

## REQUEST FOR BOARD ACTION

ITEM NO. 9.

**DATE OF MEETING:** October 19, 2009

**REQUESTED BY:** David McCole, Finance Director

**SHORT TITLE:** Resolution Authorizing a Contract with and Approving a Purchase Order to ESC Carolinas, LLP in the amount of \$11,126 for Construction Materials Testing During Construction of Upgrades to Rocky Point Primary School

**BACKGROUND:** Of the \$56 million school bond referendum approved by voters on May 3, 2005, \$1,929,000 was allocated for renovations to the Rocky Point Primary School. Thus far the Board has authorized allocations totaling \$1,532,927.30 to this project.

At this time, the schools are requesting approval of a contract with ESC Carolinas, LLP for construction materials testing and special inspection services for the additions and upgrades at Rocky Point Primary.

The County and Schools have entered into the appropriate agreements to permit the County to pay the bills associated with this construction in order to recapture the sales taxes paid and realize a substantial savings.

**SPECIFIC ACTION REQUESTED:** The Board of Commissioners is requested to authorize a contract with and purchase order to ESC Carolinas LLP in the amount of \$11,126.

**COUNTY MANAGER'S RECOMMENDATION**

Respectfully recommend approval.

JS  
Initial

**RESOLUTION**

**NOW, THEREFORE BE IT RESOLVED** by the Pender County Board of Commissioners that

contracts and purchase orders are authorized as follows:

ESC Carolinas LLP                      \$11,126

**63-406461      Rocky Point Primary School Renovations**

The Chairman/County Manager is authorized to execute any documents necessary to implement this resolution.

**AMENDMENTS:**

MOVED \_\_\_\_\_                      SECONDED \_\_\_\_\_

APPROVED \_\_\_\_\_                      DENIED \_\_\_\_\_                      UNANIMOUS

YEA VOTES: Tate \_\_\_ Brown \_\_\_ Blanchard \_\_\_ Rivenbark \_\_\_ Williams \_\_\_

\_\_\_\_\_  
Jimmy T. Tate, Chairman                      10/19/09  
DATE

\_\_\_\_\_  
ATTEST                      10/19/09  
DATE



# ECS CAROLINAS, LLP

"Setting the Standard for Service"

Geotechnical • Construction Materials • Environmental • Facilities

July 20, 2009

Pender County Schools  
Mr. David Smith  
925 Penderlea Highway  
Burgaw, North Carolina 28245

Subject: Proposal for Construction Materials Testing and Special Inspection Services  
Rocky Point Primary School Addition  
Rocky Point, North Carolina

ECS Proposal No. 11664

Dear Mr. Smith:

ECS Carolinas, LLP (ECS) is pleased to submit this proposal to provide Construction Materials Testing (CMT) and Special Inspection Services for the above referenced project located in Rocky Point, North Carolina.

ECS has previously provided CMT and Special Inspection services for several local schools including but not limited to the Topsail High School and Burgaw Elementary School in Pender County; the Murrayville Elementary School, Edwin Anderson Elementary School, Ogden Elementary School, and the Forest Hills Elementary School Addition in New Hanover County; and the Holden Beach Middle School and Town Creek Elementary School in Brunswick County.

ECS has performed and presented a report of subsurface exploration for the Rocky Point Primary School Addition project dated July 3, 2007. Our considerable experience with this project and similar projects will help us provide efficient, cost-effective construction testing and engineering consulting services. Included in this proposal is our proposed scope of services, fee schedule and cost estimate, and our authorization requirement.

## QUALIFICATIONS

ECS is a diversified engineering and environmental consulting firm that has performed similar projects throughout North Carolina. ECS is uniquely qualified to provide CMT and Special Inspection services on this project for the following reasons:

- We have extensive experience performing CMT and Special Inspection Services for similar projects.
- We have assembled a team of trained, experienced and qualified individuals prepared to meet your needs and schedules in a cost-efficient manner.
- The assembled team members are certified in different fields of testing and each individual team member can multi-task, therefore reducing the need for additional technicians on site. This results in a cost savings for the project.
- We have a proven track record of listening to our clients needs and concerns and the flexibility to respond to those needs.

*Rocky Point Primary School Addition  
Rocky Point, North Carolina  
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- We have the assets of a more than 1,200-person company available to us for expanding the project team to meet your needs if necessary. We have six full service offices in North Carolina (Wilmington, Raleigh, Greensboro, Charlotte, Fayetteville, and Asheville).

The Wilmington branch of ECS was opened in 1993 and has successfully completed numerous quality control testing, Special Inspection Services, geotechnical engineering, and environmental consulting projects in coastal plain and southeastern regions of North Carolina. ECS has previously and is currently performing construction materials testing and special inspection services for several projects. These projects include but are not limited to:

- Brunswick Learning Center
- UNCW Student Union Center (Phase A, B, C, and D)
- UNCW Center for Marine Science Addition
- City of Wilmington Police Headquarters Building
- Brunswick Community College Odell Williamson Building Addition – Bolivia, NC
- Brunswick Community College Applied Plant Science Building – Bolivia, NC
- Southeastern Community College Technology Building- Whiteville, NC
- PPD Headquarter Buildings – Wilmington, NC
- PPD Parking Deck – Wilmington, NC
- Grande Villas at The Preserve Condominiums – Indian Beach, NC
- Nautical Club Condominiums – Indian Beach, NC

The Wilmington office has 10 engineers, geologists and scientists on staff. We also have 19 technicians that are trained and certified in ASTM, NICET, ACI, NCDOT, and ICC testing procedures. Most of our technicians hold certifications in their area of expertise from nationally recognized technical organizations (ACI, NICET, Troxler, NCDOT, ICC, etc.). Our laboratory is accredited by the United States Army Corps of Engineers (USACE) and the North Carolina Department of Transportation (NCDOT) in numerous test methods on a variety of construction materials.

### **REPORTING**

ECS recognizes the importance of timely and accurate reporting. All of our technicians are equipped with a new electronic field data acquisition and electronic data transmission systems (PDA). Through the use of those new PDA systems, ECS will deliver to our clients via e-mail, the typed field report that has been reviewed by the project manager and approved by the principal engineer, within 24 to 36 hours, following the field visit.

### **PROJECT TEAM**

To effectively execute this project, ECS has organized an experienced team to provide Materials testing and Special Inspection Services for this project. The team will be responsible for the efficient and timely execution of the project activities. We have chosen team members for this project based on their professional experience matched with the particular needs of the project. The team members are, but not limited to, the following:

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Mr. Harry Slater, Mr. Clayton Smalley, and Mr. Jason Malek are senior engineering technicians, who may be assigned to this project. These team members will observe and perform the required testing services for the project. Clayton, Harry, and Jason are certified by the International Code Council (ICC) as a Special Inspector in Structural Masonry (SMSI). Harry and Clayton are also certified in Fireproofing (SFSI), and Reinforced Concrete (RCSI).

Mr. Clayton Smalley will be assigned as the Structural Steel Special Inspector for the project. Clayton is certified by the ICC as a Structural Steel Special Inspector (SWSI). Clayton is also a Certified Welding Inspector (CWI) and NDT Level II.

Mr. William Cromartie will be assigned as the Project Manager for the project. Mr. Cromartie will supervise our technicians and will be responsible for monitoring job progress and performance and provide technical support. Mr. Cromartie is certified by NICET in Soils, Asphalt, Concrete, and Geotechnical Construction, by the ICC as a Special Inspector for Structural Masonry and Reinforced Concrete, and by AWS as a Certified Welding Inspector.

Mr. Walid Sobh, P.E. will serve as the Special Inspector and project principal. Mr. Sobh will supervise the project manager and will regularly monitor the project progress and provide additional technical expertise, particularly for unusual or difficult conditions. As branch manager, Mr. Sobh has all the resources under his direct control to accomplish the project.

### **SCOPE OF SERVICES**

We propose to provide qualified engineers and engineering technicians to perform the requested services. The following reporting, testing and inspection services are typical and are requested on this project:

#### **Earthwork**

- Inspect the site after topsoil has been stripped to verify that objectionable soils have been removed.
- Conduct laboratory Proctor tests (ASTM D-698) on representative fill soils.
- Test in-place density of fill soils to verify the percent compaction achieved by the contractor.
- Submit written reports detailing our activities and findings.

#### **Foundations**

- Inspect soils at bearing level to verify that the soils encountered are satisfactory for the allowable design bearing pressure.
- Submit written reports detailing our activities and findings.

#### **Concrete**

- Visually check the concrete in each truck as it arrives on site for proper slump and observe general placement procedures.
- Sample and test plastic concrete to include slump tests, air content, and temperature.
- Make 4 inch by 8 inch concrete cylinder test specimens for compressive strength.
- Return test specimens to our laboratory for compression testing.
- Cure, test, and report compressive strength results for concrete cylinder test specimens.
- Submit written reports detailing our activities and findings.
- Verify placement of reinforcing steel prior to the placement of concrete.
- Perform Floor Flatness and Levelness testing on the concrete slab.

### **Structural Steel**

- Perform periodic inspections in accordance with the Statement of Special Inspections.
- Perform visual examination of connections including braced connections.
- Perform visual inspection of the metal decking connections.
- Submit written reports detailing our activities and findings.

### **Asphaltic Concrete Paving**

- Observe proofrolling of soil subgrade to receive stone and paving.
- Conduct in-place density tests on asphaltic paving in accordance with NCDOT or project specifications.
- Perform coring of asphalt paving to verify thickness.
- Submit written reports detailing our activities and findings.

### **Project Engineering**

- Act as Special Inspector providing monthly reports of activities, attend monthly meetings and resolve any outstanding discrepancies.
- Reports will be reviewed by the project engineer before issue.
- Recommendations will be made on non-conforming items. Recommendations will be made from the field by our technician in communication with the project engineer.

## **PROJECT SERVICING REQUIREMENTS**

Services for this project will be provided on a full time or on an on-call basis, depending on the "Schedule of Special Inspection Services." ECS will consult with your management team to provide the appropriate level of staffing to meet the project requirements. We request **24-hour** notice prior to providing on-call services to allow us to efficiently schedule technicians.

## **FEE & COST ESTIMATE**

We will invoice you for our services on a monthly basis in accordance with the attached fee schedule. Additionally, we have prepared a cost estimate for providing our services on an on-call basis. Based upon our assumptions of the project schedule, we estimate the cost for our services for the construction to be on the order of **\$11,126.00**. This cost estimate is based on our project service requirement assumptions attached with this proposal and does not constitute a lump sum bid for our services. This cost estimate includes the fee for a Special Inspector for the project.

Costs for CMT and Special Inspection services are highly dependent on the contractor's needs and the project schedule. The actual cost will depend on the frequency of testing scheduled by the general contractor and on the project schedule and testing needs.

## **GENERAL COMMENTS**

This letter is the agreement for our services. Attached to this letter, and an integral part of our proposal, are our "General Conditions". These conditions represent the current recommendations of the Association of Soil and Foundation Engineers, the Consulting Engineers Council and the Geotechnical Division of the American Society of Civil Engineers.

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ECS Proposal No. 11664  
July 20, 2009*

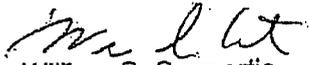
**AUTHORIZATION REQUIREMENTS**

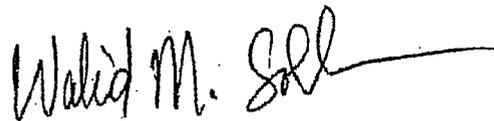
Signing and returning the attached proposal acceptance form to us indicates your acceptance of this proposal. Additionally, your acceptance may be indicated by issuing your purchase order referencing this proposal. Please note that we will be unable to issue formal reports until written acceptance of this proposal has been received by ECS.

We are pleased to have the opportunity to offer our services to you and look forward to working with you on this project.

Respectfully,

**ECS CAROLINAS, LLP**

  
William S. Cromartie  
Project Manager



Walid M. Sobh, P.E.  
Principal Engineer

Attachments: Cost Estimate  
Fee Schedule  
Proposal Acceptance Form  
Resumes and Certifications.

**ECS CAROLINAS, LLP  
WILMINGTON, NORTH CAROLINA  
2008 FEE SCHEDULE**

**PERSONNEL**

Principal Engineer .....	\$125.00/hour
Special Inspector .....	\$115.00/hour
Project Engineer .....	\$ 85.00/hour
Construction Services Manager .....	\$ 95.00/hour
Masonry and Reinforced Concrete Special Inspector .....	\$ 65.00/hour
QMS Certified NCDOT Technician.....	\$ 48.00/hour
Senior Foundation Technician (**).....	\$ 42.00/hour
Soil or Materials Field or Lab Technician – Senior Level (**).....	\$ 37.00/hour
Soil or Materials Field or Lab Technician (**) .....	\$ 34.00/hour
Welding Technician, Shop or Field Inspection:	
NDE Technician.....	\$ 65.00/hour
CW/Structural Steel/Welding Special Inspector .....	\$ 70.00/hour
ASNT Level III Consultant .....	\$ 85.00/hour
Secretary .....	\$ 37.00/hour
Transportation via company or private vehicle .....	\$ 0.65/mile

**Note:** Charges for engineering and technical personnel will be made for time spent in the field, in engineering analysis, in preparation and review of reports, and in travel to and from our office.

(\*\*) = Overtime = Standard Rate x 1.5 for services performed exceeding 8 hours per day, outside our normal business hours of 7:00 am to 5:00 pm, holidays, Saturday, and Sunday.

**EQUIPMENT and LABORATORY**

Standard Proctor (ASTM D-698) 4 inch mold.....	\$ 95.00/test
Modified Proctor (ASTM D-1557) 4 inch mold.....	\$105.00/test
Atterberg Limits (LL & PL) Determination (ASTM D-4318).....	\$ 50.00/test
Grain Size Analysis Test (ASTM D-422) .....	\$ 50.00 each
Asphalt Extraction & Gradation .....	\$ 85.00/each
Asphalt-Marshall Stability Test, Set of 3.....	\$ 90.00/set
Asphalt-Specific Gravity of Marshall Specimen - Set of 3 .....	\$ 45.00/set
Asphalt Density Determination .....	\$ 30.00/core
Testing of Cylinders, Core Specimens:	
Compressive strength of grout prisms.....	\$12.00 each
Compressive strength of mortar cubes .....	\$10.00 each
Compressive strength of concrete cylinders, (ASTM C-39) .....	\$ 9.00 each
Core Specimen (including sample preparation) .....	\$ 50.00/test
Moisture Vapor Test Kit .....	\$ 25.00/kit
Nuclear Density and Moisture Measuring Equipment.....	\$ 50.00/day
Floor Flatness Meter Equipment .....	\$75.00/day
Core machine .....	\$ 75.00/day
Rental Equipment & Non-standard Supplies .....	Cost x 1.15

**Note:** The above charges will be made for tests and equipment operated by ECS Carolinas LLP personnel in addition to personnel charges already listed.



7211 Ogden Business Park Suite 201

Wilmington, North Carolina 28411

Phone: (910) 686-9114

Fax: (910) 686-9666

Project Name:

Rocky Point Primary School  
Addition

Proposal Number:

11664

Date:

July 20, 2009

**CONSTRUCTION MATERIALS TESTING AND SPECIAL INSPECTION SERVICES**

**Assumptions:**

Earthwork	7 days	4 hours per day	2	proctors
Foundations	4 days	8 hours per day	4	sets of cyl. @ 4 cyl./set
Concrete Slabs	1 days	8 hours per pour	3	sets of cyl. @ 4 cyl./set
Asphalt Testing	2 days	8 hours per visit		
Reinforced Conc. Sp. Insp.	5 days	4 hours per visit		
Structural Steel Special Insp.	4 days	4 hours per visit		

Field Services:	Quantity	Unit Rate	Cost
<b>Engineering Technician:</b>			
Earthwork	7 visits @ 4 hours / visits	\$37.00 / hour	\$ 1,036.00
Foundations	4 visits @ 8 hours / visits	\$42.00 / hour	\$ 1,344.00
Concrete Slabs	1 visit @ 8 hours / visits	\$37.00 / hour	\$ 296.00
Asphalt Testing	2 visits @ 8 hours / visits	\$48.00 / hour	\$ 768.00
Reinforced Conc. Sp. Insp.	5 visits @ 4 hours / visits	\$65.00 / hour	\$ 1,300.00
Structural Steel Sp. Insp.	4 visits @ 4 hours / visits	\$70.00 / hour	\$ 1,120.00
Cylinder Pickups Only	2 visits @ 3 hours / visits	\$37.00 / hour	\$ 222.00
Mileage	25 visits @ 40 miles / visits	\$0.65 / mile	\$ 650.00
<b>Field Services Subtotal:</b>			<b>\$ 6,736.00</b>

Laboratory Testing:	Quantity	Unit Rate	Cost
Density of asphalt Cores	6 samples	\$30.00 / sample	\$ 180.00
Standard Proctor	2 samples	\$95.00 / sample	\$ 190.00
Grain Size Analysis	2 sets	\$50.00 / sample	\$ 100.00
Comp. Strength of Concrete Cyl	7 sets	\$ 9.00 / cylinder	\$ 252.00
<b>Laboratory Testing Subtotal</b>			<b>\$ 722.00</b>

Equipment Rental:	Quantity	Unit Rate	Cost
Nuclear Density Equipment	6 rental fees	\$50.00 / day	\$ 300.00
Core Drill Rental	2 rental fees	\$75.00 / day	\$ 150.00
F-Meter Rental	1 rental fee	\$75.00 / day	\$ 75.00
<b>Equipment Rental Subtotal:</b>			<b>\$ 525.00</b>

Engineering/Project Management:	Quantity	Unit Rate	Cost
Special Inspector (P.E. Licensed)	8 hours	\$115.0 / hour	\$ 920.00
Principal Engineer (P.E. Licensed)	9 hours	\$125.0 / hour	\$ 1,125.00
Project Manager	9 hours	\$85.00 / hour	\$ 765.00
Secretary	9 hours	\$37.00 / hour	\$ 333.00
<b>Engineering/Project Management Subtotal:</b>			<b>\$ 3,143.00</b>

**ESTIMATED TOTAL COST:** \$ 11,126.00

ECS CAROLINAS, LLP

PROPOSAL ACCEPTANCE

Proposal No.: 11664  
Scope of Work: Proposal for Construction Materials Testing and  
Special Inspection Services  
Location: Rocky Point Primary School  
Rocky Point, North Carolina

Client Signature: Alvin Abbott

Date: 9/28/09

Please complete and return this page to ECS Carolinas LLP to indicate acceptance of this proposal and to initiate work on the above-referenced project. The Client's signature above also indicates that he/she has read or has had the opportunity to read the accompanying General Conditions of Service and agrees to be bound by such General Conditions of Service.

**BILLING INFORMATION**

(Please Print or Type)

Name of Client: Pender County Schools  
Name of Contact Person: David Smith  
Telephone No. Of Contact Person: 910-663-3572  
Party Responsible for Payment:  
Company Name: Pender County Schools  
Person/Title: David Smith  
Department: Auxiliary Services Director  
Billing Address: 925 Penderlea Hwy  
Burgaw, N.C. 28425  
Telephone Number: 910-259-2187  
Fax Number: 910-259-0132  
Report Receipt Method: \_\_\_\_\_  
E-mail Address: \_\_\_\_\_  
Client Project/Account Number \_\_\_\_\_  
Special Conditions for Invoice \_\_\_\_\_  
Submittal and Approval \_\_\_\_\_