

**NEW HANOVER COUNTY
ENGINEERING DEPARTMENT
REQUEST FOR QUALIFICATIONS**

SHORELINE MAPPING AND EVALUATION

RFQ # 14-0092



WOODY WHITE, CHAIRMAN

BETH DAWSON, VICE-CHAIRMAN

JONATHAN BARFIELD, JR.

THOMAS WOLFE

CHRIS COUDRIET, COUNTY MANAGER

A. SOLICITATION OF QUALIFICATIONS

1. New Hanover County (NHC) invites North Carolina (NC) licensed and experienced engineers and accompanying NC licensed and experienced surveyors to submit qualifications for oceanfront shoreline and inlet shoulder mapping and evaluation. The mapping area includes shoreline/shoulder reaches along Wrightsville Beach, Masonboro Inlet, Masonboro Island, Carolina Beach Inlet, Freeman Park, Carolina Beach, Kure Beach and Fort Fisher State Park south to the NHC southern boundary. Please refer to the attached figures in Section L for a general depiction of the area to be evaluated.
2. Project description and applicable information are as follows.

The municipalities of Wrightsville Beach, Carolina Beach and Kure Beach are located within NHC and each has a federal Coastal Storm Damage Reduction (CSDR) project. Each municipality has executed a Project Cooperation Agreement (PCA) with the US Army Corps of Engineers (USACE) in which annual shoreline surveys and post-storm surveys are non-federal responsibilities. The successful company/team will establish transect lines congruent when possible with previous USACE planning, pre- and post-construction survey efforts on each beach and inlet shoulder. Topographic surveys (transects) will incorporate the primary/secondary dune features, beach berms and intertidal areas. The hydrographic surveys (transects) will incorporate the intertidal, subtidal, nearshore trough, the outer bar and bottoms waterward to closure. Accuracy and reproducibility are project mandates required to ensure seamless transitions and error free interpretations of topographic and hydrographic data points within each profile.

The survey data may be requested in multiple formats such as but not limited to ASCII (xyz), Excel (xyz), Shapefile (GIS), and ISRP (BMAP) allowing multiple program compatibility. Comprehensive metadata must be provided in a format compatible with New Hanover County's GIS database. All surveys must be approved and sealed by an authorized expert licensed by the North Carolina Board of Examiners for Engineers and Land Surveyors. Each profiles' data points must be reproducible and repeatable supporting third party evaluations such as but not limited to a Federal Emergency Management Agency (FEMA) assessment of an engineered beach's losses in the event of a federally declared storm event.

A robust quality assurance/quality control (QA/QC) process will be required to ensure a seamless and error free transition of topographic to hydrographic data for each profile including historical profile comparisons. Each company/team must describe specific QA/QC procedures such as but not limited to event specific site calibrations from National Geodetic Survey benchmarks and survey analyses incorporating site specific environmental/physical factors. Hydrographic echo-sounding data must be rectified for water conditions, tides, vessel motion and sounding speeds. All data (topographic and hydrographic) must follow and reference standard survey models and protocols.

Comprehensive surveys will be conducted in the May/June timeframe resulting in annual pre-storm season baselines. The survey data will be used to compute shoreline geomorphic and volumetric changes within the dune system, water ward across the beach berm, through the entire tidal range, within nearshore wading depths, the

nearshore trough, the outer bar and waterward to closure. Any NHC requested post-storm related surveys will be coordinated with the NHC project manager. Annual and post-storm requested reports will be coordinated through the NHC project manager inclusive of all necessary tables, graphs, photos, narratives and appendices needed to precisely demonstrate and describe shoreline volumes, movements and any ascertainable reach specific trends. Annual survey reports (all inclusive) will be provided preferably in late July and will be submitted in hard copy and on external media (CD, DVD and/or Flash Drives).

3. Preliminary project goals are as follows:
 - a. Meet each municipality's PCA for annual and post-storm survey requirements;
 - b. Develop a mapping and reporting program congruent and compatible with previous USACE surveys and with FEMA guidelines for maintaining engineered beaches;
 - c. Establish baseline oceanfront and inlet shoulder profile locations;
 - d. Evaluate and determine volumetric gains and losses by shoreline/shoulder reach;
 - e. Evaluate and determine reach specific short and long term erosion/accretion rates and locations (hot spots); determine shoreline nodal points and reach specific long shore drift effects;
 - f. Evaluate and determine healthy shoreline volumes per linear foot along Wrightsville, Carolina and Kure Beaches;
 - g. Generally evaluate, assess and determine the sustainability of current borrow sources and
 - h. Request, evaluate and assimilate previous USACE survey data applicable to each location referenced in Section A.1. The integration of previous USACE shoreline data and all proposed profiles must be merged into a usable and sustainable database.
4. NHC currently holds a NCDCM major permit for Mason Inlet's location management. Mason Inlet is maintained within an engineered corridor approximately 3,000 feet north of the Shell Island Resort (SIR). This inlet location maintenance project currently has a project survey mapping component. This RFQ's successful company/team will be asked to integrate the ongoing but separate surveying efforts standardizing the Wrightsville Beach survey data.
5. As an element of item A.3.h., the USACE has at least 11 years of pre- and post-construction shoreline survey data associated with the construction of the Ft. Fisher revetment. These surveys included approximately 3,000 and 17,000 linear feet of shoreline north and south of the revetment respectively. The successful company/team will request and evaluate USACE revetment survey data merging with the Pleasure Island profile data tracking and substantiating shoreline trends.

B. SUBMITTAL OF QUALIFICATIONS

1. All qualification packages will be mailed or hand delivered to New Hanover County Engineering Department, attention Jim Iannucci, County Engineer at 230 Government Center Drive, Suite 160, Wilmington NC 28403.

2. Qualification packages will be accepted at this address until **20 September 2013 by 3:00 pm**. Qualifications received after this time will not be accepted. NHC will not be responsible for mail delivery delays.
3. Qualifications will be submitted in a sealed envelope, bearing the proponent's company/team name, and plainly marked; "Qualifications for Shoreline Mapping and Evaluation."
4. Qualifications will be subject to acceptance by NHC as submitted within sixty (60) days from the receipt deadline.

C. COMPLIANCE WITH RFQ REQUIREMENTS

1. Unless the qualification clearly states otherwise, NHC will assume that all conditions and requirements listed in this RFQ will be met by the qualification package. The proponent shall clearly list every specific condition or requirement that will not be met by the qualification package and either declare an exception or describe how the proponent will meet the intent of the RFQ by other means.

D. QUALIFICATION EVALUATION AND AWARD

1. NHC will consider and evaluate each package by the following elements.
 - Experience and qualifications
 - Qualifications package quality
 - References submitted
 - Any other applicable factors
2. NHC reserves the right to negotiate and accept any forth coming proposal, to reject any or all forth coming proposals, and to offer to accept any forth coming proposal subject to the deletion of any item or group of items of work from a scope of work. However, in such a case, a scope of work and fees proposed by NHC are subject to the agreement of the proponent.
6. The proponent shall be prepared to attend an interview as part of NHC's evaluation of the packages submitted. NHC may request a presentation identifying company/team qualifications, key staff, relevant experience, and the suggested approach to undertaking this project. In addition, the proponent shall be prepared to provide a sample of documentation created for previous similar projects.
7. The proponent shall bear all costs associated with preparing for and attending such an interview and presentation. Failure to attend when requested will disqualify the company/team from being selected for this project.
8. NHC shall issue the successful company/team a Notice of Selection (NOS) accompanied by all attachments. With the NOS, the company/team's package and

documentation of all agreed variations from either the RFQ and/or the developed scope of work shall constitute the entire contract and is to be interpreted, construed and given effect in all respects according to the laws of North Carolina.

E. INSURANCE REQUIREMENTS

1. Workers Compensation and Employers Liability Insurance. Covering all of the Contractor's employees to be engaged in the work under this contract, providing the required statutory benefits under North Carolina Workers Compensation Law, and employers liability insurance providing limits in the amount of \$6,000,000/6,000,000/6,000,000 applicable to claims due to bodily injury by accident or disease.

2. Commercial General Liability. Including coverage for independent contractor operations, contractual liability assumed under the provisions of this contract, products/completed operations liability and broad form property damage liability insurance coverage. The policy shall provide liability limits in the amount of \$6,000,000 per occurrence combined single limits, applicable to claims due to bodily injury and/or property damage. New Hanover County shall be named as an additional insured under this policy.

3. Automobile Liability Insurance. Covering all owned, non-owned and hired vehicles, providing liability limits in the amount of \$6,000,000 per occurrence combined single limits applicable to claims due to bodily injury and/or property damage.

4. Professional Liability Insurance. The Contractor will be required to take out and maintain Professional Liability Insurance providing liability insurance limits in the amount of \$2,000,000. The Contractor will be required to maintain this coverage for a period of at least two (2) years beyond substantial completion of the contract.

F. INVOICES AND PAYMENT

1. Invoices shall be submitted to NHC at the address in Article B.1.
2. Invoices shall be submitted on a monthly basis by the 1st of the month, covering work carried out since the previous invoice. A brief description of work performed within the invoicing period will accompany the invoice.
3. NHC strives to pay all invoices in full within 30 days of the invoice date.

G. COMPLIANCE WITH LAWS

1. The equipment or services furnished or used on this project shall comply with all applicable federal, state and local laws; codes and regulations.
2. All work performed shall meet OSHA standards.

H. DEFAULT

1. In the event that any equipment or service provided by the successful company/team under a contract or purchase order should not conform to the requirements or specifications in the contract, NHC may reject such equipment or service. In such an event, NHC shall instruct the company/team to remove any rejected equipment without expense to NHC and to replace it with such equipment as conforms to contractual requirements and/or to provide additional or alternative services that conform to the contractual requirements.

I. QUALIFICATIONS AND EXPERIENCE

1. At a minimum, the company/team's qualifications and experience shall include the following attributes:
 - At least 10 years of coastal shoreline mapping and evaluation experience;
 - Knowledge of coastal shoreline and inlet dynamics and responses;
 - A thorough knowledge of required testing, procedures, protocols and methods;
 - Knowledge and experience with applicable safety codes, regulations and procedures and
 - Successful experience working with multi-disciplinary teams, excellent oral and written communications skills.

J. SUBMITTAL REQUIREMENTS

1. The qualification package shall include the following items:
 - A statement of qualifications and experience, as detailed in Article I;
 - Resumes of all key staff to be employed on the project;
 - Identification of the following staff to be assigned to this project;
 - A Project Manager having overall project management authority and a Field Supervisor having on-site supervisory authority;
 - An outline of your company/team's general approach to undertaking this project, demonstrating an understanding of the project goals and a capability to carry it out successfully;
 - References for projects similar in nature and scope completed within the last five (5) years;
 - For each referenced project, identify the project name including contact

- information and describe the scope of work undertaken by your company/team;
- Hourly charge-out rates for key staff to be assigned to the project that will apply to any extra work potentially authorized by NHC and
 - Technical information on the process and protocols proposed to be used.
2. The qualification package shall be signed by an authorized officer whose name and title shall be printed below the signature along with the date of signing.
 3. The proponent's company/team name shall be clearly visible on every page of the qualification package by stamp, label, printed header/footer or some other satisfactory means.

K. SCHEDULE

1. This annual contract would begin in 2014.
2. Annual draft finals would be due for NHC review no later than August 15 of each year and finals distributed no later than September 15 of the same year.
3. Potential contract extensions are at the full discretion of NHC.

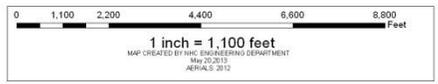
L. FIGURES

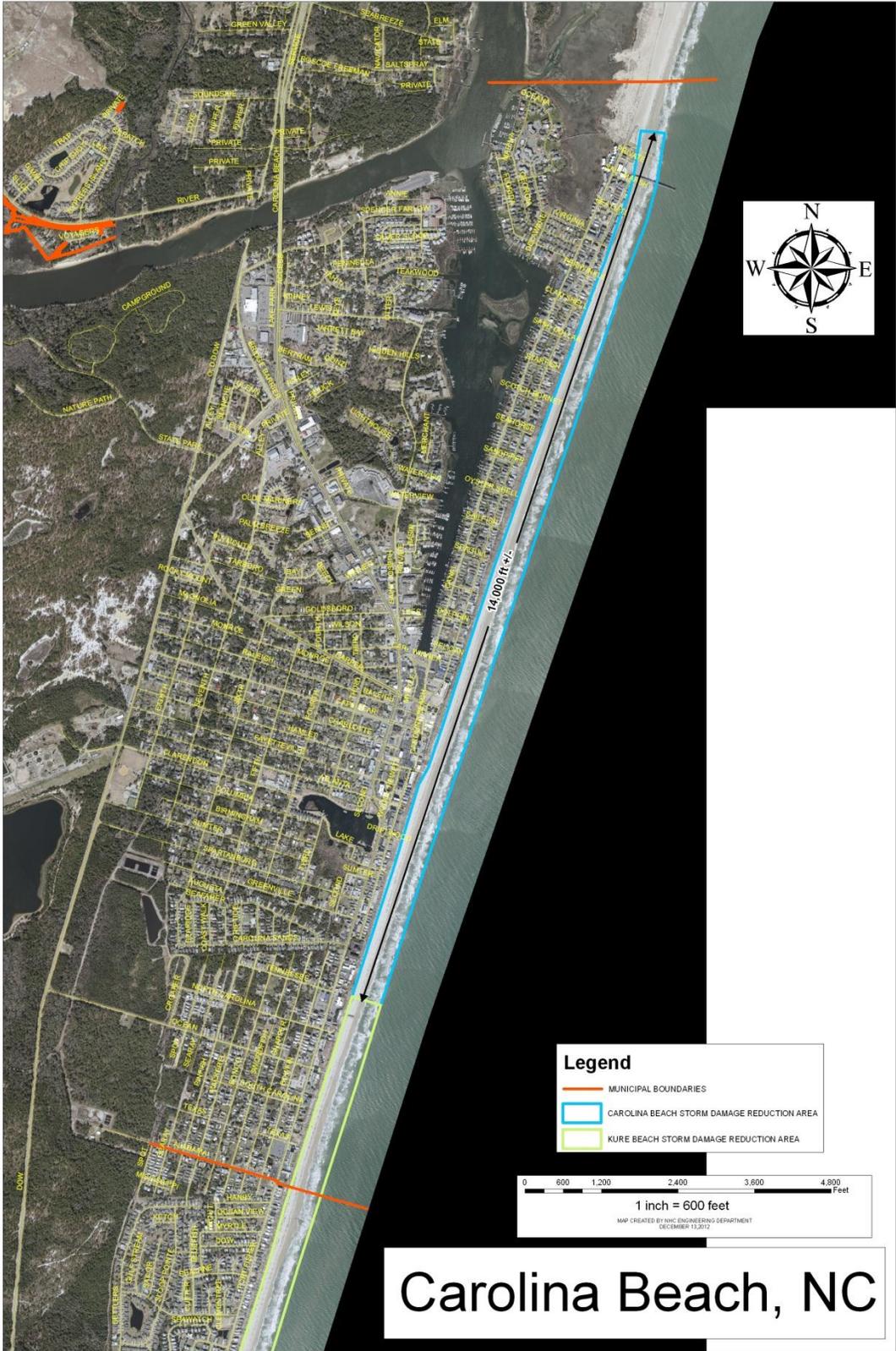
Wrightsville Beach
Masonboro Island
Carolina Beach
Kure Beach
Fort Fisher State Park





Masonboro Island





Legend

- MUNICIPAL BOUNDARIES
- CAROLINA BEACH STORM DAMAGE REDUCTION AREA
- KURE BEACH STORM DAMAGE REDUCTION AREA



Carolina Beach, NC



Legend

- MUNICIPAL BOUNDARIES
- CAROLINA BEACH STORM DAMAGE REDUCTION AREA
- KURE BEACH STORM DAMAGE REDUCTION AREA

0 600 1,200 2,400 3,600 4,800 Feet
 1 inch = 600 feet
MAP CREATED BY RMC ENGINEERING DEPARTMENT
 DECEMBER 12, 2012
 AERIALS 2012

Kure Beach, NC

