination
- Compliance Reporting per funding source (i.e. HUD, FEMA, etc.)
- Construction Management and Inspection
- Project Close-Out

PROJECT TASKS



TASK 1: DESIGN OVERSIGHT

Michael Baker understands this Work Order not only requires experienced knowledge of construction management but also design. Without a thorough knowledge of the scope of work during the design phase, one cannot perform effective construction management. Under this Work Order, the Ivy Hill project proposes a major stormwater improvement of over 2,000 feet of 42" stormwater pipe along the streets of Woodbine Ave., Norman Rd., and Ivy Street. As highlighted in our Project Experience, Michael Baker is skilled in performing designs of major stormwater related infrastructure project especially in a City setting. We can offer value engineering insights for the proposed design and will be able to ask the right questions during the design reviews. Our expertise will allow us to play an active role as required, to assist with value engineering of design alternatives to verify budgets are met and solutions fulfill the project needs and required functions. Under this task, Michael Baker will closely monitor the following:

- Projects remain within eligible scope
- The design phase is proceeding per project and Master Schedule
- Permit, regulatory, and code compliance requirements are met
- URA is being reviewed and any project acquisitions are being properly obtained
- Utility coordination is being conducted as required
- Documents are ready for permit review by the DCA, DEP, USCOE and/or applicable regulatory agency
- Safety and security responsibilities are clear and appropriate in the contract documents

It is also understood that the Environmental Review (ER) process per 24 CFR 58 is the key to obtaining the AUGF (Authorization to Use Grant Funds) for these projects. We anticipate that this project will require an Environmental Assessment level of review based on similar projects. Since we are familiar on how to prepare an EA document to HUD's standards, we will verify this activity is completed by the Subrecipients accurately and verify the environmental conditions are upheld throughout the duration of the program. Final permitting will drive the final design schedule. Our permitting technical expert, Ebony Washington, will review the permitting progress to verify that each Subrecipient's engineer consultant is on track with submissions to establish timely permits. Michael Baker will provide necessary oversight of the Subrecipient's Design Firm consultant, requiring attendance at regularly scheduled design progress meetings. Formal memorandums will be prepared, and the master project schedule will be updated accordingly to accurately track each project's progress. Most importantly, these progress meetings will confirm the PD stays informed of any potential critical issues or problems. Michael Baker will offer potential solutions to aid the PD with any decision-making requirements to progress the projects to verify a timely completion by the to be determined project end dates.

TASK 2: GENERAL REPORTING REQUIREMENTS

Michael Baker has already developed multiple tracking tools, checklists and handbook guides that can be used under this task. Michael Baker sees Task 2 as a critical path task with the goal of expediting the overall program. Providing timely reviews with proper record keeping matching pace with the local government contractor deliverable submission schedule is the key to successful grant management. Monthly reporting is one of the key communication methods for a consultant to keep an owner informed. The PD is relying on the CMF to verify that the project is meeting scope, schedule, and budget goals established for the project. Monthly progress reports will be submitted by the 15th of each month. The report will summarize in a clear concise manner the following:



- Monthly inspections reports w/ photos once construction starts.
- Invoices and change orders
- Meetings (coordination meetings and site meetings) along with minutes
- Contract amendments
- Procurements (professional and construction)
- Master Schedule updates (refer to Task 6 Master Project Schedule)
- Issues with Subrecipients meeting the State of Assurances requirements
- Projected work for the next month

The Michael Baker team is poised to provide an effective, uniform deliverable tracking system capable of handling multiple projects. The tracking system will provide overall monitoring of all procurements, amendments, invoices, change orders, coordination meetings, site visits, photo logs (for each site visit), monthly labor monitoring (including HUD-11s), Independent Cost Estimates (ICEs), project closeout and other deliverables requested for review by the NJDCA not specified in the RFP. Michael Baker will verify required contract specific deliverables are complete, accurate, and are being submitted in a timely fashion for the necessary technical reviews in order to avoid unwarranted project delays.

Michael Baker has developed two tracking spreadsheets in addition to the Master Project Schedule that will be submitted monthly. These spreadsheets were specially designed for under CMF-003/004 Work Orders and have been well received by DCA and can be effectively utilized for this work order. The first tracking spreadsheet is called the "Monthly Status Update." Michael Baker will include key dates when items are received and will involve daily e-mail logs as required. This has proven to be very beneficial for tracking progress and developing timelines for key project milestones. The second spreadsheet is entitled "Monthly Issues Update." Michael Baker developed this stand-alone tracking tool to document key issues that may arise and will indicate what the issue is, date it was initiated, impact to project, ball-in-court, tracking comments, and when the issue was resolved. Michael Baker has the technical staff with qualifications ready to support the task and meet the unpredictable "highs and lows" of the contractor submittal process. The tracking system will provide the DCA with clear and concise updates for every monthly progress update.

Michael Baker understands that each step in a project's life cycle requires unique forms and supporting documentation. We have developed a series of checklists for every step of the way. These checklists were utilized for CMF-003/004 Work Orders and can be easily transferred to this project for a seamless transition. The checklists developed include:

- Procurement Packages (both professional and contractor)
- Invoice Reviews
- Bid Document Plans and Specification Reviews
- Independent Cost Estimates
- Closeout

Michael Baker will include a checklist with each review conducted which will be updated regularly as items are received. There is also a column that indicates where the forms can be found in SIROMS for easy access. In addition to the checklists, Michael Baker has also developed handbooks for each step in a project's life cycle that include:

- Bid Package Preparation Handbooks (both professional and contractor)
- Preconstruction Conference (incl. Davis Bacon guide) Handbook
- Invoice Review Checklist
- Closeout Handbook

These handbooks are distributed early in the project to the Subrecipients and their consultants and include not only the above-mentioned checklists, but all the blank forms as well for reference. Michael Baker found that distributing these handbooks early on will eliminate any surprises for the contractors and consultants as to what is expected for each bid package, invoice, change order, and closeout.

A key critical task for successfully managing the grant award projects for this Work Order will be record keeping. Michael Baker understands that all documents and records produced by the local government contractor or CMF are to be submitted to the Sandy Integrated Recovery Operations and Management System (SIROMS) FHRR Document Library. In addition to this mandatory tracking, Michael Baker offers more robust document management solutions as detailed above.

TASK 3: INSPECTIONS AND PHOTOGRAPHS

An important aspect of the inspection services is to provide continuous routine onsite inspection as identified in the RFP



to verify the DCA that the installed construction materials meets all of the quality requirements of the contract documents, including applicable codes and standards. Project plans, specifications and material submittals will be obtained from the Design Firm and verify that all inspection staff are familiar with them prior to conducting their review. The Michael Baker team will inspect the work and report any irregularities, based on report format with photos attached.

The Michael Baker team will schedule inspection activities to support the project schedule and coordinate inspection of other consultants and agencies. The inspectors assigned to the work will monitor the materials, equipment and techniques used during construction. The inspector will advise the contractor of any materials or equipment which has not been approved and should not be installed, and any installation that does not meet the requirements of the



contract. If corrective action is not taken by the contractor, the Superintendent/Resident Engineer will advise the DPMC of the non-conforming condition and any disputes arising over improper installation.

All non-conforming or unacceptable work will be reported on the Monthly Inspection Reports and a log maintained to document corrections is completed, in accordance with the requirements. Monthly digital progress photos will be taken by the Teams inspector to document the progress of the work, equipment installation and other key aspects of the work. Exterior photographs of all structures will be taken on a monthly basis from each side of the structure from the same locations. Preconstruction photographs will be taken to document the existing conditions prior to construction. The inspector will set up an electronic file that records the key data for each photo so that photos can be used in the future. As work progresses, photos will be taken to record work progress and completion of installed pipes, equipment, systems and finishes. Our inspectors will also use digital photographs to document installation work and link these photos to their Site Monitoring Report. Other important activities will be documented through site photographs such as subsurface site conditions, concrete placement activities, site housekeeping conditions, disputed work items, etc. Documentation of such activities through photographs will be beneficial in any actions, questions, complaints or disputes, which may arise later.

As-built drawings will be reviewed and documented in conjunction with the Design Firm's engineer to verify all field changes are captured properly. We will also conifrm that the contractor complete an as-built survey to verify all elevations of buildings, platforms and equipment are built to the required flood elevations.

TASK 4: CONTRACTOR DELIVERABLE REVIEW

This task represents the center of the "universe" in relation to the overall Program. All the other tasks identified in this work order revolve around this one. As the CMF, Michael Baker knows that without a proven, precise and organized system to review all the associated documentation, the Program cannot succeed. The guidelines set forth by HUD are complex and sometimes overwhelming if you are not familiar of what they mean and what is required for documentation. We know these quidelines as almost second nature since we have been providing reviews in similar work orders through NJDPMC for the past nine (9) years. We have developed handbooks, checklists and other standard operating procedures to verify not only we understand the process but have also made it easy for the Subrecipients and their contractors to understand and follow. At the start of every phase in this Program, we will hold meetings with the Subrecipient and Contractor to review these checklists to verify they understand what will be expected to provide as backup documentation. We have also learned that it is also important to include these in the bid packages so Contractors are aware of what is required before they are awarded the contracts. For example, invoice reviews almost always seem to be a trouble spot for contractors when they submit their invoices and end holding up payments due to missing documents. For example, Contractors need to know they are to provide the required CPRs, wage rates, and monthly fringe backup documentation with every invoice just to name a few. Knowing that these types of items are required before the award provides some assurances, they know what they are in for if they are selected. Therefor we realized this type of information should be "spelled out" when possible, for them rather than relying on them to sift through the Federal quidelines (it is still understood they are ultimately responsible to follow all quidelines but we will try to make it easier for them.)

Knowing what to look for is the key to identifying any deficiencies. This is why we developed these handbooks and checklists. This Program could not make it through an audit without them. We are also very familiar with the SIROMS system (for over 8 years now) for record keeping. We can assist with setting up the required folders to store all this documentation as well when the time comes.

TASK 5: PROVIDE INDEPENDENT COST ESTIMATES (ICE)

The primary goal of Task 5 is to estimate costs and fees of local government contractor agreement amendments (change orders) at the request of the NJDCA. Performing independent cost estimates is a primary example of providing the proper checks and balances for the local government contractor. Michael Baker understands that certain complex issues often arise during construction served by considering multiple solutions or assumptions and sometimes require amendments to successfully complete a project. Michael Baker knows the value of developing Independent Cost Estimates (ICE) during every phase of the project and not just during construction. Not only is this a requirement from federal agencies such HUD as outlined in 2 CFR A 200.324 for their grants, but it is also the primary tool in keeping the Contractor "in check" during the change order process. Since Michael Baker has the "experts" in Design and Construction Management, we are well acquainted with pitfalls of accepting change orders from Contractors without an independent check. Often, this step can save the Client on unacceptable "markups" or hidden costs. As always, Michael Baker will act in the best interest of the Program first and far most.

Michael Baker's New Jersey-licensed professional engineers have extensive experience preparing ICEs and know that requested ICEs must be completed in a timely manner. The Michael Baker team is highly skilled in estimating the manhours, equipment and material required to complete change orders proposed by local government contractors. We have the expertise for any type of project that includes buildings, stormwater conveyance, pump stations, bulkheads and general construction items. Michael Baker understands the importance of ICEs for evaluating local government contractor fee proposals since discrepancies between the two may result in negotiations with the local government contractor. Michael Baker is prepared to provide cost reasonable analyses should explanations be required for differences between the ICEs and fee proposal.

Michael Baker's comprehensive life-cycle approach utilizes a standard process to develop estimates, tracking trends and historical indexes, analyzing bids, and assessing the risks and probability of high-impact events and their influence on cost. This includes maintaining relationships with local resources, including affiliations with contractors and construction associations. Michael Baker maintains a dedicated, multi-disciplined estimating staff, including Certified Construction Managers, cost engineers, and professional estimators. Our estimating staff includes Certified Construction Managers and Associate Value Specialists, as well as professionals affiliated with the American Society of Professional Estimators and the Association for the Advancement of Cost Engineering.

We understand that cost control is a very important component of project delivery. A design to cost approach will be applied correlating change order construction costs with available budget. Should deviations be observed, we will immediately alert and work with you to refine the design to work within the available funding. Michael Baker will perform cost reasonable analyses and explain any differences between ICEs and fee proposals. Standard procedures will be developed by Michael Baker to systematically review, analyze, and assess estimates. This procedure will include the development of technical independent estimates, constructability input, and management concurrence. The procedure will be formalized through project specific checklists submitted to the DPMC and NJDCA with the recommendations.

TASK 6: SCHEDULING, MASTER SCHEDULE

The Michael Baker team firmly believes that CPM schedules are an essential and powerful tool in completing a project on-time and within budget. The development of the Master Project Schedule is very dynamic, and the Michael Baker team will help verify the overall program's schedule path is clear of obstacles and optimizes the project delivery process to confirm all contracts are completed by September 2029 or earlier. Michael Baker will review the initial and final network schedules submitted by the Design Firm during design and the contractor during construction for each project and, in concert with the Subrecipient and DCA, make recommendations for acceptance, revision, or rejection.

Michael Baker is currently using a master schedule that was specifically developed to track similar progress and fiscal expenditures for CMF 003 Work Orders No. 3 & 15 and CMF 004 Work Orders No. 1 & 2. This master schedule tracks the design phase through the construction phase and will also include monthly/quarterly anticipated expenditures versus actual expenditures. This schedule can be easily reformatted for this project for a seamless transition into a working schedule. The Master Project Schedule is only part of driving the project. Accountability for project submittals and issue resolution must be diligently tracked and recorded to guard against delays and minimize the Subrecipient liability in the event of a claim.

Another lesson learned that could be added to list noted above, is the requirement, of the Subrecipient to the contractor, to insist on monthly schedule updates during construction. Often, we saw that the Subrecipient did not hold the contractors accountable routinely to provide schedule updates. What happens in these instances, is that if a delay occurs, the contractor



needs to show the impact to the schedule at the time of the delay. Waiting to the end of the project to assess delays is usually too late and potential claims can arise from the contractor. We have seen from other State governmental agencies that their general specifications require contractors to make monthly schedule updates or payment for invoices can be withheld. This is one idea that should be explored with current Subrecipient specifications templates in this Program.

TASK 7: STATEMENT OF ASSURANCES COMPLIANCE

Statement of Assurances Compliance is usually where things get "murky" as many folks may not be familiar with the Davis Bacon rules for paying overtime to employees, how you pay for an employee that works under two job classifications or at what point/threshold does a supervisor or foreman, who is on-site, get paid under specific job classification....just to name a few special cases. Michael Baker knows these answers and more. Another area that can be overlooked are when contractors have subcontractors that may not be SAMs registered. Checking for debarred contractors from not only a State level but through the Federal level via SAMs is one of the important compliance checks a CMF will do. Contractors must be registered with active IDs in SAMs prior to the award of any contract.

Section 3 compliance is also very important and many contractors may not be familiar of the requirements if they have not worked on HUD related federal grant programs. We are aware of the new Section 3 Final Rule that became effective on November 30, 2020 and is codified at 24 CFR part 75. In fact, Michael Baker assisted Sylvia Johnston at DCA prepare a new Section 3 Plan template for contractor's to use in these programs.

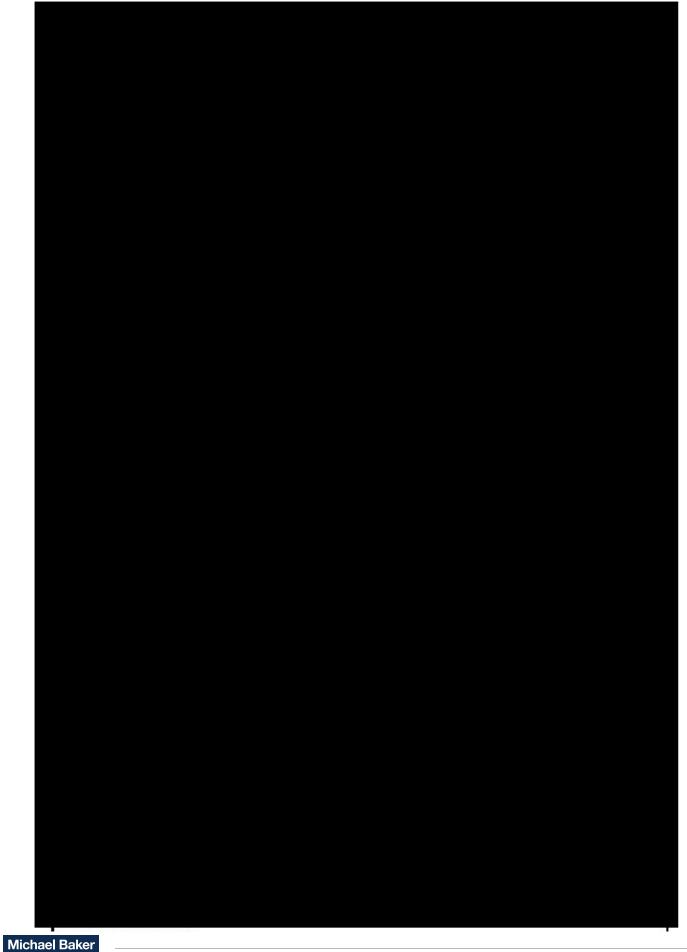
Our Program handbooks and checklists that we developed over the past 9 years for previous work order assignments help Subrecipients become compliant and are easy to understand and use.

TASK 8: PROJECT CMF REVIEW OF CONSTRUCTION CONTRACTOR INVOICES

Michael Baker understands the local contractor is being administered by the Subrecipient. However, under this Program, invoice documentation goes well beyond typical invoice packages that many Subrecipients are not familiar with. Michael Baker has allotted time to review invoices associated with each project on a monthly basis for the task order duration. During this process, contractor invoices will be reviewed to:

- Verify that each payment is consistent with applicable federal, state, and local laws, and that there is no duplication of benefits, process and payment errors, waste, fraud, abuse, malfeasance, or mismanagement of funds.
- Verify that contract deliverables are provided within acceptable timeframes for the duration of the engagement.
- If weaknesses, gaps, or errors are detected, develop recommendations and strategies to verify maximum federal recoveries, compliance with applicable laws, and prevention of associated risks.
- Verify that all invoices are complete (i.e. including all contract-required documentation), accurate, and have been uploaded to the SIROMS Document Library.
- Report findings to NJDCA and DPMC Contracting Officer.





TASK 9: MEETINGS AND CONFERENCE CALLS

Effective project management starts with good communication. Our approach to this work order is to confirm our key leadership stays "plugged in" throughout the lifespan of the project. As such, Project Manager Peter Senus and/or Deputy Project Manager Aaron Console will attend all meetings, as appropriate. If required, Michael Baker will arrange conference calls (via Teams) and/or on-site meetings with the local government designer/contractor and municipality/county throughout the design and construction phases to discuss progress of the work, critical items affecting the schedule of the project, and change order disputes.

Michael Baker understands that it is our responsibility to prepare an agenda for certain meetings, conduct the proceedings, and prepare the meeting minutes for DCA's PD following the standard meeting minutes format. At other meetings, Michael Baker will be present to document the meeting, schedule changes, budget alterations, and build the lessons learned document. Prior to these meetings and during regular project execution, Michael Baker will inform DCA of any meetings or correspondence with other agencies, government officials, and other stakeholder groups that may be required. Following the meetings and at appropriate intervals, Michael Baker will prepare and subsequently update a Weekly To-Do-List that details pertinent activities and deliverables along with assigned responsibility that are critical to the advancement of the projects. This list will be distributed to all team members including NJDCA to clearly communicate project responsibilities and keep

TASK 10: CONTRACT MODIFICATIONS

The Michael Baker team understands that Subrecipient and DCA's PD has the sole authority to issue contract modifications. As the CMF, we know that direct interaction with Contractors, for any reason, needs to be approved first by the PD and the Subrecipient as a guideline for any reason or situation. Our role is to collect the information leading up to the potential contract change and to provide the PD with the analysis (reason, cost and schedule) for them to make an informed decision. Change orders and modifications are typically initiated due to changes in field conditions, contract plan clarifications/errors/additions or by the contractor if they see a better and more economical way of doing the same thing. For most change orders, the contractor and the on-site Superintendent/Resident Engineer will jointly investigate and review the need for a change order. When a change order is necessary, the contractor will prepare the request and justification and submit it to the Superintendent/Resident Engineer for review. This information needs to then be reported to the Design Firm and CMF as soon as possible. Michael Baker has learned that having bi-weekly progress meetings during construction are essential for many reasons including identifying changes in their early stages. Bi-weekly meetings is a great way to pass this information to all stakeholders. The Superintendent/Resident Engineer will prepare a recommendation and estimate of the additional work and submit the recommendation to the Subrecipient/PD/CMF for approval. Where work is in progress and the schedule would be impacted adversely, the Subrecipient/PD will be advised and, upon approval, the work will continue, and Time and Material Records kept until an approval charge order is received.

During the preconstruction phase, Michael Baker will develop project specific procedures to handle these changes. These procedures will detail roles and responsibilities, determining the scope, process for identifying and justifying the changes, steps to process the changes, requirements to evaluate cost, and schedule and impacts. Identifying the source or reason for the change order is only the first step. Responsible entities will be advised including the Design Firm if it is deemed an error and omission of the contract documents. The priority up front will be to determine cost and schedule impacts. In addition to the required backup from the Contractor, the Design Firm and Michael Baker will perform an ICE to compare to the Contractor's cost. Once all the information is obtained, we will share the information and analysis with the PD to make an informed decision.

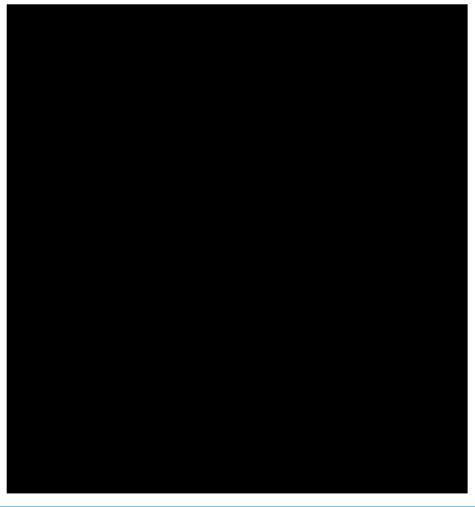
TASK 11: PROJECT CLOSEOUT

Project Closeout is as important as the activities that occur while the project is in design and construction. HUD CDBG grant requirements include many documents that Michale Baker has identified and creating a unique tracking system from past Work Orders that confirm all documents are obtained. Once the project is physically completed by the Contractor which includes all punch list items, the project must also be completed from a financial standpoint. All change orders and claims must be settled, and final release of retainage must be issued. This cannot occur until all proper documentation is obtained from not only the Contractor, but also the Subrecipient. Michael Baker created a very easy to follow checklist that will verify



all this is tracked (see figure below). Michael Baker developed a "Closeout Handbook" as well for previous work orders that can be utilized similarly under this task to track the progress of each requirement and confirm all documents are received prior to the release of final retainage. In addition, we have found that distributing this Closeout Handbook early in the project's life cycle to the Subrecipient's consultant grant manager is helpful in verifying these items are obtained in a timely

manner.



WHY CHOOSE THE MICHAEL BAKER TEAM?





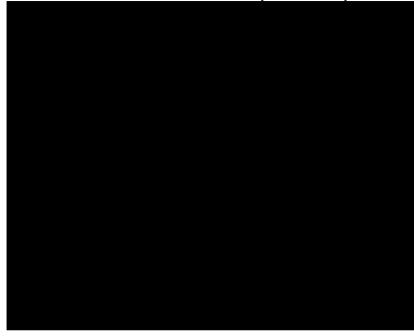


SCHEDULE

	Ivy Hill Stormwater Mitigation Program Schedule																																			
Year		2025														2026										2027										
Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC	JAN	FEB	B MAR	APR	R M	AY JUN	JUL	AUG	SEP	ОСТ	NOV	DEC	JAN	FEB	MAR	APF	R MAY	JUN	JUL	AUG	SEF	РОСТ	NOV	DEC
Quarter		Q1			Q2			Q3			Q4			Q1	·		Q)2		Q3			Q4			Q1	·		Q2			Q3			Q4	
Procurement of Design Firm							Pro	ocureme DF	ent of																											
30% Design										3	0% De:	sign																								
Environmental Review & AUGF													En	nviron	nmenta	l Revi	ew &	AUGF																		
Final Design (70%), Permitting & Public Comment														70% Design/Permitting/Public Comment						olic																
Bid Phase																										Bid									_	
Construction Phase																														Cons	structio	n				
Close Out																																			Close	e Out

SENIOR PROJECT MANAGER

Peter Senus, PMP, NICET IV



Michael Baker

Years with Michael Baker

Years of Experience

Education

B.S.C.E., 1991, Civil Engineering, Norwich University

Licenses/Certifications

Project Management Professional (PMP), 2013

NICET IV Transportation-Highway Construction, New Jersey, 2017, 1

NJ Society of Asphalt Technologists (NJSAT), New Jersey, 2014, 1

Professional Affiliations

American Society of Highway Engineers (ASHE)

Society of American Military Engineers (SAME)

RELEVANT EXPERIENCE

CMF-003 W15 Atlantic City Resiliency Program (ACRP). New Jersey Division of Property Management & Construction. Construction Sr. Program Manager responsible for the overall management of seven construction projects associated with Hurricane Sandy CDBG-DR HUD grant relief funds (\$25 million). Projects included new bulkhead structures, dry floodproofing, check valve replacements and elevation of traffic signal equipment. Responsibilities included: reviewing bid documents and RFPs for subrecipients, environmental reviews, scheduling and coordinating progress meetings with local municipalities and engineers, conducting regular site reviews and general construction inspections, monitoring local government contractor project progress, maintaining a master program schedule, preparing independent cost estimates for change orders, reviewing local government contractor pay applications, HUD (Davis Bacon) labor monitoring, Section 3 compliance and reporting, SWMBE reporting and federal competitive bidding practice reviews.

CMF003 WO3 - Flood Hazard, Reduction & Resiliency Contract (FHRRR). New Jersey Division of Property Management & Construction. Construction Sr. Program Manager responsible for the overall management of eight construction projects associated with Hurricane Sandy CDBG-DR HUD grant relief funds (\$50 Million). Projects included new outfall structures, pump stations with generators, tide gate upgrades, local road stormwater upgrades and dredge operations. Responsibilities included: reviewing bid documents and RFPs for subrecipients, environmental reviews, scheduling and coordinating progress meetings with local municipalities and engineers, conducting regular site reviews and general construction inspections, monitoring local government contractor project progress, maintaining a master program schedule, preparing independent cost estimates for change orders, reviewing local government contractor pay applications, HUD (Davis Bacon) labor monitoring, Section 3 compliance and reporting, SWMBE reporting and federal competitive bidding practice reviews.

Atlantic City Airport De-Icing Facility. South Jersey Transportation Authority. Project Manager/Construction Manager for the overall construction of a new deicing facility at the Atlantic City Airport (\$20 Million). This project includes a de-icing facility, bituminous and concrete pavement, water quality detention basin with subsurface drainage features, airport lighting and utility relocations. Responsibilities included management of the overall field construction staff, coordination with airport operations and contractor(s), subcontractor agreements, schedule review, approval of project contract finances and client coordination.

Atlantic City Expressway Third Lane Widening Program Management Consultant Contract. South Jersey Transportation Authority. Construction Manager for Michael Baker responsible for maintaining a master construction program schedule, overall construction program budget, and coordination with the project team to verify invoicing and procedures follow SJTA's standards throughout the life of the program. The program is split into multiple design and construction contracts, requiring coordination with a wide variety of professional service consultants, subconsultants, vendors, and contractors. Responsibilities include constructability reviews, schedule monitoring, bi-weekly progress meetings, change order reviews, contractor pay application reviews and general reporting to the Client.



Atlantic City Int'l Airport – Phases 1-5 Airport/Terminal Road & Amelia Boulevard Widening Reconstruction. South Jersey Transportation Authority. Project Manager/Construction Manager for this roadway improvement project that included full depth pavement replacement and widening, underground utility relocation, upgraded drainage system and traffic signal replacement, street lighting, landscaping. Responsible for overall construction management and inspection, reviewing schedule updates, reviewing extra work items, preparing change orders and ICEs, reviewing submittals, responding to Request for Information (RFIs), as-built plan preparation, final quantities and approving Contractor monthly pay applications with certified payrolls.

Ft. McCoy Central Issue Facility, Sparta, Wisconsin. U.S. Army Corps of Engineers, Louisville District. Pete served as Site Manager responsible for final design documents and construction support services of this 65,653 gsf facility. Engineering tasks included coordination of local and state agencies, demolition plan development, geometric site layout, specification development, utility infrastructure design, stormwater pollution prevention plan, site grading, landscaping and overall production plan. The site layout was developed in accordance with the current Department of Defense Anti-Terrorism/Force business Protection Measures for Buildings (ATFP). Other responsibilities included managing geotechnical and surveying subconsultant contracts, civil related financial budgets and construction support services such as resolving RFI's.

Combined Regional Maintenance Facility, Fort Dix, New Jersey. U.S. Army Corps of Engineers, Louisville District. Site Manager responsible for developing the final contract documents and construction support services. This 50,400-square-foot facility was a combined vehicle maintenance shop and training equipment site that provided concrete storage platforms capable of handling tracked combat vehicles, inspection, maintenance and repair of vehicles and equipment associated with the National Guard. Primary duties included preparing final contract documents and providing field guidance to the Resident Engineer for constructability issues as well as quality control construction inspection reviews.

Army Reserve Equipment Concentration Site w/ Vehicle Maintenance Facility and Warehouse Facility, Lakehurst, New Jersey. U.S. Army Corps of Engineers, Louisville District. Site Manager responsible for the development of a Design/Build RFP document for the construction of an Army Reserve Equipment Concentration Site (ECS). Primary facilities included construction of a Tactical Equipment Maintenance Facility (TEMF), warehouse building, organizational parking, anti-terrorism measures and building information systems. Engineering work included coordination of local and state agencies, geometric site layout, utility infrastructure coordination (mechanical, electrical, plumbing, and fire protection), stormwater pollution prevention plan development, site grading and earthwork analyses and coordination of landscape plan development. The site layout was developed in accordance with current Department of Defense ATFP. Participated in multiple project design charrette meetings. Other duties included providing field guidance to the Resident Engineer for constructability issues as well as quality control construction inspection reviews.

Joint Base McGuire-Dix-Lakehurst Site Improvements for Building 2901 87th Airbase Wing Headquarters. McGuire AFB, New Jersey. Site Manager who was responsible final design plans and specifications for Building 2901 located at Joint Base McGuire-Dix-Lakehurst, New Jersey, in accordance with ATFP standards. The scope of the project was limited to exterior improvements to parking lots, sidewalks, landscape plantings and plazas.

Atlantic City Int'l Airport – AOA Gate 11 & Security Fence. South Jersey Transportation Authority. Construction Manager for this security gate and fence improvement project that included removing existing degraded fencing and replacing with upgraded post and fence with barbed wire. Responsible for overall construction management and inspection, reviewing schedule updates, reviewing extra work items, preparing change orders and ICEs, reviewing submittals, responding to Request for Information (RFIs), as-built plan preparation, final quantities and approving Contractor monthly pay applications with certified payrolls.

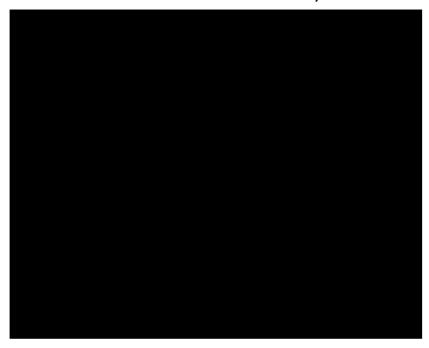
Route 280/21 Interchange Improvements Post Design Services Contract. New Jersey Department of Transportation (NJDOT). Construction Specialist responsible for construction support services for Route 280 & NJ Route 21 Interchange in the City of Newark, Essex County, New Jersey. This project will involve rehabilitation and replacement of six (6) deficient ramp and mainline structures within the project area while correcting geometric deficiencies, improving safety, completing missing moves, and optimizing traffic flow. Primary responsibilities included attendance of bi-weekly contractor coordination meetings, provided responses to Request for Information (RFIs) and submittal reviews. Other duties included providing field guidance to the Resident Engineer for constructability issues as well as quality control construction inspection reviews.

Route 52 Causeway Replacement Project, Ocean City and Somers Point, New Jersey. *NJDOT*. Project Engineer. Responsible for the overall design of the highway portion of project. Michael Baker provided comprehensive engineering services for the replacement of Route 52 Causeway and the reconstruction of approximately 2.8 miles of Route 52 from Route 9 in Somers Point to Bay Avenue in Ocean City crossing Great Egg Harbor Bay. Michael Baker's services included bridge and roadway design, environmental permitting, lighting design, traffic and intelligent transportation system design, utility relocation, community outreach, and construction management and inspection.



DEPUTY PROJECT MANAGER

Aaron Console, NICET IV



CMF-004 WO 01 & 02 Resilient Communities Program (RCP). New Jersey responsible for the overall management of seven construction projects associated

Division of Property Management & Construction. Construction Manager with Hurricane Ida CDBG-DR HUD grant relief funds (\$50 million). Projects included new pump stations, stormwater improvements, and

reporting, SWMBE reporting and federal competitive bidding practice reviews.

Michael Baker

Years with Michael Baker

Years of Experience

Education

B.A., 2024, Construction Management, Rowan University

Licenses/Certifications

NICET IV Transportation-Highway Construction, New Jersey, 2024

TCP Rutgers CAIT - Traffic Control Coordinator NJSAT Asphalt Paving Construction Technologist

OSHA 30 Hour Construction Safety and Health Certification

ACI Concrete Field-Testing Technician, Grade I ACI/CCTC - Concrete Technology

Confined Space Entry Training 8 hours (Construction Industry)

CMF-003 W15 Atlantic City Resiliency Program (ACRP). New Jersey Division of Property Management & Construction. Construction Manager responsible for the overall management of seven construction projects associated with Hurricane Sandy CDBG-DR HUD grant relief funds (\$25 million). Projects included new bulkhead structures, dry floodproofing, check valve replacements and elevation of traffic signal equipment. Responsibilities included: reviewing bid documents and RFPs for Subrecipients, environmental reviews, scheduling and coordinating progress meetings with local municipalities and engineers, conducting regular site reviews and general construction inspections, monitoring local government contractor project progress, maintaining a master program schedule, preparing independent cost estimates for change orders, reviewing local government contractor pay applications, HUD (Davis Bacon) labor monitoring, Section 3 compliance and reporting, SWMBE reporting and federal competitive bidding practice reviews.

emergency response facilities. Responsibilities included: reviewing bid documents for Subrecipients, environmental reviews, scheduling and coordinating progress meetings with local municipalities and engineers, conducting regular site reviews and general construction inspections, monitoring local government contractor project progress, maintaining a master program schedule, preparing independent cost estimates for change orders, reviewing local government contractor pay applications, HUD (Davis Bacon) labor monitoring. Section 3 compliance and

CMF003 WO3 - Flood Hazard, Reduction & Resiliency Contract (FHRR). New Jersey Division of Property Management & Construction. Construction Manager responsible for the overall management of eight construction projects associated with Hurricane Sandy CDBG-DR HUD grant relief funds (\$50 Million). Projects included new outfall structures, pump stations with generators, tide gate upgrades, local road stormwater upgrades and dredge operations. Responsibilities included: reviewing bid documents and RFPs for subrecipients, environmental reviews, scheduling and coordinating progress meetings with local municipalities and engineers, conducting regular site reviews and general construction inspections, monitoring local government contractor project progress, maintaining a master program schedule, preparing independent cost estimates for change orders, reviewing local government contractor pay applications, HUD (Davis Bacon) labor monitoring, Section 3 compliance and reporting, SWMBE reporting and federal competitive bidding practice reviews.

Nacote Creek Bridge Replacement. Atlantic County, New Jersey. Assistant Resident Engineer for the Replacement of the existing Nacote Creek Bridge over Nacote Creek, located in the City of Port Republic, Atlantic County New Jersey. The project involved the demolition of the existing swing span bridge constructed in 1904. Construction of a new 440 ft. long, six span continuous steel beam bridge with drilled shaft foundations constructed in the same alignment and ROW as the existing bridge. The bridge contains (2) 12 ft. wide concrete lanes with adjacent



5 ft. wide shoulders and a 5 ft. wide concrete curbed sidewalk area along the entire west side of the bridge, having 4-bar steel rails installed for pedestrian safety. In addition, the project involved the realignment of Riverside Road, milling, resurfacing and some areas of full depth pavement re-construction to the approaching roadways, installation of guiderails, relocation of existing utilities and drainage improvements. Responsible for overseeing the demolition of the existing bridge, construction/inspection of the new bridge, health and safety, project budgets, RFIs, change orders, progress meetings, contractors schedule review, and payment estimates.

OPS No. P3897 Drainage Rehabilitation and Sliplining, Milepost 110.6 to 115.4. *New Jersey Turnpike Authority.* Assistant Resident Engineer. Assistant Resident Engineer responsible for daily inspection, quantity tracking, CapEx reporting, and general contractor oversight. This project involves drainage rehabilitation, storm pipe replacement, storm pipe lining, jack and bore, video inspection, storm pipe cleaning, headwall repairs, and maintenance and protection of traffic. This project has 30 unique work locations with 3 locations under individual DEP permit requirements which require special care and coordination.

Atlantic City Int'l Airport – Deicing Facility. South Jersey Transportation Authority. Lead inspector for construction of aircraft deicing facility. Responsibilities include inspection of asphalt and reinforced concrete paving, lighting, striping, and drainage facilities, including an underground infiltration basin, diversion chambers, and water quality treatment devices. Michael Baker is providing construction services for SJTA on multiple projects at Atlantic City International Airport.

Atlantic City Int'l Airport – Phase 5 Tilton Road Slip Ramp. South Jersey Transportation Authority. Construction Manager/Lead Inspector for construction of new slip ramp from Amelia Blvd. to Tilton Rd. Project scope included excavation, full pavement section construction, and guiderail installations. Responsible for all construction management duties, including utility coordination, schedule management, change orders and cost estimates, submittal and RFI management, approving Contractor pay applications, and project closeout. Michael Baker is providing construction services under Agreement with SJTA for multiple projects at Atlantic City International Airport.

Atlantic City Int'l Airport - Airport Rd/Amelia Blvd Widening Project, Phases 1-4. South Jersey Transportation Authority. Senior Inspector/Office Engineer for this project to reconstruct the public access road to the airport facility, including pavement reconstruction, guiderail, drainage, lighting, and landscaping. Responsible for construction inspection, review of pay applications, change orders, submittal and RFI management, as-built plan preparation, and closeout. Michael Baker is providing construction management and inspection services under an Agreement with South Jersey Transportation Authority, including design and construction services for multiple projects at Atlantic City International Airport.

New Jersey Turnpike Authority Consultant Staff, Berlin NJ. *NJTA*. Construction inspection and office engineering at various structures on the Garden State Parkway. Verified NJTA specification compliance during contractor work cycles, installation procedures, traffic control and safety. Review and process monthly estimates, change orders, submittals, RFIs, and general office administration, developed and implemented contractor location, weather and staff scheduling calendar, performed review and data entry of inspection personnel field reports, scheduled concrete, and asphalt plant inspections. Assisted in the development of the NJTA Finger Joint Bolt Torque Testing Procedures Manual for NJTA at the Driscoll Bridge.

- P100.378 Bridge Repairs and Resurfacing; MP 0-126, \$6M (2017) Office Engineer
- P100.318 Bridge Repairs and Resurfacing; MP 0-126, \$6M (2016) Office Engineer
- P100.342 Bridge Repairs and Resurfacing; MP 0-126, \$6M (2015) Office Engineer
- P100.266 Bridge Repairs and Resurfacing; MP 0-126, \$6M (2014) Office Engineer
- P100.291 Miscellaneous Bridge Repairs; \$8.5M (2014) Office Engineer & Bridge Inspector
- P100.230 Bridge Repairs and Resurfacing; MP 0-126, \$5.5M (2013) Office Engineer
- P100.203 (GSP MP 0-126) & P100.204 (GSP MP 126-172), \$12M (2012) Office Engineer
- P100.186 (GSP MP 126-172) & P100.187 (GSP MP 0-126), \$11M (2011) Office Engineer & Senior Inspector
- P100.079 Bridge Repairs and Resurfacing; MP 0-126, \$5M (2010) Senior Inspector & Office Engineer
- P100.078 Bridge Repairs and Resurfacing; MP 0-126, \$3M (2009) Inspector

Garden State Parkway Southern Lane Closing Coordinator. *NJTA*. This position was part of a pilot program for the NJTA Lane Closing Program (LCP) requiring direct contact with all construction contracts on the Southern Garden State Parkway. Position required NJTA Employee Supervisor status. Responsibilities included daily review of lane closing requests (LCRs) and weekly conflict coordination. Development and implementation of terms used to notify the NJSP Construction Units of coordinated lane closings. Developed and implemented LCR coordination for PNC Arts Center restrictions in the LCP.



ENVIRONMENTAL PLANNING

Ebony Washington



Michael Baker

Years with Michael Baker

4

Years of Experience

16

Education

M.U.P., 2009, Environmental Planning and Technology, New York University

B.A., 2005, Environmental Engineering, Lafayette College

Professional Affiliations

American Planning Association (APA)

Women's Transportation Seminar (WTS)

relationships with reviewers at the regulatory agencies and has worked with these agencies to identify issues and develop agreeable resolutions efficiently. Additionally, collaborating with the engineers and planners, Ebony has been heavily involved in evaluating proposed alternatives in regard to regulated resources. Her involvement is essential in developing a permittable solution that minimizes environmental impacts while meeting the project's purpose and need.

RELEVANT EXPERIENCE

Atlantic City Offshore Wind O&M Facility, Atlantic City, NJ. Orsted. Project Manager who's responsibilities included providing environmental services for a proposed offshore wind operations and maintenance facility in Atlantic City's inlet area. The project will build an in-water and marine support facility, replace a failing bulkhead, install moorings and floating docks, and prepare the property to support loading and training cranes. An access platform, marine fueling facilities, construction trailers, and utilities are also part of the project. Ebony managed the permitting and licensing effort for the development of an operation and maintenance facility for an offshore wind developer. As part of her role on this job, Ebony focused primarily on preparing the NJDEP land use and Atlantic City permits. The Atlantic City permit approval effort included obtaining site plan approval from the Atlantic City Planning Board Zoning Board, which required provisions for public hearings, responding to public comments, and requests for information from various public officials.

Ocean Wind 2 Construction and Operations Plan and Permitting, Monmouth County, NJ. Orsted. The project includes providing environmental services for proposed offshore wind operations and maintenance facility in Monmouth County, NJ. As part of the project, geotechnical borings will be sited within the NJDEP defined coastal zone management area and will require authorization through the NJDEP Division of Land Resource Protection in accordance with the Coastal Zone Management Rules (N.J.A.C. 7:7). Ebony's effort included preparation of the NJDEP the land use permits required for the project's geotechnical investigation program. Ebony also developed the required compliance documentation and site plan/impact drawings required for NJDEP review and permit issuance.

Facilities Improvement Program Maintenance District TMD 4, East Windsor Township, Mercer County, NJ. Client New Jersey Turnpike Authority. Environmental Specialist responsible for the preparation of a NJDEP Division of Land Use Regulation permits for Freshwater Wetlands General Permits 6 and 7 for the proposed improvements to New Jersey Turnpike Maintenance District 4 – (TMD 4) Hightstown. Also responsible for the preparation of a Delaware and Raritan Canal Commission (DRCC) Approval application for proposed project activities located within Review Zone B of the DRCC jurisdiction.

Wetland Delineation and Environmental Permitting, Mileposts 112 to 113 (NJTA OPS No. P3782), Middletown Township, Monmouth County, New Jersey New Jersey Turnpike Authority. Ebony was Project Manager responsible for the preparation of the environmental screening report, wetland delineation, and NJDEP Land Use Permits. The wetland delineation was performed in accordance with the Federal Manual for Identifying and Delineating Jurisdictional Wetlands (1989). NJDEP Flood Hazard Area Control Act (FHACA) and Freshwater Wetlands General Permit 10B were procured for this project. In addition, Ebony also prepared a riparian mitigation plan which included



coordination with the Marsh Bog Brook I & II Mitigation Bank, NJDEP Mitigation Unit, and the New Jersey Turnpike Authority. This project entailed the rehabilitation and repair of two 120-inch corrugated metal pipe (CMP) culverts, replacement of a 66-inch CMP culvert, and replacement of additional connecting CMPs within the project limits. All of these culverts convey a tributary of Nut Swamp Brook along the Garden State Parkway (GSP).

Environmental Permitting, Scudder Falls Bridge Improvement Project, Lower Makefield Township Bucks County, Pennsylvania and Ewing Township, Mercer County, New Jersey. Delaware River Joint Toll Bridge Commission. Environmental Team Lead responsible for preparation of the DRCC Application, and NJDEP Flood Hazard Area Individual and Freshwater Wetland Individual Permit modifications and extensions. Ebony assisted with the preparation of the NJSHPO NJ Register of Historic Places Act Project Authorization. Ebony was also responsible for preparation of the Aids to Navigation (ATON) Plan for the different phases/staging of in-water bridge construction. The ATON plan was submitted to and approved by the Pennsylvania Fish and Boat Commission.

Wetland Delineation and Environmental Permitting, FREC Access Road Bridge Replacement over Toms River, Structure No. 3489-001, Jackson Township, Ocean County, NJ. New Jersey Department of Transportation. Environmental Team Lead responsible for conducting a wetland delineation, preparing the wetland delineation report and wetland plans during the Preliminary Engineering phase of this bridge deck replacement project. The wetlands delineation was performed in accordance with the Federal Manual for Identifying and Delineating Jurisdictional Wetlands (1989) and the NJ Pinelands Commission Manual for Identifying and Delineating Pinelands Area Wetlands (1991). During Final Design, Ebony prepared an NJDEP Freshwater Wetlands General Permit, an NJDEP Flood Hazard Area Individual Permit, and a NJ Pinelands Commission Development Approval for the bridge replacement.

Wetland Delineation and Environmental Permitting, Route 130 Westfield Avenue to Main Street Pavement Reconstruction Project, East Windsor Township, Mercer County, NJ, Cranbury Township, Middlesex County, NJ. New Jersey Department of Transportation. Environmental Team Lead responsible for the management and preparation of NJDEP Land Use Permits. Preparation of NJDEP Land Use Permits including Freshwater Wetlands General Permits 2 and 10 and NJDEP Flood Hazard Area Control Act Individual Permit. Conducted wetland delineation, and prepared wetland delineation report, for regulated wetlands and State open waters following the procedures in the 1989 Federal Manual for Identifying and Delineating Jurisdictional Wetlands. Also responsible for the preparation of a Delaware and Raritan Canal Commission (DRCC) Approval application for proposed project activities location within Review Zone B of the DRCC jurisdiction.

Environmental Permitting, County Road 530, Southampton Township, Pemberton Township, and Pemberton Borough, New Jersey. Burlington County. Environmental Task Lead responsible for preparation of NJDEP Individual Freshwater Wetlands and Flood Hazard Area Control Act Permits, and NJDEP Green Acres Diversion Application, Section 106 SHPO Consultation, and NJDEP Project Authorization under New Jersey Register of Historic Places Act for replacement of the existing culvert and hydraulic opening design for Goldy's Run under Magnolia Road, and the rehabilitation and extension of existing culverts for Goldy's Run and Birch Run under Route 530. All work was completed in accordance with FHWA, County, DVRPC Policies and Procedures, the NJDOT Procedures Manual, the Local Aid NJDOT Project Delivery Process, and State and Federal environmental regulations.

Environmental Permitting, Delancy Street Roadway Improvements. City of Newark. Environmental Task Lead responsible for preparing and securing NJDEP Land Use permits for Freshwater Wetlands General Permits #10A and #11, Waterfront Development (In-water and Upland), Coastal Wetland Permit, and Flood Hazard Area Control Act Individual Permit associated with culvert reconstruction activities and stream cleaning. Aided in NEPA Environmental Reevaluation. Coordinated preparation of Hazardous Waste Site Investigation Report, PAECE Reports, and Remedial Action Work Plan. All work was completed in accordance with NJDOT Procedures Manual and State and Federal regulations.

Old New York Road (CR 610) Over Nacote Creek Design of Bridge PR-07 Priority Repairs, City of Port Republic, Atlantic County, NJ. Atlantic County. Environmental Science Team Leader responsible for management and preparation of State and Federal regulatory permits including, US Army Corps of Engineers Section 404/10 permit applications and NJDEP Land Use Regulation Program permit applications (Inwater Waterfront Development Individual Permit) and United States Coast Guard Bridge permit exemption application. Additional responsibilities included initiation of the SHPO Section 106 Consultation and oversaw completion of Historic Architecture and Phase 1A Archaeological surveys. Additional responsibilities included coordination with Federal and State regulatory agencies including United States Fish and Wildlife Service, National Marine Fisheries Service, United Stated Army Corps of Engineers, United States Coast Guard, and NJ State Historic Preservation Office.



DESIGN LEAD

Joseph Danyo, PE, PP



RELEVANT EXPERIENCE

Facilities Improvement Program, Final Design Services, Turnpike North, New Jersey. New Jersey Turnpike Authority. Project Manager. PM responsible for final

Michael Baker

Years with Michael Baker 21

Years of Experience 46

Education

B.S.C.E., 1979, Civil Engineering, College of Engineering, Rutgers University

Licenses/Certifications

Professional Engineer, New Jersey, 1990, 24GE03470800

Professional Planner, New Jersey, 1990, 33LI00468700

Professional Affiliations

American Society of Civil Engineers (ASCE)

American Society of Highway Engineers (ASHE)

design for the replacement/rehabilitation of numerous maintenance yards and facilities along the Turnpike. The project includes the replacement/rehab of maintenance buildings, storage facilities, salt facilities, and other structures in the maintenance yards specifically along the Turnpike North. This project is part of the overall Facilities Improvement Program to bring the Authority's maintenance facilities on both the Turnpike and Parkway into a good state of repair. Michael Baker's contract for the Turnpike North includes six (6) new buildings and the rehabilitation of five (5) buildings, including administrative offices, multi-use buildings, salt storage buildings, and materials storage buildings. The scope of work includes architectural design; mechanical, electrical and plumbing design; site/civil design; environmental permitting and hazmat investigations; stormwater management; site lighting; geotechnical engineering and retaining walls; utilities engineering; and construction staging. Site-work is also required at the sites, in the form of rehabilitation and/or replacement of driveways, parking lots, and outside storage areas.

Combined Regional Maintenance Facility, Fort Dix, New Jersey. U.S. Army Corps of Engineers. Civil/Highway QA/QC Reviewer. Michael Baker provided final design services for a \$15 million Combined Regional Maintenance Facility (CMF) at Fort Dix, NJ. The 50,400-square-foot facility is a combined vehicle maintenance shop, and mobilization and training equipment site that provides for the storage, inspection, maintenance, and repair of combat and tactical vehicles and equipment associated with the regional deployment of Army National Guard, Army, Marine, and Navy Reserve units. Scope included site design including survey, drainage/SWM, utility extensions to serve the new facility, parking lots and yard areas, local roadway improvements, pavement design, security fencing, grading, and environmental permits.

Scudder Falls Bridge Replacement, Intelligent Transportation System Building. Delaware River Joint Toll Bridge Commission. Deputy Project Manager for final design and post-design services for the \$390M replacement of the existing four-lane Scudder Falls Bridge over the Delaware River with a twin-span 1,800 ft. structure carrying six lanes of through traffic (three in each direction), and associated auxiliary lanes for entry/exit travel, and a pedestrian and bike shared use path connecting the two historic canals toe paths on each side of the river. The scope of work design services for the \$2M Bridge Monitor and All Electronic Tolling (AET) equipment building in conjunction with the Scudders Falls Bridge design. The building will support the proposed AET system equipment, bridge security/monitoring, and maintenance equipment and storage, with consideration for possible future equipment needs. Equipment to be housed in the toll equipment building includes; lane controller cabinets, E-ZPass reader equipment cabinets, electrical equipment, HVAC equipment, standby generator control/monitoring equipment and network equipment cabinets. The project is constructed adjacent to cast-in-place concrete MSE walls for the new bridge and incorporates an ATV garage with access to the bicycle pedestrian walkway along the bridge. It provides access to the AET gantry structure via in interior stair and roof access to a catwalk for vendor system access.

New Jersey Turnpike Secaucus Interchange, Sections No. 1 & 2, Contract Nos. SIP-101, 102, & 202. New Jersey Turnpike Authority.

Project Manager for above contracts on the \$180 million Interchange 15X. Responsibilities associated with the building construction for the final design of the \$15 million SIP-202 Contract included site layout, grading, drainage/stormwater management including mechanical water



treatment devices, site lighting designs, right-of-way plans, utility services, landscaping, constructability reviews, and a new 4,000-square-foot utility building with an elevator, and a 9-lane toll plaza and access tunnel, which included DCA reviews. Utility services involved routing the services approximately 1/2 mile to connect to existing facilities and included a sanitary force main with a wet well and pump station.

Replacement of District 6 Maintenance Facility and Three State Police Stations, New Jersey. New Jersey Turnpike Authority. QA/QC Manager. Michael Baker provided supervision of construction services for replacement of the maintenance building at Turnpike District 6 Yard and construction of Troop "D" Newark, Moorestown, and Galloway State Police Stations. The State Police Stations were brought up to contemporary law enforcement agency standards to meet today's requirements and future needs, including the addition of fitness room and locker room facilities for female troopers. The new District 6 Maintenance Yard provides updated equipment, expanded capabilities, and contemporary amenities for Turnpike Maintenance personnel to replace the overcrowded and obsolete facility. Michael Baker provided inspection staff, daily coordination, and negotiations with contractors; electronic document control; change order review and analysis; safety and incident management; meetings facilitation; and claims avoidance/resolution.

Rehabilitation of the Turnpike's Toll Plaza Utility Buildings and Tunnels. New Jersey Turnpike Authority. QA/QC Manager for the Construction Management and Inspection services for the rehabilitation of 25 Toll Plaza Utility Buildings spread across 3 contracts; South, Central and North on the NJ Turnpike for approximately \$16M in construction. These contracts address the toll plaza immediate needs for functionality such as stand-by power (utility building & ETC huts), public health (water, sewer, etc.), improved working conditions for the employees (HVAC-AC/heat/positive air), electrical/lighting, waterproofing, avoidance of mold, asbestos abatement, security upgrades (doors windows, lighting, etc.), and structural repairs (slab replacements/repairs, tunnel repairs, roofs, etc.).

Route 52 Causeway Replacement. *New Jersey Department of Transportation.* QA/QC Manager responsible for oversight of feasibility studies, preliminary design, final design and construction support services for this \$400M multi-faceted, 3-mile transportation improvement project involving realignment and widening of the Route 52 Causeway and elimination of the Somers Point Circle. The project included a 3,500-sq. ft. new Visitor Center with associated utilities, parking lots, waterfront access ramps, and fishing piers with direct pedestrian access.

Roebling Station Park-and-Ride Facility, Florence Township, Burlington County, New Jersey. New Jersey Transit (NJT)/Agate Construction Company, Inc. Project Manager for a design/build project involving a 220-space parking facility to be constructed on the site of the old Roebling Steel Plant which was a U.S. EPA Superfund site. The parking lot served the Roebling Station on NJT's Camden to Trenton light rail line. Design, included drainage/SWM basin that needed to be a closed system (separated from the contaminated soils), architectural block retaining wall, lighting, signing/striping, walkways, survey, cultural resources/SHPO coordination, environmental services and building rehabilitation of the weight station structure.

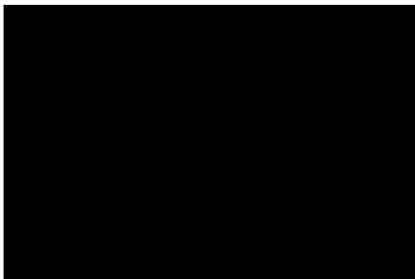
Northeast Inlet Redevelopment Area Infrastructure System Project, Atlantic County, NJ (1989-1993). Atlantic City Engineering Department. Project Engineer responsible for performing final design and construction management/inspection services for the redevelopment of the City's 75 acre Northeast Inlet section, which included the raising/reconstruction of roadways to avoid flooding, installation of traffic signals, modifications and upgrades to the stormwater drainage system, new/modifications to the water distribution system, landscaped promenade walkways, and the installation of new 2,500 feet of timber bulkheads. This work included coordinating/scheduling contractors, utilities, and developers; generating plans, CAFRA permit, EIS, specifications, and cost estimates; and reviewing/approving construction documents, shop drawings, field design changes, and contractor invoices for payment.

Union Lake Dam Rehabilitation, Millville, NJ. New Jersey Division of Building and Construction. Construction Manager responsible for concrete restoration work at the Union Lake Dam, a 35-foot-high, 2,000-foot-long earthen dam with a 200-foot-long mass concrete main spillway. Work included vertical concrete spall repairs and the injection crack sealing of concrete on the spillway structure using Portadam containments (cofferdams), the installation of concrete baffle blocks, and channel scour prevention modifications in a riprap area located immediately downstream of the stilling basin.



PROJECT CONTROLS / RISK MANAGEMENT

Sean Kahn, PE



RELEVANT EXPERIENCE

CMF-003 W15 Atlantic City Resiliency Program (ACRP). New Jersey Division of Property Management & Construction. Construction Deputy Program Manager responsible for the overall management of seven construction projects associated with Hurricane Sandy CDBG-DR HUD grant relief funds (\$25 million). Projects included new bulkhead structures, dry floodproofing, check valve replacements and elevation of traffic signal equipment. Responsibilities included: reviewing bid documents and RFPs for subrecipients, environmental reviews, scheduling and

Michael Baker

Years with Michael Baker

Years of Experience 13

Education

B.S., 2012, Civil and Environmental Engineering, Rutgers University, New Brunswick

Licenses/Certifications

Confined Space Training

FHWA - NBIS Safety Inspection of In-Service Bridges Training, 2015

Troxler HAZMAT Certification, 2014

NHI Bridge Inspection, 2015

Troxler Nuclear Gauge Safety Training Class, 2014

Traffic Control Training, 2012

Professional Engineer, New Jersey, 2021, 24GE05655400

Professional Affiliations

American Society of Civil Engineers (ASCE)

coordinating progress meetings with local municipalities and engineers, conducting regular site reviews and general construction inspections, monitoring local government contractor project progress, maintaining a master program schedule, preparing independent cost estimates for change orders, reviewing local government contractor pay applications, HUD (Davis Bacon) labor monitoring, Section 3 compliance and reporting, SWMBE reporting and federal competitive bidding practice reviews. A critical task for this program is record keeping, Sean has managed the state run SIROMS BPM SharePoint to keep all necessary documents organized, which has been proven successful when audited by HUD. Responsibilities also include training the subrecipient and numerous consultants on the standards and procedures necessary to effectively utilize the SIROMS SharePoint site.

CMF003 WO3 - Flood Hazard, Reduction & Resiliency Contract. New Jersey Division of Property Management & Construction.

Construction Deputy Program Manager responsible for the overall management of eight construction projects associated with Hurricane Sandy CDBG-DR HUD grant relief funds (\$50 Million). Projects included new outfall structures, pump stations with generators, tide gate upgrades, local road stormwater upgrades and dredge operations. Responsibilities included: reviewing bid documents and RFPs for subrecipients, environmental reviews, scheduling and coordinating progress meetings with local municipalities and engineers, conducting regular site reviews and general construction inspections, monitoring local government contractor project progress, maintaining a master program schedule, preparing independent cost estimates for change orders, reviewing local government contractor pay applications, HUD (Davis Bacon) labor monitoring, Section 3 compliance and reporting, SWMBE reporting and federal competitive bidding practice reviews. A critical task for this program is record keeping, Sean has managed the state run SIROMS BPM SharePoint to keep all necessary documents organized, which has been proven successful when audited by DCA. Responsibilities also include training the subrecipients and numerous consultants on the standards and procedures necessary to effectively utilize the SIROMS SharePoint site.

Atlantic City Expressway Third Lane Widening Program Management Consultant Contract. South Jersey Transportation Authority. Project Controls Manager responsible for establishing clear and concise processes and procedures for project controls, maintaining a master program schedule, overall program budget, overseeing project administration, coordination of project activities, managing risk and potential claims, stakeholder relations, public involvement, and coordination with the project team to verify invoicing and procedures follow SJTA's standards throughout the life of the program. The project improvements consist of widening 13 miles of highway, interchange improvements at Route 42, widening and reconstructing four mainline bridges, regulated activities requiring coordination (NJDEP, NJ Pinelands, NPS, NJSHPO, USFWS, and Soil Conservation Districts), and constructability solutions. The program is split into multiple design and construction



contracts, requiring coordination with a wide variety of professional service consultants, subconsultants, vendors, and contractors to develop and monitor clear tools for the various consultants to use and confirm project deliverables are consistent between contracts.

Airport Engineering Consultant Atlantic City International Airport (ACY) Contract. South Jersey Transportation Authority. Deputy Project Manager responsible for coordinating and managing task orders on this on-call agreement, including project design elements, coordinating with subconsultants, ensuring compliance with the National Environmental Policy Act (NEPA), managing the schedules and budgets for each task order, and submitting project deliverables. Through this on-call assignment Sean has demonstrated his ability to tackle projects throughout a range of stages: planning, design, and construction administration, and a range of assignments: including, new taxiway design, escalator replacement design, various concrete apron and emergency repairs. Task orders on previous agreements include Gates 4 and 8 Concrete Repair, Priority Concrete Repairs, Escalator Replacement Survey Report and Design, Frank S. Farley Service Plaza Natural Gas Conversion Phase I and Phase II, Concrete Apron Rehabilitation Alternatives Analysis, and planning investigations for a variety of temporary and permanent cargo facilities.

New Jersey Bridge Deck Reconstruction and Seismic Retrofit Contract. *Greenman-Pedersen Inc.* Project Engineer responsible for managing Michael Baker's post-design efforts during construction. Responsibilities include: finalizing and reviewing responses to contractor submittals, RFI's, Change of Plan documents, and coordinating with the construction management team. Michael Baker provided roadway and structural engineering services for the deck reconstruction of five of Newark Bay-Hudson County Extension's EB roadways. Along with deck reconstruction, the project restored toll plaza pavement at Interchange 14C, made miscellaneous structural repairs, and conducted seismic retrofitting between Interchange 14C and the Holland Tunnel Approach. As a subconsultant, Michael Baker was responsible for the roadway improvements, structural repairs, and maintenance and protection of traffic design.

OPS No. A3715 & OPS. No. A3778 On-Call Stormwater Engineering Services. New Jersey Turnpike Authority. Task Lead responsible for leading the maintenance and protection of traffic for three drainage repair and rehabilitation contracts on the Garden State Parkway and New Jersey Turnpike. This contract includes a wide variety of task orders for the Maintenance department for design of stormwater drainage and collection systems, asset management, evaluation of existing drainage infrastructure and supporting CM/CI services. These contracts were identified for drainage repairs based on recent occurrence of immediate response maintenance repairs, such as flooding and sinkholes and the high density of corrugated metal pipes within the project limits. Sean's primary responsibilities include overseeing MPT designs, development of contract plans, specifications, estimates, schedules and performing constructability reviews to mitigate potential conflicts with existing infrastructure and other construction projects.

Scudder Falls Bridge Replacement, Final Design Services. Delaware River Joint Toll Bridge Commission. Designer responsible for MPT design for the New Jersey side of the project. Responsibilities included in-depth design of temporary ramps and crossovers which required a full horizontal and vertical geometric design due to the complexity of the project. Additional responsibilities include assisting with Michael Baker's post-design efforts during construction, including: finalizing and reviewing responses to contractor submittals, RFI's, Change of Plan documents, and coordinating with the construction management team. Michael Baker provided final design and post-design services for the Scudder Falls Bridge Replacement project.



SITE / ROADWAY ENGINEERING

Sylvester Fryc, PE



RELEVANT EXPERIENCE

Scudder Falls Bridge Replacement, Final Design Services, Bucks County, Pennsylvania. Delaware River Joint Toll Bridge Commission. Project Engineer. Roadway Design Task Leader responsible for final design and post-design

Michael Baker

Years with Michael Baker

Years of Experience

Education

B.S., 1991, Civil Engineering Technology, New Jersey Institute of Technology

A.A.S., 1987, Civil Engineering Technology, Mercer County Community College

Licenses/Certifications

Professional Engineer, New Jersey, 2009, 24GE04809700

Professional Affiliations

American Society of Highway Engineers (ASHE)

services for the project. Michael Baker is providing final design and post-design services for the Scudder Falls Bridge Replacement project. The existing four-lane bridge over the Delaware River is functionally obsolete and needs to be replaced to alleviate recurring current peak-period and emergency-incident traffic congestion and projected future traffic. Michael Baker is designing replacement of the existing bridge with a twin-span structure carrying six lanes of through traffic (three in each direction), two auxiliary northbound lanes for entry/exit travel, and one auxiliary southbound lane for entry/exit travel. The scope of work also includes drainage upgrades, approach widening, a bicycle/pedestrian walkway, new bridge inside shoulders, a new all-electronic toll (AET) collection system, an intelligent transportation system (ITS) equipment building, and noise-abatement walls.

I-95/I-295 Re-designation Sign. *NJDOT.* Project Manager. PM responsible for leading design team in various aspects of roadway design, oversight and development of signing plans, construction staging and scheduling, and utility relocation schemes. Responsibilities included development of complete contract documents including Contact Plans, Specifications, Construction Schedule and Construction Cost Estimate.

Rio Grande Avenue Road Improvements, Wildwood, New Jersey. Cape May County. Project Manager. PM responsible for project oversight. Michael Baker is providing design and engineering services for the widening of and improvements to Rio Grande Avenue. The purpose of the project is to reduce traffic congestion by providing two-way left-turn lanes, raise the roadway profile, improve the deficient drainage system, install a regional pump station, and enhance the gateway by adding streetscaping elements and destination signing. Michael Baker's services have included roadway and drainage design, pump station design, right-of-way plans, streetscape design, wayfinding, traffic engineering, environmental services, permitting, and grant administration support.

Route 1 and 9 at Haynes Avenue Bridge Replacement and Interchange Reconfiguration, Newark, New Jersey. NJDOT. Project Engineer. Highway Design Team Lead in responsible charge of horizontal and vertical geometric design, preparation of Maintenance and Protection of Traffic plans, preparation of Soil Erosion and Sediment Control Plans and environmental assessments to identify environmental resources and potential impacts. Michael Baker managed the reconfiguration of the Route 1 and 9 interchange at Haynes Avenue and the replacement of the bridge on Haynes Avenue over Waverly Yards. Michael Baker's services included roadway design, geotechnical design, structure design, highway lighting design, intelligent transportation system design, and right-of-way plan development. Signing and pavement markings were designed in accordance with the MUTCD and standard NJDOT practices, and included freeway segments, ramps, local streets, and a proposed roundabout construction.

Route 52 Causeway Replacement Project, Ocean City and Somers Point, New Jersey. NJDOT. Assistant Project Manager. Assistant PM responsible for geometric design (horizontal and vertical design), highway section design and design exceptions. Highway design involved the development of complex construction staging plans and Maintenance and Protection of Traffic plans. Developed traffic signage and striping plans. Developed conceptual alternatives for configuration of ramps, elimination of the traffic circle, and avoidance of sensitive wildlife habitats and residences. Developed overall Access Summary Report and Access Cut-Out Plans for affected properties along the project corridor in accordance with the NJ State Highway Access Management Code. Michael Baker provided comprehensive engineering services for the replacement of the Route 52 Causeway and the reconstruction of approximately 2.8 miles of Route 52 from Route 9 in Somers Point to Bay Avenue in Ocean City crossing Great Egg Harbor Bay. Michael Baker's services included bridge and roadway design, environmental permitting,



STORMWATER MANAGEMENT

Lori Wade, PE, CPSWQ



Michael Baker

Years with Michael Baker 21

Years of Experience

21

Education

B.S., 2003, Civil Engineer, The Pennsylvania State University

Licenses/Certifications

Professional Engineer, New Jersey, 2011, 24GE04953400

Certified Professional Storm Water Quality, Worldwide, 2014, 1001

Professional Affiliations

American Council of Engineering Companies (ACEC) Water and Wastewater Committee Chair

American Society of Highway Engineers (ASHE) Past President Southern NJ Chapter

RELEVANT EXPERIENCE

Flood Risk Mapping Technical Support, Statewide, New Jersey. New Jersey Department of Environmental Protection (DEP). Technical Engineering Specialist and Project Manager. Assisted with various floodplain models to analyze areas that are vulnerable to sea level rise in New Jersey using HEC-RAS modeling and providing various engineering and mapping services including floodplain analyses, studies, outreach, and training initiatives for the New Jersey Department of Environmental Protection, Bureau of Dam Safety and Flood Control. Michael Baker's engineering services have also included site assessments, geotechnical investigations, and hydrologic and hydraulic analyses

Regional Task Orders for the Flood Map Modernization Program, Nationwide and Map MOD years 2-4. FEMA. Task Manager. Responsible for serving as the MT-2 (LOMR and CLOMR) manager for region 1-3 for the (NSP) and accountable for final review of all LOMRs and coordinating with FEMA Region 1, 2, 3. Michael Baker performed various tasks leading to the development of digital flood insurance rate maps (DFIRM) and supporting the Map Modernization program in all 10 FEMA Regions. Support tasks include maintenance and management of the web-based Mapping Information Portal (MIP), outreach, cooperating technical partner coordination, coastal guideline and specification updates, technical assistance, project monitoring, support and attendance at conferences, training, post-preliminary support, physical map revisions, floodplain boundary standard documentation, levee research and database support, and other general technical support.

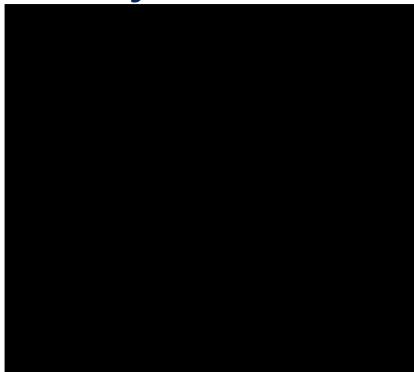
West 17th Street Flood Mitigation Concept and Construction Design, Ocean City, NJ. City of Ocean City. Lead Drainage Engineer. This project proposes improvements to address frequent flooding in the West 17th Street residential area in Ocean City, Cape May County, New Jersey. The West 17th Street development is located in a low-lying area prone to chronic flooding during various tidal and rain events. Michael Baker performed conceptual and is currently advancing final design. Lori is overseeing the development of the drainage design and plans that will include the construction of a new stormwater pumpstation, roadway improvements, and installation of new stormwater pipes, and Soil Erosion and Sediment Control Plans.

Rio Grande Avenue Drainage and Roadway Improvements, Wildwood, NJ. Cape May County. Drainage Design Manager. Drainage design manager for the pump and pipe system in Wildwood, New Jersey. This project had several constraints due to outfall locations and numerous utilities in this shore area. Michael Baker is providing design and engineering services for the widening of and improvements to Rio Grande Avenue. The purpose of the project is to reduce traffic congestion by providing two-way left-turn lanes, raise the roadway profile, improve the deficient drainage system, install a regional pump station, and enhance the gateway by adding streetscaping elements and destination signing. Michael Baker's services have included roadway and drainage design, pump station design, right-of-way plans, streetscape design, wayfinding, traffic engineering, environmental services, permitting, and grant administration support.



COST ESTIMATING

Jeffrey Weiss, CCT, CQM-C



Michael Baker

Years with Michael Baker 13

Years of Experience

Education

B.S., 2004, Civil Engineering/Construction Management, University of Pittsburgh

Licenses/Certifications

Construction Quality Management for Contractors, 2012

Certified Cost Technician, 2022

Professional Affiliations

Association for the Advancement of Cost Engineering International (AACEI)

Construction Management Association of America (CMAA)

RELEVANT EXPERIENCE

Hartford Line Railroad Stations Design, New Haven, Connecticut to Springfield, Massachusetts. Connecticut Department of Transportation. Cost Estimator. Responsible for providing quantity take-offs and construction cost estimates for multiple project locations across all phases of design. Michael Baker is developing the design for 11 new or upgraded high-speed passenger rail stations from New Haven, Connecticut, to Springfield, Massachusetts. The Connecticut Department of Transportation's new CT Rail "Hartford Line" project represents a broad partnership between the state of Connecticut, Amtrak, and the Federal Railroad Administration, along with the states of Massachusetts and Vermont. Michael Baker is preparing erosion and sedimentation control and designs for pedestrian bridges and parking facilities that comply with Americans with Disabilities Act (ADA) standards. Additional services include preparing permit applications, performing right-of-way and utility coordination, constructability reviews, and construction management, and overseeing landscape design. Projects are in Enfield, Windsor Locks, Windsor, Hartford, Newington, West Hartford, Berlin, Meriden, Wallingford, North Haven, and New Haven. As of 2020, the stations in New Haven, Meriden, Wallingford, Berlin, and Hartford are complete.

Full Facility Renovation Design-Build RFP, Orangeburg Army Reserve Center, Orangeburg, New York. U.S. Army Corps of Engineers, Louisville District. Cost Estimator. Responsible for providing construction cost estimates for the design-build RFP to renovate an existing Army Reserve Center. Estimating services included development of pricing for the Full Facility Assessment, along with MCACES estimates for the final proposed design. Michael Baker developed a design-build request for proposal (RFP) for the Full Facility Renovation Project of the Orangeburg, New York Army Reserve Center(ARC). This project included renovation to the existing 168-member ARC training building, organizational maintenance shop, military equipment parking area, and a privately owned vehicle parking area on an 18.40-acre site. Michael Baker led a reboot meeting, attended site visits, produced drawings using CADD technology. The scope of work also included completing specifications using SPECSINTACT, presenting the final design-build RFP, and discussing comments at a two-day meeting.

Architecture-Engineering (A-E) Services in Support of Hill AFB 75th CEG/CEN, Hill Air Force Base, Utah. Department of the Air Force. Cost Estimator. Responsible for providing MCACES estimates for multiple projects. Projects included demolition, renovation, new construction, site development, fire protection, and mechanical replacement. Michael Baker is providing architecture and engineering services for project at Hill Air Force Base. Its services include architecture designs, agency coordination, demolition, and structural, HVAC, electrical, mechanical, plumbing, communication, and fire suppression engineering. Designs include construction documents, demolition plans, structural calculations, code requirements, and detailed cost estimates.





CAMERON CORINI

PE, CME, CPWM

Director of Municipal Engineering

PROFILE

Cameron Corini is a Partner and Director of Engineering of Roberts Engineering Group, LLC. He started with the firm in 2008 as an intern and has continued to grow with the company. Over the course of his career with the firm, Cameron has helped grow the business and managed major contracts for various municipalities throughout the State. He has specialized in engineering and construction administration with a strong emphasis in municipal engineering.

EDUCATION

B.S., Civil Engineering

Rowan University Glassboro, New Jersey

CERTIFICATIONS

Professional Engineer 2017, New Jersey, 24GE05403500 Certified Municipal Engineer 2019, New Jersey, 19-09 Certified Public Works Manager 2023, New Jersey, M-2334

AREAS OF EXPERTISE

Municpal Engineering
Site Engineering
Utility Engineering
Permitting
Grant Writing &
Administration
Construction Administration
Contract Negotiations

MEMBERSHIPS

American Society of Civil Engineers New Jersey Society of Professional Engineers New Jersey Society of Municipal Engineers

RELEVANT EXPERIENCE

Partner/Director of Engineering, Roberts Engineering Group May 2008 - Present.

Oversees project managers, project engineers, and construction inspectors for various engineering contracts including roadways, streetscapes, off-road pathways, ADA pedestrian access routes, water and wastewater treatment and conveyance, septic systems, stormwater, recreational facilities, emergency generators, site planning, emergency generators, and waste management. Oversight includes conceptual and final designs, grant and loan administration, permitting, and construction administration.

Wastewater Treatment Plant Upgrade - Project Manager Borough of Allentown.

Responsible for overall design of wastewater treatment and pump station upgrades, electrical and structural improvements, NJDEP Treatment Works Approval and Land Use permitting, NJ Infrastructure funding application and administration, bidding, and construction administration. The goals of the project were to meet current and future permit limits and to provide greater treatment capacity. The site was constrained by existing infrastructure, 500-Year Flood limits, lands governed by Green Acres limitations, and poor soils that are likely the result of an old landfill. The treatment design included a new bar screen, new pump stations, removal of the existing trickling filter, rotating biological contractors, sand filters, expanded primary and secondary clarifiers, a new sludge holding tank, an integrated fixed-film activated sludge system (IFAS), a new elevated 350 KW diesel powered electrical generator, and a complete electrical upgrade. This project won awards through the American Society of Civil Engineers, NJ Society of Professional Engineers, and the NJ Society of Municipal Engineers.

Streetscape Improvements - Project Manager, Borough of Allentown.

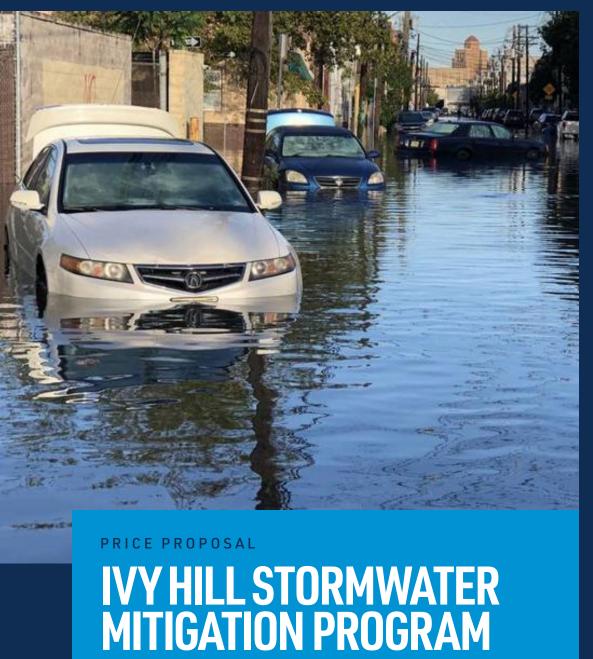
Roberts Engineering performed surveying, design, construction administration and inspection services and necessary coordination with the NJDOT for this Trust Fund project. The streetscape improvements took place over three (3) phases and were entirely within County Right-Of-Way. The projects included a full upgrade of the project streetscape to ADA Compliance. Improvements included new curb, sidewalk, brick pavers, street lighting and amenities.

Annual Road Improvements - Project Manager, Borough of Hightstown.

These projects include preparation of plans and specifications for public advertisement, including field survey, and preparation of permits for Mercer County Soil Conservation, NJDOT, and NJDEP. The annual roadway improvement program typically includes full depth pavement replacement, installation of new curb and sidewalks, drainage improvements, sanitary sewer main replacement and water main replacement and ADA accessible ramps.















RFQ NO. CMF-004 J04050

WORK ORDER #09

CMF SERVICES FEE/PRICEPROPOSAL DCA IVY HILL - CONSTRUCTION MANAGEMENT FIRM

THIS FEE PROPOSAL TO BE RETURNED ELECTRONICALLY VIA EMAIL TO: christopher.geary@treas.nj.gov & william.mahan@treas.nj.gov

DATE:**JUNE 26, 2025**PROJECT #: J0405-00 CMF-004
WORK ORDER #: 09

THIS PROPOSAL DUE DATE, NO LATER THAN 2:00 PM, JUNE 26, 2025

FIRM NAME: Michael Baker International

THE UNDERSIGNED PROPOSES TO PROVIDE ALL PROFESSIONAL SERVICES REQUIRED IN THE SCOPE OF WORK WO#09 PURSUANT TO THE PRE-EXISTING IDIQ TERM CONTRACT CMF-004 AGREEMENT BETWEEN THE STATE OF NEW JERSEY AND THE CMF.

Fee for Task #1 - Design Oversight

Fee for Task #2 - General Reporting

Fee for Task #3 - Inspections and Photographs

Fee for Task #4 - Contractor Deliverable Review

Fee for Task #5 - Provide Independent Cost Estimate

Fee for Task #6 - Master Schedule

Fee for Task #7 - Statement of Assurances Compliance

Fee for Task #8 - Review of Contractor Invoices

Fee for Task #9 - Meetings and Conference Calls

Fee for Task #10 - Contract Modifications

Fee for Task #11 - Project Closeout

Mileage

TOTAL NOT TO EXCEED (NTE) FEE FOR CMF SERVICES as set forth in the Request For Proposals

THE LEVELS AND CORRESPONDING HOURLY RATES INCLUDED IN THIS WORK ORDER PROPOSAL WILL BE FOR THE BASE PERIOD OF TERM CONTRACT CMF 004. WORK ORDER PROPOSAL GOOD FOR 60 DAYS AFTER THE DUE DATE.





Office Executive