

QUALIFICATIONS FOR

ENGINEERING SERVICES FOR VARIOUS PROJECTS AND ON-CALL SERVICES

Municipal Association of South Carolina

October 17, 2022





OCTOBER 17, 2022

Jake Broom, COO
Municipal Association of South Carolina
PO Box 12109
Columbia, SC 29211

Subject: Engineering Services for Various Projects and On-Call Services

Dear Mr. Broom,

With the authorization of expenditures from American Rescue Plan Act (ARPA) funds, local governments now have a significant funding source to address unfunded modernization and resiliency needs for their water and sewer systems. Mead & Hunt is ready to serve as an on-call consultant and partner with these municipalities to successfully deliver critical infrastructure upgrades. Our team understands the need for qualified staff who provide prompt communication and timely project updates as well as innovative and cost-effective engineering solutions. We offer local governments the following services:

Water Line Extensions | Water Line Replacements | Sewer Line Rehabilitations | Sewer Line Replacement | Sewer Line Extensions | Wastewater Lift/Pump Station and/or Force Main Repairs/Replacements/New Facilities | System Evaluations

Mead & Hunt is confident that our team is the right fit for this contract based on the following factors:

EXPERIENCE — Our team has demonstrated our ability to handle projects of all scopes and sizes with various funding sources. We are knowledgeable with state and federal requirements, and we possess the experience and expertise to manage each local government's needs for this contract. Through years of experience providing these services, we have developed a streamlined process which allows us to quickly respond to client requests. Additionally, we have assembled a highly-qualified team of experts in their respective fields who have worked together on multiple projects. Vaughn & Melton will provide subsurface utility engineering, Terracon will provide geotechnical engineering services, and PAN will provide easement acquisition services.

QUALIFICATIONS — The Mead & Hunt team is highly qualified to offer the services needed for these water and sewer projects, as evidenced by our experience with local governments like Berkeley County, Horry County, the City of Rock Hill, York County, and Grand Strand Water and Sewer Authority. We are proud of the quality of work we offer to our clients and look forward to the opportunity to serve more communities across South Carolina.

AVAILABILITY — Mead & Hunt team members are immediately available and ready to make your project our top priority. We have staff located in multiple office across the state, and we are ready and able to provide the requested services to each municipality without delay. We will prioritize each local government's infrastructure projects from day one.

Municipalities will benefit from our staff's experience and leadership on similar projects and our relationships with local agencies. We have provided these services to municipalities, counties, and utility providers around the state and have assembled a very familiar and capable team to bring this project success. The Mead & Hunt team looks forward to providing our continuing tradition of timely and efficient project delivery and personalized service that is our firm's trademark.

Sincerely,
Mead & Hunt, Inc.

Kevin Barnes, PE, ENV-SP, LEED AP
843-213-3268 | kevin.barnes@meadhunt.com

1. TECHNICAL APPROACH/UNDERSTANDING

UNDERSTANDING

The purpose of this on-call contract is to provide local governments with a list of pre-qualified engineering firms to perform services necessary to implement water and sewer system improvement projects funded by ARPA, without having to perform additional procurement processes. The intent of this contract is to allow the local governments to negotiate with the selected engineering firms for the specific scope, fee, and schedule for their projects, thereby allowing for implementation of projects quickly once funding is received. Typical services under this contract include preliminary design, final design, permitting, project cost opinions, surveying, bidding and negotiations services, construction administration services, and construction observation services.

APPROACH

The Mead & Hunt team's project approach is designed to meet critical milestones required for federal funding compliance and to minimize impacts on existing local government staff and residents. Typically, the most difficult aspects of these type of projects are communicating with residents to manage and minimize complaints, avoiding extended service disruptions and satisfying permitting and funding requirements. Our team has designed and overseen miles of water and sewer system improvements under a wide variety of conditions, each involving community outreach, traffic control, provisions for temporary/permanent service, and restoration. Mead & Hunt has demonstrated a record of accomplishment in delivering successful water and sewer infrastructure projects throughout South Carolina. The following sections outline the typical project approach to accomplish the requested scope of services.

DATA COLLECTION

PROJECT KICKOFF

The project will begin with a project kick-off meeting between local government staff and the project team to obtain and review existing infrastructure data (as-builts and GIS) within the project limits. The information gathered will be used to identify data gaps, define the parameters of the survey task, and to verify the objectives and basis of design for the project.

TOPOGRAPHIC AND PLANIMETRIC SURVEY

The survey field work will begin with records research and the establishment of existing right-of-way and easements within the project area. The survey will include location of surface features, accessible utilities, and topographic features for utilization in project development. The gathered survey data will be utilized for the creation of a project basemap to be employed in all aspects of design and other necessary stages of the project. Upon completion of the basemap, a set of existing survey plans will be generated, and a site visit will be performed for field verification of the survey data.

UTILITY COORDINATION

Our team realizes utility coordination as a priority item for successful completion of any project. Vaughn & Melton will gather information about the existing utilities from the utility providers within the project area. Necessary horizontal and vertical location of such utilities will be identified by SUE for incorporation into the design process. We will utilize the project basemap for inventory of existing utilities so that potential conflicts with other utilities may be avoided and adequate separation maintained.

WETLAND ASSESSMENT AND DELINEATION

Mead & Hunt environmental staff will evaluate wetlands and streams within the project area and complete any necessary permitting and water quality certifications. Prior to fieldwork, staff will use National Wetland Inventory maps, SC Department of Natural Resources threatened and endangered species data, ArchSite cultural resources mapping, soil surveys, national hydrography data, topographic maps, and other available data to determine potential environmental impacts within the project area.

ect area. These potential impacts will be presented to local government staff with recommendations for additional information to be acquired, and potential alternatives or construction techniques which may minimize or eliminate impacts.

Based upon approval of these recommendations, additional wetland/stream impact assessment field work will be performed. Fieldwork includes the identification and delineation of wetlands, streams, and other waters of the United States. The boundaries of these features, if present, will be collected using GPS equipment capable of sub-foot accuracy.

A Request for Jurisdictional Determination package will be submitted to the USACE if necessary, and a site meeting with their representative(s) will be conducted to verify the boundaries of waters within the project area. If wetland conflicts and/or direct impacts to waters of the United States are identified, and if activities subject to the Clean Water Act will need to be conducted, then a Section 404/401 Clean Water Act permit would be prepared and submitted on behalf of the government by Mead & Hunt environmental staff.

GEOTECHNICAL INVESTIGATION

Our geotechnical approach will begin by developing a clear understanding of site conditions, the project scope, and required services. This will be established through communication with the design team and by a preliminary site visit. After obtaining a clear understanding of the project scope and proposed improvements, Terracon will obtain soil boring data along the project corridor to explore the subsurface soil and rock profile to assist with understanding potential design and construction constraints. Soil test borings will be spaced along the alignment and at each road and utility crossing, based on available site access.

A Geotechnical Engineering Report will be provided to the local government, which will include a summary of the field exploration procedures; the encountered soil and groundwater conditions along the relocation corridor; lateral earth soil properties; discussion of geotechnical considerations which would affect construction; excavation considerations; pipe bedding; and earthwork recommendations, including backfill and compaction requirements.

DESIGN AND PERMITTING

Mead & Hunt will prepare a preliminary design submittal (30% design) which will include a basemap showing:

- Existing survey conditions
- Existing facilities and utilities/SUE data
- Wetland areas, if any
- Proposed alignment of new water and sewer infrastructure
- Location and type of rehabilitation
- Location of appurtenances and other needed improvements

This submittal will define horizontal locations of the proposed infrastructure, rehabilitation areas, connections to existing lines, and potential easement locations, and will address the ability to service existing and future homes and businesses.

The preliminary design will be submitted for formal review and comments by the local government. Mead & Hunt will schedule a time to review the design submittal with local government staff and will prepare minutes documenting any comments or requested revisions.

All preliminary plan review comments received from the local government will be incorporated into the intermediate design submittal (60% design). The 60% design submittal will consist of:

60% DESIGN SUBMITTAL	Plans and profiles, if required, of the system pipelines indicating alignment, elevation, size, structure, and appurtenance locations
	Plans and details for lateral/service lines and connections to existing pipeline infrastructure
	Plans indicating existing pipeline rehabilitation/abandonment procedures or removal methods and details
	Construction phasing/sequence plans to ensure service is maintained during construction
	Traffic control plans and details in accordance with SCDOT and local regulations
	Pavement removal, disposal, replacement, and resurfacing plans, including details and pavement
	Details of road crossings, including profiles and details for installation methods
	Location and dimension of proposed easements, if required
	Erosion and sediment control plans
	Pertinent construction details per SCDHEC, City, County, and SCDOT standards

Once the local government has approved the 60% plans, easement exhibits will be prepared and submitted for local government review. Easement documents will also be prepared using the municipality's standards. Then, our right-of-way consultant PAN will coordinate with the property owners to acquire the necessary easements. Final agreements will be provided to the local government to record.

Comments received from the local government regarding the 60% design will be incorporated into the Substantial Design submittal (90% design). This design set will include all required information for submittal to the appropriate permitting agencies. A construction schedule, technical specifications, quantities, and the estimated construction cost will also be included with this submittal.

Permit applications will be prepared and submitted for local government review and signature and to obtain application fees. They will be submitted for compliance with applicable regulatory agencies. Permit submittals may include:

PERMIT SUBMITTALS	SCDHEC Construction Permit for Water/Wastewater Facilities
	Notice of Intent (NOI) for Coverage of Primary Permittees Under South Carolina NPDES General Permit for Stormwater Discharges from Construction Activities
	Comprehensive Stormwater Pollution Prevention Plan (C-SWPPP)
	SCDOT Right-of-Way Encroachment Permit
	County or City Stormwater Permit, if required
	Utility Encroachment Permits
	Erosion and sediment control plans
	Jurisdictional Determination (USACE)
	401/404 Permits (USACE)

Comments received from the local government and comments received during regulatory agency review of the permit applications will be incorporated into the Final Design submittal (100% Final Construction Plans and Bid Documents). This submittal will contain final construction plans, quantities and opinion of probable cost, estimated construction schedule, technical specifications, and contract documents in accordance with the local government’s standard documents, special provisions, copies of permits, and copies of easement exhibits.

BIDDING PERIOD SERVICES

Mead & Hunt will provide bid-related services, including:

- Assisting the local government with advertisement of the project for solicitation of bids
- Conducting a pre-bid meeting
- Providing clarifications and responding to bidder questions concerning plans and specifications and preparing required bid addenda
- Conducting a bid opening
- Preparing bid tabulations and evaluating bids
- Recommending successful bidder to the local government for contract award
- Aiding in award of the construction contract

CONSTRUCTION SERVICES

Mead & Hunt will consult with and advise the local government during administration of the construction contract and will act as their representative throughout the construction process. Construction services provided by Mead & Hunt on behalf of the local government include:

CONSTRUCTION SERVICES	Organizing and conducting a pre-construction meeting with the contractor, local government staff and applicable stakeholders to discuss the project schedule, procedures, submittals, and approvals. Mead & Hunt will prepare meeting minutes and identify necessary action items
	Compiling and maintaining project documentation to include, but not limited to: correspondence, procedures, testing results, inspection records, shop drawings, change orders, schedules, project meetings, cost data, progress reports, and other documents concerning administration of the construction contract
	Organizing and conducting monthly progress meetings to address any necessary schedule changes, updates to project procedures, change orders, testing approvals, and other issues related to the project
	Reviewing contractor's overall project schedule and sequence of operations to allow for continued effective operation of the existing distribution facilities
	Reviewing all materials submittals and shop drawings from the construction contractor
	Reviewing the contractor’s construction schedule
	Reviewing quality assurance testing results for compliance with contract documents
	Responding to contractor Requests for Information (RFIs) and correspondence
	Providing interpretation and clarification of contract documents
	Issuing instruction on behalf of the local government regarding the construction contract
	Reviewing pay requests from the contractor(s) and providing payment recommendations to the local government
	Reviewing change order requests and providing recommendations to the local government
	Performing regular construction observation to confirm conformance of the work with the contract documents and design drawings. Construction observation reports will be submitted to the local government
	Providing a resident project representative up to full-time, as determined by the local government
Organizing and conducting a final walk-through with the contractor and local government staff and preparing a punch list of remaining work items	

CONSTRUCTION SERVICES (CONT.)	Conducting final inspection and close-out to confirm that the punch list items have been addressed and the work is satisfactory and in compliance with contract documents, plans, and specifications
	Providing a written recommendation to the local for acceptance of the Contractor's work and payment
	Obtaining concurrence from applicable regulatory agencies and informing them of project completion
	Coordinating with the contractor to obtain red-line as-built drawings

Mead & Hunt will provide record drawings and final deliverables, including:

- Preparation and submittal of signed and sealed record drawings of the completed project based upon construction redlines in accordance with the local government' specifications
- Submittal of final project documentation
- Preparation and submittal of project costs based on final quantities
- Submittal of final deliverables to regulatory agencies for approval

2. WORK MANAGEMENT PLAN/EXPERIENCE OF PERSONNEL

WORK MANAGEMENT PLAN

Project management and communication are essential for a successful project and will be vitally important throughout design and construction process. Mead & Hunt has a proven record of delivering projects of various sizes on time and within budget. We anticipate performing the following management tasks:

- Project Manager Kevin Barnes will communicate clearly and often with local government staff, allowing for continued awareness of project schedule and cost.
- Prior to design activities, Kevin will work with project staff to confirm that personnel understand their roles and implement procedures to achieve quality deliverables.
- Kevin will implement Quality Assurance/Quality Control (QA/QC) procedures and conduct quality assurance reviews throughout the duration of each project.
- Kevin will continuously collaborate with the project team to make sure that each aspect of the project is addressed and moving forward.
- Proven communication techniques and project correspondence will be utilized to facilitate the project while remaining receptive to input from local government staff and other stakeholders
- Status updates will be provided, and regular progress meetings will be conducted to keep local government staff and stakeholders informed of project progress and upcoming milestones.

Upon notification of a project, Kevin will create a Work Breakdown Structure (WBS) to list out all of the tasks and sub-tasks in sequential order and identify which project team member is responsible for which task. This WBS method will help keep the project team on track and organized to move the project forward and on schedule. Kevin will use the WBS to create a project schedule and update the schedule based upon the project progress.

QUALITY ASSURANCE/QUALITY CONTROL PROCEDURES

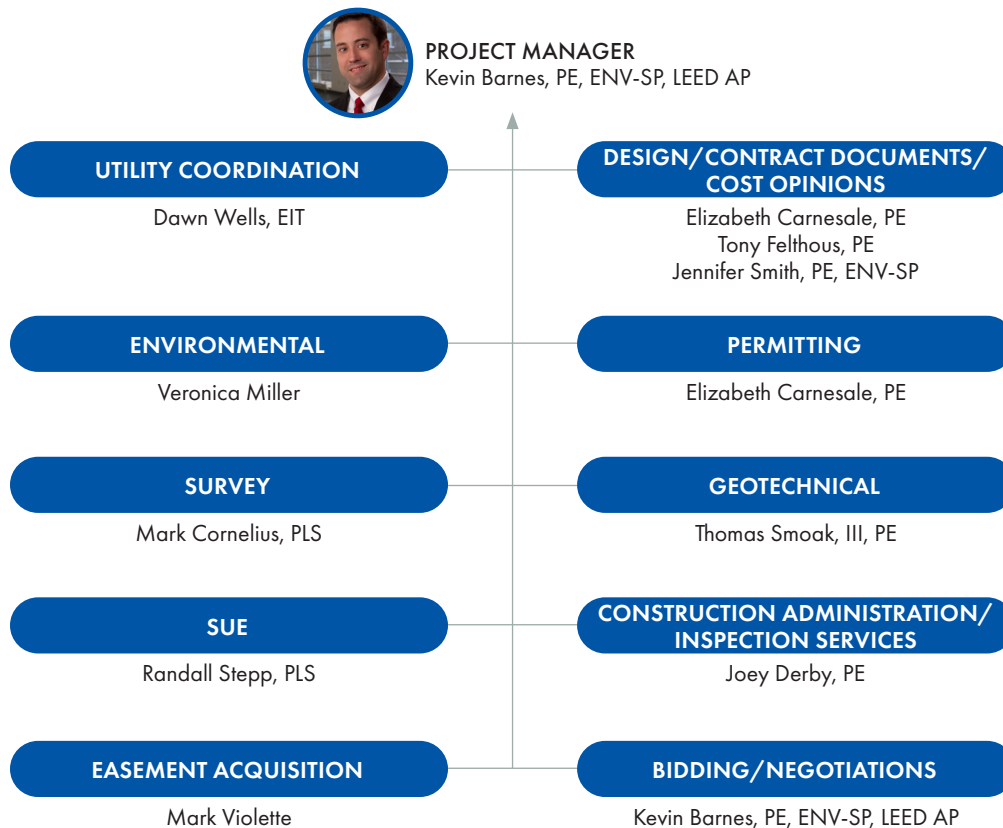
Mead & Hunt's corporate philosophy for quality is client-focused rather than project- or service-focused. Because quality is defined by our clients, we strive to understand their needs and expectations. Our commitment to quality starts at the highest levels of leadership and extends to every employee. By placing quality at the forefront, every employee is responsible for excellence and continuous improvement. Our desire to produce the highest quality deliverables for our clients is founded on our core principles:

Take care of people | Do the right thing | Do what makes sense

Mead & Hunt follows a QA/QC process throughout project development and implementation. This attention to detail improves the quality of our deliverables and strengthens our delivery schedule. At the beginning of each project, our team establishes a Quality Management Plan (QMP) to align with our client's specified needs. The QMP includes a matrix for project deliverables that will identify milestones and due dates and will incorporate quality checks and reviews. The deliverables matrix is constantly maintained and adjusted as needed. Our comprehensive management method allows us to keep local government staff up to date on project progress so that you can focus on the day-to-day work.

ORGANIZATIONAL CHART

Mead & Hunt's focus on client service begins with our ability to listen to your needs and become an extension of local staff. We prioritize assembling specialized project teams and implementing proven project methodologies to realize the best outcomes for our clients.



RESUMES



Kevin Barnes, PE, ENV-SP, LEED AP

PROJECT MANAGER, BIDDING/NEGOTIATIONS

Education

- BS, Civil Engineering, Virginia Military Institute

Registration

- Professional Engineer – South Carolina, North Carolina, Arkansas, Missouri, Virginia, Georgia
- ISI Envision Sustainability Professional (ENV-SP)
- LEED AP

Office

- Myrtle Beach, SC

Kevin brings nearly 30 years of progressive engineering design and project management experience on municipal, transportation, and economic development projects. He serves as Mead & Hunt's Utility Coordination and Design Manager across the Carolinas and has been involved in a wide range of water and sewer infrastructure projects consisting of evaluations, relocations, rehabilitations, extensions, and new facility infrastructure on capital improvement and economic development projects. His responsibilities include utility coordination, sanitary sewer and water distribution design, permitting, and construction administration. Thanks to his background, Kevin offers specialization in quality control, production control, team leadership, program management, and client communications.

Kevin is currently managing water and sewer design, easement acquisition, and construction administration for the US 176 Widening project in Berkeley County. He is also managing water and sewer design for the Cel-River and Galleria Boulevard projects. Our team is working with York County and the City of Rock Hill to evaluate the water and sewer lines that will be affected by the proposed road widening and recommend possible relocation solutions. We are currently designing water and sewer relocations to avoid conflicts with the proposed roadway improvements and other utilities.

Across South Carolina, Kevin is well known as an expert in utility coordination and design practices on both the local and state level. He leads our firm's Southeastern utility coordination and design efforts and is the project manager and point of contact for the SCDOT Statewide Utility Coordination On-Call contract. The Department provides Mead & Hunt with utility coordination responsibilities for ongoing projects throughout South Carolina. Kevin is the Co-Chair of the Utilities Subcommittee of the ACEC-SC Transportation Committee. This subcommittee serves as the Department's liaison to address issues relating to the utility coordination process.

Projects include:

- **US 176 Widening** – Berkeley County Water and Sanitation
- **Galleria Boulevard Extension** – City of Rock Hill
- **Racepath Street Improvements** – Horry County
- **Cel-River/Red River Road Widening** – York County
- **Middle Ridge Avenue Extension** – Grand Strand Water & Sewer Authority



Elizabeth Carnesale, PE

DESIGN/CONTRACT DOCUMENTS/COST OPINIONS, PERMITTING

Education

- MS, Civil Engineering, Clemson University
- BS, Civil Engineering, Clemson University

Registrations

- Professional Engineer – South Carolina
- NASSCO PACP/MACP Certified User

Office

- Lexington, SC

Elizabeth is an engineer with over 11 years of experience with various project elements, including sanitary sewer force mains, gravity sewer, water transmission mains, sanitary sewer evaluation survey, flow projections and analysis, alternatives evaluation, and construction administration. Elizabeth serves as a Project Manager for the City of Columbia CleanWater2020 Program and manages several wastewater treatment plant projects.

Elizabeth has extensive permitting experience and is experienced with South Carolina permitting requirements, including preparing SCDHEC Water/Wastewater Facilities Construction Permit applications. Elizabeth completed this application for the CDBG-funded Racepath Street Improvements project in addition to the US 176 Widening Water and Sewer Relocations project with Berkeley County Water and Sanitation.

Projects include:

- **CleanWater2020 Program** – City of Columbia
- **US 176 Widening** – Berkeley County Water and Sanitation
- **Galleria Boulevard Extension** – City of Rock Hill
- **Leesburg Road Widening** – City of Columbia



Tony Felthous, PE

DESIGN/CONTRACT DOCUMENTS/COST OPINIONS

Education

- BS, Civil Engineering, University of Wisconsin – Platteville
- AS, Engineering, Northern Virginia Community College

Registration

- Professional Engineer – South Carolina

Office

- North Charleston, SC

Tony is an engineer with a background in utility design and utility coordination. He has provided water and sanitary sewer design as well as coordination for various municipalities and counties throughout the Carolinas. Tony provided water and sanitary sewer design as well as utility coordination for the Berkeley County US 176 Widening project. The utility design included relocation and/or upsizing approximately 7,760 LF of 12-inch water main, 22,500 LF of 16-inch water main, 1,290 LF 16-inch sanitary sewer force main, and 800 LF of 24-inch gravity sewer main at a depth of 16 feet. He also provided a 1,435-foot sanitary sewer extension design for the Midlands Technical College Enterprise Campus. Tony is currently providing water and sewer design for the extension along the Racepath Street Phase II improvements in Myrtle Beach.

Projects include:

- **US 176 Widening** – Berkeley County Water and Sanitation
- **Sanitary Sewer Extension** – Midlands Technical College
- **Racepath Street Improvements** – Horry County



Jennifer Smith, PE, ENV-SP

DESIGN/CONTRACT DOCUMENTS/COST OPINIONS

Education

- BS, Civil Engineering, Southern Methodist University

Registration

- Professional Engineer – South Carolina, North Carolina, Texas
- ISI Envision Sustainability Professional (ENV-SP)
- Level III Design of Erosion and Sediment Control Plans

Office

- Raleigh, NC

Jennifer is a design engineer with 10 years of experience in water/sanitary sewer, utilities, project management, and transportation engineering. Her work experience includes water and sanitary sewer pipeline design, utility coordination, construction administration, and quantifying and calculating engineer estimates. Jennifer is currently providing utility design and coordination for a variety of projects, including the Cel-River Road/Red River Road Widening project. She is also leading the water design efforts for the Avent Ferry Road Realignment project in Holly Springs, North Carolina. She created several exhibits displaying alternative water line relocation options to determine the most effective way to design the water relocations while lessening impacts to the water infrastructure and the residents it services.

Projects include:

- **Cel-River/Red River Road Widening** – York County
- **Avant Ferry Road Realignment** – Town of Holly Springs
- **Galleria Boulevard Extension** – City of Rock Hill
- **US 176 Widening** – Berkeley County Water and Sanitation



Dawn Wells, EIT

UTILITY COORDINATION

Education

- BS, Civil Engineering, The Citadel

Registration

- Engineer-in-Training – South Carolina

Office

- North Charleston, SC

Dawn is a utility coordinator with two years of experience. She has experience with coordinating utilities of all types and sizes, working to mitigate utility conflicts and assembling final relocation designs and agreements. Dawn also has experience determining cost responsibility between agency and utility owners based on previous agreements and rights to property and/or easements. Her experience includes utility coordination for South Carolina Department of Transportation through their Statewide On-Call contract with Mead & Hunt. Dawn is also a utility coordinator on several roadway improvement projects for Horry and Berkeley Counties in South Carolina.

Projects include:

- **Statewide Utility Coordination On-Call** – SCDOT
- **RIDE III Dirt Road Paving Program** – Horry County
- **Chicora Avenue Drainage Improvements** – City of North Charleston



Veronica Miller
ENVIRONMENTAL

Education

- MS, Environmental Science, Florida Gulf Coast University
- BS, Biology, University of Scranton Control

Registration

- Basic Wetland Delineation; Advanced Wetland Delineation; Section 7 Endangered Species Act – Duncan & Duncan WEST;
- Surface Water Identification Certification – NCDEQ

Office

- Raleigh, NC

Veronica is an environmental planner with four years of experience whose academic and professional work focuses on ecotoxicology, Clean Water act permitting, natural resources studies, and agency coordination. She coordinates closely with municipalities, DOTs, and other agencies to avoid impacts to wetlands, threatened and endangered species and critical habitats. Veronica has prepared environmental permit plans and summary impacts by identifying utility impact areas and whether they were allowable or mitigable.

Projects include:

- **Cel-River/Red River Road Widening** – York County
- **US 176 Widening** – Berkeley County
- **Galleria Boulevard Extension** – City of Rock Hill
- **Shop Road Improvements** – Richland County



Mark Cornelius, PLS
SURVEY

Education

- Brookland Cayce High School

Registration

- Professional Land Surveyor – South Carolina

Office

- Lexington, SC

Mark's 38 years of survey experience allows him to understand the concepts of efficiency, organization, and dedication to produce quality work. Mark's experience is expansive and varied. Previous projects have involved utility route surveys, transportation route surveys, ALTA/ACSM land title surveys, boundary surveys, USACE freshwater wetland boundary surveys, SCDHEC OCRM critical line surveys, topographical surveys, tree surveys, bathometric/hydrographic surveys, and elevations certification of existing construction in accordance with Federal Emergency Management Agency (FEMA) guidelines. He is also knowledgeable on right-of-way/easement plat preparation and recording LiDAR and laser scanning techniques.

Projects include:

- **US 176 Widening** – Berkeley County Water and Sanitation
- **Cel-River/Red River Road Widening** – York County
- **Racepath Street Improvements** – Horry County



Joey Derby, PE

CONSTRUCTION ADMINISTRATION/INSPECTION SERVICES

Education

- BS, Civil Engineering, University of South Carolina,

Registration

- Professional Engineer – South Carolina, Florida, Georgia, North Carolina
- SCDOT Asphalt Roadway Technician
- HAZMAT Nuclear Gauge Safety Course
- OSHA 10 Construction Training
- SCDOT Earthwork, Drainage and Base Inspector

Office

- Lexington, SC

Joey has 19 years of experience managing on-call engineering contracts and projects for a multitude of clients. His primary responsibility is project management on construction projects where Mead & Hunt provides construction engineering and inspections (CEI). Joey is providing project management and construction inspection for the water and sewer relocations associated with the Leesburg Road Widening project for the City of Columbia.

Previously, Joey served as the County Engineer for the Lexington County Public Works Department where he assisted in project management as well as department management. Joey was also responsible for the implementation of the County's C-Fund Program and managed all construction projects administered by the County.

Projects include:

- **Leesburg Road Widening** – City of Columbia
- **Galleria Boulevard Extension** – City of Rock Hill
- **Sanitary Sewer Extension** – Midlands Technical College



Thomas Smoak, III, PE

GEOTECHNICAL

Education

- BS, Civil Engineering, Clemson University

Registration

- Professional Engineer – South Carolina

Office

- North Charleston, SC

Thomas has 14 years of engineering experience in South Carolina. He has managed numerous water and sewer system improvement projects requiring geotechnical site investigations using both in-situ testing methods (SCPT/CPT/DMT) and traditional soil test boring, associated engineering analysis, and reporting of engineering recommendations. Recommendations include subsurface soil conditions, groundwater conditions, earthwork, utility installation, soil parameters for Horizontal Directional Drilling, deep excavations, dewatering, foundation design, and seismic considerations.

Projects include:

- **Mount Pleasant Waterline Improvements** – Mount Pleasant Waterworks
- **FGD Wastewater Pond** – Dominion Energy
- **CWS Booster Pump Station** – Sullivan's Island Water & Sewer Department
- **PS004 Force Main Relocation** – Berkeley County Water and Sanitation



Randall Stepp, PLS

SUE

Education

- AAS, Civil Engineering

Registration

- Biennial Certified Floodplain Surveyor Updates
- CSX/Norfolk Southern Annual Training
- AutoCad Civil 3D
- Power Geopak & OpenRoads Survey
- GNSS, Grid/Ground, Coordinates and Positional Accuracy

Office

- North Charleston, SC

Randall has 28 years of experience. His work experience is rich, varied, and often part of larger projects where survey and SUE are primary components. Randall's grasp of project schedule and timely product deliverables is predicated on the need for accurate and complete SUE records research, designation, location, and report preparation to keep each project moving forward. His expertise includes records and as-built plans research, utility contacts, utility location, and mapping, as well as all aspects of the deliverables for all four levels of SUE services (A, B, C, and D). He also has extensive experience using GPS and conventional surveying technology to perform route location surveys for both transportation and utilities, control surveys for aerial mapping and hydraulic/hydrologic surveys for flood studies, No-Rise Studies, CLOMRs, and LOMRs.

Projects include:

- **Water Systems Survey** – Charleston Water Systems
- **CleanWater2020 Program** – City of Columbia
- **Wastewater System Surveys** – City of Greenville



Mark Violette

EASEMENT ACQUISITION

Education

- High School Diploma, Lexington High School

Registration

- Licensed Real Estate Agent – South Carolina, North Carolina

Office

- Lexington, SC

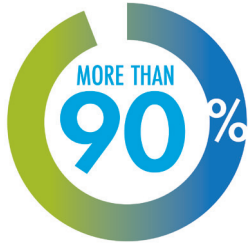
Mark has over 17 years of experience as a right-of-way consultant on local, state, and federal highway projects. He has worked as a right-of-way project manager, acquisition agent, and relocation agent for various city and county clients as well as SCDOT. Mark has provided acquisition services for utility projects for clients like the City of Charleston and Dorchester County. These projects included acquiring property through easement acquisition for drainage improvements and pump station upgrades. Mark's experience in right-of-way and project management provides him with the necessary skills to facilitate a successful right-of-way program.

Projects include:

- **Dorchester County Pump Stations 5 and 7** – Dorchester County Water and Sewer Department
- **Forest Acres Drainage** – City of Charleston
- **Conway Perimeter Road** – Horry County

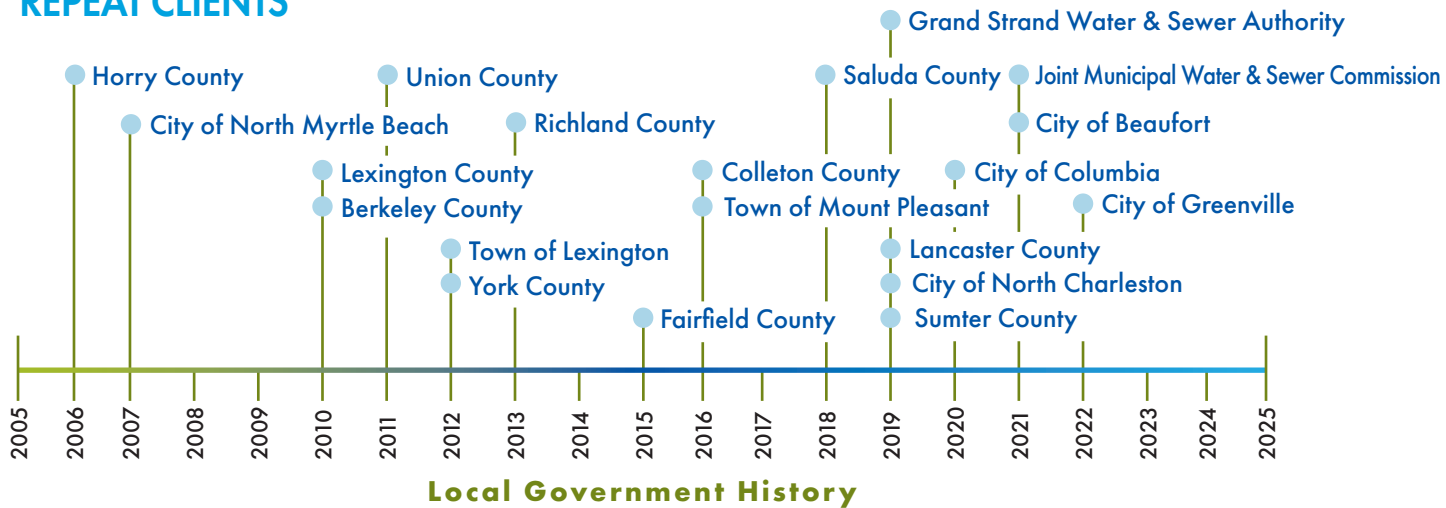
3. EXPERIENCE OF THE FIRM

EXPERIENCE WITH LOCAL GOVERNMENTS



Our roots in infrastructure services combined with a commitment to meeting clients' needs allows Mead & Hunt to build strong relationships with public works and local government agencies throughout South Carolina. The timeline below details our existing working relationships and starting year of service with local governments and public works in the state. With almost 20 years of experience serving local governments in South Carolina, we bring a well-versed staff familiar with providing solutions to these types of projects.

REPEAT CLIENTS



PROJECT EXPERIENCE



US 176 WIDENING UTILITY COORDINATION/ WATER AND SEWER RELOCATIONS

BERKELEY COUNTY, SOUTH CAROLINA

The US-176 Widening project is located 10 miles south of Moncks Corner in Berkeley County, SC. The project limits for the first phase extend along US 176 for approximately 4.5 miles west of the US 176 intersection from Nexton Parkway to US 17A near Summerville. Mead & Hunt is managing this widening project for Berkeley County, and our team is providing utility coordination and utility design services for this contract. Mead & Hunt is working with Berkeley County to perform relocations of water and sewer facilities in conjunction with the roadway widening. This effort will consist of relocation and/or upsizing approximately:

Funding Source

- Water: South Carolina Department of Health and Environmental Control (SCDHEC) State Revolving Fund (SRF)
- Sewer: Local option sales tax

Contact

- Ryan Gatlin, EIT
- 843-719-2319

- 7,760 LF of 12-inch water main
- 22,500 LF of 16-inch water main
- 1,290 LF of 16-inch sanitary sewer force main
- 800 LF of 24-inch gravity sewer main at a depth of 16 feet

The existing facilities under the proposed roadway will be abandoned or removed in accordance with SCDOT requirements.

CONT. ON FOLLOWING PAGE



Submittal items include easement acquisition documentation, construction plans, specifications, cost estimates, and calculations to Berkeley County Water and Sanitation and the SCDHEC for design and permitting approval. Mead & Hunt also prepared the required Preliminary Engineering Report and provided bidding assistance to confirm that all contract documents were in accordance with SRF requirements. Our team is currently offering Berkeley County construction administration services including review of material submittals and payment applications as submitted by the contractor. As the project progresses, we will provide project closeout and record documents for the water and sewer relocations.



CEL-RIVER/RED RIVER ROAD WIDENING AND WATER/SEWER RELOCATIONS

YORK COUNTY – YORK COUNTY, SOUTH CAROLINA

Mead & Hunt is providing project management, roadway design and construction administration services for the two-mile Cel-River/Red River Road (S-50) Widening. The existing two-lane road is being widened to five lanes from Paragon Way to Dave Lyle Boulevard in Rock Hill, and pedestrian amenities are being added.



Mead & Hunt is working with York County and the City of Rock Hill to identify the water and sewer lines that will be affected by the proposed road widening and recommend possible relocation solutions. The project goal is to design water and sewer relocations to avoid conflicts with the proposed roadway improvements and other utilities. The City of Rock Hill has requested the 12-inch water main along the existing roadway be relocated and upgraded to a 24-inch main. This effort will consist of relocating approximately:

Funding Source

- Pennies for Progress Sales Tax

Contact

- Brent Deaton
- 803-326-3884

- 6-inch water main: 190 LF
- 8-inch water main: 450 LF
- 12-inch water main: 690 LF
- 24-inch water main: 9,640 LF
- 8-inch sewer main: 306 LF

The project is locally funded and Mead & Hunt is providing utility coordination in accordance with SCDOT regulations, and is preparing water and sewer relocation construction plans, specifications, cost estimates, and calculations for submittal to SCDOT, SCDHEC, York County, and the City of Rock Hill for design and permitting approval.

Mead & Hunt coordinated with the City of Rock Hill, York County, and SCDOT so that proposed improvements to the City's wastewater treatment plant, a bridge replacement along Red River Road and the extension of Galleria Boulevard to Red River Road were taken into account when performing the water and sewer relocation design. Our services will be performed so that it will not impact the schedules for these additional projects while also meeting the City's budget constraints.



Funding Source

- Local sales tax program

Contact

- Brent Deaton
- 803-326-3884

GALLERIA BOULEVARD EXTENSIONS

CITY OF ROCK HILL – ROCK HILL, SOUTH CAROLINA

The Galleria Boulevard Extension project was originally included in the Cel-River/ Red River Road (S-50) Widening Project scope and schedule, but was separated to expedite construction. The City of Rock Hill requested that in addition to being the prime consultant on the project, Mead & Hunt design the water and gravity sewer extensions and relocations in conjunction with the Galleria Boulevard road extension project. This effort consisted of:

- Water Main Extensions:
 - 76 LF of 6-inch water main
 - 288 LF of 8-inch water main
 - 2,935 LF of 12-inch water main
- Sanitary Sewer Main Extension:
 - 1,672 LF of 8-inch gravity sewer main
- Sanitary Sewer Main Relocation
 - 497 LF of 12-inch gravity sewer main

Our team also provided bid documents and construction administration, project close-out, record documents, and permitting services for the water and sewer extensions. We reviewed and approved material submittals and issued design revisions based on changes made during construction. Our team also reviewed CCTV sewer inspection videos, documented deficiencies, and coordinated with the Mead & Hunt inspectors and contractors to resolve all deficiencies. Our team then organized all necessary documentation and submitted the water and sewer permit packages for SCDHEC review and approval to operate.

When the original project schedule was accelerated to meet the client’s needs, Mead & Hunt was able to assign additional resources and advance the project schedule by one year. By remaining flexible and available to our client while meeting York County and the City of Rock Hill's requirements, Mead & Hunt was able to create a positive working relationship between the stakeholders.



RACEPATH STREET PHASE II ROADWAY AND DRAINAGE IMPROVEMENTS

HORRY COUNTY – MYRTLE BEACH, SOUTH CAROLINA

Mead & Hunt is providing water and sewer, sidewalk, curb and gutter, drainage, and roadway improvements for Phase II of the existing Racepath Street project. Phase II consists of 1,000 feet of improvements along the existing roadway and 300 feet of new roadway improvements connecting to an existing City street (ABC Drive). Our team is extending the City's gravity sanitary sewer and water main to the end of Racepath Street in order to provide services to additional properties within the neighborhood. We are also relocating and/or replacing utilities where necessary. In addition, our team is upgrading the existing stormwater system and providing roadway and sidewalk improvements.

This project is funded by the Community Development Block Grant Program through the Department of Housing and Urban Development. Therefore, all applicable federal rules and regulations apply during both design and construction in order to maintain this funding.

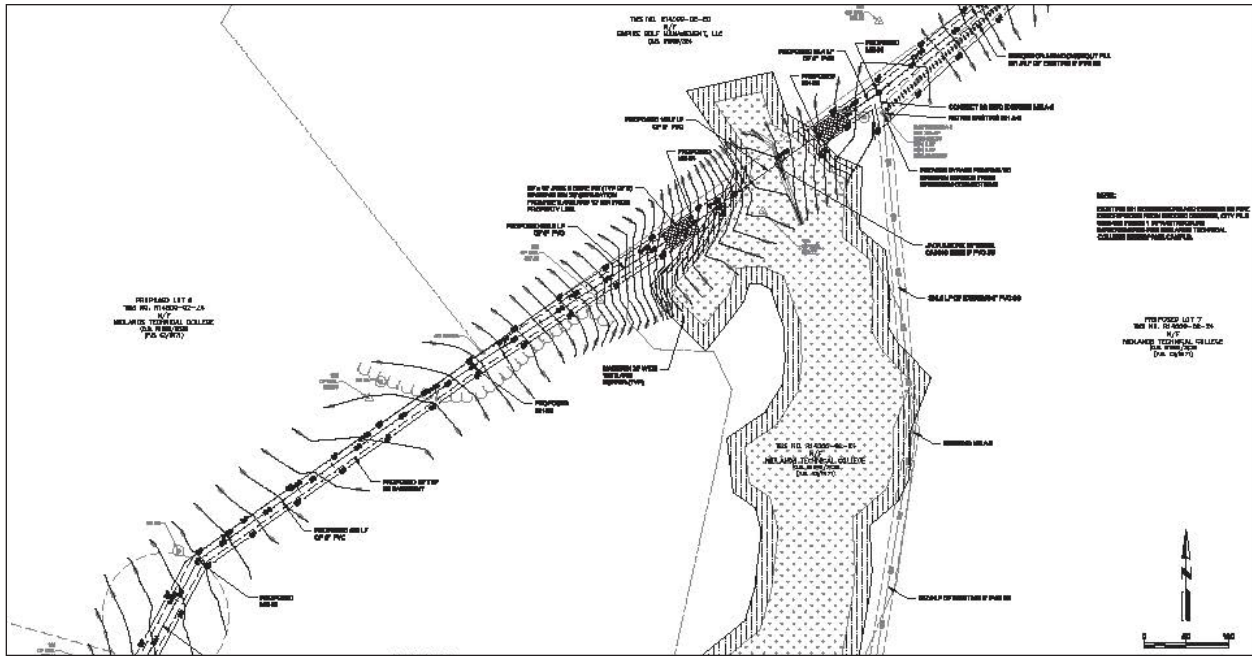
Mead & Hunt's services include project management, water and sewer design, survey, roadway design, stormwater drainage design, environmental assessment, geotechnical investigation, utility coordination, regulatory permitting, and easement acquisition. We anticipate providing bid-related services, construction engineering and inspection, and as-built documentation.

Funding Source

- Community Development Block Grant

Contact

- Andrew Markunas, PE
- 843-915-5160



Funding Source

- South Carolina Rural Infrastructure Authority (RIA) Economic Infrastructure Grant

Contact

- Chuck Whipple, SCCED
- 803-691-3954

MIDLANDS TECHNICAL COLLEGE GRAVITY SEWER EXTENSIONS

ENTERPRISE CAMPUS AUTHORITY – COLUMBIA, SOUTH CAROLINA

An extension of Midlands Technical College (MTC), the Enterprise Industrial Campus serves as an economic and industrial park facility. While preparing the land for development, MTC discovered that the existing sanitary sewer infrastructure could not provide adequate sewer service for the proposed development due to the depth of installation. The Enterprise Campus Authority selected Mead & Hunt to design a new gravity sewer main to serve 37 acres within the existing industrial park.

The project installed approximately 1,435 LF of eight-inch gravity sewer line and six manholes at depths ranging from four to 12 feet. A portion of this new line was installed within a steel casing under a wetland area via jack and bore installation. The new main connected to the existing gravity sewer line serving a portion of the industrial park. During installation, bypass pumping was required to maintain service from upstream connections.

Mead & Hunt’s team performed topographic survey and easement documentation; conducted a geotechnical investigation; prepared construction plans, specifications, cost estimates and calculations; secured permitting through SCDHEC and the City of Columbia; evaluated bid documents; conducted pre-bid and pre-construction meetings; and provided construction observation services, project closeout and record documents.

4. FAMILIARITY WITH FEDERAL FUNDING REQUIREMENTS

FEDERAL FUNDING PROJECT EXPERIENCE

LPA

- **S-48 Corridor Improvements** – Lexington County
- **SC 64 Sidewalk Improvements** – Colleton County

COMMUNITY DEVELOPMENT BLOCK GRANTS

- **Racepath Street Roadway and Drainage Improvements** – Horry County
- **FEMA Flood Assessments** – Town of Lexington

INTER-GOVERNMENT AGREEMENTS

- **US 176 Widening** – Berkeley County
- **I-20/Ginny Lane Improvements** – Town of Lexington

STATE REVOLVING FUND PROGRAM

- **US 176 Widening Water and Sewer Relocations** – Berkeley County Water and Sanitation
- **West A Street Streetscape (EB-5825)** – City of Newton

SCDHEC GRANTS

- **Old Kroger Building Drainage Improvements** – Lexington County

SC RURAL INFRASTRUCTURE AUTHORITY ECONOMIC INFRASTRUCTURE GRANT

- **Gravity Sewer Extension** – Midlands Technical College

LOCALLY ADMINISTERED PROJECTS PROGRAM

- **Avent Ferry Road Sidewalk Connections (EB-6049)** – Town of Holly Springs

C-FUNDS

- **Glen Laurel Subdivision Pavement Preservation** – Lancaster County
- **US 521 Overhead Illuminated Signs and Adjacent Street Signs** – Lancaster County
- **Windy Wood Road Dirt Road Paving** – Lexington County
- **Water Tank Road Dirt Road Paving** – Lexington County
- **SC 302/Landfill Lane Intersection Improvements** – Lexington County
- **Lakewood Estates Roadway and Drainage Improvements** – Lexington County
- **Black Avenue Drainage** – Lexington County
- **US 1 Widening – Adjacent Dirt Road Package** – Lexington County
- **2019 County Pipe Replacements** – Saluda County On-Call
- **Midway Drive Truck Queue Lane** – Union County On-Call
- **Midway Drive Extension** – Union County On-Call

EXPERIENCE WITH STATE AND FEDERALLY FUNDED PROJECTS

Through South Carolina's share of the Coronavirus Local Fiscal Recovery Fund included in the ARPA legislation, the state received \$435 million for local governments serving populations less than 50,000 (Non -Entitlement Units). There are 254 South Carolina small towns and municipalities eligible to utilize this funding based upon individual allocation amounts. This funding can be utilized to make necessary investments to improve access to clean drinking water, and to support vital water and sewer infrastructure.

In May 2022, South Carolina passed H.4408 which allocated \$783 million of the State Fiscal Recovery Funds as part of ARPA to the South Carolina Rural Infrastructure Authority (RIA) to be used for competitive grants. The South Carolina Infrastructure Investment Program (SCIIP) was created to fund and administer these grants for priority infrastructure projects.

Projects funded The State and Local Fiscal Recovery Funds under ARPA legislation must meet a federal deadline for expenditure of these funds of December 2026. Local government infrastructure projects will need to comply with specific federal requirements such as:

3. EXPERIENCE OF THE FIRM: EXPERIENCE WITH STATE AND FEDERALLY FUNDED PROJECTS

- Federal contract requirements included in Contract Documents and Publicly advertised and opened competitive bids for material/construction contract awarded to lowest responsive and responsible bidder
- Single audit if >\$750,000 in federal funds are spent in one fiscal year
- Davis Bacon Wage Certification for projects >\$10 Million
- Build America/Buy America provisions (pending federal guidance clarification)
- Uniform Relocation and Real Property Acquisition Policy Act (Uniform Act)
- Periodic reports to be included with State's report the U.S. Department detailed accounting of the use of funds

Many of the federal compliance and reporting requirements will be similar to those used for the South Carolina Department of Environmental Control (SCDHEC)/RIA's State Revolving Funds (SRF) program. Mead & Hunt has worked on multiple infrastructure projects with various funding sources like these:

STATE REVOLVING FUND PROGRAM

The State Revolving funds are federal loan programs which are jointly administered by the RIA and SCDHEC. Low-interest loans are made available to municipalities, counties, and special purpose districts statewide for a variety of clean water and drinking water projects. Berkeley County Water and Sanitation (BCWS) secured a SRF loan for 4.5 miles of waterline relocations/upgrades related to a County funded roadway widening project for US-176 near Summerville. Our team prepared the required Preliminary Engineering Report, design plans and specifications, and bid phase services related to the documentation requirements for the SRF program. BCWS additionally requested Mead & Hunt provide easement acquisition services for the proposed water relocations consisting of easement acquisition under the Uniform Act, a requirement for SRF loan utilization. Our team produced easement exhibits, conducted title searches, conducted easement negotiations, and prepared easement documentation for BCWS use in easement filing. Ultimately, we provided easement or condemnations documentation for 21 required easements. We also provided Resident Project Representative (RPR) and Construction Administration services during installation of the waterline, which included documentation and reporting requirements for American Iron and Steel and periodic SRF project progress reporting.

COMMUNITY DEVELOPMENT BLOCK GRANTS

Community Development Block Grants (CDBG) funded by the Department of Housing and Urban Development (HUD) and administered by the South Carolina Department of Commerce, seek to strengthen low to moderate income communities through revitalization and improvement of neighborhoods, public infrastructure and the local economy. CDBG grants require each local government to meet federal requirements, so funds are not jeopardized. Every aspect of the project, from the environmental assessments to the development of the bid documents, has strict guidelines that must be followed to prevent delays.

Our team has experience working with several counties and municipalities to manage their infrastructure related projects funded by CDBG Grants. Most recently, we completed Phase I of the Racepath Street Infrastructure Improvement project in Myrtle Beach. In Phase II, our team led the design for extensions of the City of Myrtle Beach's gravity sanitary sewer and water main to the end of Racepath Street and relocated existing utilities, in addition to designing drainage, curb, and sidewalk improvements.

Our team provided utility coordination and drainage design which included designing an underground infiltration system to manage stormwater flows and provide water quality for Lexington County's Bitternut Court Improvement project. Mead & Hunt's experience also includes the design, specifications, and inspections for the CDBG HOME Investment Partnership Program and FEMA flood assessments for the stream restoration of 12-Mile Creek for the Town of Lexington.

During every stage of these projects, we were required to comply with all applicable federal rules and regulations to maintain federal funding. Our team takes pride in our commitment to providing accurate reports, plans, and specifications that comply with particular funding requirements.