CAMDENCOUNTY
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BOARD
OF
COMMISSIONERS

April 25, 2016
6:00 PM
Regular Meeting

Historic Courtroom
Courthouse Complex

This agenda is only a tentative schedule of matters the Commissioners may address at their meeting and all items found on it may be deleted, amended or deferred. The Commissioners may also, in their absolute discretion, consider matters not shown on this agenda.

Special accommodations for the disabled who attend public meetings can be made by contacting the Clerk to the Board 24 hours in advance at 252-338-6363, Ext. 100.

Please turn Cell Phone ringers off during the meeting.

Agenda

Camden County Board of Commissioners
BOC - Special Meeting
April 25, 2016
6:00 PM
Historic Courtroom, Courthouse Complex

Call to Order

ITEM I. Closed Session

A. Motion to Enter Closed Session G.S. 143-318.11(A)(6) Personnel

ITEM II. Engineering and Design Services

A. Engineering and Design Services

ITEM III. Action Items

A. Point of Contact

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Board of Commissioners
AGENDA ITEM SUMMARY SHEET

Item Number: 1.A
Meeting Date: April 25, 2016

Submitted By: Angela Wooten, Clerk to the Board
Administration
Prepared by: Angela Wooten

Item Title **Motion to Enter Closed Session G.S. 143-318.11(A)(6) Personnel**

Attachments:

Summary:

Pursuant to G.S. 143-318.11(a)(6) the board will enter closed session to discuss matters pertaining to personnel.

Recommendation:

Motion to enter closed session Pursuant to G.S. 143-318.11(a)(6) the board will enter closed session to discuss matters pertaining to personnel.

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Board of Commissioners
AGENDA ITEM SUMMARY SHEET

Item Number: 2.A
Meeting Date: April 25, 2016

Submitted By: Stephanie Humphries, Finance Director
Finance
Prepared by: Angela Wooten

Item Title **Engineering and Design Services**

Attachments:
Request for Qualifications Tabulation Summary (PDF)
RFQ - Engineering Design Services (PDF)
2016-03-31 MESCO Statement of Qualifications Cover Letter (PDF)
2016-03-31 MESCO Statement of Qualifications (PDF)
MESCO RFQ Response_Camden Courthouse WWTP (PDF)
2016-03-31 Eastern Carolina Statement of Qualifications (PDF)
Courthouse Area WWTP RFQ Letter (PDF)

Summary:

The County received the 2 attached Proposals for Engineering and Design Services Courthouse Area Waterwater Treatment Plant.

Recommendation:

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Request for Qualifications Tabulation Summary
Courthouse Area WWTP Engineering & Design Services
April 4, 2016

Evaluation Factors	Eastern Carolina Engineering			Municipal Engineering Services Co.		
	Renshaw	Credle	Humphries	Renshaw	Credle	Humphries
#1 (25 Pts)	*24*	*25*	*25*	*20*	*25*	*25*
#2 (25 Pts)	*21*	*25*	*25*	*23*	*25*	*25*
#3 (25 Pts)	*24*	*25*	*20*	*21*	*20*	*15*
#4 (25 Pts)	*24*	*25*	*25*	*21*	*15*	*10*
#5 (15 Pts)	*8*	*10*	*0*	*4*	*8*	*0*
	Total Score (Avg.)		102.01	**Total Score (Avg.)**		85.66

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REQUEST FOR QUALIFICATIONS

Engineering Design Services
Courthouse Area Wastewater Treatment Plant
Camden County, North Carolina

PROPOSALS DUE BY 5:00 PM MARCH 31, 2016

The County of Camden, North Carolina is requesting proposals from qualified consultants to engineer and design a Courthouse Area Wastewater Treatment Plant utilizing biological treatment processes and high-rate infiltration technology on a site of approximately 35 acres. The site is located approximately three miles west of the Camden County Courthouse (117 NC 343 North). The site is a combination of wooded land, agricultural land, and the remnants of an abandoned hog farm operation. Existing structures are to be demolished, and the existing access road to the abandoned hog farm structures will be improved and utilized as the access to the plant.

The intent of the work is to provide engineering and construction design of a facility capable of treating 50,000 GPD upon completion of Phase 1 construction and engineered and designed such that the facility is expandable and capable of treating 100,000 GPD upon completion of Phase II construction. The engineering and design proposal should also include the necessary collection system to connect to the County's existing force main system and redirect the wastewater flow between the Courthouse and Scotland Road to the Courthouse pump station. The Courthouse Area Wastewater Treatment Plant is to be engineered and designed using biological treatment processes and advanced high-rate infiltration basin technology in order to provide year round wastewater treatment.

The overall design intent is for phased construction improvements over multiple years in order to meet new demand for treatment within the Courthouse Service Area. The first phase budget is $2.75 million. The design documents for the first phase will include a schematic design of the entire project and "For Construction" documents for the first construction phase with an estimated construction cost of approximately $1.775 million.

The schematic design will define and ensure that construction completed in each phase will seamlessly integrate into the next. The County intends but does not imply or guarantee that one engineering/design team will be selected to serve as the Project Engineer for the entire project.

The complete RFQ document for this project is available in electronic form. The RFQ may be viewed online and downloaded without charge and without deposit from http://www.camdencountync.gov/government/county-bid-rfp-solicitations and is also available for review at the Camden County Administrative Office located at 330 US HWY 158 East, Camden, NC, 27921. RFQ/plan holders are responsible for their own reproduction costs.

Please go to http://www.camdencountync.gov/government/county-bid-rfp-solicitations to download the Courthouse Area Wastewater Treatment Plant Project documents. No hard copies will be mailed to interested proposers. Any addenda to the project will be posted on the website. The bidder is responsible for periodically checking the site. The Engineer/Contractor that is awarded the project will be responsible for printing all documents necessary for performing the work. Responders are requested to submit any questions concerning this RFQ via email to: mrenshaw@camdencountync.gov.

All proposals must be received by 5:00 P.M. on March 31, 2016. Proposers must submit three (3) copies of their proposal. Proposals must be hand-delivered to:

Camden County Administrative Offices
ATTN: County Manager Michael Renshaw
330 US HWY 158 East, Camden, NC 27921

Request for Qualifications
Engineering Design Services

A. BACKGROUND

Camden County is a rural county with a population of approximately 10,300. The county has a long narrow shape consisting of 241 square miles with a length of 36 miles. It is located in Northeast North Carolina between Pasquotank and Currituck County and is divided into three townships: Shiloh Township in the south, Courthouse Township in the center, and South Mills Township in the north. The existing treatment facility was built in 2008 and is located within the South Mills Township in northern Camden County. This plant is located over 14 miles from the main sewer pump station in the Courthouse Township. The facility was permitted for 100,000 (GPD). Existing force mains constructed of excessive diameter and less than adequate pipe velocities result in poor and problematic influent wastewater at the South Mills treatment plant.

In 2008 the sewer district was proposed to provide service to a portion of the Courthouse Township including the section of US Highway 158 from Lambs Marina to the Camden Medical Park, along Gumberry Road, from NC 343 to US Highway 158, and along NC 343 from US Highway 158 to Scotland Road. The existing sewer collection system was designed to be a force main collector system. New pump stations were constructed at each school, government facility, business and home to be served by the district. These pump stations are located on private property by easement to the sewer district with electrical power being provided to the pump station by the individual business or residence. Connecting these pump stations are smaller diameter PVC and HDPE force mains. In the Courthouse Township, these force mains empty to a centralized large pump station located behind the Camden County Courthouse. It is from this centralized pump station that the effluent sewer travels approximately 6 miles to a booster pump station near 674 North NC 343. From this pump station the effluent sewer is pumped another 8 miles to the treatment plant located on Keeter Barn Road in South Mills Township. Treated water from this plant is routed north to a land application spray field sized to the plant capacity.

The County does not have engineering staff necessary for design, and therefore is proceeding with soliciting proposals from qualified consulting firms to provide technical assistance for design, contract administration and construction observation activities of the project.

B. SCOPE OF WORK:

Camden County is soliciting qualifications for engineering services necessary to design and construct the facility within the approved budget and schedule. Components of the project is to provide engineering and construction design of a

facility capable of treating 50,000 GPD upon completion of Phase 1 construction and engineered and designed such that the facility is expandable and capable of treating 100,000 GPD upon completion of Phase II construction. The engineering and design proposal should also include the necessary collection system to connect to the County's existing force main system and redirect the wastewater flow between the Courthouse and Scotland Road to the Courthouse pump station. The Courthouse Area Wastewater Treatment Plant is to be engineered and designed using biological treatment processes and advanced high-rate infiltration basin technology in order to provide year round wastewater treatment.

The overall design intent is for phased construction improvements over multiple years in order to meet new demand for treatment within the Courthouse Service Area. The first phase budget is $2.75 million. The design documents for the first phase will include a schematic design of the entire project and "For Construction" documents for the first construction phase with an estimated construction cost of approximately $1.775 million.

The schematic design will define and ensure that construction completed in each phase will seamlessly integrate into the next. The County intends but does not imply or guarantee that one engineering/design team will be selected to serve as the Project Engineer for the entire project.

Engineering Services

1. **Basic Design Services**. The Engineer will design the improvements to the standards of the North Carolina Department of Environment and Natural Resources, Camden County, and other reviewing agencies which may include the Economic Development Administration. These design services will include, but not be limited to:

    a. Perform design survey, engineering design; prepare detailed drawings, technical specifications, bid forms, notice to bidders and Instructions to bidders. The Engineer shall prepare contract documents for distribution to bidders which include all addenda, notice and instructions to bidders, model contract agreement, general and supplemental general conditions, technical specifications, and all other compliance forms required by EDA and/or Camden County.

    b. After easement requirements have been identified (if any), negotiate with the County for surveying and mapping services necessary for the acquisition of needed easements.

    c. Submission of plans and specifications to the County for review and approval prior to bid advertisement. Resolve any deficiencies in these documents as may be required by the County and regulatory agencies.

d. Attend public meetings and conferences with the County as required.

2. **Contract Administration Services**. The Engineer shall provide contract administration services to include, but not be limited to:

   a. Placement of notice to bidders and advertisement for bids.

   b. Attend bid opening, tabulate bid proposals, analyze and make recommendations to the County.

   c. Assist with pre-construction conferences.

   d. Check and approve necessary shop and working drawings.

   e. Prepare change orders as may be required.

   f. Review and approve estimates for progress and final payment.

   g. Project closeout conference.

3. **Construction Observation Services**. The Engineer will be required to provide construction observation services to include, but not be limited to:

   a. General engineering observations of the work appropriate to the stage of construction.

   b. Report to the construction administrator when the work is unsatisfactory, faulty, or defective, or does not conform to the contract documents.

   c. Make final observation of all construction and provide a written certification of final observation to the County and applicable agencies.

C. ENGINEER SELECTION PROCEDURES/PROJECT SCHEDULE:

Proposals will be reviewed by a selection committee and a recommendation will be forwarded to the County Commissioners for consideration. After considering factors outlined in Selection Criteria, the consulting firm will be selected, subject to negotiation of fair and reasonable compensation. Consultants will be notified by mail of the County's selection. The project is expected to commence immediately upon approval of the Engineer by the governing body. The project design and construction is estimated to require eighteen (18) months to complete.

D. FEE SCHEDULE:

For purposes of proposal evaluation and in accordance with G.S. 143-64.31, the Engineer is requested to submit an hourly fee schedule for all personnel to be involved in the project. The hourly rates should include fringe benefits, indirect costs and profit. The Engineer's charge for reimbursable expenses should also

be identified. The Engineer's fee schedule should be applicable to the design phase, contract administration phase, and construction observation phase. Right-of-way/easement engineering charges, if required, will be negotiated upon completion of the design phase. The fee schedule will not be the sole criteria for selection of the Engineer.

E. PROPOSAL CONTENT:

The Engineer's proposal must contain four parts:

1. **Technical.** Describing the approach to be taken in addressing the proposed scope of work. This description is to include delineation of specific tasks to be undertaken in each project activity.
2. **Management and Staffing**. Describing the management plan to be used, staffing configurations, and the like. This is to include a project schedule showing start and completion dates for all major tasks. A brief resume of the individuals involved in the project will be required.
3. **Prior Related Experience**. A brief description of High Infiltration Wastewater Treatment engineering experience including contact person and phone numbers for each referenced job.
4. **Fee Schedule.**

F. FACTORS FOR AWARD/EVALUATION CRITERIA:

The following factors will be used in evaluating Engineer's proposals and awarding of contract:

1. Technical Approach/Understanding of Project.....(25 POINTS)
2. Experience of Proposed Personnel .....(25 POINTS)
3. Experience of the Firm in Biological Treatment Processes and Advanced High-Rate Infiltration Basin Engineering .....(25 POINTS)
4. Familiarity with Locality.....(25 POINTS)
5. Minority/Women Owned Business .....(15 POINTS)

G. FEDERAL AND STATE TERMS AND CONDITIONS:

The selected Engineer must comply with all the requirements of the State, County, and any granting agencies. Procurement and contract procedures to include any affidavits, procurement limits, etc. will also apply.

License No. C-0281

CIVIL/SANITARY/ENVIRONMENTAL ENGINEERS

Municipal Services

SITE PLANNING/SUBDIVISIONS

SOLID WASTE MANAGEMENT

Engineering Company, P.A.

SUBSURFACE UTILITY ENGINEERING (SUE)

March 31, 2016

Mr. Michael Renshaw
County Manager
330 U.S. Hwy. 158 East
Camden, NC 27921

RE: Request for Qualifications
Engineering Design Services
Courthouse Area Wastewater
Treatment Plant

Dear Mr. Renshaw:

Municipal Engineering Services Company, PA (MESCO) is pleased to present our "Statement of Qualifications for Professional Engineering Design Services related to the Courthouse Area Wastewater Plant". Please find three (3) copies of this statement as requested.

On behalf of MESCO, I would like to extend my appreciation to Mr. David Credle for taking time from his busy schedule to show Mr. Ben Clawson and me the proposed site and answering our questions. His time and assistance was very helpful in understanding the needs of Camden County.

We believe our staff is very well qualified to perform the services proposed by Camden County. As you will observe from the brief resumes outlined in our Statement of Qualification, our project team utilizes very senior level staff to ensure the goals and objectives of the project are met to the complete satisfaction of our client, and is of the upmost quality. It is MESCO's philosophy to utilize the experienced project team listed in the Statement of Qualifications to execute the work, unlike others who may only present their more experienced staff to procure the work, and then hand off the actual work to junior staff to perform.

Although MESCO has not had the opportunity to work with Camden County directly, I and several members of our project team have a long history in northeastern North Carolina. We have long established relationships with the North Carolina Department of Environmental Quality – Washington Regional Office, and Non-Discharge unit in Raleigh. We also have over 30 year relationships with several staff members of the North Carolina Department of Health and Human Services Environmental Health – On Site Wastewater Division.

The management and staff at MESCO is governed by the guiding principles of listening, being responsive, and always maintaining a high ethical standard with all of our clients, contractors and others invloved. In other words, there is no excuse for not doing the right thing. We realize that not all problems with infrastructure happen between 8:00AM and 5:00PM on weekdays. Therefore, the staff at MESCO prides ourselves on being available day or night to our clients.

We would very much appreciate an opportunity to demonstrate our capabilities and commitment to service by assisting you with your upcoming Courthouse Area Wastewater Treatment Plant project. Should you have any questions regarding our qualifications, please don't hesitate to call Mr. Jim Woodie and 919-772-5393 or myself at the same office number or my cell number at 252-289-0781 or via email at mmcallister@mesco.com. We look forward to hearing from you.

Sincerely,
MUNICIPAL ENGINEERING SERVICES, CO., PA

Michael L. McAllister
Senior Project Manager

Enclosures

CC: Mr. Jimmy D. Woodie, PE, PLS
Mr. Bobby Blowe, PE

MUNICIPAL ENGINEERING SERVICES CO., P.A.

Thirty-Eight Years of Engineering Excellence

Statement of Qualifications

CAMDEN COUNTY, NC

PROFESSIONAL ENGINEERING DESIGN SERVICES

Courthouse Area Wastewater Treatment Plant

March 31, 2016

CAMDEN COUNTY

new energy. new vision.

MUNICIPAL ENGINEERING SERVICES CO., P.A.

Thirty-Eight Years of Engineering Excellence

INTRODUCTION

Company History

After obtaining his Master's Degree in Civil Engineering from North Carolina State University in 1969, Jimmy D. Woodie, future founder and President of Municipal Engineering Services Company, held several positions within local government that enabled him to experience the daily responsibilities, concerns, and activities of a municipal employee. These positions included Supervisor of Water Treatment, County Engineer, and Director of Utilities. This experience has given Mr. Woodie a unique perspective that allows him to approach each project from the viewpoint of both an operator and an engineer. During his years as a municipal employee, he discovered a need for an engineering company that understood the unique issues facing North Carolina's municipalities and government agencies. **In 1978, he established a new type of civil / sanitary engineering firm that would cater to the communities and local governments of North Carolina.**

Thirty-eight years after its inception, Mr. Woodie's vision has become a reality. He and his team of dedicated engineers and surveyors continue to provide the government agencies of North Carolina an alternative to the excessive overhead costs and detached customer service. He and his staff offer high quality, functional projects at a reasonable cost. Ultimately, it is Municipal Engineering's strict adherence to the original mission set forth by Jimmy Woodie that has made this company the premier engineering firm of choice in North Carolina.

Our Mission

To provide our clients with superior, personalized service. We take the time to listen attentively to our clients to assess their specific needs and the unique demands of the project. We approach and complete all projects with ethical and professional standards to ensure your complete satisfaction. We maintain constant communication with our clients and keep them informed of progress from beginning to end. As part of that communication, we believe early involvement from both the public works management and key operations staff is imperative to understanding the project and achieving the ultimate objective. Our staff is local and we are on the job site to resolve unforeseen obstacles, freeing our clients from the worries and complications that can occur and allowing them to proceed with their daily responsibilities. We will constantly be available to discuss the project, and we are always available for free phone consultations. Simply stated, we are here for our clients.

Contact Information

Headquarters
68 Shipwash Drive
Garner, NC 27529
(800) 278-6132 phone / (919) 772-1176 fax
jwoodie@mesco.com

Branch Office
671 West King Street
Boone, NC 28607
(828) 262-1767 phone / (828) 265-2601 fax
macquesta@mesco.com

AVAILABILITY AND EXPERIENCE

Municipal Engineering is headquartered in Garner, NC with a branch office in Boone, NC. Our experienced staff of professionals includes Professional Engineers (civil, environmental, chemical, and agricultural), Professional Land Surveyors, AutoCAD Specialists, Mapping Specialists, Environmental Technicians, Funding Administrators, and Contract Administration Specialists. **We have the available staff to dedicate to Camden County and can begin the work immediately upon a notice to proceed.**

Municipal Engineering is very interested in providing these services because this is our specialty. We have completed numerous wastewater treatment projects over the last 38 years. Our relevant experience includes:

- ✓ Probable Cost Opinions
- ✓ Funding Assistance and Administration
- ✓ In House Surveying & Mapping
- ✓ Preparation of Easements
- ✓ Preliminary Engineering Reports
- ✓ Environmental Assessments
- ✓ Hydraulic Modeling
- ✓ Pump Stations
- ✓ NCDOT Coordination
- ✓ Water & Wastewater System, Design & Expansion
- ✓ Treatment Plant Design

MUNICIPAL ENGINEERING SERVICES CO., P.A.

Thirty-Eight Years of Engineering Excellence

- ✓ Chemical/Biological Treatment Process Design
- ✓ Tertiary Treatment (i.e. sand filters)
- ✓ Pretreatment System Design
- ✓ System Rehabilitation
- ✓ Inflow & Infiltration Studies
- ✓ Permitting
- ✓ Bid Documents
- ✓ Contract Administration
- ✓ Construction Observation
- ✓ On-Site Wastewater Disposal including: Spray Irrigation, Sub-surface Drip and Low Pressure Pipe (LPP) systems
- ✓ Reclaimed Wastewater
- ✓ Biological Nutrient Removal (BNR)
- ✓ Constructed Wetlands (wastewater & Storm water)
- ✓ Project Management
- ✓ Storm Drainage
- ✓ Erosion Control/BMP's
- ✓ Electrical
- ✓ Code Compliance
- ✓ As-Built Drawings
- ✓ Residuals Management/Disposal

Municipal Engineering is prepared to begin this project upon Notice to Proceed. We primarily provide engineering services to government agencies and municipalities across North Carolina, so we understand your needs and budget constraints.

RELEVANT PROJECTS DESIGNED

Town of Stantonsburg, NC
Gary Davis, Town Manager, (252) 238-3608

Stantonsburg WWTP Improvements
Project Team: Michael Acquesta, PhD, P.E., Michael McAllister, J.C. Uzzell, PhD, PE
Design of wastewater treatment plant improvements to the existing 0.375MGD facility, which included the modifications to the existing draft tube aeration system, conversion of the existing rectangular clarifier to a digester, construction of a new clarifier, return activated sludge pump station, intermediate pump station, conversion of disinfection from chlorine to ultra-violet, post aeration and effluent flow measurement (Parshall Flume). Plant Effluent Limits: BOD 30mg/L, TSS 30mg/L, Fecal 200/100ml, TN: None, TP: None, Ammonia: None, DO: not < 5.0mg/L. Mr. McAllister was involved in the design and construction of the original facility constructed in 1983.

- Obtained Authorization to construct and modifications to the existing NPDES permit within 60-days of submission to NCDENR.
- Completed a topographic and boundary survey.
- Provided construction administration and observation.

✓ Municipal Engineering secured and administered funding for the project through the DWQ Construction Grants & Loans, NC Clean Water Management Trust grant and a NC Rural Center Economic Infrastructure grant.

Town of Bunn, NC
Judy Jeffreys, Town Administrator, (919) 496-2992

Town of Bunn WWTP Expansion
Project Team: Michael Acquesta, PhD, P.E., Michael McAllister, J.C. Uzzell, PhD, PE
Design of wastewater treatment plant expansion from 0.15MGD to 0.30MGD with included the construction of a new distribution box, manual influent bar screen, gravity influent grit chamber, pump station, ring steel package treatment plant, tertiary disk filters, and expansion of the ultra-violet disinfection. Effluent limits. BOD 30mg/L, TSS 30mg/L, Fecal 200/100ml, TN: None, TP: None, Ammonia: None, DO: not < 5.0mg/L.

- Obtained Authorization to construct and modifications to the existing NPDES permit within 60-days of submission to NCDENR.
- Engineering Alternatives Analysis
- Completed a topographic and boundary survey.
- Provided construction administration and observation.

✓ Municipal Engineering secured and administered funding for the project through the DWQ Construction Grants & Loans, and a NC Rural Center Economic Infrastructure grant.

Town of Kenly, NC
Greg Dunham, Town Manager, (919) 284-2116

Town of Kenly Regional WWTP Process Modifications
Project Team: Michael McAllister, J.C. Uzzell, PhD, PE, Emily Miller
Design of wastewater treatment plant process modifications for the existing 0.63MGD Biological Nutrient Removal (BNR) treatment facility. Kenly as a member of the Lower Neuse Basin Association/Neuse River Compliance Association (LNBA/NRCA) which holds a group NPDES permit for 21 of its members, which regulates the discharge of total nitrogen of waste treatment facilities with a flow of 0.5 MGD or greater. Mr. McAllister of our project team has represented the Town of Kenly as a Board member for the past 12-years, and is responsible for the negotiation of the first nutrient credit trade in North Carolina.

The modifications included the construction and installation of a new sodium hydroxide bulk storage tank and chemical feed system, variable frequency drives installed on the existing disc aerators and nitrate recycle motors, new programmable logic controller (PLC) to continuous monitoring of pH, nitrate, ammonia and dissolved oxygen within the oxidation and anoxic basins. The project achieved a substantial reduction in the amount of total nitrogen discharged from an average concentration of 7-9 mg/L to less than 3 mg/L. Effluent limits. BOD 10mg/L, TSS 30mg/L, Fecal 200/100ml, TN: 7,063 lbs., TP: 2mg/L, Ammonia: 2mg/L, DO: not < 6.0mg/L, and serves as a model for other facilities in the Neuse Basin.

- Obtained Authorization to Construct (A to C) and modifications to the existing NPDES permit within 60-days of submission to NCDENR.
- Engineering Alternatives Analysis
- Provided construction administration and observation.

✓ Municipal Engineering secured and administered funding for the project through the North Carolina Clean Water Management Trust Fund, and a NC Rural Center Economic Infrastructure grant.

Town of Newport, NC
Tim White, Asst. Town Manager, (252) 223-4749

Wastewater Treatment Plant Expansion
Project Team: Jimmy Woodie, P.E., P.L.S., Thomas Honeycutt, P.E., Benjamin Clawson, P.E., Michael L. McAllister, Emily Miller
Municipal Engineering has completed the design, permitting, bid & award and construction phase services to construct the expansion of the Newport treatment facility from 0.6 MGD to 1.2 MGD.

The new extended aeration plant includes the following: mechanical bars screen, vortex grit removal, influent pump station, dual vertical shaft oxidation ditches with ability to easily add anoxic zones required for full biological nutrient removal, two clarifiers, disk filters, chlorine contact basin, de-chlorination, post aeration, return sludge pump station, conversion of existing clarifiers to sludge holding, sludge de-watering and storage facilities. Effluent limits. BOD 9.2mg/L, TSS 30mg/L, Fecal 200/100ml, TN: None lbs, TP: None, Ammonia: 1.2mg/L, DO: not < 6.0mg/L.

- Design included capabilities to treat for Nitrogen and Phosphorous, even though it is not currently required by the NPDES permit for the Town of Newport.

✓ Municipal Engineering has secured and administered funding for the Wastewater Treatment Plant Expansion through NCDENR Division of Water Resources, SRF funding.

City of Albemarle, NC
Judy Redwine, Asst. Public Works Director, (704) 984-9665

Wastewater Treatment Plant Expansion
Project Team: Jimmy Woodie, P.E., P.L.S., Benjamin Clawson, P.E., Michael McAllister., Thomas Iager, Emily Miller, Hemant Sura, PE (Green Tech Consulting)
Municipal Engineering has completed the design and construction for the improvements to the existing 12MGD Long Creek Wastewater Treatment Plant. Effluent limits. BOD 10mg/L, TSS 30mg/L, Fecal 200/100ml, TN: None, TP: None, Ammonia: 2mg/L, DO: not < 6.0mg/L.

- The improvements include a new mechanical bar screen, vortex grit removal, floating aerator replacement, clarifier replacement, addition of five (5) new Aqua-Aerobics® tertiary disk filters.

✓ Municipal Engineering secured and administered a grant from the NC Rural Center Clean Water Partners program and a loan from NC DENR Construction Grants & Loans SRF.

Gates County, NC
Natalie Rountree, County Manager, (252) 357-2411

Wastewater Treatment Plant Expansion
Project Team: Jimmy Woodie, P.E., P.L.S., Michael McAllister., Thomas Iager, Emily Miller, Don Wells, LSS (Soil & Environmental Services), Eric Lappala, PE, PH, CRSM (Eagle Resources), J.C. Uzzell, PhD, PE
Municipal Engineering is nearing the design completion and permitting of a new 40,000 GPD wastewater land application system to serve the new Merchant's Commerce Park near Gatesville, NC. The Merchant Commerce Park was established as an area to stimulate approximately 70 new jobs for the citizens of Gates County. At present the park has three (3) tenants; Gates County Library, State Employee's Credit Union, and Gates House Assisted Living Center. Sewer service for the park is currently being provided by the County via an old 7-acre spray field and facultative lagoon which once belonged to the North Carolina Department of Correction, Gates Correctional Institute, which has a current treatment capacity of 15,000 GPD.

Because of some issues among several of the key participants in the project which caused extensive delays and the potential loss of a substantial amount of grant funds, MESCO was hired to work with the County and various Federal and State grant agencies to help resolve the deadline issues with the various grant agencies and find a more cost effective solution to provide sanitary sewer service to the park.

MESCO evaluated several potential land application sites near the Commerce Park, the preliminary evaluations included identification of various soil profiles and the location of the seasonal high water table. Eventually an 84-acre site was chosen approximately 2-miles north of the park. The project consists of renovations to an existing pump station, 8-inch force main, aerated equalization basin, sequential batch reactor, storage lagoon, effluent disinfection, and 25 acre fixed set spray irrigation facility. The permitting included wetland delineation, soils analysis, agronomic report and water balance performed by Mr. Don Wells with S&EC and hydro-geologic modeling by Mr. Eric Lappala, PE, PH, CRSM of Eagle Resources.

✓ Municipal Engineering is currently administering grants from the NC Rural Center, CDBG, EDA and the Golden Leaf Foundation.

PROJECT UNDERSTANDING, PROPOSED SCOPE, AND TECHNICAL APPROACH

Project Understanding
Camden County is located in northeast corner of North Carolina adjacent to the State of Virginia to the north, Currituck County to the east, Pasquotank County to the west, and Albemarle Sound to the south. Camden County was formed in 1777 with its boundaries being long and narrow, 36-miles in length. The County is divided into three (3) townships; South Mills to the North, Shiloh to the South and Courthouse Township in the central portion of the County, and the main service area for this project.

According to the information provided in the County's Request for Qualifications, Camden County with a population of 10,300 is served by an existing waste treatment facility constructed in 2008 and located within the South Mills Township, approximately 14-miles from the main sewer pump station located behind the court house. Furthermore, the document indicates the force mains are oversized. The minimum design standard as specified by the North Carolina Department of Environmental Quality (NCDEQ) is the pump capacity should supply a minimum of 2 ft./sec. which provides scour velocity within the pipe to prevent solids from settling out of the wastewater. A force main designed to maintain scour velocity over such a long distance will also most likely increase the horsepower required at the pump. However, it is doubtful that increasing the size of the pump to provide scour velocity would solve all of the issues, unless the pumps run nearly continuously. The long residence time of the sewage in the line will most likely cause anoxic/anaerobic conditions causing the formation of hydrogen sulfide gas (H_2S) which will cause odor and corrosion problems at the point of discharge.

In order to serve the "Courthouse Area", the County desires to construct a 100,000 GPD biological waste treatment facility to be constructed in phases, with phase I being 50,000 GPD. The system will utilize an advanced high rate infiltration basin for effluent disposal.

The primary beneficiaries of the new sanitary sewer service will include Towne Center and Health Care Partners. A new collection line is proposed along U.S. Hwy. 158 from the existing sewer line just northeast of Hwy. 343 to the proposed WWTP site along US 158 near the northern end of the primary service area.

Proposed Scope of Work

Municipal Engineering Services Company, P.A. (MESCO) proposes the following general scope of work as defined in the RFQ, with the understanding that the actual scope of work and associated fees will be negotiated with Camden County:

The proposed work shall be for the design of a 50,000 GPD expandable to 100,000 GPD advanced biological wastewater treatment facility, capable of treating the effluent to reclaimed water standards for discharge via high rate infiltration basins. (Note the advanced treatment level will permit the effluent to be discharged in the infiltration basin above the 0.156 gallons per day per square foot).

MESCO will perform the process, civil, erosion control, permitting assistance etc. during the design phase. However, we will utilize several sub-contract consultants we use on a regular basis and with whom have long term relationships with. These consultants and their various roles are delineated on the following pages.

Design Phase Services

Once authorization is given by Camden County, and funding is available MESCO will perform the following design phase services.

- Conduct a kick-off meeting with the County to ensure we fully understand the needs and expectations.
- Conduct a topographic survey of the proposed site and ground profile along the gravity sanitary sewer route.
- Prepare topographic, plan & profile maps of the treatment facility and gravity sewer route.
- Prepare preliminary site drawings and schematic process drawings to the County for approval prior to beginning detail design.
- Designate the location of the rapid infiltration basin and authorize S&EC and Eagle Resources to begin work of identifying the soil profiles, ground water table and hydrogeologic modeling.
- Begin design of the advanced biological treatment facility including civil/site, hydraulic profile, process flow diagrams, mechanical, structural and electrical drawings and technical specifications.
- Prepare NCDOT Encroachment Agreements and Driveway permits. (if required)
- Prepare easement surveys, and prepare easement mapping for recordation. (if required)
- Prepare final design and contract documents to include plan/profile drawings, erosion control, construction details suitable for permitting, bidding and construction. Contract documents will be compliant with Camden County and funding agency.
- Assist the County with appropriate regulatory permits and address any relevant comments generated by their review in order to receive an Authorization to Construct (A to C).

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Bid & Award/Construction Phase Services

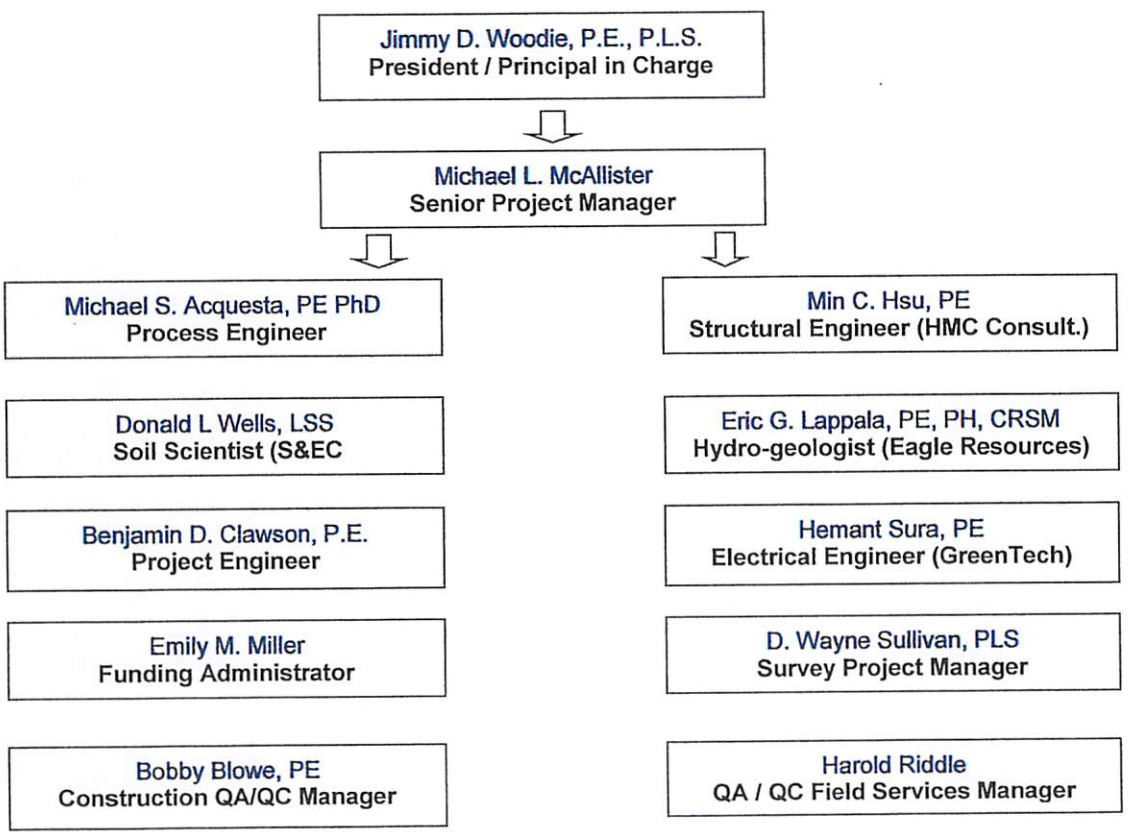
MESCO will support the County during the Bid & Award/Construction Phase of the project as follows:

- Preparation of Advertisement for Bids
- Preparation of perspective bidders' lists
- Construction Documents distribution
- Attendance at Pre-Bid meetings if required
- Preparation of contract addenda as required
- Response to Contractor questions during the bid phase
- Review of Bids
- Preparation of Certified Bid Tabulation
- Recommendation of Award
- Response to Contractor Requests for Information (RFIs)
- Attendance to progress meetings
- Pay request review and certification for payment
- Final inspection and project certification as required by NC DENR
- Preparation of Record Drawings
- Shop drawing and submittal review
- Construction Observation

Grant Administration Services

- Attendance at pre-construction meeting to review requirements, i.e. Davis Bacon payroll with the Contractor
- Prepare monthly, quarterly, semi-annual reports as required by the grant agency
- Attend monitoring visit with County if required
- Review and maintain appropriate records as required by the grant agency

ORGANIZATIONAL CHART



We also have the administrative and technical support staff to assist our Project Team Members in providing services in a timely manner. This project will be managed out of our Garner, NC office. In total, Municipal Engineering has 34 employees including:

- ✓ 10 Professional Engineers
- ✓ 4 Professional Licensed Surveyors
- ✓ 4 Field Surveyors
- ✓ 4 CAD Designers
- ✓ 6 Construction Observers
- ✓ 2 Funding Administrators
- ✓ 4 Administrative Support

PROJECT TEAM

For this project, Municipal Engineering proposes to utilize resources from our corporate office in Garner, NC for the main Project Team. This location is very experienced in civil engineering and surveying projects, and specifically wastewater system improvements.

Project Team Qualifications

Jimmy D. Woodie, P.E., P.L.S., President / Principal in Charge
Mr. Woodie will assume an active role in this project by overseeing project development and providing assistance and direction on a daily basis. He has 40 years of experience with civil and sanitary engineering projects including numerous waterline extensions, hydraulic models, pump stations, water system improvements and expansions, and water treatment plant design. These projects included surveying, environmental, design, permitting, easements, contract administration, and construction observation. Mr. Woodie has been the Principal in Charge for all of Municipal Engineering's water projects, many of which have included WWTP's. He maintains a grade IV wastewater plant operator's license, and a grade A water plant operator's license. In addition, Mr. Woodie served as a local government employee for eight years including Director of Utilities for the City of Albemarle. He has hands-on experience and knowledge from both a consulting engineering and local government perspective, and he has worked on similar projects in both positions.

Michael L. McAllister, Senior Project Manager
Mr. McAllister will oversee this project's overall design, organization, scheduling, permitting, cost control, construction documents, and will serve as the client liaison. He has over 35 years of experience in civil engineering, with the majority of his experience in the planning, funding, design and construction of nearly fifty (50) advanced water & wastewater treatment facilities. Many of these facilities included advanced treatment technologies such as biological nutrient removal (BNR) moving bed biological reactor (MBBR), membrane bioreactor (MBR), thermophilic digestion, constructed wetlands and residuals management. His experience also includes a variety of on-site wastewater disposal systems such as low pressure pipe (LPP) sub-surface drip, and land application. Mr. McAllister is also experienced in sanitary sewer collection systems including gravity sewer, pump stations and septic tank effluent pump (STEP). He is familiar with many of the various funding programs such as; USDA-RD, EDA, CDBG-I, SRF and HUC grants. He continues to maintain a good working relationship with the various regulatory agencies including NCDEQ-Washington Regional Office and NCDHHS Environmental Health, on-site sewer section.

Michael S. Acquesta, P.E., PhD, Process Engineer
Dr. Acquesta will oversee this project's process design, and review of the system hydraulic profile, basin sizing and mass balance. He has over 39-years of experience in civil and environmental engineering including design of wastewater treatment facilities and system improvements. Within the last year, Dr. Acquesta completed the Town of Bunn and Town of Stantonsburg wastewater treatment facility upgrades, both of which were funded through various grants and loans.

Benjamin D. Clawson, Project Engineer
Mr. Clawson has 14-years of experience in civil and environmental engineering. He will be responsible for design and management of AutoCAD technicians. Mr. Clawson was the Project Engineer for the aforementioned Albemarle and Newport treatment facilities. Both projects were funded through NCDENR SRF program. His additional project experience includes hydraulic modeling, water and wastewater line extensions and system expansions, and treatment plant improvements and design.

Hemant Sura, P.E., Electrical Engineer (GreenTech Consulting, Raleigh, NC)
Mr. Sura has more than 25-years of experience in the electrical engineering discipline. He most recently was involved with the electrical design for the aforementioned Albemarle wastewater treatment plant, and has collaborated on many other water & wastewater with Municipal Engineering Services. His work encompasses projects which include small pumping stations to large water and waste water treatment facilities. Mr. Sura has worked with Municipal Engineering Services for six (6) years and has worked with several members of the project team during that time. Mr. Sura will be responsible for design of the electrical components of the system. **(GreenTech Consulting is classified as a Minority Owned Business.)**

Min C. Hsu P.E. Structural Engineer (HMC Consultants, Cary, NC)
Mr. Hsu has more than 25-years of experience in the structural engineering discipline. He most recently was involved with the structural design for the aforementioned Albemarle and Newport wastewater treatment plants. His work encompasses projects which include small pumping stations to large water and waste water treatment facilities. Mr. Hsu has worked with Municipal Engineering Services for over 20-years and will be responsible for all of the structural design aspects of this project.

Donald L. Wells, LSS Soil Scientist (Soil & Environmental Consultants, Raleigh, NC)
Mr. Wells has more than 25-years of experience as a soil scientist in the State of North Carolina. He is extremely familiar with the rules & regulations of the North Carolina Department of Environmental Quality (NCDEQ) Non-Discharge Unit, North Carolina Department of Health & Human Services (NCDHHS) Environmental Health, On-site Waste Water Division, and various local health departments throughout North Carolina. Mr. Wells has worked with Municipal Engineering Services for over 3-years and will be responsible for all of the aspects of this project which require the services of a soil scientist.

Eric G. Lappala, PE, PH, CRSM, Hydro-geologic modeling (Eagle Resources, Southport, NC)
Mr. Lappala has more than 40-years of experience as a Professional Engineer, and Professional Hydrologist in the State of North Carolina. Mr. Lappala has worked with Municipal Engineering Services on several projects, which include spray irrigation and on-site wastewater disposal. Mr. Lappala will be our main source of expertise for the high rate infiltration portion of this project. Additionally, he will be responsible for the hydrologic ground water modeling for this project. He has also collaborated with several projects similar to that proposed in Camden County, whereas Municipal Engineering will utilize his expertise to provide the County with exceptional service. A summary of his high rate infiltration projects can be found in the *appendix A* of this statement of qualifications.

D. Wayne Sullivan, P.L.S., Survey Manager
Mr. Sullivan has been the Manager of the Survey Department for over 20-years. He has supervised the survey team and the construction observation and inspection crew on numerous projects involving water and wastewater system expansions from the initial planning phase to the final inspection. Mr. Sullivan understands all of the state and federal requirements that must be met from a technical stand point, and he is experienced in working with regulatory agencies on projects of similar size and scope. He has been involved with the surveying on all of Municipal Engineering's projects over the last twenty years. His role on this project will be to manage all of the surveying and field services activities.

Bobby Blowe, PE, Construction QA/QC Manager
Mr. Blowe has over 35 years of experience with the regulatory review of wastewater treatment facilities within North Carolina. He managed the NCDENR Construction Grants & Loans section for 30 years prior to joining the North Carolina Rural Center as their review engineer. Mr. Blowe will be responsible for conducting the constructability review of the plans and specifications, and he will also assist our team with funding acquisition.

Harold Riddle, Quality Assurance/Quality Control Field Services Manager
Mr. Riddle has over 24 years of experience as the Construction Observer and Quality Assurance and Quality Control (QA /QC) Field Services Manager for numerous water and wastewater system improvements and solid waste projects completed by MESCO. His role on this project will be to coordinate and monitor field activities, verifying materials as they are delivered to the site, verifying amount of work performed by the contractor, verifying construction compliance with approved plans and specifications and performing the initial review of pay requests submitted by the contractor(s). Mr. Riddle will make periodic site visits to meet with the resident construction observer and will be on site for "critical" construction events. Mr. Riddle has completed Hazardous Site Work Certification (OSHA Training) and Confined Space Training.

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Emily M. Miller, Funding Director

Ms. Miller joined Municipal Engineering Services in 2006 and started the company's Funding Division the following year. Emily has worked with State and Federal programs including USDA Rural Development, NC Department of Commerce, NC Rural Center, Golden LEAF Foundation, and Economic Development Administration to secure over $85 million in grants and loans to improve water and sewer infrastructure across the State, supporting both critical needs and economic development projects. Emily is very familiar with northeastern North Carolina and has recently worked on several infrastructure projects in this area of the state, including a current wastewater land application site in Gates County.

Prior to becoming involved with assisting rural NC local governments, Emily was employed by Agri-Waste Technologies where she worked with swine operations in eastern NC utilizing geotextile products to dewater lagoons, optimize nutrient management, and reduce greenhouse gas emissions. Emily holds a Bachelor of Science degree in Textile Manufacturing from North Carolina State University with a minor in Business Management.

PROJECT SCHEDULE

Contract Award:	**May 2, 2016**
Preliminary Engineering / Alternatives Analysis:	**June 3, 2016**
Design:	**June 2016 – August, 2016**
Permitting	**August, 2016- September 2016**
Bid:	**October, 2016**
Construction:	**November, 2016 – March, 2016**
Start-up:	**March, 2017**

RATE SCHEDULE

Hourly rates for services performed on or after the date of the Agreement effective: January 1, 2016

Sr. Principal Engineer	**$185.00/hour**
Principal Engineer	**$150.00/hour**
Senior Project Manager	**$150.00/hour**
Project Manager	**$125.00/hour**
Expert Witness	**$175.00/hour**
Lead Senior Designer	**$ 85.00/hour**
Senior Designer	**$ 80.00/hour**
Design Technician	**$ 75.00/hour**
Professional Land Surveyor	**$125.00/hour**
Surveyor - Robotics	**$120.00/hour**
Surveyor Technician	**$ 77.00/hour**
Senior Construction Observer	**$ 77.00/hour**
Secretary	**$ 50.00/hour**
Consultants	**Cost plus 15%**
Direct Costs	**Cost plus 15%**

APPENDIX A

Listed below is representative experience to the project proposed in Camden County, as performed by our consultant **Mr. Eric Lappala, PE, PH, CRSM** with Eagle Resources of Southport, NC:

Reclaimed Water and Non-Discharge Permitting Reclaimed Water High-rate Application System, Bald Head Island, NC
Developed a unique approach for expanding the disposal for reuse quality wastewater from 400,000 gallons per day (gpd) to 650,000 gpd that is conformant with the current North Carolina subchapter 2T non-discharge rules using hydrogeologic and water balance modeling. Completed the necessary hydrogeologic, soils, and water balance studies in support of the application for modification of the existing non-discharge permit. Client: Village of Bald Head Island and The Bald Head Island Club.

Hydrogeologic analysis and modeling to provide deign parameters and report in support of a non-discharge permit for a subdivision in Currituck County, NC.
Groundwater flow modeling to develop the design parameters and report in support of the non-discharge permit application for the discharge of treated wastewater using a high-rate infiltration basin to serve a development adjacent to Currituck Sound. Client: Confidential

Hydrogeologic analysis and modeling to provide design parameters and report in support of a non-discharge permit, condominium development in Atlantic Beach, NC.
Groundwater flow and transport modeling and analysis in support of a non-discharge permit for reclaimed water from a multi-story condominium development that required assessment of the combined effects of the wastewater irrigation system from an adjacent development, infiltration from storm water control basins, tidal effects and pumping from adjacent water supply wells. Client: Confidential

Hydrogeologic services in support of onsite high-rate infiltration basin and drain system for treated wastewater, Onslow County, NC.
Hydrogeologic site investigation, groundwater flow modeling, and water balance analyses to design a system of high-rate infiltration basins and drains to enhance basin infiltration in support of a large subdivision bordering the Atlantic Intra-Coastal Waterway west of Topsail Island, NC. Client: Wakefield Development

Hydrogeologic and water balance studies in support of non-discharge permit applications, two mixed use developments, Brunswick County, North Carolina.
Principal investigator for hydrogeologic site investigation, modeling, and water balance analyses to in support of design and non-discharge permitting of combined spray fields and infiltration basins for the disposal of reclaimed wastewater from two large mixed- use developments in Southport, NC. Client: Cape Fear Development LLC.

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April 6, 2016

Municipal Engineering Services Co., P.A.
68 Shipwash Drive
Garner, NC 27529
ATTN: Mr. Michael L. McAllister

Dear Mr. McAllister,

On behalf of the Camden County Board of Commissioners, thank you very much for responding to the county's Request for Qualifications (RFQ) for Engineering and Design Services for the Courthouse Area Wastewater Treatment Plant project.

On April 4, 2016 the RFQ Proposal Review Committee met to discuss and score each submitted proposal in accordance with Section C: Engineering Selection Procedures. Your submitted proposal scored 85.66 out of a possible 115 points. While your proposal was strong, the Review Committee will be recommending to the Camden County Board of Commissioners that this project be awarded to another engineering firm whose proposal scored 102.01 out of 115 possible points.

Again, we thank Municipal Engineering Services Co., P.A. for its interest in this project and for the time and effort expended in preparation of your Statement of Qualifications. We wish the firm much future success.

Kind regards,

Mike Renshaw

Mike Renshaw
Camden County Manager

Cc: David Credle, Camden County Public Works Director
Stephanie Humphries, Camden County Finance Officer

REQUEST FOR QUALIFICATIONS

CAMDEN COUNTY

Courthouse Area Wastewater Treatment Plant

CAMDEN COUNTY
new energy. new vision.

EASTERN CAROLINA ENGINEERING, PC
P. O Box 128
Camden, NC 27921
(252) 335-1888 Office
(252) 331-2390 Fax

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EASTERN CAROLINA ENGINEERING, PC
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March 31, 2016

Mr. Mike Renshaw, Count Manager
and Camden County Commissioners
P.O. Box
Camden, NC 27921

Subject: Request for Proposals – Letter of Interest
Elizabeth City – Pasquotank County Airport Authority
Due Date: March 31, 2016, 5:00 pm

Dear Mr. Renshaw and Board of Commissioners:

Eastern Carolina Engineering, PC (ECE) is pleased to submit our statement of qualifications to provide services as specified in the Request for Qualifications for the Engineering Design Services for the Courthouse Area Wastewater Treatment Plant solicitation.ort. Our response to the request contained herein includes project understanding and approach, firm contact information, expected staff to be utilized, and representation of the firm's capabilities and experience. We have provided three copies of our proposal as required.

With more than 25 years providing professional services, our firm has extensive experience providing civil engineering design, bidding services, and construction management/inspection for a large range of municipal, private, commercial, industrial, state, and federal projects. Below are some of the highlights detailed in the proposal demonstrating why Camden County should select Eastern Carolina Engineering as the firm of choice for this project.

- **Unique understanding of the County's challenges and needs for this project** – ECE has already worked with staff and completed a preliminary engineering report for this project. Therefore our staff is intimate with the project having goal setting and project costing in place. Our staff is poised and ready to hit the ground running.

- **Success with similar project** – Our firm has already designed with great success a similar plant in the neighboring county. Its plant operators have been more than happy to showcase this plant and have praised it as low maintenance and efficient thereby saving the county dollars. The underground tank system used allows for easy access to the tanks and requires little to no maintenance, especially when compared to traditional above ground tanks that require access ladders and catwalks. One Camden County staff member described the plant after touring as being "clean, neat, and efficient". And isn't that exactly what Camden County needs?

- **Not just design but constructability experience** – Our firm's practical working knowledge is reflected in the plans and specifications necessary to keep projects moving and budgets in line.The firm's principal Sean Robey, PE is a licensed general contractor that has practical working knowledge of municipal infrastructure. He has consulted and repaired many municipal infrastructure problems within the surrounding counties over the years. Design Engineer Briant Robey, certified Grade 3 Wastewater Treatment operator has worked several years as a shift operator and maintenance assistant at biological nutrient removal facilities (BNR).

- **Local presence** – ECE is located right in the heart of Camden County. Because most of our staff lives and works in Camden County, we have a direct interest in protecting the infrastructure and interests of the county. ECE will be present before, during and long after the project is completed. We have consulted county staff on many projects throughout the years…….it is our intention to be an extended part of the Camden County staff.

On behalf of our entire project team, thank you for giving us an opportunity to provide you with our proposal. We look forward to continuing to work and support the county that we reside. Please do not hesitate to contact me directly with any questions regarding this RFP response at 252-337-8918 or Sean Robey, PE at 252-337-8988.

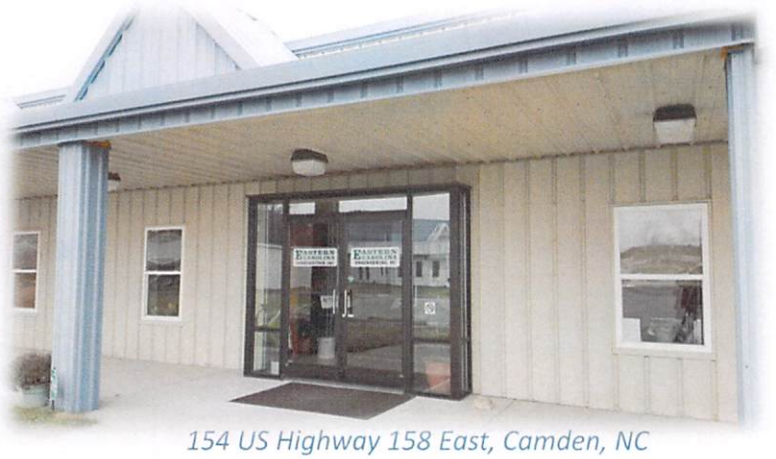
Respectfully submitted,
Eastern Carolina Engineering, PC

Kimberly D. Hamby

Kimberly D. Hamby, PE
Principal Engineer

KDH:dfr

Executive Summary



154 US Highway 158 East, Camden, NC

Company Profile

Located in the heart of Camden County, North Carolina Eastern Carolina Engineering consists of a dynamic team of engineers, surveyors, construction management, and inspection personnel driven by the common goal of providing our clients with quality engineering and construction management solutions. These solutions offered by our dedicated professional staff utilize our expertise in the areas of civil engineering, planning, mapping, hydrology, hydraulics, field surveying, construction staking, project management, and construction inspection services.

In business since 1987 Eastern Carolina Engineering brings over 25 years of dedicated service and continues to evolve to meet the ever changing needs of our clients in both the public and private sector. We believe that our personalized service and efficient resource management coupled with state-of the-art equipment and technology serve as great benefit to our clients. Our clients also benefit from the extensive planning, design and field experience gained on complex and multi-faceted projects geared toward creating economical, practical and buildable solutions.

7 employees on staff

2 PE's
1 PLS
2 EI's
1 Licensed NC General contractor

NCDOT Prequalified Firm

Small Professional Services Firm status with the NCDOT

Eastern Carolina Engineering has the management experience, technical capabilities, organization skills, manpower resources, along with in-house computer management and CADD design capabilities to provide a complete range of services for any project. The Eastern Carolina Engineering team brings years of experience and a history of timely project delivery and success.

Today, Eastern Carolina Engineering, PC is a strong firm, where talented people collaborate to provide workable solutions to challenging problems. As one of the largest firms in Northeastern North Carolina, Eastern Carolina Engineering, PC has a reputation for prompt, dependable and efficient service. We have the right size to undertake complex and demanding assignments, yet we are also a close group providing hands-on service—answering your calls, and assisting you, quickly and completely.

Financial Stability

Eastern Carolina Engineering PC has soundly demonstrated financial stability by maintaining over 25 years of continuous operation. The firm carries a minimum of $1,000,000 errors and omission insurance, and also has a strong financial standing with Branch Banking & Trust (BB&T), its principal banking institution. Eastern Carolina Engineering, PC is covered by a $2,000,000 general liability policy and meets the North Carolina State requirements for workers compensation insurance coverage. Both general liability and workers compensation policies have further coverage under a $1,000,000 additional liability umbrella.

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Firm Capabilities

Eastern Carolina Engineering, PC offers planning, civil engineering, surveying, and construction management services.

Planning-Project Development, Planning & Feasibility Studies

Each project and client has varying needs. At Eastern Carolina Engineering, PC we realize the importance of listening to our clients and developing a plan that is tailored to meet individual needs while staying within the parameters of the local, state, and federal requirements. The firm's professional engineers and surveyors work closely with the client from the project's planning phase, schematic design, construction process, and project delivery. We are part of your team from start to finish.

Planning Services

- Site analysis development
- Planning approvals (rezoning applications, special use permits, conditional use permits, technical review committees)
- Comprehensive master plans
- Public hearings
- Presentations
- Bond release coordination
- Conceptual plans
- Feasibility studies

Civil Engineering

The Eastern Carolina Engineering, PC civil engineering staff has been delivering quality engineering analysis, design and construction support to our public and private clients for more than 25 years. We work closely with our clients to assure the development of innovative, cost-effective solutions to even the most complex challenges. The results are services customized to meet individual project requirements regardless of size. We are proud that this process has led to long-lasting client relationships.

Civil Engineering Services

- Site development plans
- Erosion and sedimentation control
- Subdivision plans
- Grading plans
- Construction cost estimates
- Highway and street design
- Construction specifications
- Utility system design
- Pavement systems
- Stormwater management design
- Floodplain studies
- Hydraulic/hydrologic studies
- Drainage studies
- On-site sewage systems
- Sewage collection systems
- Pump stations
- Ground water lowering systems
- Innovative stormwater/wetland treatment systems

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Surveying

An accurate survey is the basis for every project. At Eastern Carolina Engineering, we approach every survey with the same high standards, no matter how large or small. Our experienced staff utilizes the latest in technology to provide the most precise and cost effective methods to provide a solid foundation of information from which a project can be built with confidence.

Surveying Services

- ALTA surveys
- Topographic mapping
- Control surveys
- GPS surveys
- Photo control surveys
- Right-of-way stakeouts
- Construction surveying
- Wetland boundary surveys
- Final certifications
- Legal descriptions & exhibits
- Well and septic stakeout
- Route surveys
- Construction stakeout
- Boundary surveys
- Hydrographic surveys
- Profiles
- Survey computations
- Test-boring location surveys
- Lot and building stakeout
- As-built surveys
- Subdivision platting
- Monitoring surveys

Construction Management

With many diverse disciplines, systems, teams, and plans all coming together simultaneously, managing a construction project can be a complex undertaking. Eastern Carolina Engineering, PC's comprehensive construction management consulting services have proven to be an invaluable asset to our clients on projects ranging from public infrastructure to private development.

Our team provides practical, cost-effective solutions to the real-world challenges encountered daily throughout construction. From initial concept to project closeout, we will help coordinate and facilitate the process while alleviating complex problems as needed.

Construction Management Services

- Project cost analysis
- Assistance with bidding process/contractor selection recommendations
- Constructability analysis
- Contract management
- Contractor submittal review
- Grant compliance – state and federal
- Plan, specification and permitting compliance
- Onsite inspection Services
- Project documentation and inspection reporting
- Final inspection and system startup
- As-built plans

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Why Choose Eastern Carolina Engineering, PC to be part of the Camden County Consulting Team?

What sets our team apart from the others is simple - our tested and proven commitment for delivering quality, on-time services to our clients.

- We offer Camden County experienced project management, team-focused staff, and partnering firms able to accommodate varying project needs and requirements. Our firm is willing to assist with any project need regardless of size.

- We offer Camden County a staff that has lived and worked in Northeastern North Carolina that has knowledge and experience working within the special conditions of this region.

- We offer Camden County hands-on personal service. Eastern Carolina Engineering, PC stands by its work and will be with you from start to finish on your projects and beyond. Consider us an extension of your staff for personal consulting and emergency needs situations. We offer our direct lines and cell phone numbers and are available to be on site upon notice unlike other consultants travelling outside of the area.

Most importantly.....the Eastern Carolina Engineering team is available now to serve Camden County.

FIRM CONTACT INFORMATION

Mailing Address	P.O. Box 128 Camden, North Carolina 27921
Website	www.easterncarolinaengineering.com

Principal Contacts

Sean C. Robey, PE
Principal Engineer
Direct Line: 252.337.8988
Mobile: 252.339.1745
Email: sean@easterncarolinainc.com

Kimberly D. Hamby, PE
Vice President-Engineering
Direct Line: 252.337.8918
Mobile: 252.339.4769
Email: kim@easterncarolinainc.com

Jason Mizelle, PLS
Vice President-Surveying
Direct Line: 252.337.8924
Mobile: 252.339.4810
Email: jason@easterncarolinainc.com

Federal Tax Identification Number	47-4318765
Company License Number	C-4162

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Project Understanding

Courthouse Area Wastewater Treatment Plant – Camden County

Eastern Carolina Engineering, PC understands that the purpose of the project is to provide engineering and construction design for the Courthouse Area Wastewater Treatment plant utilizing biological treatment processes and high-rate infiltration technology. Armed with an in-depth understanding of the existing conditions, project needs, and experience with biological treatment processes and construction design Eastern Carolina Engineering, PC is prepared to provide design, permitting, construction administration and inspection services for a 50,000 GPD biological treatment plant with high rate infiltration disposal. Plant design will provide for future expandability to 100,000 GPD. Included in the design are modifications and additions to the existing pressure sewer system to redirect wastewater from the Scotland Road area to the Courthouse pump station and from the Courthouse pump station to the new plant. All design will be engineered in accordance with the North Carolina Department of Environmental Quality (NCDEQ) standards and regulations of a plant of this size and process.

Understanding the Existing Conditions

Eastern Carolina Engineering, PC worked with Camden County to analyze the need for construction of a new wastewater treatment plant to service the Courthouse Township sewer district. While studying and evaluating the present conditions during preparation of the Preliminary Engineering Report we came to understand the critical need of the project. Presently Camden County is serviced by a sewer plant located in the South Mills Township. This plant – over 14 miles from the main sewer pump station in the Courthouse Township – is located too far from the Courthouse Township to efficiently treat sewage from the area.

Project Need

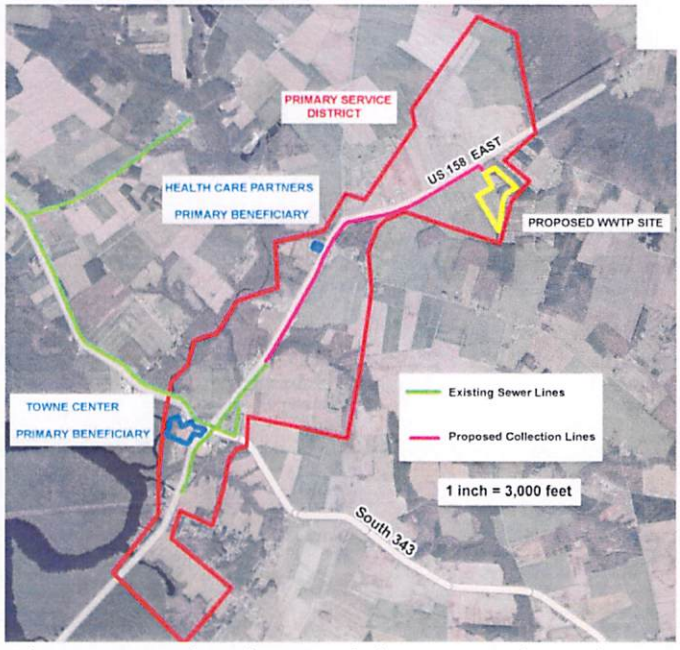
A. Problems with Treatment Plant

From the commencement of operation, the South Mills wastewater treatment plant has been plagued with problems arising from poor quality effluent. The poor quality of the wastewater is caused by the amount of time it takes the effluent to travel from the source to the treatment plant. Sewer generated in the Courthouse service district must travel from the source (home or business) into the on-site pump station. It is then pumped to the centralized pump station at the courthouse. From there it is pumped to the booster pump station at Burnt Mills, then on to the treatment plant. While it is not uncommon to pump wastewater in many municipal systems, it is uncommon to pump wastewater over 14 miles with little to no other sources of incoming waste. It is expected that the additional sewer generated by growth in the Courthouse Township will again off balance the quality of influent sewer at the South Mills wastewater treatment plant.

B. Commercial Growth within Courthouse Township

The Courthouse Township has seen growth of new businesses and additional sewer demand in the service district. In the past year, a new restaurant (Dockside Grill) and a Dollar General convenience store have opened for business in the Courthouse Township service area. A fast food restaurant (Hardees') has opened creating greater demand on the system. This year there are plans to develop and expand additional commercial sites within the Courthouse Township.

Detailed under the project experience section is the Maple Commerce Park Waste Water Treatment Plant designed by Eastern Carolina Engineering, PC and brought online in December 2012. Similar to the proposed Courthouse Township Waste Water Treatment Plant, the Maple Plant was permitted and phased for a higher gallon per day capacity for future expansion.



Based on our understanding of existing site constraints including setbacks from property lines and on-site wetlands, we will begin with layout of the site. A key to this will be coordination with Mr. Edwin Andrews, PG, who we understand has been hired by Camden County to perform the required hydrogeological study. We will work with him in the early stages of design to insure proper sizing and design of the high rate infiltration basin(s). Once the basin sizing and the topographical survey work is completed, the disposal site layout can be confirmed. Working around the appropriate basin layout, we will continue with placement of the facilities building and the required tanks for the treatment process. We plan to use reinforced concrete tanks, either cast in place or pre-cast, constructed below existing ground grade. This will provide ease of access to the tank hatches and will greatly reduce maintenance needs when compared to the use of above ground metal or concrete tanks.

A maintenance building will be designed to house all other components of the treatment system such as ultra-violet disinfection units, tanks and feed pumps for necessary chemical additives, aeration blowers, and controllers. The maintenance building design will also include an employee restroom and laboratory area for performing required testing. The building design will take into consideration additional equipment that will be installed in the future when the plant is expanded from 50,000 gpd to 100,000 gpd.

Design of the tanks and related systems will be in accordance with all NCDEQ design guidelines and will be coordinated with the developers of the Amphidrome Technology that is our preferred method of biological treatment.

Design of the sewer force main that will transmit wastewater from the Scotland Road area to the Courthouse Pump Station and from the Courthouse Pump Station to the plant will begin with the Bentley SewerGEMS model of the existing sewer system. The model will be used to determine appropriate sizes for all force mains. The conceptual layout of the force mains will be prepared over available aerial photographs. Once the route is determined, topographical survey work will be performed in areas needing precise detail such as adjacent to the railroad where a crossing permit will be required.

Once all of the components of the design have been substantially completed and approved by county staff, we will submit all required permit applications and meet with individual agencies as required to obtain permits in a timely manner.

Project Approach

The following describes Eastern Carolina Engineering, PC's approach to providing complete project design, permitting, bidding, construction administration and inspection services for Camden County's Courthouse Area Wastewater Treatment Plant Project. Project tasks will be performed using a collaborative project team approach involving invaluable input as well from Camden County staff. This project team approach will be accomplished through the following task items:

Pre-Design Meeting

A project pre-design meeting involving the Camden County staff and the Eastern Carolina Engineering, PC design team will be held to establish the communication and relationships to achieve project collaboration. The purpose of this initial meeting will be to gather and share information and ideas between both parties. These ideas and information gathered from this meeting will be incorporated into the project design.

Preliminary Research and Field Investigation (Initial Design Phase)

In addition to information gathered during the pre-design meeting, Eastern Carolina Engineering, PC will review and gather all available existing information and perform necessary site visits, surveying and field investigations. These investigations include gathering information from public works personnel and review of existing plans. Eastern Carolina Engineering, PC will also review with County staff the site constraints due to existing environmental conditions and required setbacks for the treatment facility. We will also coordinate with Mr. Edwin Andrews, III, PG to review his final hydrogeological report

An accurate topographical survey is the backbone of the field investigation upon which this project will be built. The survey prepared by a licensed North Carolina PLS will include location of any existing horizontal and vertical control monuments within the project limits. All design drawings will be tied to NC Grid allowing coordinate translation to Camden County's GIS system. The limits of the topographic survey will include all property within the site boundary up to the wetland limits and up to 100' off site as necessary to complete design. We will also perform topographical survey of any key locations for the sewer force main routing; however aerial photography and existing data will be used for much of the route. The topographical survey will locate all existing utilities, structures and drainage features within the project limits. Assistance from Public Works personnel will be required to locate any existing utilities we are unable to locate. If authorized by the Owner, we will have areas of uncertainty investigated by a subsurface utility scanner.

The results of the preliminary research and field investigation will be presented in an Engineer's report and progress drawings. The Engineer's report and progress drawings for the initial design phase will constitute a 30% submittal and will include the following deliverables:

- Topographical surveying/base map work progress mapping
- Conceptual Design of proposed sewer force main and wastewater plant site.
- List of easements or boundary surveys that may be necessary for construction
- Detailed list of permits that will be required and the schedule for each.
- Any proposed changes in scope of work

Project Permitting and Coordination

Eastern Carolina Engineering, PC maintains excellent working relationships with both State and local permitting agencies. We will coordinate efforts between Camden County, NCDOT, and regulatory agencies as required to ensure that applicable permits and encroachment agreements will be received in a timely manner. The project permitting process is completed in conjunction with the design process to keep the project on schedule.

The following is a list of the North Carolina and Federal permitting agencies that the design staff works with on a regular basis. Our experience with the processes and personnel at these agencies will prove invaluable to ensure current regulatory compliance for the wastewater treatment plant project.

- U.S. Army Corps of Engineers
- NC Wildlife Resources Commission
- U.S. Environmental Protection Agency (USEPA)
- NC DEQ – Division of Coastal Management
- NC DEQ – Division of Energy, Mineral and Land Resources
- NC DEQ – Division of Water Resources
- NCDOT – Division of Highways - Division One
- NCDOT – Contractual Services Division
- U.S. Fish and Wildlife

Project Presentation/Communication

Eastern Carolina Engineering, PC uses a project team approach to maintain open and frequent communication with Owners throughout the project. The team of Sean Robey, PE and Kimberly Hamby, PE, will facilitate coordination between Camden County and the project team on a regular basis. Scheduled meetings, telephone conversations, written correspondence including email, and other communications between the County and the project team will flow through the project manager, Kimberly Hamby, PE and be routed as appropriate to the relevant project team members. This ensures a clear flow of information and allows the entire team to be knowledgeable about the current status of the various engagements, while providing the County with a single point of contact. Written reports, correspondence and/or telephone calls will be placed with County staff to provide project updates including work completed, updated project schedule and projections, and to identify and address any issues/concerns prior to submittal.

To verify that all design standards have been followed, Eastern Carolina Engineering, PC will meet with the County at the 30%, 60% and 90% milestone design completion points. The purpose of these review meetings will be to verify that the plans and documents are consistent with the design intent.

We are well aware that public projects often necessitate meetings with community stakeholders. Eastern Carolina Engineering, PC staff is proficient at working in public environments and will work closely with Camden County to establish the goals and approach to the public involvement and information efforts as needed for the project.

Intermediate and Final Design Phases

Intermediate and final design plans will build upon the 30% initial plan phase design. The detailed design completion milestones shall include:

60% intermediate design completion milestone shall consist of the plan and profile/section views of all improvements, and applicable construction details. Draft technical specifications will be included with this submittal.

90% intermediate design completion milestone shall consist of the near final construction documents set including the front end documents (general and supplemental conditions) as coordinated with the funding sources, technical specifications, and construction drawings for all the proposed work to be completed. The 90% documents will be utilized for procuring permits from jurisdictional agencies and will be submitted to the County for review and approval. State permits to be obtained include a stormwater management permit and erosion and sedimentation control permit that will be reviewed and approved by the regional office of the Division of Energy, Mineral and Lands Resources, a sewer force main extension permit that will be obtained through the fast track permitting process through the regional office of the Division of Water Resources, and the High Rate Infiltration System plant permit that will be reviewed by the Raleigh office of the Division of Water Resources. NCDOT permits will include encroachment agreements for all sewer transmission lines and a driveway permit for the access road to the site. A permit will be required through Genesee & Wyoming, Inc, for the crossing of the transmission line under the Chesapeake & Albemarle Railroad. An Eastern Carolina Engineering, PC representative will attend any County meetings related to the project. Mr. Robey, principal engineer and licensed North Carolina utility contractor, will make a final review of the plans for constructability.

100% final design completion stage milestone shall consist of updating the 90% documents to include all constructability and design review comments as may be provided by Camden County and/or jurisdictional review agencies. This set of documents will be used as the set of "bidding documents" for the project.

These design phases will produce the following deliverables:

- Encroachment Agreement from NCDOT
- Engineering Report
- Final Plan Submittals to Camden County
- Jurisdictional Agency permits
- Bidding Documents
- Final Engineer's Cost Estimate

Project Bidding

Eastern Carolina Engineering, PC will manage a competitive bidding process including the preparation of bid packages for prospective bidders, respond to bidder inquiries concerning the technical aspects of the project, prepare any and all necessary addenda to the bid packages, attend bid opening, review bids for accuracy, investigate bid documents for eligibility and completeness, make recommendation to the Camden County regarding the acceptance of the lowest eligible bid, and other technical assistance as may be requested during the bidding process. Specific tasks include the following:

- Prepare Contract Documents and review with Camden County for compliance with procurement requirements. Assure compliance with any MBE/WBE requirements as defined by the Camden County's procurement procedures.
- Provide final cost estimate for the project.
- Advertise the project and circulate the plans to Contractors and plan review locations such as iSqFt and the NC Institute of Minority Economic Development Center. Advertisements will meet any MBE/WBE requirements.
- Conduct a Pre-Bid conference and prepare minutes of meeting as well as any addenda required to clarify any issues that arise during the bidding process.
- Conduct the Bid Opening.
- Review the bids and check licensing references and financial status of the Contractors as needed.
- Prepare bid tabulation and make a formal Recommendation of Award to Camden County.
- Following award of the project, prepare contract documents and ensure proper execution of the documents.

Construction Administration/Construction Observation Services

Once the project has been awarded, Eastern Carolina Engineering, PC will provide construction administration and construction observation services. These services are provided in detail as follows:

Project Kickoff - Organize a preconstruction conference with the Contractor, their Subcontractors, and Camden County's Public Works Manager to discuss the work sequencing involved, administrative matters, labor and funding compliance, safety and accident prevention, answer questions from the contractors, and address issues that need to be resolved prior to work commencement.

Progress Meetings - Schedule progress meetings as requested by Camden County to review project status and budget; facilitate decision making; and discuss issues that have the potential of adversely affecting the project budget, schedule, or finished product. The meeting agenda will be prepared in consultation with the public works department. The Public Works Manager, job superintendent, major subcontractors, and construction inspector will be contacted and coordinated for meeting attendance. Minutes from meetings will be recorded and distributed to meeting participants.

Coordination - Coordinate all administrative, observation, and testing activities of the construction contract.

Contractor Submittal Review - Evaluate contractor submittals for compliance to specification documents. Review and evaluate contractor requests for material substitutions and present to Owner for approval.

Progress Reporting - Prepare progress reports and submit to Camden County based upon the required number of construction observation meetings. The reports will address the progress of the work, the project schedule, information/decisions required to maintain the schedule and complete deliverables, problems encountered that may affect schedule, budget, work products, anticipated work for the following week and month, and if necessary will contain photographs documenting the progress of the work.

Contract Change Orders - Review, negotiation, and preparation of contractor requests for change order work involving changes in budget or extended contract time. Change order paperwork and documentation will be provided to the Owner for approval.

Contractor Progress Payment - Analyze Contractor's initial schedule of values to determine reasonable breakdown of line items. Reconcile and document items of work in compliance with the specifications and construction inspection documents and prepare monthly progress payments for review and approval by Owner.

Contractor Project Schedule - Monitor and analyze Contractor's schedule for compliance with the specifications and permit requirements and windows.

Project Budget - Monitor and analyze project expenditures, track earned value, forecast project costs as needed, and develop strategies to keep project within budget.

Contractor Proposals for change in work scope (if needed) - Evaluate Contractor's proposals and provide recommendations to Camden County.

Utility Coordination - Coordinate with the appropriate utility companies for work that affects its specific utility.

Shop Drawings - Coordinate, document, and make engineering recommendations regarding shop drawings and their compliance with the plans and specifications for the approval by the County's Public Works Manager.

Requests for Information (RFI's) - Coordinate, document, and make engineering recommendations regarding RFI's.

Materials Testing - Coordinate, conduct, interpret, and supervise all required soils and material tests in accordance with agency (NCDOT, etc.) standards.

Construction Surveying - Provide construction surveying and stakeout services if requested by Camden County.

Construction Inspection - Provide complete inspections of the construction and the Contractor's operations, and prepare inspection documentation with a frequency based upon the County's budget determination.

Test Data - Review and make recommendations on manufacturer's shop or mill tests (or reports from independent testing laboratories) relative to materials, equipment, performance ratings, and concrete data as necessary to ensure conformance with the project specifications.

Traffic Control - Review and make recommendations regarding all traffic control proposals, and inspect Contractor's traffic control to ensure compliance with specifications and NCDOT standards.

Permitting Compliance - Ensure that Contractor's operations are in conformance with regulatory agency permits.

Project Closeout, Final Inspection, and Startup - Preparation of final inspections to prepare a list of items to be completed or corrected. Once corrections have been made, the engineer will schedule a walk-through with Camden County's Public Works Manager and upon approval will release the job for final payment. Specifically for this project, the Engineer will schedule and coordinate start-up and training for the wastewater treatment plant.

Post Construction Services

Engineer Certifications - Engineering certification packages will be prepared and submitted to all required divisions of NC DEQ upon completion of construction and start up testing.

As-Built Plans - Provide Camden County with two (2) sets of record drawings with "As built" corrections. The record drawings will be prepared on full-size plans and included as part of the final contract records along with certification of completion and satisfaction of project requirements and recommendation of final acceptance by the County. The as-built plans will also be provided to NCDEQ – Division of Water Quality as part of the final certification for the plant and the sewer transmission lines.

Contract Records - Provide Camden County with the original set of tabbed construction documents, including all submittal documentation, correspondence, diaries, contract documents, labor compliance, etc. The closeout documents are to be in notebooks and storage boxes. Electronic copies of the closeout notebook will also be submitted in addition to hard copies.

Estimated Schedule

FOR PROJECT DESIGN AND CONSTRUCTION

Activity	Time Frame
Award of Contract	May 9, 2016 (Commissioner's meeting May 2)
Pre-design meeting	May 11
Preliminary Research (Initial Design) 30% design milestone	June 13
60% design milestone	July 18
90% design milestone/permit submittal	September 1
Permitting review time (depending upon permits required)	Approx. 90 days
Project out for bids	December 5
Public bid opening	January 6, 2017
Contractor award/ mobilization	February 13, 2017 - Notice to Proceed (Commissioner's meeting – February 6 for award)
Substantial Completion – 7 months from Notice to Proceed	August 11, 2017
Project Completion – 9 months from Notice to Proceed	October 13, 2017
Project Closeout	November 3, 2017

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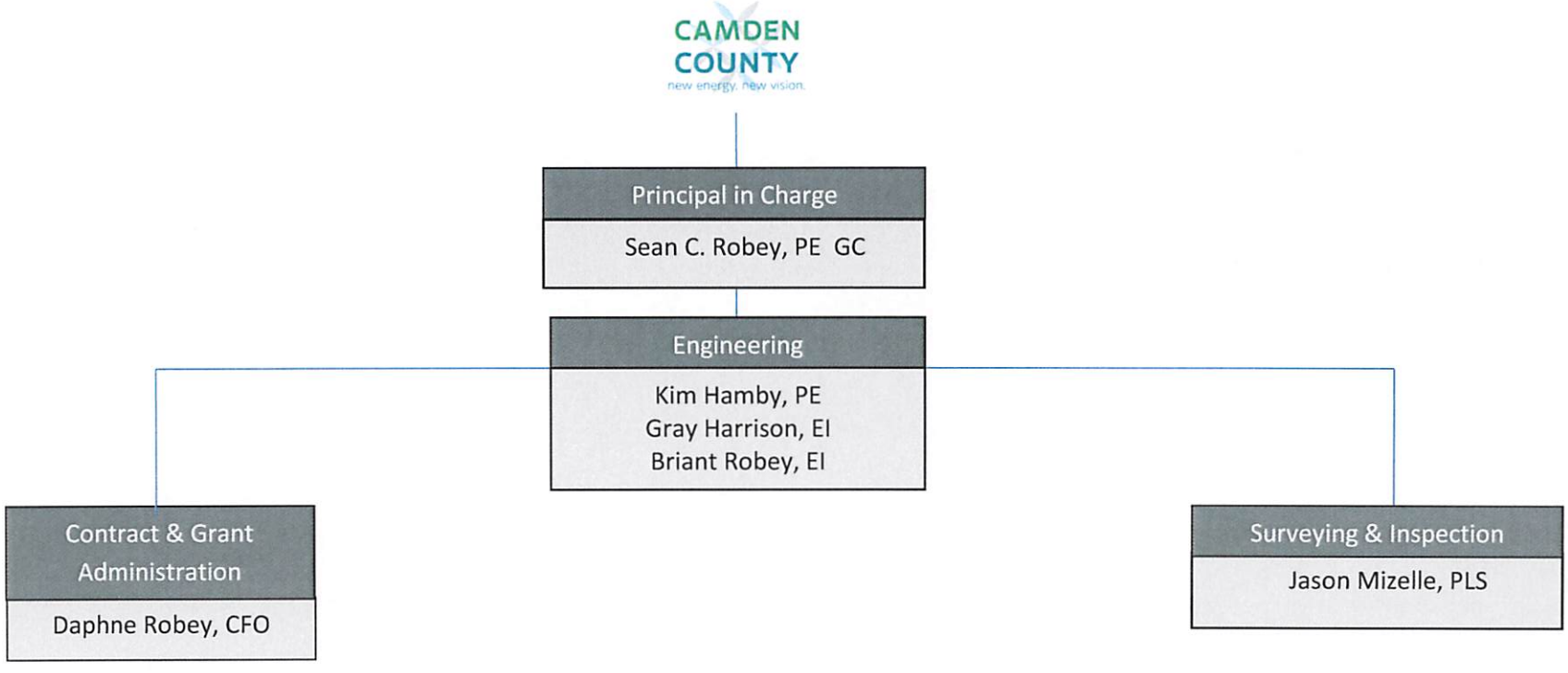
Proposed Project Design Team

Eastern Carolina Engineering, PC has over 25 years of civil engineering design and construction administration experience. Serving both municipal and private sector clients, our projects range from large multi-million dollar design and development projects to small commercial site plan design projects. The Eastern Carolina Engineering team is made up of engineers, surveyors, construction inspectors, and office support staff with the understanding of the critical deadlines and budget limitations. With our staffing capacity, we have the team necessary to work efficiently and produce a project on time and within budget. Successful working relationships within permitting, regulatory, and agencies also assists with meeting a critical schedule. The following staffing structure will be utilized for Camden County's Courthouse Area Wastewater Treatment Plant.



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Sean C. Robey, PE

Principal Engineer- Owner/Corporate Officer
North Carolina Utilities Contractor
Over 25 years' experience

Sean C. Robey has over 25 years of experience include engineering design and project management for a wide variety of civil engineering assignments. He has completed projects for several municipalities as well as corporate, private and commercial clients. Representative project types include streets and thoroughfares, storm drainage systems analysis and modeling, water distribution and sewerage collection systems, water/wastewater pumping and treatment facilities and commercial, industrial and residential developments. Mr. Robey is adept at coordination with governing agencies, preparation of construction plans, contract documents, technical specifications, cost estimation, construction administration and inspection.

Prior to establishing his own civil engineering firm, Mr. Robey worked as Assistant District Engineer for the North Carolina Department of Transportation in Elizabeth City. Mr. Robey also has a previous experience working as a staff engineer for private engineering firms in the Raleigh and Elizabeth City areas of North Carolina.

With his knowledge and hands-on experience of utilities infrastructure, Mr. Robey established, a utilities construction company, Eastern Carolina Construction, in 1996. His many years of civil design experience and combined field expertise provide practical application resulting in efficient and cost effective solutions to project development and project implementation.

EDUCATION:

BS, Civil Engineering
North Carolina State University, 1987
Raleigh, NC

PROFESSIONAL REGISTRATION:

Professional Engineer - NC 18550
Professional Engineer - VA 48952
North Carolina General Contractor's License-57634

MEMBERSHIPS:

National Society of Professional Engineers (NSPE)
Camden County Economic Development Board

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Kimberly D. Hamby, PE

Vice President-Engineering
Over 20 years' experience

Kimberly D. Hamby is a veteran employee of Eastern Carolina Engineering, PC (formerly Hyman & Robey) offering over 20 years of engineering planning and design experience. As a result she possesses extensive knowledge of the design and permitting processes for stormwater management, erosion control, water, sanitary sewer, and roadway improvements. Through work in these areas, she has developed an excellent working relationship with the local planning departments and permitting agencies at the state and local level. She works closely with the review engineers for the counties and municipalities to evaluate the required computer analyses she prepares for the projects. Drainage is analyzed using one of several drainage model programs including XPStorm, HEC-RAS, and Civil Storm. She analyzes and reports on water pressure available to sites using WaterCAD and models pressure sewer systems using SewerGEMS, both by Bentley Systems, Inc. As a former certified subsurface wastewater operator, she has designed many types of alternative septic systems for residential and commercial use including low-pressure pipe systems and pressure manifold systems. As project manager, she prepares budgets and proposals for projects, manages the timelines for project submittals, and works closely with the clients and permitting agencies. She assists in the coordination of survey work from initial topographical survey work to stake out and as-built data collection. She oversees the drafting of projects from initial sketches to final plats and as-builts and works closely with the contractors throughout the construction of projects answering questions and making site visits. Ms. Hamby also prepares cost estimates, and prepares bid documents and technical specification for engineering projects.

EDUCATION:

AAS Degree in Drafting & Design Technology
College of the Albemarle (May 1989)
Elizabeth City, NC

EMPLOYMENT:

Eastern Carolina Engineering, PC (formerly Hyman & Robey 2001-2015)
2001 – present

Robey Associates Engineering
1994 - 2001

The following highlights reflecting some of the attributes Ms. Hamby brings to the project team:

- Stormwater modeling
- Project budgeting/scheduling
- Respected working relationships with Permitting Agencies
- Water and Sewer Pressure System Modeling
- Engineering Cost Estimates
- Technical Bidding Documentation
- Internal Project Quality Control

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Jason A. Mizelle, PLS

Vice President-Surveying
Over 15 years of experience

Jason A. Mizelle is a Surveying Project Manager with over fifteen years of progressive experience in municipal and private development projects in eastern North Carolina. His primary focus is managing workflow of survey projects, and assisting in the coordination between engineering and surveying. Mr. Mizelle has been responsible for the development of site plans, utility drawings and survey maps for a wide variety of projects both on the coast and inland areas of North Carolina as well as the coordination of design surveys and construction staking. Project types worked on range from Boundary Retracement, Major Subdivisions, Commercial Site Plans, Feasibility Studies, Environmental Permitting and Construction Staking for various large commercial and government projects. Mr. Mizelle is a native of Martin County, North Carolina which has allowed him to establish productive and worthwhile relationships with both local municipalities and private sector clients.

EDUCATION:

Associates Degree - Architectural Technology
Pitt Community College (May 1996)

PROFESSIONAL REGISTRATION:

Professional Land Surveyor - NC (L-4917) – 2010

WORK HISTORY:

Eastern Carolina Engineering, PC (formerly Hyman & Robey 2012-2015)
February 2012 - present

Albemarle & Associates, Ltd
April 2000 – February 2012

The following highlights reflecting some of the attributes Mr. Mizelle brings to the project team:

- Coordination between Surveying & Engineering
- Review of scope and plans for Construction Stakeout
- Coordination of construction stakeout with Client / Contractor
- Estimate & Proposal Development

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Briant Robey, EI

Design Engineer

Briant Robey is a design engineer with a hands-on understanding of municipal wastewater treatment. With several years' experience as a shift operator and maintenance assistant at two different 15 to 20 MGD biological nutrient removal (BNR) facilities, Briant has an extensive, in-depth understanding of situations many wastewater plant operators must contend with long after design and construction have finished. As a design engineer progressing towards Professional Engineer certification, he seeks to apply this operational experience to practical considerations in his field of interest: improved treatment plant design. Briant provides not only suggestions to facilitate safe, efficient use by operators, but also ways to increase system robustness to prevent costly downtime for municipalities. He is certified as a Grade 3 (near maximum) Wastewater Treatment Operator in Arizona and is awaiting reciprocal certification in the state of North Carolina.

EDUCATION:

North Carolina State University, Raleigh, NC
Bachelor of Science (May 2011)
Major: Chemical Engineering

CERTIFICATION:

Wastewater Treatment Plant Operator – AZ, Grade 3, Cert. ID# OP032258
Water Treatment Plant Operator – AZ, Grade 1, Cert. ID# OP032258
OSHA 40-Hour HAZWOPER Certification
Confined Space Entry Certification

WORK HISTORY:

Eastern Carolina Engineering, PC
September 2015 – Present

City of Mesa, AZ
February 2012 – July 2015

The following highlights reflecting some of the attributes Mr. Robey brings to the project team:

- Internal quality control: reviews civil design and building plans for constructability
- Assists in wastewater treatment facility design
- Drafting of treatment facility site plans, profiles, and detail drawings

Gray Harrison, EI

Design Engineer

Gray Harrison is a design engineer that after completing six years of active duty as a decorated Aviation Search and Rescue Swimmer and Aerial Door Gunner, sought to gain his degree and work in the field of engineering. While seeking his degree, Gray has won scholastic awards and grants, kept a 4.0 GPA, gained admissions to the National Society of Leadership and Success, and worked on a publication for the American Society of Engineering Education as a co-author with his professor. Gray has also passed the Fundamentals of Engineering exam on his first attempt, and has obtained his Engineer-In-Training certification.

EDUCATION:
Elizabeth City State University, Elizabeth City, NC
Bachelor of Science (May 2015)
Major: Engineering Technology

WORK HISTORY:

Eastern Carolina Engineering, PC (formerly Hyman & Robey 2014-2015)
January 2014 – Present

LSI Marine Construction
August 2013 – December 2013

Currituck County Planning Department
May 2013 – August 2013

United States Navy
May 2007 – March 2013

The following highlights reflecting some of the attributes Mr. Harrison brings to the project team:

- Aids in the completion of civil-engineered site development designs
- Professionally certified within AutoCAD 2014

Daphne F. Robey, CFO

Grant Administration/Contracts Management
Over 20 + years' experience

Daphne F. Robey has 20+ years directing all aspects of business operations including business development, contract management, billing, accounting, human resources management and marketing for both Eastern Carolina Engineering, PC and Eastern Carolina Construction, a utilities construction corporation. Ms. Robey has provided contract management and grants administration for several multi-million dollar engineering design projects involving state and federally funded projects and associated compliance requirements.

EDUCATION:

Bachelor of Science in Business Administration; Minor in Accounting
Elizabeth City State University, 1990

North Carolina State University - School of Business 1985-89

WORK HISTORY:

Eastern Carolina Engineering, PC (formerly Hyman & Robey 2002-2015)
2002 - Present

Eastern Carolina Construction, Inc.
1997 – Present

Robey Associates Engineering
1997 – 2001

Elizabeth City-Pasquotank Schools, Elizabeth City, NC
1994-1997

River City Community Development Corporation, Elizabeth City, NC
1992-1994

The following highlights reflecting some of the attributes Ms. Robey brings to the project team:

- Project coordination of federal and state grant
- Financial reporting and record keeping
- Contract management and grants administration for public bidding projects
- Fiscal management for multi-million dollar companies

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Similar Project

MAPLE COMMERCE PARK WASTEWATER TREATMENT PLANT

Currituck, North Carolina

Eastern Carolina Engineering, PC served as the prime engineering firm in the design of the Maple Commerce Park Waste Water Treatment Plant. This plant model was toured by Camden County staff and selected for design implementation in Camden County. Below are some of the highlights of the project and services provided by our firm.

Project Description: The Maple Commerce Park Waste Water Treatment Plant (WWTP) was designed to service the Maple Commerce Park and adjacent county facilities including the existing Currituck Cooperative Extension Center, Currituck Family YMCA and Central Elementary School as well as the Currituck Community Park which also includes the COA Aviation and Technical Training Center. The plant utilizes a submerged attached growth bioreactor (Amphidrome) system that utilizes high rate infiltration basins for disposal of treated water.

Project Highlights:

Completed on time and within budget: Construction of the Maple Commerce Park WWTP and associated infrastructure was completed in the spring of 2012 but was brought on line in December 2012 as planned for the Currituck Family YMCA opening. Construction costs for the project came in under budget at approximately $1.9 million dollars.

Permitted and designed for growth: Permitted for for 80,000 GPD, the plant has the ability to expand to 160,000 GPD.

Cost efficiency: Currituck County staff has boasted that the Maple facility (40,000 GPD) has had an electrical usage under $500 per month.

Services Provided:

- Design of the waste water treatment plant and related infrastructure
- Permitting and Coordination with local and state agencies
- Bid Document Preparation and Award
- Construction Administration
- Construction Surveying
- Construction Management/Project Inspection

Contact Information:

William Nash, Public Utilities Superintendent - Currituck County
Mr. Eric T. Weatherly, PE, County Engineer – Currituck County
153 Courthouse Road, Suite 302
(252) 232-6062 (William Nash); (252) 232-6035 (Eric Weatherly)
Eric.weatherly@currituckcountync.gov
william.nash@currituckcountync.gov

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ADDITIONAL EXPERIENCE

Currituck and Elizabeth City, North Carolina

Additional experience with wastewater treatment plants includes assisting Currituck County with design and permitting of repairs to their Moyock Waste Water Treatment Plant in 2015. The firm works with our sister company, Eastern Carolina Construction, Inc. problem solving repair to the aging infrastructure of the municipalities that we serve. The two companies provided emergency assistance with repairs to the City of Elizabeth City's Rogerson Waste Water Treatment Plant by in 2010. Design support and construction efforts were necessary to bring the plant back online and in compliance.

Elizabeth City's Rogerson WWTP

Elizabeth City Water Treatment Plant
Raw Water Reservoir

Staff also designed the repairs to the existing 3 million gallon raw water reservoir and finishing filters at the Elizabeth City Water Plant. Engineered repairs to the raw water reservoir included: reconfiguration of yard piping to allow an unused chlorine contact basin to serve as a secondary raw water reservoir; draining and cleaning sediment and debris from both the 3 MG raw water reservoir and the chlorine contact basin; removal of a failed masonry baffle wall; and replacement of catwalks and access ladders. The scope of work for the finishing filters involved removal of the existing filter media, under drains and filter sweeps, and installation of a new under drain system with air scour backwash, and installation of replacement filter media.

The reservoir was brought online with total construction costs for both the projects coming in at a little over $1 million dollars. The project was completed on time and within project budget.

Services provided included civil engineering design of reservoir and filter renovations, permitting and coordination, bid document preparation and award, construction administration, construction surveying and project inspection.

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Meeting Schedules and Deadlines

Our Approach

Our ability to meet schedules and work within construction cost limitations is well documented. In each project, we involve all parties during the identification of project schedules, deadlines, and budgets to ensure their commitments to the project. We understand that the schedule and budget go hand-in-hand. If the schedule slips, the budget typically increases. Therefore, we analyze the schedule early in the project to make our best judgment of time involved from beginning to end. Eastern Carolina Engineering, PC understands that a project's schedule needs to be reasonable and meet the project's requirements without sacrificing quality or safety to meet deadlines.

The Eastern Carolina Engineering team follows a well-defined work plan and has stringent quality control guidelines to ensure that we meet our clients' needs as reflected in Figure 1.

Figure 1 Detailed Work Plan – *Eastern Carolina Engineering, PC in preparation and working with Camden County staff in developing the Preliminary Engineering Report (PER) has already completed steps 1 and 2 and is ready to begin step 3.*

STEP 1 Initiate "Project Undertanding"	Step 2 - Plan "Project Approach"	Step 3 - Execute "Project Work Plan"	Step 4 - Monitor & Control Quality Control	Step 5 - Closeout "Project Completion"
Collect project data	Collect requirements	Deploy Project Team	Mointor & control work	Confirm requirements met
Get to know the project	Define scope and activities	Execute Work Plan	Verify & control scope	Release Project Team
Visit project site	Develop schedule	Manage Work Activities	Control schedule	Close project
Establish objective	Determine budget	Communicate Effectively	Control costs	Issue final report
Analyze key elements	Determine project team		Perform QC	Document lessons learned
Identify stakeholders	Communicate the plan		Report performance	Archive project records

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Meeting Project Deadlines

Eastern Carolina Engineering prides itself on meeting project deadlines on time and under budget. We are fortunate to have a skilled and dedicated staff committed to delivering these projects and many of the other countless projects on time and within budget constraints. Below you will find a few examples of our many successes.

NCDOT U-4438 Utilities Relocation Project-Contracts 1-3, is a prime example of our firm's capabilities in meeting schedules and deadlines without delays, costs escalations, overruns and contractor claims. This multi-million dollar project coordinated between the City of Elizabeth City and the NCDOT required a great deal of scheduling and coordination through this process. There were many stakeholders, multiple contracts and multiple budgets, contractor coordination, and sub-consultant schedules to contend. Eastern Carolina Engineering staff met with the community as part of the early project planning and in an ongoing effort kept local downtown businesses and residents informed during the design and construction process to avoid disruptions in the project. Full time inspection services were provided and a satellite office was opened and maintained during the course of the project in order to remain close to project operations, host regular weekly meetings and maintain communication with all of the contractors and sub consultants. Traffic control plans and phased construction methods were put into place to maintain project flow and scheduling control. With the many elements of this project, Eastern Carolina Engineering was able to take this project from design to completed construction and closeout within reasonable project time frame and budget.

The Elizabeth City – Pasquotank County Airport Authority Terminal Renovation project went through several iterations in its early project beginnings as a bathroom renovation project. The project went through the bidding process twice before being awarded to AR Chesson Construction Company. Eastern Carolina Engineering worked closely with the airport manager and contractor to make tweaks and minor changes along the way to ensure a successful project ready for its grand opening in October 2011. The project was completed on time and within grant budgeting.

Eastern Carolina Engineering, PC has designed and provided construction administration, management and inspection for Currituck County's Maple Commerce Park Phase I and off site developments including the Currituck Family YMCA and Community Center, the supporting wastewater treatment plant as well as soccer fields and parks and recreation areas. Eastern Carolina Engineering, PC design team provided complete design, construction administration and inspection services in time to bring online the Currituck Wastewater Treatment Plant in time for the grand opening of the $13 million dollar Currituck Family YMCA and Community Center.

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Fee Schedule

Eastern Carolina Engineering, PC is pleased to offer our competitive rate structure. Our fees include direct labor, fringe benefits, indirect costs, expenses and profit.

Principal Engineer	$150.00/hour
Professional Engineer	$135.00/hour
Professional Land Surveyor	$125.00/hour
Design Engineer	$110.00/hour
Engineering Technician	$ 90.00/hour
CAD Technician	$ 80.00/hour
Survey Party	$125.00/hour
Construction Inspector	$ 80.00/hour
Administrative	$ 40.00/hour
8.5 x 11" copies	$ .10/page
Plan copies	$ .50/sq. ft.
Reimbursable Expenses	Cost + 10%

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Local Knowledge and Presence

Eastern Carolina Engineering, PC is Camden County's local engineering firm serving as the only firm located in the Camden County. Over half of our staff has lived in Camden County for most of our lives. As a local firm, living and working in the Camden, we have a stake in protecting the County's interest and infrastructure.

Eastern Carolina Engineering, PC has extensive experience in Camden County with various types of projects. Sean Robey, PE and Kimberly Hamby, PE of the firm prepared the civil design plans, including site design and roadway and utility extensions, for the new Camden Towne Center. We have worked closely with the County to evaluate potential sites for the wastewater plant and have prepared the Preliminary Engineering Report for the wastewater plant. We have intimate knowledge of the County's existing water and sewer systems. Having designed several sewer pump station additions to the county system, we have an up to date dynamic model of the pressure sewer system in our Bentley Systems SewerGEMS software. Our sister company, Eastern Carolina Construction, Inc., has installed and repaired water and sewer lines throughout the County.

Throughout our work in the region, we have developed an excellent working relationship with the permitting officials in the Washington Regional Office of NC Department of Environment and Natural Resources. Because the majority of our work in the past 25 years has been in the Northeast Region of the state, we remain current on the permitting requirements and regulations for the area.

References

Rich Olson
City Manager
City of Elizabeth City
P. O. Box 347
Elizabeth City, NC 27907 (252) 337-6864

Paul Fredette, PE Public Works Director City of Elizabeth City
P. O. Box 347
Elizabeth City, NC 27907 (252) 337-6864

Rodney Bunch
County Manager
Pasquotank County
P.O. Box 39
Elizabeth City, NC 27906 (252) 335-0865

Randy Keaton
Interim Executive Director/Secretary
Hampton
Roads Planning District Commission
The Regional Building
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Mr. Paul Vaughan
Chief Code Enforcement Officer
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Town of Murfreesboro
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Murfreesboro, NC 27855
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April 4, 2016

Eastern Carolina Engineering, P.C.
P.O. Box 128
Camden, NC 27921
ATTN: Mrs. Kimberly Hamby, Vice President- Engineering

Dear Mrs. Hamby,

On behalf of the Camden County Board of Commissioners, thank you very much for responding to the county's Request for Qualifications (RFQ) for Engineering and Design Services for the Courthouse Area Wastewater Treatment Plant project.

On April 4, 2016 the RFQ Proposal Review Committee met to discuss and score each submitted proposal in accordance with Section C: Engineering Selection Procedures. Your submitted proposal scored 102.01 out of a possible 115 points.

I am pleased to notify Eastern Carolina Engineering, P.C. that the firm will be recommended to the Camden County Board of Commissioners to perform Engineering and Design Services for the Courthouse Area Wastewater Treatment Plant as outlined in the RFQ documentation.

The County Manager's Office will notify you when a final award has been made by the Board of Commissioners.

Kind regards,

Mike Renshaw
Camden County Manager

Cc: David Credle, Camden County Public Works Director
Stephanie Humphries, Camden County Finance Officer

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Board of Commissioners
AGENDA ITEM SUMMARY SHEET

Item Number: 3.A
Meeting Date: April 25, 2016

Submitted By: Stephanie Humphries, Finance Director
Finance
Prepared by: Angela Wooten

Item Title **Point of Contact**

Attachments: Memo - Point of Contact (DOCX)

Summary:

Chairman McLain has recommended Stephanie Humphries to be the point of contact until the Interim County Manager has been selected.

Recommendation:

Motion to appoint Stephanie Humphries to be the point of contact until the Interim County Manager has been selected.

To: County Staff
From: Michael McLain, Chairman, Board of Commissioners
Date: 4/25/2016
Re: Interim Manager

Until the Board of Commissioners makes a final decision on the Interim County Manager, Stephanie Humphries, Finance Officer will be the point of contact for County business. Please direct all inquiries or requests to her as you would have with Mike Renshaw. The Commissioners appreciate your dedication to our County and your patience as we work to continue our history of excellence through our diligent consideration in hiring the next County Manager.