NEW HANOVER COUNTY

PUBLIC HEALTH & SOCIAL SERVICES FACILITY
SPECIAL INSPECTIONS

REQUEST FOR QUALIFICATIONS

RFQ 18-0417

Due date: June 28, 2018
Time: 5:00 pm
Receipt Location:
200 Division Drive
Wilmington, NC 28401
General Information

<table>
<thead>
<tr>
<th>Advertisement</th>
<th>Saturday, June 16, 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deadline for Questions</td>
<td>Thursday, June 21, 2018 by 5:00 PM</td>
</tr>
<tr>
<td>Response to questions on or before</td>
<td>Friday, June 22, 2018 by 5:00 PM</td>
</tr>
<tr>
<td>Deadline for Receipt of Statements of Qualifications</td>
<td>Thursday, June 28, 2018 by 5:00 PM</td>
</tr>
<tr>
<td>New Hanover County Attn: Kevin Caison 200 Division Drive Wilmington, NC 28401</td>
<td></td>
</tr>
<tr>
<td>Date for Award of Contract</td>
<td>TBD</td>
</tr>
</tbody>
</table>

The purpose of this Request for Qualifications is to solicit qualifications from qualified applicants to provide a Special Inspections and Material Testing services for the construction of the New Hanover County Public Health and Social Services facility that will be located at 1650 Greenfield Street in Wilmington North Carolina. Please review the complete project description located within this document.

New Hanover County will be constructing a 4 story 96,103 sf Type IIB building that will house the Department of Social Services (DSS) and the Health Department (HD). The new building will be constructed in the parking lot of the existing DSS facility. DSS will remain fully operational during construction. When the new building is completed, the old building will be demolished and will become the parking lot. Special Inspection and Material Testing services will be required throughout the project which is scheduled to begin in June 2018 and be complete by December 2019. The Special Inspections Material Testing required for the project are listed in detail in the plans and specifications produced by Sawyer, Sherwood, & Associate Architecture and their design team which includes Woods Engineering, CLH Design, & CBHF Engineering. Please see the attached plan sheets and specification pages listing the requirements applicable to this project. Complete plans and specifications will be made available to the firm selected to move into the fee proposal phase. **Please do not submit any pricing, estimates or quotes during this Qualification Request phase.**

New Hanover County requests qualifications from firms experienced in Special Inspections and Material Testing of similar facilities. Firms should submit their qualifications on standard form SF330, available for download in the forms library at [www.gsa.gov](http://www.gsa.gov). Completed form SF330 shall be submitted by **5:00pm Thursday June 28th, 2018**.
Contracting Office Address

New Hanover County
Attn: Kevin Caison
200 Division Drive
Wilmington, NC 28401
(910) 798-4338
kcaison@nhcgov.com

Please submit questions electronically via email to kcaison@nhcgov.com and in the subject line note “RFQ-18-0417 NHCPHSS Facility SI.” Deadline for questions is by **5:00pm Thursday June 21, 2018.** Any changes in the qualification’s request will be sent by email and furnished to all proposers. All questions received will be answered and posted as an addendum by **5:00pm Friday June 22, 2018.** Verbal information obtained otherwise will not be considered in the awarding of the proposal.

Selection Criteria

The firm must demonstrate its competence of each key consultant's qualifications with respect to the published evaluation factors for Special Inspections & Material Testing services. Evaluation factors (1) through (5) will be scored for each candidate with maximum values as indicated in each section.

Specific evaluation factors include:

1. Professional qualifications of firm and staff proposed for the Special Inspections & Material Testing services. *(30%)*

   - active professional registration in North Carolina
   - experience and roles of staff members, specifically on the projects listed in the SF330. Each project should clearly indicate the personnel involved and those personnel should be listed by each project.
   - Teams consisting of multiple firms are allowed. Demonstrations of past collaborations and team organizational charts are required.
   - Recent experience with New Hanover County system buildings
2. Capacity of the proposed team to accommodate the construction schedules for this facility: (25%)
   - Please list all current and pending projects for the proposed team members
   - Clearly show the office location of all team members that will be doing the actual work

3. Past performance on the same projects listed in SF330: (35%)
   - cost control techniques employed by the firm as demonstrated by the ability to establish an accurate project budget.
   - Describe how you handle the SI process from kickoff to completion

4. Specific internal quality control procedures proposed for projects of this nature. Firm will be evaluated on the acceptability of their internal quality control program used to ensure technical accuracy and discipline coordination of plans and specifications. (10%)
   - Do you have a written quality control plan for your firm?
   - Please explain how your plan works

Selection Process

Each firm will be evaluated based upon information provided in the Selection Criteria listed above. From such review the county will rank each firm and will negotiate a contract with the highest ranked firm. The County reserves the right to reject any and all statements of qualifications and also reserves the right to waive any irregularities in the statements of qualifications.

Final Selection: The County will negotiate a contract with the top rated firm as selected by the County. If a contract cannot be successfully negotiated with the top rated firm, the County will proceed to the second rated firm. The County reserves the right to reject any and all statements of qualifications.

Submittal Requirements

Firms responding to this Request for Qualifications are requested to submit four (4) copies of the Standard Form 330 and complete statement of qualifications and one (1) electronic copy on CD or USB.

The closing date for this announcement is Thursday June 28, 2018 at 5:00 PM EST.
The successful firm must have the capability of receiving and submitting all documents in an electronic format. Also, successful firm must have Internet access for browsing and receipt of electronic documents via Email.

This is not a request for proposal, and there is no solicitation document or package or plans and specifications to be issued as a result of this announcement.

Insurance Requirements

A. Commercial General Liability

1. Vendor shall maintain Commercial General Liability and if necessary, Commercial Umbrella Liability insurance with a total limit of not less than $5,000,000 each occurrence for bodily injury and property damage. If such CGL insurance contains a general aggregate limit, it shall apply separately to this project/location or the general aggregate shall be twice the required limit.

2. CGL insurance shall be written on Insurance Services Office (ISO) “occurrence” form CG 00 01 covering Commercial General Liability or its equivalent and shall cover the liability arising from premises, operations, independent contractors, products-completed operations, personal and advertising injury, and liability assumed under an insured contract (including the tort liability of another assumed in a business contract).

3. New Hanover County, its officers, officials, agents, and employees are to be covered as additional insureds under the CGL by endorsement CG 20 10 & CG 20 37 or an endorsement providing equivalent coverage as respects to liability arising out of activities performed by or on behalf of the vendor and under the commercial umbrella, if any. The coverage shall contain no special limitations on the scope of protection afforded to New Hanover County, its officers, officials, agents, and employees.

4. The vendor’s Commercial General Liability insurance shall be primary as New Hanover County, its officers, officials, agents, and employees. Any other insurance or self-insurance maintained by the New Hanover County, its officers, officials, and employees shall be excess of and not contribute with the vendor’s insurance.
B. Workers’ Compensation and Employer’s Liability

1. Vendor shall maintain Workers’ Compensation as required by the general statutes of the State of North Carolina and Employer’s Liability Insurance.
2. The Employer’s Liability, and if necessary, Commercial Umbrella Liability insurance shall not be less than $5,000,000 each accident for bodily injury by accident, $5,000,000 each employee for bodily injury by disease, and $5,000,000 policy limit.
3. The insurer shall agree to waive all rights of subrogation against the New Hanover County, its officers, officials, and employees for losses arising from work performed by the contractor for the New Hanover County.

C. Business Auto Liability

1. Vendor shall maintain Business Auto Liability and, if necessary, Commercial Umbrella Liability insurance with a limit of not less than $5,000,000 each accident.
2. Such insurance shall cover liability arising out of any auto, including owned, hired, and non-owned autos.
3. Business Auto coverage shall be written on ISO form CA 00 01, or a substitute form providing equivalent liability coverage. If necessary, the policy shall be endorsed to provide contractual liability coverage equivalent to that provided in ISO form CA 00 01.
4. The vendor’s Business Auto Liability insurance shall be primary as respects New Hanover County, its officers, officials, agents, and employees. Any other insurance or self-insurance maintained by the New Hanover County, its officers, officials, and employees shall be excess of and not contribute with the vendor’s insurance.

D. Professional Liability Insurance

1. Contractor shall maintain in force for the duration of this contract professional liability or errors and omissions liability insurance appropriate to the contractor’s profession. Coverage as required in this paragraph shall apply to liability for a professional error, act, or omission arising out of the scope of the contractor’s services as defined in this contract. Coverage shall be written subject to limits of not less than $1,000,000 per loss.
2. If coverage required in paragraph 1. above is written on a claims-made basis, the Contractor warrants that any retroactive date applicable to coverage under the policy precedes the effective date of this contract; and that continuous coverage
will be maintained or an extended discovery period will be exercised for a period of 2 years beginning from the time that work under the contract is complete.

**E-Verify**

Contractors and their subcontractors with 25 or more employees as defined in Article 2 of Chapter 64 of the NC General Statutes must comply with E-Verify requirements to contract with governmental units. E-Verify is a Federal program operated by the United States Department of Homeland Security and other federal agencies, or any successor or equivalent program used to verify the work authorization of newly hired employees pursuant to federal law. Please understand that Contractors, as defined above, must use E-Verify. Therefore, all contractors must be in compliance with the E-Verify requirements to enter into contracts with New Hanover County.

**Right to Reject**

The County reserves the right to reject any and all submittals received in response to this request.
SECTION 01 4533
SPECIAL INSPECTIONS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS
A. Drawings and general provisions of the Contract, including General and Supplementary General Conditions and other Division I Specification Sections, apply to this Section.

1.2 GENERAL REQUIREMENTS
A. Special Inspections and Structural Testing shall be in accordance with Chapter 17 of the North Carolina Building Code.
B. The program of Special Inspection and Structural Testing is a Quality Assurance program intended to ensure that the work is performed in accordance with the Contract Documents
C. This specification section is intended to inform the Contractor of the Owner’s quality assurance program and the extent of the Contractor’s responsibilities. This specification section is also intended to notify the Special Inspector, Testing Company/Testing Laboratory, and other Agents of the Special Inspector of their requirements and responsibilities.

1.3 SCHEDULE OF INSPECTIONS AND TESTS
A. Required inspections and tests are described in the attached Schedule of Special Inspections and in the individual Specification Sections for the items to be inspected or tested.

1.4 QUALIFICATIONS
A. The Special Inspector shall be a licensed Professional Engineer who is approved by the Structural Engineer of Record (SER) and Building Official.
B. The Testing Company/Testing Laboratory and individual technicians shall be approved by the Structural Engineer of Record (SER) and Building Official.
C. The Testing Company/Testing Laboratory shall retain a full-time licensed Professional Engineer on staff who shall certify all test reports. The Engineer shall be responsible for the training of the testing technicians and shall be in responsible charge of the field and laboratory testing operations.
   1. Special Inspections of soils and foundations may be performed by inspectors with an education and background in geotechnical engineering in lieu of a background in structural engineering.
   2. Technicians performing sampling and testing of concrete shall be ACI certified Concrete Field Testing Technicians-Grade 1.
   3. Inspectors performing inspections of concrete work such as inspections of concrete placement, batching, reinforcing placement, curing and protection, may be ACI certified Concrete Construction Inspectors or ICBO certified Reinforced Concrete Special Inspector in lieu of being a licensed P.E. or EIT.
   4. Inspectors performing inspections of prestressed concrete work may be ICBO/BOCA/SBCCI certified Prestressed Concrete Special Inspector.
   5. Inspectors performing inspections of masonry may be ICBO certified Structural Masonry Special Inspector.
6. Technicians performing visual inspection of welding shall be AWS Certified Welding Inspectors or ICBO certified Structural Steel and Welding Special Inspectors, technicians performing non-destructive testing such as ultrasonic testing, radiographic testing, magnetic particle testing, or dye-penetrant testing shall be certified as an ASNT-TC Level II or Level III technician.

7. Inspectors performing inspections of spray fireproofing may be ICBO certified Spray-Applied Fireproofing Special Inspector.

8. Technicians performing standard tests described by specific ASTM Standards shall have training in the performance of such tests and must be able to demonstrate either by oral or written examination competence for the test to be conducted. They shall be under the supervision of a licensed Professional Engineer and shall not be permitted to independently evaluate test results.

1.5 SUBMITTALS

A. The Special Inspector and Testing Company/Testing Laboratory shall submit to the SER and Building Official for review a copy of their qualifications which shall include the names and qualifications of each of the individual inspectors and technicians who will be performing inspections or tests.

B. The Special Inspector and Testing Company/Testing Laboratory shall disclose any past or present business relationship or potential conflict of interest with the Contractor or any of the Subcontractors whose work will be inspected or tested.

1.6 PAYMENT

A. The Owner shall engage and pay for the services of the Special Inspector, Agents of the Special Inspector or Testing Company/Testing Laboratory.

B. If any materials which require Special Inspections are fabricated in a plant that is not certified and is not located within 150 miles of the project, the Contractor shall be responsible for the travel expenses of the Special Inspector of Testing Company/Testing Laboratory.

C. The Contractor shall be responsible for the cost of any retesting or reinspection of work which fails to comply with the requirements of the Contract Documents.

1.7 CONTRACTOR RESPONSIBILITIES

A. The Contractor shall cooperate with the Special Inspector and his agents so that the Special Inspections and testing may be performed without hindrance.

B. The Contractor shall review the Statement of Special Inspections and shall be responsible for coordinating and scheduling inspections and tests. The Contractor shall notify the Structural Engineer of Record, Special Inspector or Testing Company/Testing Laboratory at least 48 hours in advance of a required inspection or test. Uninspected work that required inspection may be rejected solely on that basis.

C. The Contractor shall complete the attached Contractor Statement of Responsibility and submit to owner with the signed contracts.

D. The Contractor shall provide the form for the Final Report of Special Inspections to the Special Inspector for completion at the completion of the project.

E. The Statement of Special Inspections will be completed by the Structural Engineer of Record and the Owner and provided to the Contractor after the contracts are signed and
returned to the Owner. The Contractor shall submit the completed Statement of Special Inspections to the Building Official for acceptance at the time the building permit is applied for.

F. The Contractor shall provide incidental labor and facilities to provide access to the work to be inspected or tested, to obtain and handle samples at the site or at source of products to be tested, to facilitate tests and inspections, storage and curing of test samples.

G. The Contractor shall keep at the project site the latest set of construction drawings, field sketches, approved shop drawings, and specifications for use by the inspectors and testing technicians.

H. The Special Inspection program shall in no way relieve the Contractor of his obligation to perform work in accordance with the requirements of the Contract Documents or from implementing an effective Quality Control program. All work that is to be subjected to Special Inspections shall first be reviewed by the Contractor’s quality control personnel.

I. The Contractor shall be solely responsible for construction site safety.

1.8 LIMITS ON AUTHORITY

A. The Special Inspector or Testing Company/Testing Laboratory may not release, revoke, alter, or enlarge on the requirements of the Contract Documents.

B. The Special Inspector or Testing Company/Testing Laboratory will not have control over the Contractor’s means or methods of construction.

C. The Special Inspector or Testing Company/Testing Laboratory shall not be responsible for construction site safety.

D. The Special Inspector or Testing Company/Testing Laboratory has no authority to stop the work.

1.9 STATEMENT OF SPECIAL INSPECTIONS

A. The Statement of Special Inspections will be prepared by the Structural Engineer of Record.

B. The attached Statement of Special Inspections shall be used.

C. The Statement of Special Inspections shall be provided to the Contractor after the contracts are signed and returned to the Owner and shall be submitted with the application of Building Permit.

1.10 RECORDS AND REPORTS

A. Detailed daily reports shall be prepared of each inspection or test and submitted to the Special Inspector. Reports shall include:
   1. date of test or inspection
   2. name of inspector or technician
   3. location of specific areas tested or inspected
   4. description of test or inspection and results
   5. applicable ASTM standard
   6. weather conditions
   7. Engineer’s seal and signature
B. The Special Inspector shall submit interim reports to the Building Official at the end of each month which include all inspections and test reports received last week. Copies shall be sent to the SER, Architect and Contractor.

C. Any discrepancies from the Contract Documents found during a Special Inspection shall be immediately reported to the Contractor. If the discrepancies are not corrected, the Special Inspector shall notify the SER and Building Official. Reports shall document all discrepancies identified and the correction action taken.

D. The Testing Company/Testing Laboratory shall immediately notify the Special Inspector and the SER by telephone, fax or electronic mail any test results which fail to comply with the requirements of the Contract Documents.

E. Reports shall be submitted to the Special Inspector within 7 days of the inspection or test. Legible hand written reports may be submitted if final typed copies are not readily available. Formal reports shall follow.

F. At the completion of the work requiring Special Inspections, each inspection agency and Testing Company/Testing Laboratory shall provide a statement to the Special Inspector that all work was completed in substantial conformance with the Contract Documents and that all appropriate inspections and tests were performed.

1.11 FINAL REPORT OF SPECIAL INSPECTIONS

A. The Final Report of Special Inspections shall be completed by the Special Inspector and submitted to the SER and Building Official prior to the issuance of a Certificate of Use and Occupancy.

B. The attached Final Report of Special Inspections shall be used.

C. The Final Report of Special Inspections will certify that all required inspections have been performed and will itemize any discrepancies that were not corrected or resolved.

PART 2 - PRODUCTS (NOT APPLICABLE)

PART 3 - EXECUTION (NOT APPLICABLE)

3.1 Attached are the following forms:

A. Statement of Special Inspections
B. Schedule of Special Inspection Services
C. Quality Assurance Plan
D. Qualifications of Inspectors and Testing Technicians
E. Schedule of Special Inspection Services
F. Final Report of Special Inspections
G. Final Report of Special Inspections (Agent’s Final Report)
H. Contractor’s Statement of Responsibility
I. Fabricator’s Certificate of Compliance

END OF SECTION
SECTION 33 40 00
STORM DRAINAGE UTILITIES
PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including the General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes site drainage systems outside the building. Systems include the following:
   1. Storm drainage.
   2. Foundation drainage connections outside of building.
   3. Roof drainage connections outside of building.

B. Related Sections: The following Sections contain requirements that relate to this Section.
   1. Division 31 Section “Earth Moving.”
   2. Division 31 Section “Erosion Controls.”
   3. Division 03 Section “Cast-In-Place Concrete.”
   4. Division 15 Sections for storm drainage inside the building.

1.3 DEFINITIONS

A. Drainage Piping: System of pipe, fittings, and appurtenances for gravity flow of storm drainage.

1.4 SUBMITTALS

A. General: Submit each item in this Article according to the Conditions of the Contract and Division 01 Specification Sections.

B. As-Built Survey / Record drawings at Project closeout of installed drainage system piping and basins and all stormwater management devices (ponds, wetlands, bio-retention areas). As-built survey shall be signed and seal by a NC Professional Land Surveyor and shall include the following:
   1. All basin locations with no less than two primary reference dimensions from permanent above grade features.
   2. As-built rims and inverts noted.
   3. Pipe materials and sizes, plus slopes and distances between structures.
   4. As-built dimensions for installed riprap dissipater pads.
   5. Topography of embankments and interiors of drained stormwater management ponds, wetlands and bio-retention cells. Topography shall include all survey point elevations.
   6. Detailed as-built dimensions and elevations of stormwater management device outlet structures, wiers, orifices, and outlet pipes.
   7. Stormwater treatment devices and cistern locations and elevations.

1.5 QUALITY ASSURANCE

A. Environmental Agency Compliance: Comply with regulations pertaining to storm drainage systems.

B. Utility Compliance: Comply with regulations pertaining to storm drainage systems.
C. Product Options: Drawings indicate sizes, profiles, connections, and dimensional requirements of system components and are based on specific manufacturer types indicated. Other manufacturers’ products with equal performance characteristics may be considered. Refer to Division 01 Section “Products.”

1.6 DELIVERY, STORAGE, AND HANDLING

A. Do not store plastic structures in direct sunlight.

B. Do not store plastic pipe or fittings in direct sunlight.

C. Protect pipe, pipe fittings, and seals from dirt and damage.

1.7 PROJECT CONDITIONS

A. Site Information: Perform site survey, research public utility records, and verify existing utility locations.

B. Locate existing structures and piping to be closed and abandoned.

C. Existing Utilities: Do not interrupt existing utilities serving facilities occupied by the Owner or others except when permitted under the following conditions and then only after arranging to provide acceptable temporary utility services.
   1. Notify Architect not less than 48 hours in advance of proposed utility interruptions.
   2. Do not proceed with utility interruptions without receiving Architect's written permission.

1.8 SEQUENCING AND SCHEDULING

A. Coordinate storm drainage system connections to utility company's storm sewer.

B. Coordinate storm drainage system connections to existing on-site storm sewer.

C. Coordinate with interior building drainage systems.

D. Coordinate with other utility work.

PART 2 - PRODUCTS

2.1 PIPES AND FITTINGS

A. General: Refer to plans for specific pipe material applications.

   1. Lining: AWWA C104, cement mortar, coal tar epoxy lined.
   2. Gaskets, Glands, and Bolts and Nuts: AWWA C111.

C. Polyvinyl Chloride (PVC) Sewer Pipe and Fittings: ASTM D-1785, SCH 40 PVC for solvent-cemented or gasketed joints.
   1. Primer: ASTM F 656.
D. Reinforced-Concrete Sewer Pipe and Flared End Sections: ASTM C 76, Class III.
   2. Watertight Joints: O-ring rubber gasket meeting ASTM C-443 with external sealer wrap that is at least 12 inches wide and covers the full circumference of the joint.
      a. External wrap shall be ConWrap CS-212 from Concrete Sealants, Inc., EZ-Wrap form Press-Seal Gasket Corp., Seal Wrap from Mar-Mac Manufacturing or approved equal. Cover external joint sealer with a 3 foot strip of filter fabric meeting NCDOT Type 4 Engineering Fabrics.
      b. Watertight joints shall be provided at outlet pipes that penetrate pond embankments and other locations specified on the drawings.

E. High Density Polyethylene (HDPE) Pipe and Fittings: AASHTO M252, M294, MP6, or MP7. Smooth interior and corrugated exterior. All sizes shall conform to the AASHTO classification Type S or D. N-12 or N-12HC by ADS or approved equal.
   2. Watertight Joints: Watertight per ASTM D3212, AASHTO M294, MP6 or MP7, bell and spigot, rubber gasket, ASTM F477.
   3. Fittings: AASHTO M252, M294, MP6 or MP7, welded on the interior and exterior at all junctions. Only fittings supplied or recommended by the pipe manufacturer shall be used.

F. Reinforced-Concrete Box Culverts: AASHTO M259. AASHTO M273 (When less than 2-ft of cover)
   2. External Joint Sealant: Seal external joint with sealer wrap that is at least 12 inches wide and covers the joint on both sides and top of box section. ConWrap CS-212 from Concrete Sealants, Inc., EZ-Wrap form Press-Seal Gasket Corp., Seal Wrap from Mar-Mac Manufacturing or approved equal. Cover external joint sealer with a 3 foot strip of filter fabric meeting NCDOT Type 4 Engineering Fabrics.

2.2 STORM SUB-DRAIN AND FOUNDATION DRAIN PIPING

A. Storm Sub-Drain Pipe and Fittings: SCH 40 PVC or dual-wall, smooth interior HDPE as specified above, with slotted perforations. Minimum 4-inch diameter unless otherwise indicated on the drawings. Non perforated pipe shall be used outside of area to be drained to connect sub-drains to drainage inlets.


2.3 SPECIAL PIPE COUPLINGS AND FITTINGS

A. Connection from roof downspout to underground storm pipe.
   1. Cast-Iron boot fitting sized to fit over downspout and underground piping. Appropriately sized Neenah R-4926-29 Series Downspout Shoe or approved equal.
   2. Vertical stainless steel downspout adapter with sch. 40 PVC pipe outlet sized to fit over downspout and underground piping. Adapter shall have a self-cleaning debris trap consisting of a hinged cover and removable debris screen. Powder-coat color to be selected by Architect from manufacturer’s full range of colors. As manufactured by Piedmont Pipe Construction.
2.4 DRAINAGE INLETS

A. Catch Basins and Drop Inlets: Brick and mortar, of depth, shape, and dimensions indicated. Precast concrete basins may be used in lieu of brick upon approval by the Architect. All structures shall be designed to withstand AASHTO H-20 loads.

1. Base, Channel, and Bench: Concrete.
2. Wall: ASTM C 32, Grade MS, clay brick masonry units.
   a. Option: ASTM C 55, Grade S-II, solid concrete brick masonry units may be used instead of clay brick.

B. Frames and Grates: ASTM A48, Class 35B, cast iron, H-20 loading. Include flat grate with small square or short-slotted drainage openings as indicated on the drawings. Provide grate with openings compliant with ADA standards when located within sidewalk or other pedestrian walking areas or where specifically indicated on drawings.

C. Floor Drains: 12-inch diameter top drain, Dura-Coated cast iron body with 6-inch bottom outlet, seepage pan, adjustable extension frame and medium duty slotted grate. Top shall be polished nickel bronze and secured with slotted screws.

D. Area Drains or Planter Drains: 15-inch square top drain designed to be attached with a watertight connection to vertical HDPE or PVC pipe, ductile iron slotted surface grate, watertight pipe adapters. Grates shall be pedestrian-type where set in pavement or sidewalk. Grates shall be dome-type where set in mulched areas.

2.5 MANHOLES

A. Precast Concrete Storm Drainage Manholes: ASTM C-478 precast reinforced concrete, eccentric cone. All structures shall be designed to withstand AASHTO H-20 loads.

1. Base, Channel, and Bench: Concrete.
3. Size: As required to accommodate proposed pipes indicated on the drawings, 4-ft diameter minimum.

B. Frames and Covers: ASTM A48, Class 35B, heavy-duty cast iron. Include flat, round grate with 1-1/2” wide slotted drainage openings with a minimum total open area of 150-sq.in.

2.6 CONCRETE

A. General: Cast-in-place concrete according to ACI 318, ACI 350R, and the following:

1. Cement: ASTM C 150, Type I, 3,000-psi.
B. Structures: Portland-cement design mix, 4000 psi minimum, with 0.45 maximum water-cement ratio.
   2. Reinforcement Bars: ASTM A 615, Grade 60, deformed steel.

2.7 FOUNDATION DRAIN PIPING

A. Foundation and Under Slab Drain Pipe and Fittings: ASTM D-1785, SCH 40 PVC with slotted perforations located in bottom half of pipe. Minimum 4-inch diameter unless otherwise indicated on the drawings.
   1. Filter Fabric: Non-woven geotextile drainage fabric per Division 31, Section “Earth Moving.”

2.8 CLEANOUTS

A. Description: ASME A112.36.2M, round, cast-iron housing with clamping device and round, secured, scoriated, cast-iron cover. Include cast-iron ferrule with inside calk or spigot connection and countersunk, tapered-thread, brass closure plug. Use units with top-loading classifications according to the following applications:
   1. Light Duty: In earth or grass, foot-traffic areas.
   2. Medium Duty: In paved, foot-traffic areas.
   3. Heavy Duty: In vehicle-traffic service areas.
   4. Extra Heavy Duty: In roads.

2.9 TRENCH DRAINS

A. Description, General: Modular system of precast, polymer-concrete channel sections, grates, and appurtenances; designed so grates fit into channel recesses without rocking or rattling. Include number of units required to form total lengths indicated.

B. Sloped-Invert, Polymer-Concrete Systems: Include the following components:
   1. Channel Sections: Interlocking-joint, precast, modular units with end caps. Include 4-inch minimum inside width and deep, rounded bottom, with built-in invert slope of 0.6 percent minimum and with outlets in number, sizes, and locations indicated. Include extension sections necessary for required depth.
   2. Grates with manufacturer's designation "medium duty, heel proof," with slots or perforations that fit recesses in channels.
   3. Locking Mechanism: Manufacturer's standard device for securing grates to channel sections.

2.10 SUBSURFACE STORMWATER TREATMENT DEVICES

A. Basis of Design Product: R-Tank by ACF Environmental.
   1. Units shall be wrapped in 8 oz. nonwoven geotextile (or equal). Load rating: 33.4 psi (module only). Compact per manufacturer specifications. A bearing capacity of 2,000 psf must be achieved prior to installing system.
   2. Total cover – 20" minimum and 84" maximum. First 12” must be free draining backfill (refer to specifications by manufacturer): Stone <1.5” or soil (USCS Class GW, GP, SW or SP). Additional fill may be structural fill (refer to specifications by R-Tank): Stone or soil (USCS Class SM, SP, SW, GM, GP or GW) with maximum clay plasticity index of 4. A minimum 12” cover must be maintained between backfill equipment and the top of the R-Tank system at all times. Total height of top backfill should
not exceed 7’. Contact product manufacturer if more than 7’ or less than 20” of top backfill is required (from top of tank to top of pavement).

3. Base – 3” minimum bedding material (refer to specifications by R-Tanks) may be stone (<1.5”) or soil (USCS Class GW, GP, SW or SP). Must be free of lumps and debris and extend 2’ beyond system. Compact as required by manufacturer. Native soils may be used if they meet the requirements of the manufacturer and are accepted by Owner’s Engineer.

4. Side Base – 24” minimum of free draining backfill (refer to specifications by R-Tanks) may be stone (<1.5”) or soil (USCS Class GW, GP, SW or SP). Must be free of lumps, debris and other sharp objects. Spread evenly to prevent movement. Compact side backfill with powered mechanical compactor in 12” lifts (refer to specifications by manufacturer).

a. For additional module data, refer to appropriate manufacturer module sheet.


c. For infiltration applications, geotextile enveloping for R-Tank shall be ACF M200 (per manufacturer specifications) and base shall be 4” minimum uncompacted free draining backfill (per manufacturer specifications) to provide a level base. Surface must be smooth, free of lumps or debris and extend 2’ beyond tank footprint.

d. 30 mm geotextile liner fabric collar shall be installed on pipes entering modules and should fit outside diameter of pipe. Trim as needed.

B. Acceptable Products:

1. Rainstore 3 by Invisible Structures.

2. AquaBlox-D-Raintanks Tank Module by RainXchange

3. Approved equal.

PART 3 - EXECUTION

3.1 EARTHWORK

A. Excavating, trenching, and backfilling are specified in Division 31, Section “Earth Moving.”

3.2 SPECIAL PIPE COUPLING AND FITTING APPLICATIONS

A. Special Pipe Couplings: Use where indicated and where required to join piping and no other appropriate method is specified. Do not use instead of specified joining methods.

3.3 INSTALLATION, GENERAL

A. General Locations and Arrangements: Drawings (plans and details) indicate the general location and arrangement of underground drainage systems piping. Location and arrangement of piping layout take into account many design considerations. Install piping as indicated, to extent practical.

B. Install piping beginning at low point of systems, true to grades and alignment indicated with unbroken continuity of invert. Place bell ends of piping facing upstream. Install gaskets, seals, sleeves, and couplings according to manufacturer’s recommendations for use of lubricants, cements, and other installation requirements. Maintain swab or drag in line and pull past each joint as it is completed.

C. Use proper size increasers, reducers, and couplings, where different sizes or materials of pipes and fittings are connected. Reduction of the size of piping in the direction of flow is prohibited.
D. Extend drainage piping and connect to building's storm drains, of sizes and in locations indicated. Terminate piping as indicated.

E. Install drainage piping pitched down in direction of flow, at minimum slope of 1 percent and 36-inch minimum cover, except where otherwise indicated.

F. Polyvinyl Chloride (PVC) Plastic Pipe and Fittings: As follows:
   1. Join solvent-cement-joint pipe and fittings with solvent cement according to ASTM D 2855 and ASTM F 402.
   2. Join pipe and gasketed fittings with elastomeric seals according to ASTM D 2321.
   3. Join profile sewer pipe and ribbed drain pipe and gasketed fittings with elastomeric seals according to ASTM D 2321 and manufacturer's written instruction.
   4. Install according to ASTM D 2321.

G. Install HDPE pipe in accordance with ASTM D2321 with the exception that minimum cover in trafficked areas shall be 12-inches.
   1. Slightly scarify and grade the trench base to provide a uniform trench bottom. Before installing pipe, bring bedding material or trench bottom to grade along the entire length of the pipe. For 42" pipe and larger, shallow bell holes shall be provided.
   2. Trench width shall be wide enough to accommodate compaction equipment. Refer the manufacturer’s recommendations. Pipe backfill to springline shall be compacted to 95% Standard Proctor density irregardless of pipe location.
   3. Excessive groundwater necessitates dewatering. Pipe will float in standing water, requiring immediate haunching and initial backfill to hold line and grade.
   4. Join pipe per manufacturer’s instructions.

H. Join piping made of different materials or dimensions with couplings made for this application. Use couplings that are compatible with and fit both systems’ materials and dimensions.

I. Install stormwater control measure outlet pipes through embankments with concrete support cradle from the bottom of the pipe trench to the springline of the pipe.

3.4 CATCH BASIN AND DROP INLET INSTALLATION

A. Construct catch basins to sizes and shapes indicated.

B. Set frames and grates to elevations indicated.

C. Install prefabricated area drains per manufacturer's instructions.

3.5 TRENCH DRAIN INSTALLATION

A. Install trench drains in accordance with the manufacturer’s written instructions and as indicated on the drawings. Install surrounding concrete with surfaces with ¼" per foot slopes to rim of grate.

B. Extend drain pipe from in-line catch basin to large capacity site storm drainage system and install hardware mesh rodent screen over outlet of drain pipe.

C. Utilize half-meter channel sections at curved alignments (such as D-zones of 400-m track). Miter-cut ends of channel sections per manufacturer’s instructions to prevent gaps at section joints.
D. Protect trench drain with non-woven filter fabric under grate during construction. Ensure trench and entire length of outlet pipe are clear of sediment and debris at completion of construction.

3.6 SUBSURFACE STORMWATER DETENTION SYSTEM INSTALLATION

A. Subsurface stormwater detention system components shall be installed in accordance with the manufacturer’s written instructions on a properly prepared subgrade. Install specified sealant material and joint wrap to form soil tight joints.

3.7 CLOSING ABANDONED STORM DRAINAGE SYSTEMS

A. Abandoned Piping: Close open ends of abandoned underground piping that is indicated to remain in place. Include closures strong enough to withstand hydrostatic and earth pressures that may result after ends of abandoned piping have been closed. Use either of the following procedures:

1. Close open ends of piping with at least 8-inch-thick brick masonry bulkheads.
2. Close open ends of piping with threaded metal caps, plastic plugs, or other acceptable methods suitable for size and type of material being closed. Do not use wood plugs.

B. Abandoned Structures: Excavate around structure as required and use either of the following procedures:

1. Remove structure and close open ends of remaining piping.
2. Backfill to grade according to Division 31, Section “Earth Moving.”

3.8 FIELD QUALITY CONTROL

A. Clear interior of piping and structures of dirt and superfluous material as the work progresses. Maintain swab or drag in piping and pull past each joint as it is completed.

1. In large, accessible piping, brushes and brooms may be used for cleaning.
2. Place plug in end of incomplete piping at end of day and whenever work stops.
3. Flush piping between manholes and other structures, if required by authorities having jurisdiction, to remove collected debris.

B. Inspect interior of piping to determine whether line displacement or other damage has occurred. Inspect after approximately 24 inches of backfill is in place, and again at completion of the Project.

1. Submit separate reports for each system inspection.
2. Defects requiring correction include the following:
   a. Alignment: Less than full diameter of inside of pipe is visual between structures.
   b. Deflection: Flexible piping with deflection that prevents passage of a ball or cylinder of a size not less than 92.5 percent of piping diameter.
   c. Crushed, broken, cracked, or otherwise damaged piping.
   d. Infiltration: Water leakage into piping.
   e. Exfiltration: Water leakage from or around piping.
3. Replace defective piping using new materials and repeat inspections until defects are within allowances specified.
4. Reinspect and repeat procedure until results are satisfactory.
5. Inspection of underground stormwater detention system components shall be inspected in accordance with the manufacturer’s written instructions by a certified inspector from the manufacturer.
C. All HDPE pipe and fittings 12-inch in diameter and greater shall be inspected by the pipe supplier/manufacturer following delivery to the construction site for damage caused during transit. Damaged or defective materials shall be removed from the site. A record of this inspection(s) shall be submitted to the Architect. Contractor shall supply documentation of experience in the installation of HDPE storm drainage pipe or shall provide for installation supervision by the supplier/manufacturer.

D. Test new piping systems and parts of existing systems that have been altered, extended, or repaired for leaks and defects.

   1. Do not enclose, cover, or put into service before inspection and approval.
   2. Test completed piping systems according to authorities having jurisdiction.
   3. Schedule tests, and their inspections by authorities having jurisdiction, with at least 24 hours' advance notice.
   4. Submit separate reports for each test.

3.7 SUBSURFACE STORMWATER DETENTION SYSTEM MAINTENANCE

A. Contractor is responsible for quarterly inspections during the first year of operation. Inspections shall be performed based on manufacturer recommendations / requirements.

   1. Flush system as needed.
   2. Maintenance port is used to pump water into the system and re-suspend accumulated sediment, so it can be pumped out.

END OF SECTION 33 40 00
NORTH CAROLINA                  PROFESSIONAL SERVICES AGREEMENT
NEW HANOVER COUNTY

THIS AGREEMENT made and entered into this _____ day of
_____________ 2018 by and between NEW HANOVER COUNTY a political subdivision of
the State of North Carolina, hereto referred to “County”; and
______________________________, hereinafter referred to as “Professional.”

WITNESSETH:

That Professional, for the consideration hereinafter fully set out, hereby agrees
with County as follows:

1. **Scope of Service.** County shall hire Professional to provide special
inspections and material testing services per the engineered plans for the new Public
Health and Social Services Facility as more specifically described in Exhibit “A” attached
hereto and incorporated herein by reference.

2. **Payment.** County agrees to pay Professional an amount not to exceed
_____________________________ ($________________) Dollars.

3. **Time of Performance.** Professional shall begin services on your
receipt of Notice to Proceed and all services shall be completed by
______________________.

4. **Extra Services.** County and Professional shall negotiate and agree
upon the value of any extra services prior to the issuance of a County Change Order or
Renewal/Amendment (CRA) form covering said extra services. Such Change Order or
CRA shall set forth the corresponding adjustment, if any, to the Contract Price and
Contract Time.

5. **Indemnity.** Professional shall indemnify and hold County, its
officers, officials, agents, and employees, harmless against any and all claims, demands,
causes of action, or other liability, including attorney fees, for any property damages,
personal injuries or death arising out of, relating to, or resulting from the negligence, willful
act, or omission of Professional, its agents, employees and subcontractors in the
performance of work or services.
6. **Independent Contractor.** The parties hereto mutually agree that Professional is an independent contractor and not an agent of County. Professional shall not be entitled to any County employment benefits, including, but not limited to, vacation, sick leave, insurance, worker’s compensation, or pension and retirement benefits.

7. **Minimum Scope and Limits of Insurance**
   7.1. **Commercial General Liability**
   7.1.1 Professional shall maintain Commercial General Liability (CGL) and if necessary, Commercial Umbrella Liability (CUL) insurance with a total limit of not less than $1,000,000 each occurrence for bodily injury and property damage. If such CGL insurance contains a general aggregate limit, it shall apply separately to this project/location or the general aggregate shall be twice the required limit.

   7.1.2 CGL insurance shall be written on Insurance Services Office (ISO) “occurrence” form CG 00 01 covering CGL or its equivalent and shall cover the liability arising from premises, operations, independent contractors, products-completed operations, personal and advertising injury, and liability assumed under an insured contract, including the tort liability of another assumed in a business contract.

   7.1.3 County, its officers, officials, agents, and employees are to be covered as additional insureds under the CGL by endorsement CG 20 10 and CG 20 37 or an endorsement providing equivalent coverage as respects to liability arising out of activities performed by or on behalf of Professional; products and completed operations of Professional; premises owned, leased or used by Professional; and under the CUL, if any. The coverage shall contain no special limitations on the scope of protection afforded to County, its officers, officials, agents, and employees.

   7.1.4 Professional’s CGL insurance shall be primary as respects County, its officers, officials, agents, and employees. Any other insurance or self-insurance maintained by County, its officers, officials, agents, and employees shall be in excess of and shall not contribute to Professional’s insurance.

7.2. **Worker’s Compensation and Employer’s Liability**
   7.2.1 Professional shall maintain Worker’s Compensation as
required by the General Statutes of the State of North Carolina and Employer’s Liability Insurance.

7.2.2 The Employer’s Liability, and if necessary, CUL insurance shall not be less than $500,000 each accident for bodily injury by accident, $500,000 each employee for bodily injury by disease, and $500,000 policy limit.

7.2.3 The insurer shall agree to waive all rights of subrogation against County, its officers, officials, agents, and employees for losses arising from services performed by Professional for County.

7.3. **Business Auto Liability**

7.3.1 Professional shall maintain Business or Personal Auto Liability and, if necessary, CUL insurance with a limit of not less than $1,000,000 each accident.

7.3.2 Such insurance shall cover liability arising out of any auto, including owned, hired, and non-owned autos used in performance of services.

7.3.3 Business Auto coverage shall be written on ISO form CA 00 01, or a substitute form providing equivalent liability coverage. If necessary, the policy shall be endorsed to provide contractual liability coverage equivalent to that provided in ISO form CA 00 01.

7.3.4 Professional’s Business Auto Liability insurance shall be primary as respects County, its officers, officials, agents, and employees. Any other insurance or self-insurance maintained by County, its officers, officials, agents, and employees shall be in excess of and shall not contribute to Professional’s insurance.

7.4. **Professional Liability Insurance**

7.4.1 Professional shall maintain in force for the duration of this Contract professional liability or errors and omissions liability insurance appropriate to Professional’s profession. Coverage as required in this paragraph shall apply to liability for a professional error, act, negligence, or omission arising out of the scope of Professional’s services as defined in this Contract. Coverage shall be written subject to limits of not less than $1,000,000 per loss.

7.4.2 If coverage in this Contract is on a claims-made basis, Professional warrants that any retroactive date applicable to coverage under the policy
precedes the effective date of this Contract, and that continuous coverage will be maintained or an extended discovery period will be exercised for a period of two (2) years beginning from the time that services under the Contract are complete.

7.5. **Deductibles and Self-Insured Retentions**

7.5.1 Any deductibles or self-insured retentions must be declared to and approved by County. At the option of County, either the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects County, its officers, officials, agents, and employees; Professional shall procure a bond guaranteeing payment of deductibles or self-insured retentions.

7.5.2 Professional shall be solely responsible for the payment of all deductibles to which all policies are subject, whether or not County is an insured under the policy.

7.6. **Miscellaneous Insurance Provisions**

7.6.1 Any failure to comply with reporting provisions of the policies listed in this Contract shall not affect coverage provided to County its officers, officials, agents, and employees.

7.6.2 Each insurance policy required by this Contract shall be endorsed to state that coverage shall not be canceled by either party except after thirty (30) days prior written notice has been given to County, 230 Government Center Drive #125, Wilmington, NC 28403.

7.6.3 If Professional’s liability policies do not contain the standard ISO separation of insureds provision, or a substantially similar clause, they shall be endorsed to provide cross-liability coverage.

7.7. **Acceptability of Insurers.** Insurance is to be placed with insurers licensed to do business in the State of North Carolina with an A.M. Best’s rating of no less than A VII unless County has granted a specific exemption.

7.8. **Evidence of Insurance**

7.8.1 Professional shall furnish County with a certificate(s) of insurance, executed by a duly authorized representative of each insurer, showing compliance with the insurance requirements prior to commencing the services, and thereafter upon renewal or replacement of each certified coverage until all operations
under this Contract are deemed complete.

7.8.2 Evidence of additional insured status shall be noted on the certificate of insurance as per requirements in this Contract.

7.8.3 With respect to insurance maintained after final payment in compliance with requirements, an additional certificate(s) evidencing such coverage shall be provided to County with final application for payment and thereafter upon renewal or replacement of such insurance until the expiration of the period for which such insurance must be maintained.

7.8. Subcontractors. Professional shall include all subcontractors as insureds under its policies or shall furnish separate certificates for each subcontractor. All coverage for subcontractors shall be subject to all of the requirements stated herein. CGL coverage shall include independent contractors’ coverage, and Professional shall be responsible for assuring that all subcontractors are properly insured.

7.9. Conditions

7.9.1. County may, at its discretion and with the approval of Risk Management and the Finance Department, accept letters of credit or custodial accounts in lieu of specific insurance requirements.

7.9.2. Professional shall warrant that the insurance contributing to the satisfaction of insurance requirements in this Contract and shall not be canceled, terminated, or modified by Professional without prior written approval of County.

7.9.3. Professional shall promptly notify the New Hanover County Property Management and New Hanover County Risk Management at (910) 798-7497 of any accidents arising in the course of operations under the Contract causing bodily injury or property damage.

7.9.4. County reserves the right to obtain complete, certified copies of all required insurance policies.

7.9.5. Failure of County to demand a certificate of insurance or other evidence of full compliance with these insurance requirements or failure of County to identify a deficiency from evidence that is provided shall not be construed as a waiver of Professional’s obligation to maintain such insurance.
7.9.6. County does not represent that coverage and limits will be adequate to protect Professional and such coverage and limits shall not be deemed as a limitation of Professional’s liability under the indemnities granted to County in this Contract.

7.9.7. If Professional fails to maintain the insurance as set forth herein, County shall have the right to purchase said insurance at Professional’s expense. Professional agrees to reimburse County for all expenses incurred for such purchase.

7.9.8. Professional or its agent may apply to County for approval of higher deductibles based on financial capacity and quality of the carrier affording coverage.

7.9.9. County shall have the right to prohibit Professional or any subcontractor from performing work or services and may withhold payment until required certificates has been received and approved by County.

8. Standard of Care. Professional shall exercise reasonable care and skill as might be expected from similarly situated professionals performing services of the kind required under this Contract at the time and the place where the services are rendered. The staff of and subcontracted professionals engaged by Professional shall possess the experience, knowledge and character necessary to qualify them to perform the particular duties to which they are assigned.

9. Default and Termination. If Professional fails to prosecute the services with such diligence as will insure its completion within the Contract time, or if Professional breaches any one of the terms and conditions contained in this Contract and fails to cure said breach within five (5) days of County mailing Notice of Default, County may terminate this Contract at the expiration of the fifth day after mailing such Notice of Default.

10. Termination for Convenience. County may terminate this Contract for convenience at any time and without cause upon thirty (30) days prior written notice. Upon receipt of notice, Professional shall immediately discontinue the services and, If applicable, placing of orders for materials, facilities, and supplies in connection with the performance of this Contract.
11. **Non-appropriation.** All funds for payment by County under this Contract are subject to the availability of all annual appropriation by the Board of Commissioners. In the event of non-appropriation of funds by the Board of Commissioners for the services provided under the Contract, County will terminate the Contract, without termination charge or liability, on the last day of the then-current fiscal year or when the appropriation made for then-current year for the services/items covered by this Contract is spent, whichever occurs first. If at any time funds are not appropriated for the continuance of this Contract, cancellation shall be accepted by Professional upon three (3) days prior written notice, but failure to give such notice shall be of no effect and County shall not be obligated under this Contract beyond the date of termination.

12. **Subcontracts.** The Professional shall utilize no subcontractors for performing the services to be performed under this Contract without the prior written approval of the County.

13. **Entire Contract.** This Contract constitutes the entire understanding of the parties.

14. **Binding Effect.** This Contract shall be binding upon the parties hereto, and their heirs, successors, executors, administrators and assigns.

15. **Severability.** If any provision of this Contract is held unenforceable, all remaining provisions of this Contract shall remain in full force and effect.

16. **Inclusive Terms.** Use of the masculine herein shall include the feminine and neuter, and the singular shall include the plural.

17. **Governing Law.** All of the terms and conditions contained herein shall be interpreted in accordance with the laws of the State of North Carolina.

18. **E-Verify Compliance.** Pursuant to S.L. 2015-294, Professional shall fully comply with the U.S. Department of Homeland Security employee legal status E-Verify requirements for itself and all its subcontractors. Violation of the provision, unless timely cured, shall constitute a breach of Contract.

19. **Compliance with Federal Law.** If applicable, all federally funded projects, loans, grants, and sub grants whether funded in part or wholly, must be procured in a manner that conforms with all applicable Federal laws, policies, and standards, including those under the Uniform Guidance (2 C.F.R. Part 200).
20. **Notices.** All notices required hereunder to be sent to either party shall be sent to the following designated addresses, or to such other address or addresses as may hereafter be designated by either party by mailing of written notice of such change of address, by Certified Mail, Return Receipt Requested:

**To County:**
New Hanover County Property Management  
Attn: Kevin Caison  
200 Division Drive  
Wilmington, NC 28401

**To Contractor:**


21. **Assignability.** The parties hereto agree that this Contract is not transferable and shall not be assigned by either party without the written consent of the other party to this Contract.

22. **Contract Under Seal.** The parties hereto expressly agree to create a Contract under seal.

**IN WITNESS WHEREOF,** the parties have hereunto affixed their hands and seals, the day and year first above written and by authority duly given.

NEW HANOVER COUNTY

[SEAL]

______________________________
County Manager

ATTEST:

______________________________
Clerk to the Board
[SEAL]

CONTRACTOR

____________________________(Seal)
President

ATTEST:

________________________
Secretary

This instrument has been pre-audited in the manner required by the Local Government Budget and Fiscal Control Act.

Approved as to form:

________________________
County Finance Officer

________________________
County Attorney

STATE OF NORTH CAROLINA

NEW HANOVER COUNTY

I, _______________________________________, a Notary Public of the State and County aforesaid, certify that Kymberleigh G. Crowell acknowledged that she is Clerk to the Board of Commissioners of New Hanover County, and that by authority duly given and as the act of the Board, the foregoing instrument was signed in its name by its __________ County Manager, sealed with its corporate seal and attested by herself as its Clerk.

WITNESS my hand and official seal, this _____ day of _________________, 2018.

________________________________
Notary Public

My commission expires:______________

STATE OF _________________

_________________________________________ COUNTY

I, _______________________________________, a Notary Public
of the State and County aforesaid, certify that __________________ came before me this day and acknowledged that (s)he is Secretary ________________________________ , and that by authority duly given and as the act of the corporation, the foregoing instrument was signed in its name by its President and sealed with its corporate seal.

WITNESS my hand and official seal, this ____ day of ____________, 2018.

________________________________
Notary Public

My commission expires: ________________