

CITY COUNCIL AGENDA ITEM COVER MEMO

Agenda Item Number _____

Meeting Type: Regular

Meeting Date: 2/28/2013

Action Requested By:
Engineering

Agenda Item Type
Resolution

Subject Matter:

Modification No. 3 to Agreement with Building & Earth Sciences, Inc.

Exact Wording for the Agenda:

Resolution authorizing the Mayor to modify the agreement with Building & Earth Sciences, Inc. for Construction Materials Testing Services for Redstone Gateway, Phase 1A, Project No. 65-10-SP21, by Modification No. 3

10-981, 12-251 & 12-897

Note: If amendment, please state title and number of the original

Item to be considered for: Action

Unanimous Consent Required: No

Briefly state why the action is required; why it is recommended; what Council action will provide, allow and accomplish and; any other information that might be helpful.

This modification is for the continuation to provide geotechnical engineering services and testing services on concrete and soils during the construction of Redstone Gateway, Phase 1A and 1F projects for a total modification amount of \$163,325.00. An additional three hundred and three (303) calendar days added to contract completion. New end date: October 31, 2013. Account No. 05-6500-0811-2037

Associated Cost:

Budgeted Item: Select...

MAYOR RECOMMENDS OR CONCURS: Select...

Department Head: *Kerby*

Date: 2/19/13

revised 3/12/2012

150
pink
AM
2-20-13

ROUTING SLIP CONTRACTS AND AGREEMENTS

Originating Department: **Engineering**

Council Meeting Date: **2/28/2013**

Department Contact: **Lynn Majors**

Phone # **256-427-5201**

Contract or Agreement: **Construction Materials Testing Services Mod 3**

Document Name: **BESI-Redstone Gateway Project No. 65-10-SP21**

City Obligation Amount: **\$163,325.00**

Total Project Budget: **\$282,824.65**

Uncommitted Account Balance: **0**

Account Number: **05-6500-0811-2037**

Procurement Agreements

Not Applicable	Not Applicable
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Grant-Funded Agreements

Not Applicable	Grant Name:
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Department	Signature	Date
1) Originating	<i>Lynn Majors</i>	2/19/13
2) Legal	<i>Mary Clatis</i>	2/21/13
3) Finance	<i>[Signature]</i>	2/22/13
4) Originating		
5) Copy Distribution		
a. Mayor's office (1 copies)		
b. Clerk-Treasurer (Original & 2 copies)		

RESOLUTION NO. 13-

BE IT RESOLVED by the City Council of the City of Huntsville, Alabama, that the Mayor be, and is hereby authorized, in Huntsville, Alabama, on behalf of the City of Huntsville, a municipal corporation in the State of Alabama to enter into Modification No. 3 to the Agreement with Building & Earth Sciences, Inc., adopted and approved on the 2nd day of December, 2010, by the City Council of the City of Huntsville, Alabama by Resolution No. 10-981, and amended on the 22nd day of March, 2012, by Resolution No. 12-251, and amended on the 11th day of October, 2012, by the City Council of the City of Huntsville, Alabama by Resolution No. 12-897, attached hereto.

BE IT FURTHER RESOLVED that the total contract amount be and hereby is modified from ONE HUNDRED NINETEEN THOUSAND FOUR HUNDRED NINETY-NINE AND .65/100 DOLLARS (\$119,499.65) to TWO HUNDRED EIGHT-TWO THOUSAND EIGHT HUNDRED TWENTY-FOUR AND .65/100 DOLLARS (\$282,824.65), including this Modification No. 3, an increase of ONE HUNDRED SIXTY-THREE THOUSAND THREE HUNDRED TWENTY-FIVE AND NO/100 DOLLARS (\$163,325.00). There are an additional three hundred and three (303) calendar days added to contract completion. New end date: October 31, 2013. Agreement is substantially in words and figures similar to that document attached hereto and identified as "Modification No. 3 to Agreement between City of Huntsville and Building & Earth Sciences, Inc. for Construction Materials Testing Services for Redstone Gateway, Phase 1A, Project No. 65-10-SP21, as adopted by Resolution No. 10-981 of December 2, 2010, and amended by Resolution No. 12-251 of March 22, 2012, and amended by Resolution No. 12-897 of October 11, 2012" consisting of a total of three (3) pages plus six (6) additional pages consisting of Attachment "A", and the date of February 28, 2013, appearing on the margin of the first page, together with the signature of the President or President Pro Tem of the City Council, and an executed copy of said document being permanently kept on file in the Office of the City Clerk of the City of Huntsville, Alabama.

ADOPTED this the 28th day of February, 2013.

President of the City Council of
the City of Huntsville, Alabama

APPROVED this the 28th day of February, 2013.

Mayor of the City of Huntsville,
Alabama

STATE OF ALABAMA)
COUNTY OF MADISON)

Modification No. 3 to Agreement between the City of Huntsville and Building & Earth Sciences, Inc. for Construction Materials Testing Services for Redstone Gateway, Phase 1A, Project No. 65-10-SP21, as adopted by Resolution No. 10-981 of December 2, 2010, and amended by Resolution No. 12-251 of March 22, 2012, and amended by Resolution No. 12-897

THIS MODIFICATION TO AN AGREEMENT entered in on the 2nd day of December, 2010, in the amount of FORTY-NINE THOUSAND SEVEN HUNDRED EIGHTY AND .25/100 DOLLARS (\$49,780.25), and amended on the 22nd day of March, 2012, in the amount of TWENTY-NINE THOUSAND EIGHT HUNDRED SIXTY-SEVEN AND .50/100 DOLLARS (\$29,867.50), for a revised contract amount of SEVENTY-NINE THOUSAND SIX HUNDRED FORTY-SEVEN AND .75/100 DOLLARS (\$79,647.75), and amended on the 11th day October, 2012, in the amount of THIRTY-NINE THOUSAND EIGHT HUNDRED FIFTY-ONE AND .90/100 DOLLARS (\$39,851.90), for a revised contract amount of ONE HUNDRED NINETEEN THOUSAND FOUR HUNDRED NINETY-NINE AND .65/100 DOLLARS (\$119,499.65), is hereby amended by Modification No. 3 dated February 28, 2013, in the amount of ONE HUNDRED SIXTY-THREE THOUSAND THREE HUNDRED TWENTY-FIVE AND NO/100 DOLLARS (\$163,325.00) making the total revised contract amount TWO HUNDRED EIGHT-TWO THOUSAND EIGHT HUNDRED TWENTY-FOUR AND .65/100 DOLLARS (\$282,824.65), by and between the CITY OF HUNTSVILLE, ALABAMA, a municipal corporation in the State of Alabama (OWNER) and BUILDING & EARTH SCIENCES, INC., (ENGINEER).

WITNESSETH

WHEREAS, the firm identified as the ENGINEER to the Agreement dated December 2, 2010, and amended on March 22, 2012, and amended on October 11, 2012, has proposed a change, identified as Attachment "A" to the Original Agreement. This modification delineates a change to provide additional testing services.

WHEREAS, the Owner desires that the contract drawings be altered to be consistent with Attachment "A" hereto.

NOW THEREFORE, in consideration of the mutual covenants set forth herein, the Owner and the ENGINEER agree to the following modifications to the agreement:

President of the City Council of the City of
Huntsville, AL
Date: February 28, 2013

1. Building & Earth Sciences, Inc. will provide for additional testing services at a time and materials cost not to exceed ONE HUNDRED SIXTY-THREE THOUSAND THREE HUNDRED TWENTY-FIVE AND NO/100 DOLLARS (\$163,325.00). There are an additional three hundred and three (303) calendar days added to contract completion. New end date: October 31, 2013.
2. Item #1 shall be performed in accordance with the original agreement dated December 2, 2010, and approved by the City Council by Resolution No. 10-981, and as described in the letter from Robert M. Adams to Ron Adams, dated February 15, 2013, shown as Attachment "A".
3. The terms of this contract modification and the execution thereof is not in any way to be viewed as a waiver on the part of the Owner of any of its rights pursuant to the Contract as modified previously.
4. All other terms and conditions remain unchanged.

IN WITNESS WHEREOF, the parties have entered their hands and seals and attest to the same with the signature of the Mayor being the official act of the said municipality in accordance with his duly constituted authority.

THE CITY OF HUNTSVILLE, ALABAMA,
a municipal corporation

By: _____
Tommy Battle
Its Mayor

ATTEST:

Charles E. Hagood
City Clerk-Treasurer

STATE OF ALABAMA)
COUNTY OF MADISON)

I, the undersigned, a notary public in and for said County, in said State, hereby certify that Tommy Battle and Charles E. Hagood, whose names as Mayor and City Clerk-Treasurer of the City of Huntsville, a municipal corporation, are signed to the foregoing instrument, and who are known to me, acknowledged before me on this day that, being informed of the contents of the instrument, they, in their capacity as such officers, executed the same with full authority for and as the act of said corporation on the day the same bears day.

GIVEN under my hand and official seal this the _____ day of _____,
2013.

Notary Public
My Commission Expires:

ENGINEER: BUILDING & EARTH
SCIENCES, INC.

By: _____
Robert M. Adams

ATTEST:

STATE OF ALABAMA)
COUNTY OF MADISON)

I, the undersigned, a notary public in and for said County, in said State, hereby certify that Robert M. Adams, as Huntsville Branch Manager, is signed to the foregoing instrument, and who is known to me, acknowledged before me on this day that, being informed of the contents of the instrument, he, in his capacity as such officer, executed the same with full authority for and as the act of said Corporation on the day the same bears day.

GIVEN under my hand and official seal this the _____ day of _____ 2013.

Notary Public
My Commission Expires: _____

ATTACHMENT "A"



2607 Leeman Ferry Road, Suite 5 • Huntsville, AL 35801 • Ph: (256) 713-0056 • Fax: (256) 539-7021
www.BuildingAndEarth.com

February 15, 2013 *km*

City of Huntsville Engineering Department
320 Fountain Circle
Huntsville, AL 35801

km 2-22-13

Attention: Ms. Kathy Martin P.E.

Subject: Proposal to Provide Construction Quality Assurance (Testing)/
Inspection Services for the Redstone Gateway Project-
Bid Packages I-1, I-4, and J.
Huntsville, Alabama
Building & Earth Proposal No: HV15001R

Dear Ms. Martin:

Building & Earth Sciences, Inc. is pleased to submit this proposal to provide Quality Assurance services for the construction of the Redstone Gateway Bid Packages I-1 (Lake F), Bid Package I-4 (Box Culvert) and Package J (10 Acre Retail Site). We understand it is the City of Huntsville's desire to amend our existing contract to include these Bid Packages. We have discussed the anticipated construction schedule with Matt Kelley of Brasfield and Gorrie and reviewed the construction documents. Based on our understanding of the scope of work, the planned project staffing, testing and inspections, and the estimated cost for our services are presented herein.

PROJECT INFORMATION

This proposal specifically addresses the provision of services relating to Construction Quality Assurance (CQA) for the Redstone Gateway Bid Packages listed above. We have developed proposed costs to prepare a site-specific CQA Plan which includes CQA monitoring. In addition we have developed costs for the implementation of the site-specific CQA Plan. The scope of services outlined herein is for the development and implementation of the Construction Quality Assurance Plan.

We understand that Package I-1, as represented by the information provided, involves demolition of some existing site development, construction of a new detention pond approximately 6 acres in size and, installing of storm drainage in addition to the work the work Miller & Miller is performing as a part of Package I-4. The new detention pond will be constructed with a compacted clay liner intended to achieve or exceed the specified permeability rate. The

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February 15, 2013
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compacted clay liner is intended to be constructed with clay material generated from onsite material from the pond excavation.

Package J involves demolition of the existing visitors center, utility installation and mass grading of approximately 10 acres and the construction of the parking and utility improvements to support the interim relocation of the Visitor's center.. We understand that the time frame to perform this work is currently anticipated to run concurrent with the Bid Package I-1 grading.

SCOPE OF SERVICES

Our scope of services will include development and implementation of the CQA plan to observe, test and document that the construction is being performed in general accordance with the project plans and specifications. Our scope of services is listed below:

- Evaluation of materials prior to use in the project construction
- Communication with the project team including attending pre-construction meetings, weekly progress meetings, and other meetings as required to address issues related to deficiencies in the work being performed.
- Verifying contractor work progress by preparing daily reports and if required marking up the City of Huntsville (COH) Project Manager's or Owner's drawings kept on-site in jobsite trailer.
- Performing field observation and testing of the construction operation
- Laboratory testing of soils, aggregates and concrete in accordance with the CQA plan
- Documentation of the construction as defined in the CQA plan

The following assumptions were utilized during preparation of this proposal:

- Surveying services for construction verification and as-built drawing preparations will be provided by others;
- Field office, electricity, water, phone, fax and copier to be provided by the general contractor or the City of Huntsville's Construction Manager.
- We anticipate a construction work schedule of five (5) days per week, ten (10) hours per day for 125 working days during anticipated project duration of 170 calendar days. We expect that our engineering technician will work 10 hours per day and the CQAE (Construction Quality Assurance Engineer) representative will work 8 hours a day on average. The technician would be performing tests of the compacted fill while the CQA

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February 15, 2013
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Engineer would be observing the work for general conformance with the plans and specifications.

- The earthwork for Package J will be done concurrently with the work in Package I -1, therefore allowing the sharing of one full time technician between the two Bid Packages.
- Should significant changes to the project plans, specifications and/or CQA plan requirements occur, the scope of work and proposed costs presented herein may require amendment.
- Should production durations utilized within this proposal not be achieved by the contractor(s), per the construction schedule provided in the Bid Package, a scope of work amendment reflecting associated costs may be required.

Project Organization

In order to ensure the compacted clay liner meets the design infiltration parameters it will be necessary to provide significant oversight of the placement of materials to monitor the means and methods employed by the contractor. Observing the quality of the construction of the clay liner is essential to establishing a clay liner that achieves the permeability rates that will allow the lake to function as the feature element intended. A quality liner installation will maintain the design permeability rate and help lower the long-term operating cost of the facility by limiting the amount of artificial recharge (domestic water) required for maintenance of the design pool elevation. The level of Quality Assurance required to achieve this objective is more like the QA program associated with clay liner installation at landfill site versus a typical earthwork QA for general site development.

Building & Earth proposes a two-fold approach to providing provide comprehensive construction quality assurance monitoring for the project. This will consist Construction Oversight and Construction Testing and Inspections.

I. Construction Oversight by Engineering Staff:

The Building & Earth project team will be comprised of the following:

- Chief Materials Engineer
- Principal Engineer, P.E. (Construction Quality Assurance Engineer)
- Project Manager/Graduate Engineer (Construction Quality Assurance Engineer Representative)
- Field Engineering Technicians

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The full-time on-site CQAE representative (Project Manager) will be directed by the Construction Quality Assurance Engineer (CQAE) (Principal Engineer). Senior oversight of the project will be provided by the Principal Engineer, P.E. who will perform site visits prior to and during the liner installation period. The daily QA efforts of the Field Engineering Technicians will be directed by the Field Engineer who will also be responsible for documentation of the daily construction and QA activities. The Field Engineer will also be responsible for coordination of sample transport to the testing laboratory and evaluation of the laboratory test results. A complete log of the QA program test results will be maintained in the field at the project site.

II. Construction Testing and Inspection

Field and Preconstruction Activities

Construction inspection and testing will consist of preconstruction evaluation of materials, observation of and construction testing the installation of soils and other materials used in the construction. Preconstruction testing will include laboratory testing of soils and aggregates as well as verification of manufacturers' quality control testing for other materials. Preconstruction testing for soils and aggregates will include the performance of laboratory testing to develop moisture/density relationships as defined by the project specifications, particle size analysis, Atterberg Limit and classification tests, permeability tests, and other tests required to comply with the assumed project specifications. Construction testing and inspection of soils will include verification of density, thickness, field infiltration and soil laboratory permeability testing at frequencies defined in the CQA plan that is aligned with the project specifications.

Testing will include the following:

Soil, Aggregate and Concrete Laboratory Testing

- Standard Proctor
- Modified Proctor
- Atterberg Limits
- % passing #200
- Mechanical Grain Size
- Lab Permeability
- Compressive Strength of Concrete

Soil, Aggregate and Concrete Field Testing

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- In-place Density and Moisture Content of soil
- Clay liner thickness testing
- Infiltration by Double Ring Infiltrometer
- One point field proctor of soils
- Slump, Temperature and Air Content of fresh concrete

BUDGET SUMMARY

The project budget was established to provide services consistent with the anticipated requirements of the QCA plan. While a breakdown of the cost associated with the various project tasks is provided below, we are willing to discuss providing our services on a Lump Sum Basis. On a Lump Sum basis, we would provide monthly invoices based on the percent complete of our scope of work.

Construction Oversight

CQAE Representative - 125 working days x 8 hours per day x \$75.00/Hour.....\$75,000.00
 Principal Engineer, P.E. – 16 working days x 8 hrs a day x \$145.00/Hour.....\$18,560.00

Construction Oversight Total\$93,560.00

Construction Testing and Inspection

Field QA Testing Technicians – (Full-time onsite 112 days 10 hrs per day, part time 35 days x 4 hrs per day at a technician rate of \$35.00/ hr. plus report review and clerical support (no-mileage charge).....\$54,635.00
 Lab Testing (Soil and Aggregate 6 proctors, 12 atterberg limits, 12 sieve analysis, 12 lab permeability tests).....\$6,270.00
 Field and Laboratory Concrete Testing (40 total pours based on 2 hrs on-site, 1.25 hrs pick-up and log in all at \$32.00/hrs., 5 cylinders per set 1 @ 7 days, 3 @ 28, and 1 reserve at \$12 plus review and clerical time). (Note: if we have a technician coming and going the day after the concrete pours for other activities we will not charge for pick up.)\$8,860.00

Construction Testing and Inspection Total\$69,765.00



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TOTAL\$163,325.00

We appreciate the opportunity to submit this proposal for construction QA and materials testing services for the proposed construction, and are looking forward to working with you on this project. If you have any questions regarding this proposal, please contact the undersigned.

Respectfully submitted,
BUILDING & EARTH SCIENCES, INC.


George P. Ballock, P.E.
Regional Manager


Robert Adams, P.E.
Chief Materials Officer